



# SAP® Process Control

## The Comprehensive Guide

- › Implement SAP Process Control to manage compliance in your organization
- › Automate your processes with continuous control monitoring
- › Evaluate internal controls, manage the policy lifecycle, remediate issues, and more

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# **SAP® Landscape Transformation Replication Server**

**The Practical Guide**



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# Preface

In today's world, security breaches and compliance violations are on the rise, making it imperative for organizations to have a strong and effective approach to managing security and compliance risks. SAP Process Control is a solution enabling enterprises to manage their governance, risk, and compliance (GRC) needs and streamline their compliance management and internal control processes with its advanced features and functionalities. SAP Process Control has revolutionized the way organizations approach internal controls and compliance reporting.

This book is the ultimate guide to SAP Process Control. Whether you're an experienced GRC professional, a security analyst, or an SAP consultant, this book will equip you with a comprehensive understanding of the various features and functionalities found in SAP Process Control. From configuration to master data management, from control evaluation to reporting, this book covers everything.

So, let's embark on a journey to explore the world of SAP GRC solutions and SAP Process Control. This book will help you discover what SAP Process Control can do for you and take your career to new heights!

## Target Audience

This book is written for security analysts who need to acquire an in-depth knowledge of the software to manage security risks in their organizations and for SAP consultants who want to develop expertise in SAP Process Control to help their clients manage their GRC needs.

The book is also for auditors who want to comprehend the importance of SAP Process Control and its impact on audits, IT professionals who want to learn how to use SAP Process Control to manage security and compliance risks in their organization, compliance professionals who want to understand the role of SAP Process Control in managing compliance risks, and risk managers who want to learn how to use SAP Process Control to identify and mitigate risks.

Additionally, the book targets business analysts who want to understand how SAP Process Control can help their organizations maintain compliance with regulatory requirements, C-level executives who want to grasp the significance of SAP Process Control in managing security and compliance risks, and project managers who need to implement SAP Process Control in their organizations and want to understand its features and functionalities.

Other target audiences for the book include business process owners who want to understand how SAP Process Control can help them manage their business processes and identify potential risks, SAP end users who want to understand how to use SAP Process Control to manage their access to SAP applications, compliance officers who need to manage compliance risks in their organization, and internal

and external auditors who need to perform audits on an organization's or a client's security and compliance controls.

The book is a great start for consultants who want to provide advisory services on SAP Process Control to their clients, data privacy professionals who want to understand how SAP Process Control can help their organizations protect sensitive data, and system administrators who need to configure and maintain SAP Process Control in their organizations.

Furthermore, this book is a comprehensive guide catering to a wide range of professionals who need to develop a deep understanding of SAP Process Control and its features and functionalities to manage security and compliance risks in their organizations.

## **How to Read This Book**

To make the most of this book, we suggest that you follow a specific reading approach by reading the chapters in order, as concepts introduced in earlier chapters are revisited and expanded upon later in the book. For instance, custom agent determination rules explained in [Chapter 4](#) are referenced in understanding the workflow rules for master data management explained in [Chapter 5](#) and assessments detailed in [Chapter 6](#) through [Chapter 9](#). If you have a particular interest in a certain topic or chapter, we strongly suggest that you first read the introduction before diving into specific sections. The first few chapters provide an overview of SAP Process Control and configuration, while the following chapters discuss the individual solutions in detail.

We suggest that you read both types of chapters sequentially. However, if you want to gain more knowledge about a specific topic, you can read those chapters independently.

By following this approach, you can gain a comprehensive understanding of SAP Process Control and its features and functionalities.

## **How This Book Is Organized**

This book is structured to serve the various individuals who work with SAP Process Control. Each chapter illustrates a specific knowledge area and builds on the skills obtained in previous sections. The chapters are as follows:

- **Chapter 1**

In this chapter, we'll introduce SAP Process Control and its place in the wider SAP landscapes. This chapter covers the history of both SAP GRC solutions and SAP Process Control, as well as the architecture of the solutions, their capabilities, internal control management, and more. By the end of this chapter, you'll have a solid understanding of the fundamentals of SAP Process Control and how it relates to the broader field of GRC.

- **Chapter 2**

In this chapter, you'll understand the importance of governance and how it helps businesses improve their compliance processes and risk management. It also gives an overview of how SAP Process Control can help strengthen internal controls.

- **Chapter 3**

This chapter guides you through the prerequisites required to configure SAP Process Control by providing a detailed walkthrough of how the license key can be generated and also a brief overview of the factors to be considered to arrive at the system sizing requirements.

- **Chapter 4**

In this chapter, you'll learn about the basic configuration required for SAP Process Control. These steps involve activating different components of the application and defining initial configurations. This chapter provides step-by-step instructions for these tasks, which are typically performed by SAP Process Control consultants along with the support of Basis administrators in a few areas.

- **Chapter 5**

This chapter focuses on defining the master data required to manage and report on control testing in SAP Process Control. It covers how to maintain regulation requirements, organization hierarchies, business process hierarchies, localization of controls, and other related topics to provide you with a comprehensive understanding of the master data management process.

- **Chapter 6**

This chapter dives into control evaluations in SAP Process Control and their relevance. It also provides step-by-step instructions for defining the survey library, performance plans, and test plans required to evaluate the design, operating effectiveness, and other related topics to provide you with a comprehensive understanding of control evaluation.

- **Chapter 7**

This chapter will help you understand how to report issues identified on an ad hoc basis at various entity levels. The chapter also covers remediation, which is the process of reporting issues in addition to those identified as part of the periodic assessments.

- **Chapter 8**

This chapter provides a comprehensive guide on how to automate the controls testing procedure and use processes to evaluate their operating effectiveness. Additionally, you'll learn how to define the various types of data sources and business rules to test these controls.

- **Chapter 9**

In this chapter, you'll learn how to manage the lifecycle of a policy using SAP Process Control. Additionally, you'll learn about additional features such as disclosure surveys and using the sign-off functionality.

- **Chapter 10**

This chapter will help you learn about key standard reports delivered by SAP across master data, as well as rule setup, assessments, and Reports and Analytics work center.

- **Chapter 11**

In this chapter, we'll introduce you to SAP Fiori for SAP Process Control. Detailed steps on how to enable the SAP Fiori UI for SAP Process Control and how to define custom SAP Fiori groups and tiles are covered in this chapter.

- **Chapter 12**

This chapter introduces you to SAP Financial Compliance Management and shows how it fits into the SAP

landscape. It provides a detailed overview of the SAP Financial Compliance Management solution and how it can be effectively used for evaluating various controls.

## **Conclusion**

By reading this book, you'll gain a comprehensive understanding of how to use the SAP Process Control application to effectively evaluate and monitor internal controls. This book is an ideal resource for anyone involved in managing SAP Process Control, SAP functional consultants with knowledge of business processes, and professionals managing an organization's GRC process because we provide comprehensive content covering all aspects of process control. Not only does this book help you understand the use of SAP Process Control to maximize the benefits of GRC processes, but you'll understand the value it can create for organizations. With its depth and breadth, the book will help you develop both business knowledge and system configuration skills for a successful SAP Process Control implementation. Overall, this book is a key reference for understanding the SAP Process Control solution, making it an essential read for anyone looking to enhance their knowledge and skills in the field.

## **Acknowledgments**

We would like to express our heartfelt gratitude to all of those who have contributed to the creation of this book.

Their support, encouragement, and expertise have been invaluable throughout this journey.

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Lastly, we want to express our gratitude to the readers who pick up this book. It's our hope that you find it insightful and thought-provoking. Your interest in these pages is the ultimate reward for the effort and dedication that went into its creation.

Thank you, one and all, for being part of this remarkable journey.

**Raghu Boddu and Ramakrishna Chaitanya**

# 1 Introduction to SAP Process Control

*This chapter provides an overview of the SAP Process Control solution regarding how it has evolved over a period of time, the architectural requirements to use the solution, and the business benefits that organizations can reap in managing their internal control framework.*

SAP Process Control, one of the solutions in the SAP GRC solutions portfolio, enhances an enterprise's ability to streamline compliance processes. Its primary goal is to establish a central repository for internal control documentation, serving as a definitive source and enabling automated control monitoring. Additionally, SAP Process Control offers manual control assessment capabilities through test plans and surveys.

This chapter provides an introduction to the SAP Process Control solution, its architecture, and its key functionalities. Furthermore, it highlights the solution's integration with other SAP GRC solutions (e.g., SAP Access Control, SAP Risk Management, and SAP Audit Management) and outlines its role in supporting organizations in managing risk and controls in accordance with the three lines of defense approach.

## **1.1 History of SAP Process Control**

SAP Process Control offers support to organizations in streamlining their internal control processes and complying with various regulatory requirements. It serves as a comprehensive platform for documenting the organization's risk and control matrix (RCM) as a part of its master data, enabling the assessment of control effectiveness through standard features such as business rules, test plans, and surveys. Further details about the various elements in master data and the essential evaluation procedures are elaborated on in subsequent chapters of this book.

SAP Process Control was first released in the early 2000s. The initial release was version 2.5. However, the subsequent versions of the product, including 3.0, 10.0, and 10.1, were introduced with enhanced functionalities, integration options with other SAP GRC solutions, and improved user interfaces (UIs). The most current version of SAP Process Control available in the market is 12.0.

SAP Process Control 12.0 brings various new functionalities compared to the previous releases. Some of the key new functionalities are detailed in the following sections.

### **1.1.1 Semi-Automated Controls**

In earlier versions of SAP Process Control, users were limited to assigning either a business rule or a manual test plan to evaluate the operational effectiveness of a control. However, from SAP Process Control version 10.1 Service Pack 15 (SP 15), SAP has added the capability to assign both

a manual test plan and a business rule to the same control. To access this feature, select the **Semi-Automated** option in the **General** tab configuration of the control. For more detailed instructions on defining a control, see [Chapter 5, Section 5.2.3](#). It's important to note that in version 10.1, once results from the business rule (automated monitoring) are obtained, the functionality to respond to the test plan wasn't available.

SAP Process Control 12.0 introduces the full design for semi-automated control testing, which allows users to access exception results generated by the business rules. Users can review these results and use them as a foundation before proceeding with the manual test plan in the context of semi-automated control testing. See [Chapter 6](#) and [Chapter 8](#) for more detailed information on how to use manual test plans and business rules.

### **1.1.2 Manual Control Performance Integration with Continuous Control Monitoring**

Manual control performance is an important feature in SAP Process Control that the process owners utilize to assess the effectiveness of process execution. In earlier versions of SAP Process Control, specifically those with an SP level lower than 4 for version 12.0, performance plans were limited to a list of steps that performers had to carry out to evaluate process efficiencies. In these versions, automatic data extraction as a part of manual control performance wasn't supported. For a more detailed understanding of the purpose and usage of the manual control performance functionality, see [Chapter 6, Section 6.4](#).

With the introduction of this new feature as part of manual control performance execution, the control that is in scope with a business rule assigned will be triggered first to analyze data. The results are added to the control performance as links that the performers can use to complete the rest of the steps in performance plan. SAP Note 3089242 provides more details about this new functionality.

### **1.1.3 Standalone Jobs**

This new feature is part of SAP Process Control's continuous control monitoring (CCM) functionality, which is designed to automate the testing of controls. In previous versions of SAP Process Control, it was mandatory to assign a business rule to a control before it could be scheduled for automated monitoring. However, with the introduction of standalone jobs, SAP has provided the flexibility to schedule business rules directly, without the requirement of assigning them to a control. Any issues identified by the system during standalone monitoring can be reviewed by the GRC admin team, and ad hoc issues can be reported as needed. Refer to [Chapter 8, Section 8.5.2](#), to understand more about standalone jobs.

### **1.1.4 Mass Maintenance of User Assignments**

A key feature in SAP Process Control involves assigning responsibility by mapping users to master data entities. See [Chapter 5, Section 5.4.1](#), to understand more about the relevance of assigning users and the steps involved. As a

part of ongoing business operations, a need may arise to replace users for various reasons, such as individuals leaving the organization or moving to different roles. In earlier versions of SAP Process Control, this is a manual process. However, with the introduction of the mass role reassignment functionality in version 12.0, it's now possible to remove user assignments or perform mass replacements, streamlining this process for greater efficiency.

### **1.1.5 Introduction New Reports and Dashboards Based on SAP Fiori Tiles**

With SAP Process Control 12.0, SAP introduced multiple SAP Fiori app-based reports to provide greater insights to management. Following are the key SAP Fiori app-based reports introduced in version 12.0:

- **My Compliance Tasks**

An overview page providing a holistic view of the control evaluation results to the compliance manager.

- **Manual Test of Effectiveness**

The enhanced list view offers a more comprehensive way to review the results of manual tests of effectiveness, providing information on the current status of the steps completed within each of the test plans triggered. See [Chapter 6, Section 6.5](#), to understand more about the manual test of effectiveness functionality.

- **Monitor Issue Status**

A new report providing a detailed view of the issues reported across control evaluations basis on the issue priority.

- **Monitor Control Status**

An enhanced report providing a detailed view of the test results for control effectiveness, design assessment, and self-assessment. This is an interactive report where the granular details of the evaluation can be accessed using the hyperlinks available in the report.

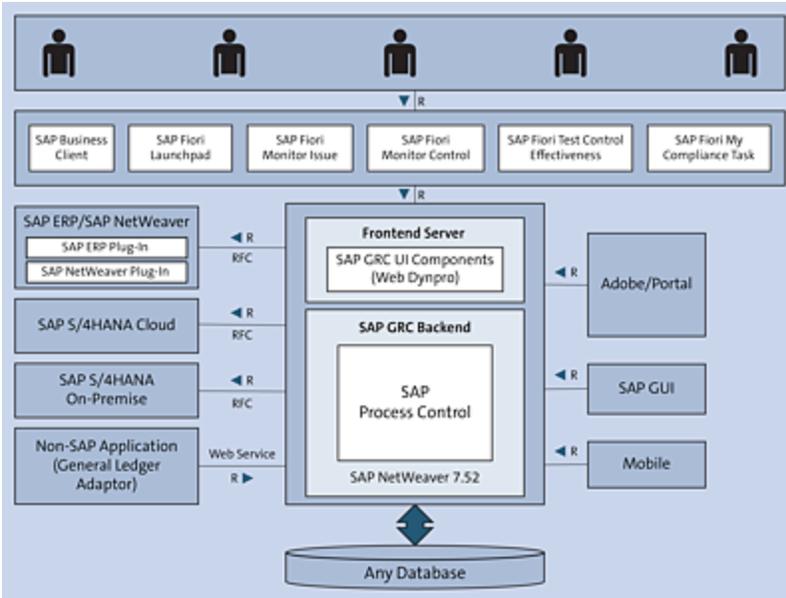
SAP continuously enhances SAP Process Control by introducing numerous additional functionalities and features with each SP release. For in-depth information on the latest enhancements and capabilities, visit the following website: <http://s-prs.co/v579900>.

## 1.2 Architecture and Landscape

As mentioned, SAP Process Control is a robust solution that plays a pivotal role in helping organizations effectively manage their compliance processes and internal control requirements. This section speaks more about its core components, architecture, landscape, and alignment with an organization's broader IT infrastructure.

SAP Process Control 12.0 offers various implementation options. It can be deployed as an add-on, either on a standalone SAP NetWeaver application or as an embedded version within the SAP S/4HANA environment. The core GRC Foundation for ABAP (GRCFND\_A) component acts as the foundation, facilitating the seamless integration of SAP Access Control, SAP Process Control, and SAP Risk Management solutions.

[Figure 1.1](#) provides a detailed overview of the SAP Process Control architecture. It details how the solution connects to the database, presents a user-friendly frontend interface through SAP Business Client or SAP Fiori, and showcases its integration capabilities with other SAP ERP and SAP S/4HANA systems via Remote Function Calls (RFCs). This architecture diagram is a valuable reference for understanding the key components and interfaces within the SAP Process Control environment.



**Figure 1.1** SAP Process Control Architecture

Refer to the following link to learn more about the architecture and other information: <http://s-prs.co/v579901>.

SAP Process Control can be installed on any database. However, to utilize some of the reporting functionalities and CCM capabilities, an SAP HANA database is required and recommended.

The only functionality in SAP Process Control that uses data from other backend systems is CCM (automated monitoring) where the SAP Process Control system connects with the target system using RFC connections. See [Chapter 8](#) to understand more about automated monitoring.

The UI in SAP Process Control can be through web-based SAP Business Client, which is available by default with the installed component (GRCFND\_A). However, if the organization would like to enhance the UI, the SAP Fiori component for SAP Process Control (UIGRRMPC 200) can be installed to use the SAP Fiori UI. SAP Fiori can be

implemented as an embedded model or a central hub model. Detailed steps to configure and use SAP Fiori apps are outlined in [Chapter 11](#).

The backend systems must have the GRCPIERP and GRCPINW plug-ins. More information about the add-on versions and plug-in versions is given in [Chapter 3](#), [Section 3.3.1](#) and [Section 3.3.2](#).

## **1.3 Regulatory Requirements, Supported Systems, and Integrations**

The SAP Process Control solution enables enterprises to strengthen the process of managing internal control procedures by providing a platform that acts as a central repository of all the controls across various processes that are defined to mitigate the risks. In addition, the solution also has inherent features to evaluate the controls and identify their owners, which increases the responsibility to ensure that controls are operated effectively in the organization. This section provides an overview of how organizations are surrounded by various regulatory requirements to have a strong internal control framework and how SAP Process Control can help meet these requirements.

### **1.3.1 Regulatory Requirements and SAP Process Control**

Numerous regulatory bodies and standards place an obligation on organizational senior management to establish a robust internal control framework to prevent the materialization of risks that could adversely affect the organization. Here is a brief overview of some of these requirements, along with an explanation of how SAP Process Control can assist in fulfilling these obligations:

## **Auditing Standard AS 2201 from the Public Company Accounting Oversight Board**

The Public Company Accounting Oversight Board (PCAOB) is a corporation established to oversee and provide guidelines for audits of public companies to ensure there are no adverse impacts to investors. One of the key auditing standards released by PCAOB is AS 2201, which talks about the audit of internal controls over financial reporting.

This standard establishes requirement to have effective internal controls over financial reporting, which provides reasonable assurance about the financial statements. When evaluating the controls, auditors consider the following areas:

- **Selection of controls and testing**

The selected controls in the scope of audit should be assessed for design effectiveness, which can be performed by inquiring with appropriate personnel and evaluating the relevant documentation. SAP Process Control provides the standard functionality to evaluate the design effectiveness of controls using the survey functionality. See [Chapter 6, Section 6.2](#), to understand more about the configurations and steps involved in using the control design assessment functionality in SAP Process Control.

Similarly, the selected controls are also tested for operating effectiveness to evaluate whether the control as designed is ensuring no unauthorized activities or fraudulent activities are taking place. SAP Process Control provides the standard functionalities to evaluate the operating effectiveness of controls based on the nature of

testing (automated or manual). See [Chapter 6, Section 6.5](#), to understand more about how manual controls are tested, and see [Chapter 8](#) to understand more about how automated controls are tested for operating effectiveness.

- **Identifying significant accounts and disclosures and their relevant assertions**

While auditing the financial reports of an organization, it's important for the audit team to identify significant accounts that have major influence on the financial reports and to identify the relevant financial assertions. These significant accounts drive the control selection process to test and determine the required evidence for the scope of audit.

SAP Process Control provides a feature to document account groups and establish necessary relationships with the processes that are influenced by them. Similarly, there is an inherent functionality to manage how significant accounts can be determined. See the discussion of the **Account Groups** tab under [Chapter 5, Section 5.2.2](#), to understand more about defining account groups, mapping relevant assertions, and determining significant account groups.

## **Sarbanes-Oxley Act, 2002**

The Sarbanes-Oxley Act is another key regulation that addresses the process of managing risks in financial reporting. It establishes guidelines for publicly listed organizations on how to manage the financial reporting process, internal audits, and internal control mechanisms.

Following are the two key clauses of this regulation and details regarding how SAP Process Control provides the platform to manage these regulatory expectations:

- **Section 302: Corporate Responsibility for Financial Statements**

This clause mandates that the company's top management should certify the effectiveness of the internal control framework and also accept responsibility by acknowledging the internal controls defined in the organization and their current effectiveness.

SAP Process Control provides a sign-off functionality that is scheduled on a periodic basis to obtain sign off from the organization's top management on the effectiveness of the internal controls defined in the organization and the number of open issues identified during the evaluation of these controls. See [Chapter 9, Section 9.3](#), to understand the process of enabling the sign-off functionality, the impact on the master data after sign-off, and open issues/remediation plans.

- **Section 404: Internal Control over Financial Reporting Requirements**

This clause establishes the requirement that management of the organization has to periodically assess and report the results of such assessments on the effectiveness of the controls.

SAP Process Control provides a platform to document all the internal controls defined in the organization and also evaluate the effectiveness of the controls across various dimensions on a periodic basis. Following are the key assessments that can be performed using SAP Process

Control and reference to respective sections in this book to understand the details of how each can be used:

- Control design assessment: [Chapter 6, Section 6.2](#)
- Control self-assessment: [Chapter 6, Section 6.3](#)
- Manual control performance: [Chapter 6, Section 6.4](#)
- Manual test of effectiveness: [Chapter 6, Section 6.5](#)
- Automated control monitoring: [Chapter 8](#)

In addition to these functionalities to evaluate the controls, SAP Process Control also provides multiple standard reports that can be used to present the current status of the control's health across the organization. See [Chapter 10](#) to understand more about the standard reports and dashboards SAP delivers out of the box and the process of extracting the results using such reports

## **Committee of Sponsoring Organization Framework**

The Committee of Sponsoring Organization (COSO) is another important internal control regulatory framework that establishes guidelines as to how the internal controls should be defined, which can provide reasonable assurance on how effectively the processes are operating in the organization. The COSO framework has five key components that specify how the controls should be classified:

- Control environment
- Risk assessment and management
- Control activities
- Information and communication

- Monitoring

SAP Process Control provides two features you can use to classify controls into these five categories:

- **Business process controls**

While configuring the control under the business process hierarchy in SAP Process Control, the control classification can be mapped using the **Control Relevance** field under the **General** tab. See [Chapter 5, Section 5.2.3](#), to understand more about how to use this field.

- **Indirect entity-level controls**

Similar to the business process controls, SAP Process Control provides a different functionality to capture the indirect entity-level controls that are conceptually classified into the five categories directed by the COSO framework. See [Chapter 5, Section 5.5](#), to understand the process of defining indirect entity-level controls.

In addition to the regulations just stated, there are many other regulations and frameworks, such as J-SOX (Japan's version of Sarbanes-Oxley) and Control Objectives for Information and Related Technologies (COBIT), that also drive the importance of having a strong internal control framework and also establish management's responsibility for certifying the control operations in the organization.

### **1.3.2 Business Benefit of SAP Process Control**

As outlined, SAP Process Control holds a critical role within an organization's internal control management process, offering a range of business advantages that can be realized

through via its functionalities. Following are some of the benefits that organizations can obtain using SAP Process Control:

- **Single source of truth**

The business process hierarchy functionality in SAP Process Control allows for the centralization of processes that were previously managed in isolated and manual ways. This functionality assigns ownership for each control, establishing accountability among the designated users. As a result, it creates a foundation to ensure that controls are effectively executed throughout the organization, moving away from siloed management toward a more integrated and accountable approach.

- **Strengthen control framework**

SAP Process Control improves the governance processes in the organization by aligning the controls with the objectives of the processes. In addition, it improves the accountability throughout the organization with owners identified at each master data entity level.

- **Streamlined process**

SAP Process Control features make it easier to determine the scope of control evaluations. The attributes of the control, such as key or non-key, control the risk level and level of evidence supports in driving the testing scope decision. See [Section 1.5](#) to understand more about the importance of these fields when setting the testing strategy.

In addition, the process of control testing and issue remediation is much more streamlined with the use of workflow-enabled environments. Any action performed in

the testing process is logged in the system and can be used for future reviews using the audit trails. With this proactive approach of evaluating the controls and remediating issues, SAP Process Control empowers organizations to manage risks more effectively and lower the chances of adverse events occurring.

- **Automation**

Automating the control testing process is another critical feature in SAP Process Control. This functionality allows for continuous monitoring of controls without the need for human intervention, generating reports only when a violation is detected. This proactive approach empowers control owners to address any issues before they are identified or reported by internal control or audit teams. This not only enhances efficiency but also saves valuable time for control owners. The system continually evaluates data according to the predefined schedule of job triggers. Control owners are alerted only in the event of system-identified exceptions. In the absence of notifications during a scheduled job, they can have confidence that the control is effectively operating within the organization. This automated approach streamlines control monitoring and ensures prompt responses to any anomalies.

- **Track actions**

The responsibility for taking action on control evaluations or remediating identified issues before the due date falls on the respective process owner. SAP Process Control offers the flexibility to configure reminders based on organizational requirements. These reminders can be set to notify the responsible owner before a specific time frame (in minutes, hours, or days) from the due date.

Additionally, the system provides an escalation mechanism through SAP Process Control's escalation functionality. The escalation is triggered based on custom agent determination rules defined in the Transaction SPRO configuration. This escalation process ensures that unaddressed issues are appropriately escalated within the organization for resolution. Detailed steps to configure reminders and the escalation functionality are provided in subsequent chapters.

- **Reports**

SAP Process Control delivers a range of reports that facilitate the real-time monitoring of compliance status and associated assessment outcomes. These reports are valuable for generating periodic updates for senior management on the overall control status within the organization. These are interactive reports that allow users to go deeper into the analysis with various sublinks within the report. Additionally, it allows users to customize the report with columns that are relevant for the analysis, enabling a more in-depth examination and a presentation of only pertinent data to the key stakeholders.

### **1.3.3 Supported Systems**

SAP Process Control can be connected to SAP S/4HANA or SAP ERP systems only when using the continuous control monitoring (CCM) functionality. See [Chapter 8](#) to understand more about using the CCM functionality. SAP Process Control can connect with all the ABAP-based SAP systems using the RFC connectors configured in Transaction SM59. To connect with web-based systems or non-SAP systems to perform

data analysis, you must use additional third-party connectors or web services. Determining which subscenarios to use in a data source is covered in [Chapter 8, Section 8.2](#).

With the recent enhancements in CCM, SAP S/4HANA Cloud systems can be connected to SAP Process Control, enabling the SAP Process Control system to fetch data to perform analysis. A new connection type for SAP S/4HANA Cloud was introduced to facilitate using this feature.

### **1.3.4 Integrations**

SAP offers multiple solutions to manage the governance, risk, and compliance (GRC) processes in an organization. Each of these solutions are integrated so that the data flows seamlessly between the solutions to manage the GRC processes in the organization. In line with the integration approach, SAP Process Control is integrated with other SAP GRC solutions such as SAP Access Control, SAP Risk Management, and SAP Audit Management.

As mentioned, SAP Process Control can be integrated with SAP Audit Management, which can be installed using the SAPFRA and UIACS components. The following sections detail the specifics of how data is shared between these solutions. Additionally, SAP Process Control can be integrated with the new generation analytic solutions, such as SAP Signavio and SAP Analytics Cloud, which we'll also cover.

## **SAP Process Control and SAP Access Control**

SAP Process Control and SAP Access Control can be integrated, which enables the following two key features:

- **Sharing mitigation controls**

The mitigation controls created in SAP Access Control can be extended to SAP Process Control to perform further evaluations, such as design assessment or effectiveness tests using automated monitoring or self-assessment. See [Chapter 5, Section 5.2.1](#) and [Section 5.2.2](#), to understand the steps involved in sharing the same control between SAP Access Control and SAP Process Control.

- **Segregation of duties (SoD) integration**

CCM is a key feature within SAP Process Control, and it enables the ongoing monitoring of user access authorization levels, especially with regard to critical access and SoD. This is achieved using the SoD Integration subscenario when defining the data source and business rules.

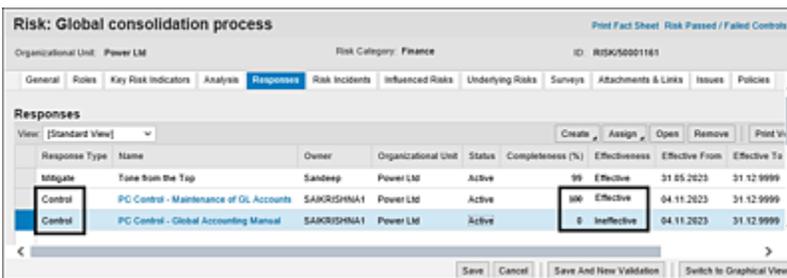
It's important to note that the SoD integration scenario operates effectively only when the SAP Access Control application is activated in the same client and Access Risk Analysis is properly configured. This integration leverages the rules and risks defined within the Access Risk Analysis functionality of SAP Access Control to establish the business rules in SAP Process Control for monitoring user access and roles.

To gain a more in-depth understanding of how SoD integration business rules are created in SAP Process Control, see the "SoD Integration" subsection in [Chapter 8, Section 8.2.2](#). This integration ensures that organizations can effectively monitor and manage critical access and SoD in a systematic and more compliant way.

## SAP Process Control and SAP Risk Management

Another key integration point between SAP Process Control and SAP Risk Management is that the controls and policies defined in SAP Process Control can be used as responses in SAP Risk Management to mitigate the inherent risk levels.

In addition to just mapping the controls from SAP Process Control as responses in SAP Risk Management, the control evaluation results can be converted using Transaction SPRO configurations to identify the completeness and effectiveness percentage of the responses, which drives the calculation of residual risk levels in SAP Risk Management. [Figure 1.2](#) (from SAP Risk Management) shows how **Control** from SAP Process Control can be mapped as a response.



Response Type	Name	Owner	Organizational Unit	Status	Completeness (%)	Effectiveness	Effective From	Effective To
Mitigate	Tone from the Top	Sandeep	Power LM	Active	99	Effective	31.05.2023	31.12.9999
Control	PC Control - Maintenance of GL Accounts	SAKRISHNA1	Power LM	Active	100	Effective	04.11.2023	31.12.9999
Control	PC Control - Global Accounting Manual	SAKRISHNA1	Power LM	Active	0	Ineffective	04.11.2023	31.12.9999

**Figure 1.2** Controls Assigned as Responses in SAP Risk Management

For a more comprehensive understanding of how assessments in SAP Process Control are linked to determine response completeness and effectiveness, refer to the configuration **Governance, Risk and Compliance • Risk Management • Response and Enhancement Plan Path • Set Up Link from Control Results to RM**. Additionally, to understand the process of converting assessment results into response completeness and effectiveness percentages, you can explore the configuration **Governance, Risk and Compliance • Risk Management • Response and**

**Enhancement Plan Path • Convert Control Rating for RM Response Field.** These configurations offer the flexibility to tailor the assessment results to the desired response completeness and effectiveness criteria. For more information, see <http://s-prs.co/v579902>.

## **SAP Process Control and SAP Audit Management**

SAP Process Control can be seamlessly integrated with SAP Audit Management. Following are three key features that facilitate the integration between SAP Process Control and SAP Audit Management:

- **Controls master data**

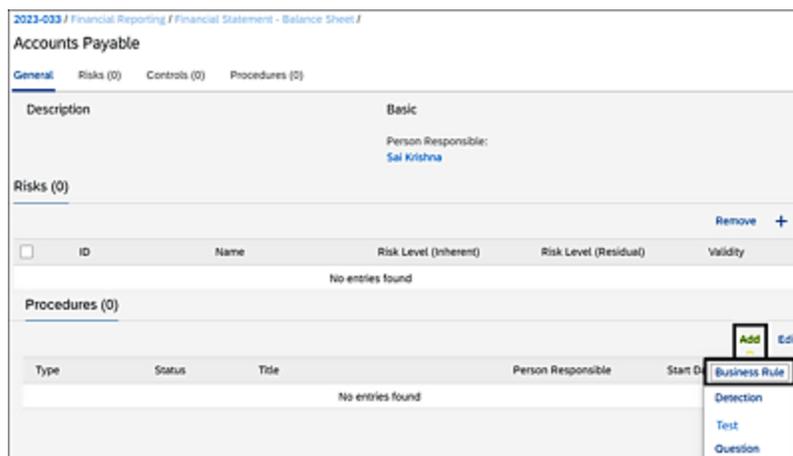
An internal audit in an organization can be conducted across a wide range of auditable items. As part of evaluating the auditable items, it's important for the auditors to identify relevant risks that can be materialized and also the controls in place to mitigate these risks impacting the organization. For organizations using SAP Process Control and SAP Risk Management to manage the controls and risks, the audit teams can use the master data defined already in these solutions, eliminating the efforts involved to define them in SAP Audit Management again. SAP Audit Management has an inherent feature to schedule the standard jobs that runs on a frequent basis to import the controls from SAP Process Control and to import the risks from SAP Risk Management.

- **Uses business rules in audit execution**

Any audit that is performed in an organization typically follows these phases:

- Planning: Identify the areas to be audited and the teams that will conduct the audit.
- Preparation: Define the test procedures to be executed as part of the next phase.
- Execution: Execute the test procedures defined, gather the audit working papers, report any findings identified, and align on the action plans to be implemented with the auditee.
- Reporting: Prepare and align the final audit report.
- Follow-up: Follow-up and close the action plans aligned and findings reported.

As part of the audit preparation phase where the test procedures are defined by the audit teams, it's possible to integrate with SAP Process Control to fetch data and analyze it using business rules. The results of business rules can be used by the auditors as part of the execution phase to report any findings. [Figure 1.3](#) (from SAP Audit Management) shows where **Business Rule** can be mapped to fetch results.

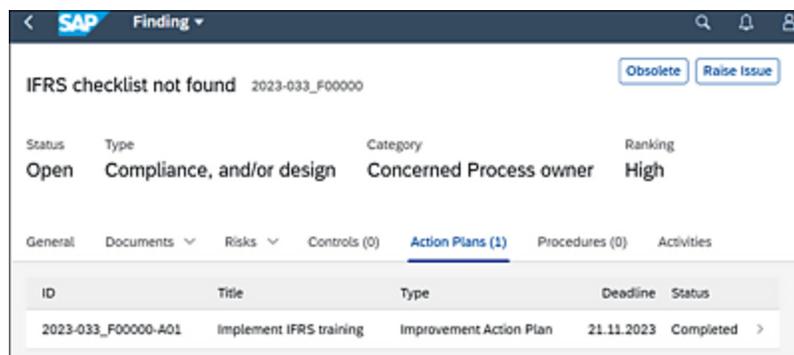


**Figure 1.3** Usage of Business Rules from SAP Process Control to Define Procedures in SAP Audit Management

- **Raises issues from SAP Audit Management**

Another key integration between SAP Audit Management and SAP Process Control is part of the auditing follow-up phase mentioned earlier: the auditor has an option to report an issue, which creates an ad hoc issue in SAP Process Control to do a further root-cause analysis and perform the remediation process. See [Chapter 7](#) to understand the ad hoc issue management process.

[Figure 1.4](#) shows the **Raise Issue** option available to report an issue from the SAP Audit Management solution.



**Figure 1.4** Option to Raise an Issue in SAP Audit Management

## **SAP Process Control and SAP Signavio**

SAP Signavio can be seamlessly integrated with SAP Financial Compliance Management (see [Chapter 12](#) to learn more about SAP Financial Compliance Management) and SAP Process Control. This integration facilitates the smooth exchange of data, ensuring a coordinated flow of information between GRC processes and other business operations. The collaborative synergy of these solutions

enhances the overall effectiveness and offers a unified and robust management approach.

SAP Signavio enables the creation of visual representations for GRC processes, risk maps, control frameworks, and compliance requirements. These visualizations simplify the comprehension of intricate GRC information, aiding communication with stakeholders and generating meaningful reports for decision-making and audits.

SAP Signavio offers many flexibilities, allowing organizations to customize the platform to meet their specific GRC needs. This adaptability ensures alignment with unique frameworks, methodologies, and compliance requirements, making it a versatile solution that caters to the organization's context and objectives.

SAP Signavio's live integration points with SAP Financial Compliance Management, and SAP Process Control provides its customers with an automated, unified, and robust GRC management approach.

## **SAP Analytics Cloud Dashboards**

SAP Analytics Cloud solution enables us to seamlessly integrate analytics and planning in a single platform, offering distinctive integrations to SAP applications and effortless access to various data sources. SAP Analytics Cloud provides 10 dashboards within SAP Analytics Cloud (9 for SAP Risk Management and 1 for SAP Process Control) and provides the flexibility to incorporate additional dashboards based on specific business needs. The existing default dashboards are listed here:

- Risk Aggregation by Risk Category
- Risk Aggregation by Impact Category
- Risk Aggregation by Driver Category
- Driver Interdependencies
- Impact Interdependencies
- Probability Level
- Driver Risk Count Heatmap
- Risk Profile
- Risk Count Heatmap
- Continuous Control Monitoring (Process Control)

For organizations that have implemented both Process Control and Risk Management, SAP Analytics Cloud can be a single platform to see all the analytical reports.

With SAP Analytics Cloud's powerful evaluations, aggregations as well as interdependency assessments are available for analysis together with monitoring capabilities on risk profile, risk bearing capacity, and probability.

Now that you've seen the overview of SAP Process Control, its architecture, and the integration with other solutions of SAP GRC, SAP Signavio, and SAP Analytics Cloud, the next sections summarize how SAP Process Control provides a platform in managing the internal control framework and compliance needs of the organization.

## 1.4 Enterprise Risk and Internal Control Management

SAP Process Control serves as a comprehensive platform for organizations, offering streamlined management of their internal control framework. It acts as a centralized repository for all risk- and control-related documentation and evaluations, simplifying the management of internal controls. With its built-in capabilities to manage various dimensions and automate testing procedures, SAP Process Control enhances the efficiency of internal control processes. The use of provided dashboards and reports ensures that the internal controls team has continuous access to real-time insights into control health and any associated issues identified during assessments.

Following are the key features that the internal controls teams can use in SAP Process Control:

- **Centralized control repository**

SAP Process Control provides all the standard features required to capture the dimensions of the RCM of the organization in one place. All the internal controls can be documented in the business process hierarchy, and the related control objectives, risks, and responsible organizations managing the controls can be mapped to establish the relationships as part of the master data. SAP also provides a standard RCM report, which can be generated to have the detailed view of the relationship between master data elements such as organization → subprocess → risk → control. See [Chapter 10](#) to

understand more about standard reports delivered in SAP Process Control.

- **Delivered workflows and email notifications**

The control evaluations that are performed on a periodic basis are workflow driven, and the business events required to enable the workflows are delivered and easy to configure in Transaction SPRO configurations to determine the agents to whom the workflow should be triggered. See [Chapter 4, Section 4.2.3](#), to understand more about performing custom agent determination rules configuration. In addition to sending a notification to SAP work inbox, email notifications can also be triggered to notify users as soon as an action is triggered to their inbox.

- **Platform for all control evaluations**

As part of the defining the testing strategy in the organization and to comply with the audit requirements and compliance needs, business processes should undergo various types of evaluations. SAP Process Control provides a platform that facilitates evaluating the standard evaluations for organizations, subprocesses, controls, and policies. Following are the key evaluations that the solution caters and the references to respective chapters which provides a detailed explanation of how SAP Process Control can be configured to perform the evaluations:

- Control design assessment: [Chapter 6, Section 6.2](#)
- Control self-assessment: [Chapter 6, Section 6.3](#)
- Manual control performance: [Chapter 6, Section 6.4](#)

- Manual test of effectiveness: [Chapter 6, Section 6.5](#)
- Automated control monitoring: [Chapter 8](#)
- Policy review and approvals: [Chapter 9, Section 9.1](#)
- Disclosure surveys: [Chapter 9, Section 9.2](#)
- Sign-off: [Chapter 9, Section 9.3](#)

## **1.5 Enterprise Risk and Compliance Management**

SAP Process Control stands as a key component within SAP's enterprise risk and compliance solutions portfolio, enabling organizations to effectively address and manage risks and controls in accordance with regulatory requirements.

The SAP GRC solutions cater to the requirements of three lines of defense by providing seamless integrations to use the data of risks and controls and seeking independent assurance. SAP Process Control is one of the key solutions enabling this process by acting as a single source of truth with respect to internal control and compliance-related matters. The following sections detail the requirements in each line of defense and how SAP GRC solutions can meet these requirements.

### **1.5.1 First Line of Defense**

This phase details how the regular operational activities relating to risks and compliance are managed by the business process and risk owners. As the first line of defense, it's the responsibility of the business process and risk owners to ensure the operational risks are identified, documented, assessed, and appropriately mitigated by implementing necessary controls/responses in the organization. In addition to managing the operational risks, it's also required to comply with the applicable regulations and manage policies of the organization. These risks and

controls that are implemented should be continuously monitored, any issue identified as part of the process should be remediated, and details of the fix should be properly documented.

SAP Process Control and SAP Risk Management are the key solutions from SAP GRC that offers functionalities to meet these requirements. SAP Risk Management offers a platform to document risks, manage the risk assessment, and implement responses to mitigate the risk level. For the other compliance needs of the first line of defense, SAP Process Control offers the following functionalities:

- Control monitoring using design assessment, self-assessment, and test of effectiveness
- Issue management, which is an inherent feature of every assessment functionality
- Policy lifecycle management (see [Chapter 9, Section 9.1](#) to understand more about the process of documenting and evaluating the effectiveness of the policy)

### **1.5.2 Second Line of Defense**

This phase discusses how the corporate level risk and compliance activities should be managed by the organization. As the second line of defense, it's the responsibility of the compliance specialists to aggregate the results of risk and compliance activities from various business entity levels. The responsible owners should evaluate the overall regulatory compliances, review the internal control management processes, and present the

holistic view of the current status of risks and controls in the organization.

SAP Process Control and SAP Risk Management are the key solutions from SAP GRC that offer functionalities to meet the second line of defense requirements. SAP Risk Management offers a platform to aggregate the risks using underlying risks functionality and presents the status of risks using dashboards such as Heatmap. For the regulatory and internal control compliance requirements of the second line of defense, SAP Process Control offers the following functionalities:

- Aggregate deficiencies to find the overall operational effectiveness levels at the organization.
- Review the regulatory compliances using the standard reports, which can be extracted based on the regulations mapped to the controls. See [Chapter 5, Section 5.2.3](#), to understand the process of how regulations are defined and mapped to the controls. In addition, see [Chapter 10](#) to understand how reports can be extracted for compliance status with specific regulation requirements.

### **1.5.3 Third Line of Defense**

This phase explains about seeking independent assurance on the first and second lines of defense. As the third line of defense, it's the responsibility of the internal audit team to review and provide assurance on the activities carried out in the first and second lines of defense which are driving the maintenance of effective internal controls processes in the organization.

SAP Audit Management solution supports managing the third line of defense by providing a platform to manage the life cycle of the audit, starting from planning, preparation, execution, reporting and follow-up. Because SAP Process Control, SAP Risk Management and SAP Audit Management are integrated, the details of controls and risks along with the test results can be extended to the audit management solution which becomes an input for the auditors to priorities high risk or ineffective controls in the evaluation process to provide an independent assurance.

## **1.6 Summary**

This chapter has provided an introductory overview of SAP Process Control, beginning with its historical evolution through various versions over time. It also discussed the solution's architecture, emphasizing its integration with SAP S/4HANA and SAP ERP systems and its UI options.

Further, the chapter delved into how SAP Process Control can be effectively integrated with the other SAP GRC solutions such as SAP Access Control, SAP Risk Management, and SAP Audit Management, illustrating its holistic approach and various benefits.

## 2 Governance

*This chapter offers an outline of the significance of governance and internal control requirements within the organization. It also presents a guide on enhancing the internal control management process and its administration through SAP GRC solutions.*

Governance refers to a structured framework offering that outlines roles, responsibilities, and decision-making processes crucial for sustainable operations and success. It encompasses the mechanisms by which an organization is directed, managed, and held accountable, ensuring that it operates effectively, ethically, and in alignment with its objectives and values.

Effective governance enables companies to navigate complexities, adapt to changes, and uphold their mission and values. For example, the governance structure of a multinational enterprise defines how decisions are made across diverse geographical locations, ensuring compliance with local laws, maintaining uniformity in business practices, and safeguarding the company's reputation amid cultural variations and regulatory landscapes.

Without robust governance, organizations may face instability, inefficiencies, and a higher likelihood of encountering legal or ethical challenges that can impact

growth and sustainability. The key aspects of governance include the following:

- Establishment of clear decision-making processes and structures within an organization, defining roles, responsibilities, and authorities of various stakeholders
- Ensuring transparency in operations, where information is readily available and accessible to stakeholders whenever needed
- Accountability to ensure that individuals and entities within the organization take responsibility for their actions and decisions
- Adherence to legal and regulatory requirements, as well as ethical standards and best practices, to maintain integrity and trust
- Implementing measures to identify, assess, and mitigate risks
- Engaging with various stakeholders, including shareholders, employees, customers, communities, and regulators

Good governance can help businesses in many ways. The key advantages are as follows:

- Grow the business with a clear vision, competitive advantage, new opportunities, and improved performance.
- Stay ahead of risks with risk insights, better strategies, reducing fraud and corruption, and learning lessons.
- Improve compliance with better legal understanding, reducing time and effort, and increasing accountability

and compliance adherence.

- Improve trust and reputation with ethical boundaries and responsibilities.

As mentioned, growing businesses require a multifaceted approach that encompasses various strategic initiatives. First, establishing a clear vision, steering the company toward its goals, and focusing on enhancing performance and achieving better financial outcomes are pivotal for sustained growth. This includes optimizing operations, leveraging resources efficiently, and consistently delivering on financial targets.

A comprehensive risk management strategy involves a deep understanding of current and potential future risks. Formulating strategies to mitigate these risks, preventing fraud or mismanagement, and learning from past experiences are crucial steps in bolstering the company's resilience. Improving compliance is another critical facet of business growth. Understanding legal responsibilities, particularly in the face of regulatory changes, helps ensure the company operates within the boundaries of the law. Streamlining compliance processes not only saves time, money, and effort but also ensures accountability at an operational level, fostering a culture of responsibility and adherence to regulations.

Enhancing trust and reputation is equally important, and establishing trust among stakeholders increases the company's reputation. Demonstrating responsible and ethical business practices not only builds customer loyalty but also assures investors that the business is managed sensibly and prioritizes safety and ethical standards.

Now, let's consider how an effective governance can be implemented and the fundamental aspects of reinforcing governance in organizations. Does this happen through internal controls or efficient compliance management?

## **2.1 Strengthen Internal Controls**

Before we discuss strengthening the internal controls, let's understand what an internal control is. Internal control refers to a system of policies, procedures, practices, and processes implemented by an organization to ensure the reliability of financial reporting, safeguard assets, uphold compliance with laws and regulations, and optimize operational efficiency.

These controls are designed to mitigate risks and prevent errors, fraud, and mismanagement within an organization. Internal controls encompass a wide range of activities, including segregation of duties (SoD), interim audits, checks, authorization and approval processes, physical security measures, and regular monitoring and assessment of operations. They serve as a protective mechanism, providing assurance to management, stakeholders, and external parties that the organization's operations are conducted effectively, accurately, and ethically.

These controls mitigate risks associated with noncompliance, ensuring accuracy, reliability, and transparency in operations. By continually assessing and adapting these controls, organizations can effectively navigate evolving regulatory landscapes, maintain

alignment with standards, and demonstrate their commitment.

A reactive approach to compliance creates complexity and forces organizations to be less agile. Earlier, organizations viewed compliance as an obligation and created multiple siloed initiatives to meet the objectives. These initiatives typically rely on manual compliance management processes burdened with costly assessments managed using error-prone spreadsheets, documents, and email. This reactive methodology makes adapting to new regulatory requirements and changing business environments difficult.

Effective compliance management requires a common compliance risk management process, information, and technology architecture tailored to the organization's strategy and operational risk management. Compliance must now be an integral part of the organization and culture that can identify and prevent problems as an ongoing process that must be monitored, maintained, and nurtured in the context of governance, risk, and compliance (GRC) management. The three pillars of an effective compliance management program are people, processes, and technology.

As mentioned, with the constantly rising risk factors and challenges as well as regulatory changes a business faces, the compliance management process is no longer just an obligation, but rather, it has become a critical solution to navigate the challenging times as a consolidated, systematic framework helps organizations avoid high penalties, security breaches, and irrecoverable reputational damage.

To safeguard an organization, the compliance management framework must be covered in all three aspects mentioned earlier—people, processes, and technology—which we'll discuss next.

### **2.1.1 People**

A compliance function starts with people. People are the greatest asset or the biggest burden in managing compliance. They play a pivotal role in any compliance management strategy, serving as the key that ensures its effectiveness. They are responsible for understanding, implementing, and upholding regulatory requirements within an organization, making their engagement, training, and commitment essential components of a robust compliance framework. To develop a strong compliance management culture, management can use the following methods:

- **Identity, roles, and access management**

Define clear job roles and responsibilities for users. Define the right access management approaches, and set physical and logical access rights to each of the employee.

- **Define accountability**

This is where 7 out of 10 organizations fail. They define roles and responsibilities, but never make people accountable. For example, the individual roles of purchase assistant and purchase manager are defined, but people use shared user IDs in the enterprise resource planning (ERP) systems, which won't have any accountability.

Ensure that everyone is responsible for compliance. Organizations need to do more than just addressing trivial IT security issues; compliance so much more than that, and every individual's contribution is important.

- **Training and awareness**

Develop proper training and awareness programs for employees. Employees outside of compliance teams may not be aware of or even worried about information risk management. With data protection laws and regulations, it's much more important to conduct necessary training and awareness programs. It becomes the job of the compliance officer and compliance leadership to keep employees engaged, interested, and informed about security and holistic compliance requirements.

- **Build a culture of compliance management**

Achieving effective compliance requires the creation of internal policies that reflect industry best practices. Developing a culture-centric organization serves as a motivating factor for the team to strive for excellence in quality. Further, it's essential to develop policies aligned with compliance management standards and integrate them into a comprehensive compliance plan. It's also crucial to consider compliance as an integral part of the key result areas (KRAs) rather than merely a routine business exercise.

## **2.1.2 Processes**

Processes play a critical role in a compliance management strategy. They involve tasks such as evaluating risks,

formulating policies, overseeing and inspecting, reporting, and implementing corrective measures. Every phase must be carefully designed to provide assurance to the organization to recognize, handle, and reduce compliance risks.

One crucial function of processes within compliance management involves optimizing the flow of information and tasks among various departments and teams. They serve as a guide for employees, directing them through the essential steps and decision-making processes needed to maintain compliance standards. Moreover, these processes facilitate documentation, record-keeping, and creation of an audit trail, which is essential in demonstrating adherence to regulatory requirements to both regulatory bodies and stakeholders. Ultimately, well-established and properly implemented compliance processes are vital to ensuring an organization consistently fulfills its responsibilities while reducing the likelihood of regulatory violations and associated risks.

Compliance management processes encompass the entirety of compliance and risk management, including the organizational structure and the systematic, methodical approach employed to address potential threats effectively.

To understand the steps necessary for creating a compliance management plan, it's crucial to recognize that the following actions are required:

- Assess potential risks throughout the product lifecycle.
- Emphasize the significance of compliance management to all stakeholders, including board members, the leadership

team, and employees.

- Allocate responsibilities effectively among relevant parties.
- Create compliance management workflows to establish repeatable compliance management processes.
- Acknowledge and address violations promptly, taking appropriate actions to mitigate the impact.

Processes should address internal and external business risks, with appropriate frameworks to deal with both external and internal threats.

It's important to answer the following questions:

- **Do you have processes in place that accommodate both proactive and reactive approaches?**

This involves being proactive in preventing risks and reactive in responding should an incident occur.

- **Do your existing processes cater to both proactive and reactive approaches?**

This involves being proactive to prevent risks and having the capability to react effectively in the event of an incident.

### **2.1.3 Technology**

Technology is clearly important for an effective compliance management program, but using it appropriately is crucial. A comprehensive compliance management framework is incomplete without suitable tools. This software significantly enhances operational efficiency and extends capabilities in

overseeing and controlling an organization's compliance risks. Several key areas where technological tools can prove particularly beneficial are discussed in the following sections.

### **Compliance Risk Repository**

The primary function of compliance management software is to serve as a repository of various compliance risks encountered by the organization along with their accompanying details. It serves as a central reference point for the organization whenever a new risk factor arises. Typically, this repository includes the following:

- Descriptions of each compliance risk
- Applicable laws or pertinent control regulations
- Identification of potentially impacted business units or functions
- Core components integral to the compliance program

### **Control Automation Using Workflows**

Automating internal controls through workflows involves leveraging technology to automate management and control of organizational activities. This is achieved by using a workflow application to establish a sequence of automated tasks aimed at achieving specific control objectives. For example, these workflows can be set up to automate internal checks and reminders, ensuring adherence to established policies and procedures.

Through this automation, organizations can reduce the likelihood of human errors, enhance operational efficiency, and improve the accuracy of their reporting. Further, workflow automation generates a transparent trail of audits, which serves as evidence of compliance with both internal policies and regulatory mandates. Ultimately, leveraging workflow automation for internal control purposes significantly enhances the efficiency and effectiveness of an organization's control processes.

### **Insights and Analytics**

Instances of compliance issues frequently occur not only from negligence of management but also from inadequate management of existing data and the failure to identify potential risk factors. The challenge lies in the huge volume of data and difficulty in establishing connections between related data elements and sources. This is a critical area where compliance tools can offer significant assistance. These tools enable the consolidation and analysis of data from diverse sources within the organization. They facilitate the identification of deviations from standard patterns or outliers that might indicate an impending compliance issue.

By leveraging these tools, organizations can proactively detect anomalies or irregularities in their data, potentially signaling an imminent compliance problem, thereby allowing for timely intervention and resolution.

### **Best Practices for Building a Winning Compliance Management Program**

A comprehensive compliance management system stands as a pivotal factor distinguishing successful organizations from those that fail in today's business landscape. A compliance management program safeguards your organization from potential risk factors and navigates emerging compliance challenges. However, building a compliance management program from the ground up can be quite daunting. The best recommendation is to adopt industry best practices that are offered by various compliance solutions. The following subsections describe the steps for building a successful compliance management program for your organization.

### ***Conduct a Comprehensive Risk Assessment***

In most industries, regulatory standards typically provide a clear framework that serves as a foundation for a compliance plan. Nevertheless, certain hidden risk factors often emerge during later stages that could significantly impact the compliance process. It's essential to proactively develop a comprehensive compliance risk assessment plan based on existing threats and industry insights. This plan should aim to identify, continually monitor, and effectively mitigate potential errors and threats to ensure that robust compliance measures are in place.

### ***Establish Company Policies and Procedures***

Compliance management is a top-down initiative where active involvement of leadership and the equal engagement of all stakeholders is critical for achieving regulatory readiness. While the compliance team is primarily

responsible for maintaining compliance, the program's optimal success requires responsibility and support from top-level management.

Create a policy outlining the roles and responsibilities related to compliance for each department and team within your organization. Additionally, establish clear deadlines to ensure the expected outcomes and timelines.

### ***Communicate the Plan and Provide Training***

It's crucial to understand that the greater the risk, the more intensive attention should be given to details within compliance management. Help employees understand the criticality of compliance with easily understandable training. This could involve simplifying training methods for holistic inclusion, such as offering bilingual training materials or presenting concrete examples supported by practical use cases.

### ***Adopt a Risk-Based Approach to Compliance Management***

A risk-based approach strategy for compliance and ethics management involves identifying, assessing, and uncovering high-priority risks within an organization. Implementing risk-based compliance programs facilitates capturing, consolidating, and centralizing risk management in accordance with established standards, controls, and actions.

Through the implementation of a risk-centered approach throughout the organization, GRC experts can implement

best practices to emphasize the most critical compliance risks across the enterprise. This also enables organizations to showcase various measures taken to mitigate issues, violations, investigations, and penalties.

A standard risk-based approach includes the following:

- Keeping up with standards
- Ensuring comprehensive understanding of requirements among all employees
- Aligning business functions with compliance requirements
- Promptly identifying and rectifying violations to optimize the process
- Periodically reviewing processes and procedures

### ***Invest in Compliance Management Software***

Addressing every risk factor and potential error manually is an impossible task. Given the continuously rising stakes, there is negligible room for errors and experiments. In such a scenario, the implementation of compliance management software becomes essential, as it enables the proactive management of the three crucial facets of your business: people, processes, and technology.

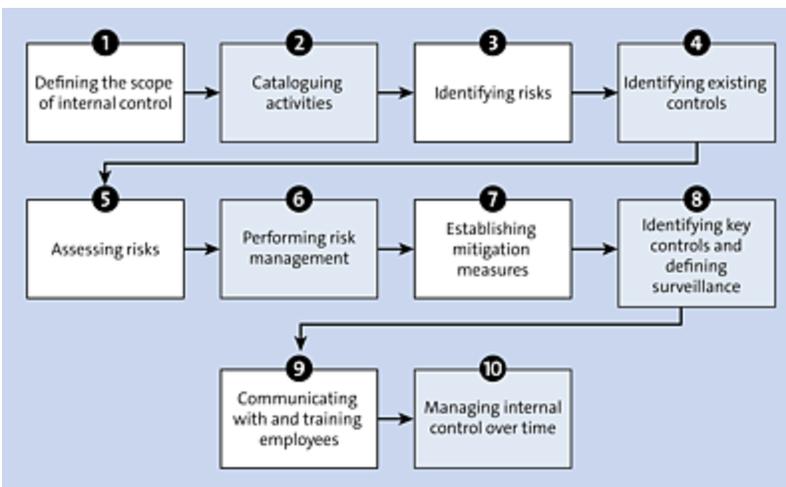
When considering compliance management software, it's imperative to seek out the following capabilities:

- Customizability to align with specific compliance obligations and meet your objectives effectively
- Ability to oversee and manage compliance programs across diverse locations or business functions

- Capacity to generate user-friendly, real-time reports via unified dashboards

## 2.2 Manage Internal Controls

The internal control system plays a pivotal role in mitigating the chance of errors or fraudulent activities. However, navigating recommendations like those from the Committee of Sponsoring Organizations (COSO) framework can be challenging for companies. [Figure 2.1](#) shows the 10 key steps for handling internal controls effectively.



**Figure 2.1** Key Steps for Handling Internal Controls Effectively

Let's look at each of these steps with relevant examples:

### ① **Defining the scope of internal control**

The initial step in establishing internal control involves defining its scope, which stands as the most critical phase and serves as the backbone of the entire internal control structure. Three plans form a clear and comprehensive starting framework:

- Geographical framework, which involves formalizing the locations encompassed within the purview of

internal control

- Identification of specific activities or processes under consideration
- Identification of risk categories, referred to as “objectives” in COSO, that internal control aims to effectively manage

Therefore, to define this scope of action, three essential questions need to be addressed:

- Which sites and subsidiaries are included within this scope?
- Which activities or processes fall under consideration?
- What risk categories does internal control aim to mitigate?

The risk categories/families may encompass the following:

- Financial: Risks that could potentially cause monetary losses to the company.
- Financial statement (or reporting): Risks involving anomalies in financial accounts, inaccurate accounting data, and so on.
- Compliance: Risks related to noncompliance with established standards or laws.
- Operational: Risks that could prevent the company from fulfilling its objectives.
- Occupational health: Risks impacting the physical or mental well-being of individuals associated with

the company.

- Information security: Risks affecting the confidentiality, integrity, and accessibility of information.
- Reputation: Risks that could detrimentally affect the company's image.
- Environmental: Risks that might impact the environment (air, water, soil, resources, energy, etc.).

Given that internal control primarily originates from the accounting domain, it typically encompasses, at a minimum, risks associated with financial statement reporting.

## ② **Cataloguing activities**

Once the scope of action is defined, it's necessary to catalogue the activities or processes undertaken by the company to identify associated risks. Activities can significantly differ from one company to another, and it's essential to highlight establishment-specific activities.

In other words, the granularity in delineating activities should be appropriate and consistent across sectors. For example, the following three statements relate to the same process but don't offer the same levels of information:

- "I do accounting."
- "I pay supplier invoices."
- "I enter accounting data."

Therefore, it's important to create a framework that facilitates the identification of activities performed without falling into a list of detailed micro tasks.

### ③ **Identifying risks**

The risks to which the company is exposed mainly result from the activities it undertakes. In this stage, the following question is relevant for each activity:

“What are the risks associated with the families/categories of the selected risks?” For example, for the “Payment of supplier invoices” process, what financial, operational, or financial reporting risks can be identified?

Identifying risks may potentially lead to an extensive list of possible risks. Despite the numerous potential risks, it’s crucial to maintain close to real-world scenarios. One approach is to start with situations that are previously encountered by the company or within a similar industry. For example, if the company has previously experienced payroll errors, that indicates the potential financial loss requiring preventive measures.

#### ④ **Identifying existing controls**

In the realm of internal control, the term *control* covers all measures employed to manage a risk: control actions, procedures, regulations, control application, tangible protective measures, and so on. Based on past experiences and industry expertise, each company typically possesses existing internal controls and effective procedures for managing specific risks. Identifying these controls becomes important because often 90% of controls are already in place but may lack formal documentation.

The focus should be on identifying the measures that mitigate or address the identified risks effectively.

Further, the concept of *controls of controls* (or surveillance of controls) should also be considered, if such measures already exist. For example, this could involve quarterly verification to ensure the execution of the *monthly salary control*.

## 5 **Assessing risks**

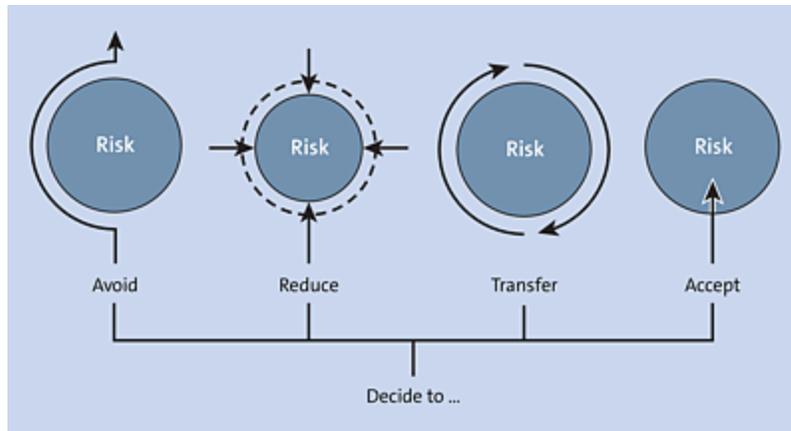
Note that all risks don't carry the same exposure, so companies may see different levels of exposure to these risks. Thus, the crucial task lies in assessing these risks concerning the specific circumstances of each company. This assessment determines whether the existing mitigation strategies are relevant and suffice, or if additional controls need to be implemented.

While this step isn't mandatory and might become time-intensive, establishing the *criticality* helps rank risks based on their significance. This criticality considers both the likelihood of a risk and its potential impact.

For example, in the context of generating pay slips, errors are highly probable, but their effect on a company's survival is relatively moderate. Similarly, for a banking institution, the risk of fraud carries immense consequences, especially if adequate control measures aren't implemented. As a result, this risk would be deemed severe, scoring a maximum of 90, signifying it as a top priority risk.

## 6 **Performing risk management**

In the implementation of internal control, there are four potential strategies for handling risks efficiently: avoid, reduce, transfer, and accept (see [Figure 2.2](#)).



**Figure 2.2** Risk Management Strategies

Consider the scenario of collecting invoice payments in cash. In this process, the potential for human or software errors are always possible and, in some cases, highly probable. Consequently, this activity carries inherent risks. Here are four potential strategies that can be applied to address this risk:

- **Avoid:** Stop collecting invoice payments in cash. There will be no more cash transactions in the company. This will avoid (eliminate) the “Risk of cash register error” or the “Risk of cash being stolen from the register.”
- **Reduce:** Set up a control on the collection of invoices with a step of checking the amount in the cash register to reduce the risk.
- **Transfer or share:** Take out specific insurance for theft, which transfers or shares the risk.
- **Accept:** Don’t make it a priority and instead accept the risk that sometimes there will be errors in the collection of invoices and that the consequences will have to be dealt with on a case-by-case basis.

If the existing controls don't align with the company's defined *risk appetite*, it becomes necessary to introduce supplementary controls and initiate risk mitigation projects to align with the desired risk management objectives.

## 7 **Establish mitigation measures**

Remember, the aim isn't to create huge volumes of documents that end up on the shelf; rather, it's about making a selection. The objective is to identify the mitigation measures that require documentation to effectively reduce the risks. Therefore, the focus lies in describing control actions, processes, procedures, regulations, and so on.

For example, when multiple departments work together, it's relevant to describe the cross-functional process to improve interdepartmental cooperation and mitigate risks arising from inadequate coordination. Documenting a mitigation measure should serve the following purposes:

- Reduce errors
- Clearly define employee responsibilities
- Ensure consistent execution of controls
- Safeguard uninterrupted operations in case of employee absence

The documentation should be tailored accordingly. It can be a simple checklist, a comprehensive set of rules, or even an explanatory video. The objective is to identify the mitigation measures that best require documentation to effectively reduce the risks.

## **8 Identifying key controls and describing surveillance**

Determining the controls is crucial to ensure that these measures are consistently executed and executed correctly—achieving the goal of done and done right. For example, consider a monthly control that has been established to verify system access. In such a case, it might be relevant to implement surveillance on this. This may involve establishing a periodic review to validate the IDs in the system, thereby minimizing information security risks.

Remember, too many controls kill their effectiveness. To prevent this, it's advisable to refrain from defining an excessive number of key controls. Doing so would require investing valuable time in implementing and managing them, potentially diluting their impact.

## **9 Communicating with and training employees**

The effectiveness of internal control only materializes when employees see its usefulness. The necessary communication and trainings should be planned to ensure widespread adherence to these controls.

While highlighting the importance of internal control concerning legal obligations is crucial, it's equally important to demonstrate to employees the personal benefits it offers. Demonstrating that internal control brings a sense of security, reduces errors, and minimizes omissions becomes important. Employees are reassured by working in an environment where risks are managed and controlled in a more effective way!

## ⑩ **Managing internal control over time**

Finally, even if your current internal control system is effective, it's crucial to recognize that it will be embedded and will evolve with the company. It's not an ad hoc and isolated action but an ongoing process. To make it useful and effective, it's important to do the following:

- Conduct an annual reassessment of risks.
- Ensure compliance with new legislations.
- Keep documentation up-to-date.
- Monitor the proper execution of controls and surveillance.
- Monitor risk mitigation projects.
- Track and address incidents as opportunities for improvement.

Note that any changes or adaptations should be accompanied by updated documentation and clear, effective communication.

In short, these 10 steps form the framework for implementing internal control and its subsequent monitoring. They enable the company to leverage an effective internal control system that is tailored to its needs, bringing satisfaction to both employees and management.

## 2.3 Integration Approach

While the previous sections highlighted the role of technology in enabling effective governance and compliance processes within organizations, choosing appropriate technology solutions becomes critical in enhancing operational efficiency while enabling proactive measures for risk detection and mitigation. SAP GRC solutions are designed to address various compliance and internal control needs within an organization, including the following:

- Serving as a central repository for internal controls and risks
- Managing regulatory and compliance requirements
- Handling policies and procedures
- Identifying and defining the roles and responsibilities of key stakeholders involved in internal control management processes
- Conducting regular evaluations of controls and risks within a workflow-driven environment
- Automating the testing process to assess the effectiveness of controls

The subsequent sections provide an overview of how SAP GRC solutions and third-party applications can effectively manage and fulfill these compliance requirements within an organization.

### **2.3.1 SAP GRC Solutions**

SAP offers a diverse array of solutions designed to address various GRC processes within organizations. These solutions are categorized into different portfolios, such as enterprise, risk, and compliance; access governance; and so on. Each portfolio comprises distinct solutions tailored to meet specific requirements and enhance internal control management processes.

For example, the enterprise, risk, and compliance portfolio encompasses solutions such as SAP Process Control, SAP Risk Management, SAP Audit Management, SAP Business Integrity Screening, and SAP Financial Compliance Management. These solutions are interconnected, facilitating seamless integration and enabling organizations to manage comprehensive compliance needs throughout the entire spectrum of their operations.

SAP Process Control provides a comprehensive set of features aimed at overseeing the entirety of internal control processes. It begins by establishing a centralized repository for risks and controls within the organization. SAP Process Control facilitates the definition of testing strategies for internal controls and evaluates these controls within a workflow-driven environment. It also provides tools to effectively manage issues arising from control assessments and document the remediation process. Further, SAP Process Control offers various prebuilt reports and dashboards to present the status of controls and enable better decision-making.

It helps organizations effectively manage and streamline the lifecycle of internal control management processes, which can be segmented into five phases as detailed in [Figure 2.3](#). We'll detail these phases in the following sections.



**Figure 2.3** Lifecycle of Internal Control Management Processes

## Document Phase

During this phase, all the required master data elements to identify a control are defined using the standard functionalities of SAP Process Control. Here are the key master data elements identified and configured as part of this phase (see [Chapter 5](#) to understand the details of each of the following master data elements):

- Organization hierarchy
- Regulations
- Business process hierarchy (process, subprocess, and control)
- Risks
- Control objectives
- Account groups
- Indirect entity level controls

Each of these elements are configured within the SAP Process Control system to effectively identify and manage controls.

## **Plan Phase**

Once the baseline framework of the internal control system is established through the definition of master data, the subsequent step is to define the testing strategy within the organization. During this phase, the organization sets out various types of evaluations that each control should undergo, along with specifying the frequency of testing. Following are the key control evaluations conducted:

- Control design assessment
- Control operating effectiveness test, which includes the following options:
  - Manual control test of effectiveness
  - Automated control monitoring
- Control self-assessment
- Manual control performance

These evaluations are critical in ensuring the effectiveness and efficiency of controls within the organization. For a comprehensive understanding of the significance and process of setting up these functionalities, see [Chapter 6](#).

## **Perform Phase**

Following the definition of the testing strategy in the plan phase, the next step is to schedule necessary jobs using standard functionalities within SAP Process Control. This includes setting up jobs for automated monitoring or Planner functionalities. When controls are scheduled for automated monitoring, the predefined rules will execute at

the specified frequency. If any issues are identified, the respective owners will be notified accordingly.

Similarly, for manual control testing, control design assessments, or self-assessments, test plans or survey work items are triggered and sent to the respective owners' SAP GRC Work Inbox. Owners can then take necessary actions through these workflow-driven activities. Users can access these work items from the Work Inbox, available in the **My Home** work center in SAP Business Client.

The entire process involved in control evaluation is workflow-driven, allowing users to respond and take necessary actions efficiently. For a detailed understanding of responding to issues triggered from automated monitoring, see [Chapter 8](#). Additionally, for insights into the process of responding to assessments, [Chapter 6](#) provides more detailed information.

## **Evaluate Phase**

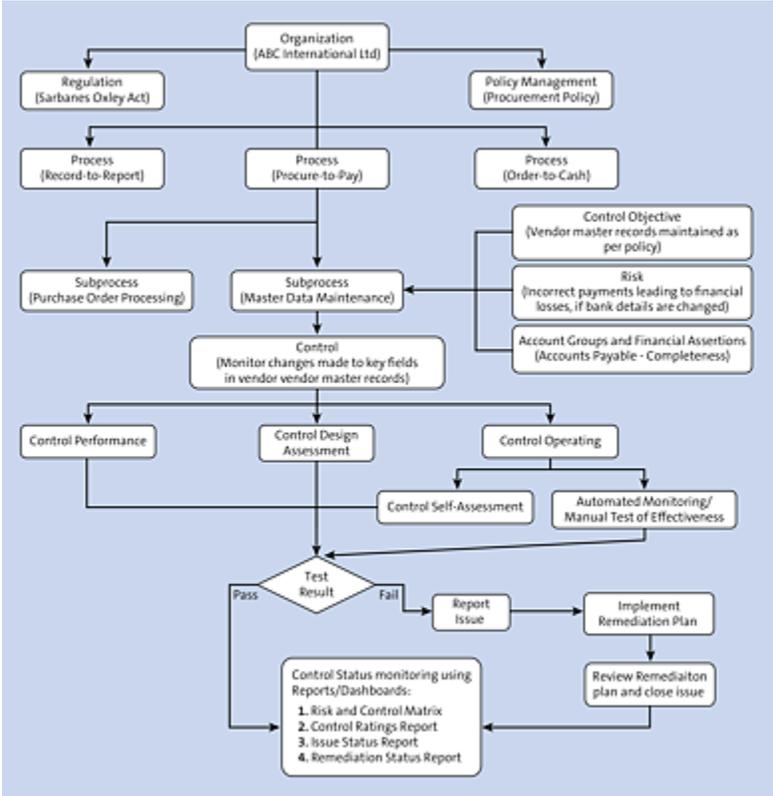
During this phase, users evaluate controls by accessing work items from the Work Inbox. They provide responses to test plans or surveys, ultimately determining the final result of testing. In cases where the final assessment result is categorized as "Fail," issues are reported and assigned to respective users.

Subsequently, the responsibility falls on the assigned issue owner to identify the root cause of the problem and initiate actions to rectify the issue. Their role includes not only addressing the current issue but also implementing

measures to prevent a reoccurrence of the issue in the future.

### Report Phase

In this phase, the internal controls team or GRC team presents how the control master data is structured across various entities in the organization hierarchy using the delivered reports, such as the risk and control matrix (RCM) report or the Organization and Process Structure report. Additionally, the team showcases the status of control health within the organization using standard reports and dashboards. More insights about the available standard reports and their significance are detailed in [Chapter 10](#).



**Figure 2.4** Overview of SAP Process Control

Moreover, an essential aspect of this phase involves obtaining acknowledgment from top management regarding their awareness of the existing internal controls within the organization and the outcomes of control evaluations. This acknowledgment aligns with key regulatory frameworks such as Sarbanes-Oxley Section 302. For further understanding of this regulatory requirement, refer to [Chapter 1, Section 1.3.1](#). The sign-off functionality within SAP Process Control facilitates this acknowledgment process. Details about the sign-off process and its importance are given in [Chapter 9, Section 9.3](#).

The processes outlined in these five phases are continuous and contribute to the maturation of the organization. They aid in identifying more controls, improving testing strategies, and reducing issues identified during control evaluations, thereby enhancing the overall control environment and maturity level of the organization.

In brief, the structure of process control encompasses two primary components: the preparation of master data, and testing controls using SAP Process Control functionalities. [Figure 2.4](#) provides a holistic view depicting the setup of master data, the establishment of relationships, and the diverse evaluations that controls undergo. It also details the steps involved in the testing process and subsequent issue-remediation procedures.

### **2.3.2 Third-Party Solutions**

Automated control monitoring stands as a crucial functionality within SAP Process Control, allowing continuous

review of SAP system data. However, by default, the system's connectivity is limited to SAP-/ABAP-based systems for automated data analysis. To overcome this limitation, SAP Process Control leverages third-party connectors or web services to establish connections with non-SAP-based systems or non-ABAP-based systems, enabling data analysis.

An example is the use of third-party solutions such as Pathlock's integration capabilities. Pathlock's integrations facilitate connections to non-SAP-based or non-ABAP-based systems, enabling the extraction of change logs from application master data or transactional data within those solutions. Subsequently, the acquired results are transmitted to SAP Process Control using web services. Following this data transmission, the subsequent steps involving reviewing exceptions and initiating issue remediation processes adhere to the standard approach detailed in [Chapter 8](#).

## 2.4 Summary

This chapter detailed the pivotal role of governance in establishing an effective internal control mechanism within an organization. It highlighted the key areas of focus to enhance the internal control framework and emphasized the significance of technology in managing these processes. In addition, this chapter detailed how SAP Process Control can streamline internal control and compliance processes using its standard functionalities. You also learned how SAP Process Control integrates third-party solutions to address connectivity limitations with non-SAP-based systems and non-ABAP-based systems, thereby improving monitoring processes within the organization.

Now that you've gained an understanding of SAP Process Control and its importance in managing internal control and compliance requirements, the next chapter details the licensing requirements necessary to implement and use the solution.

# 3 Prerequisites

*Now that you know the importance of SAP Process Control, what are the next steps? Let's delve into the licensing requirements and how to kick-start the SAP Process Control journey.*

As detailed in the previous chapters, SAP Process Control is a vital tool for enterprises seeking effective management of their governance, risk, and compliance (GRC) requirements. SAP Process Control offers automation capabilities, ensuring that regulatory compliance is efficient and hassle-free when it's configured properly. In this chapter, we dive deep into the licensing agreements, setting up the system, and the hardware and software requirements for implementing SAP Process Control.

## 3.1 Check License Agreements

SAP Process Control is an integral component of the SAP GRC solutions and is delivered as part of the SAP GRC foundation for ABAP (GRCFND\_A), which has the other key SAP GRC solutions, that is, SAP Access Control and SAP Risk Management. There are two key components that we need to consider:

- **Add-on (product) licenses**

A separate license is required to use SAP Process Control. Even though SAP Process Control comes as an add-on to SAP Access Control/SAP Risk Management, a separate component license must be procured.

- **User blocks**

User licenses are another critical aspect of the licensing model. These licenses determine the number of users who can access and use SAP Process Control within your organization.

It's important to note that the licensing model for SAP GRC is different from other models, and the specific requirements can vary based on the size and needs of your organization. To ensure that you obtain the appropriate licenses for your GRC implementation, consult with your SAP partner or with SAP directly to get the relevant guidance on the necessary licenses. Once you have the licenses, the following activities must be performed:

1. Create the system in the SAP for Me support portal (registering the system).
2. Apply the license key, which enables you to download updates, generate keys, and so on.

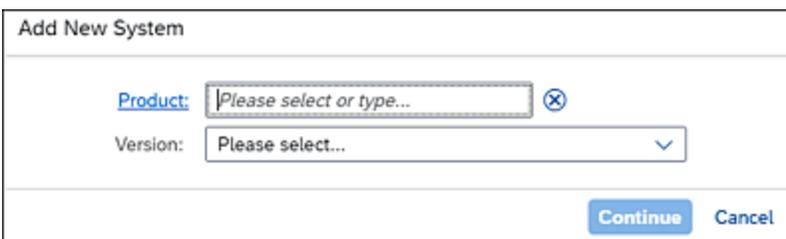
### **3.1.1 Creating the SAP GRC System in the SAP for Me Portal**

Because SAP GRC products use SAP NetWeaver technology, SAP GRC license keys can't be created directly, and the

license key must be generated for the SAP NetWeaver product.

To use the product and download the respective SAP Notes, updates, and log support incidents, you must add the respective SKU to your licenses. Follow these steps to create a separate GRC system:

1. Log in to the SAP for Me portal with your Universal ID (<https://me.sap.com/>).
2. Under **Systems & Provisioning**, navigate to **Systems**.
3. Click the **Create New System** button.
4. Select **Installation**.
5. Click + to create a new system.
6. Select **SAP Process Control** from the **Product** dropdown and the version from the **Version** dropdown.
7. Click **Continue**, as shown in [Figure 3.1](#).



The screenshot shows a form titled "Add New System". It contains two input fields: "Product" and "Version". The "Product" field is a text input with the placeholder text "Please select or type..." and a clear button (X). The "Version" field is a dropdown menu with the placeholder text "Please select...". At the bottom right of the form, there are two buttons: "Continue" and "Cancel".

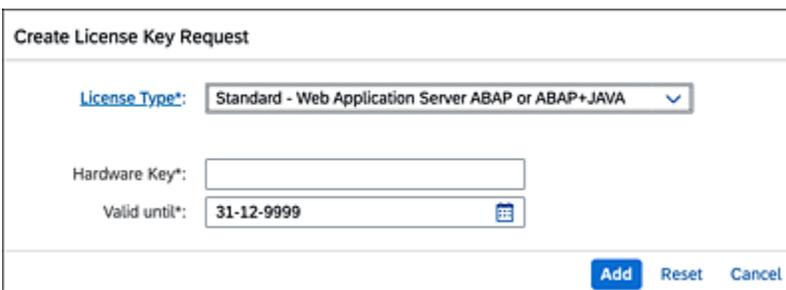
**Figure 3.1** Add New System Screen

The system will be added to the **Systems** list.

### **3.1.2 Generating and Applying the SAP GRC License**

The license key must also be installed on the SAP GRC system. Before proceeding, apply the license key. Follow these steps to create an SAP NetWeaver license key if you don't already have one:

1. Log in to the SAP for Me portal with your Universal ID (<https://me.sap.com/>).
2. Under **Systems & Provisioning**, navigate to **Keys**.
3. Select the system, and generate the licenses by entering the **Hardware Key**.
4. Enter the **Valid until** date, and click **Add**, as highlighted in [Figure 3.2](#). Once added, you may download the license keys.



Create License Key Request

License Type\*: Standard - Web Application Server ABAP or ABAP+JAVA

Hardware Key\*:

Valid until\*: 31-12-9999

Add Reset Cancel

**Figure 3.2** Create License Key Request Screen

The newly generated license key should be installed in Transaction SLICENSE. (Refer to KBA 2631419 and KBA 2924570 for more information on applying license keys.)

## 3.2 System Sizing

The size of the hardware and database is influenced by many business and technological factors. Therefore, it's highly advisable to conduct a thorough sizing assessment before making decisions on the hardware and software choices.

SAP offers a wealth of resources to assist its customers in the sizing process by conducting benchmarking across different platforms. Sizing for SAP applications encompasses the determination of hardware prerequisites, including considerations such as network bandwidth, physical memory, CPU processing power, and input/output (I/O) capacity.

This also involves taking the number of users into consideration. To achieve this, SAP standard application benchmarks can be used. More information on benchmarking can be found at [www.sap.com/benchmark](http://www.sap.com/benchmark).

As a result of benchmark testing, customers receive preliminary estimates regarding the required system size, along with evaluations of new hardware, software components, and relational database management systems (RDBMS). Throughout a benchmark run, all relevant performance data associated with the system, users, and business applications is closely monitored.

Furthermore, SAP Application Performance Standard (SAPS) offers a means to assess system performance within an SAP environment, independent of the underlying hardware.

Calculating SAPS accurately involves distinguishing between tasks that run in parallel and those that run sequentially. When tasks are executed simultaneously (in parallel), SAPS should be computed as a group, while tasks that are sequential, such as synchronization and batch user risk analysis, should not be considered parallel in SAPS calculations.

In addition, sizing is typically divided into three stages:

1. Initial sizing
2. Expert sizing
3. Customer-specific sizing

You should perform all three levels of sizing. Each of the sizing levels are described in the following sections.

### **3.2.1 Initial Sizing**

The initial sizing approach provides platform-independent requirements for the hardware resources necessary to run representative, standard SAP applications. The initial sizing guidelines assume optimal system parameters, standard business scenarios, and so on. For greenfield implementations, consultants typically focus on initial sizing.

The following factors are taken into consideration before deciding on the requirements for CPU (in SAPS) and memory requirements (in gigabytes):

- **Number of work inbox refreshes**  
Indicates the total number of concurrent users accessing the work inbox to take action on the pending actions. The

total number of refreshes per hour is the driving factor to determine the number of SAPS required for CPU and memory requirements

- **Usage of the planner functionality**

The planner is a functionality used in SAP Process Control to schedule jobs with which controls are triggered to the respective owners for evaluation. The number of such jobs scheduled per hour drives the required number of SAPS for the CPU and the required memory.

- **Managing organization hierarchy**

The organization hierarchy is a central master data item where all the controls and policies are localized and responsibilities are established. Maintenance of the organization is a key activity in SAP Process Control, and every change made in the organization is updated only on clicking **Save**. The number of times the organization hierarchy is updated in an hour drives the required number of SAPS and the memory requirements.

For more details, refer to *Sizing Guide for SAP Process Control* at <http://s-prs.co/v579903>.

### **3.2.2 Expert Sizing**

An expert sizing exercise analyzes business requirements and data to provide more customized sizing results. It's the main goal of the study to determine the resource consumption of customized content and applications (not SAP standard deliveries) through comprehensive measurements.

The expert sizing is typically carried by the consulting partners based on the inputs provided by the business. They usually do various discovery meetings or provide a list of questionnaires to gather all the information before recommending the sizing recommendations to the client.

### **3.2.3 Customer-Specific Sizing**

Hardware resource and system configuration depend on the requirements of the customer-specific project. For example, one customer may want to go with the Windows operating system and SQL Server as the database, while another customer prefers Linux with an SAP HANA database. This includes the implementation of distribution, security, and high availability solutions by different approaches using third-party tools.

Remember, even though a proper sizing exercise is carried out, your users might face some performance issues due to master data volume, transaction data volume, increase in number of concurrent users, and so on. You should review the sizing periodically to ensure the system responses are good.

Typically, the sizing is performed by taking the following scenarios into account:

- Total number of organizations in the hierarchy
- Total number of controls that needs to be set up in the business process hierarchy
- Total number of control objectives and risks to be defined

- Usage of configuration settings, such as usage of report buffers
- Usage of scheduling functionalities to evaluate the following:
  - Count of controls tested using automated monitoring
  - Count of controls tested using manual testing and number of manual test plans
  - Count of controls tested for self-assessment and design assessment
- Number of maximum concurrent users using/refreshing the SAP Process Control Work Inbox to respond to the pending actions
- Total number of systems connected to SAP Process Control

For more information on sizing, visit [www.sap.com/about/benchmark/sizing.html](http://www.sap.com/about/benchmark/sizing.html).

## 3.3 Component and Plug-In Requirements

Once the sizing exercise is completed, and the required infrastructure is procured, the backend systems need to be prepared. It's crucial to identify which systems will be connected to SAP Process Control and ensure that the necessary components and/or plug-ins have been installed.

The necessary components are based on the systems, configuration, and so on. The following sections provide a good understanding of the components and plug-ins required.

### Note

You need SAP NetWeaver 7.52 or higher to implement SAP Process Control 12.0.

### 3.3.1 SAP Process Control Component

You may need to choose the right SAP GRC add-on. For easy reference, information related to all the GRC Foundation releases are provided in the [Table 3.1](#).

Component	Component Description
GRCFND_A v1000	GRC Foundation for ABAP v 10.0

Component	Component Description
GRCFND_A v1100	GRC Foundation for ABAP v 10.1
GRCFND_A v8000	GRC Foundation - PC for SAP S/4HANA Embedded v 10.1
GRCFND_A v8100	GRC Foundation - PC for SAP S/4HANA Embedded v 12.0
GRCFND_A v1200	GRC Foundation for ABAP v 12.0

**Table 3.1** SAP Process Control Components

For SAP Process Control 12.0, choose either GRCFND\_A v8100 (SAP S/4HANA Embedded) or GRCFND\_A v1200 (standalone system).

For more information on the component, refer to SAP Note 2612335 and SAP Note 2602131. The rest of the configurations, such as connector configuration, parameter settings, and so on, remain the same as in a standalone system.

### Tips

To access the release information note for SAP Process Control 12.0, review KBA 2622708.

To know more about release strategy and maintenance information for GRCFND\_A v1200, review KBA 2602131, and for similar information for GRCFND\_A v8100, review KBA 2612335.

### 3.3.2 SAP GRC Plug-Ins

One or more plug-ins from [Table 3.2](#) have to be implemented in the backend systems based on the business requirements.

Plug-In	Description
GRCPINW	SAP Process Control integration with SAP S/4HANA and SAP ERP non-HR functions for SAP NetWeaver 7.40 and higher. This component is required for the continuous control monitoring (CCM) functionality (see <a href="#">Chapter 8</a> for more details) to fetch data from the source systems. Refer to SAP Note 2602564 for more information.
GRCPIERP	SAP Process Control integration with SAP S/4HANA and SAP ERP HR functions (used for CCM functionality). Refer to SAP Note 2602825 for more information.

Plug-In	Description
UIGRRMPC 200	<p>This SAP Fiori 2.0 for SAP Risk Management and SAP Process Control component contains the SAP Fiori apps related to both applications. Customers using UIGRRMPC 100 can upgrade to UIGRRMPC 200 directly.</p> <p>If you use the SAP HANA database, it's recommended to use these SAP Fiori apps in UIGRRMPC 200, as performance is significantly improved in the SAP HANA environment.</p> <p>Refer to SAP Note 3311378 for more information.</p>

**Table 3.2** SAP GRC Plug-Ins

## 3.4 Summary

You now have a comprehensive understanding of the licensing requirements, component prerequisites, and plug-in requirements for SAP Process Control 12.0. It's important to conduct proper sizing assessments before proceeding with the implementation and configuration of an SAP Process Control system. For detailed guidance on sizing, you can refer to <http://s-prs.co/v579903>, which offers further insights.

Once the components and plug-ins are in place, the application can be configured to meet your specific needs. The next chapter details the various configurations that are essential for setting up the SAP Process Control system effectively.

# 4 Basic Configuration

*Now that you understand the importance of governance and internal controls, and you've seen an overview of how SAP Process Control can help organizations in managing their internal controls, this chapter delves into the technical configurations, which are the baseline requirements to start using the solution.*

In the previous chapter, you learned about the prerequisites required before using the SAP Process Control solution. This chapter focuses on the basic Transaction SPRO configurations required to activate the SAP Process Control application, important business configuration sets (BC sets), and Transaction SICF services. In addition, we'll cover the usage of various functionalities by configuring workflow settings and the specific stages that should be part of performing control assessments. This chapter also details the steps to configure the connectors to read data from the target systems and the process of setting up the regulation configurations. In addition to the basic configurations, you'll get an overview of the various work centers available in the solution and the key activities performed in each.

## 4.1 Initial Configuration

This section provides detailed information on the initial setup required to enable SAP Process Control. The initial configuration involves the following activities:

1. Enabling the application in the client
2. Activating BC sets
3. Activating Transaction SICF services, which are necessary for the remaining configurations
4. Setting up second-level authorizations

The following sections will detail each of these activities and provide a step-by-step explanation.

### **4.1.1 Activate the Application in the Client**

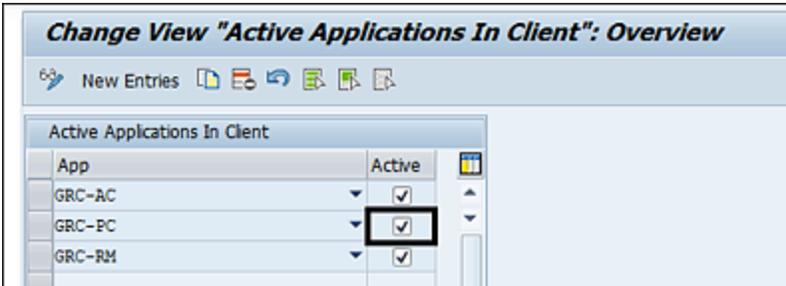
Installing the GRFND\_A (GRC Foundation for ABAP) component will provide you with SAP Access Control, SAP Process Control, and SAP Risk Management by default. To use these applications, they must be enabled in the Transaction SPRO configuration.

#### **Note**

The GRCFND\_A v1200 component is for a standalone SAP GRC system. However, the version in the SAP S/4HANA system (embedded) of GRCFND\_A will be v8100. The configuration steps remain the same in both versions.

To enable, execute Transaction SPRO\_ADMIN, click the **SAP Reference IMG** button, and follow menu path **Governance, Risk and Compliance • General Settings**

- **Activate Applications in Client.** Check the **Active** checkbox for the SAP Process Control application (**GRC-PC**), and click **Save**, as highlighted in [Figure 4.1](#).



**Figure 4.1** Activate the SAP Process Control Application

## Note

Ensure that you have transport request create/release authorization because Transaction SPRO configurations may require you to create transport requests or capture the changes in an existing transport request. It's advisable to have transport requests ready in case you're not authorized to create them.

Once the application is activated, you may proceed with activating BC sets.

### 4.1.2 Activate the BC Sets

SAP has provided preconfigured BC sets to enable various functionalities easily within SAP Process Control. These configurations can be activated using Transaction SCPR20. [Table 4.1](#) provides an overview of the BC sets associated with key configurations within SAP Process Control, including the navigation path in Transaction SPRO.

<b>Configuration Activity</b>	<b>BC Set Name</b>	<b>Purpose</b>
<p><b>Governance, Risk and Compliance • General Settings • Key Attributes</b></p> <ul style="list-style-type: none"> <li>• <b>Maintain Timeframe Frequencies</b></li> <li>• <b>Maintain Timeframes</b></li> </ul>	<ul style="list-style-type: none"> <li>• GRPC-FREQUENCY</li> <li>• GRPC-TIMEFRAME</li> </ul>	<p>Define the time frames to be used while defining the master data, rules, or scheduling the automated monitoring/planner functionality to test the controls.</p>
<p><b>Governance, Risk and Compliance • General Settings • Authorizations • Entity Role Assignment</b></p>	<ul style="list-style-type: none"> <li>• BC_SET_ROLES</li> <li>• GRPC-ROLE-GLOBAL-UPG</li> </ul>	<p>Configure the mapping of standard roles with various master data entities. These drives identify the ownership and responsibility to act on various workflow stages.</p>

<b>Configuration Activity</b>	<b>BC Set Name</b>	<b>Purpose</b>
<b>Governance, Risk and Compliance • General Settings • Workflow • Custom Agent Determination</b>	<ul style="list-style-type: none"> <li>• GRPC-AGENT-UPG-25</li> <li>• GRPC-AGENTSLOTCTC-FDA</li> <li>• GRPC-AGENTSLOTCTC-GLOBAL</li> <li>• GRPC-AGENTSLOTCTC-SOX</li> </ul>	Configure the determination rules to identify the roles that should receive the workflow based on the defined business event for each functionality.
<b>Governance, Risk and Compliance • Shared Master Data Settings • Activate Workflow for Master Data Changes</b>	<ul style="list-style-type: none"> <li>• GRFN-MDC</li> </ul>	Enable the workflow feature where any changes made to the master data entities will be sent to the reviewers as a notification or to seek approval based on the activations.

Configuration Activity	BC Set Name	Purpose
<b>Governance, Risk and Compliance</b> • <b>Shared Master Data Settings</b> • <b>Maintain Ability to Add Locally</b> • <b>Defined Controls</b>	<ul style="list-style-type: none"> <li>• GRFN-ALLOW-CREATE-LOCAL-CTRL</li> </ul>	<p>Enables an option to create a new control directly under the local subprocess, instead of creating a copy in the business process hierarchy. Controls are usually localized only on assignment of a subprocess.</p>
<b>Governance, Risk and Compliance</b> • <b>Process Control</b> • <b>Edit Attribute Values</b>	<ul style="list-style-type: none"> <li>• GRPC-ATTR-ASSERTION</li> <li>• GRPC-ATTR-CATEGORY</li> <li>• GRPC-ATTR-CTRL_FREQUENCY</li> <li>• GRPC-ATTR-CTRL_GROUP</li> <li>• GRPC-ATTR-CTRL_OBJ_CATEGORY</li> <li>• GRPC-ATTR-IELC-FREQ</li> </ul>	<p>Enables the attributes that should be part of the control definition. See <a href="#">Chapter 5, Section 5.2.3</a>, to better understand the control definition and the relevant control attributes.</p>

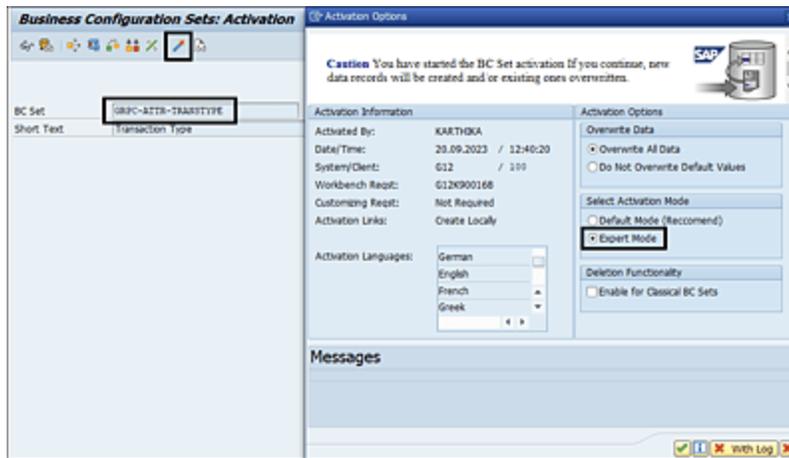
Configuration Activity	BC Set Name	Purpose
	<ul style="list-style-type: none"> <li>• GRPC-ATTR-INDUSTRY</li> <li>• GRPC-ATTR-NATURE</li> <li>• GRPC-ATTR-PURPOSE</li> <li>• GRPC-ATTR-RELEVANCE</li> <li>• GRPC-ATTR-RISK_IMPACT</li> <li>• GRPC-ATTR-SAMPLE_METHOD</li> <li>• GRPC-ATTR-SCHED_FREQUENCY</li> <li>• GRPC-ATTR-SIGNIFICANCE</li> <li>• GRPC-ATTR-TEST_TECH</li> <li>• GRPC-ATTR-TRANSTYPE</li> </ul>	

**Table 4.1** Key Configurations of BC Sets in SAP Process Control

To activate BC sets, follow these steps:

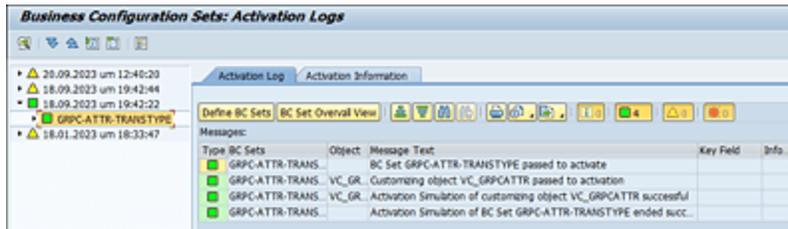
1. Log in to the SAP Process Control system.
2. Execute Transaction SCPR20.
3. Enter the BC set name (e.g., "GRPC-ATTR-TRANSTYPE").

- Click the **Activate** button.
- Choose **Overwrite All Data** in the **Overwrite Data** options, choose **Expert Mode** in the **Select Activation Mode** options, and click **Execute**, as shown in [Figure 4.2](#).



**Figure 4.2** BC Set Activation

- Check the log for the activation status, as shown in [Figure 4.3](#). If the log displays entries marked in red (indicating errors), it's required to review and correct these errors before reactivating the BC set.



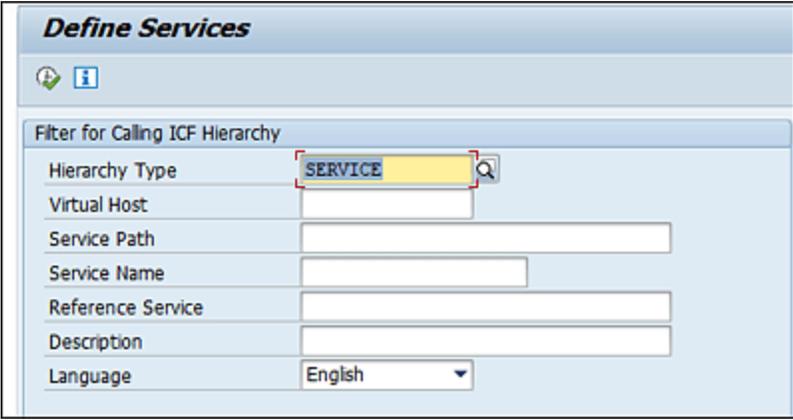
**Figure 4.3** BC Set Activation Log

After activating all the BC sets per [Table 4.1](#), you can proceed with activating the services.

### 4.1.3 Activate Transaction SICF Services

This section explains how key communications can be enabled using Transaction SICF. You'll activate the key service hierarchies: PUBLIC, BC, and GRC, which are essential to use the SAP Process Control application. To activate these hierarchies, follow these steps:

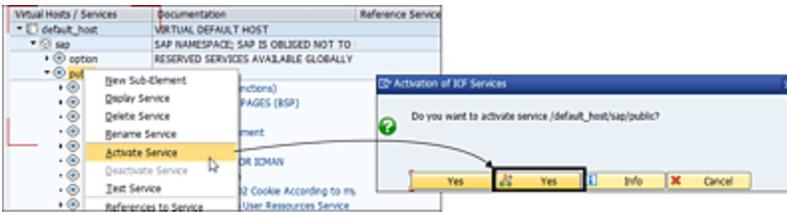
1. Log in to the SAP Process Control system.
2. Execute Transaction SICF.
3. Select **SERVICE** in **Hierarchy Type**, as shown in [Figure 4.4](#).



The screenshot shows the 'Define Services' transaction in SAP. The title bar reads 'Define Services'. Below the title bar, there are two icons: a green checkmark and an information icon. The main area is titled 'Filter for Calling ICF Hierarchy'. It contains several input fields: 'Hierarchy Type' (with 'SERVICE' entered and highlighted by a red box), 'Virtual Host', 'Service Path', 'Service Name', 'Reference Service', 'Description', and 'Language' (set to 'English').

**Figure 4.4** Activating Services Using Transaction SICF

4. Click the **Execute** icon.
5. Expand the node **default\_host • sap • public**.
6. Right-click **public**, and choose **Activate Service**.
7. Choose **Activate Service** for all subnodes (**Yes** button with subnode option), as highlighted in [Figure 4.5](#).



**Figure 4.5** Activation of the “Public” Service and Subnodes

Activate the services under BC and GRC hierarchies following the same steps by choosing the option **Activate Service** after right-clicking on the relevant service. This will activate all the services that are needed to utilize the SAP Process Control application.

#### 4.1.4 Second-Level Authorizations: Maintain Authorization Customization

The next step in the configuration is to determine the authorization level required for the users to be eligible for assignment as an owner of the master data entity or responsible for receiving a workflow stage in performing any control assessment.

Subsequent sections in this chapter detail the process to determine the roles mapped at a master data entity (see [Section 4.2.2](#)) and roles that should receive the workflow for a business event (see [Section 4.2.3](#)). Before getting into these workflow configurations, it’s important to know the required authorization levels for the process control users to perform the relevant activities. In general, all SAP Process Control users are provided access to the following roles to access the solution:

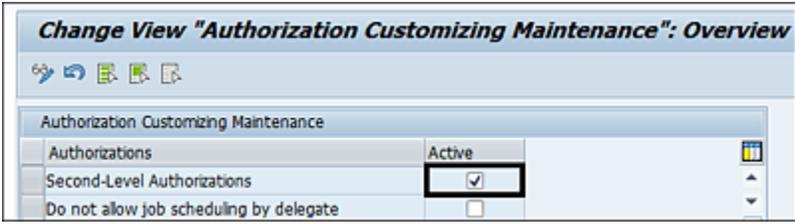
- SAP\_GRC\_FN\_BASE (GRC - Base Role to Run GRC Applications)

- SAP\_GRC\_NWBC (Governance, Risk, & Compliance)
- SAP\_GRC\_FN\_BUSINESS\_USER (GRC - Business User)

In addition, depending on the requirement, the specific task role access will be provided to the user, such as control owner, organization owner, and so on. While performing the user assignments to the roles at the master data entities, the GRC admin can select any valid dialog user from the entire GRC user base with access to business user role <SAP\_GRC\_FN\_BUSINESS\_USER> (see [Chapter 5, Section 5.4.1](#), for more on user assignments). However, to have more control on the assignment of user responsibilities to any master data entity/workflow, it's important to have a restriction that selection can be made only from the list of users with access to the specific task role. This can be enabled by activating the **Second-Level Authorizations** configuration.

To enable the second-level authorization, follow these steps:

1. Log in to the SAP Process Control system.
2. Execute Transaction SPRO\_ADMIN.
3. Click the **SAP Reference IMG** button.
4. Follow menu path **Governance, Risk and Compliance**
  - **General Settings**
  - **Authorizations**
  - **Maintain Authorization Customizing.**
5. Enable the **Active** checkbox for **Second-Level Authorization** option, as highlighted in [Figure 4.6](#).
6. Click **Save**.



**Figure 4.6** Activation of Second-Level Authorizations

## 4.2 Workflow Configuration

One of the primary features of SAP Process Control involves carrying out the execution of test procedures and workflow stages. Controls in the organization should undergo various evaluations to ensure management has reasonable evidence that internal controls in the organization are being operated effectively. The execution of a test procedure encompasses multiple stages, with each stage being the responsibility of a designated owner to complete.

SAP Process Control streamlines this process by utilizing workflows. To gain a deeper understanding of control evaluation procedures, see [Chapter 6](#). Furthermore, [Chapter 7](#), [Chapter 8](#), and [Chapter 9](#) detail various other functionalities that also utilize workflows for stage execution.

This section explains the configurations required to activate and customize workflows for different aspects of the SAP Process Control solution. The configurations are broadly categorized into four subtopics:

- Task-specific customizing
- Entity role assignment
- Custom agent determination
- Fallback users

### 4.2.1 Task-Specific Customizing

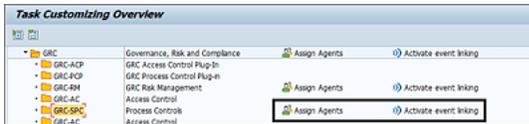
Prior to configuring users and roles, you must set up the workflow functionality along with the stage configuration where the workflow initiation is necessary. To perform this configuration, follow these steps:

1. Log in to the SAP Process Control system.
2. Execute Transaction SPRO\_ADMIN.
3. Click the **SAP Reference IMG** button.
4. Follow menu path **Governance, Risk and Compliance • General Settings • Workflow • Perform Task-Specific Customizing**.
5. Expand **GRC**, and double-click **GRC-SPC**.

You must perform both **Assign Agents** and **Activate event linking** configuration for SAP Process Control, as highlighted in [Figure 4.7](#). We'll walk through both tasks in the following sections.

#### Note

If the **GRC** folder isn't visible, execute program RS\_APPL\_REFRESH using Transaction SE38 to refresh the apps. Perform the steps to view the folder again.



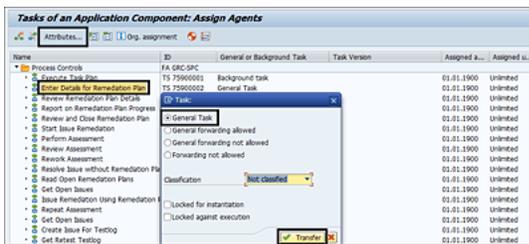
**Figure 4.7** Activities to Be Performed under Task-Specific Customizing

## Assign Agents

Each stage within a workflow is represented as a task, and it's required to enable all tasks relevant to the workflow functionalities within the scope of workflow activation. The tasks must be defined as a **General Task**. The following steps detail the process:

1. Expand the **GRC** folder, and access **GRC-SPC**.
2. Click on the **Assign Agents** link.
3. Select the task ID, and click the **Attributes** button.
4. Select the **General Task** option from the radio button group, and change the **Classification** to **Not classified**.
5. Click the **Transfer** button to update the changes.

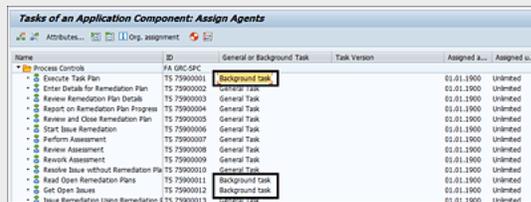
[Figure 4.8](#) highlights each of the options in the assign agents task customization.



**Figure 4.8** Configuration of Tasks to Enable the Workflow

### Note:

Repeat the steps for all the task IDs that are classified as **General Task**. Don't change the attributes for the tasks defined as **Background** by default. [Figure 4.9](#) shows the tasks that are listed as **Background task**.

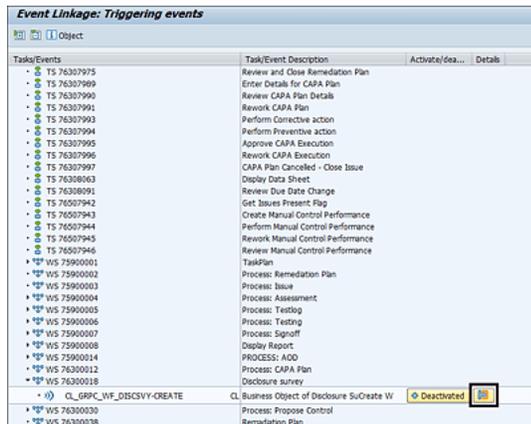


**Figure 4.9** Tasks Defined as Background by Default

## Activate Event Linking

Once all the tasks are updated to general tasks, the next step is to activate the workflow event linkage. Choose **Activate Event Linking** link from the **Task Specific Customizing Overview** screen. To activate the event linking for a process, follow these steps:

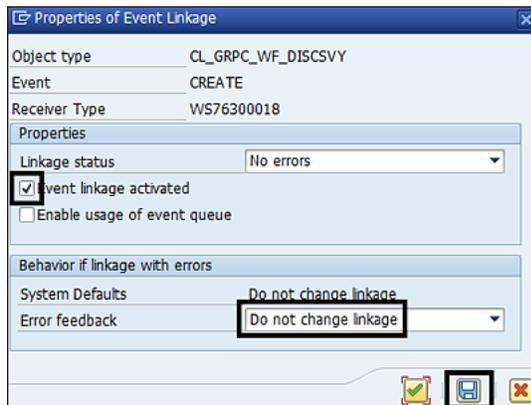
1. Expand the relevant workflow stage folder (e.g., **WS76300018**).
2. If the status is **Deactivated**, click the **Details** icon, as highlighted in [Figure 4.10](#).



**Figure 4.10** Review the Status of the Workflow

Clicking the **Details** icon will display a popup (**Properties of Event Linkage**) screen. The following activities must be performed in this screen:

1. Enable the **Event linkage activated** checkbox.
2. Select **Do not change linkage** from the **Error feedback** dropdown, as highlighted in [Figure 4.11](#).
3. Click **Save**.



**Figure 4.11** Activation of Event Linkage

Once the activation is completed, the status is updated to **Activated**, as highlighted in [Figure 4.12](#).

Task/Events	Task/Event Description	Activate/dea...	Details
TS 76307975	Review and Close Remediation Plan		
TS 76307989	Enter Details for CAPA Plan		
TS 76307990	Review CAPA Plan Details		
TS 76307991	Rework CAPA Plan		
TS 76307993	Perform Corrective action		
TS 76307994	Perform Preventive action		
TS 76307995	Approve CAPA Execution		
TS 76307996	Rework CAPA Execution		
TS 76307997	CAPA Plan Cancelled - Close Issue		
TS 76308063	Display Data Sheet		
TS 76308091	Review Due Date Change		
TS 76507942	Get Issues Present Flag		
TS 76507943	Create Manual Control Performance		
TS 76507944	Perform Manual Control Performance		
TS 76507945	Rework Manual Control Performance		
TS 76507946	Review Manual Control Performance		
WS 75900001	TaskPlan		
WS 75900002	Process: Remediation Plan		
WS 75900003	Process: Issue		
WS 75900004	Process: Assessment		
WS 75900005	Process: Testlog		
WS 75900006	Process: Testing		
WS 75900007	Process: Signoff		
WS 75900008	Display Report		
WS 75900014	PROCESS: ADD		
WS 76300012	Process: CAPA Plan		
WS 76300018	Disclosure survey		
CL_GRP_C_WF_DISCSVY-CREATE	CL Business Object of Disclosure SuCreate W	Activated	
WS 76300030	Process: Propose Control		

**Figure 4.12** Activated Status of the Workflow Stage

## Note

Repeat the same steps for all the workflow items that start with **WS**, and ensure that all of these tasks are activated.

## 4.2.2 Entity Role Assignment

SAP Process Control serves as a solution to address the compliance needs of an organization. Given its role in managing internal controls, it's vital to establish clear responsibilities across different master data entities, such as the organization, subprocess, and control levels. This ensures that specific users are held accountable in the event of any anomalies. Additionally, there are various workflow-based test procedures that are executed using SAP Process Control.

To facilitate this process, specific roles are assigned at each master data entity. These roles determine which users are designated to receive the associated workflows.

Before assigning users to a master data element, it's necessary to identify and link the Transaction PFCG roles that should exist within each of the master data entities. Once these Transaction PFCG roles are associated with the respective entities, they become accessible in the **Roles** section of the entities in the frontend, allowing you to perform the user assignments.

To review the existing entity role assignments or to perform new assignments access, follow these steps:

1. Log in to the SAP Process Control system.
2. Execute Transaction SPRO\_ADMIN.
3. Click the **SAP Reference IMG** button, and follow menu path **Governance, Risk and Compliance • General Settings • Authorizations • Maintain Entity Role Assignment**. The **Relevant Roles for GRC Authorization** screen will display the existing entities and the roles assigned, as shown in [Figure 4.13](#).

**Change View "Relevant Roles for GRC Authorization": Overview**

New Entries

Entity	Role	Unique	Application
CORPORATE	SAP_GRC_SPC_GL..	<input type="checkbox"/>	Process Control
CORPORATE	SAP_GRC_SPC_GL..	<input type="checkbox"/>	Process Control
CORPORATE	SAP_GRC_SPC_GL..	<input type="checkbox"/>	Process Control
CORPORATE	SAP_GRC_SPC_SO..	<input type="checkbox"/>	Process Control
G_AI	SAP_GRC_FM_ADI..	<input checked="" type="checkbox"/>	Process Control and Risk Ma..
OFF	SAP_GRC_RM_API..	<input type="checkbox"/>	Process Control and Risk Ma..
ORGUNIT	SAP_GRC_RM_API..	<input type="checkbox"/>	Process Control and Risk Ma..
ORGUNIT	SAP_GRC_RM_API..	<input type="checkbox"/>	Process Control and Risk Ma..
ORGUNIT	SAP_GRC_RM_API..	<input type="checkbox"/>	Process Control and Risk Ma..
ORGUNIT	SAP_GRC_SPC_CR..	<input type="checkbox"/>	Process Control
ORGUNIT	SAP_GRC_SPC_CR..	<input type="checkbox"/>	Process Control and Risk Ma..

**Figure 4.13** Entity Role Assignment Configuration

4. To create a new assignment, click the **New Entries** button, and update the following fields, as shown in [Figure 4.14](#):

- **Entity:** Name of the master data entity for which the role should be assigned. For SAP Process Control, this configuration is performed for the following entities:
  - **CORPORATE**
  - **ORGANIZATION**
  - **SUBPROCESS**
  - **CONTROL**
  - **POLICY**
- **Role:** Transaction PFCG role that should be tagged to the entity.
- **Unique:** Activate this if only one user can be mapped to the role. For example, the CEO/CFO role SAP\_GRC\_RM\_API\_CEO\_CFO is marked as unique for the **CORPORATE** entity.
- **Application:** Because this configuration is common for both SAP Process Control and SAP Risk Management, it's important to mention if the entity role assignment is specific to SAP Process Control, SAP Risk Management, or both SAP Process Control and SAP Risk Management.

**Change View "Relevant Roles for GRC Authorization": Overview**

New Entries

Entity	Role	Unique	Application
CONTROL	SAP_GRC_SPC_CRS_ISSUE_A..	<input type="checkbox"/>	Process Control and Risk :
CONTROL	SAP_GRC_SPC_CRS_PRC_TES..	<input type="checkbox"/>	Process Control
CONTROL	SAP_GRC_SPC_CTL_OPERATOR	<input type="checkbox"/>	Process Control
CONTROL	2_SAP_GRC_SPC_CRS_REM_O..	<input type="checkbox"/>	Process Control and Risk :
CORPORATE	SAP_GRC_RM_API_CENTRAL..	<input type="checkbox"/>	Process Control and Risk :
CORPORATE	SAP_GRC_RM_API_CEO_CFO	<input checked="" type="checkbox"/>	Process Control and Risk :
CORPORATE	SAP_GRC_RM_API_INTERNAL..	<input type="checkbox"/>	Process Control and Risk :

**Figure 4.14** Relevant Role for SAP GRC Authorization

5. Click **Save** to save the changes.

### Note

If an entity-role assignment is marked as **Unique**, the user assignment in the frontend will allow only one user. Once the role is assigned to one user, the **Assign** option (button) is grayed out, as highlighted in [Figure 4.15](#). Upon removal of the assignment from the existing user, the **Assign** button will become active.

The screenshot shows the 'Roles' tab for the organization 'Electric Power'. The table lists the following role assignment:

Role	Regulation	Name	User	Valid From	Valid To
CEO/CFO		BGUSER	BGUSER	20.09.2023	31.12.9999
Central Risk Manager					

**Figure 4.15** User Assignment When a Role Is Marked as Unique

Upon successfully configuring the new entity-role assignment, it will become visible within the corresponding master data entity in the frontend. For instance, the **Control Owner** role can be found in the **Roles** tab of the local control. To access it, follow these steps:

1. Select the organization from the hierarchy in the **Master Data** work center.
2. Navigate to and expand the **Subprocess** tab within the selected organization.
3. Select the specific control within the subprocess and click on **Open**.
4. Navigate to the **Roles** tab to locate the role that has been previously mapped, as highlighted in [Figure 4.16](#).

The screenshot shows the 'Roles' tab for the control 'Global Accounting Manual'. The table lists the following role assignment:

Role	Regulation	Name	User	Valid From	Valid To
Cross Regulation Control Owner					
Cross Regulation Control Performer					

**Figure 4.16** Review the New Entity-Role Assignment

### 4.2.3 Custom Agent Determination

All the functionalities in SAP Process Control are workflow driven, and there are multiple stages involved in executing these functionalities. Each stage is represented by a business event, and it's important to determine who should be the recipient of the workflow for each of these business events. As previously mentioned, each functionality within SAP Process Control relies on workflow tasks. To enhance comprehension, you'll need to provide detailed information on the determination rules that need to be configured to generate the workflow stages for various business events, as follows:

- Control design assessment
- Control self-assessment
- Manual control performance
- Manual test of effectiveness
- Ad hoc issues
- Automated monitoring
- Policy lifecycle management
- Disclosure survey
- Sign-off

- Master data changes

The following sections outline the agent determination rules for each of these business events. Note that the roles mentioned are for representation purposes only and can be updated based on the requirements of the organization. First, however, we'll discuss how to maintain the determination of agents for business events.

### Configuration Overview

The next configuration step is determination of agents for each business event. To perform this configuration, follow these steps:

1. Log in to the SAP Process Control system.
2. Execute Transaction SPRO\_ADMIN.
3. Click the **SAP Reference IMG** button, and follow menu path **Governance, Risk and Compliance • General Settings • Workflow • Maintain Custom Agent Determination Rules**.
4. Click **New Entries** to create a new agent determination rule.

The **Business Event**, **Sort**, **Role**, **Entity ID**, **Subentity**, and **Business Event Name** must be updated. See [Figure 4.17](#) and [Table 4.2](#) for details on each of the fields in the **Customized Business Events** screen.



**Figure 4.17** Customized Business Events Screen Elements

Field	Description
<b>Business Event</b>	Represents each stage in a workflow. Every SAP Process Control functionality has multiple stages in completing the assessment workflows, and each stage in the workflow is represented by a business event.
<b>Sort</b>	Represents the sequence in which the system should identify the agent rules. This sequence outlines how the system determines which agent rules to apply. For instance, consider the scenario where the first default processor for an ad hoc issue is the issue owner, and the second processor is the control owner. When an ad hoc issue is reported for a control, the system follows this sequence: Initially, it searches for the user assigned as the issue owner for the control. If no user is assigned as the issue owner role to the control, the system then looks for the user assigned as the control owner. It's important to note that if the sort number isn't defined, the system considers it to be 0.
<b>Role</b>	Represents the Transaction PFCG role that should be mapped to the business event. Note that the roles mapped in custom agent determination rules should be the same as the roles mapped in the entity role assignment.

Field	Description
<b>Entity</b>	Represents the master data entity, issue, or remediation plan of the stage where the business event is getting generated.
<b>Subentity</b>	Helps in determining the functionality for which the business event is getting generated if the entity is shared across multiple functionalities of SAP Process Control.
<b>Business Event Name</b>	Briefly describes the business event for which the workflow is triggered.

**Table 4.2** Details of Customized Business Events Screen Elements

Once these details are provided, click **Save** to complete the configuration.

### Control Design Assessment

[Table 4.3](#) shows the agent determination rules that are to be defined for control design assessment. See [Chapter 6, Section 6.2](#), to read more about control design assessment and the workflow stages involved. The following events occur in the control design assessment:

1. Receive the design assessment
2. Review the design assessment
3. Receive the issue generated from the design assessment
4. Receive a remediation plan to fix the issue identified in the design assessment

Business Event	Sort	Role	Entity	Subentity	Business Event
<b>OPC_PERF_ASSESSMENT</b>	<b>1</b>	SAP_GRC_SPC_CRS_CTL_OWNER (Control Owner)	<b>G_AS</b> (Assessment)	<b>CD</b> (Control Design Assessment)	Performance Assessment
<b>OPC_VALI_ASSESSMENT</b>	<b>1</b>	SAP_GRC_SPC_CTL_REVIEWER (Test Reviewer)	<b>G_AS</b> (Assessment)	<b>CD</b> (Control Design Assessment)	Validation Assessment
<b>OPC_RECE_ISSUE</b>	<b>1</b>	SAP_GRC_SPC_ISS_OWNER (Issue Owner)	<b>G_AS</b> (Assessment)	<b>CD</b> (Control Design Assessment)	Issue Received
<b>OPC_RECE_REM_PLAN</b>	<b>1</b>	SAP_GRC_SPC_REM_OWNER (Remediation Owner)	<b>G_IS</b> (Issue)	<b>CD</b> (Control Design Assessment)	Remediation Plan Received

**Table 4.3** Custom Agent Determination Rules for Control Design Assessment

### Control Self-Assessment

[Table 4.4](#) shows the agent determination rules that are to be defined for control self-assessment along with the stages involved. See [Chapter 6, Section 6.3](#), to understand more about control self-assessment and the workflow stages involved. The following events are involved in the control self-assessment:

1. Receive the self-assessment
2. Review the self-assessment
3. Receive the issue generated from the self-assessment
4. Receive the remediation plan to fix the issue identified in the self-assessment

Business Event	Sort	Role	Entity	Subentity	B
OPC_PERF_ASSESSMENT	1	SAP_GRC_SPC_CRS_CTL_TESTER (Control Tester)	G_AS (Assessment)	CE (Control Self-Assessment)	P
OPC_VALI_ASSESSMENT	1	SAP_GRC_SPC_CTL_REVIEWER (Test Reviewer)	G_AS (Assessment)	CE (Control Self-Assessment)	R
OPC_RECE_ISSUE	1	SAP_GRC_SPC_ISS_OWNER (Issue Owner)	G_AS (Assessment)	CE (Control Self-Assessment)	R
OPC_RECE_REM_PLAN	1	SAP_GRC_SPC_REM_OWNER (Remediation Owner)	G_IS (Issue)	CE (Control Self-Assessment)	R

**Table 4.4** Custom Agent Determination Rules for Control Self-Assessment

### Manual Control Performance

[Table 4.5](#) shows the agent determination rules that are to be defined for manual control performance. The roles mentioned are for representation purposes and can be updated based on the requirements of the organization. See [Chapter 6, Section 6.4](#), to understand more about manual control performance. The following events are involved in the manual control performance:

1. Perform manual control performance (used only when configuration for stage performers isn't enabled)
2. Review manual control performance

Business Event	Sort	Role	Entity	Subentity	Business Event Name
OPC_PERF_CTRL_PERF	1	SAP_GRC_SPC_CRS_CTL_PERFORMER (Control Performer)	CONTROL	NA	Perform manual control performance
OPC_VALI_CTRL_PERF	1	SAP_GRC_SPC_CRS_SPC_OWNER (Subprocess Owner)	CONTROL	NA	Review manual control performance

**Table 4.5** Custom Agent Determination Rules for Manual Control Performance

### Note

Issue reported as part of manual control performance and following the remediation stage follows the ad hoc issue management workflow.

## Manual Test of Effectiveness

[Table 4.6](#) shows the agent determination rules that are to be defined for the manual test of effectiveness. See [Chapter 6, Section 6.5](#), to understand more about the manual test of effectiveness and the workflow stages involved. The following events are involved in the manual test of effectiveness:

1. Perform testing
2. Review testing
3. Receive the issue generated from manual control testing
4. Receive a remediation plan to fix the issue identified in manual control testing

Business Event	Sort	Role	Entity	Subentity	Business Event Name
OPC_PERF_TESTING	1	SAP_GRC_SPC_CRS_PRC_TESTER (Control Tester)	G_TL (Test Log)	TE (Log for Manual Test of Effectiveness)	Perform testing
OPC_VALI_TESTING	1	SAP_GRC_SPC_CTL_REVIEWER (Test Reviewer)	G_TL (Test Log)	TE (Log for Manual Test of Effectiveness)	Review testing

Business Event	Sort	Role	Entity	Subentity	Business Event Name
OPC_RECE_ISSUE	1	SAP_GRC_SPC_ISS_OWNER (Issue Owner)	G_TL (Test Log)	TE (Log for Manual Test of Effectiveness)	Receive issue
OPC_RECE_REM_PLAN	1	SAP_GRC_SPC_REM_OWNER (Remediation Owner)	G_IS (Issue)	TE (Log for Manual Test of Effectiveness)	Receive remediation plans

**Table 4.6** Custom Agent Determination Rules for Manual Test of Effectiveness

### Ad Hoc Issues

[Table 4.7](#) shows the agent determination rules that are to be defined for ad hoc issue management when they are reported for various master data entities/objects. See [Chapter 7](#) to understand more about ad hoc issue management and the workflow stages involved.

Business Event	Sort	Role	Entity	Subentity
OFN_AHISSUE_DEFAULT_PRC	1	SAP_GRC_SPC_CRS_CTL_OWNER (Control Owner)	CONTROL	-
OFN_AHISSUE_DEFAULT_PRC	1	SAP_GRC_SPC_CRS_ICMAN (Internal Control Manager)	CORPORATE	-
OFN_AHISSUE_DEFAULT_PRC	1	SAP_GRC_SPC_GLOBAL_ORG_OWNER (Organization Owner)	ORGUNIT	-
OFN_AHISSUE_DEFAULT_PRC	1	SAP_GRC_SPC_CRS_SPR_OWNER (Subprocess Owner)	SUBPROCESS	-

Business Event	Sort	Role	Entity	Subentity
OFN_AHISSUE_DEFAULT_PRC	1	SAP_GRC_SPC_CRS_POLICY_OWNER (Policy Owner)	POLICY	-

**Table 4.7** Custom Agent Determination Rules for Ad Hoc Issue Processing

## Automated Monitoring

[Table 4.8](#) shows the agent determination rules that are to be defined for automated monitoring. See [Chapter 8](#) to understand more about continuous monitoring of automated controls and the workflow stages involved. The following events are involved in automated monitoring:

1. Receive the issue
2. Receive the remediation plan

Business Event	Sort	Role	Entity	Subentity	Business Event Name
OPC_RECE_ISSUE	1	SAP_GRC_SPC_ISS_OWNER (Issue Owner)	G_IS	MO	Receive issue
OPC_RECE_REM_PLAN	1	SAP_GRC_SPC_REM_OWNER (Remediation Owner)	G_IS	MO	Receive remediation plans

**Table 4.8** Custom Agent Determination Rules for Automated Monitoring

## Policy Lifecycle Management

[Table 4.9](#) shows the agent determination rules that are to be defined for policy lifecycle management. See [Chapter 9, Section 9.1](#), to understand more about policy lifecycle management and the workflow stages involved. The following events are involved in policy lifecycle management:

1. Review policy
2. Approve policy

Business Event	Sort	Role	Entity	Subentity	Business Event Name
OFN_POLICY_REVIEW	1	SAP_GRC_SPC_CRS_PLC_REVIEW (Policy Reviewer)	POLICY	-	Review policy
OFN_POLICY_APPROVE	1	SAP_GRC_SPC_CRS_PLC_APPR (Policy Approver)	POLICY	-	Approve policy

**Table 4.9** Custom Agent Determination Rules for Policy Management

### Disclosure Survey

[Table 4.10](#) shows the agent determination rules that are to be defined for the disclosure survey. See [Chapter 9, Section 9.2](#), to understand more about the disclosure survey and the levels of master data entities at which the disclosure survey is triggered. The following events are involved in the disclosure survey:

1. Perform the disclosure survey
2. Review the disclosure survey

#### Note

Issues reported as part of the disclosure survey and following the remediation stage follow the ad hoc issue management workflow.

Business Event	Sort	Role	Entity	Subentity	Business Event Name
OPC_PERF_DISCSVY	1	SAP_GRC_SPC_GLOBAL_ORG_OWNER (Organization Owner)	ORGUNIT (Organization)	-	Perform the disclosure survey
OPC_PERF_DISCSVY	1	SAP_GRC_SPC_CRG_SPR_OWNER (Subprocess Owner)	SUBPROCESS	-	Perform the disclosure survey
OPC_PERF_DISCSVY	1	SAP_GRC_SPC_CRG_CTL_OWNER (Control Owner)	CONTROL	-	Perform the disclosure survey
OPC_REVIEW_DISCSVY	1	SAP_GRC_SPC_CRG_ICMAN (Internal Control Manager)	ORGUNIT (Organization)	-	Review the disclosure survey
OPC_REVIEW_DISCSVY	1	SAP_GRC_SPC_CRG_ICMAN (Internal Control Manager)	SUBPROCESS	-	Review the disclosure survey
OPC_REVIEW_DISCSVY	1	SAP_GRC_SPC_CRG_ICMAN (Internal Control Manager)	CONTROL	-	Review the disclosure survey

**Table 4.10** Custom Agent Determination Rules for Disclosure Survey

### Sign-Off

[Table 4.11](#) shows the agent determination rules that are to be defined for sign-off, which is performed at the organization level first and then finally at the corporate level. See

[Chapter 9, Section 9.3](#), to understand more about the sign-off functionality, its relevance, and the levels at which the sign-off is performed.

Business Event	Sort	Role	Entity	Sub
OPC_PERF_SIGNOFF	1	SAP_GRC_SPC_GLOBAL_ORG_OWNER (Organization Owner)	ORGUNIT (Organization)	-
OPC_PERF_SIGNOFF	1	SAP_GRC_SPC_GLOBAL_CEO_CFO (CEO/CFO)	CORPORATE	-

**Table 4.11** Custom Agent Determination Rules for the Sign-Off Functionality

### Master Data Changes

[Table 4.12](#) shows the agent determination rules that are to be defined for triggering approval workflow for changes in relevant master data entities or to notify the designated user for any change made to the respective master data element. See [Section 4.3.2](#) to understand more about the requirement of having approval workflow for master data changes and how to activate the approval and notification features for the same.

Business Event	Sort	Role	Entity	Subentity	Business Event Name
OFN_MDCHG_APPR	1	SAP_GRC_RM_API_ORG_OWNER	CONTROL	-	Get master data change approval who is the change author of the object
OFN_MDCHG_APPR	1	SAP_GRC_RM_API_ORG_OWNER	SUBPROCESS	-	Get master data change approval who is the change author of the object

Business Event	Sort	Role	Entity	Subentity	Business Event Name
OFN_MDCHG_APPR	1	SAP_GRC_SPC_GLOBAL_ORG_ADMIN	ORGUNIT	-	Get master data change approval who is the change author of the object
OFN_MDCHG_NOTIFY	1	SAP_GRC_RM_API_ORG_OWNER	CONTROL	-	Get notification person who is the display author of the object
OFN_MDCHG_NOTIFY	1	SAP_GRC_RM_API_ORG_OWNER	SUBPROCESS	-	Get notification person who is the display author of the object
OFN_MDCHG_NOTIFY	1	SAP_GRC_SPC_GLOBAL_ORG_ADMIN	ORGUNIT	-	Get notification person who is the display author of the object

**Table 4.12** Custom Agent Determination Rules for Master Data Change Approval Workflow

Upon completing the workflow for master data elements, you can see the workflow for various business units, as highlighted in [Figure 4.18](#).

Business Event	Sort	Role	Entry ID	Subentry	Business Event Name
OTH_AISSUE_DE..1		SAP_GRC_SPC_CRS_CTL_OWNER	CONTROL		Default processor for ad-hoc issue
OTH_AISSUE_DE..1		SAP_GRC_SPC_CRS_ICMAN	CORPORATE		Default processor for ad-hoc issue
OTH_AISSUE_DE..1		SAP_GRC_SPC_CRS_POLICY_OWNER	POLICY		Default processor for ad-hoc issue
OTH_AISSUE_DE..1		SAP_GRC_SPC_CRS_PROC_OWNER	PROCESS		Default processor for ad-hoc issue
OTH_AISSUE_DE..1		SAP_GRC_SPC_CRS_SFP_OWNER	SUBPROCESS		Default processor for ad-hoc issue
OTH_AISSUE_DE..1		SAP_GRC_SPC_GLOBAL_ORG_OWNER	ORGUNIT		Default processor for ad-hoc issue
OTH_AISSUE_DE..1		SAP_GRC_SPC_GLOBAL_REG_ADMIN	REGULATION		Default processor for ad-hoc issue
OTH_AISSUE_DE..2		SAP_GRC_SPC_GLOBAL_ORG_OWNER	CONTROL		Default processor for ad-hoc issue
OTH_AM_BSPF_NO..1		SAP_GRC_SPC_CRS_CTL_OWNER	CONTROL		BRF plus notification
OTH_AM_BSPF_NO..1		SAP_GRC_SPC_ITA_CTL_OWNER	CONTROL		BRF plus notification
OTH_AM_BSPF_NO..1		SAP_GRC_SPC_SOX_CTL_OWNER	CONTROL		BRF plus notification
OTH_ISSUE_NOTI..1		SAP_GRC_SPC_CRS_CTL_OWNER	CONTROL		Send notification to object owner

**Figure 4.18** Screen with All the Custom Agent Determination Rules

## 4.2.4 Fallback Users

As explained in the previous section, workflows are triggered to users based on agent determination rules. If the agent assignment for a specific role isn't performed, the system will look for a fallback receiver (referred to as a fallback user) before ending it with an error. Fallback users can be defined at the system level. Navigate to Transaction SPRO to review the user IDs maintained as current fallback users, to add a new fallback user, or to remove a current fallback user by following these steps:

1. Log in to the SAP Process Control system.
2. Execute Transaction SPRO\_ADMIN.
3. Click the **SAP Reference IMG** button.
4. Follow menu path **Governance, Risk and Compliance • General Settings • Maintain Fallback Receiver**.
5. To add a new fallback user, click the **New Entries** button, and select the new ID in the **User** field, as shown in [Figure 4.19](#).

Fallback Recipient of Work Items	
User	
GARTHINA	
SANDEEPL	
SUBBRANSHU	

**Figure 4.19** Review Fallback Users Maintained for the System

### Important

Note that the user assigned as a fallback ID for the system should have the required authorizations to receive and perform the activity. It's always recommended to provide fallback users with wider access or with access to the power user (role: SAP\_GRC\_FN\_ALL).

Additionally, multiple user IDs can be maintained as fallback users, and the workflow will be triggered to all those users.

## **4.3 Shared Master Data Settings**

Shared master data settings in SAP Process Control typically refers to the configuration and management of master data that can be shared across multiple organizational units or entities within an organization. Master data in SAP Process Control includes information about controls, risks, regulations, and other data elements that are essential for managing internal controls and compliance.

This section details the following activities:

- Configuring a new root organization hierarchy, which is a crucial step for establishing a new corporate structure
- Configuring workflow settings to manage master data changes efficiently
- Enabling the essential functionality of defining a local control directly within the system

### **4.3.1 Create a Root Organization Hierarchy**

During the initial configuration, or when there is a need to introduce a new entity structure, it's essential to perform the configuration of the root organization. This configuration involves setting up both the corporate organization and its immediate child organization. Follow the steps detailed here:

1. Log in to the SAP Process Control system.
2. Execute Transaction SPRO\_ADMIN.

3. Click the **SAP Reference IMG** button.
4. Follow menu path **Governance, Risk and Compliance**
  - **Shared Master Data Settings**
  - **Create Root Organization Hierarchy.**
5. In the **Select the Organization View** field, use **002** (if the organization is using only the standard hierarchy). If there are any custom organization views created, select the specific view under which the root has to be created, as shown in [Figure 4.20](#).
6. Enter the **Root Organizational Unit**, which is the name of the corporation (top most organization in the hierarchy).
7. Enter the **Child Organizational Unit**, which is the first child organization under the corporation.
8. Enter **Valid From**, which is the date from which the organization is valid.
9. Click **Execute**.

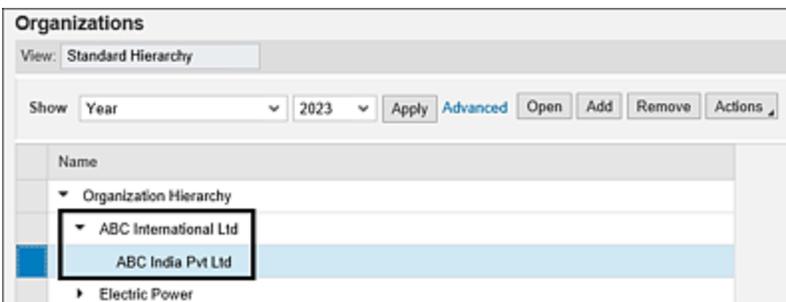


Create Root Organizations	
Select the Organization View	002
Details	
Root Organizational Unit	ABC International Ltd
Child Organizational Unit	ABC India Pvt Ltd
Valid From	01.01.2023

**Figure 4.20** Configuration of the Root Organization

Once the root organization is configured, the same can be accessed from the frontend in the organizations work item. To review the newly created organization hierarchy, follow these steps:

1. Log in to the SAP GRC system.
2. Execute Transaction NWBC.
3. Navigate to the **Master Data** work center.
4. Under the **Organizations** work group, click the **Organizations** work item.
5. Review the newly created corporation and child organization from the hierarchy as detailed in [Figure 4.21](#).



**Figure 4.21** Organization View from the Organization Work Item

## Note

More child organizations can be created from SAP Business Client. Use the other options to set up the organization further.

### 4.3.2 Activate the Workflow for Master Data Changes

To meet various compliance requirements, it's crucial to ensure that the organization's master data entities consistently align with its policies. SAP offers standard

reports such as Audit Log and Change Analysis to track any changes made to these entities.

However, relying solely on these reports for validation is a reactive approach. To enhance the effectiveness of master data maintenance and have better control over changes, enabling an approval workflow for the master data changes is recommended. Refer to [Section 4.2.3](#) to understand the rules that must be defined to trigger the approval workflow or the notification workflow for master data changes.

With respect to having control of the master data changes made, SAP Process Control provides flexibility by enabling approvals/notifications to the designated users, which can be done at a specific master data entity instead of having the same at the system level. Following are the master data entities for which the workflow can be enabled:

- Organization
- Process
- Subprocess (central or local)
- Control (central or local)
- Account group
- Control objectives
- Risk template
- Indirect entity level controls (central or local)

There are two ways in which workflows can be enabled for master data changes:

- **Approval**

Any required change to the master data has to be

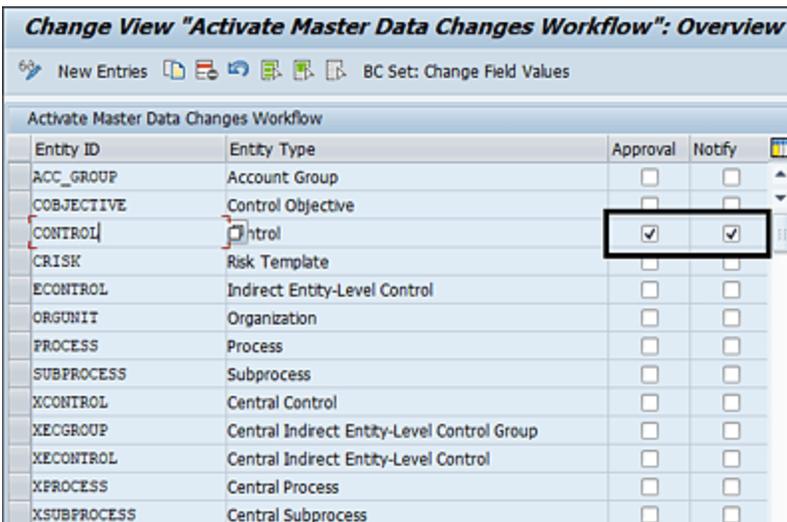
requested and approved by an authorized user before the change can be made.

- **Notify**

This will notify the authorized user about the change made to the respective master data entity. No specific approval is required to make the change if only this configuration is enabled.

[Figure 4.22](#) shows the various master data entities for which approval/notify workflow can be enabled from the Transaction SPRO configuration. Follow these steps:

1. Log in to the SAP Process Control system.
2. Execute Transaction SPRO\_ADMIN.
3. Click the **SAP Reference IMG** button.
4. Follow the menu path **Governance, Risk and Compliance • Shared Master Data Settings • Activate Master Data Changes Workflow**.
5. Use the **Approval** and **Notify** checkboxes to enable.
6. Click **Save**.



The screenshot shows the SAP SPRO configuration screen for 'Activate Master Data Changes Workflow'. The table lists various master data entities with checkboxes for 'Approval' and 'Notify'.

Entity ID	Entity Type	Approval	Notify
ACC_GROUP	Account Group	<input type="checkbox"/>	<input type="checkbox"/>
OBJECTIVE	Control Objective	<input type="checkbox"/>	<input type="checkbox"/>
CONTROL	Control	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
CRISK	Risk Template	<input type="checkbox"/>	<input type="checkbox"/>
ECONTROL	Indirect Entity-Level Control	<input type="checkbox"/>	<input type="checkbox"/>
ORGUNIT	Organization	<input type="checkbox"/>	<input type="checkbox"/>
PROCESS	Process	<input type="checkbox"/>	<input type="checkbox"/>
SUBPROCESS	Subprocess	<input type="checkbox"/>	<input type="checkbox"/>
XCONTROL	Central Control	<input type="checkbox"/>	<input type="checkbox"/>
XECGROUP	Central Indirect Entity-Level Control Group	<input type="checkbox"/>	<input type="checkbox"/>
XECONTROL	Central Indirect Entity-Level Control	<input type="checkbox"/>	<input type="checkbox"/>
XPROCESS	Central Process	<input type="checkbox"/>	<input type="checkbox"/>
XSUBPROCESS	Central Subprocess	<input type="checkbox"/>	<input type="checkbox"/>

**Figure 4.22** Activate Master Data Changes Workflow Configuration Screen

Details about the functionality and how the approver receives the notifications, approves the request, and so on are detailed in [Chapter 5, Section 5.6](#). In addition, refer to [Section 4.2.3](#) on master data changes to understand the workflow configurations to be performed to trigger notifications to the approvers whenever a change is requested in a master data entity.

### **4.3.3 Maintain the Ability to Add Locally Defined Controls**

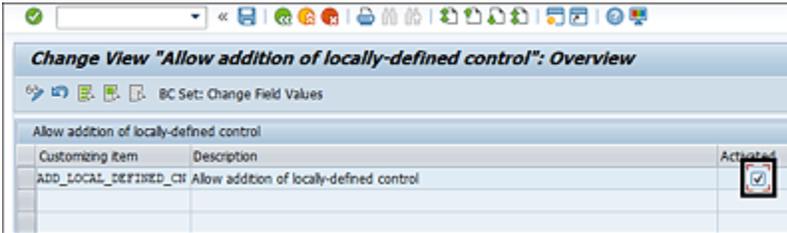
As part of master data definition, controls are defined as part of the business process hierarchy under a subprocess and then mapped to an organization or multiple organizations where the control is being operated.

[Chapter 5, Section 5.3.2](#), details more about control localization. However, if there is a specific requirement for an organization in the hierarchy to create a new control under one of the local subprocesses, it can be created directly under the organization without having been created under the business process hierarchy. To enable users to create localization controls, the customization option must be activated by following these steps:

1. Log in to the SAP Process Control system.
2. Execute Transaction SPRO\_ADMIN.
3. Click the **SAP Reference IMG** button.
4. Follow menu path **Governance, Risk and Compliance**
  - **Shared Master Data Settings** • **Maintain Ability**

## to Add Locally Defined Controls.

5. Select the **Activated** checkbox for the customizing item **ADD\_LOCAL\_DEFINED\_CN**, as highlighted in [Figure 4.23](#).



**Figure 4.23** Activate the Ability to Add Locally Defined Controls

## 4.4 Integration Framework

Continuous monitoring of automated controls is another key functionality in SAP Process Control. The automated monitoring feature fetches details from the source system where the data resides and on top of which business rules are defined to test the effectiveness of controls. [Chapter 8](#) details more about the continuous control monitoring.

Remote Function Call (RFC) connections must be defined to fetch the data from the source systems. This section outlines the detailed procedures involved in defining the connectors and mapping them to the relevant subscenarios. On a broader level, here are the activities:

- **Create Connectors**
- **Maintain Connectors and Connection Types**
- **Maintain Connection Settings**

The following subsections outline more about each of these topics along with the configuration steps.

### 4.4.1 Create Connectors

To create a new connection or review the existing connection

1. Log in to the SAP Process Control system.
2. Execute Transaction SPRO\_ADMIN.

- Click the **SAP Reference IMG** button, and follow menu path **Governance, Risk and Compliance • Common Component Settings • Integration Framework • Create Connectors**. Alternatively, administrators can use Transaction SM59.
- The **RFC Connections** screen displays all the existing RFC connections, as shown in [Figure 4.24](#).

RFC Connections	Ty...	PL...	Comment
ABAP Connections	3		
DYNAMIC_DEST_CALLBACK_WHITELIST	3	-	Callback Positive List for Dynamic Destinations
G12	3	-	
G12CLNT100	3	-	G12CLNT100
G12_WORKFLOW_000	3	-	SAP Business Workflow
G12_WORKFLOW_100	3	-	G12_WORKFLOW_100
G12_WORKFLOW_100_1	3	-	SAP Business Workflow
TGDCL100	3	-	GRC 12 TO TGD 100
TGDCL210	3	-	GRC 12 TO TGD210
TGDCL300	3	-	GRC 12 TO TGD 300
TGDCL400	3	-	GRC 12 TO TGD 400
TGDCLNT210	3	-	GRC 12 TO TGD210
TGDCLNT300	3	-	GRC 12 TO TGD 300
TGDCLNT400	3	-	TGDCLNT400

**Figure 4.24** RFC Connections

- If the RFC connection is already established, select it from the list, and click the **View** button to ensure it's set up correctly.

Alternatively, a new connection can be created by clicking the **Create** button. Enter details such as **RFC Destination**, **Connection Type**, and **Description**, as well as **Target Host** details under the **Technical Settings** tab and log in information under the **Logon & Security** tab (see [Figure 4.25](#)). Click **Save**.

**Figure 4.25** RFC Connection Definition

## Note

Click **Connection Test** to check if the connection is established. Additionally, it's recommended to perform the authorization test by choosing **Utilities • Test • Authorization Test**. Make sure both the tests are successful before moving to the next set of configurations.

## 4.4.2 Maintain Connectors and Connection Types

The next step in the configuration is to maintain connectors and connection types. This configuration is shared between SAP Access Control and SAP Process Control solutions. To perform the configuration, follow these steps:

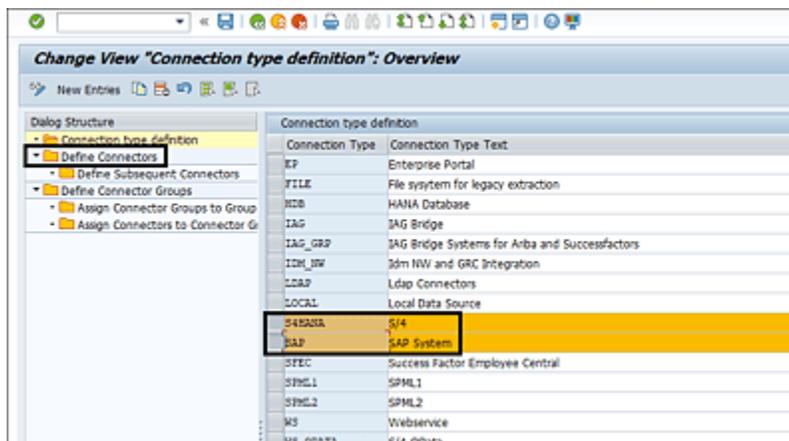
1. Log in to the SAP Process Control system.
2. Execute Transaction SPRO\_ADMIN.

3. Click the **SAP Reference IMG** button.
4. Follow menu path **Governance, Risk and Compliance • Common Component Settings • Integration Framework • Maintain Connectors and Connection Types**.

## Note

Selecting the connection types and defining the connectors are the only steps required to enable usage of connectors for the automated monitoring functionality in SAP Process Control.

5. Select the **Connection Type**, for example, **S4HANA**, **SAP**, and so on.
6. From the dialog structure, double-click **Define Connectors** to map the connectors defined in the previous section, as shown in [Figure 4.26](#).

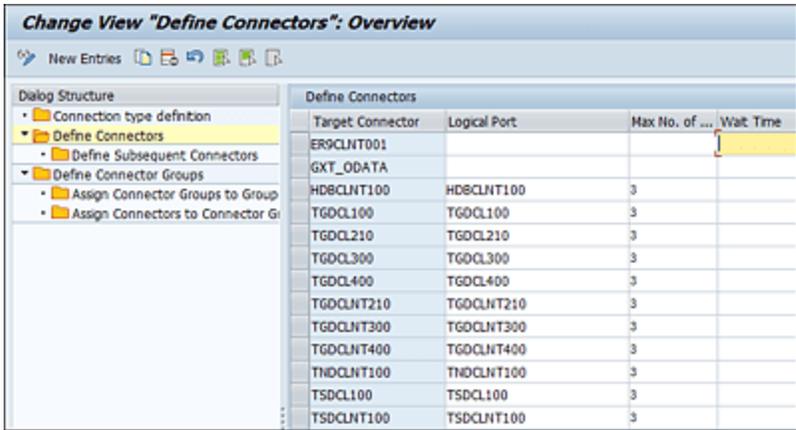


**Figure 4.26** Configuration to Define Connectors for a Connection Type

7. In the **Define Connectors** screen, shown in [Figure 4.27](#), select the RFC connector. The field mapping is as

follows:

- **Target Connector:** RFC ID of the target system defined in Transaction SM59 in the SAP Process Control system.
- **Max No. of Background WP:** Not relevant for SAP Process Control.
- **Wait Time:** Not relevant for SAP Process Control.
- **Con. Type:** Indicates the type of connection as either **S4HANA** or **SAP** (per the system).
- **Source Connector:** Specify the name of the RFC connection created in the target system connecting to the SAP Process Control system. This is a reverse RFC connection required to use the asynchronous functionality of a business rule. To understand more about the business rule definition, see [Chapter 8, Section 8.3](#).
- **Logical Port:** Not relevant for SAP Process Control.



Change View "Define Connectors": Overview			
New Entries			
Dialog Structure			
• Connection type definition			
• Define Connectors			
• Define Subsequent Connectors			
• Define Connector Groups			
• Assign Connector Groups to Group			
• Assign Connectors to Connector G			
Target Connector	Logical Port	Max No. of ...	Wait Time
ER9CLNT001			
GXT_ODATA			
HDBCLNT100	HDBCLNT100	3	
TGDCL100	TGDCL100	3	
TGDCL210	TGDCL210	3	
TGDCL300	TGDCL300	3	
TGDCL400	TGDCL400	3	
TGDCLNT210	TGDCLNT210	3	
TGDCLNT300	TGDCLNT300	3	
TGDCLNT400	TGDCLNT400	3	
TNDCLNT100	TNDCLNT100	3	
TSDCL100	TSDCL100	3	
TSDCLNT100	TSDCLNT100	3	

**Figure 4.27** Define Connectors Configuration

8. Click the **Save** button to save the changes.

Once the connectors and connection types are configured, move to maintaining connection settings as outlined in the next section.

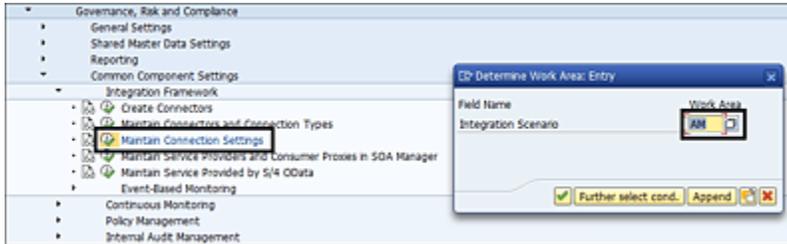
### 4.4.3 Maintain Connection Settings

There are different mechanisms by which the data can be fetched from the target system while defining a data source, referred to as integration scenarios. Each such method is called a subscenario in automated monitoring. To understand more about such subscenarios, see [Chapter 8, Section 8.2.1](#).

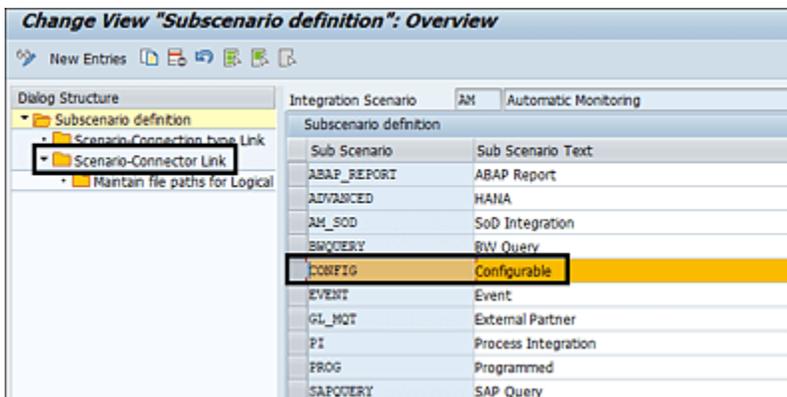
It's important to tag the RFC connection defined in [Section 4.4.1](#) to each of these subscenarios using the Transaction SPRO configuration. Follow these steps:

1. Log in to the SAP Process Control system.
2. Execute Transaction SPRO\_ADMIN.
3. Click the **SAP Reference IMG** button.
4. Follow menu path **Governance, Risk and Compliance • Common Component Settings • Integration Framework • Maintain Connection Settings**.
5. Select the **AM Work Area** in the **Integration Scenario** field of the popup screen.
6. Click **Execute** to start mapping the RFCs to the subscenarios, as shown in [Figure 4.28](#).
7. The **Integration Scenario** screen lists the **Subscenario definition**, as outlined in [Figure 4.29](#).

- Select the line items using the checkboxes, and double-click the **Scenario-Connector Link** option from the **Dialog Structure**.

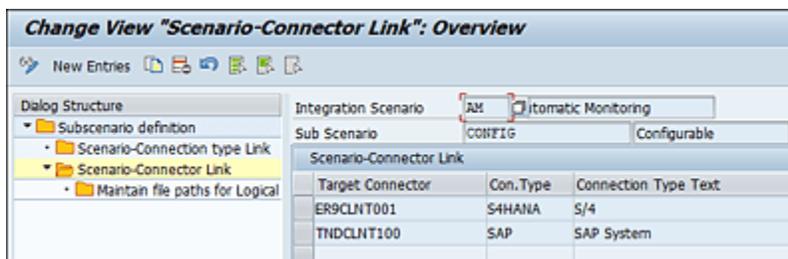


**Figure 4.28** Access the Integration Scenario



**Figure 4.29** Access the Subscenario under Integration Scenario

- Click **New Entries**, add the RFC connectors created in the previous step, and click Save, as shown in [Figure 4.30](#).



**Figure 4.30** Assigning RFC Connections to Subscenarios

Once the mapping is performed, the connection-specific configuration is completed. You may repeat the same steps

if additional connectors need to be added at a later stage.

## 4.5 Multiple Compliance Framework

Regulations play a crucial role in SAP Process Control when it comes to defining master data or in performing any type of assessment. This section explains the process of defining the configurations required to be performed in the Transaction SPRO configuration before a user can define a regulation in the **Master Data** section in SAP Business Client. See [Chapter 5, Section 5.2.2](#), to understand more about the process of defining regulation hierarchy. Following are the configurations to be performed to configure regulations:

- Define subtypes for regulation-specific attributes
- Configure compliance initiatives
- Relate regulation to plan usage

### 4.5.1 Define Subtypes for Regulation-Specific Attributes

In SAP Process Control, defining subtypes for regulation-specific attributes allows for a more tailored and precise approach to managing compliance requirements. While creating a new regulation, a subtype has to be assigned that should be defined by copying from the following standard infotypes:

- 5302: Relevance
- 5304: Control Details

- 5306: ELC Details
- 5307: Regulation Specific Flag
- 5311: Settings: Subprocess
- 5313: Settings: Organization
- 5315: Settings: Local ELC
- 5326: Test Plan
- 5337: MCF Organization Attributes
- 5338: Scope

To review the existing infotypes and standard subtypes, or to create a new subtype, follow these steps:

1. Execute Transaction SPRO\_ADMIN.
2. Click the **SAP Reference IMG** button.
3. Follow menu path **Governance, Risk and Compliance**
  - **Process Control** • **Multiple-Compliance Framework** • **Define Subtypes for Regulation Specific Attributes.**

SAP delivers standard subtypes 5000 and 5100, with the required infotype mapping mentioned earlier, which are used for the regulation configurations of Sarbanes-Oxley (SOX) and Food & Drug Administration (FDA), respectively. [Figure 4.31](#) shows the various infotypes.

**Change View "Subtypes": Overview**

New Entries

Dialog Structure

- Subtypes
  - Time constraint

Infotyp.	Infotype Name	Subtyp	Subtype text
5302	Relevance	5000	SOX
5302	Relevance	5100	FDA
5302	Relevance	9001	Companies Act
5302	Relevance	9010	Sarbanes Oxley Reg
5304	Control Details	5000	SOX
5304	Control Details	5100	FDA
5304	Control Details	9001	Companies Act
5304	Control Details	9010	Sarbanes Oxley Reg
5306	Remote Risks	5000	SOX
5306	Remote Risks	5100	FDA
5306	Remote Risks	9001	Companies Act
5306	Remote Risks	9010	Sarbanes Oxley Reg
5307	Regulation specific flag	5000	SOX
5307	Regulation specific flag	5100	FDA
5307	Regulation specific flag	9001	Companies Act
5307	Regulation specific flag	9010	Sarbanes Oxley Reg
5311	Settings: Subprocess	5000	SOX
5311	Settings: Subprocess	5100	FDA
5311	Settings: Subprocess	9001	Companies Act
5311	Settings: Subprocess	9010	Sarbanes Oxley Reg
5313	Settings: Organization	5000	SOX
5313	Settings: Organization	5100	FDA

**Figure 4.31** Subtypes Configuration for Regulations

To create a new subtype, select the 10 infotypes listed at the start of the section, and click **Copy**. In the copied entries, enter a new subtype number for all the infotypes, which should be in the range of 9000 to 9999, as highlighted in [Figure 4.32](#). The name of the regulation for reference in subtype text can be updated per the requirement. Click **copy all** to also get the dependent entries for all the infotypes.

**Change View "Subtypes": Overview of Selected Set**

Dialog Structure

- Subtypes
  - Time constraint

Infotyp.	Infotype Name	Subtyp	Subtype text
5302	Relevance	9002	Companies Act
5304	Control Details	9002	Companies Act
5306	Remote Risks	9002	Companies Act
5307	Regulation specific flag	9002	Companies Act
5311	Settings: Subprocess	9002	Companies Act
5313	Settings: Organization	9002	Companies Act
5315	Settings: Local ELC	9002	Companies Act
5326	Test Plan	9002	Companies Act
5337	MCF Organization Attr.	9002	Companies Act
5338	Scope	9002	Companies Act

Specify object to be copied

Entry 1 of the entries to be copied has dependent entries.

You can copy the entry with all dependent entries, or just the entry itself.

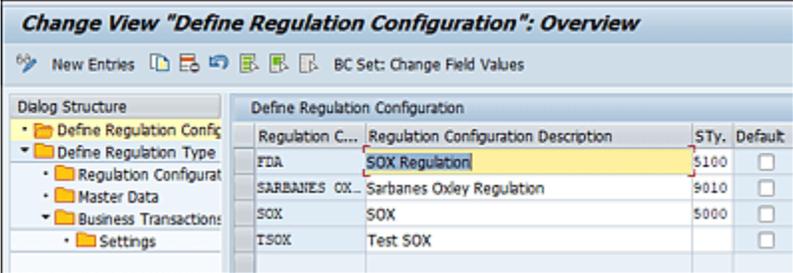
**Figure 4.32** Configuration of New Subtypes

Once the copy of dependent entries is performed for all the infotypes, click **Save** to complete the subtype configuration.

## 4.5.2 Configure Compliance Initiatives

The subtypes created in the previous section can be used to setup/configure new regulations to define the master data and the business transactions to be enabled for each of the regulation type. Steps to use them are detailed in this section. To review the existing regulation configurations or create a new one, follow these steps:

1. Execute Transaction SPRO\_ADMIN.
2. Click the **SAP Reference IMG** button.
3. Follow menu path **Governance, Risk and Compliance • Process Control • Multiple-Compliance Framework • Configure Compliance Initiatives**. The current regulation configurations are listed with the subtypes, as highlighted in [Figure 4.33](#).



The screenshot shows the SAP SPRO transaction 'Define Regulation Configuration' in 'Overview' mode. The table lists the following configurations:

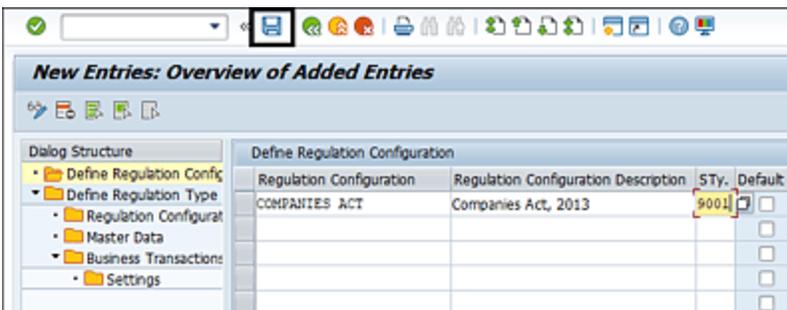
Regulation C...	Regulation Configuration Description	STY.	Default
FDA	SOX Regulation	5100	<input type="checkbox"/>
SARBANES OX...	Sarbanes Oxley Regulation	9010	<input type="checkbox"/>
SOX	SOX	5000	<input type="checkbox"/>
TSOX	Test SOX		<input type="checkbox"/>

**Figure 4.33** Review Current Regulation Configurations

4. To create a new regulation configuration, click **New Entries**, and provide the following details, as outlined in [Figure 4.34](#):

- **Regulation Configuration:** Brief name of the regulation.
- **Regulation Configuration Description:** Detailed name of the regulation.
- **STy.:** Subtype number that is created in [Section 4.5.1](#).

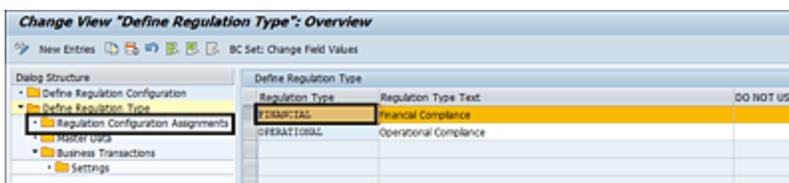
5. Once these details are provided, click **Save** to complete the configuration.



**Figure 4.34** Setting Up New Regulation Configuration

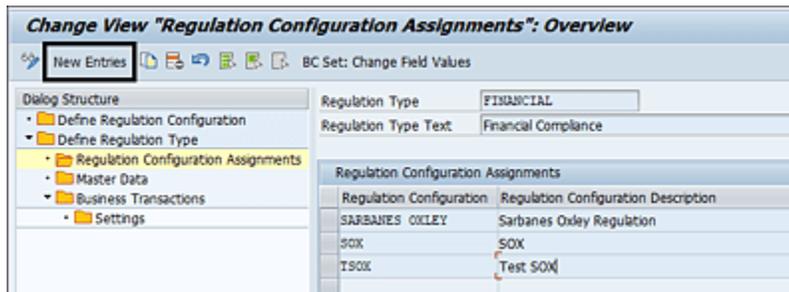
Once the regulation configuration is saved, assign it to a regulation type by following these steps:

1. Expand **Define Regulation Type** from the **Dialog Structure**.
2. Select one of the regulation types, **FINANCIAL** or **OPERATIONAL**.
3. Double-click **Regulation Configuration Assignments** from the **Dialog Structure**, as shown in [Figure 4.35](#).



**Figure 4.35** Access Regulation Type from the Configuration

- The subsequent screen shows the details of the current set of regulations assigned to the regulation type. Click **New Entries** to add a new regulation type, as highlighted in [Figure 4.36](#).



**Figure 4.36** Option to Add New Entries to the Regulation Type

- Select the regulation configuration from the search option.
- Click **Save** to complete the regulation assignment to the regulation type.

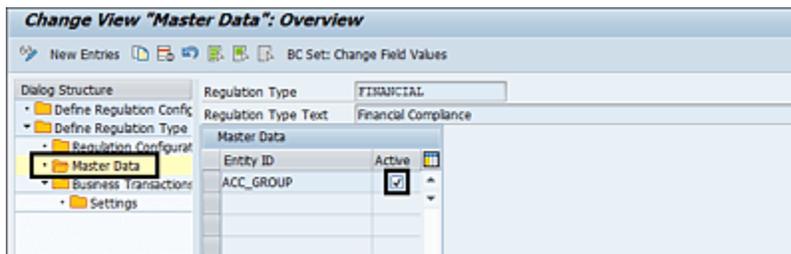
Regulations drive the applicability of few key features such as account groups, aggregation of deficiencies, corrective action and preventive action (CAPA), and sign-off at the organization level in SAP Process Control. Applicability of these features are maintained at the regulation type level. Once the regulation assignment is completed, as shown in [Figure 4.36](#), all the configurations that are performed for the regulation type are extended to the new regulation configuration.

Following are the two key configurations performed for the regulation type:

- **Master Data**

The account group is a key functionality in SAP Process Control, and the work center to maintain account groups

is enabled only if this configuration is enabled for at least one of the regulation types and regulations, which is explained more in detail in [Chapter 5, Section 5.2.2](#). [Figure 4.37](#) shows the master data configuration for a regulation type.



**Figure 4.37** Activation of the Account Group Work Center for a Regulation Type

- **Business Transactions**

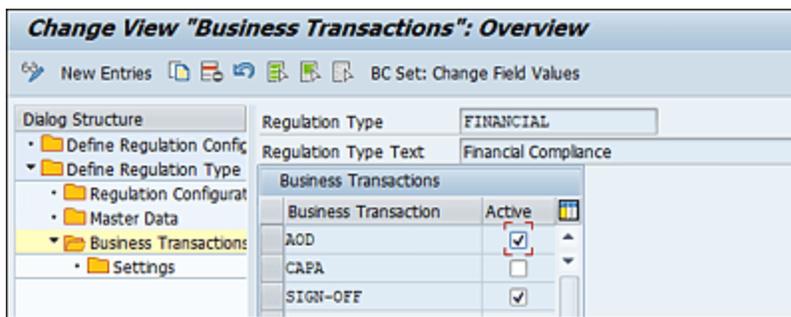
Following are the three configurations that can be enabled at a regulation level. These functionalities can be used only if they are enabled for the regulation against which the assessments are being performed.

- **AOD**: Aggregation of deficiencies is a functionality used to provide a consolidated view to management about the deficiencies identified in the controls in the scope of the organization complying with a specific regulation. Enable this checkbox to activate the **Aggregation of Deficiencies** field on the **General** tab of the organization. Refer to Table 5.4 in [Chapter 5](#) to understand more about the fields available on the **General** tab.
- **CAPA**: The corrective action and preventive action (CAPA) plan is an alternative and more robust methodology of the issue remediation process. If a CAPA is enabled for a regulation and if an issue is

identified as part of any control assessment, the issue owner has to define the root cause for the issue, corrective action plan, an owner to implement the corrective action, and then a preventive action plan and an owner to implement the preventive action. If this checkbox is enabled, the issue owner will have an option to assign a CAPA plan instead of assigning a remediation plan as part of the issue remediation process.

- **SIGN-OFF:** This is a process of obtaining attestation from top management of an organization level about the master data in scope, assessments performed, issues reported, and the respective remediation plans initiated to fix the issues. Enable this checkbox to activate the **Sign-Off** field on the **General** tab of the organization. See [Chapter 9, Section 9.3](#), to learn more about the sign-off functionality.

See [Figure 4.38](#) to review the current business transactions configuration or to maintain the same.



**Figure 4.38** Business Transactions Configuration for a Regulation Type

### 4.5.3 Relate Regulation to Plan Usage

The planner is a key function in SAP Process Control for initiating various assessments at different levels such as control, subprocess, or organization. [Chapter 6](#) and [Chapter 9](#) provide more detailed understanding about the assessments conducted through SAP Process Control. When using the planner to trigger these assessments, the initial step involves selecting a regulation, which acts as a filter to display only objects mapped to that regulation for selection.

Plan usage configuration in Transaction SPRO details which SAP Process Control plan activities require regulation selection while using scheduling Planner. This configuration must be performed by following these steps:

1. Navigate to Transaction SPRO\_ADMIN.
2. Click the **SAP Reference IMG** button.
3. Follow menu path **Governance, Risk and Compliance**
  - **Common Component Settings**
  - **Planning and Scheduling**
  - **Define Plan Usage.**
4. Double-click **Plan Activity for Process Control** from the **Dialog Structure**, which shows the plan activities for SAP Process Control, and the **Need Regu** (need regulation) column indicates whether regulation is the required selection or not, as shown in [Figure 4.39](#).

**Change View "Plan Activity for Process Control": Overview**

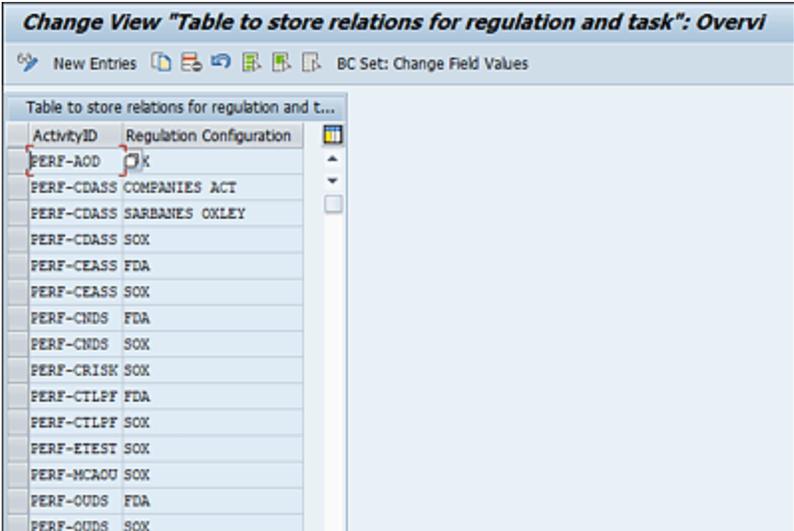
ActivityID	Org. Spec.	Share Eva	Need Surve	Is Testing	Need Obj.	Need Rptz	Need Regu	Recurring
GRC_ABSRV	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
PERF-ADD	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>				
PERF-CLASS	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
PERF-CRDS	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
PERF-CRISK	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
PERF-CTEST	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
PERF-CTEST	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
PERF-ICAGO	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
PERF-ODDS	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
PERF-RISK	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
PERF-SOPD	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
PERF-SPOS	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
PERF-TEST	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

**Figure 4.39** Review Plan Usage Configuration

If the **Need Regu** field is activated for a plan activity, it becomes mandatory to select a regulation in the planner functionality. See [Chapter 6, Section 6.2.2](#), to understand the detailed steps involved in scheduling a Planner.

In the **Select Regulation** screen of the Planner, the only regulations available in the dropdown are for the plan activity for which the mapping is performed using the **Relate Regulation to Plan Usage** configuration. To access this configuration:

1. Navigate to Transaction SPRO\_ADMIN.
2. Click the **SAP Reference IMG** button.
3. Follow menu path **Governance, Risk and Compliance • Process Control • Multiple-Compliance Framework • Relate Regulation to Plan Usage**, which displays the current regulation to plan usage mapping, as shown in [Figure 4.40](#).

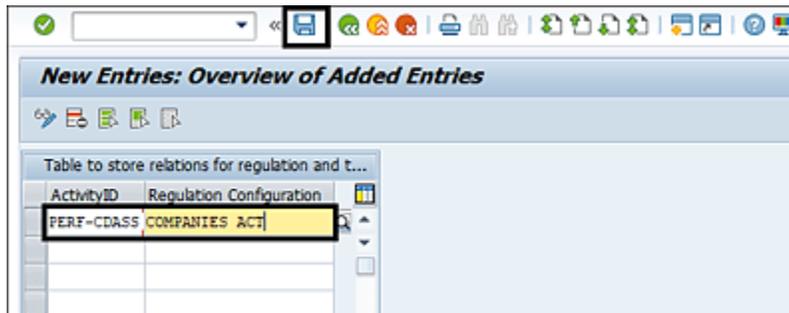


The screenshot shows the SAP SPRO configuration screen for the table 'Table to store relations for regulation and task'. The table has two columns: 'ActivityID' and 'Regulation Configuration'. The first row is highlighted, showing 'PERF-AOD' in the ActivityID column and 'k' in the Regulation Configuration column. The table lists various activity IDs and their corresponding regulation configurations.

ActivityID	Regulation Configuration
PERF-AOD	k
PERF-CDASS	COMPANIES ACT
PERF-CDASS	SARBANES OXLEY
PERF-CDASS	SOX
PERF-CEASS	FDA
PERF-CEASS	SOX
PERF-CNDS	FDA
PERF-CNDS	SOX
PERF-CRISK	SOX
PERF-CTLPF	FDA
PERF-CTLPF	SOX
PERF-ETEST	SOX
PERF-MCAOU	SOX
PERF-OUDS	FDA
PERF-OUDS	SOX

**Figure 4.40** Review the Current Regulation to Plan Activity Mapping

4. If a new regulation is configured and has to be mapped to the plan activity, click **New Entries**, and provide the following details:
  - **ActivityID**: Select the process control plan activity for which the need regulation is enabled, as shown in [Figure 4.40](#).
  - **Regulation Configuration**: This is the regulation configuration created in [Section 4.5.2](#).
5. Click **Save** to complete the assignment, as shown in [Figure 4.41](#).



**Figure 4.41** New Regulation Configuration Assignment to a Plan Activity

The regulation will be available for selection from the dropdown in the **Select Regulation** tab while scheduling a planner for control design assessment.

## 4.6 Other Configurations

This section provides an overview of other essential configurations required before initiating SAP Process Control activities. It outlines the following:

- How to set up master data attributes
- How to validate the completeness of case management
- How to compare data with client 000 and populate missing values in the active client if there are gaps

### 4.6.1 Maintain Master Data Attribute Values

When defining master data elements in SAP Process Control, specific attributes defining the master data entity must be specified. Many of these fields can be prefilled with standard values, giving users options to select from dropdowns, perform searches, or use radio buttons during master data definition.

To configure these prepopulated values, follow these steps:

1. Go to Transaction SPRO\_ADMIN.
2. Click the **SAP Reference IMG** button.
3. Follow menu path **Governance, Risk and Compliance**
  - **Process Control**
  - **Edit Attribute Values.**

Attributes are categorized into three sections based on the type of user maintenance allowed:

- **Attributes and Values**

All the available master data elements for which attribute values should be defined are configured in this dialog structure.

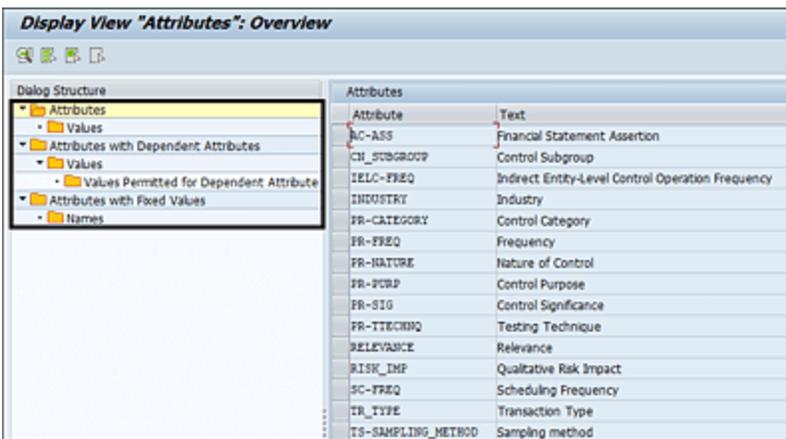
- **Attributes with Dependent Attributes**

Master data attributes related to or dependent on each other are defined in this structure. For example, values of the control subgroup are dependent on the value of the control group selected.

- **Attributes with Fixed Values**

These master data attributes are provided with fixed values by SAP, and the user can't add or remove the values from these. The only available maintenance for the users is to update the text per the requirements of the organization.

[Figure 4.42](#) details the various categories.



**Figure 4.42** Maintenance Screen of Master Data Attributes

[Table 4.13](#) provides an overview of various master data attributes that can be maintained in this configuration.

Field Name	Details
<b>Financial Statement Assertions</b>	These are financial assertions that the organization has to select based on the criteria the account group has to comply with. <a href="#">Chapter 5, Section 5.2.2</a> , outlines more about the process of maintaining assertions in the configuration.
<b>Control Subgroup</b>	Further classifies the controls based on the nature of the control. The subgroups are decided based on the control groups. <a href="#">Chapter 5, Section 5.2.3</a> , outlines more about maintenance of control subgroups.
<b>Indirect Entity-Level Control Operational Frequency</b>	Indicates the frequency at which the indirect entity level controls should be tested. Following are the values that are added to this configuration by default on activating standard BC set GRPC-ATTR-IELC-FREQ: <ul style="list-style-type: none"> <li>• <b>Annual</b></li> <li>• <b>As Needed</b></li> <li>• <b>Continual</b></li> <li>• <b>Monthly</b></li> <li>• <b>Quarterly</b></li> </ul>
<b>Industry</b>	As part of defining subprocesses in the business process hierarchy, the user has an option to classify the subprocesses as industry specific or not. If the option is

Field Name	Details
	<p>selected as <b>Yes</b>, following are the values that are added to this configuration by default on activating standard BC set GRPC-ATTR-INDUSTRY:</p> <ul style="list-style-type: none"><li>• <b>Aerospace and Defense</b></li><li>• <b>Automotive</b></li><li>• <b>Banking</b></li><li>• <b>Chemicals</b></li><li>• <b>Construction and Operations</b></li><li>• <b>Consumer Products</b></li><li>• <b>Higher Education and Research</b></li><li>• <b>Engineering</b></li><li>• <b>Healthcare</b></li><li>• <b>High Tech</b></li><li>• <b>Industrial Machinery and Components</b></li><li>• <b>Insurance</b></li><li>• <b>Media</b></li><li>• <b>Mill Products</b></li><li>• <b>Mining</b></li><li>• <b>Oil and Gas</b></li><li>• <b>Pharmaceuticals</b></li><li>• <b>Professional Services</b></li></ul>

Field Name	Details
	<ul style="list-style-type: none"> <li>• <b>Public Sector</b></li> <li>• <b>Retail</b></li> <li>• <b>Service Providers</b></li> <li>• <b>Telecommunications</b></li> <li>• <b>Transportation</b></li> <li>• <b>Utilities</b></li> </ul>
<b>Control Category</b>	Classifies a control to identify the process area that the control belongs to. To understand more about maintaining the control category, see Table 5.2 in <a href="#">Chapter 5, Section 5.2.3</a> .
<b>Frequency</b>	Indicates the frequency at which the control should be tested.
<b>Nature of Control</b>	Indicates the nature of the control activity.
<b>Control Purpose</b>	Indicates whether the control is defined as a detective or preventive control in the source system where the control is defined.
<b>Control Significance</b>	Indicates how the control can be classified based on the criticality.
<b>Testing Technique</b>	Indicates the methodology to be followed in testing a control. This option to select appears if the control is marked as <b>Yes</b> for <b>To be tested</b> in the <b>General</b> tab.

Field Name	Details
<b>Relevance</b>	Defines the nature of a control based on the principles of the Committee of Sponsoring Organization (COSO) framework.
<b>Qualitative Risk Impact</b>	Indicates the risk level of the control.
<b>Transaction Type</b>	<p>As part of defining subprocesses in the business process hierarchy, the user has an option to define the type of transactions being covered as part of the definition. Following are the values that are added to this configuration by default on activating standard BC set GRPC-ATTR-TRANSTYPE:</p> <ul style="list-style-type: none"> <li>• <b>Estimation</b></li> <li>• <b>Non-Routine</b></li> <li>• <b>Routine</b></li> </ul>

Field Name	Details
<b>Sampling Method</b>	<p>While defining the manual test plan, it's important to indicate the method to be followed by the control tester to gather the sample data. Following are the values that are added to this configuration by default on activating standard BC set GRPC-ATTR-SAMPLE_METHOD:</p> <ul style="list-style-type: none"><li>• <b>Interval Sampling</b></li><li>• <b>Judgmental Sampling</b></li><li>• <b>Random Sampling</b></li><li>• <b>Stratified Sampling</b></li></ul>
<b>Control Group</b>	<p>Groups similar controls based on the activities that the control performs. <b>Control Group</b> is part of <b>Attributes with Dependent Values</b>, so for each control group created, it's important to define the control subgroups that can be selected while defining the control.</p>

Field Name	Details
<b>Control Design Rating</b>	<p>Indicates the results that can be selected by the control owner after performing the assessment design effectiveness. The values in this configuration come by default (fixed values), and new values can't be added or current values can't be removed. However, users can update the description of the ratings. Following are delivered values:</p> <ul style="list-style-type: none"><li>• <b>Adequate</b></li><li>• <b>Deficient</b></li><li>• <b>Significantly Deficient</b></li></ul>
<b>Automation</b>	<p>Indicates the control automation in the source system. The values in this configuration come by default (fixed values); new values can't be added nor can current values be removed. However, users can update the description of the control automation. Following are the delivered values:</p> <ul style="list-style-type: none"><li>• <b>Automated</b></li><li>• <b>Manual</b></li><li>• <b>Semi-Automated</b></li></ul>

Field Name	Details
<b>Test Automation</b>	<p>Indicates how the control can be tested. The value in this configuration comes by default (fixed values); new values can't be added nor can current values be removed. However, users can update the description of the test automation. Following are the delivered values:</p> <ul style="list-style-type: none"> <li>• <b>Automated</b></li> <li>• <b>Manual</b></li> <li>• <b>Semi-Automated</b></li> </ul>

**Table 4.13** Overview of Master Data Attributes

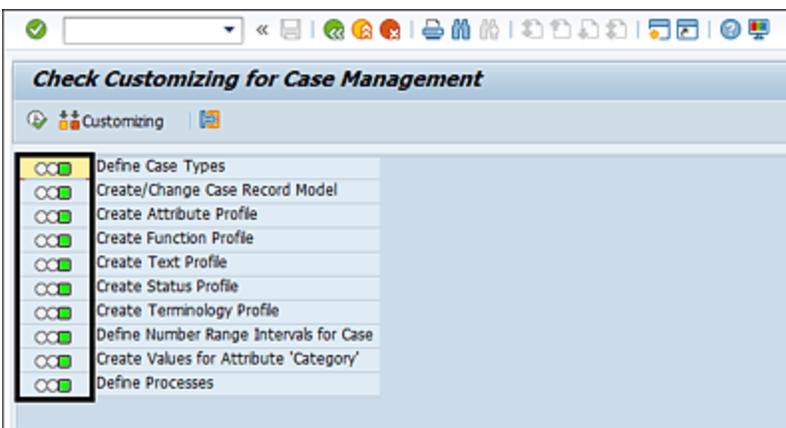
## 4.6.2 Check Customizing for Case Management

Case management in SAP Process Control refers to the systematic approach of tracking, monitoring, and managing compliance-related issues, incidents, or tasks within an organization. It enables users to record, investigate, and resolve compliance cases efficiently.

As part of the SAP Process Control solution installation, the Basis team creates a separate client that is a copy of standard client 000. All the configurations will be carried out in the new client only. During this client creation, it's vital to ensure that all values are accurately copied to the new client. If any values are missing, the case management system will flag them with a red icon to indicate the gaps.

To review the case configuration, follow these steps:

1. Execute Transaction SPRO\_ADMIN.
2. Click the **SAP Reference IMG** button.
3. Follow menu path **Governance, Risk and Compliance • Process Control • Cases • Check Customizing for Case Management**, which will display the status of each of the customization related to case management, as highlighted in [Figure 4.43](#).



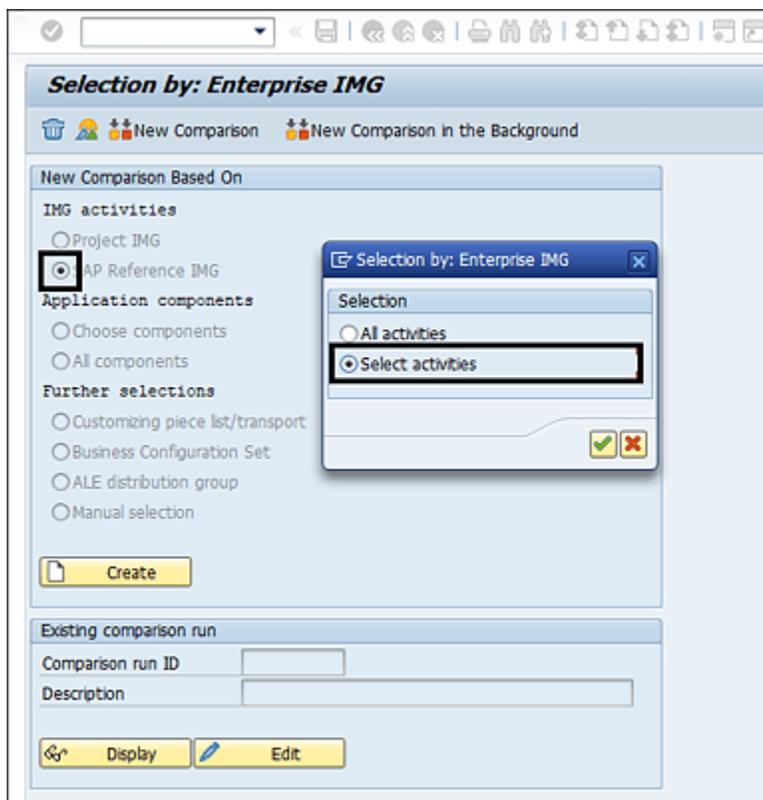
**Figure 4.43** Case Customization Configuration in SAP Process Control

Any line items displayed with yellow or red must be addressed before using any of the functionality in SAP Process Control. To fix the missing values, a comparison must be carried out with client 000. Detailed steps are outlined in SAP Note 753547. Following is an overview:

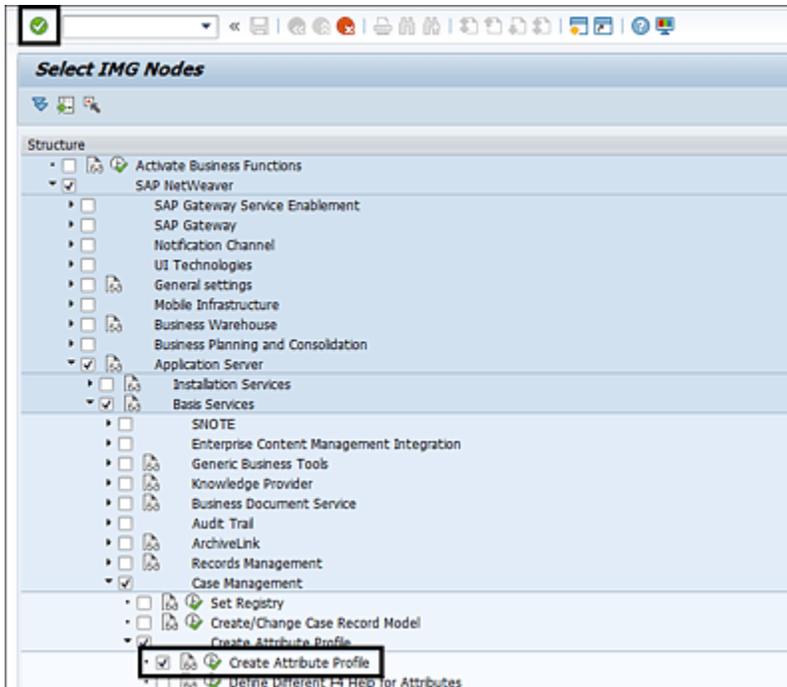
1. Execute Transaction SCU0 in the client where the case comparison should be performed.
2. In the comparison screen, select **SAP Reference IMG**.
3. Click **Create**, and a popup screen appears from which you can select either **All activities** for comparison or **Select activities** to select specific nodes from

Transaction SPRO for comparison, as shown in [Figure 4.44](#).

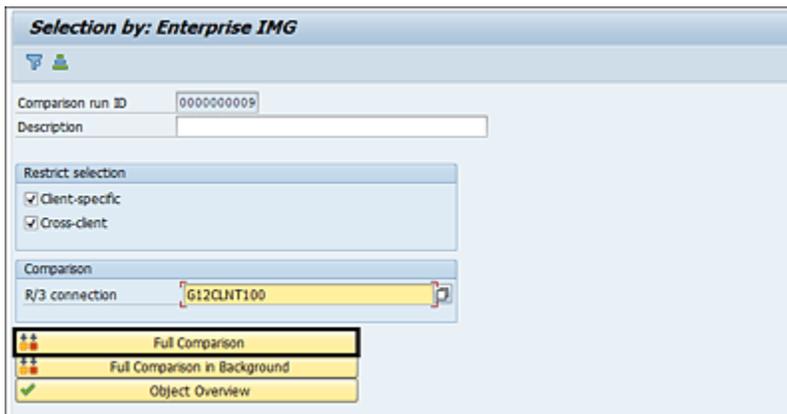
4. In the next screen, select the configuration nodes that needs to be copied, as outlined in [Figure 4.45](#).
5. Click the checkmark button to proceed.
6. Input the RFC connection ID connecting to the 000 client of the SAP GRC system in the **R/3 connection** field, and then click **Full Comparison**, as shown in [Figure 4.46](#).



**Figure 4.44** Define the Comparison Method



**Figure 4.45** Selection of Case Configuration for Comparison



**Figure 4.46** Execution of Comparison

7. The next screen gives the details of the comparison result. Missing values will be displayed with a not equal to symbol. Administrators can select these and click **OK** to copy those values into the current client.

If all the values are the same as of the comparing client, it shows no differences as the equal to symbol in green is

displayed (see [Figure 4.47](#)).

**Customizing Cross-System Viewer: Change mode**

Comparison Application Component DAG Environment Statistics Display

Selection type: SAP Reference IMG (manual) Filter: active Comparison run: 0000000010  
 Logon system: G12/100/752 <-> Comparison system: G12/000/752 - Last action: 20.09.2023

Stat.	Object Subobject Subobject	Description	Comp	Entries	Entries	Entries	Entries	Component
				Total	LogonSys	Only in LogonSys	Changed	
CC	SCHMATER_PRI0	S Priority	0	4	0	0	0	BC-SFW-CM
CC	SCHMATER_SEPCAL	S Reasons for Escalation	0	2	0	0	0	BC-SFW-CM
CC	SCHMATER_SELEVAL	S Authorization Levels	0	3	0	0	0	BC-SFW-CM
CC	SCHMATER_ATTRPROF	C Case: Define Attribute Profiles	0	3	0	0	0	BC-SFW-CM
	SCHMATER_ATTRPROF	V Case: Attribute Profile (Header/Sheet Text)	0	18	0	0	0	BC-SFW-CM
	SCHMATER_ATTRPROFA	V Case: Attribute Profile, Assignment of Attri	0	305	0	0	0	BC-SFW-CM
	SCHMATER_ATTRPROFG	V Case: Attribute Group Maintenance	0	16	0	0	0	BC-SFW-CM
CC	SCHMATER_ATTRSECAL	V View: Reason for Escalation	0	3	0	0	0	BC-SFW-CM
CC	SCHMATER_ATTRHELP	V Case: Different F4 Help for Attributes	0	All clients, identical systems				BC-SFW-CM

**Figure 4.47** Comparison Result with Client 000

## 4.7 Introduction to Work Centers for SAP Process Control

In the previous sections of this chapter, we covered the backend configurations within Transaction SPRO configurations. Now, before we get into subsequent chapters that focus on defining master data and conducting control evaluations, it's worth seeing an overview of the available work centers accessible to users (see [Figure 4.48](#)):

- **My Home**
- **Master Data**
- **Rule Setup**
- **Assessments**
- **Access Management**
- **Reports and Analytics**



**Figure 4.48** SAP Business Client Work Centers

Each of these work centers will display various options related to SAP Access Control, SAP Process Control, and SAP Risk Management. Options (work items) related to SAP Process Control for each work center are detailed in the following sections.

### 4.7.1 My Home

The **My Home** work center is where only those objects specific to the user are available. Following is an overview of a few key objects from **My Home**, specific to SAP Process Control:

- **Work Inbox**

This is similar to the Outlook mailbox, where all the actions pending for user's response are visible. Once the action is performed, the item disappears from the user's Work Inbox.

- **Ad Hoc Tasks - Issues**

If the user identifies any issue apart from the regular assessments, the same can be reported as an ad hoc issue for the object. See [Chapter 7](#) to understand more about ad hoc issue management.

- **My Objects**

From this section, the user can see the processes, subprocesses, controls, indirect entity level controls, policies, issues, and remediation plans for which the user is assigned as an owner.

- **Delegation**

Using the **My Delegation** option, users can delegate their access to other users who can execute the tasks on their behalf during their absence.

## **4.7.2 Master Data**

Master data in SAP GRC solutions is shared across SAP Access Control, SAP Process Control, and SAP Risk Management. To understand more about master data

management, see [Chapter 5](#). Following is the overview of a few key master data entities specific to SAP Process Control:

- **Organizations**

The hierarchy representing the organization's reporting or compliance structure is defined in this section. The process of creating an organization hierarchy is explained in detail in [Chapter 5, Section 5.3](#).

- **Regulations**

All the regulations with which the organization is complying are defined in this hierarchy. The process of creating a regulation hierarchy is explained in detail in [Chapter 5, Section 5.2](#).

- **Policies**

SAP Process Control also supports managing the entire lifecycle of the policy, starting from definition, review, approval, and distribution of the policy with the employees of the organization. The process of defining policy is explained in detail in [Chapter 9, Section 9.1](#).

- **Control Objectives**

This is a statement identified at the subprocess level indicating what the control should achieve. Creating process control objectives is explained in detail in [Chapter 5, Section 5.2.2](#).

- **Business Processes**

This hierarchy represents the processes the organization is executing, Subprocesses are the logical subdivisions of the process and the controls that are in place to mitigate the risks identified in the process. See [Chapter 5, Section 5.2](#), to understand more about the creation of a business process hierarchy.

- **Indirect Entity Level Controls**

Indirect entity level controls are SCUD identified at an organization level. See [Chapter 5, Section 5.5](#), to understand more about the process of defining indirect entity level controls.

- **Accounts**

Account groups that are part of the organization's trial balance, including the assertions it's complying with, are defined in this configuration. See [Chapter 5, Section 5.2.2](#), to understand more about the creation of accounts.

- **Reports**

There are multiple reports that SAP Process Control delivers along with the standard solution. Following are a few key master data reports that are available for access:

- **Risk and Control Matrix**

This report provides the overview of mapping between master data objects organization, control, and risks that the control is mitigating.

- **Organization and Process Structure**

This is a report of localized controls that provides details of the organization and subprocess controls mapped to the organization.

- **Audit Log**

This change log report gives the detailed view of the changes made to the central or local master data.

### **4.7.3 Rule Setup**

The **Rule Setup** work center is the section where the automated rules are defined and scheduled for monitoring. To understand more about continuous monitoring of automated controls, see [Chapter 8](#). Following is an overview of a few key work links in the **Rule Setup** work center specific to SAP Process Control:

- **Data Sources**

This is the definition of method in which data is fetched from the target system, tables, and fields that store the data required for analysis. [Chapter 8, Section 8.2](#), provides more details about the process of creating data sources.

- **Business Rules**

This is the definition of logic to monitor the operating effectiveness of the controls. This is created on top of the data source, where we define the filter fields, deficiency fields, and criteria to monitor the control. [Chapter 8, Section 8.3](#), provides more details about the process of creating business rules.

- **Business Rule Parameters**

The filter criteria defined while defining the business rule are specific to that particular business rule, which is common for all the organizations to which the control is mapped. If there is a requirement to have different filter criteria for each organization, the same can be configured using business rule parameters.

- **Business Rule Assignment**

To monitor the operating effectiveness of the automated control, it's important to run the business rule. To meet

this requirement, the business rule is assigned to the control, and then the control is scheduled for assessment.

- **Automated Monitoring**

Depending on the criticality of the control, the same is scheduled for monitoring using the automated monitoring functionality of SAP Process Control.

- **Job Monitor**

This is a report providing the details of jobs scheduled using automated monitoring, its result, and the detailed deficiency view.

- **Reports**

Following are the two key reports to provide an overview of the automated monitoring results:

- **Monitoring Issue Status**

This report provides visibility into the status of effectiveness testing by regulation, by organization, by process, and by control. This report is used to determine the controls that failed and current status of reported deficiencies.

- **Monitoring Remediation Status**

This report provides visibility into the status of issue remediation by regulation, by organization, by process, and by control. This report is used to determine the current status of various initiated remediation plans.

#### **4.7.4 Assessments**

This work center is used to define the question and survey library for the purpose of performing control design

assessment, control self-assessment, policy management, and sign-off. In addition, define manual test plans to test the operating effectiveness of manual controls and planner functionality to schedule assessments. Following is an overview of a few key work links in **Assessments**, specific to SAP Process Control:

- **Question Library**

In this section the questions along with the type of answers that should be part of various assessment surveys are defined. See [Chapter 6, Section 6.2.1](#) to understand more about the process of defining question library.

- **Survey Library**

In this section the surveys are created which is a grouping of list of questions that should be responded to by the assessor. See [Chapter 6, Section 6.2.1](#) to understand more about the process of defining of survey library.

- **Manual Test Plans**

List of steps and tests that the control tester should execute to evaluate the operating effectiveness of the manual control. See [Chapter 6, Section 6.5.1](#), to understand more about the process of defining manual test plans.

- **Planner**

Using this functionality in SAP Process Control, the GRC administrator schedules controls for various types of assessments to evaluate their effectiveness. See [Chapter 6, Section 6.2.2](#), to understand the process of scheduling a planner.

- **Control Ratings Report**

A summary report which provides a detailed report of various assessments that the control underwent, including the final result of assessment.

#### **4.7.5 Access Management**

This work center is predominantly used for SAP Access Control. However, the **GRC Role Assignments** section is used in SAP Process Control to manage user assignments. Following is the overview of a few key work links in SAP Access Management under **GRC Role Assignments** that are specific to SAP Process Control:

- **Organizations**

Assign users to the roles maintained at the organization level. This configuration helps in mass maintenance of user assignments to multiple organizations.

- **Business Processes**

Assign users to the roles maintained at the subprocess and control levels. This configuration helps in mass maintenance of user assignments to multiple subprocesses/controls. See [Chapter 5, Section 5.4](#), to understand more about the process of assigning users to the roles.

- **Replacement**

Using this option, the existing owners of the master data entities, issues, and remediation plans can be replaced with a new user. In addition, the current user assignments can also be removed using this functionality.

- **Central Delegation**

This is a feature used by the GRC administrator to extend the access rights from one user who is unavailable to take action on the pending task to another user who is eligible to execute the tasks in the delegator's absence. See [Chapter 5, Section 5.4.5](#), to understand more.

## 4.7.6 Reports and Analytics

This work center provides access to standard reports and dashboards that SAP delivers in the standard solution. Following are a few key dashboards and reports specific to SAP Process Control:

- **Evaluation Status Dashboard**

This dashboard provides a graphical representation of survey assessments results such as the outcome of control design assessment, control self-assessment, indirect entity level controls assessment, and results of the test of manual control effectiveness. It also provides the overview of the **Issue and Remediation Plan** summary for all the survey-based assessments. This dashboard also provides a status of the **Sign-Off** functionality. All of these results can be executed based on a specific time frame and can be filtered for regulation-specific results.

- **Overall Compliance Status Dashboard**

This dashboard provides a bar chart representation of metrics such as control coverage for the risks defined, overview of percentage of controls not evaluated, and—if they are evaluated—the detailed split between controls

that are marked as effective and ineffective as part of the control assessments. It also gives a percentage representation of open issues and remediation plans. All of these results can be executed based on a specific time frame and can be filtered to get regulation-, organization-, or country-specific results.

- **Datasheet**

This report provides a single point of view for all the information related to subprocesses or controls, including the attributes, relation with other master data entities, and assessments and test results (e.g., the details of issue and remediation plans generated for such assessments). All of these results can be executed based on a specific time frame and can be filtered based on regulation, organization, process, or subprocess.

## 4.8 Summary

This chapter has laid the foundation for using SAP Process Control by covering essential configurations. It included enabling the application in the client, and configuring Transaction SICF services, BC sets, and workflow settings. Additionally, it explained how to define connectors and connector groups for fetching data to support automated controls and how to set up the compliance framework for regulation configuration. The chapter also offered information about the various work centers accessible through SAP Business Client, highlighting key work items to make you comfortable with each of the options. In the next chapter, we'll explore the core master data entities in SAP Process Control and the steps involved in configuring each of them.

# 5 Master Data Management

*In the previous chapter, we discussed the fundamental Transaction SPRO configurations needed to access the various functions in SAP Process Control. Now, we'll focus on the different elements of master data and explore their importance and configuration steps.*

Master data is a key element in SAP Process Control, and this chapter provides an overview of the key master data elements such as business process hierarchy and organization hierarchy. In addition to these, it also provides a brief discussion of how regulations, control objectives, account groups, and risks can be configured and their interrelationships. In addition, the chapter details the importance of managing the users and roles at various master data entity levels, which plays a crucial role in the assessment workflows.

## Note

Before we begin with this chapter, it's important to note that all master data element definition screens include an **Attachments and Links** tab. This tab allows you to add any relevant documentation or links directly to these references for future reference. To keep our explanations

concise, we won't be discussing this tab in detail for each master data definition.

## 5.1 Introduction to Master Data

Efficiently handling master data in SAP Process Control is critical for enabling precise risk evaluation, overseeing compliance, and, ultimately, driving success of the effectiveness of governance, risk, and compliance (GRC) endeavors in an organization. This ensures that all relevant information is properly documented and is readily available for continuous monitoring, reporting, and well-informed decision-making procedures. The following sections provide an overview of the key master data elements that are required to be configured in SAP Process Control and details how each master data element is related to the others.

### 5.1.1 Overview of Key Master Data Elements

As mentioned, setting up the master data serves as a fundamental step in building the foundation for SAP Process Control. This encompasses various master data components, as outlined in [Table 5.1](#).

Master Data Element	Purpose
---------------------	---------

Master Data Element	Purpose
Organization hierarchy	<p>This is a hierarchical representation of an entity's structure based on the reporting requirements. This hierarchy can be a representation of the geographical spread of the organization (e.g., Asia Pacific, Americas, Africa, etc.), or it can also be created as a hierarchy that represents the major activities that the organization is delivering (e.g., in case of a power industry, Consumer Products, Healthcare, Logistics, etc.).</p> <p>SAP Process Control provides flexibility to define the organization hierarchy to the most granular level possible. See <a href="#">Section 5.3</a> to understand the process of creating the root organization and the child organizations.</p>

Master Data Element	Purpose
Business process hierarchy	<p>SAP Process Control mainly focuses on providing a platform to support evaluation of controls in various aspects based on the regulatory and compliance requirements that the organization has to comply with. To use the functionalities to test the controls, it's important to document all the internal controls of the organization as part of the master data.</p> <p>A business process hierarchy in SAP Process Control comprises the process, subprocess, and control. See <a href="#">Section 5.2</a> to understand the process of creating a business process hierarchy and the relationship between each of these items.</p>
Regulation hierarchy	<p>As part of this hierarchy, the organization documents the regulatory and compliance requirements to which it must adhere. SAP Process Control includes configurations for Sarbanes-Oxley Act (SOX) and Food &amp; Drug Administration (FDA) regulations within its Business Configuration (BC) sets. To know how to create a new regulation configuration and understand the hierarchy, see <a href="#">Section 5.2</a>.</p>

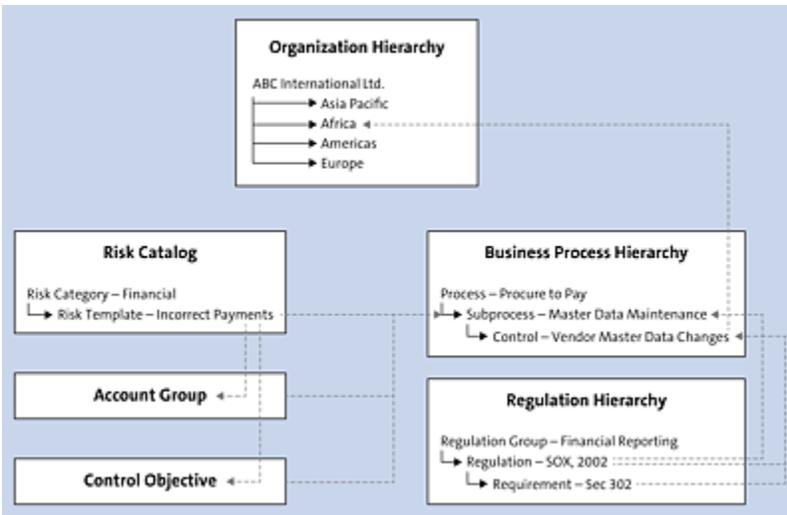
Master Data Element	Purpose
Account groups	<p>This section of master data is used to maintain the accounts that are part of the trial balance of the organization and the respective financial assertions (completeness, existence, or occurrence; presentation and disclosure, rights and obligations, valuation or allocation) that each account is complying with.</p> <p><a href="#">Section 5.2.2</a> details the process of creating account groups with the discussion of the <b>Account Groups</b> tab.</p>
Control objectives	<p>This is a statement representing the objectives that the subprocess should achieve in managing the risks that the process is prone to. We define controls in the organization to meet the control objectives and ensure that risks are under the appetite of the organization. To understand more about control objectives, see <a href="#">Section 5.2.2</a> on the <b>Control Objectives</b> tab</p>

Master Data Element	Purpose
Risk catalog	This is shared master data between SAP Process Control and SAP Risk Management. However, as part of SAP Process Control, we use only the risk templates to define the overall risk and control matrix (RCM) of the organization. <a href="#">Section 5.2.2</a> on the <b>Risks</b> tab details the purpose and process of definition of a risk category and risk template.

**Table 5.1** Overview of Master Data Elements in SAP Process Control

### 5.1.2 Relationship between Master Data Attributes

The master data elements listed in [Table 5.1](#) are interconnected. For each subprocess defined, organizations should identify the objectives, that is, outcomes, that are represented by the control objectives. Additionally, it's essential to highlight any risks associated with the subprocess that could impact achieving those objectives. Subsequently, controls are established to not only meet the subprocess objectives but also to mitigate the identified risks, ensuring they doesn't materialize.



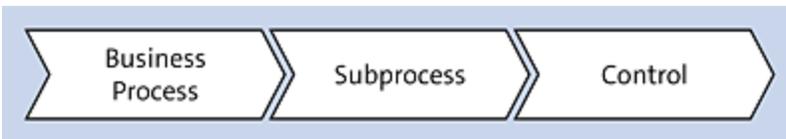
**Figure 5.1** Relationships between Master Data Elements in SAP Process Control

Account groups are used as one of the main factors to identify whether the significance of the subprocesses is key or not. Once the subprocesses and controls are defined as detailed previously, the same are assigned to the respective organizations in the hierarchy where they are being operated. [Figure 5.1](#) illustrates the relationships between the master data elements.

The next sections detail the process of configuring these master data elements and the process of mapping each other.

## 5.2 Business Process Hierarchies

In SAP Process Control, business process hierarchies refer to a structured representation of an organization's business processes as detailed in [Figure 5.2](#). These hierarchies help in organizing and managing various business processes within the system for the purpose of risk assessment, compliance monitoring, and GRC initiatives.



**Figure 5.2** Business Process Hierarchy Flow

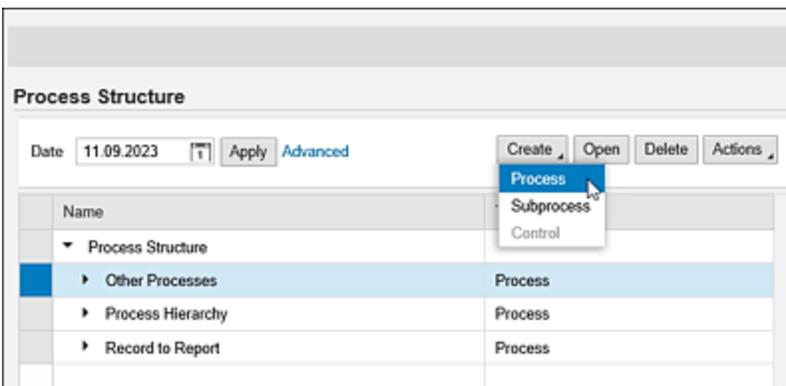
Within SAP Process Control's business process hierarchy master data, various business processes that organizations deal with, such as procure to pay and order to cash, are defined. These business processes are then subdivided into logical subprocesses, where specific details such as relevant risks, control objectives, and account groups, as well as the regulations that these processes must comply with, are defined. To address the identified risks at the subprocess level and to achieve the defined objectives, controls are outlined within each subprocess.

To review the existing process hierarchy or to create a new one, log in to the SAP Process Control system, execute Transaction NWBC, and navigate to the **Master Data** work center. Under the **Activities and Processes** work group, execute the **Business Processes** work item. In the

following sections, we'll walk through the business process, subprocesses, and controls.

## 5.2.1 Business Process

Business processes are the activities that the organization carries out to run the business. To create a new process in the hierarchy, select the **Process Structure**, and choose **Create • Process** from the dropdown, as highlighted in [Figure 5.3](#).



**Figure 5.3** Creating a New Process in the Process Hierarchy

The new process screen has two tabs: **General** and **Attachments and Links**. The **General** tab serves as the platform for defining the process, where you can update the **Name**, **Description**, **Valid From**, and **Valid To** fields, similar to other master data definitions.

In the new process screen, enter the **Name**, a valid **Description**, and **Valid From** and **Valid To** dates; select the process from the **Business Process** dropdown menu; and click **Save** (see [Figure 5.4](#)).

The screenshot shows the 'Process' configuration window for 'Central Process: Procure to Pay'. The window title is 'Process'. The main title is 'Central Process: Procure to Pay'. Below the title, there are fields for 'Parent Process: Process Hierarchy', 'Effective Date: 11.09.2023', 'Timeframe: 11.09.2023', and 'ID: 50000894'. There are two tabs: 'General' (selected) and 'Attachments and Links'. Under the 'General' tab, there are several fields: 'Name: Procure to Pay', 'Description: Business Process to cover the procurement process, risk involved and the applicable account groups', 'Valid From: 01.01.2023', 'Valid To: 31.12.9999', and 'Business Process: Procure to Pay'. At the bottom right, there are 'Save' and 'Cancel' buttons.

**Figure 5.4** Process Configuration

## Note

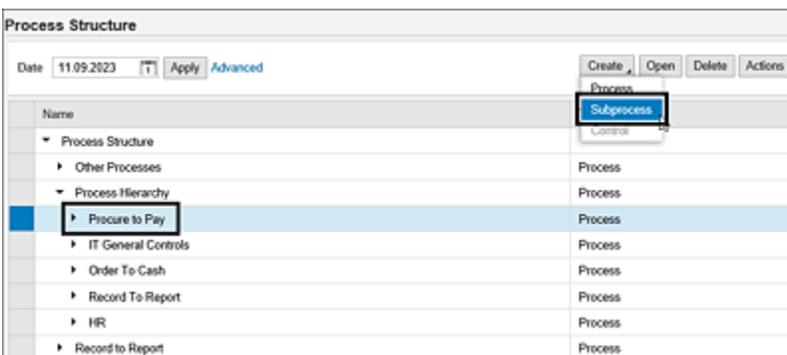
That business process acts as the crucial link between SAP Access Control and SAP Process Control. Any mitigation control created in SAP Access Control under the selected business process will be automatically generated as a local control. This mitigation control, extended from SAP Access Control, can be assessed for its effectiveness using the testing features available in SAP Process Control.

The dropdown values in the business process can be maintained in the Transaction SPRO configuration. Log in to the SAP Process Control system, execute Transaction SPRO\_ADMIN, click the **SAP Reference IMG** button, and expand **Governance, Risk and Compliance • Access Control • Maintain Business Processes and Subprocesses** to review the existing business processes and subprocesses or to create new ones.

## 5.2.2 Subprocess

Subprocesses are the logical subdivision of activities within the process defined in the previous step. For example, the **Procure to Pay** process can have **Purchase Requisition**, **Purchase Order**, and **Goods Receipt** as subprocesses under it. To view, maintain, or create a new subprocess in the hierarchy, expand the existing processes in the structure, and click **Open**.

To create a new subprocess, select the root business process, and choose **Create • Subprocess**, as shown in [Figure 5.5](#). The subprocess created under the business process hierarchy configuration is referred to as a *central subprocess*, and once it's assigned to any organization, it's referred to as a *local subprocess*.



**Figure 5.5** Option to Create a New Subprocess in the Hierarchy

The new subprocess screen has **General**, **Controls**, **Regulations**, **Control Objectives**, **Account Groups**, **Risks**, and **Attachments and Links** tabs, which we'll discuss in the following sections.

## General Tab

The **General** tab (see [Figure 5.6](#)) can be used to define subprocess basic information such as **Name**, **Description**,

**Valid From**, and **Valid To**, similar to other master data definitions.

The screenshot shows a software window titled "Subprocess" with a tabbed interface. The active tab is "General". The main title is "Central Subprocess: Maintain Vendor Master Data". Below the title, it shows "Parent Process: Procure to Pay", "ID: 50001065", "Timeframe: 11.09.2023", and "Effective Date: 11.09.2023". The "General" tab contains several fields: "Name" (Maintain Vendor Master Data), "Description" (This activity monitors the maintenance of key fields in vendor master data), "Valid From" (29.05.2023), "Valid To" (31.12.9999), "Transaction type" (Routine), "Business Subprocess" (Vendor Master Maintenance), and "Industry-specific" (radio buttons for Yes and No, with No selected). At the bottom right, there are "Save" and "Cancel" buttons.

**Figure 5.6** Subprocess Definition Screen

Additionally, the following fields must be defined:

- **Industry-specific**

Select **Yes** if the subprocess is applicable only to the industry in which the organization is operating. This is purely used from the documentation and reporting standpoint, which helps filter out all those subprocesses and controls that are crucial and applicable only to the specific industry. If the option is selected as **Yes**, a new field appears on the screen with a list of dropdown values indicating various possible industries.

To maintain/create the dropdown values for this field, execute **Governance, Risk and Compliance • Process Control • Edit Attribute Values**. From the **Dialog Structure** section, click **Attributes**. Select **INDUSTRY**, and click **Values** to view the current values. The following values are added by default by activating BC set GRPC-ATTR-INDUSTRY:

- **Aerospace and Defense**
- **Automotive**

- **Banking**
- **Chemicals**
- **Construction and Operations**
- **Consumer Products**
- **Higher Education and Research**
- **Engineering**
- **Healthcare**
- **High Tech**
- **Industrial Machinery and Components**
- **Insurance**
- **Media**
- **Mill Products**
- **Mining**
- **Oil and Gas**
- **Pharmaceuticals**
- **Professional Services**
- **Public Sector**
- **Retail**
- **Service Providers**
- **Telecommunications**
- **Transportation**
- **Utilities**

- **Transaction type**

This field helps in classifying the subprocess as **Routine** or **Non-routine**, which indicates the frequency of the activities that are carried out as part of the subprocess. This field also helps in strategizing the periodicity at which the controls under this subprocess should be evaluated.

- **Business Subprocess**

This is an integration point between SAP Access Control and SAP Process Control. Any mitigation control created in SAP Access Control under the business process selected in the dropdown in the previous step and business subprocess selected in this step, including the organization, will be created as a local control in SAP Process Control automatically. The values in the **Business Subprocess** dropdown are based on the business process selected in the previous step.

### Note

The dropdown values in **Business Subprocess** can be maintained in the Transaction SPRO configuration. To review this configuration, log in to the SAP Process Control system, execute Transaction SPRO\_ADMIN, click the SAP Reference IMG button, and expand **Governance, Risk and Compliance • Access Control • Maintain Business Processes and Subprocesses**. Select the business process, and then click on **Business Subprocess** from the **Dialog Structure** to view/maintain the **Business Subprocess** dropdown values.

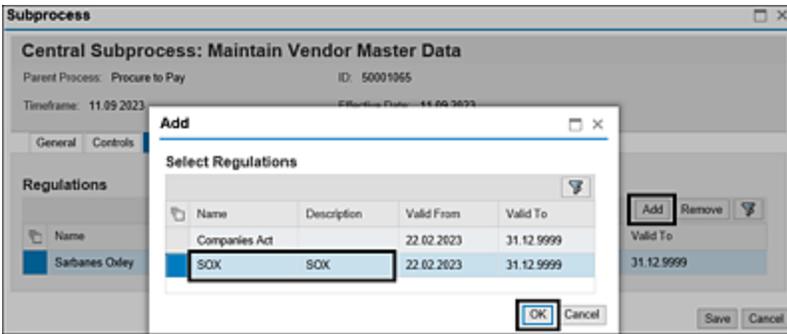
## Controls Tab

This tab shows the list of controls created under this subprocess. See [Section 5.2.3](#) to understand the process of configuring a control in business process hierarchy and the importance of various attributes while defining a control.

## Regulations Tab

Organizations in the process of operating the business have to comply with multiple regulatory requirements. Depending on the subprocess being defined, the applicable regulation should be mapped against which the processes are tested for effectiveness. For example, if the process is financial reporting, the applicable regulation could be the Sarbanes-Oxley Act (SOX), whereas if the process is manufacturing medicines, the applicable regulation could be the Food & Drug Administration (FDA).

Once the compliance requirements are documented in the master data, they are mapped to the subprocesses based on the applicability. Regulations mapped to the subprocess will only be available for assignment to the control. In addition, note that only those regulations assigned to the central subprocess can be managed at the local subprocess level under the organization. To assign a regulation to the subprocess, navigate to the **Regulations** tab, and click the **Add** button. In the **Add** dialog window, select the relevant regulation from the list to assign it to the subprocess, and click **OK** to complete the assignment, as highlighted in [Figure 5.7](#).



**Figure 5.7** Assignment of Regulation to the Subprocess

After making the necessary assignments, click the **Save** button to complete the assignment. Repeat this process for all other regulation assignments as required for the subprocess.

## Note

The regulations in the popup shown in [Figure 5.7](#) are created in the **Master Data** work center, which we'll discuss next.

SAP Process Control supports defining the multiregulatory compliance framework. There are three levels within the regulation hierarchy:

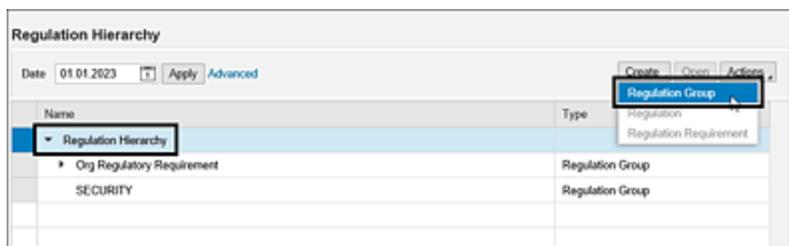
### 1. Regulation Group

When the organization is complying with various regulations, it's important to group relevant organizations under one group for the ease of maintenance and reporting. The regulation group organizes regulations within relevant categories and helps in grouping similar regulations and regulatory requirements. For example, if the organization is complying with SOX and the Indian Companies Act, a

regulations group can be created called Financial Reporting.

The regulation group isn't directly linked to any other master data element. To review the existing regulation groups in the hierarchy or to create a new one, log in to the SAP Process Control system, execute Transaction NWBC, and execute the **Regulations** work item under the **Master Data** work center, which is part of the **Regulations and Policies** work group.

To create a new regulation group, click on **Regulation Hierarchy**, and choose **Create • Regulation Group**, as highlighted in [Figure 5.8](#).



**Figure 5.8** Option to Create a New Regulation Group in the Hierarchy

On the **Regulation Group** screen, enter a brief name of the regulation group in the **Name** field, a detailed explanation to specify the regulations to be grouped under this regulation group in the **Description** field, the date from which the regulation group is valid in the **Valid From** field, and the date till which the regulation group is valid in the **Valid To** field, as outlined in [Figure 5.9](#). Click **Save**. After creating the regulation group, the subsequent step involves creating a regulation.

Regulation Group

Regulation Group : Org Regulatory Requirement

Parent Regulation Group: ID: 50000720  
Timeframe: 01.01.2023 Effective Date: 01.01.2023

General Attachments and Links

\* Name: Org Regulatory Requirement \* Valid From: 01.01.2022  
Description: Org Regulatory Requirement \* Valid To: 31.12.9999

Save Cancel

**Figure 5.9** Configuration of the Regulation Group

## 2. Regulation

Under the regulation group created in the previous step, the applicable regulations the organization has to comply with are configured, for example, Sarbanes Oxley Act, 2002. Note that regulations are directly linked to the subprocess and relevant underlying controls. To create a new regulation, click on the **Regulation Group**, and choose **Create • Regulation** from the dropdown.

Enter a brief name of the regulation in the **Name** field, a detailed explanation to specify compliance needs of the organization in the **Description** field, the date from which the regulation is valid from in the **Valid From** field, and the date till which the regulation is valid in the **Valid To** field; select the regulation configuration from the **Assign Regulation Configuration** dropdown, as outlined in [Figure 5.10](#); and then click the **Save** button.

### Note

The **Assign Regulation Configuration** options are based on the configuration carried out in Transaction SPRO settings. Refer to [Chapter 4, Section 4.5.2](#), to understand how to define the regulation configuration.

The screenshot shows the 'Regulation' configuration window in SAP. The title bar reads 'Regulation'. The main header is 'Regulation : Sarbanes Oxley'. Below this, the 'Parent Regulation Group' is 'Org Regulatory Requirement' with ID '50001123'. The 'Timeframe' is '01.01.2023' and the 'Effective Date' is '01.01.2023'. There are three tabs: 'General' (selected), 'Issues', and 'Attachments and Links'. In the 'General' tab, the 'Name' is 'Sarbanes Oxley' and the 'Description' is 'Sarbanes-Oxley Act of 2002'. The 'Valid From' date is '01.01.2023' and the 'Valid To' date is '31.12.9999'. The 'Assign Regulation Configuration' dropdown is set to 'Sarbanes Oxl...'. 'Save' and 'Cancel' buttons are at the bottom right.

**Figure 5.10** Setting Up Regulation

## Important

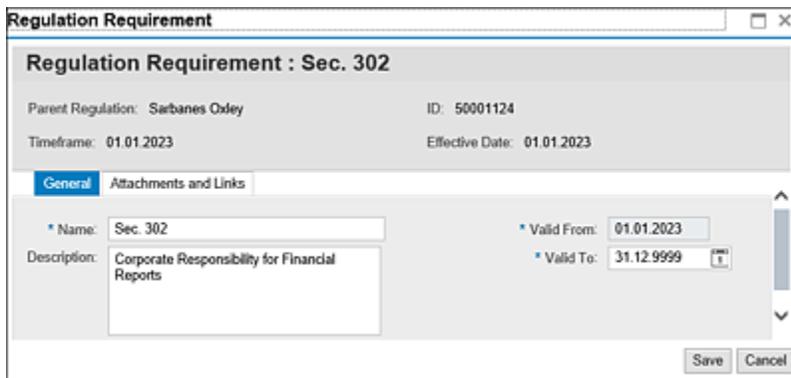
Additionally, the **Issues** tab is used to report any ad hoc issues that are identified in complying with the regulation or to show any previously reported ad hoc issue against this regulation. [Chapter 7](#) details the process of creating an ad hoc issue for the **Regulation** object type.

### 3. Regulation Requirement

After successfully creating the regulation, the next step involves setting up the **Regulation Requirement** option. It's required to specify the particular clauses or sections that the organization is adhering to. These regulation requirements are directly connected to subprocesses and the corresponding underlying controls.

To create a new regulation requirement, select the **Regulation** from the hierarchy (**Sarbanes Oxley** in our example), and click **Create • Regulation Requirement**.

Enter the brief name of the section or clause with which the organization is complying in the **Name** field, a detailed explanation of the requirements that the section or clause defines in the **Description** field, the date from which the regulation requirement is valid in the **Valid From** field, and the date till which the regulation requirement is valid in the **Valid To** field, as highlighted in [Figure 5.11](#). Click the **Save** button.



The screenshot shows a software interface for configuring a regulation requirement. The window title is "Regulation Requirement". The main heading is "Regulation Requirement : Sec. 302". Below this, there are two rows of information: "Parent Regulation: Sarbanes Oxley" and "ID: 50001124", and "Timeframe: 01.01.2023" and "Effective Date: 01.01.2023". There are two tabs: "General" (selected) and "Attachments and Links". Under the "General" tab, there are four fields: "Name" (Sec. 302), "Description" (Corporate Responsibility for Financial Reports), "Valid From" (01.01.2023), and "Valid To" (31.12.9999). At the bottom right, there are "Save" and "Cancel" buttons.

**Figure 5.11** Configuration of the Regulation Requirement

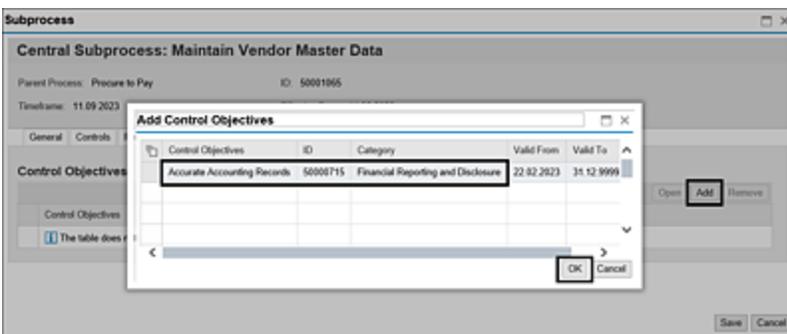
## Control Objectives Tab

The subsequent configuration step of the subprocess is mapping the corresponding control objective. When the control objective is assigned to the subprocess, any risks identified at the control objective level are automatically linked to the subprocess and are labeled with the source as **Inherent to Control Objective**.

To assign the control objective, access the **Control Objective** tab, and click on the **Add** option. From the list of control objectives originating from the master data, choose the ones that you intend to assign to the subprocess. Confirm the assignment by clicking **OK**, as highlighted in [Figure 5.12](#).

## Note

The control objectives in the popup shown in [Figure 5.12](#) are created in the **Master Data** work center, which we'll discuss next.



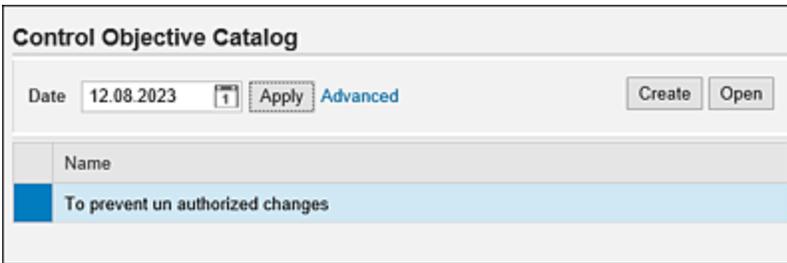
**Figure 5.12** Assignment of Control Objective to the Subprocess

Organizations face various inherent risks when managing their business processes. To address and minimize these risks, organizations establish internal controls throughout their processes. Within the realm of SAP Process Control master data, it's essential to define control objectives. These control objectives serve as statements outlining the desired outcomes of the controls, aiming to mitigate the associated risks.

To review the existing control objectives or to create a new one, log in to the SAP Process Control system, execute

Transaction NWBC, navigate to the **Master Data** work center, and click on the **Control Objectives** work item under the **Objectives** work group.

To create a new control objective, click on the **Create** button in the **Control Objective Catalog** window, as shown in [Figure 5.13](#).



**Figure 5.13** Create Option in the Control Objective Catalog Screen

The new **Control Objective** screen contains the **General**, **Subprocesses**, **Risks**, and **Attachments and Links** tabs. The **General** tab options can be used to define the control objective. Enter a brief name of the control objective in the **Control Objective** field, a category to group the similar control objectives under in the **Objective Category** field, a detailed explanation of what the control should achieve in the **Description** field, the date from which the control objective is valid in the **Valid From** field, and the date till which the control objective is valid in the **Valid To** field, as shown in [Figure 5.14](#).

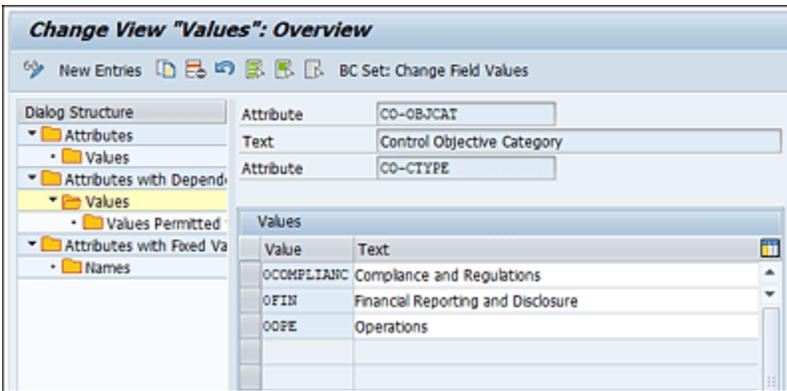
**Figure 5.14** Configuration of the Control Objective

Map the applicable subprocesses and risks to this control objective in the **Subprocesses** and **Risks** tabs, and click **Save** to complete the configuration process.

The control **Objective Category** selection will show the default objective categories. These are added automatically by activating BC set GRPC-ATTR-CTRL\_OBJ\_CATEGORY using Transaction SCPR20. The default categories are listed here:

- **Compliance and Regulations**
- **Financial Reporting and Disclosure**
- **Operations**

Additional (custom) categories can be added using Transaction SPRO\_ADMIN: click the **SAP Reference IMG** button, and expand **Governance, Risk and Compliance** • **Process Control** • **Edit Attribute Values**. From the **Dialog Structure** section, expand **Attributes with Dependent Values**. Select **Control Objective Category**, and click **Values** to view the current values, as shown in [Figure 5.15](#).



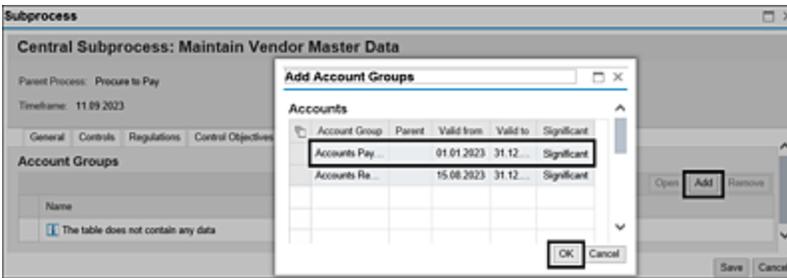
**Figure 5.15** Configuration to Review the Objective Categories

To define a new category, click the **New Entries** button, and enter a unique ID for the control objective category in the **Value** field and a brief name of the control objective category in the **Text** field. Click **Save** to save the new category.

## Account Groups Tab

The subsequent step in the subprocess configuration is mapping the corresponding account groups. Once the account group is assigned to the subprocess, any risks that are identified at the account level are auto-assigned to the subprocess and are indicated with the source as **Inherent to Account Group**.

Navigate to the **Account Group** tab, and click on the **Add** button. Select the relevant account from the list displayed, and click **OK** to perform the assignment (see [Figure 5.16](#)).



**Figure 5.16** Assignment of Account Group to the Subprocess

## Note

The account groups in the popup shown in [Figure 5.16](#) are created in the **Master Data** work center, which we'll discuss in this section.

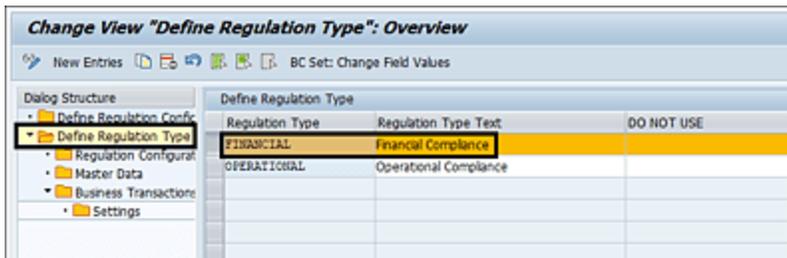
Organizations in the process of defining the business process hierarchy can identify the significant subprocesses based on the general ledger accounts that the subprocess impacts.

The process of establishing account groups within SAP Process Control's master data entails creating accounts that align with the organization's trial balance and the financial statements reflected by these accounts. Once the account groups have been established, you can also associate the corresponding general ledger accounts with them. This stage allows you to link any risks that may affect these account groups.

To begin the process, activate the **Accounts** work center. Note that the **Account Groups** work center is an integral component of the multicombpliance framework master data. Without completing the following steps for at least one of

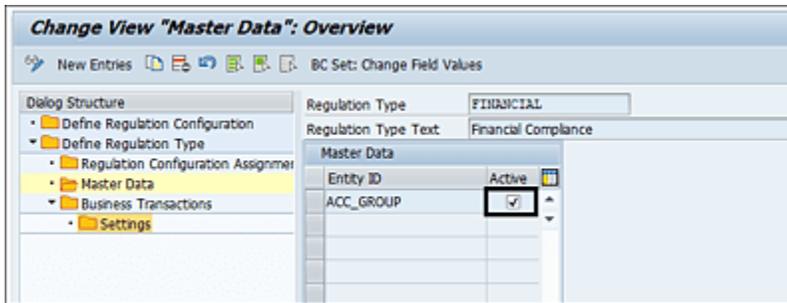
the regulation types, the **Accounts** work center will remain hidden from the view. Follow these steps:

1. To enable the **Accounts** work center, log in to the SAP Process Control system, execute Transaction SPRO\_ADMIN, click the **SAP Reference IMG** button, and expand **Governance, Risk and Compliance • Process Control • Multiple-Compliance Framework • Configure Compliance Initiatives**.
2. Double-click the **Define Regulation Type** option in the **Dialog Structure**, and enable a **Regulation Type** for which the account group master data is to be enabled by checking the respective checkbox, as shown in [Figure 5.17](#).



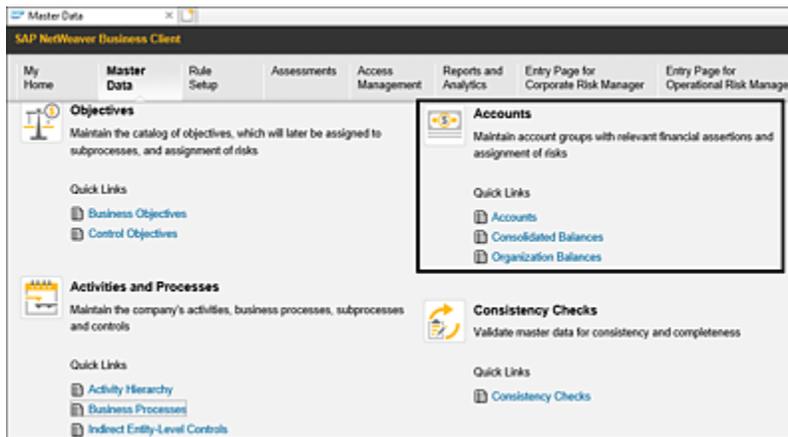
**Figure 5.17** Selection of Regulation Type for Enabling Account Groups Master Data

3. In the next step, select the **Regulation Type** line item, and double-click on the **Master Data** option from the **Dialog Structure** to navigate to the available options
4. Activate the **Entity ID ACC\_GROUP** by selecting its checkbox, as outlined in [Figure 5.18](#).



**Figure 5.18** ACC\_GROUP Activation in the Regulation Type

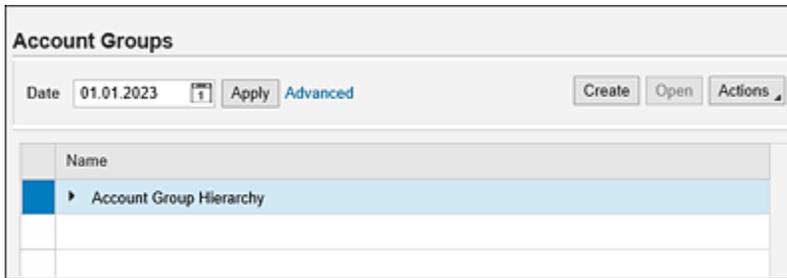
5. Once the option is enabled, the **Accounts** work center is visible in the **Master Data** section in Transaction NWBC, as shown in [Figure 5.19](#).



**Figure 5.19** Accounts Work Center in SAP Process Control Master Data

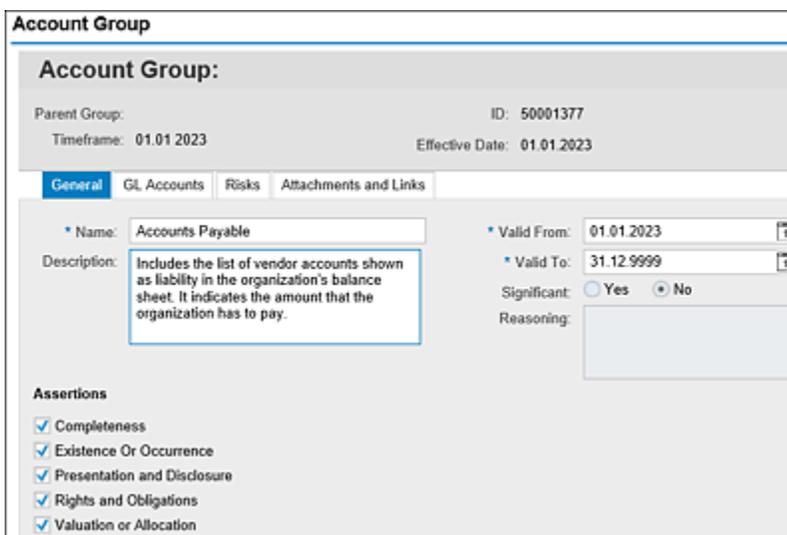
Once the **Accounts** work center is activated, the next step is definition of account groups and mapping of financial assertions, as follows:

1. To review the existing account groups or to create new groups, log in to the SAP Process Control system, execute Transaction NWBC, navigate to the **Master Data** work center, and click the **Accounts** work item under the **Accounts** work group. To create a new account group, select the **Account Group Hierarchy**, and click the **Create** button, as shown in [Figure 5.20](#).



**Figure 5.20** Option to Create a New Account Group

2. On the **General** tab, define the basic information about the account group along with the other settings. Similar to the other configuration requirements, you must update the **Name**, **Description**, **Valid From**, and **Valid To** fields, as shown in [Figure 5.21](#).



**Figure 5.21** General Tab in Configuration of Account Groups

In addition, maintain the following supplementary fields:

- **Significant (Yes/No)**  
Used to determine whether the account group is considered significant or not. An account group can be marked as significant either based on the value of the account group if it's a material amount or based on its

criticality, which is determined by management. Justification for choosing this option can be manually entered in the **Reasoning** field.

Only significant account groups are eligible to be assigned to a subprocess by default. Later in this section, we'll discuss the process of defining the significant account groups and then the assignment process of account groups to subprocess and controls.

- **Reasoning**

Justification supporting the reason to mark the account group as significant. This is a free-text field.

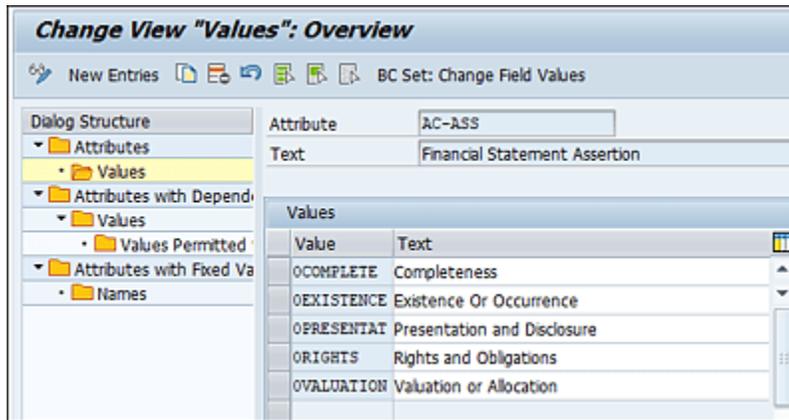
- **Assertions**

These are financial assertions that the organization has to select based on the criteria the account group has to comply with. The default financial assertions listed here are added automatically by activating the BC set GRPC-ATTR-ASSERTION during the initial configuration:

- **Completeness**
- **Existence Or Occurrence**
- **Presentation and Disclosure**
- **Rights and Obligations**
- **Valuation or Allocation**

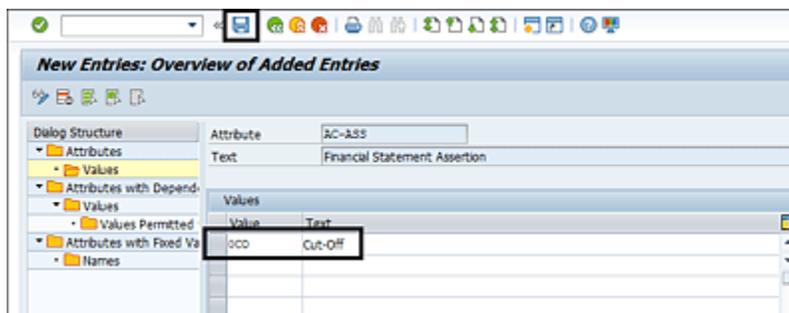
3. If additional financial assertions are needed, they can be created via **Governance, Risk and Compliance • Process Control • Edit Attribute Values**. From the **Dialog Structure** section, double-click **Attributes**. Select **AC-ASS: Financial Statement Assertion**, and

click **Values** to view the current values. as shown in [Figure 5.22](#).



**Figure 5.22** Configuration to Review the Financial Assertions

- To define a new financial assertion, click **New Entries** in the top menu, and enter the **Value** (a unique ID for the financial assertion), and **Text** (a brief name for the financial assertion), as highlighted in [Figure 5.23](#).



**Figure 5.23** New Financial Assertion Value

- Click **Save** to save the newly added value. Once saved, the new assertion is visible for maintenance while creating an account group, as highlighted in [Figure 5.24](#).

**Account Group**

**Account Group: Accounts Payable**

Parent Group: ID: 50001213  
Timeframe: 11.09.2023 Effective Date: 11.09.2023

**General** | GL Accounts | Risks | Attachments and Links

Name: Accounts Payable  
Description: Includes the list of vendor accounts shown as liability in the organization's balance sheet. It indicates the amount that the organization has to pay.  
Valid From: 01.01.2023  
Valid To: 31.12.9999  
Significant:  Yes  No  
Reasoning:

**Assertions**

Cut-Off  
 Completeness  
 Existence Or Occurrence  
 Presentation and Disclosure  
 Rights and Obligations  
 Valuation or Allocation

Save Cancel

**Figure 5.24** New Financial Assertion Value in the Assertion List

- The next step in the account group maintenance is to map the general ledger accounts. Click the **GL Accounts** tab to map the general ledger accounts that are part of the account group under maintenance. This is a manual input and used to document the general ledger accounts, as shown in [Figure 5.25](#).

**Account Group**

**Account Group: Accounts Payable**

Parent Group: ID: 50001213  
Timeframe: 11.09.2023 Effective Date: 11.09.2023

General | **GL Accounts** | Risks | Attachments and Links

**General Ledger Accounts**

Remove

From	To
1022031	
9823011	

Save Cancel

**Figure 5.25** Mapping General Ledger Accounts to the Account Group

- Once the general ledger accounts are mapped, navigate to the **Risks** tab to map any risks identified at the account group level, and then go to the **Attachments**

**and Links** tab to add any relevant attachments/links (optional). Click **Save** to complete the account group creation process.

In the configuration of the **General** tab, the account groups are determined to be significant or not, and the following describes how the account groups undergo such classification. Account groups have an influential factor in determining whether a subprocess and the relevant controls have to be considered as key and in scope of the control testing strategy. Following are the two methods in which an account group will be determined as significant or not:

- **Based on the account group balance**

Management of the organization can consider a value threshold to determine any account group's significance, and any account group having a value in trial balance beyond this value is automatically considered significant. For example, all the account groups with value beyond 5 million USD should be treated as significant.

To maintain the account group balances and significant threshold value, log in to the SAP Process Control system, execute Transaction NWBC, navigate to the **Master Data** work center, and click the **Consolidated Balances** work item under the **Accounts** work group.

In the **Consolidated Account Balances** screen, you may notice the list of account groups that are defined in the previous step. Maintain the balance of these account groups per the latest trial balance of the organization in the **Consolidated Balance** column. Select the **Year** and **Currency** in which the account balances should be maintained, as shown in [Figure 5.26](#).

**Consolidated Account Balances**

Year: 2023

\* Currency: USD

\* Significance Threshold: 5,000,000.00

\* Version: 0001

Changed On: 17.08.2023

**Accounts**

Accounts	Consolidated Balance	Significant	Reason
Accounts Payable	4,950,000.00	<input checked="" type="checkbox"/>	Significant impact on the reputation of the organization if not paid as per the payment terms
Accounts Receivable	5,345,000.00	<input checked="" type="checkbox"/>	

**Figure 5.26** Determination of Significant Accounts

Once the account balances are maintained, update the significance threshold value by clicking the **Apply Significance Threshold** button to determine the significant account groups. Any account group with a balance beyond this threshold will be marked as significant. Click **Save** to complete the account balance maintenance process.

- **Manual definition as significant**

In the previous method, account groups are categorized as significant and nonsignificant based on the account balances. There could be situations where the account balance may not cross the threshold but considering the criticality of the account group or its impact on the organization's business processes, it's required to mark the account group as significant. For example, even if the Accounts Payable account group doesn't cross the threshold, it's considered critical as it has an impact on the organization's financials if it's not monitored as a key process.

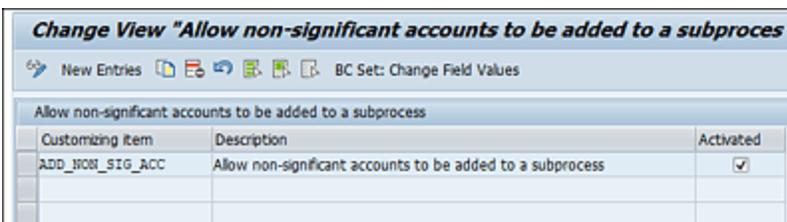
In such scenarios, the account group can be marked as significant by clicking on the **Significant** checkbox shown in [Figure 5.26](#). However, justification should be provided

in the **Reason** column backing up the decision to mark the account as significant even if it doesn't breach the threshold.

Click **Save** to save the changes in the current version. If there is a requirement to keep the old values unimpacted and keep the new values appearing in the system, use the **Save as New Version** option, which creates a dropdown in the **Version** field with which the values in both the versions will be made available for the GRC administrators.

Per the standard configuration of SAP Process Control, only account groups determined as significant are eligible to be assigned to subprocesses. If the organization has a requirement to map nonsignificant account groups to the subprocesses, the same can be activated via **Governance, Risk and Compliance • Shared Master Settings • Maintain the Ability to Add Non-Significant Account Group to Subprocess**.

Ensure that the **Activated** checkbox for the **Allow non-significant accounts to be added to a subprocess** customizing item is checked, as shown in [Figure 5.27](#).



The screenshot shows a SAP configuration table titled "Change View 'Allow non-significant accounts to be added to a subprocess'". The table has three columns: "Customizing item", "Description", and "Activated". A single row is visible with the following data:

Customizing item	Description	Activated
ADD_NON_SIG_ACC	Allow non-significant accounts to be added to a subprocess	<input checked="" type="checkbox"/>

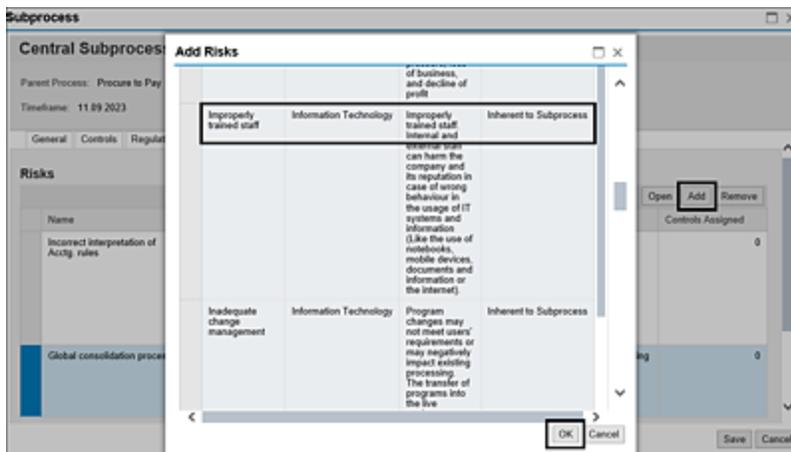
**Figure 5.27** Configuration to Activate Assignment of Nonsignificant Accounts to a Subprocess

Click **Save** to capture the changes in a transport request. Now even the nonsignificant accounts can be assigned to

subprocesses.

## Risks Tab

After completing the account group assignment to the subprocess, proceed to the **Risks** tab to add relevant risks that the subprocess is prone to experience. The **Source** column indicates how the risk is linked to the subprocess, showing the source of assignment. To include additional risks, click the **Add** button, select the risk to be mapped to the subprocess from the popup, and click **OK** to perform the assignment, as shown in [Figure 5.28](#).



**Figure 5.28** Selection of Risk to Assign to the Subprocess

Once the risk assignment is done, the **Source** column shows how the risk is assigned to the subprocess. In this case, it's manually assigned to the subprocess, and the **Source** shows **Inherent to Subprocess**. Click **Save** to complete the assignment, as shown in [Figure 5.29](#).

Name	Description	Source	Controls Assigned
Incorrect interpretation of Acctg rules	Incorrect interpretation of Accounting rules incorrect and or incomplete preparation of financial statements for the group or the entities and or incomplete or inaccurate or invalid informing of subsidiaries concerning changes in accounting policies. Due to wrong interpretation and/or non awareness of accounting standards the accounting contains errors and therefore the (consolidated) financial statements could be misleading for internal decision making and are misleading from compliant with IFRS or local GAAP and can lead to loss of credibility, reputation and financial claims.	Account Group:Accounts Payable/Account Group:Assetion, Compliances, Presentation and Disclosure	0
Global consolidation process	Incorrect, incomplete data or unauthorized, invalid changes can lead to incorrect consolidation results and therefore the (consolidated) financial statements could be misleading for internal decision making or are non-compliant with IFRS or local GAAP and can lead to loss of credibility, reputation and financial claims.	Control Objective:Accurate Accounting Records	0
Improperly trained staff	Improperly trained staff, internal and external staff can harm the company and its reputation in case of wrong behaviour in the usage of IT systems and information (like the use of notebooks, mobile devices, documents and information or the internet).	Inherent to Subprocess	1

**Figure 5.29** Assignment of Risk to the Subprocess

Risks can be assigned to subprocesses through three different sources, and the identification of how the risk is assigned to the subprocess is shown in the **Source** column, as follows:

- **Inherent to Subprocess**  
Risk templates are mapped to the subprocess directly.
- **Inherent to Control Objective**  
Risk templates are mapped to control objectives first, and then subprocess/controls inherit the risks based on the assignment of control objectives.
- **Inherent to Account Group**  
Risk templates are mapped to account groups first, and then subprocess/controls inherit the risks based on the assignment of account groups.

## Note

The risks in the popup shown earlier in [Figure 5.28](#) are created in the **Master Data** work center, which we'll discuss next.

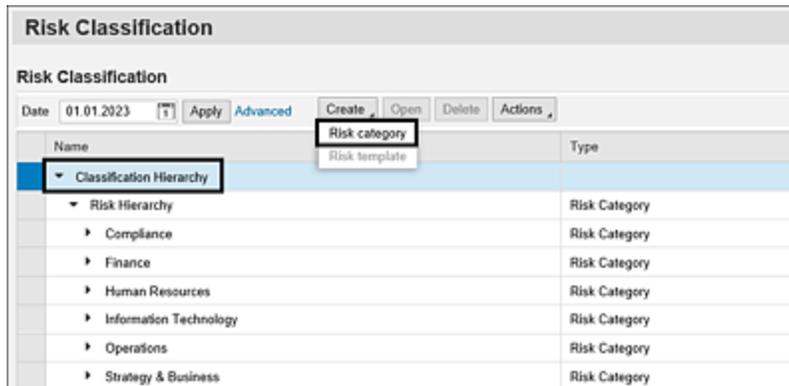
Risk plays a pivotal role in SAP Risk Management, where it undergoes a comprehensive definition, responsibility definition, and analysis through the risk assessment functionality. It's important to note that risk definitions are classified as a common master data element between SAP Process Control and SAP Risk Management.

SAP Process Control uses the risk master data to define the risk and control matrix (RCM). RCM is a robust solution that helps organizations identify, prioritize, and establish a control testing strategy. This synergy between SAP Process Control and SAP Risk Management streamlines the process of managing and mitigating risks, ensuring a more effective and integrated approach to GRC initiatives.

There are two levels within the risk catalog: risk category and risk template. Risk category organizes risk with relatable characteristics and helps in grouping similar risks under one group. For example, financial risks, operational risks, and so on. To review the existing risk categories in the hierarchy or to create a new one, follow these steps:

1. Log in to the SAP Process Control system, execute Transaction NWBC, and navigate to the **Master Data** work center. Choose the **Risk Catalog** work item under the **Risks and Responses** work group.
2. Select the proper head under the hierarchy, and click **Create • Risk category**, as highlighted in [Figure 5.30](#).
3. Enter a brief name of the risk category in the **Name** field, a detailed explanation to specify the risks to be grouped under this risk category in the **Description** field, the date from which the risk category is valid in

the **Valid From** field, and the date until which the risk category is valid in the **Valid To** field.



**Figure 5.30** Option to Create a New Risk Category in the Hierarchy

The **Allow Assignment** radio group, **Analysis Profile** fields, and **KRI template** tab are relevant only for SAP Risk Management. A risk can be created under this risk category only when this field is marked as **Yes**, and the analysis profile specifies the method in which the probability and impact of the risk are defined to arrive at the inherent and residual risk levels. Clicking the **Analysis Profile Detail** link shows the details of the configurations on how inherent risk and residual risk calculations can be calculated while performing risk assessment in SAP Risk Management. Once the details are provided, click the **Save** button to create the risk category detailed in [Figure 5.31](#). This action will create the risk category within the chosen risk classification.

Risk Category

Risk category: Compliance

Parent Category: Risk Hierarchy Created On: 01.01.2023 ID: 50001019

General KRI Template Attachments and Links

Name: Compliance Valid From: 01.01.2023

Description: Compliance Valid To: 31.12.9999

Allow Assignment:  Yes  No

Analysis Profile: System default (Qualitative analysis profile) Analysis Profile Detail

Save Cancel

**Figure 5.31** Configuration of the Risk Category

Moving on to the risk template, under the risk category, the specific risks identified by the organization are configured as risk templates, such as breach of international trading laws or risk from litigation/administration.

To review the existing risk templates under the risk category or to create a new one, execute Transaction NWBC in the SAP Process Control system, navigate to the **Master Data** work center, and click the **Risk Catalog** work item under the **Risks and Responses** work group.

To create a new risk template, follow these steps:

1. Select the **Risk Category** from the list, and click **Create • Risk template** (refer to [Figure 5.30](#)).
2. Enter a brief name of the risk template in the **Name** field, a detailed explanation to specify the risks to be grouped under this risk category in the **Description** field, the date from which the risk template is valid in the **Valid From** field, and the date until which the risk template is valid in the **Valid To** field.

3. Once the details are provided as shown in [Figure 5.32](#), the next step is to map the **Risk Drivers and Impacts** (discussed in more detail later).
4. Upon selecting the relevant drivers and impacts, click **Save** to save the risk template.

Impact Category	Impact Category Description
Financial (Revenue)	Financial Loss of Revenues

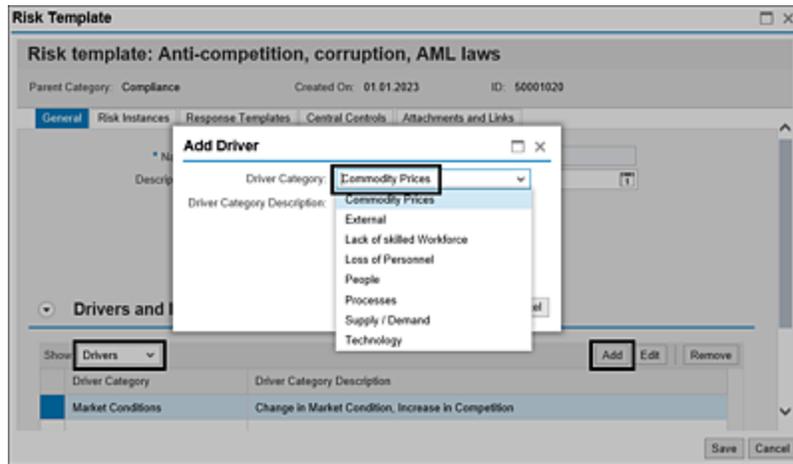
**Figure 5.32** Risk Template Configuration Screen

Let's look deeper into the significance of drivers and impacts and how they play a crucial role in defining risk templates, as follows:

- **Drivers**

Drivers are the driving factors or variables that contribute to the assessment and evaluation of risks associated with a particular process or aspect of an organization's operations. These drivers are instrumental in identifying the source from which the risk could potentially emerge. For example, people and processes are a few examples of risk drivers. To add a driver, click the **Add** button, and select the applicable driver from the categories available in the dropdown, as shown in [Figure 5.33](#). Click **Save** to

save the risk template. Additional drivers or impacts can be added per the business requirement.



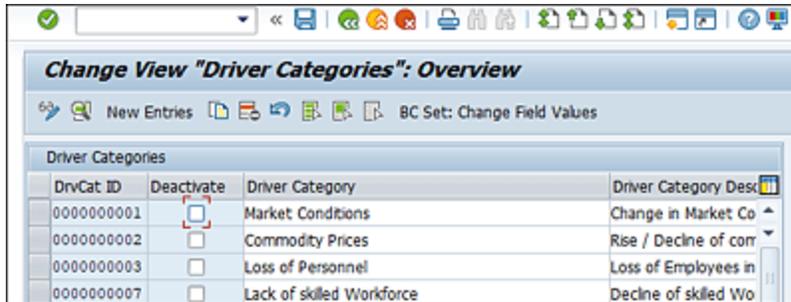
**Figure 5.33** Driver Categories under the Add Driver Option

Driver categories in the dropdown can be maintained using the Transaction SPRO configuration. To perform this configuration, follow menu path **Governance, Risk and Compliance • Shared Master Settings • Risk and Opportunity Attributes • Maintain Driver Categories**. Activating BC set GRPC-RISK-DRIVER-CATEGORY from Transaction SCPR20 will add the following default categories, as shown in [Figure 5.34](#):

- **Market Conditions**
- **Commodity Prices**
- **Loss of Personnel**
- **Lack of skilled Workforce**

If any of these standard values aren't in scope of the organization, the same can be deactivated by checking the **Deactivate** checkbox. Deactivated driver categories aren't available for selection for a risk template. New

driver categories can be defined by clicking the **New Entries** button. Add the **DrvCat ID** (a unique driver ID), **Driver Category**, and **Driver Category Description**. Click **Save** to save the new driver category and the newly created driver categories will be available for selection in the risk templates.



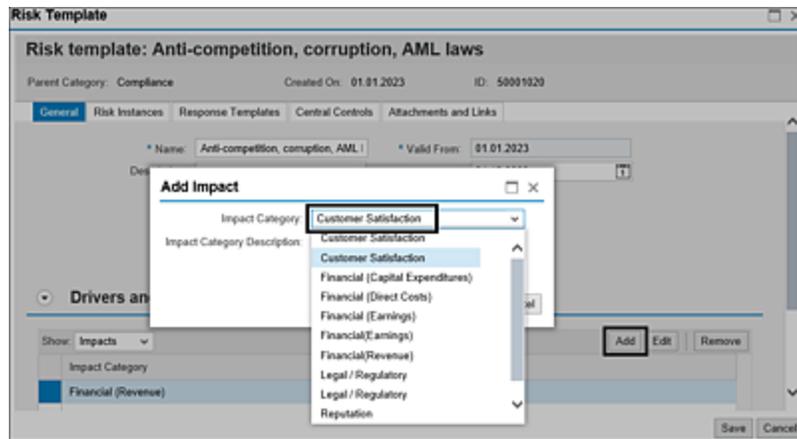
The screenshot shows the SAP 'Change View "Driver Categories": Overview' interface. It features a table with four columns: 'DrvCat ID', 'Deactivate', 'Driver Category', and 'Driver Category Description'. The first row is highlighted, and a red box is drawn around the 'Deactivate' checkbox for the first entry. The table contains the following data:

DrvCat ID	Deactivate	Driver Category	Driver Category Description
0000000001	<input checked="" type="checkbox"/>	Market Conditions	Change in Market Co
0000000002	<input type="checkbox"/>	Commodity Prices	Rise / Decline of corr
0000000003	<input type="checkbox"/>	Loss of Personnel	Loss of Employees in
0000000007	<input type="checkbox"/>	Lack of skilled Workforce	Decline of skilled Wo

**Figure 5.34** Configuration to Review the Driver Categories

- **Impacts**

Impacts indicate the consequences that the organization should face if the risk materializes. Risk assessment in SAP Risk Management is done against the specific impacts that are mapped to the risks. Impacts can be added to the risk templates the same way as drivers. Click **Add**, and select the applicable impact from the categories available in the dropdown shown in [Figure 5.35](#).



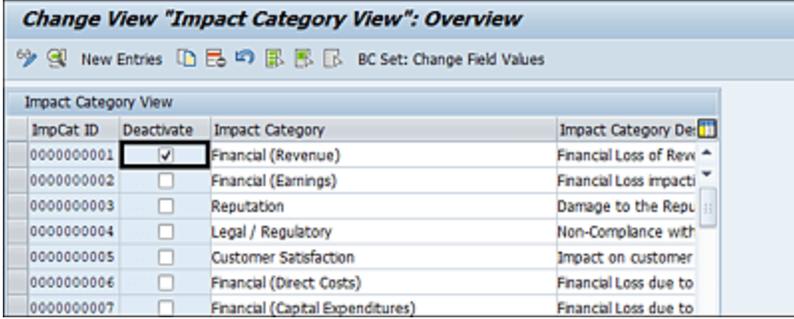
**Figure 5.35** Option to Add Impact Categories while Defining the Risk Template

Similar to drivers, impact categories in the dropdown can be maintained via menu path **Governance, Risk and Compliance • Shared Master Settings • Risk and Opportunity Attributes • Maintain Impact Categories**. Activating BC set GRPC-RISK-IMPACT-CATEGORY using Transaction SCPR20 will activate the following impacts:

- **Financial (Revenue)**
- **Financial (Earnings)**
- **Reputation**
- **Legal / Regulatory**
- **Customer Satisfaction**
- **Financial (Direct Costs)**
- **Financial (Capital Expenditure)**

The default/standard values that aren't in scope of the organization can be deactivated by selecting the **Deactivate** checkbox, as shown in [Figure 5.36](#). Once the

impact category is deactivated, it won't be available for selection for a risk template.



ImpCat ID	Deactivate	Impact Category	Impact Category De
000000001	<input checked="" type="checkbox"/>	Financial (Revenue)	Financial Loss of Rev
000000002	<input type="checkbox"/>	Financial (Earnings)	Financial Loss impact
000000003	<input type="checkbox"/>	Reputation	Damage to the Reput
000000004	<input type="checkbox"/>	Legal / Regulatory	Non-Compliance with
000000005	<input type="checkbox"/>	Customer Satisfaction	Impact on customer
000000006	<input type="checkbox"/>	Financial (Direct Costs)	Financial Loss due to
000000007	<input type="checkbox"/>	Financial (Capital Expenditures)	Financial Loss due to

**Figure 5.36** Deactivating Impact Category Screen

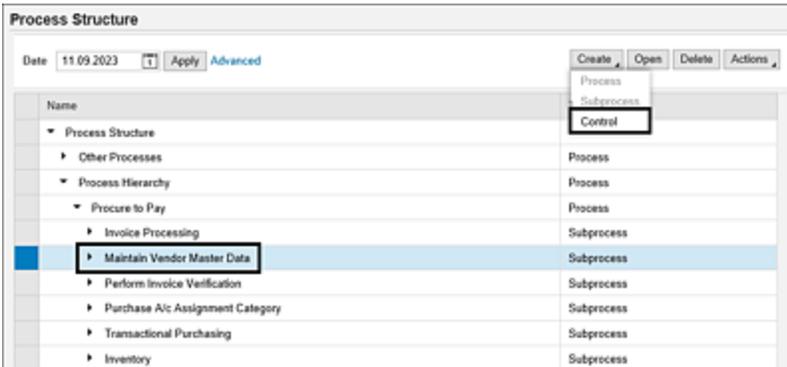
Additionally, new impact categories can be defined using the **New Entries** button. Click the button, enter the **Impact Category** and **Impact Category Definition**, and click the **Save** button. Once the categories are added, you may notice them in the **Risk Template** selection.

Once all the details of the subprocess are defined in the **General, Regulation, Control Objectives, Account Group**, and **Risks** tabs as applicable, click **Save** to complete the definition of the central subprocess in the business process hierarchy.

### 5.2.3 Control

Once the subprocess and relevant attributes, such as regulations, control objectives, accounts, and risks, are defined, the next step is definition of controls. To mitigate the risks identified in the subprocess and also to meet the objectives, organizations must define controls. To create a new control in the hierarchy, click on the subprocess

created in the previous step, and click **Create • Control** from the dropdown, as shown in [Figure 5.37](#). The control created in this configuration step is referred to as the central control.

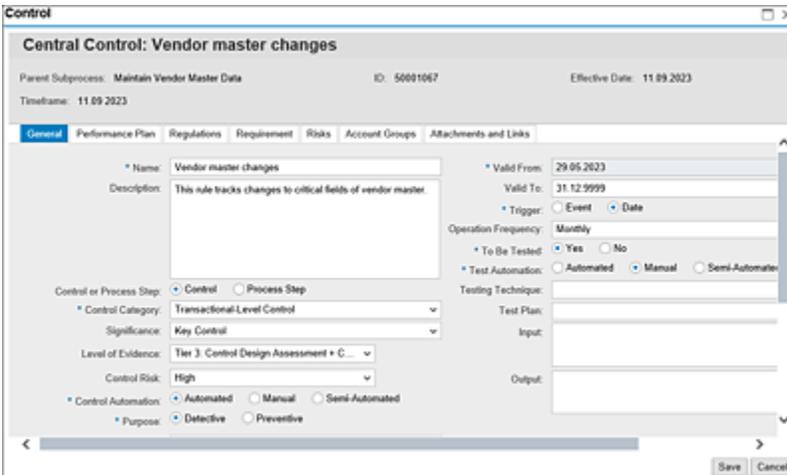


**Figure 5.37** Option to Create a New Control in the Hierarchy

The new control definition screen consists of several tabs, including **General**, **Performance Plan**, **Regulations**, **Requirement**, **Risks**, **Account Groups**, and **Attachments and Links**. It's essential to configure each of these tabs with the relevant settings to ensure the control's effectiveness. All of these tabs, along with the field elements, are detailed in the following sections.

## General Tab

The **General** tab data definition is particularly crucial, and it's advisable to set up all the fields carefully. For a comprehensive understanding of each field, see [Figure 5.38](#).



**Figure 5.38** New Control Definition Screen

Note that the control attributes described in [Table 5.2](#) can be configured within the Transaction SPRO settings. The specific Transaction SPRO node and detailed steps for configuring each field are provided for your reference.

Field Name	Details
<b>Name</b>	This is a brief name of the control.
<b>Description</b>	This is a detailed explanation of the steps that the control is performing to meet the objective.

Field Name	Details
<b>Control Category</b>	<p>This classifies a control to identify the process area that the control belongs to. To create new fields, execute <b>SAP Reference IMG</b> configuration, <b>Governance, Risk and Compliance • Process Control • Edit Attribute Values</b>. From the <b>Dialog Structure</b> section, double-click <b>Attributes</b>. Select <b>PR-Category Control Category</b>, and click <b>Values</b> to view the current values. Following are the control categories that are added to this configuration by default on activating the BC set GRPC-ATTR-CATEGORY:</p> <ul style="list-style-type: none"><li>• <b>Direct ELC</b></li><li>• <b>IT General Control</b></li><li>• <b>Transactional-Level Control</b></li></ul> <p>Click the <b>Create New</b> button to create new categories.</p>

Field Name	Details
<b>Significance</b>	<p>This classifies the control based on the criticality.</p> <p>To maintain/create the dropdown values for this field, execute <b>Governance, Risk and Compliance • Process Control • Edit Attribute Values</b>. From the <b>Dialog Structure</b> section, click <b>Attributes</b>. Select <b>PR-SIG Control Significance</b>, and click <b>Values</b> to view the current values.</p> <p>The following values are added by default by activating BC set GRPC-ATTR-SIGNIFICANCE:</p> <ul style="list-style-type: none"><li>• <b>Key Control</b></li><li>• <b>Standard Control</b></li></ul> <p>Click the <b>Create New</b> button to create new significance value options.</p>

Field Name	Details
<b>Level of Evidence</b>	<p>This defines the level of testing that the control should undergo.</p> <p>To maintain the dropdown values in the <b>Level of Evidence</b> field, expand <b>Governance, Risk and Compliance • Process Control • Scoping • Set Level of Evidence Value</b>.</p> <p>The following values are added by default on activating standard BC set GRPC-SCOPING-LOE:</p> <ul style="list-style-type: none"><li>• <b>Tier 1: No Testing</b></li><li>• <b>Tier 2: Self-Assessment</b></li><li>• <b>Tier 3: Control Design Assessment + Control Effectiveness</b></li><li>• <b>N/A: N/A</b></li></ul> <p>You can create new line items by using the <b>Create New</b> button.</p>

Field Name	Details
<b>Control Risk</b>	<p>This specifies the extent of risk impact on the organization in the event of control failure. To maintain additional values in the dropdown for this field, execute <b>Governance, Risk and Compliance • Process Control • Edit Attribute Values</b>. From the <b>Dialog Structure</b> section, click <b>Attributes</b>. Select <b>Risk-IMP Qualitative Risk Impact</b>, and click <b>Values</b> to view the current values. Following are the default values that are added on activating of BC set GRPC-ATTR-RISK_IMPACT:</p> <ul style="list-style-type: none"><li>• <b>High</b></li><li>• <b>Medium</b></li><li>• <b>Low</b></li></ul>

Field Name	Details
<b>Control Automation</b>	<p>This specifies the automation type that describes how the control is configured within the source system. To maintain the dropdown values for this field, execute <b>Governance, Risk and Compliance • Process Control • Edit Attribute Values</b>. From the <b>Dialog Structure</b> section, click <b>Attributes with Fixed Values</b>. Select <b>PR-AUTOM Automation</b>, and click <b>Names</b> to view the current values. Following are the standard values available in this configuration:</p> <ul style="list-style-type: none"><li>• <b>Automated</b></li><li>• <b>Manual</b></li><li>• <b>Semi-Automated</b></li></ul>

Field Name	Details
<b>Purpose</b>	<p>This indicates how the control is defined in the source system, and whether to prevent the error/fraud from occurring or identify the issue as part of review. To maintain the dropdown values for this field, execute <b>Governance, Risk and Compliance • Process Control • Edit Attribute Values</b>. From the <b>Dialog Structure</b> section, click <b>Attributes</b>. Select <b>PR-PURP Purpose</b>, and click <b>Values</b> to view the current values. The following values are added to this configuration by default on activating BC set GRPC-ATTR-PURPOSE:</p> <ul style="list-style-type: none"><li>• <b>Detective</b></li><li>• <b>Preventive</b></li></ul>

Field Name	Details
<b>Nature</b>	<p>This indicates the nature of the control activity. To maintain the values for this field, execute <b>Governance, Risk and Compliance • Process Control • Edit Attribute Values</b>. From the <b>Dialog Structure</b> section, click <b>Attributes</b>. Select <b>PR-Nature Nature of Control</b>, and click <b>Values</b> to view the current values. The following values are added to this configuration by default on activating BC set GRPC-ATTR-NATURE:</p> <ul style="list-style-type: none"> <li>• <b>Adjustment</b></li> <li>• <b>Authorization</b></li> <li>• <b>Initiation</b></li> <li>• <b>Match</b></li> <li>• <b>Processing</b></li> <li>• <b>Reconciliation</b></li> </ul>
<b>Nature (Cont.)</b>	<ul style="list-style-type: none"> <li>• <b>Recording</b></li> <li>• <b>Restricted Access</b></li> <li>• <b>Review</b></li> <li>• <b>Safeguarding of Assets</b></li> <li>• <b>Segregation of Duties</b></li> </ul>

Field Name	Details
<b>Allow Referencing</b>	Select the checkbox if this control should be available for mitigating risks that are part of another subprocess.
<b>Control Relevance</b>	<p>The sources for the options available in control relevance are based on the principals of the Committee of Sponsoring Organization (COSO) regulatory framework. To maintain the values available for this field, execute <b>Governance, Risk and Compliance • Process Control • Edit Attribute Values</b>. From the <b>Dialog Structure</b> section, click <b>Attributes</b>. Select <b>Relevance</b>, and click <b>Values</b> to view the current values. The following values are added to this configuration by default on activating BC set GRPC-ATTR-RELEVANCE:</p> <ul style="list-style-type: none"> <li>• <b>Control Activities</b></li> <li>• <b>Control Environment</b></li> <li>• <b>Information and Communication</b></li> <li>• <b>Monitoring</b></li> <li>• <b>Fraud Prevention and Detection</b></li> <li>• <b>Risk Assessment</b></li> </ul>

Field Name	Details
<b>Control Group</b>	<p>This is used to group similar controls based on the activities that the control performs. To maintain the values available for this field, execute <b>Governance, Risk and Compliance • Process Control • Edit Attribute Values</b>. From the <b>Dialog Structure</b> section, click <b>Attributes with dependent values</b>. Select <b>CN_GROUP Control Group</b>, and click <b>Values</b> to view the current values. The following values are added to this configuration by default on activating BC set GRPC-ATTR-CTRL_GROUP:</p> <ul style="list-style-type: none"><li>• <b>Compliance and Regulations</b></li><li>• <b>Financial Reporting and Disclosure</b></li><li>• <b>Operations</b></li></ul>

Field Name	Details
<b>Control Subgroup</b>	<p>This is used to further classify the controls based on the group selected in the previous step. To maintain the values available for this field, execute <b>Governance, Risk and Compliance • Process Control • Edit Attribute Values</b>. From the <b>Dialog Structure</b> section, click <b>Attributes</b>. Select <b>CN_SUBGROUP Control Group</b>, and click <b>Values</b> to view the current values. The following values are added to this configuration by default on activating BC set GRPC-ATTR-CTRL_GROUP:</p> <ul style="list-style-type: none"><li>• <b>Accuracy</b></li><li>• <b>Completeness</b></li><li>• <b>Effectiveness</b></li></ul>

Field Name	Details
<b>Control Subgroup</b> (Cont.)	<ul style="list-style-type: none"> <li>• <b>Efficiency</b></li> <li>• <b>Environment</b></li> <li>• <b>Health</b></li> <li>• <b>Restricted Access</b></li> <li>• <b>Safety</b></li> <li>• <b>Tax</b></li> <li>• <b>Validity</b></li> </ul> <p>Once the subgroups are defined, the same will be tagged to the groups as applicable under <b>Attributes with dependent values</b>. Select <b>CN_GROUP Control Group</b>, choose <b>Value</b>, and click <b>Values Permitted Dependent Attribute</b> to view the control group and subgroup mapping.</p>
<b>Valid From</b>	This is the date from which the control is valid.
<b>Valid To</b>	This is the date till which the control is valid.

Field Name	Details
<b>Trigger</b>	<p>This is used to classify if the control is to be tested on an event-based or date-based trigger:</p> <ul style="list-style-type: none"><li>• <b>Event:</b> Notifies the owner responsible to fix the issues on a real-time basis as and when the event occurs that is defined in the business rule.</li><li>• <b>Date:</b> This is schedule-based monitoring, where the business rule runs per the frequency defined in the automated monitoring rules.</li></ul> <p>For more in-depth information regarding the scheduling process, see <a href="#">Chapter 8, Section 8.5</a>.</p>

Field Name	Details
<b>Operational Frequency</b>	<p>This indicates the frequency at which the control should be tested. To maintain the values available for this field, execute <b>Governance, Risk and Compliance • Process Control • Edit Attribute Values</b>. From the <b>Dialog Structure</b> section, click <b>Attributes</b>. Select <b>PR-FREQ Frequency</b>, and click <b>Values</b> to view the current values. Following are the values that are added to this configuration by default on activating standard BC set GRPC-ATTR-CTRL_FREQUENCY:</p> <ul style="list-style-type: none"> <li>• <b>Annual</b></li> <li>• <b>Bi-Weekly</b></li> <li>• <b>Continual</b></li> <li>• <b>Daily</b></li> <li>• <b>Monthly</b></li> <li>• <b>Quarterly</b></li> <li>• <b>Semi-Monthly</b></li> <li>• <b>Weekly</b></li> </ul>
<b>To Be Tested</b>	<p>Select <b>Yes</b> if the control is in the scope of testing for the period. If it's not in scope, select <b>No</b>.</p>

Field Name	Details
<b>Test Automation</b>	<p>This indicates the automation type and how the control should be tested for operating effectiveness. To maintain the dropdown values for this field, execute <b>Governance, Risk and Compliance • Process Control • Edit Attribute Values</b>. From the <b>Dialog Structure</b> section, click <b>Attributes with Fixed Values</b>. Select <b>PR-Test_AUTOM Test Automation</b>, and click <b>Names</b> to view the current values. The following standard values are available in this configuration:</p> <ul style="list-style-type: none"><li>• <b>Automated</b></li><li>• <b>Manual</b></li><li>• <b>Semi-Automated</b></li></ul>

Field Name	Details
<b>Testing Technique</b>	<p>This defines the type of testing that will be performed to evaluate the control. To maintain the values available for this field, execute <b>Governance, Risk and Compliance • Process Control • Edit Attribute Values</b>. From the <b>Dialog Structure</b> section, click <b>Attributes</b>. Select <b>PR-TTECHNQ Testing Technique</b>, and click <b>Values</b> to view the current values. The following values are added to this configuration by default on activating standard BC set GRPC-ATTR-TEST_TECH:</p> <ul style="list-style-type: none"> <li>• <b>Attribute sampling</b></li> <li>• <b>Inspection of documentation corroborated by inquiry</b></li> <li>• <b>Observation of control corroborated by inquiry</b></li> <li>• <b>Reperformance of control corroborated by inquiry</b></li> </ul>
<b>Manual Test Plan</b>	<p>Test plans are series of steps that the control tester should execute to test the operating effectiveness of the control. To understand more about manual test plans, see <a href="#">Chapter 6, Section 6.5.1</a>.</p>

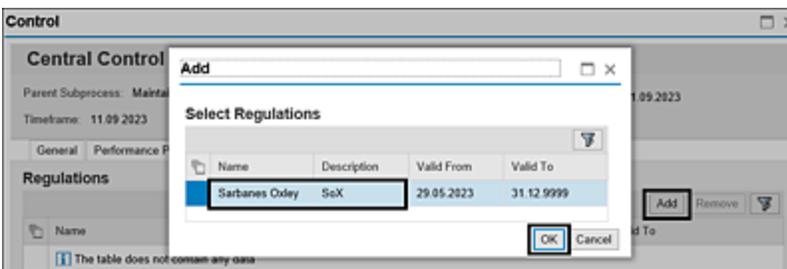
**Table 5.2** List of Control Attributes

## Performance Plans Tab

Performance plans contain a sequence of activities that the performers should complete to check the efficiency of the control activities. These plans are used as part of the manual control performance functionality of SAP Process Control. To understand more about performance plans and assignment of the same to control, see [Chapter 6, Section 6.4.1](#).

## Regulations Tab

Once the performance plans are maintained, navigate to the **Regulations** tab to map the relevant regulations against which the control should be evaluated. To map a new regulation, click on the **Add** button that will list the available regulations that are previously assigned to the parent subprocess. Choose the regulation that you want to assign to the control. After selecting the regulation, click **OK** to complete the assignment, as shown in [Figure 5.39](#).

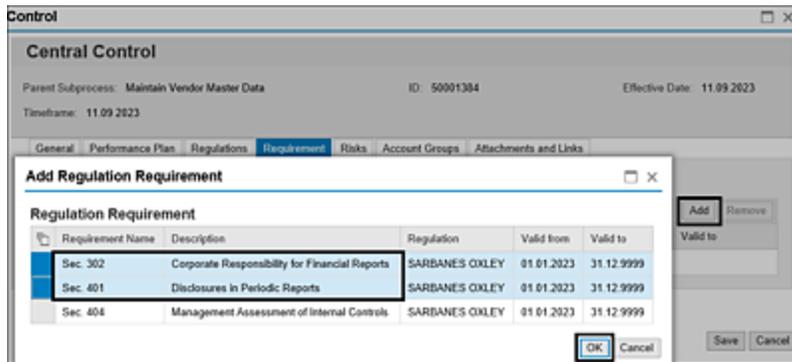


**Figure 5.39** Assignment of Regulation to the Control

## Requirement Tab

As a next step, navigate to the **Requirement** tab to assign the requirements of the regulation to the control. Click the

**Add** button to view the list of requirements that were created for the regulation assigned in the previous step in the master data. Select the regulation requirements to be assigned to the control, and click **OK** to perform the assignment, as shown in [Figure 5.40](#).

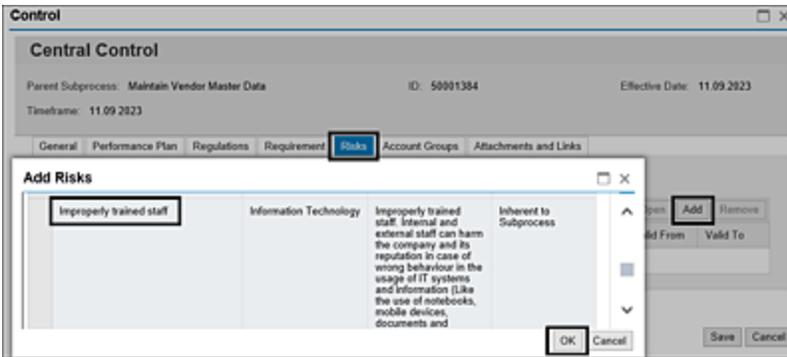


**Figure 5.40** Assignment of Regulation Requirements to the Control

## Risks Tab

The risks assigned to the subprocess indicate all the risks that it's prone to. To mitigate these risks, one or multiple controls can be created under the subprocess. This section details how the controls are mapped to the risks they're mitigating.

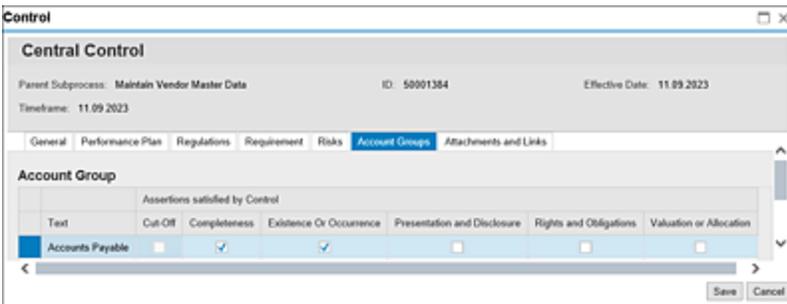
To map the risks, navigate to the **Risks** tab of the control, click **Add**, and a popup screen shows the list of risks that are mapped at the parent subprocess level. Select the specific risk that should be mapped to the control, and click **OK**, as shown in [Figure 5.41](#).



**Figure 5.41** Assignment of Risks to the Control

## Account Groups Tab

As a next step, navigate to the **Account Groups** tab where the financial assertions that the control has to comply with are maintained. This tab lists all the account groups that are mapped to the parent subprocess, and the only activity that can be performed is to enable the checkboxes for various financial assertions that are applicable, as shown in [Figure 5.42](#).



**Figure 5.42** Maintenance of Financial Assertions Applicable for the Control

Once all the details of the control are defined in the **General, Performance Plans, Regulation, Requirement, Risks, and Account Group** tabs, click **Save** to complete the definition of the central control in the business process hierarchy.

## 5.3 Organization Hierarchies

Organization hierarchies in SAP Process Control serve as a hierarchical representation of an entity's structure, primarily based on reporting requirements. This master data element is of utmost importance, as it plays a key role in determining responsibility and accountability for managing the effectiveness of subprocesses and controls once they are assigned to a specific organization.

In addition, note that the organization is shared master data across SAP Access Control, SAP Process Control, and SAP Risk Management solutions, and there are multiple tabs that need to be maintained when defining an organization.

[Table 5.3](#) shows the significance of each of these tabs along with the solution they pertain to.

<b>SAP Process Control</b>	<b>SAP Risk Management</b>	<b>SAP Access Control</b>
----------------------------	----------------------------	---------------------------

<b>SAP Process Control</b>	<b>SAP Risk Management</b>	<b>SAP Access Control</b>
<ul style="list-style-type: none"> <li>• <b>General</b></li> <li>• <b>Subprocess</b></li> <li>• <b>Indirect Entity-Level Controls</b></li> <li>• <b>Regulations</b></li> <li>• <b>Policies</b></li> <li>• <b>Roles</b></li> <li>• <b>Issues (Ad-hoc)</b></li> <li>• <b>Attachments and Links</b></li> </ul>	<ul style="list-style-type: none"> <li>• <b>General</b></li> <li>• <b>Objectives</b></li> <li>• <b>Key Risk Indicators</b></li> <li>• <b>Units of Measure</b></li> <li>• <b>Risk Appetite</b></li> <li>• <b>Risk Thresholds</b></li> <li>• <b>Roles</b></li> <li>• <b>Attachments and Links</b></li> </ul>	<ul style="list-style-type: none"> <li>• <b>Users</b></li> <li>• <b>Owners</b></li> <li>• <b>AC Roles</b></li> <li>• <b>Assignments</b></li> <li>• <b>Attachments and Links</b></li> </ul>

**Table 5.3** SAP GRC Solutions: Classification of Tabs in Organization Maintenance

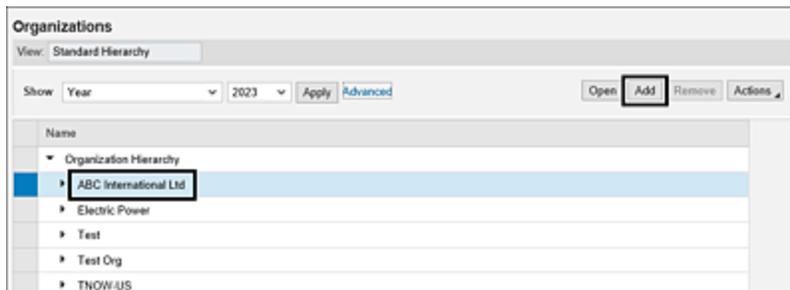
There is no default organization, and you must create the root organization and child organization as a part of the initial configuration. Refer to [Chapter 4, Section 4.3.1](#), to understand the process of creating the root organization hierarchy. The topmost entity in the hierarchy is referred to as “Corporate,” and the rest of the entities are called “Organizations.” It’s essential to create the root organization and child organizations as a part of the initial configuration because there is no default organization available. The

following sections detail the steps to set up new organizations and also the steps to be followed to map the control to the organization.

### 5.3.1 Creation of an Organization

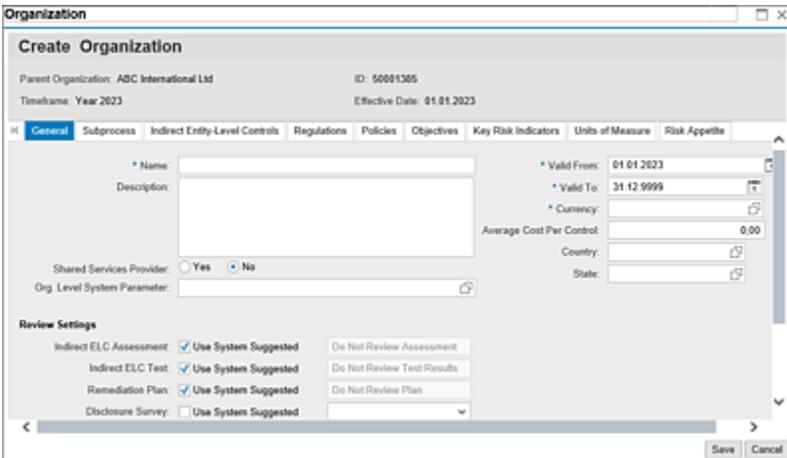
Once the root organization is created, further child organizations can be created from Transaction NWBC. To review the existing organization hierarchy or to create a new one, log in to the SAP Process Control system, execute Transaction NWBC, navigate to the **Master Data** work center, and click the **Organizations** work item under the **Organizations** work group.

To create a new organization within the hierarchy, choose the existing organization under which the new one should be created, and then click the **Add** button, as highlighted in [Figure 5.43](#).



**Figure 5.43** Option to Create a New Organization in the Hierarchy

The new **Organization** definition screen has several tabs, including **General**, **Subprocess**, **Indirect Entity-Level Controls**, **Regulations**, **Policies**, **Roles**, **Issues**, and **Attachments and Links**, as shown in [Figure 5.44](#).



**Figure 5.44** General Tab of the Organization

For a comprehensive understanding of each of these tabs, see [Table 5.4](#).

Tab	Details
<p><b>General</b></p>	<p>The <b>General</b> tab can be used to define the organization, and it allows you to configure fields such as <b>Name</b>, <b>Description</b>, <b>Valid From</b>, and <b>Valid To</b>, which are consistent with other master data definitions. Furthermore, the following fields must also be set up:</p> <ul style="list-style-type: none"> <li> <p><b>Subject to Sign-Off</b> Mark it as Yes if the organization is to be considered for the sign-off process. See <a href="#">Chapter 9, Section 9.3</a>, to understand more about the sign-off process.</p> </li> <li> <p><b>Shared Services Provider</b> If the organization is a shared service center that manages the controls of various other organizations, the controls</p> </li> </ul>

Tab	Details
	<p>can be localized in the shared service provider and tested. These controls can be localized in the other organizations with reference to the shared service provider where the control results, which were tested in the shared service provider, will be extended to the receiving organization.</p> <ul style="list-style-type: none"><li>• <b>Deficiency Analysis Flag</b> If the organization is to be considered for the functionality of aggregating deficiencies, mark this field as <b>Yes</b>.</li><li>• <b>In Scope</b> Mark it as <b>Yes</b>, if the organization is critical and should be considered in planning any type of control evaluations. This eases the task of GRC administrator while scheduling the Planner, and all the organizations in scope can be selected in a single click.</li><li>• <b>Currency</b> This field is relevant for SAP Risk Management, where risk thresholds should be maintained in a currency in which the organization is operating.</li></ul>

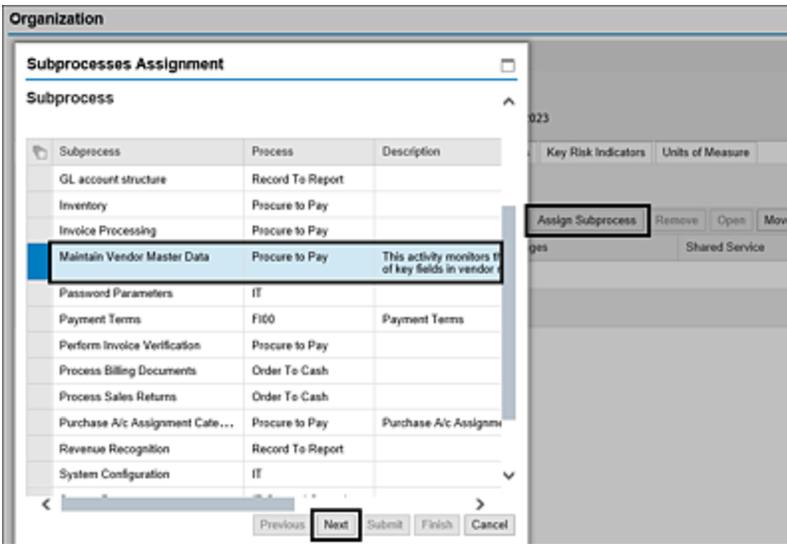
Tab	Details
<b>Subprocess</b>	<p>Map all those subprocess and controls that are being managed by this organization and for which it's responsible to ensure they are being operated effectively. For a more comprehensive understanding of how subprocesses and controls are assigned to the organization, see <a href="#">Section 5.3.2</a>.</p>
<b>Indirect Entity-Level Controls</b>	<p>Indirect entity-level controls are defined based on the COSO regulation framework at an organization level, which is across all the business processes. See <a href="#">Section 5.5</a> to understand more about indirect entity-level controls.</p>
<b>Regulations</b>	<p>All the regulations that the organization is required to comply with are automatically inherited in this tab when you perform the assignment of subprocesses, indirect entity-level controls, or policies to the organization.</p>
<b>Policies</b>	<p>This section displays all the policies that have been created with the organization identified as the responsible entity. See <a href="#">Chapter 9, Section 9.1.1</a>, to see how responsible organizations are assigned while creating a policy.</p>

Tab	Details
<b>Roles</b>	<p>This tab displays all the roles that are available for user assignment and have been configured in entity role assignment for the corporation or organization. These role-user assignments serve as the foundation for any workflow defined per custom agent determination.</p> <p>For detailed information on how roles are mapped to a corporation or organization, refer to <a href="#">Chapter 4, Section 4.2.2</a>.</p>
<b>Issues</b>	<p>Displays any ad hoc issue that is reported with this organization as object. <a href="#">Chapter 7</a> details more about ad hoc issue management.</p>

**Table 5.4** Overview of Tabs while Configuring Organizations

### 5.3.2 Control Localization

In the previous sections of this chapter, we've explored creating individual business process hierarchies; the relationship with regulations, control objectives, account groups, and risks; and creating organizations within master data. In this section, we'll delve into the process of mapping each of the controls that are being used within an organization by exploring the various options available during the assignment process.



**Figure 5.45** Selection of the Subprocess to Assign It to the Organization

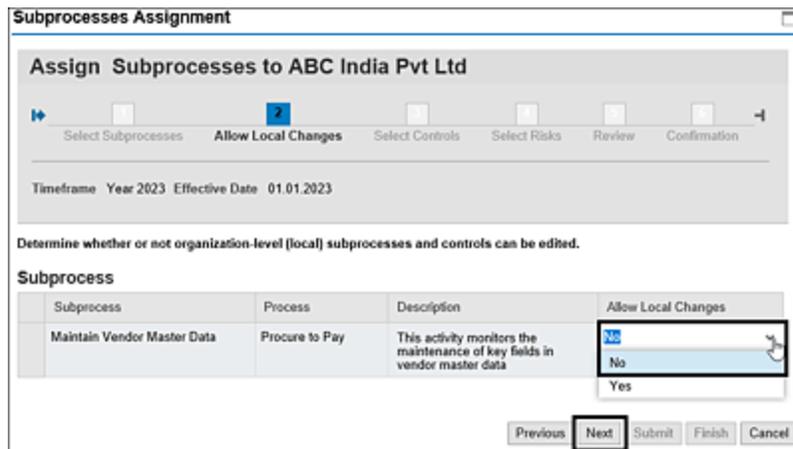
Select the organization from the hierarchy, and navigate to the **Subprocess** tab where the assignment can be performed. Click **Add Subprocess**, and select from the list of subprocesses created in the business process hierarchy of the master data. Select the subprocess and controls to be assigned to the organization, and click **Next** (see [Figure 5.45](#)).

The next tab provides two options while localizing the subprocess and control to an organization in the **Allow Local Changes** dropdown, as shown in [Figure 5.46](#):

- **Yes**  
In this case, a copy of the subprocess and control is created, and any changes required to be made to the subprocess or control can be made directly at the local level in the organization. This option is used if there are multiple zones in the organization hierarchy, and each entity is managing their zonal specific control description and attributes.

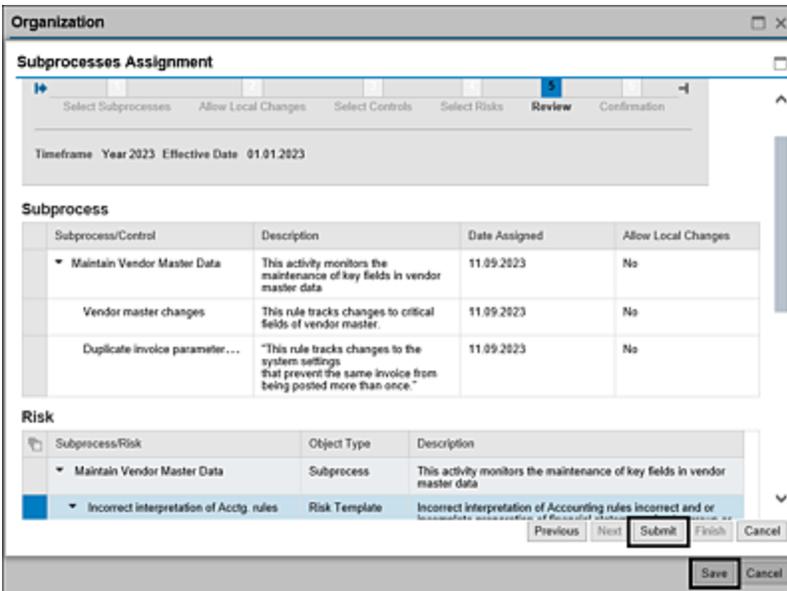
- **No**

In this case, a reference of the subprocess and control is created, and any changes required to be made to the subprocess or control should be made in the central business process hierarchy and the same will be reflected in the local subprocess and control. This option is used if there are multiple zones in the organization hierarchy and the control data is managed centrally, that way a single change made in the central process hierarchy is extended to all the local copies, thereby eliminating huge manual efforts.



**Figure 5.46** Selection of Local Changes Method while Localizing the Controls

Review the subprocess, controls, and risks that will be mapped to the organization. Click **Submit** after confirming the details, and then save to complete the subprocess and control assignment to the organization, as shown in [Figure 5.47](#).



**Figure 5.47** Saving the Subprocess and Controls Assigned to the Organization

Once the localization of a subprocess and control is completed, all the relevant attributes of control are copied/referenced to the organization. The subsequent step is to identify the owners responsible for the control, which is explained in detail in [Section 5.4](#).

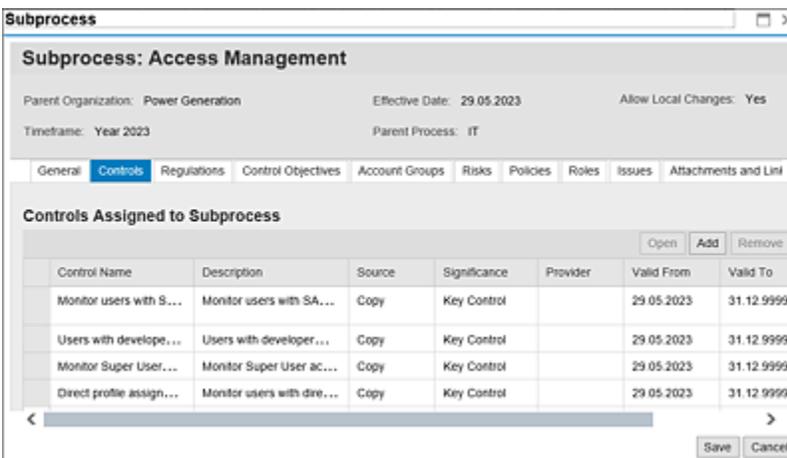
### 5.3.3 Add a Control Directly under the Local Subprocess

In the previous section, you've seen how to map a control to an organization using the localizing concept of assignment using a subprocess. If there is a requirement to define a control specific to only one organization and the same need not be part of the central process hierarchy, SAP Process Control provides a feature to define a control directly under the local subprocess, which saves the manual efforts of

defining the control as part of the business process hierarchy and then mapping it to the organization.

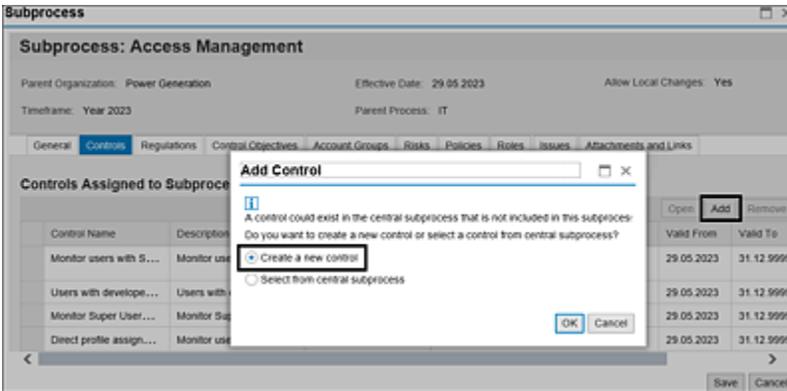
This isn't a default feature in SAP Process Control, but the same can be enabled from the Transaction SPRO configuration. Refer to [Chapter 4, Section 4.3.3](#), to understand the process of enabling the ability to add locally defined controls. Once the configuration is activated, follow the steps given here to create a new control under the local subprocess.

Select the organization from the hierarchy in the **Master Data** work center under which the local control has to be defined, navigate to the **Subprocess** tab, select the subprocess, click **Open**, and navigate to the **Controls** tab, as shown in [Figure 5.48](#).



**Figure 5.48** Access the Controls Tab from the Local Subprocess

This tab shows the details of current controls. Click **Add**, and a popup screen appears in which you can select the **Create a new control** option to define a new local control, as shown in [Figure 5.49](#).



**Figure 5.49** Option to Create a Local Control from Subprocess under an Organization

On clicking the **Create a new control** option, you have to follow the standard process of creating a control. To learn more about defining a control, refer to [Section 5.2.3](#). If the configuration defined in [Chapter 4, Section 4.3.3](#), isn't activated, this option is grayed out and isn't available for you to define a local control directly from an organization.

## 5.4 Users and Roles

SAP Process Control is a platform to manage the compliance needs of the organization, it's important to identify the users responsible to ensure the processes are operated effectively. Different types of evaluations that the processes/controls undergo in SAP Process Control are workflow driven, so it's key to map the roles and the users responsible to act on different stages of these assessments. This section provides a detailed understanding of how the user assignments and the further maintenance of replacement or removal can be performed at a control level.

### 5.4.1 User Assignment

To perform user assignment, navigate to the **Roles** tab of the control assigned to the organization in the previous section, as shown in [Figure 5.50](#).

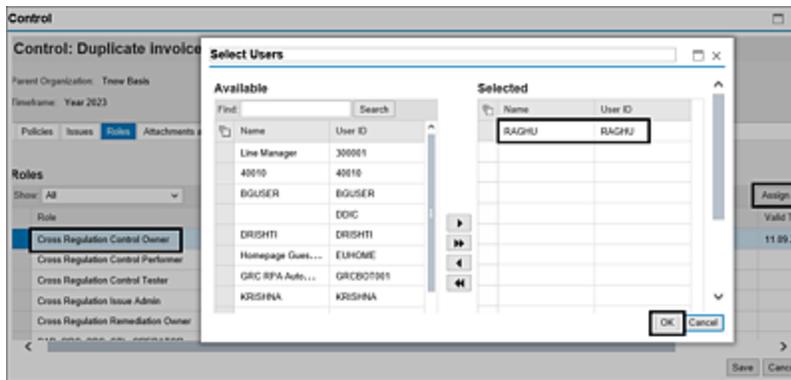
The screenshot shows the SAP Process Control configuration window for a control named "Duplicate invoice parameter changes". The window has a title bar "Control" and a subtitle "Control: Duplicate invoice parameter changes". Below the subtitle, there are fields for "Parent Organization: Trow Basis", "Parent Subprocess: Maintain Vendor Master Data", and "Allow Local Change". The "Timeframe" is set to "Year 2023" and the "Effective Date" is "29.05.2023". The "Roles" tab is selected and highlighted with a red box. The "Mitigating Control ID" field contains "Duplicate invoice parameter changes". The "Description" field contains "This rule tracks changes to the system settings that prevent the same invoice from being posted more than once.". The "Valid From" field is "29.05.2023" and the "Valid To" field is "31.12.9999". The "Trigger" field is "Date". The "Operation Frequency" field is "Monthly". The "To Be Tested" field is "Yes". The "Test Automation" field is "Automated". The "Testing Technique" field is "Input". The "Control or Process Step" field is "Control". The "Control Category" field is "Transactional-Level Control". The "Significance" field is "Key Control". The "Save" and "Cancel" buttons are visible at the bottom right.

**Figure 5.50** Navigation Option to Roles Tab of a Local Control

## Note

Roles in this tab appear based on the Transaction SPRO configuration of **Entity Role Assignment**. Refer to [Chapter 4, Section 4.2.2](#), to understand the process of mapping roles to entities in SAP Process Control.

Select the role to which the user has to be assigned, and click **Assign**. A new popup screen opens with the list of users having the selected role assigned to their user ID, in this case, the control owner role. Select the user to be assigned to the role, and click **OK**, as shown in [Figure 5.51](#).



**Figure 5.51** Assignment of a User to the Control Owner Role

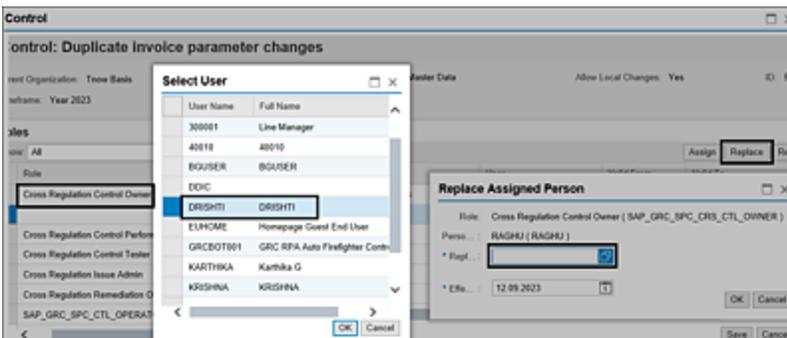
## Note

This control to have only those users available for selection can be managed using the **Second-Level Authorizations** configuration in Transaction SPRO. Refer to [Chapter 4, Section 4.1.4](#), to understand more about second-level authorizations maintenance and relevance. If the **Second-Level Authorization** configuration is deactivated, the popup screen shows the list of all the

GRC users who have access to role  
SAP\_GRC\_FN\_BUSINESS\_USER.

## 5.4.2 Replacing Users

The previous section explained how a new user can be assigned to the role available in the **Roles** tab of a local control. This section details how to replace the current user with a new one. This option is used if the controller is either moving from a role with a different responsibility or the owner is leaving the organization, where a new owner has to be mapped to the subprocess/control. From the **Roles** tab of the local control, select the user that is assigned to the designated role, and click **Replace**. From the popup, select the new user who will be the new control owner, and select the **Effective Future Date** from which the responsibility will be transferred, as shown in [Figure 5.52](#).



**Figure 5.52** Replacement of Current Owner from the Roles Tab

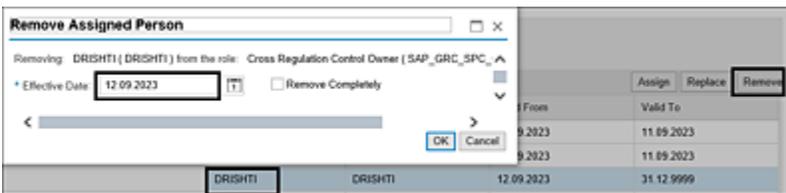
### Note

The replacement will be effective on the mentioned date, only on successful completion of background job GRFN\_REPLACEMENT\_MASS\_ACTIVATE where all the current **Work**

**Inbox** items of the old owner also get transferred to the new owner.

### 5.4.3 Removing Users

The current owner can be removed from ownership rights. This option is used if the current user is no longer the owner of the control or if more than one user is assigned to the role and one of the owners is either moving to a new role with a different responsibility or the owner is leaving the organization. From the **Roles** tab of the local control, select the user that should be removed from the designated role, and click **Remove** to delink the responsibility. From the popup, select the **Effective Date** from which the responsibility should be removed from the user, as shown in [Figure 5.53](#).



**Figure 5.53** Removal of Current Owner from the Roles Tab

### 5.4.4 Maintaining User Assignments from the Access Management Work Center

SAP Process Control provides a feature in which owners for multiple controls can be maintained simultaneously from a single screen using the **GRC Role Assignments** option under the **Access Management** tab in Transaction NWBC. To maintain the control owners for multiple controls, execute

Transaction NWBC, navigate to the **Access Management** work center, and execute the **Business Processes** work item under the **GRC Role Assignments** work group.

In the selection screen, Select **Role and Filter**, select the **Role Level** as **Control**, and use the filters **Organization**, **Process**, and **Subprocess** to get only those lists of controls under which they are created or assigned, as shown in [Figure 5.54](#).

**Assign Process, Subprocess and Control Roles**

1 Select Role and Filter 2 Assign Roles 3 Review 4 Confirmation

Timeframe: Year 2023 Apply Effective Date 12.09.2023

Select Role Levels to be assigned. If desired, select Filters, then click Next.

**Role Level**

Process

Subprocess

Control

**Regulations**

Show Cross-Regulation Roles?:  Yes  No

Regulations: Add

**Display Expired User Role Assignment for Selected Timeframe**

Display Expired User Role Assignment for Selected Timeframe:  Yes  No

**Filters**

Organization: 3 Selected

Process: Add

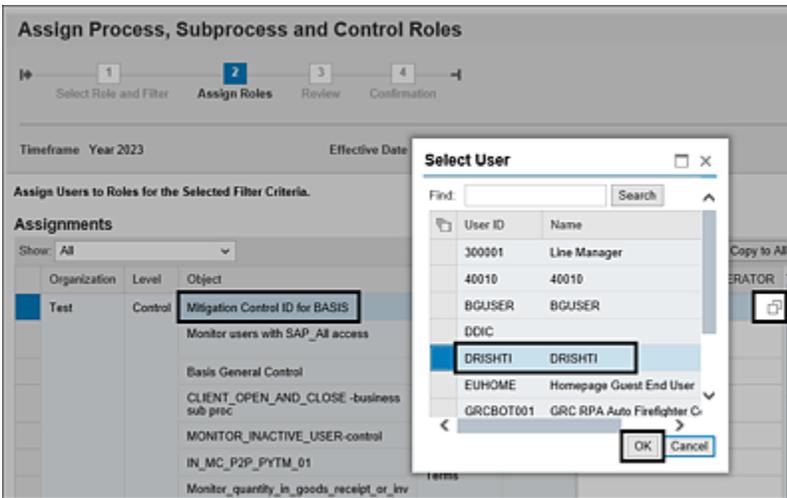
Subprocess: Add

Control: Add

Role: 1 Selected

**Figure 5.54** Filter Options Available in the Select Role and Filters Tab

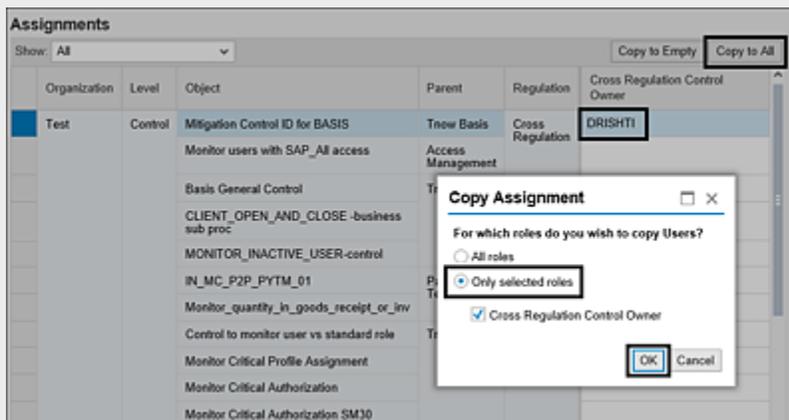
After adding the required filters, click **Next** to navigate to the **Assign Roles** tab where we can see the list of controls for which the control owners should be assigned based on the filters selected in the previous step. To assign the owner to a control, select a control, and search in the **Control Owner** column, which lists the users with rights to be assigned as a control owner. Select the user, and click **OK**, as shown in [Figure 5.55](#).



**Figure 5.55** Selection of User for Assignment to the Subprocess Owner Role

## Note

Using the **Copy to Empty** and **Copy to All** options, the user assigned as owner for one control can be replicated as owner for the rest of the controls for which owners aren't mapped yet, as shown in [Figure 5.56](#).



**Figure 5.56** Mass Maintenance of User Assignments to Roles

Click **Next** to navigate to the **Review** tab. Review the assignments made and the **Effective Date**, and then click

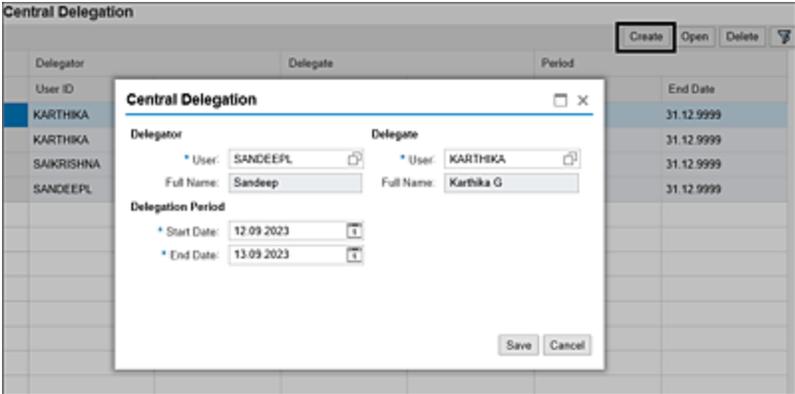
**Confirm** to complete the user assignments to the selected objects and roles.

### 5.4.5 Central Delegation

Central delegation is a feature used by the SAP Process Control administrators to extend the roles, rights, and responsibilities of one user (referred to as delegator) to another user (referred to as delegate). This is done for a specific period of time if the user responsible for performing certain tasks is unavailable to complete those on time, and the responsibilities can be executed by a designated user.

To perform the delegation, execute Transaction NWBC, navigate to the **Access Management** work center, and click the **Central Delegation** work item under **GRC Role Assignments**.

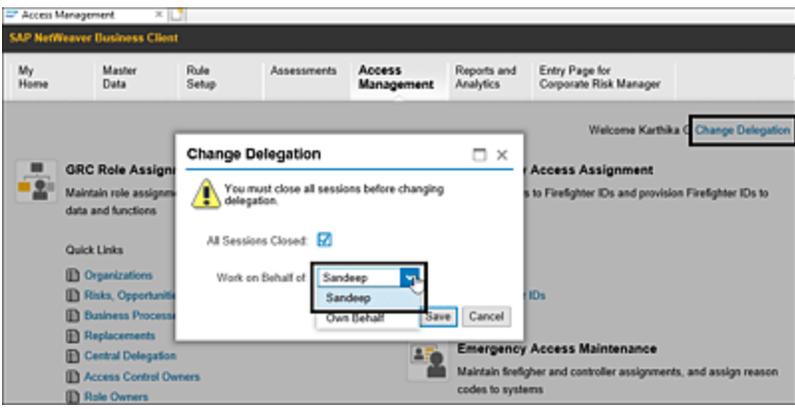
Click **Create** for a new delegation, and in the popup screen, provide the ID of the user whose rights are being assigned in the **Delegator** section and the ID of the user who is receiving the access rights in the **Delegate** section in their respective **User** fields. In addition, provide the delegation **Start Date** and **End Date** only between which the delegated user can execute the rights. Click **Save** to complete the delegation, as shown in [Figure 5.57](#).



**Figure 5.57** Creation of Central Delegation

On creating central delegation, the delegated user can access the system with the delegator rights by using the **Change Delegation** option, as shown in [Figure 5.58](#).

Once the user assignments are completed for various roles applicable to SAP Process Control, the detailed view of the master entity role-to-user mapping can be reviewed from the **Object Authorization Analysis** report from the **Reports and Analytics** work center in Transaction NWBC.



**Figure 5.58** Changing the Delegation ID to Perform Tasks Assigned

## 5.5 Working with Indirect Entity-Level Controls

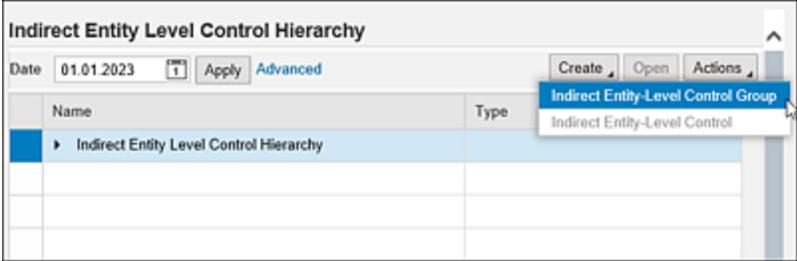
While [Section 5.2](#) provided an overview of the business process hierarchy that dealt with how business processes, subprocesses, and controls are established, this section furnishes an overview of indirect entity-level controls. It provides more information on what indirect entity-level controls are, how they are configured and aligned with organizations, and the various types of assessments that will be performed.

Indirect entity-level controls are defined in master data through two distinct levels, and the following steps outline the process for creating both indirect entity-level control groups and individual indirect entity-level controls within the hierarchy.

### 5.5.1 Indirect Entity-Level Control Group

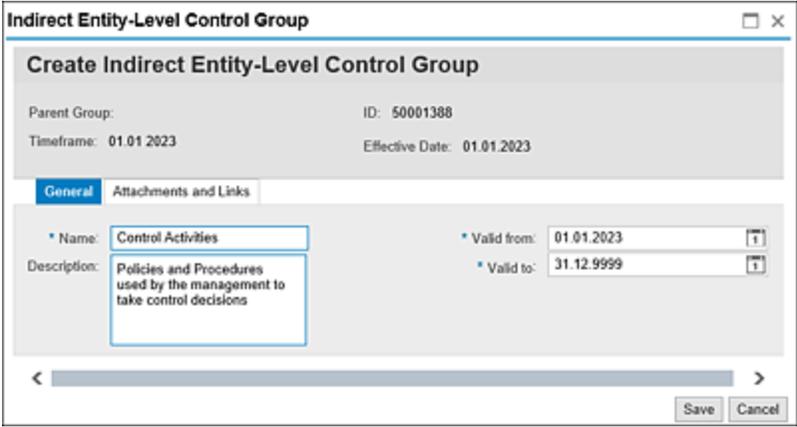
Indirect entity-level control groups organize indirect entity-level controls with relatable characteristics and helps in grouping similar controls under one group, for example, control activities, control environment, and so on. To review the existing indirect entity-level control groups in the hierarchy or to create a new one, log in to the SAP Process Control system, execute Transaction NWBC, navigate to the **Master Data** work center, and click the **Indirect Entity-Level Controls** work item under the **Activities and Processes** work group.

To create a new indirect entity-level control group, click on the **Indirect Entity Level Control Hierarchy**, and click **Create • Indirect Entity-Level Control Group** from the list, as shown in [Figure 5.59](#).



**Figure 5.59** Option to Create a New Indirect Entity-Level Control Group in the Hierarchy

The new **Indirect Entity-Level Control Group** definition screen has the **Name**, **Description**, **Valid From**, and **Valid To** fields that can be defined similar to the other master data items, as shown in [Figure 5.60](#).



**Figure 5.60** Configuration of the Indirect Entity-Level Control Group

Once the details are updated, as shown in [Figure 5.60](#), click **Save** to create the indirect entity-level control group. Once the group is created, the next step is to create and configure controls under this group, which is detailed in the next section.

## 5.5.2 Indirect Entity-Level Control

Indirect entity-level controls relate to the governance process in the organization, activities pertaining to internal communications, and employee behavior that has an impact on the overall environment in the organization. A couple of examples of indirect entity-level controls are code of conduct and code of ethics. To create a new indirect entity-level control in the hierarchy, click on the group created in the previous step, and then choose **Create • Indirect Entity-Level Control**.

The new **Indirect Entity-Level Control** definition screen includes standard fields such as **Name**, **Description**, **Valid From**, and **Valid To**, similar to other master data definitions, as shown in [Figure 5.61](#).

The screenshot shows a software interface for configuring an indirect entity-level control. The window is titled "Indirect Entity-Level Control". The main heading is "Central Indirect Entity-Level Control :". Below this, there are fields for "Parent Group: Control Activities", "ID: 50001389", "Timeframe: 01.01.2023", and "Effective Date: 01.01.2023". There are three tabs: "General" (selected), "Regulations", and "Attachments and Links". The "General" tab contains: "Name: Reconciliation", "Valid from: 01.01.2023", "Valid to: 31.12.9999", "Description: Payroll reports are reviewed by a user outside the system", "Operation Frequency: Monthly", "To Be Tested: Yes (selected) No", and "Test Plan: Payroll account reconciliations". At the bottom right are "Save" and "Cancel" buttons.

**Figure 5.61** Configuration of an Indirect Entity-Level Control

Additionally, it has the following fields:

- **Operational Frequency**  
This indicates the frequency at which the control should be tested.

- **To Be Tested**

Select **Yes** if the control is to be tested for operating effectiveness, and then assign a manual test plan that is created in the **Assessments** work center. See [Chapter 6, Section 6.5.1](#), to understand the process of defining a manual test plan.

- **Test Plan**

The process of evaluating operating effectiveness of indirect entity-level controls is similar to the manual control test of effectiveness. Select the test plan that contains the series of steps that the indirect entity-level control tester should follow to arrive at the operating effectiveness rating.

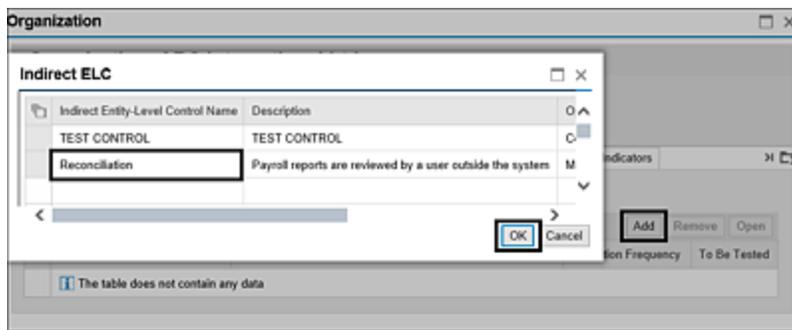
Once the details are provided, navigate to the **Regulations** tab, map the regulation with which the indirect entity-level control is complying, and click **Save** to complete the indirect entity-level control creation process.

### **5.5.3 Localization of Indirect Entity-Level Controls**

Indirect entity-level controls created in the previous section act as a central master data repository. If there are multiple geographical zones that are part the organization hierarchy, the process of handling the indirect entity-level controls may vary in each such entity. To assign the responsibility of maintenance of indirect entity-level controls and also get a clear picture of how effectively the indirect entity-level controls are being operated at each organization level, it's essential to map them to the respective organizations where

they're being managed. This process of assigning an indirect entity-level control to the organization is referred as localization.

Select the organization from the hierarchy, and navigate to the **Indirect Entity-Level Control** tab where the assignment can be performed. Click **Add**, and select the **Indirect ELC** from the list of indirect entity-level controls created in the master data. Click **OK** and **Save** to complete the assignment, as highlighted in [Figure 5.62](#).



**Figure 5.62** Assignment of Indirect Entity-Level Control to the Organization

Once the indirect entity-level controls are defined and mapped to an organization, the same should undergo evaluations such as design and operating effectiveness tests that are done on a periodic basis.

To test the design effectiveness of the indirect entity-level control, define a survey with a list of questions that should be responded to by the indirect entity-level control tester. Additionally, for a deeper understanding of the process, see [Chapter 6, Section 6.2.1](#), to learn about defining a survey and scheduling a planner activity, as well as [Chapter 6, Section 6.2.2](#), which explains the process of scheduling a Planner control.

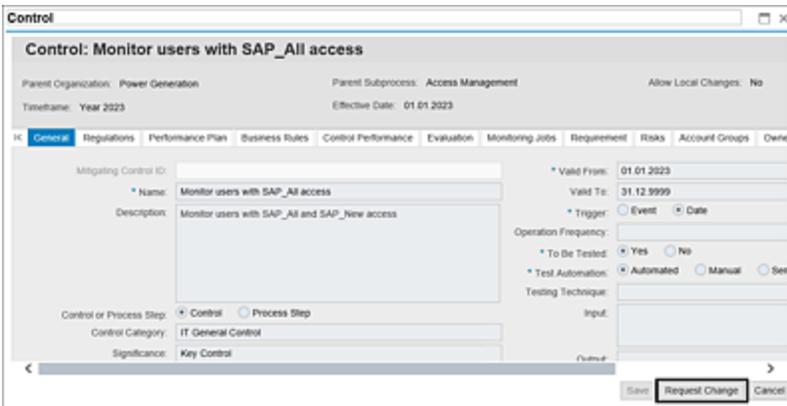
To evaluate the operational effectiveness of the indirect entity-level control, it's advisable to establish a manual test plan containing a series of steps that the tester should execute. For a detailed process on how to define a manual test plan, see [Chapter 6, Section 6.5.1](#). Subsequently, schedule a planner activity for the **Test of Indirect Entity-Level Control Effectiveness**. You can find the process for scheduling a planner in [Chapter 6, Section 6.2.2](#).

## 5.6 Approval Workflow for Master Data Changes

The previous sections of this chapter detailed the process to define various master data elements. Any GRC administrator with access to maintain master data can make changes to these elements, and the elements can be reviewed using the standard audit log reports. However, this will act as a detective control to review whether all the changes made are in line with the expectations. To make the master data maintenance more efficient, SAP Process Control provides an approval workflow feature where any changes required in master data have to be approved by an administrator. This approval workflow can be enabled from the Transaction SPRO configuration. Refer to [Chapter 4, Section 4.3.2](#), to understand the configurations to enable the approval workflow for various master data elements.

For better understanding, the process of applying workflow is explained for a local control later. However, the steps remain similar for the other master data changes.

To request a change in local control, select the organization from the hierarchy in the **Master Data** work center. Navigate to the **Subprocess** tab, expand the **Subprocess**, and select **Control** for which a request for change is to be submitted, as shown in [Figure 5.63](#).



**Figure 5.63** Request Change Option in the Local Control

The following sections detail the steps involved in requesting a change to be performed in a master data entity, providing approvals, updating the master data entity once approval is received, and reviewing the change made to the master data.

### 5.6.1 Request Change

Because the approval workflow is enabled for local controls, a change can't be made to the entity. Approval must be obtained from the master data change approver. Click the **Request Change** button, and a popup screen appears where the request details should be updated and submitted to the approver for review, as shown in [Figure 5.64](#):

- **Change Request**  
Enter the purpose of the change.
- **Field to be Changed**  
Specify the fields for which the change is required.
- **Proposed Changes**  
Detailed explanation of the changes to be made in the

field.

Field to be Changed	Proposed Change
Description	Control description to be updated
Nature	Update the nature of the control

**Figure 5.64** Details to Be Updated in the Change Request for the Master Data Update

Click **OK** to submit the request for approval.

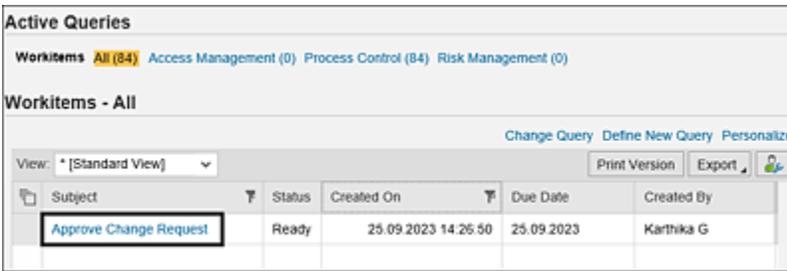
### Note

If a change request is submitted and is pending approval, you can't request another change to the entity until the existing work item is addressed.

## 5.6.2 Approve Change

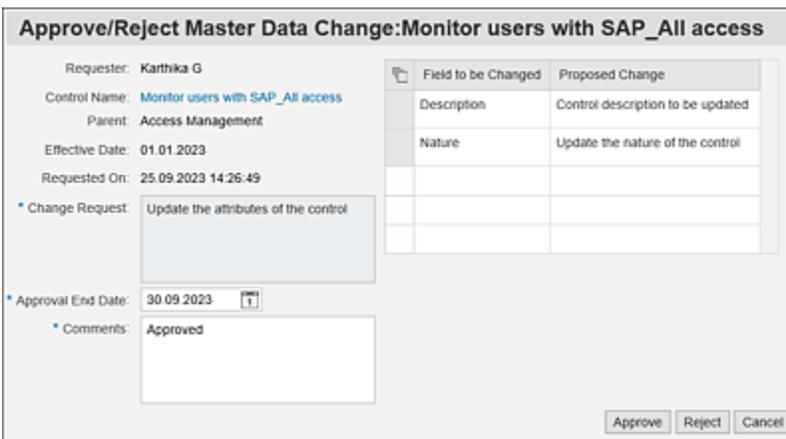
Once the request for change is submitted, a workflow will be triggered to the agent as defined in the custom agent determination rules (refer to [Chapter 4, Section 4.2.3](#), for more details about custom agent determination rules).

Approvers can access the work items that are pending for their action from the **Work Inbox**. All the pending work items for action with the subject line **Approve Change Request** are displayed under the SAP Process Control group. [Figure 5.65](#) shows the pending workflow along with the status and other information.



**Figure 5.65** Work Inbox Screen with Items Pending for Action

Click the **Subject** to open the work item, and the approver can see details such as **Requester**, **Control Name**, **Change Request** information, and other details entered while submitting the request (see [Figure 5.66](#)).



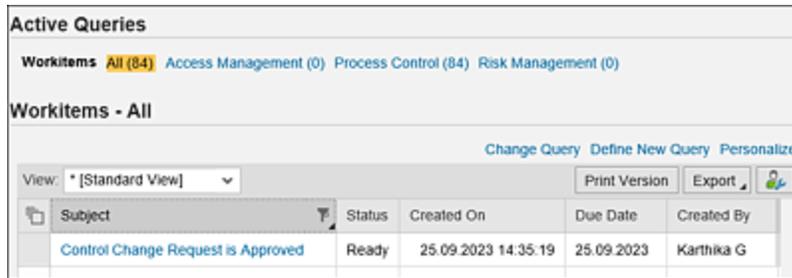
**Figure 5.66** Master Data Change Request: Approver View

Once the details are reviewed, the **End Date** can be updated along with the **Comments**, and the request can be approved by clicking the **Approve** button. The **Reject** button can be used to reject the changes requested.

### 5.6.3 Implement Change

Once the change request is approved, a temporary authorization is assigned to the requester to make

necessary changes to the requested master data entity. A notification will be triggered to the requester to carry out the approved changes, as highlighted in [Figure 5.67](#).



Subject	Status	Created On	Due Date	Created By
<a href="#">Control Change Request is Approved</a>	Ready	25.09.2023 14:35:19	25.09.2023	Karthika G

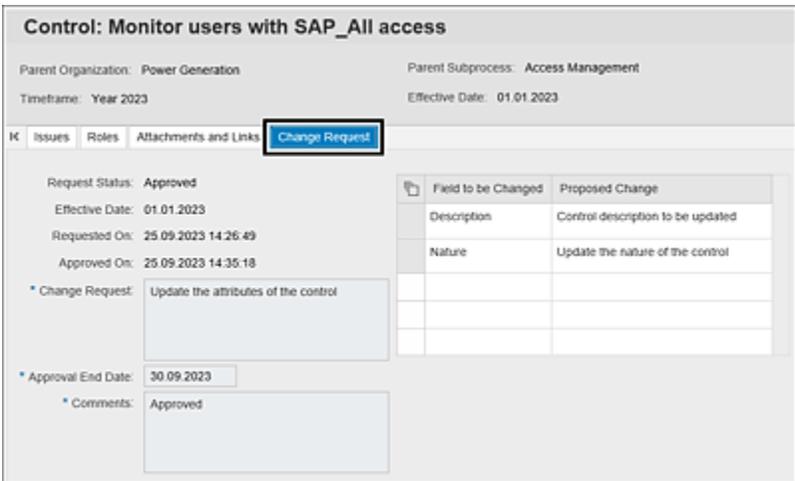
**Figure 5.67** Change Request Approval Confirmation

The requester can access the work item by clicking the **Subject** link, making the required changes, and clicking **Save** to complete the changes.

### Note

The option to make changes remains until the approval end date provided by the approver. If the requester clicks **Finish**, it indicates all the required changes are completed and the request will be closed. For any further changes, the requester should raise another change request and follow the approval workflow process.

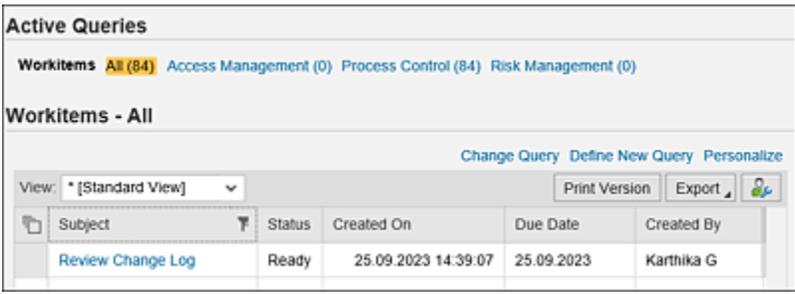
The details of the change request can be reviewed from the **Change Request** tab of the master data element, as shown in [Figure 5.68](#).



**Figure 5.68** Review Change Request Details

### 5.6.4 Review Change

Once the changes are implemented and the requester clicks on the **Finish** button, the approver of the master data change request receives a notification to review the changes made to the master data entity. The approver can access the review work item from the **Work Inbox**, which is listed with the subject line **Review Change Log**, as shown in [Figure 5.69](#).



**Figure 5.69** Work Inbox Screen with Review Items Pending for Action

On accessing the review log, the approver can review the updated control and click **Finish** to complete the review, as outlined in [Figure 5.70](#).

**Control: Monitor users with SAP\_All access**

Parent Organization: Power Generation      Parent Subprocess: Access Management      Allow Local Changes: No      ID: 58001143

Timeframe: Year 2023      Effective Date: 01.01.2023

General | Regulations | Performance Plan | Business Rules | Control Performance | Evaluation | Monitoring Jobs | Requirement | Risks | Account Groups | Owners | Reports | Policies

Mitigating Control ID:

Name:

Description:

Valid From: 01.01.2023      Valid To: 31.12.9999

Trigger:  Event       Date

Operation Frequency:

To Be Tested:  Yes       No

Test Automation:  Automated       Manual       Semi-Automated

Testing Technique:

Control or Process Step:  Control       Process Step

Control Category:

Significance:

Level of Evidence:

Control Risk:

Save      Cancel      Finish

**Figure 5.70** Review Updated Control

The preceding stages of **Change Request**, **Approval**, **Implement**, and **Review** are followed only when both the checkboxes are marked for **Approval** and **Notify**. If only the **Notify** option is enabled, as shown in [Figure 5.71](#), any authorized user can make changes to the master data without any approvals. In such a case, the designated user receives a master data change notification in his **Work Inbox** to review the change log.

**Change View "Activate Master Data Changes Workflow": Overview**

New Entries      BC Set: Change Field Values

Activate Master Data Changes Workflow			
Entity ID	Entity Type	Approval	Notify
ACC_GROUP	Account Group	<input type="checkbox"/>	<input type="checkbox"/>
COBJECTIVE	Control Objective	<input type="checkbox"/>	<input checked="" type="checkbox"/>
CONTROL	Control	<input type="checkbox"/>	<input type="checkbox"/>
CRISK	Risk Template	<input type="checkbox"/>	<input type="checkbox"/>
ECONTROL	Indirect Entity-Level Control	<input type="checkbox"/>	<input type="checkbox"/>

**Figure 5.71** Configuration to Notify Master Data Changes

## 5.7 Uploading Master Data Using the Master Data Upload Generator

The Master Data Upload Generator (MDUG) feature in SAP Process Control can be used to maintain key master data elements in mass via a Microsoft Excel template that can be downloaded from the system. A template can be uploaded with all the relevant data. To download the template, access program GRFN\_MDUG through Transaction SA38 or Transaction SE38. The template download screen has the selection options illustrated in [Figure 5.72](#) and described in [Table 5.5](#).

**Master Data Upload Generator**

Mode

Generate Template  
 Upload Data

Options

Maintain ID manually  
 Include Regulation data  
 Multiple languages  
Select languages  to  

Export Data

Export data

**Figure 5.72** Generate Template for MDUG

Option	Description
Mode	Select <b>Generate Template</b> to download a template. The <b>Upload Data</b> option can be used to upload the filled-in template.

Option	Description
<b>Options</b>	<ul style="list-style-type: none"> <li>• <b>Maintain ID manually:</b> Enable the checkbox if you want to provide the IDs of the master data entities to be created in the system. Don't select the checkbox if you're okay to have the system-generated IDs.</li> <li>• <b>Include Regulation data:</b> Enable the checkbox if you want to do the regulation to subprocess/control assignments from the Excel template.</li> <li>• <b>Multiple languages:</b> If the language packages are made available in the system, select the specific language in which the master data should be uploaded and maintained.</li> </ul>
<b>Export Data</b>	Select the checkbox if you want to download the template, including the existing data in the system. A blank template will be generated if this checkbox isn't selected.

**Table 5.5** Program GRFN\_MDUG Options

The following data can be maintained in the template:

- Regulation hierarchy
- Organization hierarchy
- Risk catalog
- Risk template
- Risk drivers

- Risk impacts
- Control objective including the risk mapping
- Account groups including the risk mapping
- Account balances
- Manual test plans
- Process
- Subprocess
- Control
- Subprocess for regulation, control objective, risks, and accounts mapping
- Control to regulation, requirement, risks, and accounts mapping
- Indirect entity-level controls
- Policy hierarchy

Once the details are filled in the template, upload the template using program GRFN\_MDUG. When the **Upload Data** option is selected, it will prompt you to select the template to be uploaded and execute to initiate the master data upload, as shown in [Figure 5.73](#).

**Master Data Upload Generator**

Mode

Generate Template

Upload Data

Options

Maintain ID manually

Include Regulation data

Find ID by name

Import in background

File Name

**Figure 5.73** Upload the MDUG File into the System to Update the Master Data

An XML file gets generated in the next step, which can be tested using a simulation run before uploading the data into the system. In addition, provide the validity periods in from and to dates with which the master data has to be created in the system, as shown in [Figure 5.74](#).

**Import Data**

File Selection

Use dataset

File name

Additional Function

Simulation

Extended log

Validity

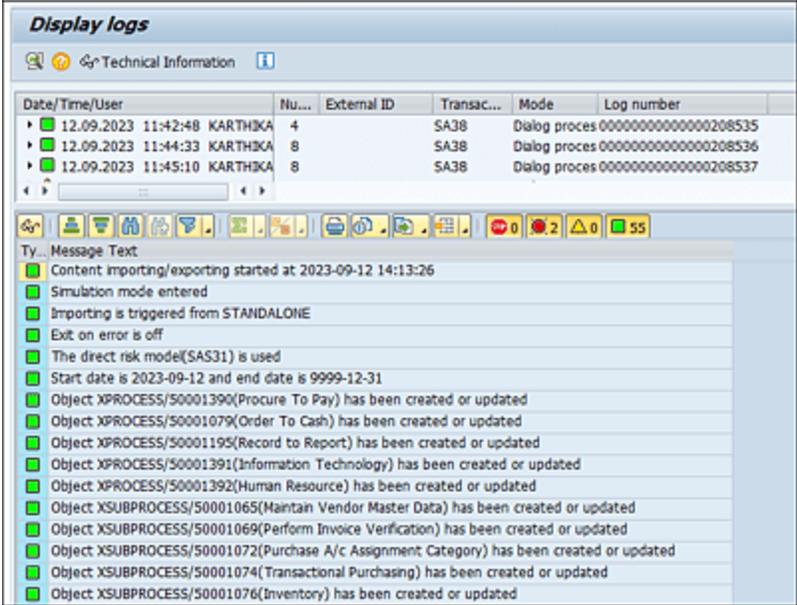
Valid from

Valid to

**Figure 5.74** Execution of the MDUG File in Simulation Mode

Click **Execute** in the simulation mode, and then review the logs to validate if the data has been created. If the log shows everything in green without any errors, it indicates the data maintained in Excel is good to be uploaded into the system, as shown in [Figure 5.75](#).

On reviewing the logs and ensuring there are no errors in the file being uploaded, click **Back**, uncheck the **Simulation** checkbox, and click **Execute** to perform the actual run. This will create the master data in the system, which can be reviewed in the respective master data sections from Transaction NWBC.



**Figure 5.75** Logs after Uploading the MDUG File in Simulation for Review

## 5.8 Summary

This chapter covered the significance of maintaining master data in SAP Process Control, encompassing various master data elements such as organization, business processes, regulations, risk hierarchy, control objectives, and account groups that can be effectively managed through the system. It has highlighted the relevance of each master data element and underscored their relationships.

Moreover, this chapter has provided insights into establishing roles at the local subprocess/control levels and delineated how users can be assigned to these roles. It also expounded on the process of replacing current owners with new users or removing them from their roles. Additionally, it clarified how central delegation can be facilitated in the absence of an owner to ensure the timely completion of tasks.

In the next chapter, we'll delve into control evaluation and the assessments that controls undergo, elucidating the workflows and stages involved in executing these assessments.

# 6 Control Evaluation

*While the previous chapter details working with master data, regulation requirements, organization hierarchies, business process hierarchies, localization of controls, and so on, this chapter focuses on control evaluations, which is an essential component of accurate financial reporting. Organizations can identify vulnerabilities and strengthen their control environments by assessing the effectiveness of controls.*

The internal controls defined in the organization undergo various types of evaluation, which are detailed in this chapter, such as design assessment, self-assessment, control performance, and effectiveness test. The chapter explores evaluation methodologies and illustrates real-world examples to help you uphold financial transparency and comply with regulatory requirements.

## **6.1 Introduction to Control Evaluation**

In today's dynamic business world, organizations are faced with a web of regulatory requirements for reporting financial data that is both accurate and transparent. To meet these

obligations, robust internal controls are essential. Organizations use these controls to safeguard themselves against potential risks and ensure that their financial statements are accurate. However, implementation of controls alone isn't sufficient; management must also evaluate their effectiveness in all aspects. It's possible for organizations to uncover vulnerabilities, address gaps, and strengthen their control environment by carefully assessing and scrutinizing various control measures. In this chapter, we examine the significance of control evaluations in promoting financial transparency and ensuring regulatory compliance.

Periodic evaluations of internal controls are essential for organizations to maintain the integrity of their control environment. These evaluations are performed by either internal controls or internal audit teams with the goal of verifying the effectiveness of control operations and evaluating the completeness of control design. To mitigate the risk of materializing threats that could adversely affect an organization's overall well-being, organizations have to identify and address any deficiencies. To ensure a control's effectiveness, it must undergo a number of important assessments, which are listed in [Table 6.1](#).

Type of Assessment	Frequency	Need?
--------------------	-----------	-------

<b>Type of Assessment</b>	<b>Frequency</b>	<b>Need?</b>
Control design assessment	Biannually (or) annually	To evaluate the comprehensiveness and accuracy of the control, a design assessment should be conducted semiannually or annually. For example, when examining duplicate invoice configurations, the goal is to ensure that the control includes all active company codes within the organization as well as all vendor groups. As there will be many changes to the company codes and vendor groups, a design assessment will help to realign the control.
Control self-assessment	Monthly (or) quarterly	To obtain an operating effectiveness status for a control from the business owners, a self-assessment is conducted monthly or quarterly, depending on the criticality of the control. It enables the control owner to identify areas in a control that need to be improved that weren't identified earlier.

Type of Assessment	Frequency	Need?
		<p>A self-assessment process can also be used by large organizations with decentralized internal controls teams. Each zone/country can provide the central internal controls team with the operating effectiveness status of each control based on how it's performing in that zone/country.</p> <p>In SAP Process Control, self-assessment involves sending a questionnaire to the control testers as part of the survey functionality. Control testers are required to answer these questions before providing assessment results.</p>

Type of Assessment	Frequency	Need?
Control operating effectiveness	Continual	<p>A control's operating effectiveness is determined by whether the control is performing as intended and whether the person performing the control has the necessary authority and competence to do so. Effectiveness tests can be conducted in a variety of ways depending on where and how the data resides:</p> <ul style="list-style-type: none"> <li>• Manual (inspection of documents or verification of physical inventory)</li> <li>• Automated (validation of system data)</li> <li>• Semiautomated (a combination of manual and automated processes)</li> </ul>

**Table 6.1** Types of Control Assessments

These assessments will be discussed in more detail in the following sections, including their configuration and step-by-step instructions. These sections offer detailed guidance on how to perform and customize each assessment according to the organization's needs. You'll develop a comprehensive

understanding of the assessment process by following detailed instructions and leveraging insights shared in this chapter.

## 6.2 Control Design Assessment

The control design assessment is performed through the survey functionality, which involves sending questionnaires to control owners. The purpose of these questionnaires is to gather specific information and insights about the design effectiveness of the controls. It's the responsibility of the control owners to answer these questions and provide their assessment results.

The survey functionality in SAP Process Control allows organizations to streamline the process of assessing control design. Through this approach, control evaluations can be structured and standardized, ensuring consistency across evaluations. As a result of the control owners' responses to the questionnaires, we can determine the design effectiveness of the controls and identify any potential gaps or areas for improvement.

Using the SAP Process Control survey functionality, organizations can efficiently collect and analyze control owners' assessments, enabling a comprehensive analysis of control design. It enhances the overall effectiveness of the control environment and supports informed decision-making regarding control design enhancements by facilitating collaboration and communication between control owners and the internal control team. The following sections detail the configurations and steps to carry out the design assessments:

- Defining the survey library, that is, defining survey questions and surveys

- Scheduling surveys using the planner for design assessment
- Setting up the workflow structure
- Performing assessment and using the issue remediation process

### **6.2.1 Define Survey Library**

The survey library features predefined survey templates that can be used by organizations to gather information from stakeholders and conduct assessments. It's a centralized resource for creating surveys tailored to specific control evaluation needs. Using the survey library, you can collect data efficiently and consistently with preconfigured questions and responses.

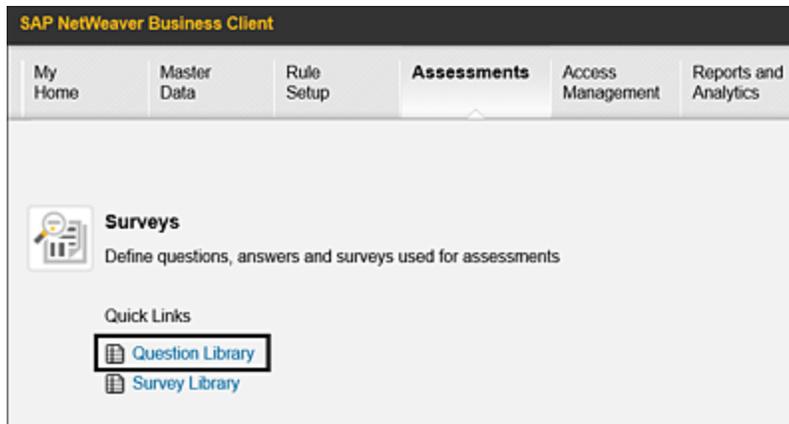
Surveys can be customized according to organization requirements, ensuring relevancy and specificity. Following are the two items that can be configured, which we'll discuss in the following sections:

- Question library
- Survey library

#### **Question Library**

The question library contains the questions and answers. It allows us to define additional questions and the type of answers to be provided during the assessment. To view the existing questions and answers, as well as define new ones, follow these steps:

1. Log in to the SAP Process Control system.
2. Execute Transaction NWBC.
3. Navigate to the **Assessments** work center.
4. Under the **Surveys** work group, select the **Question Library** work item, as shown in [Figure 6.1](#).



**Figure 6.1** Category Options in the Create Question Screen

## Note

You'll get access to the **Assessments** work center by having authorization to role SAP\_GRC\_SPC\_GLOBAL\_SRV\_ADMIN. A custom Z role can also be created and assigned. Refer to the standard role for the required authorizations.

5. The **Question Library** screen shows the list of questions along with **Category**, **Active**, **Answer Type**, **Created By**, and **Created On** information, as shown in [Figure 6.2](#).
6. To create a new question, click the **Create** button. In the **Create Question** screen, choose a **Category**, for which the question is being created, from the **Category** dropdown. For example, select **Control Design** from

the list if you're creating a question related to control design assessment. The list of categories with descriptions are listed in [Table 6.2](#).

Category	Question	Active	Answer Type	Created By	Created On
Control Design	Are all the company codes in scope of the control are accurate and valid?	Yes	Choice	Karthika G	27.06.2023 15:22:05
Risk Survey	How many events occurred in the past 3 years?	Yes	Choice	Karthika G	27.06.2023 15:25:41
Control Design	If the Control designed is meeting the organization ICS requirement?	Yes	Yes/No/NA	Karthika G	27.06.2023 15:29:17
Subprocess Design	If the Organization structure designed meeting ICS requirement?	Yes	Yes/No/NA	Karthika G	27.06.2023 15:30:05
Control Design	Is the design of the control meeting the standards of ICS of the organization?	Yes	Yes/No/NA	Karthika G	27.06.2023 15:30:41
Risk Survey	What is the major impact if the risk materializes?	Yes	Choice	Karthika G	27.06.2023 15:31:56
Control Design	Need access to critical codes related to basis?	Yes	Yes/No/NA	Karthika G	27.06.2023 15:32:38

**Figure 6.2** Question Library Maintenance Screen

Category	Category Description
<b>Self-assessment</b>	These questions are part of the survey to obtain sign-off on the operating effectiveness of the control from the control owner.
<b>Control Design</b>	These questions are used to evaluate the completeness and accuracy of the design effectiveness of a control.
<b>Indirect Entity-level Control</b>	These questions are part of the survey to obtain sign-off on the effectiveness of the indirect entity-level controls from the organization owner.
<b>Subprocess Design</b>	These questions are used to evaluate the completeness and accuracy of the design effectiveness of a subprocess.

<b>Category</b>	<b>Category Description</b>
<b>Sign-off</b>	The organization or the corporate owner should respond to these questions before providing sign-off on the master data and assessment results.
<b>Policy Approval</b>	These questions are part of the survey that the policy approver should respond to before approving the policy and publishing it.
<b>Policy Quiz</b>	These questions are sent to the end users/employees of the organization to evaluate the policy awareness in the organization.
<b>Policy Survey</b>	These questions are used to obtain feedback from the end users in scope of the policy that helps in identifying the policy gaps and areas of improvement
<b>Disclosure Survey</b>	These questions expect responses from the owners, which increases their accountability toward the improvement of control performance.

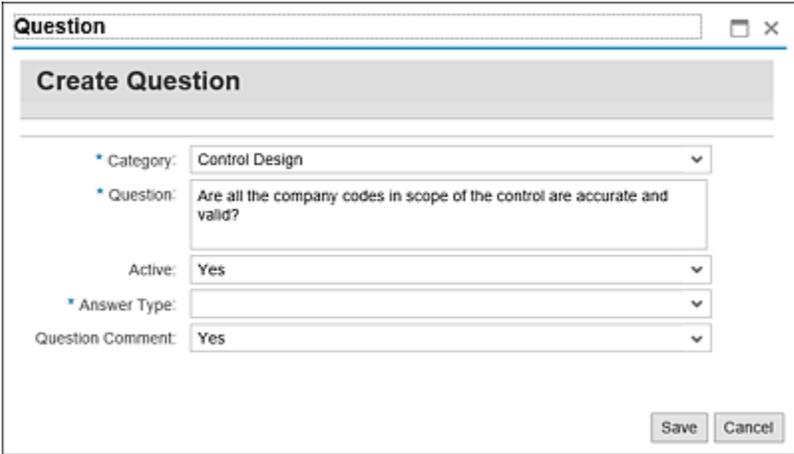
**Table 6.2** Process Control Categories in the Create Question Screen

### **Note**

**The Risk Survey, Opportunity Survey, Activity Survey, Risk Indicator Survey, and Risk**

**Consolidation** survey categories are related to SAP Risk Management and hence not detailed in [Table 6.2](#).

7. After you've chosen the category, enter the **Question** (descriptive), set the **Active** field to **Yes**, and select the **Answer Type** and **Question Comment** options, as shown in [Figure 6.3](#).



The screenshot shows a 'Create Question' dialog box. The 'Category' dropdown is set to 'Control Design'. The 'Question' text field contains the text: 'Are all the company codes in scope of the control are accurate and valid?'. The 'Active' dropdown is set to 'Yes'. The 'Answer Type' dropdown is currently empty. The 'Question Comment' dropdown is set to 'Yes'. At the bottom right, there are 'Save' and 'Cancel' buttons.

**Figure 6.3** Create Question Screen for Control Design Assessment

8. Click **Save** to save the question.

## Note

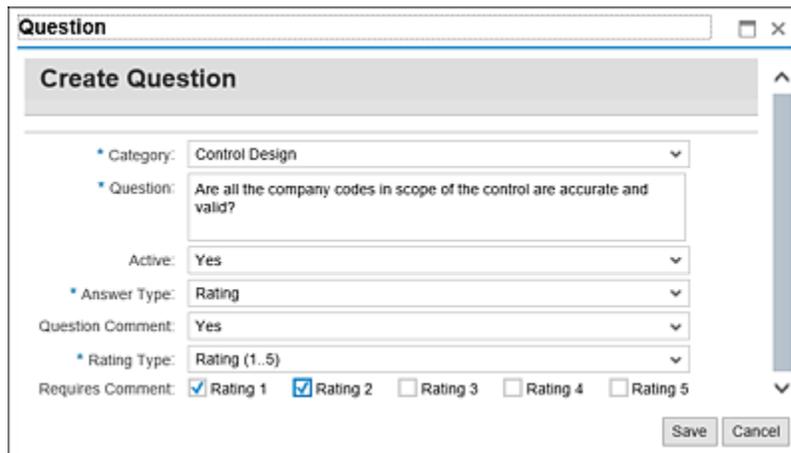
Questions with **Active** status as **Yes** are only visible for selection in the survey library.

Before moving on, let's take a little more time to walk through the **Answer Type** dropdown, which provides the following four options:

- **Rating**  
Used when the control owner must provide a rating for a question on a scale of 1 to 5. Selecting **Rating** as the

**Answer Type** provides the following additional options to be maintained, as shown in [Figure 6.4](#):

- **Question Comment**  
Makes the comments mandatory when set to **Yes**. The control owner must enter comments for the given rating.
- **Rating Type**  
Provides the rating types such as **Rating (1 - 5)**.
- **Requires Comment**  
Allows the administrator to enforce comments for specific ratings. For example, if the rating is **1** or **2**, the control owner is mandated to provide comments justifying the rating.



The screenshot shows a 'Create Question' form with the following fields and values:

- Category: Control Design
- Question: Are all the company codes in scope of the control are accurate and valid?
- Active: Yes
- Answer Type: Rating
- Question Comment: Yes
- Rating Type: Rating (1..5)
- Requires Comment:  Rating 1,  Rating 2,  Rating 3,  Rating 4,  Rating 5

Buttons: Save, Cancel

**Figure 6.4** Options for the Rating Answer Type

- **Yes/No/NA**  
Used when the control owner must respond to the question with the options as yes, no, or not applicable. Administrators can also make comments mandatory for specific responses. On selecting **Yes/No/NA** as the answer type, the following additional options can be set up:

- **Question Comment:** Makes the comments mandatory when set to **Yes**. Control owner must enter comments for a specific response, as shown in [Figure 6.5](#).
- **Requires Comments:** Allows the administrator to select for which responses comments are required. For example, if the answer is **No** or **N/A**, you can mandate the control owner to provide comments justifying the response.

The screenshot shows a 'Question' window with a 'Create Question' form. The form contains the following fields and values:

- Category: Control Design
- Question: Are all the company codes in scope of the control are accurate and valid?
- Active: Yes
- Answer Type: Yes/No/NA
- Question Comment: Yes
- Requires Comment:  Yes  No  N/A

Buttons for 'Save' and 'Cancel' are visible at the bottom right.

**Figure 6.5** Options for Answer Type Yes, No, N/A

- **Text**  
Used if the response expectation of the question is a detailed explanation from the control owner. The **Answer Type** of **Text** doesn't give an additional option.
- **Choice**  
Used if custom options are to be provided to the control owner to choose from the answer list. On selecting **Choice** as the answer type, the following additional details must be provided:
  - **Question Comment**  
Prompts the control owner to enter comments.

- **Answer Options**  
The administrator creates the custom answer options, as shown in [Figure 6.6](#).
- **Requires Comment**  
If the checkbox is enabled, it makes the comment mandatory, and the control owner must enter comments if the option is selected as the answer for the question.

Administrators can maintain the **Answer Options** by using the various buttons in the **Create Question** screen, as follows:

- **Add**  
Used to add a new value (response) to the list.
- **Remove**  
Used to delete an existing value from the list. Select the row and click **Remove** to delete the option.
- **Actions**  
Used to change the sequence of answer options **Up** and **Down**.

**Create Question**

Category: Control Design

Question: Are all the company codes in scope of the control are accurate and valid?

Active: Yes

Answer Type: Choice

Question Comment: Yes

**Answer Options**

Selection	Value	Score	Requires Comment
a	Yes, all the company codes are covered and upto date	0	<input type="checkbox"/>
b	No, new company codes creating during the assessment pe...	0	<input checked="" type="checkbox"/>
c	There are few company codes which are no longer valid sh...	0	<input checked="" type="checkbox"/>

Save Cancel

**Figure 6.6** Options for the Choice Answer Type

## Survey Library

The survey library contains questionnaires that can be used to perform assessments and allows you to define new surveys grouping the relevant questions together created in the **Question Library** section. To view the existing surveys and to create new surveys, follow these steps:

1. Log in to the SAP Process Control system.
2. Execute Transaction NWBC.
3. Navigate to the **Assessments** work center.
4. Under the **Surveys** work group, click **Survey Library** work item (refer to [Figure 6.1](#)). This will load the **Survey Library** that displays all the existing surveys.

### Note

The surveys in SAP Process Control are used for various functionalities. Administrators must choose the right category based on the type of assessment for which the survey is being created. Questions created under the selected category are only visible while creating the survey.

[Table 6.3](#) describes the surveys that can be created.

<b>Survey Type</b>	<b>Description</b>
<b>Self-Assessment</b>	Contains questions to obtain attestation on the operating effectiveness of controls from their respective owners
<b>Control Design</b>	Contains questions to evaluate the design effectiveness of the control from the control owners
<b>Indirect Entity Level Control</b>	Contains questions to evaluate the design and operating effectiveness of the indirect entity level control from the organization owners
<b>Subprocess Design</b>	Contains questions to evaluate the design effectiveness of the subprocess from subprocess owners
<b>Sign-Off</b>	Contains questions that the organization owner should respond to before providing sign-off confirmation to ensure the master data and open issues/remediation plans are reviewed

<b>Survey Type</b>	<b>Description</b>
<b>Policy Approval</b>	Contains questions that the policy approver should respond to before approving the policy to ensure all the clauses and scope of policy are reviewed
<b>Policy Quiz</b>	Contains questions that the employees of the organization should respond to, which helps management in evaluating the effectiveness of policy
<b>Policy Survey</b>	Contains questions to take input from the employees of the organization to understand policy gaps and to identify areas of improvement
<b>Disclosure Survey</b>	Contains questions to evaluate the accountability of the owners about performance at the control level, subprocess level, or organization level

**Table 6.3** SAP Process Control Survey Types

### Note

This section exclusively covers control design and evaluation. Other categories will be covered in their respective Sections, ensuring a comprehensive exploration of each category.

- To create a new survey, click the **Create** button, as shown in [Figure 6.7](#).

Category	Title	Description	Active	Created By	Created On
Control Design	Control Design Survey(TEST)	Control Design Survey (TEST)	Yes	Karthika G	27.06.2023 18:50:37
Control Design	Critical basis access	Critical basis access	Yes	Karthika G	27.06.2023 18:54:34
Control Design	Quarterly design assessment		Yes	Karthika G	27.06.2023 18:51:28
Subprocess Design	Subprocess Design(TEST)	Subprocess Design (TEST)	Yes	Karthika G	27.06.2023 18:52:40
Control Design	Survey for Control Design_01	Survey for Control Design_01	Yes	Karthika G	27.06.2023 16:31:27
Risk Survey	Survey to perform risk assessment	Survey to perform risk assessment	Yes	Karthika G	27.06.2023 18:53:30

**Figure 6.7** Create Button in the Survey Library Maintenance Screen

- On the **Create Survey** screen, select options such as **Category**, **Title**, **Description**, **Valuation**, and **Active** status. [Table 6.4](#) details each of these fields, which you can see in [Figure 6.8](#).

**Survey**  
Create Survey  
Category: Control Design

**General** Attachments and Links

Category: Control Design  
Title: Control Design Survey  
Description: Control Design Survey

Valuation: **No Valuation**  
Active: No Valuation

Questions: Score based valuation

Add Add As Child Remove

**Figure 6.8** Valuation Types for Creating a Survey

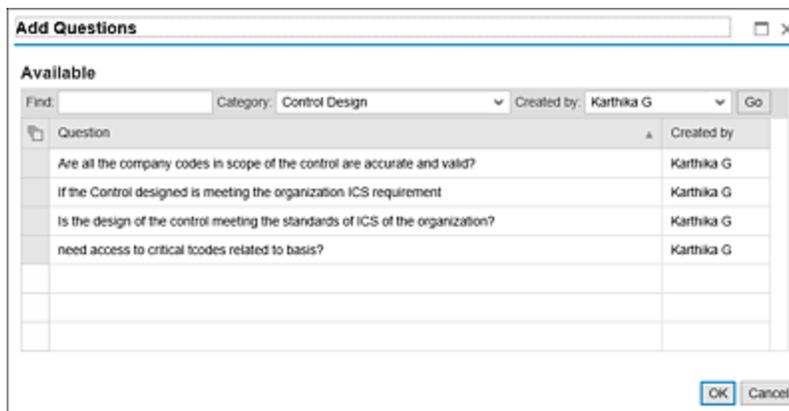
Field	Description
<b>Category</b>	Select the category based on the purpose of the survey, for example, control design assessment. These categories are the same as the ones listed in <a href="#">Table 6.2</a> .

Field	Description
<b>Title</b>	A short description of the survey. It's recommended to use a unique name to identify it while triggering the control for assessment using the planner functionality.
<b>Description</b>	A detailed description mentioning the purpose and the expectations of the survey.
<b>Valuation</b>	<p>Provides two options in the selection:</p> <ul style="list-style-type: none"> <li>• <b>No Valuation:</b> This option is used if the expectation of the survey is only to get responses from the control owner and an overall assessment rating. No further valuation is carried out.</li> <li>• <b>Score based valuation:</b> This option is used to set scores against the answer options available for the control owner. Scores can be provided for all the answer types except <b>Text</b>. Refer to the previous section to understand the answer types available in a question. The overall rating and result of the assessment is arrived at based on the responses the control owner chooses.</li> </ul>

Field	Description
<b>Active</b>	Indicates the status of the survey as <b>Active</b> or <b>Inactive</b> . Only the surveys with <b>Active</b> status as <b>Yes</b> will be available for selection in the planner while triggering assessments.

**Table 6.4** Fields in the Create Survey Screen

- Once the survey is created, click the **Add** button to add questions from the list. Select the question, and click **OK**. [Figure 6.9](#) shows the existing questions available for selection in the survey.



**Figure 6.9** The Option to Add Questions to the Survey

- Once the questions are added, they can be seen on the **Create Survey** screen, as shown in [Figure 6.10](#).

**Create Survey**  
Category: Control Design

**General** Attachments and Links

Category: Control Design  
Title: Control Design  
Description:  
Valuation: No Valuation  
Active: Yes

**Questions** Add Add As Child Remove Open Actions

Question	Answer Type
Are all the company codes in scope of the control are accurate and valid?	Choice
Is the design of the control meeting the standards of ICS of the organization?	Yes/No/NA

Save Cancel

**Figure 6.10** The Questions Selected to Be Part of the Survey

9. The **Add As Child** button is used to add a nested question, referred to as a child question. You can select the child question from the dropdown shown in [Figure 6.11](#).

**Create Survey**  
Category: Control Design

**General** Attachments and Links

Category: Control Design  
Title: Control Design  
Description:  
Valuation: No Valuation  
Active: Yes

**Questions**

Question	Answer Type	Always Display
Are all the company codes in scope of the control are accurate and valid?	Choice	Always Display
Is the design of the control meeting the standards of ICS of the organization?	Yes/No/NA	

Save Cancel

**Figure 6.11** Assigning a Child Question to a Root Question

## Note

Use the **Attachments and Links** tab to add any relevant document links for the respective survey.

10. Once the child question is added, the **Display Condition** option can be used with two options:
- **Always Display**  
The child question will always be part of the survey, and the control owner should respond to this question mandatorily.
  - **Specific Choice**  
This shows the choices from the parent question. If the user wants to have a child question based on the response of the control owner to the parent question, choose the respective answer from the dropdown. The child question pops up during assessment only if the response of the parent question meets the display condition.
11. [Table 6.5](#) describes the **Create Survey** screen's additional buttons/options.

Button/Option	Function
<b>Remove</b>	Deletes an existing question from the survey. Select the row, and click <b>Remove</b> to delete.
<b>Open</b>	Opens the question to review the details at any point.
<b>Up/Down</b>	Changes the sequence of the questions, that is, up or down.

Button/Option	Function
<p><b>Create Question</b></p>	<p>If the required question isn't created in the question library, you can use this option to create a question directly while creating a survey via one of the following options:</p> <ul style="list-style-type: none"> <li>• <b>Question is Local - Yes:</b> If this option is selected, the question created as part of the survey won't be added to the question library in master data and will remain specific to this survey.</li> <li>• <b>Question is Local - No:</b> If this option is selected, the question created as part of the survey will be added to the question library in master data and will be available for selection in any other survey that will be created under this category.</li> </ul>
<p><b>Create Question as Child</b></p>	<p>Creates a child question directly if it's not available in the question library. Select the parent question from the list, and choose this option. The <b>Question is Local</b> with <b>Yes</b> and <b>No</b> options are available for the child question as well.</p>

**Table 6.5** Buttons in the Create Survey Screen

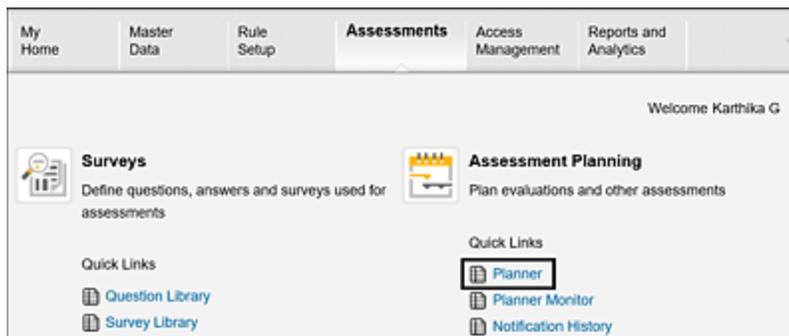
12. Click **Save** to save the survey.

Once the survey is created, the next step is to schedule it using the planner functionality.

## 6.2.2 Scheduling Controls Using the Planner

The administrator can schedule the controls that require design assessment for review using the planner functionality. To access the planner functionality, follow these steps:

1. Log in to the SAP Process Control system.
2. Execute Transaction NWBC.
3. Navigate to the **Assessments** work center.
4. Under the **Assessment Planning** work group, click the **Planner** work item, as shown in [Figure 6.12](#).



**Figure 6.12** Planner Option in the Assessments Work Center

5. The **Planner** work item shows all the active plans related to process control and risk management. The existing plans can be viewed with the status and other information. [Figure 6.13](#) shows the current plans and the various options and buttons under the planner function.

Schedule Name	Schedule Activity	Created On	Changed On	Organizations	Start Date	Due Date	Next Runtime	Status
Design Assessment_Q3 2023	Perform Control Design Assessment	27.06.2023 17:10:34	27.06.2023 17:10:34	5	27.06.2023	18.07.2023	00:00:0000 00:00:00	Completed
Design Assessment_Q2	Perform Control Design Assessment	25.06.2023 16:44:12	25.06.2023 16:44:12	5	25.06.2023	30.06.2023	00:00:0000 00:00:00	Completed
Design Assessment_Q2	Perform Control Design Assessment	21.06.2023 22:15:29	21.06.2023 22:15:29	5	21.06.2023	30.06.2023	00:00:0000 00:00:00	Completed
Design Assessment_Q2	Perform Control Design Assessment	15.06.2023 22:13:34	15.06.2023 22:13:34	5	15.06.2023	30.06.2023	00:00:0000 00:00:00	Completed
Design Assessment_Q2	Perform Control Design Assessment	15.06.2023 20:36:54	15.06.2023 20:36:54	5	15.06.2023	30.06.2023	00:00:0000 00:00:00	Completed
Risk Assessment	Perform Risk Assessment via Survey	01.06.2023 10:27:33	01.06.2023 10:27:33	4	01.06.2023	30.06.2023	00:00:0000 00:00:00	Completed
Risk Assessment	Perform Risk Assessment via Survey	01.06.2023 10:24:36	01.06.2023 10:24:36	4	01.06.2023	30.06.2023	00:00:0000 00:00:00	Completed
Risk Assessment	Perform Risk Assessment	01.06.2023 10:00:44	01.06.2023 10:00:44	4	01.06.2023	30.06.2023	00:00:0000 00:00:00	Completed
Test of Effectiveness	Test Control Effectiveness	30.05.2023 10:27:57	30.05.2023 10:27:57	5	30.05.2023	23.07.2023	00:00:0000 00:00:00	Completed
Test of Effectiveness	Test Control Effectiveness	29.05.2023 16:55:03	29.05.2023 16:55:03	5	29.05.2023	23.07.2023	00:00:0000 00:00:00	Completed
beta critical access planner	Perform Control Design Assessment	04.05.2023 12:11:39	04.05.2023 12:11:39	2	04.05.2023	10.05.2023	00:00:0000 00:00:00	Completed
Control Design Survey Planner (TEST)	Perform Control Design Assessment	30.03.2023 21:44:51	30.03.2023 21:44:51	2	30.03.2023	30.04.2023	00:00:0000 00:00:00	Completed

**Figure 6.13** Planner Functionality to Schedule New Jobs

- To create a new plan, click on the **Create** button to trigger the navigational scheduler, which will guide and ensure that all the relevant settings are properly captured.

The plan scheduler comprises six key stages/steps, each of which is detailed in the following section.

## Step 1: Enter Plan Details

**Enter Plan Details** is the first stage in the planner, as shown in [Figure 6.14](#).

**Figure 6.14** Create Plan: Navigational Scheduler

The administrator can define the plan details in this screen such as **Plan Name**, **Plan Activity**, and so on. Each of the

fields in this step are detailed in [Table 6.6](#).

<b>Field</b>	<b>Description</b>
<b>Plan Name</b>	This is a brief name of the scheduler for identification.
<b>Plan Activity</b>	The planned activity must be selected here. For example, to perform a control design assessment, choose the <b>Perform Control Design Assessment</b> option. The other options in this field can be used for various assessments and tests via SAP Process Control and SAP Risk Management. Detailed information about these tests and assessments are provided in <a href="#">Table 6.7</a> coming up next.
<b>Survey</b>	Choose a survey from the list. Refer to <a href="#">Section 6.2.1</a> to understand the process of creating a survey.
<b>Period</b>	From the time frames available in the dropdown, select the period for which the assessment should be performed. For example, if design assessment is performed on a quarterly basis, select the respective quarter ( <b>Quarter 1, Quarter 2, Quarter 3, or Quarter 4</b> ) for which the assessment is triggered.
<b>Year</b>	This represents the year for which the assessment is being triggered.

Field	Description
<b>Reference Timeframe</b>	Choose <b>Yes</b> if the results of the assessment relating to the reference timeframe should be sent to the user along with the new task. This option is used only while using the offline (Adobe Forms) workflow process.
<b>Start Date</b>	This indicates the date on which the assessment should trigger and the control owner should receive the notification to perform the assessment.
<b>Due Date</b>	This represents the date by which the assessment should be completed by the control owner. This date can be used as a base to send reminders to the control owner and to send escalations to the manager of the control owner.

**Table 6.6** Fields in the Enter Plan Details Stage of the Planner

A **Plan Activity** refers to the type of assessment that is being scheduled per the testing strategy defined in the organization. As part of the scheduling process, a comprehensive plan is developed that outlines the actions and controls that need to be taken to address risks and achieve objectives, as detailed in [Table 6.7](#).

Plan Activity	Activity Purpose
<b>Perform Control Design Assessment</b>	To evaluate the design effectiveness of the controls using survey questionnaire

<b>Plan Activity</b>	<b>Activity Purpose</b>
<b>Perform Self-Assessment</b>	To obtain attestation from the control owners about the operating effectiveness of the controls
<b>Perform Control Disclosure Survey</b>	To gather the performance confirmation from the control owner using a survey questionnaire
<b>Perform Control Risk Assessment</b>	To evaluate the controls based on certain defined risk factors to identify the risk level of the control
<b>Manual Control Performance</b>	To send the performance plans defined for the controls that the process team performs on a scheduled basis
<b>Test of Indirect Entity Level Control Effectiveness</b>	To evaluate the operating effectiveness of the indirect entity level controls using the test procedures defined
<b>Perform Indirect Entity Level Control Assessment</b>	To evaluate the design effectiveness of the indirect entity level controls using a survey questionnaire
<b>Perform Organization Disclosure Survey</b>	To gather the performance confirmation from the organization owner using a survey questionnaire

<b>Plan Activity</b>	<b>Activity Purpose</b>
<b>Perform Subprocess Design Assessment</b>	To evaluate the design effectiveness of the subprocess using a survey questionnaire
<b>Perform Policy Acknowledgement</b>	To send alerts to the end users/employees of the organization to get their acknowledgement of policy awareness
<b>Perform Policy Quiz</b>	To evaluate the effectiveness of the policy using a survey questionnaire defined at the policy level
<b>Perform Policy Survey</b>	To seek feedback from the employees of the organization to identify the areas of improvement in the policy using a survey questionnaire defined at the policy level

Plan Activity	Activity Purpose
<b>Perform Sign Off</b>	To initiate the sign-off process for all organizations where the <b>Sign-Off</b> radio button is enabled in the <b>General</b> tab: A bottom-up approach is used in the sign-off process, where the final approval is received at the corporate level. The master data of an organization is locked against changes for the sign-off period, and any open issues are carried forward for the next sign-off period.
<b>Perform Subprocess Disclosure Survey</b>	To gather the performance confirmation from the subprocess owner using a survey questionnaire
<b>Test Control Effectiveness</b>	To evaluate the operating effectiveness of the controls: Schedules business rules for the automated controls and triggers manual test plans to the control testers for the manual controls

**Table 6.7** Process Control Plan Activities in the Planner Functionality

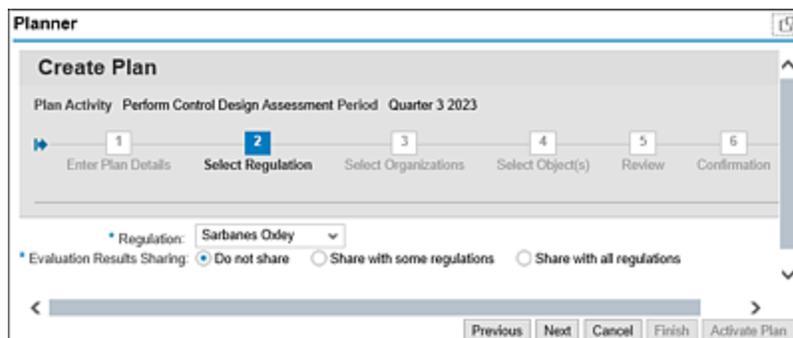
To proceed to the **Select Regulation** step, click on then **Next** button once you've completed the plan details stage definition.

## **Step 2: Select Regulation**

As discussed in [Section 6.1](#), there are multiple assessments/tests that the organization conducts on the internal controls to meet regulatory and compliance requirements. In the **Select Regulation** screen, select the **Regulation** type, for example, **Sarbanes Oxley**. Refer to [Chapter 4, Section 4.5.3](#), to gain a better understanding of how the regulations in this dropdown are handled. Select the **Evaluation Results Sharing** option, which provides the following options:

- **Do not share**

Choose this option if the assessment is being performed only for the specific regulation that is selected, as shown in [Figure 6.15](#).

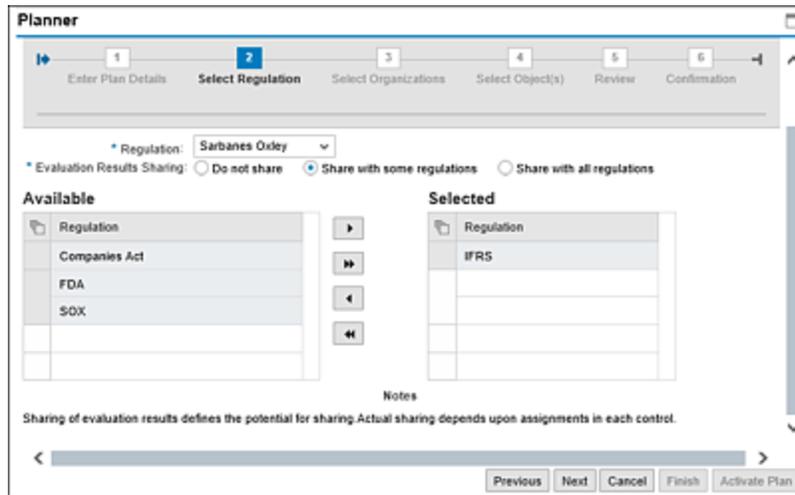


**Figure 6.15** Don't Share Regulations Option while Defining the Evaluation Results Sharing

- **Share with some regulations**

Choose this option if the organization has multiple regulations to comply with and if the assessment being performed is the same for more than one regulation. For example, if the organization must comply with Sarbanes Oxley (SOX), International Financial Reporting Standards (IFRS), and Food & Drug Administration (FDA) regulations, and the assessment being performed is applicable to both

SOX and IFRS, select **SOX** from the dropdown and select **IFRS**, as shown in [Figure 6.16](#).



**Figure 6.16** Share with Some Regulations Option while Defining the Evaluation Results Sharing

If your organization is subject to multiple regulations such as SOX, IFRS, and so on, and the assessment being conducted applies to more than one of them, choose this option to select multiple values. For example, if your organization needs to comply with regulations such as SOX, IFRS, and FDA, and the assessment being performed is relevant for both SOX and IFRS, select them from the available list, as shown in [Figure 6.16](#).

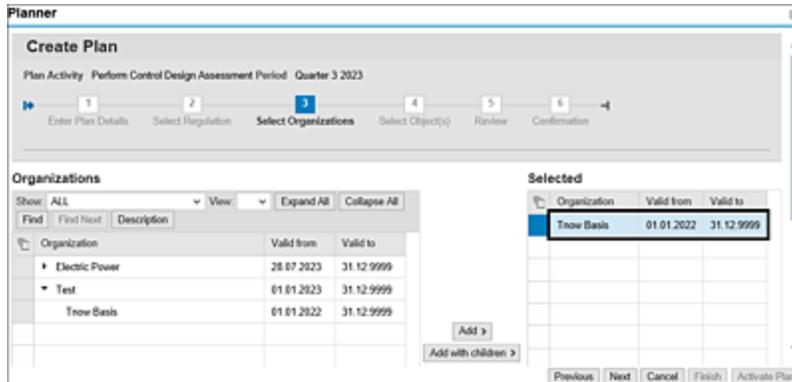
- **Share with all regulations**

Choose this option if the organization has multiple regulations to comply with and if the assessment being performed is the same for all the regulations applicable to the organization.

Click **Next** to navigate to the next step.

### **Step 3: Select Organizations**

This is an important step where the organizations must be selected and where the controls are localized. Select the root or child organization from the organizations list, and click the **Add** or **Add with children** button. The selected organizations will be moved to the **Selected** panel on the right, as shown in [Figure 6.17](#).



**Figure 6.17** Organizations Selected for Filtering the Controls for Assessment

## Note

To create root or child organizations, refer to [Chapter 4, Section 4.3.1](#).

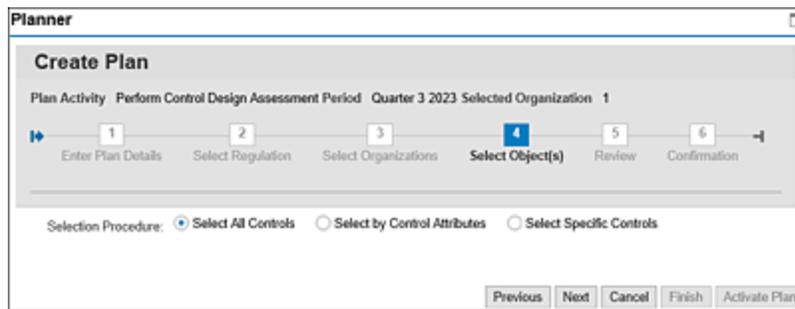
Click **Next** to continue.

## Step 4: Select Object(s)

During this step, the administrator chooses which controls to be scheduled for design effectiveness. These controls can be selected in several ways by the user, including selecting individual controls manually by referring to their knowledge, industry standards, best practices, regulatory requirements, or expert or stakeholder consultation. Following are the options:

- **Select All Controls**

No further control selection is required when this option is selected (see [Figure 6.18](#)). All the controls that have been localized in the selected organizations from the previous step will automatically be triggered for assessment.



**Figure 6.18** Select All Controls Option while Scheduling the Planner

- **Select by Control Attributes**

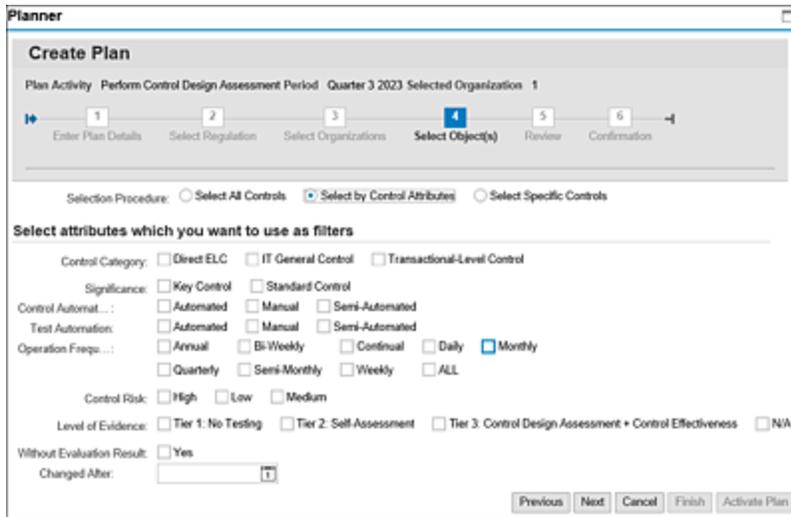
This procedure allows for filtering controls based on the attributes specified in the **General** tab of the control. Controls can be selected by considering one or more attributes, including **Control Category**, **Significance**, **Control Automation**, **Test Automation**, **Operational Frequency**, **Control Risk**, and **Level of Evidence**. For a visual reference and to explore the different options, see [Figure 6.19](#).

There are also two additional options:

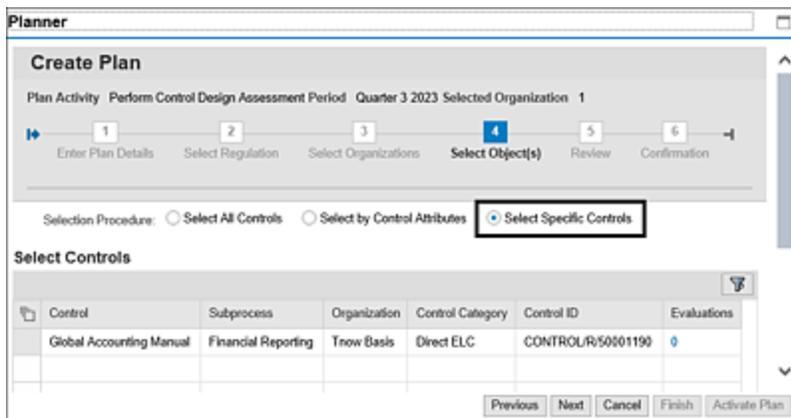
- **Without Evaluation Result:** Choose **Yes** if you want to select only those controls that aren't tested for the period selected in step **1 Enter Plan Details**.
  - **Changed After:** This option is used to select only those controls that are changed after a specific date.
- **Select Specific Controls**  
Use this option if specific controls are to be selected from

the available list. Choosing this option will show all the available controls, and administrators can select the ones that need to be selected for the design evaluation, as shown in [Figure 6.20](#). Multiple line items can be selected by holding down the `Ctrl` key.

Click **Next** to proceed to review the plan.



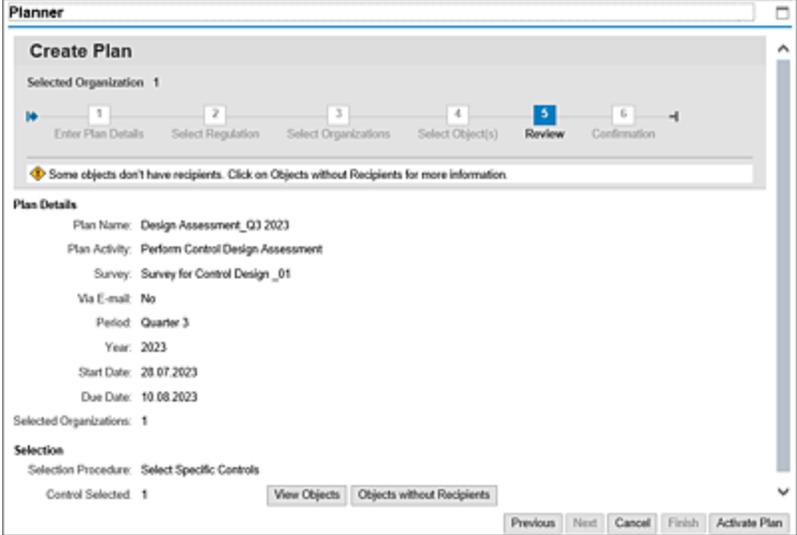
**Figure 6.19** Select by Control Attributes Option while Scheduling the Planner



**Figure 6.20** Select Specific Controls Option while Scheduling the Planner

## Step 5: Review

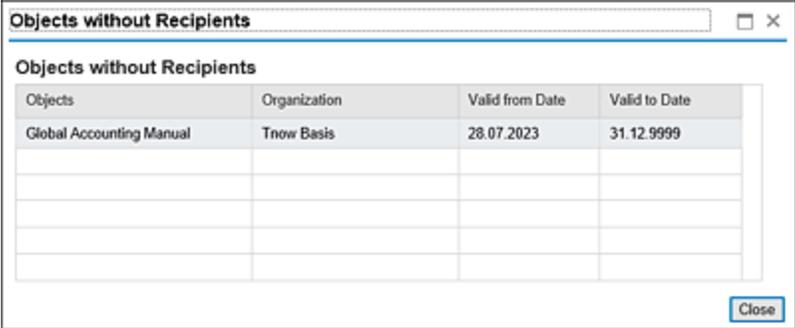
In this step, the administrator can review the plan details, view objects, and so on, and then activate the plan, as shown in [Figure 6.21](#).



**Figure 6.21** Plan Details Selected for Scheduling the Planner

**Note**

If you see a message that says **Some objects don't have recipients**. Click on **Objects without Recipients** for more information, click the **Objects without Recipients** button, which shows the list of objects (see [Figure 6.22](#)). Make the necessary adjustments in the objects. To know the steps to add recipients to objects, refer to [Chapter 5, Section 5.4.1](#).



**Figure 6.22** Review Screen to Check the Objects with No Recipients Assigned

The **View Objects** button shows the details of controls selected and the recipients of the workflow based on the custom agent determination rules defined (refer to [Chapter 4, Section 4.2.3](#), to understand the custom agent determination rule maintenance). [Figure 6.23](#) shows the objects and recipients information.

Objects	Organization	Recipients	Valid From	Valid To
Global Accounting Manual	Throw Basis	Karthika G Sandeep (Fallback Recipient)	28.07.2023	31.12.99

Notes: The above list shows objects based upon each object's validity date and status. However, if a user changes an object, the objects

Close

Previous Next Cancel Finish Activate Plan

**Figure 6.23** Review Screen to Check the Recipients of the Workflow for Each Object Control

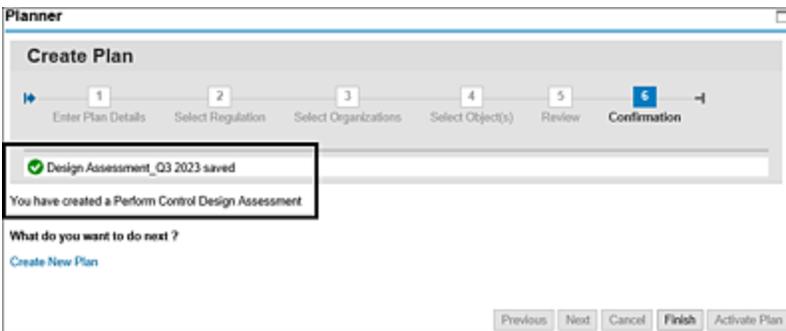
## Note

In the **Recipients** column, it either shows the control owner who is assigned to the control, or it shows the fallback user (refer to [Chapter 4, Section 4.2.4](#), to understand the fallback user maintenance process) names, if no control owner is assigned to the control.

Click the **Activate Plan** button to activate the plan and move on to the final step.

## Step 6: Confirmation

A confirmation message appears indicating the job is saved and the controls are scheduled successfully for design assessment. Click **Finish** to close the window shown in [Figure 6.24](#).

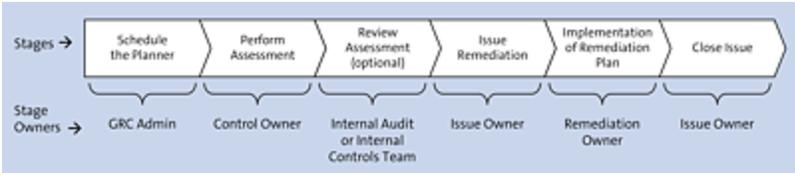


**Figure 6.24** Confirmation Message for the Scheduled Job Using the Planner

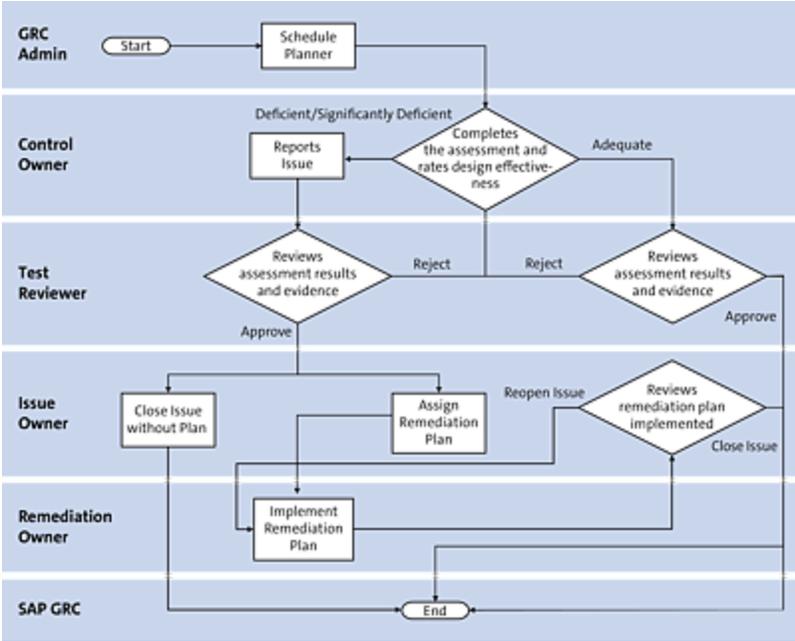
The control design evaluation process is initiated at this stage. The subsequent section outlines the various stages involved in the assessment process, highlighting the steps and activities that occur during each stage.

### 6.2.3 Workflow Structure

After scheduling the design evaluation process using the planner, it proceeds through multiple stages of assessment as outlined in the workflow structure flow diagram, as shown in [Figure 6.25](#). It aids in determining and assigning roles and responsibilities for each stage of the design assessment. Additionally, these workflow stages guide the progression of the design evaluation process, facilitating a systematic and organized approach.



**Figure 6.25** Stages in the Design Assessment Workflow with Owners' Information



**Figure 6.26** Flowchart Depicting the Stages of Control Design Assessment

The workflow of the assessment is detailed in [Figure 6.26](#). It explains how the assessment flows from the initiation till closing, stage owners involved, and the activities performed by the respective owners.

Each of the stages is detailed in [Table 6.8](#).

Workflow Stage	Description
----------------	-------------

Workflow Stage	Description
Schedule planner	<p>The GRC admin schedules the controls due for design assessment using the planner functionality (this section details the steps of using the planner).</p> <p>Based on the workflow rules defined in custom agent determination for control design assessment (<a href="#">Chapter 4, Section 4.2.3</a>, details the steps to define the agent determination rules for design assessment), the following stages will be triggered to the users assigned to the respective roles for the local control (refer to <a href="#">Chapter 5, Section 5.4.1</a>, to understand the steps to review the users assigned at a local control).</p>
Perform assessment	<p>Control owner receives the workflow item in the SAP Process Control Work Inbox to respond to the survey and rate the design effectiveness of the control as either <b>Adequate</b> or <b>Deficient/Significantly Deficient</b>.</p> <p>For a failed assessment, the control owner must report an issue that will be triggered to the issue owner for the remediation process.</p>
Review assessment	<p>The test reviewer (who is usually the process owner or a person from internal controls or an internal audit team)</p>

Workflow Stage	Description
	<p>receives the workflow to review the assessment submitted by the control owner. The reviewer can either approve or reject the assessment result after looking at the responses provided to the questionnaire, attachments uploaded, and the issue details for a failed control. Note that this step is optional and can be enabled from the Transaction SPRO configuration. To enable, log in to the SAP Process Control system, execute Transaction SPRO_ADMIN, click the SAP Reference IMG button, and expand <b>Governance, Risk and Compliance • Process Control • Evaluation Setup • Specify Whether Review is Necessary</b>.</p> <p>Select the <b>Activate</b> checkbox for the <b>Validation1</b> (validation of control design assessment) indicator. This will enable the review stage for control design assessment.</p> <p>Transaction SPRO changes involve workbench modifications, and it's necessary to implement them in the development system first. Once the changes are thoroughly tested, they can be transported to subsequent systems,</p>

Workflow Stage	Description
	such as testing or production environments.
Issue remediation	<p>Note that this stage is applicable only in a control failed scenario in assessment. In this stage, the issue owner looks at the assessment result and has two options to perform:</p> <ul style="list-style-type: none"><li>• <b>Assign Remediation Plan</b> This option is selected if the issue needs a detailed investigation and an action plan to remediate it. The issue owner identifies the remediation owner, who is usually the control owner that is responsible for its maintenance, to implement the remediation plan.</li><li>• <b>Close Issue without Plan</b> This option is used if the issue owner can resolve it without the need of a remediation plan by providing the evidence and comments justifying the reason to close the issue without plan.</li></ul>

Workflow Stage	Description
Implementation of remediation plan	Note that this is only applicable if the <b>Assign Remediation Plan</b> option is applicable. The remediation owner looks at the instructions provided by the issue owner, implements the same, and provides evidence to support a successful implementation of the remediation plan.
Close issue	Note that this is only applicable if the issue owner and remediation owner are different users. The issue owner looks at the remediation performed by the remediation owner and either closes the issue or reopens the remediation plan for further actions to be performed.

**Table 6.8** Stages in Control Design Assessment

## 6.2.4 Assessment and Issue Remediation Process

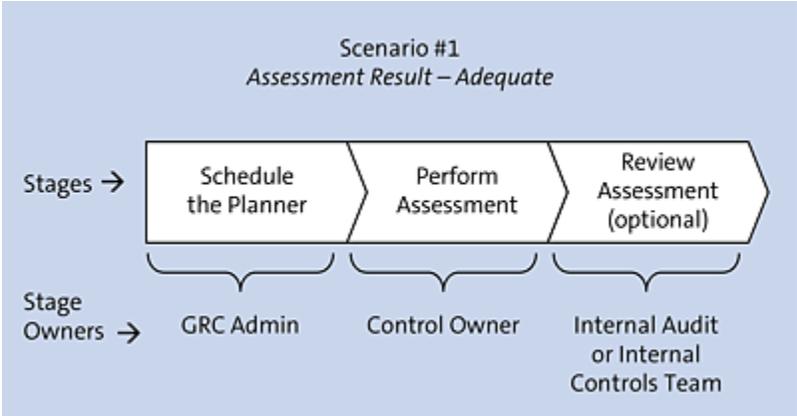
While evaluating the design effectiveness of a control, the control owner checks for the completeness and accuracy of the control coverage. On completion of the assessment, the control owner provides the overall rating of the control as one of the following:

- Adequate
- Deficient/significantly deficient

We'll discuss these two possible ratings in the following sections.

**Assessment Result: Adequate**

If the design coverage of the control is complete and accurate, the control owner rates the control as adequate after responding to the assessment survey. The stages involved in this case are shown in [Figure 6.27](#).



**Figure 6.27** Stages Involved When the Design Assessment Is Adequate

If the assessment result is **Adequate**, the GRC admin, control owner, and internal audit team or the internal controls team are involved. The responsibility of each of these owners is detailed in [Table 6.9](#).

Stage Owner	Role
GRC administrator	The GRC administrator is responsible for scheduling the planner and trigger controls for design assessment per the testing schedule defined in the control testing strategy of the organization.

Stage Owner	Role
Control owner	The control owner responds to the assessment survey and rates the control. For failed controls, the control owner must report an issue.
Internal controls/internal audit team	The internal controls team is responsible for reviewing the assessment done by the control owner and can either approve or reject the results.

**Table 6.9** Owners for Each Stage in Scenario #1

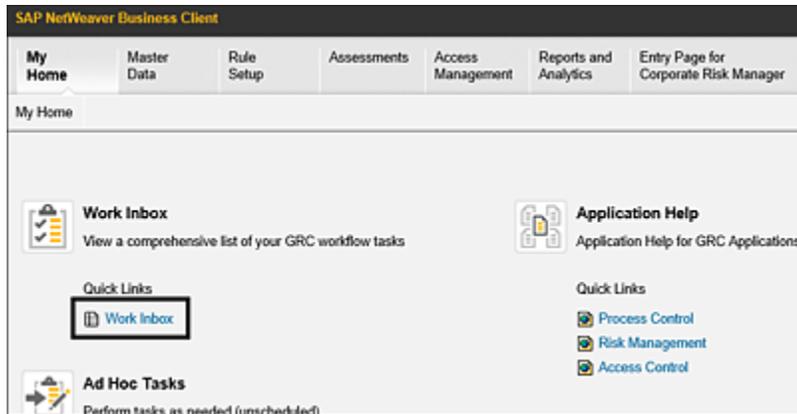
### Note

[Section 6.2.2](#) details the steps to schedule the control assessment using the planner, which is our first step.

## **Perform Assessment**

Once the GRC administrator triggers assessment for a control, the control owner receives the workflow notification, which can be accessed from the Work Inbox. To view the pending actions, follow these steps:

1. Log in to the SAP Process Control system.
2. Execute Transaction NWBC.
3. Navigate to the **My Home** work center.
4. Under the **Work Inbox** work group, click the **Work Inbox** work item, as highlighted in [Figure 6.28](#).



**Figure 6.28** Work Inbox Option in the My Home Work Center

5. Click on the **Process Control** work items link in the header section to find the work items pending for action, as shown in [Figure 6.29](#).



**Figure 6.29** Work Inbox Screen with Items Pending for Action

6. Click the **Subject** to open the work item.
7. Once the assessment is opened, the control owner can review the assessment period, and other information such as organization, process, and subprocess in the header column, and the other relevant information, such as questions and so on, in their respective tabs.

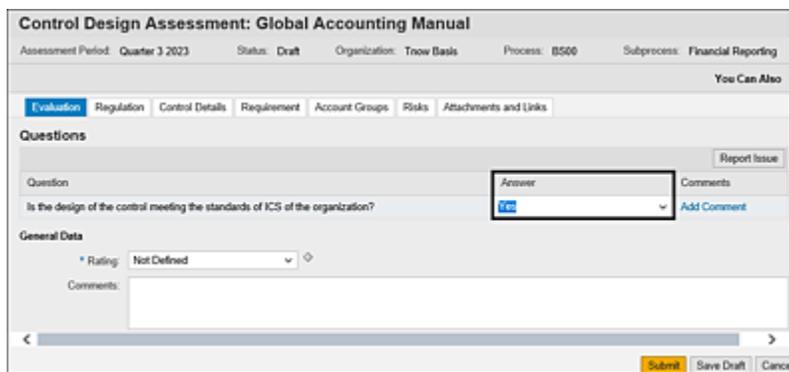
## Note

The other tabs in the control design assessment provide various pieces of information related to the control and

can be reviewed by the control owner before evaluating and responding to the assessment questions.

The control owner should perform the following tasks:

1. To provide responses, in the design assessment, under the **Evaluation** tab, all the requests that are added by the administrator for the respective controls are displayed. The control owner should respond to the questions survey, as shown in [Figure 6.30](#).



The screenshot displays the SAP Control Design Assessment interface. At the top, it shows the title 'Control Design Assessment: Global Accounting Manual' and various metadata fields: 'Assessment Period: Quarter 3 2023', 'Status: Draft', 'Organization: Tron Base', 'Process: B500', and 'Subprocess: Financial Reporting'. Below this, there are tabs for 'Evaluation', 'Regulation', 'Control Details', 'Requirement', 'Account Groups', 'Risks', and 'Attachments and Links'. The 'Evaluation' tab is active. The main section is titled 'Questions' and contains a question: 'Is the design of the control meeting the standards of ICS of the organization?'. To the right of the question is an 'Answer' dropdown menu and a 'Comments' field. Below the question is a 'General Data' section with a 'Rating' dropdown menu set to 'Not Defined' and a 'Comments' text area. At the bottom right, there are buttons for 'Submit', 'Save Draft', and 'Cancel'.

**Figure 6.30** Questions and Answers in the Control Design Assessment

2. Additionally, the control owner should also provide the assessment result in the **Rating** field using the dropdown option: **Not Defined**, **Adequate**, **Deficient**, or **Significantly Deficient**. If the design of the control is effective, the control owner will mark the assessment rating as **Adequate**.

Ratings can be configured per the business requirements from Transaction SPRO settings. To set this up, log in to the SAP Process Control system, execute Transaction SPRO\_ADMIN, click the **SAP Reference IMG** button, expand **Governance, Risk and Compliance** • **Process Control** • **Evaluation Setup** • **Specify Names for Ratings**. You may either review the

standard ratings available or make changes as required, as shown in [Figure 6.31](#).

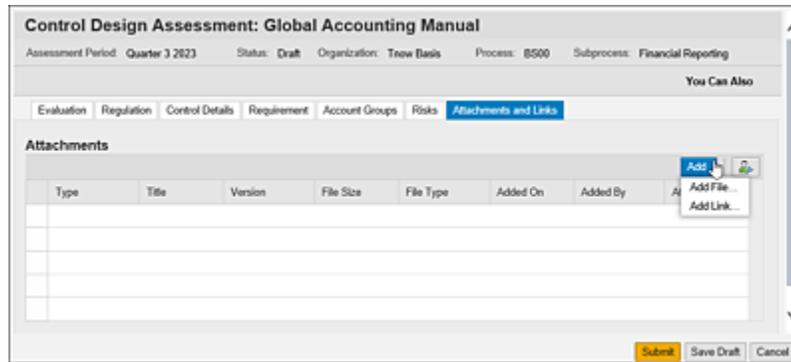
Attribute	DESIGN_RATING
Text	Control Design Rating
Control Design Rating 	
Value	Text
<input type="checkbox"/> G	Adequate
<input type="checkbox"/> R	Significantly Deficient
<input type="checkbox"/> Y	Deficient

**Figure 6.31** Navigation to the Specify Names for Ratings Configuration Step

## Note

Any changes made to the control design rating configuration must be captured in a transport request and transported to the subsequent systems.

- Any supporting evidence justifying the rating provided for the control design assessment can be added in **Attachments and Links**. Following are the options available, as shown in [Figure 6.32](#):
  - Add File:** This is used to add files of any format, such as Microsoft Excel, Word, PowerPoint, and so on.
  - Add Link:** If the evidence is stored in a shared folder, links to the folder can be embedded here in this tab.



**Figure 6.32** Options Available for the Control Owner to Upload Evidences

## ***Review Assessment***

Once the control owner performs the assessment on the control, the internal controls team or the internal audit team can do the review if defined in custom agent determination rules (refer to [Chapter 4, Section 4.2.3](#)). A workflow to review the assessment will be assigned to the respective team.

The review item can be accessed from the **Work Inbox** as discussed in the previous section, which will display the **Subject, Organization, Regulation, Status, Object Name, and Created By** fields, as shown in [Figure 6.33](#).

Access the work item by clicking the **Subject** column, and the reviewer can see all the fields similar to the control owner along with the responses and rating information provided by him. Further, any evidence uploaded in the **Attachments and Links** section can also be reviewed by the team. Once all the details are reviewed, there are two options available for the user, as shown in [Figure 6.34](#):

Subject	Organization	Regulation	Status	Due Date	Created On	Object Name	Created By
Review Control Design Assessment	Test	Sarbanes Oxley	Ready	14.07.2023	12.09.2023 19:47:58	Monitor users with SAP_All access	Karthika G

**Figure 6.33** Work Inbox Screen with Items Pending for Action

- Approve**  
 If all the details provided are correct, the reviewer can click on **Approve**, and the workflow ends here for the **Adequate** scenario.
- Reject**  
 If the details provided are incomplete, the reviewer can click on **Reject**, and the workflow is triggered to the control owner, and the steps mentioned in the previous section must be reperformed or corrected.

**Control Design Assessment: Monitor users with SAP\_All access**

Assessment Period: Year 2023    Status: Review    Organization: Test    Process: IT General Controls    Subprocess: Access Management

**Evaluation** | Issues | Regulation | Control Details | Monitoring Jobs | Requirement | Account Groups | Risks | Attachments and Links

**Questions**

Question	Answer	Comments
Is the design of the control meeting the standards of ICS of the organization?	No	

**General Data**

\* Rating: Significantly Deficient

Comments:

Documents: 0 Attachments

Performed by: SAKRISHNA1 SAKRISHNA1    Performed Date: 12.09.2023

Reviewer Comment

Reviewed by: SANDEEPL Sandeep    Review Date: 05.09.2023

Reviewer Comment:

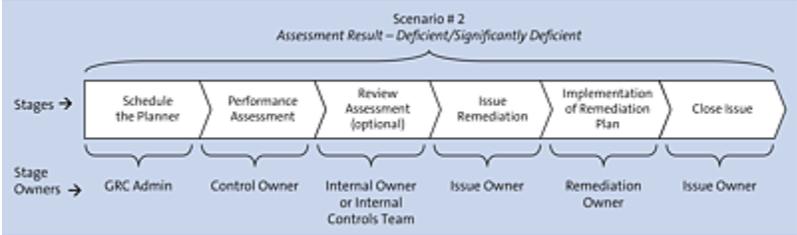
Review Control Design Assessment   

**Figure 6.34** Evaluations Tab from the Control Design Assessment Review Work Item

Once the assessment results are approved, the workflow ends, and the results can be reviewed using the standard reports. See [Section 6.6](#) to know more about the reports available for the control evaluation.

# Assessment Result: Deficient/Significantly Deficient

This scenario explains how the control owner rates the control as **Deficient/Significantly Deficient** when the design coverage of the control is incomplete or inaccurate, after responding to the assessment survey. The stages involved in this case are detailed in [Figure 6.35](#).



**Figure 6.35** Assessment Result = Deficient/Significantly Deficient

In this scenario, the owners listed in [Table 6.10](#) (along with their responsibilities) are involved.

Stage Owner	Role
GRC administrator	The administrator is responsible for scheduling the planner and triggering controls for design assessment per the testing schedule defined in the control testing strategy of the organization.
Control owner	The control owner responds to the assessment survey and rates the control. For failed controls, the control owner must report an issue.

Stage Owner	Role
Internal controls/internal audit team	The internal controls team is responsible for reviewing the assessment done by the control owner and the issue reported and then can either approve or reject the results.
Issue owner	The issue owner is responsible for defining a remediation plan to correct the issue identified in the current assessment and ensuring the same issues doesn't occur in future.
Remediation owner	The remediation owner is responsible for implementing the instructions received from the issue owner to correct the observations noted as part of the assessment.
Issue owner	The issue owner is also responsible for reviewing the remediation plan implemented by the remediation owner and can either close or reopen the issue.

**Table 6.10** Owners for Each Stage in This Scenario

### Note

[Section 6.2.2](#) details the steps to schedule the control assessment using the planner, which is our first step.

In the following sections, we'll look at each of the stages in this scenario.

## **Perform Assessment**

Once the assessment is triggered, the control owner receives the workflow notification, which can be accessed from the Work Inbox. To view and take an action on the assessment, log in to the SAP Process Control system, execute Transaction NWBC, and navigate to the **My Home** work center. Under the **Work Inbox**, click the **Work Inbox** link. To view the SAP Process Control-related work items, click the **Process Control** link in the header section (refer to [Figure 6.29](#)).

Click the **Subject** to access the work item. Once the assessment is accessed, the control owner can observe the assessment questions, assessment period, and other relevant details within the corresponding tabs. These tabs offer various pieces of information associated with the control and can be examined by the control owner prior to assessing and providing responses to the assessment questions. The control owner should perform the following actions:

1. Within the design assessment, on the **Evaluation** tab, all the requests that the administrator has included for the respective controls are displayed (see [Figure 6.36](#)). The control owner is required to address the survey questions. Furthermore, it's possible to append comments by using the **Add Comment** link.

Control Design Assessment: Monitor Duplicate Invoice Check Config

Assessment Period: Second Half of Year 2023    Status: Draft    Organization: Test    Process: Procure to Pay    Subprocess: Invoice Processing

You Can Also

Evaluation    Regulation    Control Details    Monitoring Jobs    Requirement    Account Groups    Risk    Attachments and Links

Questions

No	Question	Answer	Comments
1	Are all the company codes in scope of the control are accurate and valid?	No, new company codes cre...	Add Comment
1.1	Is the design of the control meeting the standards of ICIS of the organization?	No	Add Comment

General Data

Rating: **Not Defined** (dropdown menu open showing: Not Defined, Adequate, Deficient, Significantly Deficient)

Comments:

Documents: Attachments

Performed by: Administration    Performed Date:

Modified By:    Modified On:

**Figure 6.36** Response Screen for the Design Assessment Survey

2. It's also important for the control owner to furnish the assessment result in the **Rating** field by selecting the appropriate option from the dropdown menu. [Figure 6.36](#) shows the various options that the control owner can select under the **Rating** option. In instances where the control design proves to be inadequate, the control owner will indicate the assessment as **Deficient** or **Significantly Deficient**.
3. It's further recommended to upload supporting evidence justifying the rating provided for the control design assessment. These attachments can be added in the **Attachments and Links** tab. The control owner can use the following options:
  - **Add File:** This is used to upload files of any format, such as Microsoft Excel, Word, PowerPoint, and so on.
  - **Add Link:** Document links can be added. For example, SharePoint or cloud drive links can be added directly instead of downloading and uploading them.
4. Further, for a control with ineffective design, the control owner must report it as an issue before submitting the

results by clicking the **Report Issue** button in the **Evaluation**, as shown in [Figure 6.36](#).

5. The **Report Issue** screen will be displayed, as shown in [Figure 6.37](#), requiring the control owner to furnish specific information, including the **Issue Name**, which constitutes a concise description of the problem; **Priority**, signifying the level of urgency based on associated risks; and the **Owner**, designating the individual accountable for investigating and resolving the issue, along with the list of compensating controls and the potential impact.

The screenshot shows a 'Report Issue' dialog box with the following fields and values:

- Issue Name:** New company codes are not in scope of the
- Priority:** High
- Owner:** KARTHIKA
- Description:** New Company codes added in scope of the organization are not considered in the control
- Compensating Controls:** NA
- Potential Impact:** Risk of duplicate invoices being processed or the new company codes

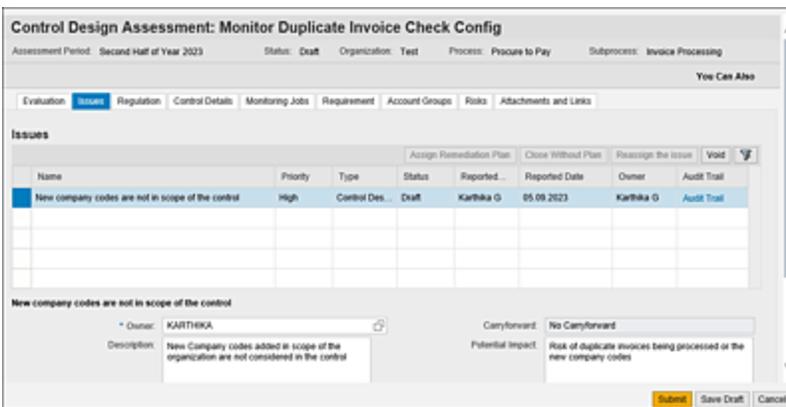
**Figure 6.37** Report Issue Screen

## Note

The name of the issue owner is automatically populated by the system based on the custom agent determination

rules defined for the default control design assessment. (Refer to [Chapter 4, Section 4.2.3](#), to understand the process of defining custom agent determination rules for control design assessment.)

6. Upon clicking the **OK** button, the navigation will return to the previous screen. The control owner can then review all additional information pertaining to the created issue within the **Issues** tab. To complete the process, the control owner can click the **Submit** button. For a comprehensive overview of the options available under the **Issues** tab, see [Figure 6.38](#).



**Figure 6.38** Issues Tab and Options

## ***Review Assessment***

After the control owner submits the control design assessment, the internal controls team or the internal audit team will take on the responsibility of reviewing it further. The workflow for reviewing the assessment will be assigned to the relevant team based on the customized agent determination rules as described in [Chapter 4, Section 4.2.3](#).

The internal control or audit team can access the work item through the **Work Inbox** under Transaction NWBC. The assigned reviewer will have access to all the information, similar to that available to the control owner. This includes the responses, rating information provided, attachments, and the details of any reported issues.

The reviewer has the option to either **Approve** or **Reject** the work item, as shown in [Figure 6.39](#). In cases where all the provided details are accurate, the reviewer can select the **Approve** button, which will trigger the issue remediation workflow and pass it to the designated issue owner for resolution.

If the information provided is either incomplete or inaccurate, the reviewer can opt to reject the work item by clicking **Reject** button. In such instances, the workflow is routed back to the control owner, and the steps outlined in the previous section need to be reperformed and rectified before resubmission.

No	Question	Answer	Comments
1	Are all the company codes in scope of the control are accurate and valid?	No, new company codes creating...	NO
1.1	Is the design of the control meeting the standards of ICS of the organization?	No	

General Data

Rating: Significantly Deficient

Comments: SD

Documents: 0 Attachments

Performed by: KARTHIKA Karthika G | Performed Date: 05.09.2023

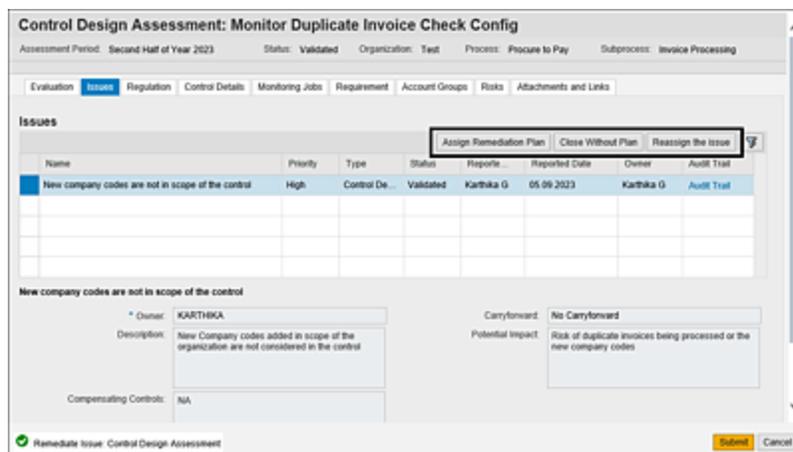
Buttons: Approve, Reject, Cancel

**Figure 6.39** Approve and Reject Buttons in Review Assessment

## ***Issue Remediation***

Following the submission and review of an assessment for a failed control, the issue owner will receive a workflow containing the information regarding the observation or issue reported by the control owner. These workflow items can be accessed through the **Work Inbox**. The issue owner will have various options, as highlighted in [Figure 6.40](#) and as follows:

- **Assign Remediation Plan**  
This option is selected if the issue needs a detailed investigation and a fix to remediate it.
- **Close Without Plan**  
This option is used if the issue owner can resolve it without the need of a remediation plan by providing the evidence and comments justifying the reason to close the issue without plan.
- **Reassign the issue**  
This option is used if the issue owner can transfer the responsibility to fix the issue to another user.



**Figure 6.40** Issue Remediation Options

In the case of a failed assessment, a remediation plan can be triggered by the issue owner by clicking the **Assign Remediation Plan** button. This will prompt the owner to input specific details, as shown in [Figure 6.41](#), including the following:

- **Plan Name**  
This field allows the issue owner to provide a concise description of the remediation plan to be implemented.
- **Start Date**  
The start date indicates when the notification should be sent to the remediation owner.
- **Due Date**  
The due date specifies the deadline by which the remediation plan needs to be executed.
- **Description**  
This can be used to provide a comprehensive set of instructions to the remediation owner regarding the required evidence collection and actions to be taken to resolve the issue.

After the remediation plan details have been updated, the issue owner can review all the provided information. Once satisfied with the accuracy and completeness of the plan, the issue owner can proceed to click the **Submit** button, thereby finalizing the remediation process.

**Assign Remediation Plan**

\* Plan Name: Duplicate Inv Checks

\* Start Date: 05.09.2023

\* Due Date: 26.09.2023

\* Owner: KARTHIKA

\* Description: Check for invoices created against the company code and confirm about any duplicate invoices

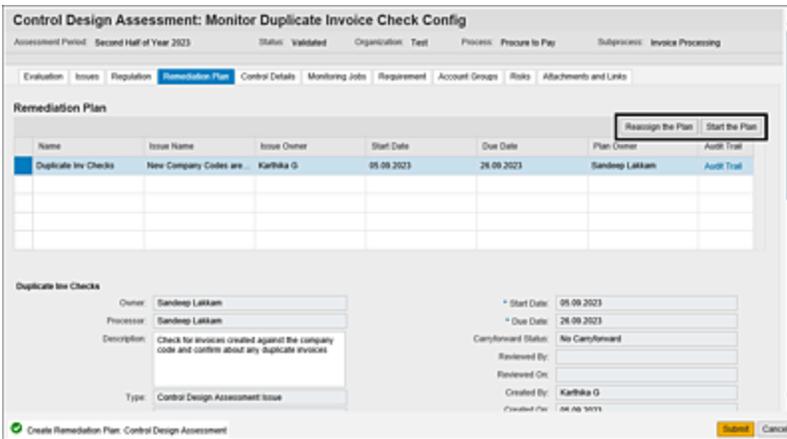
OK Cancel

**Figure 6.41** Assign Remediation Plan Screen Options

### ***Implementation of the Remediation Plan***

Once the issue owner submits the remediation plan for a failed control, the remediation owner receives a workflow with the details of instructions to fix the issue identified in the design of the control. To view the actions pending, access the **Work Inbox** from the **My Home** work center.

The remediation owner can access the work item by selecting the **Work Item** link. Upon accessing the work item, the remediation owner can validate the details of the assessment that was conducted, the reported issue, and the prescribed remediation plan. The remediation owner is presented with the following options for action on the work item (see [Figure 6.42](#)):



**Figure 6.42** Remediation Plan Options

- **Reassign the Plan**

The remediation owner can choose to delegate the responsibility of plan the implementation to another user.

- **Start the Plan**

If the remediation owner has opted to initiate the plan implementation and intends to upload evidence of the corrective actions taken, this option can be selected.

Upon selecting **Start the Plan**, the remediation owner is presented with several options, as shown in [Figure 6.43](#) and as follows:

- **Assign Next Processor**

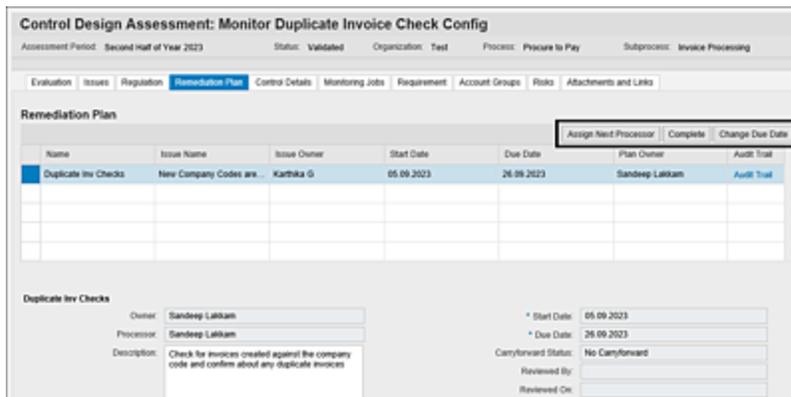
The remediation owner has the capability to reassign the responsibility for implementing the remediation plan to another user.

- **Complete**

This option is chosen when the remediation plan has been fully implemented and its completion is marked as **100%**. This action precedes the submission of the workflow for review by the issue owner.

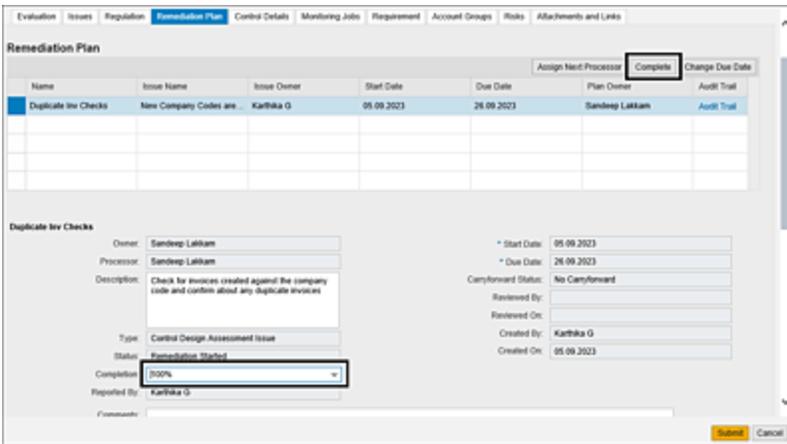
- **Change Due Date**

In instances where the remediation owner requires an extension of the due date to finalize the implementation of the remediation plan, a request can be initiated to the issue owner. This request includes a new due date. In such a scenario, a separate workflow will be triggered to the issue owner. The issue owner will then have the option to either accept or reject the change in due date request.



**Figure 6.43** Remediation Plan Implementation Options

After successfully carrying out the implementation of the remediation plan within the organization, the remediation owner must mark the completion percentage. Additionally, any relevant evidence can be uploaded in the **Attachments and Links** tab. Once the remediation reaches a full completion status of 100%, click **Complete** and then click the **Submit** button, as shown in [Figure 6.44](#).



**Figure 6.44** Options to Complete the Remediation Plan

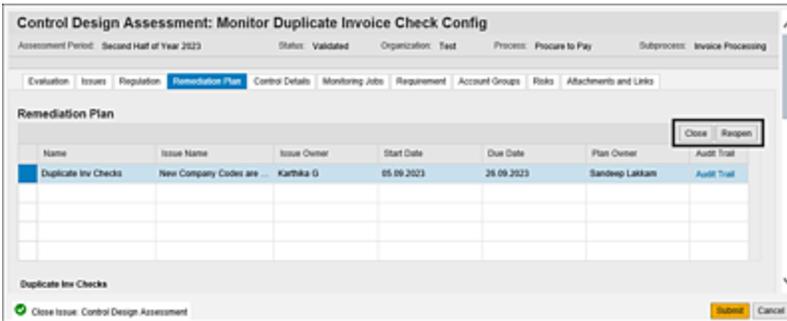
## ***Close Issue***

Upon the remediation owner successfully finalizing the implementation of the remediation plan, the issue owner will be notified through a workflow. This workflow item can be accessed via the **Work Inbox**. The issue owner can review the comprehensive explanations from the remediation owner about the specific actions that have been executed as part of the plan along with any evidence that has been uploaded in the **Attachments and Links** section.

After thoroughly reviewing all the provided details, the issue owner has two options available within the **Remediation Plan** tab, as shown in [Figure 6.45](#):

- **Close**  
If the issue has been successfully resolved and fixed, the issue owner can choose to **Close** the issue.
- **Reopen**  
If the information provided is deemed incomplete or inaccurate, the issue owner can opt to **Reopen** the remediation plan.

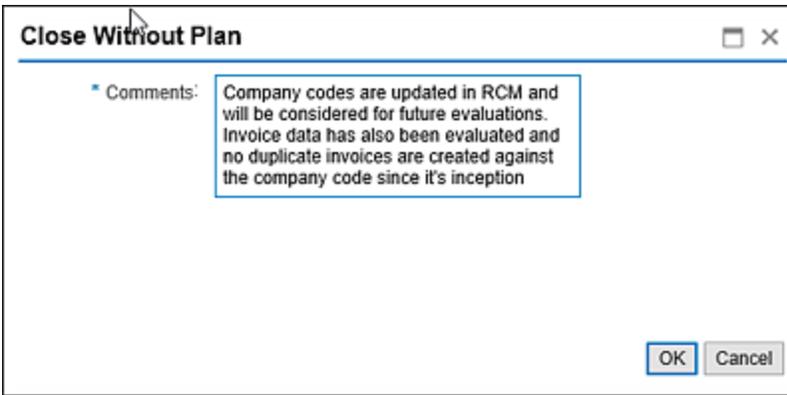
Upon selecting **Reopen**, a workflow is initiated, involving the remediation owner in further actions. In the case of reopening, the steps outlined in the previous section need to be revisited and rectified.



**Figure 6.45** Remediation Plan Options

Once the remediation plan implementation is successfully aligned and the issue has been closed, the workflow concludes. Subsequently, the results of the control assessment can be evaluated using SAP standard reports. These reports offer insights into the overall status and effectiveness of the controls within the organization's processes.

Additionally, the issue owner can close an issue without a remediation plan by providing comments justifying the decision to close the issue without a plan using the **Close Without Plan** option. Additionally, supporting files can be uploaded within the **Attachments and Links** tab. Once these steps are fulfilled, the issue can be closed by clicking the **Submit** button, which will conclude the workflow, as shown in [Figure 6.46](#).



**Figure 6.46** Comments Screen in the Close without Plan Option

## **6.3 Control Self-Assessment**

The control self-assessment process is also triggered using the survey functionality, which involves sending questionnaires to control testers. The main objective of these questionnaires is to collect specific information and gauge the operating effectiveness of controls. It becomes the responsibility of the control testers to address these questions and provide their assessment outcomes.

The survey functionality enables organizations to streamline the process of gauging the operating effectiveness of controls based on self-assessment from control testers. This approach allows for structured and standardized control evaluations, promoting consistency across assessments. By gathering responses from control testers through the questionnaires, the operating effectiveness of controls can be determined, and any potential gaps or areas for enhancement can be identified.

The upcoming sections detail the following configurations and steps to carry out the self-assessments:

- Defining the survey library, that is, defining questions and surveys
- Scheduling surveys using the planner for self-assessment
- Setting up the workflow structure
- Performing the assessment and issue remediation process

### **6.3.1 Define Survey Library**

To understand the process of creating a question library and survey library, refer to [Section 6.2.1](#). However, ensure that you select **Self-Assessment** as the category, which is specifically intended for the purpose of the self-assessment control.

### **6.3.2 Scheduling Controls Using the Planner**

To familiarize yourself with the process of scheduling a control for self-assessment, refer to [Section 6.2.2](#). However, when executing this task, be sure to choose **Perform Self-Assessment** as the plan activity, which is the designated category for creating a planner job. [Section 6.2.2](#) further outlines the detailed steps to efficiently schedule a control for self-assessment within the organization's framework.

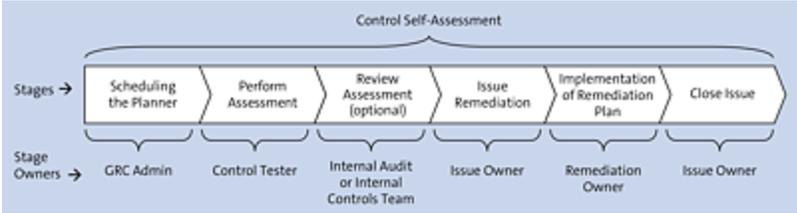
### **6.3.3 Workflow Structure**

Once a control self-assessment is scheduled using the planner, it follows a series of stages within the assessment process as detailed in the workflow structure shown in [Figure 6.47](#). Each of the workflow stages plays a crucial role in the advancement of the self-assessment process. By adhering to this structured framework, the self-assessment procedure is efficiently guided, ensuring an organized and systematic approach throughout its various phases.

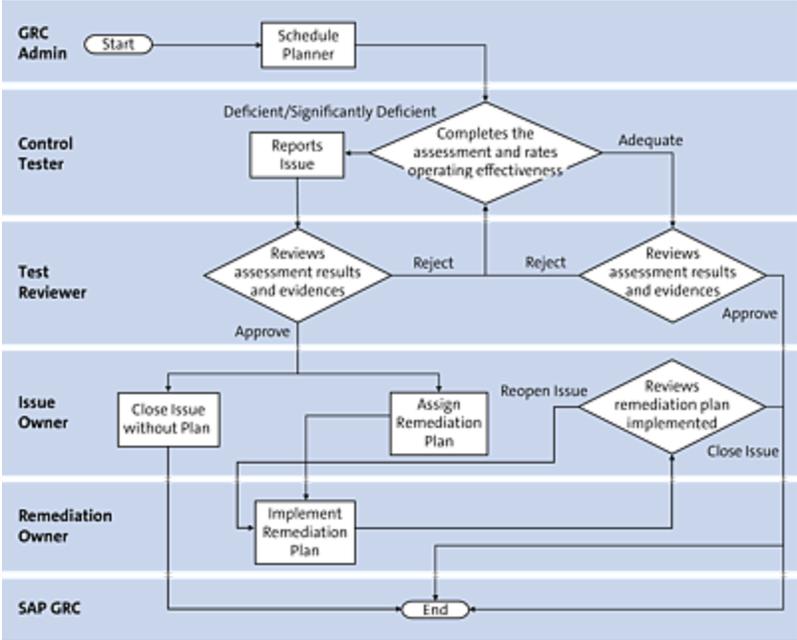
The detailed flow of the self-assessment is illustrated in [Figure 6.48](#) from initiation to closure. It further outlines the designated stage owners engaged in each of the phases

along with the specific activities undertaken by these respective owners.

[Table 6.11](#) provides comprehensive information on each of these stages.



**Figure 6.47** Stages in the Self-Assessment Workflow with the Respective Owners



**Figure 6.48** Flowchart That Details the Flow of Control Self-Assessment

Workflow Stage	Description
----------------	-------------

Workflow Stage	Description
Schedule planner	<p>The GRC administrator schedules the controls due for self-assessment using the planner functionality (<a href="#">Section 6.2.2</a> details the steps of using the planner). Based on the workflow rules defined in custom agent determination for control self-assessment (<a href="#">Chapter 4, Section 4.2.3</a>, details the steps to define the agent determination rules for self-assessment), the following stages will be triggered to the users assigned to the respective roles for the local control (refer to <a href="#">Chapter 5, Section 5.4.1</a>, to understand the steps to review the users assigned at a local control).</p>
Perform assessment	<p>The control tester receives the workflow item in the SAP Process Control Work Inbox to respond to the survey and rate the operating effectiveness of the control as either <b>Adequate</b> or <b>Deficient/Significantly Deficient</b>. For a failed assessment, the control tester must report an issue that will be triggered to the issue owner for the remediation process.</p>
Review assessment	<p>The test reviewer (usually the process owner or a person from internal controls or the internal audit team) receives the</p>

Workflow Stage	Description
	<p>workflow to review the assessment submitted by the control tester. The reviewer can either approve or reject the assessment result after looking at the responses provided to the questionnaire, attachments uploaded, and the issue details for a failed control.</p> <p>Note that this step isn't mandatory and can be activated/deactivated through the Transaction SPRO configuration. To enable/disable this feature, follow these steps:</p> <ol style="list-style-type: none"><li>1. Log in to the SAP Process Control system.</li><li>2. Execute <b>Transaction SPRO_ADMIN</b>.</li><li>3. Click on the <b>SAP Reference IMG</b> button, and navigate to <b>Governance, Risk and Compliance • Process Control • Evaluation Setup • Specify Whether Review is Necessary</b>.</li><li>4. In this section, select the <b>Activate</b> checkbox for the <b>Validation2</b> (validation of control self-assessment) indicator. Unchecking this would deactivate the functionality.</li></ol>

<b>Workflow Stage</b>	<b>Description</b>
Issue remediation	<p>During this stage, the issue owner evaluates the assessment outcome and has two options to consider:</p> <ul style="list-style-type: none"><li>• <b>Assign Remediation Plan</b> If the issue requires a thorough investigation and a comprehensive action plan for rectification, this option is chosen. The issue owner identifies the remediation owner, typically the control owner responsible for the control's maintenance, to oversee the implementation of the remediation plan.</li><li>• <b>Close Issue Without Plan</b> This alternative can be selected when the issue owner is able to resolve the issue without necessitating a formal remediation plan. In such cases, the issue owner provides supporting evidence using the <b>Attachments and Links</b> option that substantiates the decision to close the issue without a plan.</li></ul> <p>Note: This stage is applicable only in a control failed scenario.</p>

Workflow Stage	Description
Implementation of remediation plan	<p>Note that this step is relevant when the <b>Assign Remediation Plan</b> option has been chosen in the preceding stage. During this step, the designated remediation owner reviews the instructions provided by the issue owner, executes the specified actions, and subsequently provides evidence to support the successful implementation of the remediation plan.</p>
Close issue	<p>Note that this is applicable only when the issue owner and the remediation owner are distinct users. The issue owner validates the remediation efforts undertaken by the assigned remediation owner. Based on this assessment, the issue owner then decides to either close the issue if the remediation has been effective or reopen the remediation plan if further actions are deemed necessary.</p>

**Table 6.11** Stages in Control Self-Assessment

### 6.3.4 Assessment and Issue Remediation Process

During the self-assessment of a control, the control tester evaluates the operating effectiveness of the control. On completion of the assessment, the control tester assigns an overall rating to the control, choosing from the following options:

- **Adequate**
- **Deficient or Significantly Deficient**

The procedures for these two scenarios are described in [Section 6.2.4](#) where you'll find a detailed walkthrough of the steps to complete the assessment, review the assessment, report the issue, implement the remediation plan, and close the issue.

## 6.4 Manual Control Performance

In large-scale organizations where huge transactions take place within various business processes, implementing control over these activities is vital to ensure the ongoing efficiency of the processes. The utilization of the manual control performance functionality in SAP Process Control enables the establishment of performance plans for each control. These plans are executed by control performers at regular intervals to assess the effectiveness of activities within each business process.

This functionality provides control owners the flexibility to systematically execute control assessments, proactively identifying potential issues before they occur for the attention of control testers or internal audit teams. Moreover, it seamlessly integrates with the manual test of effectiveness functionality. This integration allows performers to submit responses and evidence as part of manual control performance plans across specified time frames. Subsequently, control testers can review this information prior to assigning an operating effectiveness rating. This integration significantly reduces control testers' dependency on process owners for evidence gathering, as evidence can now be directly retrieved from the manual control testing work item. Further information on this integration is detailed in [Section 6.5](#).

The following sections provide a comprehensive breakdown of the configurations and steps required to execute manual control performance:

- Defining performance plans for a control
- Scheduling control for performance using the planner
- Setting up the workflow structure
- Executing control performance and creating the ad hoc issue
- Performing issue remediation

### **6.4.1 Define Performance Plans**

Performance plans comprise a sequence of activities that performers need to complete to assess the efficiency of control activities. During these steps, performers have the flexibility to include attachments as evidentiary support for the checks carried out as part of the process. Furthermore, performers can also use the ad hoc issue functionality within SAP Process Control to report any identified issues.

Performance plans are established for each control within the business process hierarchy. They are then linked to a local control, or if local changes are permissible, performance plans can be directly created within a local control.

For reviewing an existing performance plan or creating a new one for a local control, follow these steps:

1. Log in to the SAP Process Control system.
2. Execute Transaction NWBC, and navigate to the **Master Data** work center.
3. Under the **Organizations** work group, select the **Organizations** work item.

4. Access the relevant organization where the control is localized.
5. Proceed to the **Sub Process** tab within the organization.
6. Open the specific control, which opens the screen shown in [Figure 6.49](#).

**Figure 6.49** Access Local Control from an Organization through Transaction NWBC

7. Click on the **Performance Plan** tab to define the steps for control performance, as shown in [Figure 6.50](#).

**Figure 6.50** Performance Plan Tab from a Local Control

8. Click the **Add** button to create the performance plan. [Table 6.12](#) details each of the fields.

**Field**

**Description**

Field	Description
<b>Step</b>	This is a short detail of the activity to be performed as part of the performance plan.
<b>Description</b>	This is a detailed explanation of the activity to be performed by the performer.
<b>Evidence Required</b>	Select <b>Yes</b> if it's mandatory for the step performer to upload any evidence backing up the checks performed.
<b>Comments Required</b>	Select <b>Yes</b> if it's mandatory for the step performer to provide comments for the activity performed.
<b>Sequence</b>	The sequence establishes the order in which steps must be executed. It's important to note that until the preceding step is successfully completed, the subsequent steps won't become accessible for the step performer to carry out.
<b>Step Performer</b>	Instead of having a single performer at the control level, an alternative option is to activate indicator <b>MCP_STEP_LVL_CHECK</b> that allows individual performers to be designated for each step. This can be achieved through the Transaction SPRO configuration via the following steps:

Field	Description
	<ol style="list-style-type: none"><li>1. Log in to the SAP Process Control system.</li><li>2. Execute <b>Transaction SPRO_ADMIN</b>.</li><li>3. Click on the <b>SAP Reference IMG</b> button.</li><li>4. Navigate <b>Governance, Risk and Compliance • Process Control • Evaluation Setup • Manual Control Performance • Enable Performer Assignment on Step Level</b>.</li><li>5. Select the <b>Activate</b> checkbox for the <b>MCP_STEP_LVL_CHECK</b> indicator, and click <b>Save</b>.</li><li>6. Once this is enabled, the responsibility to perform individual steps can be assigned using the <b>Edit Performer</b> option.</li></ol> <p>Note: If this configuration isn't activated, the workflow will be triggered based on the workflow rules defined in custom agent determination for manual control performance. (<a href="#">Chapter 4, Section 4.2.3</a>, outlines the necessary steps to define the agent determination rules for control performance.)</p>

Field	Description
<b>Duration (Days)</b>	Specify the duration in terms of the number of days within which the step should be accomplished by the performer. This configuration aids in monitoring and reviewing steps that are approaching their respective deadlines.

**Table 6.12** Fields in Performance Plan

## 9. Click **Save**.

The next step is to schedule the control for manual control performance using the planner functionality.

### 6.4.2 Scheduling Controls Using the Planner

The administrator can schedule controls for manual control performance using the planner functionality. To access this feature, execute Transaction NWBC within the SAP Process Control system. Navigate to the **Assessments** work center under the **Assessment Planning** work group. Click the **Planner** work item. The **Planner** work item will display all the active plans associated with **Process Control & Risk Management**, as shown in [Figure 6.51](#).

Schedule Name	Schedule Activity	Created On	Changed On	Organizations	Start Date	Due Date	Status
Design Assessment_Q3 2023	Perform Control Design Assessment	04.09.2023 10:57:15	04.09.2023 10:57:15	1	04.09.2023	11.09.2023	Completed
Manual Test of Effectiveness_Q2 2023	Test Control Effectiveness	30.07.2023 09:53:08	30.07.2023 09:53:08	1	30.07.2023	05.08.2023	Completed
Design Assessment_Q3 2023	Perform Control Design Assessment	28.07.2023 15:38:21	28.07.2023 15:38:21	1	28.07.2023	10.08.2023	Completed
MCP_Q3 2023	Manual Control Performance	28.07.2023 15:29:58	28.07.2023 15:29:58	1	28.07.2023	01.08.2023	Completed
MCP_Q3 2023	Manual Control Performance	28.07.2023 08:50:16	28.07.2023 08:50:16	1	04.09.2023	05.09.2023	In Process
Design Assessment_Q2 2023	Perform Control Design Assessment	27.06.2023 17:10:34	27.06.2023 17:10:34	1	27.06.2023	14.07.2023	Completed
Design Assessment_Q2	Perform Control Design Assessment	25.06.2023 16:44:12	25.06.2023 16:44:12	1	25.06.2023	30.06.2023	Completed

**Figure 6.51** Plans: Process Control & Risk Management

To initiate the creation of a new plan, select the **Create** button, prompting the activation of the navigational scheduler. This tool is designed to guide and verify the accuracy of all the settings.

The plan scheduler encompasses six pivotal stages, which we'll cover in the following sections:

1. **Enter Plan Details**
2. **Select Regulation**
3. **Select Organizations**
4. **Select Object(s)**
5. **Review**
6. **Confirmation**

### **Step 1: Enter Plan Details**

The **Enter Plan Details** stage is the starting point within the planner. Administrators can define essential plan details, including the **Plan Name**, **Plan Activity**, **Recurring Plan** parameters, **Recurring Range** specifications, **Frequency** settings, **Recurrence** timelines, **Due Date Lag**, **Period**, and **Year**, as shown in [Figure 6.52](#).

The screenshot shows the 'Create Plan' window in SAP. At the top, there are six steps: 1. Enter Plan Details (active), 2. Select Regulation, 3. Select Organizations, 4. Select Object(s), 5. Review, and 6. Confirmation. The main area contains the following fields:

- Plan Name: MCP\_Q3\_2023
- Plan Activity: Manual Control Performance
- Recurring Plan: Yes (selected)
- Recurring Range: From 04.09.2023 to 04.11.2023
- Frequency: Weekly
- Recurrence: Every 01 Week(s) Monday
- Recurrence Text: Week
- Due Date Lag: 001 Days
- Period: Quarter 3
- Year: 2023

At the bottom, there are buttons for 'Previous', 'Next', 'Cancel', 'Finish', and 'Activate Plan'.

**Figure 6.52** Create Plan: Definition Screen

[Table 6.13](#) provides detailed information on each of the fields in this step.

Field	Description
<b>Plan Name</b>	This is a brief name of the scheduler for identification.
<b>Plan Activity</b>	The planned activity must be selected here. For example, to schedule a manual control performance, choose the <b>Manual Control Performance</b> option. The other options in this field can be used for various assessments and tests using SAP Process Control and SAP Risk Management. Detailed information about these tests and assessments is provided in <a href="#">Table 6.7</a> of <a href="#">Section 6.2.2</a> .

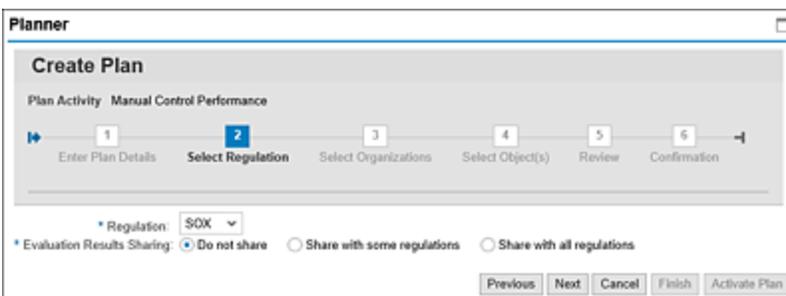
Field	Description
<b>Recurring Plan</b>	If the performance of the control is to be triggered only once, select <b>No</b> , and if the performance of the control is done on a regular basis, select <b>Yes</b> .
<b>Recurring Range</b>	This field pops up only if the recurring plan is selected as <b>Yes</b> . Define the duration and the period for which the control should be performed.
<b>Frequency</b>	Set the frequency at which the work item should be triggered to the control performers. Select the frequency as <b>Daily</b> , <b>Weekly</b> , <b>Monthly</b> , or <b>Yearly</b> from the dropdown available.
<b>Recurrence</b>	Set the time frame at which the recurrence of the plan should happen based on the frequency set in the previous step.
<b>Due Date Lag</b>	This option is used to set the due date from the start date for each recurrence.
<b>Period</b>	From the time frames available in the dropdown, select the period for which the control should be performed.
<b>Year</b>	This represents the year for which the control performance is being triggered.

**Table 6.13** Fields in the Enter Plan Details Stage of the Planner

To proceed to the **Select Regulation** step, click on the **Next** button once you've completed the plan details.

## Step 2: Select Regulation

As discussed in [Section 6.1](#), there are multiple assessments/tests that the organization conducts to the internal controls to meet the regulatory and compliance requirements. In the **Select Regulation** screen, select the respective **Regulation**, as shown in [Figure 6.53](#).



The screenshot shows a software window titled "Planner" with a "Create Plan" sub-header. Below the header, there are two tabs: "Plan Activity" and "Manual Control Performance". A progress bar with six numbered steps is visible: 1. Enter Plan Details, 2. Select Regulation (highlighted in blue), 3. Select Organizations, 4. Select Object(s), 5. Review, and 6. Confirmation. Below the progress bar, there is a dropdown menu for "Regulation" with "SOX" selected. Underneath, there are radio buttons for "Evaluation Results Sharing": "Do not share" (selected), "Share with some regulations", and "Share with all regulations". At the bottom of the window, there are buttons for "Previous", "Next", "Cancel", "Finish", and "Activate Plan".

**Figure 6.53** Select Regulation Option while Scheduling the Planner

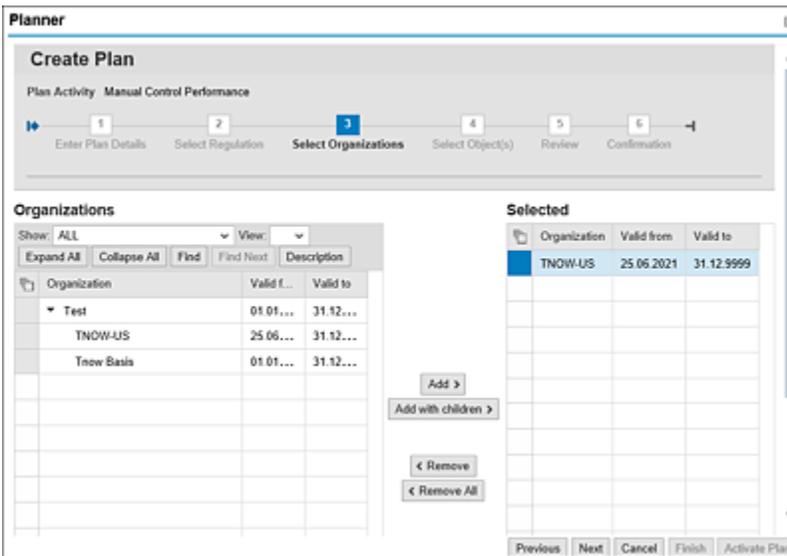
### Note

For a more comprehensive understanding of the various regulations accessible in the **Regulations** dropdown, refer to [Chapter 4, Section 4.5.3](#). This section will provide you with detailed insights into the various regulations available for selection.

Furthermore, to gain a clearer understanding of the available options under the **Evaluation Results Sharing** category, refer to [Section 6.2.2](#). This section will provide you with a comprehensive overview of the choices and functionalities. Click **Next** to navigate to the next step.

### Step 3: Select Organizations

This is an important step where the organizations must be selected and where the controls are localized. Select the root or child organization from the **Organizations** list, and click the **Add** or **Add with Children** button. The selected organizations will be moved to the right **Selected** panel, as shown in [Figure 6.54](#).



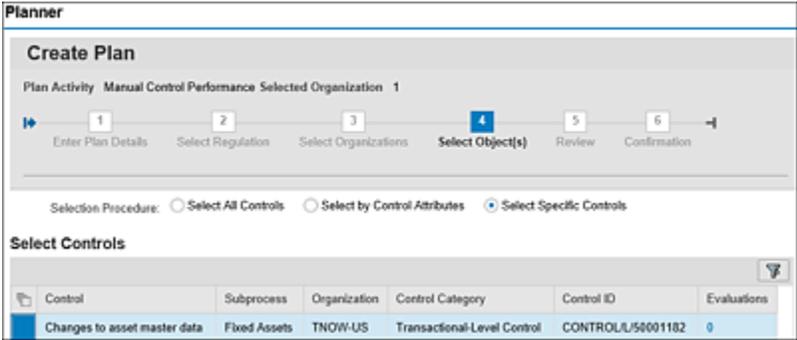
**Figure 6.54** Organizations Selected for Filtering the Controls for Assessment

Click **Next** to continue.

### Step 4: Select Object(s)

In this stage, the administrator determines the controls that should be selected for control performance. This selection can be accomplished through various means, including manual selection of individual controls based on knowledge, industry standards, best practices, and regulatory mandates, or through consultation with experts or stakeholders. For a more comprehensive understanding of

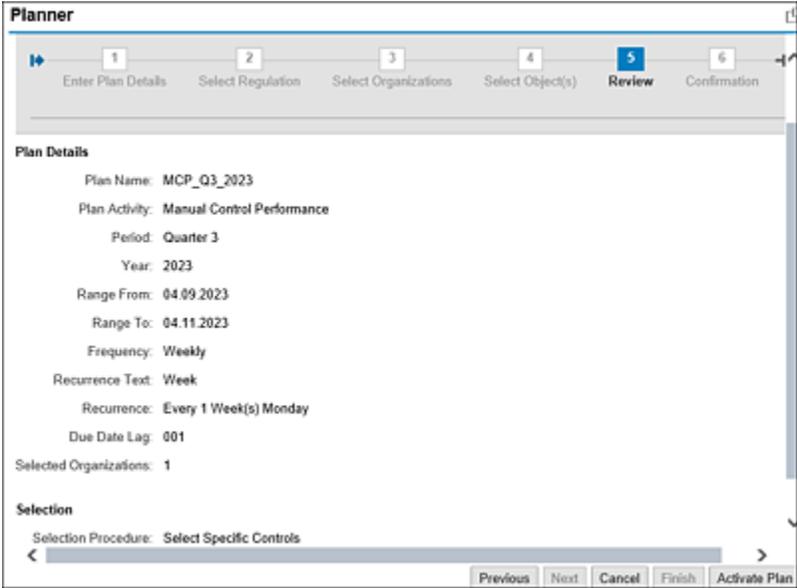
the selection procedure, refer to the corresponding section within [Section 6.2.2](#). This step will provide you with detailed information on how to effectively carry out the selection process. [Figure 6.55](#) shows the controls selected.



**Figure 6.55** Selection of Controls in the Create Plan Screen

### Step 5: Review

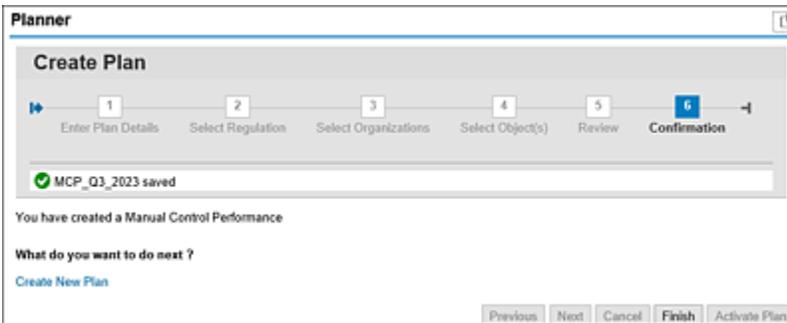
In this step, the administrator can review the plan details, view objects, and so on, and activate the plan by clicking the **Activate Plan** button, as highlighted in [Figure 6.56](#).



**Figure 6.56** Review Screen

## Step 6: Confirmation

A confirmation message is received indicating the job is saved and the controls are scheduled successfully for control performance. Click **Finish** to close the window shown in [Figure 6.57](#).

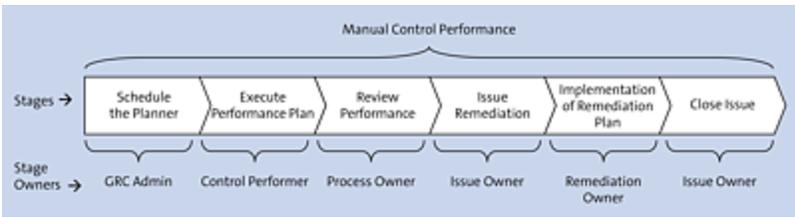


**Figure 6.57** Confirmation Message for the Scheduled Job Using the Planner

The manual control performance process is initiated at this stage. The subsequent section outlines the various stages involved in the performance process, highlighting the steps and activities that occur during each stage.

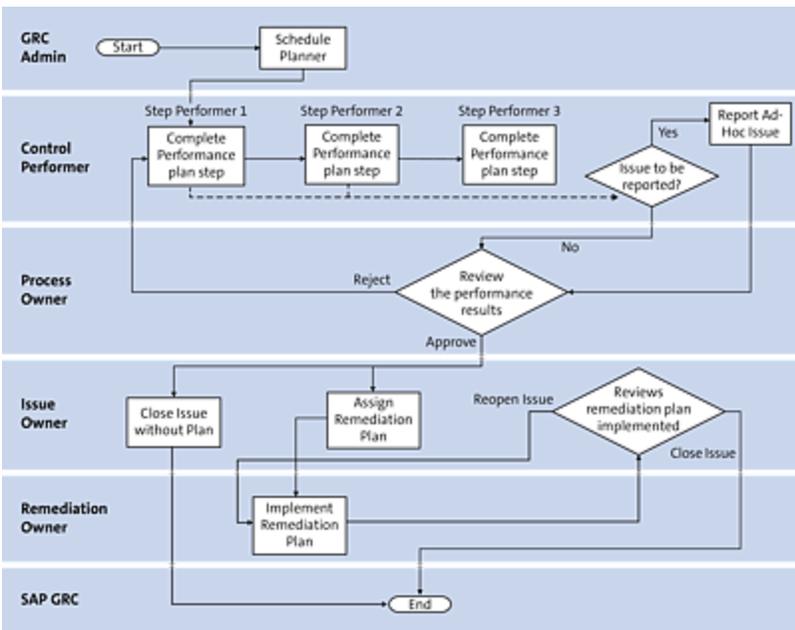
### 6.4.3 Workflow Structure

After scheduling the controls for performance using the planner, it proceeds through multiple stages of workflow, as outlined in the flow diagram shown in [Figure 6.58](#). It aids in determining and assigning roles and responsibilities for each stage of the control performance. Additionally, these workflow stages guide the progression of control performance, facilitating a systematic and organized approach.



**Figure 6.58** Stages in Control Performance with Owners' Information

The flow of the control performance is detailed in [Figure 6.59](#), which explains how the performance stages flow from the initiation till closure, the stage owners involved, and the activities performed by each owner.



**Figure 6.59** Flowchart Depicting the Stages of Control Performance

Each of the stages is detailed in [Table 6.14](#).

Workflow Stage	Description
----------------	-------------

Workflow Stage	Description
Schedule planner	<p>The GRC administrator schedules the controls for performance using the planner functionality (<a href="#">Section 6.2.2</a> detail the steps of using the planner). Performers of each step receive the workflow to complete the steps, or if the configuration mentioned in <a href="#">Table 6.12</a> isn't enabled, the workflow is triggered based on the rules defined in custom agent determination for manual control performance. (<a href="#">Chapter 4, Section 4.2.3</a>, details the steps to define the agent determination rules for manual control performance.)</p>
Control performance	<p>The control performer receives the workflow item in the SAP Process Control Work Inbox to complete the task assigned in the step and provide evidence and comments as applicable. During the step performance process, if the owner has identified an issue, the same can be reported as an ad hoc issue for further remediation processes.</p>

Workflow Stage	Description
Review control performance	<p>The performance reviewer (who is usually the process owner) receives the workflow to review the performance plan executed by the respective control performers. The reviewer can either approve or reject the results after looking at the responses provided to the steps and attachments uploaded.</p> <p>However, this step is optional and is disabled by default. It can be enabled from the Transaction SPRO configuration. Log in to the SAP Process Control system, execute <b>Transaction SPRO_ADMIN</b>, click the <b>SAP Reference IMG</b> button, and expand <b>Governance, Risk and Compliance • Process Control • Evaluation Setup • Specify Whether Review Is Necessary</b>.</p> <p>Select the <b>Activate</b> checkbox for the <b>Validation8</b> (validation of manual control performance) indicator. This will enable the review stage for manual control performance.</p> <p>Note: Transaction SPRO changes involve workbench modifications, and it's necessary to implement them in the development system and transport the changes as a transport request.</p>

<b>Workflow Stage</b>	<b>Description</b>
Ad hoc issue remediation	<p>In this stage, the issue owner looks at the ad hoc issue reported and has two options to perform:</p> <ul style="list-style-type: none"><li>• <b>Assign Remediation Plan</b> This option is selected if the issue needs a detailed investigation and an action plan to remediate it. The issue owner identifies the remediation owner, who is usually the control owner that is responsible for its maintenance, to implement the remediation plan.</li><li>• <b>Close Issue Without Plan</b> This option is used if the issue owner can resolve it without the need of a remediation plan by providing the evidence and comments justifying the reason to close the issue without a plan.</li></ul> <p>Note: This stage is applicable only if the performer of any step reports an ad hoc issue.</p>

Workflow Stage	Description
Implementation of remediation plan	<p>The remediation owner looks at the instructions provided by the issue owner, implements them, and provides evidence to support successful implementation of the remediation plan.</p> <p>This is applicable only if the <b>Assign Remediation Plan</b> option is applicable.</p>
Close issue	<p>The issue owner reviews the remediation performed by the remediation owner and either closes the issue or reopens the remediation plan for further actions to be performed.</p> <p>This is applicable only if the issue owner and remediation owner are different users.</p>

**Table 6.14** Stages in Manual Control Performance

#### 6.4.4 Control Performance Process

During the execution of the control performance process, the control performer carries out the designated steps to assess the effectiveness of the process. The sequence determines the flow of tasks across different performers involved. If any problems are detected by the performer during this process, they will raise an ad hoc issue, which will then be addressed through appropriate corrective

actions. The following section details the procedural flow of the workflow.

## **Completing the Control Performance**

Once the GRC administrator triggers control for performance, the control performer assigned to step 1 receives the workflow notification, which can be accessed from the **Work Inbox**. To view the pending actions, follow these steps:

1. Log in to the SAP Process Control system, execute Transaction NWBC, and navigate to the **My Home** work center. Under the **Work Inbox** work group, click the **Work Inbox** work item, **and** click on the **Process Control** work items link in the header section to find the work items pending for action. Click **Subject** to open the work item.
2. After opening the assessment work item, the control performer can review the specific steps that have been assigned, along with their respective deadlines, as detailed in the [Figure 6.60](#).

Manual Control Performance: MCP\_Q3 2023

### Manual Control Performance

Control Name: [Changes to asset master data](#) New  
 Parent Subprocess: Fixed Assets Period: Quarter 3 2023  
 Organization: TNOW-US

Steps Control Info Forward Info

Steps (2)

Step	Description	Evidence R...	Comments...	Sequence	Step Perfor...	Due Date	Status	Last Updat...
Asset Register	Obtain the list of assets acquired during the test period	Yes	Yes	001	SAKRISHNA 1	Sep 5, 2023	In Process	>
Capitalization	validate the asset capitalization including the expenses incurred	Yes	Yes	002	Sandeep Lakkam	Sep 5, 2023	Pending	>

Forward

**Figure 6.60** Control Performance Work Item

- As the control performer, click on the step corresponding to your responsibility and examine the task outlined in the step description. Provide the comments, append supporting evidence if any, and raise any issues through the process, as highlighted in [Figure 6.61](#).

Manual Control Performance Step

#### General Info

Step: Asset Register  
 Description: Obtain the list of assets acquired during the test period  
 Evidence Required: Yes  
 Comments Required: Yes

Comment:  
 List of assets acquired during the month of July is gathered and attached herewith

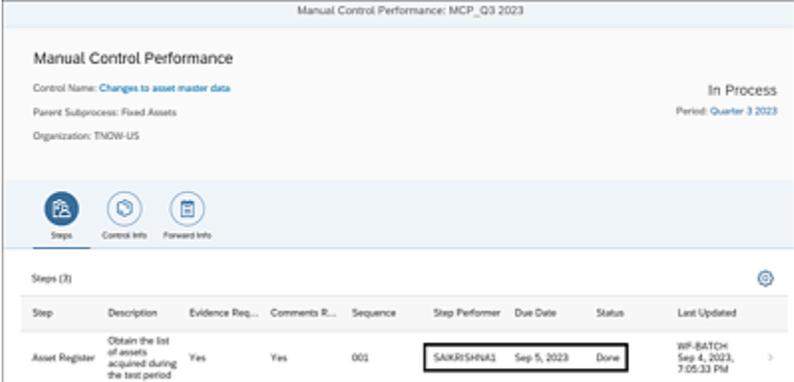
Evidence (1) + ✎

Type	Name	Uploaded By
	<a href="#">Asset Register.xlsx</a>	WF-BATCH Sep 4, 2023, 7:01:19 PM

Save Set to Done Report Issue

**Figure 6.61** Options for the Control Performer to Complete the Step Assigned

4. After successfully finishing all tasks within the designated step, click the **Set to Done** button for the completion of the step. This will trigger the workflow to the subsequent step and assign it to the relevant step performer. The status of the steps is detailed in [Figure 6.62](#).



Manual Control Performance: MCP\_Q3 2023

Manual Control Performance

Control Name: Changes to asset master data  
Parent Subprocess: Fixed Assets  
Organization: TNOV-US

In Process  
Period: Quarter 3 2023

Steps Control Info Forward Info

Steps (1)

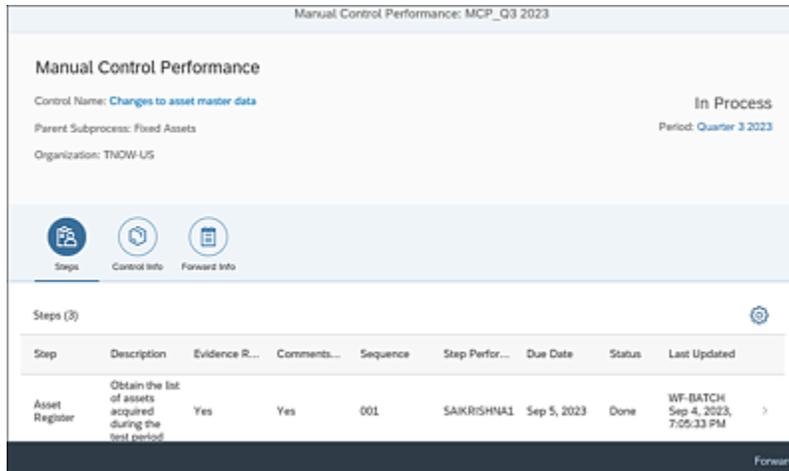
Step	Description	Evidence Req...	Comments R...	Sequence	Step Performer	Due Date	Status	Last Updated
Asset Register	Obtain the list of assets acquired during the test period	Yes	Yes	001	SAKRISHNAJ	Sep 5, 2023	Done	WF-BATCH: Sep 4, 2023, 7:05:33 PM

**Figure 6.62** Control Performance Work Item with Steps Set to Done

## Note

The activities mentioned here will continue till the last step is completed.

5. Next, the task can be reassigned to a different user who will then take on the responsibility of completing the control step. To perform the reassignment, open the work item, and click on the **Forward** button at the bottom-right corner, as shown in the [Figure 6.63](#).



**Figure 6.63** Option to Forward the Performance Step

6. This will show the list of users. Select the desired user, and click **OK**. The step will be assigned to the new performer.
7. Finally, during the control performance process, if the performer detects any irregularities within the process, they can be reported by using the **Report Issue** button, as highlighted in [Figure 6.64](#).
8. A new window will be displayed where the performer should provide details such as **Name**, **Description**, **Priority**, and so on, as shown in [Figure 6.65](#). Furthermore, detailed information about each of these fields is provided in [Table 6.15](#).

Manual Control Performance Step

**General Info**

Step: Asset Register  
 Description: Obtain the list of assets acquired during the test period  
 Evidence Required: Yes  
 Comments Required: Yes  
 Comment: List of assets acquired during the month of July is gathered and attached herewith

Evidence (1) + ✎

Type	Name	Uploaded By
	Asset Register.xlsx	WF-BATCH Sep 4, 2023, 7:01:19 PM

Save Set to Done Report Issue

**Figure 6.64** Report Issue Option

SAP Ad Hoc Issue:

Status: Draft Created By: SAIKRISHNA1 Created On: 04.09.2023 Updated By: Updated On:

Issue Details Regulation Attachments and Links

\* Name: Capitalization of few assets is not done Notes

\* Description: Capitalization of few assets is not done Add Note

\* Priority: High

Object Type: Control

Object Name: Changes to asset master data Open

Owner: KARTHIKA

Source: Manual Control Performance

\* Issue Date: 04.09.2023

Due Date: 11.09.2023

Audit Trail: [Audit Trail](#)

**Figure 6.65** Submission of an Ad Hoc Issue as Part of Manual Control Performance

**Field**

**Description**

Field	Description
<b>Name</b>	This is a brief name to identify the issue to be reported.
<b>Description</b>	This is a detailed explanation of the issue identified.
<b>Priority</b>	This is used to classify the criticality of the issue as <b>High/Medium/Low</b> .
<b>Object Type</b>	This is automatically set to <b>Control</b> .
<b>Object Name</b>	This is automatically set to the name of the control for which the issue is being reported.
<b>Owner</b>	The name of the owner responsible for responding to this issue is automatically selected by the system based on the custom agent determination rules defined for a default ad hoc issue processor for a control (refer to <a href="#">Chapter 4, Section 4.2.3</a> , to understand the process of defining custom agent determination rules for ad hoc issues).
<b>Source</b>	The source of the issue is automatically set to <b>Manual Control Performance</b> .
<b>Issue Date</b>	This is the date when the issue was identified.

Field	Description
<b>Due Date</b>	This is the date by which the issue should be remediated by the owner of the issue or the respective stakeholder responsible.
<b>Notes</b>	Using this option, the control performer can provide additional details and background of how this issue was identified and what the issue is.
<b>Regulation</b>	Details of the regulation are auto-populated or inherited from the control for which the issue is being reported.
<b>Attachments and Links</b>	<p>Supplementary evidence related to the reported issue can be included in the <b>Attachments and Links</b> section. The following alternatives are accessible:</p> <ul style="list-style-type: none"> <li>• <b>Add File:</b> Files such as Microsoft Excel, Word, PowerPoint, and so on can be attached.</li> <li>• <b>Add Link:</b> Links can be added. For a shared folder link, a link to the corresponding location can be included within this section.</li> </ul>

**Table 6.15** Ad Hoc Issue Fields

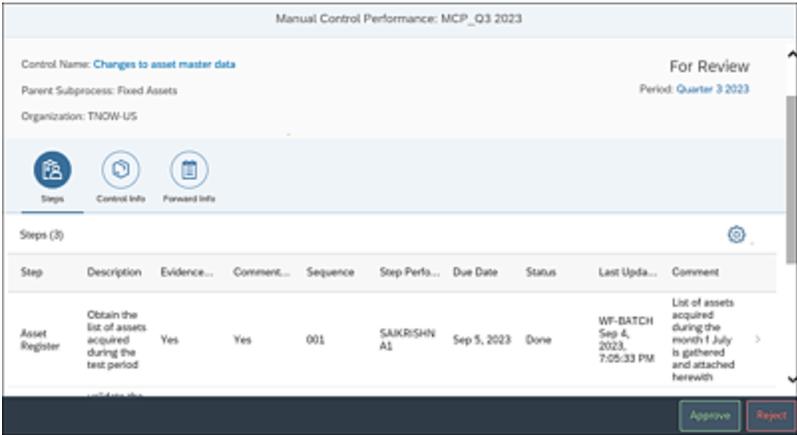
9. Once the details are updated, click on **Submit**.

When an issue is reported, the subsequent steps for rectification will adhere to the established process of ad hoc issue management. Detailed information and steps are provided in [Chapter 7, Section 7.2.3](#).

### Review the Control Performance

Once all the steps are successfully carried out by the respective control performers, a workflow will be initiated to the reviewer as specified in the custom agent determination rules (refer to [Chapter 4, Section 4.2.3](#)).

The review item can be accessed from the **Work Inbox** as discussed in the previous sections. By selecting the subject line of the work item, the reviewer can review all the details available in the work item similar to the control performers, including the responses and attachments submitted throughout the review process. The reviewer has the option to either **Approve** or **Reject** the control performance work item by selecting the appropriate button, as highlighted in [Figure 6.66](#).



**Figure 6.66** Options Available for the Reviewer as Part of Control Performance

Upon the approval of the assessment results, the workflow ends. Refer to [Chapter 10, Section 10.1.3](#), for more information on standard reports that are available to view the assessment results.

### **6.4.5 Mass Maintenance of Performance Plans**

In cases where performance plans need to be established for individual controls, the task of creating these plans manually can be extensive, particularly for large organizations dealing with numerous controls. SAP offers a solution to address this challenge by enabling the mass management of performance plans through a program. The steps in the following sections outline the procedure for effectively carrying out this mass performance plan maintenance:

1. Exporting performance plan templates
2. Updating the templates
3. Importing duly filled-in templates

#### **Export Performance Plan Template**

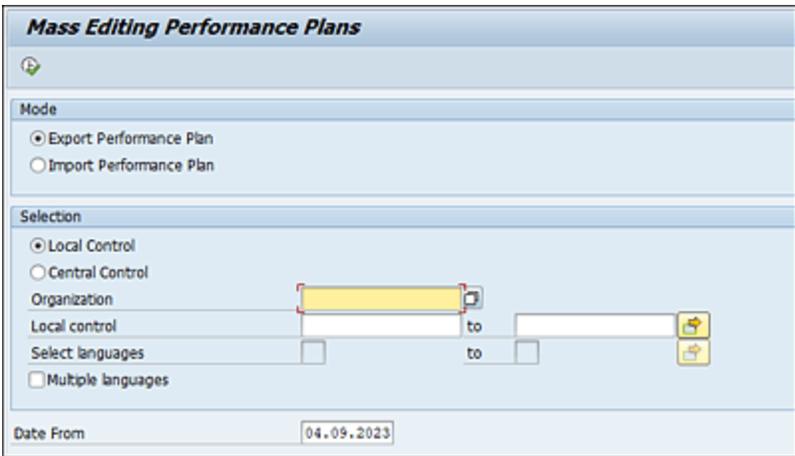
To download the template, access program GRFN\_CTRL\_PERF (Mass Editing Performance Plans) using Transaction SE38. [Table 6.16](#) details each of the program's options.

<b>Selection Option</b>	<b>Description</b>
-------------------------	--------------------

<b>Selection Option</b>	<b>Description</b>
<b>Export Performance Plans</b>	This option is used for retrieving a template that can be populated with performance plan data and subsequently uploaded, as shown in <a href="#">Figure 6.67</a> .
<b>Import Performance Plan</b>	Once the exported template is filled in with all the required details, use this option to upload it back.
<b>Selection - Local Control</b>	SAP has provided options to update the performance plans either at the local control level or at the central control level. If the requirement is to maintain the performance plans for the localized controls, use this option. The details of step performers can also be updated.
<b>Selection - Central Control</b>	Use this option if the requirement is to maintain the performance plans for the central controls.
<b>Organization</b>	This option is applicable only if <b>Local Control</b> is selected. The organization can be selected for which you wish to maintain the performance plans. When an organization is selected in this option, only those controls localized for that organization will be exported as part the template.

Selection Option	Description
<b>Local control</b>	This option is applicable only if <b>Local Control</b> is selected in the previous step, where you can select the list of local controls for which you wish to maintain the performance plans.
<b>Central Control</b>	This option is applicable only if <b>Central Control</b> is selected in previous step, where you can select the list of central controls for which you wish to maintain the performance plans.
<b>Select languages</b>	This is enabled only when the <b>Multiple languages</b> checkbox is selected. If language packages are enabled, you can maintain the performance plans in the downloaded template in the required language.
<b>Date From</b>	This is the applicable date from which the performance plans should be updated to the controls.

**Table 6.16** Options in the Mass Editing Performance Plans Screen



**Figure 6.67** Selection Screen in Mass Editing Performance Plans

### Updating the Templates

After making the necessary selections and exporting the template for local controls, the template will encompass a list of controls for which performance plans can be maintained. Furthermore, it will display the existing performance plans as well within the system, including details such as step performer information, as shown in [Figure 6.68](#).

Control ID	Control Name	Plan Step Name	Plan Step Description	Comment
CONTROL_U/30000884	Mitigation Control ID for BASIS			
CONTROL_U/30000899	Monitor Duplicate Invoice Check Config			
CONTROL_U/30001187	Monitor users with SAP_All access			
CONTROL_U/30001180	FA Account Determination Configuration			
CONTROL_U/30001181	Assignment of Screen Layout for G.data det.			
CONTROL_U/30001182	Changes to asset master data	Asset Register	Obtain the list of assets acquired during the test period	X
		Capitalization	validate the asset capitalization including the expenses incurred	X
		Report issue	Report issue and track it for closure if there are any deviations observed in the process	X
CONTROL_U/30001202	Account Reconciliations	Extract report	Extract the GL Account Report	X
CONTROL_U/30001229	Monitor users with SAP_All and SAP_New			
CONTROL_U/30001230	Users with Developer access in Productive			
CONTROL_U/30001231	Monitor Super User account maintenance			
CONTROL_U/30001232	Direct profile assignments			

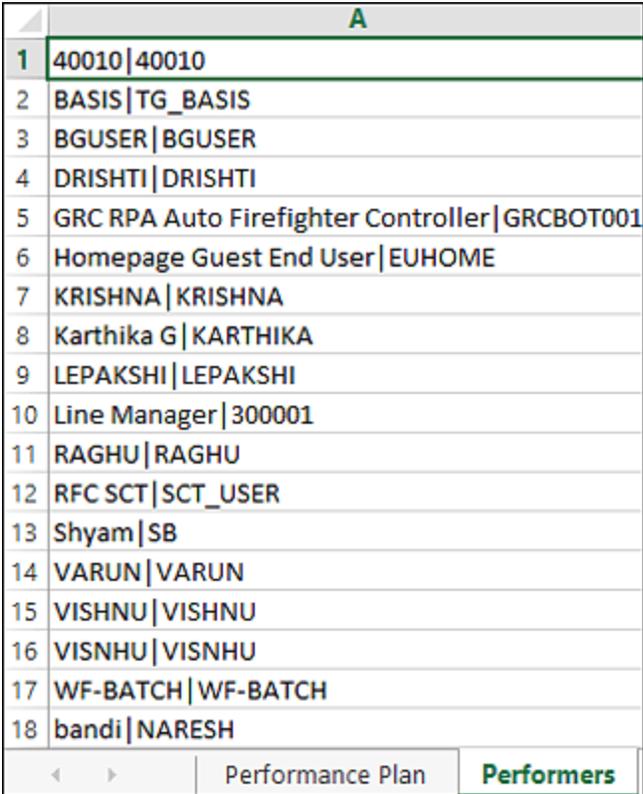
**Figure 6.68** Performance Plans Template

The exported template also contains a sheet called **Performers** that contains a list of users with access to control performer role SAP\_GRC\_SPC\_CRS\_CTL\_PERFORMER. These users can be used as step performers when outlining the performance plan steps, as shown in [Figure 6.69](#).

The **Performance Plan** sheet must be updated with the following information:

- **Plan Step Name**
- **Plan Step Description**
- **Comments Required**
- **Evidence Required**
- **Plan Step Sequence**
- **Performers**
- **Duration**

After updating the required information, save the Excel file on your local device. Next, you'll need to upload the same and complete the activity.



	A
1	40010 40010
2	BASIS TG_BASIS
3	BGUSER BGUSER
4	DRISHTI DRISHTI
5	GRC RPA Auto Firefighter Controller GRCBOT001
6	Homepage Guest End User EUHOME
7	KRISHNA KRISHNA
8	Karthika G KARTHIKA
9	LEPAKSHI LEPAKSHI
10	Line Manager 300001
11	RAGHU RAGHU
12	RFC SCT SCT_USER
13	Shyam SB
14	VARUN VARUN
15	VISHNU VISHNU
16	VISNHU VISNHU
17	WF-BATCH WF-BATCH
18	bandi NARESH

**Figure 6.69** Performers Sheet in the Performance Plan Template

## Import Performance Plan Template

The template that has been filled in with the updated performance plans can be uploaded using program GRFN\_CTRL\_PERF through Transaction SE38 or Transaction SA38. Selecting the **Import Performance Plans** radio button will show the **Upload** options described in [Table 6.17](#).

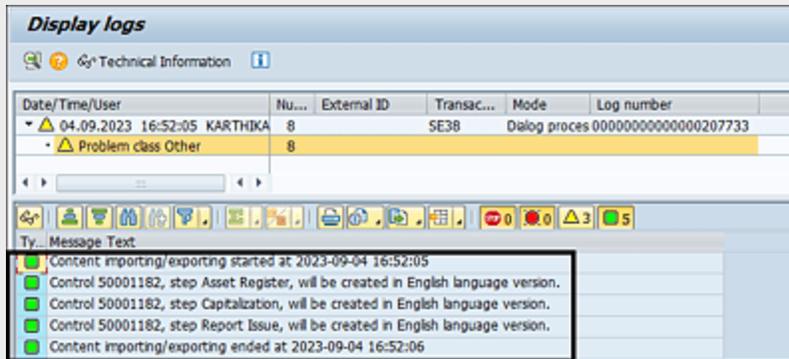
Selection Option	Description
<b>Simulation</b>	This is a test run to ensure all the details updated in the template being uploaded are as expected without any issues.
<b>Select File</b>	This is where to select the updated template to be uploaded into the system.
<b>Date From</b>	This is the applicable date from which the performance plans should be updated to the controls.

**Table 6.17** Selection Options of the Import Performance Plan Template

### Note

It's recommended to use the simulation feature prior to uploading the actual data. Select the **Simulation** option, select the file, and click the **Execute** button. You'll see a message indicating **Simulation completed successfully. Check the log file details**. Click **Yes** to verify the correctness of the uploaded details, as shown in [Figure 6.70](#). Upon validating, uncheck the **Simulation**

option, and proceed with uploading the template again. This will ensure that the data is successfully uploaded into the system.



**Figure 6.70** Successful Log after Uploading the Performance Plan Template

## 6.5 Manual Test of Effectiveness

While the preceding sections outlined the procedures for assessing control design and obtaining self-assessment for ascertaining the operational efficacy of controls and their certification, the current section delves into the significance of well-established internal controls and the necessity of their optimal functionality within the process. To test the effectiveness of these controls, they undergo periodic operating effectiveness tests.

Depending on the source of data and the process in which it can be analyzed, the nature of control and its operating effectiveness tests are divided into three types, as shown in the [Table 6.18](#).

Nature of Control	Source of Data and Nature of Testing
Manual controls	Validating the operational effectiveness of these controls necessitates human involvement. For example, if the data is stored physically or within a system that can't be readily connected for detailed analysis, manual controls are appropriate to test these controls, and we establish test plans comprising a sequence of steps or tests that the tester must execute to reach a result.

Nature of Control	Source of Data and Nature of Testing
Automated controls	When data is stored in an accessible system, we classify such controls as automated controls. To assess the operational effectiveness of these controls, we create a structured approach. This involves defining a data source that retrieves data from the source system and formulating a business rule that contains the logic required to test the operating effectiveness of the control.
Semiautomated controls	This is a combination of manual and automated control, where certain steps involved in testing the control can be automated and can be an input to test the remaining steps that involve human intervention. To test the operating effectiveness of semiautomated controls, we define a business rule and also a manual test plan.

**Table 6.18** Type of Controls

This section deals further with the manual controls and their evaluation using SAP Process Control. The subsequent sections detail the configurations and procedures essential for conducting a manual test of effectiveness. The steps consist of the following:

- Define manual test plans.

- Map test plans to controls.
- Schedule manual controls using the planner.
- Set up the workflow structure.
- Perform the control testing and issue remediation process.
- Use the control performance results.

### 6.5.1 Define Manual Test Plans

A manual test plan contains a sequence of steps/tests that the control tester should perform to test the operating effectiveness of the control. As part of the manual test plan central library, you can define all the test procedures and then tag them to the applicable controls. Once the controls are scheduled for a test of effectiveness, the control testers receive the test plans that they can follow to perform the tests.

To review the existing manual test plan or to define a new one, log in to the SAP Process Control system, execute Transaction NWBC, and navigate to the **Assessments** work center. Under the **Manual Test Plans** work group, click the **Manual Test Plans** work item. The **Manual Test Plans** screen will show the list of existing test plans along with the central control to which it's assigned, as shown in [Figure 6.71](#).

To create a new test plan, click the **Create** button on the top-right corner of the **Manual Test Plans** maintenance screen. The **Manual Test Plans** screen has the **General** and **Attachments and Links** tabs. The **General** tab helps to define the test plan with the **Test Name**, **Description**,

**Valid From/Valid To** dates, and **Test Steps**, as shown in [Figure 6.72](#).

Test Plan Name	Description	Valid From	Valid To
Balance Sheet account reconciliations	Balance Sheet account reconciliations	01.01.2023	31.12.9999
Global Accounting Manual	Global Accounting Manual Test Procedures	01.01.2023	31.12.9999

Control Name	Description	Control Type	Indirect ELC	Regulation	Organization	Valid From	Valid To
Changes to asset master data	Changes to asset master data	Copied		SOX	TNDW-US		
Global Accounting Manual	Global Accounting Manual	Central		SARBANES OXLEY			

**Figure 6.71** Manual Test Plans Maintenance Screen

Timeframe: Year 2023      Effective Date: 01.01.2023

**General**    Attachments and Links

\* Test Name:       \* Valid From: 01.01.2023

Description:       \* Valid To: 31.12.9999

**Test Steps**

Step Number	Step Name	Step Description	Step or Test	Required	Fail Ends Test	Initial Sample	Sampling M...

Buttons: Add, Remove, Up, Down, Save, Cancel

**Figure 6.72** General Tab in the Manual Test Plan Definition

The **Test Steps** section provides the details of the steps and tests to be executed by the tester to test the control’s operating effectiveness. [Table 6.19](#) provides the details for each field.

Field Name	Description
<b>Test Name</b>	Brief and unique name of the test plan to identify it while assigning it to the control
<b>Description</b>	A detailed description mentioning the purpose and the expectations of the test plan

Field Name	Description
<b>Valid From</b>	Date from which the test plan is valid from and after which the test plan can be assigned to a control
<b>Valid To</b>	Date until the test plan is valid and after which the test plan is inactive and can't be assigned to a control
<b>Step Number</b>	Three-digit alphanumeric number to indicate the step defined
<b>Step Name</b>	Brief name of the step that indicates the type of step/test to be performed
<b>Step Description</b>	Detailed explanation of what activity will be performed as part of this step
<b>Step or Test</b>	Indicates whether the activity is a step or a test: A step is an activity that involves gathering of evidence, performing walkthrough sessions, or conducting interviews with process owners. A test is an activity that involves validating the details gathered.
<b>Required</b>	Indicates if the step is mandatory or optional
<b>Fail Ends Test</b>	Specifies whether, in the event of a step's failure, the overall test outcome should be marked as <b>Failed</b> or not

Field Name	Description
<b>Initial Sample</b>	Specifies the quantity of samples that need to be selected for the execution of each step in the scenario where testing is conducted on a sampling basis rather than the entire population
<b>Sampling Method</b>	Indicates the method to be followed by the control tester to gather the sample data; following are the sampling methods available from the dropdown that can be used for selection: <ul style="list-style-type: none"> <li> <b>• Interval Sampling</b>              This involves collection of samples at a specific time or count difference.           </li> <li> <b>• Judgmental Sampling</b>              Collection of samples is purely dependent on the judgement or the knowledge of the tester.           </li> <li> <b>• Random Sampling</b>              Samples are collected without any calculations, hence eliminating any kind of bias involvement of the tester.           </li> <li> <b>• Stratified Sampling</b>              The overall population is divided into subgroups, and then samples are collected from each of the subgroups.           </li> </ul>

**Table 6.19** Fields in Creation of a Manual Test Plan

After making the necessary updates in the **General** tab, click the **Save** option. You also have the option to upload relevant documents within the **Attachments and Links** tab. These documents can be added either directly as files or as links.

### **6.5.2 Map Test Plans to Controls**

Once the test plan is defined, it needs to be allocated to a control. When the control is scheduled for a *test of effectiveness*, the associated test plan will be activated and assigned to the tester. This assignment can be carried out by either of the following:

- Central control
- Local control

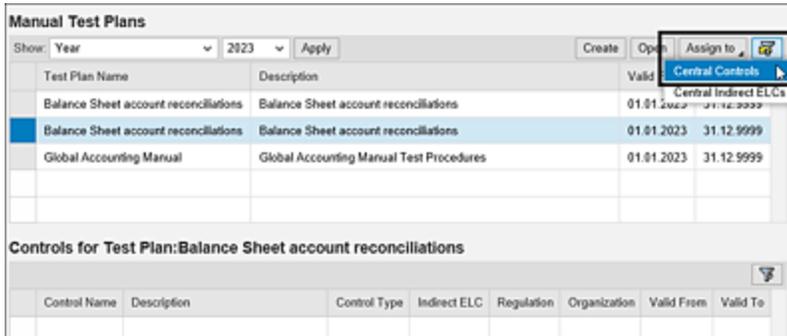
This depends on the scope for local modifications, as we'll discuss in the following sections.

#### **Assignment of the Test Plan to a Central Control**

Test plans can be assigned either to a central control or a local control. In situations where local changes are restricted within the scope of master data management, the controls will be assigned to a central control. This action will effectively assign the test plan to all the associated local controls. To execute this assignment, follow these steps:

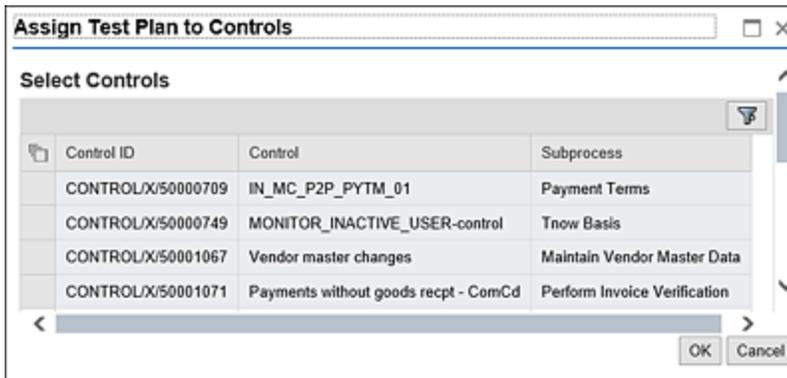
1. Choose the desired test plan that needs to be assigned to a control.
2. Click on the **Assign To** dropdown menu.

- From the dropdown, select the **Central Controls** option, as shown in [Figure 6.73](#).



**Figure 6.73** Central Controls Option in Manual Test Plans for the Control Assignment Screen

- Choosing the **Central Controls** option, all the **Control IDs** are displayed in the **Assign Test Plan to Controls** window, as highlighted in [Figure 6.74](#).



**Figure 6.74** List of Manual Controls Available for Assignment to a Test Plan

- Choose the control to which the test plan needs to be assigned, and click the **OK** button. Upon successful completion of this process, the control to which the test plan has been assigned will be displayed in the **Controls for Test Plan: <<Control Name>>** section, as shown in [Figure 6.75](#).

Manual Test Plans						
Show:	Year	2023	Apply	Create	Open	Assign to
Test Plan Name	Description	Valid From	Valid To			
Balance Sheet account reconciliations	Balance Sheet account reconciliations	01.01.2023	31.12.9999			
Balance Sheet account reconciliations	Balance Sheet account reconciliations	01.01.2023	31.12.9999			
Global Accounting Manual	Global Accounting Manual Test Procedures	01.01.2023	31.12.9999			

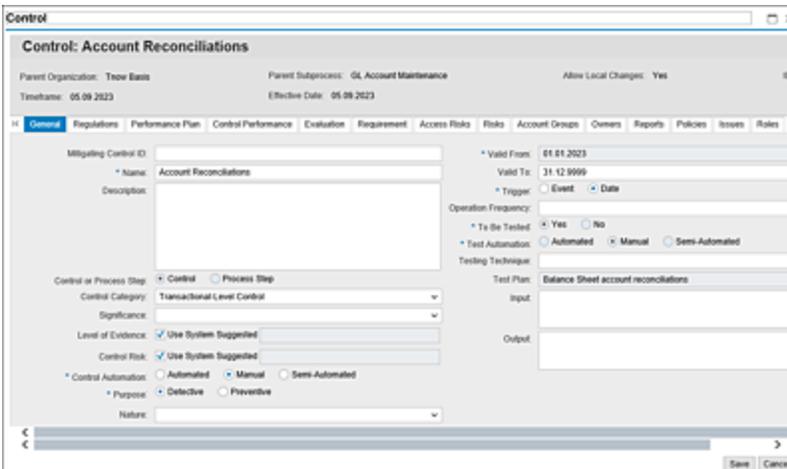
Controls for Test Plan:Balance Sheet account reconciliations							
Control Name	Description	Control Type	Indirect ELC	Regulation	Organization	Valid From	Valid To
Payments without goods receipt - ComCd	Payments without goods receipt - ComCd	Central					

**Figure 6.75** Controls for Test Plans: Assignment Screen

## Assignment of the Test Plan to a Local Control

Test plans can also be assigned to local controls. To perform this task, follow these steps:

1. Log in to the SAP Process Control system.
2. Access Transaction NWBC.
3. Navigate to the **Master Data** work center.
4. Under the **Organizations** work group, select the **Organizations** work item.
5. Open the relevant organization where the control is localized.
6. Navigate to the **Sub Process** tab within the organization.
7. Open the specific control for which the test plan needs to be assigned, leading to the screen shown in [Figure 6.76](#).

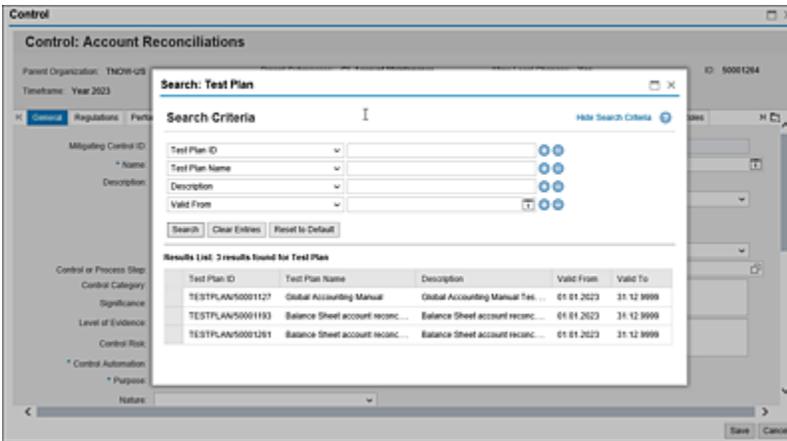


**Figure 6.76** Accessing the Local Control from an Organization

It should be noted that the test plans can only be allocated to a control if the **Test Automation** option is set to **Manual** or **Semi-Automated**. To proceed with the assignment, follow these steps:

1. In the **Test Plan** field, click on the search option (or press F4). This action will open a popup screen, providing access to available test plans.
2. Within the popup screen, input your search criteria, and click **Search**.
3. Choose the specific test plan that needs to be assigned to the control.
4. Complete the process by clicking the **Save** button, as shown in [Figure 6.77](#).

Once the control localization process and test plan assignment have been successfully carried out, the subsequent step involves scheduling the controls for a test of effectiveness using the planner functionality.



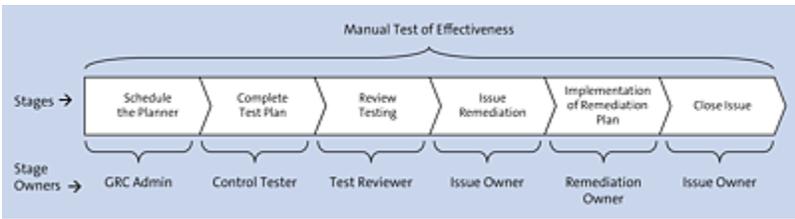
**Figure 6.77** Selection of the Manual Test Plan

### 6.5.3 Schedule Manual Controls Using the Planner

For detailed steps on using the planner functionality, refer to [Section 6.2.2](#). However, when executing this task, be sure to choose **Test of Effectiveness** as the plan activity, which is the designated category for creating a planner job. The manual control test of effectiveness process is initiated at this stage.

### 6.5.4 Workflow Structure

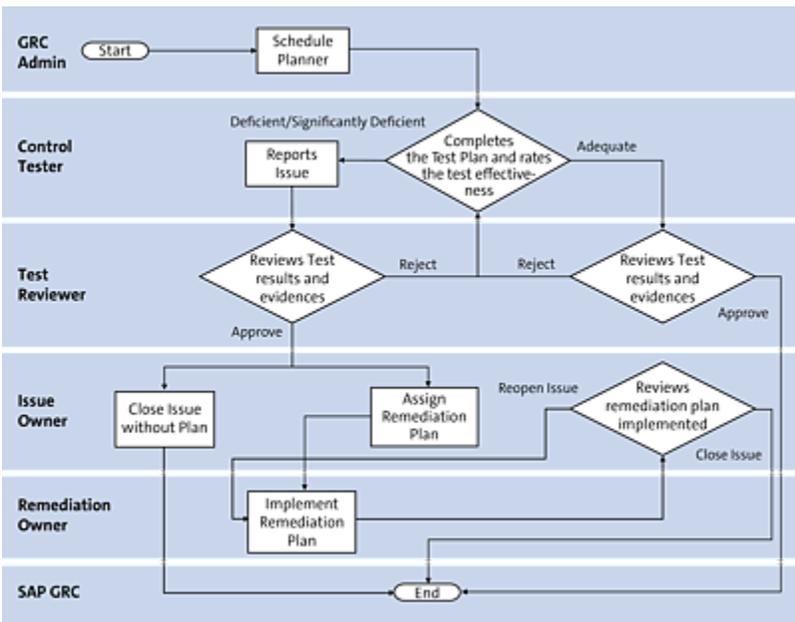
Once the test control effectiveness is scheduled through the planner, it proceeds through a sequence of testing stages as detailed in the workflow structure flow diagram. [Figure 6.78](#) shows the purpose of defining and allocating roles and responsibilities for each testing stage of the manual control evaluation.



**Figure 6.78** Stages in the Manual Control Testing Workflow with Owners' Information

Moreover, these workflow stages guide the course of the control testing process, ensuring a methodical and structured approach.

The testing workflow is detailed in [Figure 6.79](#). It explains how the assessment flows from the initiation to closing, the stage owners involved, and the activities performed by the respective owners.



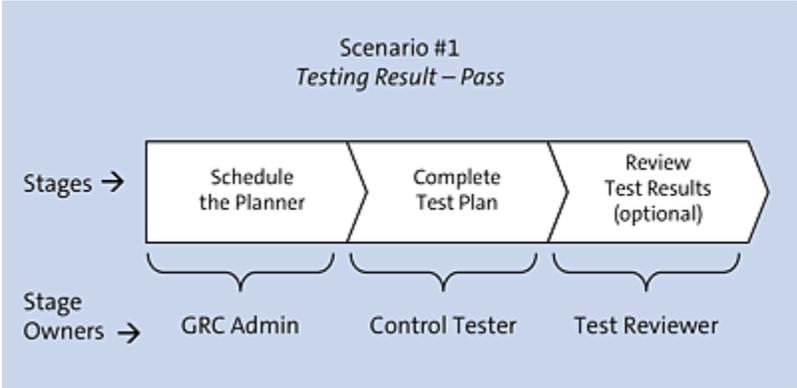
**Figure 6.79** Flowchart Depicting the Stages in the Test of Effectiveness

## 6.5.5 Control Testing and Issue Remediation Process

During the evaluation of a control’s operational efficiency, the control tester follows the test plan’s instructions and reaches a conclusion regarding the control’s operating effectiveness. Upon concluding the testing process, the control tester furnishes an overall rating for the control, classifying it as either a **Pass** or a **Fail**. These two distinct outcomes are detailed further in the following sections.

**Testing Result: Pass**

If the operating effectiveness of the control is adequate, the control tester rates the control as **Pass** after completing the test plan. The stages involved in this case are shown in [Figure 6.80](#).



**Figure 6.80** Stages Involved When the Control Effectiveness Test Result = Pass

In the event of this scenario, where the testing result is **Pass**, the GRC administrator, control tester, and test reviewer are involved. The responsibilities attributed to each of these stakeholders are detailed in [Table 6.20](#).

Stage Owner	Role
-------------	------

Stage Owner	Role
GRC administrator	The GRC administrator is responsible for the schedule planner and trigger controls for operating the effectiveness test per the testing schedule defined in the control testing strategy of the organization.
Control tester	The control tester completes the test plan and rates the control as <b>Pass</b> if all the results are as expected.
Test reviewer	The lead of the internal controls team is responsible for reviewing the testing done by the control tester and then either approving or rejecting the results.

**Table 6.20** Owners for Each Stage

### Note

[Section 6.2.2](#) details the steps to schedule the test control effectiveness using the planner, which is our first step.

In the following sections, we'll look at each of the stages in this scenario.

### ***Complete the Test Plan***

Upon the initiation of an effectiveness test for control by the GRC administrator, the control tester will receive a workflow notification, which is accessible through the **Work Inbox**. To

access pending tasks, log in into the SAP Process Control system and execute Transaction NWBC. Then, navigate to the **My Home** work center, and select the **Work Inbox** work item in the **Work Inbox** work group. Click on the **Process Control** work items link situated in the header section, and proceed to open the designated work item by selecting its **Subject** line.

Once the test is opened, the control tester can see the test period and other information such as **Organization**, **Process**, and **Subprocess** in the header column, as well as the other relevant information (e.g., **Test Plan**) in the respective tabs (see [Figure 6.81](#)).

Step Name	Step Description	Step/Test	Required	Fail Ex.	Initial S.	Sample	Cumulat.	Comd.	Review	# Fail	IR	Comments
Interview	Interview responsible personnel and understand the process and the frequency of the control	Step	Yes	Yes	0		0	0	0	0	0	Add Comment
Sample Collection	Select a sample of months/quarters and obtain the account reconciliations; verify that reconciliations were performed on a timely basis	Step	Yes	Yes	2	Random...	0	0	0	0	0	Add Comment
Reconcile	Verify that reconciliation items have been followed up and adjusted when necessary	Test	Yes	Yes	2	Random...	0	0	0	0	0	Add Comment
Approval verification	Verify that the reconciliations has been adequately reviewed and approved	Test	Yes	Yes	2	Random...	0	0	0	0	0	Add Comment

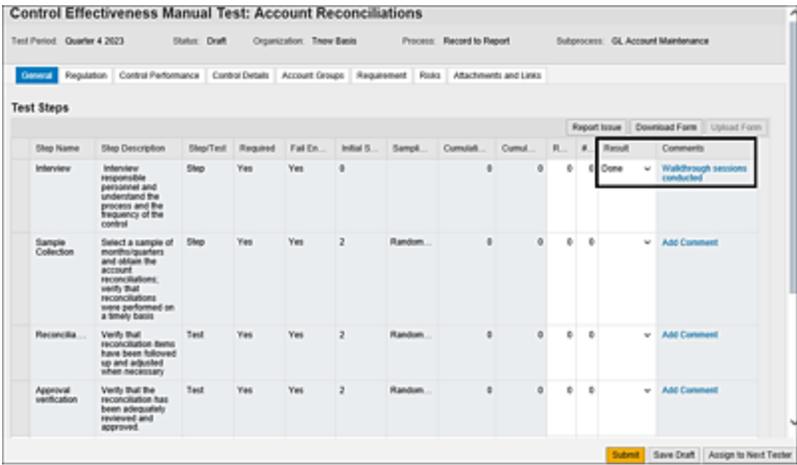
**Figure 6.81** General Tab from the Control Effectiveness Manual Test Work Item

## Note

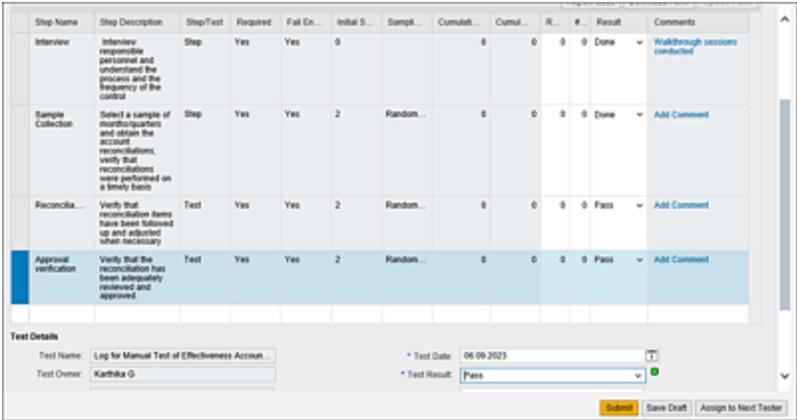
The other tabs in the control effectiveness test provide various information related to the control and can be reviewed by the control tester before evaluating and completing the test plan.

The control tester proceeds to fulfill each step, submitting the test result and any additional information within the **Comments** section for each respective step, as highlighted in [Figure 6.82](#).

The control tester concludes all the required tests and presents the overall test result. In cases where the control’s effectiveness test is successful, the control tester will mark the testing rating as **Pass**, as shown in [Figure 6.83](#).



**Figure 6.82** Responses to the Steps in Control Testing



**Figure 6.83** Control Tester Providing the Overall Control Testing Result

Any supporting evidence justifying the rating provided to the control effectiveness test can be added in the

## Attachments and Links tab.

### Review Testing

Once the control tester completes the testing of the control, the test reviewer (internal controls team or the internal audit team) does the review, as defined in the custom agent determination rules (refer to [Chapter 4, Section 4.2.3](#)). The review item can be accessed from the **Work Inbox**, as discussed in the previous sections.

The test reviewer can review all the information similar to the control tester. This includes responses, rating details, and the rating provided by the control tester. Additionally, any uploaded evidence is available within the **Attachments and Links** section. After a thorough review of all details, the reviewer has the option to either **Approve** or **Reject** the request, as highlighted in [Figure 6.84](#).

Step Name	Step Description	Step/Test	Required	Fail Ex.	Initial S.	Sample	Cumulativ.	Cumula.	Revised	# Failed	R.	Comments
Interview	Interview responsible personnel and understand the process and the frequency of the control.	Step	Yes	Yes	0		0	0	0	0	Done	Walkthrough scenario conducted
Sample Collection	Select a sample of month/quarters and obtain the ACCOUNT reconciliations, verify that reconciliations were performed on a timely basis	Step	Yes	Yes	2	Random...	0	0	0	0	Done	Add Comment
Reconciliation	Verify that reconciliation basis have been followed up and adjusted when necessary	Test	Yes	Yes	2	Random...	0	0	0	0	Pass	Add Comment

**Figure 6.84** General Tab from the Control Effectiveness Test Review Work Item

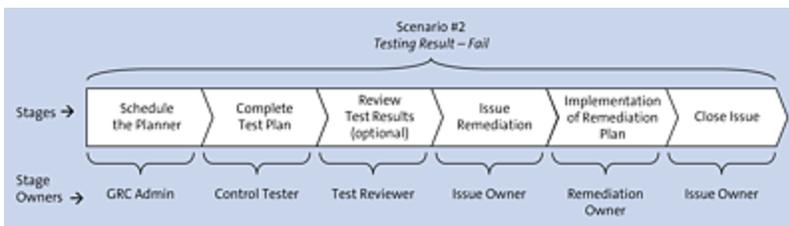
Upon the approval of the assessment results, the workflow ends, and the results can be assessed using the standard

reports. For a more thorough understanding of the various reports available for control evaluation, see [Section 6.6](#).

### Testing Result: Fail

If the operating effectiveness of the control is inadequate, the control tester rates the control as **Fail** after completing the test plan. The stages involved in this case are shown in [Figure 6.85](#).

When the testing result is **Fail**, the GRC administrator, control tester, and test reviewer, along with issue owner and remediation owner, are involved. The responsibilities attributed to the GRC administrator, control tester, and test reviewer were already detailed earlier in [Table 6.20](#), and the issue owner and remediation owner are detailed in [Table 6.21](#).



**Figure 6.85** Stages Involved When the Control Effectiveness Test Result Is Fail

Stage Owner	Role
Issue owner	The issue owner is responsible for defining a remediation plan to correct the issue identified in the current tests and ensure the same issues don't occur in the future.

Stage Owner	Role
Remediation owner	The remediation owner is responsible for implementing the instructions received from the issue owner to correct the observations noted as part of the testing.

**Table 6.21** Additional Owners in Scenario #2

The stages involved in a failed control were previously covered in the following sections:

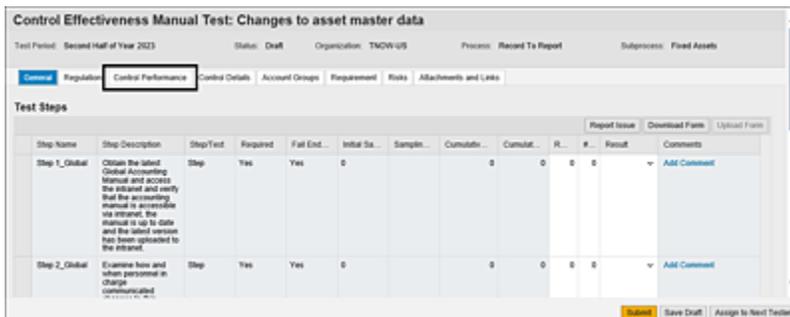
- Schedule the Planner ([Section 6.2.2](#))
- [Complete the Test Plan](#) (previous section)
- Report Issue ([Section 6.2.4](#); the process of creating an issue for failed manual control testing is similar to that of control design assessment)
- [Review Testing](#) (previous section)
- Implement Remediation Plan ([Section 6.2.4](#))
- Close Issue ([Section 6.2.4](#))

### 6.5.6 Usage of Control Performance Results

SAP Process Control provides an integration between manual control performance and manual control test of effectiveness. The results of manual control performances executed for a control across the test period can be accessed by the control tester from the manual test of effectiveness **Work Inbox** item.

The control tester can access the performance results by following these steps:

1. Navigate to the **Work Inbox**.
2. Access the **Manual Test of Effectiveness** tasks from the **Work Inbox**.
3. Once the test is opened, the control tester can see the test period and other information related to the control in the scope of testing.
4. Navigate to the manual **Control Performance** tab, as shown in [Figure 6.86](#).



**Figure 6.86** General Tab from the Control Effectiveness Manual Test Work Item

5. The control tester can access the responses provided by the performers and evidence they've attached as part of the control performance. These details become input for the tester in reviewing the data, making decisions, and arriving at the overall test effectiveness result. [Figure 6.87](#) details the screen elements of the control effectiveness manual test.

**Control Effectiveness Manual Test: Changes to asset master data**

Test Period: Second Half of Year 2023    Status: Draft    Organization: TNCW-US    Process: Record To Report    Subprocess: Fixed Assets

General | Regulation | **Control Performance** | Control Details | Account Groups | Requirement | Risk | Attachments and Links

Left: Hide/Show    Ind. Acc.    L: Hide    R: Hide/Show

Period	Year	Name	Regulation	Status	Start Date	End Date
July	2023	MCP_Q3 2023	SCR	New	28.07.2023	01.08.2023
Quarter 3	2023	MCP_Q3 2023	SCR	New	31.07.2023	01.08.2023
Quarter 3	2023	MCP_Q3 2023	SCR	Done	07.08.2023	08.08.2023
Quarter 3	2023	MCP_Q3 2023	SCR	New	14.08.2023	15.08.2023
Quarter 3	2023	MCP_Q3 2023	SCR	New	21.08.2023	22.08.2023

**Performance Steps**

Step	Description	Evidence Required	Comments Required	Sequence	Status	Last Changed On	Last Changed By	Comments	Control Evidence	Step Performer	Due Date
Asset Register	Obtain the list of assets required during the test period	Yes	Yes	001	In Process					SANKOSHUM1	28.07.2023

Submit    Save Draft    Assign to Next Tester

**Figure 6.87** Usage of Manual Control Performance Results as Part of Manual Control Testing

## 6.6 Reporting

SAP Process Control offers a range of standard reports designed to assess organizational control health across different assessment types discussed in this chapter. The Control Ratings report holds particular significance among the various reports available. This report provides complete visibility into the control landscape, indicating the number of controls subjected to design assessment, self-assessment, or manual test of effectiveness. It also highlights controls that haven't undergone testing.

Further, the report furnishes detailed information about the assessment outcomes for controls that have been tested by their respective owners or testers. To access the report, follow these steps:

1. Log in to the SAP Process Control system.
2. Execute Transaction NWBC.
3. Navigate to the **Assessments** work center.
4. Under the **Reports** work group, click the **Control Ratings** work item.
5. Provide inputs in the selection screen as required in the **Organization, Process, Subprocess, or Control Fields**, and click **Go** to view the results, as shown in [Figure 6.88](#).

Control Ratings						Personalize
A tabular report showing overall control ratings by organization, process and subprocess						
• Selection						
Results						
Organization	Subprocess	Control	Control Description	Significance	Control Design Rating (Type)	
Power Generation	Invoice Processing	Monitor Duplicate Invoice Check Config	Monitor Duplicate Invoice Check Configurations	Key Control		
Power Generation	Maintain Vendor Master Data	Vendor master changes	This rule tracks changes to critical fields of vendor master.	Key Control		
Power Generation	Maintain Vendor Master Data	Duplicate invoice parameter changes	This rule tracks changes to the system settings that prevent the same invoice from being posted more than once.	Key Control		
Power Generation	System Parameters	Monitor Password Parameter	Password Parameter Maintenance	Key Control		
Power Generation	Access Management	Monitor users with SAP_AJ access	Monitor users with SAP_AJ and SAP_New access	Key Control		
Power Generation	Access Management	Monitor users with SAP_AJ and SAP_New	Monitor users with SAP_AJ and SAP_New profiles access	Key Control		
Power Generation	Access Management	Users with developer access in Production	Users with developer access in Production System	Key Control		
Power Generation	Access Management	Monitor Super User account maintenance	Monitor Super user account maintenance	Key Control		
Power Generation	Access Management	Direct profile assignments	Monitor users with direct profile assignments	Key Control		
Test	Invoice Processing	Monitor Duplicate Invoice Check Config	Monitor Duplicate Invoice Check Configurations	Key Control	Significantly Deficient	
Test	Access Management	Monitor users with SAP_AJ access	Monitor users with SAP_AJ and SAP_New access	Key Control		
Test	Payment Terms	RL_MC_F2F_FYTM_01	India Manual Control F2F Payment Terms Control 01	Key Control		

**Figure 6.88** Control Ratings Report Providing the Test Results for the Controls

## **6.7 Summary**

This chapter offers an extensive explanation of the rationale behind the various aspects of testing based on the regulatory requirements that organizations must adhere to. It further covered the distinct categories of testing, detailing the various scenarios inherent to each type of testing. This encompasses a breakdown of the workflow stages within each scenario, along with the stakeholders responsible for executing each of these stages. Importantly, the chapter underscores how SAP Process Control serves to optimize and streamline the execution of these assessments, facilitating a more efficient and organized approach.

# 7 Ad Hoc Issue Management

*While the previous chapter details the control evaluation considering the organization's testing strategy and the compliance requirements on a periodical basis, this chapter focuses on how the ad hoc issues are identified within the organization, reporting them using SAP Process Control, and the remediation steps.*

The growing compliance requirements of today's business landscape necessitate continuous monitoring and regular testing of organizational processes. Consequently, it becomes crucial to not only address issues discovered through periodic assessments but also to track those identified during ongoing monitoring efforts. Ad hoc issue management in SAP Process Control offers an effective solution for monitoring and managing issues beyond the scope of regular control assessments. Using this feature, issues can be identified at a variety of levels, such as organizational, subprocess, control, or regulatory, as well as be tracked and monitored.

In this chapter, we'll explore key aspects of ad hoc issue management, from issue identification to resolution. The steps involved in reporting ad hoc issues using SAP Process Control will be discussed along with effective strategies and best practices for successful remediation. Organizations can

drive continual improvement in their processes by understanding and implementing these approaches.

## 7.1 Configuration

To use the process of ad hoc issue management, there are several essential configurations that need to be performed in Transaction SPRO settings. These configurations are required to enable the reporting of ad hoc issues for specific objects and to configure the relevant sources required during the reporting process.

With these settings configured, organizations can establish a structured framework for effectively resolving ad hoc issues. To enhance the overall effectiveness of issue management, these configurations play a crucial role in streamlining the reporting and tracking of ad hoc issues. The steps include enabling ad hoc issues by object type and maintaining the sources that are detailed in the following sections.

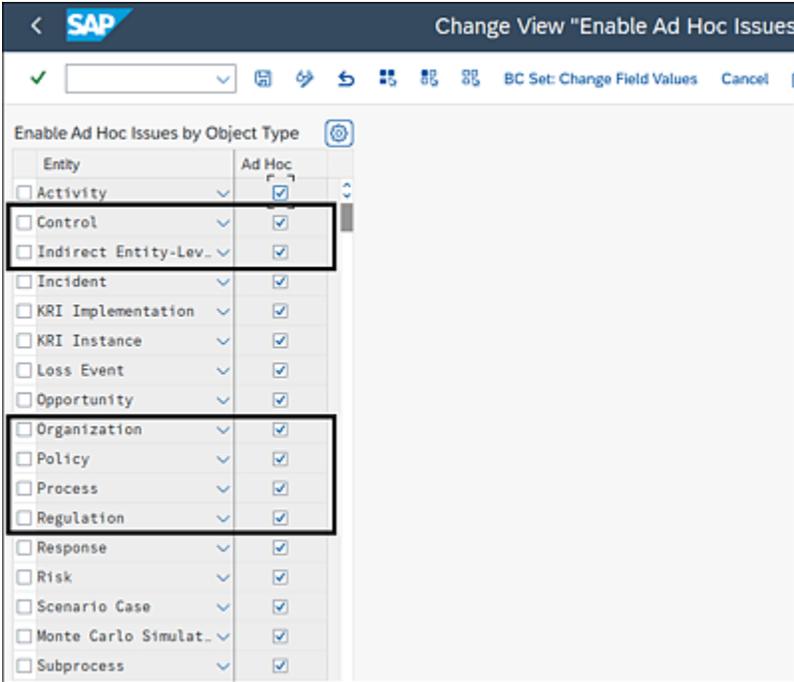
### 7.1.1 Enable Ad Hoc Issues by Object Type

This configuration allows for enabling objects/entities for reporting ad hoc issues. The specific objects to be included in the scope of the ad hoc issue management process depend on the areas being tested or audited, as well as the organization's requirements. This configuration can be performed by logging in to the SAP Process Control system and executing Transaction SPRO\_ADMIN. Click the **SAP Reference IMG** button, and follow menu path

## **Governance, Risk and Compliance • Common Component Settings • Ad Hoc Issues • Enable Ad Hoc Issues by Object Type.**

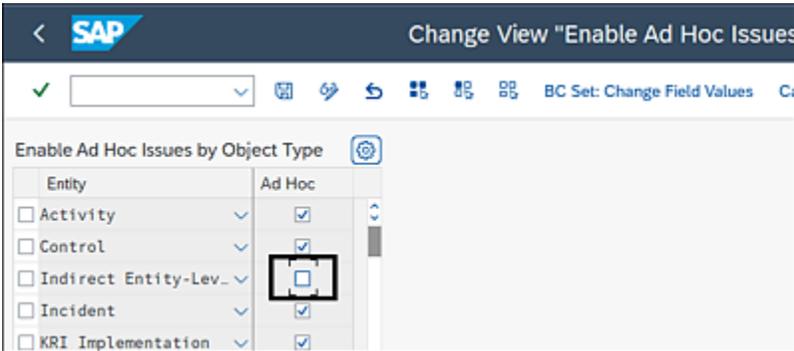
By executing this configuration, organizations can define the relevant objects/entities against which ad hoc issues can be reported. This ensures that the ad hoc issue management process aligns with the areas of focus in testing or auditing, providing a tailored approach to issue identification and resolution.

It's important to note that the business configuration set (BC set) for process control GRFN-AHISS-OBJECT (Enable Ad Hoc Issues by Object Type) activates the following objects: **Control, Indirect-Entity Level Control, Organization, Policy, Regulation, and Subprocess**, as shown in [Figure 7.1](#). If these objects aren't listed, activate the BC Set using Transaction SCPR20. When enabled, the objects are listed under the **Enable Ad Hoc Issues by Object Type** setting.



**Figure 7.1** Configuration to Review the SAP Process Control Entities Enabled for Ad Hoc Issues

In addition, it's recommended that nonscoped objects be deactivated. Uncheck the **Ad Hoc** checkbox in the **Enable Ad Hoc Issues by Object Type** option in edit mode to deactivate. Make sure to click **Save** after updating the settings to capture the changes in a transport request, as shown in [Figure 7.2](#).

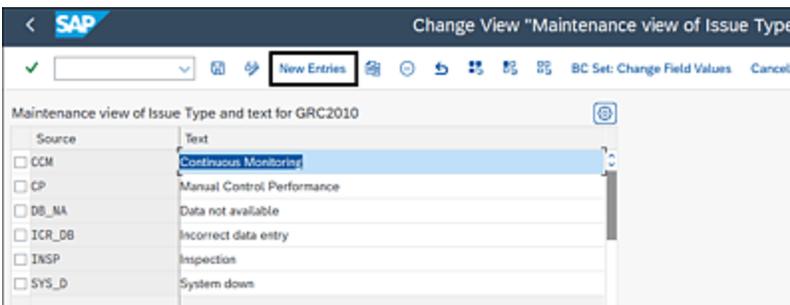


**Figure 7.2** Configuration to Maintain the Standard Entities in Scope of Ad Hoc Issues

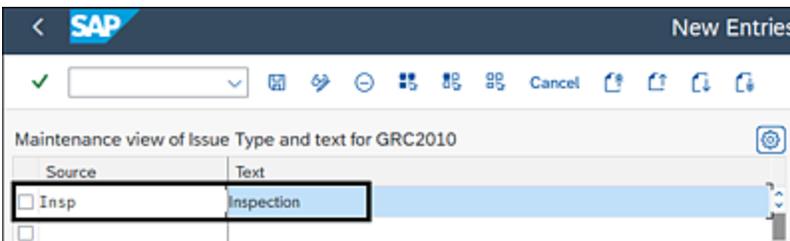
## 7.1.2 Maintain Ad Hoc Issue Sources

Reporting an ad hoc issue should include the source from which the internal control team identified the issue. Users reporting ad hoc issues can choose from a list of sources configured. To set up the sources, follow these steps:

1. Log in to the SAP Process Control system.
2. Execute Transaction SPRO\_ADMIN.
3. Click the **SAP Reference IMG** button.
4. Follow menu path **Governance, Risk and Compliance • Common Component Settings • Ad Hoc Issues • Maintain Adhoc Issue Sources**.
5. Click **New Entries**, as shown in [Figure 7.3](#).
6. Add **Source** and **Text**, as shown in [Figure 7.4](#).
7. Click **Save**, and capture the changes in a transport request when prompted.



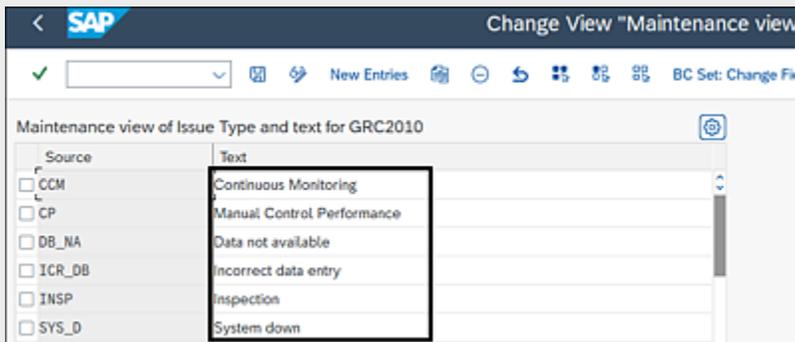
**Figure 7.3** Option to Create New Entries in the Source List



**Figure 7.4** New Entries Added to the Source List

## Note

Activating BC set GRFN-AHISS-SOURCE (Maintain Ad Hoc Issue Sources) will add the following standard source items: **CCM (Continuous Monitoring)**, **CP (Manual Control Performance)**, **DB\_NA (Data not available)**, **ICR\_DB (Incorrect data entry)**, **INSP (Inspection)**, and **SYS\_D (System Down)**. [Figure 7.5](#) shows the list of standard source items.



**Figure 7.5** Standard Source List for Ad Hoc Issues

Object types for ad hoc issues and sources must be mapped to be available in the frontend to report the ad hoc issues.

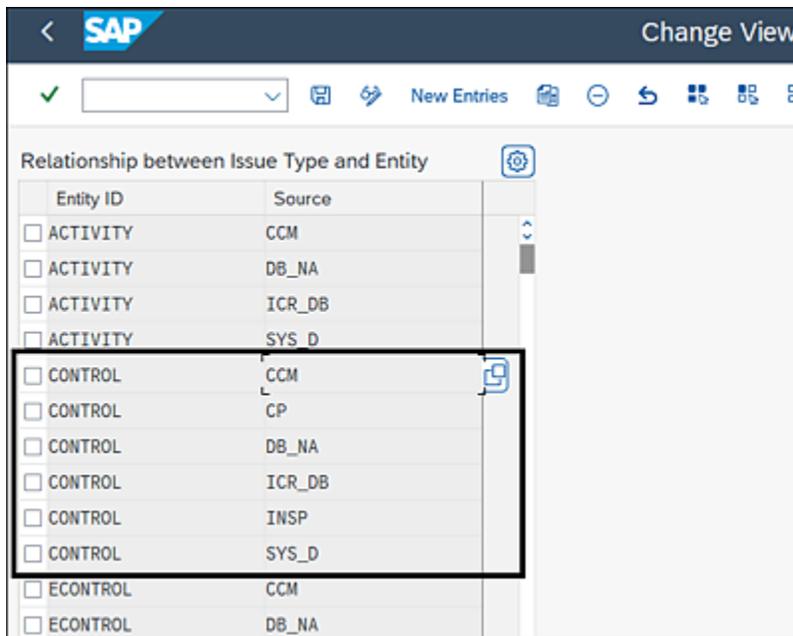
## Note

In the previous section, we discussed that ad hoc issues are reported for the object type for which the issue was identified. It's also important to select the source of the ad hoc issue while reporting it. SAP Process Control provides the flexibility to have the issue sources specific to each

object type and that relationship can be maintained in the Transaction SPRO configuration.

To establish the relationship between the object type and source, execute **SAP Reference IMG • Governance, Risk and Compliance • Common Component Settings • Ad Hoc Issues • Assign Ad Hoc Issue Sources to Object Types**. The current configuration of sources mapped for each object type will be shown (see [Figure 7.6](#)).

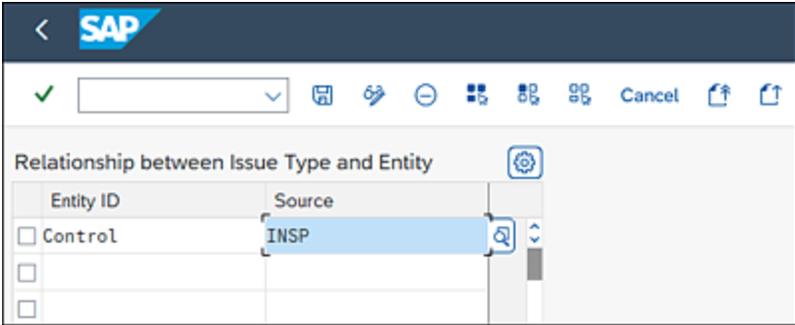
To maintain a new relationship, click the **New Entries** button, and enter the **Entity ID** and **Source** as shown in [Figure 7.7](#). Click **Save**.



The screenshot shows the SAP SPRO configuration screen for 'Relationship between Issue Type and Entity'. The table lists various entity types and their associated sources. A red box highlights the 'CONTROL' entity type, which is currently mapped to 'CCM', 'CP', 'DB\_NA', 'ICR\_DB', and 'SYS\_D'. The 'New Entries' button is visible in the top right corner of the table area.

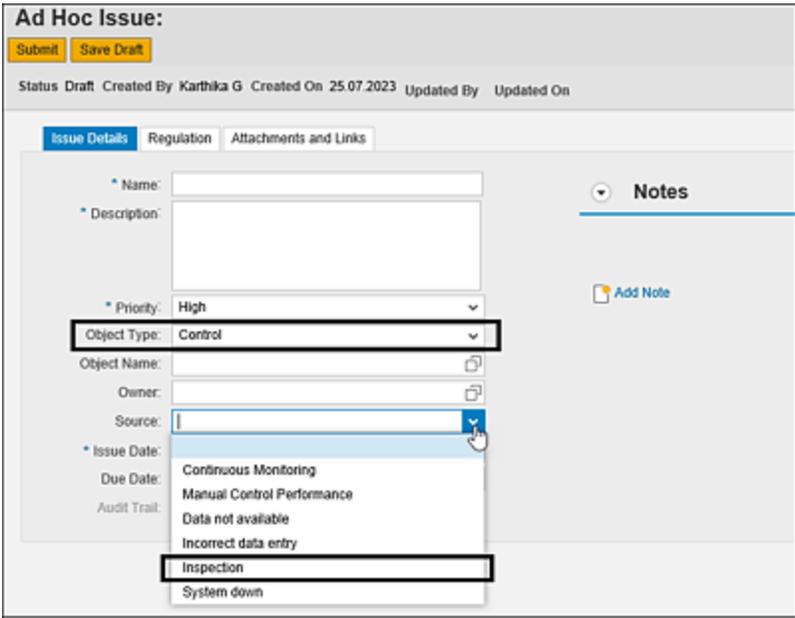
Entity ID	Source
<input type="checkbox"/> ACTIVITY	CCM
<input type="checkbox"/> ACTIVITY	DB_NA
<input type="checkbox"/> ACTIVITY	ICR_DB
<input type="checkbox"/> ACTIVITY	SYS_D
<input type="checkbox"/> CONTROL	CCM
<input type="checkbox"/> CONTROL	CP
<input type="checkbox"/> CONTROL	DB_NA
<input type="checkbox"/> CONTROL	ICR_DB
<input type="checkbox"/> CONTROL	INSP
<input type="checkbox"/> CONTROL	SYS_D
<input type="checkbox"/> ECONTROL	CCM
<input type="checkbox"/> ECONTROL	DB_NA

**Figure 7.6** Relationship between Issue Type and Entity



**Figure 7.7** New Relationships Maintained for the Object Type and Source

Once the relationship is maintained, the sources are available for the user to select from the list, as shown in [Figure 7.8](#).



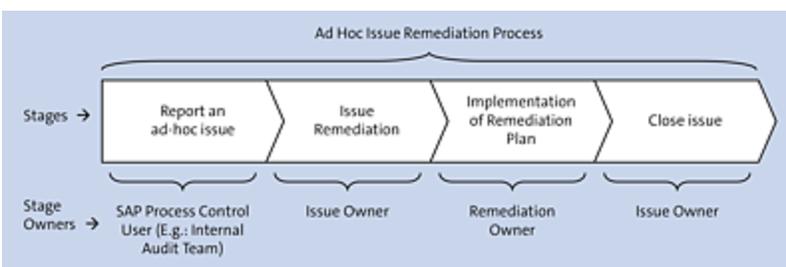
**Figure 7.8** Option to Select a New Source while Reporting an Issue

## 7.2 Issue Remediation Process

As mentioned, ad hoc issues can be reported in SAP Process Control during routine internal control testing by the organization's internal audit team. In the following sections, we'll first discuss the stages of ad hoc issue remediation and then walk through each of those stages: reporting, remediation, plan implementation, and closing the issue.

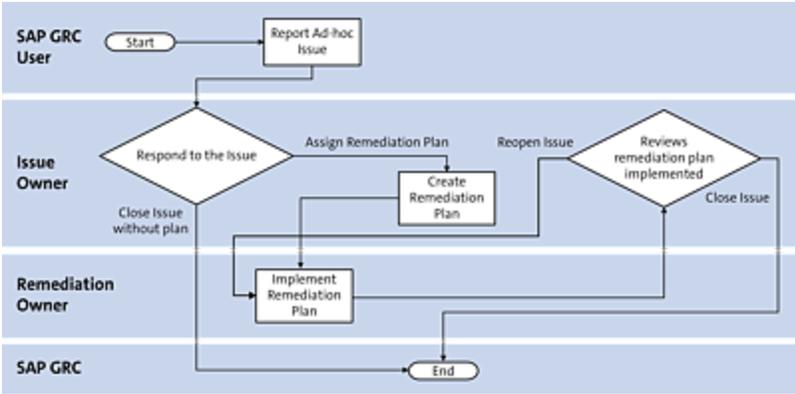
### 7.2.1 Stages

Following the reporting of an ad hoc issue, it undergoes various stages of response, as shown in [Figure 7.9](#). Each stage of the process is represented in this diagram and identifies roles and responsibilities of the respective stage owner. This remediation process provides a systematic and well-organized framework for ad hoc issue remediation, facilitating a systematic and organized approach.



**Figure 7.9** Stages in the Ad Hoc Issue Remediation Workflow with Owners' Information

[Figure 7.10](#) illustrates the entire process of reporting an ad hoc issue, implementing a remediation plan, and closing it.



**Figure 7.10** Flowchart Depicting the Stages of Ad Hoc Issue Remediation and the Flow

[Table 7.1](#) provides a clear overview of the different stages involved in the ad hoc issue remediation process, allowing for effective tracking and management of each stage’s progress.

Workflow Stage	Description
----------------	-------------

Workflow Stage	Description
Report ad hoc issue	<p>Users with the role SAP_GRC_FN_BUSINESS_USER can report ad hoc issues from the <b>My Home</b> work center. In SAP Process Control, ad hoc issues can be raised for any object or entity such as organization, control, subprocess, policy, or regulation (see <a href="#">Section 7.1.2</a> for more information).</p> <p>A user creating an ad hoc issue selects the object type and the object, and the system automatically selects the issue owner based on the workflow rules defined in custom agent determination (<a href="#">Chapter 4, Section 4.2.3</a>, outlines the steps to define the agent determination rules for identifying default issue processors for ad hoc issues). The following stages will be triggered to the users assigned to the respective roles at the respective entity (see <a href="#">Chapter 5, Section 5.4.1</a>, for a detailed explanation of how to review the SAP Process Control user assignments at various entity levels).</p>

Workflow Stage	Description
Issue remediation	<p>In this stage, the issue owner looks at the details of the reported issue, object and its source and then has two options to respond:</p> <ul style="list-style-type: none"> <li>• <b>Assign Remediation Plan</b> This option is selected if the issue needs a detailed investigation and an action plan to remediate it. The issue owner identifies the remediation owner who is responsible for the object's maintenance to implement the remediation plan.</li> <li>• <b>Close Issue without Plan</b> This option is used if the issue owner can resolve it without the need of a remediation plan by providing the evidence and comments justifying the reason to close the issue without plan.</li> </ul>
Implementation of remediation plan	<p>During the issue remediation, if the owner selects the <b>Assign Remediation Plan</b> option, the remediation owner looks at the instructions provided by the issue owner, implements them, and provides evidence to support the successful implementation of the remediation plan.</p>

Workflow Stage	Description
Close issue	The issue owner looks at the remediation performed by the remediation owner and either closes the issue or reopens the remediation plan for further actions to be performed. Note that this is only applicable if the issue owner and remediation owner are different users.

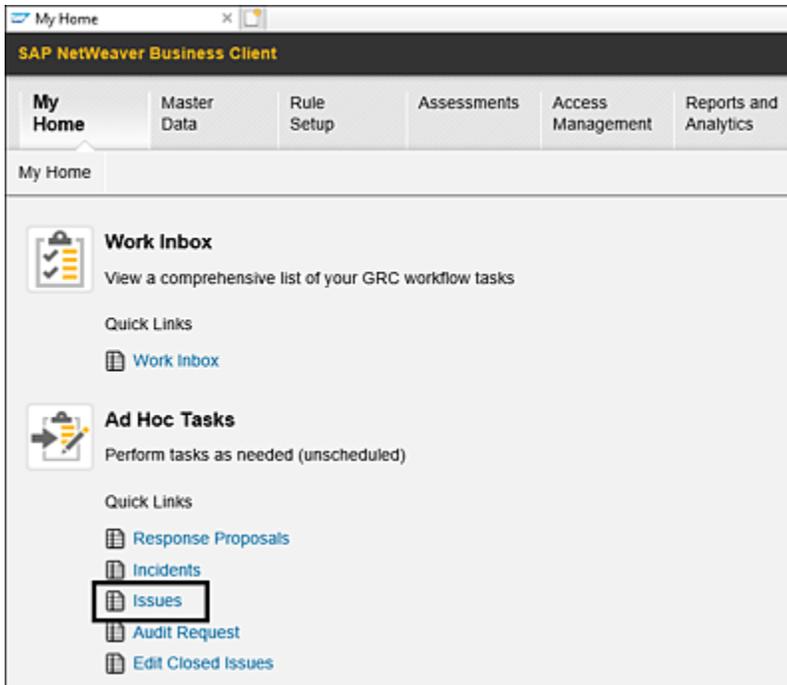
**Table 7.1** Detailed Explanation of Stages in the Ad Hoc Issue Remediation Process

Let's now move on to performing each of these activities.

## 7.2.2 Reporting Ad Hoc Issues

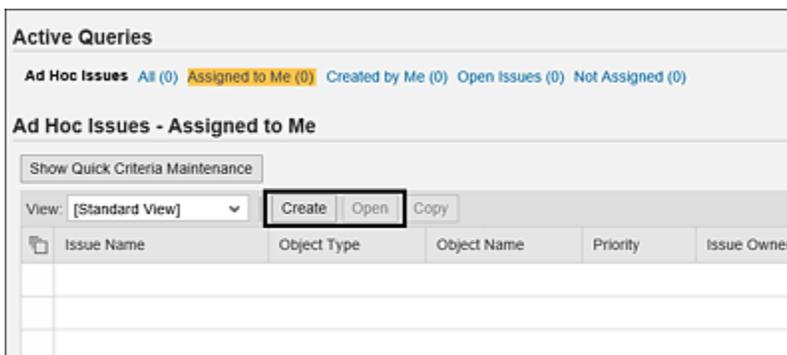
If the compliance or an internal audit team member identified an issue that requires the attention of the business team, the issue can be reported as an ad hoc issue as follows:

1. Log in to the SAP Process Control system.
2. Execute Transaction NWBC.
3. Click the **My Home** work center.
4. Under the **Ad Hoc Tasks** work group, click the **Issues** work item, as highlighted in [Figure 7.11](#).



**Figure 7.11** Ad Hoc Issues Option in the My Home Work Center

5. The issues screen shows all the current **Ad Hoc Issues** that are reported by the user and also the list of ad hoc issues for which the user is responsible (**Ad Hoc Issues - Assigned to Me**). To report a new ad hoc issue, click the **Create** button, as shown in the [Figure 7.12](#).
6. The new **Ad Hoc Issue** screen will have three tabs, **Issue Details**, **Regulation**, and **Attachments and Links**, as shown in [Figure 7.13](#).



**Figure 7.12** Option to Create an Ad Hoc Issue

**Ad Hoc Issue:**

Submit Save Draft

Status: Draft Created By: Karthika G Created On: 26.07.2023 Updated By: Updated On:

Issue Details Regulation Attachments and Links

Name: Duplicate Invoice payments

Description: As part of the regular internal audit process, we have tested the invoice records and identified there are duplicate payments made to 2 vendors against the same invoice record

Priority: High

Object Type: Control

Object Name: Monitor Duplicate Invoice Check Config Open

Owner: KARTHIKA

Source: Continuous Monitoring

Issue Date: 26.07.2023

Due Date: 27.07.2023

Audit Trail: Audit Trail

Notes

Payment records shows that duplicate payments were made to vendor 00012058 against the invoice number 1250000041 and 00013785 against the invoice number 1250000091

Cancel

**Figure 7.13** Details to Be Filled in by the User Reporting the Ad Hoc Issue

7. On the **Issue Details** tab, fill in the following fields:

- **Name**  
Enter a short name to identify the ad hoc issue. This is free text where you can enter any name. However, it's recommended that you use a name that can help you identify the issue quickly.
- **Description**  
Add a detailed description of the ad hoc issue. Providing as much detail as possible about the issue will help the issue owner and the remediation owner understand the issue without delving too deeply into the details.
- **Priority**  
Classify the criticality of the issue as **High**, **Medium**, or **Low**.
- **Object Type**  
Select the type of the object against which the issue is to be reported. [Section 7.1.1](#) details the steps to configure/set up the object types for ad hoc issues.

- **Object Name**

Select the object from the search against which the issue is to be reported. The objects in the search are available based on the object type selected in the previous step.

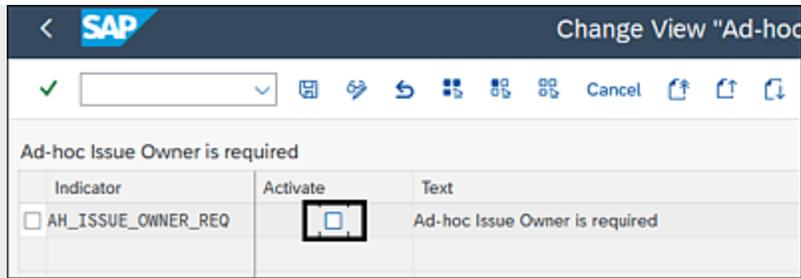
- **Owner**

The name of the owner responsible to respond to this issue is automatically populated by the system based on the custom agent determination rules defined for the default ad hoc issue processor. (Refer to [Chapter 4, Section 4.2.3](#), to understand the process of defining custom agent determination rules for ad hoc issues.)

## Note

The **Issue Owner** field is an optional selection by default. This field can be made mandatory from the Transaction SPRO settings. To enable, log in to the SAP Process Control system, execute Transaction SPRO\_ADMIN, click the SAP Reference IMG button, and follow menu path **Governance, Risk and Compliance** • **Common Component Settings** • **Ad Hoc Issues** • **Define Issue Owner as Required Field**.

Select the **Activate** checkbox for the **AH\_ISSUE\_OWNER\_REQ (Ad-hoc Issue Owner is required)** indicator (see [Figure 7.14](#)). This will make the **Issue Owner** field mandatory while reporting an ad hoc issue.



**Figure 7.14** Configuration to Make the Issue Owner Mandatory in Ad Hoc Issues

Note that Transaction SPRO changes require workbench modifications, and they must first be implemented in the development system. After the changes have been thoroughly tested, they can be transported to subsequent environments, such as testing and production.

- **Source**

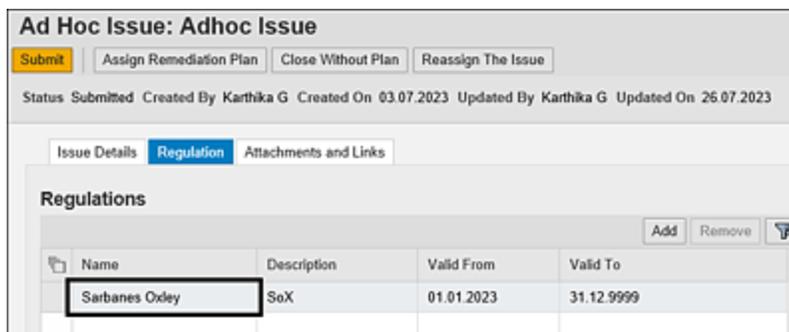
Define the origin of the issue from where it was identified. Following are the options available by default. These options are automatically added with the activation of BC Set GRFN\_AHISS\_SOURCE:

- **Continuous Monitoring**
- **Manual Control Performance**
- **Data Not Available**
- **Incorrect Data Entry**
- **System Down**

Refer to [Section 7.1.2](#) to understand the process to review the default values or to add new values to the source list.

- **Issue Date**  
Enter the date on which the issue is identified.
- **Due Date**  
Enter the date by which the issue should be remediated by the owner of the issue or the respective stakeholder responsible.
- **Notes**  
Users reporting issues can use this option to provide additional details and background regarding how the issue was identified. The issue owner and the remediation owner will be able to better understand the issue this way.

8. The **Regulation** tab fields are automatically populated from the **Issue Details** tab and are inherited from the selected object, as shown in [Figure 7.15](#).



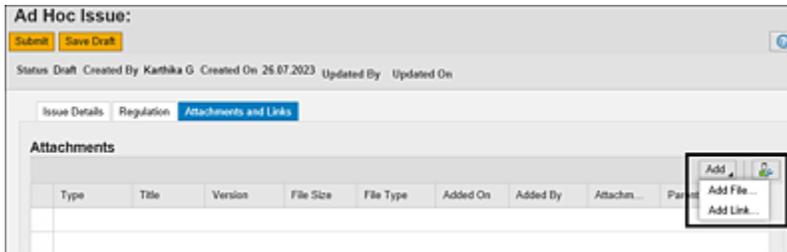
**Figure 7.15** Regulation Tab

9. Use the **Attachments and Links** tab to attach any evidence to support the issue being reported. As shown in [Figure 7.16](#), this tab provides two options:

- **Add File**  
This is used to add a file of any format, such as Microsoft Excel, Word, PowerPoint, and so on.

- **Add Link**

If the evidence is stored in a shared folder, the folder link can be embedded using this option.



**Figure 7.16** Options Available to Attach Evidence while Reporting an Issue

10. Once all the details of the issue are filled out, click **Submit** to trigger the notification and workflow to the issue owner to act.

### Note

If there are additional details that need to be updated before submitting the issue, use the **Save Draft** option to save it.

11. On submitting the ad hoc issue, you'll receive a message that reads, **Issue successfully submitted for processing.**

In the next step, an issue remediation plan is assigned or implemented, or it can be closed without a plan. To better understand the topic, we'll describe both scenarios in the following section.

## 7.2.3 Issue Remediation

Once the ad hoc issue is reported, the issue owner receives a workflow with the details of the observation/issue reported. To view the actions pending, access the **Work Inbox** by following these steps:

1. Log in to the SAP Process Control system.
2. Execute Transaction NWBC.
3. Navigate to the **My Home** work center.
4. Under the **Work Inbox** work group, click the **Work Inbox** work item (refer to [Figure 7.11](#)).
5. Click on the **Process Control** work items link in the header section, as highlighted in [Figure 7.17](#). The **Work Inbox** will have the following details available:
  - **Subject** indicates the type of work item pending for action.
  - **Organization** details where the control is localized and being operated.
  - **Regulation** indicates the compliance needs we're meeting with this assessment.
  - **Status Ready** indicates that a new work item is added for review, Reserved indicates the ones accessed earlier and still pending for users' action.
  - **Object Name** indicates the name of the control/subprocess/organization for which the issue is reported.
  - **Created By** is the control owner who reported the ad hoc issue.

Active Queries				
WorkItems All (76) Access Management (0) <b>Process Control (76)</b> Risk Management (0)				
WorkItems - Process Control				
View: [Standard View]				
Subject	Organization	Regulation	Status	Object Name
<a href="#">Start Remediation for the Ad Hoc Issue 'Duplicate Invoice payments'</a>	Power Generation	Sarbanes Oxley	Ready	Monitor Duplicate Invoice Check Config

**Figure 7.17** Work Inbox Screen with Items Pending for Action

6. Access the work item by clicking on the subject link to review the ad hoc issue reported. The owner can take one of the following actions on the work item, as shown in [Figure 7.18](#):

- **Assign Remediation Plan**

This option is selected if the issue needs a detailed investigation and a fix to remediate it.

- **Close Without Plan**

This option is used if the issue owner can resolve it without the need of a remediation plan by providing the evidence and comments justifying the reason to close the issue without plan.

- **Reassign The Issue**

The issue owner can transfer the responsibility to fix the issue to another user.

**Ad Hoc Issue: Duplicate Invoice payments**

Status: Submitted Created By: Karthika G Created On: 26.07.2023 Updated By: Karthika G Updated On: 26.07.2023

Name: Duplicate Invoice payments

Description: As part of the regular internal audit process, we have tested the invoice records and identified there are duplicate payments made to 2 vendors against the same invoice record

Priority: High

Object Type: Control

Object Name: Monitor Duplicate Invoice Check Config [Open](#)

Owner: KARTHIKA

Source: Continuous Monitoring

Issue Date: 26.07.2023

Due Date: 27.07.2023

Audit Trail: [Audit Trail](#)

**Notes**

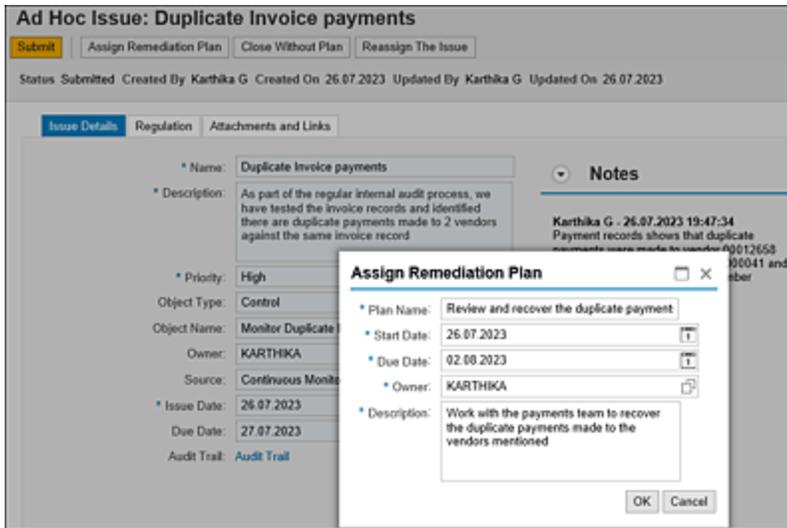
**Karthika G - 26.07.2023 19:47:34**  
Payment records shows that duplicate payments were made to vendor 00012658 against the invoice number 125000041 and 00013785 against the invoice number 125000091

[Add Note](#)

**Figure 7.18** Options Available for the Issue Owner while Responding to the Issue

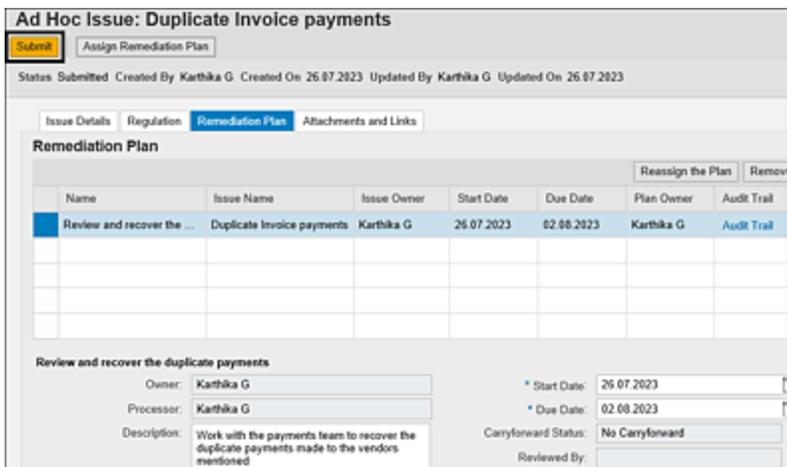
The ad hoc issue will either be assigned to the remediation owner in the next stage or be closed by the issue owner. It can also be assigned to another issue owner if the current owner doesn't own the issue. Both scenarios are detailed in this section, starting with assigning the remediation plan:

1. The issue owner clicks on the **Assign Remediation Plan** option and creates a remediation plan with the following details, as shown in [Figure 7.19](#):
  - **Plan Name**  
Brief definition about the remediation plan to be implemented.
  - **Start Date**  
Indicates the date when the notification should be sent to the remediation owner.
  - **Due Date**  
Indicates the date by which the plan should be implemented.
  - **Owner**  
The owner who would be working on the remediation plan
  - **Description**  
A detailed description of the evidence needed to be gathered and the expectations to be met by the remediation owner.



**Figure 7.19** Issue Owner Assigning a Remediation Plan to Fix the Issue

2. Once the remediation plan details are updated, information in the **Remediation Plan** tab must be reviewed. Clicking **Submit** will submit the ad hoc issue for further remediation, as shown in [Figure 7.20](#).



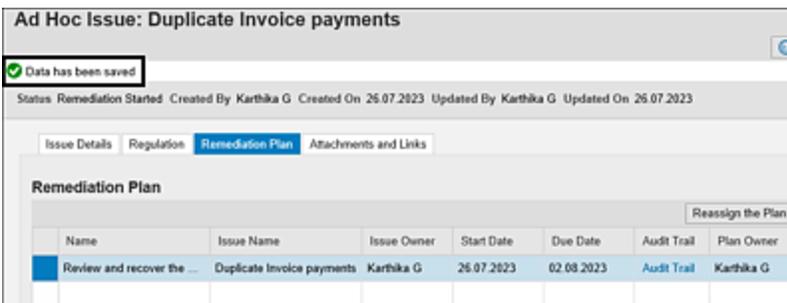
**Figure 7.20** Issue Owner Submitting the Remediation Plan

## Note

If the ad hoc issue requires multiple remediations plans to be implemented by different owners, the issue owner

can report additional remediation plans using the **Assign Remediation Plan** button, located next to the **Submit** button.

3. Once the details of the remediation plans created are reviewed and submitted, a confirmation message will be shown, as highlighted in [Figure 7.21](#).



**Figure 7.21** Remediation Plan Created for the Ad hoc Issue

A workflow will be triggered for the remediation owner to work on the recommended remediation plan.

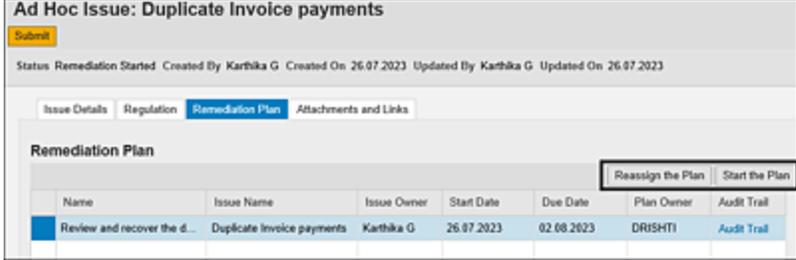
## 7.2.4 Implementation of Remediation Plan

The remediation owner can access the **Work Inbox** by following these steps once he receives a workflow for fixing the issue identified for the respective object:

1. Log in to the SAP Process Control system.
2. Execute Transaction NWBC.
3. Navigate to the **My Home** work center.
4. Under the **Work Inbox** work group, click the **Work Inbox** work item.

5. Click the **Process Control** work item link in the header section, which will show the work items (refer to [Figure 7.17](#) to see this screen). Following are the details available in the screen:
  - **Subject** indicates the type of work item pending for action.
  - **Organization** details the name of the entity to which the object is related.
  - **Regulation** indicates the compliance requirement the object is complying with.
  - **Status** indicates the current status. **Ready** indicates that it's a new work item, and **Reserved** indicates the ones accessed earlier and still pending for user action.
  - **Object Name** indicates the name of the object (organization/subprocess/control) for which the ad hoc issue is reported and the remediation plan has to be implemented.
  - **Created By** is the issue owner who created the remediation plan.
  
6. The remediation owner reviews the issue report and the remediation plan by clicking the link in the **Subject** column. The following options are available to act on the work item:
  - **Reassign the Plan**  
The remediation owner can transfer the responsibility to implement the plan to another user.
  - **Start the Plan**  
The remediation owner has decided to start

implementing the plan and would like to upload evidence for the actions taken or the fixes performed. [Figure 7.22](#) shows both options.



The screenshot shows a web interface for an 'Ad Hoc Issue: Duplicate Invoice payments'. It includes a 'Submit' button, status information, and navigation tabs for 'Issue Details', 'Regulation', 'Remediation Plan', and 'Attachments and Links'. The 'Remediation Plan' tab is active, displaying a table with columns for Name, Issue Name, Issue Owner, Start Date, Due Date, Plan Owner, and Audit Trail. A row is visible with the name 'Review and recover the d...', issue name 'Duplicate Invoice payments', owner 'Karthika G', start date '26.07.2023', due date '02.08.2023', and plan owner 'DRISHTI'. Above the table, there are buttons for 'Reassign the Plan' and 'Start the Plan'.

Name	Issue Name	Issue Owner	Start Date	Due Date	Plan Owner	Audit Trail
Review and recover the d...	Duplicate Invoice payments	Karthika G	26.07.2023	02.08.2023	DRISHTI	Audit Trail

**Figure 7.22** Remediation Plan Actions

7. By clicking **Start the Plan**, the remediation owner can promptly identify and address the deviations within the process. This approach enables the owner to take timely remedial actions, preventing further damage and minimizing the impact of the issue at hand. Additionally, this process facilitates data collection, aids in understanding the root cause of the problem, and allows for the implementation of existing control measures to mitigate risks effectively. It gives the following options (see [Figure 7.23](#)):

- **Assign Next Processor**

The remediation owner can transfer the responsibility of implementing the remediation plan to a different user.

- **Complete**

The remediation plan is implemented, and the completion is marked as 100%. However, it's required to perform the necessary remediation for the issue before marking it as completed.

- **Change Due Date**

If the remediation owner requires additional time to implement the remediation plan, a request can be sent to the issue owner with a new due date. In this case, a separate workflow will be triggered to the issue owner to either accept or reject the change due date request.



**Figure 7.23** Options Available in the Remediation Plan Implementation Window

8. After successfully implementing the remediation plan, the remediation owner marks the progress percentage to indicate the stage of implementation and uploads any supporting evidence in the **Attachments and Links** section. Once the remediation activities are completed, set the **Completion** field at **100%**, and click the **Complete** button to finish the remediation process. Finally, click **Submit** to officially close the remediation plan, as shown in [Figure 7.24](#).
9. The remediation plan status will be changed from **Remediation Started** to **Resolved** once submitted, and the remediation owner will receive the message **Data has been saved**.

**Ad Hoc Issue: Duplicate Invoice payments**

**Submit**

Status: Remediation Started Created By: Karthika G Created On: 26.07.2023 Updated By: Karthika G Updated On: 26.07.2023

Issue Details | Regulation | **Remediation Plan** | Attachments and Links

**Remediation Plan**

Assign Next Processor **Complete** Change Due Date

Name	Issue Name	Issue Owner	Start Date	Due Date	Plan Owner	Audit Trail
Review and recover the duplicate payments	Duplicate Invoice payments	Karthika G	26.07.2023	02.08.2023	DRISHTI	<a href="#">Audit Trail</a>

**Review and recover the duplicate payments**

Owner: DRISHTI

Processor: DRISHTI

Description: Work with the payments team to recover duplicate payments

Type: Ad Hoc Issue

Status: Remediation Started

Completion: 100%

Start Date: 26.07.2023

Due Date: 02.08.2023

Carryforward Status: No Carryforward

Reviewed By:

Reviewed On:

Created By: Karthika G

Created On: 26.07.2023

**Figure 7.24** Remediation Owner Submitting the Work Item for the Issue Owner’s Review

### 7.2.5 Close Issue

Following the implementation of the remediation plan, the issue owner receives a review workflow to review the remediations implemented and evidence provided in the **Attachments and Links** tab. An issue owner can view the actions pending in his Transaction NWBC Work Inbox. A **Close Issue: Ad Hoc Issue** work item will be displayed to the issue owner, as shown in [Figure 7.25](#).

**Active Queries**

Workitems: All (77) Access Management (0) **Process Control (77)** Risk Management (0)

**Workitems - Process Control**

Change Query Define New Query Person

View: [Standard View] Print Version Export

Subject	Organization	Regulation	Status	Due Date	Created On	Object Name	Created By
<b>Close Issue: Ad Hoc Issue</b>	Power Generation		Ready	02.08.2023	26.07.2023 21:16:40	Monitor Duplicate Invoice Check Config	Karthika G

**Figure 7.25** Work Inbox Screen with Items Pending for Action

The issue owner can access the work item by clicking the **Subject** line, which will have the following:

- Detailed comments by the remediation owner about the actions taken
- Evidence uploaded in the **Attachments and Links** section

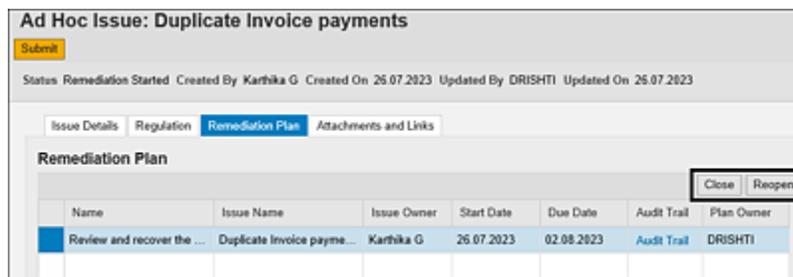
Once the details are reviewed, the remediation owner will have two options:

- **Close**

If all the details provided are correct, the reviewer can close the case by clicking the **Close** button. The workflow ends here, indicating the issue is fixed.

- **Reopen**

If the details provided are incomplete, the reviewer, that is, the issue owner, can reopen the issue by clicking the **Reopen** button. The workflow is retrIGGERED to the remediation owner. Prior to submitting it back, the remediation owner must perform any necessary remediation or corrections. The options are shown in [Figure 7.26](#).



**Figure 7.26** Remediation Plan Tab: Review Work Item for the Control Design Assessment

Once the remediation owner clicks on **Close**, the status of the plan is changed from **Resolved** to **Closed**, and a

confirmation message is received that the workflow is submitted (see [Figure 7.27](#)).

The screenshot shows a web interface for an 'Ad Hoc Issue: Duplicate Invoice payments'. At the top, there is a green checkmark and the text 'Data has been saved'. Below this, the status is 'Remediation Started', created by 'Karthika G' on '27.07.2023', and updated by 'Karthika G' on '27.07.2023'. A table lists the issue details:

Name	Issue Name	Issue Owner	Start Date	Due Date
Review and recover the ...	Duplicate Invoice payme...	Karthika G	27.07.2023	02.08.2023

Below the table, the form details for the issue are shown:

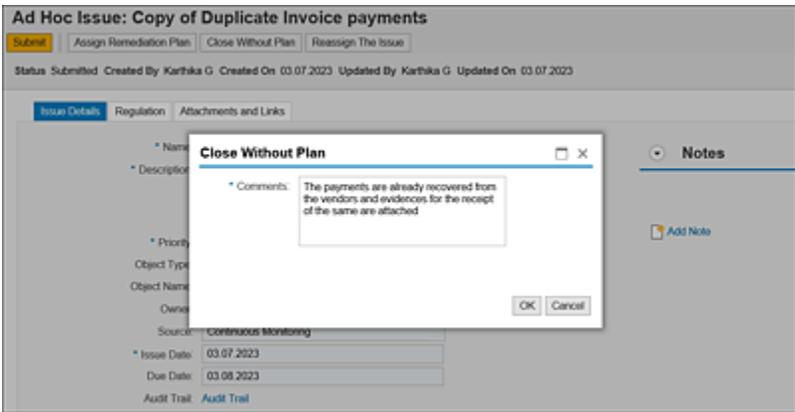
- Owner: DRISHTI
- Processor: DRISHTI
- Description: Work with the payment team to recover the duplicate payments made
- Type: Ad Hoc Issue
- Status: Closed
- Completion: 100%

On the right side, there are fields for 'Start Date', 'Due Date', 'Carryforward Status', 'Reviewed By', 'Reviewed On', 'Created By', and 'Created On'.

**Figure 7.27** Issue Owner Approving the Implemented Remediation Plan

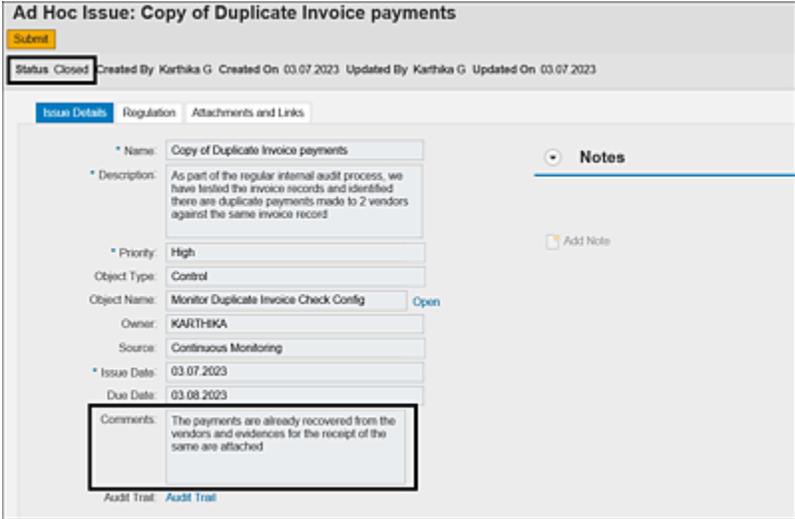
Once the remediation plan has been implemented and the issue has been resolved, the workflow concludes, and the results can be reviewed using the standard reports.

It's possible to close an ad hoc issue without a remediation plan. By clicking on **Close Without Plan**, the issue owner provides comments supporting the decision to close an issue without a remediation plan. Additionally, supporting files can be uploaded in the **Attachments and Links** tab. Clicking the **Submit** button will end the workflow, and no further action is required, as shown in [Figure 7.28](#).



**Figure 7.28** Issue Owner Closing the Issue without a Plan

Figure 7.29 shows the **Issue Details** tab with the **Status** and **Comments**, along with other information.



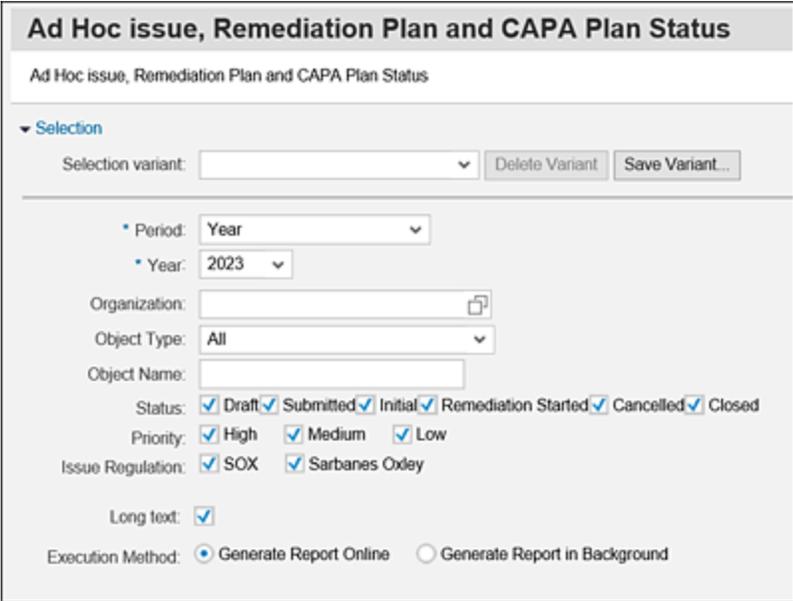
**Figure 7.29** Ad Hoc Issue Closed without a Plan

## 7.3 Reporting

SAP Process Control provides a standard Ad Hoc Issue report that provides management with a summary of all the ad hoc issues reported in the organization. This interactive report provides hyperlinks with which you can access the issues or remediation plans to see the complete details.

To access the report, following these steps:

1. Log in to the SAP Process Control system.
2. Execute Transaction NWBC.
3. Navigate to the **Assessments** work center.
4. Under the **Reports** work group, click the **Ad Hoc Issue Report** work item.
5. Use the options in [Table 7.2](#) to filter the data before extracting the results, as shown in [Figure 7.30](#).



The screenshot displays the 'Ad Hoc issue, Remediation Plan and CAPA Plan Status' selection screen. The title bar reads 'Ad Hoc issue, Remediation Plan and CAPA Plan Status'. Below the title, there is a sub-header 'Ad Hoc issue, Remediation Plan and CAPA Plan Status'. The main area is titled 'Selection' and contains several input fields and checkboxes. The 'Selection variant' field is empty, with 'Delete Variant' and 'Save Variant...' buttons. The 'Period' is set to 'Year' and the 'Year' is set to '2023'. The 'Organization' field is empty with a search icon. The 'Object Type' is set to 'All'. The 'Object Name' field is empty. The 'Status' section has checkboxes for Draft, Submitted, Initial, Remediation Started, Cancelled, and Closed, all of which are checked. The 'Priority' section has checkboxes for High, Medium, and Low, all of which are checked. The 'Issue Regulation' section has checkboxes for SOX and Sarbanes Oxley, both of which are checked. The 'Long text' checkbox is also checked. The 'Execution Method' section has two radio buttons: 'Generate Report Online' (selected) and 'Generate Report in Background'.

**Figure 7.30** Selection Screen to Generate a Report of Ad Hoc Issues

Selection Criteria	Description
<b>Period</b>	Indicates the time frame for which the report has to be generated; for example, you can filter for any specific month, quarter, half year, or whole year.
<b>Year</b>	Indicates the year for which the data has to be considered for report generation.
<b>Organization</b>	Name of the organization against which the issue is reported directly or where the object is localized for which the issue is reported.
<b>Object Type</b>	Select a specific object type (refer to <a href="#">Section 7.1.1</a> to understand more about object types for ad hoc issues) if the report is to be extracted for that, or select <b>All</b> if no such filter is required for a specific object type.
<b>Object Name</b>	Provide the name of the object based on the type selected in the previous step.
<b>Status</b>	This works as a filter if the report is to be generated for only those issues based on the current status. <a href="#">Figure 7.30</a> shows the options available for status filters.

Selection Criteria	Description
<b>Priority</b>	This works as a filter if the report is to be generated for only those issues based on the priority. <a href="#">Figure 7.30</a> shows the options available for status filters.
<b>Issue Regulation</b>	This works as a filter if the report is to be generated for only those issues reported against a specific regulation.

**Table 7.2** Selection Criteria for Generation of an Ad Hoc Issue Report

6. Based on the selection criteria from the previous step, the generated reports show the details of all ad hoc issues and their corresponding remediation plans. It contains hyperlinks with which you can navigate to the issue or remediation plan where all the details can be reviewed. The **Hierarchy** column displays details of the object and its parent entities up to the organization level, as shown in [Figure 7.31](#).

Hierarchy	Object Type	Organization	Original Object	Report by (Issue)	Issue Priority
Ethiopian Electric Power	Organization	Ethiopian Electric Power			
Power Generation	Organization	Power Generation			
EEP Process Hierarchy	Process	Power Generation			
Process to Pay	Process	Power Generation			
Duplicate Invoice payments	Ad Hoc Issue	Power Generation	Monitor Duplicate Invoice Check Config	Karthika G.	High
Review and recover the duplicate payments	Remediation plan	Power Generation	Monitor Duplicate Invoice Check Config	Karthika G.	High
Duplicate Invoice payments	Ad Hoc Issue	Power Generation	Monitor Duplicate Invoice Check Config	Karthika G.	High
Review and recover the duplicate payments	Remediation plan	Power Generation	Monitor Duplicate Invoice Check Config	Karthika G.	High

**Figure 7.31** Ad Hoc Issue Report to See the Details of Issues and Remediation Plans

## 7.4 Summary

An organization's controls team can use ad hoc issue management to identify and report internal control issues efficiently. By using this process, the organization is able to monitor its processes continuously. Ad hoc issues can be assigned to responsible owners who must take action. Owners can either close the issue without a remediation plan or assign one. The remediation owner then implements the plan and submits it to the issue owner for review before closing the issue. It's also possible to track the number of ad hoc issues reported within a specified period and monitor their status using SAP Process Control standard reports.

Moreover, issues arising from manual control performance and disclosure surveys can be tracked with the ad hoc issues functionality. [Chapter 6](#) and [Chapter 9](#) detail the reporting and tracking process for these issues.

# 8 Continuous Control Monitoring

*While the previous chapters provided an overview of how control assessments can be performed, the key functionality in SAP Process Control is to automate the testing process of the controls, which is referred to as continuous control monitoring or automated monitoring. This chapter provides the details of the configurations required to enable usage of this functionality.*

The previous chapters have provided a comprehensive overview on how the controls undergo various types of evaluations such as design assessment, self-assessment, and so on, as well as how manual control controls are tested for operating effectiveness, including the process of reporting any issues that are observed as part of the testing procedure. We've also delved into the procedure for reporting any ad hoc issues that may arise within the organization, whether they pertain to controls or other master data elements.

This chapter focuses on the definition and assessment of automated controls' operational effectiveness. It elucidates how business rules are employed, various methods for retrieving data from the target system through data

sources, the process of addressing issues, and the transportation of rules across the SAP Process Control landscape.

## **8.1 Introduction to Continuous Control Monitoring**

Continuous control monitoring (CCM) stands as a key feature within SAP Process Control. It's designed to automate the evaluation of control effectiveness where the system retrieves data from the target system and analyzes the data based on defined logic to identify potential deviations from the control's intended objectives. These identified deviations are then reported as deficiencies to the control owner, referred to as the issue owner, who is responsible for taking the necessary corrective actions.

To use the capabilities of this feature, it's required to have the GRC plug-in (GRCPINW) component installed on the backend system where the relevant data resides. For a more in-depth understanding of the prerequisites related to this component, refer to [Chapter 3](#).

The standard or conventional process of testing controls in a manual environment relies on the internal audit or controls team. The typical challenges associated with this manual process are as follows:

- The internal audit or controls team is required to collect business information through interviews and walkthrough sessions with process owners. This is a time-consuming

activity, and involving key process owners in these interviews or discussions can be quite challenging.

- Data analysis is performed manually using various tools such as Microsoft Excel VLOOKUP and validations. This not only demands significant manual effort to test the complete set of controls but also opens up the possibility of human errors.
- To manage the workload, control testing is scheduled on a quarterly, semiannual, or annual basis depending on the volume of controls that need to be examined.
- Control testing results are based on the samples selected by the testers, rather than testing the entire population. This is due to the difficulties in analyzing the entire dataset, considering the high volumes of transactions that organizations deal with.

The CCM functionality within SAP Process Control is the answer! CCM serves as a vigilant watchdog, continuously monitoring system data and promptly alerting issue owners when deviations are detected in near real time. This approach facilitates the timely resolution of issues, eliminating the need to wait till the quarterly or yearly assessments by internal control or audit teams. CCM can be configured to run at different intervals, whether on an hourly, daily, weekly, monthly, quarterly, or yearly basis, depending on the control's criticality. Moreover, CCM evaluates 100% of the population, ensuring completeness and accuracy in the testing process and providing comprehensive assurance.

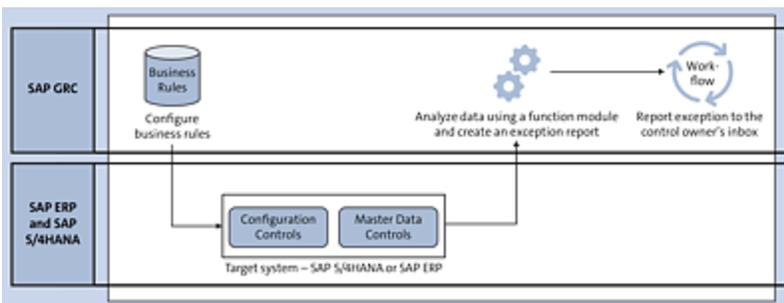
CCM has the capability to monitor system data (including the changes using Remote Function Calls [RFCs]), as highlighted in [Table 8.1](#).

<b>System Item</b>	<b>What Can Be Monitored?</b>
Configurations	Table data can be monitored to validate them against desired values of the configuration, or any changes made to the configuration can be monitored to make sure the changes made are genuine and the control owners are aware of the changes. If the changes aren't part of any approved requests, the control owner can initiate a remediation plan to investigate the changes made to the configuration. You can monitor table data to verify its alignment with the specified configuration values or monitor the configuration changes to ensure their authenticity, with control owners being informed of these changes. If the changes don't correspond to approved requests, the control owner can trigger a remediation plan to scrutinize the changes made to the configuration, for example, three-way match configuration checks, such as tolerance settings or payment configuration checks.

System Item	What Can Be Monitored?
Master data	Master data configuration changes can be monitored, such as vendor master, customer master, and so on. These changes can be monitored to ensure all the required key fields are maintained while defining the master data. For example, you can monitor key fields in vendor master data to ensure completeness of the vendor record.
Transactional data	Transactional data such as purchase orders, sale orders, or invoices can be monitored against various internal policies to ensure there are no fraudulent activities taking place in the process. For example, you can monitor invoice data to identify any duplicate invoices that have been processed.

**Table 8.1** Datasets to Establish CCM

[Figure 8.1](#) provides an overview of how the CCM functionality fetches the data and reports issues to the issue owners.



**Figure 8.1** Process Depiction of the CCM Functionality

With CCM, issue owners no longer need to wait for internal control/audit teams to report or highlight an issue. It continuously monitors the controls and triggers email to the owners for issue resolution. Here are several key benefits that organizations can achieve by using the CCM functionality:

- **Exception-based monitoring**

CCM jobs can be set to run at regular intervals. The GRC team has the capability to schedule controls for an extended duration such as one to two years, and the system automates all the remaining tasks. Issue owners will receive notifications automatically when an exception is detected. If no exceptions are found during a job run, the system won't generate any notifications.

- **100% population**

Testing is conducted across the entire population rather than relying on sample testing, providing a comprehensive view of the control's operational effectiveness within the organization.

- **Find problems faster and easier**

Critical or key controls can be scheduled to run more frequently, such as daily or hourly. This allows for near real-time notifications of any process deviations, enabling faster issue resolution without significantly increasing the risk of control failure.

- **Workflow driven**

Based on the workflow configurations, the issues are routed to the control owner who can either fix the issue on his own or create a remediation plan to the responsible person to fix the issue. All these stages of issue

remediation are workflow driven, and evidences of issue fixes will be available as an audit trail that can be reviewed by the audit teams at the end of the year to check the effectiveness of the control.

## 8.2 Data Sources

When implementing the CCM feature for the first time or when adding a new control to the scope of automated monitoring, it's important for the GRC admin team or the individual responsible for configuring the controls to conduct a design walkthrough workshop with the process owners. This workshop is essential for understanding how data flows within the SAP S/4HANA or SAP ERP systems. It's also vital to understand the source of the data within the SAP S/4HANA or SAP ERP system. The data to be analyzed may be present in tables, ABAP reports, or queries.

Once the data source has been identified, the initial step involves configuring the data source to retrieve the data in the SAP Process Control system. Subsequently, a business rule is defined to establish the logic for testing the effectiveness of the control.

This section provides an explanation of defining a data source, outlines key subscenarios available in the standard SAP solution for data retrieval, and details how configurable subscenarios can be effectively used.

### 8.2.1 Usage of Configurable Subscenarios

A subscenario is a specific type of data source used to retrieve data from the target system into the SAP Process Control application. SAP offers various subscenarios tailored to different types of systems and data storage methods. These subscenarios are discussed in [Section 8.2.2](#).

A configurable subscenario is particularly useful for monitoring system configurations or master data stored in tables. It helps ensure that these configurations align with the organization's policies. This form of data analysis is referred to as a *value check*. If the data is stored in multiple tables, you can monitor it by joining these tables. The process of joining is discussed in detail in the following subsections.

Additionally, you can use the standard functionality of a configurable subscenario to monitor changes made to table data. This type of data analysis is known as a *change log check*. Change logs for tables can be retrieved from Transaction SCU3, and SAP Process Control provides a built-in feature to fetch changes from the Transaction SCU3 handler for respective tables using a configurable subscenario.

The following sections provide a detailed explanation of the process for defining the data source and the steps to configure it.

## Scenario

Before creating a data source using a configurable subscenario, it's important to identify the specific tables in the target system where the data is stored. [Table 8.2](#) outlines the process of configuring a data source when duplicate invoice checks are in place in SAP S/4HANA or SAP ERP.

Detail	Description
--------	-------------

Detail	Description
What is the risk?	The risk is excessive payments leading to financial loss if duplicate invoices are processed.
Configuration	The duplicate invoice check configuration ensures that the system examines invoices for duplicates by considering specific parameters set during invoice generation, such as the company code, reference number, and invoice date. These configurations are individually managed at the company code level, allowing the organization to activate all three checks or any combination of them based on their specific needs.
Transaction	These configurations are maintained using Transaction OMRDC.
Table	Data is stored in table T169P.

**Table 8.2** Configuring an Automated Control in SAP Process Control

### Important

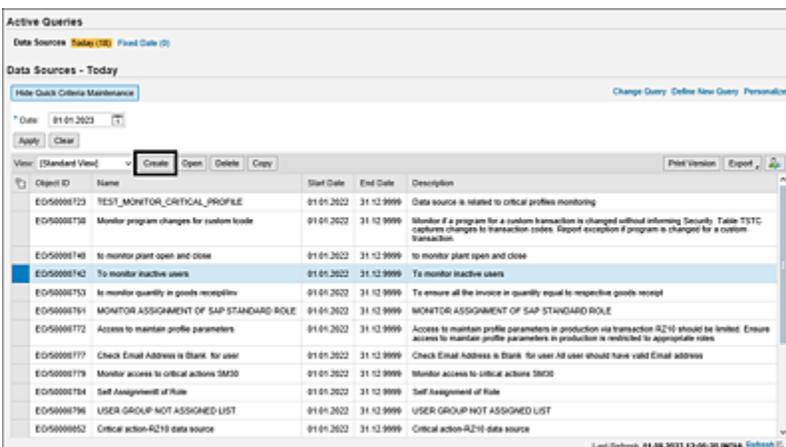
To identify the table where the data is stored and to find the technical name of the field, press the F1 key after placing the cursor on the field configuration, and then click **Technical Information** in the menu bar, which will provide the required details.

Once the details of the control are identified along with the name of tables where the data is stored, proceed to the steps to configure the data source as outlined in the next section.

## Configuration of the Data Source

To review the existing data sources or to create a new one, follow these steps:

1. Log in to the SAP Process Control system.
2. Execute Transaction NWBC.
3. Navigate to the **Rule Setup** work center, and under the **Continuous Monitoring** work group, execute the **Data Sources** work item.
4. From the **Data Sources** page, click **Create**, as shown in [Figure 8.2](#), and navigate to the various tabs to start configuring a data source.



The screenshot shows the 'Active Queries' page in SAP. The 'Data Sources - Today' section is active, displaying a table of existing data sources. The 'Create' button in the toolbar is highlighted with a red box. The table contains the following data:

Object ID	Name	Start Date	End Date	Description
EGS0001723	TEST_MONITOR_CRITICAL_PROFILE	01.01.2022	31.12.9999	Data source is related to critical profile monitoring
EGS0001730	Monitor program changes for custom loads	01.01.2022	31.12.9999	Monitor if a program for a custom transaction is changed without informing Security Table TSTC captures changes to transaction codes. Report exception if program is changed for a custom transaction.
EGS0001740	to monitor plant open and close	01.01.2022	31.12.9999	to monitor plant open and close
EGS0001742	To monitor inactive users	01.01.2022	31.12.9999	To monitor inactive users
EGS0001753	to monitor quantity in goods receipts	01.01.2022	31.12.9999	To ensure all the invoice in quantity equal to respective goods receipt
EGS0001791	MONITOR ASSIGNMENT OF SAP STANDARD ROLE	01.01.2022	31.12.9999	MONITOR ASSIGNMENT OF SAP STANDARD ROLE
EGS0001772	Access to maintain profile parameters	01.01.2022	31.12.9999	Access to maintain profile parameters in production via transaction RZ10 should be limited. Ensure access to maintain profile parameters in production is restricted to appropriate roles
EGS0001777	Check Email Address is Blank for user	01.01.2022	31.12.9999	Check Email Address is Blank for user. All user should have valid Email address
EGS0001779	Monitor access to critical actions SM30	01.01.2022	31.12.9999	Monitor access to critical actions SM30
EGS0001784	Self Assignment of Role	01.01.2022	31.12.9999	Self Assignment of Role
EGS0001796	USER GROUP NOT ASSIGNED LIST	01.01.2022	31.12.9999	USER GROUP NOT ASSIGNED LIST
EGS0001852	Critical action-RZ10 data source	01.01.2022	31.12.9999	Critical action-RZ10 data source

**Figure 8.2** Create a Data Source

The data source configuration has the **General** tab, **Object Field** tab, **Adhoc Query** tab, and **Connectors** tab. Each of

these tabs are detailed in the following sections.

## **General Tab**

The **General** tab is used to define data source basic information such as **Data Source**, **Description**, **Valid From**, and **Valid To** fields, as shown in [Figure 8.3](#). This definition is similar to the other master data definitions.

Additionally, the following fields must be defined:

- **Status**

Indicates the current status of the data source. It has four options:

- **New**: When a new data source is being created, the data source is shown with this status.
- **In Review**: The data source should be updated to this status when it's saved for the first time.
- **Active**: This status appears when the data source is reopened after saving it as **In Review**. Only active data sources and business rules can be used for scheduling automated controls for monitoring.
- **Inactive**: If the data source is no longer valid, the same can be marked as inactive. Once marked as inactive, it will no longer be available for creation of a business rule.

**Figure 8.3** Data Source Configuration: General Tab

- **Search Term**

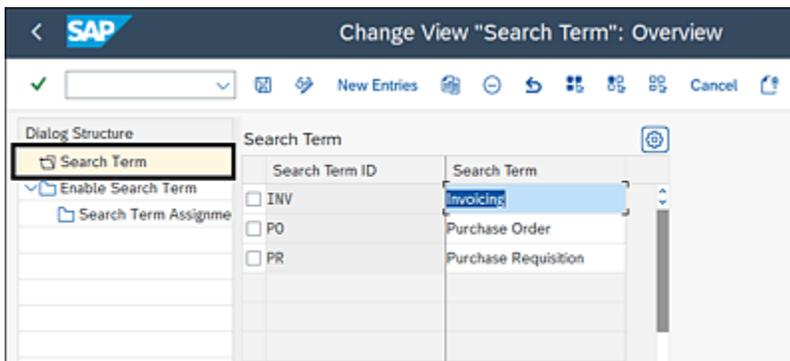
This is an optional configuration that can be activated using the Transaction SPRO settings. These search terms can be used while creating a business rule, allowing users to select relevant search terms from the provided dropdown menu, as shown in [Figure 8.4](#). Further, [Section 8.3](#) details the steps to create a business rule and the process of using search terms.

**Figure 8.4** Selection of Search Terms from Dropdowns

To maintain values for the search term, follow these steps:

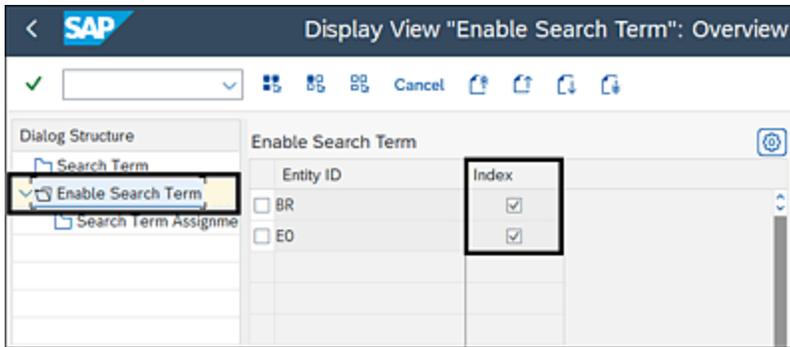
1. Log in to the SAP Process Control system.
2. Execute Transaction SPRO\_ADMIN.

3. Click the **SAP Reference IMG** button.
4. Expand **Governance, Risk and Compliance • Common Component Settings • Continuous Monitoring • Maintain Search Terms for Business Rule and Data Source**.
5. To review the current search terms or to create new ones, click **Search Term** in the **Dialog Structure**. You can view all the search terms in the view. To add new terms to the list, click **New Entries**, and provide a unique **Search Term ID** and **Search Term** description, as outlined in [Figure 8.5](#).



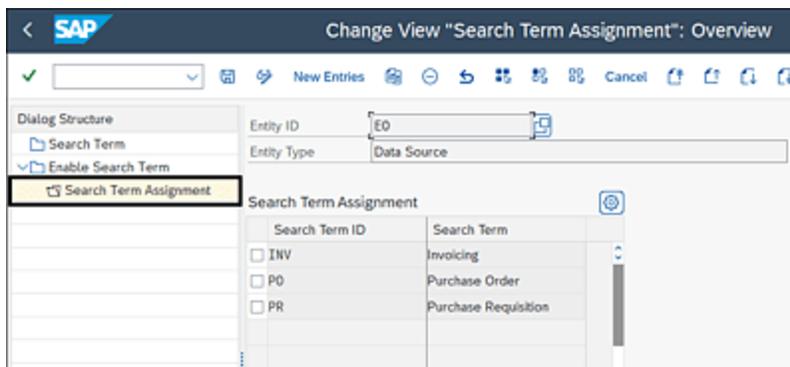
**Figure 8.5** Configuration of Search Terms

6. Optionally, select **Enable Search Term**, which can be disabled at the data source or business rule level. You can review the current status, as shown in [Figure 8.6](#). In the **Entity ID** field, **EO** represents data source and **BR** represents business rule. The **Index** column indicates the activation status. If the organization decides to disable the usage of search terms, uncheck the **Index** box for the entity.



**Figure 8.6** Activation Status of Search Terms

- Once the organization decides to make use of search terms while defining business rules and assigning business rules to controls, assign the relevant search terms to the data source and business rules. To review the current assignments for **Data Source**, select **EO** from the **Entity ID** column, and then click **Search Term Assignment** from the **Dialog Structure**, which shows the current search terms assigned (see [Figure 8.7](#)). To assign new search terms, click **New Entries**, and select the search terms created as shown in the previous step.

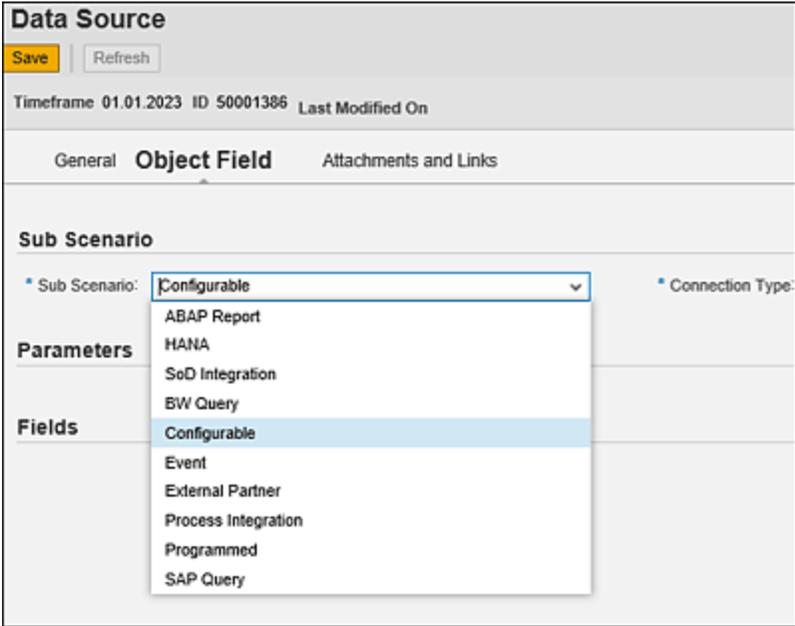


**Figure 8.7** Configuration to Map Search Terms to Data Source

Once the general details are updated for a data source, navigate to the **Object Field** tab where the details of the target system RFC, type of subscenario, table, and fields are configured.

# Object Field Tab

Fields in this tab are used to configure the subscenario, table, and fields from which the data has to be fetched from the target system. Each of the options in the **Sub Scenario** dropdown are detailed in [Table 8.3](#). For the selected control, select the **Configurable** option from the dropdown, as shown in [Figure 8.8](#).



**Figure 8.8** Sub Scenario Selection in the Data Source Screen

Subscenario Name	Explanation
------------------	-------------

<b>Subscenario Name</b>	<b>Explanation</b>
<b>Configurable</b>	<p>This subscenario option offers a method to monitor configuration and master data changes during the testing period or to validate specific values at a particular moment. It also alerts the control owner when violations are detected. Examples include three-way match configuration checks and monitoring changes to critical fields in vendor master data.</p>
<b>ABAP Report</b>	<p>This option uses the SAP-delivered standard ABAP reports that stores required data. These can be used directly as an input to the control. There is no additional effort needed to identify and fetch tables or join multiple tables to create a data source.</p> <p>For example, report RSUSR102 can be used to identify any profile changes to sensitive users such as SAP*, and report RSUSR200 can be used to identify users who have never changed their passwords.</p>

<b>Subscenario Name</b>	<b>Explanation</b>
<b>HANA</b>	<p>While monitoring transactional data, there might be a requirement to validate large volumes of data. In those cases, this subscenario option can be used. It provides a platform to the user to leverage the SAP HANA database's processing power to crunch data and present results. Calculation views offer much greater flexibility and expressive power. Examples include analyzing purchase order data and analyzing duplicate invoices.</p>
<b>SoD Integration</b>	<p>This is an integration between SAP Access Control and SAP Process Control. This subscenario doesn't need any RFC to fetch data from the target system and this gets data from SAP Access Control. This subscenario provides a means to monitor critical access, permissions, and segregation of duties (SoD) assigned to the users or at the role level. However, SAP Access Control must be configured. A few of the scenarios are users assigned with critical SoD, users assigned with critical access, and so on.</p>

<b>Subscenario Name</b>	<b>Explanation</b>
<b>BW Query</b>	<p>This subscenario can be used to consume SAP Business Warehouse (SAP BW) queries. They can be fetched to monitor controls easily. SAP BW query creation also has an additional capability to fetch data from data lake platforms that store data coming from different systems using certain application programming interface (API) calls. Examples include supplier invoices for processing and split purchase orders monitoring.</p>
<b>Event</b>	<p>Event-based monitoring is a method to monitor controls on a real-time basis, which is key for business-critical controls that have a huge impact on the organization. This subscenario requires usage of web services and configuration of business add-ins (BAIs) to define event rules to notify the control owners immediately as and when a violation occurs in the system. An example is sensitive data maintenance such as a change in the vendor bank account.</p>

<b>Subscenario Name</b>	<b>Explanation</b>
<b>External Partner</b>	This subscenario is used to monitor data stored in other non-SAP external systems using web services, for example, sales order data processed in a non-SAP system. This requires additional third-party connectors to fetch data.
<b>Process Integration</b>	This subscenario is used to monitor data stored in other non-SAP external systems using third-party connectors and proxies created in the target system.
<b>Programmed</b>	Data within SAP S/4HANA or SAP ERP systems that can't be accessed through configurable or query scenarios can be observed by using a programmed subscenario via ABAP support. This requires the development of a custom class for fetching specific information. Examples include moving average price change impact and purchase orders created with incorrect procedures.

Subscenario Name	Explanation
<b>SAP Query</b>	This subscenario offers the capability to join multiple tables. Additionally, ABAP code can be added within the query to get more precise data and eliminate duplicate records. Furthermore, it provides the ability to create custom fields in the final output, which can be subsequently monitored in CCM. Examples include vendor/customer credit notes percentages and internal orders: plan/budget vs. actual value.

**Table 8.3** Overview of Available Subscenarios in Defining a Data Source

The other fields in the **Object Field** tab are as follows:

- **Connection Type**

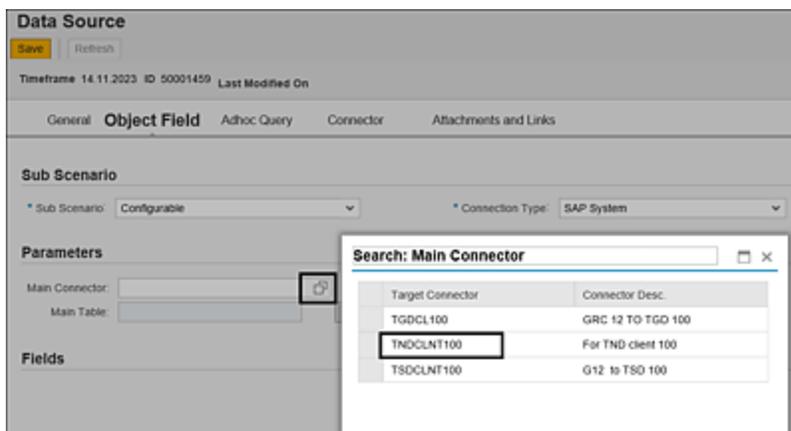
Indicates the type of system, SAP S/4HANA or SAP ERP, where the process is managed. SAP Process Control has **S4HANA** and **SAP System** as two connection types by default, where the relevant connectors are mapped. [Chapter 4, Section 4.4.2](#), details more on the process of mapping connectors against these connection types. For easy understanding, we suggest selecting **SAP System** from the dropdown.

- **Main Connector**

As explained in the data source overview, the main objective of the data source is to connect to the target system to fetch data from the tables. **Main Connector** acts the bridge to support the SAP Process Control system

to connect to the target systems and read data. Select the connector ID from the search screen, which has the list of connectors configured in Transaction SPRO (refer to [Chapter 4, Section 4.4.3](#), to understand the process of mapping connectors to the various data source subscenarios). Select the **Target Connector** from the popup window, as shown in [Figure 8.9](#).

The connector selected in this field is referred to as the *main connector*. If you want to monitor the same control for other SAP systems within your organization's landscape, you can select the additional connector IDs in the **Connector** tab.



**Figure 8.9** Selection of the Main Connector in the Data Source

Once the target connector is selected, it provides the option to select the tables and fields where the data is stored in the target system.

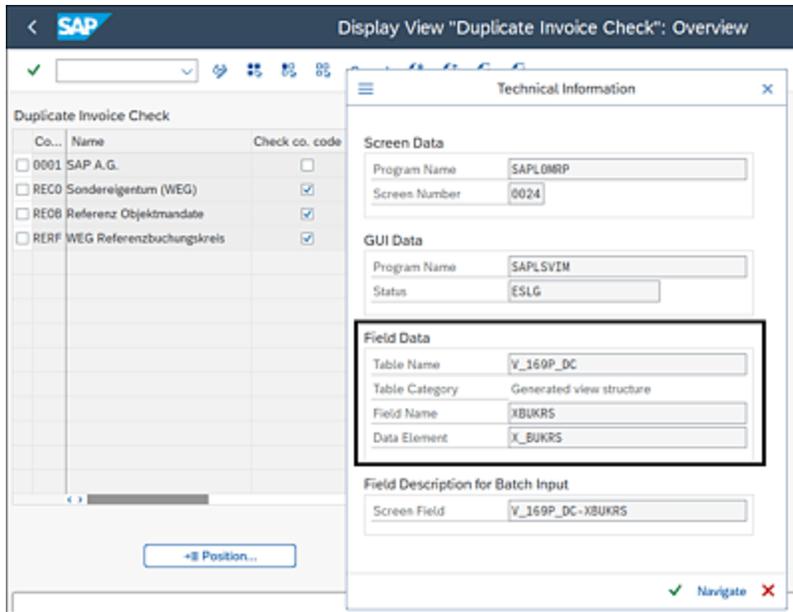
- **Main Table**

Once the connector is selected, the next step is to select the table where the data is stored in the target system. Identification of the table can be done either during the design workshops based on the inputs from the business process functional teams or by following these steps:

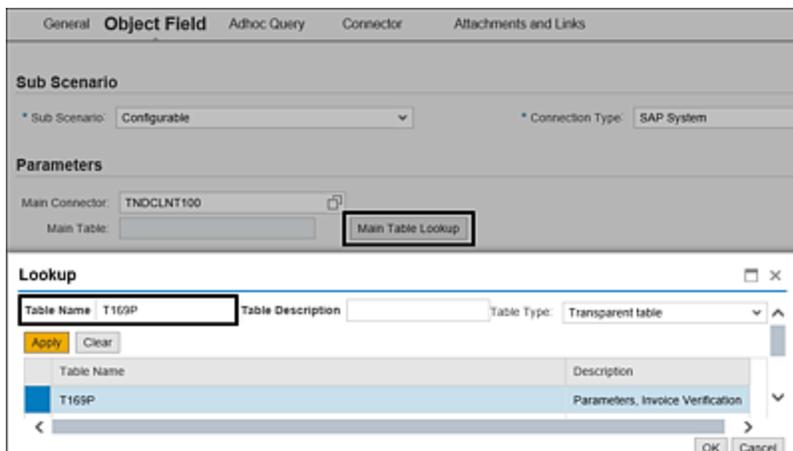
- Navigate to the configuration where the data is maintained.
- Place the cursor on the field to analyze.
- Press the F1 key, and then click on **Technical Information**.
- The popup provides **Table Name** and **Field Name** details where the data is stored as highlighted in [Figure 8.10](#).
- **Main Table Lookup**

After identifying the table details, you can choose the table in the data source by selecting the **Main Table Lookup** option. Input the **Table Name**, and click **Apply**. From the results, select the desired table, and click **OK**, as highlighted in [Figure 8.11](#).

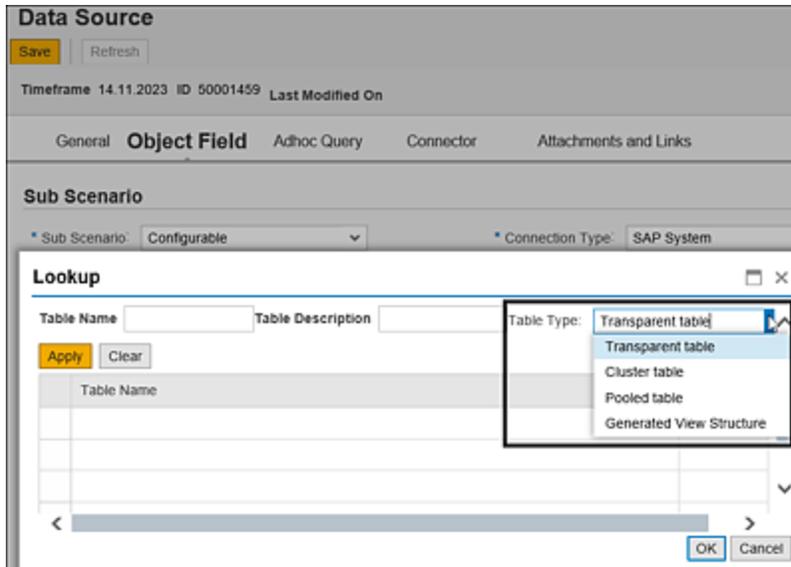
Note that understanding the table type is critical as it serves as a filter when searching for tables. The default is **Transparent table**. However, if the table is of a different type, such as **Cluster table**, **Pooled table**, or **Generated View Structure**, make sure to choose the appropriate type from the dropdown menu, as highlighted in [Figure 8.12](#), before searching for the specific table.



**Figure 8.10** Identification of Table and Field Technical Information



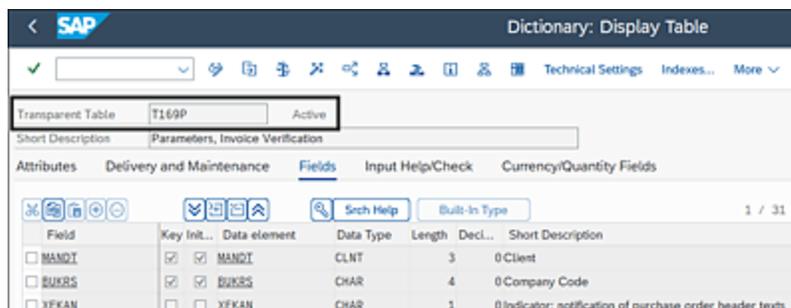
**Figure 8.11** Selection of Main Table in the Data Source



**Figure 8.12** Selection of Table Types

If you want to know the type of table, follow these steps:

- Go to Transaction SE11.
- Enter the name of the table, and click **Display**.
- The type of the table is displayed before the table name in the **Dictionary** screen, as highlighted in [Figure 8.13](#).



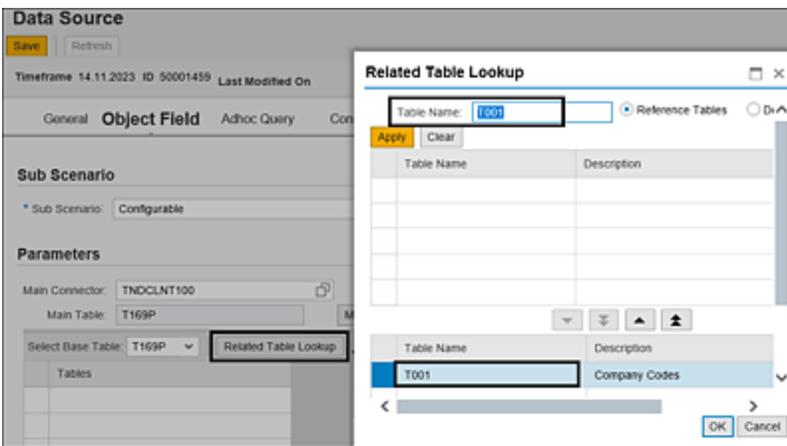
**Figure 8.13** Identification of Table Type from Transaction SE11

Returning to the **Object Field** tab, in situations where data is needed from multiple tables, it becomes necessary to join tables to gather the required information. The **Related Tables** option can be used to create a more meaningful

report that offers control owners the most relevant data for deciding on action plans to address identified deficiencies.

For example, in the given scenario where we're monitoring data to assess the effectiveness of duplicate invoice configuration maintenance, the primary data is stored in table T169P. However, if the control owner also requires the company code description, an additional table must be joined because this information isn't available in table T169P. To achieve this, you need to join table T169P with table T001, which contains company code IDs and descriptions.

To add, click on **Related Table Lookup**, input the **Table Name**, and click **Apply**. Once the table name is displayed in the results, select it by clicking the downward arrow to add the table to the selection, and then click **OK** to complete the table join, as detailed in [Figure 8.14](#).



**Figure 8.14** Selection of Related Table

## Note

Transparent tables are the only table type that can be joined. Other table types, such as pooled and cluster tables, can't be joined.

After adding the related table to the selection, the default field joins that are available between these two tables will be displayed in the **Join Conditions** section, as shown in [Figure 8.15](#). These join conditions specify how the fields are linked to retrieve data from the related tables. In this scenario, the company code (**BUKRS**) is used as the join condition.

The screenshot shows the 'Data Source' configuration window. The 'Object Field' tab is active. Under 'Sub Scenario', 'Configurable' is selected for the sub scenario and 'SAP System' for the connection type. The 'Parameters' section shows 'Main Connector' as 'TNDCLNT100' and 'Main Table' as 'T169P'. The 'Join Conditions' section is expanded, showing a table with two rows of join conditions. The first row is 'T001 BUKRS = T169P BUKRS' and the second row is 'T001 MANDT = T169P MANDT'. The first row is highlighted with a black border.

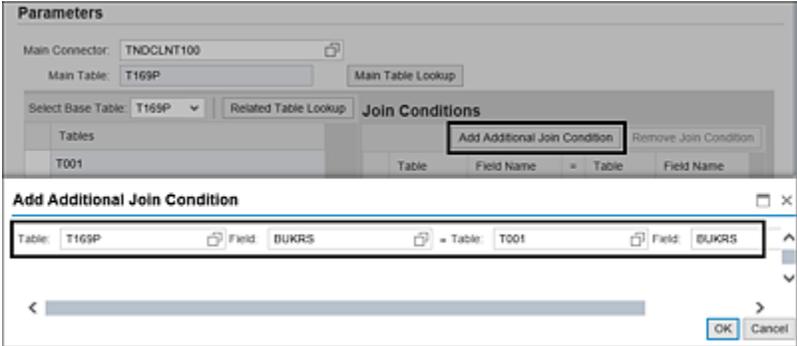
Table	Field Name	=	Table	Field Name
T001	BUKRS	=	T169P	BUKRS
T001	MANDT	=	T169P	MANDT

**Figure 8.15** Join Conditions between the Two Tables

In situations where the tables you want to join aren't found in the **Related Table Lookup** option, you can manually connect them (both tables must have common primary fields that can serve as a join condition). To manually join tables, follow these steps:

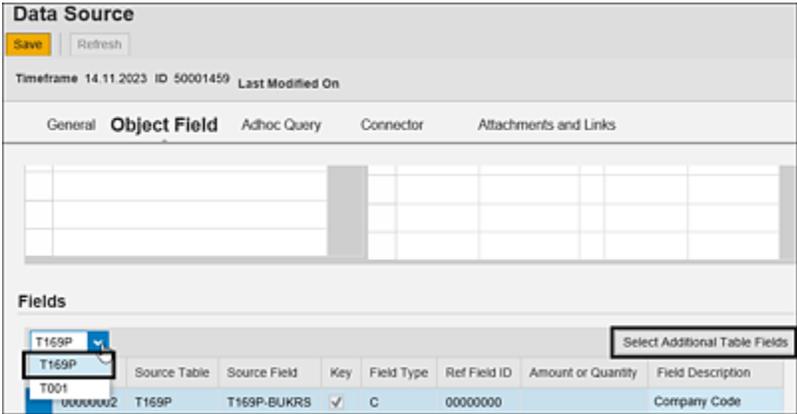
1. Click on the **Add Additional Join Condition** button.
2. Provide the names of both the **Table** and the **Field**, as highlighted in [Figure 8.16](#).
3. Click **OK** to complete the manual table join.

This allows you to establish the connection between the tables using the specified field as the join condition.



**Figure 8.16** Manual Join of Tables

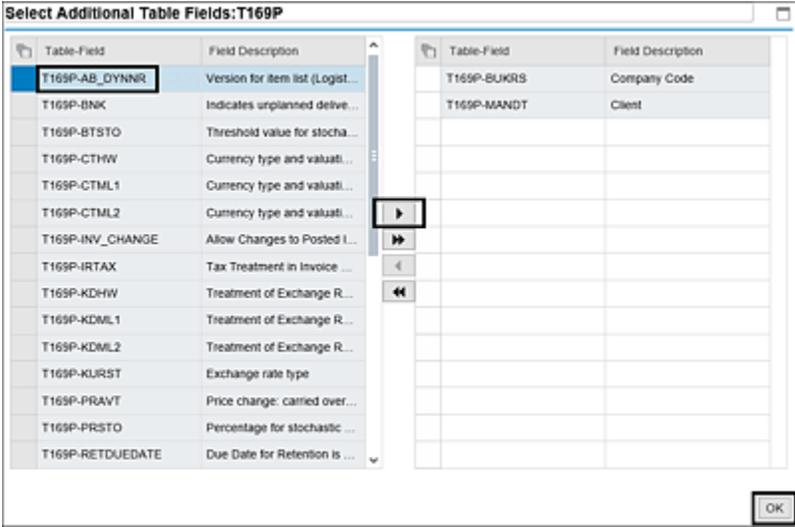
Once the tables are selected, the next step is to select the fields required for analysis. In the **Data Source** screen, all the fields required for analysis in business rules must be selected. Using the dropdown in the **Fields** section, select the table, and click **Select Additional Table Fields** button, as highlighted in [Figure 8.17](#).



**Figure 8.17** Selecting Tables in the Data Source Configuration

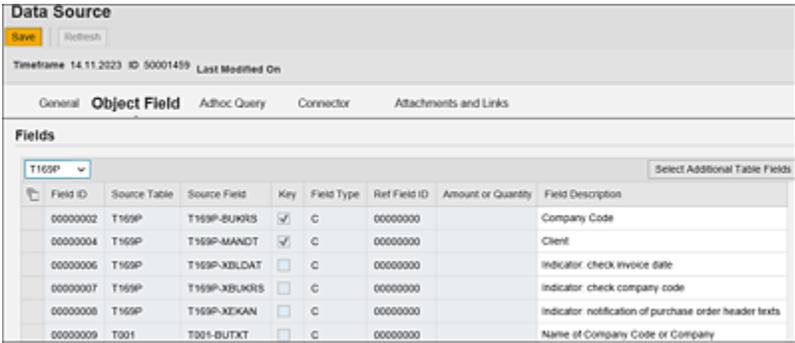
From the **Select Additional Table Fields** popup, select the fields that are required, move them to the section on the right, and click **OK**, as shown in [Figure 8.18](#). The left pane indicates the fields available in the table for selection, and

the right pane indicates the fields that are selected in the data source.



**Figure 8.18** Selection of Fields from the Table

Follow the same steps to select the fields from the other joined tables, if any, by changing the table name from the dropdown. Once the required fields are selected from all the tables, you can see all the selected fields in the **Fields** section, as shown in [Figure 8.19](#).



**Figure 8.19** Selected Fields for Analysis in the Data Source Configuration

**Note**

The **Field Description** displays the standard descriptions by default, but these can be customized to align with specific business requirements. The user-defined field descriptions will be reflected in the CCM output report.

Once the tables and fields are selected, navigate to the **Adhoc Query** tab to validate if the data source defined is accurate in fetching data from the tables.

### ***Adhoc Query Tab***

An ad hoc query is used to test if the data source is defined correctly. This fetches data from tables selected in the **Object Field** tab (technically, it fetches data from the target connector), which is the same data as in Transaction SE16. The **Target Connector** dropdown has the **Main Connector** list selected in the **Object Field** tab and also the additional connectors selected in the **Connector** tab. **Max. Rows** indicates the maximum number of rows of data that should be fetched from the target system.

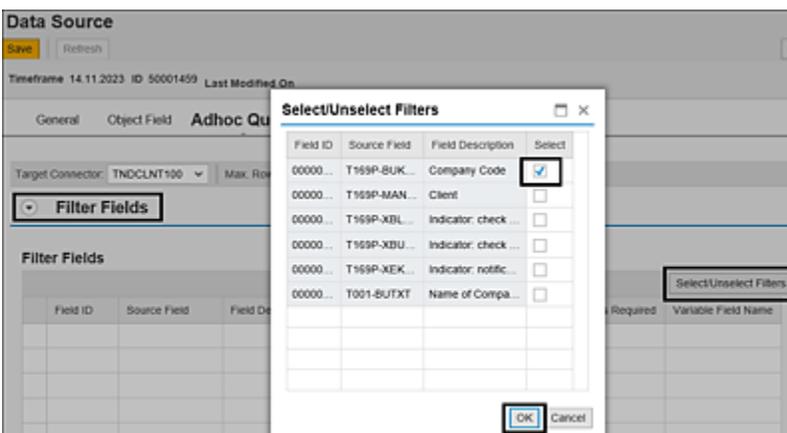
To test the data source, click on **Execute Query** after selecting the target connector from the dropdown and setting the **Max. Rows** as shown in [Figure 8.20](#). The **Results** section provides the output of the tables selected in the **Object Field** tab.



**Figure 8.20** Ad Hoc Query in the Data Source Screen

Apart from running the query to view the output, the ad hoc query also offers the capability to apply filters to specific fields before obtaining the results. For instance, if you need to execute the ad hoc query on a particular company code, you can use the filter option. To add filters, follow these steps:

1. Expand the **Filter Fields** section.
2. Click on the **Select/Unselect Filters** option.
3. Choose the **Company Code** field.
4. Click **OK** to apply the filter, as highlighted in [Figure 8.21](#).



**Figure 8.21** Selection of Filter Fields in the Data Source Ad Hoc Query

Once the filter field is selected, the next step is to add the filter value in the **Filter Value** section, which pops up in the screen. Click **Add**, and provide required inputs in the following fields before executing the query:

- **Sign**

Select the type in which the filter should be considered. It indicates whether the result should contain data that includes the filter values (**Range limit included**) or whether the result should not contain the data related to the filter values (**Range limit excluded**).

- **Option**

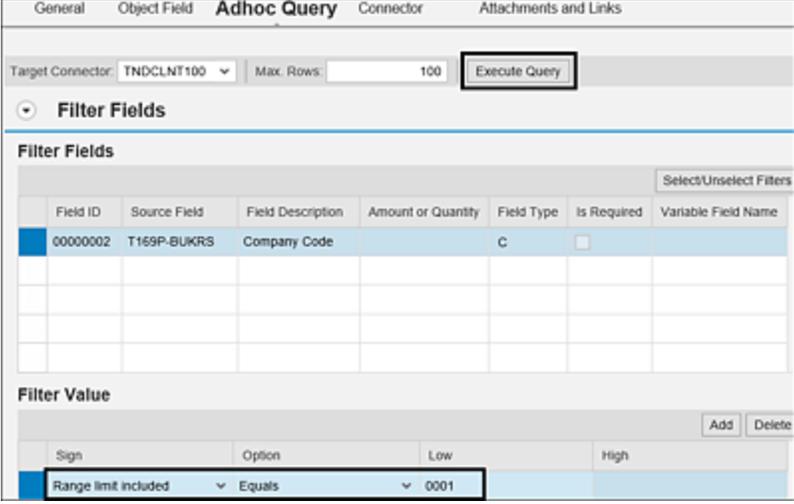
Following are the options available for considering the filter values:

- **Between...and...**
- **Contains the template**
- **Equals**
- **Greater than or equal to**
- **Greater than**
- **Less than or equal to**
- **Less than**
- **Not between...and...**
- **Not equal to**
- **Does not contain the template**

- **Low/High**

Input the specific values of the field that should be considered for filter criteria. The **High** value should be provided only when selecting **Between...and** and

**Between...and** where a data range should be provided. In all other cases, only the **Low** value should be provided as input for consideration of filters.



The screenshot shows the 'Adhoc Query' tab in a software interface. At the top, there are tabs for 'General', 'Object Field', 'Adhoc Query', 'Connector', and 'Attachments and Links'. Below the tabs, there is a 'Target Connector' dropdown set to 'TNDCLNT100', a 'Max. Rows' input field set to '100', and an 'Execute Query' button. Below this is a 'Filter Fields' section with a 'Select/Unselect Filters' button. A table lists filter fields with columns: Field ID, Source Field, Field Description, Amount or Quantity, Field Type, Is Required, and Variable Field Name. One row is highlighted with a blue background, showing '00000002' in Field ID, 'T169P-BUKRS' in Source Field, 'Company Code' in Field Description, and 'C' in Field Type. Below the table is a 'Filter Value' section with 'Add' and 'Delete' buttons. A row in this section is highlighted with a blue background, showing 'Range limit included' in Sign, 'Equals' in Option, and '0001' in Low.

Field ID	Source Field	Field Description	Amount or Quantity	Field Type	Is Required	Variable Field Name
00000002	T169P-BUKRS	Company Code		C	<input type="checkbox"/>	

Sign	Option	Low	High
Range limit included	Equals	0001	

**Figure 8.22** Ad Hoc Query in the Data Source with Filtered Values

After selecting the options for all the fields, click **Execute Query** to see the results considering the filter criteria, as shown in [Figure 8.22](#).

Once the ad hoc query is executed and the data source is tested, navigate to the **Connector** tab to add additional connectors if the same control is applicable to different systems in the landscape.

## **Connector Tab**

In situations where the control needs to be tested in multiple systems with identical data structures and tables, you can define a single data source and extend it to all other systems by adding additional connectors in this tab. To add additional connectors, follow these steps:

1. Click the **Add** button.

2. Select the additional connectors you want to add.
3. Click **OK** to add additional connectors to the data source, as shown in [Figure 8.23](#).



**Figure 8.23** Selection of Additional Connectors

After making all the configurations in all the tabs, you can finalize the definition of the data source by clicking the **Save** button. To ensure that the data source is active, reopen the control, and update its status to **Active**. This ensures that the data source is ready for use.

## 8.2.2 Usage of Other Key Subscenarios

You've seen in [Table 8.2](#) the various subscenarios that are provided for configuring data sources, and [Section 8.2.1](#) details how the **Configurable** subscenario can be effectively used. This section aims to cover the process of defining data sources for several other subscenarios, such as **ABAP Report**, **SAP Query**, and **SoD Integration**. Additionally, [Section 8.8](#), delves into the details of using the **HANA** subscenario, leveraging SAP HANA's processing capabilities to analyze data and deliver results.

### **ABAP Report**

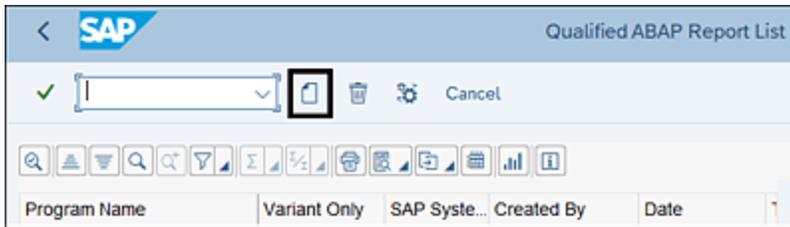
The **ABAP Report** subscenario can be used with SAP-delivered or custom ABAP reports/programs that contain the necessary data for analyzing control effectiveness. By using this subscenario, you can select the ABAP program in the data source, which will extract the relevant fields included in the ABAP report. This streamlines the process by eliminating the need to identify and join tables to retrieve data from the target system. For instance, if there is a need to monitor user or role changes, you can directly use report RSUSR100N to obtain the results, without having to go through the steps of identifying tables and change logs.

However, it's important to note that there are certain prerequisites that need to be fulfilled in the target system, specifically, adding the report to the qualified report list. Only after doing so will the report be available for selection in the data source. The steps for adding the report as a qualified report and selecting it in a data source are detailed in the following sections.

### ***Adding the ABAP Report as a Qualified Report***

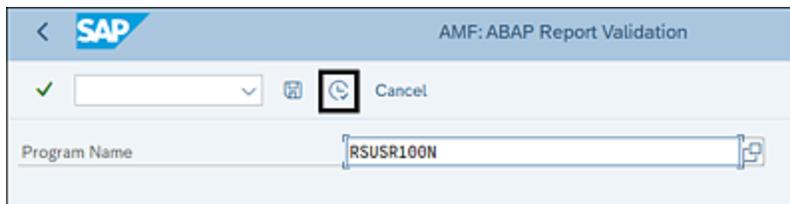
To add the ABAP report as a qualified report, follow these steps:

1. Log in to the target system.
2. Execute Transaction /N/GRCPI/OVERVIEW.
3. Click the **New** icon to add **New Entries**, as shown in [Figure 8.24](#).



**Figure 8.24** Option to Add the ABAP Report to the Qualified List

4. Enter the name of the ABAP report, for example, “RSUSR100N”, in the **Program Name** field, as shown in [Figure 8.25](#), and then click **Execute**.



**Figure 8.25** Selection of the ABAP Report to Add as a Qualified Report

However, note that an ABAP report can be used in the data source only when some of the checks are passed, which are listed in [Table 8.4](#).

Check Name	Purpose of Check
------------	------------------

Check Name	Purpose of Check
<p><b>Report can be executed in background mode</b></p>	<p>It's important to check whether the report can be executed in the background before the same can be used in the data source, as the job scheduled for automated monitoring runs the program in the background to fetch data into SAP Process Control. To test if the report can be executed in the background, schedule the same in Transaction SE38 in background mode to test if it's getting completed without any errors.</p>
<p><b>Review the ABAP report output that is displayed as expected in spool graphical mode</b></p>	<p>This validates whether the ABAP report output executed is accessible in spool graphic mode. An ABAP report can be used only if this check passes. To test the same, execute Transaction SP01, provide the spool request number or the name of the user who scheduled the program, and click <b>Execute</b> to see if the results show a valid output without any deviations.</p>

Check Name	Purpose of Check
<p><b>Report contains the screen elements not referring to a data element</b></p>	<p>This is an optional check that will help in understanding whether the ABAP report contains any fields that don't have any data element references. In addition, if this checkbox is enabled, the report can be executed with <b>Variant Only</b>, and no changes can be made to the filter criteria in the data source. Don't enable this checkbox if you need the flexibility to manage filters in the data source instead of getting the filters from the variant.</p>
<p><b>Report has no nested selection screen</b></p>	<p>Only those ABAP reports can be selected for monitoring in the data source that have only one selection screen. If the report has additional selection screens where more inputs should be provided before getting the results, the same can't be used in the data source.</p>
<p><b>Report has no popup window</b></p>	<p>Only those ABAP reports can be selected for monitoring in the data source that don't give additional popup screens (except for <input type="text" value="F4"/> search) before getting the results on executing.</p>

Check Name	Purpose of Check
<b>Report can only display data, no update to database</b>	Only those reports used to review data can be used in the data source and not the ones that update some data in the target system on its execution.

**Table 8.4** Checks to Be Performed before an ABAP Report Can Be Added to the Qualified List

If the ABAP report in scope qualifies all the checks per [Table 8.4](#), select the main checkboxes, as shown in [Figure 8.26](#), and click **Add Table To Transport Request** button to capture the changes in a transport request to move it to the other systems in the SAP Process Control landscape.

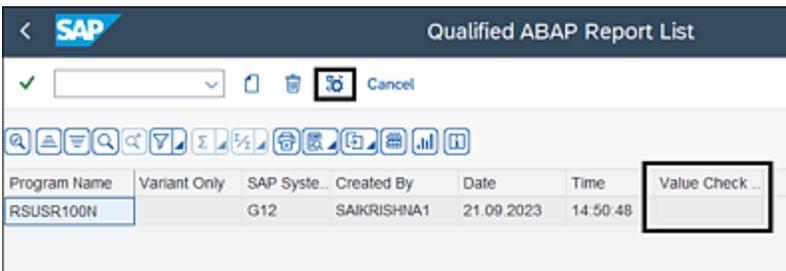
The screenshot shows the 'ABAP Report Requirements' dialog in SAP. It contains the following elements:

- Main Check:**
  - Report can be executed in background mode  
T-code: SE38 -> Program -> Background Execution
  - Review the ABAP report output that is displayed as expected in spool graphical mode  
T-code: SP01 -> Display Content (ICON) -> Graphic Format
- Additional Check:**
  - Report contains the screen elements not referring to a data element (e.g. radio button group) which will lead to input fields without description in AMF Data Source
- Exception Check:**
  - Report can not have nested selection screen
  - Report can not have popup window
  - Report can only display data, no update to database

At the bottom left, there is an 'Add' button, and at the bottom right, the 'Add Table To Transport Request' button is highlighted with a red rectangular box.

**Figure 8.26** Confirmation of Checks to Add the Report to the Qualified List

Once the report is accepted, a confirmation message will appear. To access the qualified/accepted ABAP report list, go to Transaction /N/GRCPI/OVERVIEW. Once the ABAP report is added to the qualified list, as shown in [Figure 8.27](#), you can find the **Program Name** (name of the ABAP report added to the qualified list), **Variant Only**, **SAP System**, **Created By**, **Date**, **Time**, and **Value Check** (if this field is blank, the report can be used only for analysis type **Review Required** where no deficiency criteria can be defined in the business rule).

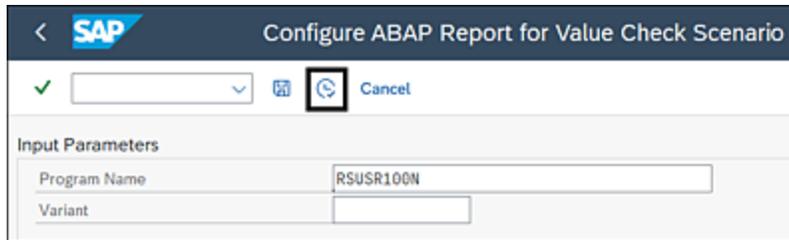


Program Name	Variant Only	SAP System	Created By	Date	Time	Value Check
RSUSR100N		G12	SAIKRISHNA1	21.09.2023	14:50:48	

**Figure 8.27** Configuration to Enable the Value Check Option for an ABAP Report

If there is a requirement to define deficiency criteria, perform the follow steps:

1. Select the **Gear** icon in the **Qualified ABAP Report List** screen, which will open the value check configuration screen.
2. Enter the name of the program that should be considered for value check, and click **Execute** (see [Figure 8.28](#)).



**Figure 8.28** Selection of ABAP Report for the Value Check Scenario

3. Click **Execute** again to run the report (ensure there is some data for the selections made in execution).
4. Click the **Back** button to update the value check scenario option, as shown in [Figure 8.29](#).

Program Name	Variant Only	SAP Syste.	Created By	Date	Time	Value Check
RSUSR100N		G12	SAKRISHNA1	21.09.2023	14:50:48	X

**Figure 8.29** Value Check Configuration for the ABAP Report

### ***Selection of the ABAP Report in the Data Source***

To create a data source with the **ABAP Report** subscenario, follow the steps shown earlier in [Section 8.2.1](#). Once completed, navigate to the **Object Field** tab, select the **ABAP Report** subscenario, and select the **Main Connector** where the ABAP report was added to the qualified list. Click the **Program Lookup** option to find the ABAP report to be selected in the data source, as highlighted in [Figure 8.30](#).

**Figure 8.30** Program Lookup Option in the ABAP Report Data Source

From the **Lookup** screen, search for the ABAP report, and click **Apply**. From the results, select the ABAP report, and click **OK** (see [Figure 8.31](#)).

ABAP Report	Description	Report Variant
RSUSR100N	Change Documents for Users	

**Figure 8.31** Selection of the ABAP Report in the Data Source

On selection of the ABAP report, all the relevant fields from the ABAP report are auto-populated in the data source, which can be used for analysis in the business rule, as shown in [Figure 8.32](#).

Data Source							
<span>Save</span> <span>Refresh</span> Timestam: 14.11.2023 ID: 50001459 Last Modified On							
General <b>Object Field</b> Connector Attachments and Links							
Main Connector: <input type="text" value="G12CLNT100"/> <span>Program Lookup</span> ABAP Report: <input type="text" value="RSUSR100N"/> Report Variant: <input type="text"/>							
Fields							
Field ID	Technical Information	Source Table	Source Field	Field Type	Amount or Quantity	Ref Field ID	Field Description
00000053	ROLE	RSUSR100N	ROLE	C		00000000	
00000054	F_ROLE	RSUSR100N	AGR_DEFINE-AGR_NAME	C		00000000	Role
00000055	PROF	RSUSR100N	PROF	C		00000000	
00000056	F_PROF	RSUSR100N	UST105-PROFN	C		00000000	Profile
00000057	SYS	RSUSR100N	SYS	C		00000000	
00000058	F_SYS	RSUSR100N	USZBVSYS-SUBSYSTEM	C		00000000	Receiving system
00000059	CROLE	RSUSR100N	CROLE	C		00000000	
00000060	F_CROLE	RSUSR100N	USLA04-AGR_NAME	C		00000000	Role

**Figure 8.32** Fields Selected from the ABAP Report in the Data Source

## Note

Field descriptions can be updated per the business requirement.

Click on the **Connector** tab, and add additional connectors. Note that the report should be added to the qualified report list in each of the target systems. Click **Save** to complete the data source configuration.

## SAP Query

The **SAP Query** subscenario option uses predefined SAP queries created via Transaction SQ01 in the target system or to create new queries by combining multiple tables. It offers flexibility by allowing the definition of ABAP custom code along with table joins for performing calculations that can't be accomplished using Business Rule Framework plus (BRFplus) workbench formulas. The retrieval of queries from the target system is facilitated through the RFC connector.

SAP Query is configured in the respective target system from which the data has to be fetched into SAP Process Control for analysis. Following are the steps to configure an SAP Query:

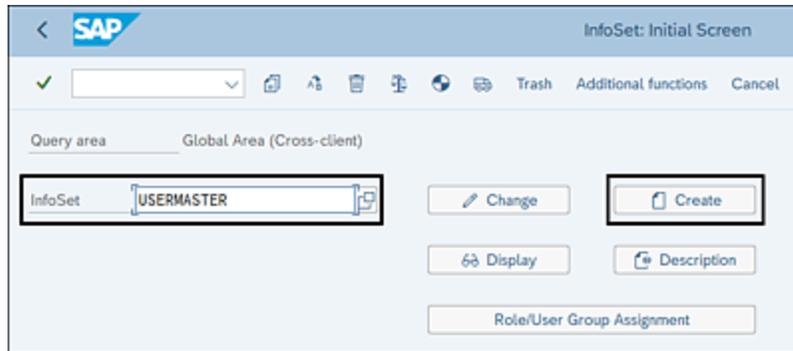
1. Configure the InfoSet.
2. Map the InfoSet to the user group.
3. Configure the InfoSet query.
4. Select an SAP Query in the data source.

For example, you can create an SAP Query to identify the list of active dialog users whose email ID is external. This requires joining tables `USR02`, `USR21`, and `ADR6`, as well as creating a report of users along with their email IDs maintained in the user master. The following sections outline the steps for each activity.

### ***Configure the InfoSet***

An InfoSet is similar to a data source where all the relevant tables and fields required for analysis are defined. To configure an InfoSet, follow these steps:

1. Go to Transaction `SQ02`.
2. Provide a name in the **InfoSet** field, and click **Create**, as highlighted in [Figure 8.33](#).



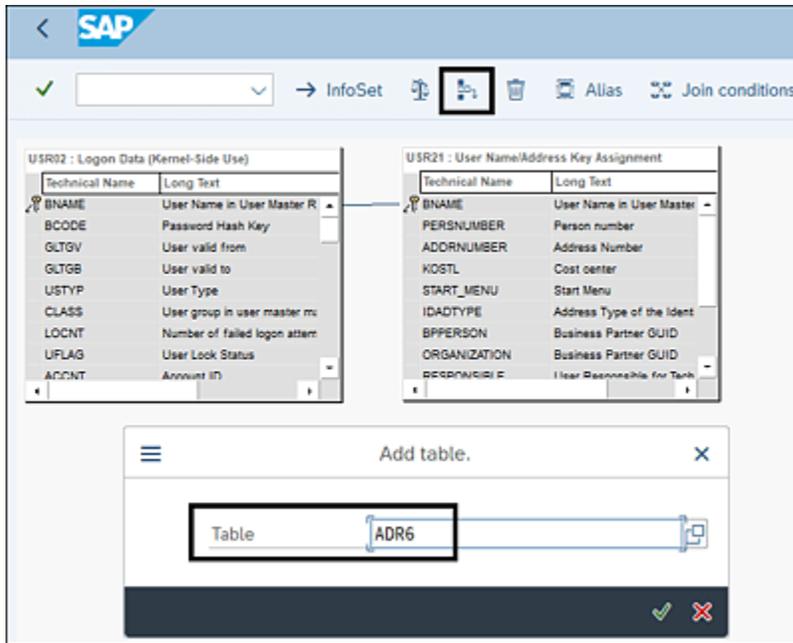
**Figure 8.33** Creation of an InfoSet

3. In the **InfoSet: Title and Database** popup screen, provide the name for the InfoSet. You also have the following options:
  - **Table join using basis table:** To join multiple tables.
  - **Direct read of table:** To read data from a single table.
  - **Logical database:** To use any logical database element.
  - **Data retrieval by program:** To use structures.
4. In this scenario, because the requirement is to join three tables (tables `USR02`, `USR21`, and `ADR6`), choose the **Table join using basis table** option, provide the main table, and click **OK**, as shown in [Figure 8.34](#).

The screenshot shows a window titled "InfoSet : Title and Database". At the top, there is a "Name" field containing "User Master" and an "Authorization group" field. Below this is the "Data Source" section, which is highlighted with a black box. It contains several radio button options: "Table join using basis table" (selected), "Direct read of table", "Logical database", and "Data retrieval by program". The "Table join using basis table" option has a text field next to it containing "USR02". Under "Data retrieval by program", there is a "Data structure" section with "Integrated program" (selected) and "External program:" options. At the bottom, there is an "Options" section with checkboxes for "no automatic text recognition" (unchecked) and "Fixed point arithmetic" (checked). A "Further options" button is visible at the bottom right.

**Figure 8.34** Definition of the InfoSet

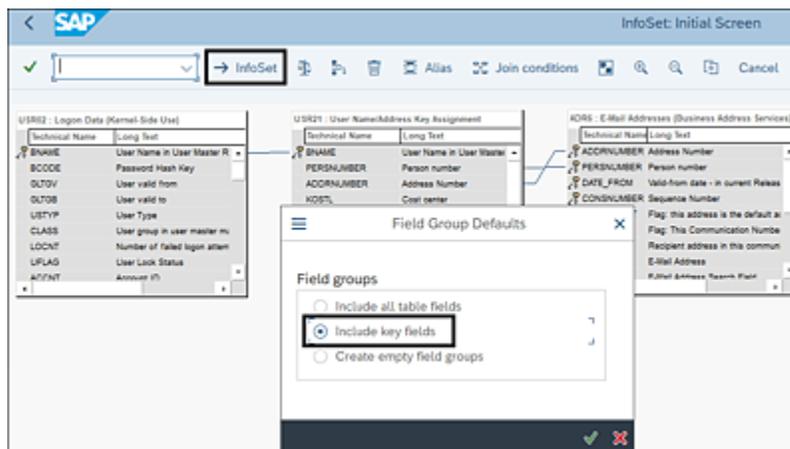
5. In the **InfoSet : Initial Screen**, use the **Insert Table** option to input the other tables (tables USR21 and ADR6) to be joined with the main table (in this case, with table USR02). After providing the additional tables to be joined, the join conditions are added by default based on the default relationships between the tables, as shown in [Figure 8.35](#).
6. Once all the required tables are joined and the join conditions are reviewed, click the **InfoSet** button, as highlighted in [Figure 8.36](#).
7. Select the method in which the fields should be selected.



**Figure 8.35** Option to Join Additional Tables

8. Select the **Include Key Fields** option, and click **OK**, as highlighted in [Figure 8.36](#). The options in **Field Groups Defaults** are as follows:

- **Include all table fields**  
All the fields from tables added in the **InfoSet** are selected by default to define an **InfoSet** query.



**Figure 8.36** Selection of Field Groups

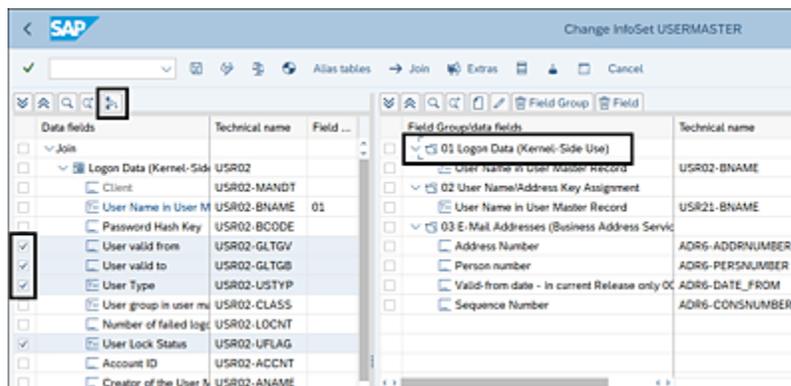
- **Include key fields**

Only the primary fields from tables added in the **InfoSet** are selected by default, and any additional fields required for analysis should be added to the selection manually.

- **Create empty field groups**

Only the field groups are created, and fields required for analysis should be selected manually.

9. In the **Change InfoSet USERMASTER** screen, review the fields selected in the right pane **Field Group/data fields** column. You may add any additional fields required for analysis by selecting the corresponding checkbox and clicking on the **Insert field(s) in field group** option, as highlighted in [Figure 8.37](#).



**Figure 8.37** Selection of Additional Fields in the InfoSet

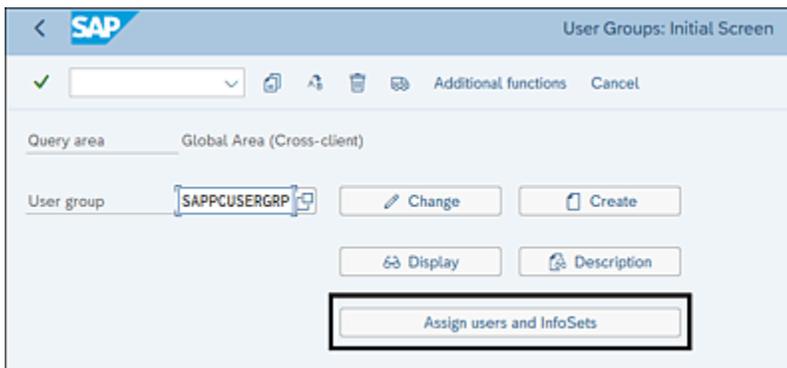
10. Click **Save**, and then click **Generate** to complete the configuration of the InfoSet. On successful generation of the InfoSet, you'll receive the **InfoSet <USERMASTER> generated** message.

The next step is to assign the InfoSet to a user group.

## Map the InfoSet to the User Group

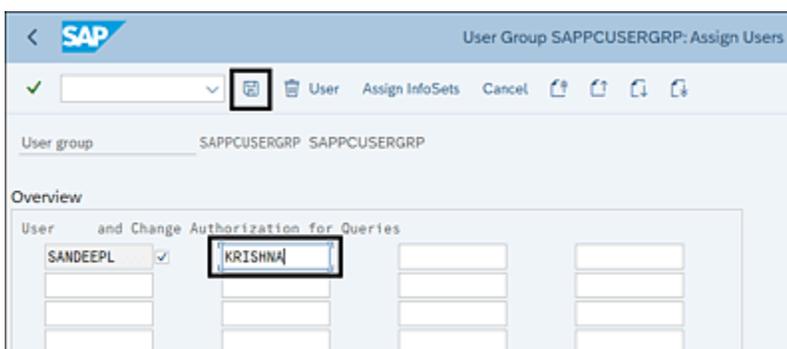
The user group acts as an additional authorization check, where the InfoSet can be used for creation of a query by only those users tagged to the user group. To review the users assigned to the user group or to add new users to the user group, follow these steps:

1. Go to Transaction SQ03.
2. Enter the name of the user group, and click the **Assign users and InfoSets** option, as highlighted in [Figure 8.38](#).



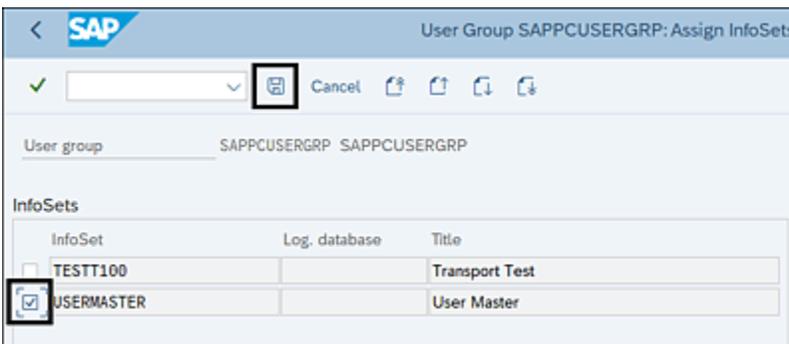
**Figure 8.38** Assigning Users and InfoSets with the User Group

3. The **Overview** section shows the list of users already having access to the user group, and additional users can be added by entering the user IDs in the blank fields, as shown in [Figure 8.39](#).



**Figure 8.39** Review of Users Mapped to the User Groups

4. Click **Save** to complete the assignment of new users to the user group.
5. Click the **Assign InfoSets** button to assign the InfoSet to the user group.
6. Select the InfoSet that was created in the previous step, and click **Save**, as highlighted in [Figure 8.40](#).



**Figure 8.40** Mapping the InfoSet to the User Group

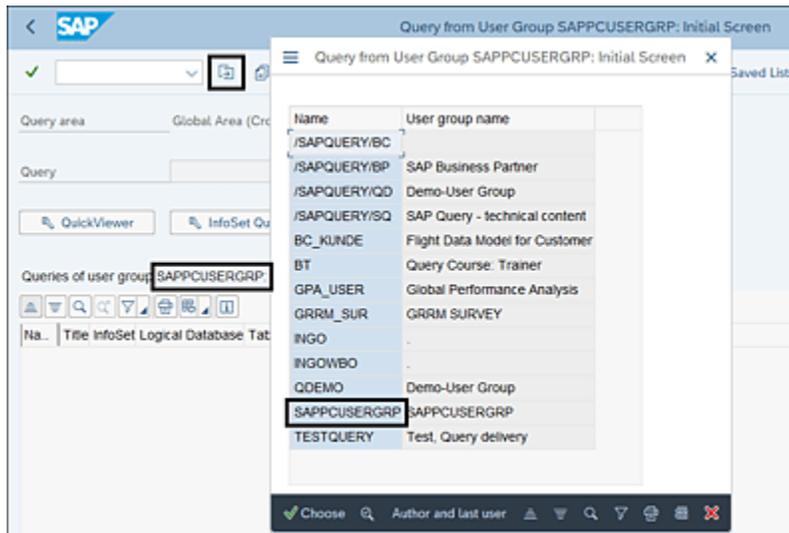
Now that the InfoSet has been created and mapped to user group, the subsequent step involves the configuration of the InfoSet query.

### ***Configure the InfoSet Query***

An InfoSet query is defined to perform the field criteria segregation. This is required to identify all the fields necessary for analysis in the business rule and those fields required to be part of the output report of CCM. To configure an InfoSet query, follow these steps:

1. Execute Transaction SQ01. It's important to ensure that you're in the correct user group, as only InfoSets associated with the current user group can be selected

to create a query. If the right user group isn't selected, click the **Other User Group** button, select the required user group from the list, and click **OK**, as highlighted in [Figure 8.41](#).

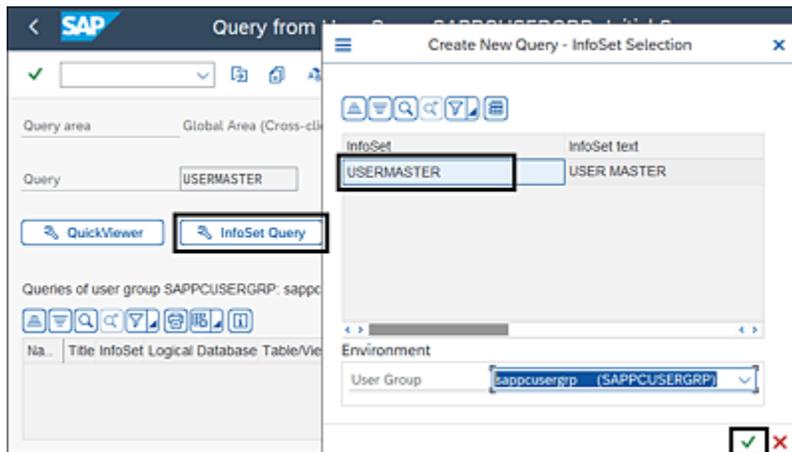


**Figure 8.41** Selection of the User Group for Query Creation

2. Enter a new query name in the **Query** field, and click the **InfoSet Query** button.
3. From the **Create New Query - InfoSet Selection** popup screen, select the required InfoSet where the tables and fields were selected, and click **OK**, as outlined in [Figure 8.42](#).
4. The **InfoSet Query** screen (see [Figure 8.43](#)) shows the list of tables and fields selected in the InfoSet in the **Field Groups/Fields** section. Select the appropriate checkboxes against each field. You may select **Selection**, **Output**, or both. By selecting the **Selection** checkbox, the field is available for filter criteria or deficiency criteria while defining a business rule. To

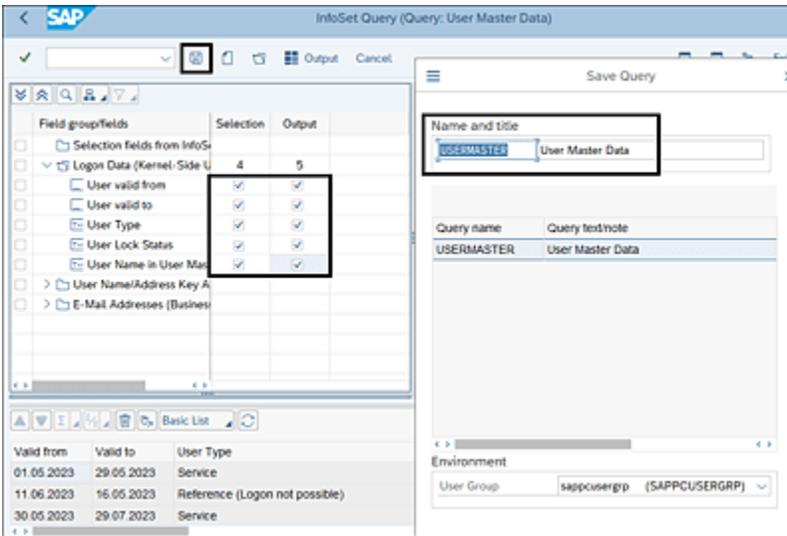
understand the relevance of filter and deficiency criteria, [Section 8.3.2](#).

By selecting the **Output** checkbox, the field will be available as part of the output report of the business rule. If a field is selected only for output, the same can't be used for filter or deficiency criteria in a business rule. To understand the relevance of the output report in a business rule, see [Section 8.3.1](#).



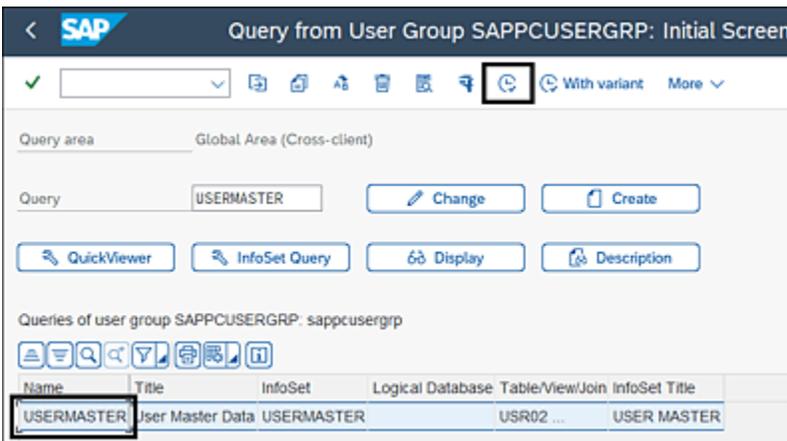
**Figure 8.42** Selection of the InfoSet for Query Definition

5. Once the required selections are made, click **Save**, and enter the name of the InfoSet query in the popup screen. Click **OK** to complete the configuration of the InfoSet query, as highlighted in [Figure 8.43](#).



**Figure 8.43** Option to Save the InfoSet Query Defined

Once the query is saved, you can execute it to test if the results being fetched by the tables joined in the InfoSet are in line with the expectation from relevant tables. To test, select the InfoSet query, and click **Execute**, as highlighted in [Figure 8.44](#).



**Figure 8.44** Execution of the InfoSet Query

In the following screen, enter report-specific selections such as **User Type**, **Validity**, and so on, and click **Execute** to run the query and display the results screen. Note that this

output is based on the tables joined and the filters. Validate the results before proceeding with the next step.

### **Select the SAP Query in the Data Source**

To create an **SAP Query** subscenario data source, follow the steps in [Section 8.2.1](#), and to start configuring a data source, follow these steps:

1. Navigate to the **General** tab, and fill in all the relevant information.
2. Navigate to the **Object Field** tab, and select the **SAP Query** subscenario.
3. Select the **Main Connector** where the **InfoSet Query** was configured.
4. Click the **Query Lookup** option to find the query to be selected in the data source, as highlighted in [Figure 8.45](#).
5. From the **Lookup** screen, search for the query based on the user group, and click **Apply**. From the results, select the **Query**, and click **OK**, as highlighted in [Figure 8.46](#).

On selection of the query, all the relevant fields selected in the InfoSet query are auto-populated in the data source, which can be used for analysis in the business rule, as shown in [Figure 8.47](#).

---

#### **Note**

Any fields for which descriptions needs a change can be updated manually.

**Data Source**

Save Refresh

Timeframe 14.11.2023 ID 50001460 Last Modified On

General **Object Field** Connector Attachments and Links

**Sub Scenario**

\* Sub Scenario: SAP Query \* Connection Type: SAP System

**Parameters**

Main Connector: TNDCLNT100 Query Lookup

Query Name: User Group: Query Area: Standard

**Fields**

**Figure 8.45** Query Lookup Option in the SAP Query Data Source

**Lookup**

Query Name: USERMASTER User Group: SAPPUSERGRP Query Area: Global

Apply Clear

Query Name	Query Text	Query Area	User Group
USERMASTER	User Master Data	Global	SAPPUSERGRP

OK Cancel

**Figure 8.46** Selection of the Query in the Data Source

**Data Source**

Save Refresh

Timeframe 14.11.2023 ID 50001467 Last Modified On

General **Object Field** Connector Attachments and Links

**Sub Scenario**

\* Sub Scenario: SAP Query \* Connection Type: SAP System

**Parameters**

Main Connector: TNDCLNT100 Query Lookup

Query Name: USERMASTER Query Area: Global

User Group: SAPPUSERGRP

**Fields**

Field ID	Technical Information	Source Table	Source Field	Field Type	Amount or Quantity	Ref Field ID	Field Description
00000001	D001_USR02_GLTGV	USERMASTER	USR02_GLTGV	D		00000000	User valid from
00000002	D002_USR02_GLTGB	USERMASTER	USR02_GLTGB	D		00000000	User valid to
00000003	D003_TEXT_USR02_USTYP	USERMASTER	TEXT_USR02_USTYP	C		00000000	Text User Type
00000004	D004_TEXT_USR02_UFLAG	USERMASTER	TEXT_USR02_UFLAG	C		00000000	Text User Lock Status

**Figure 8.47** Fields Selected from the InfoSet Query in the Data Source

Further note that additional connectors can be defined to connect to the other target systems. However, ensure that the query is defined with the same name in each of those target systems and maintained in the **Connector** tab. You'll finish by clicking **Save** to complete the data source configuration.

## **SoD Integration**

The **SoD Integration** subscenario is used to continuously monitor access-related controls such as critical actions, critical permissions, SoD, and so on at the user level or role level. To use this subscenario, the prerequisite is that SAP Access Control should be activated and configured on the same system where SAP Process Control is being used. Using the **SoD Integration** subscenario, there is no requirement of an RFC connector to connect to a target system as it integrates with SAP Access Control on the same system.

SAP Process Control delivers a predefined set of fields that is available in the data source. Follow the steps in [Section 8.2.1](#) to start configuring a data source by filling in the details on the **General** tab. Navigate to the **Object Field** tab, and then follow these steps:

1. Select the **Sub Scenario** as **SoD Integration**.
2. Ensure that the **Connection Type** is **Local Data Source** (will be selected automatically).
3. Validate all the fields for analysis in the business rule that are auto-populated.

4. Make necessary changes to the **Field Description**, as shown in [Figure 8.48](#).

Field ID	Technical Information	Source Table	Source Field	Field Type	Amount or Quantity	Ref Field ID	Field Description
00000013	IV_EXPIRED_USER		IV_EXPIRED_USER	C		00000000	Expired User
00000014	IV_LANGU		IV_LANGU	C		00000000	Language
00000015	IV_LOCKED_USER		IV_LOCKED_USER	C		00000000	Locked User
00000016	IV_OBJECT_TYPE		IV_OBJECT_TYPE	I		00000000	Object Type
00000017	IV_OFFLINE_ANALYSIS		IV_OFFLINE_ANALYSIS	C		00000000	Offline analysis
00000018	IV_REPORT_FORMAT		IV_REPORT_FORMAT	N		00000000	Report Format
00000019	IV_REPORT_VIEW		IV_REPORT_VIEW	N		00000000	Risk Analysis Report View
00000020	IV_ROLE_TYPE		IV_ROLE_TYPE	C		00000000	Role Type for risk analysis
00000021	IV_SIMU_RISK_ONLY		IV_SIMU_RISK_ONLY	C		00000000	Simulation risk only
00000022	IV_USE_SIMU_AUTH_ONLY		IV_USE_SIMU_AUTH_ONLY	C		00000000	Use simulation authorization

**Figure 8.48** SoD Integration Subscenario Configuration

5. Click **Save** to complete the configuration of the **SoD Integration**-based data source.

Understanding the significance of each predefined field in the data source with **SoD Integration** is important. SAP provides a predefined set of filter values that must be chosen when configuring a business rule for **SoD Integration**-based data sources. [Table 8.5](#) details each of these fields and the potential values that can be selected for the fields in the filter criteria while setting up a business rule.

Field	Possible Filter Values
-------	------------------------

Field	Possible Filter Values
<b>Report Type Table</b>	<ul style="list-style-type: none"> <li>• <b>01 = Action Level</b></li> <li>• <b>02 = Permission Level</b></li> <li>• <b>03 = Critical Action</b></li> <li>• <b>04 = Critical Permission</b></li> <li>• <b>05 = Critical Role/Profile</b></li> <li>• <b>06 = Analytical Report</b></li> <li>• <b>07 = Mitigating Controls</b></li> <li>• <b>08 = Invalid Mitigating Controls</b></li> <li>• <b>09 = Alerts</b></li> <li>• <b>10 = Access Risk Assessment</b></li> <li>• <b>21 = SoD Reports</b></li> <li>• <b>22 = ERM Role</b></li> <li>• <b>30 = Role</b></li> <li>• <b>31 = User</b></li> <li>• <b>32 = Profile</b></li> <li>• <b>33 = User Org</b></li> <li>• <b>34 = Role Org</b></li> <li>• <b>35 = HR Object</b></li> </ul>
<b>Object Range Table</b>	<p>Values to be passed in this field should be a manual entry and depends on the value selected for the <b>Object Type</b> field.</p>

Field	Possible Filter Values
<b>System Range Table</b>	Connector ID of the target system from which the user and role details are to be analyzed.
<b>Object Type</b>	<ul style="list-style-type: none"> <li>• <b>1 = User</b></li> <li>• <b>2 = Role</b></li> <li>• <b>3 = Profile</b></li> <li>• <b>4 = HR Object - Job</b></li> <li>• <b>5 = HR Object - Org Unit</b></li> <li>• <b>6 = HR Object - Position</b></li> <li>• <b>7 = Action</b></li> <li>• <b>8 = User Org</b></li> <li>• <b>9 = Role Org</b></li> <li>• <b>10 = User Group</b></li> <li>• <b>11 = Org Unit</b></li> </ul>
<b>Risk Level Range</b>	Level of risk to be considered while analyzing the data, for example, <b>High, Critical.</b>

Field	Possible Filter Values
User Type	<ul style="list-style-type: none"> <li>• <b>0 = All</b></li> <li>• <b>A = Dialog</b></li> <li>• <b>B = System</b></li> <li>• <b>C = Communication</b></li> <li>• <b>L = Reference</b></li> <li>• <b>S = Service</b></li> </ul>
Analysis Mode	<ul style="list-style-type: none"> <li>• <b>1 = Ad Hoc Foreground</b></li> <li>• <b>2 = Ad Hoc Background</b></li> <li>• <b>3 = Batch</b></li> </ul>
Offline Analysis	<ul style="list-style-type: none"> <li>• <b>X - True (selected)</b></li> <li>• <b>” - False</b></li> </ul>
Report Format	<ul style="list-style-type: none"> <li>• <b>1 = Summary</b></li> <li>• <b>2 = Detail</b></li> <li>• <b>3 = Management Summary</b></li> <li>• <b>4 = Executive Summary</b></li> </ul>
Role Type	<ul style="list-style-type: none"> <li>• <b>1 = Technical Role</b></li> <li>• <b>2 = Business Role</b></li> <li>• <b>3 = CUA Role</b></li> </ul>

Field	Possible Filter Values
Simulation Risk Only	<ul style="list-style-type: none"> <li>• X - True (selected)</li> <li>• " - False</li> </ul>
Use Simulation Authorization Only	<ul style="list-style-type: none"> <li>• X - True (selected)</li> <li>• " - False</li> </ul>

**Table 8.5** Available Values for Predelivered Filter Fields

All the other fields available for selection can have dynamic filters based on the data maintained in the specific system. Using these filters, you can analyze actions, permission-level critical access, and SoD at the user level or role level using **SoD Integration**.

## 8.3 Business Rules

After creating the data source to retrieve information from the target system, the subsequent step involves defining the business rule. The data source fetches raw data from the target system, and it's essential to analyze this data to identify any exceptions. This analysis can be achieved by applying filters to specific fields. Filters aid in ensuring that there are no false positives. Additionally, the definition of deficiency criteria is key for identifying any data that doesn't align with the control requirements.

If the analysis requires comparison of different fields or managing any string values, the same can be achieved with BRFplus conditions and calculations. This section provides a detailed explanation of how a business rule is defined and the relevance of the filters, deficiencies, and output format.

To initiate the creation of a business rule, it's important to first define the data source, following the steps outlined in [Section 8.2.1](#). The configuration of business rules varies depending on the subscenario used for creating a data source. This scenario will provide a step-by-step process for defining a business rule for a data source created using the configurable subscenario.

### 8.3.1 Configuration of Business Rules

For a business rule using a configurable data source, there are two modes of analysis to evaluate the data. The first involves analyzing change logs, while the second mode

monitors the current values maintained in the tables. Comprehensive details for both analysis methods are elaborated on in the following sections.

## **Change Log Check**

The business rule is created to monitor the maintenance of the **Duplicate Invoice Check** configuration. For example, considering only the company code **0001** is within the scope, any modifications in the fields such as **Check Co. Code, Check Reference, and Check Inv. Date** are to be reported to the control owner. The control owner is responsible for validating these changes.

To review the existing business rules or to create a new one, follow these steps:

1. Execute Transaction NWBC, and navigate to the **Rule Setup** work center.
2. Under the **Continuous Monitoring** work group, execute the **Business Rules** work item.
3. Click the **Create** button.
4. Click the **Search** button next to the **Data Source** field.

In the search screen, there are multiple options available as input criteria to search for the data source, as follows:

- **Data Source**  
Name of the data source that is defined while configuring the data source.
- **Sub Scenario**  
Type of subscenario and the search gives the complete list

of data sources created using the subscenario as results.

- **Connection Type**

Select the connection type (**S/4** or **SAP System**), and the search gives the complete list of data sources created using the connection type as results.

- **Search Terms**

Using the search option, select the search term to identify the list of data sources for which the search terms are mapped in the **General** tab of the data source.

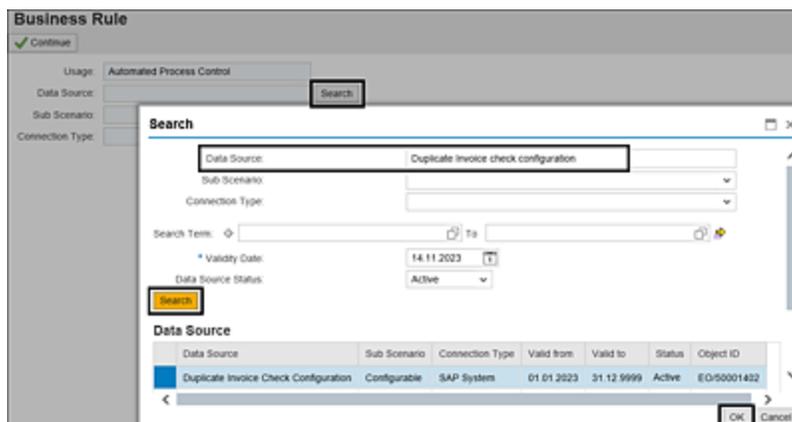
- **Validity Date**

Acts as a filter that only those data sources created on or before the date will be shown in the results for selection.

- **Data Source Status**

Acts as a filter so that only those data sources with the specific status selected as **Active**, **New**, **In Review**, or **Inactive** will be shown in the results for selection.

Input the name of the **Data Source**, click **Search**, select the **Data Source** from the results, and click **OK** to start configuring the business rule, as outlined in [Figure 8.49](#).



**Figure 8.49** Selection of the Data Source to Create a Business Rule

The business rule will have the following steps, which we'll discuss in the following sections:

- **Basic Information**
- **Data for Analysis**
- **Filter Criteria**
- **Deficiency Criteria**
- **Conditions and Calculations**
- **Output Format**
- **Technical Settings**
- **Adhoc Query**
- **Attachments and Links**

### ***Basic Information***

This step is used to define business rule basic information such as **Name**, **Description**, **Valid From**, and **Valid To**, similar to other master data definitions. Additionally, the fields in [Table 8.6](#) must be defined.

<b>Field Name</b>	<b>Purpose and Usage</b>
-------------------	--------------------------

Field Name	Purpose and Usage
<b>Category</b>	<p>For a business rule using a configurable data source, two categories are available for selection:</p> <ul style="list-style-type: none"> <li>• <b>Change Log Check:</b> Select this option if the requirement is to monitor the changes made to the configuration.</li> <li>• <b>Value Check:</b> Select this option if the requirement is to compare the current values of the configuration against the expected baseline values</li> </ul>
<b>Analysis Type</b>	<p>Depending on the category selected in the previous step, the values available in the dropdown of this field varies. If the category selected is <b>Change Log Check</b>, the following options are available for selection:</p> <ul style="list-style-type: none"> <li>• <b>Changes</b> Returns the detailed change records, including the old value, new value, changed by, changed date, and changed time.</li> <li>• <b>Number of Changes</b> Returns the count of changes made to each field considered in the deficiency criteria.</li> <li>• <b>Review Required for Changes</b> The changes will be sent to the control owner for review, which should be</li> </ul>

Field Name	Purpose and Usage
	<p>validated before considering the same as an issue in the control.</p> <ul style="list-style-type: none"> <li>• <b>Monitor</b> This is a check to monitor values from the change records. The new value from each change record is compared against the baseline values to revert only those change records that deviate from the objective of the control.</li> <li>• <b>Pattern</b> This option requires the definition of a calculated field that contains the conditions to identify changes indicating a certain pattern, which should be evaluated further for any potential fraud.</li> </ul> <p>If the category selected is <b>Value Check</b>, the analysis type is populated as <b>Monitor Value</b> by default.</p>
<b>Status</b>	<p>Indicates the current status of the business rule with the following four possible statuses:</p> <ul style="list-style-type: none"> <li>• <b>New</b> When a new business rule is being created, it's shown with this status.</li> </ul>

Field Name	Purpose and Usage
<b>Status</b> (Cont.)	<ul style="list-style-type: none"> <li> <b>• In Review</b>            The business rule should be updated to this status when it's saved for the first time.         </li> <li> <b>• Active</b>            This status appears when the business rule is reopened after saving it <b>In Review</b>. Only active data sources and business rules can be used for scheduling automated controls for monitoring.         </li> <li> <b>• Inactive</b>            If the business rule is no longer valid, the same can be marked as <b>Inactive</b>, and then it will no longer be available for assignment to a control or scheduling for monitoring.         </li> </ul>
<b>Search Terms</b>	<p>This is an optional configuration that can be enabled from Transaction SPRO and used to search for business rules based on certain terms. These search terms are used to fetch the business rule while performing business rule assignment to a control. Refer to the information on the <b>General</b> tab from <a href="#">Section 8.2.1</a> to understand the process of definition of a search term and mapping it with a data source and business rules in Transaction SPRO.</p>

Field Name	Purpose and Usage
<b>Connectors</b>	The list of connectors that are selected in the data source are auto-populated in this section by default. The <b>Main Connector</b> checkbox is grayed out from modification because it represents the main connector selected in the data source. Select/unselect the checkboxes in the <b>Applied</b> column based on the target systems in scope. Only those connectors selected in this column can be scheduled for monitoring.

**Table 8.6** Definition of the Basic Information Tab in the Business Rule

**Business Rule: Step 1 of 9 (Basic Information)**

Timeframe: 14.11.2023

**General**

- Name: Duplicate Invoice Check
- Description: Monitor changes made to duplicate invoice check configuration
- Category: Change Log Check
- Analysis Type: Changes
- Status: In Review
- Valid from: 14.11.2023
- Valid to: 31.12.9999
- Usage: Automated Process Control
- Data Source: Duplicate Invoice Check Configuration
- Sub Scenario: Configurable
- Connection Type: SAP System
- Data Source Status: Active

**Connectors**

Target Connector	Main Connector	Applied
TMDCLNT100	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

**Search Term**

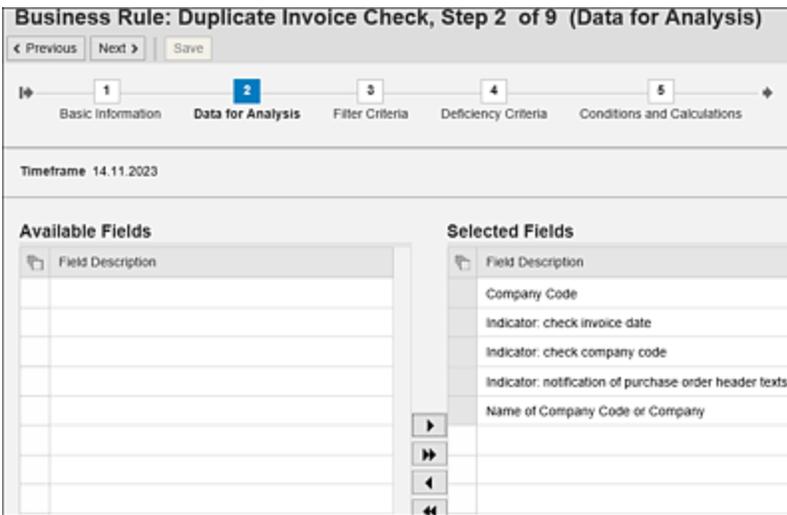
Term 1: Term 2: Term 3: Term 4: Term 5:

**Figure 8.50** Basic Information Tab in the Business Rule

For this scenario, select the **Category** as **Change Log Check**, and populate the details in other fields, as shown in [Figure 8.50](#). Then, navigate to the next step.

## ***Data for Analysis***

In this step, the **Available Fields** section has the list of fields that are selected in the data source. Select the fields required for analysis in **Filter Criteria** and **Deficiency Criteria** for output format, and move them to the **Selected Fields** section, as outlined in [Figure 8.51](#).



**Figure 8.51** Selection of Fields for Analysis

Once the fields are selected, navigate to the third tab, **Filter Criteria**.

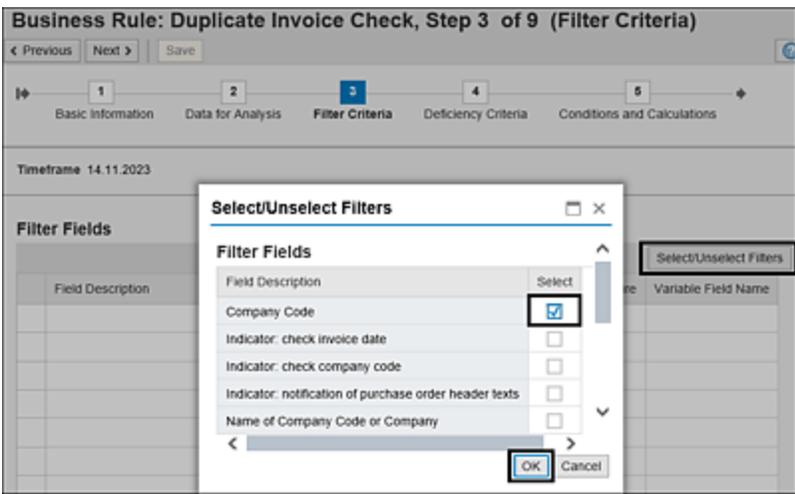
### ***Filter Criteria***

The **Filter Criteria** step provides the option to add filters to the required fields. As outlined at the start of this section, the control is limited to the company code **0001**. To streamline the monitoring process and exclude details of other company codes that may be redundant or delivered by SAP but not in use within the organization, these can be excluded from monitoring using the filter criteria.

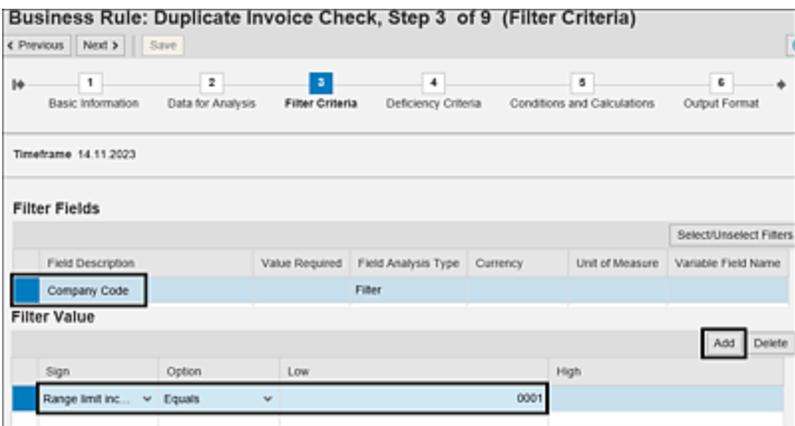
To add fields into the scope of filters, click **Select/Unselect Filters**, select the **Company Code** field from the popup

screen, and click **OK**, as outlined in [Figure 8.52](#).

After selecting the filter fields, proceed to add the values to be considered for filtering in the **Filter Value** section. In this case, choose the **Company Code** field, and click the **Add** button to include the filter value as **Range limit included Equals 0001**. This ensures that only the 0001 company code is considered for analysis, as outlined in [Figure 8.53](#).



**Figure 8.52** Selection of Fields for Filter Criteria



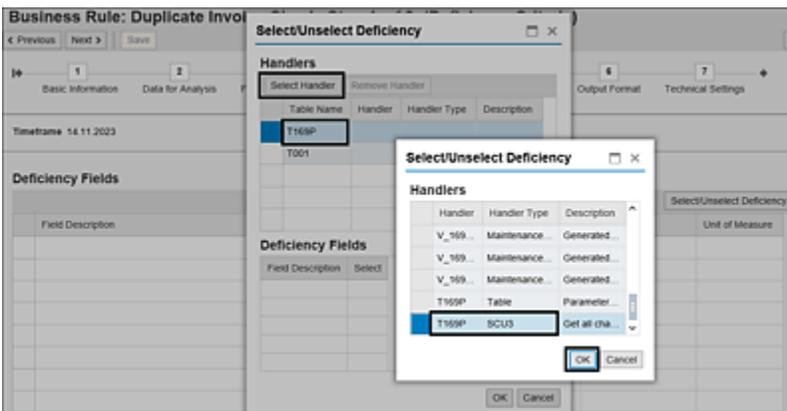
**Figure 8.53** Addition of Filter Values in the Business Rule

To understand more about the purpose of the **Sign**, **Option**, **Low**, and **High** fields, refer to the information on the **Adhoc Query** tab in [Section 8.2.1](#).

## **Deficiency Criteria**

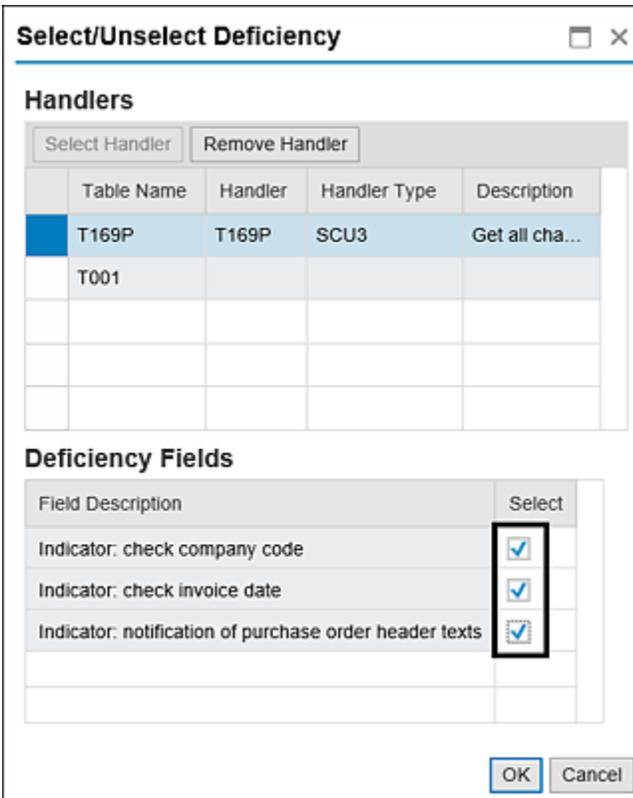
In this step, include the fields that need to be monitored for changes from the table. To add these fields, select the **Select/Unselect Deficiency** option.

To obtain the fields for selection, click the **Select Handler** option, and choose **SCU3** from the **Handlers** list (as changes to SAP tables are recorded in the Transaction SCU3 handler) for the table where the deficiency field exists. Click **OK** to confirm, as detailed in [Figure 8.54](#).



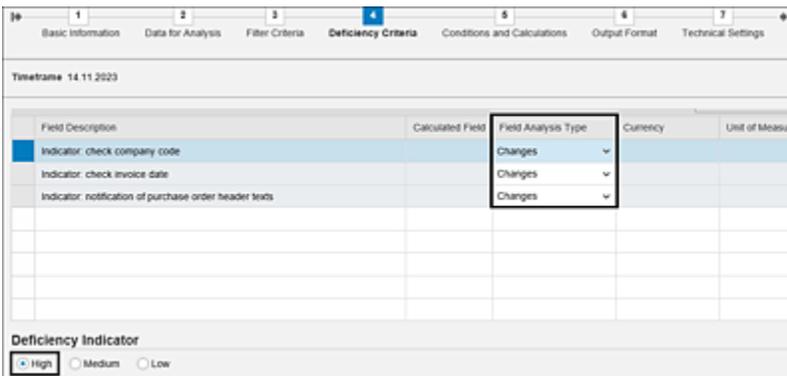
**Figure 8.54** Selection of Handler for the Table

On selecting the handler, the **Deficiency Fields** section is populated with a list of fields that can be selected for deficiency criteria. From the list, select the fields for which changes should be monitored, and click **OK** to complete the selection of deficiency fields, as shown in [Figure 8.55](#).



**Figure 8.55** Selection of Deficiency Fields

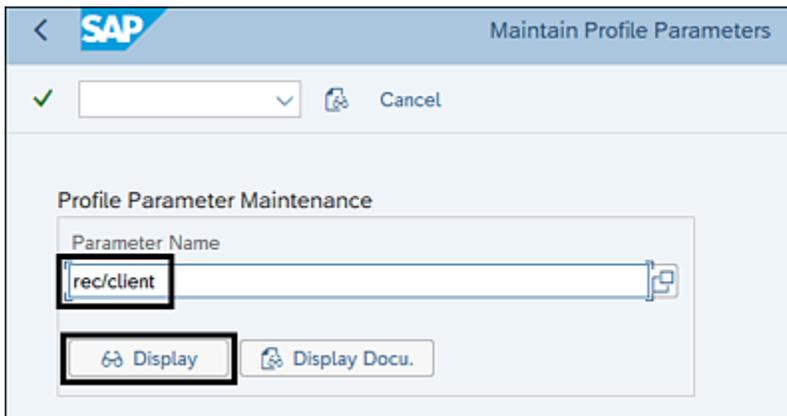
After selecting the deficiency fields, the next step is to choose the type of analysis to be performed on these fields. In the change log check scenario, the only available option in the **Field Analysis Type** is **Changes**. Select this option for each deficiency field, and then update the deficiency indicator as **High**, **Medium**, or **Low** based on the criticality of the field, as shown in [Figure 8.56](#).



**Figure 8.56** Selection of Field Analysis Type and Deficiency Indicator

To enable the proper functioning of a change log check business rule, a couple of prerequisites must be configured in the target system. These prerequisites ensure that any changes made to the tables are accurately recorded:

1. System-level change logging should be enabled using the Transaction RZ10 system parameter REC/CLIENT. To review the configurations, access Transaction RZ11, enter the **Parameter Name** as “rec/client”, and click **Display**, as shown in [Figure 8.57](#).



**Figure 8.57** Transaction RZ11: Parameter Screen

Review the values maintained under **Value of Profile Parameter**. This parameter should be active, and the values for **Default Profile**, **Instance Profile**, and **Current Value** should be maintained as **ALL**. If the values are shown as **OFF**, reach out to your Basis team to change the value. [Figure 8.58](#) shows the parameter in each of the profiles with values.

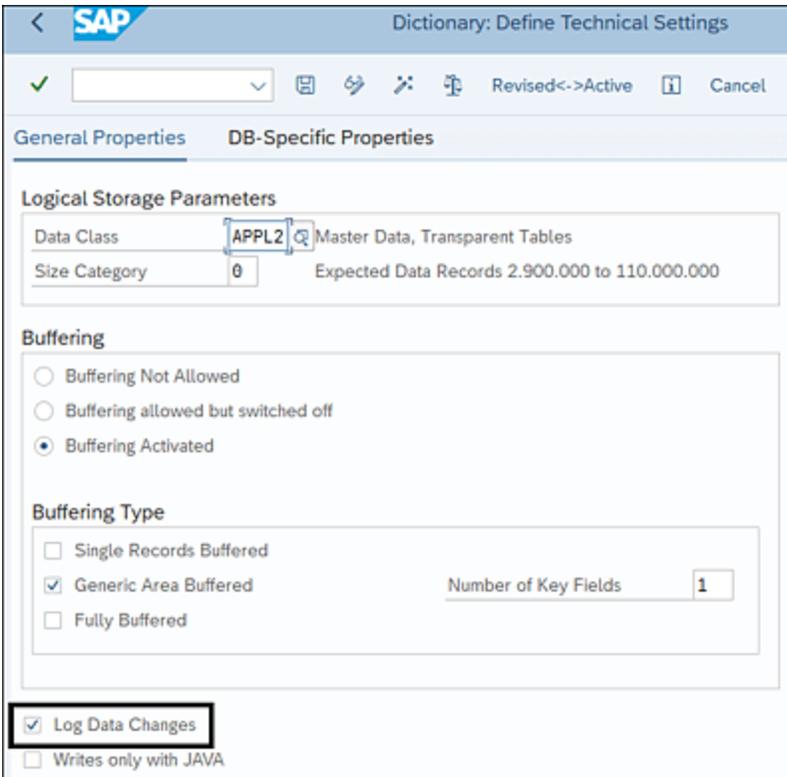
Metadata for Parameter rec/client	
Description	Value
Name	rec/client
Type	String
Further Selection Criteria	^(OFF ALL [0-9]{3}){0,9}\$
Unit	
Parameter Group	Database
Parameter Description	Activate Deactivate table auditing
CSN Component	BC-DB-DBI
System-Wide Parameter	No
Dynamic Parameter	No
Vector Parameter	No
Has Subparameters	No
Check Function Exists	No
Value of Profile Parameter rec/client	
Expansion Level	Value
Kernel Default	OFF
Default Profile	ALL
Instance Profile	ALL
Current Value	ALL
Origin of Current Value: Default Profile	

**Figure 8.58** Review of rec/client Parameter Values

- It's also important to ensure the change log is enabled at the specific table level. If the system-level change log is enabled as shown in the previous step, the changes for a table won't be recorded unless the change log is activated for each table in the monitoring scope.

To review the change log settings of the table, go to Transaction SE11, enter the name of the table for which change logs configuration should be reviewed, and click **Display**. Click the **Technical Settings** button, and navigate to **General Properties**. Verify the **Log Data Changes** checkbox. This should be enabled (checked) to record the changes, as shown in [Figure 8.59](#).

Changes for a table will be logged only if both the prerequisites are configured to log changes. To review the changes for the table, access Transaction SCU3, and specify the name of the table and the period for which the changes can be reviewed.



**Figure 8.59** Review the Log Data Changes Configuration for the Table

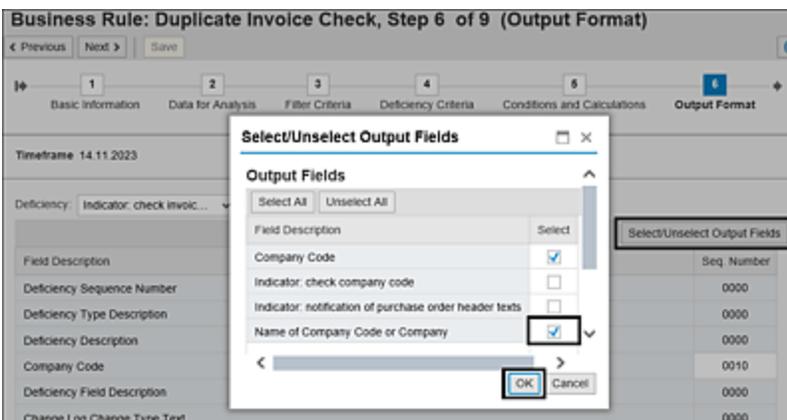
## ***Conditions and Calculations***

This tab is used in defining BRFplus conditions that are essential for data analysis, particularly when direct reading of table data doesn't meet the control monitoring criteria. To establish this, a calculated field should be defined in the **Deficiency Criteria** step. Additionally, this tab is used to include additional filter conditions when a filter requires specific BRFplus conditions or when a filter needs to be added to a field already considered as a deficiency criterion. To understand more about conditions and calculations, [Section 8.3.3](#).

## ***Output Format***

This step showcases the fields included in the output report of the automated monitoring jobs received by the control owner. It also indicates the sequence in which these fields should appear in the report. Details such as **Deficiency Sequence Number, Deficiency Type Description, Deficiency Description, Deficiency Field Description, Changed Text, Changed On, Changed At, and Changed By** are automatically populated for all change log check rules. In addition to these default values, the filter fields will also be part of the report.

To choose additional fields from those selected in the **Data for Analysis** step, click the **Select/Unselect Output Fields** button. From the selection screen, select the required fields by clicking the checkbox, and then click **OK**, as highlighted in [Figure 8.60](#).



**Figure 8.60** Selection of Additional Output Fields

Once the fields are selected, update the sequence of each output field in the **Seq. Number** column in the way it should be represented in the output report.

## ***Technical Settings***

This step is a key configuration as part of defining the business rule. These settings drive how the automated monitoring job should execute and how the data should be fetched from the target system. The fields that need to be maintained are detailed in [Table 8.7](#).

Field Name	Purpose of configuration
<p><b>Where to Calculate Deficiency</b></p>	<p>This configuration defines where the analysis of data is to be performed, whether it should be done remotely on the target system or locally in the SAP Process Control system:</p> <ul style="list-style-type: none"> <li>• <b>Remotely</b> This option analyzes the data in the target system and returns only the deficient results to the SAP Process Control system. This option is useful when the volume of data being analyzed is huge.</li> <li>• <b>Locally</b> If this option is selected, the automated monitoring job runs and analyzes the data in the SAP Process Control system before returning the results.</li> </ul>
<p><b>Communication Mode</b></p>	<p>This configuration indicates how the jobs should execute to return the results. Following are the two available communication modes:</p>

Field Name	Purpose of configuration
	<ul style="list-style-type: none"><li>• <b>Asynchronization</b> When the business rule is executed in this mode, it creates a background job in the target system. Once the job is completed, the same returns the data to SAP Process Control using the reverse RFC connection created from the target system to SAP GRC. See <a href="#">Chapter 4, Section 4.4.2</a>, to understand how the target and source connectors are configured in connection settings. This mode of communication works only if the source connector column is filled with the RFC ID created in the target system connecting to SAP GRC system. This method is used in scenarios where the volume of data being analyzed is huge.</li><li>• <b>Synchronization</b> This communication mode doesn't create any background job in the target system, and the RFC call from SAP GRC to the target system waits till the same returns the results to SAP Process Control.</li></ul>

Field Name	Purpose of configuration
<b>Change Log Type</b>	<p>This configuration is applicable only for the business rules when the category is selected as <b>Change Log Check</b>. The business rule can fetch three types of changes to the data based on the selections made in this field as follows:</p> <ul style="list-style-type: none"> <li>• <b>Insert</b> Returns the newly created entries in the table considering the deficiency field in scope.</li> <li>• <b>Update</b> Returns the old and new values if the current values in the table are changed.</li> <li>• <b>Delete</b> Returns the details of the entries deleted from the configuration.</li> </ul>
<b>Max. No. of Records to Analyze</b>	<p>Indicates the maximum rows of data that should be analyzed to provide the results. It's always recommended to maintain a blank value in the field, so it monitors the entire set of population before returning the results.</p>

**Table 8.7** Configurations in the Technical Settings Tab

Select the configurations shown in [Figure 8.61](#), and navigate to the **Ad-hoc Query** step to test the design of the business

rule and expected results when the control is scheduled for automated monitoring.

**Business Rule: Duplicate Invoice Check, Step 7 of 9 (Te..**

< Previous   Next >   Save

5   6   7   8

Conditions and Calculations   Output Format   **Technical Settings**   Ad-hoc Query

Timeframe 14.11.2023

Where to Calculate Deficiency:  Remotely    Locally

Communication Mode:  Asynchronization    Synchronization

Change Log Type:  Insert    Update    Delete

Max. No. of Records to Analyze:

Do Not Use OLSP

**Figure 8.61** Technical Settings Configuration in a Business Rule

## ***Ad-Hoc Query***

The **Ad-hoc Query** step is used to test whether the design of the business rule is correctly defined. The source from which the business rule fetches data depends on the category of the business rule. For example, if a business rule is created for a change log check, it fetches data from Transaction SCU3. On the other hand, if the business rule is created with the category **Value Check**, it fetches data from Transaction SE16.

Following are selections to be made before clicking on **Start**:

- **Target Connector**  
Indicates the system from which the data should be fetched.

- **Max. Rows**

Maximum rows of data that should be analyzed to return the results based on the filter, deficiency, or both.

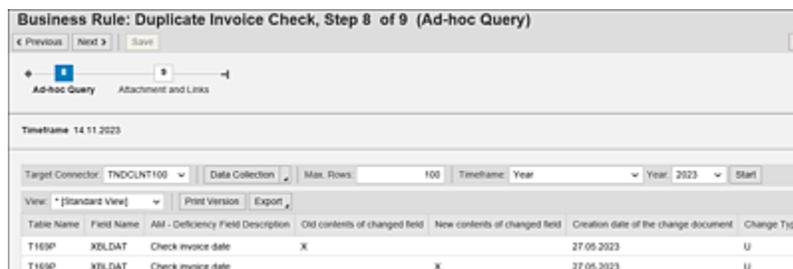
- **Timeframe and Year**

Indicates the period for which the records should be filtered and values should be returned. These fields are applicable only if the business rule is a change log check or if there are any date-related filter fields where the filter values are selected to be dynamic, such as **Run Time Determination** (see [Section 8.3.2](#) to understand more about runtime determination filters). For value check rules where there are no date filters, these selections don't have any impact as they return the results considering the data at the time of job execution.

- **Data Collection**

When the query is executed with this option, it fetches all the change records for the table in scope of the business rule just by applying the filters and additional filters in conditions. The deficiency criteria, output format, isn't considered while returning the results in this option.

[Figure 8.62](#) shows the data collection results.



The screenshot shows a web interface for a Business Rule Ad Hoc Query. The title is "Business Rule: Duplicate Invoice Check, Step 8 of 9 (Ad-hoc Query)". It includes navigation buttons for "Previous", "Next", and "Save". Below the title, there are controls for "Ad-hoc Query" and "Attachment and Links". The "Timeframe" is set to "14.11.2023". The "Target Connector" is "TNDCLNT100", and the "Data Collection" option is selected. The "Max. Rows" is set to "100", and the "Timeframe" is set to "Year" for "2023". There are "Print Version" and "Export" buttons. The main content is a table with the following data:

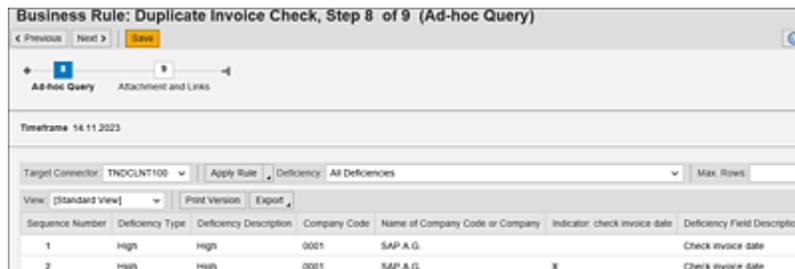
Table Name	Field Name	Alt - Deficiency Field Description	Old contents of changed field	New contents of changed field	Creation date of the change document	Change Type
T169P	XBLDAT	Check invoice date	X		27.05.2023	U
T169P	XBLDAT	Check invoice date		X	27.05.2023	U

**Figure 8.62** Data Collection in the Business Rule Ad Hoc Query

- **Apply Rule**

When the query is executed with this option, it also

applies the deficiency criteria and returns the actual results, which the control owner will receive if the job is scheduled for the connector and time frame selected while executing the ad hoc query. The results are more structured in this option as it returns the values considering the output format defined in the previous step, as shown in [Figure 8.63](#).



Sequence Number	Deficiency Type	Deficiency Description	Company Code	Name of Company Code or Company	Indicator: check invoice date	Deficiency Field Description
1	High	High	0001	SAP A.G.		Check invoice date
2	High	High	0001	SAP A.G.	X	Check invoice date

**Figure 8.63** Apply Rule Option in the Business Rule Ad Hoc Query

## ***Attachments and Links***

This step allows you to add any relevant documentation or links for future reference. The links or files attached in this step will be sent to the control owner as reference when the issue is received from CCM.

After updating all the necessary details, click **Save** to complete the configuration of the business rule. To activate the business rule, reopen it, and update the status of the rule from **In Review** to **Active** in the **Basic Information** step.

## **Value Check**

Now that the previous scenario has detailed how the changes in a particular configuration can be monitored, this

scenario provides an overview of how the values maintained in a particular configuration or transactional data can be monitored. For better clarity, a business rule will be established to monitor the maintenance of the **Duplicate Invoice Check** configuration. It's assumed that only the company code **0001** is within the scope. Per the process objective, the checkboxes for the **Check Co. Code**, **Check Reference**, and **Check Inv. Date** fields should always be enabled. The automated monitoring job will review these configurations according to the schedule, and if any of the checkboxes aren't enabled, it will be reported to the control owner. The control owner is responsible for validating the configurations and responding accordingly.

The process of configuring business rule remains the same as described in the previous section. However, this section details the areas where the configurations are different, considering the category and type of analysis is monitoring values instead of change.

### ***Basic Information***

This step is used to define business rule basic information such as **Name**, **Description**, **Valid From**, and **Valid To**, similar to other master data definitions. For this scenario, select the **Category** as **Value Check**, and **Analysis Type** is populated by default as **Monitor Value**, as shown in [Figure 8.64](#).

**Business Rule: Step 1 of 9 (Basic Information)**

Navigation: < Previous | Next > | Save

Progress: 1 (Basic Information) | 2 (Data for Analysis) | 3 (Filter Criteria) | 4 (Deficiency Criteria) | 5 (Conditions and Calculations) | 6 (Output Format) | 7 (Technical Settings)

Timestamp: 14.11.2023

**General**

- Name: Duplicate Invoice Check
- Description: Monitor Values maintained for the configuration duplicate invoice check
- Category: Value Check
- Analysis Type: Monitor Value
- Status: In Review
- Valid From: 14.11.2023
- Valid To: 31.12.9999
- Usage: Automated Process Control
- Data Source: Duplicate Invoice Check Configura...
- Sub Scenario: Configurable
- Connection Type: SAP Systems
- Data Source Status: Active

**Connectors**

Target Connector	Main Connector	Applied
TNDCLNT100	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

**Search Term**

Term 1:  Term 2:  Term 3:  Term 4:  Term 5:

**Figure 8.64** Basic Information Tab in the Value Check Business Rule

Once the details of the business rule are defined, navigate to the next step to select the required fields for analysis.

**Data for Analysis**

Select the fields required for analysis. Refer to the previous section to understand the process of selection of fields.

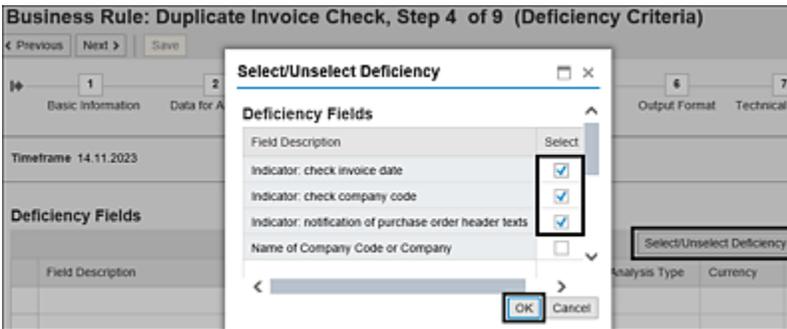
**Filter Criteria**

Because the company codes in the scope of monitoring are only for **0001**, it’s essential to add a filter for this field in this step. To understand the process of selecting the **Filter** field and adding filter values, refer to the previous section.

**Deficiency Criteria**

In this step, add the fields that should be monitored from the table, as well as their values that should be monitored. To add these fields, click the **Select/Unselect Deficiency**

button, select the fields from the list that should be monitored, and click **OK**, as shown in [Figure 8.65](#).



**Figure 8.65** Selection of Deficiency Fields: Value Check

Once the deficiency fields are selected, the next step is select the type of analysis that should be performed on these fields. In the value check scenario, there are two options in which the data can be analyzed:

- **Value Check**

Use this option if the requirement is to compare the current field configuration against the baseline values defined, for example, monitoring password parameters in the system to identify if the minimum password length isn't less than six characters.

- **Blank Check**

Use this option if the requirement is to identify whether the key fields in the master data or configurations are left blank, for example, monitoring vendor master data to identify vendor accounts for which the payment terms field is left blank.

Because the requirement in this scenario is to monitor the duplicate invoice configuration checkboxes, both options can be used as follows:

- **Value Check** can be used to identify company codes for which the configurations for any of the three fields isn't equal to X.
- **Blank Check** can be used to identify company codes for which the configurations for any of the three fields is left blank.

Configure the settings as shown in [Figure 8.66](#), representing option 1. Choose **Value Check** as the **Field Analysis Type**, input the deficiency values, and assign the **Deficiency Type** as **High**, **Medium**, or **Low** based on the field's criticality within the monitoring scope.

**Business Rule: Duplicate Invoice Check, Step 4 of 9 (Deficiency Criteria)**

Timeframe: 14.11.2023

Field Description	Calculated Field	Field Analysis Type	Currency	Unit of Measure
Indicator: check invoice date		Value Check		
Indicator: check company code		Value Check		
Indicator: notification of purchase order header texts		Value Check		

Deficiency Type	Deficiency Description	Sign	Option	Low	High
High	Check for invoice date is not activated	Range limit includ...	Not equal to	X	
Medium					
Low					

**Figure 8.66** Selection of Field Analysis Type and Deficiency Value

## **Conditions and Calculations**

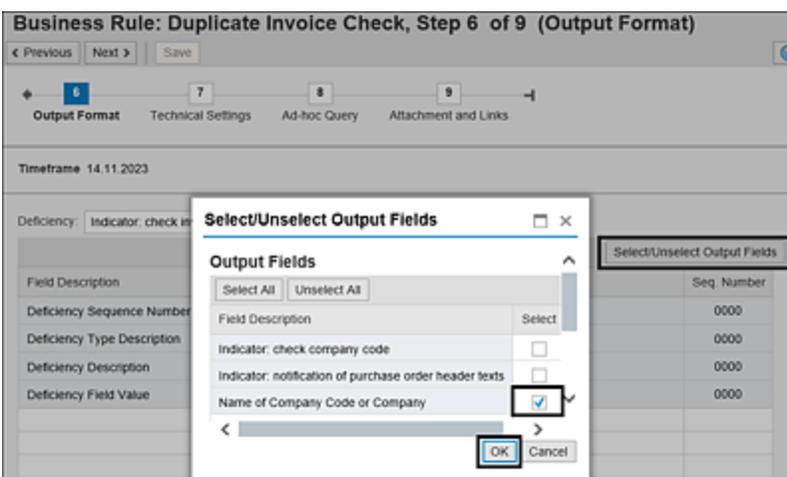
See [Section 8.3.3](#) to understand the relevance of this step.

## **Output Format**

Refer to the previous section to understand the relevance of this tab and the process of selecting additional fields required in the output report. However, the default fields for

**Value Check** rules are **Deficiency Sequence Number**, **Deficiency Type Description**, **Deficiency Description**, and **Deficiency Field Value**, as shown in [Figure 8.67](#).

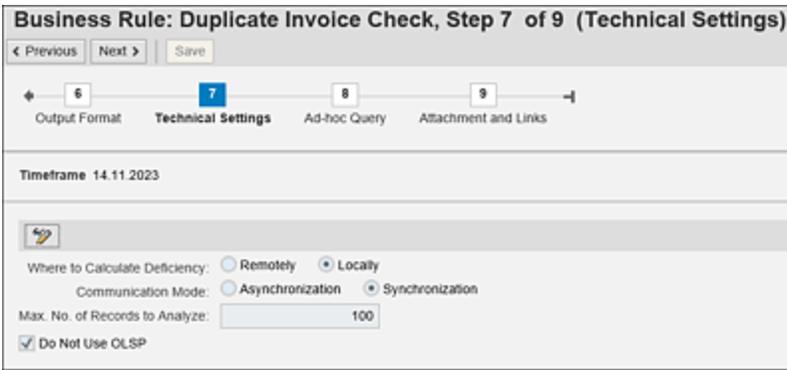
After selecting the additional fields, be sure to update the sequence of each output field in the **Seq. Number** column to reflect the order in which they should appear in the output report. Arrange the sequence numbers according to the business requirement.



**Figure 8.67** Output Format Step in the Value Check Scenario

## **Technical Settings**

The purpose of fields explained in the previous section remain the same in the value check scenario, except that the **Change Log Type** field is unavailable in this scenario, as shown in [Figure 8.68](#).



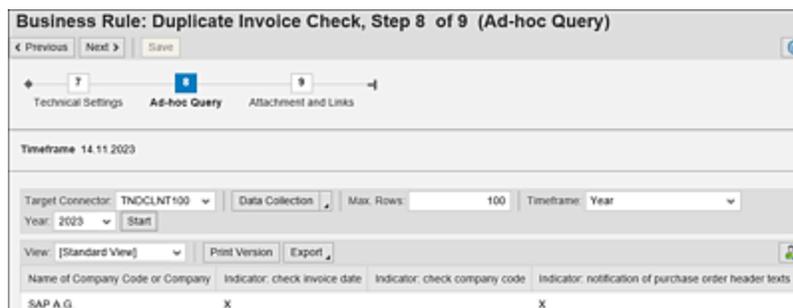
**Figure 8.68** Technical Settings Configuration in a Value Check Business Rule

## Ad Hoc Query

Refer to the previous section to understand the purpose of the **Ad-hoc Query** step and the source from which the data is fetched for a value check scenario. It also explains the purpose of using **Data Collection** and **Apply Rule**, as follows:

- **Data Collection**

When the query is executed with this option, it fetches all the current configuration values maintained in the table for the filters (**Company Code 0001**) in scope, as shown in [Figure 8.69](#).



**Figure 8.69** Data Collection in the Value Check Business Rule

- **Apply Rule**

When the query is executed with this option, it also

applies the deficiency criteria and returns the actual results, which the control owner receives if the job is scheduled for the connector and time frame selected while executing the ad hoc query. The results are more structured as it returns the values considering the output format defined in the previous step, as shown in [Figure 8.70](#).

The screenshot displays the configuration for a business rule. At the top, it says 'Business Rule: Duplicate Invoice Check, Step 8 of 9 (Ad-hoc Query)'. Below this are navigation buttons for 'Previous', 'Next', and 'Save'. There are three tabs: 'Technical Settings', 'Ad-hoc Query' (which is active), and 'Attachment and Links'. A progress indicator shows step 8 of 9. The 'Tmeframe' is set to '14.11.2023'. Below this, there are dropdown menus for 'Target Connector' (TNDCLNT100), 'Apply Rule' (Deficiency), and 'All Deficiencies'. There are also fields for 'Max. Rows' (0), 'Tmeframe' (Year), 'Year' (2023), and 'Start'. A 'View' dropdown is set to '[Standard View]', and there are buttons for 'Print Version' and 'Export'. At the bottom, a table shows the results of the query.

Sequence Number	Deficiency Type	Deficiency Description	Company Code	Name of Company Code or Company	Indicator: check
1	High	Check for Company Code is not activated	9001	SAP A.G.	

**Figure 8.70** Apply Rule Option in the Value Check Business Rule

## ***Attachments and Links***

This step allows you to add any relevant documentation or links directly to these references for future reference. The links or files attached in this tab will be sent to the control owner as reference when the issue is received from CCM.

Once all the details are update, click **Save** to complete the configuration of the business rule. To activate the business rule, reopen it and update the status of the rule from **In Review** to **Active** in the **Basic Information** step.

## **8.3.2 Customized Date Filters and Runtime Determination Rules**

The automated monitoring jobs run on a scheduled basis (daily, weekly, monthly, quarterly, half-yearly, or yearly), and it's critical that the data analyzed for controls corresponds to that specific time period. The change log check category inherently considers data only for the period during which the job runs. However, for business rules with value check categories, it's necessary to include a date field in the filter criteria. This ensures that the data is filtered only for the specific period. SAP Process Control offers a feature for dynamic filter values for such date fields in business rules. Following are the two methods of determining the dynamic date filters:

- Adding runtime determination rules in filter criteria
- Creating a custom date filter where the values are maintained in Transaction SPRO

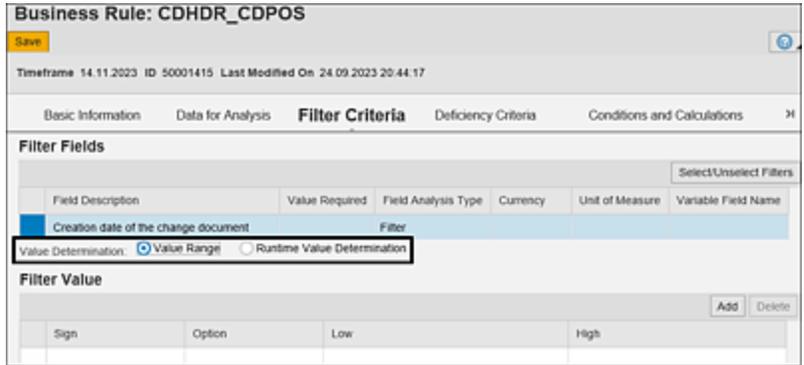
The following sections explain the process of adding filter values in the **Date** field for the scenario of monitoring records from tables CDHDR and CDPOS. the filter for the **Date** field is available in table CDHDR to consider the data specific to the test period.

## **Adding Runtime Determination Rules in Filter Criteria**

When a **Date** field is added to the filter criteria, there are two options by which the filter values can be added to it:

- **Value Range**  
This is a static filter by providing the required date filters.
- **Runtime Value Determination**  
This helps in providing dynamic filters that will be derived

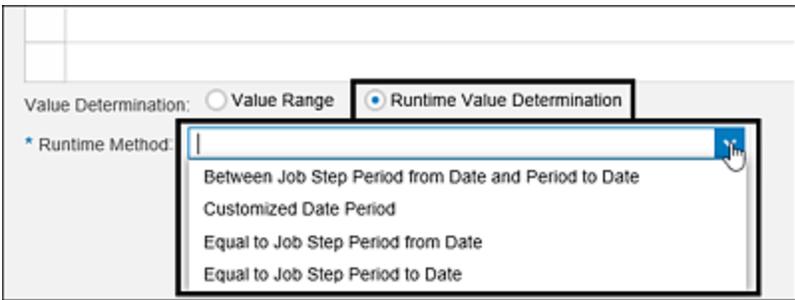
based on the time frame for which the automated monitoring job runs.



**Figure 8.71** Options to Add Filter Values for a Date Field

To understand how the time frame is selected in automated monitoring jobs, see [Section 8.5](#). [Figure 8.71](#) shows the date filter options in **Filter Criteria**.

Select the **Runtime Value Determination** radio button. The **Runtime Method** dropdown shows the values available to select for the dynamic date filter (see [Figure 8.72](#)).



**Figure 8.72** Runtime Methods Available in Selection of Values for a Date Filter

These runtime methods are as follows:

- **Between Job Period from Date and Period to Date**  
If this option is selected and the job is scheduled for the

month of September, the data for the period 09/01/YYYY to 09/30/YYYY is filtered, and all other filters and deficiency criteria defined in the business rule will be applied on top of the date filtered data.

- **Customized Date Period**

Refer to [Section 8.3.3](#) to understand more about the process of using this option.

- **Equal to Job Step Period from Date**

If this option is selected and the job is scheduled for the month of September, the data for the period 09/01/YYYY is filtered, and all other filters and deficiency criteria defined in the business rule will be applied on top of the filtered data. Ideally, it's recommended to use this option when the job is scheduled for a daily basis with which the specific date-related data will be filtered for analysis.

- **Equal to Job Step Period to Date**

If this option is selected and the job is scheduled for the month of September, the data for the period 09/30/YYYY is filtered, and all other filters and deficiency criteria defined in the business rule will be applied on top of the filtered data. Ideally, it's recommended to use this option when the job is scheduled for a daily basis with which the specific date-related data will be filtered for analysis.

Select the relevant runtime method to apply the filter value for dates, and follow the rest of the steps as outlined in [Section 8.3.1](#) to complete the configuration of the business rule.

## **Customized Date Filters in Runtime Determination**

This section details the process of configuring the runtime determination of date filters using the **Customized Date Period** option. This option is used if there is a specific requirement to have a custom test period for the standard time frames in use.

For example, if the internal controls team requires the testing results for the data belonging to the period from the 16th of last month to the 15th of the current month, the standard monthly time frames don't meet this requirement on using the runtime filters explained in [Section 8.3.2](#). Therefore, the business rule with such a requirement should have a custom date filter that can be achieved using this option.

To start configuring the customized date period, select the option in **Filter Criteria**, and take a note of the business rule **ID**, as shown in [Figure 8.73](#).

The screenshot shows the configuration interface for a business rule. At the top, it says 'Business Rule: CDHDR\_CDPOS'. Below that, there is a 'Save' button and a 'Timeframe' field with the value '14.11.2023'. The 'ID' field contains '50001415', which is highlighted with a red box. To the right of the ID, it says 'Last Modified On 24.09.2023 20:44:17'. Below this is a section titled 'Filter Fields' with a 'Select/Unselect Filters' button. A table is displayed with the following columns: 'Field Description', 'Value Required', 'Field Analysis Type', 'Currency', 'Unit of Measure', and 'Variable Field Name'. The first row has 'Creation date of the change document' in the 'Field Description' column and 'Filter' in the 'Field Analysis Type' column. At the bottom, there is a 'Value Determination' section with two radio buttons: 'Value Range' (unselected) and 'Runtime Value Determination' (selected). Below this is a 'Runtime Method' dropdown menu set to 'Customized Date Period'.

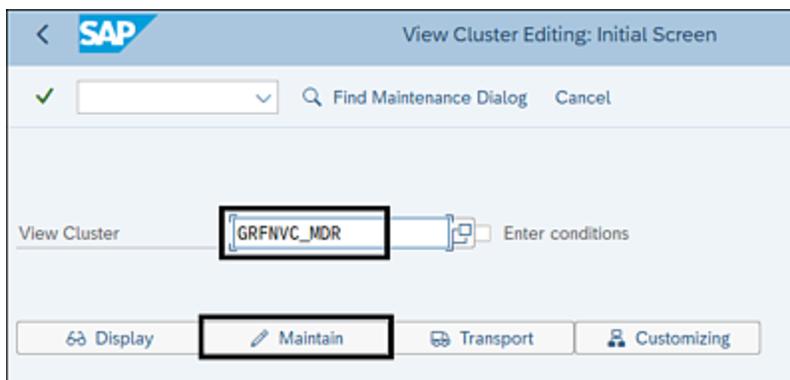
Field Description	Value Required	Field Analysis Type	Currency	Unit of Measure	Variable Field Name
Creation date of the change document		Filter			

**Figure 8.73** Selection of the Customized Date Period in the Runtime Method

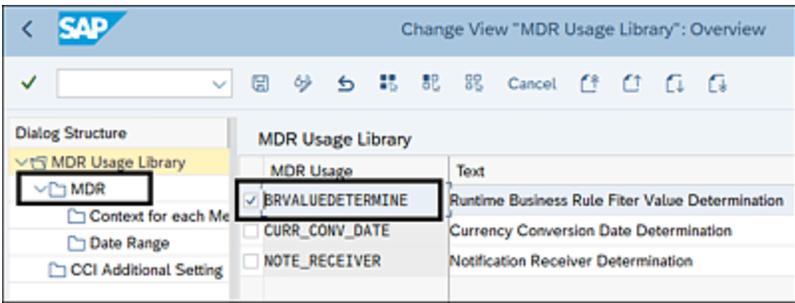
On capturing the **ID** of the business rule (e.g., 50001415, as highlighted in [Figure 8.73](#)), follow these steps:

1. Execute Transaction SM34 in the SAP Process Control system.

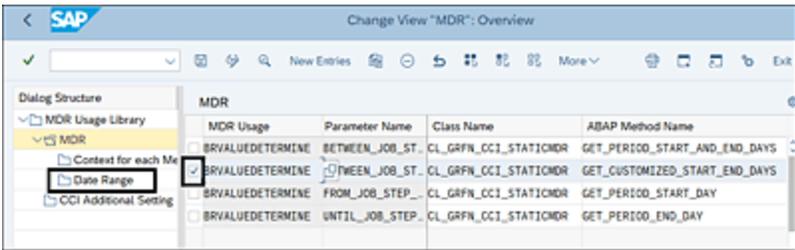
2. Enter the **View Cluster** as “GRFNVC\_MDR”, and click the **Maintain** button, as shown in [Figure 8.74](#).
3. Select the **BRVALUEDETERMINE** option, as outlined in [Figure 8.75](#), and double-click on the **MDR** folder in the **MDR Usage Library** in the **Dialog Structure**.
4. Select the **ABAP Method Name GET\_CUSTOMIZED\_START\_END\_DAYS**, and click the **Date Range** option, as shown in [Figure 8.76](#).
5. In the next screen, enter the custom parameters for each business rule to which the customized date period is selected. As explained earlier, the requirement is to schedule the business rule on a monthly basis, and the period should be the 16th of the previous month to the 15th of the current month.
6. Click **New Entries**, enter the **Parameter Name** (“BETWEEN\_JOB\_STEP\_PERIOD\_START\_AND\_END\_DAYS\_CUSTOMIZATION”), business rule ID that was captured in the **Object Field** column, and the date ranges, as shown in [Figure 8.77](#).
7. Click **Save**.



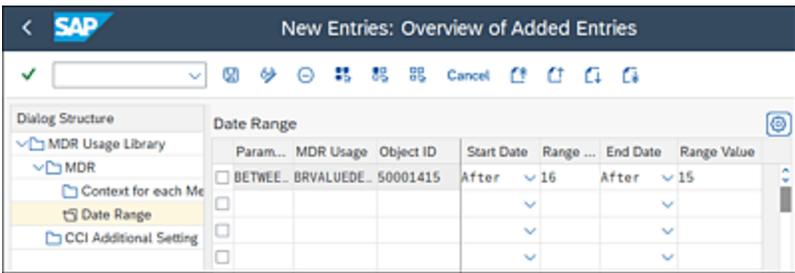
**Figure 8.74** Access the View Cluster from Transaction SM34



**Figure 8.75** Selection of MDR Usage BRVALUEDETERMINE



**Figure 8.76** Selection of the ABAP Method



**Figure 8.77** Definition of Customized Date Range for a Business Rule ID

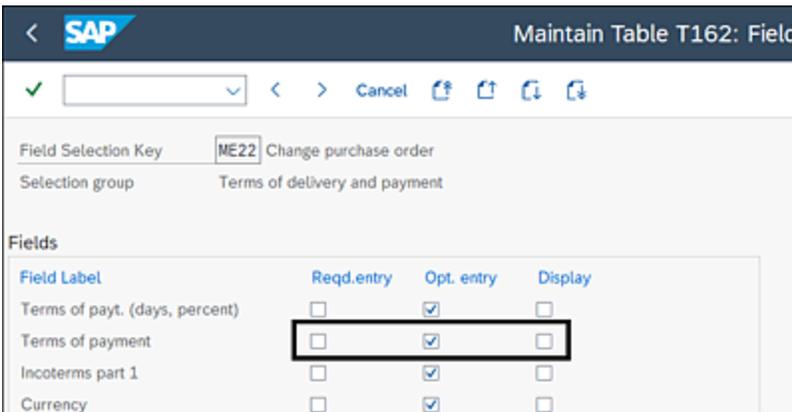
Based on this configuration, whenever the business rule is scheduled, it takes into account the number of days specified in the range values for **Start Date** and **End Date** from **Test Period From** and **Test Period To** while retrieving data for the scheduled test period.

For example, if the job is scheduled for the month of September, it retrieves data for the period from the 16th of September to the 15th of October based on the adjustment of the range values as shown previously. This flexibility

allows GRC administrators to plan job schedules according to the dynamic date filters, deviating from standard time frames as needed.

### 8.3.3 BRFplus Condition and Calculations in a Business Rule

BRFplus conditions can be used when the standard filtering or deficiency criteria options are inadequate for monitoring a control. For example, if the control in scope involves monitoring the field status configuration for purchase orders, and the requirement is that the **Terms of payment** field must be maintained as **Display** only signifying that the values for terms of payment should be derived from the master data during the processing of purchase orders, no modifications can be made to it during purchase order processing. [Figure 8.78](#) shows the configuration.



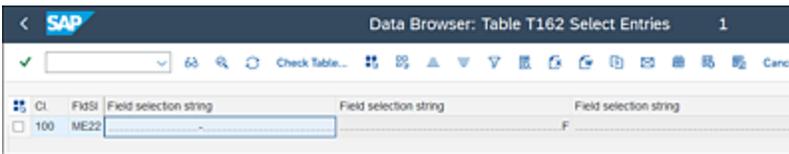
**Figure 8.78** Field Status Configuration

This configuration is stored in table T162, but the status selected in the checkboxes are stored as strings as “+” (plus) indicating required entries, “.” (dot) indicating optional entries, and “\*” (star) indicating the display-only

entries. Each character in the string (referred to as substring) indicates configuration of a field label.

You may notice the **Field selection string** for the respective transaction code using Transaction SE16 (Data Browser) as shown in [Figure 8.79](#).

The GRC consultant is responsible for identifying the substring containing the configuration of a specific field based on discussions with the functional team or insights from testing. In this context, the configuration of the **Terms of Payment** field is situated in the 11th character of the string within the **FAUS1** field. However, using the standard options, reviewing the 11th character and returning results isn't possible.



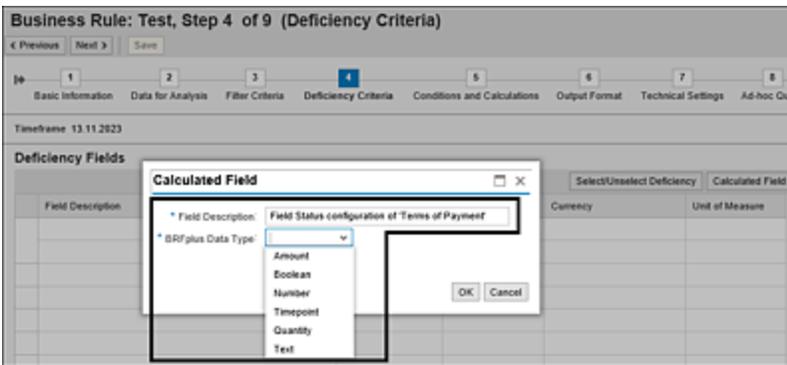
**Figure 8.79** Review the Table Data and Content

SAP Process Control offers a solution to address this challenge. This involves defining a calculated field, within which a BRFplus condition can be specified to extract the substring value, enabling the formulation of deficiency criteria. The subsequent steps outline the process of creating the calculated field and establishing the condition using the BRFplus workbench.

Defining the data source for table T162 remains the same process as explained in [Section 8.2.1](#). Once the data source is defined, start configuring the business rule and update the details in the **Basic Information**, **Data for Analysis**, and **Filter Criteria** tabs, as explained in [Section 8.3.2](#).

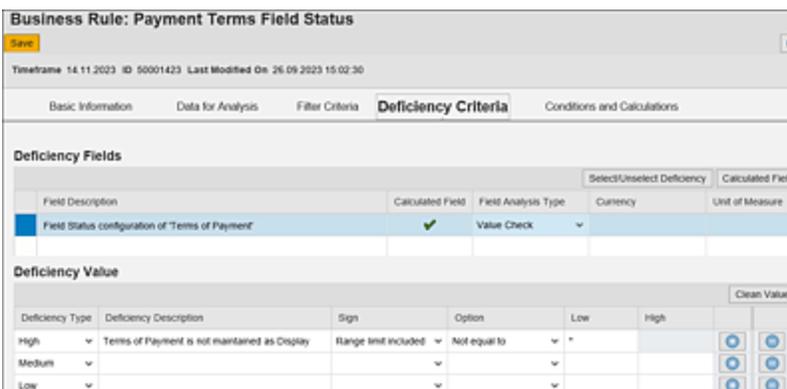
Navigate to the **Deficiency Criteria** tab, click on the **Calculated Field** option, and click **Add**.

In the **Calculated Field** popup, enter the **Field Description** (indicating the name of the field to be part of the report as deficiency field) and **BRFplus Data Type** (select from the dropdown depending on the type of data being analyzed and also the type of data that will be provided as output from the calculations of BRFplus) from the options, as shown in [Figure 8.80](#).



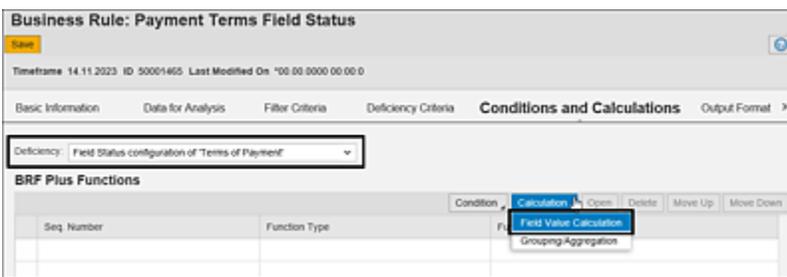
**Figure 8.80** Calculated Field Data Type Options

Because, strings/substrings are being monitored as part of the example defined earlier, select the **Text** option from the list, select the **Field Analysis Type** (refer to [Section 8.3.2](#) to understand the relevance of this field), and define the deficiency value, as shown in [Figure 8.81](#).



**Figure 8.81** Definition of Deficiency Criteria Calculated Field

After defining the **Deficiency Criteria**, proceed to the **Conditions and Calculations** tab to define the formula for extracting the substring from the field. Choose **Field Status configuration of 'Terms of Payment'** in the **Deficiency** field from the dropdown menu for which the calculation will be defined. Then, click on the **Calculation • Field Value Calculation** option, as shown in [Figure 8.82](#).



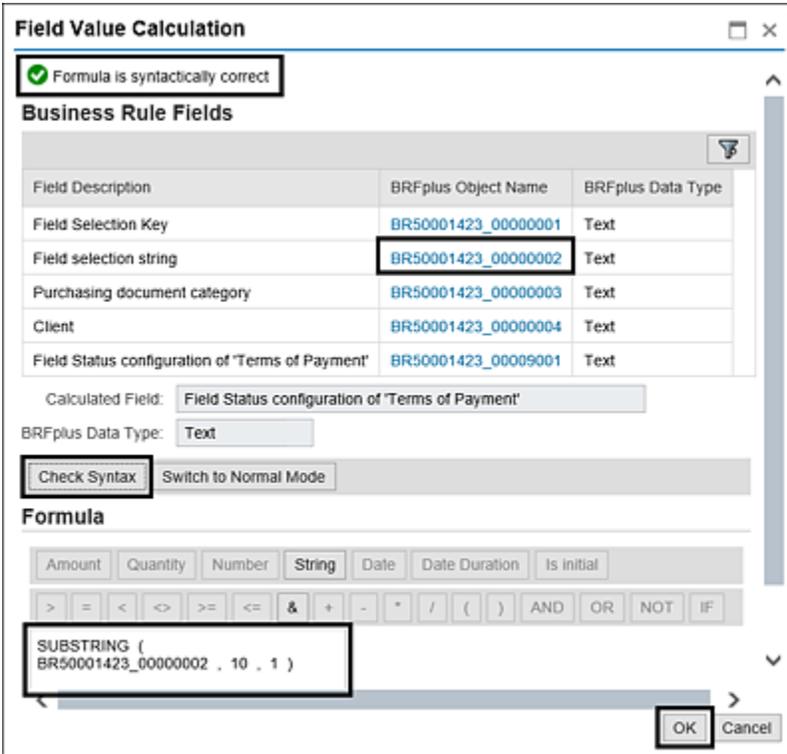
**Figure 8.82** Selection of the Option Field Value Calculation

## Note

The **Grouping/Aggregation** option is used in scenarios where there is a requirement to aggregate values of a specific field, for example, to calculate the total purchase orders created for one vendor.

The formula can be manually entered in the **Formula** field in the **Field Value Calculation** window, as shown in [Figure 8.83](#). It's recommended to check the syntax before saving the calculation. Click **OK** to finalize the definition. References for the fields to be selected in the formulas are provided in the **Business Rule Fields** section. Proceed to the subsequent tabs, **Output Format**, **Technical Settings**, **Ad-hoc Query**, and **Attachments**, to perform the required

configurations, as detailed in [Section 8.2.2](#). This will conclude the definition of the business rule with calculations.

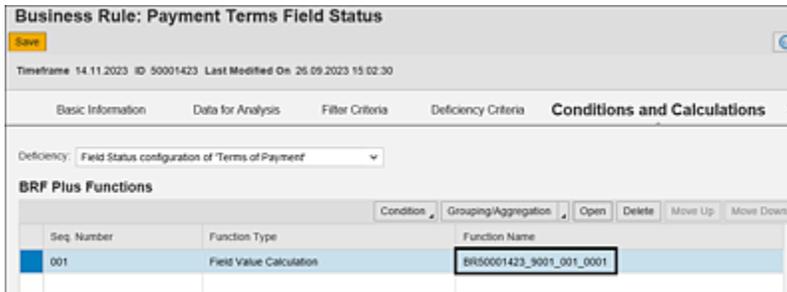


**Figure 8.83** Definition of the Calculation Formula

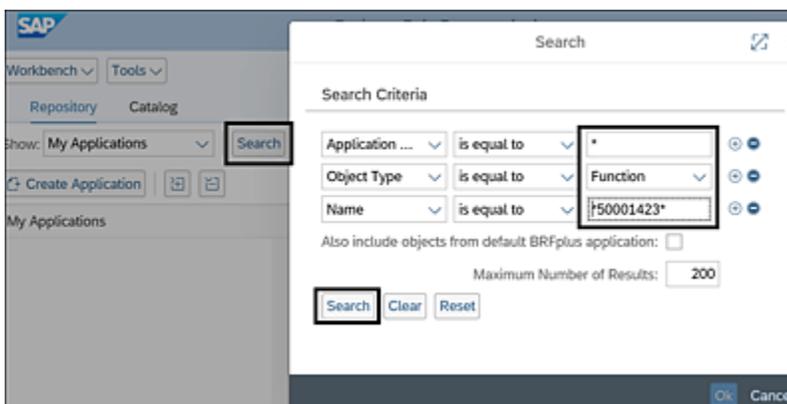
Alternatively, if the formula to be defined requires complex conditions, instead of defining the formula in the **Conditions and Calculations** tab, users can define the calculated field in the business rule, as illustrated in [Figure 8.84](#), and then define the formula in the BRFplus workbench, where multiple formula references are available for configuring the formula. Before proceeding to the BRFplus workbench, make a note of the **Function Name** from the **Conditions and Calculations** tab, as shown in [Figure 8.84](#).

To access the BRFplus workbench, follow these steps:

1. Log in to the SAP Process Control system.
2. Execute either Transaction BRFPLUS or Transaction BRF+.
3. Click the **Search** button, and enter the **Function** name to search, as shown in [Figure 8.85](#).

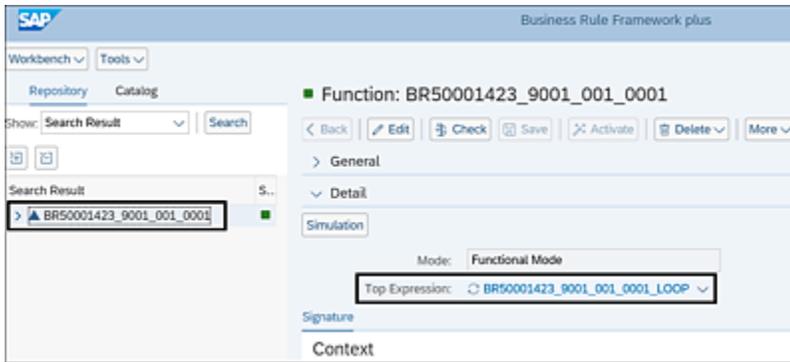


**Figure 8.84** Identification of the Function Name from Calculated Fields



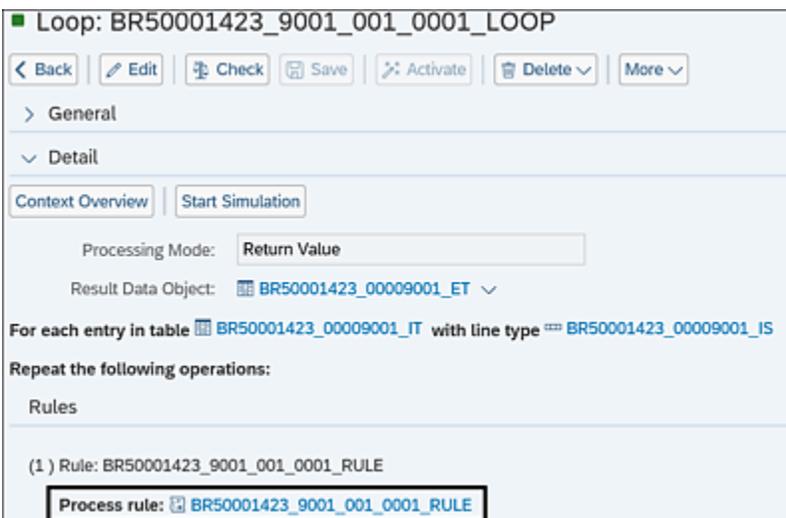
**Figure 8.85** Option to Search for the Function

4. From the **My Applications** dialog structure, select the **Function ID**.
5. Click **Edit**, and navigate to the next screen by clicking the **Top Expression** link, as highlighted in [Figure 8.86](#).



**Figure 8.86** Option to Select and Edit the Function

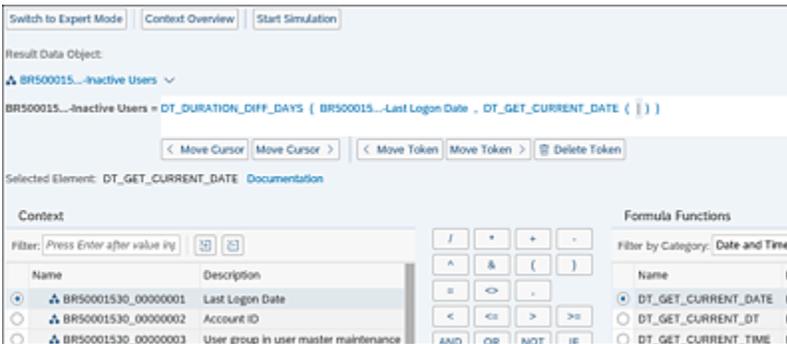
6. On the next screen, click on the **Process Rule** option, as shown in [Figure 8.87](#), which will take you to the screen where the BRFplus formula can be defined.



**Figure 8.87** Option to Select Rule to Define BRFplus Formula

On the formula page, complex formulas can be defined in the BRFplus workbench. To make the topic easy to understand, we're going to look at an example. To monitor inactive users in the SAP system (those who haven't logged in for 90 days or more), it's necessary to compare the last logon date with the current date during the job run. This involves calculating the difference in days between these two dates.

To achieve this, the **Date and Time Function** formula must be used (for a list of possible categories, see [Table 8.8](#)). You'll need to maintain the formula **DT\_DURATION\_DIFF\_DAYS** (field representing last logon date, **DT\_GET\_CURRENT\_DATE** ())—as shown in [Figure 8.88](#). You'll click **Save** and **Activate** to complete the definition of the calculated field.



**Figure 8.88** BRFplus Workbench to Define Calculation Formula

The formula will now be visible in the **Conditions and Calculations** tab of the business rule under the defined function. To test the calculated field and results, run the ad hoc query as explained in [Section 8.3.2](#) before proceeding to the next section of performing control to business rule assignment.

[Table 8.8](#) shows the categories available for selection to define the formula.

Category	Description
----------	-------------

Category	Description
<b>Date and Time Functions</b>	<p>These formula functions are used whenever the business rule involves comparison of date and time fields, such as comparison of transaction dates with the current date of rule execution (in this case, current date can be fetched using the formula DT_GET_CURRENT_DATE).</p>
<b>String Functions</b>	<p>When there is a requirement to analyze the string data such as extracting specific characters from a string or when there is a requirement to concatenate two field values, these functions are used. For example, SUBSTRING is used to fetch specific characters from a string field.</p>
<b>System Functions</b>	<p>When certain system parameters are to be fetched automatically for the purpose of data analysis, these functions are used. For example, if the system ID is required for an IT general control (ITGC) analysis, the formula SYS_INFO_SYSTEM_ID can be used</p>
<b>Table Functions</b>	<p>If the table column values are to be analyzed, such as returning the minimum value in a specific column from a table or to calculate the summation, these functions can be used.</p>

Category	Description
<b>Mathematical Functions</b>	These formula functions are used with mathematical calculations such as trigonometric functions like cosine or when absolute values of numbers are to be fetched from the transactional data.
<b>Miscellaneous Functions</b>	In addition to the preceding categories, there are a few other functions categorized under the miscellaneous group, which can be used for calculations such as converting an amount from a specific currency to another or converting into a quantity or amount.

**Table 8.8** Formula Categories Table

### Note

The details provided in [Table 8.8](#) are only for illustrative purposes, but the BRFplus workbench has more formulas in each of the categories specified that can be used to define complex calculation logic for automated control monitoring.

## 8.4 Perform Control Business Rule Assignment

Once the business rule is configured as explained in [Section 8.3](#), the subsequent step is to associate it with the local control (refer to [Chapter 5, Section 5.3.2](#), to understand the concept of local control). The effectiveness of the control is determined by the results of the business rule execution. Finally, the outcomes of the automated monitoring job should be triggered to the control owner mapped at the local control level (refer to [Chapter 5, Section 5.4.1](#), to understand the process of assigning owners to the control).

To carry out this assignment, follow these steps:

1. Log in to the SAP Process Control system.
2. Execute Transaction NWBC.
3. Navigate to the **Rule Setup** work center.
4. Under the **Continuous Monitoring** work group, execute the **Business Rule Assignment** work item.
5. On the subsequent screen, select an **Organization** and the **Control**, as highlighted in [Figure 8.89](#), and click **Search**.

Control	Valid From	Valid To	Description	Organization	Process	Subprocess	Test Automation	Trigger
Monitor Duplicate Invoice Check Config	01.01.2023	31.12.9999	Monitor Duplicate Invoice Check Configurations	ABC India Pvt Ltd	Procure to Pay	Invoice Processing	Automated	Date

**Figure 8.89** Option to Search for Control to Perform the Business Rule Assignment

## Note

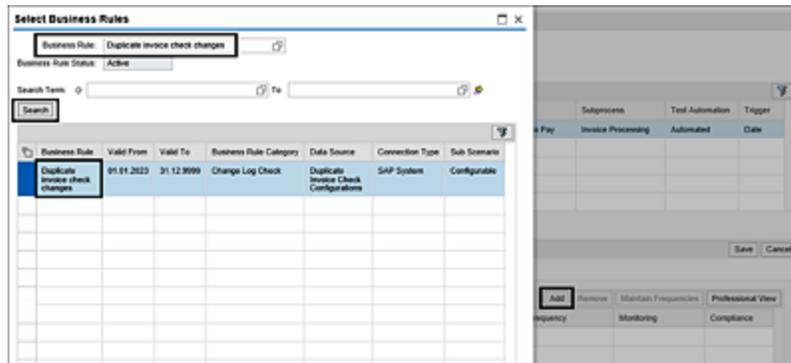
Note that while searching for the control during the business rule assignment process, it's crucial to consider the following points:

- Confirm that the control is mapped to a specific organization.
- Ensure that the test automation for the local control is set to **Automated**.
- Verify that the local control is active on the date selected at the top of the screen.

These criteria are essential for accurately identifying and mapping the desired control in the SAP Process Control system.

6. Once the control is displayed in the search results, select the relevant control, click **Modify**, and then click the **Add** button.
7. In the **Select Business Rules** popup, enter the name of the business rule, and click **Search**.

8. From the search results, select the business rule to be mapped, and click **OK**, as shown in [Figure 8.90](#).



**Figure 8.90** Selection of the Business to Perform Assignment to Control

## Tip

When searching for the business rule, ensure the following points are considered:

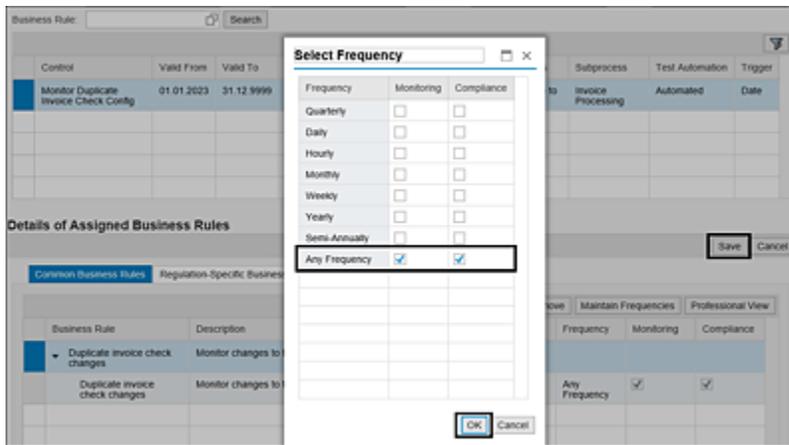
- The status of the business rule should be **Active**.
- **Valid From** of the business rule should be on or before the date selected on top of the screen in the previous step.

9. Before saving the assignment, it's critical to set the frequency at which the business rule can be scheduled for automated monitoring. If the control needs to be scheduled on a monthly basis, choose the frequency. Alternatively, if flexibility is required to select the frequency during job scheduling, opt for the **Any Frequency** option under the **Monitoring** column, as shown in [Figure 8.91](#). This ensures that the business

rule is executed at the desired interval per the monitoring requirements.

## Note

Controls can be scheduled from the Planner functionality using the **Test control effectiveness** activity. In such cases, the frequency maintained under **Compliance** will be considered.



**Figure 8.91** Selection of Frequencies in the Business Rule Assignment

10. Click **Save** to complete the control to business rule mapping.

Note that a control can be scheduled for automated monitoring only after the business rule is assigned to it and the frequencies are maintained.

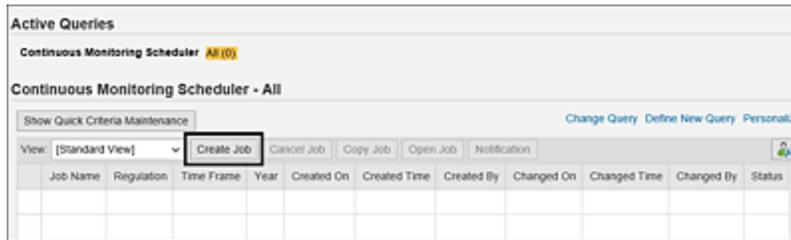
## 8.5 Create an Automated Monitoring Job

Automated monitoring is a functionality within SAP Process Control designed for scheduling automated controls for testing purposes. When a job is scheduled, the associated business rule runs according to the time frame selected and gives the results. If the job identifies exceptions based on the deficiency criteria defined in the business rule, it concludes with a status of **Deficient** or **Significantly Deficient**, triggering a notification to the control owner for necessary actions. If no exceptions are identified, the job completes with an **Adequate** status, and no separate notification is triggered to the control owner.

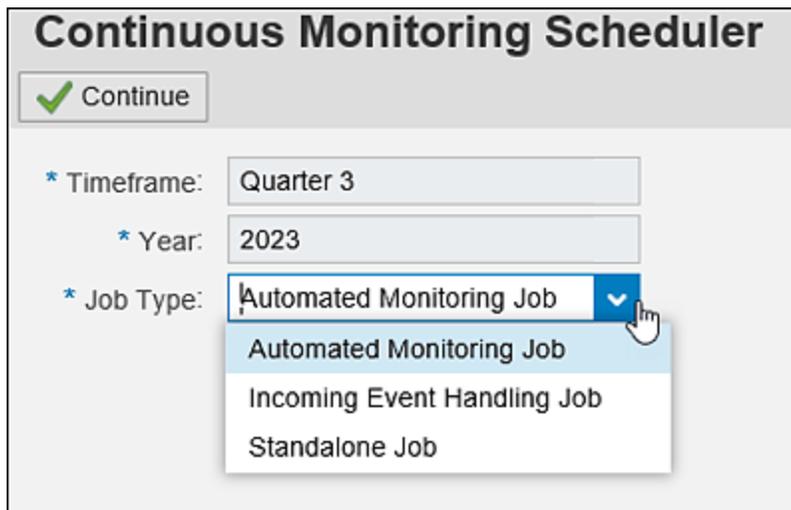
To schedule a job using automated monitoring, follow these steps:

1. Log in to the SAP Process Control system.
2. Execute Transaction NWBC.
3. Navigate to the **Rule Setup** work center.
4. Under the **Scheduling** work group, initiate the **Automated Monitoring** work item.
5. The **Continuous Monitoring Scheduler** screen displays a list of the scheduled jobs. To schedule a new job, click on the **Create Job** button, as highlighted in [Figure 8.92](#).
6. Next, the **Continuous Monitoring Scheduler** screen displays the **Timeframe** and **Year** for which the control

can be scheduled, as shown in [Figure 8.93](#).



**Figure 8.92** Create Job Option for Automated Monitoring



**Figure 8.93** Selection of Job Type as an Automated Monitoring Job

7. Select the **Job Type** (which is the key field). The possible options are **Automated Monitoring Job**, **Incoming Event Handling Job**, and **Standalone Job**. Detailed explanation of these types can be found in [Table 8.9](#).

Job Type	Explanation
<b>Automated Monitoring Job</b>	This option is used to schedule the controls for which business rules are assigned, and owners are assigned to receive any exceptions.

Job Type	Explanation
<b>Incoming Event Handling Job</b>	This option is used to schedule the controls that are configured with event-based subscenarios.
<b>Standalone Job</b>	This new option was introduced in SAP Process Control 12.0 to schedule the business rules on an ad hoc basis without performing the control assignment or identifying the ownership in master data. The GRC administrator can use this option to schedule the business rules. If any issues are identified, an ad hoc issue can be reported to the ad hoc issue processor who can decide on the action plan.

**Table 8.9** Job Types

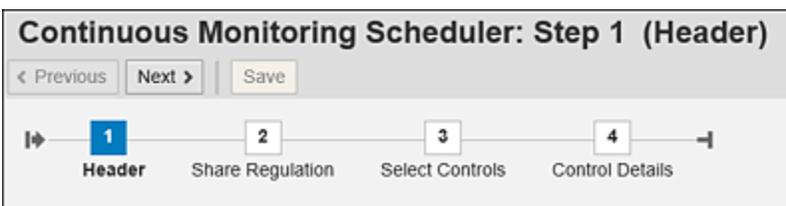
Detailed information and step-by-step instructions for setting up **Automated Monitoring Job** and **Standalone Job** job types are outlined in the following section. **Incoming Event Handling Job** isn't covered as it's not widely used.

### 8.5.1 Automated Monitoring Job

This section details the steps involved in scheduling the job for automated monitoring and also the process of remediating any issues identified by the system as part of the automated monitoring process.

## Scheduling the Job

After clicking on **Create Job**, as shown in [Figure 8.92](#), select **Automated Monitoring Job** as the **Job Type**, and click **Continue**. There are multiple steps, that is, **Header**, **Share Regulation**, **Select Controls**, and **Control Details**, in which the configuration must be maintained, as shown in [Figure 8.94](#). Each of these steps are detailed in the following sections.



**Figure 8.94** Continuous Monitoring Scheduler Job Steps

### ***Header Step***

The **Header** section is key to define the job. Specify the **Job name**, **Execution Type**, **Frequency**, **Test Period From/To**, and **Target Connector**, as highlighted in [Figure 8.95](#).

**Continuous Monitoring Scheduler: Step 1 (Header)**

< Previous   Next >   Save

1 Header   2 Share Regulation   3 Select Controls   4 Control Details

Timeframe Quarter 3 2023

\* Job Type: Automated Monitoring Job

\* Job name: AM\_JOB\_Q4\_2023

\* Execution Type: Immediate

\* Frequency: Monthly

\* Test Period From: 01.10.2023

\* Test Period To: 31.12.2023

Target Connector:

Comment:

**Figure 8.95** Header Options in the Continuous Monitoring Scheduler

The **Execution Type** field gives the options listed in [Table 8.10](#).

Execution Type	Description
<b>Immediate</b>	If a job is scheduled on a monthly basis with the execution type set to <b>Immediate</b> , the job will initiate immediately and at the end of each month. To illustrate, if the job is scheduled for the duration of quarter four to run at a monthly frequency, it generates three different jobs, each set to execute at the end of the respective months, namely on the 31st of October, 30th of November, and 31st of December.

Execution Type	Description
<b>Date/Time</b>	This option allows user to choose a specific date and time along with job frequencies. For instance, if the job is scheduled for quarter four to run on a monthly basis, specifying the execution time and day, it generates three jobs that will execute at the selected day/time on those specified frequencies.
<b>Event Trigger</b>	This type is used for business rules, which are created with the <b>Event</b> subscenario. There is no requirement to select the time frame or frequency as this type triggers notifications on a real-time basis whenever the event is triggered as defined in the business rule.

**Table 8.10** Job Execution Types

The other fields are self-explanatory and aren't detailed. Once the fields are maintained, navigate to the next step, that is, **Share Regulation**.

### ***Share Regulation Step***

The **Share Regulation** step is used to designate the local control that needs to be scheduled for automated monitoring, as shown in [Figure 8.96](#). For a comprehensive understanding of how the regulation is linked to a control, refer to the discussion of the **Regulation** step in [Chapter 5, Section 5.2.3](#).

**Continuous Monitoring Scheduler: Step 2 (Share Regulation)**

< Previous   Next >   Save

1 Header   2 Share Regulation   3 Select Controls   4 Control Details

Timeframe Year 2023

Regulation: SOX

Monitoring Results Sharing:  Do not share    Share with some regulations    Share with all regulations

**Figure 8.96** Selection of Regulation in Scheduler

The **Monitoring Results Sharing** options offer the capability to share results based on the chosen selections. For a deeper understanding of the significance of each of these options, that is, **Do not share**, **Share with some regulations**, and **Share with all regulations**, refer to [Chapter 6, Section 6.2.2](#).

The next step is **Select Controls**.

### ***Select Controls Step***

Controls that are needed for automated monitoring can be selected in this step. These controls can be searched by the name of the organization to which they are localized. Alternatively, search can be conducted based on the name of the process or subprocess under which the control is created, the name of the control itself, or the name of the business rule to which it's mapped, as shown in [Figure 8.97](#).

**Continuous Monitoring Scheduler: Step 3 (Select Controls)**

< Previous Next > Save

1 Header 2 Share Regulation 3 Select Controls 4 Control Details

Timeframe: Year 2023

**Control Search**

Organization: ABC\* Process: Subprocess: Control:

Business Rule: Search

Control	Valid From	Valid To	Description	Organization	Process	Subprocess	Test Automation	Trigger
Monitor Duplicate Invoice Check Config	31.01.2023	31.12.9999	Monitor Duplicate Invoice Check Configurations	ABC India Pvt Ltd	Procure to Pay	Invoice Processing	Automated	Date

Control Valid From Valid To Description Organization Process Subprocess Test Automation Trigger

**Figure 8.97** Option to Search for Controls to be Scheduled for Automated Monitoring

Once the control appears in the search results, move it to the bottom selection section of the screen, and click **Next** to review the details and save the scheduler.

If the control doesn't appear in the search, validate the following points to check if any one of them is a possible reason:

- The regulation selected in the previous tab should be the one assigned to the local control.
- Test automation maintained in the **General** tab of the local control should be **Automated** or **Semi-Automated**. **Manual Controls** can't be selected for scheduler.
- If the job type selected is **Automated Monitoring Job**, only controls with date-based trigger types can be searched, as maintained in the **General** tab of the local control.
- Review the valid from and valid to dates of the control, business rule, and business rule assignment, and these

dates should cover the test period selected in the **Header** tab.

- If **Target Connector** is selected in the **Header** tab, the business rule should have this connector mapped to it.
- The user scheduling the business rules should have proper authorizations.

### **Control Details Step**

Review the controls and business rules selected for continuous monitoring, and click **Save** to complete scheduling the job, as shown in [Figure 8.98](#).

#### **Note**

Use the **Configure Submission** button if there are multiple business rules assigned to a control and if one or a few of them should be unselected before scheduling the control.

Control	Valid From	Valid To	Description	Organization	Process	Subprocess	Test Automation	Trigger
Monitor Duplicate Invoice Check Config	01.01.2023	31.12.9999	Monitor Duplicate Invoice Check Configurations	ABC India Pvt Ltd	Procure to Pay	Invoice Processing	Automated	Date

Business Rule	Description	Target Connector
Duplicate invoice check changes	Monitor changes to the configuration duplicate invoice check	TMOCLNT100

**Figure 8.98** Review the Control Details to Schedule the Job

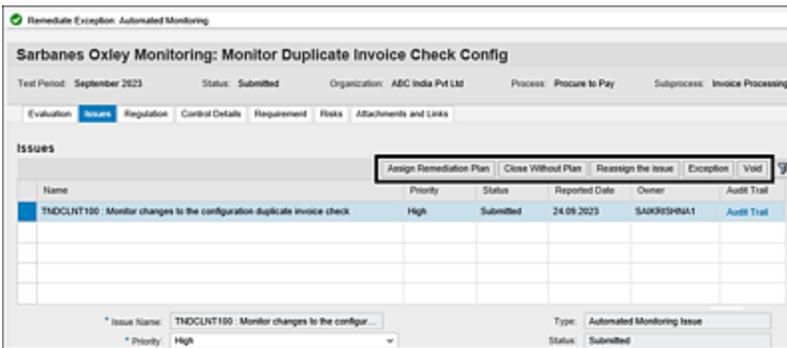
Once the job is scheduled, you'll receive the **Your schedule has been saved successfully** message. If the job

identifies any exceptions, the same is notified to the control owner. Let's now jump into the process of issue remediation.

## Remediation of Automated Monitoring Issue

Once the automated control is scheduled and has exceptions, a notification is triggered to the control owner per the workflow defined in the custom agent determination rules. Refer to [Chapter 4, Section 4.2.3](#), to understand the configuration of workflows for automated monitoring.

These workflow items can be accessed through the **Work Inbox** under Transaction NWBC within the **My Home** work center. The issue owner will have the options highlighted in [Figure 8.99](#).



**Figure 8.99** Options Available for the Issue Owner

These options are described here:

- **Assign Remediation Plan**  
This option can be selected if the issue needs a detailed investigation and a fix to remediate it.
- **Close Without Plan**  
This option is used if the issue owner can resolve it without the need of a remediation plan by providing the

evidence and comments justifying the reason to close the issue without a plan.

- **Reassign the Issue**

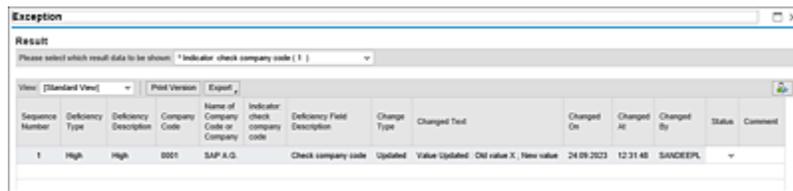
The issue owner can transfer the responsibility to fix the issue to another user.

- **Exception**

This option provides the detailed report of exceptions identified by the business rule in this job run, as shown in [Figure 8.100](#).

- **Void**

The issue owner uses this option if the exceptions received contain false-positive results and require a fix in the business rule design.



The screenshot shows a window titled 'Exception' with a 'Result' section. Below the result section, there is a table with the following columns: Sequence Number, Deficiency Type, Deficiency Description, Company Code, Name of Company Code or company code, Indicator check company code, Deficiency Field Description, Change Type, Changed Text, Changed On, Changed At, Changed By, Status, and Comment. The table contains one row of data.

Sequence Number	Deficiency Type	Deficiency Description	Company Code	Name of Company Code or company code	Indicator check company code	Deficiency Field Description	Change Type	Changed Text	Changed On	Changed At	Changed By	Status	Comment
1	High	High	0001	SAP A.G.	Check company code	Updated	Value updated: Old value X, New value		24 09 2023	12 31 48	SANDEEPL		

**Figure 8.100** Review of Exception Details from the Issue Work Item

The process of using other options to remediate the issues remains the same as for other control assessments. Refer to [Chapter 6, Section 6.2.4](#), to understand the stages involved in using the **Assign Remediation Plan** option and the **Close without Plan** option.

## 8.5.2 Standalone Job

As explained in [Table 8.9](#), this option is used to schedule business rules directly without the necessity of mapping them to a control. Upon selecting the **Standalone Job**

option as the **Job Type**, various steps are made available, each requiring detailed definitions before the job can be scheduled. The particulars of each step are detailed in the following:

- **Header**

This section is key for defining the job such as name, frequency, and period for which the job should be scheduled. A comprehensive explanation of each key field is provided in the previous section.

- **Select Business Rules**

During this step, the administrator chooses which business rules to be scheduled for automated monitoring as a standalone job. These business rules can be searched by the **Object ID** or by the name of the business rule, as shown in [Figure 8.101](#).

Continuous Monitoring Scheduler: Step 2 (Select Business Rules)

< Previous Next > Save

1 Header 2 Select Business Rules 3 Confirm

Timeframe Year 2023

Object ID: [ ] To [ ]

Analysis Type: [ ] To [ ]

Category: [ ] To [ ]

Name: \*DUPLICATE\*

Valid From: 01 01 2023

Search

List of Business Rules

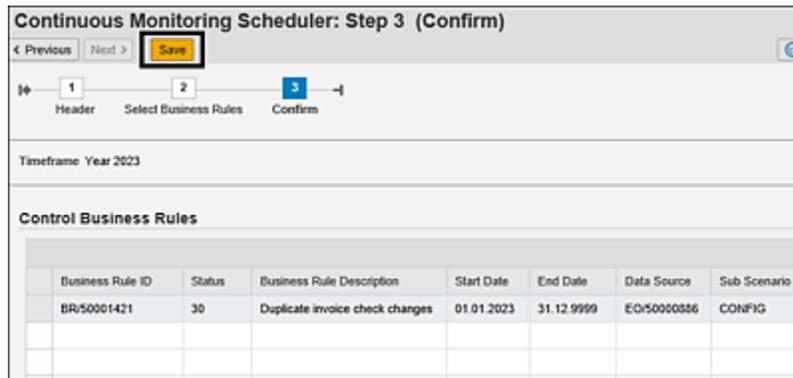
Business Rule ID	Business Rule Status	Name	Start Date	End Date	Data Source Name	Sub Scenario
BR/50001421	Active	Duplicate invoice check ch...	01 01 2023	31 12 9999	Duplicate Invoice Check C...	Configurable

**Figure 8.101** Option to Search for Business Rule to Be Scheduled for Standalone Jobs

Once the business rule appears in the search results, select it, and click **Next** to review the details and save the scheduler.

- **Confirm**

Review the business rules selected for the standalone job, and if everything is correct, click **Save** to complete scheduling the job, as shown in [Figure 8.102](#).



**Figure 8.102** Confirm Step

Upon scheduling, a confirmation message is displayed. The status of the job, indicating whether it's in progress or completed, can be reviewed from the automated monitoring landing screen.

If the job identifies any exceptions, a notification isn't automatically sent to any user by default. An administrator can schedule the **Report Ad-hoc Issue** job to notify the control owner. Refer to [Chapter 7](#) for a detailed understanding of the process of responding to ad hoc issues.

## 8.6 Transport Procedure

Data sources and business rules created in the development system should be transported across the landscape. A transport request is used to capture these changes while saving them during the configuration. It's essential to note that the process of capturing data sources and business rules in a transport request differs from the typical process followed in other configurations. Follow these steps in the source and target systems as part of transporting the data source, business rule, and BRFplus conditions:

1. Perform preparation activities in the original system for transport.
2. Perform activities in the target system after transport.
3. Transport the BRFplus business rule data.

The subsequent sections provide a comprehensive step involved in capturing data sources and business rules within a transport request.

### 8.6.1 Preparation Activities in the Original System for Transport

Once the data source and business rule are configured, activated, and tested, the process of capturing them in a transport request is performed via Transaction SPRO. The configuration is typically divided into four stages as follows:

- **Prepare Data Source in Original System for Transport**

This setting is used to capture the data source in a transport request.

- **Prepare Business Rules with Data Sources in Original System for Transport**

This setting is used to capture the business rule in a transport request.

- **Reset Connector and Status for Data Sources in Orig. Sys. after Transport**

Once the data source is captured in a transport request, the connectors and status in the data source are removed from it. This setting is used to restore the connectors and status back to the original configurations.

- **Reset Connector and Status for Bus. Rules with Data Sources after Transport**

Once the business rule is captured in a transport request, the connectors and status for the business rule are removed from it. This setting is used to restore the connectors and status back to the original configurations.

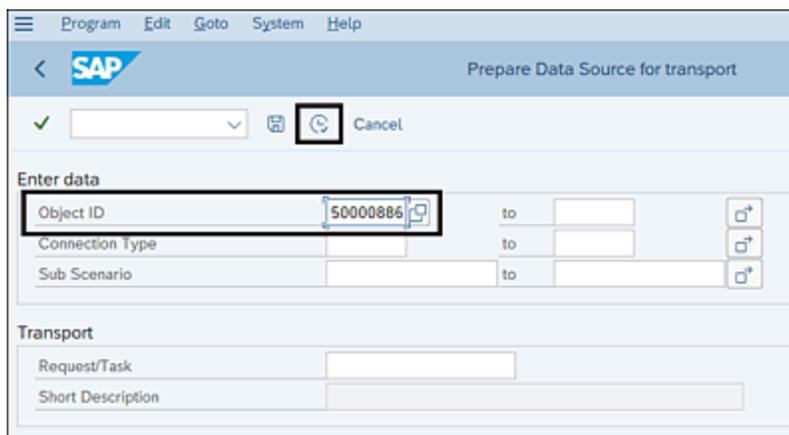
Each stage is outlined in the following sections.

## **Prepare Data Sources in Original System for Transport Configuration**

This step is used to capture the data source in a transport request. To access this configuration step, follow these steps:

1. Log in to the SAP Process Control system.
2. Execute Transaction SPRO\_ADMIN.
3. Click the **SAP Reference IMG** button.

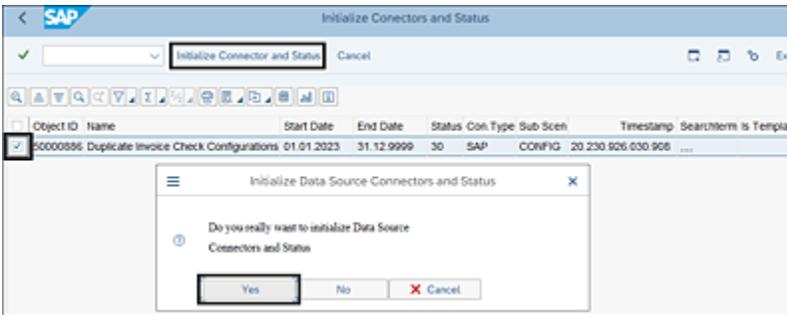
4. Expand **Governance, Risk and Compliance** • **Common Component Settings** • **Continuous Monitoring** • **Data Source and Business Rule Transport** • **Prepare Data Sources in Original System for Transport**.
5. In the configuration screen, enter the **Object ID** of the data source, and click **Execute**, as shown in [Figure 8.103](#).



The screenshot shows the SAP 'Prepare Data Source for transport' configuration screen. The 'Object ID' field is highlighted with a black box and contains the value '50000886'. The 'Execute' button is also highlighted with a black box. The screen includes a menu bar (Program, Edit, Goto, System, Help), a status bar (SAP logo, title, success icon, dropdown, icons, Cancel), and input fields for 'Enter data' (Object ID, Connection Type, Sub Scenario) and 'Transport' (Request/Task, Short Description).

**Figure 8.103** Prepare Data Source for Transport

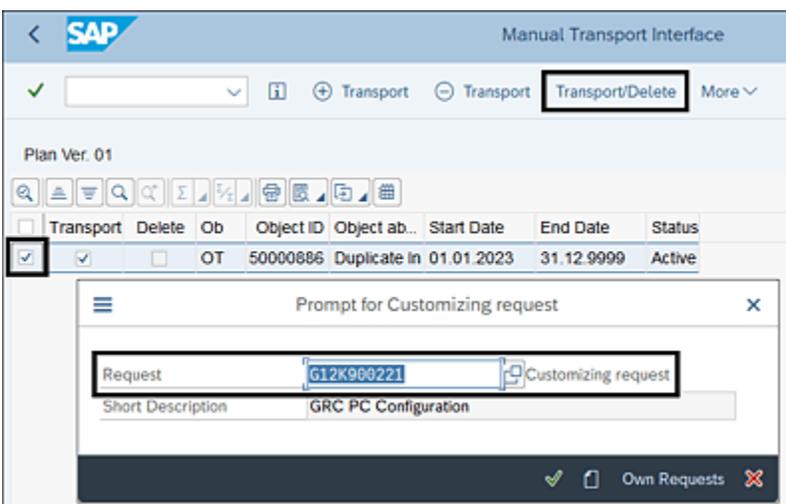
6. Select the **Data Source** to be captured in the transport.
7. Click **Initialize Connector and Status** button on the top header.
8. Click **Yes** when prompted by the message **Do you really want to initialize Data Source Connectors and Status**, as shown in [Figure 8.104](#).



**Figure 8.104** Option to Initialize Connectors and Data Source

The purpose of initialization is to remove the connectors from the data source before they are captured in a transport request. This step is necessary because the connectors to be used in quality or production systems aren't the same as in the development system. Initializing the data source ensures that the connectors are appropriately adjusted for the target systems during the transportation process.

Once the data source is initialized, the next step is to capture the data source in a transport request. Select the data source, and click the **Transport/Delete** button. Enter the transport request number when prompted, and click **Okay** to the process of capturing the data source in a transport request, as shown in [Figure 8.105](#).



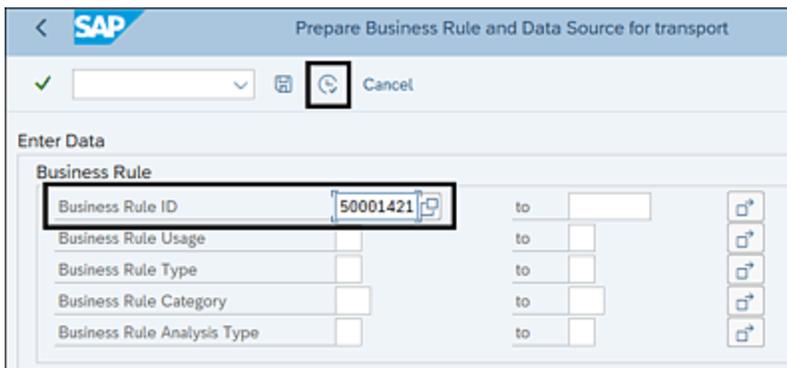
**Figure 8.105** Capturing the Data Source in a Transport Request

You'll receive a success message once the changes are captured in the transport request.

## Prepare Business Rules in Original System for Transport Configuration

This step is used to capture the business rule in the transport request. To access this configuration step, follow these steps:

1. Execute Transaction SPRO\_ADMIN.
2. Click the **SAP Reference IMG** button.
3. Expand **Governance, Risk and Compliance • Common Component Settings • Continuous Monitoring • Data Source and Business Rule Transport • Prepare Business Rule and Data Sources in Original System for Transport**.
4. In the configuration screen, enter the **Business Rule ID**, and click **Execute**, as highlighted in [Figure 8.106](#).



The screenshot shows the SAP configuration screen titled "Prepare Business Rule and Data Source for transport". At the top, there is a navigation bar with the SAP logo and a back arrow. Below the title bar, there is a status bar with a green checkmark, a dropdown menu, a refresh icon, and a "Cancel" button. The main area is titled "Enter Data" and contains a table with the following fields:

Business Rule	
Business Rule ID	50001421
Business Rule Usage	
Business Rule Type	
Business Rule Category	
Business Rule Analysis Type	

To the right of the table, there are "to" labels and empty input fields for each row, along with a copy icon for each row. The "Execute" button is highlighted with a black box.

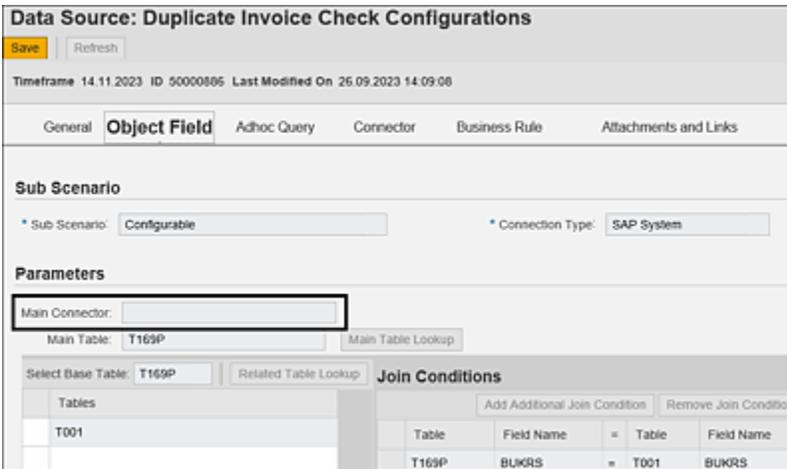
**Figure 8.106** Selection of the Business Rule ID

5. Select the business rule to be captured in the transport, and click on the **Initialize Connector and Status** button.
6. Select **Yes** when prompted.
7. Once the business rule is initialized, the next step is to capture the business rule in the transport request. Select the business rule along with the data source, and click **Transport/Delete** to capture the changes in a transport request.

After capturing the data source and business rules in the transport requests, it's necessary to release them to move across the landscape. Once the data source and business rules have been transported to subsequent systems, such as quality or production, it's crucial to execute the steps outlined in [Section 8.6.2](#) within the target system. This ensures the proper configuration and functionality of the transported data source and business rule in the new environment.

### **Reset Connector and Status for Data Sources in Orig. Sys. after Transport Configuration**

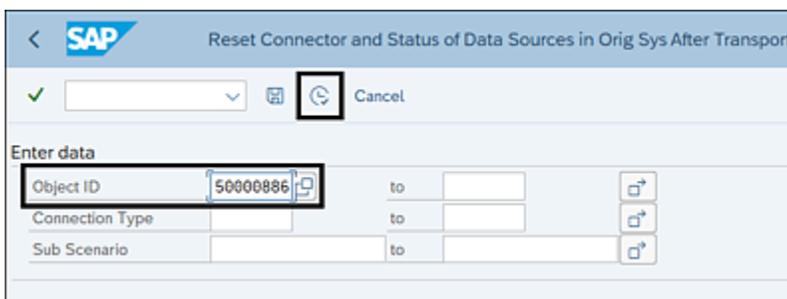
Upon releasing the transport requests, it's crucial to reset the connectors and status back to their original stage. Failing to perform this step can result in the blank value for the **Main Connector**, as highlighted in [Figure 8.107](#). Resetting the connectors and status ensures that the data source retains its configuration and functionality after being transported.



**Figure 8.107** Blank Connector Field after the Data Source Is Captured in a Transport

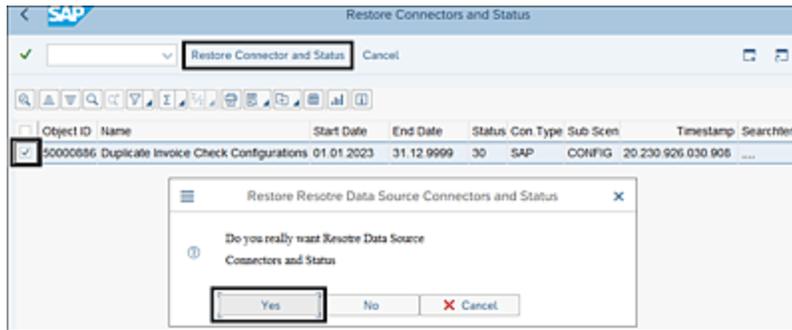
To restore the connectors, follow these steps:

1. Execute Transaction SPRO\_ADMIN.
2. Click the **SAP Reference IMG** button.
3. Expand **Governance, Risk and Compliance • Common Component Settings • Continuous Monitoring • Data Source and Business Rule Transport • Reset Connector and Status for Data Sources in Orig Sys after Transport**.
4. Enter the **Object ID** of the data source, and click **Execute**, as shown in [Figure 8.108](#).



**Figure 8.108** Selection of Data Source ID to Reset the Connectors

5. Select the data source for which the connectors and status should be restored, and click on the **Restore Connector and Status** option, as highlighted in [Figure 8.109](#).



**Figure 8.109** Option to Restore Data Source Connectors and Status

6. Select **Yes** to complete the configuration.

Once the configuration is completed, the data source will no longer appear in the search criteria of this configuration, indicating that the connectors and status are restored.

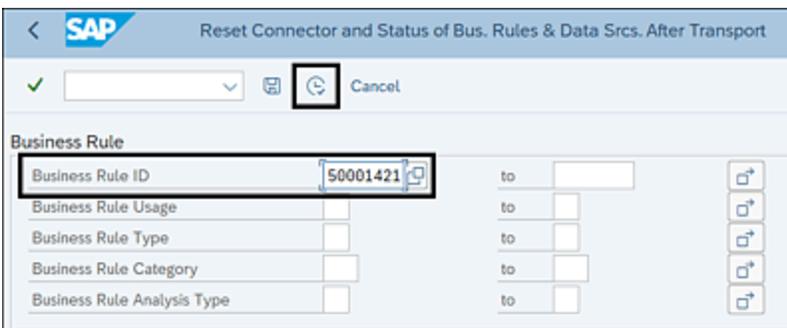
## **Reset Connector and Status for Bus. Rules with Data Sources after Transport Configuration**

The next step is to restore the connectors and status back to the original stage, without which the business rule can't be used for the purpose of modifications or testing in the development system. When the business rule is accessed without performing this step, it can be observed from Transaction NWBC that the Connectors section isn't visible in the **Basic Information** tab.

To access this configuration step to restore the connectors, follow these steps:

1. Execute Transaction SPRO\_ADMIN.
2. Click the **SAP Reference IMG** button.
3. Expand **Governance, Risk and Compliance • Common Component Settings • Continuous Monitoring • Data Source and Business Rule Transport • Reset Connector and Status for Bus. Rules with Data Sources after Transport.**
4. Enter the **Business Rule ID**, and click **Execute**, as shown in [Figure 8.110](#).
5. Select the **Business Rule** for which the connectors and status should be restored, and click the **Restore Connector and Status** button.
6. Select **Yes** to complete the configuration changes when prompted.

Once the configuration is completed, the business rule will no longer appear in the search criteria of this configuration, indicating that the connectors and status are restored.



**Figure 8.110** Selection of Business Rule ID to Reset the Connectors

## 8.6.2 Activities in the Target System after Transport

Once the transport requests are imported in the next systems, it's required to set the connectors of the target SAP S/4HANA or SAP ERP system against which the business rule should run. Use these configurations to set the connectors to the data source and business rule:

- **Set Connector and Status for Data Source in Target System**
- **Set Connector and Status for Bus. Rules with Data Sources in Target System**

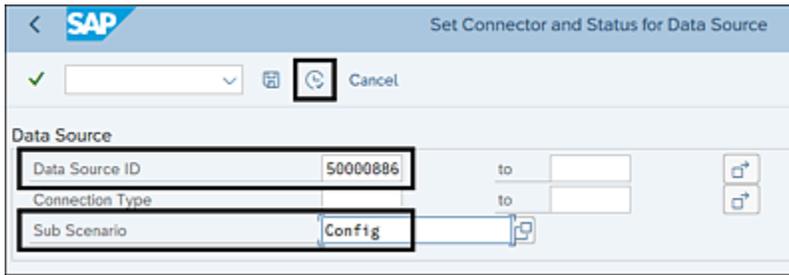
Both are outlined in the following sections.

### **Set Connector and Status for Data Source in Target System Configuration**

Because the imported data source doesn't have the connector mapped to it, you must perform this configuration. Follow these steps:

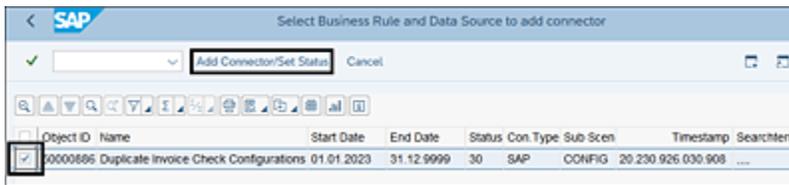
1. Log in to the target system (where the transport requests are imported).
2. Execute Transaction SPRO\_ADMIN.
3. Click the **SAP Reference IMG** button.
4. Expand **Governance, Risk and Compliance • Common Component Settings • Continuous Monitoring • Data Source and Business Rule Transport • Set Connector and Status for Data Source in Target System**.
5. Enter the **Data Source ID** and **Sub Scenario** with which it was created, and click **Execute**, as shown in

Figure 8.111.



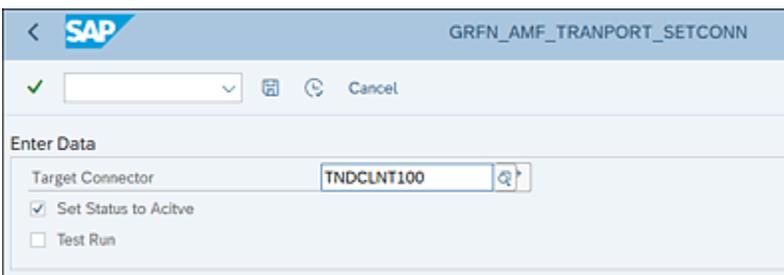
**Figure 8.111** Selection of Data Source ID to Set Connectors

6. Select the data source for which the connectors should be added, and click **Add Connector/Set Status** button, as shown in [Figure 8.112](#).



**Figure 8.112** Selection of Option to Add Connectors to a Data Source

7. On the next screen, select the connector, enable the **Set Status to Active** checkbox, and click **Execute** to add the connector, as shown in [Figure 8.113](#).



**Figure 8.113** Selection of Connector to Be Added to the Data Source

## Note

The **Test Run** option can be used to run this on simulation before actually setting the connectors and status.

If the connector is added and the status is successfully updated, the data source ID will be displayed in the **Successfully Updated Objects** section. Similarly, if the process encounters any issues, the data source ID will appear in the **Failed List** along with the specific reason for the failure.

Upon completing this configuration, the selected connector is displayed in the **Main Connector** field of the data source. If additional connectors need to be added into the data source, they can be manually added in the **Connectors** tab of the data source. This ensures that the data source is configured with all the necessary connectors to facilitate its functionality and integration within the system.

### **Set Connector and Status for Bus. Rules with Data Sources in Target System Configuration**

Similarly, the connectors must also be mapped to the business rules by following these steps:

1. Execute Transaction SPRO\_ADMIN.
2. Click the **SAP Reference IMG** button.
3. Expand **Governance, Risk and Compliance • Common Component Settings • Continuous Monitoring • Data Source and Business Rule Transport • Set Connector and Status for Bus. Rules with Data Sources in Target System.**

4. Enter the **Business Rule ID** and **Sub Scenario** with which the underlying data source was created, and click **Execute**, as shown in [Figure 8.114](#).

The screenshot shows the SAP Business Rule configuration interface. The title bar reads "Select Business Rule and Data Source to add Connector and Active Status". The interface is divided into two main sections: "Business Rule" and "Data Source".

**Business Rule Section:**

- Business Rule ID: 50001421 (highlighted with a black box)
- Business Rule Usage: [ ]
- Business Rule Type: [ ]
- Business Rule Category: [ ]
- Business Rule Analysis Type: [ ]

**Data Source Section:**

- Data Source ID: [ ]
- Connection Type: [ ]
- Sub Scenario: Config (highlighted with a black box)

At the top right, there is a "Cancel" button and a "Execute" button (represented by a clock icon).

**Figure 8.114** Selection of Business Rule ID to Set Connectors

5. Select the business rule for which the connectors should be added, and click the **Add Connector/Set Status** button, as shown in [Figure 8.115](#).

The screenshot shows the SAP Business Rule configuration interface. The title bar reads "Select Business Rule and Data Source to add connector". The interface is divided into two main sections: "Business Rule" and "Data Source".

**Business Rule Section:**

- Business Rule ID: 50001421 (highlighted with a black box)
- Business Rule Usage: [ ]
- Business Rule Type: [ ]
- Business Rule Category: [ ]
- Business Rule Analysis Type: [ ]

**Data Source Section:**

- Data Source ID: [ ]
- Connection Type: [ ]
- Sub Scenario: Config (highlighted with a black box)

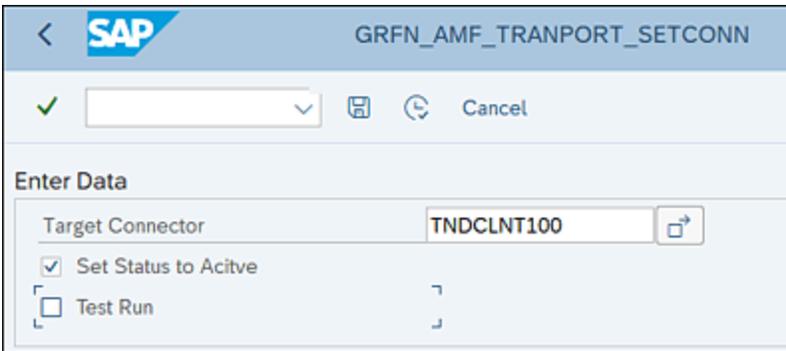
At the top right, there is a "Cancel" button and an "Add Connector/Set Status" button (highlighted with a black box).

Below the form, there is a table of business rules:

BR ID	Business Rule	Usage	Type	Category	Analy Type	Ana Ty	Ind	Status	Group	Searchterm	Business Rule Ver.	Is Templ
50001421	Duplicate invoice check changes	10	30	LOG	CC			30			20 230 926 063 908	

**Figure 8.115** Selection of Option to Add Connectors to a Business Rule

6. On the next screen, select the connector, enable the **Set Status to Active** checkbox, and click **Execute** to add the connector, as shown in [Figure 8.116](#).



**Figure 8.116** Selection of Connector to Be Added to the Business Rule

The status will be updated accordingly.

### 8.6.3 Transport of BRFplus Business Rule Data

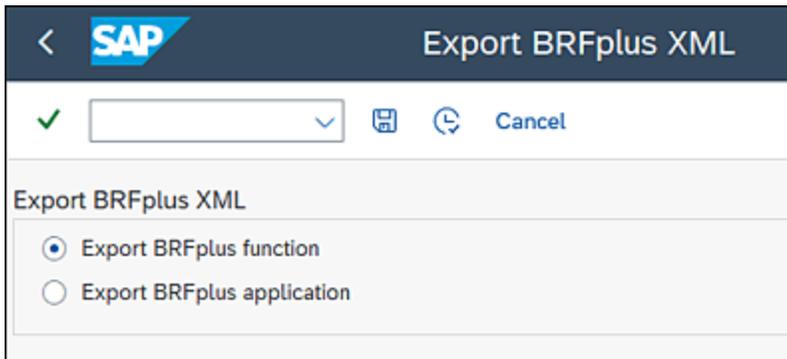
[Section 8.6.1](#) detailed the process of capturing the data source and business rule in a transport request. However, any conditions or calculations defined in the business rule (refer to [Section 8.3.3](#) for more about conditions and calculations) aren't captured in the transport request automatically. These BRFplus conditions should be moved manually across the landscape following the download and upload options. The following configurations should be made to transport the BRFplus function:

- **Generate BRFplus XML for Business Rule in Orig. Sys.**
- **Import BRFplus XML for Business Rule in Target System**

#### **Generate BRFplus XML for Business Rule in Orig. Sys. Configuration**

BRFplus conditions defined in the business rule should be exported into an XML file by following these steps:

1. Execute Transaction SPRO\_ADMIN.
2. Click the **SAP Reference IMG** button.
3. Expand **Governance, Risk and Compliance • Common Component Settings • Continuous Monitoring • Data Source and Business Rule Transport • Transport BRFplus Business Rule Data • Generate BRFplus XML for Business Rule in Orig. Sys.**
4. In the **Export BRFplus XML** screen, select the **Export BRFplus function** radio button, and click **Execute**, as shown [Figure 8.117](#).



**Figure 8.117** Selection of the Export BRFplus Option

### Note

Selecting an **Export BRFplus XML** option only has to be performed before moving any BRFplus function for the first time.

5. On the next screen, enter the business rule IDs, which have conditions and calculations defined for them, and

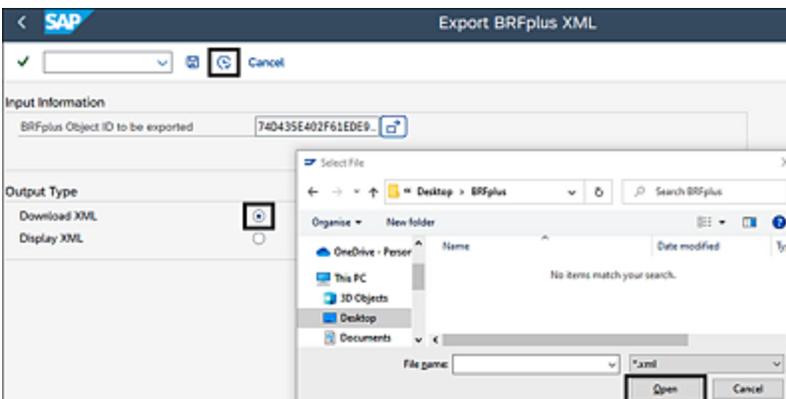
click **Execute**.

- From the **Business Rule List** screen, select the business rule, and click the **Export BRFplus Function XML** button, as outlined in [Figure 8.118](#).



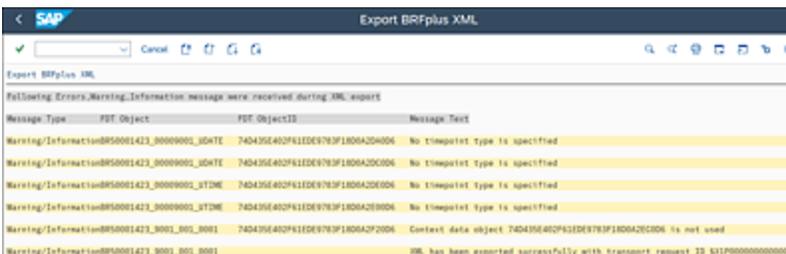
**Figure 8.118** Selection of Business Rule to Export to BRFplus

- Select the **Download XML** option in the **Output Type**, and click **Execute**. This generates an XML file to be saved in the local system, as shown in [Figure 8.119](#).



**Figure 8.119** Export BRFplus Function

Once the file is successfully exported, the export log can be seen, as shown in [Figure 8.120](#).



**Figure 8.120** Message Indicating Successful Export of XML File

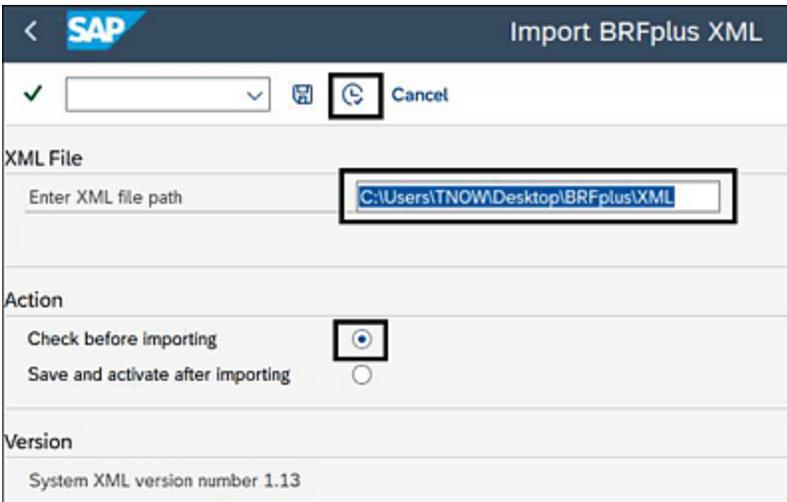
## Import BRFplus XML for Business Rule in Target System Configuration

Now the XML file can be imported in the target system. To import the BRFplus file into the target system, follow these steps:

1. Execute Transaction SPRO\_ADMIN.
2. Click the **SAP Reference IMG** button, expand **Governance, Risk and Compliance • Common Component Settings • Continuous Monitoring • Data Source and Business Rule Transport • Transport BRFplus Business Rule Data • Import BRFplus XML for Business Rule in Target System**.
3. In the **Import BRFplus XML** screen, select the file exported in the previous step, select the **Save and activate after importing** option, and click **Execute**, as outlined in [Figure 8.121](#).

### Note

To import the file in simulation mode, use the **Check before importing** option to do a test run.



**Figure 8.121** Selection of BRFplus File for Import

Once the file is successfully imported, you'll see the log in the next screen.

This section has outlined the process of transporting data sources, business rules, and BRFplus functions across systems within the same landscape. In scenarios where there is a need to transfer business rules into a system in a different landscape, SAP offers an option to export and import business rules. The details of this export and import process are provided in the next section.

## 8.7 Export and Import Functionality

The functionality of exporting and importing data sources and business rules is useful when there's a need to transfer them from one system in a landscape to another landscape. It's important to note that this feature doesn't serve as a replacement for the transport method because the business rule ID differs in the system importing it. If this option is used to move business rules within the same landscape, subsequent changes made in the development system can't be updated in the quality/production system due to the discrepancy in the business rule IDs. Following are the two configurations to execute to move the business rule, which we'll discuss in the following sections:

- **Export Data Sources and Business Rules**
- **Import Data Sources and Business Rules**

### 8.7.1 Export Data Sources and Business Rules Configuration

This activity is performed in the system where the data source and business rule are defined. To access it, follow these steps:

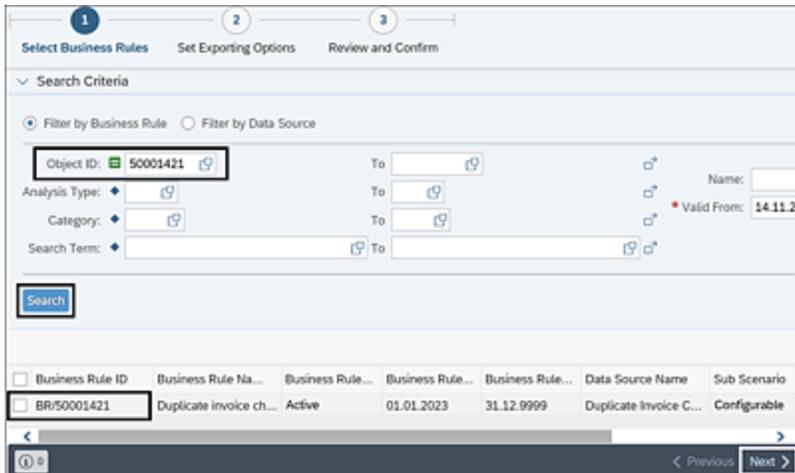
1. Execute Transaction SPRO\_ADMIN.
2. Click the **SAP Reference IMG** button.
3. Expand **Governance, Risk and Compliance** • **Common Component Settings** • **Continuous Monitoring** • **Export Data Sources and Business**

**Rules.** This will open the Web Dynpro screen, as shown in [Figure 8.122](#).



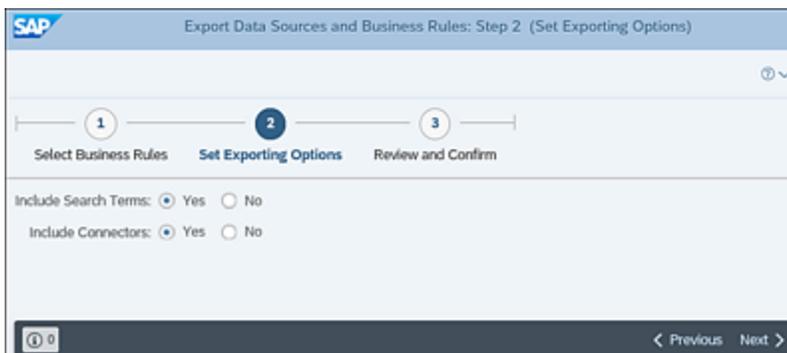
**Figure 8.122** Options to Export Data

4. Select one of the following options per the business requirement:
  - **Export Business Rules with relevant Data Sources:** Select this radio button if the requirement is to capture both data sources and business rules.
  - **Export Data Sources only:** Select this radio button if the requirement is to capture only data sources.
5. Enter the business rule **Object ID** to be exported, as shown in [Figure 8.123](#). If multiple business rules are to be exported, the range option can be used. Click **Next**.



**Figure 8.123** Selection of Business Rules to Export

- In the **Set Exporting Options** step, select the **Yes** or **No** radio buttons for **Including Search Terms** and **Including Connectors**, depending on the requirement, as shown in [Figure 8.124](#).

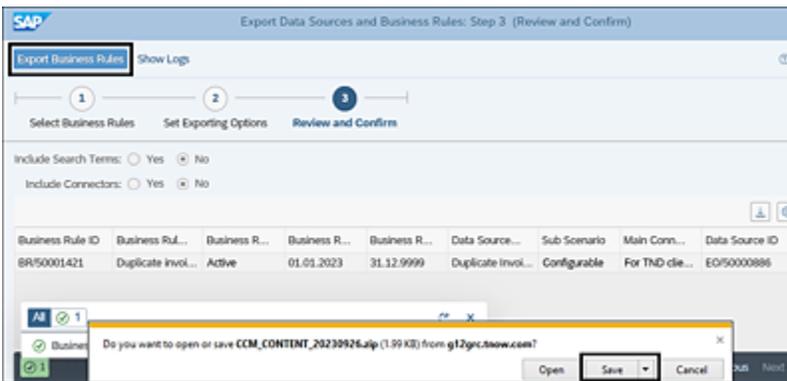


**Figure 8.124** Selection of Export Options

## Note

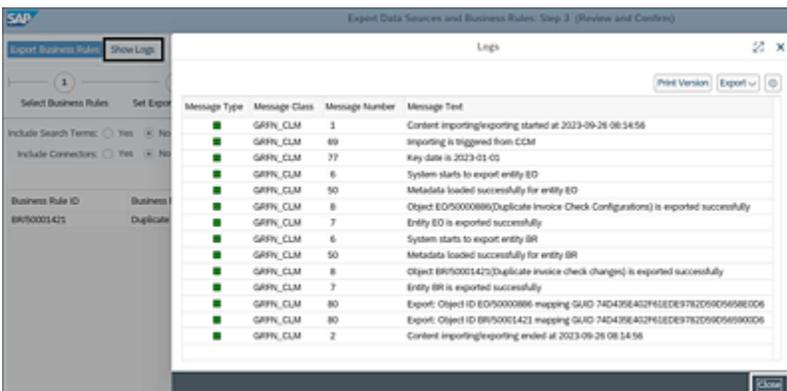
If **Yes** is selected for both options, the search terms and connectors maintained in the data source and business rule are also exported.

7. Click **Next** to navigate to the **Review and Confirm** screen.
8. From the **Review and Confirm** screen, review the list of business rules selected. If the list is fine, click on the **Export Business Rules** option, which exports a zip file that can be saved on the local system, as shown in [Figure 8.125](#).



**Figure 8.125** Option to Export the Business Rule in a Zip File and Save It

Once the file is saved, it can be imported into the other system after which the business rule will be created automatically. To review the logs of the export, click **Show Logs**, as shown in [Figure 8.126](#).

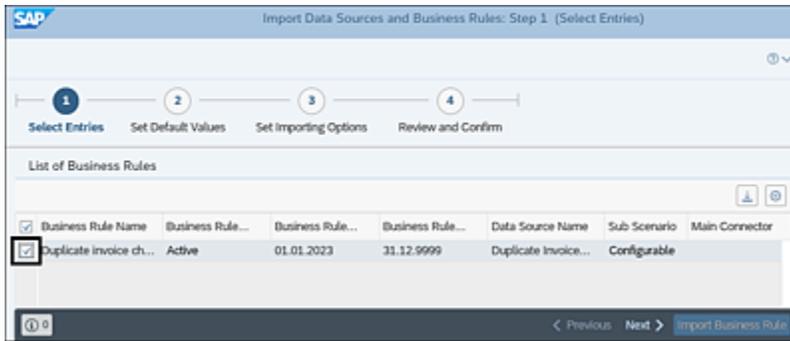


**Figure 8.126** Option to Review the Export Logs

## 8.7.2 Import Data Sources and Business Rules Configuration

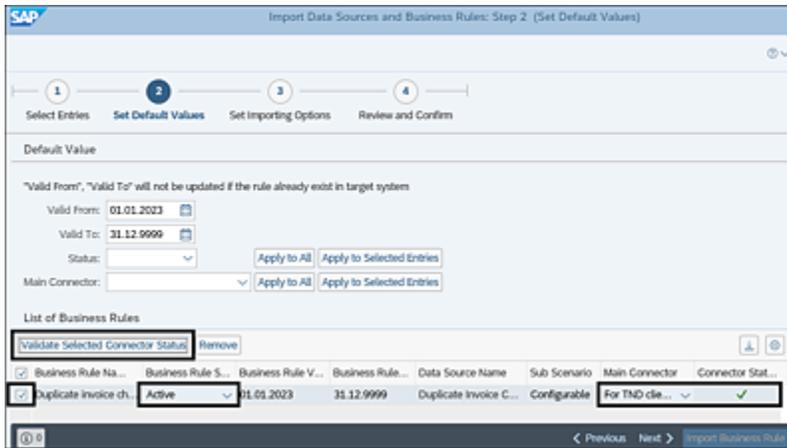
Once the configuration is exported successfully, it can be imported by following these steps:

1. Execute Transaction SPRO\_ADMIN.
2. Click the **SAP Reference IMG** button.
3. Expand **Governance, Risk and Compliance • Common Component Settings • Continuous Monitoring • Import Data Sources and Business Rules**. It redirects you to a Web Dynpro screen, which provides an option to upload the exported zip file, as explained in [Section 8.7.1](#).
4. Search and select the path of the zip file in the **File Path** field, and click **Continue**.
5. You'll navigate through multiple tabs to perform activities before importing the file into the system. In the **Select Entries** step, select the specific business rules that should be imported into the system. For example, if the exported file has five business rules and the requirement is to select only one of the business rules for import, the single business rule can be selected using this option. After selecting the business rule, click **Next**, as shown in [Figure 8.127](#).

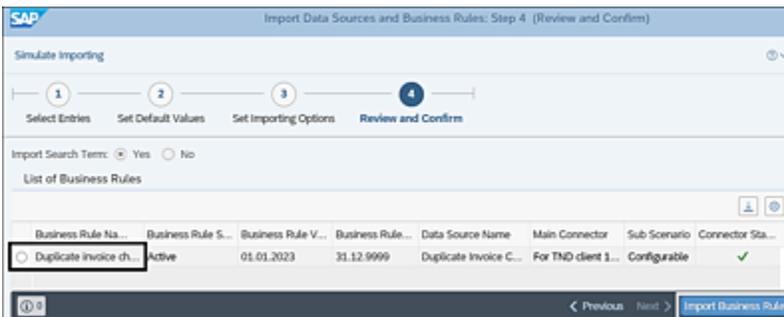


**Figure 8.127** Selection of Business Rules for Import

6. In the **Set Default Values** screen, select the **Main Connector** from the dropdown, and set the status as **Active**. Before proceeding to the next step, select the business rule line item, and click on the **Validate Selected Connector Status** option, which runs a test on the connector. If the connections are fine, it adds a checkmark in the **Connector Status** column, as shown in [Figure 8.128](#).
7. Click **Next**, and in the **Set Importing Options** step, select the option to import search terms as **Yes** or **No**, depending on the requirements. Click **Next** to navigate to the **Review and Confirm** screen.
8. Select the business rules that should be imported, and click **Import Business Rule**, as shown in [Figure 8.129](#).



**Figure 8.128** Option to Set the Connector and Status to the Business Rules



**Figure 8.129** Option to Import Business Rules

Once the file is imported, you can see the status of the import with a confirmation message and a detailed log. On completing the import, the business rules and data sources are seen in their respective configuration in the **Rule Setup** work center.

## 8.8 Usage of the SAP HANA Subscenario

The CCM feature within SAP Process Control is used to oversee the effectiveness of controls established within SAP S/4HANA and SAP ERP systems by validating the configurations and master data implemented in these systems. There are instances where it becomes necessary to analyze huge amounts of transactional data (e.g., generated purchase orders or processed invoices) to assess the effectiveness of organizational controls. While certain subscenarios within the CCM functionality may fulfill specific needs, there are situations where extensive data analysis is required for decision-making. Using some of the subscenarios isn't possible due to longer processing times. The **HANA** subscenario presents a solution for handling such scenarios, enabling SAP Process Control to monitor transactional data in target systems by directly accessing the SAP HANA database. To use the **HANA** subscenario, you must create calculation views within the SAP HANA database of the target system. SAP Process Control then uses these calculation views as the data source and business rules for analysis purposes.

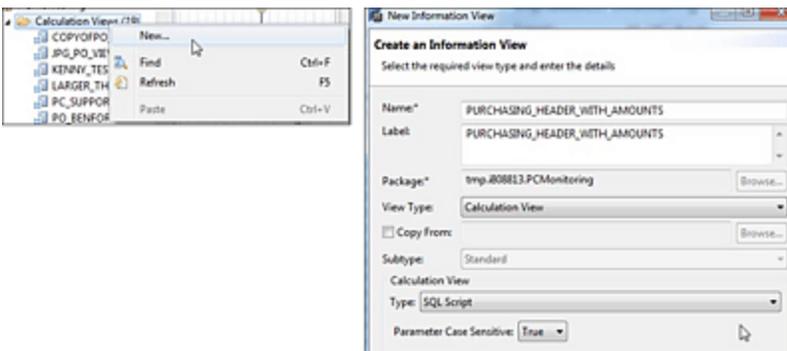
Following are the steps involved to configure a calculation view and select the view in the data source, as outlined in the following sections:

1. Configure calculation views in the SAP HANA database.

2. Establish RFC connectors (Transaction DBCO and logical connections).
3. Create a data source in SAP Process Control.

### 8.8.1 Configuration of Calculation Views in SAP HANA

Before creating a data source using the **HANA** subscenario, the prerequisite is to create a calculation view in the respective SAP HANA database. To create a new calculation view, log in to the SAP HANA database, right-click on **Calculation Views**, and then select **New**, as shown in [Figure 8.130](#).



**Figure 8.130** Option to Create New Calculation Views

Define the output columns, per the requirement (it's always recommended to define the output columns first, regardless of the requirement). Click on **Create Columns**, and from the next screen, select the required columns and data types, as shown in [Figure 8.131](#).

	Name	Data type	Length	Scale
1	Client	NVARCHAR	3	
2	PO_ID	NVARCHAR	10	
3	CoCode	NVARCHAR	10	
4	Currency	NVARCHAR	3	
5	LastChangedOn	NVARCHAR	10	
6	isDeleted	NVARCHAR	1	
7	PO_Amt	DECIMAL	15	2
8	ItemCount	INTEGER		
9	<Click to add>			

**Figure 8.131** Definition of Output Columns

As a next step, define the input parameters. These parameters enable the calling application to pass in parameter values that control the execution of the script. Typically, this is done by filtering the data. This is particularly important for SAP Process Control, which can help in defining the filter criteria in business rules. To create a new input parameter, click on the **New Input Parameter** option, as shown in [Figure 8.132](#).

**Create an Input Parameter**

Input parameters are used to parameterize the view execution such as, to parameterize currency conversion, calculated columns or inner filters.

Name: ClientParameter

Label: ClientParameter

Parameter Type: Direct  Is Mandatory

Default Value

Constant  Expression

Value: 600

Direct

Semantic Type: [Dropdown]

Data Type: NVARCHAR Length: 3 Scale: 1

**Figure 8.132** Definition of Input Parameters

Once the input and output parameters are defined, the next step is to enter the SQL procedure, which is required to analyze the data, as shown in [Figure 8.133](#).

Once the procedure is defined, click on the **Save and Activate** option to complete the creation of the calculation view.

## Note

The view can be tested and validated using the data preview feature, which functions similar to executing an ad hoc query. This allows users to test whether the view generates the expected results before formal implementation.

```
SQL

@/**** BEGIN PROCEDURE SCRIPT *****/

BEGIN

  var_out =

  select L.MANDT AS "Client", L.EBELN AS "PO_ID", L.BUKRS as "CoCode"
    , L.WAERS as "Currency", to_date(L.AEDAT) as "LastChangedOn"
    , L.LOEKZ as "IsDeleted", sum (R.NETWR) as "PO_Amt"
    , count (*) as "ItemCount"
  from "SAPN60"."EKKO" as L right outer join "SAPN60"."EKPO" as R
    AS L.MANDT = R.MANDT and L.EBELN = R.EBELN
  where
    L.MANDT like :ClientParameter
    and to_date(:DateFrom) < To_date(L.AEDAT)
    and to_date(:DateTo) < To_date(L.AEDAT)
  group by L.MANDT, L.EBELN, L.BUKRS, L.WAERS, L.AEDAT, L.LOEKZ
  order by L.EBELN, L.AEBDT;

END /*****End Procedure Script *****/
```

**Figure 8.133** Sample SQL Code in a Calculation View

## 8.8.2 Establishing RFC Connectors

To establish the connection between SAP Process Control and the SAP HANA database of the target system, you must configure a database connection in the SAP Process Control system. To configure the connection, access Transaction DBCO, and click on the **New Entries** option. In the **New**

**Entries** screen, provide the required information such as **DB Connection, DBMS (HDB), User Name, DB Password,** and **Conn. info** (connection information), as shown in [Figure 8.134](#).

New Entries: Details of Added Entries	
DB Connection	H000
DBMS	HDB
User Name	sudhakar
DB password	***** / *****
Conn. info	ld9227:30215
Permanent	<input checked="" type="checkbox"/>
Connection Limit	10
Optimum Conns	5

**Figure 8.134** Establishment of a New Transaction DBCO Connection

Once the database connector is created, the next step is to create a logical connector with the same name as the database connection. To create a logical connection, access Transaction SM59, and click **Create**. Provide the **RFC Destination** name (same as the database connection), and **Connection Type** (**L** - logical connection) in the new entries screen, as shown in [Figure 8.135](#).

RFC Destination H000	
Connection Test	
RFC Destination	H000
Connection Type	L Logical Destination
Description	

**Figure 8.135** Configuration of the Logical Connection

Once the required connectors are defined, perform the following two configurations, which are part of the SAP Process Control connector configuration:

- **Maintain Connectors and Connection Types**  
Refer to [Chapter 4, Section 4.4.2](#), to understand the process of configuring the RFC connections to be used in the SAP Process Control CCM functionality.
- **Maintain Connection Settings**  
Refer to [Chapter 4, Section 4.4.3](#), to understand the process of mapping the RFC connections to the data source subscenario. Follow the same steps as in [Section 4.4.3](#), except select **Scenario-Connection Link: HANA** and the map the connector created in the previous step.

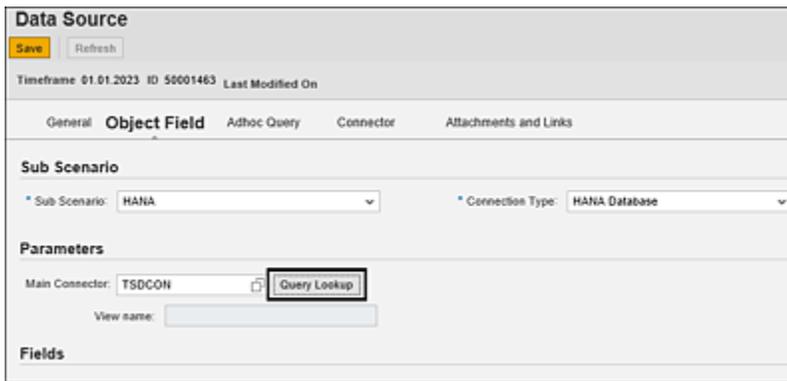
After completing the prerequisites of configuring the calculation view and setting up the RFCs, the subsequent step involves defining the data source using the **HANA** subscenario, outlined in the following section.

### **8.8.3 Creation of a Data Source in SAP Process Control**

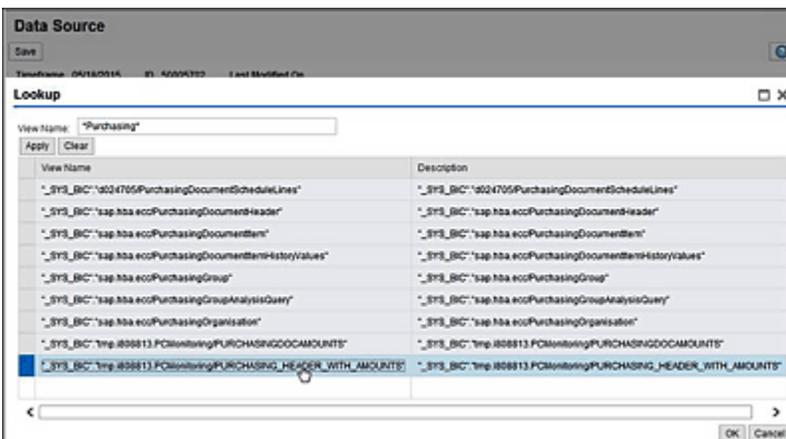
To create an **HANA** subscenario data source, follow the steps in [Section 8.2.1](#) shown earlier. To start configuring a data source, follow these steps:

1. Navigate to the **General** tab, and fill in all the relevant information.
2. Navigate to the **Object Field** tab, and select the **Sub Scenario** as **HANA**.
3. Select the **Main Connector** where the SAP HANA view was created.

4. Click the **Query Lookup** button to find the view to be selected in the data source, as highlighted in [Figure 8.136](#).
5. From the **Lookup** screen, in the **View Name** field, search for the view that was created in the SAP HANA database, and click **Apply**. From the results, select the **View**, and click **OK**, as highlighted in [Figure 8.137](#).



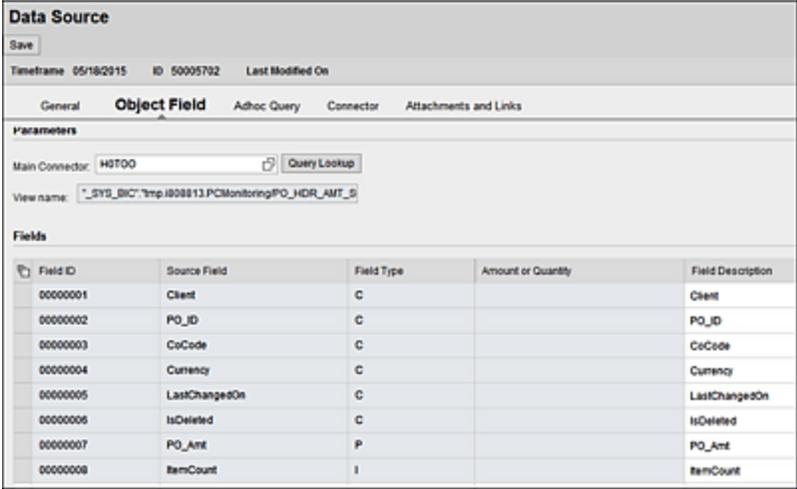
**Figure 8.136** Query Lookup Option in the SAP HANA Data Source



**Figure 8.137** Selection of the Query in the Data Source

On selection of the view, all the relevant fields selected in the calculation view are auto-populated in the data source, which can be used for analysis in the business rule, as shown in [Figure 8.138](#).

Note that additional connectors can be defined to connect to the other target systems. However, ensure that the view is defined with the same name in each of those target systems and maintained in the **Connector** tab. Click **Save** to complete the data source configuration.



The screenshot shows the 'Data Source' configuration window. At the top, there is a 'Save' button and metadata including 'Timeframe: 05/18/2015', 'ID: 50005792', and 'Last Modified On'. Below this are tabs for 'General', 'Object Field', 'Adhoc Query', 'Connector', and 'Attachments and Links'. The 'Object Field' tab is active, showing a 'Parameters' section with 'Main Connector' set to 'HSTOO' and a 'View name' of '"/>

Field ID	Source Field	Field Type	Amount or Quantity	Field Description
00000001	Client	C		Client
00000002	PO_ID	C		PO_ID
00000003	CoCode	C		CoCode
00000004	Currency	C		Currency
00000005	LastChangeOn	C		LastChangedOn
00000006	IsDeleted	C		IsDeleted
00000007	PO_Amt	P		PO_Amt
00000008	ItemCount	I		ItemCount

**Figure 8.138** Fields Selected from the InfoSet Query in the Data Source

**Note**

The process of using an ad hoc query in the data source remains the same as defined in [Section 8.2.1](#). To understand the process of defining a business rule using a data source, refer to [Section 8.3](#).

## 8.9 Reporting

SAP Process Control offers a range of standard reports to provide an overview of the list of controls scheduled for automated monitoring, results for each job, statuses of issues reported as part of CCM, and statuses of remediation plans created to respond to these issues. The **Rule Setup** work center in Transaction NWBC has the following key reports for CCM:

- Job Monitor
- Monitoring Issue Status
- Monitoring Remediation Status

Each of these reports are explained in the following sections.

### 8.9.1 Job Monitor

The Job Monitor report provides a detailed view of jobs scheduled for automated monitoring, along with details of controls, business rules that are part of the scheduled job, target connectors against which the jobs are scheduled, and results for each job, such as **Adequate/Deficient**. To access this report, execute Transaction NWBC, navigate to the **Rule Setup** work center, and execute the **Job Monitor** work item under **Scheduling Group**.

This report can be executed to review the details of the job scheduled for a specific time frame, which are represented in the fields next to **Show**. In addition, enter the maximum

number of line items that the report should execute, and click **Apply**. The Job Monitor report also provides a feature to extract the results based on the following search criteria:

- **Job Name**  
Name provided in the **Header** tab of an automated monitoring job.
- **Frequency**  
Used to get results of only those jobs scheduled at that frequency.
- **Job Status**  
Used to extract the results of automated monitoring jobs based on status, such as **Cancelled, Error, Released, New, In Progress, Obsolete, Replaced, or Completed**.
- **Execution Date From and To**  
Used to identify only those jobs that are executed during that period.
- **Target Connector**  
Used to fetch the details of jobs executed against a specific target connector.

The search criteria are optional, the report provides the details of the jobs and respective results when you click **Search**. The **Deficiency Type** column indicates whether the job has identified any issue (indicated with **High/Medium/Low**) or the job ended without identifying any issue (indicated with **Adequate**).

Regulation	Job Name	Job Step	Status	Total Deficiency Count	Deficiency Type	Exception Date	Start Time	Control	Business Rule
SOX	MONITOR PROFILE PARAMETER ACCESS	105	New	0		26 09 2023	05:30:00	Monitor Critical Authentication	Access to maintain profile parameters
SOX	MONITOR SMOG ACCESS	105	New	0		26 09 2023	05:30:00	Monitor Critical Authentication SMOG	Monitor access to Critical action SMOG
SOX	MONITOR PROFILE PARAMETER ACCESS	104	New	0		26 09 2023	05:30:00	Monitor Critical Authentication	Access to maintain profile parameters
SOX	MONITOR SMOG ACCESS	104	New	0		26 09 2023	05:30:00	Monitor Critical Authentication SMOG	Monitor access to Critical action SMOG
SOX	MONITOR PROFILE PARAMETER ACCESS	103	New	0		26 09 2023	05:30:00	Monitor Critical Authentication	Access to maintain profile parameters
SOX	MONITOR SMOG ACCESS	103	New	0		26 09 2023	05:30:00	Monitor Critical Authentication SMOG	Monitor access to Critical action SMOG
SOX	MONITOR PROFILE PARAMETER ACCESS	102	New	0		27 09 2023	05:30:00	Monitor Critical Authentication	Access to maintain profile parameters
SOX	MONITOR SMOG ACCESS	102	New	0		27 09 2023	05:30:00	Monitor Critical Authentication SMOG	Monitor access to Critical action SMOG
SOX	MONITOR PROFILE PARAMETER ACCESS	101	New	0		26 09 2023	05:30:00	Monitor Critical Authentication	Access to maintain profile parameters
SOX	MONITOR SMOG ACCESS	101	New	0		26 09 2023	05:30:00	Monitor Critical Authentication SMOG	Monitor access to Critical action SMOG
SOX	MONITOR PROFILE PARAMETER ACCESS	100	New	0		26 09 2023	05:30:00	Monitor Critical Authentication	Access to maintain profile parameters
SOX	MONITOR SMOG ACCESS	100	New	0		26 09 2023	05:30:00	Monitor Critical Authentication SMOG	Monitor access to Critical action SMOG
Sehames Data	IM_JOB_Q42023	9	Completed	3	High	26 09 2023	01:49:53	Monitor Duplicate Invoice Check Config	Duplicate invoice check changes
Sehames Data	IM_JOB_Q42023	8	Completed	0	Adequate	26 09 2023	01:49:51	Monitor Duplicate Invoice Check Config	Duplicate invoice check changes
Sehames Data	IM_JOB_Q42023	7	Completed	0	Adequate	26 09 2023	01:49:50	Monitor Duplicate Invoice Check Config	Duplicate invoice check changes
Sehames Data	IM_JOB_Q42023	6	Completed	0	Adequate	26 09 2023	01:49:47	Monitor Duplicate Invoice Check Config	Duplicate invoice check changes

**Figure 8.139** Job Monitor Report

For the jobs with deficiencies, the details of the exceptions can be reviewed using the **View Results** option. In addition, this is an interactive report, where the details of the controls and business rules can also be accessed with a single click, as shown in [Figure 8.139](#).

### 8.9.2 Monitoring Issue Status

This report provides visibility into the status of issues identified as part of the automated monitoring jobs. The results can be extracted by regulation, by organization, by process, or by control. You can review this report to determine the controls that failed and the current status of reported deficiencies. To access this report, execute Transaction NWBC, navigate to the **Rule Setup** work center, and execute the **Monitoring Issue Status** work item under the **Reports** group.

This report provides a detailed view of the controls for which the issue is identified, including the organization where the control is localized, the subprocess under which the control is created, the current processor of the issue, issue status,

and number of remediation plans created to fix the issue. In addition, this is an interactive report, where the details of the controls and issue can be accessed by clicking on their respective hyperlinks, as shown in [Figure 8.140](#).

Organization	Subprocess	Control	Issue	Description (Issue)	Issue Processor
ABC India P/LM	Invoice Processing	Monitor Duplicate Invoice Check Config	TNDC/NT100	Monitor changes to the configuration duplicate invoice check	2 High 2 Medium 0 Low 0
ABC India P/LM	Invoice Processing	Monitor Duplicate Invoice Check Config	TNDC/NT100	Monitor changes to the configuration duplicate invoice check	3 High 3 Medium 0 Low 0 SAKRISHNA
Power Generation	Invoice Processing	Monitor Duplicate Invoice Check Config	TNDC/NT100	Monitor changes made to duplicate invoice check	4 High 4 Medium 0 Low 0 Sandeep
Power Generation	Invoice Processing	Monitor Duplicate Invoice Check Config	TNDC/NT100	Monitor changes made to duplicate invoice check	4 High 4 Medium 0 Low 0
Power Generation	Invoice Processing	Monitor Duplicate Invoice Check Config	TNDC/NT100	Monitor changes made to duplicate invoice check	4 High 4 Medium 0 Low 0 Sandeep
Power Generation	Invoice Processing	Monitor Duplicate Invoice Check Config	TNDC/NT100	Monitor changes made to duplicate invoice check	4 High 4 Medium 0 Low 0 Sandeep
Power Generation	System Parameters	Monitor Password Parameter	TNDC/NT100	Monitor Password Parameter Settings	1 High 1 Medium 0 Low 0 SAKRISHNA
Power Generation	System Parameters	Monitor Password Parameter	TNDC/NT100	Monitor Password Parameter Settings	1 High 1 Medium 0 Low 0
Power Generation	Access Management	Monitor users with SAP_A0 access	TNDC/NT100	Monitor users with access to profiles: SAP_A0	10 High 10 Medium 0 Low 0 Sandeep
Test	Test Base	Control to monitor user vs standard role	TNDC/NT100	Business rule to monitor user vs standard role assignment	7 High 7 Medium 0 Low 0
Test	Test Base	Control to monitor user vs standard role	TNDC/NT100	Business rule to monitor user vs standard role assignment	7 High 7 Medium 0 Low 0
Test	Test Base	Control to monitor user vs standard role	TNDC/NT100	Business rule to monitor user vs standard role assignment	7 High 7 Medium 0 Low 0

**Figure 8.140** Monitoring Issue Status Report

### 8.9.3 Monitoring Remediation Status

This report provides visibility into the status of remediation plans for the issues identified by regulation, by organization, by process, or by control. You can review this report to determine the current status of various initiated remediation plans. You can drill down into the automated monitoring issue to review the details of the exceptions identified.

To access this report, execute Transaction NWBC, navigate to the **Rule Setup** work center, and execute the **Monitoring Remediation Status** work item under the **Reports** group.

This report provides a detailed view of the controls for which the remediation plan is created, including the organization where the control is localized, the subprocess under which the control is created, details of the issue for which the plan is created, the owner of the issue, details of the remediation

plan, remediation owner, and the current status of the plan. In addition, this is an interactive report, where the details of the controls and remediation plan can be accessed by clicking on their respective hyperlinks, as shown in [Figure 8.141](#).

The screenshot shows a web interface titled "Monitoring Remediation Status" with a sub-header "Tabular report showing the status of remediation plans by monitoring control". Below this is a "Results" section containing a table. The table has six columns: Organization, Subprocess, Control, Issue, Issue Priority, and Issue Processor. Two rows of data are visible, each with a blue hyperlink in the Control column.

Organization	Subprocess	Control	Issue	Issue Priority	Issue Processor
Power Generation	Invoice Processing	<a href="#">Monitor Duplicate Invoice Check Config</a>	TNECLNT100 Monitor changes made to duplicate invoice check	High	Sandeep
Power Generation	Access Management	<a href="#">Monitor users with SAP_HR access</a>	TNECLNT100 Monitor users with access to profiles - SAP_HR	High	Sandeep

**Figure 8.141** Monitoring Remediation Status Report

## 8.10 Summary

This chapter provided a detailed walkthrough of how the control testing can be automated using the CCM functionality of SAP Process Control. It explained in detail how the data source and business rule can be configured using various subscenarios and usage of BRFplus conditions, as well as the importance of the automated monitoring jobs to schedule the controls on a recurring basis to trigger notifications to the control owners whenever an exception is identified in the target system.

The chapter detailed the process of moving the data source and business rules across the same landscape using transport requests and the process of moving them across systems in different landscapes using the export and import options.

Now that you understand the different evaluation procedures available and used to evaluate the controls, the next chapter provides a detailed walkthrough of other processes used in the organization to strengthen the internal control processes, such as managing the policies in a workflow-enabled environment, usage of disclosure surveys, and obtaining sign-off from top management about the internal controls in place in the organization.

# 9 Additional Features in SAP Process Control

*The previous chapters detailed the significance of establishing master data within SAP Process Control and explored various evaluation methods, including design assessments, self-assessments, and tests for the effectiveness of both manual and automated controls, as well as addressing ad hoc issues related to controls and other master data elements.*

This chapter focuses on the key additional functionalities in SAP Process Control such as managing the policies, usage of disclosure surveys, and taking sign-off from the top management. These additional functionalities contribute to fortifying the internal control framework within the organization and details about various activities such as overseeing policy lifecycles, obtaining top management's approval regarding the current state of control health in the organization, and using disclosure surveys to obtain feedback from users regarding the performance of controls, subprocesses, or the organization as a whole.

## 9.1 Policy Lifecycle Management

A policy is a defined set of rules, guidelines, or procedures that are defined in the organization and should be followed to ensure smooth functioning of the processes. It represents a framework that outlines how the organization intends to work, make decisions, and achieve its objectives while ensuring compliance with applicable laws and regulations. A policy can be defined at an organization level, function level, or process level, for example, information security policy, human resource policy, procurement policy, and so on.

SAP Process Control provides a platform that can act as a central repository of all the policies that exist in the organization, which are currently managed in silos by individual policy owners. It also supports in managing the entire lifecycle of the policy, consisting of the following stages in a workflow-enabled environment:

- Definition of a policy
- Policy review
- Policy approval
- Publishing the policy

Once the policy is approved and published, SAP Process Control also supports distributing the policies to the relevant employees of the organization to ensure they are aware of it. In addition, using functionalities such as surveys and quizzes, policy supports evaluating the effectiveness of its operation in the organization. The following sections detail how the policy is configured in SAP Process Control and the stages of workflow involved in the approval process.

## 9.1.1 Configuration of Policy

The policy administrator configures the policy in the SAP Process Control system. Users with access to Transaction PFCG role SAP\_GRC\_SPC\_CRS\_PLC\_ADMIN will get authorization to define the policy. The definition of policy in SAP Process Control involves two levels within the hierarchy:

- Policy group
- Policy

In the following, we'll detail the importance of policy groups, the process of creating them, and the steps to set up policies under the group.

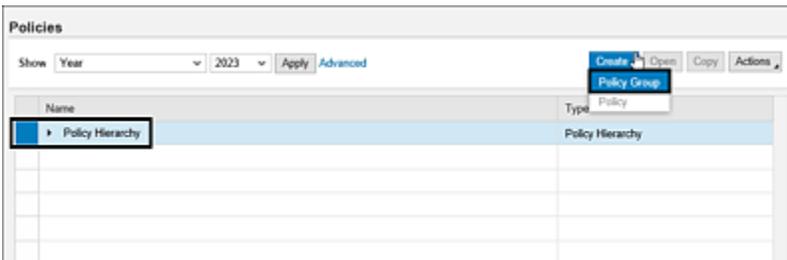
### Policy Group

When an organization is managing multiple policies, it becomes important to group the relevant policies within a group to simplify maintenance and reporting processes. A policy group serves this purpose by structuring policies into relevant groups, facilitating grouping of similar policies associated with the same processes or compliance areas. For instance, if the organization is responsible for managing policies such as anti-corruption policy and anti-bribery policy, these can be organized and grouped together under a policy category named "Compliance."

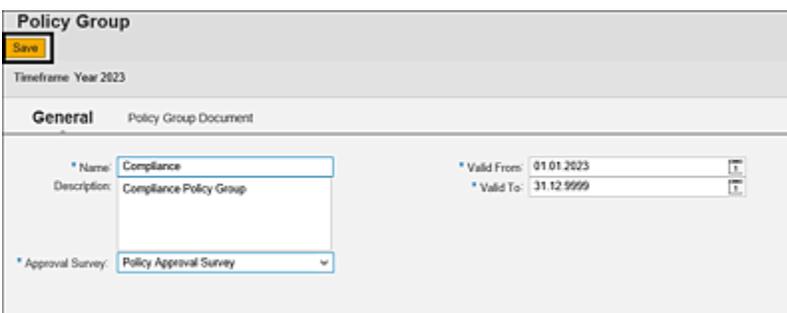
To review the existing policy groups in the hierarchy or to create a new one, log in to the SAP Process Control system, execute Transaction NWBC, select the **Master Data** work center, click the **Regulations and Policies** work group, and execute the **Policies** work item.

To create a new policy group, click on the **Policy Hierarchy**, and then choose **Create • Policy Group**, as highlighted in [Figure 9.1](#).

On the **Policy Group** screen, enter a unique **Name** for the policy group, **Description**, and **Approval Survey**, that is, the survey the policy approver should respond to before approving the policy. This approval survey is applicable to all the policies created under this group. [Chapter 6, Section 6.2.1](#), details the process of creating questions and survey libraries, as well as using the **Policy Approval** category for this requirement, **Valid From** (date from which the policy group is valid), and **Valid To** (date till which the policy group is valid). Click **Save** to save the new policy group, as outlined in [Figure 9.2](#).



**Figure 9.1** Policy Group Creation Option under Policies



**Figure 9.2** Configuration of Policy Group

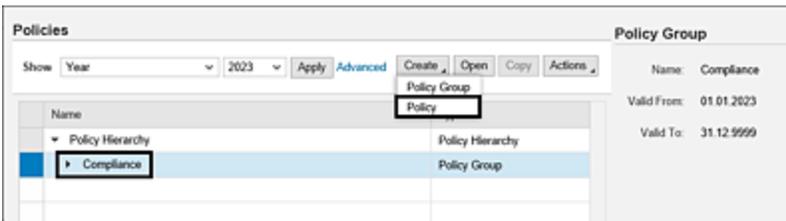
Once the policy group is created, the subsequent step involves creation of a policy, which we'll cover next.

## Policy

Policies can be configured by the policy administrator within a policy group created. It's essential to specify the scope of the policy. Once the policy is outlined, it undergoes a two-tier review process: the first level of review is conducted by the policy reviewer, and the second level is conducted by the policy approver. The policy will be published only once the policy is ready for approval.

To review the existing policies under the groups or to create a new one, log in to the SAP Process Control system, execute Transaction NWBC, navigate to the **Master Data** work center, and click the **Policies** work item under the **Regulations and Policies** work group.

To create a new policy, select the **Policy Group** under the **Policy Hierarchy**, and choose **Create • Policy**, as highlighted in [Figure 9.3](#).



**Figure 9.3** Policy Creation Option under Policy Group

The configuration of policy involves definition of details in the following multiple tabs starting from definition of general details of the policy, methods of distribution, responsible organization, risks that might materialize if the policy norms aren't complied with, and controls that are implemented to mitigate the risks and keep the policy effective:

- **General**
- **Policy Document**
- **Policy Scope**
- **Risks**
- **Controls**
- **Policy Sources**
- **Roles**
- **Review and Approval**

Each of these tabs are detailed in the following sections.

### ***General Tab***

The initial tab in the policy creation screen is the **General** tab, which is used to define the fundamental policy details, including the **Name**, **Policy Type**, and so on. You can find detailed explanations of all the fields within this tab in [Table 9.1](#).

<b>Field Name</b>	<b>Purpose</b>
<b>Name</b>	This is a brief name of the policy.
<b>Description</b>	This is a detailed description of the policy and its applicability in the organization.

Field Name	Purpose
<b>Policy Type</b>	<p>This functionality in SAP Process Control supports managing not only policies in the organization but also maintaining standard operating procedures (SOPs), guidelines, or standards. Select the type of policy that is being configured from the dropdown. The dropdown values can be managed from the Transaction SPRO configuration. To manage, log in to the SAP Process Control system, execute Transaction SPRO_ADMIN, click the <b>SAP Reference IMG</b> button, and navigate to <b>Governance, Risk and Compliance • Common Component Settings • Policy Management • Maintain Policy Types and Distribution Methods</b>.</p> <p>Following are the values available by default:</p> <ul style="list-style-type: none"><li>• <b>Policy</b></li><li>• <b>Procedure</b></li><li>• <b>Standard</b></li><li>• <b>Work Instruction</b></li><li>• <b>SOP</b></li></ul> <p>Additional values can be created using the <b>New</b> button.</p>

Field Name	Purpose
<b>Distribution Methods</b>	Following are the three types of policy distribution methods available. See <a href="#">Section 9.1.3</a> to understand more about the relevance of these methods: <ul style="list-style-type: none"><li>• <b>Acknowledgement</b></li><li>• <b>Quiz</b></li><li>• <b>Survey</b></li></ul>
<b>Distribution Language</b>	Select the language in which the distribution of acknowledgement, quiz, and survey should reach the employees.
<b>Purpose</b>	This is a brief description of the objective, which the policy aims to achieve.

Field Name	Purpose
<b>Policy Category</b>	<p>This option is used to group similar policies under a category for reporting purposes. Select the policy category from the dropdown values that are configured in Transaction SPRO_ADMIN. Following are the policy categories that are added to this configuration by default on activating the Business Configuration set (BC set) GRFN-POLICY-CATEGORY:</p> <ul style="list-style-type: none"> <li>• <b>IT Policy</b></li> <li>• <b>Sustainability Policy</b></li> <li>• <b>Global trade related policy</b></li> <li>• <b>HR policy</b></li> <li>• <b>Physical access policies</b></li> </ul> <p>To modify default values or add new values into the category list, execute Transaction SPRO_ADMIN, click <b>SAP Reference IMG</b>, and navigate to configuration node <b>Governance, Risk and Compliance • Common Component Settings • Policy Management • Maintain Policy Categories</b>.</p>

Field Name	Purpose
<b>Responsible Organization</b>	Select the organization from the organization hierarchy created in the master data (refer to <a href="#">Chapter 5, Section 5.3</a> , to understand the process of definition the organization hierarchy), which is responsible for defining and maintaining the policy.
<b>Created By</b>	This is a display-only field, which populates the name of the user creating the policy by default.
<b>Created On</b>	This is a display-only field, which populates the date and time when the policy was created.
<b>Valid From</b>	This indicates the date from which the policy is valid.
<b>Valid To</b>	This indicates the date till which the policy is valid.
<b>Date for Next Revision</b>	This is an optional field, where the policy administrator can define a future date when the policy should be revisited for any updates.
<b>Note</b>	Update the input that should be received by the policy administrator when a notification is received on the date of the next revision

**Table 9.1** Various Fields in General Tab

Enter the details as explained in [Table 9.1](#) in the **General** tab, and then navigate to the next tab to define the scope of the policy. [Figure 9.4](#) shows the fields on this tab.

The screenshot shows the 'General' tab of the SAP Policy Creation interface for an 'Anti Corruption Policy'. The interface includes a header with 'Save', 'Send for Review', and 'Submit for Approval' buttons. Below the header, there are tabs for 'Policy Group Compliance', 'Distribution Methods', 'Acknowledgement, Quiz, Survey', 'Status Draft', and 'Version 002'. The 'General' tab is active, showing fields for Name, Description, Policy Type, Distribution Methods, Distribution Language, Quiz Template, Survey Template, Purpose, Policy Category, Responsible Organization, Created By, Created On, Valid From, Valid To, Date for Next Revision, and Note.

Field	Value
Name	Anti Corruption Policy
Description	Policy to comply with anti-corruption laws
Policy Type	Policy
Distribution Methods	<input checked="" type="checkbox"/> Acknowledgement <input checked="" type="checkbox"/> Quiz <input checked="" type="checkbox"/> Survey
Distribution Language	
Quiz Template	Policy Quiz
Survey Template	Policy Survey
Purpose	No corruptive practices take place in the organization
Policy Category	Global trade related policy
Responsible Organization	ABC International LMF
Created By	SAKRISHNA1
Created On	08.10.2023 22:27:31
Valid From	08.10.2023
Valid To	31.12.9999
Date for Next Revision	01.01.2024
Note	Review the policy document

**Figure 9.4** General Tab Options in Policy Creation

## ***Policy Document Tab***

As part of policy definition, the guidelines are typically documented as clauses within the policy. When configuring a policy in SAP Process Control, the policy document can be attached in this tab, allowing it to be reviewed by the policy reviewer and approver before the policy is published. There are two methods available for uploading the policy document:

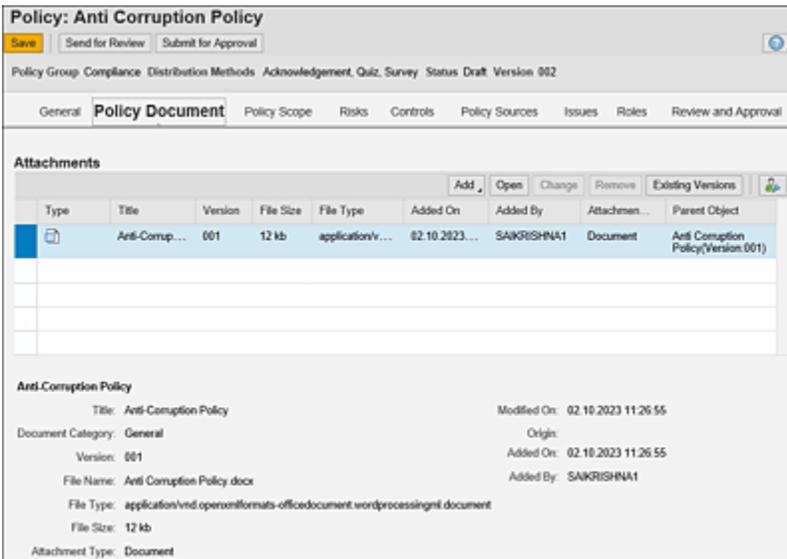
- **Add File**

This method involves manually uploading the policy document file from your local PC.

- **Add Link**

Instead of directly uploading the document, you can provide a link to an external document or resource, allowing access to the policy document without physically uploading it to the system.

To add the policy document/link, click the **Add** button, use one of these two options, and upload the policy document. Once the document is added, you may notice it under the **Attachments** section, as highlighted in [Figure 9.5](#), along with other information about the file/link.



**Figure 9.5** Policy Document Upload Options

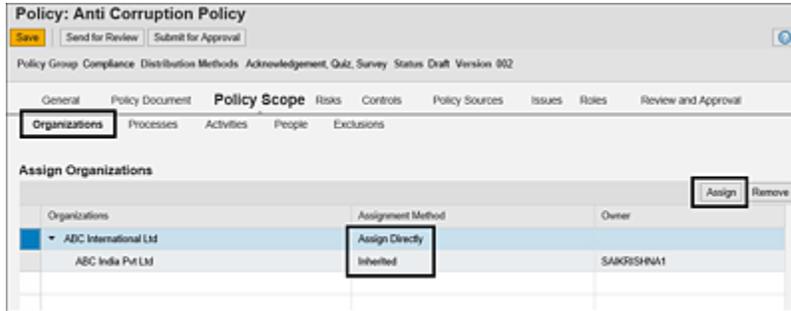
## ***Policy Scope Tab***

The third tab in the policy definition is dedicated to defining the comprehensive scope of the policy. Within this tab, you can specify **Organizations, Processes, Activities, People,** and the **Exclusions**. Each of the subtabs are detailed in the following:

- **Organizations**

Select the organizations from the master data hierarchy (refer to [Chapter 5, Section 5.3](#), for the steps to define process definition in the organization hierarchy). Click the **Assign** button and select the organization from the popup screen. If an organization has child organizations defined

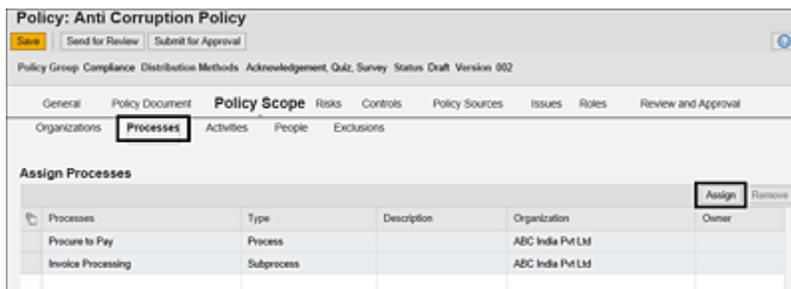
in the hierarchy, all the relevant child organizations are inherited into the scope of the policy. [Figure 9.6](#) shows the **Organizations** and **Assignment Method** fields.



**Figure 9.6** Assignment of Organizations in the Scope of Policy

- **Processes**

Select the processes that are impacted and should run in accordance with the guidelines defined in the policy. Processes that are localized at the organization level can only be selected in this tab. [Chapter 5, Section 5.3.2](#), detailed the concept of localization. Click the **Assign** button to select the processes from the popup screen. Selected processes and subprocesses will be listed in the **Assign Processes** table, as highlighted in [Figure 9.7](#).

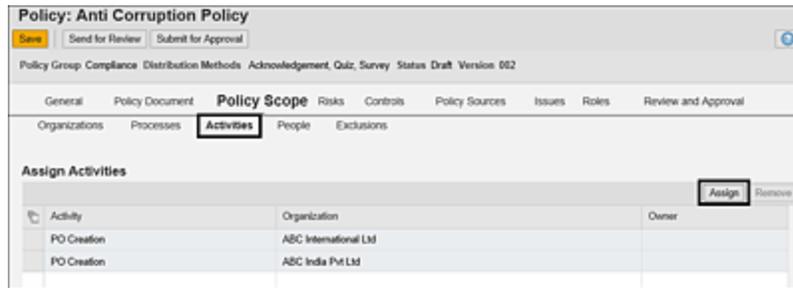


**Figure 9.7** Processes and Subprocess Assignment Screen in Policy Definition

- **Activities**

Policy being a shared master data item between SAP

Process Control and SAP Risk Management, the **Activities** that are defined in SAP Risk Management and are in scope of the policy are mapped in this tab. Click the **Assign** button to select the relevant activities, as highlighted in [Figure 9.8](#).



**Figure 9.8** Assignment of Activities in the Scope of Policy

- **People**

People who are responsible to comply with the policy are mapped in this section. Whenever a policy acknowledgement, quiz, or survey job is triggered using the planner functionality, the users mapped in this tab receive the workflow/notifications to respond. Following are the assignment methods available to map the users to the policy:

- **Roles**

Use this option to consider all the users who have the selected roles assigned.

- **User Groups**

Use this option to consider all the users who have the selected user groups assigned.

- **Specific Users**

This option is used to assign the users based on their individual user IDs.

- **Distribution List**

Use this option to consider the users who are members of the selected Outlook distribution list.

You must add users using one or more of these methods. Click the **Select** button against each of the options, and maintain the values. [Figure 9.9](#) lists the available options in this screen.

- **Exclusions**

Any specific exclusions the end users must consider while understanding the policy must be added in this text box, as shown [Figure 9.10](#).

The screenshot shows the 'Policy: Anti Corruption Policy' configuration interface. At the top, there are buttons for 'Save', 'Send for Review', and 'Submit for Approval'. Below this, the 'Policy Group' is identified as 'Compliance' and the 'Status' is 'Draft' with 'Version 002'. The main navigation tabs include 'General', 'Policy Document', 'Policy Scope', 'Risks', 'Controls', 'Policy Sources', 'Issues', 'Roles', and 'Review and Approval'. Under the 'Policy Scope' tab, there are sub-tabs for 'Organizations', 'Processes', 'Activities', 'People', and 'Exclusions'. The 'People' sub-tab is active, showing four sections: 'Select Roles' with a table containing 'Cross Regulation Policy Viewer' (GRC Role) and a 'Select' button; 'Select User Groups' with a table for 'User Group ID' and 'User Groups' and a 'Select' button; 'Select Specific Users' with a table for 'People', 'Type', and 'Email Address' and a 'Select' button; and 'Select Distribution List' with a table for 'Distribution List' and 'Type' and a 'Select' button.

**Figure 9.9** Assignment of People in the Scope of Policy

The screenshot shows the 'Policy: Anti Corruption Policy' configuration interface, specifically the 'Exclusions' sub-tab under the 'Policy Scope' tab. It features the same top navigation and buttons as Figure 9.9. The 'Exclusions' section contains a text box with the following text: 'Exclusions: Clause 1.2 mentioned in the attached policy document is applicable only to Compliance team and employees from other teams can ignore it'.

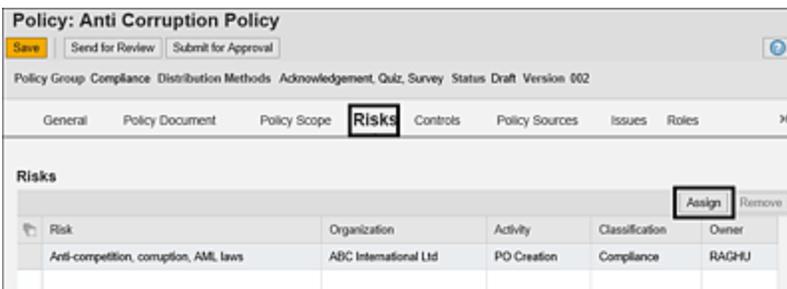
**Figure 9.10** Exclusions in the Scope of Policy

Once the policy scope is maintained, you may proceed with defining the risks.

## **Risks Tab**

In this tab, you can map the risks specified within SAP Risk Management under the **Assessments** work center. Only risks originating from the organizations against which they were created can be linked if they are added in the **Policy Scope**. Risks mapped in this tab indicate the potential risks that can materialize and impact the organization if the policy isn't followed effectively.

To add a risk, click the **Assign** button, and select the risk from the popup to map it to the policy. Once the risk is added, it can be viewed in the **Risks** table, as highlighted in [Figure 9.11](#).



Policy: Anti Corruption Policy				
Save Send for Review Submit for Approval				
Policy Group Compliance Distribution Methods Acknowledgement Quiz Survey Status Draft Version 002				
General Policy Document Policy Scope <b>Risks</b> Controls Policy Sources Issues Roles				
Risks				
				Assign Remove
Risk	Organization	Activity	Classification	Owner
Anti-competition, corruption, AML, laws	ABC International Ltd	PO Creation	Compliance	RAGHU

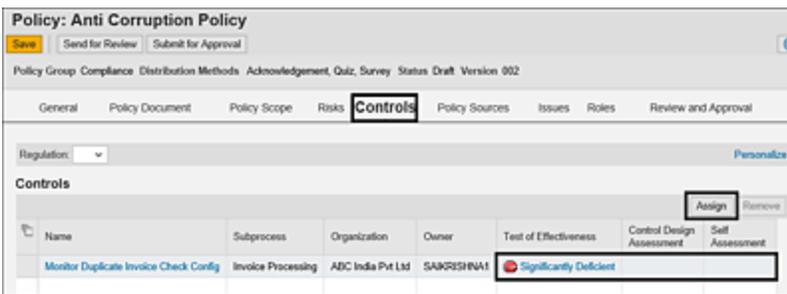
**Figure 9.11** Option to Add Risk to the Policy

## **Controls Tab**

The controls selected in this tab indicate the ones implemented in the organization to ensure the policy is operated effectively and the risks doesn't materialize. To associate these controls with the policy, click on the **Assign** button, and then select the controls that are relevant to the

policy. Be sure to link controls that are specific to the organizations selected within the policy scope.

Additionally, this tab provides information regarding the outcomes of various assessments, including operating effectiveness, design assessment, and self-assessment. The results section includes hyperlinks that allow for a detailed review of the assessment details, as shown in [Figure 9.12](#).



**Figure 9.12** Option to Add Controls to the Policy

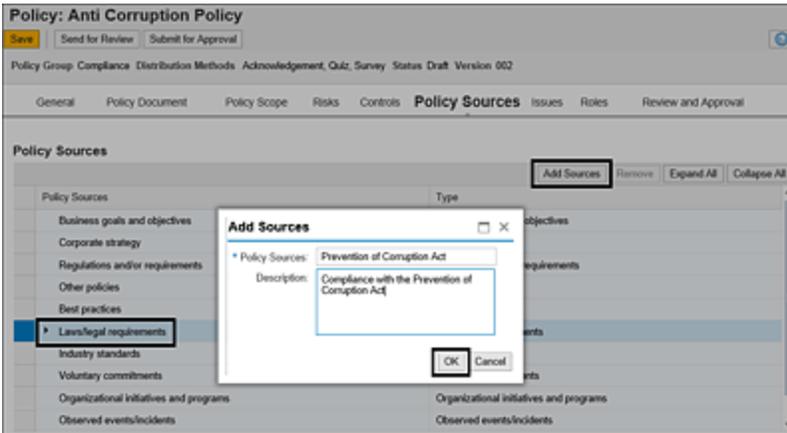
## Note

Similar to the business process control, there is an option to add indirect entity-level controls following the same process detailed in this tab. [Chapter 5, Section 5.5](#), discusses the concept of the indirect entity-level control and steps to configure it.

## ***Policy Sources Tab***

The **Policy Sources** tab displays the list of policy categories under which the sources can be defined. For example, if the **Source** of the policy is “Prevention of Corruption Act”, the same can be defined under the **Laws/Legal Requirements** category.

To create the source, select the relevant category from the **Policy Sources** list, and click **Add Sources** button. Provide the details of **Policy Source** and **Description**, and click **OK**, as shown in [Figure 9.13](#).



**Figure 9.13** Assignment of Policy Sources

## Note

The **Policy Source** categories displayed in this tab are maintained in the Transaction SPRO configuration. To access the configuration step, execute Transaction SPRO\_ADMIN, click **SAP Reference IMG**, and navigate to the path **Governance, Risk and Compliance • Common Component Settings • Policy Management • Maintain Policy Source Categories**.

The default values are as follows:

- **Business goals and objectives**
- **Corporate strategy**
- **Regulations and/or requirements**
- **Other policies**

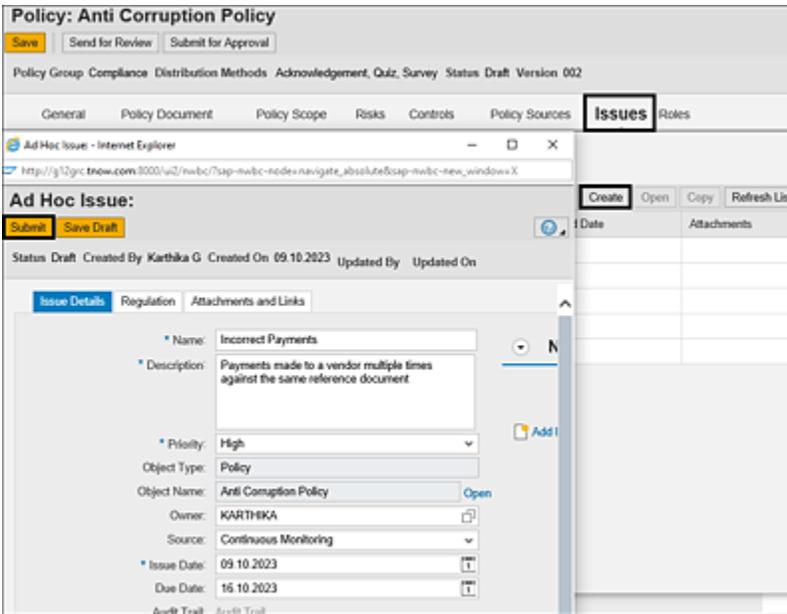
- **Best practices**
- **Laws/legal requirements**
- **Industry standards**
- **Voluntary commitments**
- **Organizational initiatives and programs**
- **Observed events/incidents**
- **Other**

A new category can be added in the configuration using the **New Entries** button.

### ***Issues Tab***

This tab provides an option to report any issues identified in the policy definition or any issue during the operation of the policy for detailed investigation and remediation. Once an issue is reported, it will be triggered to the ad hoc issue processor as defined in the custom agent determination rules for the policy (refer to [Chapter 4, Section 4.2.3](#), to understand the definition of custom agent determination rule for ad hoc issues). Additionally, this tab provides the list of historical issues reported against this policy, which acts as a base for the policy administrator while revising the policy in future.

To create an issue, click the **Create** button, and provide the details such as **Name**, **Description**, **Priority**, **Owner**, **Source**, **Issue Data**, and **Due Date** of the issue, as detailed in [Figure 9.14](#). Additional notes can be added by clicking the **Add Note** link.



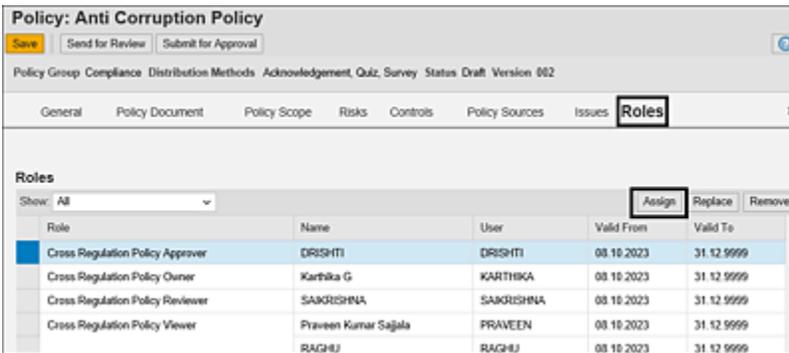
**Figure 9.14** Reporting an Issue for a Policy

Click on the **Submit** button to report the issue. Upon submitting, the issue will proceed through various stages within the remediation process. For a comprehensive understanding of these steps, refer to [Chapter 7, Section 7.3](#).

## ***Roles Tab***

This tab lists roles associated with the **Policy** entity as configured in the entity role assignment. For a deeper understanding of this configuration and how roles are linked to an entity, refer to [Chapter 4, Section 4.2.2](#). It's important to note that these roles determine the authorizations for users who can access and also initiate workflows for reviewing and approving the policy. To assign users to these roles, click the **Assign** button, as highlighted in [Figure 9.15](#). A comprehensive explanation of the process for assigning,

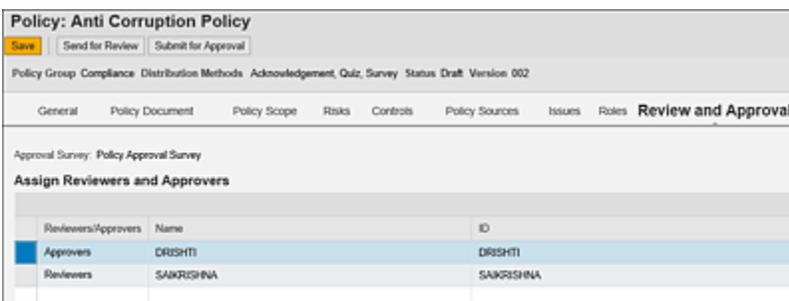
replacing, and removing user assignments is provided in [Chapter 5, Section 5.4](#).



**Figure 9.15** Assignment of Users to the Roles in the Policy

## ***Review and Approval Tab***

This tab shows the summary of the users who are responsible to review and approve the policy once the policy is submitted after configuring all the details mentioned in the other tabs. [Figure 9.16](#) lists the **Reviewers and Approvers**.



**Figure 9.16** Reviewers and Approvers: Policy Definition

Once all the details are set up, click the **Send for Review** button to initiate the workflow for the reviewers to validate the details maintained in the policy.

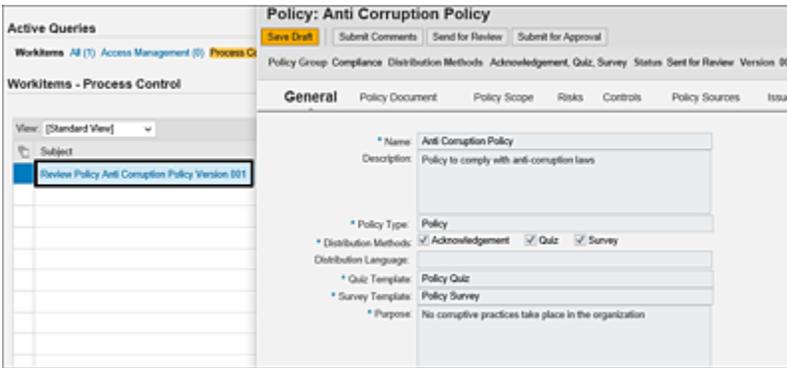
## 9.1.2 Policy Review/Approve Workflow

Once the policy administrator has configured the policy, the next step is to have it reviewed and approved by the designated approvers. When you click the **Send for Review** button, a workflow is initiated and is directed to the policy reviewers mapped in the **Roles** tab. This process follows custom agent determination rules configured in Transaction SPRO. Comprehensive information on how to review the workflow rules for policy review and approval in [Chapter 4, Section 4.2.3](#).

Subsequent sections will provide a detailed breakdown of the steps involved in reviewing and approving the policy.

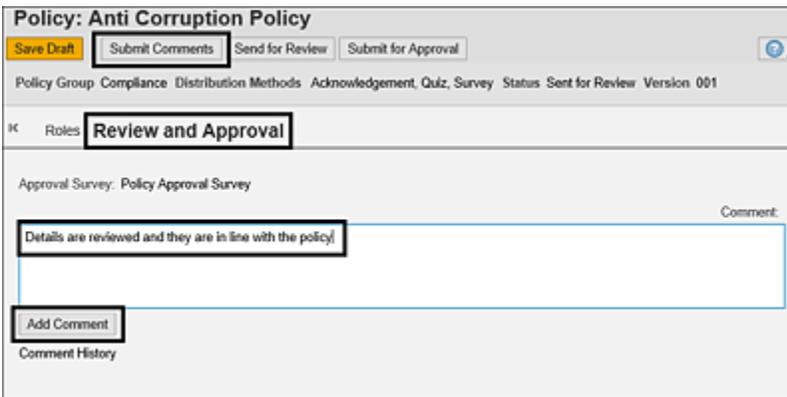
### Review Policy

The reviewer can access the review work item from the **Work Inbox**. To view and take an action on the review work item, log in to the SAP Process Control system, execute Transaction NWBC, navigate to the **My Home** work center, and click the **Work Inbox** work item/link under the **Work Inbox** group. The **Review Policy** work item will be displayed, as highlighted in [Figure 9.17](#). The line item can be accessed using the hyperlink, and the policy details are displayed for the reviewer.



**Figure 9.17** Review Policy Work Item

The reviewer must review all the tabs in the policy and can submit it for final approval after providing the comments in the **Review and Approval** tab. To add the comments, enter the details in the comments text box, click the **Add Comments** button, and then click the **Submit Comments** button, as highlighted in [Figure 9.18](#).



**Figure 9.18** Option to Submit Comments while Reviewing the Policy

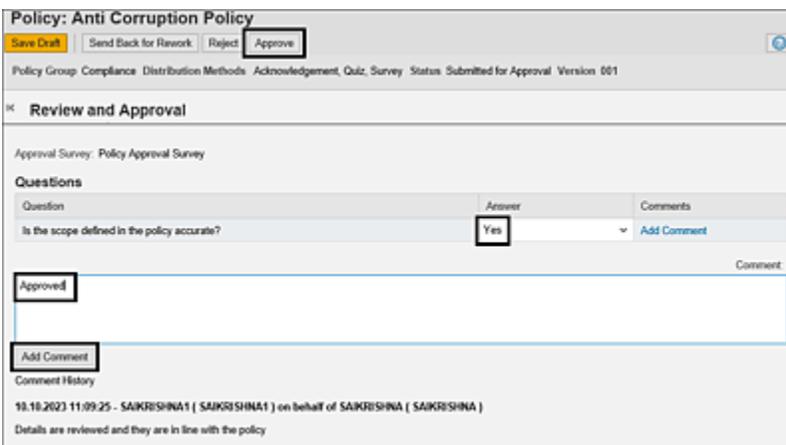
Once the comments are submitted, click the **Submit for Approval** button to send the policy for approval to the user maintained as **Policy Approver** in the **Roles** tab of the policy.

Once the policy is submitted for approval, the next step is to approve/reject the policy.

## Approve Policy

The approver can access the work item through the **Work Inbox**, just like the reviewer. Within the policy, the approver can review various details from the tabs within the policy scope/definition and also go through the comments submitted by the policy reviewer in the **Review and Approval** tab.

After thoroughly reviewing all the policy details, the approver can respond to the policy approval survey questions, provide any comments, and then **Approve** the policy, as highlighted in [Figure 9.19](#).



The screenshot shows the 'Policy: Anti Corruption Policy' interface. At the top, there are buttons for 'Save Draft', 'Send Back for Rework', 'Reject', and 'Approve'. Below this, the 'Review and Approval' tab is active. The 'Approval Survey: Policy Approval Survey' section contains a table with the following content:

Question	Answer	Comments
Is the scope defined in the policy accurate?	Yes	Add Comment

Below the table is a large text area for 'Approved' and a button for 'Add Comment'. At the bottom, the 'Comment History' section shows a comment from 'SAKRISHNA1 (SAKRISHNA1)' on behalf of 'SAKRISHNA (SAKRISHNA)' dated '13.10.2023 11:09:25', with the note 'Details are reviewed and they are in line with the policy'.

**Figure 9.19** Policy Approval Screen

Once the policy is approved, the status of the policy is updated to **Published**, which can now be distributed across the organization. The approver can use the other options, as follows:

- **Send Back for Rework**

If any of the details provided in the policy definition are missing, the same be submitted back for rework. In such cases, a workflow is triggered to the user maintained as

policy owner in the **Roles** tab of the policy along with the observations of the policy approver to make necessary corrections. Once the corrections are made by the policy owner, the same has to be submitted for the cycle of policy review and approval.

- **Reject**

If the policy approver believes that the details specified in the policy scope are significantly incorrect, he can reject the policy by choosing the **Reject** button. The policy owner is informed of the reason for rejection, which can be accessed from the user's **Work Inbox**. It's important to note that the same version of the policy can't be revised or resubmitted for review after it has been rejected. Instead, it must be deleted from the policy library using the **Void** option, which is the only available choice for the policy owner in this situation.

- **Save Draft**

If the approver requires additional information or further clarifications, the policy can be saved as a draft and revisited at a later stage for further work or review.

### **9.1.3 Policy Distribution Methods**

Once the policy is approved and published, the next step is to circulate it to the employees. The three different distribution methods for which the employees are reached as part of the policy lifecycle are as follows:

- Acknowledgement
- Quiz

- Survey

Each of these methods are detailed in the following sections.

## **Acknowledgement**

This option is used when the policy is initially created or whenever any modifications are made to the policy clauses, resulting in a new version of the policy. This distribution process is carried out to ensure that employees are informed about the introduction of the policy or any updates to it, and their acknowledgment is sought.

When this distribution method is chosen, and the policy is triggered using the planner functionality, end users receive an email notification in their mailbox with the following two response options:

- **Yes: I acknowledge that I have read and understood this policy.**
- **No: I do NOT accept this policy.**

### **Note**

The text values for the **Yes/No** options can be updated in the Transaction SPRO configuration. Log in to the SAP Process Control system, click the **SAP Reference IMG**, and navigate to **Governance, Risk and Compliance • Common Component Settings • Policy Management • Define Acknowledgement Text**, as highlighted in [Figure 9.20](#).

Ack.	Text
Yes	I acknowledge that I have read and understood this policy.
No	I do NOT accept this policy.

**Figure 9.20** Acknowledgement Text Definition

## Quiz

Once the policy has been implemented within the organization, employees are bound to adhere to it. It also becomes crucial to assess the policy's effectiveness by validating the employees' understanding of it. This evaluation method uses the survey functionality, which consists of a set of questions that employees must respond to. This survey aids in determining the level of awareness and understanding of the policy by the employees.

When this option is selected, a new field called **Quiz Template** is added in the **General** tab of the policy. This field allows for the selection of a policy quiz survey. A detailed explanation of the process of creating questions and survey libraries is given in [Chapter 6, Section 6.2.1](#).

## Survey

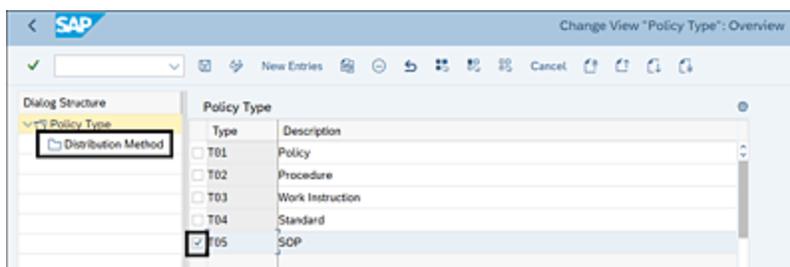
Once the policy is implemented and operating in the organization for a long period of time, it's important to update the clauses of the policy to keep it up to date. During this process of updating the policy, the management can seek inputs from the employees to get their feedback,

understand any gaps in the policy operation, and address them during the creation of a new version of the policy. Once this option is selected, a new **Survey Template** field is added to the screen asking for the selection of a policy survey to be selected. The policy quiz and policy survey are created in the survey library. Refer to [Chapter 6, Section 6.2.1](#), to understand the process of creating questions and survey libraries.

## Note

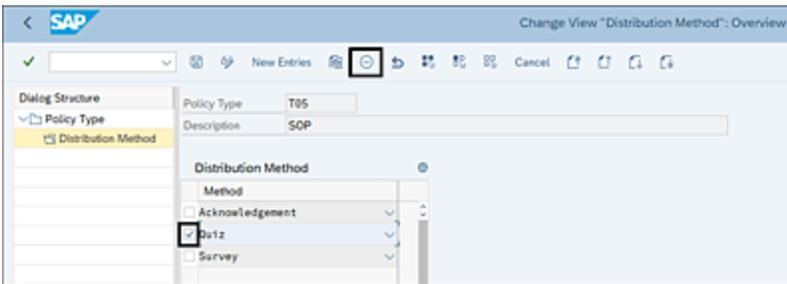
The options of distribution methods to be selected are dependent on the **Policy Type** selected in the previous step. The availability of distribution methods for a policy type can be managed in the Transaction SPRO configuration.

Log in to the SAP Process Control system, execute Transaction SPRO\_ADMIN, and navigate to **Governance, Risk and Compliance • Common Component Settings • Policy Management • Maintain Policy Types and Distribution Methods**. Select the checkbox in front of the policy type, and double-click the **Distribution Method** option from the **Dialog Structure**, as highlighted in [Figure 9.21](#).



**Figure 9.21** Selection of the Distribution Method Option

The change view of **Distribution Method** displays all three distribution methods by default; however, if any of them aren't applicable for the specific policy type, select the method, and click **Delete** to delink the mapping, as highlighted in [Figure 9.22](#).



**Figure 9.22** Delinking Distribution Methods

Note that the jobs are scheduled using the planner functionality, to send the policy either for acknowledgement, quiz, or survey using the respective plan activities. Refer to [Chapter 6, Section 6.2.2](#), to understand the process of scheduling the planner.

## 9.2 Disclosure Surveys

The disclosure survey is an additional functionality in SAP Process Control that is used to gather information from the respective owners to ascertain their accountability in performance of the operations. This is an attestation obtained from the owners of the master data entities acknowledging their accountability of its operations. The objective of this functionality works in the same lines of the sign-off functionality, but [Table 9.2](#) highlights the differences between the disclosure survey functionality and sign-off functionality (refer to [Section 9.3](#) to understand more about the sign-off functionality).

Objective	Disclosure Survey	Sign-Off
Level of evaluation	Disclosure survey can be performed at the control level or at the group level, such as at subprocess or even at an organization level.	Sign-off is performed at organization and corporate levels. Specific control/subprocess level sign-off can't be obtained individually.

Objective	Disclosure Survey	Sign-Off
Result of evaluation	Only responses are obtained from the owners to seek acknowledgement on accountability. It doesn't impact the master data or the open issues/remediation plans.	Open issues and remediation plans are cloned and carried forward to the next period. Master data also freezes and can't be modified for the period for which sign-off is obtained.
Owners of evaluation	Disclosure survey is performed by respective corporate, organization, subprocess, or control owners depending on the level at which the survey is performed.	Sign-off is performed by corporate and organization owners.

Objective	Disclosure Survey	Sign-Off
Process of evaluation	This is a specific master data entity-level evaluation and not a hierarchical process. In addition, there is no dependency on other entity's disclosure survey processes.	Sign-off process is a bottom-up approach in the organization hierarchy. A corporate sign-off can be performed only after completion of sign-off at all the child organizations under that hierarchy.
Reporting issues	Any issues identified during the disclosure survey process can be reported as ad hoc issues in the same work item.	Any issues that are identified during the process of review can't be reported.

**Table 9.2** Comparison between Sign-Off and Disclosure Survey Functionalities

The following sections will detail more about these topics:

- Types of disclosure surveys
- Schedule disclosure survey using the planner functionality
- Workflow structure
- Respond to disclosure survey and ad hoc issue remediation

### 9.2.1 Types of Disclosure Surveys

As mentioned in [Table 9.2](#), disclosure survey isn't a hierarchical evaluation, and it can be performed at respective master data entity level. Disclosure survey uses the survey functionality of SAP Process Control and can be performed at three different levels of master data:

- Control disclosure survey
- Subprocess disclosure survey
- Organization disclosure survey

[Chapter 6, Section 6.2.1](#), provides more detailed information to understand the purpose of a survey library and the steps involved in defining the questions and surveys in the library. Use the category **Disclosure Survey** to define the surveys required for all three types of disclosure surveys mentioned in the preceding list.

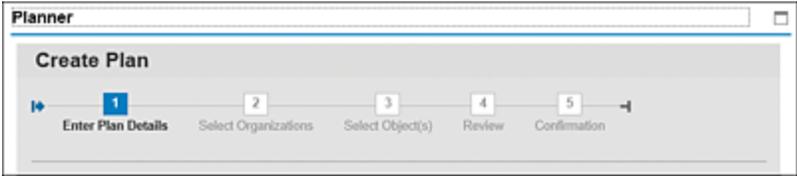
For each survey type, there must be one disclosure survey that the owner must respond to at an overall evaluation level. Additionally, there is an option to select an object survey, which isn't mandatory but can be responded to at the respective object level. To gain a deeper understanding of these two surveys, see [Section 9.2.2](#).

## **9.2.2 Schedule Disclosure Survey Using the Planner**

Once the required surveys are created in the library for the **Disclosure Survey** category and the required objects that should be scheduled for disclosure are identified, the next step is to schedule the job using the planner functionality.

To access the planner functionality, log in to the SAP Process Control system, execute Transaction NWBC, navigate to the **Assessments** work center, and click the **Planner** work item under the **Assessment Planning** work group. The planner work item will show all the plans scheduled for SAP Process Control and SAP Risk Management. To create a new plan, click the **Create** button, and enter the required details in respective tabs to schedule the planner for disclosure survey for control, subprocess, or organization. [Figure 9.23](#) shows the various tabs in the planner functionality.

The **Enter Plan Details** step is the first stage in the planner. The administrator can define the plan details in this screen such as plan name, activity, and so on; all of the fields in this step are detailed in [Table 9.3](#).



**Figure 9.23** Planner Functionality: New Plan

Field	Description
<b>Plan Name</b>	This is a brief name of the scheduler for identification.

Field	Description
<b>Plan Activity</b>	<p>The planned activity must be selected here. For example, if the disclosure survey is to be performed at a control level, choose the <b>Control Disclosure Survey</b> option.</p> <p>The other options in this field can be used for various assessments and tests using SAP Process Control and SAP Risk Management. Refer to <a href="#">Chapter 6, Section 6.2.2</a>, to understand more about the options available in <b>Plan Activity</b> and the relevance of each option.</p>
<b>Survey</b>	<p>Choose a survey from the list, which is created for the <b>Disclosure Survey</b> category in the survey library.</p> <p>Refer to <a href="#">Chapter 6, Section 6.2.1</a>, to understand the process of creating a survey. The standard behavior of the disclosure survey functionality consolidates all the controls that have the same owner and sends a single work item with the list of objects scheduled using the planner. Therefore, SAP Process Control provides an option to select two surveys: where the survey selected in this field is responded to only once at a holistic level of the assessment, or <b>Object Survey</b>, which is selected in the next field.</p>

Field	Description
<b>Object Survey</b>	This is an optional selection, if the organization requires individual responses for each of the controls selected for evaluation, <b>Object Survey</b> can be selected, and the control owner has to respond to this survey for each control selected for the disclosure survey for which he is the owner. To understand more about the response process for survey and object survey, <a href="#">Section 9.2.4</a> .
<b>Period</b>	From the time frames available in the dropdown, select the period for which the disclosure survey is to be conducted. For example, if acknowledgement is obtained on a quarterly basis, select the respective quarter ( <b>Quarter 1</b> , <b>Quarter 2</b> , <b>Quarter 3</b> , or <b>Quarter 4</b> ) for which the job is to be triggered.
<b>Year</b>	This represents the year for which the survey is being triggered.
<b>Start Date</b>	This indicates the date on which the notification should be triggered to the respective owners.
<b>Due Date</b>	This represents the date by which the survey should be completed by the owners. This date can be used as a base to send reminders to the control owner and escalations to the manager of the control owner.

**Table 9.3** Fields in the Enter Plan Details Stage of the Planner for Disclosure Survey

Enter the details in the tab to schedule the control disclosure survey, as shown in [Figure 9.24](#), and then navigate to the other tabs using the **Next** button.

The screenshot shows a 'Planner' window with a 'Create Plan' wizard. The wizard has six steps: 1. Enter Plan Details (active), 2. Select Regulation, 3. Select Organizations, 4. Select Object(s), 5. Review, and 6. Confirmation. The 'Enter Plan Details' tab contains the following fields:

- Plan Name: Control Disclosure Survey\_Q3 2023
- Plan Activity: Perform Control Disclosure Survey
- Survey: Disclosure Survey
- Object Survey: Control Disclosure Survey
- Period: Quarter 3
- Year: 2023
- Start Date: 09.10.2023
- Due Date: 16.10.2023

At the bottom of the form, there are buttons for 'Previous', 'Next', 'Cancel', 'Finish', and 'Activate Plan'. The 'Next' button is highlighted.

**Figure 9.24** The Enter Plan Details Tab to Schedule a Planner for Disclosure Survey

The remaining steps are as follows:

- **Select Regulation**  
Only those organizations for which this regulation is assigned can be selected in the subsequent tabs. Refer to [Chapter 6, Section 6.2.2](#), to understand the relevance of this step.
- **Select Organizations**  
Select the organizations where the controls to be scheduled for disclosure survey are localized. Refer to [Chapter 6, Section 6.2.2](#), to understand the relevance of this step.
- **Select Object(s)**  
Various options are available to select the objects. In this case, select the controls that should be scheduled for disclosure survey. Refer to [Chapter 6, Section 6.2.2](#), to understand the relevance of this step.

- **Review**

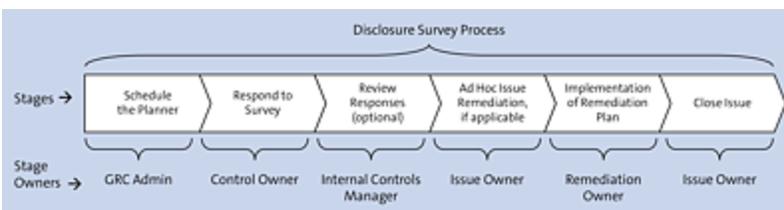
During this step, the administrator reviews the plan details before activating the plan. Once all the details are as expected, click on the **Activate Plan** option to initiate the disclosure survey workflow tasks.

- **Confirmation**

A confirmation message will be displayed indicating that the job is saved and the workflow is initiated successfully. Click **Finish** to close the window.

### 9.2.3 Workflow Structure

After scheduling the planner for the control disclosure survey, it goes through several stages of assessment, which are illustrated in the workflow structure flow diagram in [Figure 9.25](#). These stages play a vital role in identifying and assigning specific roles and responsibilities for each step of the disclosure survey. Moreover, these workflow stages serve as a road map for the progression of the evaluation process, facilitating a methodical and well-organized approach to the survey assessment.



**Figure 9.25** Stages in the Control Disclosure Workflow with Owners' Information

Refer to Table 6.8 in [Chapter 6, Section 6.2.3](#), which provides an overview of similar stages involved in control design assessment. However, the review stage is an

optional step and is activated by default. To disable the review stage, use the Transaction SPRO configuration via **Governance, Risk and Compliance • Common Component Settings • Surveys • Disclosure Survey • Skip Review Process for Disclosure Surveys**. Select the **Activate** checkbox for the **SKIP\_VAL\_DISCSVY** (skip validation of disclosure survey) indicator. This will disable the review stage for disclosure survey.

#### **9.2.4 Respond to Disclosure Survey and Ad Hoc Issue Remediation**

When responding to the disclosure survey, the control owner evaluates the performance of control operations and provides responses to the questions that are part of the survey. If any issues are identified during this evaluation, the control owner has the option to report them as ad hoc issues. The following subsections discuss these options and their respective processes.

##### **Respond to Survey**

Once the SAP GRC administrator schedules the controls for disclosure survey, a workflow is triggered to the control owner's inbox, which has the consolidated list of controls for which the user is responsible to provide responses. The work items can be accessed from the **Work Inbox**. The work items are listed with the **Perform Disclosure Survey <Job Name>** prefix, as highlighted in [Figure 9.26](#).

Active Queries							
WorkItems All (3) Access Management (2) <b>Process Control (1)</b> Risk Management (0)							
WorkItems - Process Control							
View: [Standard View] <span style="float: right;">Print Version Export</span>							
Subject	Organization	Regulation	Status	Due Date	Created On	Object Name	Created By
Perform Disclosure Survey: Control Disclosure Survey_Q3 2023	TNOW-US		Ready	15-10-2023	09-19-2023 10:09:15		Karibika G

**Figure 9.26** Perform Disclosure Survey Work Item in the Work Inbox

Open the work item and navigate to the **Evaluation** tab that provides the details of the controls for which the responses should be provided, as shown in [Figure 9.27](#).

Perform Disclosure Survey: Control Disclosure Survey_Q3 2023							
Regulation SOX Status In Process							
<b>Evaluation</b> Disclosure Attachments and Links							
Controls to be Evaluated							
Object	Entity	Description	Subprocess	Organization	Frequency	Survey Status	
Changes to asset master data	Control	Changes to asset master data	Fixed Assets	TNOW-US	Monthly	[Green Icon]	
FA Account Determination Configuration	Control	Only valid changes are made to the account determination configuration to ensure accurate recording of depreciation expense to the correct general ledger account	Fixed Assets	TNOW-US	Monthly	[Red Icon]	

Questions		
Question	Answer	Comments
Is the control being operated as per the policy expectations?	Yes	<a href="#">Add Comment</a>

**Figure 9.27** Evaluation Tab in Disclosure Survey

The **Survey Status** column indicates whether responses have been provided for the object survey, which is indicating with a green icon (typically indicates that responses have been submitted), or a red icon, which suggests that no responses have been provided.

The **Surveys** tab in the bottom section is applicable only when an object survey is selected during the Planner scheduling process. The **Ad hoc Issues** tab provides information about any ad hoc issues that have been reported for the control in the past. You can view the details of these issues by selecting a specific issue line item and using the **Open** button. These historical ad hoc issues can

be an input for the control owner when providing responses and also offer the option to report a new ad hoc issue if necessary.

Respond to the object survey for all the controls for disclosure survey work items in the **Evaluation** tab, and then navigate to the **Disclosure** tab where the owner should respond to the common survey that was selected in the **Survey** field while scheduling the Planner and provide overall comments, as highlighted in [Figure 9.28](#).

The screenshot shows a web application interface for a survey. At the top, there's a title bar 'Perform Disclosure Survey: Control Disclosure Survey\_Q3 2023' with buttons for 'Save', 'Close', and 'Send for Review'. Below that, it says 'Regulation SOX Status In Process'. There are three tabs: 'Evaluation', 'Disclosure' (which is active), and 'Attachments and Links'. Under the 'Disclosure' tab, there's a section for 'Questions' with a table. The table has columns for 'Question', 'Answer', and 'Comments'. The first row has the question 'Are there any issues in the control environment which needs to be addressed?'. The 'Answer' column has a dropdown menu open with options 'Yes', 'No', and 'N/A'. The 'Comments' column has an 'Add Comment' button. Below the table is an 'Overall Comments:' field with a text input area.

**Figure 9.28** Option to Respond to the Survey in the Disclosure Tab

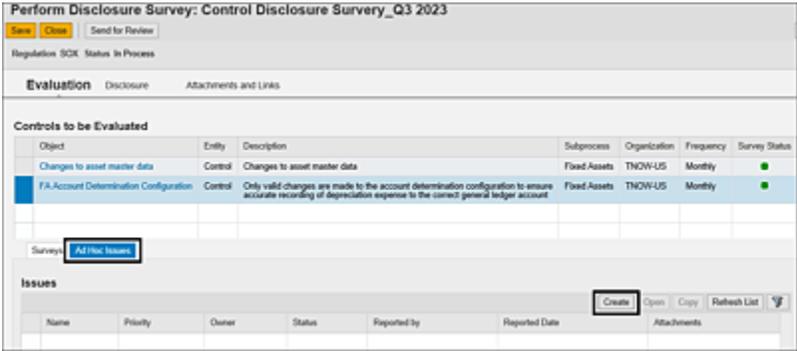
Once the questions are responded to and comments are provided, click the **Send for Review** button to initiate the next phase in the workflow. The next section details the process of reporting an ad hoc issue.

## Reporting Ad Hoc Issue

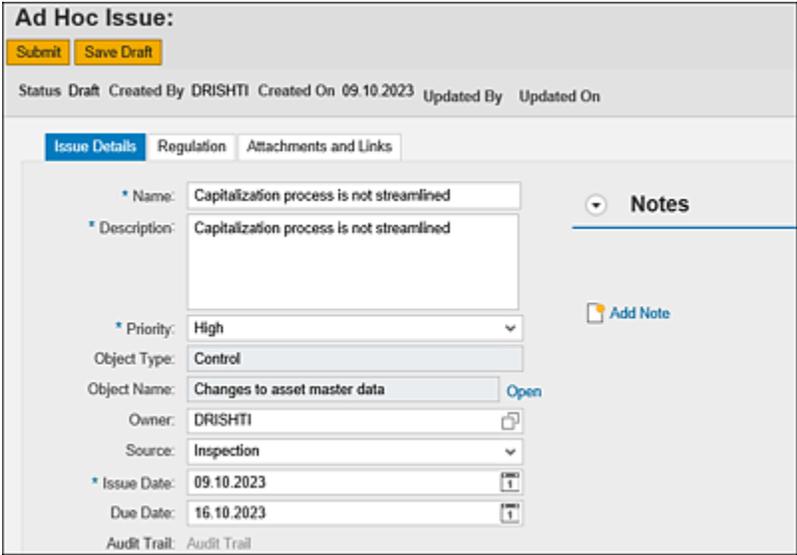
If the owner identifies any anomalies in the process, they can be reported by creating an ad hoc issue before submitting the work item for review. Use the **Create** button to report an ad hoc issue under the **Ad Hoc Issues** tab, as highlighted in [Figure 9.29](#).

In the **Ad Hoc Issue** window, input details about the issue, regulation, relevant attachments, links, and any relevant notes, as shown in [Figure 9.30](#).

The various fields are explained in detail in [Table 9.4](#).



**Figure 9.29** Option to Report Ad Hoc Issue in Disclosure Survey



**Figure 9.30** Ad Hoc Issue Reporting Screen

Field	Description
Name	Enter a brief name to identify the issue to be reported.
Description	Provide the details of the issue identified.

Field	Description
<b>Priority</b>	Classify the criticality of the issue as <b>High/Medium/Low</b> .
<b>Object Type</b>	This field is automatically set to <b>Control</b> .
<b>Object Name</b>	This field is automatically set to the name of the control for which the issue is being reported.
<b>Owner</b>	The name of the owner responsible to respond to this issue is automatically selected by the system based on the custom agent determination rules defined for the default ad hoc issue processor for a control (refer to <a href="#">Chapter 4, Section 4.2.3</a> , to understand the process of defining custom agent determination rules for an ad hoc issue).
<b>Source</b>	Select the source from which the issue is identified from the available options in the dropdown.
<b>Issue Date</b>	Choose the date when the issue was identified.
<b>Due Date</b>	Choose the date by which the issue should be remediated by the owner of the issue or the respective stakeholder responsible.
<b>Notes</b>	Provide additional details and background of how this issue was identified and what the issue is.

Field	Description
<b>Regulation</b>	Details of the regulation are auto-populated or inherited from the control for which the issue is being reported.
<b>Attachments and Links</b>	<p>Add any supporting evidence to back up the issue being reported. The following are available:</p> <ul style="list-style-type: none"> <li>• <b>Add File:</b> This is used to add files of any format, such as Microsoft Excel, Word, PowerPoint, and so on.</li> <li>• <b>Add Link:</b> If the evidence is stored in a shared folder, its link can be embedded here.</li> </ul>

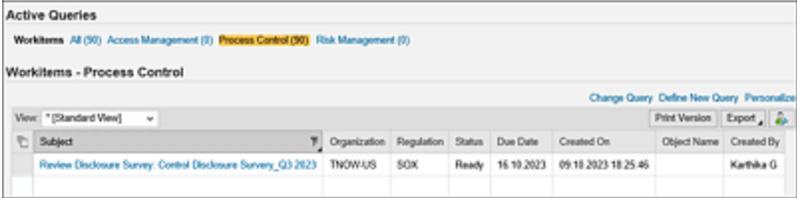
**Table 9.4** Fields in the Ad Hoc Issue Reporting Screen

After you've filled in the details, click the **Submit** button. Once the issue is reported, the remediation process will follow the standard procedures outlined in [Chapter 7, Section 7.2.3](#).

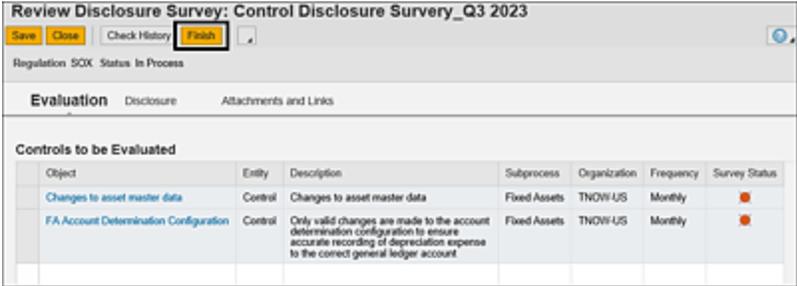
## Review the Responses

Once the control owner submits the survey for review, a workflow is triggered to the reviewer's (internal control manager's) inbox to validate the responses submitted by the control owner. The work item can be accessed from the **Work Inbox**. Access the work item **Review Disclosure Survey <Job Name>**, as highlighted in [Figure 9.31](#).

The reviewer can validate the information provided by the control owner for both the overall survey and object surveys, as well as the details included in the overall comments. Once the validation process is complete and the reviewer is satisfied with the responses, the reviewer can approve the submission by clicking the **Finish** button. This marks the validation process as completed, as shown in [Figure 9.32](#).



**Figure 9.31** Option for the Reviewer to Access Disclosure Survey Work Inbox Item



**Figure 9.32** Finish Button in Review Disclosure Survey

**Note**

The process of performing disclosure survey at the subprocess or organization level follows the same steps.

## 9.3 Sign-Off Functionality

SAP Process Control offers a comprehensive platform for managing the entire lifecycle of internal controls. It's designed to provide management with reasonable assurance that internal controls are being effectively evaluated. These features of SAP Process Control have been elaborated on in previous chapters.

In addition to these features, SAP Process Control also offers a sign-off functionality. This functionality enables organizations to formally request attestation from top management, confirming their accountability for the current status of internal controls within the organization. Some companies use this functionality to meet regulatory requirements, such as Section 302 of the Sarbanes-Oxley Act. This section holds the CEO and CFO of a company directly responsible for the accuracy, documentation, and submission of all financial reports, as well as the internal controls within the organization. To use the sign-off functionality, follow these steps, as detailed in the following sections:

1. Perform the sign-off process prerequisites.
2. Assign roles and configure workflows.
3. Schedule organizations for sign-off using the planner.
4. Perform the sign-off.
5. After the sign-off, freeze the master data.
6. Monitor the sign-off report.

### 9.3.1 Sign-Off Process Overview and Prerequisites

[Chapter 5](#) through [Chapter 8](#) detailed the process involved in defining the master data and evaluating controls in SAP Process Control, and sign-off is a functionality to take attestation from the top management that the master data defined in the system is accurate and that they are aware of the assessments performed and issues reported, including the open issues in remediation. Once the sign-off is obtained for a specific time frame for an organization, it's important that no changes are made to it for the signed-off period. To support this requirement, SAP Process Control performs the following activities after a sign-off is taken for an organization:

1. Master data is locked and can only be viewed, preventing any further modifications or updates during this period.
2. Any ongoing/open assessments, such as control design or control self-assessments, are technically closed or deleted. Owners and participants can't continue or perform these assessments for the current period.
3. Any open issues or remediation plans that were generated as a result of assessments or tests are cloned. This means that the current work item is effectively closed, and an identical copy is created and carried forward to the next period. The responsibility for addressing and remediating these issues remains with the assigned issue owner and remediation owner in the upcoming period.

These actions are part of the control and governance processes within SAP Process Control, ensuring that assessments are closed, master data remains consistent, and outstanding issues are properly managed and addressed in subsequent periods. To use this functionality, the following section detail the prerequisite configuration steps that should be performed in the system.

### **Maintain Issue Types for Sign-Off**

The sign-off functionality serves the purpose of obtaining confirmation from top management regarding their awareness of issues reported across various assessments conducted in SAP Process Control. This configuration drives the types of issues and the level of priority of the issue to be considered for sign-off. If the organization doesn't think indirect entity-level control assessment issues need to be in management's review, the same can be deactivated from the scope of sign-off from this Transaction SPRO configuration.

To access the configuration, navigate to Transaction SPRO\_ADMIN, click the **SAP Reference IMG** button, and expand **Governance, Risk and Compliance • Process Control • Sign-Off • Maintain Issue Types for Sign-Off**. The values in the configuration are available by default, and the user can only manage the status of activation and priority of issue to be considered. [Figure 9.33](#) shows the issue types.

Ca...	Category	Text	Sign-Off	Priority
<input type="checkbox"/>	G_AS CD	Control Design Assessment	<input checked="" type="checkbox"/>	Low
<input type="checkbox"/>	G_AS CE	Self-Assessment	<input checked="" type="checkbox"/>	Low
<input type="checkbox"/>	G_AS MCOU	Assessment of Indirect Entity-Level Control	<input checked="" type="checkbox"/>	Low
<input type="checkbox"/>	G_AS PD	Assessment of Subprocess Design	<input checked="" type="checkbox"/>	Low
<input type="checkbox"/>	G_TE CO	Automated Test of Effectiveness	<input checked="" type="checkbox"/>	Low
<input type="checkbox"/>	G_TE MO	Automated Monitoring	<input type="checkbox"/>	Low
<input type="checkbox"/>	G_TE MTOU	Test of Indirect Entity-Level Control	<input checked="" type="checkbox"/>	Low
<input type="checkbox"/>	G_TE TE	Manual Test of Effectiveness	<input checked="" type="checkbox"/>	Low

**Figure 9.33** Configuration of Maintain Issue Types Options for Sign-Off

The **Priority** column serves as a determinant of the issue priority. When **Low** is chosen, all priority levels, including low, medium, and high, are considered for the sign-off process. Choosing **Medium** entails that only issues with medium and high priority levels are considered, with low priority issues excluded. Alternatively, selecting **High** ensures that only issues designated with a high priority are considered in the sign-off process, with medium and low priority issues omitted from consideration. This flexibility enables organizations to tailor their sign-off process to focus on specific priority levels based on their significance and urgency.

## Scheduling Background Jobs

As part of the sign-off process, any open issues for the assessments that are involved in the sign-off process will be carried forward to the next period. For the system to carry forward the issues, remediation plans, and any relevant attachments that are part of the issues, the following background jobs must be scheduled:

- GRPC\_CLOSING\_BACKGROUND
- GRPC\_DOCUMENTS\_CLONING\_JOB

You have the option to schedule these as event-based jobs using Transaction SM37. This means that the jobs will be triggered and executed automatically once the sign-off workflow process has been successfully completed.

## **Master Data Definition**

The next step involves activating the sign-off option at the organization level, as specified in the master data. To better understand organization hierarchy and terms such as “corporation” and “organization,” refer to [Chapter 5, Section 5.3](#).

It’s important to note that only organizations for which the **Sign-Off** radio button is set to **Yes** will be included in the sign-off process. This means that only assessments, issues, and remediation plans created for that organization with this setting will be considered for the sign-off process.

To enable or disable the **Sign-Off** radio button for a particular organization, go to Transaction NWBC, navigate to the **Master Data** work center, and select the **Organizations** work item under the **Organizations** work group. Make the necessary changes to the sign-off settings for each organization as required.

Select and open the organization where the **Sign-Off** option has to be maintained, and access the **General** tab of the organization. Option **Yes** indicates the organization is in

scope, and option **No** indicates the organization isn't in scope, as shown in [Figure 9.34](#).

The screenshot shows the 'Organization: ABC India Pvt Ltd' configuration page. The 'Subject to Sign-Off' option is highlighted with a red box and is currently set to 'No'. Other fields include Name (ABC India Pvt Ltd), Valid From (01.01.2023), Valid To (31.12.9999), Currency (INR), and various flags for Shared Services Provider, Deficiency Analysis, and In Scope.

**Figure 9.34** Sign-Off Settings at the Organization Level

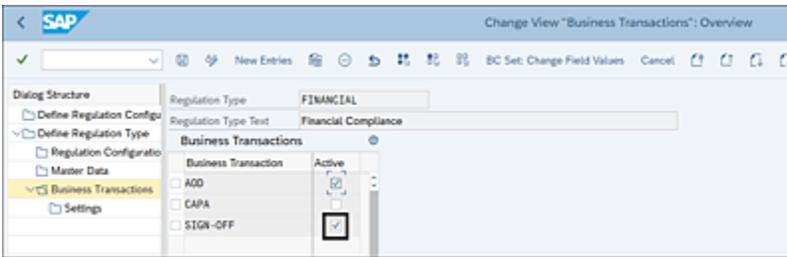
The **Subject to Sign-Off** option isn't available by default. To enable this option, the same has to be activated for at least one of the regulation configurations maintained in Transaction SPRO. To activate the option, execute Transaction SPRO\_ADMIN, click the **SAP Reference IMG** button, and navigate to **Governance, Risk and Compliance • Process Control • Multiple-Compliance Framework • Configure Compliance Initiatives**. Select the **Regulation Type**, and double-click on **Business Transactions** in the **Dialog Structure**, as shown in [Figure 9.35](#).

The screenshot shows the 'Define Regulation Type' dialog structure in SAP SPRO. The 'Business Transactions' option is highlighted with a red box and has a checkmark in the 'Active' checkbox. The table below shows the configuration for 'FINANCIAL' and 'OPERATIONAL' regulation types.

Regulation Type	Regulation Type Text	DO NOT USE
FINANCIAL	Financial Compliance	
OPERATIONAL	Operational Compliance	

**Figure 9.35** Option to Access Business Transactions for a Regulation Type

The checkmark in the **Active** checkbox next to the **SIGN-OFF** option indicates whether the functionality is activated or not for a regulation type, as shown in [Figure 9.36](#).



**Figure 9.36** Option to Activate Sign-Off for a Regulation Type

Once this configuration is enabled, the **Subject to Sign-Off** option is made available in the **General** tab of the organization hierarchy.

### 9.3.2 Roles and Workflow

Once the Planner is scheduled, the workflow triggers to the users per the custom agent determination rules defined in the Transaction SPRO settings. Refer to [Chapter 4, Section 4.2.3](#), for more on the custom agent determination rules to be configured for a sign-off business event. As a best practice, the organization level sign-off is triggered to the organization owner, and the corporate level sign-off is triggered to the corporate owner or CEO/CFO.

The sign-off process is a bottom-up approach where the lowest level organizations in the hierarchy are sent to the designated users first for obtaining the sign-off, after which the next level in the hierarchy are triggered, and then finally the corporate level is sent to the owner for sign-off.

[Figure 9.37](#) shows a sample scenario for easy understanding.



**Figure 9.37** Sample Organization Hierarchy

In this scenario, when all organizations are enabled for **Subject to Sign-Off**, and the sign-off process is initiated, it follows a hierarchical sequence. Initially, the sign-off process is triggered for the sublevel organizations, that is, India and Singapore. Once the sign-off for these two organizations is completed, the process then proceeds to the next level, which is the Asia Pacific region, and subsequently the final sign-off process for the corporate entity, that is, ABC International Ltd.

This sequential approach ensures that sign-off occurs in a hierarchical manner, starting with individual organizations and progressively moving up the organizational structure until it reaches the corporate level.

### 9.3.3 Scheduling Using the Planner

Once the sign-off prerequisites are configured, the related organizations are enabled for sign-off, and roles workflows are configured, the next step is to schedule the job using the planner functionality.

To access the planner functionality, log in to the SAP Process Control system, execute Transaction NWBC, navigate to the **Assessments** work center, and click the **Planner** work item under the **Assessment Planning** work group. The **Planner** work item will show all the plans scheduled for SAP Process Control and SAP Risk Management. To create a new plan, click the **Create** button, and enter the required details in the respective steps to schedule the Planner for sign-off, as follows:

- **Enter Plan Details**

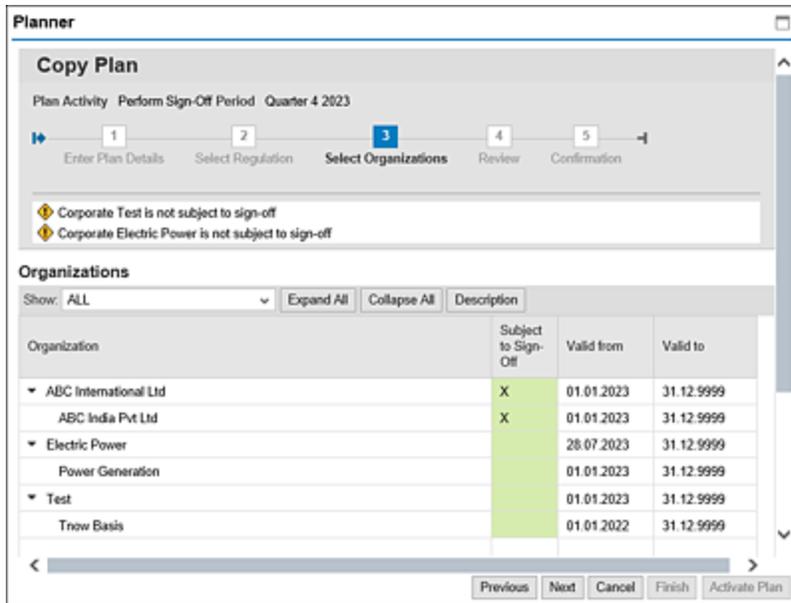
Select **Perform Sign-Off** in the **Plan Activity** dropdown for this scenario. Refer to [Chapter 6, Section 6.2.2](#), to understand the relevance of the fields to be populated in this step.

- **Select Regulation**

Only those organizations for which the sign-off option is enabled and this regulation is assigned can be scheduled for sign-off. Refer to [Chapter 6, Section 6.2.2](#) to understand the relevance of this step.

- **Select Organizations**

This is an important step where the organizations can be reviewed before scheduling the planner. Unlike other plan activities, there is no option to select objects in the sign-off plan activity; the GRC administrator scheduling the planner can only review the organizations for which the **Subject to Sign-off** option is enabled, as shown in [Figure 9.38](#).



**Figure 9.38** Review Organizations That Are Subject to Sign-Off

## Note

The workflow for sign-off is triggered only for those organizations for which the **Subject to Sign-Off** column is marked (X). In addition, note that a warning message is shown at the top of the screen if the corporate entity isn't enabled for sign-off.

- **Review**  
During this step, the administrator reviews the plan details before activating the plan. Once all the details are as expected, click the **Activate Plan** button to initiate the sign-off workflow tasks.
- **Confirmation**  
A confirmation message is received indicating the job is saved and the sign-off process is initiated successfully. Click **Finish** to close the window.

### 9.3.4 Perform Sign-Off

Once the Planner is scheduled as detailed in [Section 9.3.3](#), the workflow is sent to the organization owner of ABC India Pvt Ltd. To access the sign-off work item, log in to the SAP Process Control system, execute Transaction NWBC, navigate to the **My Home** work center, and click the **Work Inbox** work item under the **Work Inbox** work group. Access the work item **Sign-Off for Organization Unit**, as highlighted in [Figure 9.39](#).

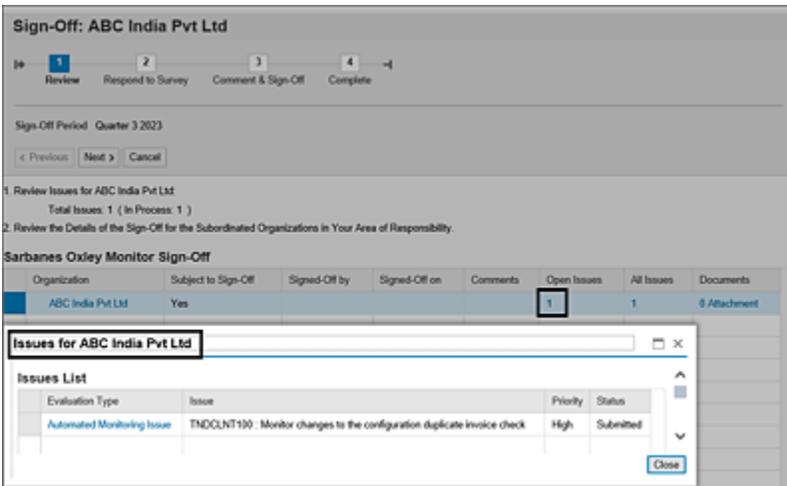
Subject	Organization	Regulation	Status	Due Date	Created On	Object Name	Created By
Sign-Off for Organizational Unit	ABC India Pvt Ltd	Sarbanes Oxley	Reserved	05.11.2023	10.10.2023 12:32:25	ABC India Pvt Ltd	SANKESHNA1

**Figure 9.39** Option for the Organization Owner to Access the Sign-Off Work Inbox Item

Click **Sign-Off for Organization Unit** under **Subject** to open the work item and perform the steps in the workflow, which we'll discuss in the following sections.

### Review

The **Review** step (see [Figure 9.40](#)) provides an overview of all the issues reported across various types of assessments and the details of current open issues for the organization that are in the process of sign-off. To view the details of either open issues or all the issues, click on the hyperlink in the respective columns.



**Figure 9.40** Option to Review the Details of Issues Reported in the Organization

On accessing the hyperlink, a popup window provides the evaluation type during which the issues were reported, a brief name of the issue, the priority level, and the current status of the issue. In addition, using the hyperlink under the **Organization** column, the owner providing sign-off can review the details of the master data, including the controls that are localized and the details of assessments that were performed during the sign-off period.

## Respond to Survey

Once the details are reviewed, navigate to the **Respond to Survey** step (see [Figure 9.41](#)) where the organization owner has to respond to the survey that was selected while scheduling the planner. The user providing sign-off responds to the questions and adds relevant comments.

**Sign-Off: ABC India Pvt Ltd**

1 Review 2 Respond to Survey 3 Comment & Sign-Off 4 Complete

Sign-Off Period Quarter 3 2023

< Previous Next > Cancel

**Questions**

No	Question	Comments	Answer
1	Are you aligned with the assessments and related issues reported?		<input type="text" value=" "/> <ul style="list-style-type: none"> <li>Yes</li> <li>No</li> <li>N/A</li> </ul>

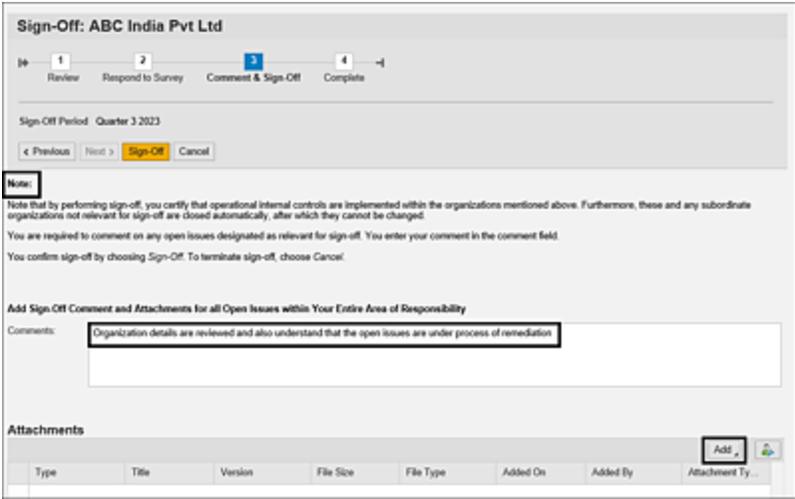
**Figure 9.41** Option to Respond to the Sign-Off Survey

## Comments and Sign-Off

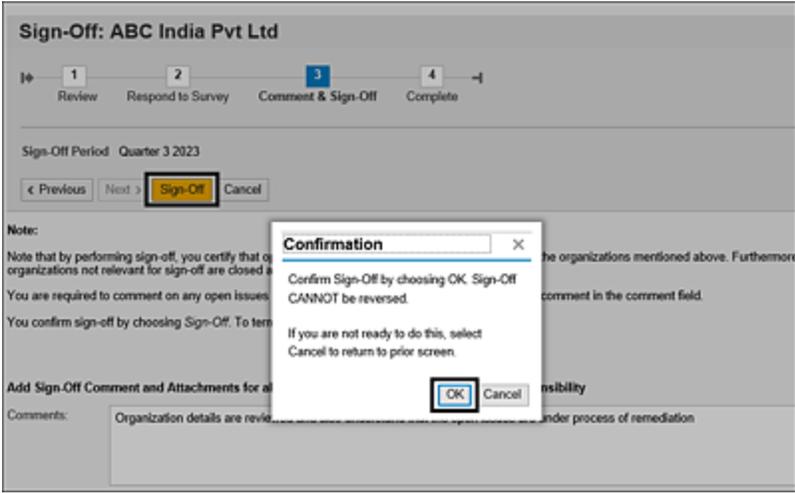
Once the questions are answered, click **Next** to navigate to the **Comments & Sign-Off** tab. The organization owner can review the **Note**, which acts as guidance before providing the sign-off. After reviewing the note, the user provides the **Comments** that act as the summary of the review performed about the master data and issues for the period under consideration. Any required evidence can be added under the **Attachments** section, as highlighted in [Figure 9.42](#).

Once the comments are entered, click the **Sign-Off** button, and confirm the sign-off, as shown in [Figure 9.43](#).

The text under the **Note** section can be maintained to meet the business requirements. To customize it, go to Transaction SPRO\_ADMIN, click **SAP Reference IMG**, and expand **Governance, Risk and Compliance • Process Control • Sign-Off • Change Sign-Off Note Text**. On executing the configuration step, it navigates the user to **Edit Documents: Initial Screen**.

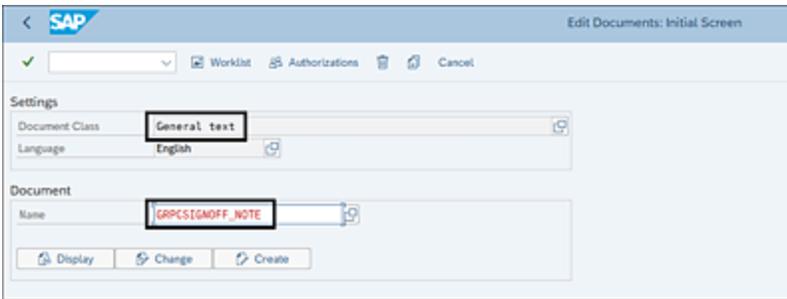


**Figure 9.42** Option to Enter Comments and Add Attachments before Providing Sign-Off



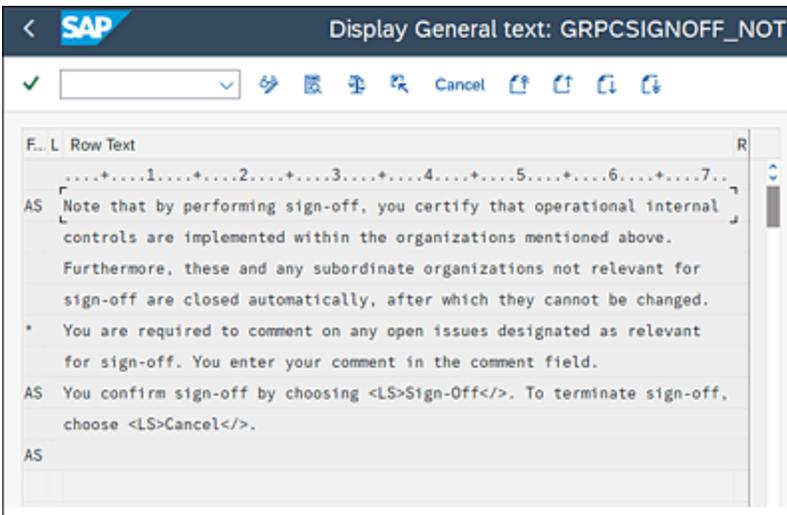
**Figure 9.43** Sign-Off Confirmation Screen

Alternatively, it can be maintained using Transaction SE61. Access the document **GRPCSIGNOFF\_NOTE** with **Document Class** set as **General text**, as highlighted in [Figure 9.44](#).



**Figure 9.44** Transaction SE61: Document Class Maintenance Screen

Click **Change** to open the maintenance screen and make any necessary modifications, as highlighted in [Figure 9.45](#).

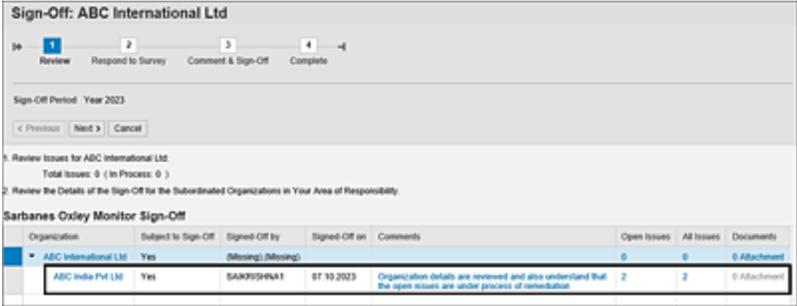


**Figure 9.45** Option to Modify the Sign-Off Note

## Complete

On completing the sign-off process, you may notice a confirmation message indicating that the sign-off is completed successfully for the organization. Once all the organization-level sign-offs have been successfully completed, the next task is to perform the corporate-level sign-off. This sign-off request is directed to the corporate owner, CEO, or CFO. The process and tabs for accessing and

responding to the sign-off request remain the same as in the previous stages. However, because the corporate entity is the parent organization, the owner has a comprehensive view that includes all child organizations. Further, the corporate-level view displays details of the responses provided by the organization owners during their respective organization sign-off processes, as shown in [Figure 9.46](#).

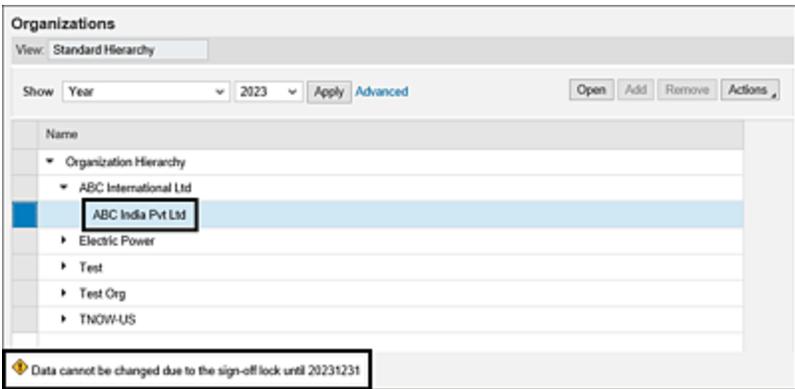


**Figure 9.46** Review Screen: Corporate Owner

After reviewing the issues and master data details, the corporate owner proceeds with the next steps of the sign-off process. Follow the steps detailed in the **Review, Respond to Survey, Comments & Sign-Off**, and **Complete** steps to complete the sign-off process at the corporate entity level as the steps remain same.

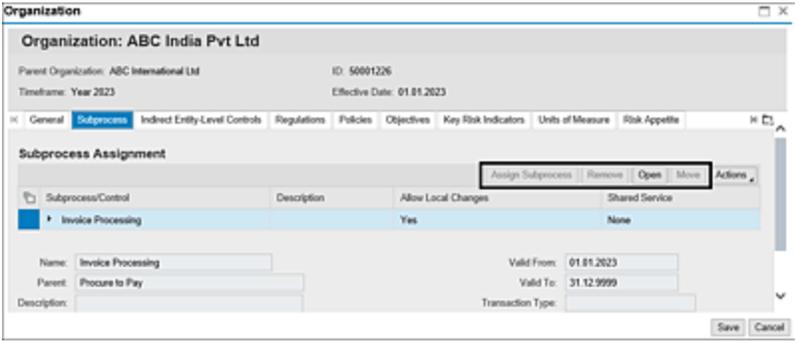
### 9.3.5 Post Sign-Off: Master Data Freeze

Once the sign-off process is submitted for an organization, the master data for that organization will freeze. Attempting to modify the organization will result in a lock message indicating that it can't be modified until a certain date, as highlighted in [Figure 9.47](#).



**Figure 9.47** Lock Message When the Signed-Off Organization Is Accessed

In addition, when the organization is opened, it can be viewed only in display mode and all the options to modify will no longer be available, indicating that no changes can be made to the organization for the period the sign-off is obtained, as highlighted in [Figure 9.48](#).



**Figure 9.48** Organization Screen Elements in Display Mode

### 9.3.6 Monitor Sign-Off Report

The Monitor Sign-Off report provides a comprehensive overview of the organization hierarchy, highlighting the organizations that are subject to the sign-off process for the reporting period. It also displays the user’s information who provided the sign-off and the date on which the sign-off was received. [Figure 9.49](#) shows the report.

To access the report, log in to the SAP Process Control system, execute Transaction NWBC, and execute the **Sign-Off Monitor** work item under the **Assessments** work center, which is part of the **Assessment Planning** work group, as shown in [Figure 9.49](#).

Monitor Sign-Off					
Show:	Year	2023	Sarbanes Oxley	Apply	Actions
Organization	Subject to Sign-Off	Signed-Off by	Signed-Off on	Documents	
▼ ABC International Ltd	Yes	Karthika G,(Missing)	07.10.2023	0 Attachment	
ABC India Pvt Ltd	Yes	SAKRISHNA1	07.10.2023	0 Attachment	
▼ Electric Power	No				
Power Generation	No				
▼ Test	No				
Tnow Basis	No				

**Figure 9.49** Monitor Sign-Off Report

## 9.4 Summary

This chapter covered the significance of other key functionalities available in SAP Process Control, detailing how the lifecycle of the policy can be managed in a workflow-enabled environment to define the scope, review it, and then finally obtain the approvals. In addition, this chapter provided insights on obtaining acknowledgement from the entity owners about their responsibility in operating controls, subprocesses, and organizations. The acknowledgement can be obtained using disclosure survey, which is a common way of using a questionnaire to get responses, or it can be obtained using the sign-off functionality, which is a more sophisticated approach that freezes the master data for the period which was signed off.

# 10 Reporting

*The previous chapters detailed the key functionalities in SAP Process Control, the process of configuring master data, scheduling the assessments using the planner, performing assessments, and managing issues. In addition to performing these activities on a regular basis, it's also important for the management and GRC administrators to get a holistic view of control compliance, issues identified, and remediation plans in progress. This chapter delves into the standard reports that are delivered by SAP Process Control.*

SAP Process Control provides insightful analytics to support decisions and promote accountability. The predefined reports and dashboards help understand the status of internal control evaluations and overall compliance at a glance.

A range of reports available in SAP Process Control facilitate real-time monitoring of compliance status and associated assessment outcomes. These reports are valuable for generating periodic updates for senior management on the overall control status within the organization. These are interactive reports that allow users to go deeper into the analysis with various sublinks within the report. Additionally, it allows you to customize the report with various columns

that are relevant for the analysis, enabling a more in-depth examination and the presentation of only pertinent data to the key stakeholders. The following sections will elaborate on the essential reports provided by SAP across various work centers and illustrate the process of adjusting report columns and filters prior to extracting results.

## **10.1 Reports by Work Centers**

Reports in SAP Process Control are available across the following work centers, which can be accessed through Transaction NWBC:

- **Master Data**
- **Rule Setup**
- **Assessments**
- **Reports and Analytics**

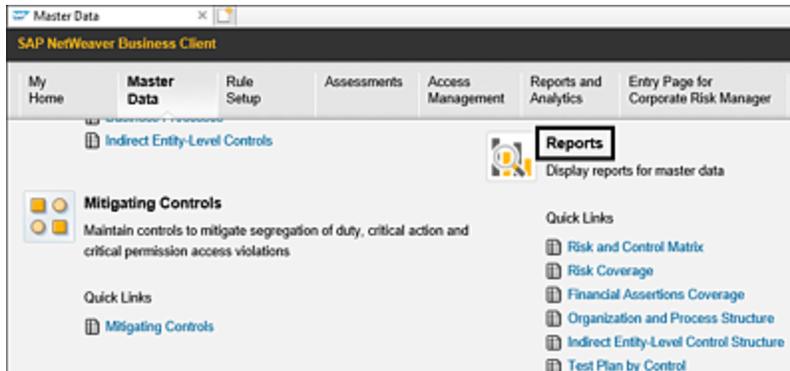
These reports are mapped to the work centers based on the relevance and the type of the data it presents as an output. More details and the steps to access these key reports is detailed in the following sections.

### **10.1.1 Key Reports under Master Data**

Master data, being a key element in SAP Process Control where the control framework and organization hierarchy is configured, it's required to have a detailed overview of the master data, which is delivered by the standard reports. To access the master data reports, follow these steps:

1. Log in to the SAP Process Control system.
2. Execute Transaction NWBC.
3. Navigate to the **Master Data** work center.

You can access all the standard master data reports under the **Reports** work groups, as highlighted in [Figure 10.1](#).



**Figure 10.1** Master Data Reports

A brief overview of each of the master data reports, their importance, and their output are detailed in the following sections. To learn more about the master data elements in SAP Process Control, refer to [Chapter 5](#).

## **Risk and Control Matrix Report**

This is the most important report in the master data work center. Organizations managing the risk and control matrix (RCM) in offline mode (e.g., Microsoft Excel or SharePoint) can now make use of the digitized report with SAP Process Control acting as a central repository of all the internal controls.

This report provides a detailed view of the relationship between master data elements, organization → subprocess

→ risk → control, as shown in [Figure 10.2](#). All the details of the control attributes defined in the **General** tab of the control are shown in this report. The relationship with other master data elements is also shown if the source of the risk is via account groups (including the assertions that the control is complying with) or via control objectives.

Organization	Process	Subprocess	Risk	Control	Owner (Control)
AIC India Pvt Ltd	Procure to Pay	Invoice Processing		Monitor Duplicate Invoice Check Config	SAKRISHNA1
Power Ltd	Record to Report	GL Account Maintenance		Maintenance of GL Accounts	SAKRISHNA1
Power Generation	Procure to Pay	Invoice Processing		Monitor Duplicate Invoice Check Config	Sandeep
Power Generation	Procure to Pay	Maintain Vendor Master Data	Improperly trained staff	Vendor master changes	
Power Generation	Procure to Pay	Maintain Vendor Master Data		Duplicate invoice parameter changes	
Power Generation	IT General Controls	System Parameters		Monitor Password Parameter	SAKRISHNA1
Power Generation	IT General Controls	Access Management		Monitor users with SAP All access	Sandeep

**Figure 10.2** Risk and Control Matrix

### Risk Coverage Report

This report helps the organization review the control mapping to the risks and to identify the gaps existing in mitigating the risks. It details the number of risks identified for each of the local subprocesses. It shows the details of the source for each risk to the subprocess (which could be control objective, account group, or inherent to the subprocess) and also how many such risks are being mitigated with the controls. [Figure 10.3](#) shows the output of the report.

Organization	Subprocess	Risk Source	Risk	Risk Level	Control
Power Generation	Maintain Vendor Master Data	Inherent to Subprocess	Improperly trained staff		Vendor master changes
Power Generation	Maintain Vendor Master Data	Account Group: Accounts Payable (Account Group Assertion: Completeness, Presentation and Disclosure: Completeness, Presentation and Disclosure)	Incorrect interpretation of Acctg rules		
Power Generation	Maintain Vendor Master Data	Control Objective: Accurate Accounting Records	Global consolidation process		
True Basis	Maintain Vendor Master Data	Inherent to Subprocess	Improperly trained staff		Vendor master changes
True Basis	Maintain Vendor Master Data	Account Group: Accounts Payable (Account Group Assertion: Completeness, Presentation and Disclosure: Completeness, Presentation and Disclosure)	Incorrect interpretation of Acctg rules		
True Basis	Maintain Vendor Master Data	Control Objective: Accurate Accounting Records	Global consolidation process		

**Figure 10.3** Risk Coverage Report

## Financial Assertions Coverage Report

This report is only of use if the organization is making use of the account group functionality and managing the compliance of controls with the financial assertions. To understand more about account groups, refer to [Chapter 5, Section 5.2.2 \(Account Groups tab\)](#). This report gives an overview of the relationships between organization → subprocess → account group → assertion → control mapping to understand the account groups applicable to a local subprocess and the assertions that the relevant control is complying with. [Figure 10.4](#) shows the details of the report output.

Regulation	Organization	Subprocess	Account Group	Assertion	Control
Sarbanes Oxley	Power Generation	Maintain Vendor Master Data	Accounts Payable	Completeness	
Sarbanes Oxley	Power Generation	Maintain Vendor Master Data	Accounts Payable	Existence Or Occurrence	
Sarbanes Oxley	Power Generation	Maintain Vendor Master Data	Accounts Payable	Presentation and Disclosure	
Sarbanes Oxley	Power Generation	Maintain Vendor Master Data	Accounts Payable	Rights and Obligations	
Sarbanes Oxley	Power Generation	Maintain Vendor Master Data	Accounts Payable	Valuation or Allocation	
Sarbanes Oxley	Tronv Basis	Maintain Vendor Master Data	Accounts Payable	Completeness	Monitor maintenance of vendor master
Sarbanes Oxley	Tronv Basis	Maintain Vendor Master Data	Accounts Payable	Existence Or Occurrence	
Sarbanes Oxley	Tronv Basis	Maintain Vendor Master Data	Accounts Payable	Presentation and Disclosure	
Sarbanes Oxley	Tronv Basis	Maintain Vendor Master Data	Accounts Payable	Rights and Obligations	
Sarbanes Oxley	Tronv Basis	Maintain Vendor Master Data	Accounts Payable	Valuation or Allocation	

**Figure 10.4** Financial Assertion Coverage Report

## Organization and Process Structure Report

This is another important master data report that gives a hierarchical view of the organization → process → subprocess → control mapping, which is performed as part of the control localization process. [Chapter 5, Section 5.3.2](#), details more on the control localization topic. Additionally,

see [Figure 10.5](#) that outlines the **Organization and Process Structure**.

Organization and Process Structure				
A hierarchical report which shows the overall organization and process structure				
Selection				
Result				
Expand All				
Hierarchy	Object Type	Owner	Significance	Assigned Regulations (Control)
ABC International Ltd	Organization			
ABC India Pvt Ltd	Organization			
Process Hierarchy	Process			
Procure to Pay	Process			
Invoice Processing	Subprocess			
Monitor Duplicate Invoice Check Config	Control	SAKROSHNA1	Key Control	Sarbanes Oxley
Power Ltd	Organization			
Record to Report	Process			
GL Account Maintenance	Subprocess			
Maintenance of GL Accounts	Control	SAKROSHNA1		Sarbanes Oxley

**Figure 10.5** Organization and Process Structure

## Test Plan by Control Report

This report is only of use if manual controls are documented and are being tested in SAP Process Control. This report gives an overview of the localized manual control to manual test plan mapping. This helps the GRC administrator review the test plans being used for various controls and also identify those manual controls for which the test plans aren't yet identified. [Chapter 6, Section 6.5](#), details more about the manual controls and usage of manual test plans.

## Test Step Details Report

This is an extension to the previous report (Test Plan by Control report) where this report provides a detailed view of the localized control to manual test plan mapping, including the specific steps defined in each of the test plan, which the control tester should execute to test the operating

effectiveness of the control. [Chapter 6, Section 6.5.1](#), details more about the process of defining steps in a test plan.

## Change Analysis Report

This report provides the detailed analysis of the changes made in the master data elements between the two time periods selected while executing the report. While executing this report, the user has to select **Period 1 (Time Frame and Year)** and **Period 2 (Time Frame and Year)** to compare the master data. The output of the report provides any changes (creation, modification, deletion, and role assignments) made to the master data between the two periods under selection. [Figure 10.6](#) shows the output of the Change Analysis report.

Change Analysis					
A summary report that chronologically shows all object changes and details, that occurred within specified time period					
▶ <a href="#">Selection</a>					
Results					
Object Name	Object Type	Change Type	Field Changed	Old value	New value
TNOW	Organization	Modify	Valid from (Organization)	20210625	20230101
TNOW	Organization	Modify	Valid to (Organization)	20221231	99991231
TNOW	Organization	Modify	Currency (Organization)		ETB
TNOW	Organization	Modify	Validate iELC Effectiveness Test		Use Central Setting
TNOW	Organization	Modify	Validate iELC Assessment		Use Central Setting
TNOW	Organization	Modify	Retest iELC Effectiveness Test		Use Central Setting
TNOW	Organization	Modify	Retest iELC Assessment		Use Central Setting
TNOW	Organization	Modify	Organization	TNOW	Test

**Figure 10.6** Change Analysis Report

## Audit Log Report

This report provides a detailed log of the changes made to any of the central or local master data elements between the dates under selection while executing the report. The

changes are shown in chronological order, and it's required to select if the changes to be reviewed should be extracted from the central master data (individual entities in the master data) or local master data (entities mapped to an organization). The report can be executed for any of the following master data elements:

- Process
- Subprocess
- Control
- Control objective
- Risk
- Account group
- Indirect entity-level control
- Business rule
- Data source
- Regulation, policy
- Regulation requirement

## **Risk-Based Compliance Management Report**

As detailed in [Chapter 5](#), master data is shared between SAP Process Control and SAP Risk Management. This report offers a comprehensive perspective on the risks integrating both SAP Process Control and SAP Risk Management viewpoints. It outlines the identified risks associated with one or more organizations and the corresponding controls established to mitigate them. In addition to the master data

relationships, this report also provides the outcomes of various control assessments to determine the effectiveness of risk mitigation. This, in turn, equips management with a tool to identify any existing gaps and the potential need for implementing additional controls to prevent the materialization of these risks.

### **Policies by Regulation Report**

This report provides the summary of all the policies/standards/standard operating procedures (SOPs) defined to comply with the requirements of the regulation. [Chapter 9, Section 9.1.1](#), details more about the process of defining a policy.

### **Policy Versions Report**

Once a policy is defined, approved, and published, any changes required in the policy are made by generating a new version. This report provides the various changes the policy underwent across different versions that were published in the organization over time.

### **Risks Associated with Policies Report**

While defining the scope of the policy, it's important to map the risks that will materialize if the clauses in the policy aren't followed effectively. This report gives the details of the risks that are mapped to the policy while configuring its scope. [Chapter 9, Section 9.1.1](#), on the **Policy Scope** tab, details more on the process of mapping risks to a policy.

## **Processes and Controls with Policies Report**

While defining the scope of the policy, it's important to implement certain controls that ensure the policy is operated effectively and that the associated risks don't materialize. This report gives the details of the controls that are mapped to the policy while configuring its scope.

[Chapter 9, Section 9.1.1](#), on the **Controls** tab, details more on the process of mapping controls to a policy.

## **Regulation/Requirement-Control Coverage Report and Control-Regulation/Regulation Control Coverage Report**

These two reports provide a summary of the controls implemented to comply with the regulations and the specific requirements of the regulation in the organization.

## **Central Business Process Structure Report**

This business process hierarchy (process → subprocess → control) defined in the **Master Data** work center is shown as the output of the report. [Chapter 5, Section 5.2](#), details more about the central business process hierarchy.

### **10.1.2 Key Reports under Rule Setup**

Automated monitoring is a key functionality in SAP Process Control, which is managed from the **Rule Setup** work center. The standard reports under **Rule Setup** provide a detailed overview of the data sources, business rules, and control relationship, including the details of the issues

identified as part of the automated control monitoring and the status of remediation plans initiated to fix the issues.

To access the reports under the **Rule Setup** work center, log in to SAP Process Control system, execute Transaction NWBC, click the **Rule Setup** work center, and access the reports relating to automated control monitoring under the **Reports** work group.

Each of the reports under the **Reports** work group are detailed in the following sections. Additionally, refer to [Chapter 8](#) to understand more about the terminology and the process such as data source, business rule, control to business rule mapping, scheduling controls for automated monitoring, and issue remediation. The reports in this work center give a holistic view of data configured for the purpose of automated control monitoring and test results.

### **Data Source Business Rule Assignment Report**

Automated controls are monitored through business rules that are created using the data sources. This report provides an interactive output for such relationship between data sources and business rules. The details of the tables, using which the data source is created, can be reviewed by clicking on the hyperlink. Similarly, the details of the filter criteria and deficiency criteria can be reviewed by clicking on the business rule link.

Another key feature of the report is that it provides a complete version history of the business rules, which helps in tracking various changes made during report execution.

Figure 10.7 shows the report output for a better understanding.

Hierarchy	Object Type	Data Source ID	Data Source	Data Source Description	Connection Type Key
TEST_MONITOR_CRITICAL_PROFILE	Data Source	50000723	TEST_MONITOR_CRITICAL_PROFILE	Data source is related to critical profiles monitoring	SAP
TEST_MONITOR_CRITICAL_PROFILE	Business Rule	50000723	TEST_MONITOR_CRITICAL_PROFILE	Data source is related to critical profiles monitoring	SAP
26290314112966	BR Version	50000723	TEST_MONITOR_CRITICAL_PROFILE	Data source is related to critical profiles monitoring	SAP
26290314113037	BR Version	50000723	TEST_MONITOR_CRITICAL_PROFILE	Data source is related to critical profiles monitoring	SAP
26290314113051	BR Version	50000723	TEST_MONITOR_CRITICAL_PROFILE	Data source is related to critical profiles monitoring	SAP
Monitor program changes for custom code	Data Source	50000728	Monitor program changes for custom code	Monitor if a program for a custom transaction is changed without informing Security. Table TSTC captures changes to transaction codes. Report exception if program is	SAP

Figure 10.7 Data Source Business Rule Assignment Report

## Control Monitoring History with Ratings Report and Monitoring Issue Status Report

The Control Monitoring History with Ratings report and the Monitoring Issue Status report provide visibility into the status of issues identified as part of the automated monitoring jobs. These reports provide a detailed view of the controls for which the issue is identified, including the organization where the control is localized, the subprocess under which the control is created, the current processor of the issue, the issue status, and the number of remediation plans created to fix the issue.

Organization	Subprocess	Control	Issue	Description (Issue)	Issue Processor
ABC India Pvt Ltd	Invoice Processing	Monitor Duplicate Invoice Check Config	TNDCLNT100	Monitor changes to the configuration duplicate invoice check	2 High 2 Medium 0 Low 0
ABC India Pvt Ltd	Invoice Processing	Monitor Duplicate Invoice Check Config	TNDCLNT100	Monitor changes to the configuration duplicate invoice check	3 High 3 Medium 0 Low 0
Power Ltd	GL Account Maintenance	Maintenance of GL Accounts	TSDCL100	Monitor maintenance of GL Account	1 High 1 Medium 0 Low 0
Power Ltd	GL Account Maintenance	Maintenance of GL Accounts	TSDCL100	Monitor maintenance of GL Account	1 High 1 Medium 0 Low 0
Power Generation	Invoice Processing	Monitor Duplicate Invoice Check Config	TNDCLNT100	Monitor changes made to duplicate invoice check	4 High 4 Medium 0 Low 0
Power Generation	Invoice Processing	Monitor Duplicate Invoice Check Config	TNDCLNT100	Monitor changes made to duplicate invoice check	4 High 4 Medium 0 Low 0

Figure 10.8 Monitoring Issue Status Report

The **Monitoring Issue Status** report screen is interactive, where the details of the controls and issue can be accessed by clicking on the respective hyperlinks, as shown in [Figure 10.8](#).

### Monitoring Remediation Status Report

This report provides visibility into the status of remediation plans initiated to fix issues identified as part of automated monitoring. This is an interactive report using which the user can drill down into the automated monitoring issue to review the details of the exceptions identified and the remediation plan created. This report provides a detailed view of the controls for which the remediation plan is created, including the organization where the control is localized, the subprocess under which the control is created, details of the issue for which the plan is created, the owner of the issue, details of the remediation plan, the remediator, and the current status of the plan, as shown in [Figure 10.9](#).

Organization	Subprocess	Control	Remediation Plan	Status (Remediation Plan)	Remediator
Power Ltd	GL Account Maintenance	Maintenance of GL Accounts	Update the configuration of GL	Closed	Karthika G
Power Ltd	GL Account Maintenance	Maintenance of GL Accounts	Update the GL Account Configuration	Closed	Karthika G
Power Generation	Invoice Processing	Monitor Duplicate Invoice Check Config	Gather the evidences of approval	Closed	SAKORISHNA SAJ
Power Generation	Access Management	Monitor users with SAP_All access	Remove access to non-relevant users	Closed	SAKORISHNA SAJ

**Figure 10.9** Monitoring Remediation Status Report

### Automated Control Business Rule Assignment Report

The business rules created for the purpose of automated monitoring should be mapped to the control for which the operating effectiveness should be evaluated. Only on

completion of the control-business rule assignment can a control be scheduled for automated monitoring. This report provides the view of the relationship between the local controls to which the business rules are assigned.

## **Standalone Job Monitoring Results Based on Rule Report**

Standalone job is a new feature introduced in SAP Process Control 12.0 where the business rules can be scheduled without assigning them to a control to test the data. This report gives the overview of business rules that are scheduled for standalone monitoring, the status of the job, and the result of the business rules for the scheduled period. [Chapter 8, Section 8.5.2](#), detailed more about standalone jobs.

### **10.1.3 Key Reports under Assessments**

As detailed in [Chapter 6](#), [Chapter 7](#), and [Chapter 9](#), controls undergo different types of assessments such as design assessment, self-assessment, control performance, and manual test of effectiveness. The details of various assessments the controls are scheduled for, test results, issues reported, and remediation plans initiated can be reviewed using the reports available in the **Assessments** work center.

Log in to the SAP Process Control system, execute Transaction NWBC, navigate to the **Assessments** work center, and use the various work items under the **Reports**

work group to access reports related to the control assessments.

The reports under this section are shared across SAP Process Control and SAP Risk Management. The following sections contain the list of reports along with a brief overview of the output and importance of each of the reports.

Refer to [Chapter 6](#) to understand more about the relevance of different assessments that the control undergoes, and refer to [Chapter 7](#) and [Chapter 9](#) to understand ad hoc issue management, disclosure survey, policy management, and sign-off functionalities.

## Evaluation Results by Organization Report

This report gives a summary of results for the assessments conducted during the period of report execution. It can be executed for one or more of the evaluation types, that is, **Subprocess Design Assessment, Control Design Assessment, Self-Assessment, and Effectiveness (Control Test of Effectiveness)**.

Hierarchy	Object Type	Rating (Symbol)	Control Design Rating (Sym)	Self-Assessment Rating (Sym)	Owner
Test	Organization				
Process Hierarchy	Process				
Process to Pay	Process				
Invoice Processing	Subprocess	Significantly Deficient	Significantly Deficient		
Monitor Duplicate Invoice Check Config	Control	Significantly Deficient	Significantly Deficient		DRISHYI
IT General Controls	Process				
Access Management	Subprocess	Significantly Deficient	Significantly Deficient		
Monitor users with SAP_AJ access	Control	Significantly Deficient	Significantly Deficient		DRISHYI

**Figure 10.10** Evaluation Results by Organization

This report gives a hierarchical view of the organization, process, subprocess, control, and results of the assessments conducted for the relevant master data entities. Note that this is an interactive report and allows users to navigate granular details of assessments, issues reported, and remediation plans initiated by clicking the hyperlinks. [Figure 10.10](#) shows the evaluation results by organization and the status.

## **Evaluation Management Report**

This report can be used by management to understand the gaps in the evaluation process and plan the future schedule accordingly. The executed report identifies the organizations where one or more of the local subprocesses, controls, or indirect entity-level controls aren't tested for the following assessments:

- **IELC Assessment**
- **IELC Testing**
- **Subprocess Design Assessment**
- **Control Design Assessment**
- **Control Self-Assessment**
- **Test of Effectiveness**

## **Indirect Entity-Level Control Evaluations Report and Indirect Entity-Level Control Evaluations by Organizations Report**

These two reports provide a summary of the indirect entity-level controls assessment and testing performed during the period of report execution (the first in list view and the second in hierarchical view). The executed reports provide the assessment results of whether it passed or failed for each indirect entity-level control that is mapped at the organization level. This is an interactive report that provides flexibility to the users to drill down for each assessment to review the details of the tests and any issues reported as part of the assessment. To understand more about indirect entity-level controls, refer to [Chapter 5, Section 5.5](#).

### **Subprocess Design Assessment Report**

This report provides a detailed view of the subprocesses mapped to the organizations in the hierarchy and whether they are assessed for design or not. For the subprocesses assessed for design, the details of the test results, along with any issues reported, can be viewed using the drilldown options in the result ratings.

### **Control Ratings Report**

The Control Ratings report provides a summary of the results of the following assessments performed for all the local controls mapped at the organization hierarchy:

- **Control Design Assessment**
- **Control Self-Assessment**
- **Control Test of Effectiveness**

This report can be used to identify the controls that are scheduled for these three control assessments and the controls that aren't. For the controls that are scheduled, the results of the assessment are shown as **Adequate**, **Deficient**, or **Significantly Deficient**. Via hyperlinks, users can drill down to review the assessment responses, issues reported, and remediation plans initiated.

### **Control Test History with Ratings Report**

While the **Control Ratings** report provides the latest test results of control test of effectiveness performed for the controls, the Control Test History with Ratings report provides visibility on the multiple tests performed during the period of report execution. The drilldown options of the test results are available in this report as well, with which the details of the tests conducted can be reviewed.

### **Test Step Status Report**

This report gives a detailed report that provides responses at the step level provided by the testers for the effectiveness tests conducted for the business process controls and indirect entity-level controls. The test steps that are triggered to the control testers, along with the responses provided for each test step, can be reviewed from this report.

### **Risk Coverage with Evaluations Report and Risk Coverage with Ratings by Organization Report**

As part of the master data definition in SAP Process Control, risks impacting the objectives of the subprocess are mapped. To mitigate the risks, organizations implement controls and ensure that they are operated effectively. These two reports give the list of risks identified (the first in list view and the second report in hierarchical view) for the local subprocesses and the controls mapping for each risk (the **Control** column is blank if a control isn't mapped to mitigate the risk). For those controls mitigating the risk, this report provides the summary of results for the following control assessments to validate whether they are effective or not:

- **Control Design Assessment**
- **Control Self-Assessment**
- **Control Test of Effectiveness**

### **Assessment Survey Results Report and Assessment Survey Details Report**

These two reports provide the results summary and the detailed view of the responses provided for each question part of the survey for the following assessments conducted during the report execution period:

- **Subprocess Design Assessment**
- **Control Design Assessment**
- **Control Self-Assessment**

[Figure 10.11](#) shows the **Assessment Survey Details** report screen.

Assessment Survey Details						Personalize
Table report showing the assessment survey details of the scheduled surveys						
Results						
Organization	Control	Control Design Rating (Sym)	Survey Name	Question	Answer	
Test	Monitor Duplicate Invoice Check Config	Significantly Deficient	Quarterly design assessment	Are all the company codes in scope of the control accurate and valid?	No, new company	
Test	Monitor Duplicate Invoice Check Config		Quarterly design assessment	Is the design of the control meeting the standards of ICS of the organization?	No	
Test	Monitor users with SAP_AH access	Significantly Deficient	Survey for Control Design_01	Is the design of the control meeting the standards of ICS of the organization?	No	
Test	Monitor users with SAP_AH access		Survey for Control Design_01	Is the design of the control meeting the standards of ICS of the organization?	No	
Test	Self Assignment of Role	Adequate	critical basis access	need access to critical codes related to basis?	Yes	
Test	Self Assignment of Role	Significantly Deficient	critical basis access	need access to critical codes related to basis?	Yes	
Test Basis	Self Assignment of Role	Significantly Deficient	Survey for Control Design_01	Is the design of the control meeting the standards of ICS of the organization?	No	
Test Basis	Global Accounting Manual	Significantly Deficient	Survey for Control Design_01	Is the design of the control meeting the standards of ICS of the organization?	No	
Test Basis	Global Accounting Manual		Survey for Control Design_01	Is the design of the control meeting the standards of ICS of the organization?	No	

**Figure 10.11** Assessment Survey Details Report

## Issue Status Report and Remediation Status Report

The Issue Status report and Remediation Status report are consolidated reports that show the details of all the issues reported and remediation plans initiated during the period of report execution across various evaluation types, as follows:

- **IELC Assessment**
- **IELC Testing**
- **Subprocess Design Assessment**
- **Control Design Assessment**
- **Control Self-Assessment**
- **Control Test of Effectiveness**

Using the drilldown option, users can view the details of the issues and remediation plans created as part of the assessments. [Figure 10.12](#) shows the various issues and the issue statuses.

Organization	Control	Issue	Issue Type	Duration in Days	Issue Status
Test	Monitor Duplicate Invoice Check Config	New Company codes are not in scope of the control	Control Design Assessment Issue	1	Closed
Test	Monitor Duplicate Invoice Check Config	Duplicate Inv Checks	Control Design Assessment Issue	122	In Process
Test	Monitor Duplicate Invoice Check Config	Remediate Issue	Control Design Assessment Issue	53	In Process
Test	Monitor Duplicate Invoice Check Config	New Company Codes are not in scope of the control	Control Design Assessment Issue	1	Closed
Test	Monitor Duplicate Invoice Check Config	New company codes are not in scope of the control	Control Design Assessment Issue	1	Closed
Test	Monitor Duplicate Invoice Check Config	New Company Codes are not in scope of the control	Control Design Assessment Issue	86	In Process
Test	Monitor users with SAP_All access	New company codes are not in scope of the control	Control Design Assessment Issue	47	Review
Throw Basis	Self Assignment of Role	New company codes are not in scope of the control	Control Design Assessment Issue	47	Review
Throw Basis	Global Accounting Manual	New company codes are not in scope of the control	Control Design Assessment Issue	48	Review

**Figure 10.12** Issue Status Report

While the preceding report shows the details of the issues identified across various assessments, the Remediation Status report provides the detailed view of the remediation plans created to fix those issues. [Figure 10.13](#) shows the details of the remediation plans created across different assessments, the current owner of the **Remediation Plan, Status**, and the **Duration** for which the remediation plan is in **Open** status.

Control	Remediation Plan	Remediator	Reported by (Remediation Plan)	Status (Remediation Plan)	Duration (Remediation Plan)
Monitor Duplicate Invoice Check Config	Duplicate Inv Checks	Sandeep	Karthika G	Closed	1
Monitor Duplicate Invoice Check Config	Duplicate Inv Checks	Sandeep	Sandeep	Remediation Started	122
Monitor Duplicate Invoice Check Config	Duplicate Inv Checks	SANKRISHNA S	Karthika G	Draft	53
Monitor Duplicate Invoice Check Config	Duplicate Invoice Checks	Sandeep	Karthika G	Closed	1
Monitor Duplicate Invoice Check Config	Duplicate Inv Checks	Karthika G	Karthika G	Closed	1
Monitor Duplicate Invoice Check Config	Duplicate Inv Checks	Sandeep	Karthika G	Resolved	1

**Figure 10.13** Remediation Status Report

## Test Status by Organization and Test Status by Process Report

The Test Status by Organization and Test Status by Process reports are analytical reports in a hierarchical view (the first provides an organization-level overview, and the second provides more details of processes and controls), which

provide the following assessments/tests conducted for local controls:

- Total number of controls localized
- Total number of controls assessed for design assessment, self-assessment, and control test of effectiveness
- Total number and % of controls that have the failed rating
- Total number and % of controls remediated

### **Scoping Coverage Report and Organization-Level Materiality Analysis Report**

These reports are of use only if the organization is using the account group functionality and managing consolidated account balances and organization-level account balances. To understand more about account groups and account balance maintenance, refer to [Chapter 5, Section 5.2.2](#) (**Account Groups** tab).

The Scoping Coverage report gives the summary of the current account balances and materiality threshold maintained in the configuration at the account group level, and the Organization-Level Materiality Analysis report provides summary of the balances based for the local account groups mapped to the organization through subprocesses. In addition, these reports also provides a summary of the number of controls and risks to which these account groups are mapped.

### **Organization Sign-Off Status**

This report provides information on how the organization uses the sign-off feature as outlined in [Chapter 9, Section 9.3.4](#). It includes a comprehensive breakdown of the organizational hierarchy, the organizations where the **Subject to Sign-Off** functionality is enabled, and their respective sign-off statuses (**Completed**, **In-Progress**, or **Not Done**). For organizations in which sign-off is in progress or completed, it also specifies the users responsible for the sign-off process.

### **Aggregation of Deficiency Status Report**

This report focuses on the organization's utilization of the deficiency aggregation functionality. It provides a comprehensive overview of the organizational hierarchy, identifies the organizations where **Subject to AoD** (aggregation of deficiencies) is enabled, and reports the AoD status. This status indicates whether the business process owner has carried out deficiency aggregation or not.

### **Ad Hoc Issue Report**

This report provides a hierarchical depiction of the organization hierarchy and policy hierarchy against which any ad hoc issues are reported, the user who is responsible to take action on it, and any remediation plan created to fix the ad hoc issue.

### **Policy Issue Report**

As part of the policy definition, the controls are mapped to ensure the policy is complied with effectively in the

organization. This report helps in understanding the effectiveness of the policy by providing the details of the issues reported against such controls that are mapped and any ad hoc issues reported against the policy.

### **Disclosure Survey Status Report and Disclosure Survey Details Report**

The Disclosure Survey Status and Survey Details reports provide the results summary and the detailed view of the responses provided for each question part of the survey triggered as part of the disclosure survey. Refer to [Chapter 9, Section 9.2](#), to understand the importance of disclosure surveys and the scenarios where they can be used.

### **Manual Control Performance Results Report and Manual Control Performance Details Report**

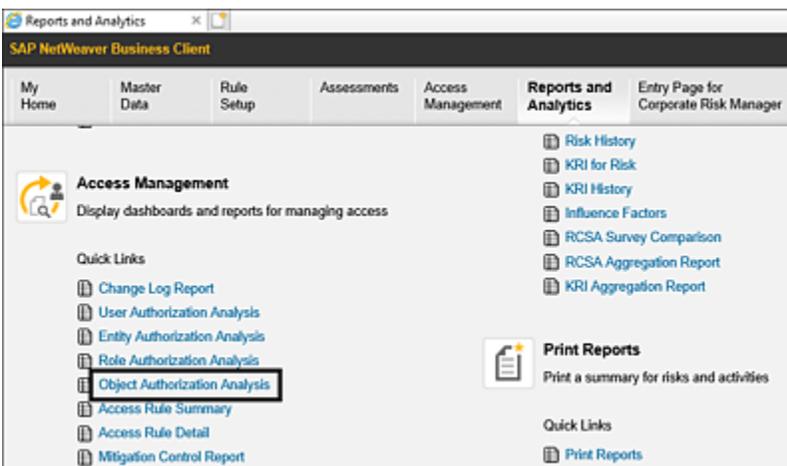
These two reports provide the results summary and the detailed view of the responses provided by the control performer for each step that is part of the performance plan. Refer to [Chapter 6, Section 6.4](#), to understand the importance of manual control performance and the scenarios when it can be used.

## **10.1.4 Key Reports under Reports and Analytics**

The **Reports and Analytics** work center provides access to various standard dashboards and reports that are applicable

to SAP Process Control, SAP Risk Management, and SAP Access Control. With respect to SAP Process Control, it delivers dashboards and reports to monitor the compliance status within the organization.

To access, log in to the SAP Process Control system, execute Transaction NWBC, navigate to the **Reports and Analytics** work center, and access the various work items under the **Compliance** group relating to various compliances. In addition to these compliance reports, there is another key report called **Object Authorization Analysis**, which gives insights of current user assignments at various master data entity levels in SAP Process Control, as shown in [Figure 10.14](#).

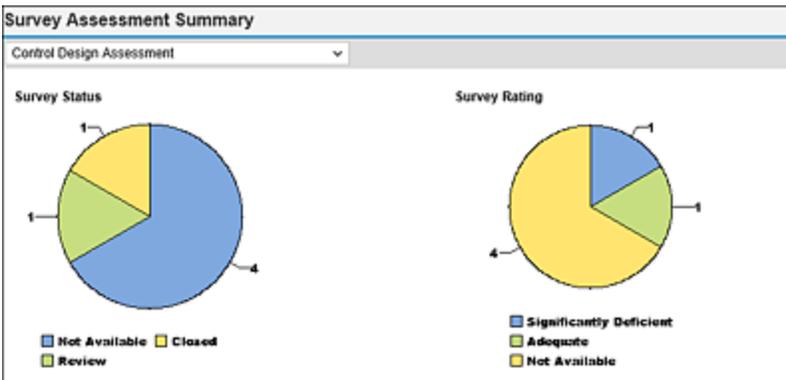


**Figure 10.14** Location to Access Reports and Analytics Reports

The reports under compliance are applicable to both SAP Process Control and SAP Risk Management. The following sections contain the list of dashboards and reports along with a brief overview of the output and importance of each of the reports.

## Evaluation Status Dashboard

The Evaluation Status dashboard offers a graphical representation of survey assessment results, encompassing the outputs of assessments such as control design, control self-assessment, indirect entity-level controls assessment, and the outcomes of manual control effectiveness tests. Additionally, it displays a summary of issue and remediation plan status for all assessments conducted via surveys. The dashboard also provides insights into the **Sign-Off** status. These results can be generated for a specific time frame and filtered to specifically display results related to particular regulations using the dropdown option. [Figure 10.15](#) shows the **Control Design Assessment** information as an example.



**Figure 10.15** Evaluations Status Dashboard

## Overall Compliance Status Dashboard

The Overall Compliance Status dashboard presents a bar chart that provides various metrics such as control coverage for defined risks, an overview of the percentage of controls that haven't been evaluated, and, if evaluated, a breakdown of controls marked as effective or ineffective as part of the

control assessments. It also provides a percentage representation of open issues and remediation plans. These results can be generated for a specific time frame and can be filtered to obtain results specific to regulations, organizations, or countries.

### **Datasheet Report**

This report offers a consolidated perspective on all information pertaining to subprocesses or controls. It encompasses their attributes, relationships with other master data entities, and the assessment and test results. It also provides detailed information regarding any issues and the corresponding remediation plans generated during these assessments. These results can be generated for a specific time frame and can be filtered to obtain information specific to regulations, organizations, processes, or subprocesses.

### **Object Authorization Analysis Report**

As explained in [Chapter 5, Section 5.4](#), user assignments are made to the roles at various master data entity levels to assign the responsibility, and these assignments drive the workflows in SAP Process Control. This report provides a holistic view of such roles to user assignments (current and previous), made during the period of report execution. [Figure 10.16](#) gives an overview of authorizations and user IDs for object types.

Object Authorization Analysis						Personalize
Object Authorization Analysis						
• Selection						
Results						
Object Type	Object Name	Role ID	User ID	Role	Start Date	
Organization	Power Generation	SAP_GRC_RM_AFL_ORG_OWNER	KARTHIKA	Organization Owner	20.08.2023	
Organization	ABC International Ltd	SAP_GRC_RM_AFL_CEO_CFO	KARTHIKA	CEO/CFO	06.10.2023	
Organization	ABC India Pvt Ltd	SAP_GRC_RM_AFL_ORG_OWNER	SAKRISHNA1	Organization Owner	06.10.2023	
Control	Monitor_quantity_in_goods_receipt_or_inv	SAP_GRC_SPC_CRS_CTL_OWNER	ERISHTI	Cross Regulation Control Owner	12.09.2023	
Control	Self Assignment of Role	SAP_GRC_SPC_CRS_CTL_OWNER	ERISHTI	Cross Regulation Control Owner	12.09.2023	
Control	Monitor Password Parameter	SAP_GRC_SPC_CRS_CTL_OWNER	SAKRISHNA1	Cross Regulation Control Owner	28.05.2023	
Control	Monitor Password Parameter	Z_SAP_GRC_SPC_CRS_REM_OWNER	SANKEEPL	Cross Regulation Remediation Owner	28.05.2023	
Control	Global Accounting Manual	SAP_GRC_SPC_CRS_PRC_TESTER	SAKRISHNA1	Cross Regulation Control Tester	29.05.2023	

**Figure 10.16** Object Authorization Analysis Report

## **10.2 Personalization and Configuration**

As previously outlined, the columns in all the reports discussed in various work centers can be conveniently controlled using the available configurations. This functionality facilitates the thorough analysis and presentation of pertinent data to key stakeholders by slicing and dicing the data. The following sections cover the process of selecting or deselecting columns through the personalization option and provide a comprehensive explanation of the configuration settings for managing the fields available for personalization.

### **10.2.1 Personalize Columns**

SAP's predelivered reports come with the fields that are common to customers for extracting output, and these can be modified during the report execution in Transaction NWBC. However, if there is a need to add a new field for selection, or if any of the existing fields are found to be invalid, these adjustments can be made through the Transaction SPRO configuration. The process of personalizing fields and columns in Transaction NWBC and maintaining these changes via the Transaction SPRO configuration is outlined in the following sections.

### **Personalize Fields in SAP Business Client**

As an example, when running the Risk and Control Matrix report, the standard report includes information about the organization, process, and control, but there is a need to include details about assigned business rules and test plans, which can be achieved by using the **Personalize Fields** option.

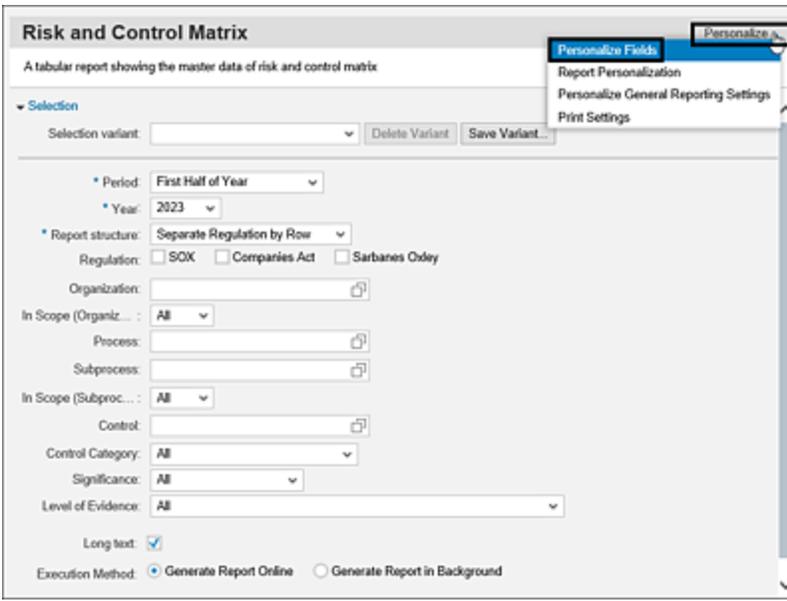
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### Note

The ability to add extra fields to the report using the **Personalize Fields** option is only functional when these fields are already integrated into the report's structure.

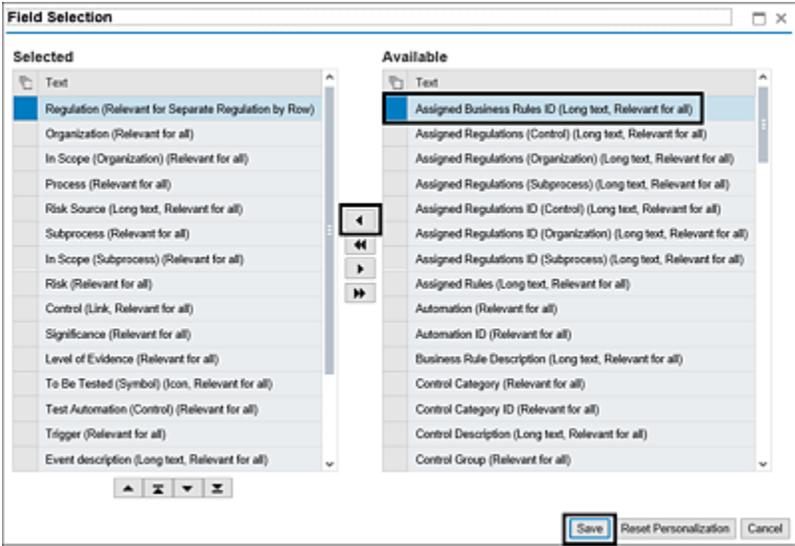
The next section will provide more detailed information on adding additional relevant fields to the **Personalize Fields** option while managing the column structure in Transaction NWBC.

To add new fields/columns to the report, access the report (via Transaction NWBC, select the **Master Data** work center, click on the **Reports** work group, and click on the report **Risk and Control Matrix**), select **Personalize**, and choose **Personalize Fields**, as highlighted in [Figure 10.17](#).



**Figure 10.17** Option to Access Personalize Fields

A new popup window labeled **Field Selection** will appear with a list of fields that are currently included in the report output in the left pane labeled **Selected** and a list of fields that can be added to the report output in the right pane labeled **Available**. If the desired field isn't already part of the **Selected** pane, you can select the field and move it to the **Selected** pane, as highlighted in [Figure 10.18](#). After you've made the necessary changes, click on the **Save** button. You'll notice the newly added fields in the output.

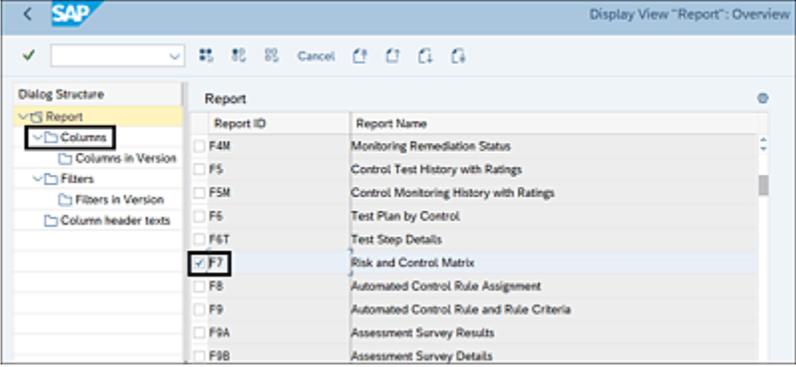


**Figure 10.18** Maintenance of Report Output Fields Using the Personalize Fields Option

## Maintain Fields through Transaction SPRO Configuration

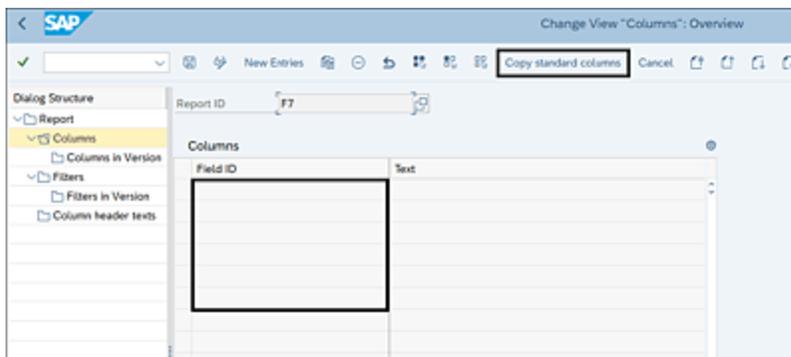
To add new fields that are part of the report structure but not part of the output, the same can be added to the report from the Transaction SPRO configuration:

1. Log in to the SAP Process Control system.
2. Execute Transaction SPRO\_ADMIN.
3. Click the **SAP Reference IMG** button.



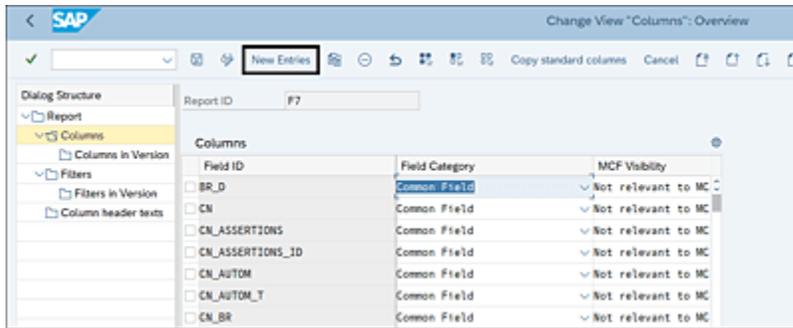
**Figure 10.19** Selection of Columns to Maintain from the Dialog Structure

4. Expand **Governance, Risk and Compliance • Reporting • Maintain Report Column Settings** to review and maintain the existing columns part of the standard reports.
5. Select the report from the list, as highlighted in [Figure 10.19](#), and click on **Columns** from the left **Dialog Structure**, as outlined in [Figure 10.19](#).
6. The **Columns** screen will be blank at first, but to populate the default columns, click the **Copy standard columns** button, as highlighted in [Figure 10.20](#).



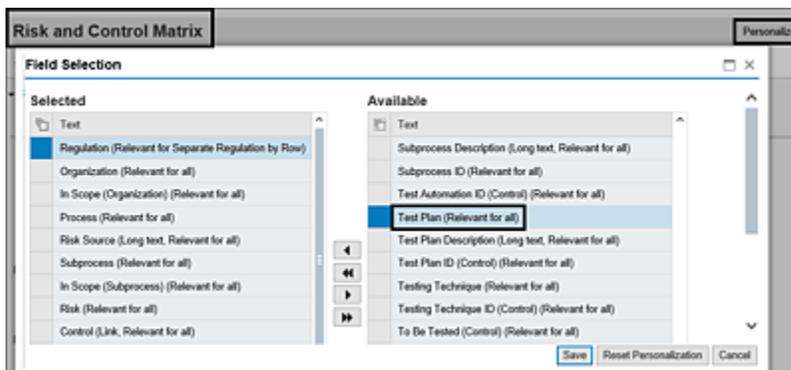
**Figure 10.20** Option to Populate Standard Columns in the Configuration

7. You may delete any of the fields that are no longer required or relevant. Select the column, and click the **Delete** icon on the top menu.
8. To add a new field, click the **New Entries** button, as highlighted in [Figure 10.21](#).



**Figure 10.21** Option to Add New Columns to the Report

9. Use the **F4** search selection to select a field from the list. Once the field is saved in the configuration, it's available for selection from the **Personalize Fields** option of that particular report, as outlined in [Figure 10.22](#).



**Figure 10.22** Review the Newly Added Field to the Report Structure

10. Select the field, and click **Save** to update the field list.

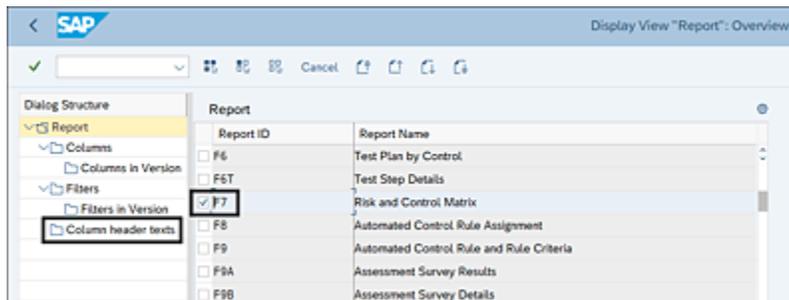
## Note

In addition to managing the fields as part of the report, the header text can be managed and updated as required. For example, if the name of the column **Organization** should be shown as **Entity** in the Risk and Control Matrix

report, it can be updated in the Transaction SPRO configuration.

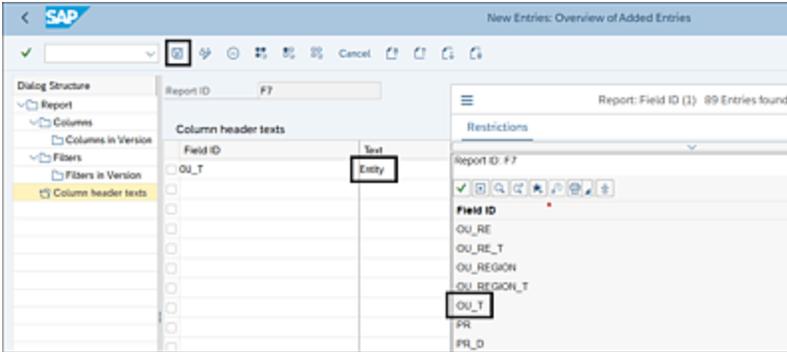
To change the nomenclature of the fields, follow these instructions:

1. Log in to the SAP Process Control system.
2. Execute Transaction SPRO\_ADMIN.
3. Click the **SAP Reference IMG** button.
4. Expand **Governance, Risk and Compliance • Reporting • Maintain Report Column Settings**.



**Figure 10.23** Configuration to Update Column Header Texts

5. Select the report where the column name has to be updated, and click the **Column header texts** option under **Dialog Structure**, as shown in [Figure 10.23](#).
6. In the next screen, select the field for which the text should be updated, and enter the new name in the **Text** column, as outlined in [Figure 10.24](#). Click **Save** to save the change.



**Figure 10.24** Option to Update the Report Column Header Texts

Once the changes are made by following these steps, they are reflected in the report.

## Maintain User Responsible for Entity

Another key configuration in the reporting framework of the process control is identification of the owners for different master data entities. For example, while executing the Risk and Control Matrix report, it shows the details of the owner of the control who is maintained as the control owner in the **Roles** tab of the local control. But the identification of the owner of an entity whose user ID should be shown in the report is maintained in the Transaction SPRO configuration. Following are the steps to access the configuration:

1. Log in to the SAP Process Control system.
2. Execute Transaction SPRO\_ADMIN.
3. Click the **SAP Reference IMG** button.
4. Expand **Governance, Risk and Compliance • Reporting • Maintain Users Responsible for Entity** option.

- Set up the role of the user responsible for each of the master data entities, as outlined in [Figure 10.25](#). For example, if the master data entity is a control, identify the Transaction PFCG role created to grant access to the control owners, and use the role (SAP\_GFC\_SPC\_CRS\_CTL\_OWNER) for mapping in this configuration.

The screenshot shows the SAP configuration screen 'Maintain Users Responsible for Entity'. The table below represents the data visible in the screenshot:

Entity ID	Rep. Area	Role
<input type="checkbox"/> ACTIVITY	RM Reports	SAP_GRC_RM_API_ACTIVITY_OWNER
<input type="checkbox"/> CONTROL	PC Reports	SAP_GRC_SPC_CRS_CTL_OWNER
<input type="checkbox"/> CORPORATE	RM Reports	SAP_GRC_RM_API_CENTRAL_RM
<input type="checkbox"/> CORPORATE	PC Reports	SAP_GRC_SPC_CRS_ICMAN
<input type="checkbox"/> LOSS_EVENT	RM Reports	SAP_GRC_RM_OB_API_OPRISK_MNGR
<input type="checkbox"/> DPP	RM Reports	SAP_GRC_RM_API_OPP_OWNER
<input type="checkbox"/> ORGUNIT	RM Reports	SAP_GRC_RM_API_ORG_OWNER
<input type="checkbox"/> ORGUNIT	PC Reports	SAP_GRC_SPC_GLOBAL_ORG_OWNER
<input type="checkbox"/> POLICY	RM Reports	SAP_GRC_SPC_CRS_POLICY_OWNER
<input type="checkbox"/> POLICY	PC Reports	SAP_GRC_SPC_CRS_POLICY_OWNER
<input type="checkbox"/> PROCESS	RM Reports	SAP_GRC_SPC_GLOBAL_PRC_ADMIN
<input type="checkbox"/> PROCESS	PC Reports	SAP_GRC_SPC_GLOBAL_PRC_ADMIN
<input type="checkbox"/> RISK	RM Reports	SAP_GRC_RM_API_RISK_OWNER

**Figure 10.25** Configuration to Maintain Users Responsible for an Entity

### Note

The **Role** column values are available by default on activating Business Configuration sets (BC sets) BC\_SET\_MAINTAIN\_USER\_RESP, GRPC-RESP-USER-GLOBAL, and GRPC-RESP-USER-GLOBAL-UPG. If any values are missing, verify the activation logs for these BC sets from Transaction SCPR20.

### Important

The custom Z or Y roles for granting access to control owners can be maintained in this screen. Refer to [Chapter 5, Section 5.4](#), to understand more about the process of assigning users to the roles at different master data entities.

## 10.2.2 Personalize Organization Filters

While executing the standard reports, there are multiple filter options available in the **Selection** screen before extracting the results. This section explains the usage of the **Organization** key filter. [Section 10.3](#) details the usage of **Regulation** and **Time Frame** filters.

As detailed in [Chapter 5, Section 5.3](#), the organizations configured in SAP Process Control comprise a hierarchical depiction of the company's reporting requirements. The standard reports have an option to enter only one organization at a time to get the results. SAP Process Control provides a feature to extract the results of all the child organizations when the parent organization is selected in this filter field. This option can be selected from the **Report Personalize** option, as outlined in [Figure 10.26](#).

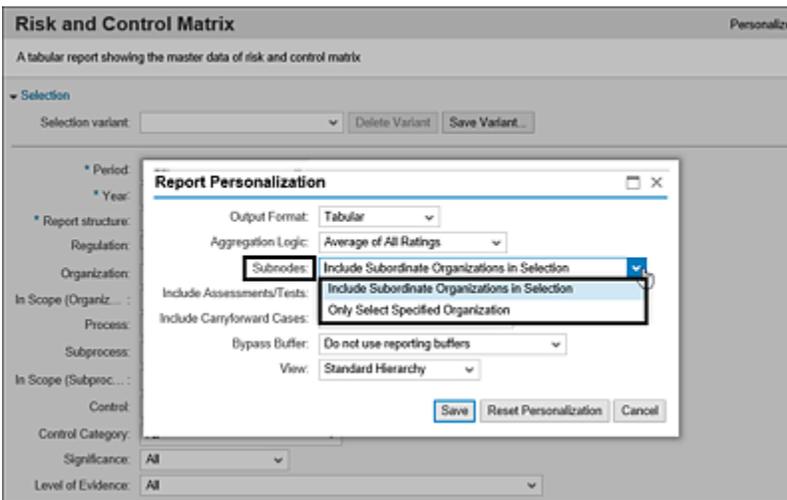
The screenshot displays the 'Risk and Control Matrix' selection screen. The title bar includes 'Personalize' and 'Personalize Fields'. A dropdown menu is open, showing options: 'Report Personalization' (highlighted with a red box), 'Personalize General Reporting Settings', and 'Print Settings'. The main screen features a 'Selection' section with a 'Selection variant' dropdown and 'Delete Variant' and 'Save Variant...' buttons. Below this, there are several filter fields: 'Period' (Year), 'Year' (2023), 'Report structure' (Separate Regulation by Row), 'Regulation' (checkboxes for SOX, Companies Act, Sarbanes Oxley), 'Organization' (text input with a search icon), 'In Scope (Organiz...)' (All), 'Process' (text input with a search icon), 'Subprocess' (text input with a search icon), and 'In Scope (Subproc...)' (All).

**Figure 10.26** Selection of the Report Personalization Option

Upon selecting the **Report Personalization** option, a popup appears where the **Subnodes** option must be configured to manage the organization selection for report generation. Following are the two options available for selection:

- **Include Subordinate Organizations in Selection**  
If this option is selected, all the child organization data will also part of the output for the organization selected as the filter in selection screen.
- **Only Select Specified Organization**  
If this option is selected, only the data specific to the organization selected as the filter in selection screen is displayed in the output.

[Figure 10.27](#) shows both the options available in the **Subnodes** selection screen.



**Figure 10.27** Maintenance of the Subnodes Option in Report Personalization

For example, the organization hierarchy has two organizations created:

- Parent organization: Power Ltd
- Subordinate (child) organization: Power Generation

If the **Include Subordinate Organization in Selection** option is chosen in **Report Personalization**, and **Power Ltd** is selected as the filter in the **Organization** field while extracting the report, the report provides the information relating to both the organizations (Power Ltd and Power Generation), as shown in [Figure 10.28](#).

The screenshot shows the 'Risk and Control Matrix' report interface. A 'Report Personalization' dialog box is open, with the 'Subnodes' dropdown set to 'Include Subordinate Organizations in Selection'. The 'Organization' field in the background is set to 'Power Ltd'. The results table below shows data for both Power Ltd and Power Generation.

Organization	Process	Subprocess	Risk	Control	Owner (Control)
Power Ltd	Record to Report	GL Account Maintenance		Maintenance of GL Accounts	SAKKRSHILA1
Power Generation	Procure to Pay	Invoice Processing		Monitor Duplicate Invoice Check Config	Sandeep
Power Generation	Procure to Pay	Maintain Vendor Master Data	Inproperly trained staff	Vendor master changes	
Power Generation	Procure to Pay	Maintain Vendor Master Data		Duplicate invoice parameter changes	

**Figure 10.28** Results of the Include Subordinate Organization in Selection Option

The screenshot shows the 'Risk and Control Matrix' report interface. A 'Report Personalization' dialog box is open, with the 'Subnodes' dropdown set to 'Only Select Specified Organization'. The 'Organization' field in the background is set to 'Power Ltd'. The results table below shows data only for Power Ltd.

Organization	Process	Subprocess	Risk	Control	Owner (Control)
Power Ltd	Record to Report	GL Account Maintenance		Maintenance of GL Accounts	SAKKRSHILA1

**Figure 10.29** Results of the Only Select Specified Organization Option

In the same example—with the parent organization as Power Ltd and the child organization as Power Generation—if the **Only Select Specified Organization** option is chosen in **Report Personalization** and **Power Ltd** is selected as the filter in the **Organization** field while extracting the report, the report provides the information relating to only the organization selected, as shown in [Figure 10.29](#).

## 10.3 Interpretation of Report Results

Additionally, the **Time Frame (Period and Year)** and **Regulation** key filters also help in various reports. As these are common across SAP Process Control reports, it's recommended to use them. The steps to set up the filters are detailed in the following sections.

### 10.3.1 Report Interpretation with Time Frame Filters

As mentioned earlier, date selection plays a vital role in master data maintenance and while performing control assessments in SAP Process Control. For example, if the control self-assessments are performed on a quarterly basis, and there is a requirement to present the report of quarter 3 of the current year to management, quarter 3 can be applied as a filter while extracting the report to get only relevant data. [Figure 10.30](#) shows the time frame filtering options.

**Evaluation Results by Organization**

A hierarchical report which shows the list of organizations and their overall assessment ratings

▼ Selection

Selection variant:   

\* Period:

\* Year:

\* Report structure:

Organization:

Process:

Subprocess:

Control:

Evaluation type:  Subprocess Design Assessment  Control Design Assessment  
 Self-Assessment  Effectiveness

Long text:

Execution Method:  Generate Report Online  Generate Report in Background

**Figure 10.30** Time Frame Filter while Executing the Reports

If the report is executed based on the selections shown in [Figure 10.30](#), only those controls scheduled for self-assessment for that period will be displayed in the output of the report.

### 10.3.2 Report Interpretation with Regulation Filters

Regulation is another key element while configuring the master data and any assessment performed for controls, subprocesses, or organizations is done to comply with the regulatory requirements that are applicable to the organization.

Refer to [Chapter 6, Section 6.2.2](#), to understand the relevance of selecting different options of sharing results across regulations. Because the reports in SAP Process Control are generated to see the assessment results and to review the compliance against the regulations, the

regulations filter can be used in the selection screen to extract results for that specific regulation.

Following are the two options available for selection under **Report Structure** (see [Figure 10.31](#)), before extracting the reports:

- **Aggregate Regulations**

If there is no requirement to extract reports for a specific regulation, this option is used, and all the assessments performed for the selected time frame are displayed in the output irrespective of the regulation selected while scheduling the planner.

- **Separate Regulations by Hierarchy**

If the organization has to comply with various regulations and the assessments are performed against the specific regulatory requirements, the user can select specific regulations under the **Regulation** field, which appears on the screen after selecting this option.

The screenshot shows a web interface titled "Evaluation Results by Organization". Below the title is a subtitle: "A hierarchical report which shows the list of organizations and their overall assessment ratings". There is a "Selection" section with a "Selection variant" dropdown, "Delete Variant", and "Save Variant..." buttons. Below this are fields for "Period" (Quarter 3), "Year" (2023), "Report structure" (a dropdown menu with "Separate Regulation by Hierarchy" selected), "Regulation" (a dropdown menu with "Separate Regulation by Hierarchy" selected), "Organization" (a text field with a copy icon), "Process" (a text field with a copy icon), and "Subprocess" (a text field with a copy icon). A red box highlights the "Report structure" dropdown and its options.

**Figure 10.31** Selection of Report Structure while Executing the Reports

Based on the selections made for time frames and the regulation (SOX), the extracted report displays the data specific to these filters. [Figure 10.32](#) shows the output.

**Note**

While scheduling the planner, as detailed in [Chapter 6, Section 6.2.2](#), if the results are shared across different regulations, the results are displayed in each individual regulation while extracting the report.

Hierarchy	Regulation	Control Design Rating (Sym)	Self-Assessment Rating (Sym)
▾ <input type="checkbox"/> Throw Basis	SOX		
▾  Process Hierarchy	SOX		
▾  Procedure to Pay	SOX		
▾  Record To Report	SOX		
▾  Fixed Assets	SOX		
Changes to asset master data	SOX		
▾  Other Processes	SOX		
▾  B500	SOX		
▾  Throw Basis	SOX	Significantly Deficient	
Self Assignment of Role	SOX	Significantly Deficient	
▾  Record to Report	SOX		

**Figure 10.32** Execution of Report for a Specific Time Frame and Regulation

## **10.4 Summary**

This chapter covered the importance of standard reports available in SAP Process Control, highlighting the significance of each report and its potential applications. Furthermore, it provided insights into customizing the fields that can be included in the report output and the steps for adding fields to the customization section. The chapter also details the use of time frame and regulation filters to extract the report and analyze the findings in a better and easier way.

# 11 SAP Fiori for SAP Process Control

*SAP Fiori is a great shift in the way users access applications. It not only provides a rich user interface (UI) but also enhances the user experience (UX) with minimal inputs and easy navigations. Let's understand how SAP Fiori can be used in SAP Process Control.*

The previous chapters detail the key functionalities in SAP Process Control, their relevance, and the situations when these functionalities can be used in the organization to manage the internal control framework. This chapter focuses on how the UX can be improved with the use of the SAP Fiori UI for SAP Process Control, configuration steps, and working with custom catalogs and groups.

## 11.1 SAP Fiori Apps for SAP Process Control

SAP Fiori provides a highly personalized and responsive UX that simplifies users' daily activities, offering a simplified design that seamlessly integrates all the systems, making it a unified platform. When combined with other SAP

applications and the SAP HANA database, SAP Fiori delivers exceptional application response times and query execution. Refer to the SAP Experience website (<https://experience.sap.com/fiori-design-web/sap-fiori/>) to learn more about SAP Fiori, its evaluation, and various other important links.

With the introduction of SAP S/4HANA, the SAP Fiori launchpad has emerged as the primary entry point for user-centric business activities. This is due to the SAP Fiori interface's design, which simplifies application management through SAP Fiori apps and the SAP Fiori design framework. Powered by SAPUI5, SAP Fiori operates as an adaptive web-based UI, providing real-time access to all business roles on compatible handheld devices. Building on the success of SAP Fiori with SAP S/4HANA, SAP has extended SAP Fiori's design principles to SAP Process Control. Let's delve further into SAP Fiori architecture and terminology.

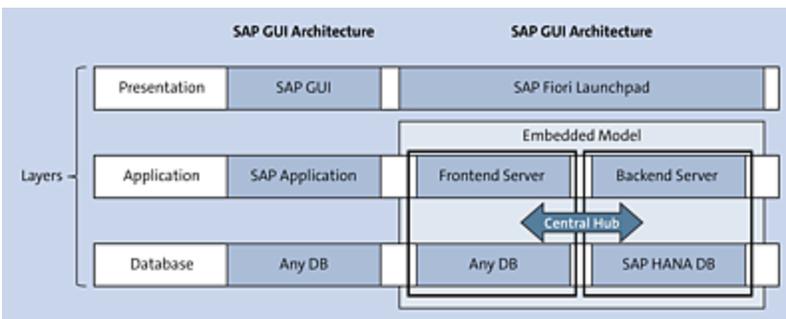
### **11.1.1 SAP Fiori Architecture**

The SAP Fiori UI operates independently of the SAP application and differs from the conventional SAP List Viewer (ALV) UI. As a result, it reduces the load on SAP, while also fostering a unified and seamless UI that enhances the overall UX. It eliminates the necessity for users to log in to multiple SAP systems. SAP Fiori offers five deployment choices as follows:

- Frontend server, embedded model
- Frontend server, central hub model
- Embedded SAP Gateway

- SAP Gateway hub
- SAP Fiori Cloud

However, we'll only cover the most-used deployment models here, which is the frontend server, embedded model and the frontend server, central hub model. [Figure 11.1](#) details the SAP GUI and SAP Fiori architecture.



**Figure 11.1** Difference between SAP GUI Architecture and SAP Fiori Architecture

The SAP Fiori client uses an SAPUI5-based frontend called the SAP Fiori launchpad, which enables users to launch various apps such as transactional, analytical, or fact sheets. The SAP Fiori launchpad also allows legacy apps to be published and used.

The frontend server is the SAP Gateway for SAP Fiori system that connects with the backend server. In general, the backend server systems are the transactional systems such as SAP S/4HANA. Both the SAP Fiori frontend and backend components can be installed on the same system, which is referred to as an embedded model. Having a unified SAP Fiori interface isn't possible in this model.

When the frontend and backend components are deployed in separate systems, it's termed the central hub model. In

this configuration, the frontend server, often referred to as the SAP Gateway for SAP Fiori, serves as a single point of connection for multiple backend server systems, resulting in making the SAP Fiori launchpad a unified interface.

### 11.1.2 Terminology

Before we move on to any other topics, let's discuss the various common terms used in SAP Fiori, as shown in [Table 11.1](#).

Term	Description
SAP Fiori app	Tiles in the SAP Fiori launchpad represent applications and are called apps.
SAP Fiori group	Groups are subsets of catalogs that contain apps relevant to users. It's possible to categorize these separately on your SAP Fiori launchpad. Groups can be either predefined or user defined. Note that the group concept will be replaced with spaces, pages, and sections. Instead of adding groups into the Transaction PFCG roles, you may need to assign space IDs.

Term	Description
SAP Fiori catalogs	Roles are used to assign SAP Fiori apps to users. Depending on the role and catalog assigned to the role, a user can browse, select, and add apps to the SAP Fiori launchpad entry page. SAP offers predefined catalogs. The tile and target mapping are defined in the technical catalog, identified with the ID "TC". SAP also provides sample and ready-to-use business catalogs. Those are marked with "BC".
Spaces	Space is a collection of pages.
Pages	Pages consists of single or multiple sections.
Sections	A section will have one or more SAP Fiori tiles.
Target mapping	Target mappings are the actual references to the targets. Navigation targets are defined in SAP using the Transaction LPD_CUST, which targets SAPUI5 applications.
Technical catalog	A technical catalog contains all mappings for SAPUI5 applications, Web Dynpro applications, and HTML GUI applications.
Business catalog	In a nutshell, it's the same as the apps (SAP Fiori apps in SAP Fiori launchpad). The SAP Fiori launchpad will display the catalog (app) if the catalog is assigned to an end user Transaction PFCG role.

Term	Description
Semantic object	Semantic objects represent a business entity such as a customer, a sales order, or a product. Using semantic objects, we can bundle applications based on specific scenarios. As a result, it's possible to refer to objects in a standardized manner, abstracting from their concrete implementations. We can either use SAP's semantic objects or create our own as needed.
Action	The action that is intended to be performed on a semantic object (such as display or create purchase order).
SAP Fiori launchpad	SAP Fiori groups/tiles can be accessed via SAP Fiori launchpad. SAP Fiori launchpad can be invoked using Transaction /N/UI2/FLP. In addition, users can directly access the web URL.
SAP Fiori launchpad designer	SAP Fiori launchpad designer allows administrators to create new catalogs and groups, and customize them further. It's mostly used by SAP Fiori developers via Transaction /UI2/FLPD_CUST.

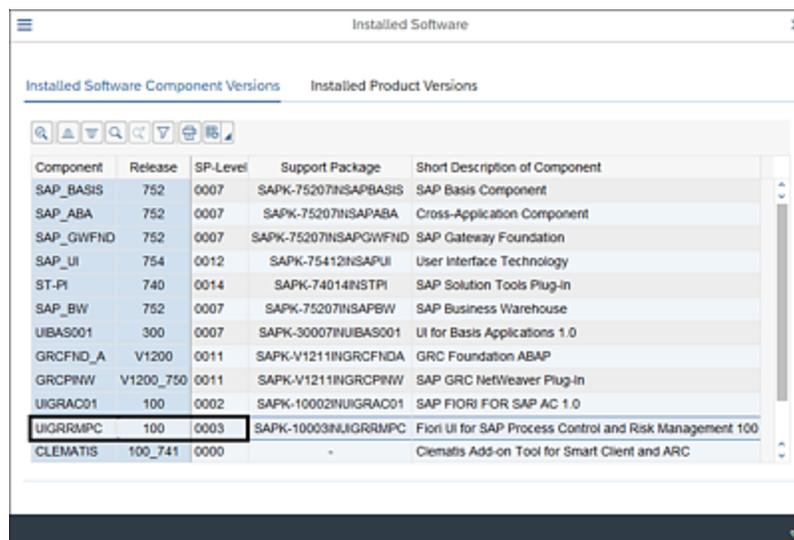
**Table 11.1** SAP Fiori Terminology

## 11.2 SAP Fiori Configuration

To use SAP Fiori applications, the installation of essential components and their configuration is a must. The following sections detail the prerequisites and the various configurations that must be undertaken.

### 11.2.1 Prerequisites

For installing SAP Fiori 1.0 for SAP Process Control, a prerequisite for integrating SAP GRC with SAP Fiori is to ensure that the add-on UIGRRMPC for SAP Process Control is installed.



Component	Release	SP-Level	Support Package	Short Description of Component
SAP_BASIS	752	0007	SAPK-75207INSAPBASIS	SAP Basis Component
SAP_ABA	752	0007	SAPK-75207INSAPABA	Cross-Application Component
SAP_GWFND	752	0007	SAPK-75207INSAPGWFND	SAP Gateway Foundation
SAP_UI	754	0012	SAPK-75412INSAPUI	User Interface Technology
ST-PI	740	0014	SAPK-74014INSTPI	SAP Solution Tools Plug-in
SAP_BW	752	0007	SAPK-75207INSAPBW	SAP Business Warehouse
UIBAS001	300	0007	SAPK-30007NUIBAS001	UI for Basis Applications 1.0
GRCFND_A	V1200	0011	SAPK-V1211INGRCFND_A	GRC Foundation ABAP
GRCPINW	V1200_750	0011	SAPK-V1211INGRCPINW	SAP GRC NetWeaver Plug-In
UIGRAC01	100	0002	SAPK-10002NUIGRAC01	SAP FIORI FOR SAP AC 1.0
UIGRRMPC	100	0003	SAPK-10003NUIGRRMPC	Fiori UI for SAP Process Control and Risk Management 100
CLEMATIS	100_741	0000	-	Clematis Add-on Tool for Smart Client and ARC

**Figure 11.2** Installed Component Versions

To validate the component installation, log in to the SAP GRC system, click **System • Status**, and then click on the **Details** button under the SAP system data, and you can

view all the components installed. [Figure 11.2](#) shows various installed components.

Note that most of these activities are one-time configurations, so they should be executed with caution.

## 11.2.2 Activating SAP Gateway

The process of SAP Fiori configuration begins with the activation of the SAP Gateway. In embedded deployments, it's essential to activate the SAP Gateway within the SAP GRC system. Similarly, for the central hub model, the activation and configuration of the gateway should take place within the frontend server hub system. The steps for activating the SAP Gateway remain the same in both the scenarios. To activate SAP Gateway, follow these steps:

1. Go to Transaction SPRO\_ADMIN.
2. Click **SAP Reference IMG**.
3. Expand **SAP NetWeaver • SAP Gateway • OData Channel and Configuration • Activate or Deactivate SAP Gateway**, and click **Activate** for the SAP Gateway, as shown in [Figure 11.3](#).



**Figure 11.3** SAP Gateway Activation Screen

Once SAP Gateway is activated, you'll see an **SAP Gateway is Active** message.

### 11.2.3 Activating Internet Communication Framework Services

It's of utmost important to activate the Internet Communication Framework (ICF) services using Transaction SIFC. Ensure that the following ICF services are activated:

- /default\_host/sap/bc/ui2/start\_up
- /default\_host/sap/bc/ui5\_ui5/ui2/ushell
- /default\_host/sap/bc/ui5\_ui5/sap/arsrv\_upb\_admn
- /default\_host/sap/bc/ui5\_ui5/sap/ar\_srvc\_news
- /default\_host/sap/bc/ui5\_ui5/sap/ar\_srvc\_launch
- /default\_host/sap/public/bc/ui5\_ui5/
- /default\_host/sap/public/bc/ui2/

[Chapter 4, Section 4.1.3](#), details the steps to activate the Transaction SIFC services.

### 11.2.4 Maintain OData Services

Once the ICF services are activated, the next step is to enable OData services that are needed to use the SAP Fiori apps. These are common services and aren't specific to SAP Process Control. Use Transaction /N/IWFND/MAINT\_SERVICE,

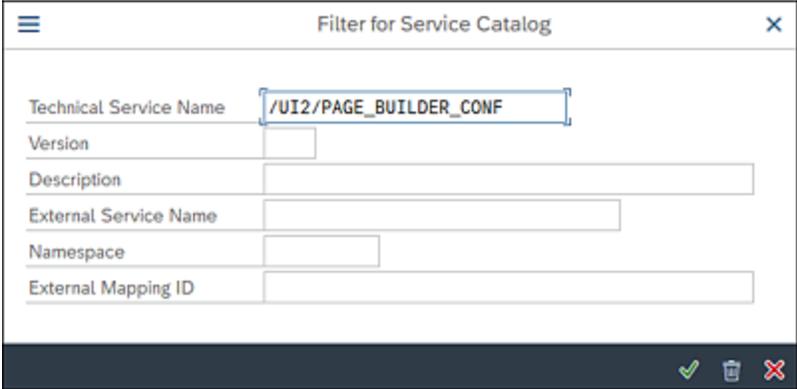
and maintain the system alias details for the services detailed in [Table 11.2](#).

Service Name	Description
/UI2/PAGE_BUILDER_CONF	Page Builder - Configuration Level
/UI2/PAGE_BUILDER_CUST	Page Builder - Customizing Level
/UI2/PAGE_BUILDER_PERS	Page Builder - Personalization Level
/UI2/TRANSPORT	UI2: Transport Service
/UI2/INTEROP	Gateway Service of Interoperability
GRFN_ASSESSMENT_SRV	GRC-PC Assessments
GRFN_ASSESSMENT_OVERVIEW_SRV	GRC-PC Assessment Overview Page
GRFN_MONITOR_CONTROL_STATUS_SRV	Monitor Control Status
GRFN_PC_SIGN_OFF_SRV	PC Sign-Off

**Table 11.2** List of Services

Alternatively, use Transaction SPRO\_ADMIN, click **SAP Reference IMG**, and expand **SAP NetWeaver • SAP Gateway • OData Channel • Administration • General Settings • Activate and Maintain the Services**. Once in the **Activate and Maintain services** screen, click **Filter**, and enter the service name, as shown in [Figure 11.4](#). Click **Continue** (checkmark) to proceed.

In the bottom-right corner of the **Assign SAP System Aliases to OData Service** screen, click the **Add System Alias** button, and click the **New Entries** button. Select the **Service Doc. Identifier** (same as the service name), select the **SAP System Alias** (**LOCAL** for embedded and the Remote Function Call [RFC] name for the central hub). Select the **Default System** checkbox, and click **Save**, as shown in [Figure 11.5](#).

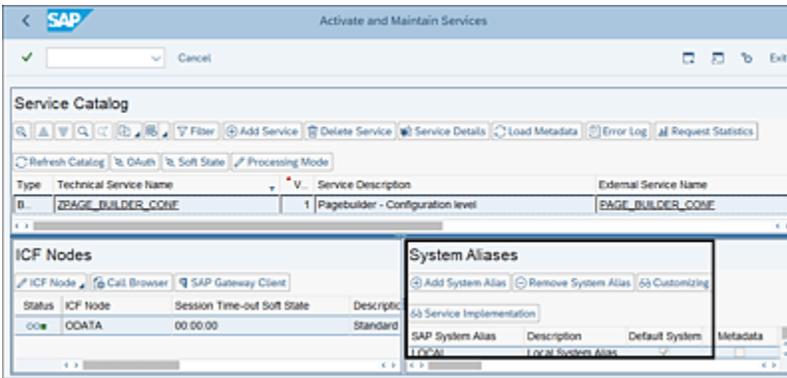


**Figure 11.4** Search Service Using Filter Conditions

Service Doc. Identifier	User Role	Host Name	SAP System Alias	Default System	Metadata Default
ZPAGE_BUILDER_CONF_0001			LOCAL	<input checked="" type="checkbox"/>	<input type="checkbox"/>

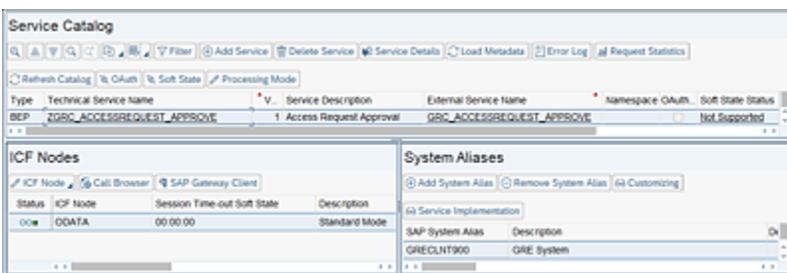
**Figure 11.5** Adding System Alias

Once the system alias is added, you can see the status highlighted in [Figure 11.6](#).



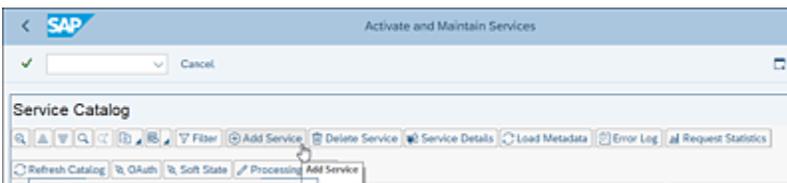
**Figure 11.6** Screen That Appears after System Alias Addition

For central (frontend server) hub deployment mode, the system alias will have the RFC connection of the backend system, as shown in [Figure 11.7](#).



**Figure 11.7** System Aliases Option in the Frontend Services Hub Model

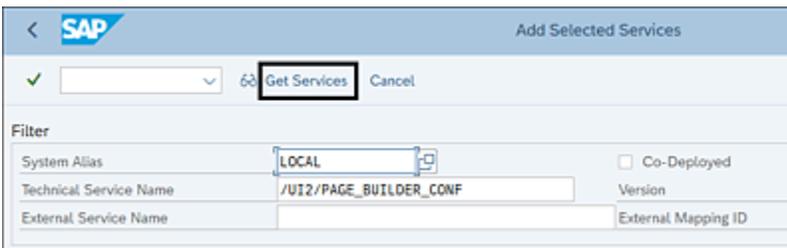
Once the system alias is maintained, click the **ICF Node** button and then click **Activate ICF**. If the service is missing, you may add it by using the **Add Service** button, as shown in [Figure 11.8](#).



**Figure 11.8** Add Service Button

Enter the **System Alias** and **Technical Service Name**, and click the **Get Services** button, as highlighted in [Figure 11.9](#),

to get the missing service.



**Figure 11.9** Loading the Missing Service

Once the service is added, select the service, and click **Add Selected Services**, assign it to a package, and click **Save**. You'll receive the **Metadata was loaded successfully** message. Repeat the same process/steps for all the services that needs to be activated per the list provided in [Table 11.2](#).

## 11.2.5 Set Up Remote Function Call Connections

The next step in the configuration of SAP Fiori is to make sure that the RFC connections are set up between the SAP Process Control system and the backend systems. Similarly, if the frontend server hub system is used, the RFCs must be established between the frontend server hub and SAP GRC system. For detailed steps to set up RFC connections, refer to [Chapter 4, Section 4.4.1](#).

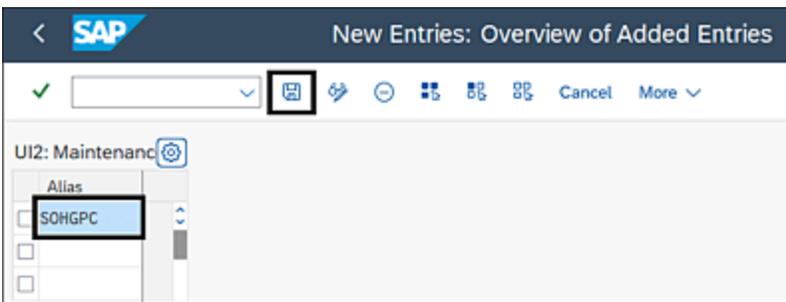
### Note

The configuration steps may differ based on the version of SAP GRC and the specific SAP system you're trying to integrate with. Further, it's recommended to adhere to

your organization's established best practices and security guidelines when configuring RFC connections.

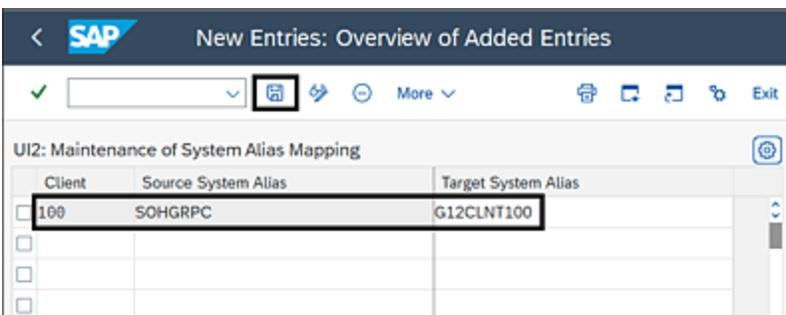
## 11.2.6 Mapping Remote Function Call Connections to the System Alias

SAP-delivered standard component SOHGPC should be added to the system alias table /UI2/V\_SYSALIAS. To add it, access table /UI2/V\_SYSALIAS using Transaction SE16, click on **New Entries**, and add the component SOHGPC to the list (see [Figure 11.10](#)).



**Figure 11.10** Maintenance of the System Alias for SAP Process Control

The next step is to map the system alias with the ABAP RFC connector created in [Section 11.2.5](#).



**Figure 11.11** Maintenance of System Alias Mapping for SAP Process Control

To perform the mapping, access table /UI2/V\_ALIASMAP using the Transaction SE16, click on **New Entries**, enter the **Client** ID, select component **SOHGPC** from the search list, and enter the RFC connector in **Target System Alias**, as highlighted in [Figure 11.11](#). Click **Save**.

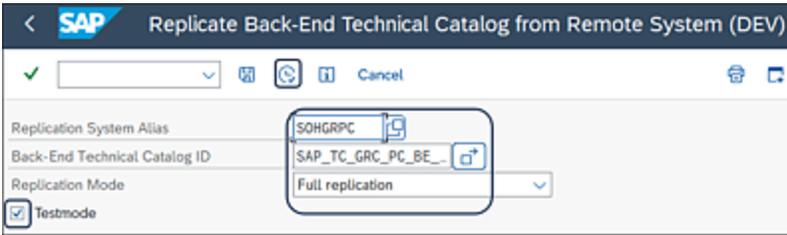
## 11.2.7 Replicate the SAP Fiori Catalog

To generate the standard SAP-delivered SAP Fiori tiles for SAP Process Control, it's essential to replicate the technical catalog from the backend for the system alias associated with SAP Process Control. By performing this procedure, all standard SAP Fiori tiles become accessible within the SAP Fiori launchpad Customization. To configure, follow these steps:

1. Go to Transaction SE38.
2. Enter the program  
"/UI2/GET\_APP\_DESCR\_REMOTE\_DEV", and execute.
3. In the **Replicate Back-End Technical Catalog from Remote System (Dev)** screen shown in [Figure 11.12](#), fill in the details as follows:
  - **Replication System Alias: SOHGRPC**
  - **Back-End Technical Catalog ID: SAP\_TC\_GRC\_PC\_BE\_APPS**
  - **Replicate Mode: Full replication**
4. Click **Execute**.

Enable the **Testmode** checkbox to run it in simulation first to check the results. Review the log results of test mode,

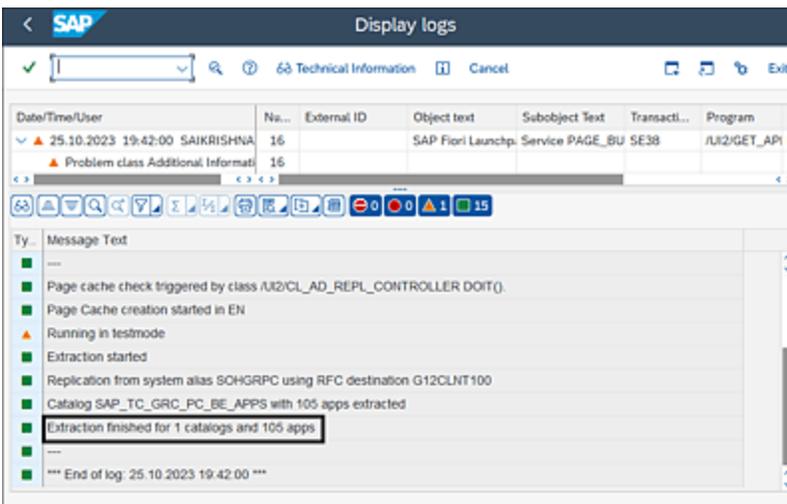
and re-execute the program by removing the checkbox next to **Testmode**, if the results are as expected.



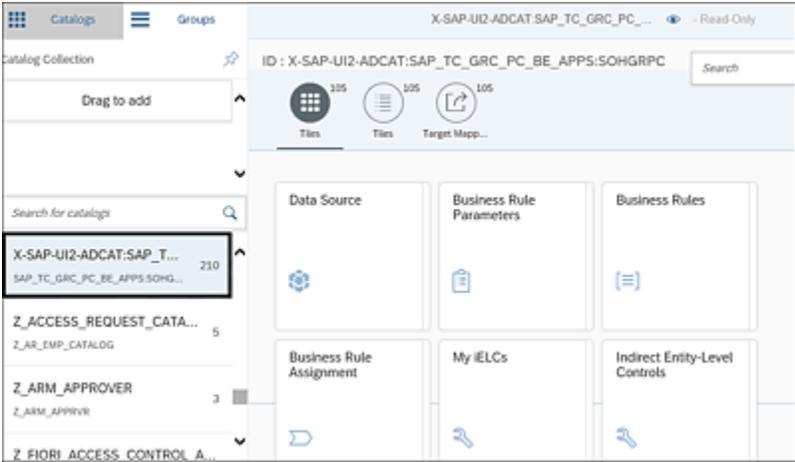
**Figure 11.12** Replication of Backend Technical Catalog for SAP Process Control

Once executed, you'll see the log results, as shown in [Figure 11.13](#).

After successful execution, all the catalogs for SAP Process Control with lists of standard SAP Fiori tiles can be seen from Transaction /UI2/FLPD\_CUST. [Figure 11.14](#) shows the new catalog for SAP Process Control: **X-SAP-UI2-ADCAT:SAP\_TC\_GRC\_PC\_BE\_APPS:SOHGRPC**.



**Figure 11.13** Log Report



**Figure 11.14** Review of Replicated SAP Process Control Catalog

The business catalogs and business catalog roles in [Table 11.3](#) and [Table 11.4](#) are delivered as part of the frontend component UIGRPC01.

SAP-Delivered Catalogs	Description
SAP_GRC_BC_COMSPL_BE_T	Compliance Specialist
SAP_GRC_BC_EXECUTIVE_BE_T	GRC PC Executive
SAP_GRPBC_BC_MANAGER_BE_T	GRC PC Manager
SAP_TC_GRPBC_COMMON	GRC: Process Control All Apps

**Table 11.3** SAP-Delivered Catalogs

SAP-Delivered Business Catalog Roles	Description
SAP_GRC_BCR_COMSPL_T	Compliance Specialist
SAP_GRPBC_BCR_EXECUTIVE_T	Executive
SAP_GRPBC_BCR_MANAGER_T	Manager

**Table 11.4** SAP-Delivered Business Catalog Roles

The following sections will discuss the process of creating custom catalogs and mapping them to Transaction PFCG roles before providing access to end users.

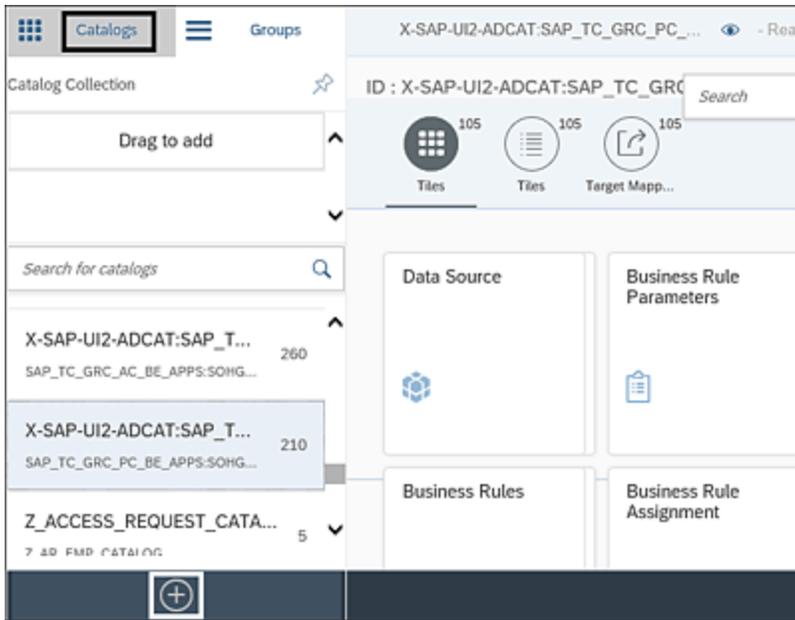
## 11.3 Working with SAP Fiori Apps

SAP-delivered business catalog roles and catalogs can be either used directly or custom roles and catalogs can be created to fit in the business requirements. The following sections detail the process of creating custom catalogs and groups.

### 11.3.1 Creating Custom Catalogs

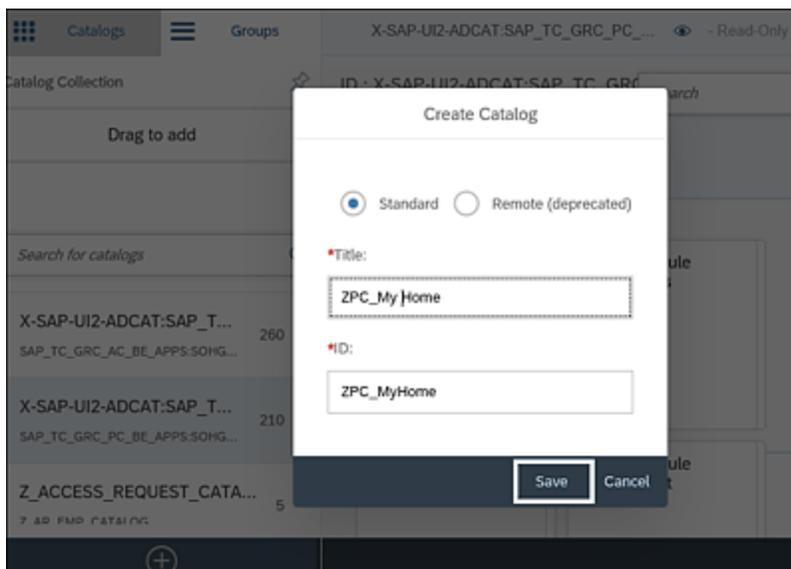
An inherent challenge with using the standard catalogs is that they provide users with access to a wider range of SAP Fiori apps. By creating custom catalogs, you can provide access to a limited selection of apps, as well as organize and categorize them according to the specific needs of your business. The following steps outline the process to create a custom catalog:

1. Log in to your SAP Process Control system.
2. Execute Transaction /N/UI2/FLPD\_CUST to access the SAP Fiori launchpad designer.
3. Click the **Catalogs** work center on the left side, which shows the catalogs available in the system.
4. Click the + icon to create a new custom catalog, as shown in [Figure 11.15](#).



**Figure 11.15** Option to Create a New Custom Catalog

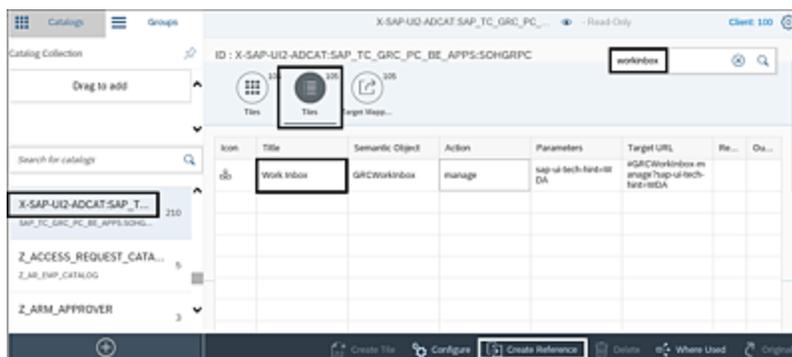
5. Select the **Standard** option (the **Remote** option can be used in the frontend server hub model).
6. Enter the **Title** and **ID**, as shown in [Figure 11.16](#).



**Figure 11.16** Custom Catalog Creation Screen

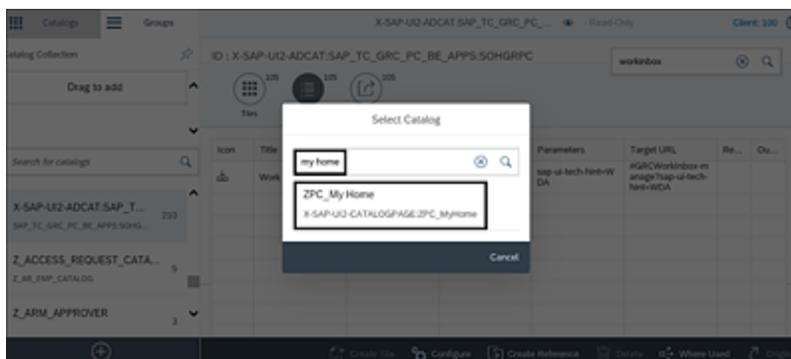
Once the custom catalog is saved, the next step is to add relevant tiles (with the details of the target URL to access) and the respective target mappings (with the details of the Web Dynpro applications), as follows:

1. Access the SAP-delivered catalog and search for/select the tile required to be copied to the custom catalog. Click on the **Create Reference** button, as highlighted in [Figure 11.17](#).



**Figure 11.17** Adding Tiles to a Custom Catalog

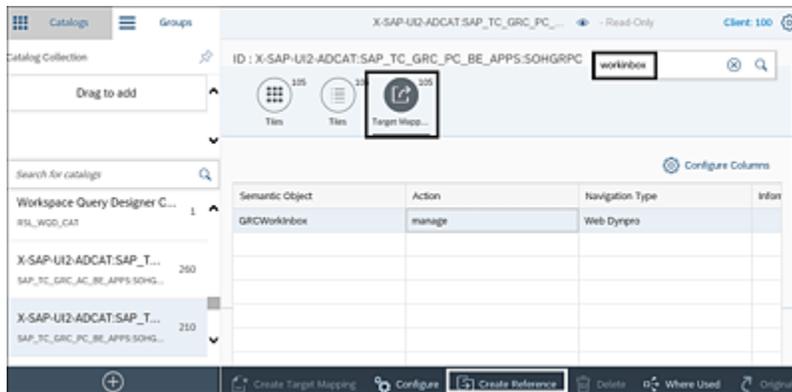
2. Select the newly created catalog from the list, as shown in [Figure 11.18](#). The reference will be added automatically to the new catalog. On successful mapping, you may notice a message (a notification box) with the completion status.



**Figure 11.18** Option to Select the Custom Catalog for Reference Mapping

After adding the semantic object, you can proceed to reference the target mappings associated with these semantic objects from the SAP-delivered catalog to your custom catalog, as follows:

1. To include the target mapping in the custom catalog, access the SAP-delivered catalog, search for and select the specific semantic object into the custom catalog, and then click on the **Create Reference** button, as shown in [Figure 11.19](#).



**Figure 11.19** Create Reference of Target Mapping for the Custom Catalog

2. After clicking **Create Reference**, select the catalog from the list into which the target mapping must be copied.

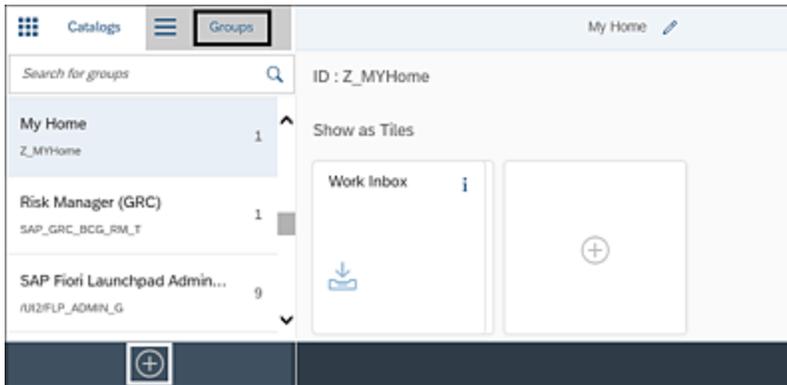
You may notice a message (a notification box) that indicates successful mapping the target mapping. Perform the same steps for all the other apps and target mappings.

### 11.3.2 Create a Custom Group

An SAP Fiori group is a collection of relevant tiles that are grouped on the SAP Fiori home screen. To create a new

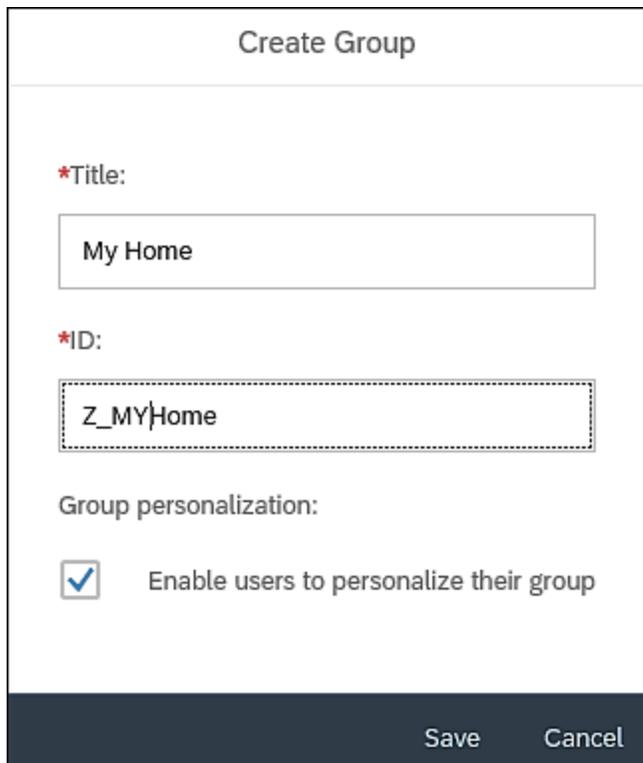
custom group, follow these steps:

1. Go to the **Groups** section.
2. Click the + icon, as highlighted in [Figure 11.20](#).



**Figure 11.20** Creating a Custom Group

3. In the **Create Group** screen, provide the **Title** and **ID**, as shown in [Figure 11.21](#).

The screenshot shows the 'Create Group' form. The title of the form is 'Create Group'. There are two required fields: '\*Title:' with the value 'My Home' and '\*ID:' with the value 'Z\_MYHome'. Below these fields is a section for 'Group personalization:' which includes a checked checkbox and the text 'Enable users to personalize their group'. At the bottom of the form, there are two buttons: 'Save' and 'Cancel'.

**Figure 11.21** Custom Group Creation Screen

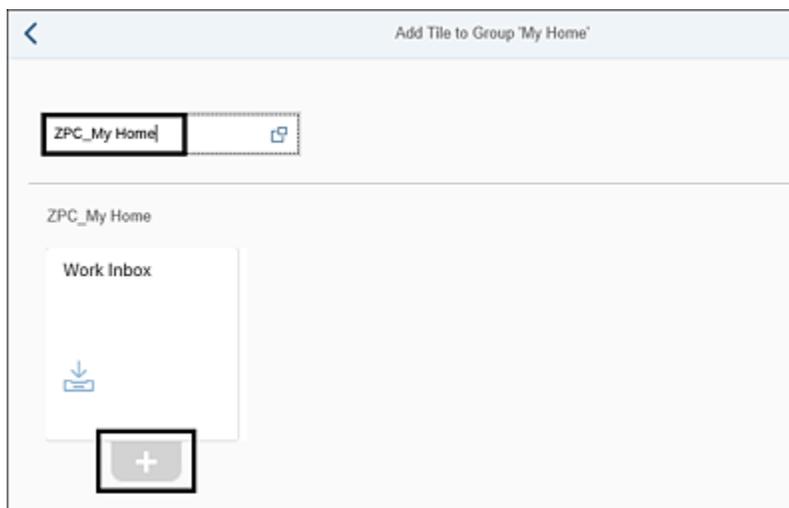
## Note

Use the **Enable users to personalize their group** checkbox to enable end users with access to the group to manage the tiles visible on their screen.

### 4. Click **Save**.

The next step is to add relevant tiles (apps) to the group, as follows:

1. Click the + option to add tiles, as highlighted in [Figure 11.22](#).



**Figure 11.22** Selection of Tiles in the Group

2. Select the apps, and you may notice a message **Tile <name of the tile> added successfully**, indicating the successful addition of the tile to the catalog. Execute the same steps to add any additional apps to the custom group.

Once the custom catalog and group is created, the next step is to add these to the **Role** menu in Transaction PFCG.

## **11.4 Mapping Custom Catalogs, Groups, and Space IDs to Transaction PFCG Roles**

As outlined in [Section 11.3.1](#) and [Section 11.3.2](#), custom catalogs and groups can be created to suit specific business needs. Note that direct assignment of catalogs and groups to users isn't possible; they must instead be added within Transaction PFCG roles and then assigned to users. SAP Fiori provides two options, dependent on the version of SAP NetWeaver and the SAP Fiori component in use:

1. Assigning SAP Fiori catalogs and SAP Fiori groups
2. Assigning SAP Fiori catalogs and space IDs

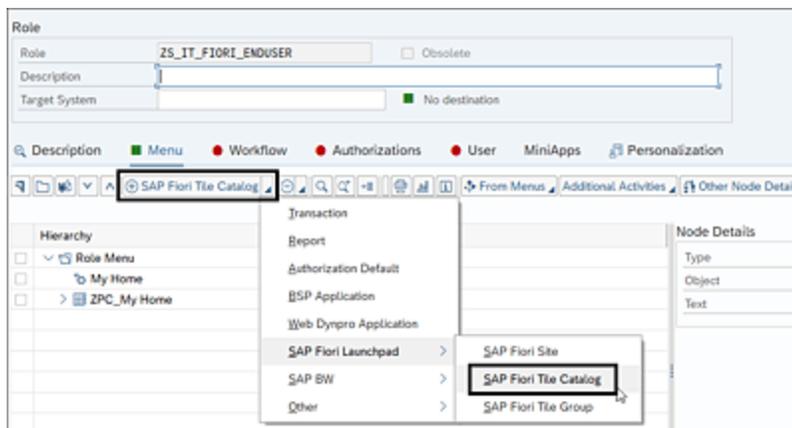
Mapping SAP Fiori apps to sections, pages, and spaces represents a modern approach to organizing apps for simplified navigation. Detailed instructions for creating sections, pages, and spaces are outlined in [Section 11.4.3](#).

However, for those who continue to use the concept of groups, direct assignment of groups to Transaction PFCG roles is an option. The step-by-step process for adding groups is detailed in [Section 11.4.2](#). The following sections will explain the process of adding catalogs and groups to Transaction PFCG roles.

### **11.4.1 Adding Catalogs to Transaction PFCG Roles**

To map the catalogs to the roles, follow these steps:

1. Log in to the SAP Process Control system.
2. Go to Transaction PFCG.
3. Create a new role or select an existing role to which the catalog should be mapped.
4. From the **Menu** tab, select **SAP Fiori Tile Catalog • SAP Fiori Launchpad • SAP Fiori Tile Catalog** from the list, as highlighted in [Figure 11.23](#).



**Figure 11.23** Selection of the SAP Fiori Tile Catalog Option in Transaction PFCG

5. Search for the desired catalog, and click **OK**.

The catalog will be added in the **Role** menu.

## Note

Adding catalogs alone won't automatically display the apps to the user. Therefore, it's advisable to include groups or space IDs for a better UX.

## 11.4.2 Adding Groups to Transaction PFCG Roles

To map the custom SAP Fiori groups, follow these steps:

1. Log in to the SAP Process Control system.
2. Go to Transaction PFCG, enter the **Role name**, and click **Create** (for an existing role, enter the name, and click **Change**).
3. Navigate to the **Menu** tab, and select **SAP Fiori Tile Catalog • SAP Fiori Launchpad • SAP Fiori Tile Group**.
4. Search for the SAP Fiori group, and click **OK** to add.
5. Once the required catalogs and groups are added, maintain the authorization objects and their values, and generate the profile.

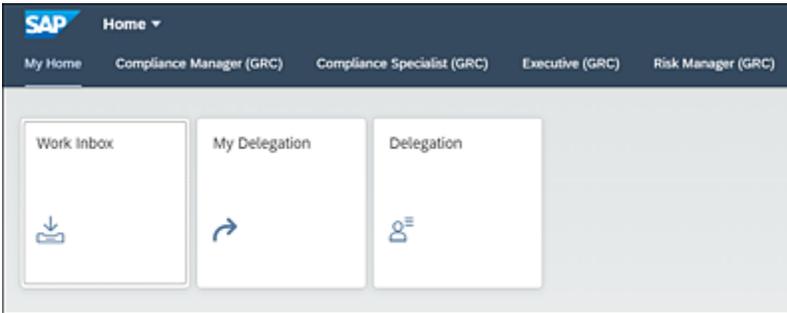
Assigning the role to users will provide access to the respective SAP Fiori apps.

### Note

In addition to assigning roles containing catalogs and groups, it's essential to assign all the necessary foundational roles to the end user, including roles with authorizations such as INTEROP and Page Builder, as well as end user roles such as SAP\_UI2\_USER\_750.

Once these required roles have been assigned to the user ID, the user will be able to access the SAP Fiori launchpad using Transaction /N/UI2/FLP. This access will enable the

user to reach all the relevant SAP Fiori tiles, as shown in [Figure 11.24](#).



**Figure 11.24** End-User SAP Fiori Launchpad Screen

### 11.4.3 Mapping Space IDs

As previously mentioned, the introduction of spaces, pages, and sections is a novel aspect that increases the UX.

[Figure 11.25](#) provides a visual representation of the new structure:

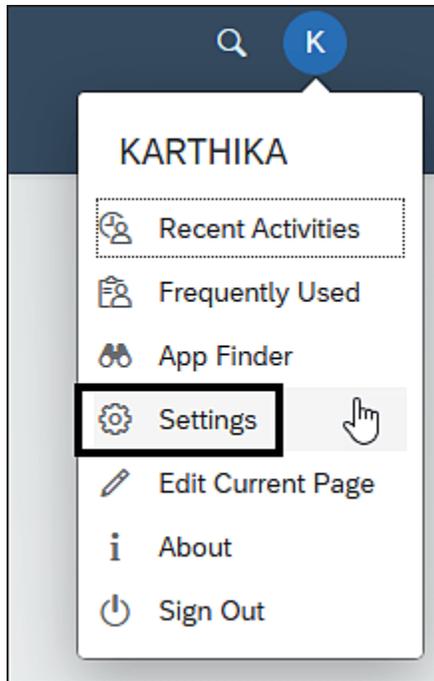
- ① SAP Fiori space
- ② SAP Fiori pages
- ③ SAP Fiori apps/tiles section



**Figure 11.25** New SAP Fiori Structure

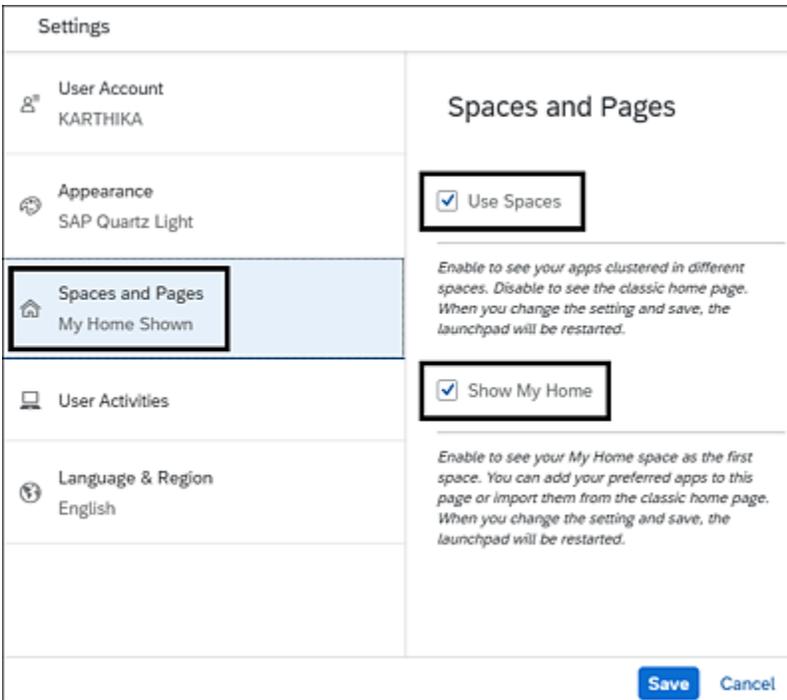
Before assigning space IDs in roles, it's required to activate the space and pages in SAP Fiori launchpad. This setting must be carried out in the users' SAP Fiori launchpad settings, as follows:

1. In SAP Fiori launchpad, click the user's icon, and click the **Settings** button, as shown in [Figure 11.26](#).



**Figure 11.26** Settings Option in SAP Fiori Launchpad

2. Click **Space and Pages**, check both **Use Spaces** and **Show My Home** checkboxes, and click **Save**, as shown in [Figure 11.27](#). This will enable space and pages in SAP Fiori launchpad.



**Figure 11.27** Enabling Spaces and Pages

To create spaces and pages, follow these steps:

1. Go to Transaction /N/UI2/FLP (SAP Fiori launchpad).
2. Select the Manage Launchpad Spaces app.
3. In the **Manage Launchpad Spaces** page, click the **Create** button, as shown in [Figure 11.28](#).



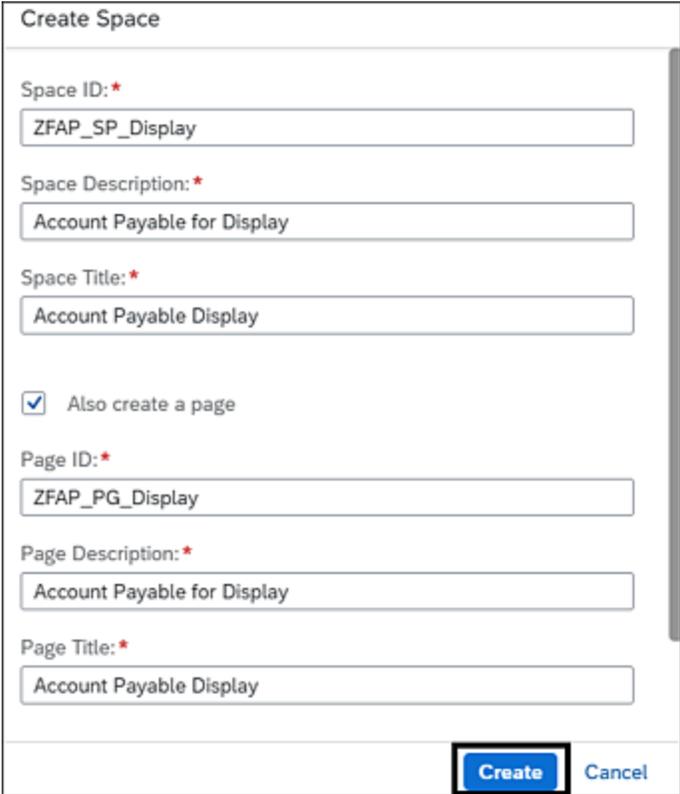
**Figure 11.28** Create Option in the Manage Launchpad Spaces Page

4. Enter **Space ID**, **Space Description**, and **Space Title**, as shown in [Figure 11.29](#).

## Note

A page can also be created in parallel with the **Space ID** by filling in the information. Check the **Also create a page** checkbox to do so.

5. Click the **Create** button.



The screenshot shows a 'Create Space' form with the following fields and options:

- Space ID:** \* ZFAP\_SP\_Display
- Space Description:** \* Account Payable for Display
- Space Title:** \* Account Payable Display
- Also create a page
- Page ID:** \* ZFAP\_PG\_Display
- Page Description:** \* Account Payable for Display
- Page Title:** \* Account Payable Display

At the bottom right, there are two buttons: **Create** (highlighted with a red box) and **Cancel**.

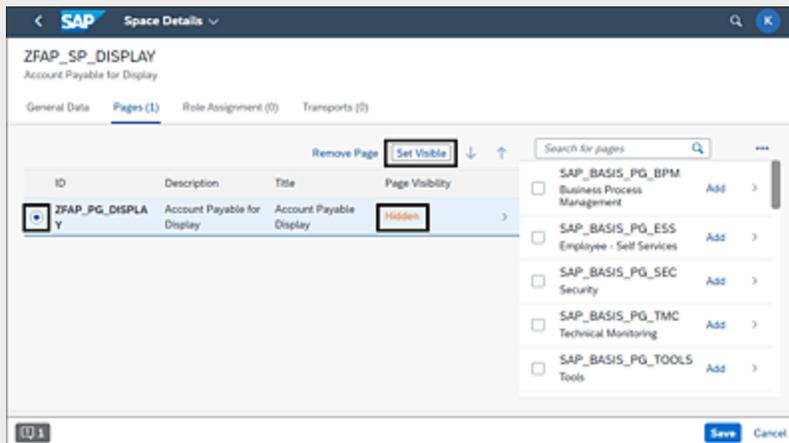
**Figure 11.29** Create Space Options

If the spaces are already created, pages can be added. To add a page, follow these steps:

1. Select the **Space ID** from the list.
  2. Click the **Pages** tab.
  3. Use the search pane on the right-hand side to find the relevant pages, and click the **Add** button.
  4. Click **Save**.
-

## Note

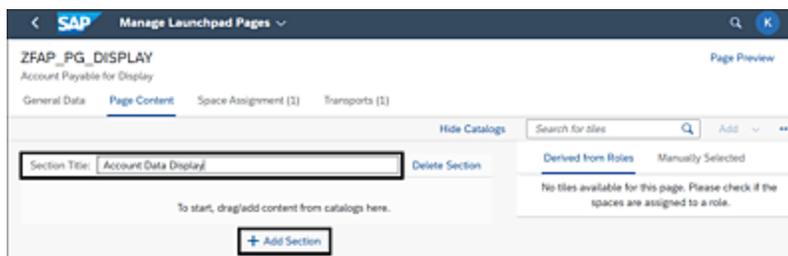
The pages can be hidden as required. If the page visibility is set to **Hidden**, select the page, and click **Set Visible**, as shown in [Figure 11.30](#). Click **Save**.



**Figure 11.30** Maintaining Pages

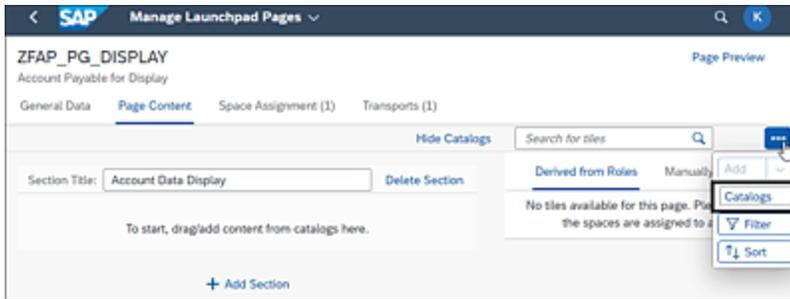
Once the page is created, the next step is to create a section, as follows:

1. Click + **Add Section** in the page, and enter the **Section Name** in **Section Title**, as shown in [Figure 11.31](#).



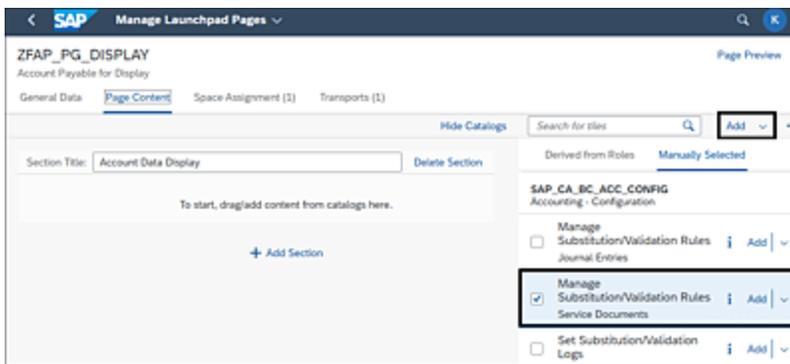
**Figure 11.31** Section Definition

2. Add apps from the catalogs by clicking the **Add • Catalogs** option, as highlighted in [Figure 11.32](#).



**Figure 11.32** Adding Apps from the Catalog

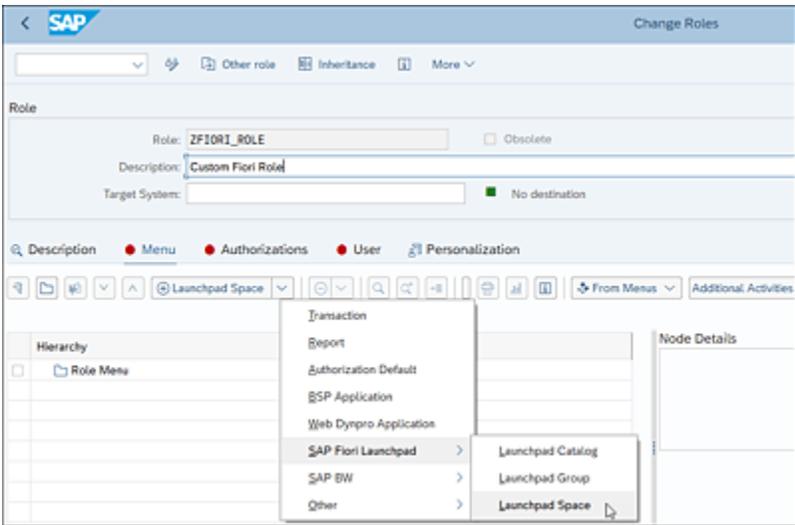
3. Select the apps from the list, and click **Add**, as shown in [Figure 11.33](#).



**Figure 11.33** Assigning Apps to Sections from Catalogs

4. Click **Save**.

Once the spaces and pages are created successfully, the next step is to assign them to a role. From Transaction PFCG, enter the **Role** name, click **Create** (click **Change** if this is an existing role), navigate to the **Menu** tab, and choose **Launchpad Space • SAP Fiori Launchpad • Launchpad Space**, as highlighted in [Figure 11.34](#). Enter the **Space ID**, and click **OK**.



**Figure 11.34** Adding Launchpad Space in the Transaction PFCG Role

Now when users log in to the SAP Fiori launchpad, they see the spaces, pages, and sections, as outlined earlier in [Figure 11.25](#).

## **11.5 Summary**

This chapter has provided an in-depth understanding of SAP Fiori as the UI for SAP Process Control. It has also walked through the essential steps for setting up SAP Fiori and establishing connections using RFCs, maintaining system aliases, and other configuration. Further, the chapter has also detailed the steps to activate standard catalogs, customization of catalogs, and groups, as well as assigning them to users.

# 12 SAP Financial Compliance Management

*In the previous chapters, you've learned how important the SAP Process Control solution is and how it can help organizations manage the risks and controls across various processes. In this final chapter we provide a brief overview of the SAP Financial Compliance Management cloud-based solution introduced by SAP to manage the internal control compliance processes.*

SAP Financial Compliance Management is designed to facilitate the management of internal controls within an organization in a cloud-based environment. This chapter offers an overview of key components within master data, providing a thorough examination of both manual and automated procedures. Furthermore, it delves into the preconfigured automated procedures that SAP offers, providing a head start for the implementation process. This chapter further details the key dashboards provided by SAP, enabling users to assess the status of master data and compliance within the organization.

## 12.1 Overview

SAP Financial Compliance Management is part of SAP's enterprise risk and compliance portfolio, which helps in managing the risks, controls, and compliance needs of the organization. This is a cloud-based application hosted on SAP Business Technology Platform (SAP BTP). The solution supports organizations in managing the controls and evaluating them on a periodic basis to ensure there are no adverse impacts on the financial reporting process of the organization. This solution can be connected to an SAP S/4HANA Cloud or on-premise SAP S/4HANA system to fetch the data to execute automated procedures and evaluate the effectiveness of the controls.

Here are the key advantages that organizations can gain through the use of the SAP Financial Compliance Management application:

- **Repository of controls**

SAP Financial Compliance Management has a built-in feature that allows the documentation of all internal controls within the organization. This includes the mapping of related dimensions, such as the specific process it pertains to, the business objectives it aims to fulfill, the associated risk category mitigated by its implementation, the organizations overseeing the control, and the regulatory standards with which the control complies. Additionally, relevant procedures, whether automated or manual, can be linked to assess the overall effectiveness of these controls based on their nature.

- **Predefined automated procedures**

SAP Financial Compliance Management includes a predefined collection of automated procedures that

organizations can leverage to accelerate the implementation process and quickly introduce the solution to business users. As part of the standard solution subscription, SAP provides approximately 22 predefined controls categorized within specific process areas. Additionally, organizations also get around 72 predefined automated procedures associated with these controls, offering the flexibility to use them as-is or modify them to align with specific requirements:

- Journal entries
- Purchasing
- Suppliers
- Invoices
- Payments
- General ledger accounts
- Sales orders
- Customers
- Change logs
- Products
- Contract-based revenue recognition
- Taxes

For more detailed information about the delivered controls and the automated procedures, access the SAP Help Portal information at <http://s-prs.co/v579904>.

- **Dashboards**

SAP Financial Compliance Management brings a diverse

set of dashboards that enable organizations to gain a real-time perspective on the master data and compliance status of evaluated controls. These dashboards are interactive, allowing users to delve into details and obtain a granular view of the master data and compliance status. This level of detail is useful for management to make informed decisions.

- **Integration with SAP Signavio**

SAP Financial Compliance Management can be integrated with SAP Signavio to import the business processes, subprocesses (referred to as tasks in SAP Signavio), and controls currently maintained in SAP Signavio, eliminating the duplicate efforts to create the control information again in SAP Financial Compliance Management (or vice versa). For more information on integration with SAP Signavio, go to <http://s-prs.co/v579905>.

## 12.2 Master Data Elements

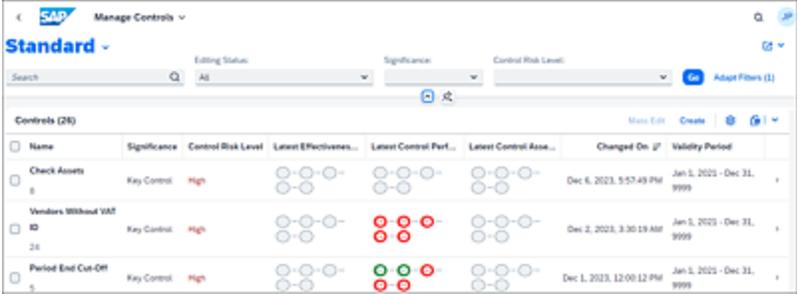
Because SAP Financial Compliance Management is a solution to support the organization in managing internal controls, it's important to document the control details comprehensively. As part of master data definition in the solution, SAP Financial Compliance Management provides functionalities to define the control library and map it with organizations, processes, subprocesses, and regulations. The following sections describe the importance of each master data element, such as controls, organizations, processes, regulations, and master data dashboards. You can also find the steps to define/configure these master data elements.

### 12.2.1 Controls

Internal controls for the SAP S/4HANA system are the crux of SAP Financial Compliance Management and are documented using the standard feature of defining the master data elements. In addition to documenting only the details required to identify the control, the control can be mapped to processes, subprocesses, organizations, and regulations in the **Related Objects** section of the control master. To define a new control, access the **Manage Controls** tile, and follow the steps described next to configure the various relevant tabs.

The **Manage Controls** tile shows the list of controls already defined in the system along with an overview of the last five

results for the control assessments performed for the **Effectiveness Test, Control Performance, and Control Assessment**. To create a new control, click on the **Create** option, as shown in the [Figure 12.1](#).



**Figure 12.1** Option to Create a Control

The **New: Manage Controls** definition screen consists of several tabs, including **Header, General Information, Description, Additional Information, Procedures, Related Objects, and Attachments and Links**. It’s essential to configure each of these tabs with the relevant settings to ensure the control’s completeness, as shown in [Figure 12.2](#) and [Table 12.1](#).

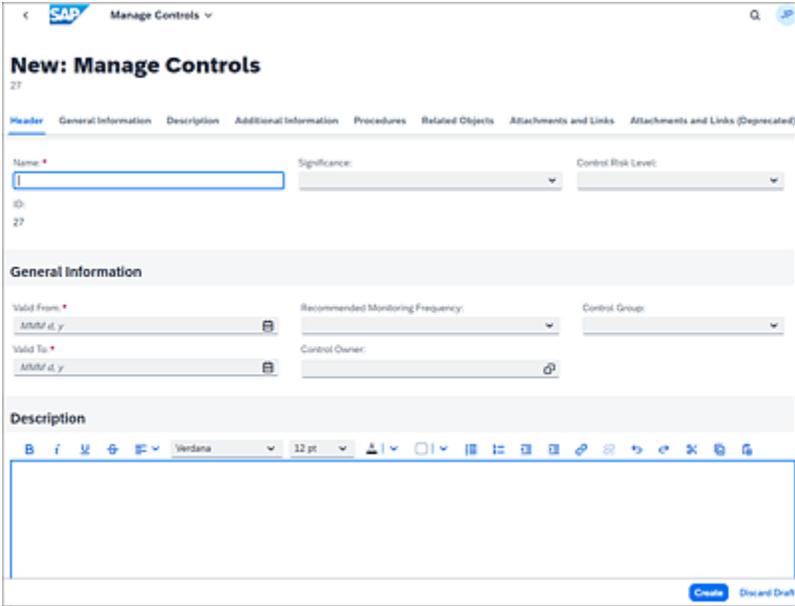
Tab	Field Name	Description
Header	<b>Name</b>	Brief name of the control.
	<b>ID</b>	A system-generated unique ID to identify the controls.
	<b>Significance</b>	Determines whether the control is a key or a non-key control.

Tab	Field Name	Description
	<b>Control Risk Level</b>	Determines the risk criticality level of the control as <b>High</b> , <b>Medium</b> , or <b>Low</b> , which are delivered as default values. To modify them or to create new control risk levels, access the Control Settings app, and navigate to <b>Standard Fields, Control Risk Level</b> under <b>Field Settings</b> . Provide the details of ID and name of the new risk level that should be made available in the <b>Control Risk Level</b> field under the <b>Control Header</b> tab.
<b>General Information</b>	<b>Valid From</b>	The date from which the control is valid.
	<b>Valid To</b>	The date till which the control is valid.

Tab	Field Name	Description
	<b>Recommended Monitoring Frequency</b>	<p>The proposed frequency at which the control should be tested. The available options for the frequency options in SAP Financial Compliance Management are as follows and are delivered by default:</p> <ul style="list-style-type: none"> <li>• <b>Daily</b></li> <li>• <b>Weekly</b></li> <li>• <b>Bi Weekly</b></li> <li>• <b>Monthly</b></li> <li>• <b>Quarterly</b></li> <li>• <b>Every Half Year</b></li> <li>• <b>Yearly</b></li> <li>• <b>Any Frequency</b></li> </ul> <p>The dropdown values can be updated from the Control Settings app following the same steps as mentioned previously for the <b>Control Risk Level</b> field.</p>

Tab	Field Name	Description
	<b>Control Owner</b>	The user responsible for the management of the control and ensuring it's being operated effectively in the system.
	<b>Control Group</b>	Groups similar controls based on the activities that the control performs. The dropdown values can be updated from the Control Settings app following the same steps as mentioned for the <b>Control Risk Level</b> field.
<b>Description</b>	<b>Description</b>	Detailed explanation of the activities that the control performs to meet the objectives of the process.

**Table 12.1** A Glimpse of Various Tabs in the New: Manage Controls Screen



**Figure 12.2** New Manage Controls Screen

[Table 12.2](#) provides detail about the other tabs that should be configured while defining the control.

Tab	Field Name	Description
<b>Additional Information</b>	<b>Business Objective</b>	The objective that the control is intending to achieve.

Tab	Field Name	Description
	<b>Chart of Accounts</b>	Because the major focus of SAP Financial Compliance Management is to monitor the controls based out of the SAP S/4HANA and SAP S/4HANA Cloud system, it provides an option to map the identified control to the chart of accounts that the process belongs to.
	<b>Risk Category</b>	Determines the category of the risk the control is mitigating.
<b>Procedures</b>	<b>Automated Procedures</b>	Monitors the effectiveness of the controls. Select the automated procedures that contains the connectivity to the SAP S/4HANA system, the related OData services, and the fields that should be monitored as part of effectiveness testing.

Tab	Field Name	Description
	<b>Manual Procedures</b>	Monitors the effectiveness of the controls. Select the manual procedures containing the steps that should be executed by the tester to evaluate the effectiveness. Depending on the nature of the control testing, automated, manual, or both procedures can be mapped to the control.
<b>Related Objects</b>	<b>Organization</b>	Maps the organizations where the control is being operated. See <a href="#">Section 12.2.2</a> to understand more about defining organizations.
	<b>Business Process</b>	Maps the business processes and subprocesses to which the control is being operated. See <a href="#">Section 12.2.3</a> to understand more about configuring business processes and subprocesses.

Tab	Field Name	Description
	<b>Regulations</b>	Maps the regulations that the control is complying with. See <a href="#">Section 12.2.4</a> to understand more about regulations configuration.
<b>Attachments and Links</b>	<b>Attachments and Links</b>	Used to attach any documents relating to the control.

**Table 12.2** Tabs to Be Configured while Defining the Control

## 12.2.2 Organizations

The definition of the organization structure is important for organizations to manage the internal control reporting process. The organization can be a hierarchical representation of geography-based operations or can be based on the types of business operations that are performed in the company. [Figure 12.3](#) shows a sample geography-based organization hierarchy.

With the mapping of controls to the organization, it becomes easy for the internal controls team to extract reports for the specific business unit or a zone to report the status of control effectiveness to the management teams. Following are the details that are documented while defining the organization using the **Org Hierarchies** tile in SAP Financial Compliance Management (see [Figure 12.4](#)):

- **ID**  
Unique system-generated ID to identify the organization.

- **Name**  
Brief name of the organization.
- **Description**  
Detailed definition of the organization representing its structure and objectives.
- **Valid From**  
Date from which the organization is valid.
- **Valid To**  
Date until which the organization is valid.

ID	Name	Type
▼ L1	CRG International Ltd - Entities	Root
▶ L1.1	UKI	Org
▶ L1.2	Americas	Org
L1.3	Japan	Org
L1.4	Germany	Org

**Figure 12.3** Organization Hierarchy

**Figure 12.4** Details to Be Configured while Defining an Organization

After configuring the details, click on **Save** to complete the creation of the organization. The organizations established in this hierarchy can be used for mappings in the control within the **Related Objects** section. In the event that an organization is no longer valid within the hierarchy, you can use the **Retire** option to delimit the organization, and it's no longer valid for any assignments or future usage.

### 12.2.3 Process

When a control is documented, it's important to identify the business process to which it belongs. The business processes to which the internal controls identified in monitoring belong to can be documented using the **Process Catalogs** tile. Following are the details that are documented while defining the process, as shown in [Figure 12.5](#):

- **ID**  
Unique system-generated **ID** to identify the process.
- **Name**  
Brief name of the process.
- **Description**  
Detailed definition of the activities carried out in the process.
- **Valid From**  
Date from which the process is valid.
- **Valid To**  
Date till which the process is valid.

The screenshot shows a web form titled "New Process Catalog". It has a "General Information" section with the following fields: "ID" (text input), "Name" (text input), "Valid From" (date picker set to "Dec 20, 2023"), "Valid To" (date picker set to "Dec 31, 9999"), and "Description" (text area). At the bottom right, there are "Create" and "Cancel" buttons.

**Figure 12.5** Details to Be Configured while Defining a Process

After configuring the details, click **Save** to finalize the creation of the process. The processes established here can be used for mappings in the control within the **Related Objects** section. If a process becomes obsolete, use the **Retire** option to delimit the process, which makes it no longer valid for any assignments or future usage.

## 12.2.4 Regulations

Organizations are bound to comply with various regulatory requirements to have a strong internal control procedure. It's also key to define the regulations in the system and map them to the controls, which enables management to identify how the controls are implemented in the organization to meet the regulatory requirements and the effectiveness of such compliance.

Following are the details that are documented while defining the regulation, as shown in [Figure 12.6](#):

- **Name**  
Brief name of the regulation.

- **Description**  
Detailed definition about the applicability of the regulation to the organization.
- **Category**  
Groups relevant regulations into the same categories.
- **Valid From**  
Date from which the regulation is valid.

The screenshot displays a web-based configuration form for an 'ABAC Regulation'. The form is divided into three main sections: 'General Information', 'Requirements', and 'Attachments'. The 'General Information' section includes fields for 'Name' (filled with 'ABAC Regulation'), 'Description' (empty), 'Category' (filled with 'Internal Control System (ICS)'), 'Valid From' (filled with 'Jan 1, 2021'), and 'Valid To' (filled with 'Dec 31, 9999'). The 'Requirements' section is currently empty, showing a table with columns for 'ID', 'Name', and 'Status', and a message 'No data available'. The 'Attachments' section is also empty.

**Figure 12.6** Details to Be Configured while Defining a Regulation

- **Valid To**  
Date till which the regulation is valid.
- **Requirements**  
Individual clauses that are critical to be complied with the implementation of internal controls can be documented.

For example, if there are multiple regulatory requirements that the organization is complying with, such as the Sarbanes-Oxley Act, Indian Companies Act, or the

Committee of Sponsoring Organization (COSO) framework, all such compliance needs can be created in this regulation app and can be mapped to the controls that are implemented in the organization to comply with these requirements.

### **12.2.5 Master Data Dashboards**

SAP Financial Compliance Management offers a wide range of predelivered dashboards that can be used by organizations to have a holistic view of the controls and the relevant mappings with the other master data elements. These dashboards are interactive and can be drilled into further to see the detailed view of the configurations performed in defining the controls. The dashboards provided by SAP are accessible from the reports landing page.

The list of dashboards available from the landing page are as follows:

- **Distribution of Controls**

This dashboard provides an overview of how the controls are structured against various regulations and assignment of control groups, represented by a pie chart with the percentage of controls in these sections. This page also has a heat map showing how the controls are distributed across various organizations and processes. [Figure 12.7](#) shows the sample dashboard for distribution of controls.



**Figure 12.7** Sample Dashboard: Distribution of Controls

- **Assignment of Control Owners**

As detailed in [Section 12.2.1](#), users are assigned to the controls as owners, and this report provides the summary of such owner assignments. The report also provides an overview of the percentage of controls assigned to each control owner.

- **Missing Assignment in Controls by Organizations, Process and Subprocess**

As detailed in [Section 12.2.1](#), while configuring the control, all the related objects are mapped to the control, such as organizations, processes and regulations. This report provides an overview of such missing assignments to the control. The page is an interactive report that the user can use to navigate to the specific control to complete the missing assignments, as shown in [Figure 12.8](#).



**Figure 12.8** Sample Dashboard: Missing Assignments in Controls

- **Missing Assignment in Controls by Owners, Control Groups, and Procedures**

While the Assignment of Control Owners report provides the visibility on control owner assignments, this dashboard provides an overview of the controls for which the control owner assignments aren't performed.

Similarly, the dashboard provides an overview of the other missing control attributes such as control groups and controls not having procedures assigned.

- **Assignments of Procedures to Controls**

Depending on the nature of the control, automated, manual, or both procedures are assigned to evaluate the effectiveness of the controls. This dashboard provides an overview of the procedures that are assigned to at least two controls with a pie chart representation.

- **Orphaned Objects**

This report provides details of the controls that aren't scheduled for evaluation so far in the system. It also shows the details of the automated procedures or the manual procedures that are defined in the catalog, but not assigned to any controls.

- **List of Controls**

This is a summary report that provides the details of all the controls defined in the system, including the mappings with the related objects such as control group, regulation, process, organization, control owner, procedure type (automated/manual), and procedure name.

## 12.3 Control Evaluation Procedures

The controls defined in SAP Financial Compliance Management can be tested using the automated and manual procedures. The automated procedures contain the logic that should run on the SAP S/4HANA system to test the control and return results. The manual procedure contains the series of steps that should be executed by the control owner to evaluate the effectiveness of the control. These procedures are scheduled for testing using the work packages functionality. The following sections provide an overview of automated procedures, manual procedures, and how work packages can be used to trigger the test process.

### 12.3.1 Procedures

As mentioned earlier, test procedures are defined depending on the nature of the control. The following sections discuss the two available types of procedures and provide an overview of the details configured in each of the procedure types: automated and manual.

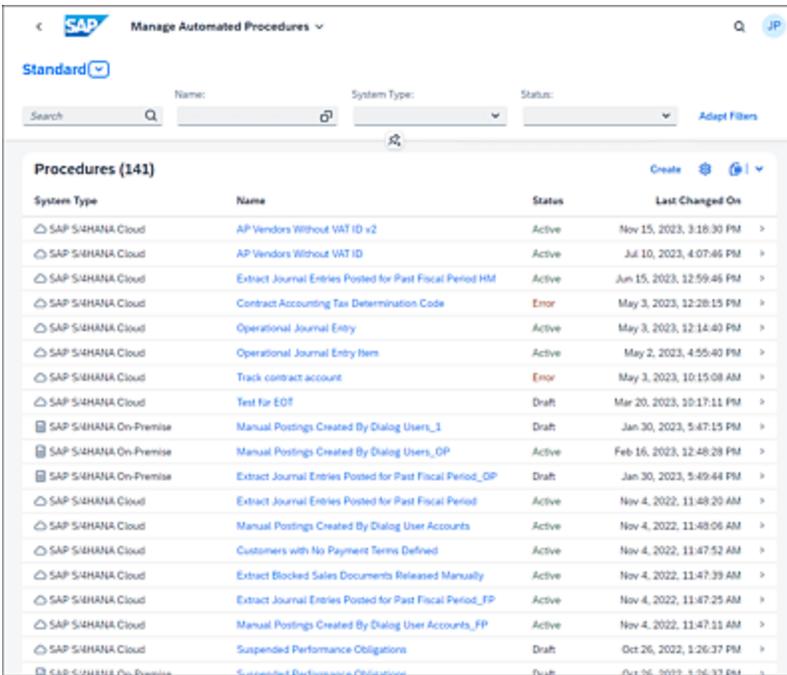
#### **Automated Procedure**

An automated procedure is used when the required data of monitoring exists in the SAP S/4HANA system and the user can define the logic to analyze the data and retrieve the results using OData services into SAP Financial Compliance Management. Once the automated procedures are defined, they are mapped to the control in the **Procedures** tab,

which can be executed by scheduling the work packages to view the control effectiveness.

As mentioned in [Section 12.1](#), SAP Financial Compliance Management delivers a lot of predefined automated procedures that can be used by the organization depending on the solution in scope. These automated procedures are by default imported into the Manage Automated Procedures app and are shown in the **Draft** status. To make use of these procedures, update the target system settings from which the data has to be analyzed and change the status of the automated procedure to **Active**. With this, the procedure can now be used for assigning to a control and also for scheduling using the work packages. If there is a requirement to create a new automated procedure, the steps described here will provide an overview of the fields to be configured in the process.

To review the existing automated procedures or to create a new one, access the Manage Automated Procedures app, and the landing page shows the list of existing automated procedures along with the current status. To create a new one, click on **Create**, as shown in [Figure 12.9](#). Access an existing procedure by clicking on the hyperlink available in the **Name** column.



**Figure 12.9** Option to Create an Automated Procedure

In the screen shown in [Figure 12.10](#), the fields mentioned in [Table 12.3](#) must be defined while configuring the automated procedure.

Field Name	Description
Procedure Name	Brief name of the automated procedure.
ID	Unique system-generated ID for the automated procedure.

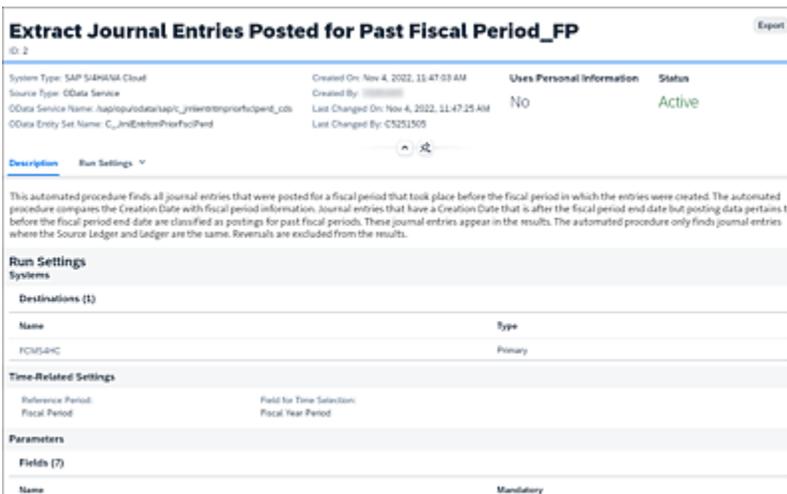
Field Name	Description
<b>System Type</b>	<p>Indicates the type of system from which the automated procedure will analyze the data to return results. Following are the types of systems from which the option can be selected:</p> <ul style="list-style-type: none"> <li>• <b>SAP S/4HANA Cloud</b></li> <li>• <b>SAP S/4HANA</b></li> <li>• <b>SAP ERP</b></li> </ul>
<b>Source Type</b>	<p>Indicates the type of data used to create the automated procedure.</p>
<b>OData Service Name</b>	<p>Provide the name of the OData service required to fetch the metadata/core data services (CDS) views from the target system, which is used to analyze and provide control effectiveness results.</p>
<b>OData Entity Set Name</b>	<p>Provide the name of the OData entity set that was created to fetch the metadata/CDS views from the target system, which is used to analyze and provide control effectiveness results.</p>
<b>Description</b>	<p>Detailed explanation of the automated procedure, indicating the objective of the control that the procedure is intending to achieve and also a brief overview of the data that the procedure is analyzing.</p>

Field Name	Description
<b>Destination</b>	Indicates the name of the system where the automated procedure should be executed.
<b>Reference Period</b>	<p>Select the type of the time frame that should be considered while the automated procedure is executed. Following are the options available for selection:</p> <ul style="list-style-type: none"> <li>• <b>Fiscal Period:</b> Indicates that the dates considered while running the automated procedure are based on the fiscal periods defined in the system (custom time frame based on the organization's needs).</li> <li>• <b>Calendar Period:</b> Indicates that the dates considered while running the automated procedure are based on the calendar period (January-December).</li> <li>• <b>No Date:</b> Indicates that the automated procedures are executed without need of any date considerations.</li> </ul>
<b>Parameters-Fields</b>	The fields in the parameter section are auto-populated on selection of the OData services. The mandatory fields appearing in the list can't be removed, but any changes required in the other field set can be performed using the <b>Add</b> or <b>Remove</b> options.

**Table 12.3** Reference for Use When Mapping These Fields

When the automated procedure is created, its first status is **Draft**, which indicates the procedure is still in the process of updating. In this stage of the procedure, it can't be used for control mapping or scheduled for testing using work packages.

Upon validating that all the procedure details are correctly updated, click on **Activate**. The procedure's status initially shows as **Activating**, during which the system validates the proper establishment of connections with the target system and the accurate definition of the OData service. The outcome of this status can either change to **Active** or **Error**. When all the details in the automated procedure are accurately configured, the status is updated to **Active**, indicating that the procedure is now ready for control mapping and scheduling.



**Figure 12.10** Configuration of Automated Procedure

If there are any issues with the connections or the OData service, the status is updated to **Error**, and the OData

metadata can't be retrieved by the procedure or be assigned to a control.

## **Manual Procedures**

A manual procedure is used when human intervention is required to evaluate the effectiveness of the controls. The manual procedures contain the steps that should be performed by the owner to determine how effectively the control is being operated in the organization. Once the manual procedures are defined, they are mapped to the control in the **Procedures** tab, which can be executed by scheduling the work packages to send the steps to the owner. Two types of manual procedures can be defined: steps or surveys. With steps, a list of steps is defined as part of the procedure with the details of step number, name, and description of the activity that the control owner should follow to test the control. The steps procedure type is used when the control has to be tested either for effectiveness or performance.

With surveys, a list of questions is defined as part of the procedure with the details of question number, name, and description of the question that the control owner should respond to in order to complete the testing process. The survey procedure type is used when the control assessment has to be performed. The responses can be provided to the questions based on the type of answer selected while defining the survey. Following are the answer types available that can be selected:

- **Yes/No/NA**

The responses in this option should be selected from the

available dropdown values as **Yes, No, or Not Applicable**. In addition, the nomenclature of the labels (**Yes, No, N/A**) can be updated based on the organization needs.

- **Rating**

This is used when the control owner has to provide a rating for a question, such as a response on a scale of 1 to 5.

- **Choice**

This is used if custom options are provided to the control owner to choose from the answer list. There are two options with respect to choice: **Single choice** if only one option should be selected by the responder, and **Multiple Choice** if more than one option can be selected by the responder.

- **Free Text**

This option is used if the response expectation of the question is a detailed explanation from the control owner.

- **Matrix**

A free text or a rating matrix represented by a row and column table is provided to the control owner to respond to the survey, where the responses can be provided as a free text or ratings against each block in the matrix.

To review the existing manual procedures or to create a new one, access the Design Manual Procedures app. The landing page shows the list of existing manual procedures along with the current status. To create a new one, click on the **Create** option. [Figure 12.11](#) outlines access to an existing procedure by opening the manual test procedure.

ID	Name	Status	Assurance Activity	Manual Procedure Type
9	MP Party does not violate child labour policy	Active	Control Performance	Steps
8	My MP	Draft	Control Effectiveness Test	Steps
1	Cut-Off Testing	Active	Control Performance	Steps

**Figure 12.11** Option to Create a New/Review Manual Procedure

[Figure 12.12](#) shows how these fields are configured in the manual procedure.

Step #	Name	Description
1	Identify and test cut-off procedures	Identify and test the adequacy of cut-off procedures for period end accounts payable.
2	Inquire about unrecorded liabilities	Inquire about potential sources of unrecorded liabilities, for example, inventory that has been rece...
3	Examine disbursement records after the balance sheet date	Examine disbursements records for the period after the balance sheet date. Determine if selected inv...
4	Examine files of unmatched receiving reports or invoices	Examine files of unmatched receiving reports or unmatched or unpaid vendor invoices, files of pendin...
5	Review fluctuations in purchases or returns near period end	Consider key performance indicators and management information that would indicate unusual fluctuati...

**Figure 12.12** Configuration of a Manual Procedure

[Table 12.4](#) shows the fields that are needed to be maintained while configuring the manual procedure.

Field Name	Description
Procedure Name	Brief name of the manual procedure.
ID	Unique system-generated ID for the manual procedure.

Assurance Activity	Description
	<p>Following are the three types of assurance activities available, and the type of manual procedure (step based or survey based) that can be created is dependent on the selection made in this field:</p> <ul style="list-style-type: none"><li>• <b>Control Effectiveness:</b> This control testing is performed to evaluate if the control is operating as designed and achieving the objectives of the process effectively. If this assurance type is selected, a step-based manual procedure is created.</li><li>• <b>Control Performance:</b> This control testing is performed to evaluate the efficiency of the control in its execution. If this assurance type is selected, a step-based manual procedure is created.</li><li>• <b>Control Assessment:</b> This control testing is performed to evaluate the effectiveness of the control based on the assessment of the control owner. The effectiveness test can be either to check the design effectiveness or a self-assessment. If this assurance type is selected, a survey-based manual procedure is created.</li></ul>

Field Name	Description
<b>Description</b>	Detailed explanation of the automated procedure, indicating the objective of the control that the procedure is intending to achieve and providing a brief overview of the data that the procedure is analyzing.
<b>Steps/Surveys</b>	Represents the steps or surveys that the control owner should perform and respond to with the evaluation results.

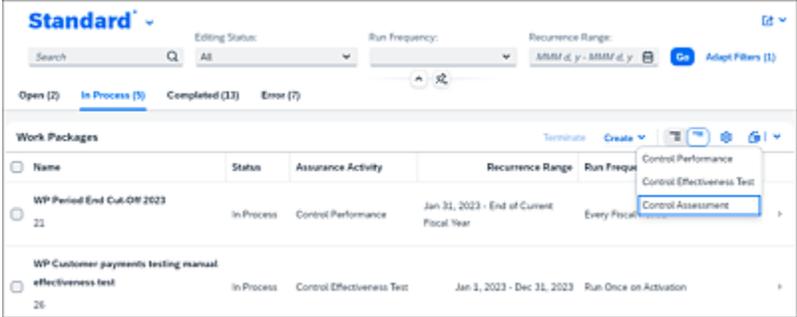
**Table 12.4** Fields to Be Defined and Maintained in a Manual Procedure

Upon creation of the manual procedure, its initial status is displayed as **Draft**, which indicates that the procedure is still in the update process. During this phase, it can't be used for control mapping or scheduled for testing via work packages. Once all the details in the manual procedure are appropriately configured, activate it using the **Activate** option. Subsequently, the procedure becomes available for mapping with controls and scheduling.

### 12.3.2 Work Packages

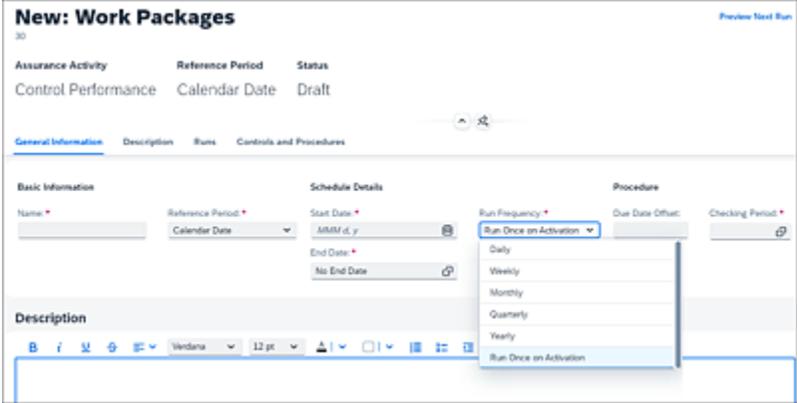
The **Work Packages** option is used to schedule jobs that run periodically, triggering both automated and manual procedures assigned to a control based on the selected frequency during work package creation. To access work packages, choose the **Manage Work Packages** tile. Once launched, you can see the current list of scheduled work packages, as shown in [Figure 12.13](#).

To schedule new ones, click **Create**, and choose **Control Effectiveness**, **Control Assessment**, or **Control Performance**. To open an existing work package to review the configured details, see Figure 1.14.



**Figure 12.13** Manage Work Packages App

[Figure 12.14](#) shows the various elements of the **New: Work Packages** screen.



**Figure 12.14** Work Package Configuration Screen

[Table 12.5](#) shows the fields that must be set up while scheduling the work package for different types of assessments.

Field Name	Description
------------	-------------

Field Name	Description
<b>Work Package Name</b>	Brief name of the work package.
<b>ID</b>	Unique system-generated ID for the work package.
<b>Description</b>	Detailed explanation of what is being scheduled as part of the work package.
<b>Reference Period</b>	<p>Select the type of the time frame that should be considered while the procedure is executed. Following are the options available for selection:</p> <ul style="list-style-type: none"> <li>• <b>Fiscal Period</b></li> <li>• <b>Calendar Period</b></li> <li>• <b>No Date</b></li> </ul>
<b>Checking Period</b>	<p>Select the test period for which the data should be considered while evaluating the procedures. The option to select the checking period is available only for the <b>Fiscal Period</b> and <b>Calendar Period</b> options; this field is hidden if the <b>No Date</b> option is selected.</p>
<b>Schedule Details</b>	<p>Select the <b>Start Date</b> and <b>End Date</b> within which the work package should execute per the run frequency selected.</p>

Field Name	Description
<b>Run Frequency</b>	<p>Indicates the frequency at which the work package should be executed. Following are the options available by default for execution:</p> <ul style="list-style-type: none"> <li>• <b>Daily</b></li> <li>• <b>Weekly</b></li> <li>• <b>Monthly</b></li> <li>• <b>Quarterly</b></li> <li>• <b>Yearly</b></li> <li>• <b>Run Once on Activation</b></li> </ul>
<b>Controls and Procedures</b>	<p>Select the control and the procedure that should be considered as part of the work package schedule.</p>

**Table 12.5** Details to Be Updated in Scheduling the Work Package

Further, when scheduling the work package, the user gets to see the following details:

- **Runs**

This section is a tracker that provides details of the total runs or the jobs that should be executed based on the frequency and schedule selected. It also shows the details of the status, that is, if the job is executed, or it's due for execution in future, as shown in [Figure 12.15](#).

Scheduled Run Time	Actual Run Time	Recurrence Range	Status	Checking Period	Progress
Dec 1, 2023, 12:00:00 PM Asia/Calcutta	Dec 1, 2023, 12:00:04 PM Asia/Calcutta	Dec 1, 2023 - Dec 31, 2023	In Process	011-2023 - 011-2023	100%
Nov 1, 2023, 12:00:00 PM Asia/Calcutta	Nov 1, 2023, 12:00:27 PM Asia/Calcutta	Nov 1, 2023 - Nov 30, 2023	In Process	010-2023 - 010-2023	100%
Oct 1, 2023, 12:00:00 PM Asia/Calcutta	Oct 10, 2023, 3:55:02 PM Asia/Calcutta	Oct 1, 2023 - Oct 31, 2023	In Process	009-2023 - 009-2023	100%

**Figure 12.15** Work Package Run Details

- Controls and Procedures**

This section shows the details of the controls and procedures that were selected during the configuration of a work package. Further, it also shows the details of the target system destination details for an automated procedure and the details of the owner who received the manual procedure for testing, as shown in [Figure 12.16](#).

Name	ID	Enabled Destinations	Assignees	Item Type
Period End Cut-Off	5			Control
Extract Journal Entries Posted for Past Fiscal Period_FP	2			Automated Procedure
Cut-Off Testing	1		1	Manual Procedure

**Figure 12.16** Details of Controls and Procedures in a Work Package

Once the work package is scheduled, the automated procedure analyzes the data and returns the found issues.

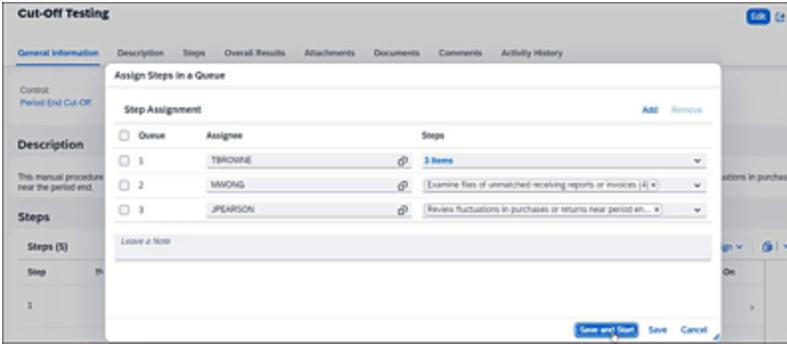
Similarly, for the manual procedures, the assignee executes the steps/responds to the survey to provide the results. The next section explains how manual procedures are performed.

### **12.3.3 Perform Manual Procedures**

As detailed in earlier sections, manual procedures serve three distinct evaluation purposes: control performance, control assessment, and control testing. This section provides an overview of the control performance scenario, illustrating how the steps outlined in the procedure are allocated to individual assignees responsible for providing responses and reporting issues if necessary.

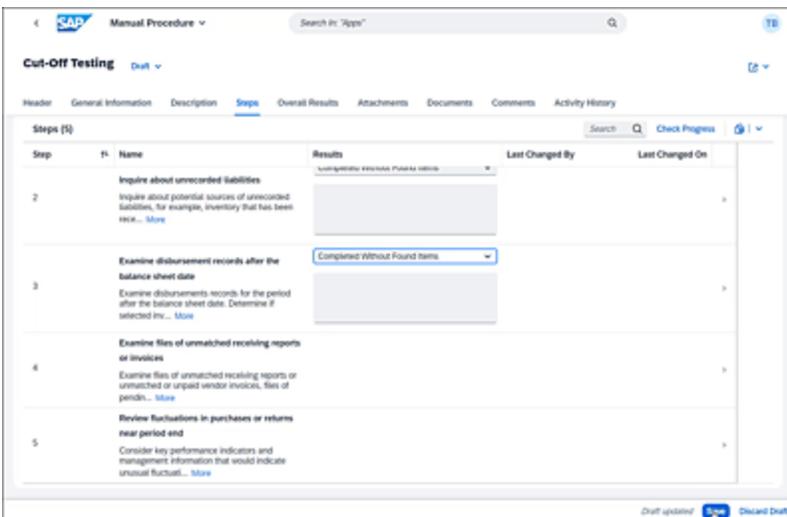
To assign the responsibility for executing steps in the manual performance procedure, navigate to the Perform Manual Procedures app, and access the work package used to schedule the manual procedure. On the **General Information** tab, proceed to the **Steps** section, where users have the option to assign steps to specific individuals by clicking on the **Assign** dropdown and selecting **Assign Steps in a Queue**.

On the next screen, assign the responsibility to the assignees to perform one or more steps. Once the assignment is completed, click **Save and Start**, which now triggers the responsibility of execution to the assignees in the sequence mentioned in the queue, as shown in [Figure 12.17](#).



**Figure 12.17** Assign Steps in a Queue Screen

The assignees access the procedure from the My Inbox app and provides responses to the steps for which they are responsible. The results can be provided from the dropdown, and the assignee also has to report any issue identified as part of the evaluation process that will go for the investigation process. [Figure 12.18](#) outlines the details of responses that can be provided by the assignee.



**Figure 12.18** Responses to the Manual Procedure

Once all the results are provided for the steps assigned, click **Save** to complete the evaluation process.

## 12.3.4 Process Issues/Found Items

Any issues/found items reported as part of the evaluation process are sent for investigation and remediation process. The issues can be accessed from the Process Issues app, and the owner has to review the details of the issue and use the following options to conclude on the results reported (see [Figure 12.19](#)):

- **Confirmed**
- **False Positive**
- **Omitted**
- **Withdrawn**

Upon reaching a conclusion, provide the conclusion details and save. After completing this step, navigate to the **Investigation and Remediation** section to initiate the creation of an investigation task or remediation task. Assign the responsibility for these tasks to individuals who are responsible for completing them and providing the necessary responses, as shown in [Figure 12.20](#).

**10052** Draft

Internal Controls over Financial Reporting

Comments Internal Controls over Financial Reporting Details **Investigation and Remediation** Conclusion

### Investigation and Remediation

Task Lists (2)

Sent	Task List Type	Origin Issue ID	Task List Template	Task List Owner
<input type="checkbox"/> Yes	Investigation	10052	General Finance Investigation	
<input type="checkbox"/> Yes	Remediation	10052	General Finance Remediation	

Conclusion

Conclusion: Confirmed

Conclusion Detail: High likelihood this will result in financial exposure in the short te...

Save Discard Draft

**Figure 12.19** Conclusion on the Reported Issues

**10052**

Internal Controls over Financial Reporting

Comment Internal Controls over Financial Reporting Details **Investigation and Remediation** Conclusion

### Investigation and Remediation

Task Lists (2)

Sent	Task List Type	Task List Template	Task List Owner
<input type="checkbox"/> Yes	Investigation	General Finance Investigation	Jessica Pearson
<input type="checkbox"/> No	Remediation	General Finance Remediation	Jessica Pearson

Conclusion

Conclusion: Confirmed

Conclusion Detail: High likelihood this will result in financial exposure in the short term

**Figure 12.20** Options to Create Investigation and Remediation Tasks for the Issues

The task list owner receives the notification and accesses the work item in the inbox. The owner does the necessary investigation or remediations, provides the responses with detailed activities performed, and save the responses, as shown in [Figure 12.21](#).

The screenshot shows a detailed view of an issue record. At the top, the issue ID is '10052' with a 'Draft' status. The title is 'Internal Controls over Financial Reporting'. The status is 'Medium' and 'Completed'. Metadata includes 'Created By: system', 'Created On: Jul 18, 2023, 5:49:20 PM', 'Changed By:', 'Changed On: Dec 20, 2023, 12:48:47 PM', 'Transfer Status: Not Transferred', and 'Issue Creator: Standard'. Below this is a navigation bar with tabs for 'Comments', 'Internal Controls over Financial Reporting', 'Details', 'Investigation and Remediation', and 'Conclusion'. A comment input field is present with a placeholder '(Type something here)' and a '255 characters remaining' indicator. Below the comment field, it says '(No Comments)'. The main section is titled 'Internal Controls over Financial Reporting' and contains several dropdown menus: 'ICFR Severity' set to 'Material Weakness', 'Issue Association' set to 'Control', and 'Relevant For' set to 'Line of Business'. At the bottom right, there are 'Save' and 'Discard Draft' buttons.

**Figure 12.21** Responses to the Investigation or Remediation Task List

Upon the successful completion and saving of the assigned tasks, the status of the issue is updated to **Completed**, marking the conclusion of the evaluation process. Comprehensive details of all these issues and identified items can be reviewed through the standard dashboards that are readily available. The next section details the evaluation dashboards.

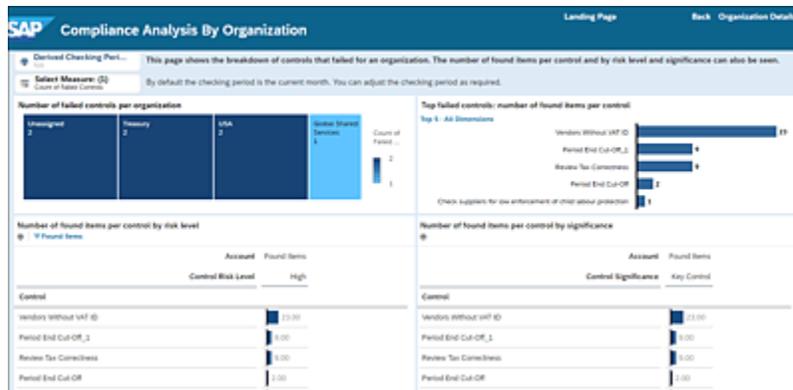
### 12.3.5 Evaluation Dashboards

The SAP Financial Compliance Management solution offers a wide range of dashboards that can be used by organizations to get a holistic view of the compliance of the controls based on various dimensions, such as organizations, processes, and regulations. In addition to these, there are also reports available to view the detailed results of the procedures based on the work packages executions.

Following are the dashboards delivered by SAP that can be accessed from the landing page of the reports:

- **Compliance Analysis by Organizations**

This dashboard provides an overview of the number of failed controls (where issues/found items were identified) that are assigned to the organization in the period of report execution. Additionally, it also gives the summary of the found items per control based on the risk levels and also the significance levels (see [Figure 12.22](#)).



**Figure 12.22** Compliance Analysis Dashboard

- **Compliance Analysis by Processes**

This dashboard provides an overview of the number of failed controls (where issues/found items were identified) that are mapped to a particular process during the period of report execution.

- **Compliance Analysis by Regulations**

This dashboard provides an overview of the number of failed controls (where issues/found items were identified) that are mapped to a specific regulation during the period of report execution.

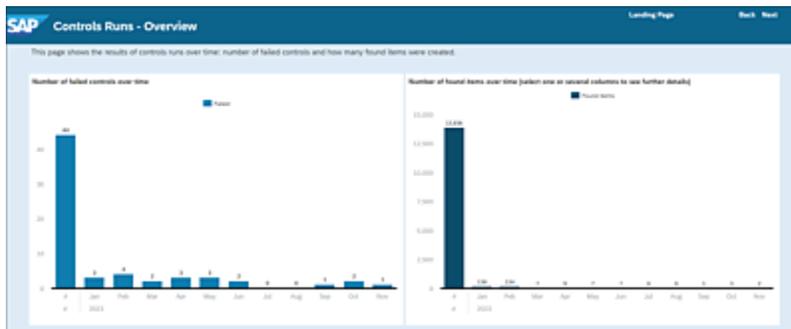
- **Manual Procedures**

This dashboard provides an analytical report on the

average number of days required to complete manual procedures scheduled for assessment, performance, or effectiveness tests. The calculation encompasses both manual procedures that have passed and those where found items were identified during execution. Additionally, the dashboard offers details on manual procedures where found items were observed, including information such as the associated work package, procedure name, and the testing period for which the procedures are assessed.

- **Control Runs - Overview**

This dashboard (see [Figure 12.23](#)) offers a timeline summary view of the controls that failed each month during the report execution period. Additionally, it provides a summary of the total number of found items identified in each month of the report execution. The bar chart is interactive, allowing you to click for more detailed information and providing enhanced visibility into the found items.



**Figure 12.23** Control Runs - Overview Dashboard

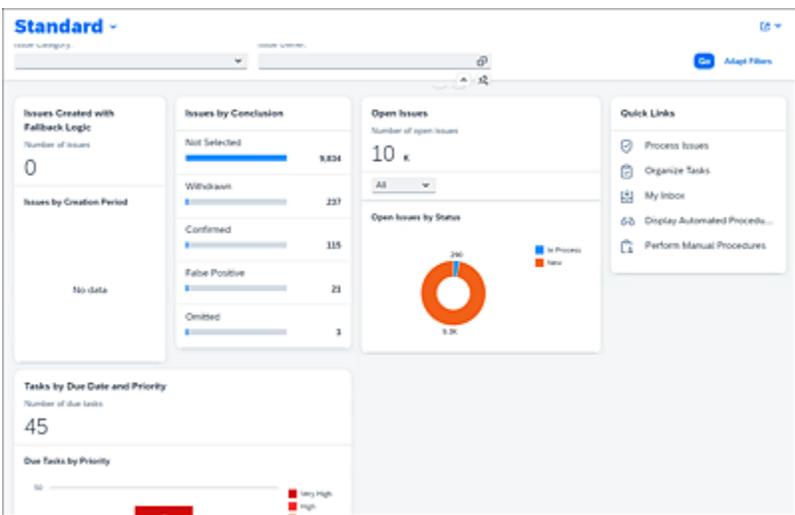
- **Breakdown of Procedure Runs Overtime**

This dashboard provides the details of the number of found items identified for each procedure during the report execution period. There are more filters available

using which the report can be reloaded for specific controls, procedure types, procedures, destinations and work packages.

- **Issue Overview**

The **Issue Overview** page (see [Figure 12.24](#)) is like an entry page that gives the complete summary of issues with various aspects such as the users who are processing the found issues and the users who are working on the tasks. Further, it gives the details of the total number of open issues and the current status as to whether they are newly reported issues or already in the remediation process.



**Figure 12.24** Issue Overview Dashboard

## **12.4 Summary**

This chapter offered an introductory overview of SAP Financial Compliance Management and is an exploration of the solution's offerings, various master data elements within the standard solution, and their configuration for managing internal compliance requirements. It further detailed SAP Financial Compliance Management's role as a platform for evaluating controls through both automated and manual procedures, along with the process of addressing identified issues.

Moreover, the chapter provided insights into various master data and compliance dashboards available in SAP Financial Compliance Management. It briefly outlined the information each report offers, giving you a glimpse into the comprehensive reporting capabilities of the system.

# A The Authors



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**Ramakrishna Chaitanya** is a chartered accountant with more than 10 years of experience in the areas of SAP GRC solutions, including SAP Process Control, SAP Risk Management, and SAP Audit Management. As an advisor, he has helped clients implement SAP GRC solutions for managing risks and controls in an automated environment. He has worked on analyzing business processes across various SAP solutions to identify potential risks and control checkpoints. He has led multiple SAP Process Control implementation projects, as well as projects converting existing risk and control matrices to suit the SAP GRC environment. He has implemented survey design in SAP Process Control to monitor GDPR compliance for a leading company in the consumer goods industry.

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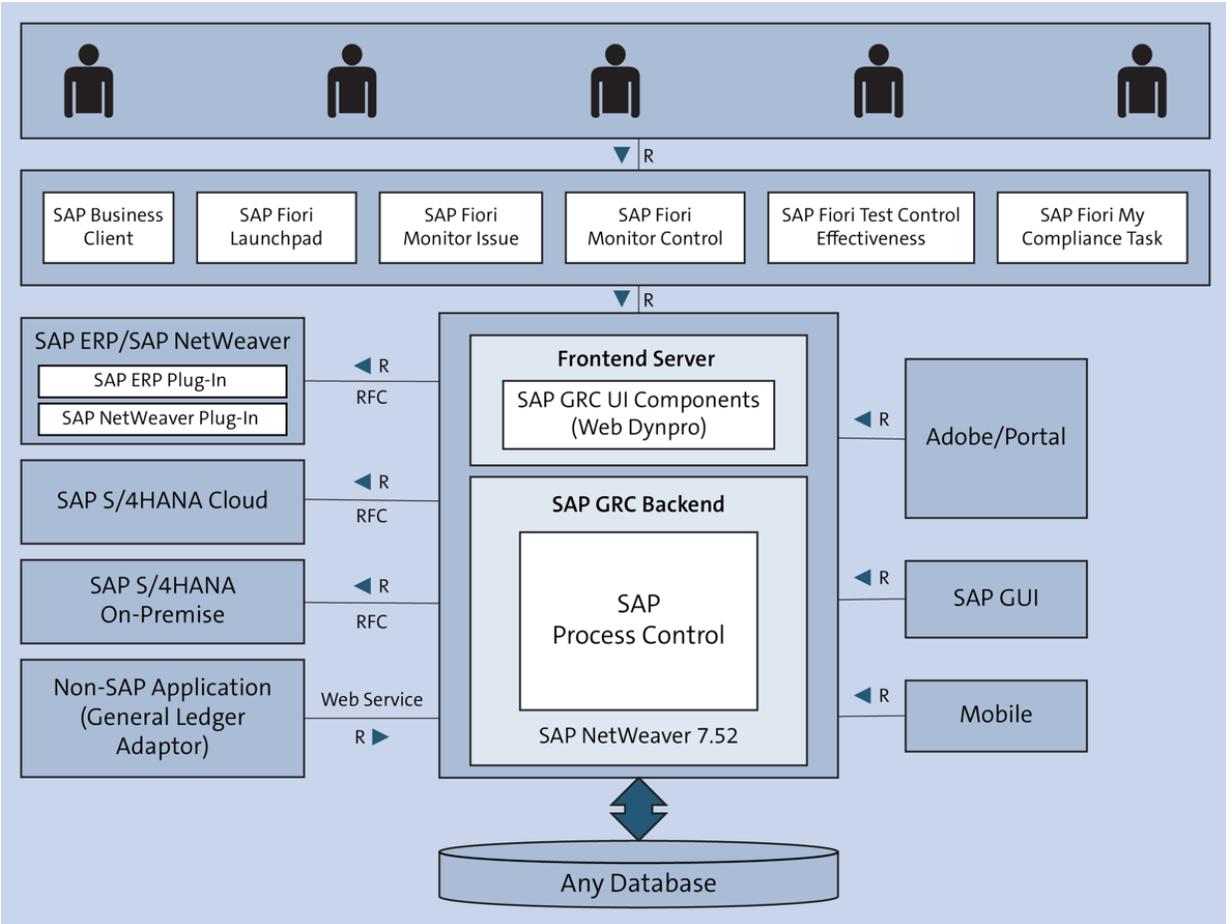
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**Figure 1.1** SAP Process Control Architecture

Risk: Global consolidation process														
Organizational Unit: Power Ltd			Risk Category: Finance			ID: RISK/50001161								
General	Roles	Key Risk Indicators	Analysis	Responses	Risk Incidents	Influenced Risks	Underlying Risks	Surveys	Attachments & Links	Issues	Policies			
<b>Responses</b>														
View: [Standard View]										Create	Assign	Open	Remove	Print Vi
Response Type	Name	Owner	Organizational Unit	Status	Completeness (%)	Effectiveness	Effective From	Effective To						
Mitigate	Tone from the Top	Sandeep	Power Ltd	Active	99	Effective	31.05.2023	31.12.9999						
Control	PC Control - Maintenance of GL Accounts	SAIKRISHNA1	Power Ltd	Active	100	Effective	04.11.2023	31.12.9999						
Control	PC Control - Global Accounting Manual	SAIKRISHNA1	Power Ltd	Active	0	Ineffective	04.11.2023	31.12.9999						
										Save	Cancel	Save And New Validation	Switch to Graphical View	

**Figure 1.2** Controls Assigned as Responses in SAP Risk Management

2023-033 / Financial Reporting / Financial Statement - Balance Sheet /

### Accounts Payable

General Risks (0) Controls (0) Procedures (0)

Description Basic  
 Person Responsible: Sai Krishna

Risks (0)

Remove +

ID	Name	Risk Level (Inherent)	Risk Level (Residual)	Validity
No entries found				

Procedures (0)

Add Edit

Type	Status	Title	Person Responsible	Start Date
No entries found				

Business Rule

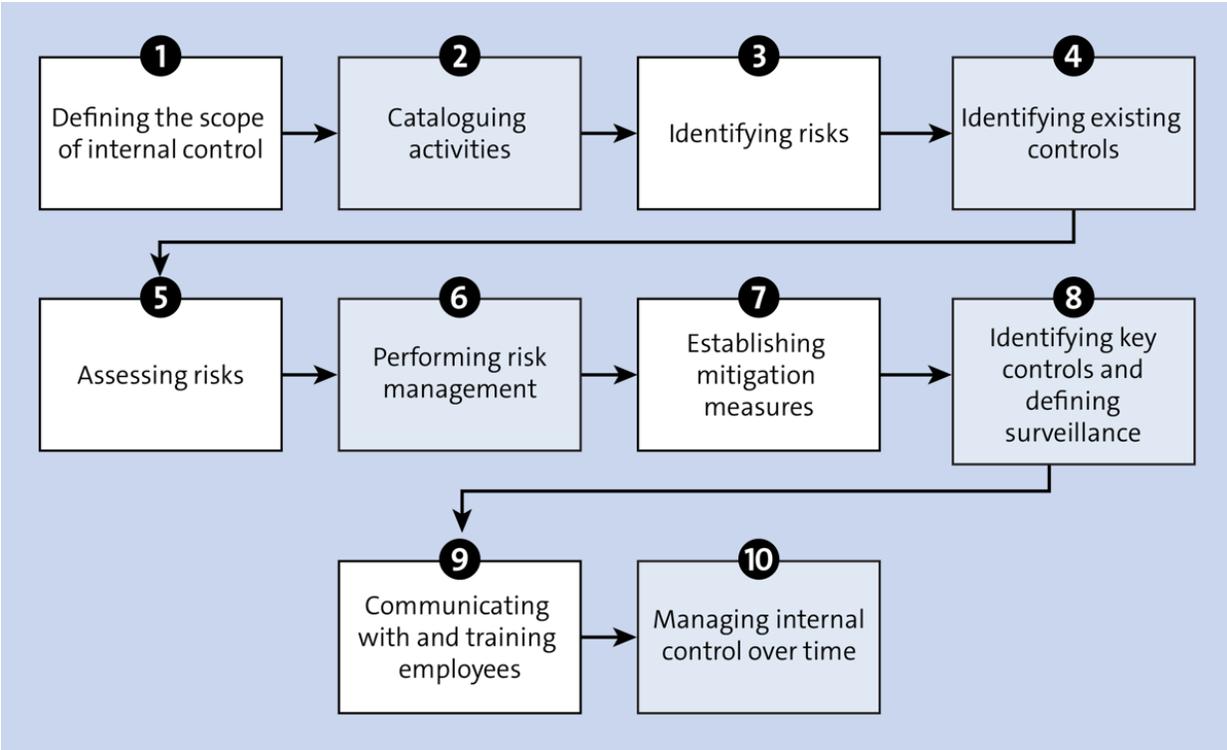
- Detection
- Test
- Question

**Figure 1.3** Usage of Business Rules from SAP Process Control to Define Procedures in SAP Audit Management

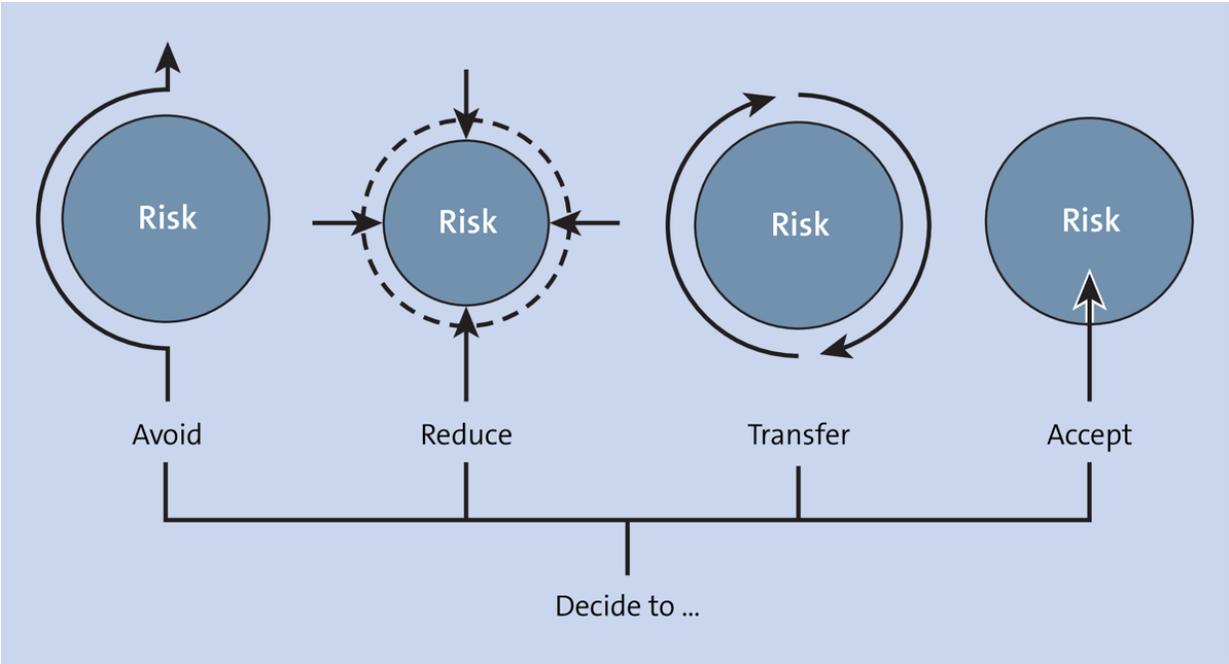
The screenshot displays the SAP Audit Management interface for a finding. At the top, the SAP logo and 'Finding' are visible. The finding title is 'IFRS checklist not found' with ID '2023-033\_F00000'. Two buttons, 'Obsolete' and 'Raise Issue', are located in the top right. Below the title, the finding details are shown: Status 'Open', Type 'Compliance, and/or design', Category 'Concerned Process owner', and Ranking 'High'. A navigation bar includes 'General', 'Documents', 'Risks', 'Controls (0)', 'Action Plans (1)', 'Procedures (0)', and 'Activities'. The 'Action Plans' tab is active, showing a table with one entry:

ID	Title	Type	Deadline	Status
2023-033_F00000-A01	Implement IFRS training	Improvement Action Plan	21.11.2023	Completed

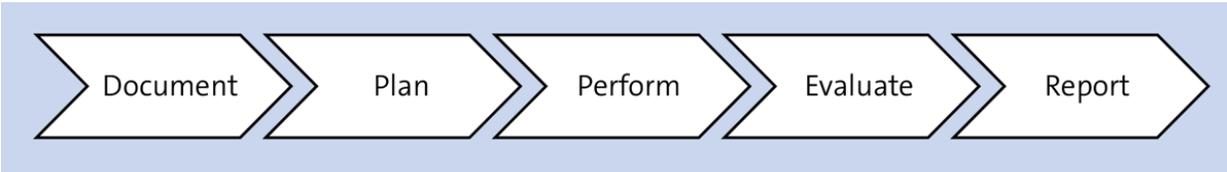
**Figure 1.4** Option to Raise an Issue in SAP Audit Management



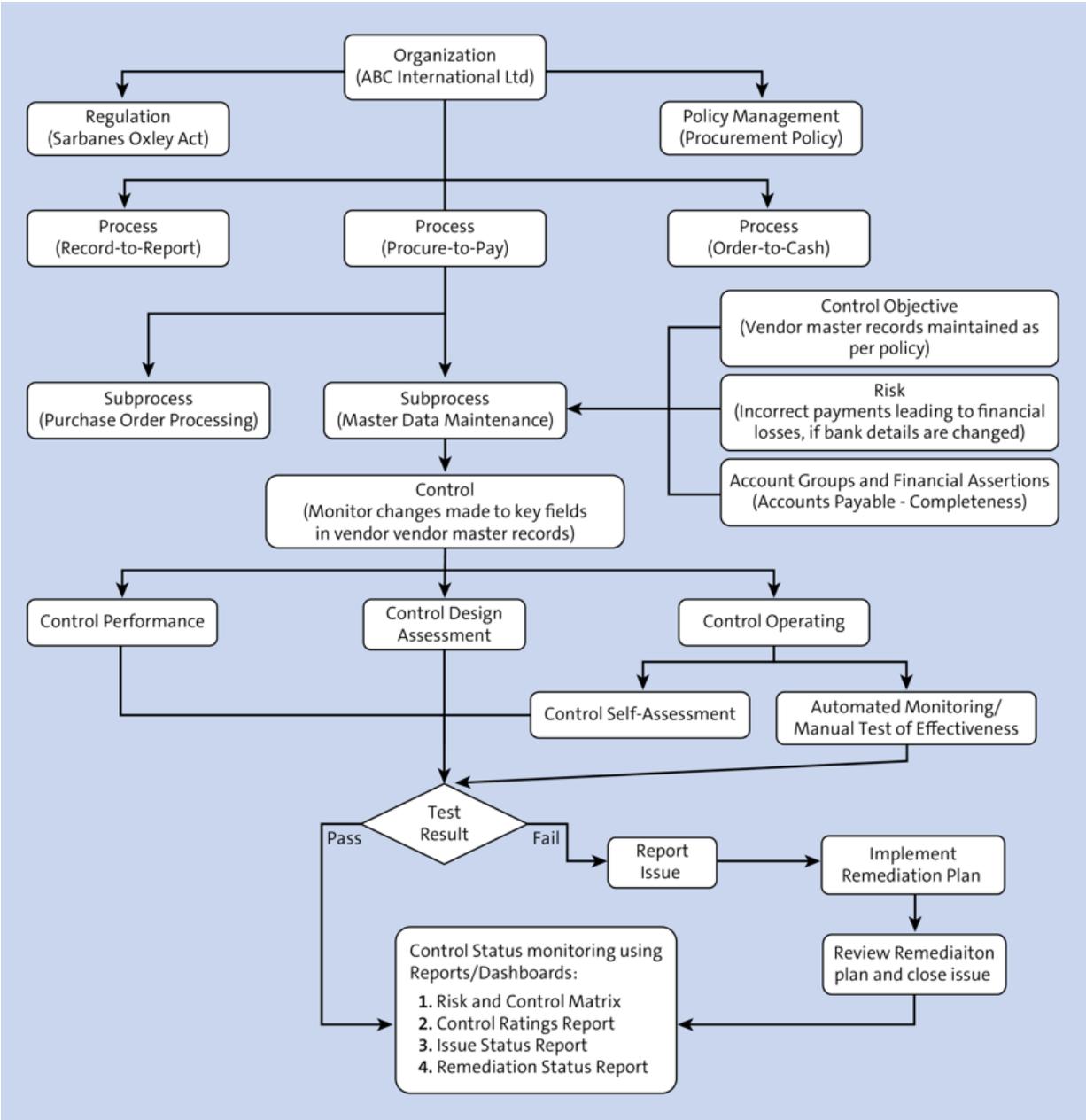
**Figure 2.1** Key Steps for Handling Internal Controls Effectively



**Figure 2.2** Risk Management Strategies



**Figure 2.3** Lifecycle of Internal Control Management Processes



**Figure 2.4** Overview of SAP Process Control

Add New System

Product:

Version:

**Figure 3.1** Add New System Screen

Create License Key Request

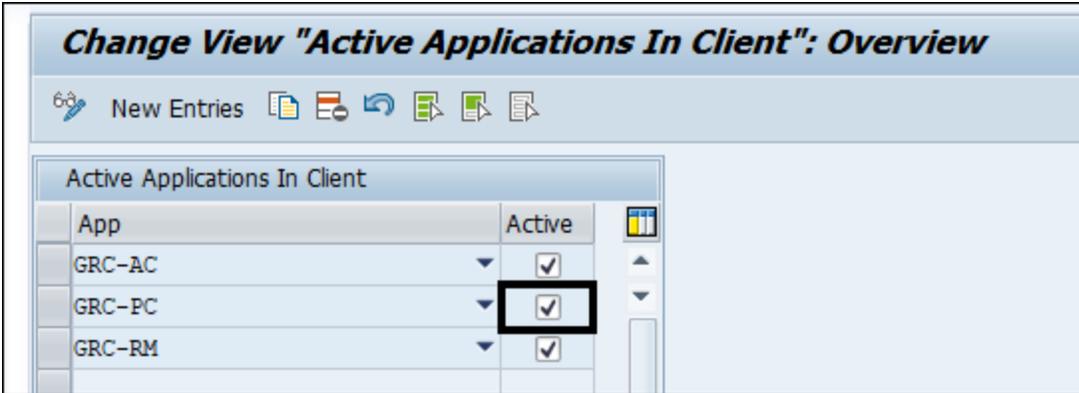
License Type\*: Standard - Web Application Server ABAP or ABAP+JAVA

Hardware Key\*:

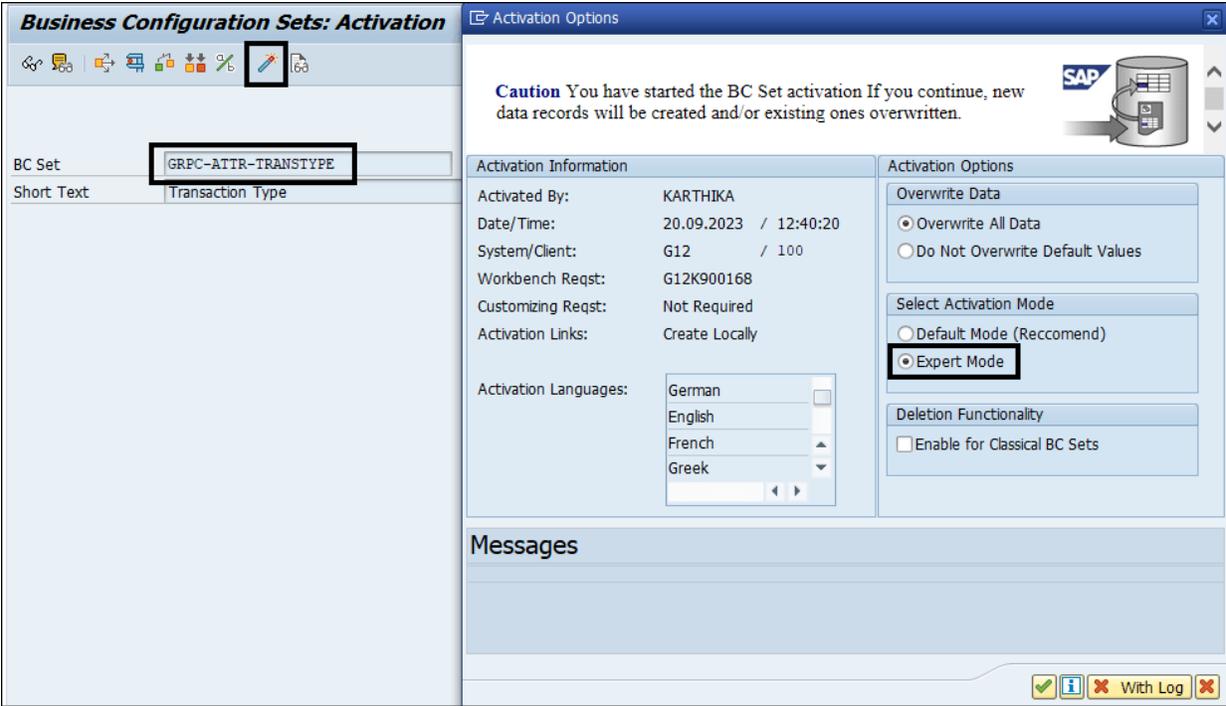
Valid until\*: 31-12-9999

Add Reset Cancel

**Figure 3.2** Create License Key Request Screen



**Figure 4.1** Activate the SAP Process Control Application



**Figure 4.2** BC Set Activation

**Business Configuration Sets: Activation Logs**

20.09.2023 um 12:40:20  
 18.09.2023 um 19:42:44  
 18.09.2023 um 19:42:22  
 GRPC-ATTR-TRANSTYPE  
 18.01.2023 um 18:33:47

Define BC Sets | BC Set Overall View | 4 | 0 | 0

Messages:

Type	BC Sets	Object	Message Text	Key Field	Info...
Success	GRPC-ATTR-TRANS...		BC Set GRPC-ATTR-TRANSTYPE passed to activate		
Success	GRPC-ATTR-TRANS...	VC_GR...	Customizing object VC_GRPATTR passed to activation		
Success	GRPC-ATTR-TRANS...	VC_GR...	Activation Simulation of customizing object VC_GRPATTR successful		
Success	GRPC-ATTR-TRANS...		Activation Simulation of BC Set GRPC-ATTR-TRANSTYPE ended succ...		

**Figure 4.3** BC Set Activation Log

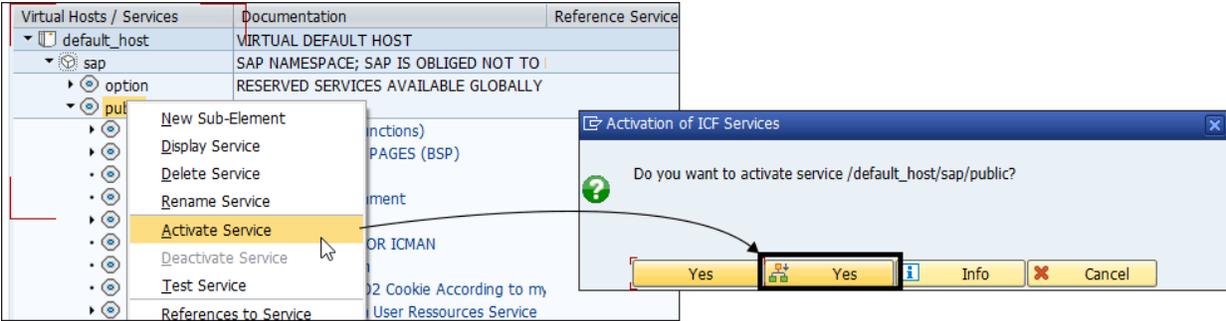
**Define Services**

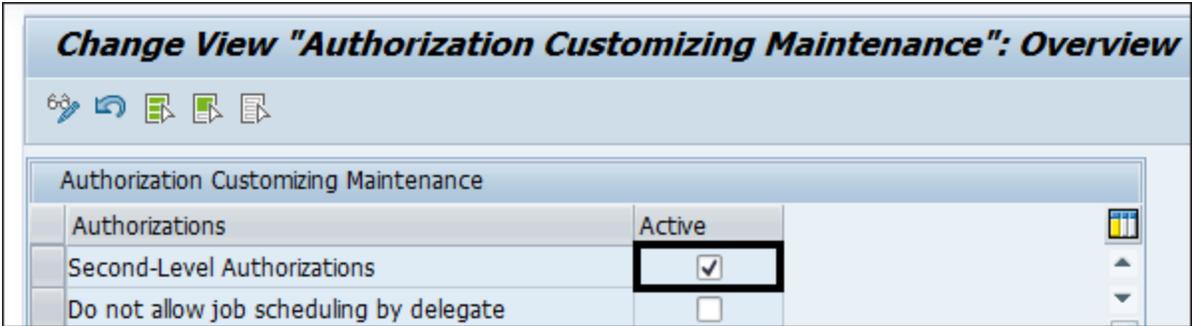
Filter for Calling ICF Hierarchy

Hierarchy Type	<input type="text" value="SERVICE"/>	
Virtual Host	<input type="text"/>	
Service Path	<input type="text"/>	
Service Name	<input type="text"/>	
Reference Service	<input type="text"/>	
Description	<input type="text"/>	
Language	<input type="text" value="English"/>	

**Figure 4.4** Activating Services Using Transaction SICF



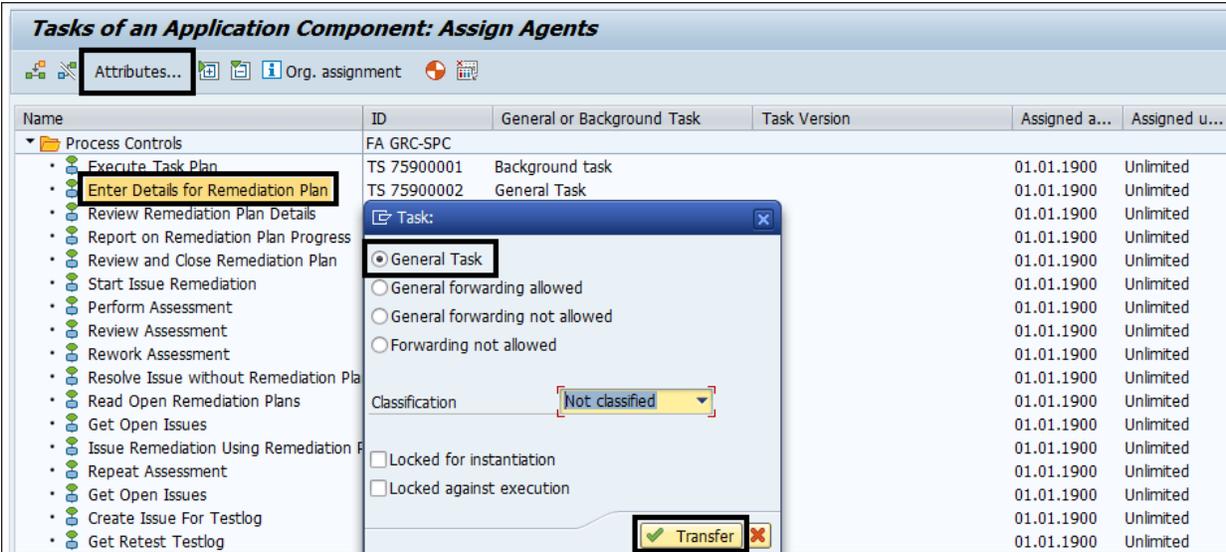
**Figure 4.5** Activation of the “Public” Service and Subnodes



**Figure 4.6** Activation of Second-Level Authorizations

<b>Task Customizing Overview</b>			
<ul style="list-style-type: none"> <li>▼ GRC</li> <li>• GRC-ACP</li> <li>• GRC-PCP</li> <li>• GRC-RM</li> <li>• GRC-AC</li> <li>• GRC-SPC</li> <li>• GRC-AC</li> </ul>	Governance, Risk and Compliance GRC Access Control Plug-In GRC Process Control Plug-in GRC Risk Management Access Control Process Controls Access Control	Assign Agents Assign Agents Assign Agents	Activate event linking Activate event linking Activate event linking

**Figure 4.7** Activities to Be Performed under Task-Specific Customizing



**Figure 4.8** Configuration of Tasks to Enable the Workflow

**Tasks of an Application Component: Assign Agents**

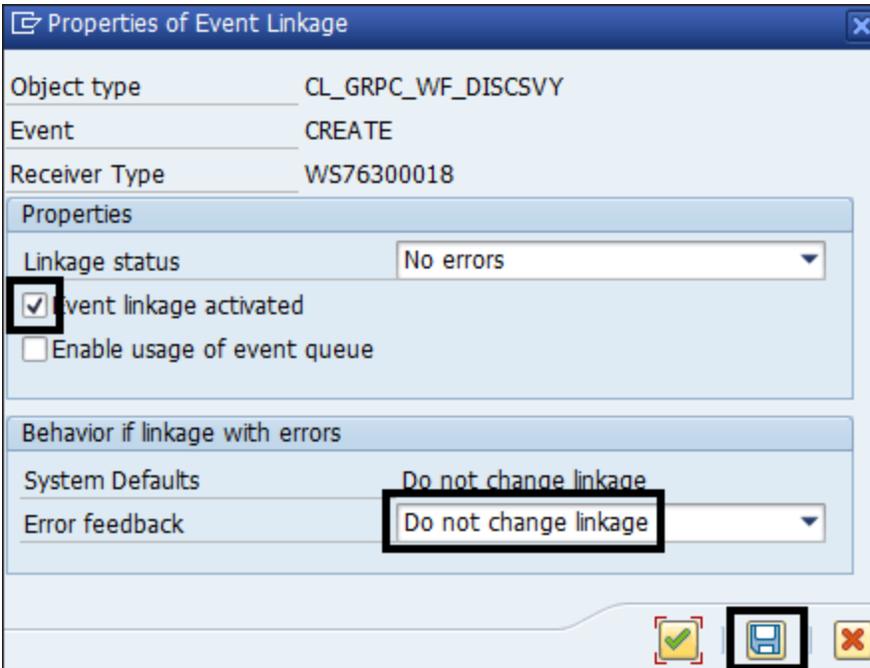
Attributes... Org. assignment

Name	ID	General or Background Task	Task Version	Assigned a...	Assigned u...
Process Controls	FA GRC-SPC				
• Execute Task Plan	TS 75900001	Background task		01.01.1900	Unlimited
• Enter Details for Remediation Plan	TS 75900002	General Task		01.01.1900	Unlimited
• Review Remediation Plan Details	TS 75900003	General Task		01.01.1900	Unlimited
• Report on Remediation Plan Progress	TS 75900004	General Task		01.01.1900	Unlimited
• Review and Close Remediation Plan	TS 75900005	General Task		01.01.1900	Unlimited
• Start Issue Remediation	TS 75900006	General Task		01.01.1900	Unlimited
• Perform Assessment	TS 75900007	General Task		01.01.1900	Unlimited
• Review Assessment	TS 75900008	General Task		01.01.1900	Unlimited
• Rework Assessment	TS 75900009	General Task		01.01.1900	Unlimited
• Resolve Issue without Remediation Pla	TS 75900010	General Task		01.01.1900	Unlimited
• Read Open Remediation Plans	TS 75900011	Background task		01.01.1900	Unlimited
• Get Open Issues	TS 75900012	Background task		01.01.1900	Unlimited
• Issue Remediation Using Remediation F	TS 75900013	General Task		01.01.1900	Unlimited

**Figure 4.9** Tasks Defined as Background by Default

Event Linkage: Triggering events			
Object			
Tasks/Events	Task/Event Description	Activate/dea...	Details
• TS 76307975	Review and Close Remediation Plan		
• TS 76307989	Enter Details for CAPA Plan		
• TS 76307990	Review CAPA Plan Details		
• TS 76307991	Rework CAPA Plan		
• TS 76307993	Perform Corrective action		
• TS 76307994	Perform Preventive action		
• TS 76307995	Approve CAPA Execution		
• TS 76307996	Rework CAPA Execution		
• TS 76307997	CAPA Plan Cancelled - Close Issue		
• TS 76308063	Display Data Sheet		
• TS 76308091	Review Due Date Change		
• TS 76507942	Get Issues Present Flag		
• TS 76507943	Create Manual Control Performance		
• TS 76507944	Perform Manual Control Performance		
• TS 76507945	Rework Manual Control Performance		
• TS 76507946	Review Manual Control Performance		
▶ WS 75900001	TaskPlan		
• WS 75900002	Process: Remediation Plan		
• WS 75900003	Process: Issue		
▶ WS 75900004	Process: Assessment		
▶ WS 75900005	Process: Testlog		
▶ WS 75900006	Process: Testing		
▶ WS 75900007	Process: Signoff		
▶ WS 75900008	Display Report		
▶ WS 75900014	PROCESS: AOD		
• WS 76300012	Process: CAPA Plan		
▼ WS 76300018	Disclosure survey		
• CL_GRPC_WF_DISCSVY-CREATE	CL Business Object of Disclosure SuCreate W	◆ Deactivated	
▶ WS 76300030	Process: Propose Control		
• WS 76300038	Remediation Plan		

**Figure 4.10** Review the Status of the Workflow



**Figure 4.11** Activation of Event Linkage

Event Linkage: Triggering events			
Object			
Tasks/Events	Task/Event Description	Activate/dea...	Details
• TS 76307975	Review and Close Remediation Plan		
• TS 76307989	Enter Details for CAPA Plan		
• TS 76307990	Review CAPA Plan Details		
• TS 76307991	Rework CAPA Plan		
• TS 76307993	Perform Corrective action		
• TS 76307994	Perform Preventive action		
• TS 76307995	Approve CAPA Execution		
• TS 76307996	Rework CAPA Execution		
• TS 76307997	CAPA Plan Cancelled - Close Issue		
• TS 76308063	Display Data Sheet		
• TS 76308091	Review Due Date Change		
• TS 76507942	Get Issues Present Flag		
• TS 76507943	Create Manual Control Performance		
• TS 76507944	Perform Manual Control Performance		
• TS 76507945	Rework Manual Control Performance		
• TS 76507946	Review Manual Control Performance		
▶ WS 75900001	TaskPlan		
• WS 75900002	Process: Remediation Plan		
• WS 75900003	Process: Issue		
▶ WS 75900004	Process: Assessment		
▶ WS 75900005	Process: Testlog		
▶ WS 75900006	Process: Testing		
▶ WS 75900007	Process: Signoff		
▶ WS 75900008	Display Report		
▶ WS 75900014	PROCESS: AOD		
• WS 76300012	Process: CAPA Plan		
▼ WS 76300018	Disclosure survey		
• CL_GRPC_WF_DISCSVY-CREATE	CL Business Object of Disclosure SuCreate W	<input checked="" type="checkbox"/> Activated	
▶ WS 76300030	Process: Propose Control		

**Figure 4.12** Activated Status of the Workflow Stage

**Change View "Relevant Roles for GRC Authorization": Overview**

New Entries

Relevant Roles for GRC Authorization

Entity	Role	Unique	Application
CORPORATE	SAP_GRC_SPC_GL...	<input type="checkbox"/>	Process Control
CORPORATE	SAP_GRC_SPC_GL...	<input type="checkbox"/>	Process Control
CORPORATE	SAP_GRC_SPC_GL...	<input type="checkbox"/>	Process Control
CORPORATE	SAP_GRC_SPC_SO...	<input type="checkbox"/>	Process Control
G_AI	SAP_GRC_FN_ADI...	<input checked="" type="checkbox"/>	Process Control and Risk Ma...
OPP	SAP_GRC_RM_API...	<input type="checkbox"/>	Process Control and Risk Ma...
ORGUNIT	SAP_GRC_RM_API...	<input type="checkbox"/>	Process Control and Risk Ma...
ORGUNIT	SAP_GRC_RM_API...	<input type="checkbox"/>	Process Control and Risk Ma...
ORGUNIT	SAP_GRC_RM_API...	<input type="checkbox"/>	Process Control and Risk Ma...
ORGUNIT	SAP_GRC_SPC_CR...	<input type="checkbox"/>	Process Control
ORGUNIT	SAP_GRC_SPC CR...	<input type="checkbox"/>	Process Control and Risk Ma...

**Figure 4.13** Entity Role Assignment Configuration

**Change View "Relevant Roles for GRC Authorization": Overview**

New Entries

Entity	Role	Unique	Application
CONTROL	SAP_GRC_SPC_CRS_ISSUE_A...	<input type="checkbox"/>	Process Control and Risk !
CONTROL	SAP_GRC_SPC_CRS_PRC_TES...	<input type="checkbox"/>	Process Control
CONTROL	SAP_GRC_SPC_CTL_OPERATOR	<input type="checkbox"/>	Process Control
CONTROL	Z_SAP_GRC_SPC_CRS_REM_O...	<input type="checkbox"/>	Process Control and Risk !
CORPORATE	SAP_GRC_RM_API_CENTRAL_...	<input type="checkbox"/>	Process Control and Risk !
CORPORATE	SAP_GRC_RM_API_CEO_CFO	<input checked="" type="checkbox"/>	Process Control and Risk !
CORPORATE	SAP_GRC_RM_API_INTERNAL...	<input type="checkbox"/>	Process Control and Risk !

**Figure 4.14** Relevant Role for SAP GRC Authorization

**Organization**

**Organization: Electric Power**

Parent Organization: - ID: 50000889  
 Timeframe: Year 2023 Effective Date: 01.01.2023

Risk Appetite
  Risk Thresholds
  Users
  Owners
  AC Roles
  Assignments
  Roles
  Issues
  Attachments and Links

**Roles**

Show: All

Assign Replace Remove

Role	Regulation	Name	User	Valid From	Valid To
CEO/CFO		BGUSER	BGUSER	20.09.2023	31.12.9999
Central Risk Manager					

**Figure 4.15** User Assignment When a Role Is Marked as Unique

**Control**

**Control: Global Accounting Manual**

Parent Organization: Electric Power      Parent Subprocess: Financial Reporting      Allow Local Changes: No  
 Timeframe: Year 2023      Effective Date: 01.01.2023

**Roles**

Show: All Assign Replace

Role	Regulation	Name	User	Valid From	Valid To
Cross Regulation Control Owner					
Cross Regulation Control Performer					

**Figure 4.16** Review the New Entity-Role Assignment

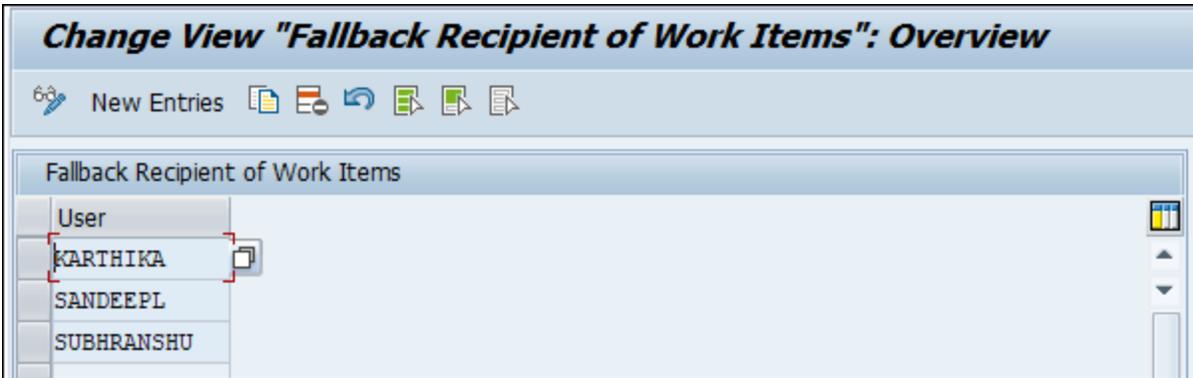
The screenshot shows the SAP 'New Entries: Overview of Added Entries' screen. At the top, there is a toolbar with various icons, including a save icon (floppy disk) which is highlighted with a black box. Below the toolbar is a header bar with the title 'New Entries: Overview of Added Entries' and several action icons. The main content area is titled 'Customized Business Events' and contains a table with the following data:

Business Event	Sort	Role	Entity ID	Subentity	Business Event Name
0FN_AHISSUE_DE...	2	SAP_GRC_SPC_CRS_CTL_OWNER	CONTROL		Default processor for ad-hoc issue

**Figure 4.17** Customized Business Events Screen Elements

<b>Change View "Customized Business Events": Overview</b>						
 New Entries       BC Set: Change Field Values						
Customized Business Events						
Business Event	Sort	Role	Entity ID	Subentity	Business Event Name	
0FN_AHISSUE_DE...	1	SAP_GRC_SPC_CRS_CTL_OWNER	CONTROL		Default processor for ad-hoc issue	
0FN_AHISSUE_DE...	1	SAP_GRC_SPC_CRS_ICMAN	CORPORATE		Default processor for ad-hoc issue	
0FN_AHISSUE_DE...	1	SAP_GRC_SPC_CRS_POLICY_OWNER	POLICY		Default processor for ad-hoc issue	
0FN_AHISSUE_DE...	1	SAP_GRC_SPC_CRS_PRC_OWNER	PROCESS		Default processor for ad-hoc issue	
0FN_AHISSUE_DE...	1	SAP_GRC_SPC_CRS_SPR_OWNER	SUBPROCESS		Default processor for ad-hoc issue	
0FN_AHISSUE_DE...	1	SAP_GRC_SPC_GLOBAL_ORG_OWNER	ORGUNIT		Default processor for ad-hoc issue	
0FN_AHISSUE_DE...	1	SAP_GRC_SPC_GLOBAL_REG_ADMIN	REGULATION		Default processor for ad-hoc issue	
0FN_AHISSUE_DE...	2	SAP_GRC_SPC_GLOBAL_ORG_OWNER	ECONTROL		Default processor for ad-hoc issue	
0FN_AM_BRFP_NO...	1	SAP_GRC_SPC_CRS_CTL_OWNER	CONTROL		BRF plus notification	
0FN_AM_BRFP_NO...	1	SAP_GRC_SPC_FDA_CTL_OWNER	CONTROL		BRF plus notification	
0FN_AM_BRFP_NO...	1	SAP_GRC_SPC_SOX_CTL_OWNER	CONTROL		BRF plus notification	
0FN_ISSUE NOTI...	1	SAP_GRC_SPC_CRS_CTL_OWNER	CONTROL		Send notification to object owner	

**Figure 4.18** Screen with All the Custom Agent Determination Rules



**Figure 4.19** Review Fallback Users Maintained for the System

**Create Root Organizations**

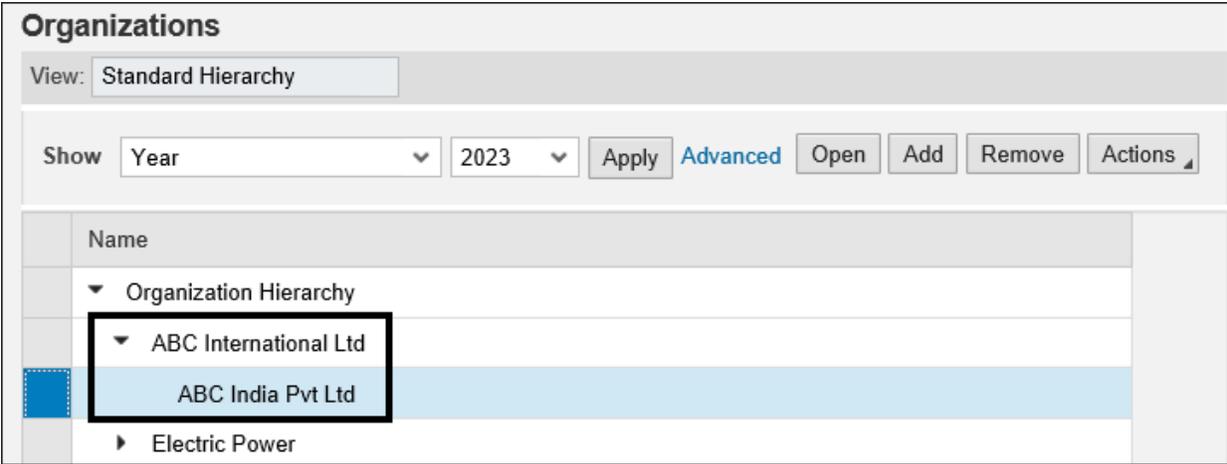


Select the Organization View

Details

Root Organizational Unit	<input type="text" value="ABC International Ltd"/>
Child Organizational Unit	<input type="text" value="ABC India Pvt Ltd"/>
Valid From	<input type="text" value="01.01.2023"/>

**Figure 4.20** Configuration of the Root Organization



**Figure 4.21** Organization View from the Organization Work Item

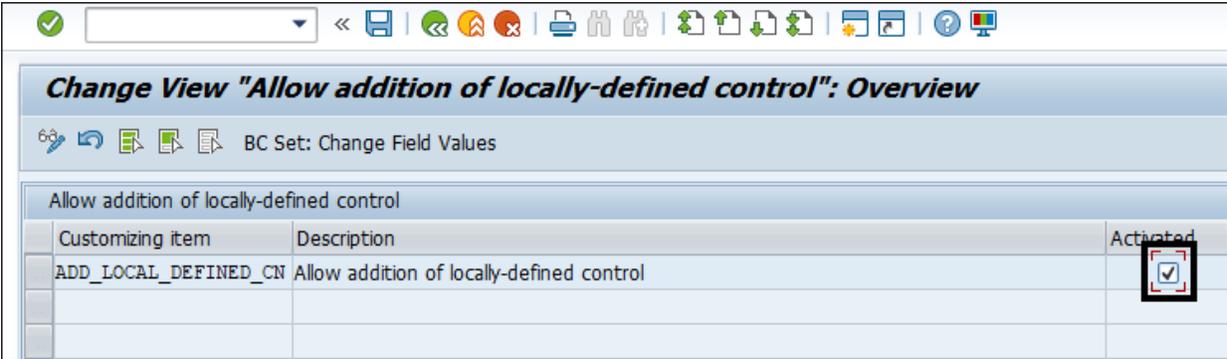
**Change View "Activate Master Data Changes Workflow": Overview**

New Entries BC Set: Change Field Values

Activate Master Data Changes Workflow

Entity ID	Entity Type	Approval	Notify
ACC_GROUP	Account Group	<input type="checkbox"/>	<input type="checkbox"/>
OBJECTIVE	Control Objective	<input type="checkbox"/>	<input type="checkbox"/>
CONTROL	Control	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
CRISK	Risk Template	<input type="checkbox"/>	<input type="checkbox"/>
ECONTROL	Indirect Entity-Level Control	<input type="checkbox"/>	<input type="checkbox"/>
ORGUNIT	Organization	<input type="checkbox"/>	<input type="checkbox"/>
PROCESS	Process	<input type="checkbox"/>	<input type="checkbox"/>
SUBPROCESS	Subprocess	<input type="checkbox"/>	<input type="checkbox"/>
XCONTROL	Central Control	<input type="checkbox"/>	<input type="checkbox"/>
XECGROUP	Central Indirect Entity-Level Control Group	<input type="checkbox"/>	<input type="checkbox"/>
XECONTROL	Central Indirect Entity-Level Control	<input type="checkbox"/>	<input type="checkbox"/>
XPROCESS	Central Process	<input type="checkbox"/>	<input type="checkbox"/>
XSUBPROCESS	Central Subprocess	<input type="checkbox"/>	<input type="checkbox"/>

**Figure 4.22** Activate Master Data Changes Workflow Configuration Screen



**Figure 4.23** Activate the Ability to Add Locally Defined Controls

**Configuration of RFC Connections**

Generate RFC Callback Positive Lists  
  Activate Non-Empty Whitelists  
  Positive List for Dynamic Connection

RFC callback check not secure

RFC Connections	Ty...	PL...	Comment
<ul style="list-style-type: none"> <li>ABAP Connections</li> </ul>	3		
<ul style="list-style-type: none"> <li> <ul style="list-style-type: none"> <li>DYNAMIC_DEST_CALLBACK_WHITELIST</li> </ul> </li> </ul>	3	-	Callback Positive List for Dynamic Destinations
<ul style="list-style-type: none"> <li> <ul style="list-style-type: none"> <li>G12</li> </ul> </li> </ul>	3	-	
<ul style="list-style-type: none"> <li> <ul style="list-style-type: none"> <li>G12CLNT100</li> </ul> </li> </ul>	3	-	G12CLNT100
<ul style="list-style-type: none"> <li> <ul style="list-style-type: none"> <li>G12_WORKFLOW_000</li> </ul> </li> </ul>	3	-	SAP Business Workflow
<ul style="list-style-type: none"> <li> <ul style="list-style-type: none"> <li>G12_WORKFLOW_100</li> </ul> </li> </ul>	3	-	G12_WORKFLOW_100
<ul style="list-style-type: none"> <li> <ul style="list-style-type: none"> <li>G12_WORKFLOW_100_1</li> </ul> </li> </ul>	3	-	SAP Business Workflow
<ul style="list-style-type: none"> <li> <ul style="list-style-type: none"> <li>TGDCL100</li> </ul> </li> </ul>	3	-	GRC 12 TO TGD 100
<ul style="list-style-type: none"> <li> <ul style="list-style-type: none"> <li>TGDCL210</li> </ul> </li> </ul>	3	-	GRC 12 TO TGD210
<ul style="list-style-type: none"> <li> <ul style="list-style-type: none"> <li>TGDCL300</li> </ul> </li> </ul>	3	-	GRC 12 TO TGD 300
<ul style="list-style-type: none"> <li> <ul style="list-style-type: none"> <li>TGDCL400</li> </ul> </li> </ul>	3	-	GRC 12 TO TGD 400
<ul style="list-style-type: none"> <li> <ul style="list-style-type: none"> <li>TGDCLNT210</li> </ul> </li> </ul>	3	-	GRC 12 TO TGD210
<ul style="list-style-type: none"> <li> <ul style="list-style-type: none"> <li>TGDCLNT300</li> </ul> </li> </ul>	3	-	GRC 12 TO TGD 300
<ul style="list-style-type: none"> <li> <ul style="list-style-type: none"> <li>TGDCLNT400</li> </ul> </li> </ul>	3	-	TGDCLNT400

**Figure 4.24** RFC Connections

**RFC Destination G12CLNT100**

Remote Logon   Connection Test   Unicode Test   Fast Serialization Test 

RFC Destination  

Connection Type  ABAP Connection   Description

Description

Description 1	<input type="text" value="G12CLNT100"/>
Description 2	<input type="text" value="G12CLNT100"/>
Description 3	<input type="text" value="G12CLNT100"/>

Administration   **Technical Settings**   Logon & Security   Unicode   Special Options

Target System Settings

Load Balancing Status

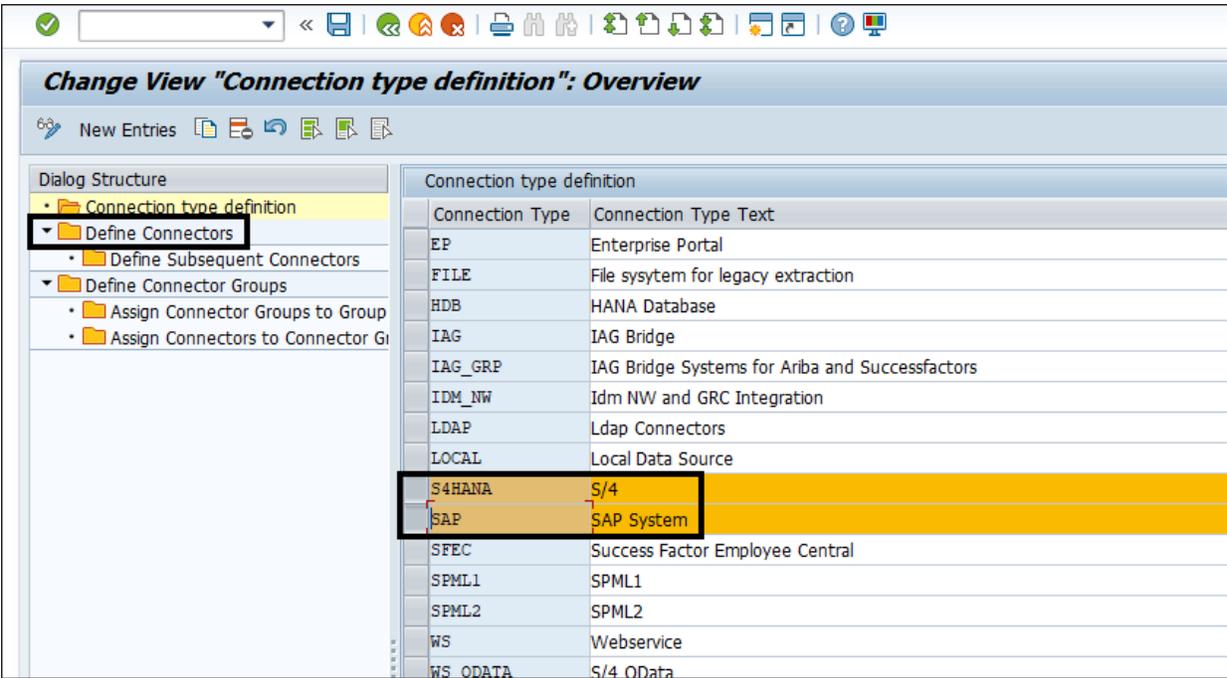
Load Balancing  Yes    No

Target Host    Instance No.

Save to Database as

Save as  Host    IP Address

**Figure 4.25**   RFC Connection Definition



**Figure 4.26** Configuration to Define Connectors for a Connection Type

**Change View "Define Connectors": Overview**

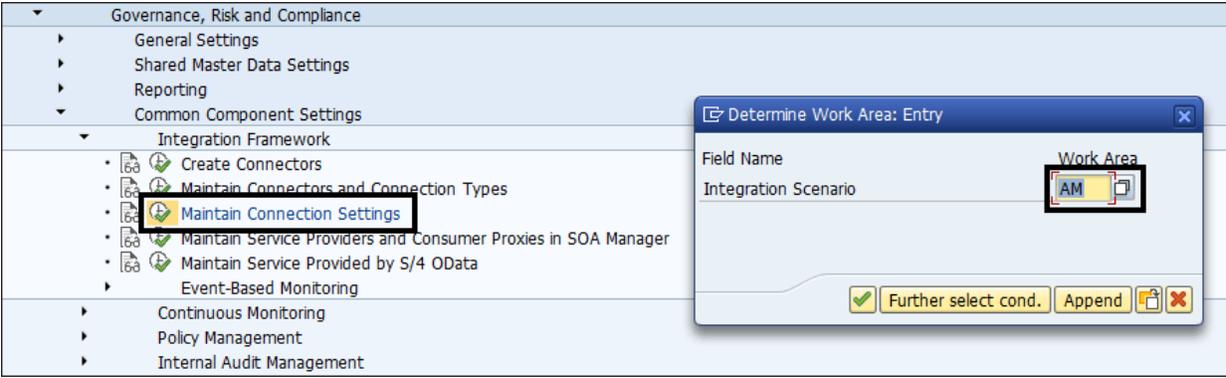
New Entries

Dialog Structure

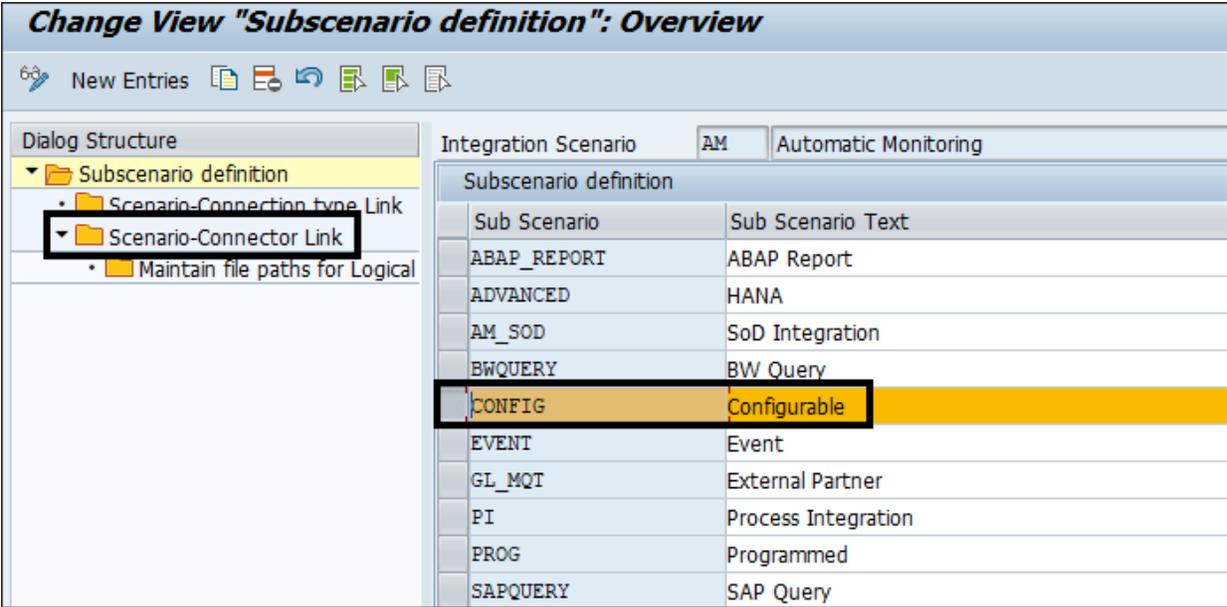
- Connection type definition
- ▼ Define Connectors
  - Define Subsequent Connectors
- ▼ Define Connector Groups
  - Assign Connector Groups to Group
  - Assign Connectors to Connector G

Define Connectors			
Target Connector	Logical Port	Max No. of ...	Wait Time
ER9CLNT001			
GXT_ODATA			
HDBCLNT100	HDBCLNT100	3	
TGDCL100	TGDCL100	3	
TGDCL210	TGDCL210	3	
TGDCL300	TGDCL300	3	
TGDCL400	TGDCL400	3	
TGDCLNT210	TGDCLNT210	3	
TGDCLNT300	TGDCLNT300	3	
TGDCLNT400	TGDCLNT400	3	
TNDCLNT100	TNDCLNT100	3	
TSDCL100	TSDCL100	3	
TSDCLNT100	TSDCLNT100	3	

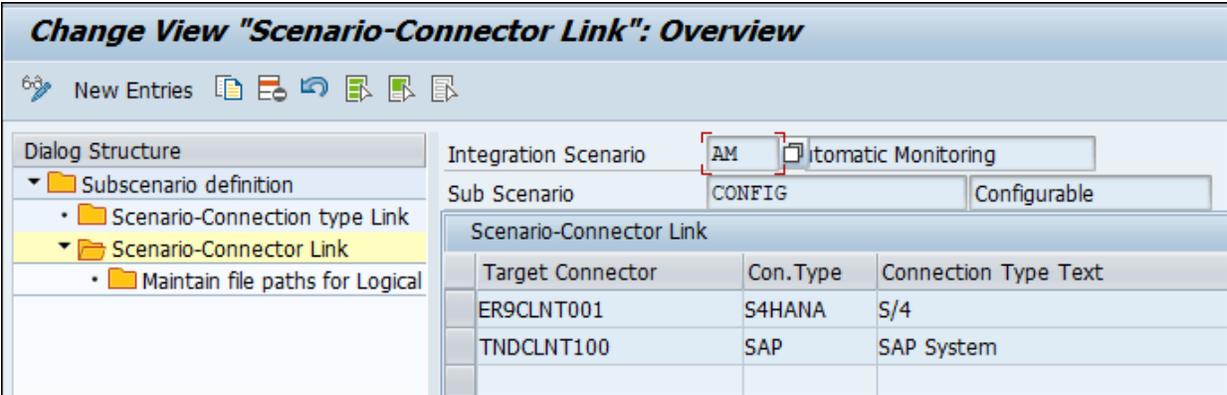
**Figure 4.27** Define Connectors Configuration



**Figure 4.28** Access the Integration Scenario



**Figure 4.29** Access the Subscenario under Integration Scenario



**Figure 4.30** Assigning RFC Connections to Subscenarios

**Change View "Subtypes": Overview**

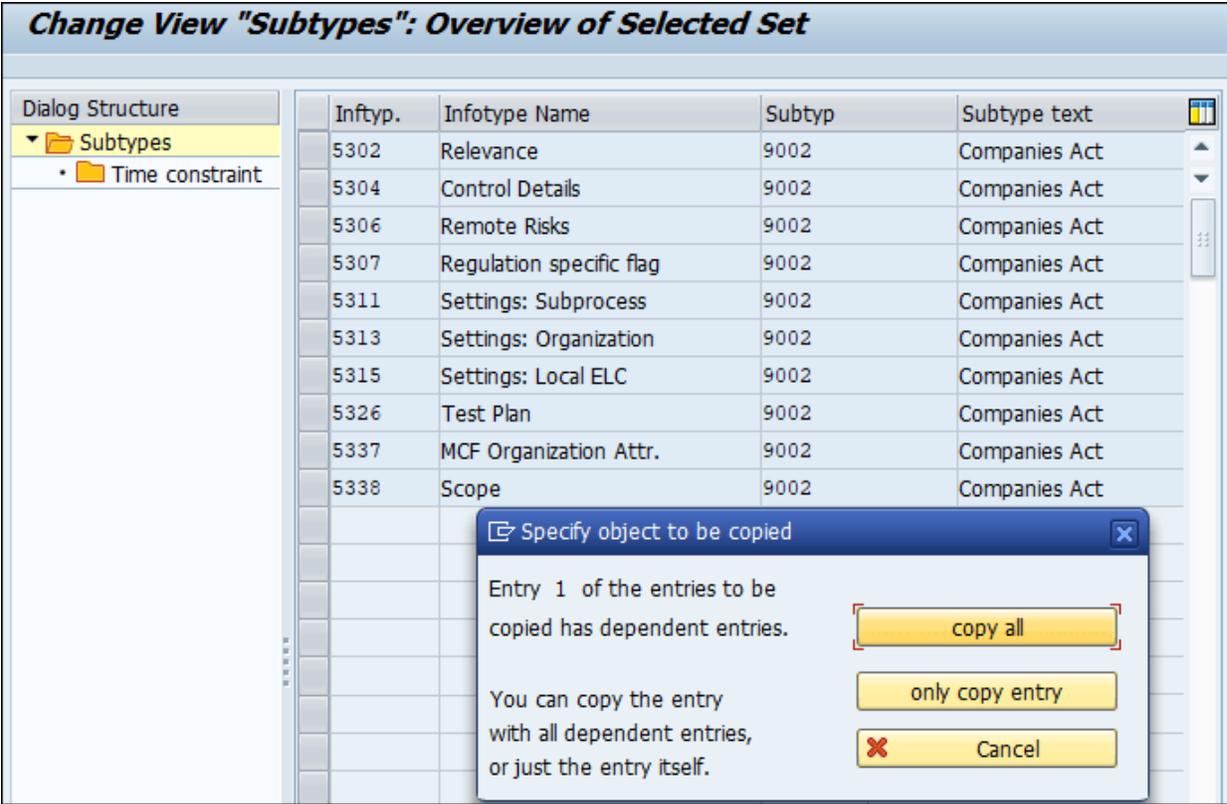
New Entries

Dialog Structure

- Subtypes
  - Time constraint

Inftyp.	Infotype Name	Subtyp	Subtype text
5302	Relevance	5000	SOX
5302	Relevance	5100	FDA
5302	Relevance	9001	Companies Act
5302	Relevance	9010	Sarbanes Oxley Reg
5304	Control Details	5000	SOX
5304	Control Details	5100	FDA
5304	Control Details	9001	Companies Act
5304	Control Details	9010	Sarbanes Oxley Reg
5306	Remote Risks	5000	SOX
5306	Remote Risks	5100	FDA
5306	Remote Risks	9001	Companies Act
5306	Remote Risks	9010	Sarbanes Oxley Reg
5307	Regulation specific flag	5000	SOX
5307	Regulation specific flag	5100	FDA
5307	Regulation specific flag	9001	Companies Act
5307	Regulation specific flag	9010	Sarbanes Oxley Reg
5311	Settings: Subprocess	5000	SOX
5311	Settings: Subprocess	5100	FDA
5311	Settings: Subprocess	9001	Companies Act
5311	Settings: Subprocess	9010	Sarbanes Oxley Reg
5313	Settings: Organization	5000	SOX
5313	Settings: Organization	5100	FDA

**Figure 4.31** Subtypes Configuration for Regulations



**Figure 4.32** Configuration of New Subtypes

**Change View "Define Regulation Configuration": Overview**

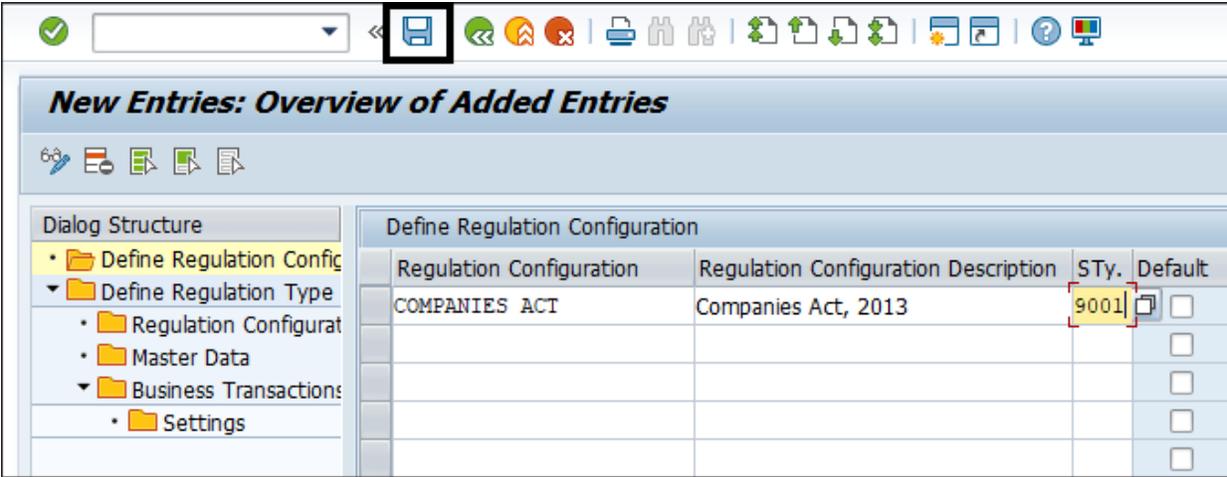
New Entries BC Set: Change Field Values

Dialog Structure

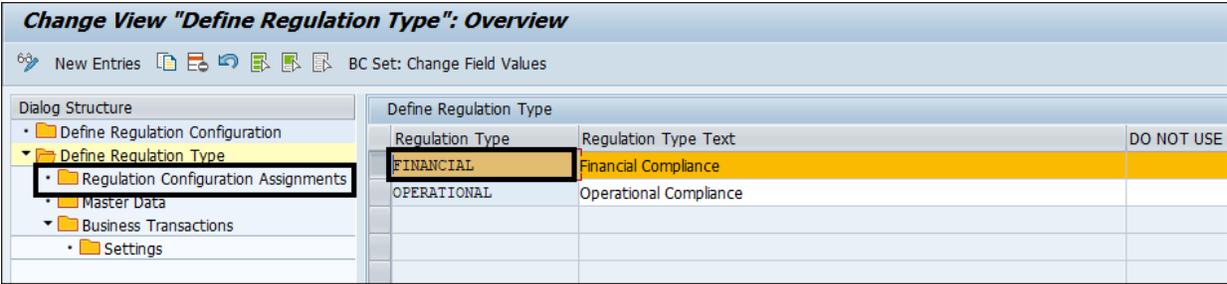
- Define Regulation Configur...
- Define Regulation Type
  - Regulation Configur...
  - Master Data
  - Business Transactions
    - Settings

Regulation C...	Regulation Configuration Description	STy.	Default
FDA	SOX Regulation	5100	<input type="checkbox"/>
SARBANES OX...	Sarbanes Oxley Regulation	9010	<input type="checkbox"/>
SOX	SOX	5000	<input type="checkbox"/>
TSOX	Test SOX		<input type="checkbox"/>

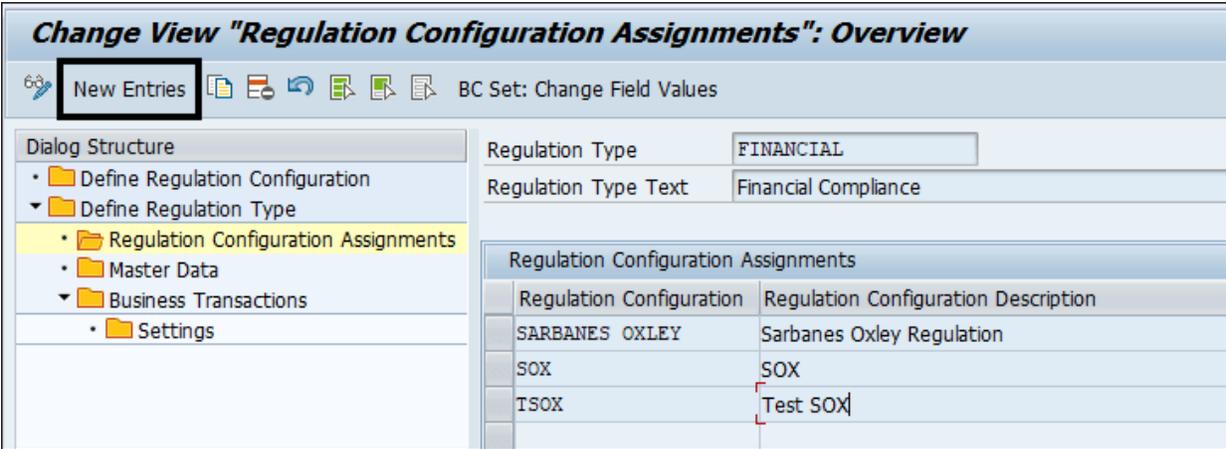
**Figure 4.33** Review Current Regulation Configurations



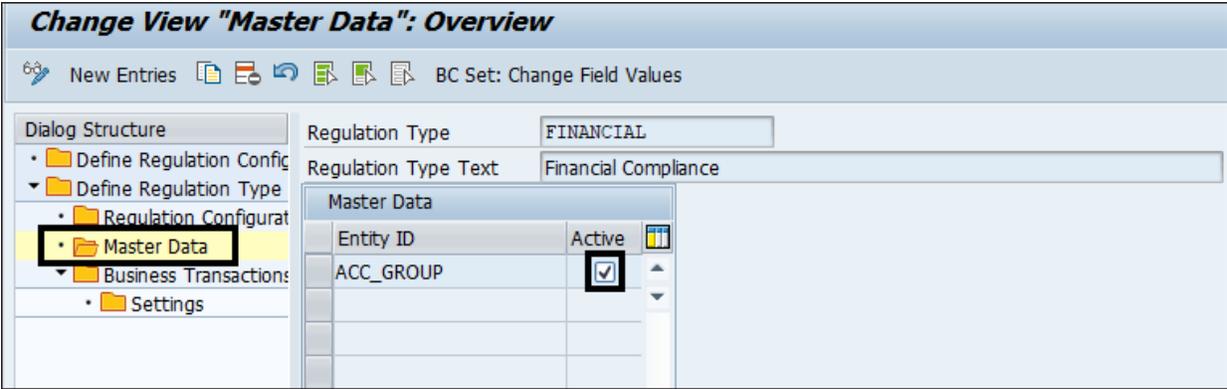
**Figure 4.34** Setting Up New Regulation Configuration



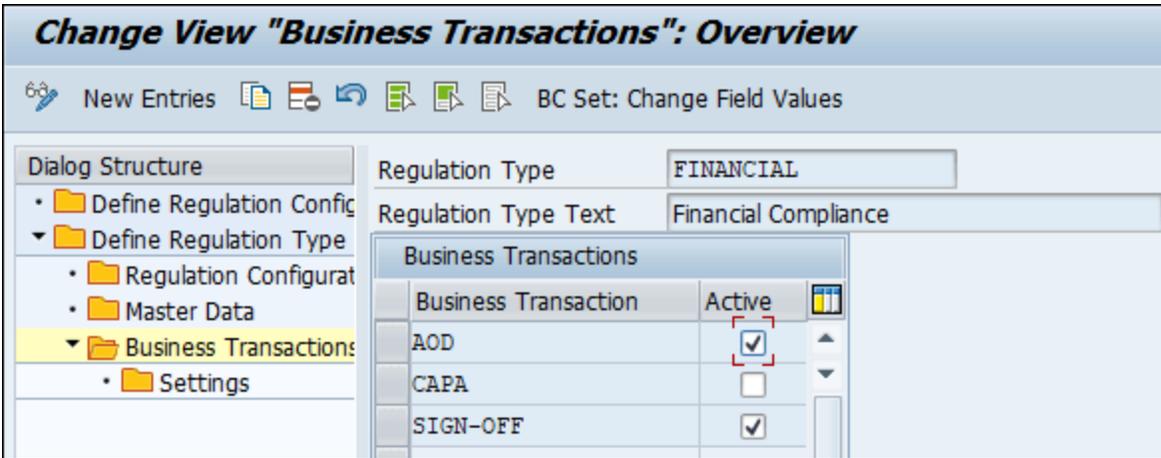
**Figure 4.35** Access Regulation Type from the Configuration



**Figure 4.36** Option to Add New Entries to the Regulation Type



**Figure 4.37** Activation of the Account Group Work Center for a Regulation Type



**Figure 4.38** Business Transactions Configuration for a Regulation Type

**Change View "Plan Activity for Process Control": Overview**

New Entries

Dialog Structure

- Plan Activity for Access Management
- Plan Activity for Process Control**
- Plan Activity for Risk Management
- Plan Activity for common components

ActivityID	Org. Spec.	Share Eva	Need Surve	Is Testing	Need Obj.	Need Rcpt	<b>Need Regu</b>	Recurring
GRPC_AHSRV	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
PERF-AOD	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>				
PERF-CEASS	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
PERF-CNDS	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
PERF-CRISK	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
PERF-CTLPF	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
PERF-EEST	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
PERF-MCAOU	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
PERF-ODS	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
PERF-RISK	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
PERF-SOFOU	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
PERF-SPDS	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
PERF-TEST	GRC-PC	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

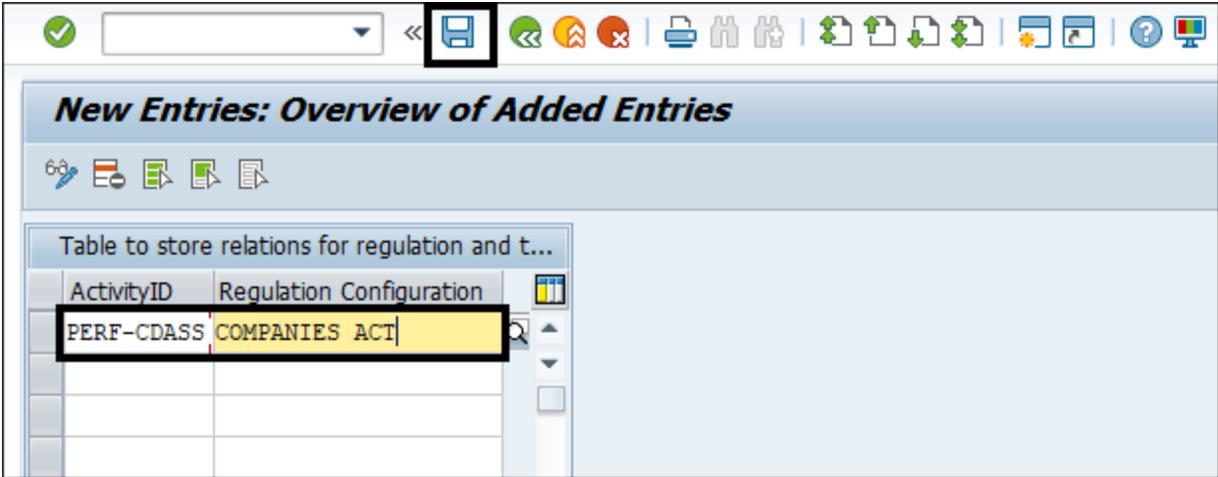
**Figure 4.39** Review Plan Usage Configuration

**Change View "Table to store relations for regulation and task": Overvi**

New Entries BC Set: Change Field Values

ActivityID	Regulation Configuration
PERF-AOD	X
PERF-CDASS	COMPANIES ACT
PERF-CDASS	SARBANES OXLEY
PERF-CDASS	SOX
PERF-CEASS	FDA
PERF-CEASS	SOX
PERF-CNDS	FDA
PERF-CNDS	SOX
PERF-CRISK	SOX
PERF-CTLPF	FDA
PERF-CTLPF	SOX
PERF-ETEST	SOX
PERF-MCAOU	SOX
PERF-OUDS	FDA
PERF-OUDS	SOX

**Figure 4.40** Review the Current Regulation to Plan Activity Mapping



**Figure 4.41** New Regulation Configuration Assignment to a Plan Activity

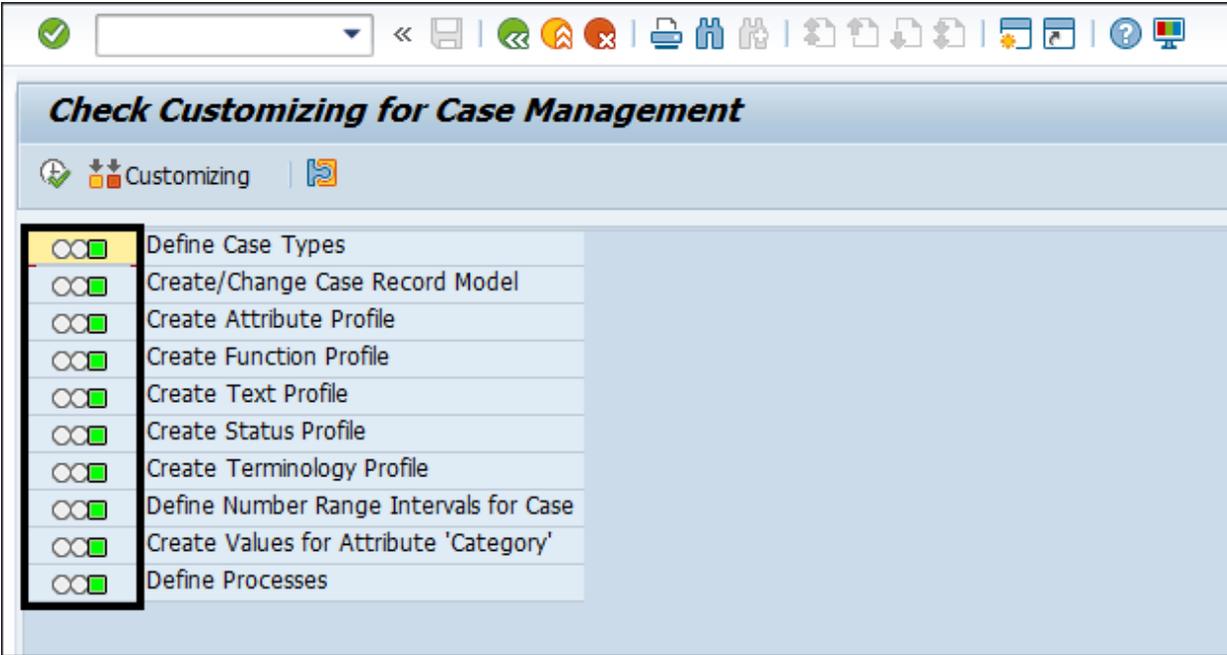
**Display View "Attributes": Overview**

Dialog Structure

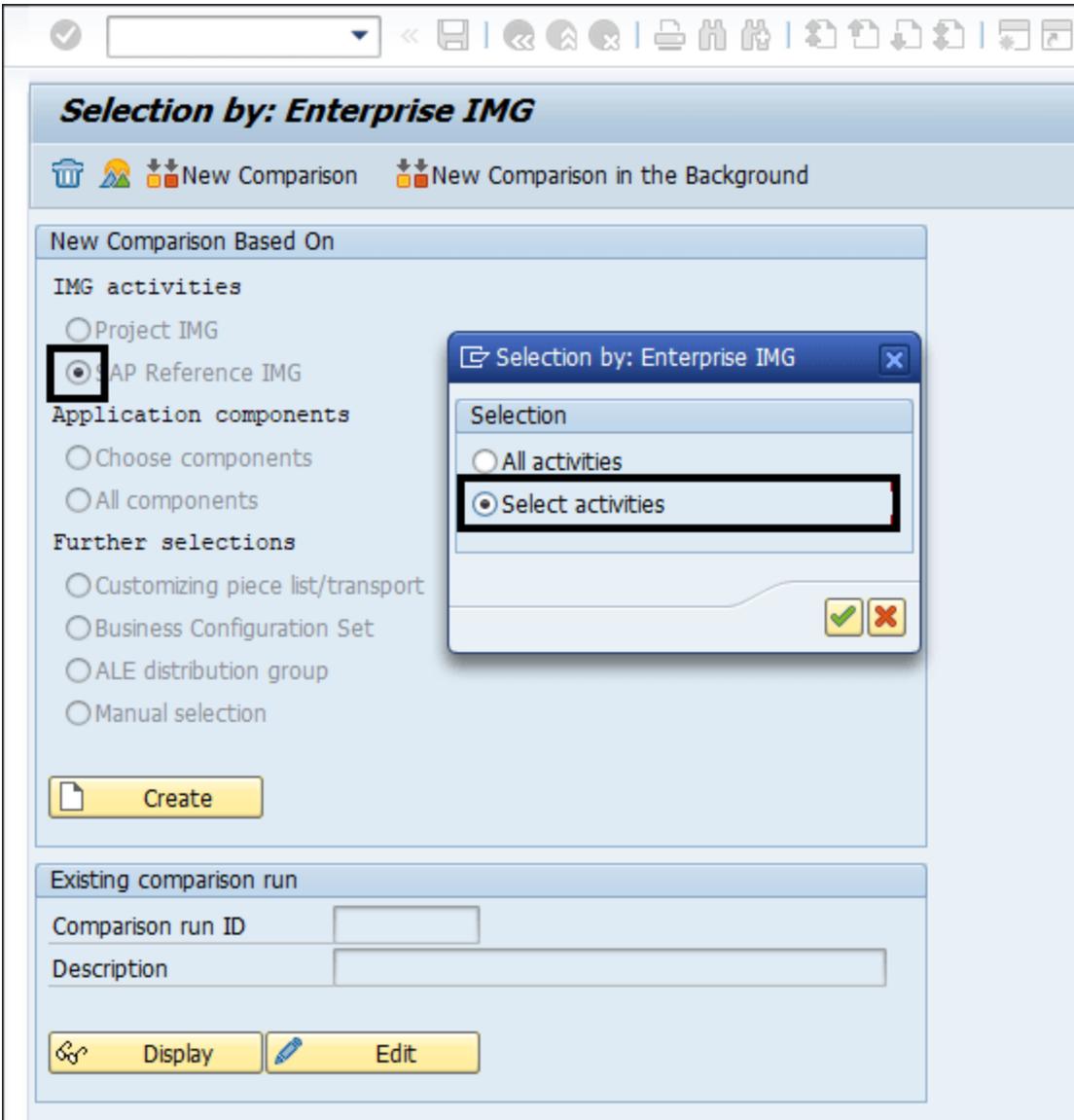
- Attributes
  - Values
- Attributes with Dependent Attributes
  - Values
    - Values Permitted for Dependent Attribute
- Attributes with Fixed Values
  - Names

Attribute	Text
AC-ASS	Financial Statement Assertion
CN_SUBGROUP	Control Subgroup
IELC-FREQ	Indirect Entity-Level Control Operation Frequency
INDUSTRY	Industry
PR-CATEGORY	Control Category
PR-FREQ	Frequency
PR-NATURE	Nature of Control
PR-PURP	Control Purpose
PR-SIG	Control Significance
PR-TECHNQ	Testing Technique
RELEVANCE	Relevance
RISK_IMP	Qualitative Risk Impact
SC-FREQ	Scheduling Frequency
TR_TYPE	Transaction Type
TS-SAMPLING_METHOD	Sampling method

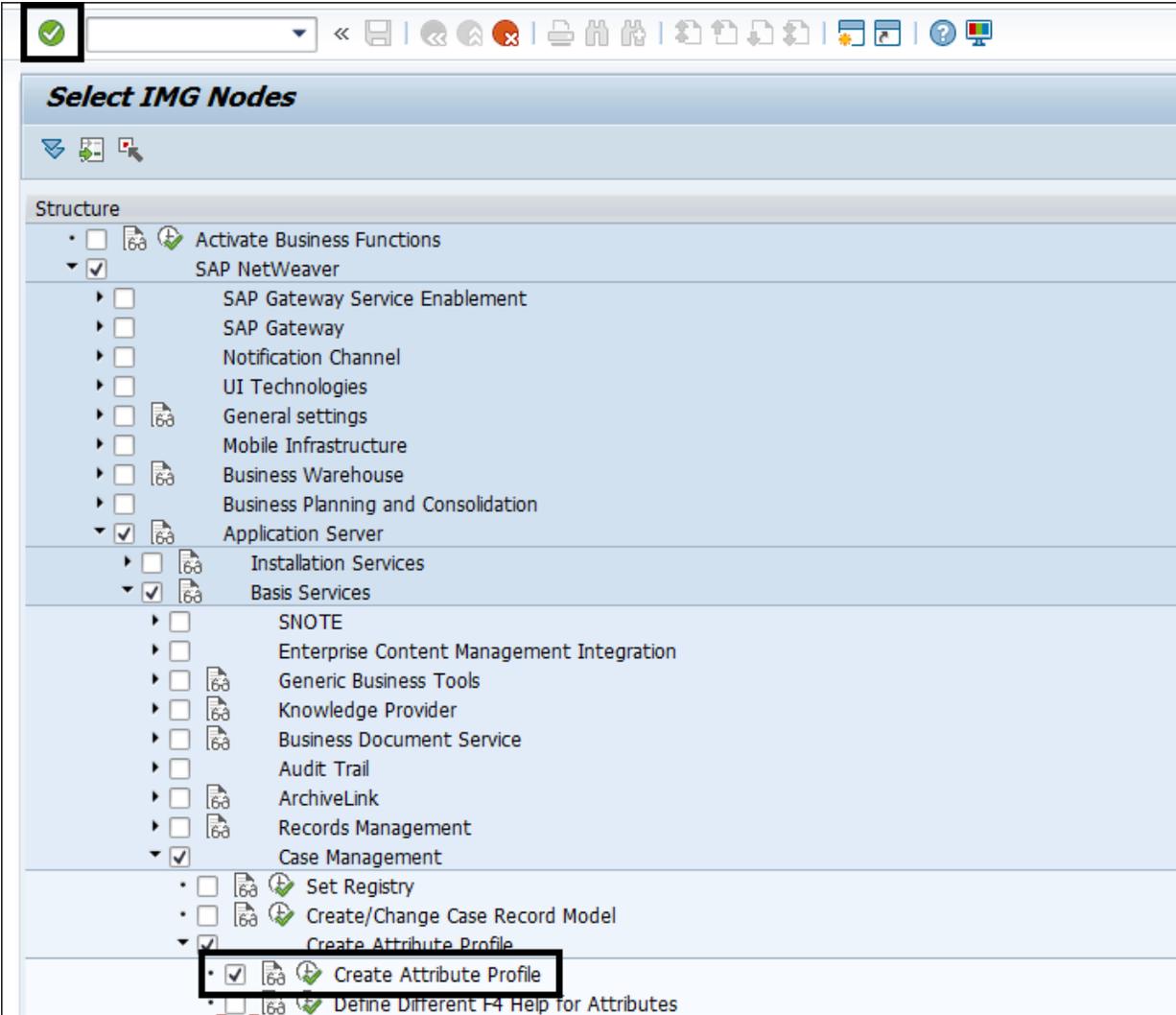
**Figure 4.42** Maintenance Screen of Master Data Attributes



**Figure 4.43** Case Customization Configuration in SAP Process Control



**Figure 4.44** Define the Comparison Method



**Figure 4.45** Selection of Case Configuration for Comparison

**Selection by: Enterprise IMG**

Comparison run ID: 000000009  
Description: [Empty text box]

**Restrict selection**

- Client-specific
- Cross-client

**Comparison**

R/3 connection: G12CLNT100

Full Comparison  
Full Comparison in Background  
Object Overview

**Figure 4.46** Execution of Comparison

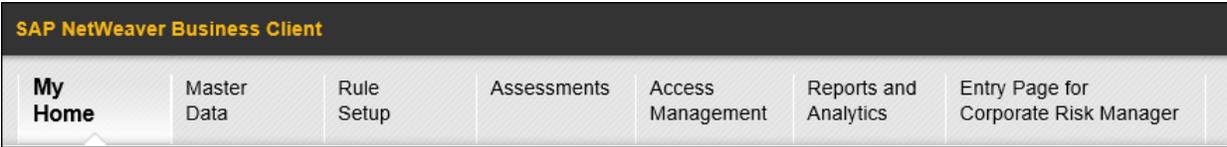
**Customizing Cross-System Viewer: Change mode**

Comparison Application Component IMG Environment Statistics Display

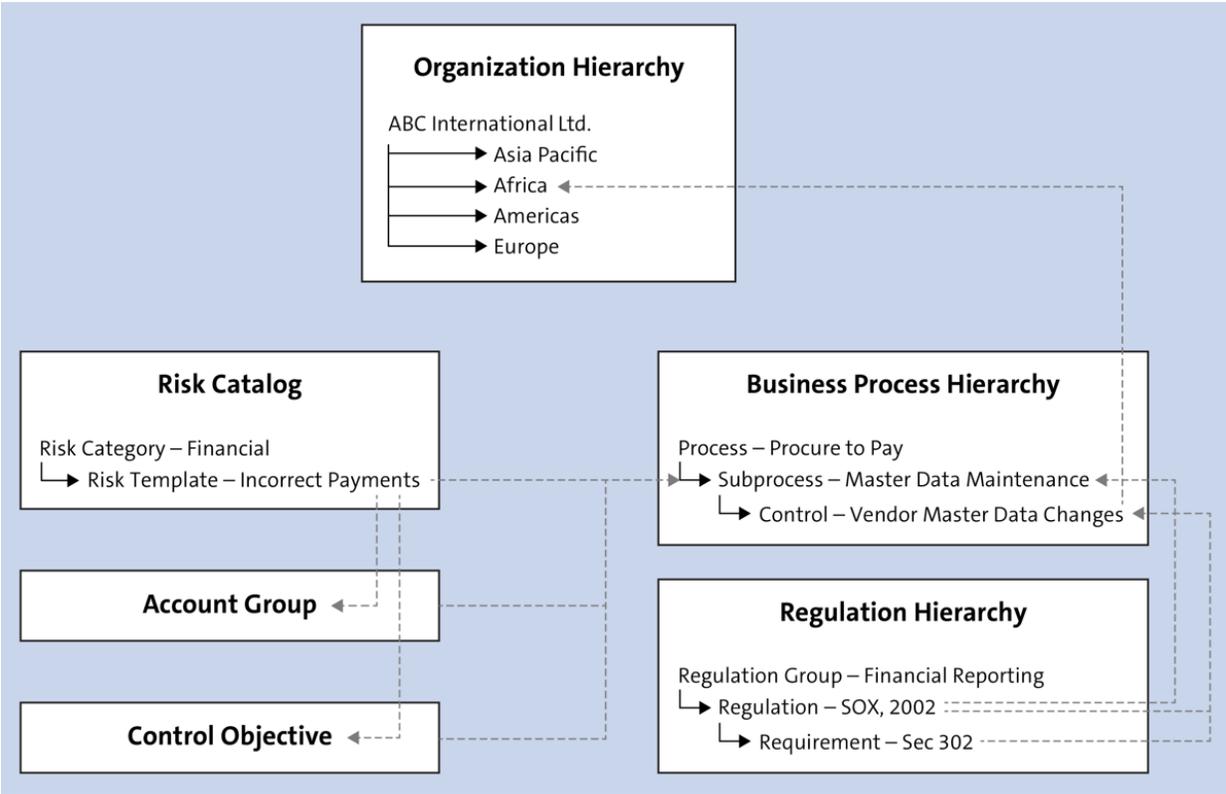
Selection type: SAP Reference IMG (manual) Filter: active Comparison run: 0000000010  
 Logon system: G12/100/752 <-> Comparison system: G12/000/752 - Last action: 20.09.2023

Stat.	Object Subobject Subobject	Description	Comp	Entries LogonSys Total	Entries Only in LogonSys	Entries Changed	Entries Only in CompSys.	Component
<input type="checkbox"/>	SCMGATTR_Prio	S Priority	=	4	0	0	0	BC-SRV-CM
<input type="checkbox"/>	SCMGATTR_SESCAL	S Reasons for Escalation	=	2	0	0	0	BC-SRV-CM
<input type="checkbox"/>	SCMGAUT_SECLEVEL	S Authorization Levels	=	3	0	0	0	BC-SRV-CM
<input type="checkbox"/>	SCMGVC_ATTRPROF	C Case: Define Attribute Profiles						BC-SRV-CM
	SCMGV_ATTRPROF	V Case: Attribute Profile (Header/Short Text)	=	18	0	0	0	BC-SRV-CM
	SCMGV_ATTRPROFA	V Case: Attribute Profile, Assignment of Attri	=	305	0	0	0	BC-SRV-CM
	SCMGV_ATTRPROFG	V Case: Attribute Group Maintenance	=	16	0	0	0	BC-SRV-CM
<input type="checkbox"/>	SCMGV_ATTRRESCAL	V View: Reason for Escalation	=	3	0	0	0	BC-SRV-CM
<input type="checkbox"/>	SCMGV_ATTRHELP	V Case: Different F4 Help for Attributes	=	All clients, identical systems				BC-SRV-CM

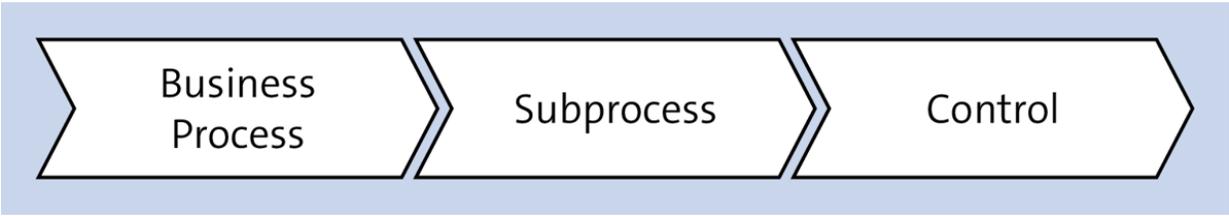
**Figure 4.47** Comparison Result with Client 000



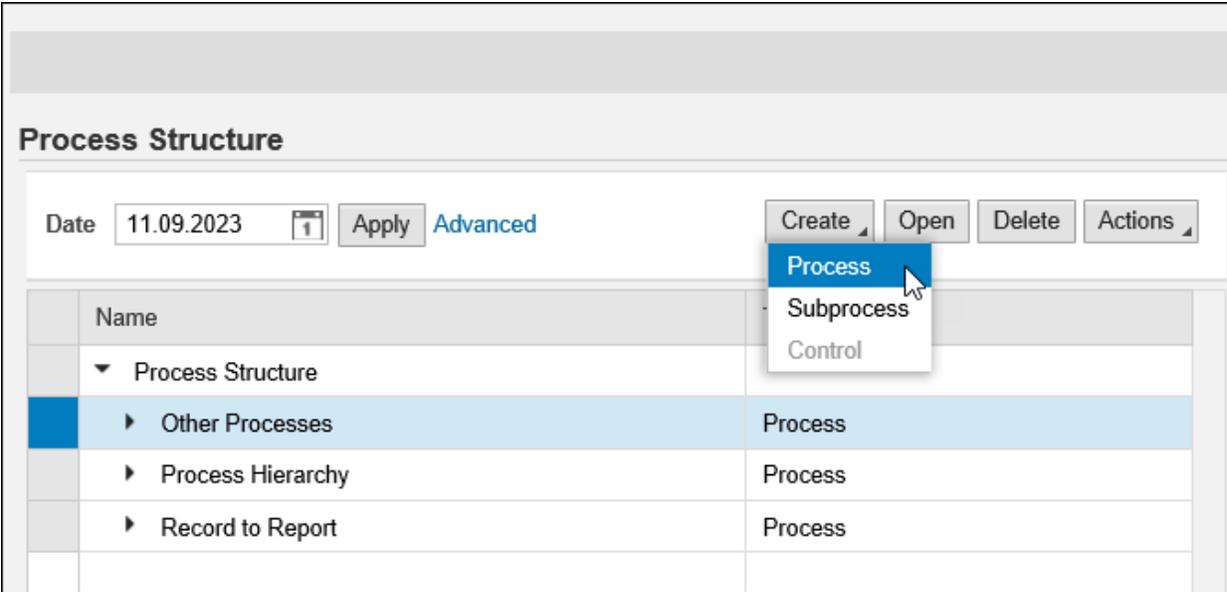
**Figure 4.48** SAP Business Client Work Centers



**Figure 5.1** Relationships between Master Data Elements in SAP Process Control



**Figure 5.2** Business Process Hierarchy Flow



**Figure 5.3** Creating a New Process in the Process Hierarchy

**Process** [Close]

### Central Process: Procure to Pay

Parent Process: Process Hierarchy      Effective Date: 11.09.2023  
Timeframe: 11.09.2023      ID: 50000894

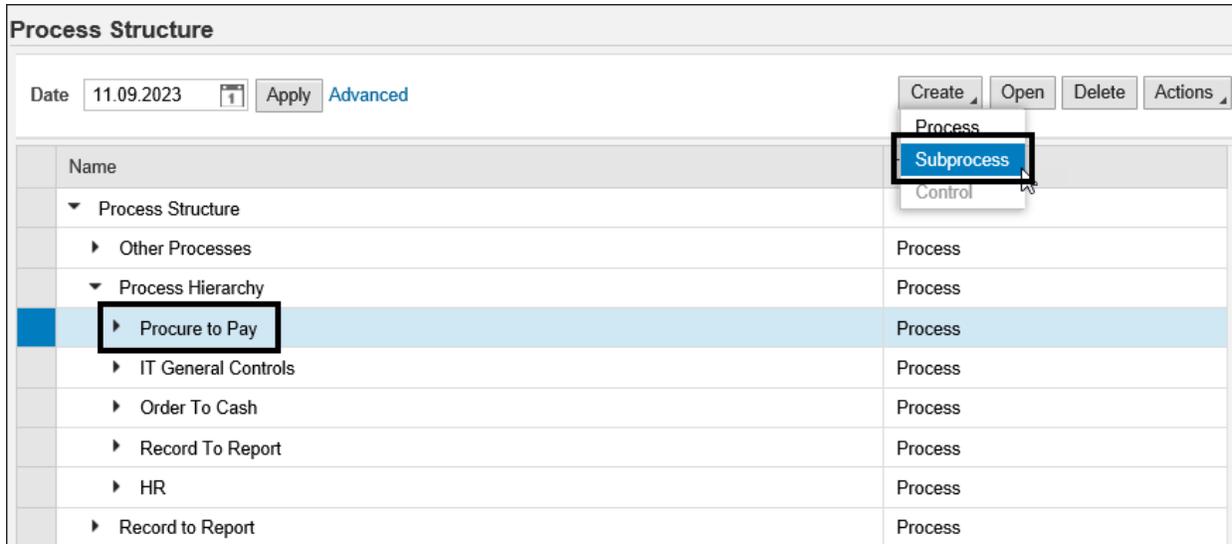
**General** | Attachments and Links

\* Name:       \* Valid From:   
Description:       \* Valid To:  [1]  
Business Process:  ▾

< [Progress Bar] >

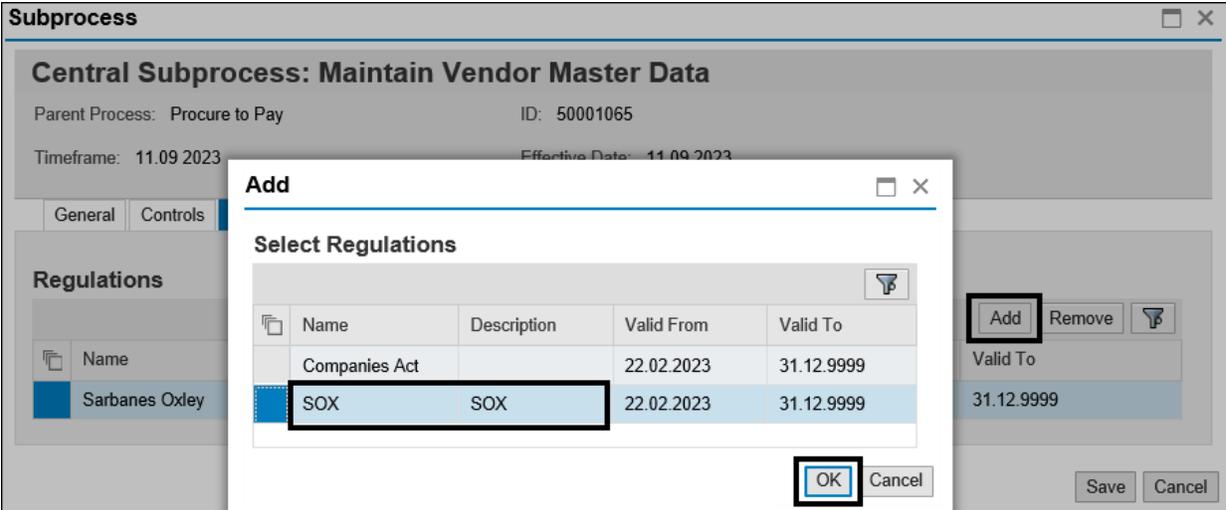
Save Cancel

**Figure 5.4**    Process Configuration

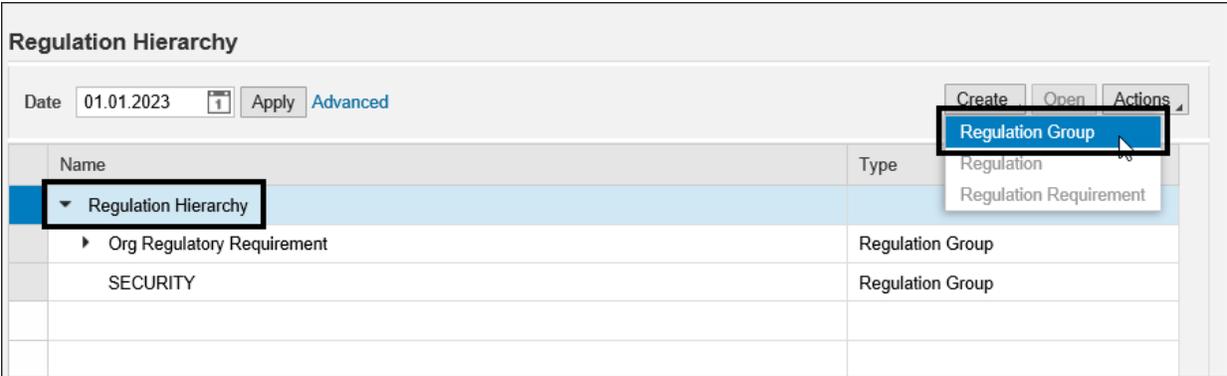


**Figure 5.5** Option to Create a New Subprocess in the Hierarchy





**Figure 5.7** Assignment of Regulation to the Subprocess



**Figure 5.8** Option to Create a New Regulation Group in the Hierarchy

**Regulation Group** [Window Title]

---

**Regulation Group : Org Regulatory Requirement**

Parent Regulation Group: ID: 50000720  
Timeframe: 01.01.2023 Effective Date: 01.01.2023

**General** Attachments and Links

\* Name:  \* Valid From:   
Description:  \* Valid To:

Save Cancel

**Figure 5.9** Configuration of the Regulation Group

**Regulation** [Close]

---

**Regulation : Sarbanes Oxley**

Parent Regulation Group: Org Regulatory Requirement ID: 50001123  
Timeframe: 01.01.2023 Effective Date: 01.01.2023

**General** | Issues | Attachments and Links

\* Name:  \* Valid From:   
Description:  \* Valid To:   
\* Assign Regulation Configuration:  [Dropdown Arrow]

[Save] [Cancel]

**Figure 5.10** Setting Up Regulation

**Regulation Requirement** [Close]

---

**Regulation Requirement : Sec. 302**

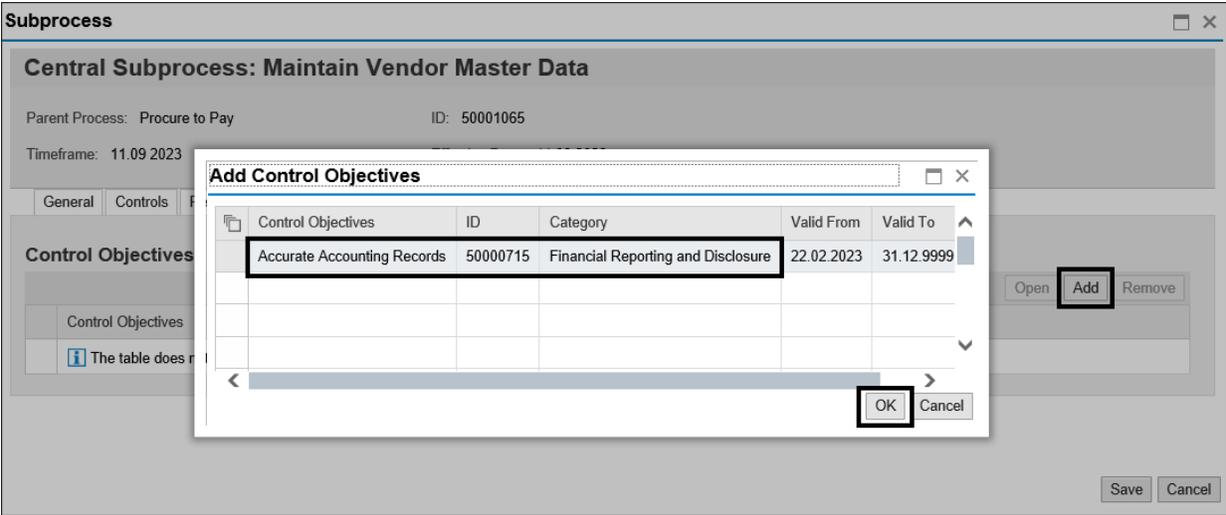
Parent Regulation: Sarbanes Oxley ID: 50001124  
Timeframe: 01.01.2023 Effective Date: 01.01.2023

**General** Attachments and Links

\* Name:  \* Valid From:   
Description:  \* Valid To:  [Calendar Icon]

[Save] [Cancel]

**Figure 5.11** Configuration of the Regulation Requirement



**Figure 5.12** Assignment of Control Objective to the Subprocess

**Control Objective Catalog**

Date    [Advanced](#)

Name
To prevent un authorized changes

**Figure 5.13** Create Option in the Control Objective Catalog Screen

**Control Objective** ☐ ✕

---

**Control Objective: Accurate Accounting Records**

Objective ID: 50000715 Effective Date: 11.09.2023

Timeframe: 11.09.2023

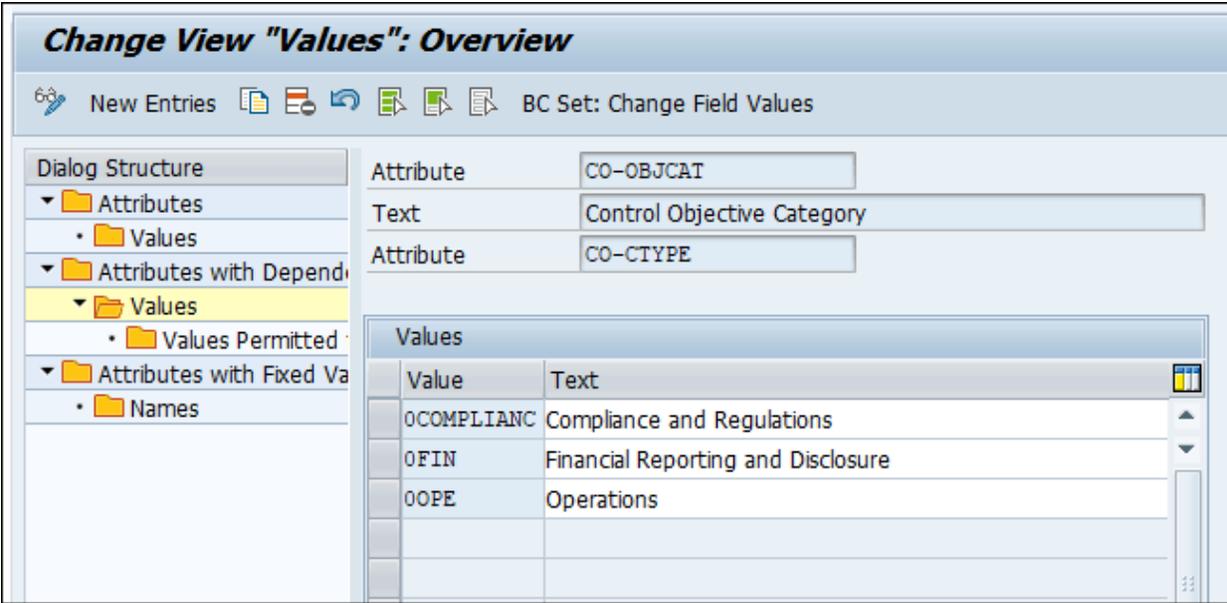
**General** | Subprocesses | Risks | Attachments and Links

\* Control Objective:  \* Valid From:

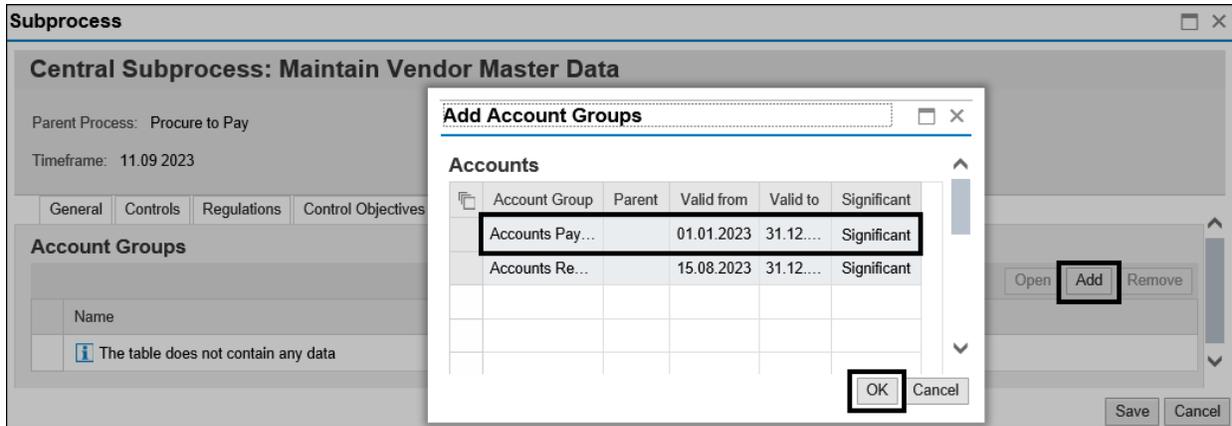
\* Objective Category:  \* Valid To:

Description:

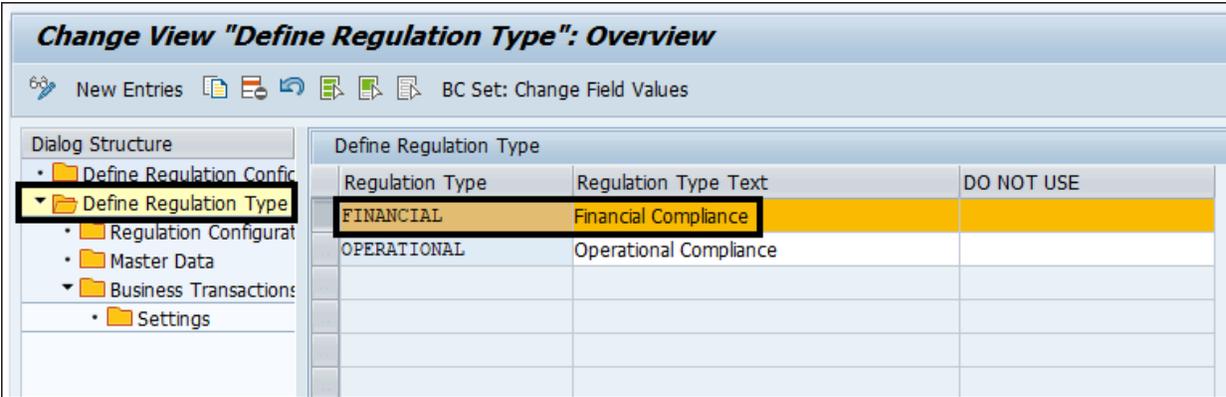
**Figure 5.14** Configuration of the Control Objective



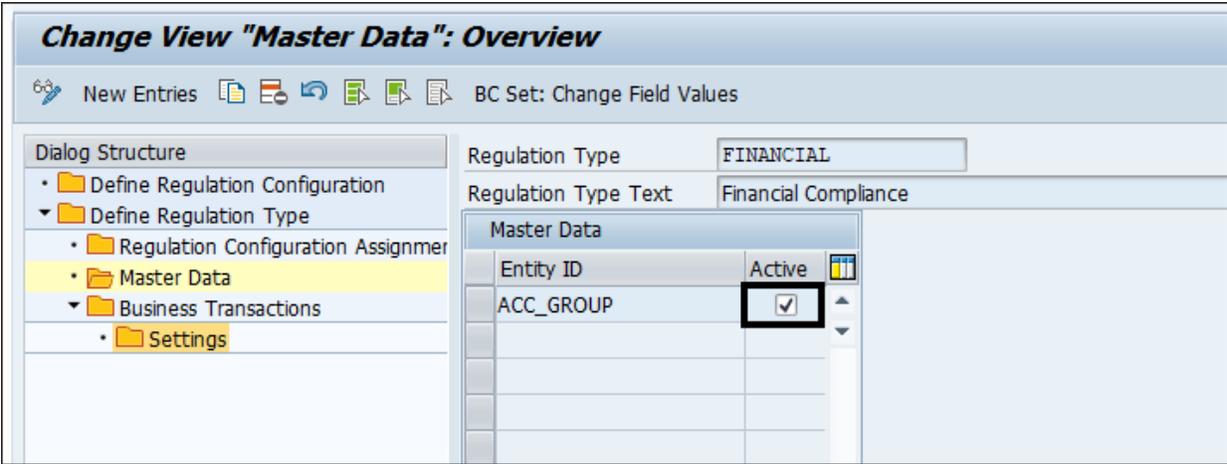
**Figure 5.15** Configuration to Review the Objective Categories



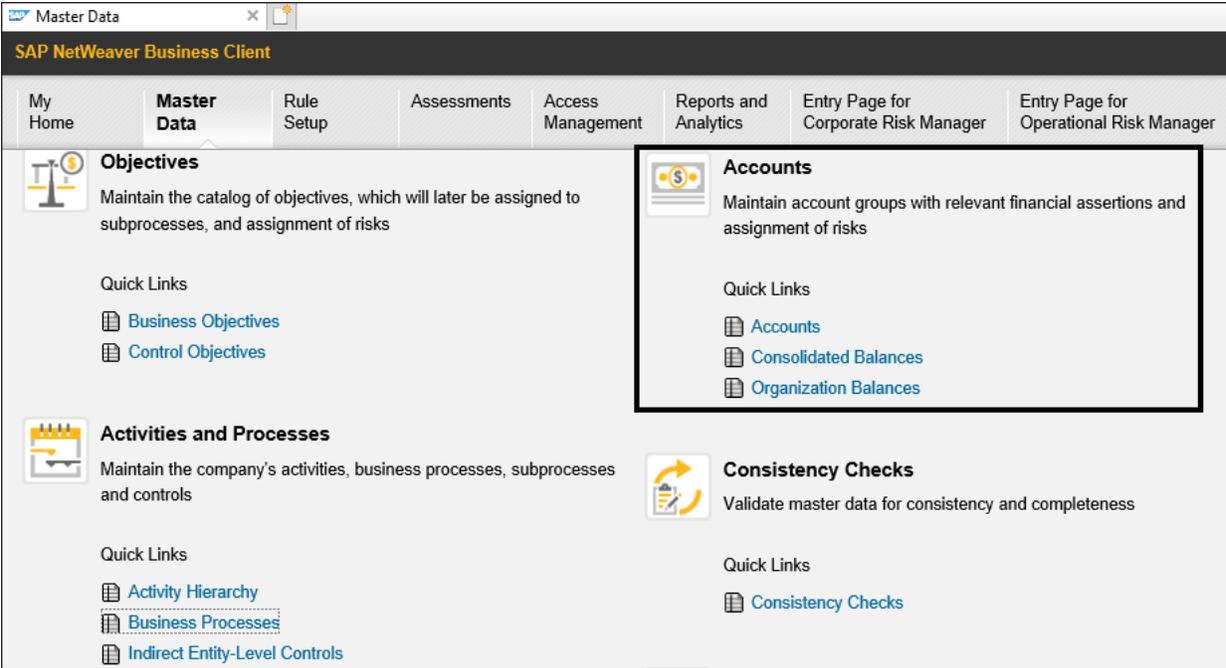
**Figure 5.16** Assignment of Account Group to the Subprocess



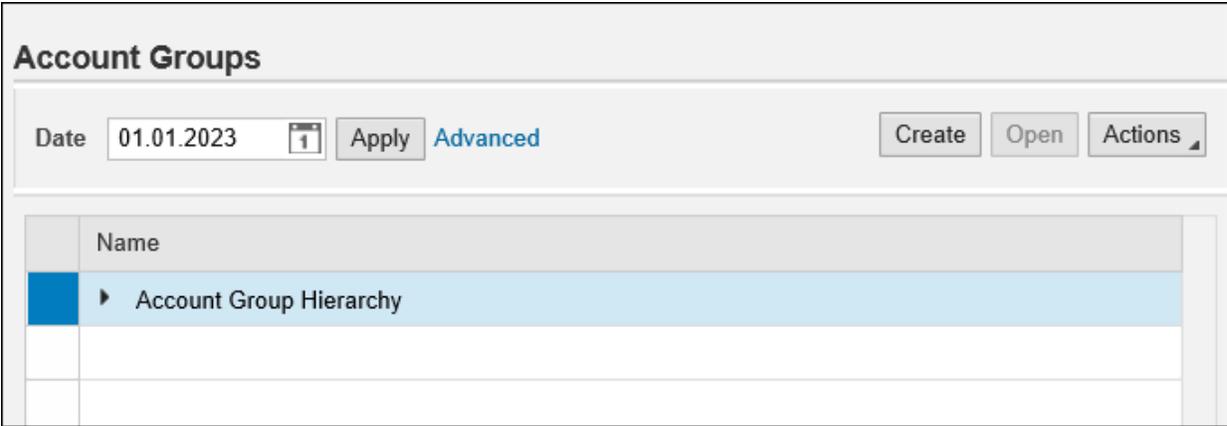
**Figure 5.17** Selection of Regulation Type for Enabling Account Groups Master Data



**Figure 5.18** ACC\_GROUP Activation in the Regulation Type



**Figure 5.19** Accounts Work Center in SAP Process Control Master Data



**Figure 5.20** Option to Create a New Account Group

**Account Group**

---

**Account Group:**

Parent Group: ID: 50001377  
Timeframe: 01.01.2023 Effective Date: 01.01.2023

**General** | GL Accounts | Risks | Attachments and Links

\* Name: Accounts Payable

Description: Includes the list of vendor accounts shown as liability in the organization's balance sheet. It indicates the amount that the organization has to pay.

\* Valid From: 01.01.2023

\* Valid To: 31.12.9999

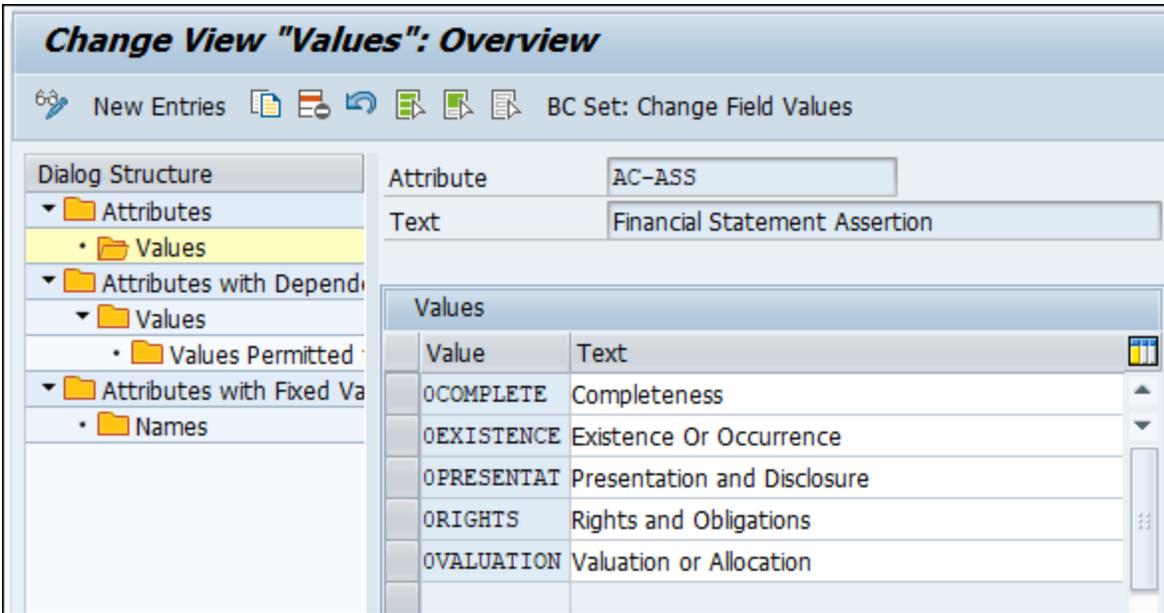
Significant:  Yes  No

Reasoning:

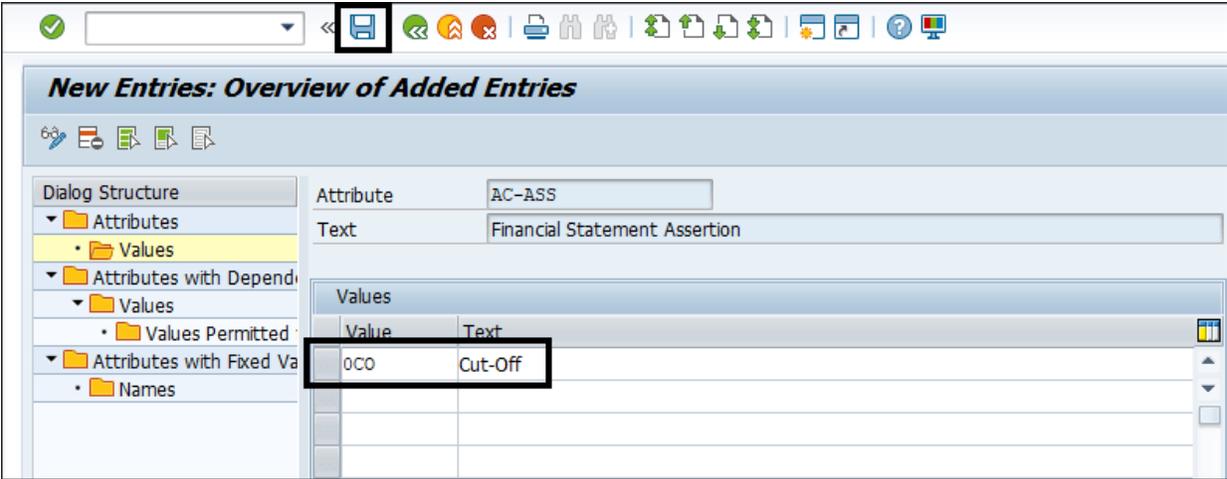
**Assertions**

- Completeness
- Existence Or Occurrence
- Presentation and Disclosure
- Rights and Obligations
- Valuation or Allocation

**Figure 5.21** General Tab in Configuration of Account Groups



**Figure 5.22** Configuration to Review the Financial Assertions



**Figure 5.23** New Financial Assertion Value

**Account Group**

---

**Account Group: Accounts Payable**

Parent Group: ID: 50001213  
Timeframe: 11.09.2023 Effective Date: 11.09.2023

**General** | GL Accounts | Risks | Attachments and Links

\* Name: Accounts Payable

Description: Includes the list of vendor accounts shown as liability in the organization's balance sheet. It indicates the amount that the organization has to pay.

\* Valid From: 01.01.2023  
\* Valid To: 31.12.9999  
Significant:  Yes  No  
Reasoning:

**Assertions**

- Cut-Off
- Completeness
- Existence Or Occurrence
- Presentation and Disclosure
- Rights and Obligations
- Valuation or Allocation

Save Cancel

**Figure 5.24** New Financial Assertion Value in the Assertion List

**Account Group** □ ×

---

**Account Group: Accounts Payable**

Parent Group: ID: 50001213  
Timeframe: 11.09.2023 Effective Date: 11.09.2023

General **GL Accounts** Risks Attachments and Links

**General Ledger Accounts**

From	To	Remove
1022031		
9823011		

Save Cancel

**Figure 5.25** Mapping General Ledger Accounts to the Account Group

**Consolidated Account Balances**

Year: 2023

\* Currency: USD

Significance Threshold: 5.000.000,00

\* Version: 0001

Changed On: 17.08.2023

**Accounts**

Accounts	Consolidated Balance	Significant	Reason
Accounts Payable	4.950.000,00	<input checked="" type="checkbox"/>	Significant impact on the reputation of the organization if not paid as per the payment terms
Accounts Receivable	5.345.000,00	<input checked="" type="checkbox"/>	

**Figure 5.26** Determination of Significant Accounts

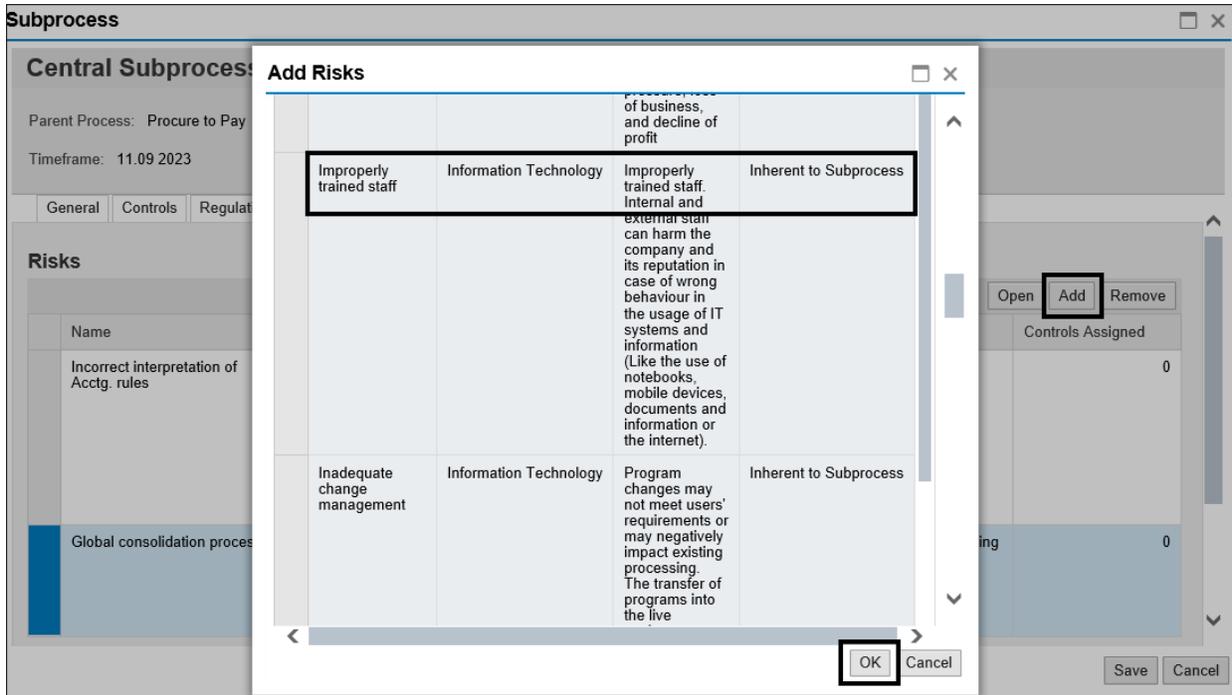
**Change View "Allow non-significant accounts to be added to a subprocess"**

New Entries       BC Set: Change Field Values

Allow non-significant accounts to be added to a subprocess

Customizing item	Description	Activated
ADD_NON_SIG_ACC	Allow non-significant accounts to be added to a subprocess	<input checked="" type="checkbox"/>

**Figure 5.27** Configuration to Activate Assignment of Nonsignificant Accounts to a Subprocess



**Figure 5.28** Selection of Risk to Assign to the Subprocess

**Subprocess**

**Central Subprocess: Maintain Vendor Master Data**

Parent Process: Procure to Pay ID: 50001065  
 Timeframe: 11.09.2023 Effective Date: 11.09.2023

General Controls Regulations Control Objectives Account Groups **Risks** Attachments and Links

**Risks**

Name	Description	Source	Controls Assigned
Incorrect interpretation of Acctg. rules	Incorrect interpretation of Accounting rules incorrect and or incomplete preparation of financial statements for the group or the entities and or incomplete or inaccurate or invalid informing of subsidiaries concerning changes in accounting policies. Due to wrong interpretation and/or non-awareness of accounting standards the accounting contains errors and therefore the (consolidated) financial statements could be misleading for internal decision making and are misleading from compliant with IFRS or local GAAP and can lead to loss of credibility, reputation and financial claims	Account Group:Accounts Payable(Account Group Assertion: Completeness , Presentation and Disclosure )	0
Global consolidation process	Incorrect, incomplete data or unauthorized, invalid changes can lead to incorrect consolidation results and therefore the (consolidated) financial statements could be misleading for internal decision making or are non compliant with IFRS or local GAAP and can lead to loss of credibility, reputation and financial claims	Control Objective:Accurate Accounting Records	0
Improperly trained staff	Improperly trained staff. Internal and external staff can harm the company and its reputation in case of wrong behaviour in the usage of IT systems and information (Like the use of notebooks, mobile devices, documents and information or the internet).	Inherent to Subprocess	1

Open Add Remove

Save Cancel

**Figure 5.29** Assignment of Risk to the Subprocess

**Risk Classification**

**Risk Classification**

Date: 01.01.2023   [Advanced](#)

Name	Type
<ul style="list-style-type: none"> <li>▼ Classification Hierarchy               <ul style="list-style-type: none"> <li>▼ Risk Hierarchy                   <ul style="list-style-type: none"> <li>▶ Compliance</li> <li>▶ Finance</li> <li>▶ Human Resources</li> <li>▶ Information Technology</li> <li>▶ Operations</li> <li>▶ Strategy &amp; Business</li> </ul> </li> </ul> </li> </ul>	
	Risk Category

**Figure 5.30** Option to Create a New Risk Category in the Hierarchy

**Risk Category** □ ×

---

**Risk category: Compliance**

Parent Category: Risk Hierarchy      Created On: 01.01.2023      ID: 50001019

**General** | KRI Template | Attachments and Links

\* Name:       \* Valid From:

Description:       \* Valid To:  ⓘ

Allow Assignment:  Yes     No

Analysis Profile:  [Analysis Profile Detail](#)

**Figure 5.31** Configuration of the Risk Category

**Risk Template** □ ×

---

**Risk template: Anti-competition, corruption, AML laws**

Parent Category: Compliance      Created On: 01.01.2023      ID: 50001020

**General** | Risk Instances | Response Templates | Central Controls | Attachments and Links

\* Name:       \* Valid From:

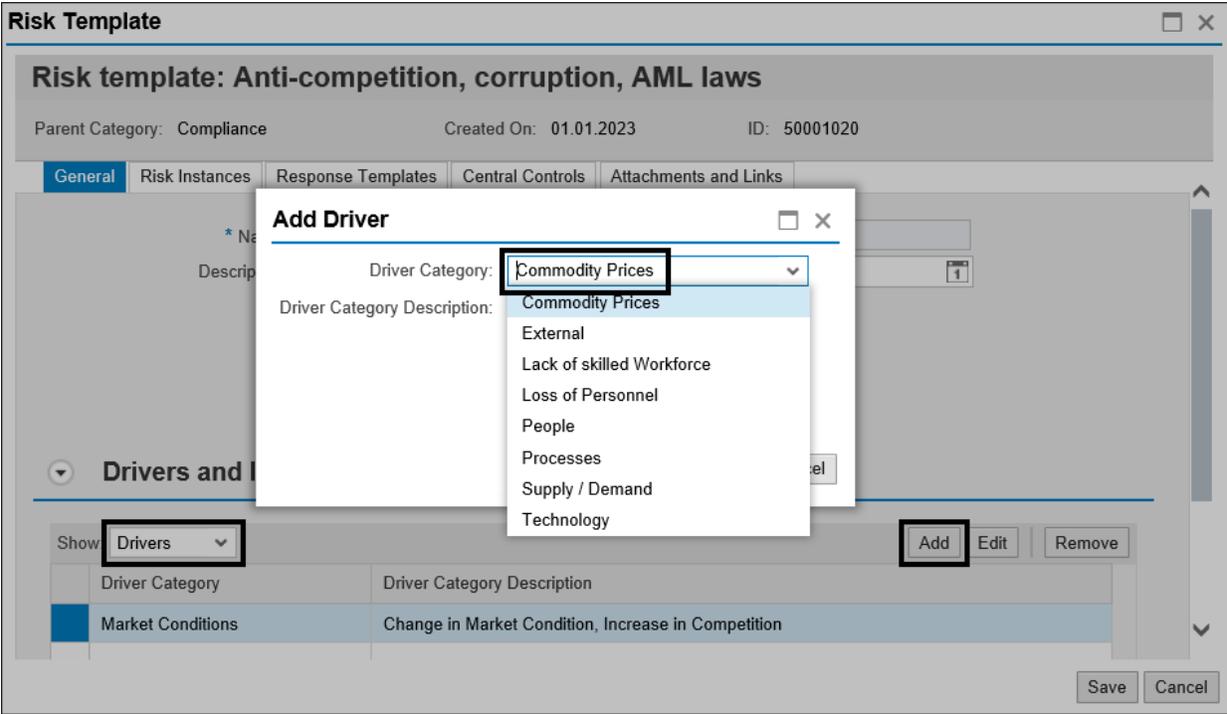
Description:       \* Valid To:

⊖ **Drivers and Impacts**

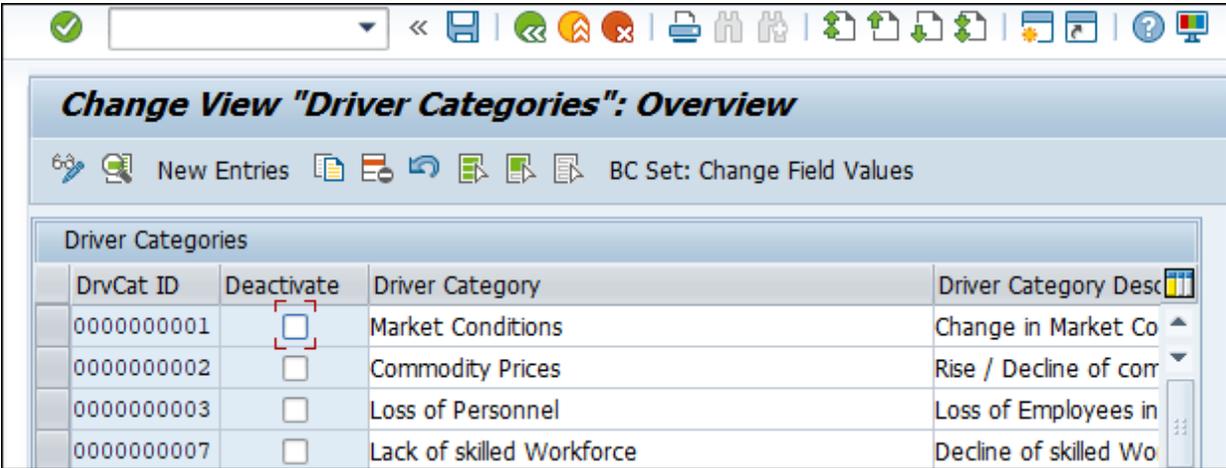
Show:

Impact Category	Impact Category Description
Financial (Revenue)	Financial Loss of Revenues

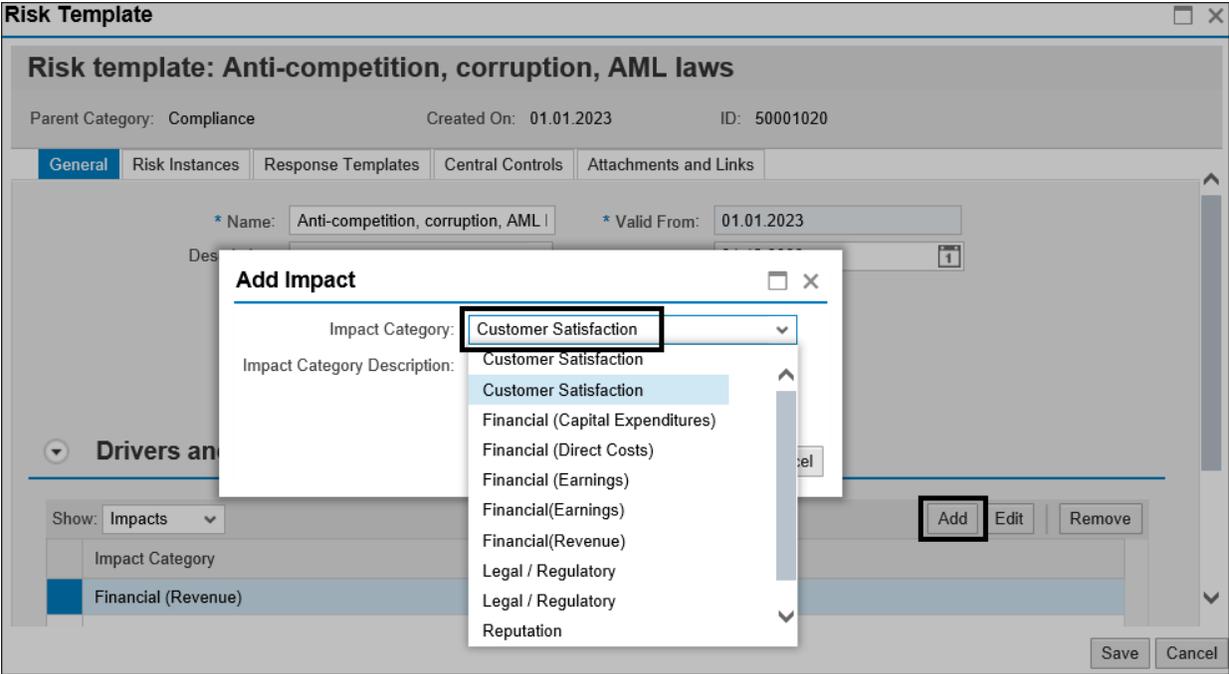
**Figure 5.32** Risk Template Configuration Screen



**Figure 5.33** Driver Categories under the Add Driver Option



**Figure 5.34** Configuration to Review the Driver Categories



**Figure 5.35** Option to Add Impact Categories while Defining the Risk Template

**Change View "Impact Category View": Overview**

New Entries BC Set: Change Field Values

ImpCat ID	Deactivate	Impact Category	Impact Category De:
0000000001	<input checked="" type="checkbox"/>	Financial (Revenue)	Financial Loss of Reve
0000000002	<input type="checkbox"/>	Financial (Earnings)	Financial Loss impact
0000000003	<input type="checkbox"/>	Reputation	Damage to the Reput
0000000004	<input type="checkbox"/>	Legal / Regulatory	Non-Compliance with
0000000005	<input type="checkbox"/>	Customer Satisfaction	Impact on customer
0000000006	<input type="checkbox"/>	Financial (Direct Costs)	Financial Loss due to
0000000007	<input type="checkbox"/>	Financial (Capital Expenditures)	Financial Loss due to

**Figure 5.36** Deactivating Impact Category Screen

**Process Structure**

Date: 11.09.2023  [Advanced](#)

Name	
▼ Process Structure	
▶ Other Processes	Process
▼ Process Hierarchy	Process
▼ Procure to Pay	Process
▶ Invoice Processing	Subprocess
▶ <b>Maintain Vendor Master Data</b>	Subprocess
▶ Perform Invoice Verification	Subprocess
▶ Purchase A/c Assignment Category	Subprocess
▶ Transactional Purchasing	Subprocess
▶ Inventory	Subprocess

Context menu for 'Maintain Vendor Master Data':

- Process
- Subprocess
- Control**

**Figure 5.37** Option to Create a New Control in the Hierarchy

**Control** □ ×

---

**Central Control: Vendor master changes**

Parent Subprocess: Maintain Vendor Master Data      ID: 50001067      Effective Date: 11.09.2023  
 Timeframe: 11.09.2023

**General** | Performance Plan | Regulations | Requirement | Risks | Account Groups | Attachments and Links

\* Name:

Description:

Control or Process Step:  Control    Process Step

\* Control Category:

Significance:

Level of Evidence:

Control Risk:

\* Control Automation:  Automated    Manual    Semi-Automated

\* Purpose:  Detective    Preventive

\* Valid From:

Valid To:

\* Trigger:  Event    Date

Operation Frequency:

\* To Be Tested:  Yes    No

\* Test Automation:  Automated    Manual    Semi-Automated

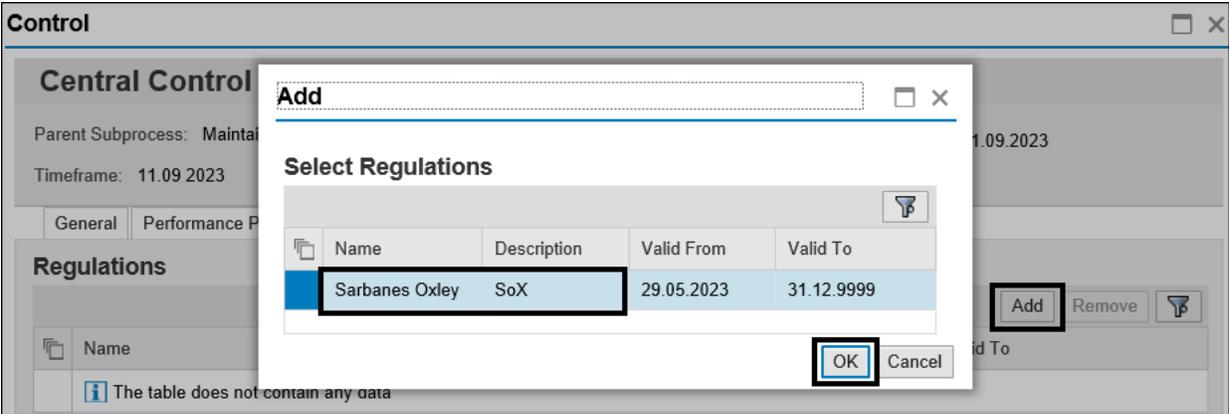
Testing Technique:

Test Plan:

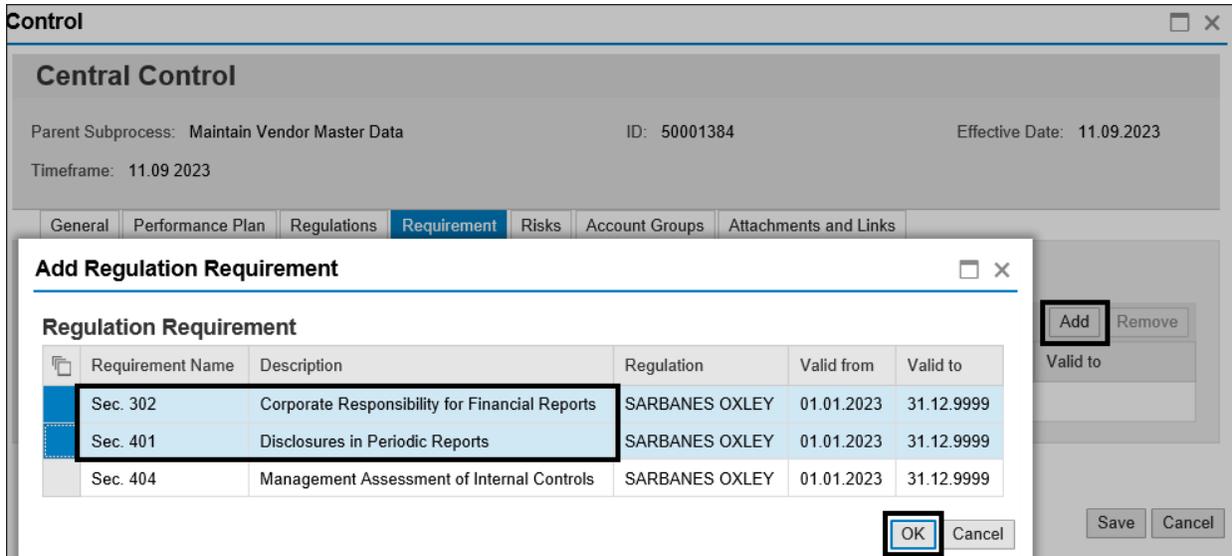
Input:

Output:

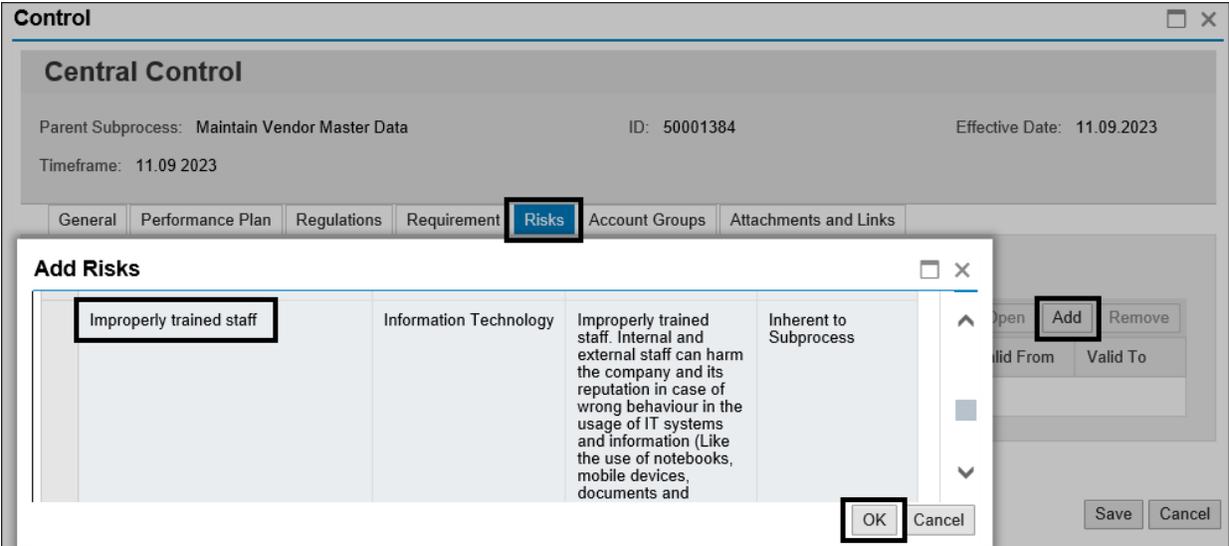
**Figure 5.38**    New Control Definition Screen



**Figure 5.39** Assignment of Regulation to the Control



**Figure 5.40** Assignment of Regulation Requirements to the Control



**Figure 5.41** Assignment of Risks to the Control

**Control** □ ×

---

**Central Control**

Parent Subprocess: Maintain Vendor Master Data      ID: 50001384      Effective Date: 11.09.2023

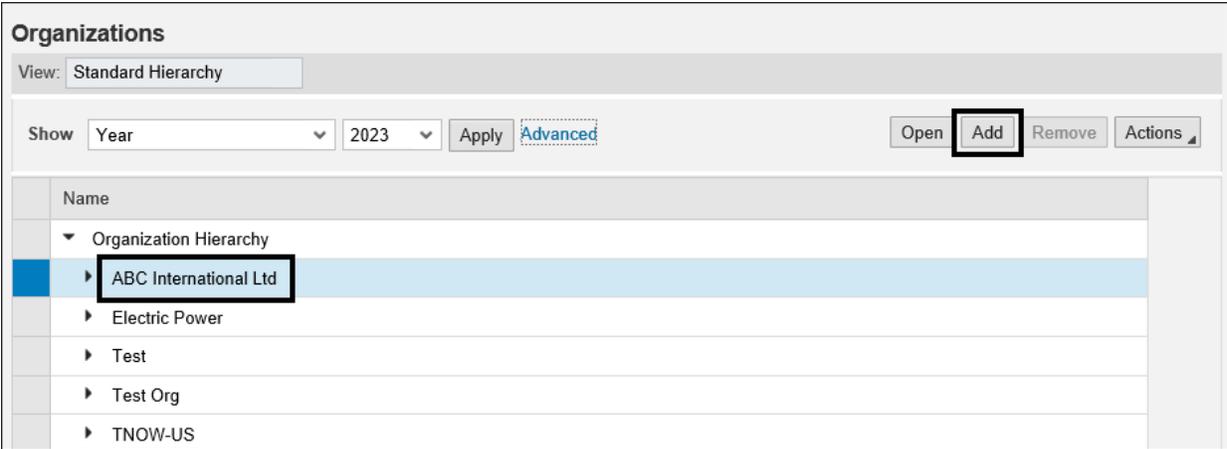
Timeframe: 11.09.2023

General | Performance Plan | Regulations | Requirement | Risks | **Account Groups** | Attachments and Links

**Account Group**

Assertions satisfied by Control						
Text	Cut-Off	Completeness	Existence Or Occurrence	Presentation and Disclosure	Rights and Obligations	Valuation or Allocation
Accounts Payable	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Figure 5.42** Maintenance of Financial Assertions Applicable for the Control



**Figure 5.43** Option to Create a New Organization in the Hierarchy

**Organization** [Close]

### Create Organization

Parent Organization: ABC International Ltd ID: 50001385  
Timeframe: Year 2023 Effective Date: 01.01.2023

**K** **General** Subprocess Indirect Entity-Level Controls Regulations Policies Objectives Key Risk Indicators Units of Measure Risk Appetite

\* Name:   
Description:

Shared Services Provider:  Yes  No  
Org. Level System Parameter:

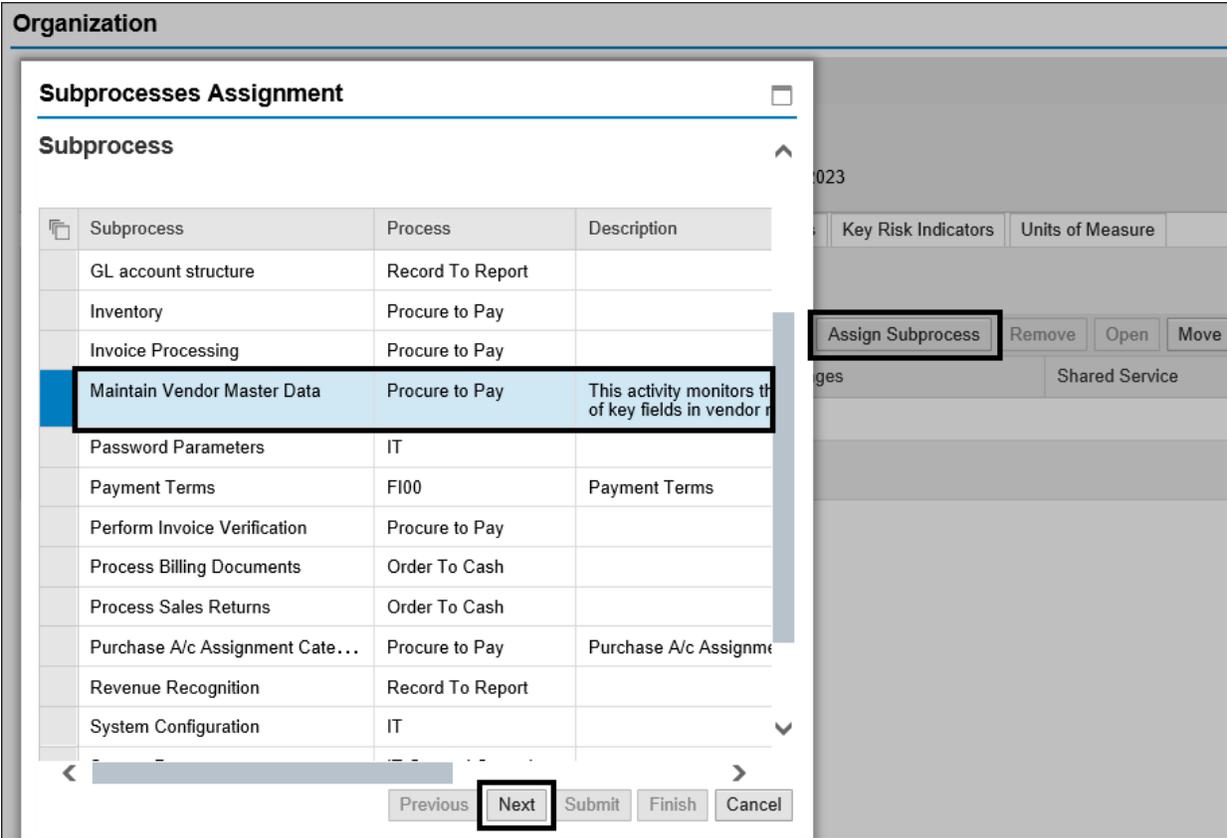
\* Valid From: 01.01.2023  
\* Valid To: 31.12.9999  
\* Currency:   
Average Cost Per Control: 0,00  
Country:   
State:

**Review Settings**

Indirect ELC Assessment:  Use System Suggested   
Indirect ELC Test:  Use System Suggested   
Remediation Plan:  Use System Suggested   
Disclosure Survey:  Use System Suggested

[Save] [Cancel]

**Figure 5.44** General Tab of the Organization



**Figure 5.45** Selection of the Subprocess to Assign It to the Organization

**Subprocesses Assignment**

### Assign Subprocesses to ABC India Pvt Ltd

1 2 3 4 5 6
  
 Select Subprocesses **Allow Local Changes** Select Controls Select Risks Review Confirmation

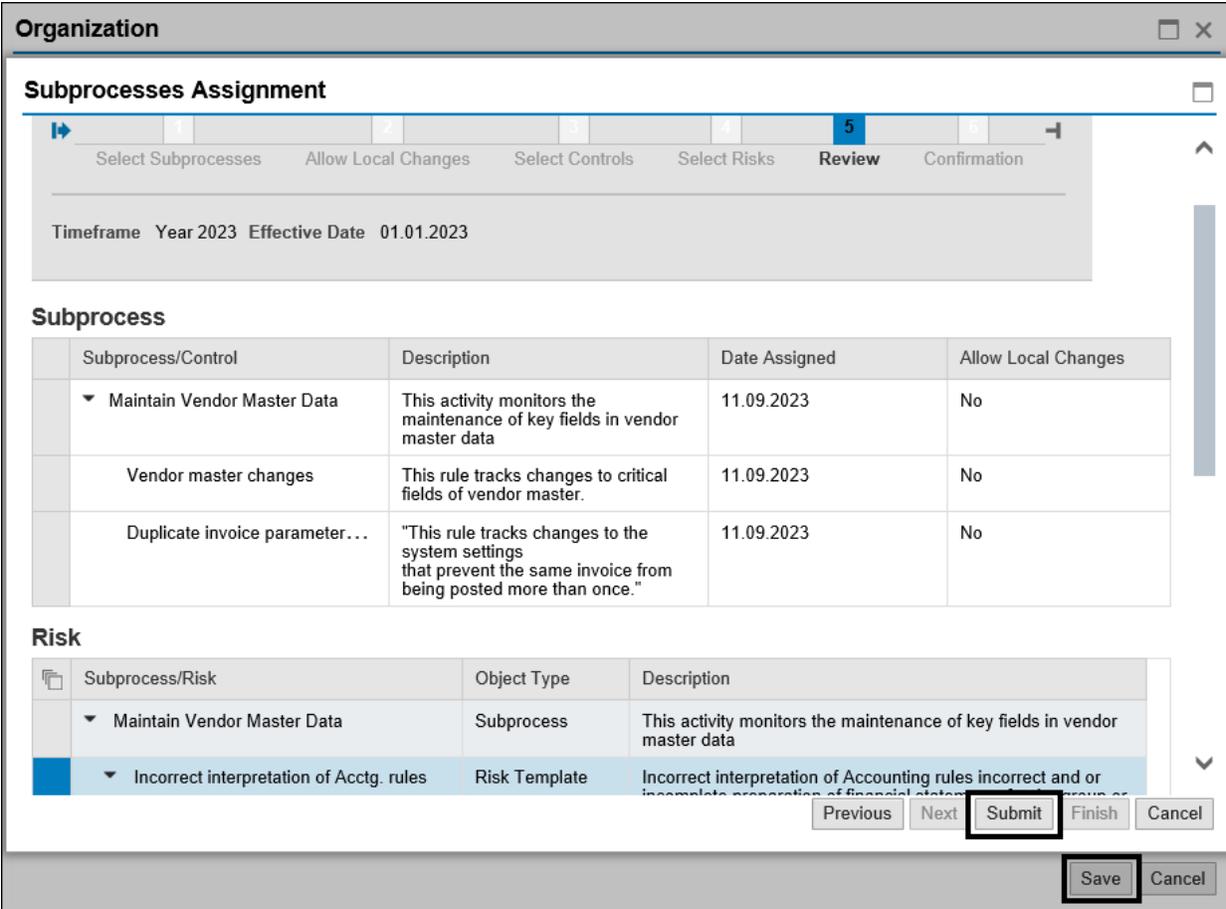
Timeframe Year 2023 Effective Date 01.01.2023

Determine whether or not organization-level (local) subprocesses and controls can be edited.

**Subprocess**

Subprocess	Process	Description	Allow Local Changes
Maintain Vendor Master Data	Procure to Pay	This activity monitors the maintenance of key fields in vendor master data	<input type="text" value="No"/> <input type="text" value="No"/> <input type="text" value="Yes"/>

**Figure 5.46** Selection of Local Changes Method while Localizing the Controls



**Figure 5.47** Saving the Subprocess and Controls Assigned to the Organization

**Subprocess** □ ×

---

**Subprocess: Access Management**

Parent Organization: Power Generation      Effective Date: 29.05.2023      Allow Local Changes: Yes

Timeframe: Year 2023      Parent Process: IT

General
Controls
Regulations
Control Objectives
Account Groups
Risks
Policies
Roles
Issues
Attachments and Link

---

**Controls Assigned to Subprocess**

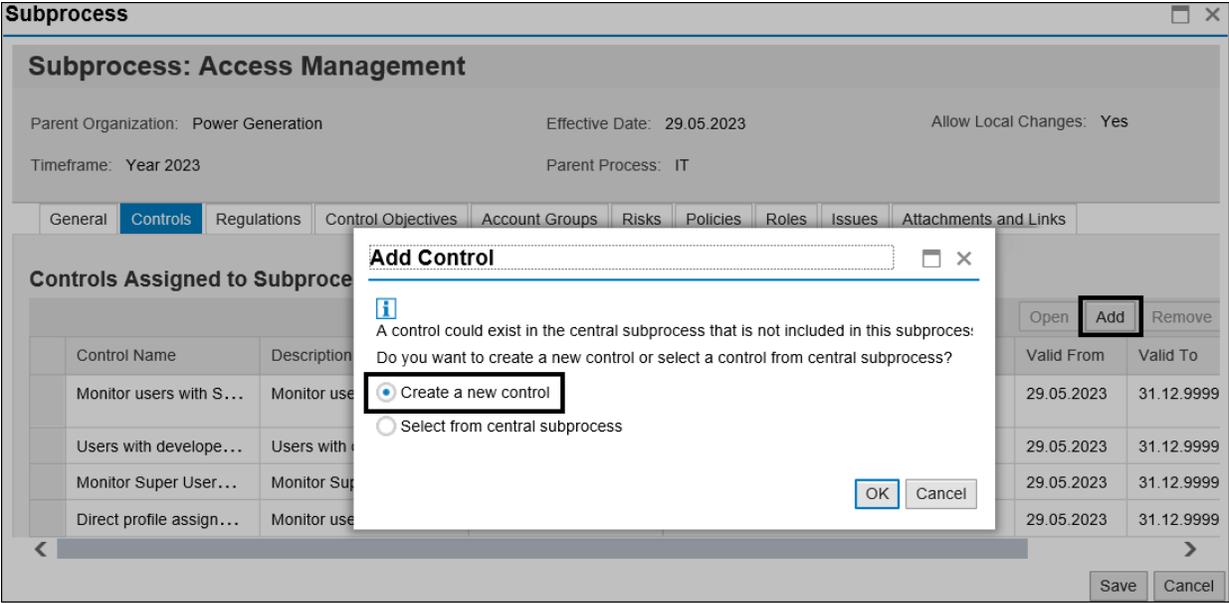
Open Add Remove

Control Name	Description	Source	Significance	Provider	Valid From	Valid To
Monitor users with S...	Monitor users with SA...	Copy	Key Control		29.05.2023	31.12.9999
Users with developo...	Users with developer...	Copy	Key Control		29.05.2023	31.12.9999
Monitor Super User...	Monitor Super User ac...	Copy	Key Control		29.05.2023	31.12.9999
Direct profile assign...	Monitor users with dire...	Copy	Key Control		29.05.2023	31.12.9999

<  >

Save Cancel

**Figure 5.48** Access the Controls Tab from the Local Subprocess



**Figure 5.49** Option to Create a Local Control from Subprocess under an Organization

**Control** □ ×

### Control: Duplicate invoice parameter changes

Parent Organization: Tnow Basis      Parent Subprocess: Maintain Vendor Master Data      Allow Local Change  
Timeframe: Year 2023      Effective Date: 29.05.2023

◀ Policies Issues **Roles** Attachments and Links ▶

Mitigating Control ID:

\* Name: Duplicate invoice parameter changes

Description: "This rule tracks changes to the system settings that prevent the same invoice from being posted more than once."

\* Valid From: 29.05.2023  
Valid To: 31.12.9999  
\* Trigger:  Event  Date  
Operation Frequency: Monthly  
\* To Be Tested:  Yes  No  
\* Test Automation:  Automated  Manual  
Testing Technique:   
Input:   
Output:

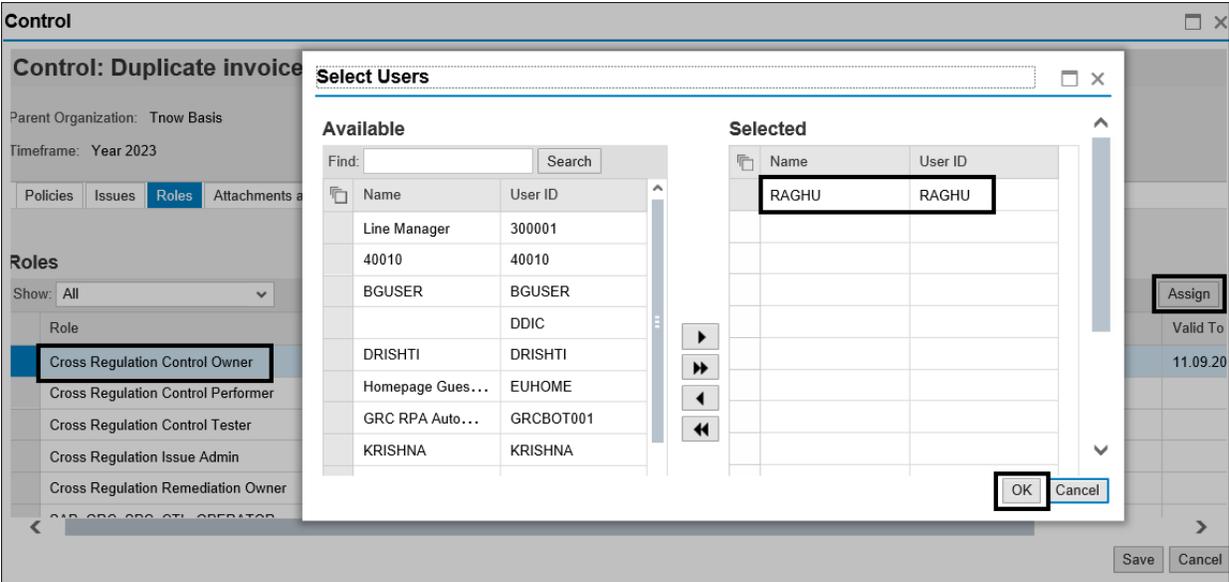
Control or Process Step:  Control  Process Step

Control Category: Transactional-Level Control

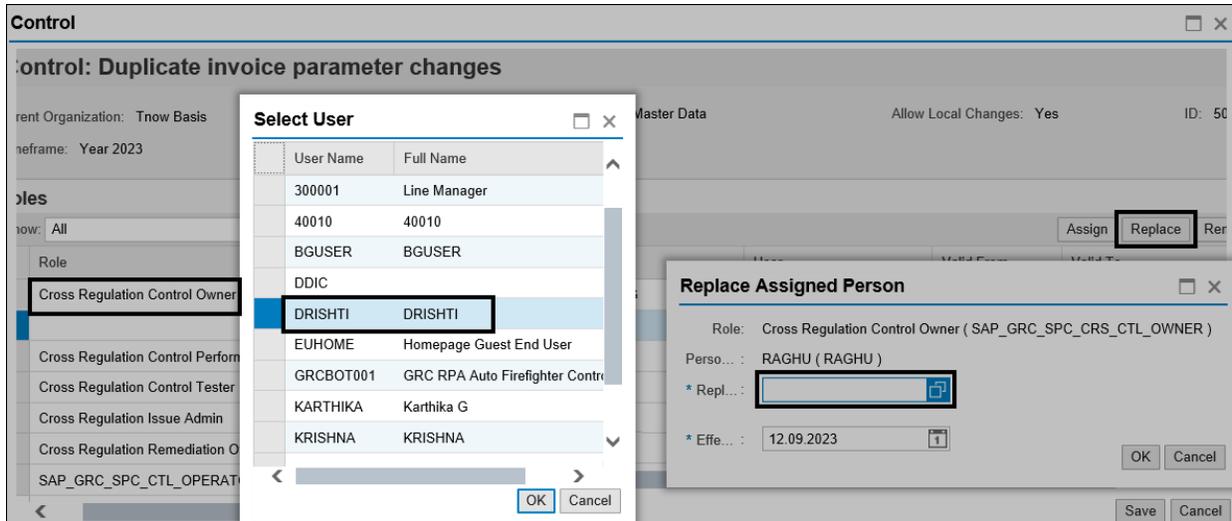
Significance: Key Control

◀   ▶

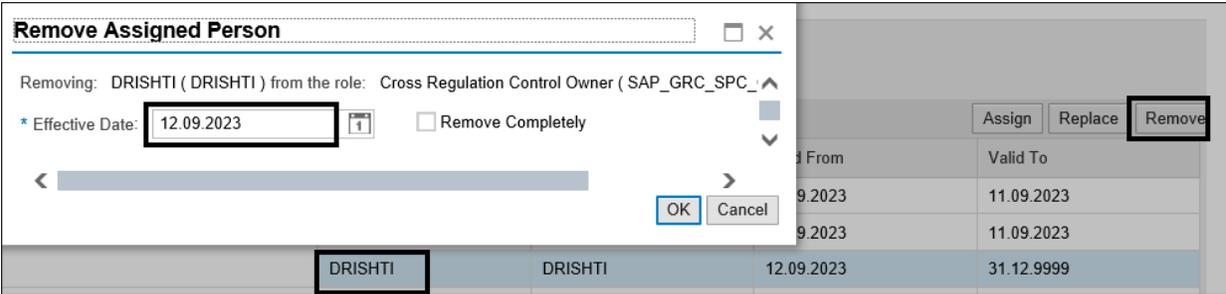
**Figure 5.50** Navigation Option to Roles Tab of a Local Control



**Figure 5.51** Assignment of a User to the Control Owner Role



**Figure 5.52** Replacement of Current Owner from the Roles Tab



**Figure 5.53** Removal of Current Owner from the Roles Tab

### Assign Process, Subprocess and Control Roles

1 Select Role and Filter    2 Assign Roles    3 Review    4 Confirmation

Timeframe: Year 2023 Apply    Effective Date 12.09.2023

Select Role Levels to be assigned. If desired, select Filters, then click Next.

**Role Level**

Process

Subprocess

Control

**Regulations**

Show Cross-Regulation Roles?:  Yes  No

Regulations: Add

**Display Expired User Role Assignment for Selected Timeframe**

Display Expired User Role Assignment for Selected Timeframe:  Yes  No

**Filters**

Organization: 3 Selected

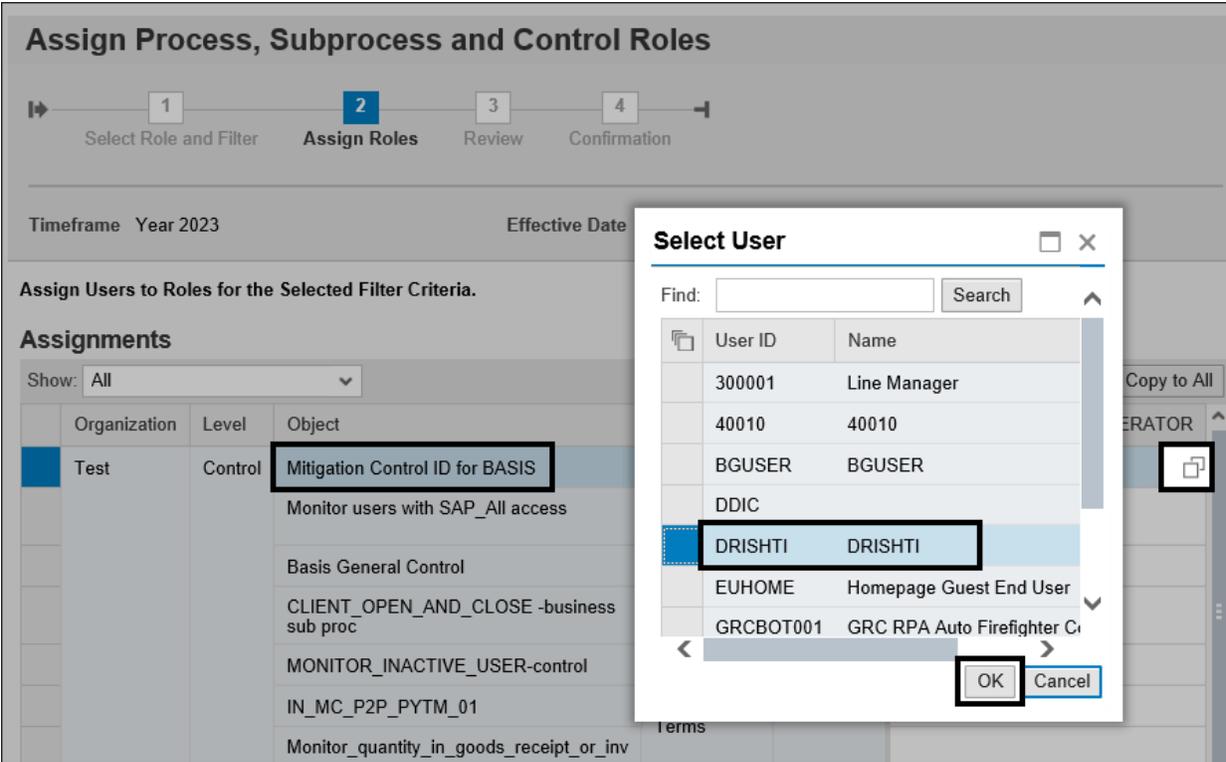
Process: Add

Subprocess: Add

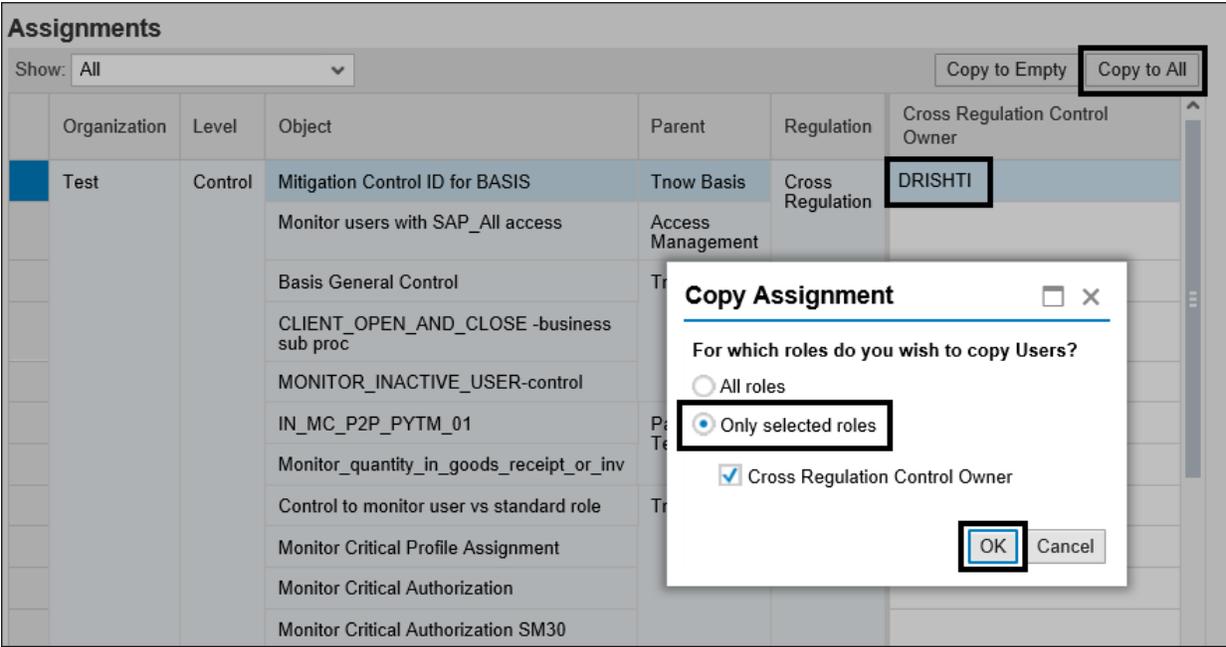
Control: Add

Role: 1 Selected

**Figure 5.54** Filter Options Available in the Select Role and Filters Tab



**Figure 5.55** Selection of User for Assignment to the Subprocess Owner Role



**Figure 5.56** Mass Maintenance of User Assignments to Roles

**Central Delegation**

Create Open Delete

Delegator	Delegate	Period	End Date
KARTHIKA			31.12.9999
KARTHIKA			31.12.9999
SAIKRISHNA			31.12.9999
SANDEEPL			31.12.9999

**Central Delegation**

Delegator Delegate

\* User: SANDEEPL \* User: KARTHIKA

Full Name: Sandeep Full Name: Karthika G

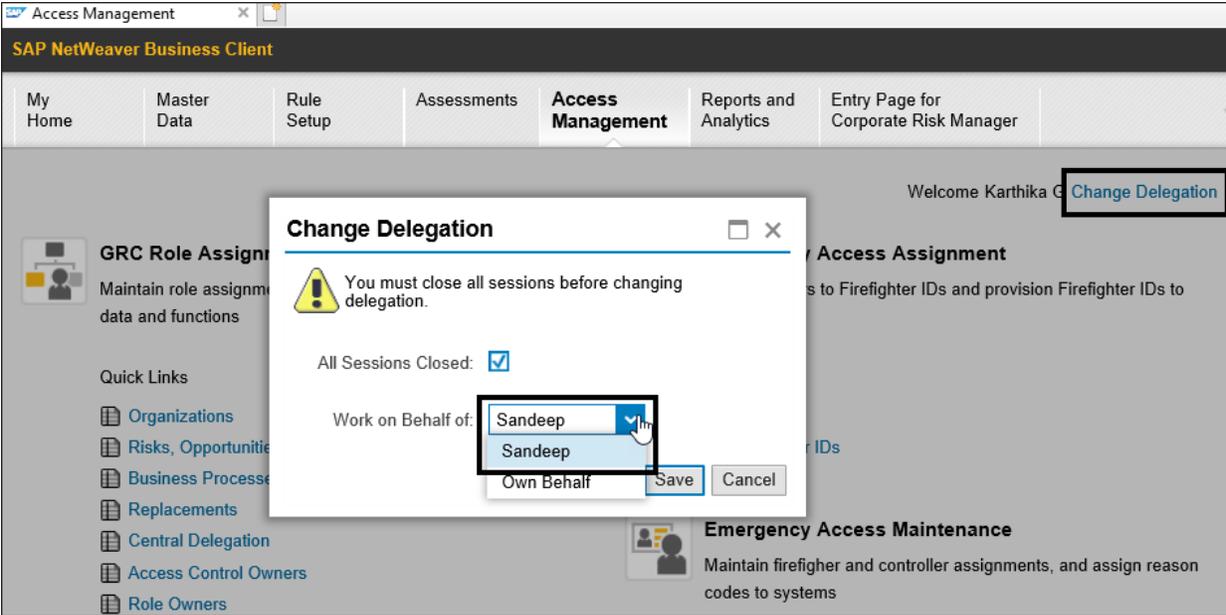
Delegation Period

\* Start Date: 12.09.2023

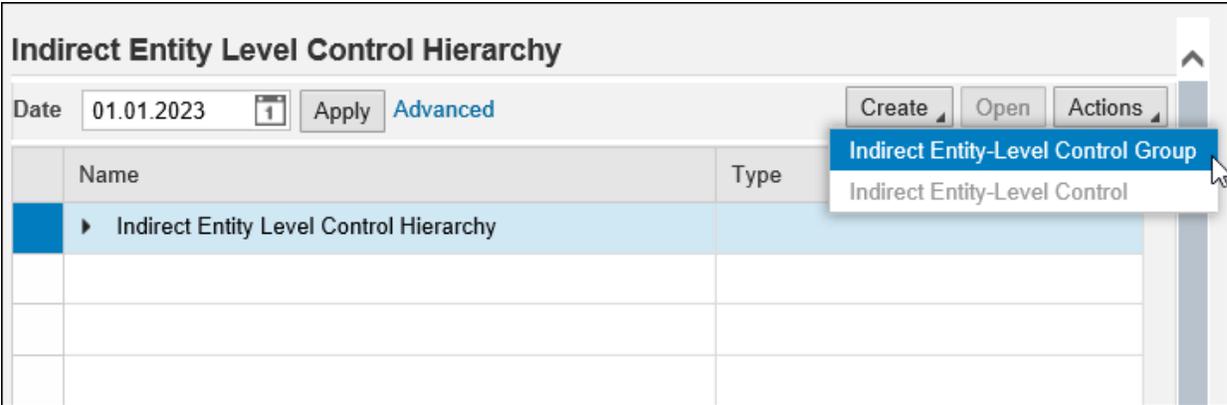
\* End Date: 13.09.2023

Save Cancel

**Figure 5.57** Creation of Central Delegation



**Figure 5.58** Changing the Delegation ID to Perform Tasks Assigned



**Figure 5.59** Option to Create a New Indirect Entity-Level Control Group in the Hierarchy

**Indirect Entity-Level Control Group** □ ×

---

**Create Indirect Entity-Level Control Group**

Parent Group: ID: 50001388  
Timeframe: 01.01.2023 Effective Date: 01.01.2023

**General** Attachments and Links

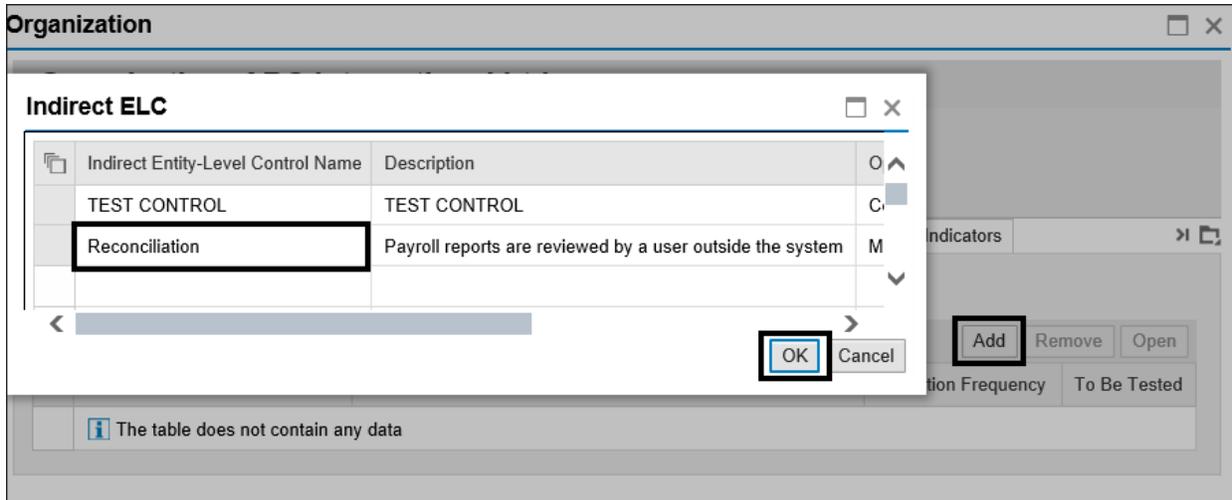
\* Name:  \* Valid from:

Description:  \* Valid to:

<   >

**Figure 5.60** Configuration of the Indirect Entity-Level Control Group





**Figure 5.62** Assignment of Indirect Entity-Level Control to the Organization

**Control** □ ×

---

**Control: Monitor users with SAP\_All access**

Parent Organization: Power Generation      Parent Subprocess: Access Management      Allow Local Changes: No  
Timeframe: Year 2023      Effective Date: 01.01.2023

◀ **General** | Regulations | Performance Plan | Business Rules | Control Performance | Evaluation | Monitoring Jobs | Requirement | Risks | Account Groups | Own

---

Mitigating Control ID:

\* Name:

Description:

\* Valid From:   
Valid To:   
\* Trigger:  Event  Date

Operation Frequency:

\* To Be Tested:  Yes  No

\* Test Automation:  Automated  Manual  Sen

Testing Technique:

Control or Process Step:  Control  Process Step

Control Category:

Significance:

Input:

Output:

◀    ▶

**Figure 5.63** Request Change Option in the Local Control

**Change Request**

Control Name: Monitor users with SAP\_All access  
Parent: Access Management  
Effective Date: 01.01.2023

\* Change Request: Update the attributes of the control

	Field to be Changed	Proposed Change
	Description	Control description to be updated
	Nature	Update the nature of the control

Insert Line

OK Cancel

**Figure 5.64** Details to Be Updated in the Change Request for the Master Data Update

**Active Queries**

Workitems **All (84)** Access Management (0) Process Control (84) Risk Management (0)

**Workitems - All**

[Change Query](#) [Define New Query](#) [Personalize](#)

View: \* [Standard View] Print Version Export

Subject	Status	Created On	Due Date	Created By
<a href="#">Approve Change Request</a>	Ready	25.09.2023 14:26:50	25.09.2023	Karthika G

**Figure 5.65** Work Inbox Screen with Items Pending for Action

**Approve/Reject Master Data Change: Monitor users with SAP\_All access**

Requester: Karthika G

Control Name: [Monitor users with SAP\\_All access](#)

Parent: Access Management

Effective Date: 01.01.2023

Requested On: 25.09.2023 14:26:49

\* Change Request: Update the attributes of the control

\* Approval End Date: 30.09.2023

\* Comments: Approved

Field to be Changed	Proposed Change
Description	Control description to be updated
Nature	Update the nature of the control

Approve Reject Cancel

**Figure 5.66** Master Data Change Request: Approver View

**Active Queries**

Workitems **All (84)** Access Management (0) Process Control (84) Risk Management (0)

**Workitems - All**

[Change Query](#) [Define New Query](#) [Personalize](#)

View: \* [Standard View] Print Version Export

Subject	Status	Created On	Due Date	Created By
<a href="#">Control Change Request is Approved</a>	Ready	25.09.2023 14:35:19	25.09.2023	Karthika G

**Figure 5.67** Change Request Approval Confirmation

**Control: Monitor users with SAP\_All access**

Parent Organization: Power Generation      Parent Subprocess: Access Management  
 Timeframe: Year 2023      Effective Date: 01.01.2023

K Issues Roles Attachments and Links **Change Request**

Request Status: Approved  
 Effective Date: 01.01.2023  
 Requested On: 25.09.2023 14:26:49  
 Approved On: 25.09.2023 14:35:18

\* Change Request: Update the attributes of the control

\* Approval End Date: 30.09.2023

\* Comments: Approved

Field to be Changed	Proposed Change
Description	Control description to be updated
Nature	Update the nature of the control

**Figure 5.68** Review Change Request Details

**Active Queries**

Workitems **All (84)** [Access Management \(0\)](#) [Process Control \(84\)](#) [Risk Management \(0\)](#)

**Workitems - All**

[Change Query](#) [Define New Query](#) [Personalize](#)

View: \* [Standard View] Print Version Export 

 Subject	Status	Created On	Due Date	Created By
<a href="#">Review Change Log</a>	Ready	25.09.2023 14:39:07	25.09.2023	Karthika G

**Figure 5.69** Work Inbox Screen with Review Items Pending for Action

**Control: Monitor users with SAP\_All access**

Parent Organization: Power Generation      Parent Subprocess: Access Management      Allow Local Changes: No      ID: 50001143

Timeframe: Year 2023      Effective Date: 01.01.2023

General  
  Regulations  
  Performance Plan  
  Business Rules  
  Control Performance  
  Evaluation  
  Monitoring Jobs  
  Requirement  
  Risks  
  Account Groups  
  Owners  
  Reports  
  Policies

Mitigating Control ID:

\* Name:

Description:

Control or Process Step:  Control    Process Step

Control Category:

Significance:

Level of Evidence:

Control Risk:

\* Valid From:

Valid To:

\* Trigger:  Event    Date

Operation Frequency:

\* To Be Tested:  Yes    No

\* Test Automation:  Automated    Manual    Semi-Automated

Testing Technique:

Input:

Output:

Save   Cancel   Finish

**Figure 5.70**      Review Updated Control

**Change View "Activate Master Data Changes Workflow": Overview**

New Entries BC Set: Change Field Values

Activate Master Data Changes Workflow				
Entity ID	Entity Type	Approval	Notify	
ACC_GROUP	Account Group	<input type="checkbox"/>	<input type="checkbox"/>	▲
COBJECTIVE	Control Objective	<input type="checkbox"/>	<input type="checkbox"/>	▼
CONTROL	Control	<input type="checkbox"/>	<input checked="" type="checkbox"/>	⋮
CRISK	Risk Template	<input type="checkbox"/>	<input type="checkbox"/>	
ECONTROL	Indirect Entity-Level Control	<input type="checkbox"/>	<input type="checkbox"/>	

**Figure 5.71** Configuration to Notify Master Data Changes

**Master Data Upload Generator**



**Mode**

Generate Template  
 Upload Data

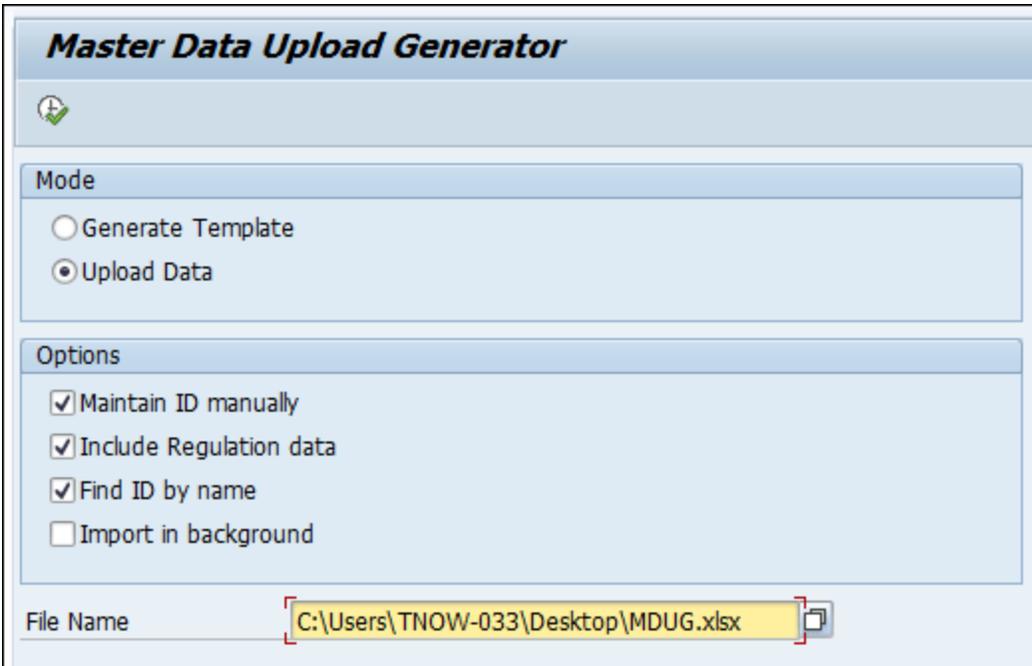
**Options**

Maintain ID manually  
 Include Regulation data  
 Multiple languages  
Select languages  to  

**Export Data**

Export data

**Figure 5.72** Generate Template for MDUG



**Figure 5.73** Upload the MDUG File into the System to Update the Master Data

**Import Data**



**File Selection**

Use dataset

File name  

**Additional Function**

Simulation

Extended log

**Validity**

Valid from	<input type="text" value="12.09.2023"/>
Valid to	<input type="text" value="31.12.9999"/>

**Figure 5.74** Execution of the MDUG File in Simulation Mode

**Display logs**

Technical Information

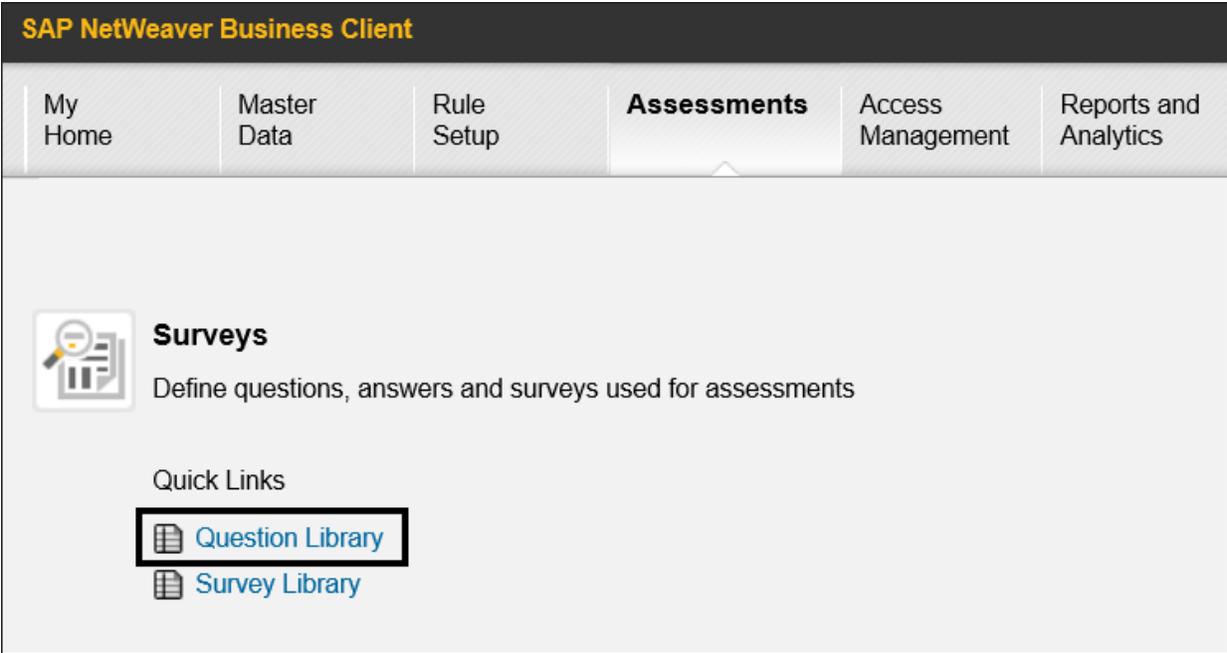
Date/Time/User	Nu...	External ID	Transac...	Mode	Log number
12.09.2023 11:42:48 KARTHIKA	4		SA38	Dialog proces	00000000000000208535
12.09.2023 11:44:33 KARTHIKA	8		SA38	Dialog proces	00000000000000208536
12.09.2023 11:45:10 KARTHIKA	8		SA38	Dialog proces	00000000000000208537

STOP 0 2 0 55

Message Text

- Content importing/exporting started at 2023-09-12 14:13:26
- Simulation mode entered
- Importing is triggered from STANDALONE
- Exit on error is off
- The direct risk model(SAS31) is used
- Start date is 2023-09-12 and end date is 9999-12-31
- Object XPROCESS/50001390(Procure To Pay) has been created or updated
- Object XPROCESS/50001079(Order To Cash) has been created or updated
- Object XPROCESS/50001195(Record to Report) has been created or updated
- Object XPROCESS/50001391(Information Technology) has been created or updated
- Object XPROCESS/50001392(Human Resource) has been created or updated
- Object XSUBPROCESS/50001065(Maintain Vendor Master Data) has been created or updated
- Object XSUBPROCESS/50001069(Perform Invoice Verification) has been created or updated
- Object XSUBPROCESS/50001072(Purchase A/c Assignment Category) has been created or updated
- Object XSUBPROCESS/50001074(Transactional Purchasing) has been created or updated
- Object XSUBPROCESS/50001076(Inventory) has been created or updated

**Figure 5.75** Logs after Uploading the MDUG File in Simulation for Review



**Figure 6.1** Category Options in the Create Question Screen

Question Library								
						Create	Delete	Actions
Category	Question	Active	Answer Type	Created By	Created On			
Control Design	Are all the company codes in scope of the control are accurate and valid?	Yes	Choice	Karthika G	27.06.2023 15:22:05			
Risk Survey	How many events occurred in the past 3 years?	Yes	Choice	Karthika G	27.06.2023 15:25:41			
Control Design	If the Control designed is meeting the organization ICS requirement	Yes	Yes/No/NA	Karthika G	27.06.2023 15:29:17			
Subprocess Design	If the Organization structure designed meeting ICS requirement	Yes	Yes/No/NA	Karthika G	27.06.2023 15:30:05			
Control Design	Is the design of the control meeting the standards of ICS of the organization?	Yes	Yes/No/NA	Karthika G	27.06.2023 15:30:41			
Risk Survey	What is the major impact if the risk materializes?	Yes	Choice	Karthika G	27.06.2023 15:31:16			
Control Design	need access to critical codes related to basis?	Yes	Yes/No/NA	Karthika G	27.06.2023 15:32:38			

**Figure 6.2** Question Library Maintenance Screen

Question □ ×

---

**Create Question**

---

\* Category: Control Design ▼

\* Question: Are all the company codes in scope of the control are accurate and valid?

Active: Yes ▼

\* Answer Type: ▼

Question Comment: Yes ▼

**Figure 6.3** Create Question Screen for Control Design Assessment

Question ☐ ✕

### Create Question

\* Category: Control Design ▾

\* Question: Are all the company codes in scope of the control are accurate and valid?

Active: Yes ▾

\* Answer Type: Rating ▾

Question Comment: Yes ▾

\* Rating Type: Rating (1..5) ▾

Requires Comment:  Rating 1  Rating 2  Rating 3  Rating 4  Rating 5 ▾

Save Cancel

**Figure 6.4** Options for the Rating Answer Type

**Question** ☐ ×

---

**Create Question**

---

\* Category: Control Design ▼

\* Question: Are all the company codes in scope of the control are accurate and valid?

Active: Yes ▼

\* Answer Type: Yes/No/NA ▼

Question Comment: Yes ▼

Requires Comment:  Yes  No  N/A

Save Cancel

**Figure 6.5** Options for Answer Type Yes, No, N/A

**Question** □ ×

---

**Create Question**

\* Category:  ▼

\* Question:

Active:  ▼

\* Answer Type:  ▼

Question Comment:  ▼

**Answer Options**

	Selection	Value	Score	Requires Comment
	a	Yes, all the company codes are covered and upto date	0	<input type="checkbox"/>
	b	No, new company codes creating during the assessment pe...	0	<input checked="" type="checkbox"/>
	c	There are few company codes which are no longer valid sh...	0	<input checked="" type="checkbox"/>

**Figure 6.6** Options for the Choice Answer Type

Survey Library								
						Create	Delete	Actions
Category	Title	Description	Active	Created By	Created On			
Control Design	<a href="#">Control Design Survey(TEST)</a>	Control Design Survey (TEST)	Yes	Karthika G	27.06.2023 18:50:37			
Control Design	<a href="#">Critical basis access</a>	Critical basis access	Yes	Karthika G	27.06.2023 18:54:34			
Control Design	<a href="#">Quarterly design assessment</a>		Yes	Karthika G	27.06.2023 18:51:28			
Subprocess Design	<a href="#">Subprocess Design(TEST)</a>	Subprocess Design (TEST)	Yes	Karthika G	27.06.2023 18:52:40			
Control Design	<a href="#">Survey for Control Design _01</a>	Survey for Control Design _01	Yes	Karthika G	27.06.2023 16:31:27			
Risk Survey	<a href="#">Survey to perform risk assessment</a>	Survey to perform risk assessment	Yes	Karthika G	27.06.2023 18:53:30			

**Figure 6.7** Create Button in the Survey Library Maintenance Screen

**Survey**

---

**Create Survey**

Category: Control Design

---

**General** Attachments and Links

\* Category: Control Design

\* Title: Control Design Survey

Description: Control Design Survey

Valuation: No Valuation

Active: No Valuation

Score based valuation

**Questions**

Add Add As Child Remove

The image shows a web-based form for creating a survey. At the top, there's a header 'Survey' and a sub-header 'Create Survey'. Below that, the category is set to 'Control Design'. There are two tabs: 'General' (selected) and 'Attachments and Links'. The form fields include: '\* Category:' with a dropdown menu showing 'Control Design'; '\* Title:' with a text input containing 'Control Design Survey'; 'Description:' with a text area containing 'Control Design Survey'; 'Valuation:' with a dropdown menu currently showing 'No Valuation' and an open list of options: 'No Valuation' (highlighted with a black box), 'No Valuation', and 'Score based valuation'; and 'Active:' with a dropdown menu showing 'No Valuation'. At the bottom, there's a 'Questions' section with three buttons: 'Add', 'Add As Child', and 'Remove'.

**Figure 6.8** Valuation Types for Creating a Survey

**Add Questions** ☐ ✕

**Available**

Find:  Category: Control Design ▾ Created by: Karthika G ▾ Go

Question	Created by
Are all the company codes in scope of the control are accurate and valid?	Karthika G
If the Control designed is meeting the organization ICS requirement	Karthika G
Is the design of the control meeting the standards of ICS of the organization?	Karthika G
need access to critical tcodes related to basis?	Karthika G

OK Cancel

**Figure 6.9** The Option to Add Questions to the Survey

**Create Survey**

Category: Control Design

---

**General** Attachments and Links

\* Category: Control Design

\* Title: Control Design

Description:

Valuation: No Valuation

Active: Yes

**Questions**

Add Add As Child Remove Open Actions

Question	Answer Type
Are all the company codes in scope of the control are accurate and valid?	Choice
Is the design of the control meeting the standards of ICS of the organization?	Yes/No/NA

Save Cancel

**Figure 6.10** The Questions Selected to Be Part of the Survey

**Create Survey**

Category: Control Design

General Attachments and Links

\* Category: Control Design

\* Title: Control Design

Description:

Valuation: No Valuation

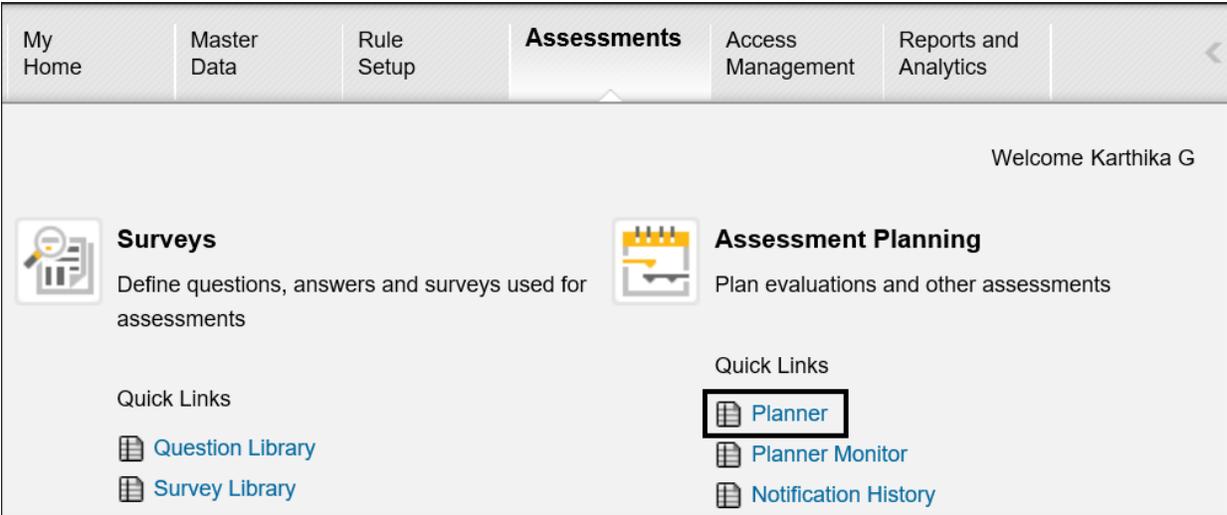
Active: Yes

**Questions**

<ul style="list-style-type: none"> <li>Are all the company codes in scope of the assessment?           <ul style="list-style-type: none"> <li>Always Display               <ul style="list-style-type: none"> <li>Yes, all the company codes are covered and upto date</li> <li>No, new company codes creating during the assessment period are not updated in the scope</li> <li>There are few company codes which are no longer valid should be removed from the scope of the control</li> </ul> </li> </ul> </li> </ul>	Is the design of the control meeting the standards of ICS of the organization?	Yes/No/NA	Always Display
--	--	-----------	----------------

Save Cancel

**Figure 6.11** Assigning a Child Question to a Root Question



**Figure 6.12** Planner Option in the Assessments Work Center

Plans - Process Control & Risk Management								
Show Quick Criteria Maintenance								
View: * [Standard View] <input type="button" value="Open"/> <input type="button" value="Create"/> <input type="button" value="Cancel"/> <input type="button" value="Delete"/> <input type="button" value="Copy"/> <input type="button" value="Split"/> <input type="button" value="Notification"/>								
Schedule Name	Schedule Activity	Created On	Changed On	Organizations	Start Date	Due Date	Next Runtime	Status
Design Assessment_Q2 2023	Perform Control Design Assessment	27.06.2023 17:10:34	27.06.2023 17:10:34	1	27.06.2023	14.07.2023	00.00.0000 00:00:00	Completed
Design Assessment_Q2	Perform Control Design Assessment	25.06.2023 16:44:12	25.06.2023 16:44:12	1	25.06.2023	30.06.2023	00.00.0000 00:00:00	Completed
Design Assessment_Q2	Perform Control Design Assessment	21.06.2023 22:15:29	21.06.2023 22:15:29	1	21.06.2023	30.06.2023	00.00.0000 00:00:00	Completed
Design Assessment_Q2	Perform Control Design Assessment	15.06.2023 22:13:34	15.06.2023 22:13:34	1	15.06.2023	30.06.2023	00.00.0000 00:00:00	Completed
Design Assessment_Q2	Perform Control Design Assessment	15.06.2023 20:36:54	15.06.2023 20:36:54	1	15.06.2023	30.06.2023	00.00.0000 00:00:00	Completed
Risk Assessment	Perform Risk Assessment via Survey	01.06.2023 10:27:33	01.06.2023 10:27:33	4	01.06.2023	30.06.2023	00.00.0000 00:00:00	Completed
Risk Assessment	Perform Risk Assessment via Survey	01.06.2023 10:24:36	01.06.2023 10:24:36	4	01.06.2023	30.06.2023	00.00.0000 00:00:00	Completed
Risk Assessment	Perform Risk Assessment	01.06.2023 10:00:44	01.06.2023 10:00:44	4	01.06.2023	30.06.2023	00.00.0000 00:00:00	Completed
Test of Effectiveness	Test Control Effectiveness	30.05.2023 18:27:57	30.05.2023 18:27:57	1	30.05.2023	23.07.2023	00.00.0000 00:00:00	Completed
Test of Effectiveness	Test Control Effectiveness	29.05.2023 16:55:03	29.05.2023 16:55:03	1	29.05.2023	23.07.2023	00.00.0000 00:00:00	Completed
basis critical access planner	Perform Control Design Assessment	04.05.2023 12:11:39	04.05.2023 12:11:39	2	04.05.2023	10.05.2023	00.00.0000 00:00:00	Completed
Control Design Survey Planner (TEST)	Perform Control Design Assessment	30.03.2023 21:44:51	30.03.2023 21:44:51	2	30.03.2023	30.04.2023	00.00.0000 00:00:00	Completed

**Figure 6.13** Planner Functionality to Schedule New Jobs

**Planner**

### Create Plan

1 Enter Plan Details    2 Select Regulation    3 Select Organizations    4 Select Object(s)    5 Review    6 Confirmation

\* Plan Name:

\* Plan Activity:

\* Survey:

\* Period:

\* Year:

Reference Timeframe:  Yes  No

\* Start Date:

\* Due Date:

**Figure 6.14** Create Plan: Navigational Scheduler

**Planner**

### Create Plan

Plan Activity Perform Control Design Assessment Period Quarter 3 2023

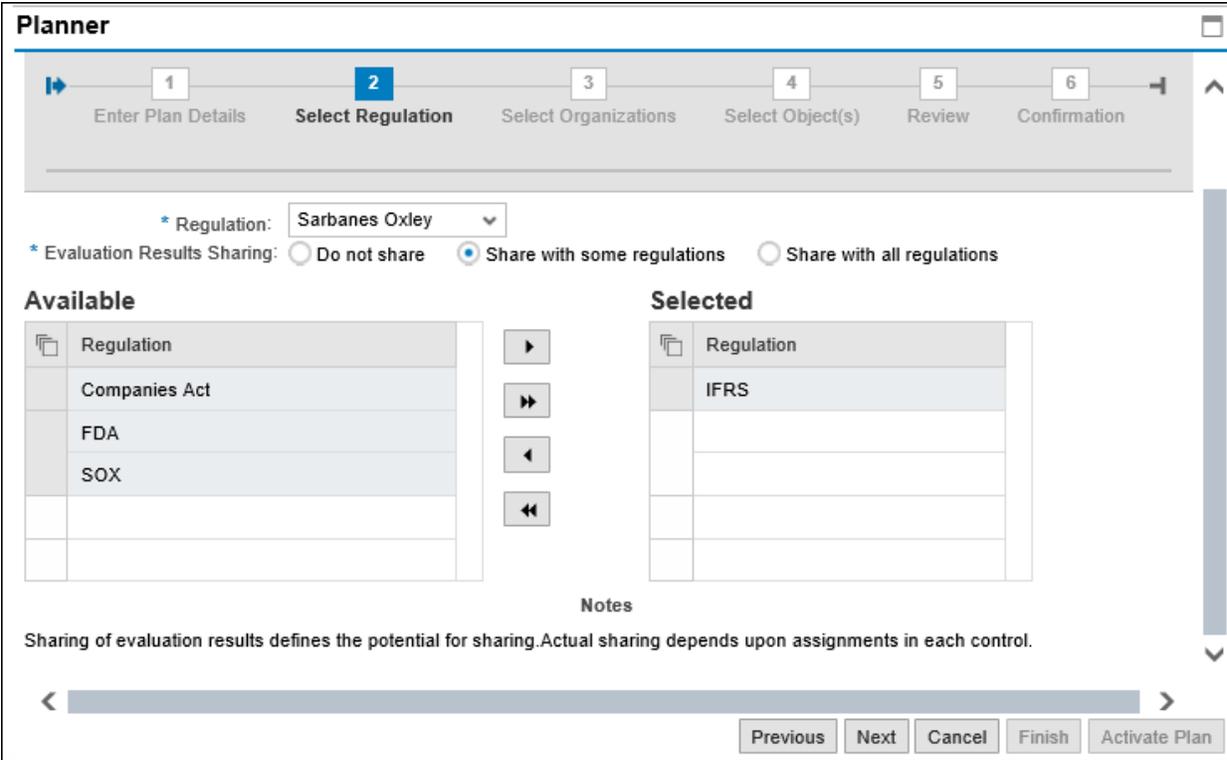
1 Enter Plan Details 2 **Select Regulation** 3 Select Organizations 4 Select Object(s) 5 Review 6 Confirmation

\* Regulation: Sarbanes Oxley

\* Evaluation Results Sharing:  Do not share  Share with some regulations  Share with all regulations

Previous Next Cancel Finish Activate Plan

**Figure 6.15** Don't Share Regulations Option while Defining the Evaluation Results Sharing



**Figure 6.16** Share with Some Regulations Option while Defining the Evaluation Results Sharing

**Planner**

### Create Plan

Plan Activity Perform Control Design Assessment Period Quarter 3 2023

1 Enter Plan Details   2 Select Regulation   **3 Select Organizations**   4 Select Object(s)   5 Review   6 Confirmation

---

**Organizations**

Show: ALL   View:   Expand All   Collapse All

Find   Find Next   Description

Organization	Valid from	Valid to
▶ Electric Power	28.07.2023	31.12.9999
▼ Test	01.01.2023	31.12.9999
Tnow Basis	01.01.2022	31.12.9999

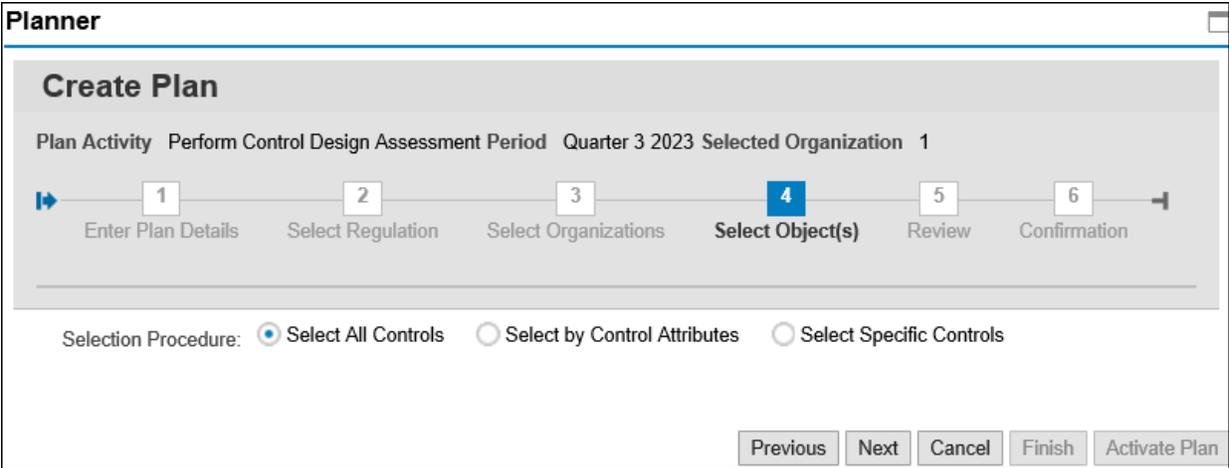
Add >  
Add with children >

**Selected**

Organization	Valid from	Valid to
Tnow Basis	01.01.2022	31.12.9999

Previous   Next   Cancel   Finish   Activate Plan

**Figure 6.17** Organizations Selected for Filtering the Controls for Assessment



**Figure 6.18** Select All Controls Option while Scheduling the Planner

**Planner**

### Create Plan

Plan Activity Perform Control Design Assessment Period Quarter 3 2023 Selected Organization 1

1 2 3 4 5 6

Enter Plan Details Select Regulation Select Organizations **Select Object(s)** Review Confirmation

Selection Procedure:  Select All Controls  **Select by Control Attributes**  Select Specific Controls

**Select attributes which you want to use as filters**

Control Category:  Direct ELC  IT General Control  Transactional-Level Control

Significance:  Key Control  Standard Control

Control Automat...:  Automated  Manual  Semi-Automated

Test Automation:  Automated  Manual  Semi-Automated

Operation Frequ...:  Annual  Bi-Weekly  Continual  Daily  Monthly  
 Quarterly  Semi-Monthly  Weekly  ALL

Control Risk:  High  Low  Medium

Level of Evidence:  Tier 1: No Testing  Tier 2: Self-Assessment  Tier 3: Control Design Assessment + Control Effectiveness  N/A

Without Evaluation Result:  Yes

Changed After:

Previous Next Cancel Finish Activate Plan

**Figure 6.19** Select by Control Attributes Option while Scheduling the Planner

**Planner**

### Create Plan

Plan Activity Perform Control Design Assessment Period Quarter 3 2023 Selected Organization 1

1 2 3 4 5 6  
Enter Plan Details Select Regulation Select Organizations **Select Object(s)** Review Confirmation

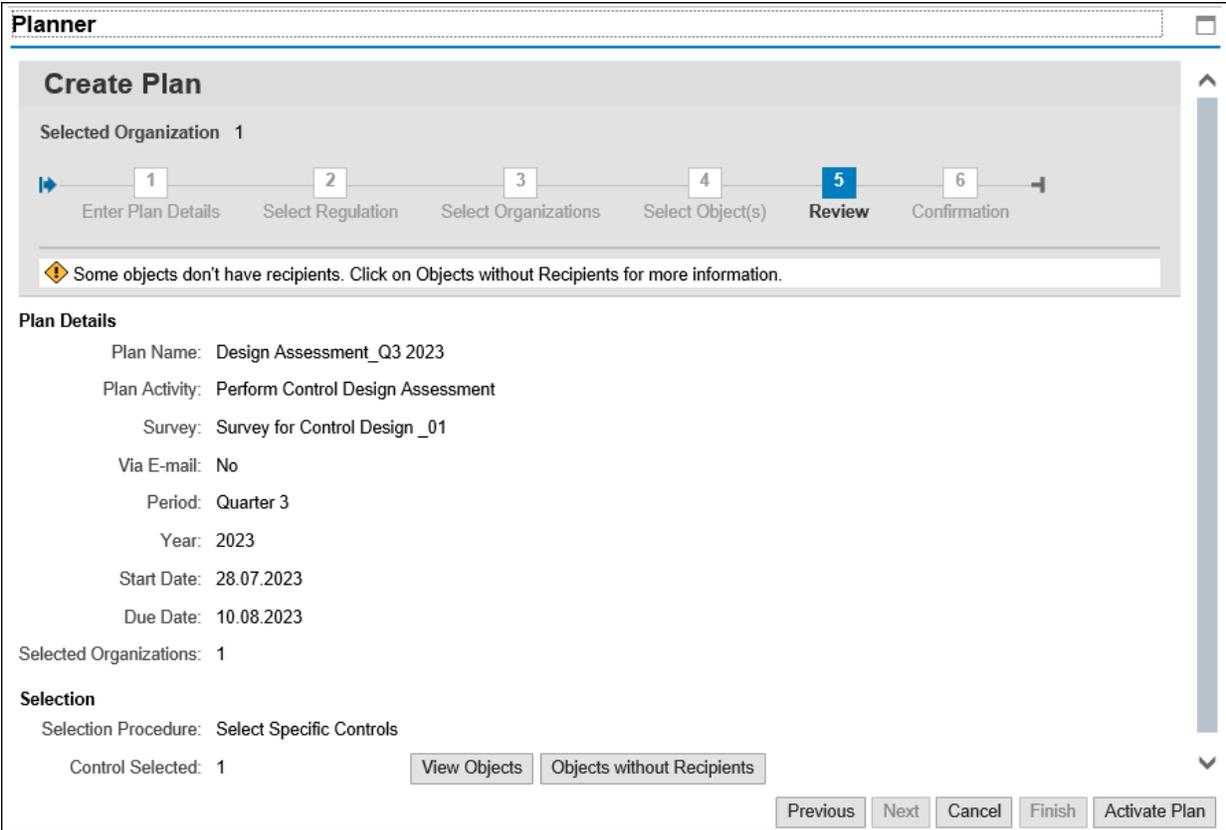
Selection Procedure:  Select All Controls  Select by Control Attributes  **Select Specific Controls**

### Select Controls

Control	Subprocess	Organization	Control Category	Control ID	Evaluations
Global Accounting Manual	Financial Reporting	Tnow Basis	Direct ELC	CONTROL/R/50001190	0

Previous Next Cancel Finish Activate Plan

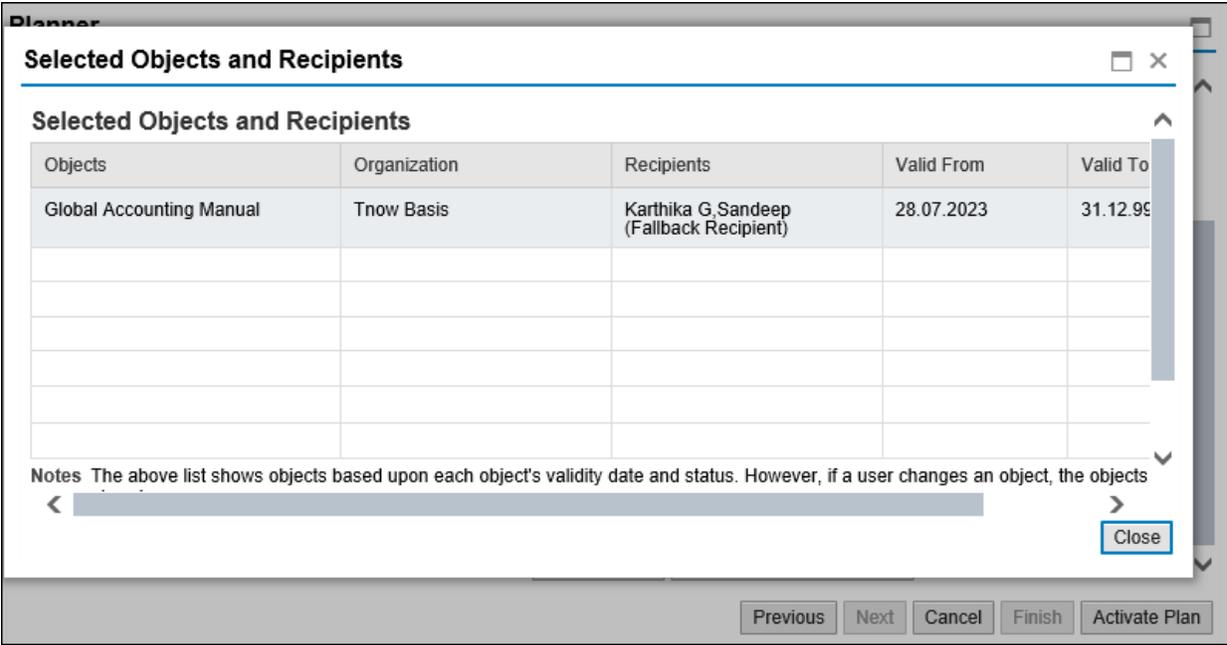
**Figure 6.20** Select Specific Controls Option while Scheduling the Planner



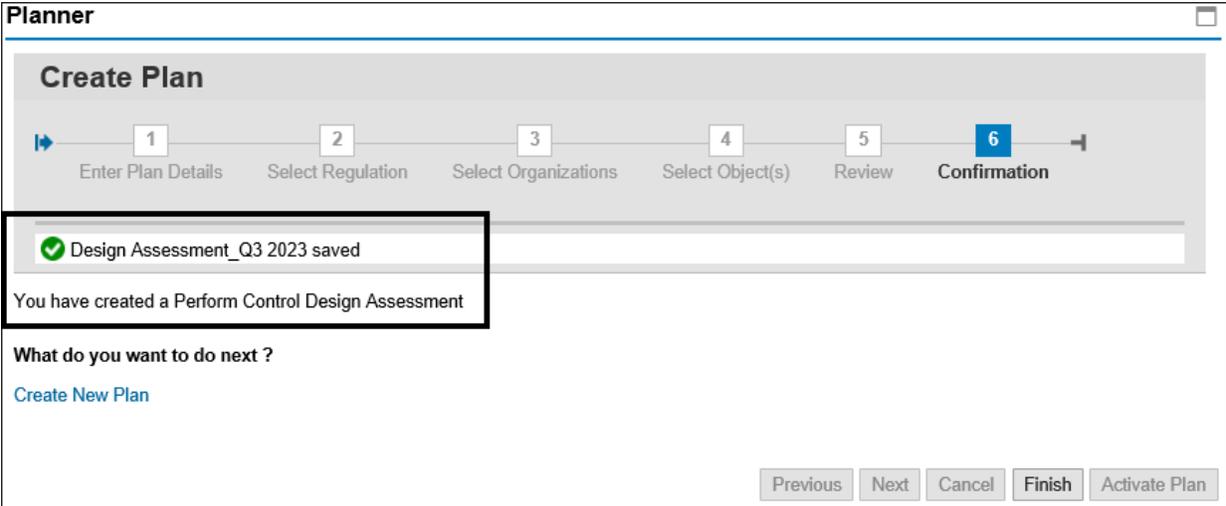
**Figure 6.21** Plan Details Selected for Scheduling the Planner

Objects	Organization	Valid from Date	Valid to Date
Global Accounting Manual	Tnow Basis	28.07.2023	31.12.9999

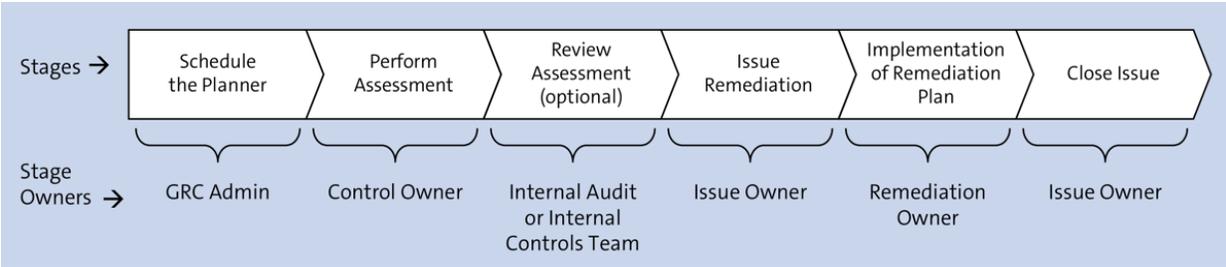
**Figure 6.22** Review Screen to Check the Objects with No Recipients Assigned



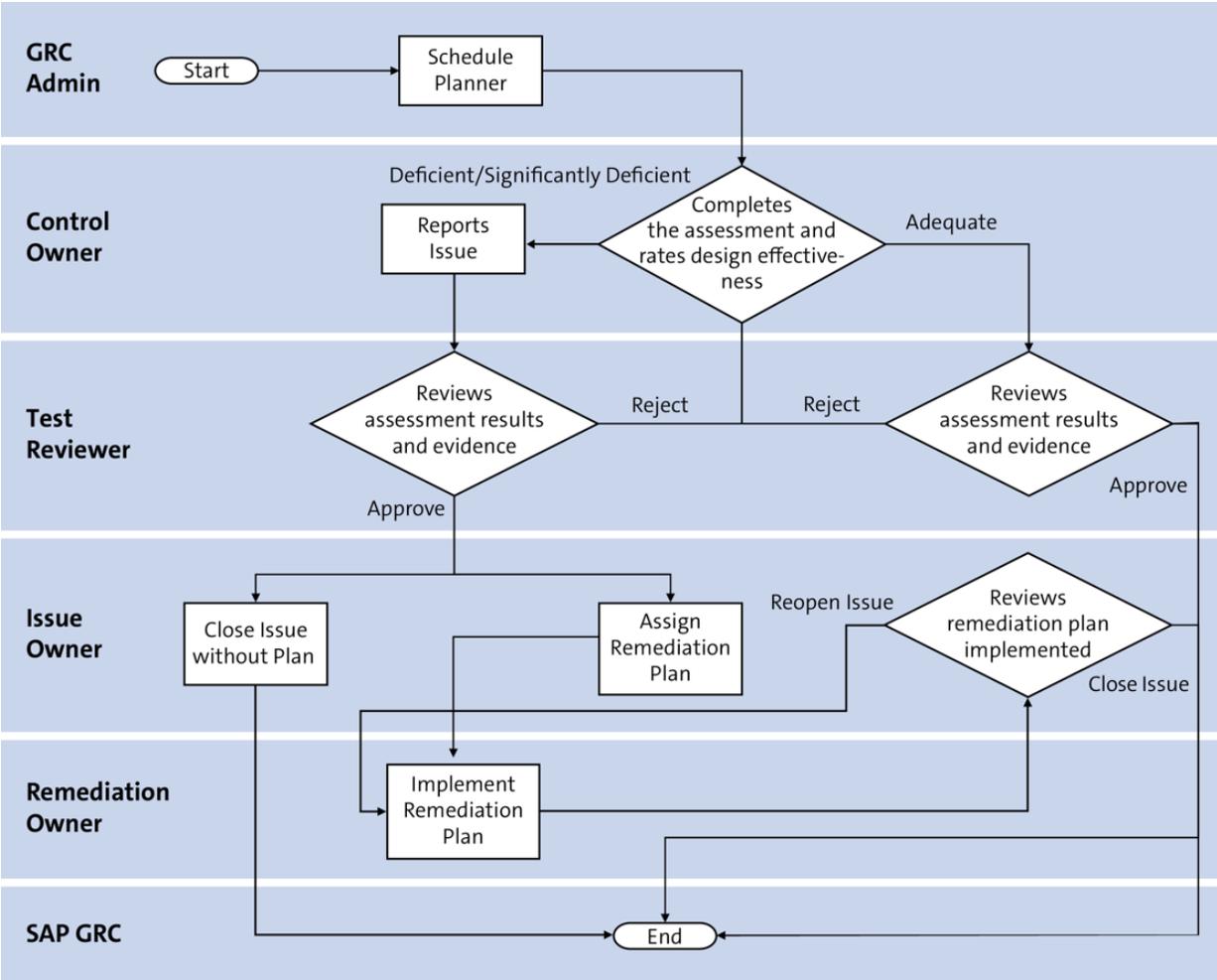
**Figure 6.23** Review Screen to Check the Recipients of the Workflow for Each Object Control



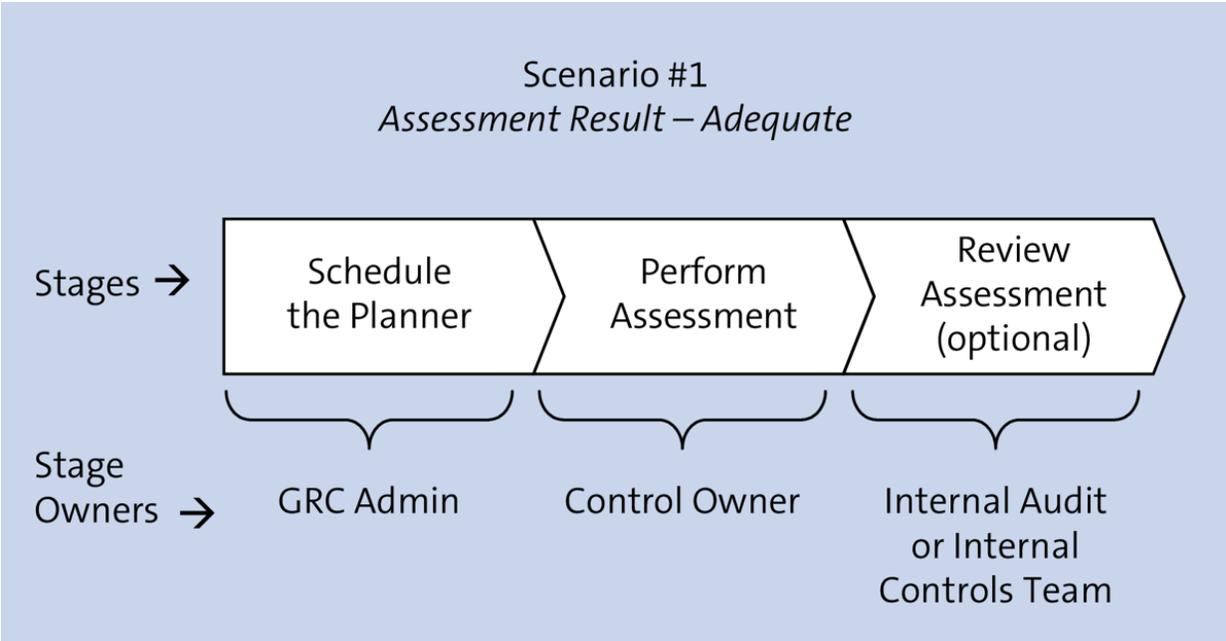
**Figure 6.24** Confirmation Message for the Scheduled Job Using the Planner



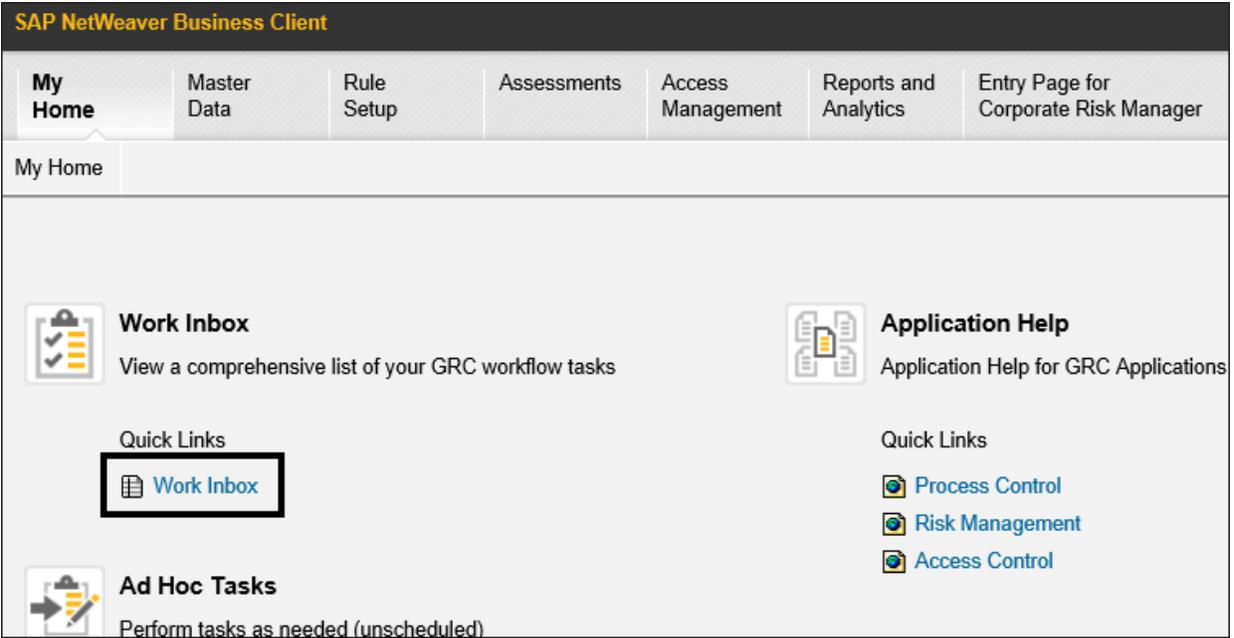
**Figure 6.25** Stages in the Design Assessment Workflow with Owners' Information



**Figure 6.26** Flowchart Depicting the Stages of Control Design Assessment



**Figure 6.27** Stages Involved When the Design Assessment Is Adequate



**Figure 6.28** Work Inbox Option in the My Home Work Center

**Active Queries**

Workitems [All \(76\)](#) [Access Management \(0\)](#) **[Process Control \(76\)](#)** [Risk Management \(0\)](#)

**Workitems - Process Control**

[Change Query](#) [Define New Query](#) [Personalize](#)

View: \* [Standard View] Print Version Export

Subject	Organization	Regulation	Status	Due Date	Created On	Object Name	Created By
<a href="#">Perform Control Design Assessment</a>	Tnow Basis	Sarbanes Oxley	Ready	10.08.2023	28.07.2023 15:38:24	Global Accounting Manual	Karthika G

**Figure 6.29** Work Inbox Screen with Items Pending for Action

**Control Design Assessment: Global Accounting Manual**

Assessment Period: Quarter 3 2023    Status: Draft    Organization: Tnow Basis    Process: BS00    Subprocess: Financial Reporting

You Can Also

**Evaluation**   Regulation   Control Details   Requirement   Account Groups   Risks   Attachments and Links

**Questions** Report Issue

Question	Answer	Comments
Is the design of the control meeting the standards of ICS of the organization?	Yes	<a href="#">Add Comment</a>

**General Data**

\* Rating: Not Defined

Comments:

[Submit](#)   [Save Draft](#)   [Cancel](#)

**Figure 6.30**    Questions and Answers in the Control Design Assessment

Attribute

Text

Control Design Rating 

	Value	Text
<input type="checkbox"/>	G	Adequate
<input type="checkbox"/>	R	Significantly Deficient
<input type="checkbox"/>	Y	Deficient

**Figure 6.31** Navigation to the Specify Names for Ratings Configuration Step

**Control Design Assessment: Global Accounting Manual**

Assessment Period: Quarter 3 2023    Status: Draft    Organization: Tnow Basis    Process: BS00    Subprocess: Financial Reporting

You Can Also

Evaluation    Regulation    Control Details    Requirement    Account Groups    Risks    **Attachments and Links**

**Attachments**

Type	Title	Version	File Size	File Type	Added On	Added By	At

**Add** | 

- Add File...
- Add Link...

**Submit**    Save Draft    Cancel

**Figure 6.32** Options Available for the Control Owner to Upload Evidences

**Active Queries**

Workitems [All \(84\)](#) [Access Management \(0\)](#) [Process Control \(83\)](#) [Risk Management \(1\)](#)

**Workitems - Process Control**

[Change Query](#) [Define New Query](#) [Personalize](#)

View: \* [Standard View] Print Version Export

Subject	Organization	Regulation	Status	Due Date	Created On	Object Name	Created By
<a href="#">Review Control Design Assessment</a>	Test	Sarbanes Oxley	Ready	14.07.2023	12.09.2023 19:47:58	Monitor users with SAP_All access	Karthika G

**Figure 6.33** Work Inbox Screen with Items Pending for Action

**Control Design Assessment: Monitor users with SAP\_All access**

Assessment Period: Year 2023      Status: Review      Organization: Test      Process: IT General Controls      Subprocess: Access Management

You Can Also

**Questions**

Question	Answer	Comments
Is the design of the control meeting the standards of ICS of the organization?	No	

**General Data**

\* Rating:  ❌

Comments:

Documents: [0 Attachments](#)

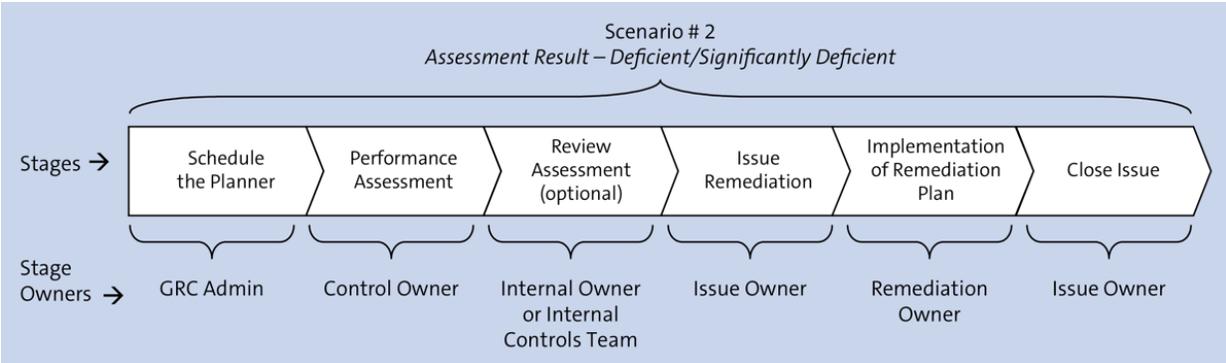
Performed by: SAIKRISHNA1 SAIKRISHNA1      Performed Date: 12.09.2023

**Reviewer Comment**

Reviewed by: SANDEEPL Sandeep      Review Date: 05.09.2023

Reviewer Comment:

**Figure 6.34** Evaluations Tab from the Control Design Assessment Review Work Item



**Figure 6.35** Assessment Result = Deficient/Significantly Deficient

**Control Design Assessment: Monitor Duplicate Invoice Check Config**

Assessment Period: Second Half of Year 2023      Status: Draft      Organization: Test      Process: Procure to Pay      Subprocess: Invoice Processing

You Can Also

[Evaluation](#)   [Regulation](#)   [Control Details](#)   [Monitoring Jobs](#)   [Requirement](#)   [Account Groups](#)   [Risks](#)   [Attachments and Links](#)

**Questions** [Report Issue](#)

No	Question	Answer	Comments
1	Are all the company codes in scope of the control are accurate and valid?	No, new company codes cre... <input type="button" value="v"/>	<a href="#">Add Comment</a>
1.1	Is the design of the control meeting the standards of ICS of the organization?	No <input type="button" value="v"/>	<a href="#">Add Comment</a>

**General Data**

\* Rating:

Comments:

Documents: [0 Attachments](#)

Performed by: \_\_\_\_\_ Performed Date: \_\_\_\_\_

**Administration**

Modified By: \_\_\_\_\_ Modified On: \_\_\_\_\_

**Figure 6.36** Response Screen for the Design Assessment Survey

**Report Issue** [Close]

\* Issue Name: New company codes are not in scope of the |

\* Priority: High [v]

\* Owner: KARTHIKA [Copy]

Description: New Company codes added in scope of the organization are not considered in the control

Compensating Controls: NA

Potential Impact: Risk of duplicate invoices being processed or the new company codes|

[OK] [Cancel]

**Figure 6.37** Report Issue Screen

**Control Design Assessment: Monitor Duplicate Invoice Check Config**

Assessment Period: Second Half of Year 2023      Status: Draft      Organization: Test      Process: Procure to Pay      Subprocess: Invoice Processing

You Can Also

[Evaluation](#)   **[Issues](#)**   [Regulation](#)   [Control Details](#)   [Monitoring Jobs](#)   [Requirement](#)   [Account Groups](#)   [Risks](#)   [Attachments and Links](#)

**Issues**

[Assign Remediation Plan](#)   [Close Without Plan](#)   [Reassign the issue](#)   [Void](#)   

Name	Priority	Type	Status	Reported...	Reported Date	Owner	Audit Trail
New company codes are not in scope of the control	High	Control Des...	Draft	Karthika G	05.09.2023	Karthika G	<a href="#">Audit Trail</a>

**New company codes are not in scope of the control**

\* Owner:  

Description:

Carryforward:

Potential Impact:

**Figure 6.38**      Issues Tab and Options

**Control Design Assessment: Monitor Duplicate Invoice Check Config**

Assessment Period: **Second Half of Year 2023**      Status: **Review**      Organization: **Test**      Process: **Procure to Pay**      Subprocess: **Invoice Processing**

**You Can Also**

**Evaluation** | Issues | Regulation | Control Details | Monitoring Jobs | Requirement | Account Groups | Risks | Attachments and Links

**Questions** Report Issue

No	Question	Answer	Comments
1	Are all the company codes in scope of the control are accurate and valid?	No, new company codes creating...	NO
1.1	Is the design of the control meeting the standards of ICS of the organization?	No	

**General Data**

\* Rating:  

Comments:

Documents: [0 Attachments](#)

Performed by: **KARTHIKA Karthika G**      Performed Date: **05.09.2023**

Review Control Design Assessment

**Approve** **Reject** Cancel

**Figure 6.39**      Approve and Reject Buttons in Review Assessment

**Control Design Assessment: Monitor Duplicate Invoice Check Config**

Assessment Period: Second Half of Year 2023    Status: Validated    Organization: Test    Process: Procure to Pay    Subprocess: Invoice Processing

Evaluation   **Issues**   Regulation   Control Details   Monitoring Jobs   Requirement   Account Groups   Risks   Attachments and Links

**Issues**

Name	Priority	Type	Status	Reporte...	Reported Date	Owner	Audit Trail
New company codes are not in scope of the control	High	Control De...	Validated	Karthika G	05.09.2023	Karthika G	<a href="#">Audit Trail</a>

**New company codes are not in scope of the control**

\* Owner:

Description:

Compensating Controls:

Carryforward:

Potential Impact:

Assign Remediation Plan   Close Without Plan   Reassign the issue

Remediate Issue: Control Design Assessment     

**Figure 6.40** Issue Remediation Options

**Assign Remediation Plan** ☐ ✕

\* Plan Name: Duplicate Inv Checks

\* Start Date: 05.09.2023 📅 1

\* Due Date: 26.09.2023 📅 1

\* Owner: KARTHIKA 👤

\* Description: Check for invoices created against the company code and confirm about any duplicate invoices

OK Cancel

**Figure 6.41** Assign Remediation Plan Screen Options

**Control Design Assessment: Monitor Duplicate Invoice Check Config**

Assessment Period: Second Half of Year 2023      Status: Validated      Organization: Test      Process: Procure to Pay      Subprocess: Invoice Processing

**Remediation Plan**

Name	Issue Name	Issue Owner	Start Date	Due Date	Plan Owner	Audit Trail
Duplicate Inv Checks	New Company Codes are...	Karthika G	05.09.2023	26.09.2023	Sandeep Lakkam	<a href="#">Audit Trail</a>

**Duplicate Inv Checks**

Owner:

Processor:

Description:

Type:

\* Start Date:

\* Due Date:

Carryforward Status:

Reviewed By:

Reviewed On:

Created By:

Created On:

Create Remediation Plan: Control Design Assessment

**Figure 6.42** Remediation Plan Options

**Control Design Assessment: Monitor Duplicate Invoice Check Config**

Assessment Period: Second Half of Year 2023      Status: Validated      Organization: Test      Process: Procure to Pay      Subprocess: Invoice Processing

[Evaluation](#)   [Issues](#)   [Regulation](#)   **[Remediation Plan](#)**   [Control Details](#)   [Monitoring Jobs](#)   [Requirement](#)   [Account Groups](#)   [Risks](#)   [Attachments and Links](#)

**Remediation Plan**

[Assign Next Processor](#)   [Complete](#)   [Change Due Date](#)

Name	Issue Name	Issue Owner	Start Date	Due Date	Plan Owner	Audit Trail
Duplicate Inv Checks	New Company Codes are...	Karthika G	05.09.2023	26.09.2023	Sandeep Lakkam	<a href="#">Audit Trail</a>

**Duplicate Inv Checks**

Owner:

Processor:

Description:

\* Start Date:

\* Due Date:

Carryforward Status:

Reviewed By:

Reviewed On:

**Figure 6.43** Remediation Plan Implementation Options



**Control Design Assessment: Monitor Duplicate Invoice Check Config**

Assessment Period: **Second Half of Year 2023**      Status: **Validated**      Organization: **Test**      Process: **Procure to Pay**      Subprocess: **Invoice Processing**

[Evaluation](#)   [Issues](#)   [Regulation](#)   **[Remediation Plan](#)**   [Control Details](#)   [Monitoring Jobs](#)   [Requirement](#)   [Account Groups](#)   [Risks](#)   [Attachments and Links](#)

**Remediation Plan**

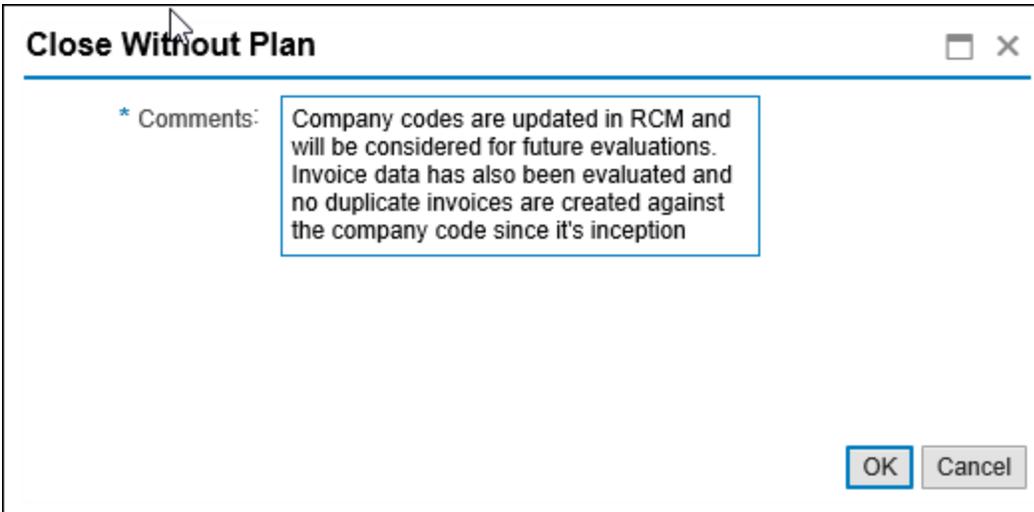
Close   Reopen

Name	Issue Name	Issue Owner	Start Date	Due Date	Plan Owner	Audit Trail
Duplicate Inv Checks	New Company Codes are ...	Karthika G	05.09.2023	26.09.2023	Sandeep Lakkam	<a href="#">Audit Trail</a>

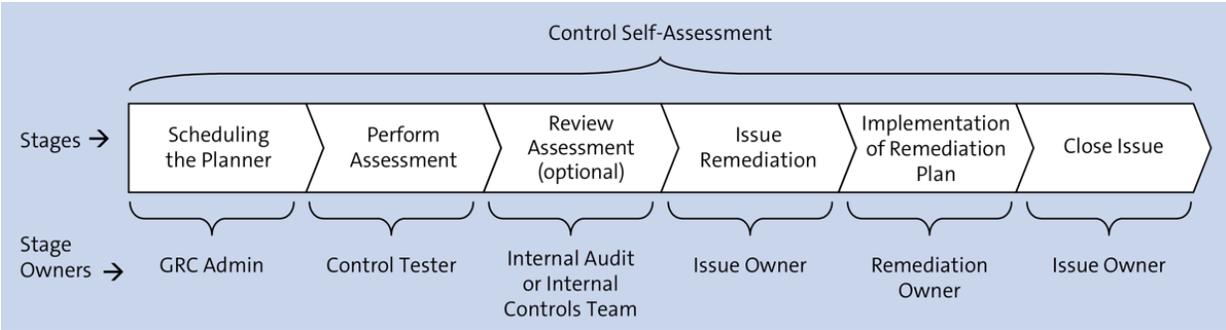
**Duplicate Inv Checks**

Close Issue: Control Design Assessment
 
  

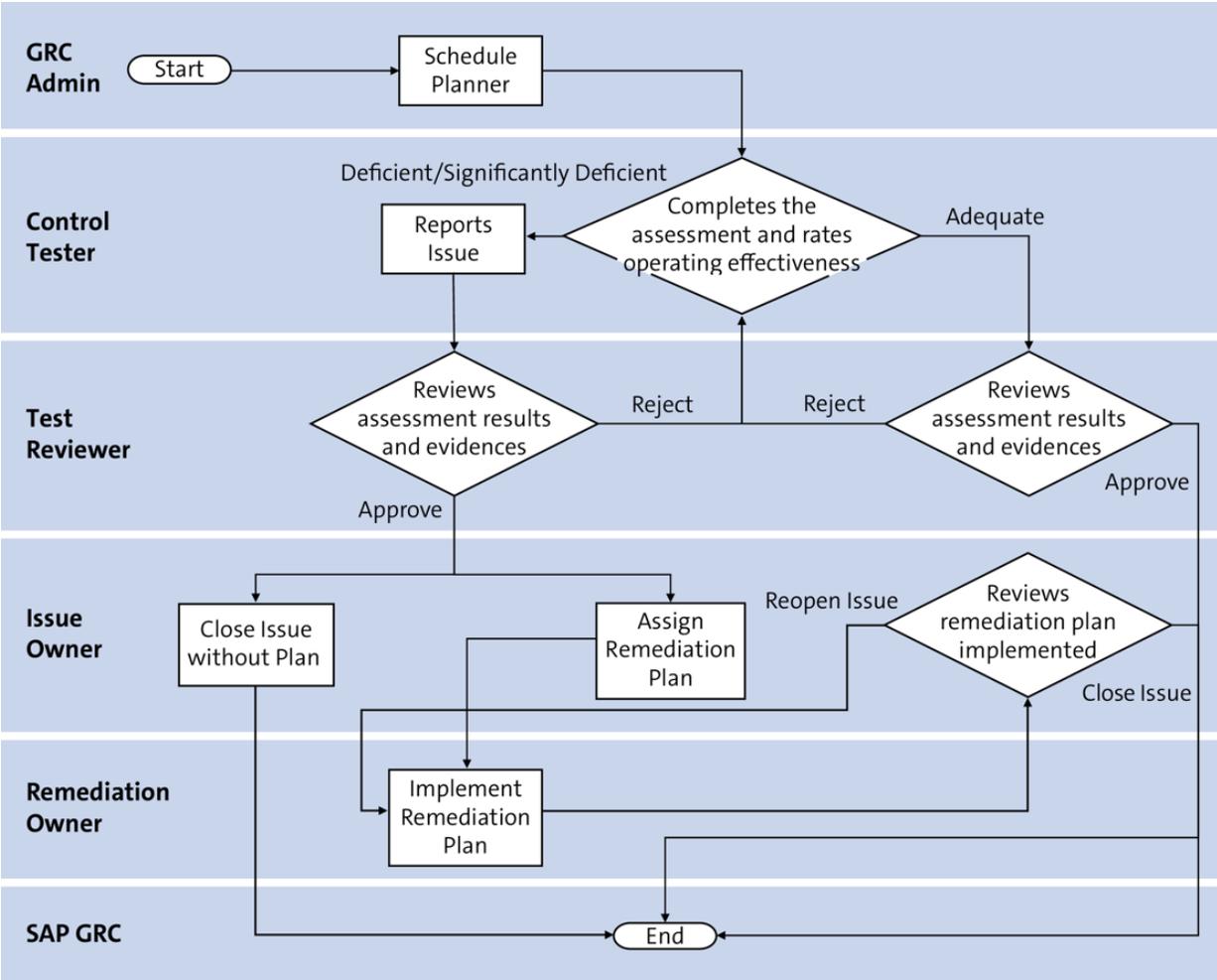
**Figure 6.45**      Remediation Plan Options



**Figure 6.46** Comments Screen in the Close without Plan Option



**Figure 6.47** Stages in the Self-Assessment Workflow with the Respective Owners



**Figure 6.48** Flowchart That Details the Flow of Control Self-Assessment

**Control**

**Control: FA Account Determination Configuration**

Parent Organization: TNOW-US      Parent Subprocess: Fixed Assets      Allow Local Changes: Yes      ID: 5000

Timeframe: 04.09.2023      Effective Date: 04.09.2023

K **General** | Regulations | Performance Plan | Business Rules | Control Performance | Evaluation | Monitoring Jobs | Requirement | Access Risks | Risks | Account Groups | Owners

Mitigating Control ID:

\* Name: FA Account Determination Configuration

Description: Only valid changes are made to the account determination configuration to ensure accurate recording of depreciation expense to the correct general ledger account

Control or Process Step:  Control     Process Step

Control Category: Transactional-Level Control

Significance: Key Control

Level of Evidence:  Use System Suggested    Tier 3: Control Design Assessment + C...

\* Valid From: 27.07.2023

Valid To: 31.12.9999

\* Trigger:  Event     Date

Operation Frequency: Monthly

\* To Be Tested:  Yes     No

\* Test Automation:  Automated     Manual     Semi-Automated

Testing Technique:

Input:

Output:

**Figure 6.49** Access Local Control from an Organization through Transaction NWBC

**Control** □ ×

---

**Control: FA Account Determination Configuration**

Parent Organization: TNOW-US      Parent Subprocess: Fixed Assets      Allow Local Changes: Yes  
Timeframe: 04.09.2023      Effective Date: 04.09.2023

◀ General   Regulations   **Performance Plan**   Business Rules   Control Performance   Evaluation   Monitoring Jobs   Requirement   Access Risks   Risks

Step	Description	Evidence Required	Comments Required	Sequence	Step Performer
<i>i</i> The table does not contain any data					

**Figure 6.50**      Performance Plan Tab from a Local Control

Active Queries							
Plans <b>Process Control &amp; Risk Management (17)</b>							
Plans - Process Control & Risk Management							
Show Quick Criteria Maintenance							
View: * [Standard View]   Open   Create   Cancel   Delete   Copy   Split   Notification							
Schedule Name	Schedule Activity	Created On	Changed On	Organizations	Start Date	Due Date	Status
Design Assessment_Q3 2023	Perform Control Design Assessment	04.09.2023 10:57:15	04.09.2023 10:57:15	1	04.09.2023	11.09.2023	Completed
Manual Test of Effectiveness_Q2 2023	Test Control Effectiveness	30.07.2023 09:53:00	30.07.2023 09:53:00	1	30.07.2023	05.08.2023	Completed
Design Assessment_Q3 2023	Perform Control Design Assessment	28.07.2023 15:38:21	28.07.2023 15:38:21	1	28.07.2023	10.08.2023	Completed
MCP_Q3 2023	Manual Control Performance	28.07.2023 15:20:58	28.07.2023 15:20:58	1	28.07.2023	01.08.2023	Completed
MCP_Q3 2023	Manual Control Performance	28.07.2023 08:50:16	28.07.2023 08:50:16	1	04.09.2023	05.09.2023	In Process
Design Assessment_Q2 2023	Perform Control Design Assessment	27.06.2023 17:10:34	27.06.2023 17:10:34	1	27.06.2023	14.07.2023	Completed
Design Assessment_Q2	Perform Control Design Assessment	25.06.2023 16:44:12	25.06.2023 16:44:12	1	25.06.2023	30.06.2023	Completed

**Figure 6.51** Plans: Process Control & Risk Management

**Planner**

### Create Plan

1 Enter Plan Details    2 Select Regulation    3 Select Organizations    4 Select Object(s)    5 Review    6 Confirmation

\* Plan Name:

\* Plan Activity:

\* Recurring Plan:  Yes     No

\* Recurring Range: From    To

\* Frequency:     Recurrence Text:

\* Recurrence: Every  Week(s)

\* Due Date Lag:  Days

\* Period:

\* Year:

**Figure 6.52** Create Plan: Definition Screen

**Planner**

### Create Plan

Plan Activity Manual Control Performance

1 Enter Plan Details   2 **Select Regulation**   3 Select Organizations   4 Select Object(s)   5 Review   6 Confirmation

\* Regulation: SOX

\* Evaluation Results Sharing:  Do not share    Share with some regulations    Share with all regulations

Previous   Next   Cancel   Finish   Activate Plan

**Figure 6.53** Select Regulation Option while Scheduling the Planner

**Planner**

### Create Plan

Plan Activity Manual Control Performance

1 Enter Plan Details   2 Select Regulation   **3 Select Organizations**   4 Select Object(s)   5 Review   6 Confirmation

#### Organizations

Show: ALL   View: [v]

Expand All   Collapse All   Find   Find Next   Description

Organization	Valid f...	Valid to
▼ Test	01.01...	31.12...
TNOW-US	25.06...	31.12...
Tnow Basis	01.01...	31.12...

Add >

Add with children >

< Remove

< Remove All

#### Selected

Organization	Valid from	Valid to
TNOW-US	25.06.2021	31.12.9999

Previous   Next   Cancel   Finish   Activate Plan

**Figure 6.54** Organizations Selected for Filtering the Controls for Assessment

**Planner**

---

**Create Plan**

Plan Activity Manual Control Performance Selected Organization 1

Selection Procedure:  Select All Controls  Select by Control Attributes  Select Specific Controls

**Select Controls**

Control	Subprocess	Organization	Control Category	Control ID	Evaluations
Changes to asset master data	Fixed Assets	TNOW-US	Transactional-Level Control	CONTROL/L/50001182	0

**Figure 6.55** Selection of Controls in the Create Plan Screen

**Planner**

1 Enter Plan Details    2 Select Regulation    3 Select Organizations    4 Select Object(s)    **5 Review**    6 Confirmation

**Plan Details**

Plan Name: MCP\_Q3\_2023  
Plan Activity: Manual Control Performance  
Period: Quarter 3  
Year: 2023  
Range From: 04.09.2023  
Range To: 04.11.2023  
Frequency: Weekly  
Recurrence Text: Week  
Recurrence: Every 1 Week(s) Monday  
Due Date Lag: 001  
Selected Organizations: 1

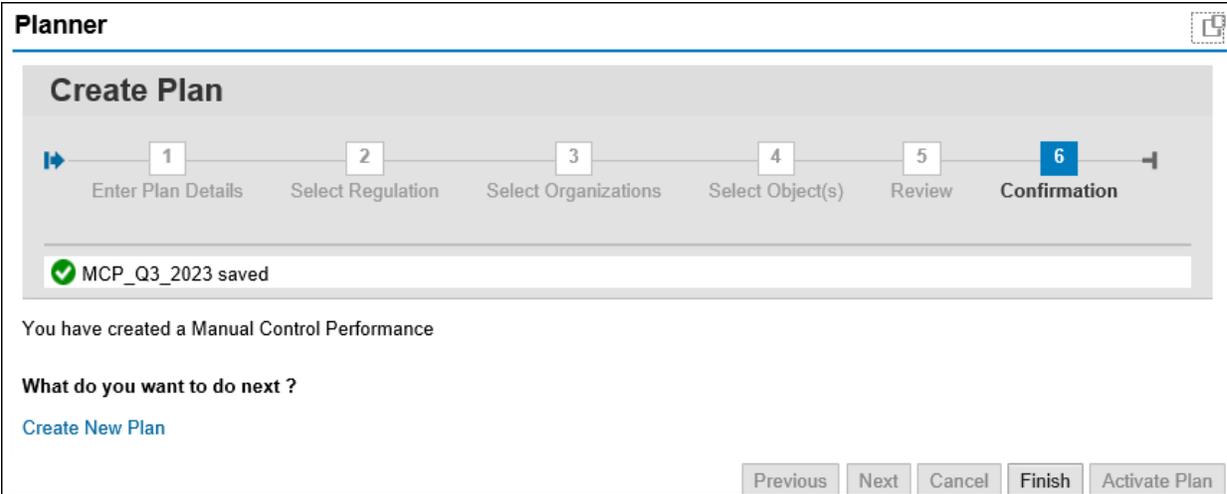
**Selection**

Selection Procedure: Select Specific Controls

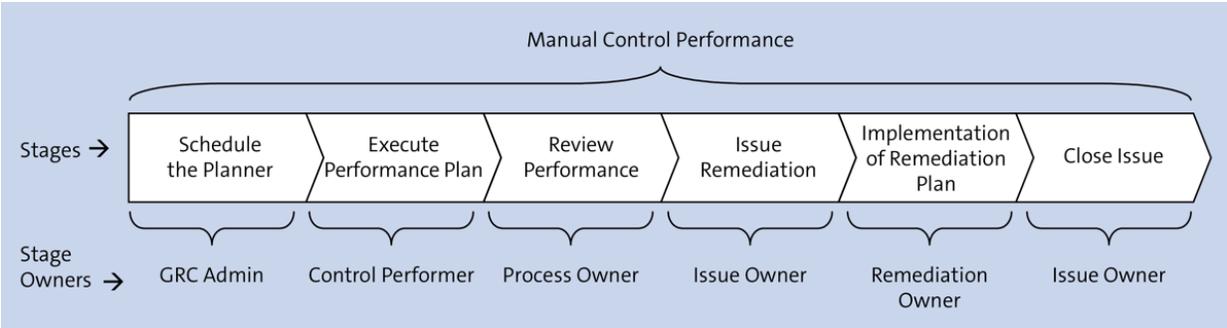
< [Progress Bar] >

Previous Next Cancel Finish Activate Plan

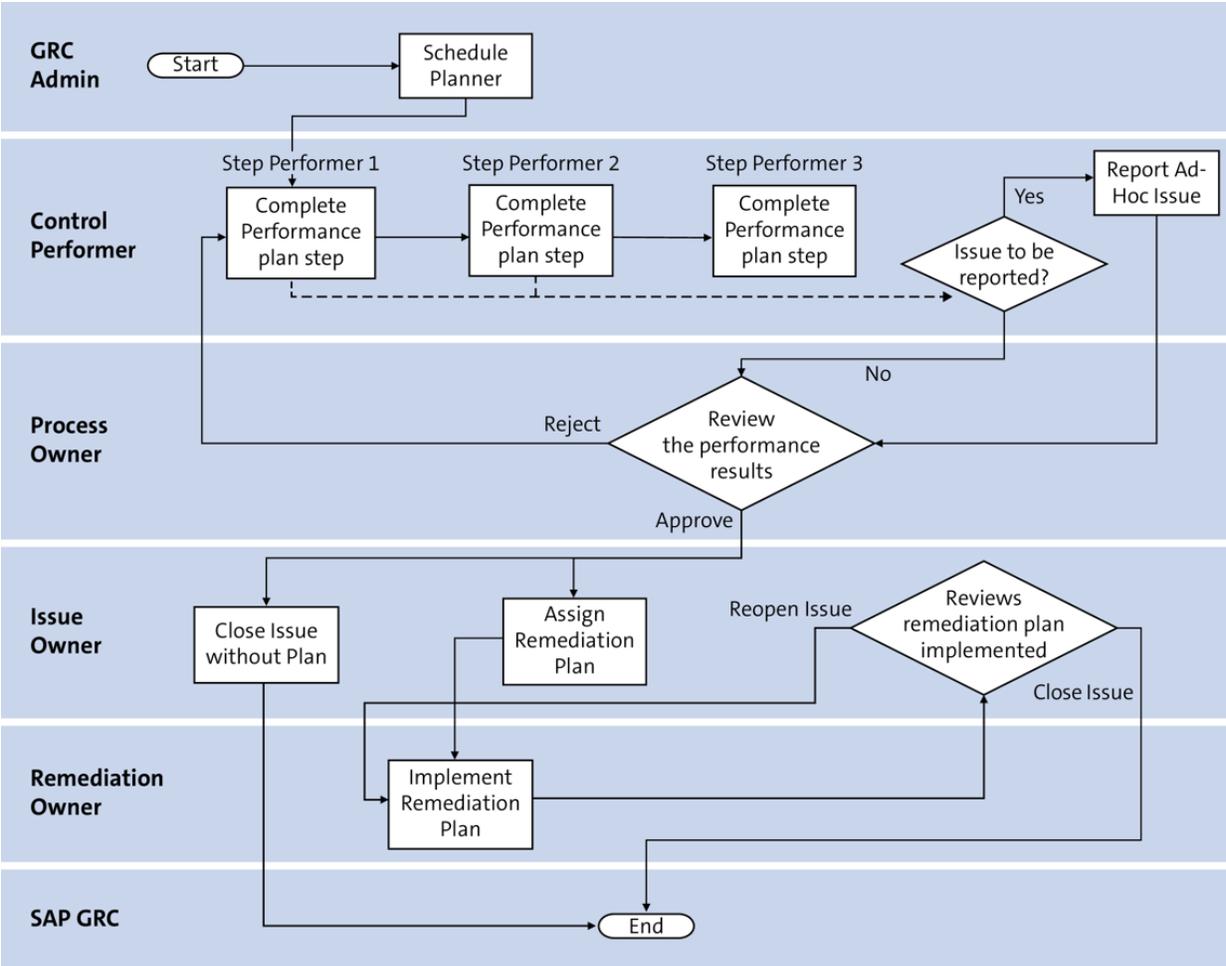
**Figure 6.56** Review Screen



**Figure 6.57** Confirmation Message for the Scheduled Job Using the Planner



**Figure 6.58** Stages in Control Performance with Owners' Information



**Figure 6.59** Flowchart Depicting the Stages of Control Performance

Manual Control Performance: MCP\_Q3 2023

## Manual Control Performance

Control Name: [Changes to asset master data](#) New  
 Parent Subprocess: Fixed Assets Period: [Quarter 3 2023](#)  
 Organization: TNOW-US

  
Steps

  
Control Info

  
Forward Info

Steps (3) 

Step	Description	Evidence R...	Comments...	Sequence	Step Perfor...	Due Date	Status	Last Updat...
Asset Register	Obtain the list of assets acquired during the test period	Yes	Yes	001	SAIKRISHNA 1	Sep 5, 2023	In Process	>
Capitalization	validate the asset capitalization including the expenses incurred	Yes	Yes	002	Sandeep Lakkam	Sep 5, 2023	Pending	>

Forward

**Figure 6.60** Control Performance Work Item

Manual Control Performance Step

General Info

Step: Asset Register

Description: Obtain the list of assets acquired during the test period

Evidence Required: Yes

Comments Required: Yes

Comment: List of assets acquired during the month of July is gathered and attached herewith

Evidence (1) + ✎

Type	Name	Uploaded By
	<a href="#">Asset Register.xlsx</a>	WF-BATCH Sep 4, 2023, 7:01:19 PM

Save   Set to Done   Report Issue

**Figure 6.61** Options for the Control Performer to Complete the Step Assigned

Manual Control Performance: MCP\_Q3 2023

---

**Manual Control Performance**

Control Name: [Changes to asset master data](#) In Process

Parent Subprocess: Fixed Assets Period: [Quarter 3 2023](#)

Organization: TNOW-US

---

 Steps
  Control Info
  Forward Info

---

Steps (3) ⚙️

Step	Description	Evidence Req...	Comments R...	Sequence	Step Performer	Due Date	Status	Last Updated
Asset Register	Obtain the list of assets acquired during the test period	Yes	Yes	001	SAIKRISHNA1	Sep 5, 2023	Done	WF-BATCH Sep 4, 2023, 7:05:33 PM

**Figure 6.62** Control Performance Work Item with Steps Set to Done

Manual Control Performance: MCP\_Q3 2023

### Manual Control Performance

Control Name: [Changes to asset master data](#) In Process  
 Parent Subprocess: Fixed Assets Period: [Quarter 3 2023](#)  
 Organization: TNOW-US

  
Steps

  
Control Info

  
Forward Info

Steps (3) 

Step	Description	Evidence R...	Comments...	Sequence	Step Perfor...	Due Date	Status	Last Updated	
Asset Register	Obtain the list of assets acquired during the test period	Yes	Yes	001	SAIKRISHNA1	Sep 5, 2023	Done	WF-BATCH Sep 4, 2023, 7:05:33 PM	>

Forward

**Figure 6.63** Option to Forward the Performance Step

<
Manual Control Performance Step

---

**General Info**

Step: Asset Register

Description: Obtain the list of assets acquired during the test period

Evidence Required: Yes

Comments Required: Yes

Comment: 

List of assets acquired during the month of July is gathered and attached herewith

Evidence (1) +

Type	Name	Uploaded By
	Asset Register.xlsx	WF-BATCH Sep 4, 2023, 7:01:19 PM

Save
Set to Done
Report Issue

**Figure 6.64** Report Issue Option

**SAP** Ad Hoc Issue:

Status: Draft Created By: SAIKRISHNA1 Created On: 04.09.2023 Updated By: Updated On:

[Issue Details](#) [Regulation](#) [Attachments and Links](#)

\* Name: Capitalization of few assets is not done Notes

\* Description: Capitalization of few assets is not done Add Note

\* Priority: High

Object Type: Control

Object Name: Changes to asset master data [Open](#)

Owner: KARTHIKA

Source: Manual Control Performance

\* Issue Date: 04.09.2023

Due Date: 11.09.2023

Audit Trail: [Audit Trail](#)

**Figure 6.65** Submission of an Ad Hoc Issue as Part of Manual Control Performance

Manual Control Performance: MCP\_Q3 2023

Control Name: [Changes to asset master data](#) For Review  
 Parent Subprocess: Fixed Assets Period: [Quarter 3 2023](#)  
 Organization: TNOW-US

 Steps   
  Control Info   
  Forward Info

Steps (3) 

Step	Description	Evidence...	Comment...	Sequence	Step Perfo...	Due Date	Status	Last Upda...	Comment
Asset Register	Obtain the list of assets acquired during the test period	Yes	Yes	001	SAIKRISHN A1	Sep 5, 2023	Done	WF-BATCH Sep 4, 2023, 7:05:33 PM	List of assets acquired during the month of July is gathered and attached herewith >

**Figure 6.66** Options Available for the Reviewer as Part of Control Performance

**Mass Editing Performance Plans**



**Mode**

Export Performance Plan  
 Import Performance Plan

**Selection**

Local Control  
 Central Control

Organization  

Local control  to  

Select languages  to  

Multiple languages

Date From

**Figure 6.67** Selection Screen in Mass Editing Performance Plans

1	Control ID	Control Name	Plan Step Name	Plan Step Description	Comment
2	CONTROL/L/50000884	Mitigation Control ID for BASIS			
3	CONTROL/L/50000899	Monitor Duplicate Invoice Check Config			
4	CONTROL/L/50001167	Monitor users with SAP_All access			
5	CONTROL/L/50001180	FA Account Determination Configuration			
6	CONTROL/L/50001181	assignmt of Screen Layout for G.data det			
7	CONTROL/L/50001182	Changes to asset master data	Asset Register	Obtain the list of assets acquired during the test period	X
8			Capitalization	validate the asset capitalization including the expenses incurred	X
9			Report Issue	Report Issue and track it for closure if there are any deviations observed in the process	X
10	CONTROL/L/50001202	Account Reconciliations	Extract report	Extract the GL Account Report	X
11	CONTROL/L/50001229	Monitor users with SAP_All and SAP_New			
12	CONTROL/L/50001230	Users with developer access in Productio			
13	CONTROL/L/50001231	Monitor Super User account maintenance			
14	CONTROL/L/50001232	Direct profile assignments			

**Figure 6.68** Performance Plans Template

A	
1	40010 40010
2	BASIS TG_BASIS
3	BGUSER BGUSER
4	DRISHTI DRISHTI
5	GRC RPA Auto Firefighter Controller GRCBOT001
6	Homepage Guest End User EUHOME
7	KRISHNA KRISHNA
8	Karthika G KARTHIKA
9	LEPAKSHI LEPAKSHI
10	Line Manager 300001
11	RAGHU RAGHU
12	RFC SCT SCT_USER
13	Shyam SB
14	VARUN VARUN
15	VISHNU VISHNU
16	VISNHU VISNHU
17	WF-BATCH WF-BATCH
18	bandi NARESH
<div style="display: flex; justify-content: space-between; align-items: center;"> <span>&lt; &gt;</span> <span>Performance Plan</span> <span style="border: 1px solid green; padding: 2px;">Performers</span> </div>	

**Figure 6.69** Performers Sheet in the Performance Plan Template

**Display logs**

Technical Information

Date/Time/User	Nu...	External ID	Transac...	Mode	Log number
04.09.2023 16:52:05 KARTHIKA	8		SE38	Dialog proces	00000000000000207733
Problem class Other		8			

Message Text

- Content importing/exporting started at 2023-09-04 16:52:05
- Control 50001182, step Asset Register, will be created in English language version.
- Control 50001182, step Capitalization, will be created in English language version.
- Control 50001182, step Report Issue, will be created in English language version.
- Content importing/exporting ended at 2023-09-04 16:52:06

**Figure 6.70** Successful Log after Uploading the Performance Plan Template

Manual Test Plans									
Show: Year		2023		Apply		Create	Open	Assign to	
Test Plan Name	Description	Valid From	Valid To						
Balance Sheet account reconciliations	Balance Sheet account reconciliations	01.01.2023	31.12.9999						
Global Accounting Manual	Global Accounting Manual Test Procedures	01.01.2023	31.12.9999						
Controls for Test Plan:Global Accounting Manual									
Control Name	Description	Control Type	Indirect ELC	Regulation	Organization	Valid From	Valid To		
Changes to asset master data	Changes to asset master data	Copied		SOX	TNOW-US				
Global Accounting Manual	Global Accounting Manual	Central		SARBANES OXLEY					

**Figure 6.71** Manual Test Plans Maintenance Screen

**Manual Test Plans** ☰ ✕ ▲

---

TEST PLAN ID: 30001321

Timeframe: Year 2023 Effective Date: 01.01.2023

**General** | Attachments and Links

\* Test Name:  \* Valid From: 01.01.2023

Description:  \* Valid To: 31.12.9999

**Test Steps**

Add Remove Up Down

Step Number	*Step Name	*Step Description	Step or Test	Required	Fail Ends Test	Initial Sample	Sampling M...

Save Cancel

**Figure 6.72** General Tab in the Manual Test Plan Definition

**Manual Test Plans**

Show: Year 2023 Apply Create Open Assign to 

Test Plan Name	Description	Valid From	Valid To
Balance Sheet account reconciliations	Balance Sheet account reconciliations	01.01.2023	31.12.9999
Balance Sheet account reconciliations	Balance Sheet account reconciliations	01.01.2023	31.12.9999
Global Accounting Manual	Global Accounting Manual Test Procedures	01.01.2023	31.12.9999

**Controls for Test Plan:Balance Sheet account reconciliations**

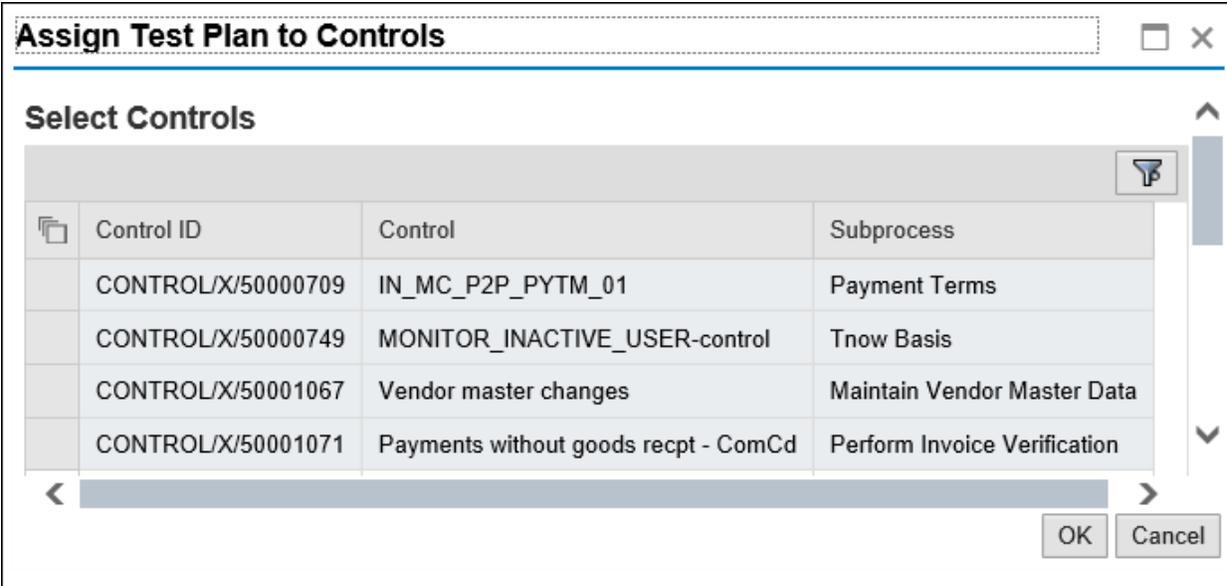


Control Name	Description	Control Type	Indirect ELC	Regulation	Organization	Valid From	Valid To

**Assign to** dropdown menu:

- Central Controls
- Central Indirect ELCs

**Figure 6.73** Central Controls Option in Manual Test Plans for the Control Assignment Screen



**Figure 6.74** List of Manual Controls Available for Assignment to a Test Plan

Manual Test Plans								
Show: Year		2023	Apply	Create	Open	Assign to		
Test Plan Name	Description	Valid From	Valid To					
Balance Sheet account reconciliations	Balance Sheet account reconciliations	01.01.2023	31.12.9999					
Balance Sheet account reconciliations	Balance Sheet account reconciliations	01.01.2023	31.12.9999					
Global Accounting Manual	Global Accounting Manual Test Procedures	01.01.2023	31.12.9999					
Controls for Test Plan:Balance Sheet account reconciliations								
Control Name	Description	Control Type	Indirect ELC	Regulation	Organization	Valid From	Valid To	
Payments without goods recpt - ComCd	Payments without goods recpt - ComCd	Central						

**Figure 6.75** Controls for Test Plans: Assignment Screen

**Control: Account Reconciliations**

Parent Organization: Tnow Basis      Parent Subprocess: GL Account Maintenance      Allow Local Changes: Yes      ID:

Timeframe: 05.09.2023      Effective Date: 05.09.2023

General  
 Regulations  
 Performance Plan  
 Control Performance  
 Evaluation  
 Requirement  
 Access Risks  
 Risks  
 Account Groups  
 Owners  
 Reports  
 Policies  
 Issues  
 Roles

Mitigating Control ID:

\* Name:

Description:

Control or Process Step:  Control    Process Step

Control Category:

Significance:

Level of Evidence:  Use System Suggested

Control Risk:  Use System Suggested

\* Control Automation:  Automated    Manual    Semi-Automated

\* Purpose:  Detective    Preventive

Nature:

\* Valid From:

Valid To:

\* Trigger:  Event    Date

Operation Frequency:

\* To Be Tested:  Yes    No

\* Test Automation:  Automated    Manual    Semi-Automated

Testing Technique:

Test Plan:

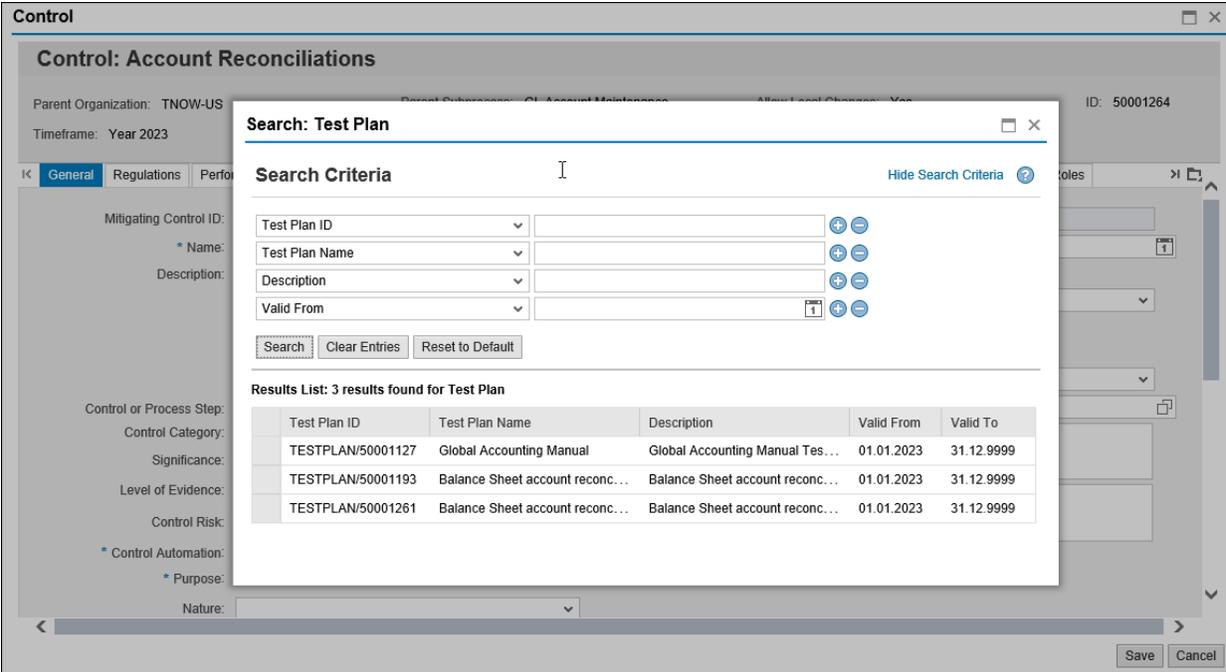
Input:

Output:

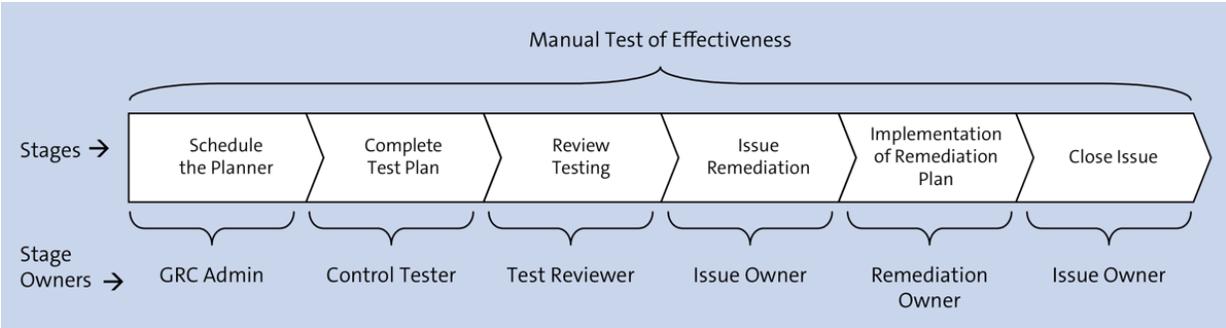
< < > >

Save Cancel

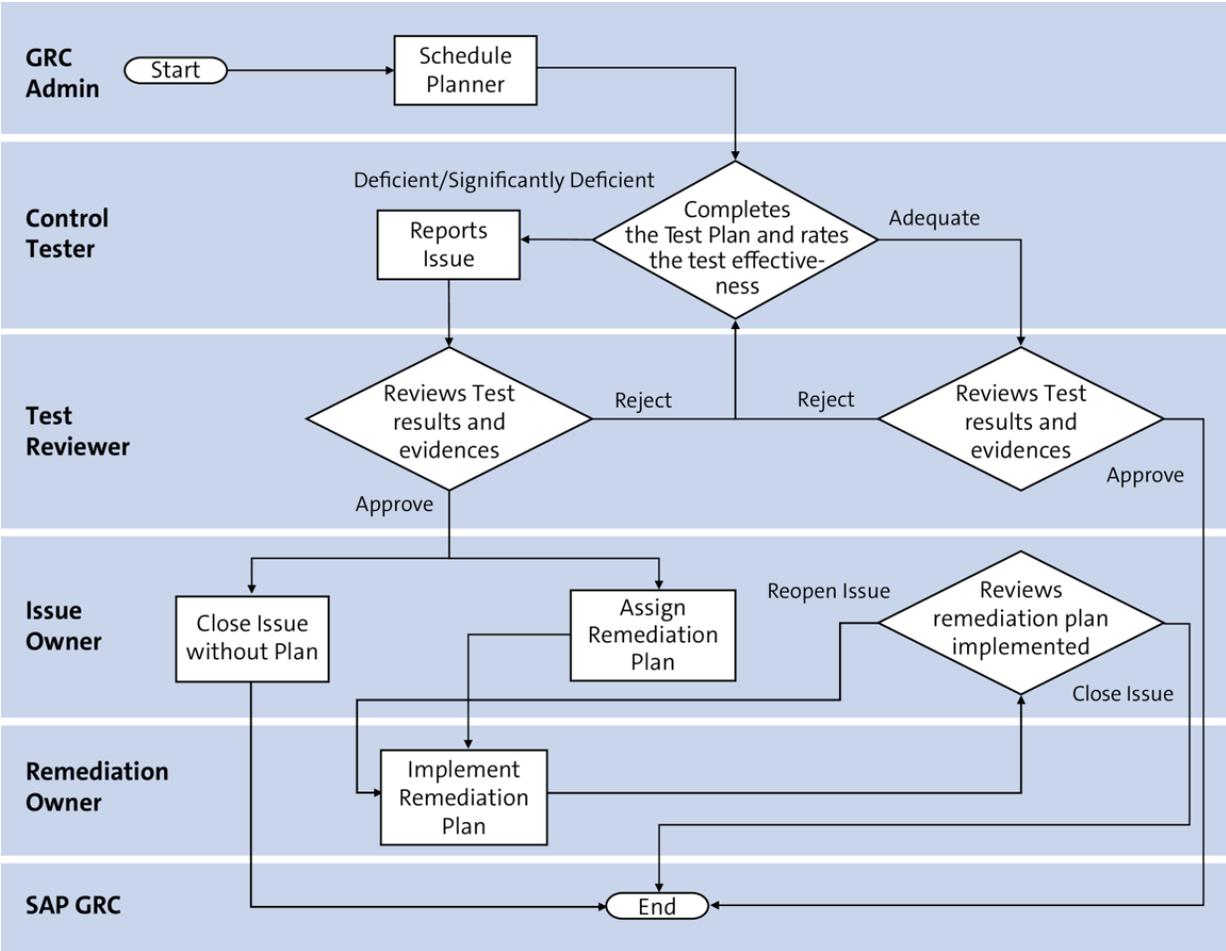
**Figure 6.76**      Accessing the Local Control from an Organization



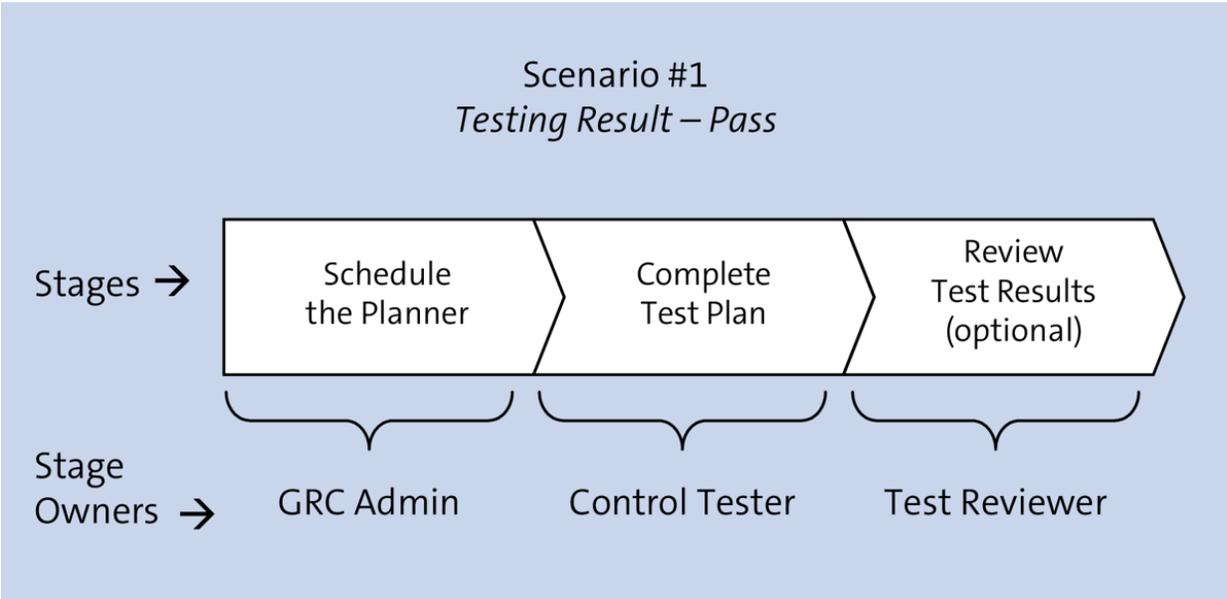
**Figure 6.77** Selection of the Manual Test Plan



**Figure 6.78** Stages in the Manual Control Testing Workflow with Owners' Information



**Figure 6.79** Flowchart Depicting the Stages in the Test of Effectiveness



**Figure 6.80** Stages Involved When the Control Effectiveness Test Result = Pass

**Control Effectiveness Manual Test: Account Reconciliations**

Test Period: Quarter 4 2023    Status: Draft    Organization: Tnow Basis    Process: Record to Report    Subprocess: GL Account Maintenance

General    Regulation    Control Performance    Control Details    Account Groups    Requirement    Risks    Attachments and Links

**Test Steps**

Report Issue    Download Form    Upload Form

Step Name	Step Description	Step/Test	Required	Fail En...	Initial S...	Sampli...	Cumulati...	Cumul...	Revise...	# Fail...	R...	Comments
Interview	Interview responsible personnel and understand the process and the frequency of the control	Step	Yes	Yes	0		0	0	0	0	▼	<a href="#">Add Comment</a>
Sample Collection	Select a sample of months/quarters and obtain the account reconciliations; verify that reconciliations were performed on a timely basis	Step	Yes	Yes	2	Random...	0	0	0	0	▼	<a href="#">Add Comment</a>
Reconcilia...	Verify that reconciliation items have been followed up and adjusted when necessary	Test	Yes	Yes	2	Random...	0	0	0	0	▼	<a href="#">Add Comment</a>
Approval verification	Verify that the reconciliation has been adequately reviewed and approved.	Test	Yes	Yes	2	Random...	0	0	0	0	▼	<a href="#">Add Comment</a>

Perform Manual Test of Control Effectiveness   
    
    

**Figure 6.81**    General Tab from the Control Effectiveness Manual Test Work Item

**Control Effectiveness Manual Test: Account Reconciliations**

Test Period: Quarter 4 2023      Status: Draft      Organization: Tnow Basis      Process: Record to Report      Subprocess: GL Account Maintenance

General   Regulation   Control Performance   Control Details   Account Groups   Requirement   Risks   Attachments and Links

**Test Steps**

Report Issue   Download Form   Upload Form

Step Name	Step Description	Step/Test	Required	Fail En...	Initial S...	Sampli...	Cumulati...	Cumul...	R...	#...	Result	Comments
Interview	Interview responsible personnel and understand the process and the frequency of the control	Step	Yes	Yes	0		0	0	0	0	Done	Walkthrough sessions conducted
Sample Collection	Select a sample of months/quarters and obtain the account reconciliations; verify that reconciliations were performed on a timely basis	Step	Yes	Yes	2	Random...	0	0	0	0		Add Comment
Reconcilia...	Verify that reconciliation items have been followed up and adjusted when necessary	Test	Yes	Yes	2	Random...	0	0	0	0		Add Comment
Approval verification	Verify that the reconciliation has been adequately reviewed and approved.	Test	Yes	Yes	2	Random...	0	0	0	0		Add Comment

Submit   Save Draft   Assign to Next Tester

**Figure 6.82** Responses to the Steps in Control Testing

Step Name	Step Description	Step/Test	Required	Fail En...	Initial S...	Sampli...	Cumulati...	Cumul...	R...	#...	Result	Comments
Interview	Interview responsible personnel and understand the process and the frequency of the control	Step	Yes	Yes	0		0	0	0	0	Done	Walkthrough sessions conducted
Sample Collection	Select a sample of months/quarters and obtain the account reconciliations; verify that reconciliations were performed on a timely basis	Step	Yes	Yes	2	Random...	0	0	0	0	Done	Add Comment
Reconcilia...	Verify that reconciliation items have been followed up and adjusted when necessary	Test	Yes	Yes	2	Random...	0	0	0	0	Pass	Add Comment
Approval verification	Verify that the reconciliation has been adequately reviewed and approved.	Test	Yes	Yes	2	Random...	0	0	0	0	Pass	Add Comment

**Test Details**

Test Name:  \* Test Date:

Test Owner:  \* Test Result:

**Figure 6.83** Control Tester Providing the Overall Control Testing Result

**Control Effectiveness Manual Test: Account Reconciliations**

Test Period: Quarter 4 2023      Status: Review      Organization: Tnow Basis      Process: Record to Report      Subprocess: GL Account Maintenance

[General](#)
[Regulation](#)
[Control Performance](#)
[Control Details](#)
[Account Groups](#)
[Requirement](#)
[Risks](#)
[Attachments and Links](#)

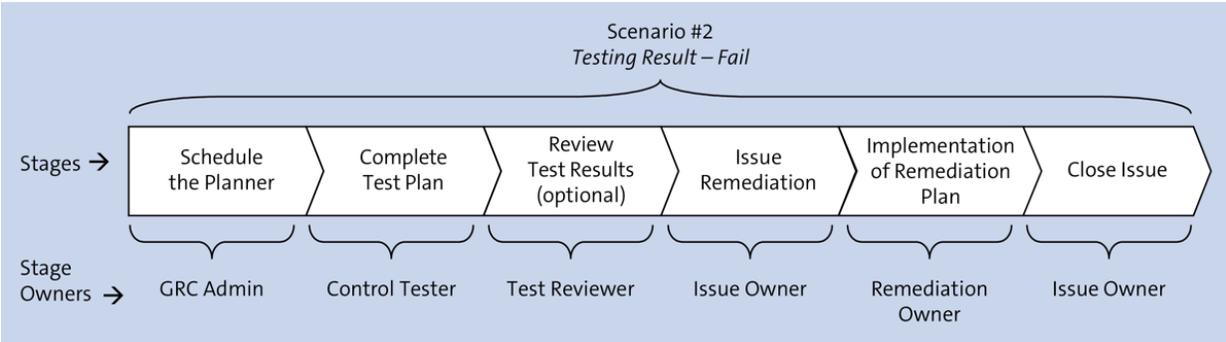
**Test Steps**

[Download Form](#)    [Upload Form](#)

Step Name	Step Description	Step/Test	Required	Fail En...	Initial S...	Samplin...	Cumulativ...	Cumula...	Revised...	# Failed	R...	Comments
Interview	Interview responsible personnel and understand the process and the frequency of the control	Step	Yes	Yes	0		0	0	0	0	Done	<a href="#">Walkthrough sessions conducted</a>
Sample Collection	Select a sample of months/quarters and obtain the account reconciliations; verify that reconciliations were performed on a timely basis	Step	Yes	Yes	2	Random ...	0	0	0	0	Done	<a href="#">Add Comment</a>
Reconciliation	Verify that reconciliation items have been followed up and adjusted when necessary	Test	Yes	Yes	2	Random ...	0	0	0	0	Pass	<a href="#">Add Comment</a>

Review Manual Test: Control Effectiveness

**Figure 6.84** General Tab from the Control Effectiveness Test Review Work Item



**Figure 6.85** Stages Involved When the Control Effectiveness Test Result Is Fail

**Control Effectiveness Manual Test: Changes to asset master data**

Test Period: Second Half of Year 2023      Status: Draft      Organization: TNOW-US      Process: Record To Report      Subprocess: Fixed Assets

[General](#)  
 [Regulation](#)  
 [Control Performance](#)  
 [Control Details](#)  
 [Account Groups](#)  
 [Requirement](#)  
 [Risks](#)  
 [Attachments and Links](#)

**Test Steps**

[Report Issue](#)  
[Download Form](#)  
[Upload Form](#)

Step Name	Step Description	Step/Test	Required	Fail End...	Initial Sa...	Samplin...	Cumulativ...	Cumulat...	R...	#...	Result	Comments
Step 1_Global	Obtain the latest Global Accounting Manual and access the intranet and verify that the accounting manual is accessible via intranet, the manual is up to date and the latest version has been uploaded to the intranet.	Step	Yes	Yes	0		0	0	0	0		<a href="#">Add Comment</a>
Step 2_Global	Examine how and when personnel in charge communicated	Step	Yes	Yes	0		0	0	0	0		<a href="#">Add Comment</a>

[Submit](#)  
[Save Draft](#)  
[Assign to Next Tester](#)

**Figure 6.86** General Tab from the Control Effectiveness Manual Test Work Item

**Control Effectiveness Manual Test: Changes to asset master data**

Test Period: Second Half of Year 2023      Status: Draft      Organization: TNOW-US      Process: Record To Report      Subprocess: Fixed Assets

General   Regulation   **Control Performance**   Control Details   Account Groups   Requirement   Risks   Attachments and Links

Period	Year	Name	Regulation	Status	Start Date	End Date
July	2023	MCP_Q3 2023	SOX	New	28.07.2023	01.08.2023
Quarter 3	2023	MCP_Q3 2023	SOX	New	31.07.2023	01.08.2023
Quarter 3	2023	MCP_Q3 2023	SOX	Done	07.08.2023	08.08.2023
Quarter 3	2023	MCP_Q3 2023	SOX	New	14.08.2023	15.08.2023
Quarter 3	2023	MCP_Q3 2023	SOX	New	21.08.2023	22.08.2023

**Performance Steps**

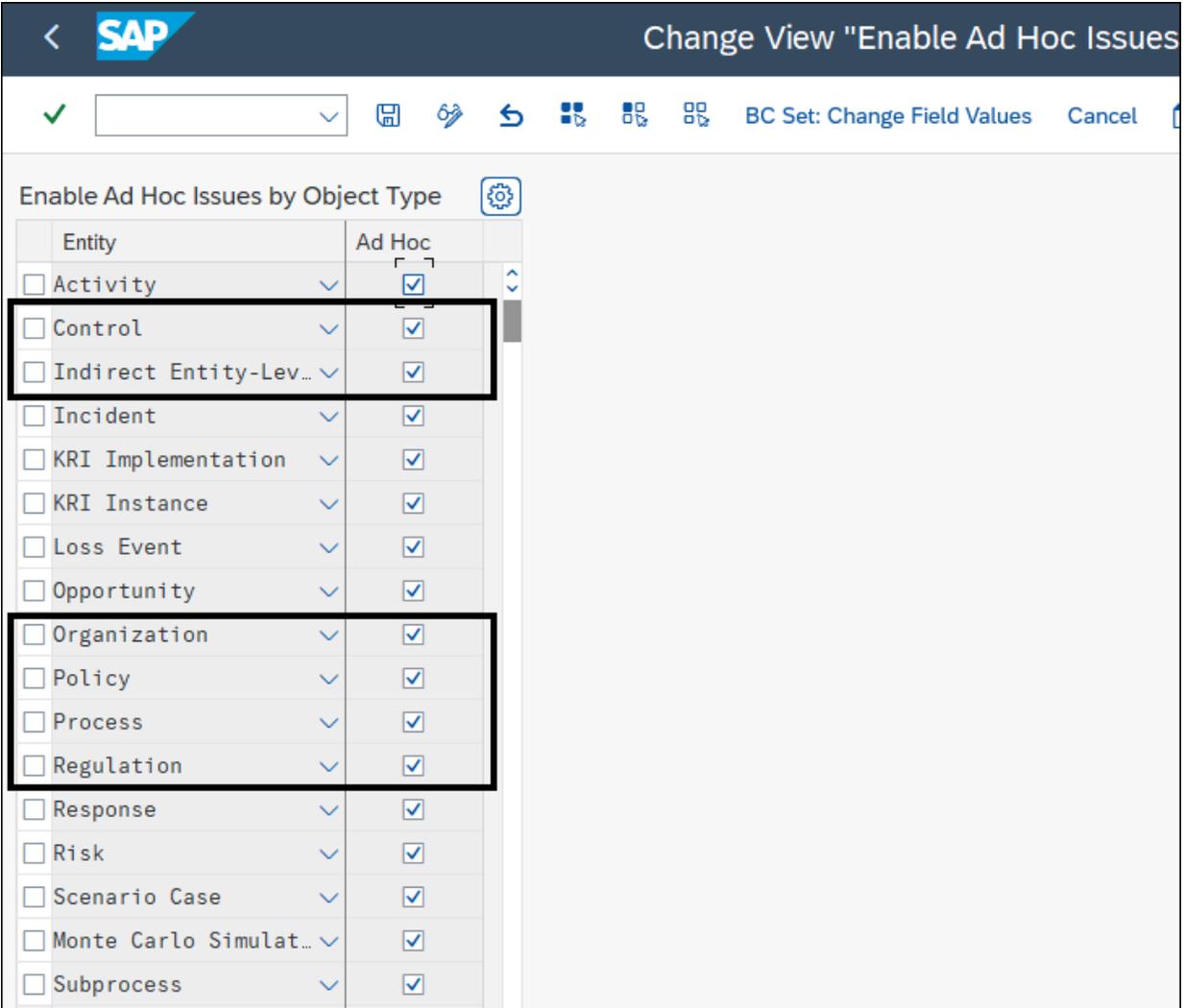
Step	Description	Evidence Required	Comments Required	Sequence	Status	Last Changed On	Last Changed By	Comments	Control Evidence	Step Performer	Due Date
Asset Register	Obtain the list of assets acquired during the test period	Yes	Yes	001	In Process					SAIKRISHNA1	29.07.2023

Submit   Save Draft   Assign to Next Tester

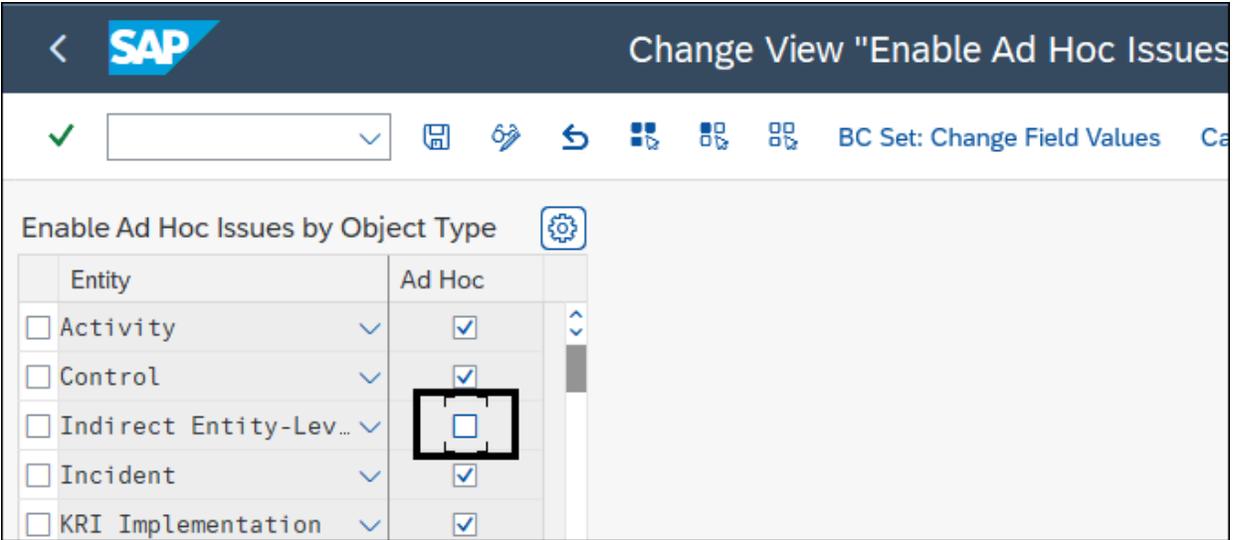
**Figure 6.87** Usage of Manual Control Performance Results as Part of Manual Control Testing

Control Ratings						Personalize
A tabular report showing overall control ratings by organization, process and subprocess						
▶ Selection						
<b>Results</b>						
						Print or Export
Organization	Subprocess	Control	Control Description	Significance	Control Design Rating (Sym)	
Power Generation	Invoice Processing	Monitor Duplicate Invoice Check Config	Monitor Duplicate Invoice Check Configurations	Key Control		
Power Generation	Maintain Vendor Master Data	Vendor master changes	This rule tracks changes to critical fields of vendor master.	Key Control		
Power Generation	Maintain Vendor Master Data	Duplicate invoice parameter changes	"This rule tracks changes to the system settings that prevent the same invoice from being posted more than once."	Key Control		
Power Generation	System Parameters	Monitor Password Parameter	Password Parameter Maintenance	Key Control		
Power Generation	Access Management	Monitor users with SAP_All access	Monitor users with SAP_All and SAP_New access	Key Control		
Power Generation	Access Management	Monitor users with SAP_All and SAP_New	Monitor users with SAP_All and SAP_New profiles access	Key Control		
Power Generation	Access Management	Users with developer access in Productio	Users with developer access in Production System	Key Control		
Power Generation	Access Management	Monitor Super User account maintenance	Monitor Super User account maintenance	Key Control		
Power Generation	Access Management	Direct profile assignments	Monitor users with direct profile assignments	Key Control		
Test	Invoice Processing	Monitor Duplicate Invoice Check Config	Monitor Duplicate Invoice Check Configurations	Key Control	Significantly Deficient	
Test	Access Management	Monitor users with SAP_All access	Monitor users with SAP_All and SAP_New access	Key Control		
Test	Payment Terms	IN_MC_P2P_PYTM_01	India Manual Control P2P Payment Terms Control 01	Key Control		
						Go Clear

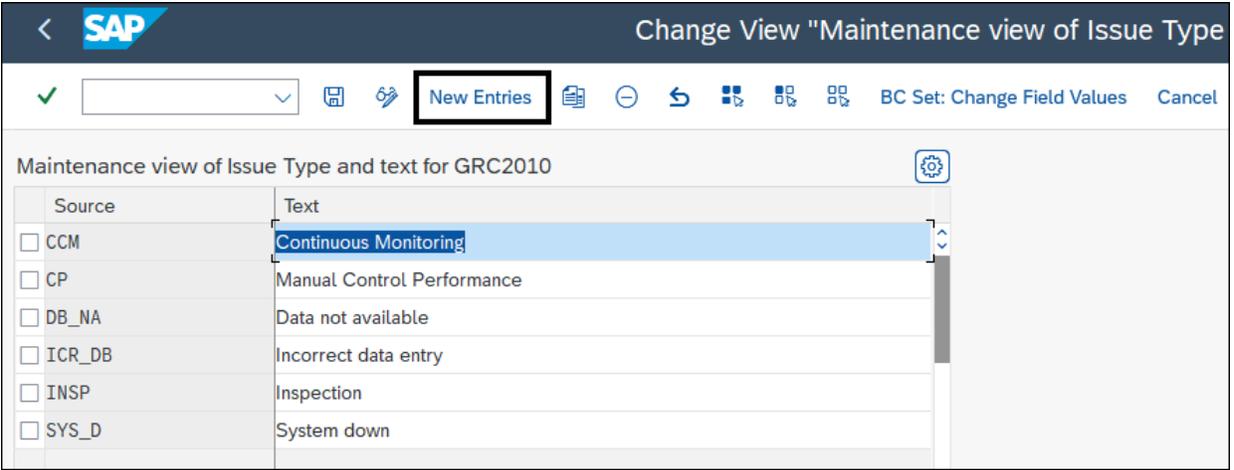
**Figure 6.88** Control Ratings Report Providing the Test Results for the Controls



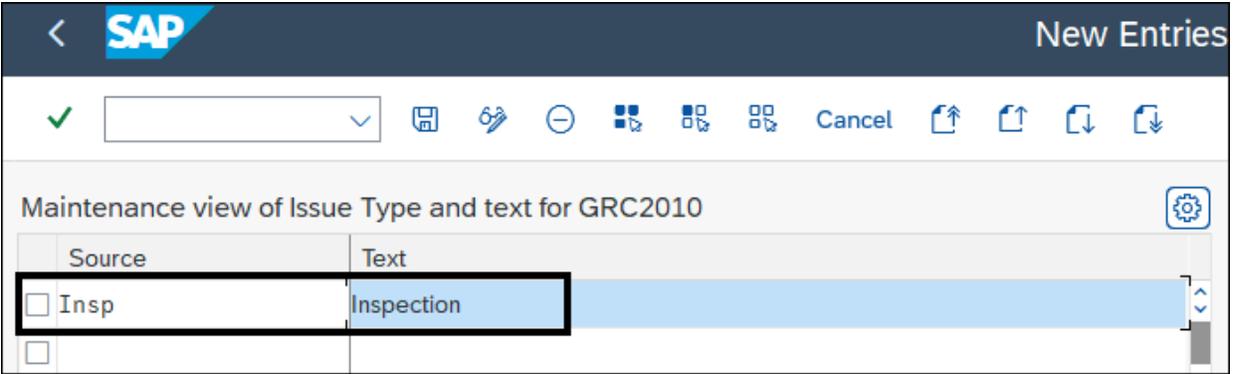
**Figure 7.1** Configuration to Review the SAP Process Control Entities Enabled for Ad Hoc Issues



**Figure 7.2** Configuration to Maintain the Standard Entities in Scope of Ad Hoc Issues



**Figure 7.3** Option to Create New Entries in the Source List



**Figure 7.4** New Entries Added to the Source List

SAP Change View "Maintenance view"

Maintenance view of Issue Type and text for GRC2010

Source	Text
<input type="checkbox"/> CCM	Continuous Monitoring
<input type="checkbox"/> CP	Manual Control Performance
<input type="checkbox"/> DB_NA	Data not available
<input type="checkbox"/> ICR_DB	Incorrect data entry
<input type="checkbox"/> INSP	Inspection
<input type="checkbox"/> SYS_D	System down

**Figure 7.5** Standard Source List for Ad Hoc Issues

SAP Change View

✓

Relationship between Issue Type and Entity

Entity ID	Source
<input type="checkbox"/> ACTIVITY	CCM
<input type="checkbox"/> ACTIVITY	DB_NA
<input type="checkbox"/> ACTIVITY	ICR_DB
<input type="checkbox"/> ACTIVITY	SYS_D
<input type="checkbox"/> CONTROL	CCM
<input type="checkbox"/> CONTROL	CP
<input type="checkbox"/> CONTROL	DB_NA
<input type="checkbox"/> CONTROL	ICR_DB
<input type="checkbox"/> CONTROL	INSP
<input type="checkbox"/> CONTROL	SYS_D
<input type="checkbox"/> ECONTROL	CCM
<input type="checkbox"/> ECONTROL	DB_NA

**Figure 7.6** Relationship between Issue Type and Entity

The screenshot shows the SAP Fiori interface for maintaining relationships. At the top, there is a navigation bar with the SAP logo and a back arrow. Below it is a toolbar with a green checkmark, a dropdown menu, and several icons for save, edit, delete, and other actions. The main content area is titled "Relationship between Issue Type and Entity" and contains a table with the following data:

	Entity ID	Source	
<input type="checkbox"/>	Control	INSP	<input type="checkbox"/>
<input type="checkbox"/>			<input type="checkbox"/>
<input type="checkbox"/>			<input type="checkbox"/>

**Figure 7.7** New Relationships Maintained for the Object Type and Source

**Ad Hoc Issue:**

[Submit](#) [Save Draft](#)

Status Draft Created By Karthika G Created On 25.07.2023 Updated By Updated On

[Issue Details](#) [Regulation](#) [Attachments and Links](#)

\* Name:

\* Description:

\* Priority: High

**Object Type: Control**

Object Name:

Owner:

Source:

\* Issue Date:

Due Date:

Audit Trail:

**Notes**

[Add Note](#)

Continuous Monitoring

Manual Control Performance

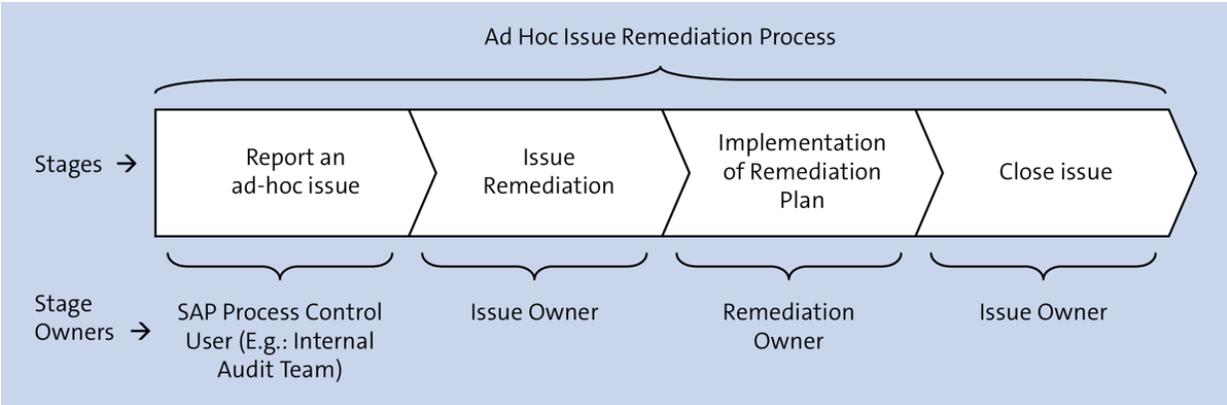
Data not available

Incorrect data entry

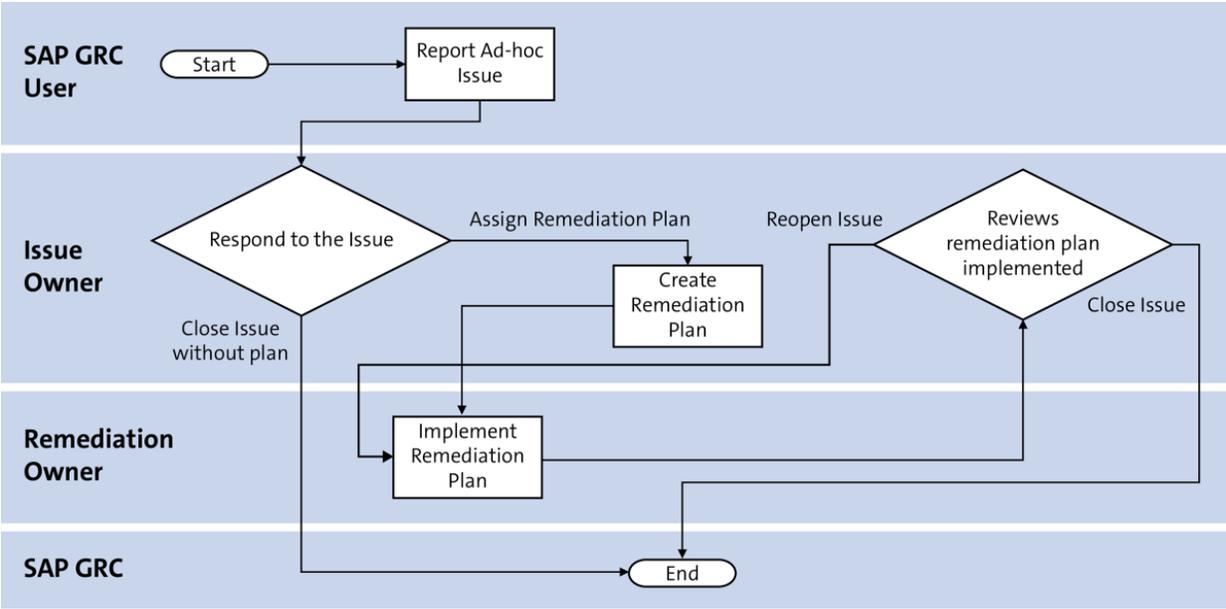
**Inspection**

System down

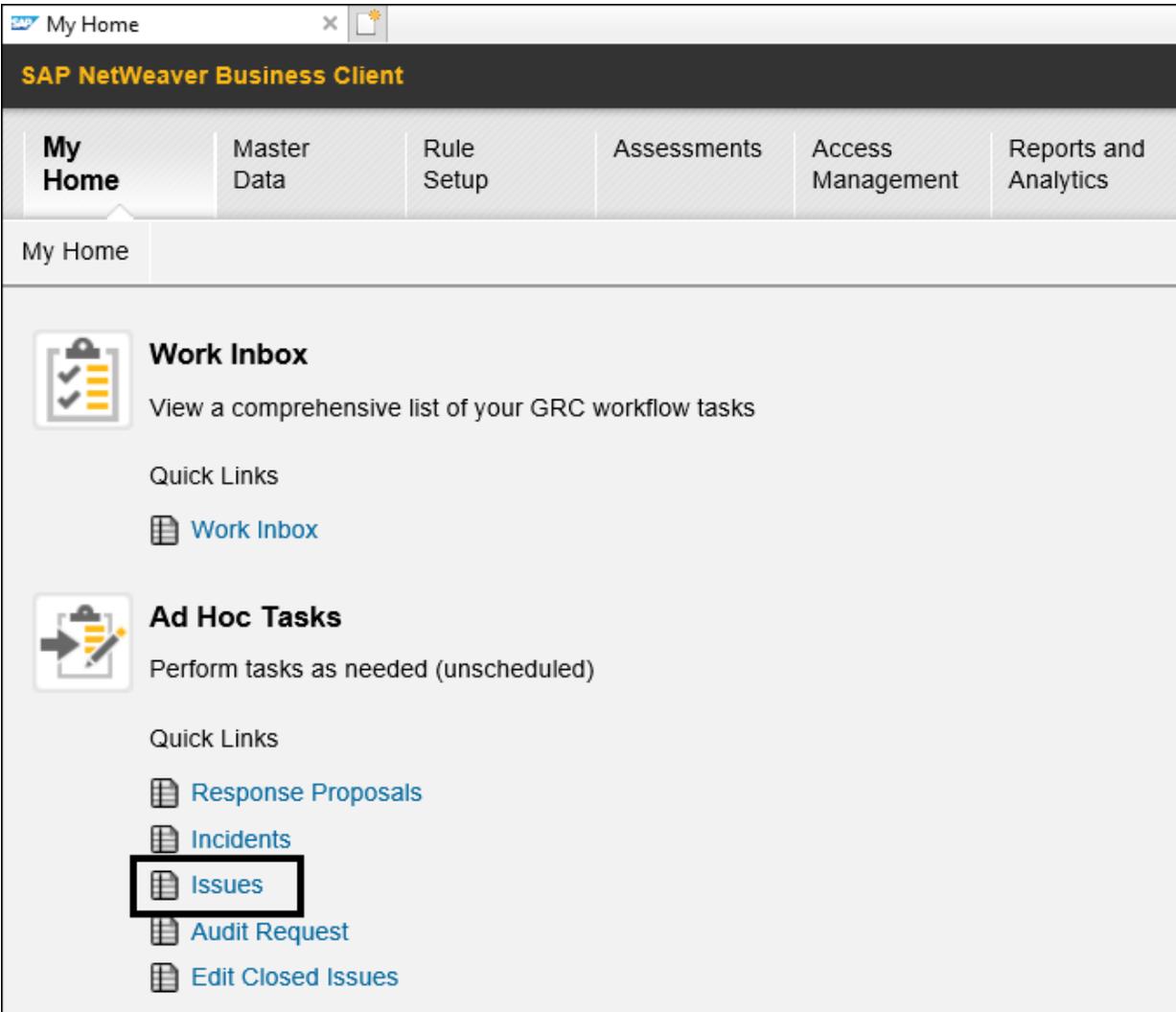
**Figure 7.8** Option to Select a New Source while Reporting an Issue



**Figure 7.9** Stages in the Ad Hoc Issue Remediation Workflow with Owners' Information



**Figure 7.10** Flowchart Depicting the Stages of Ad Hoc Issue Remediation and the Flow



**Figure 7.11** Ad Hoc Issues Option in the My Home Work Center

**Active Queries**

**Ad Hoc Issues** All (0) **Assigned to Me (0)** Created by Me (0) Open Issues (0) Not Assigned (0)

**Ad Hoc Issues - Assigned to Me**

Show Quick Criteria Maintenance

View: [Standard View]

 Issue Name	Object Type	Object Name	Priority	Issue Owner

**Figure 7.12** Option to Create an Ad Hoc Issue

**Ad Hoc Issue:**

Submit Save Draft

Status Draft Created By Karthika G Created On 26.07.2023 Updated By Updated On

Issue Details Regulation Attachments and Links

\* Name: Duplicate Invoice payments

\* Description: As part of the regular internal audit process, we have tested the invoice records and identified there are duplicate payments made to 2 vendors against the same invoice record

\* Priority: High

Object Type: Control

Object Name: Monitor Duplicate Invoice Check Config [Open](#)

Owner: KARTHIKA

Source: Continuous Monitoring

\* Issue Date: 26.07.2023

Due Date: 27.07.2023

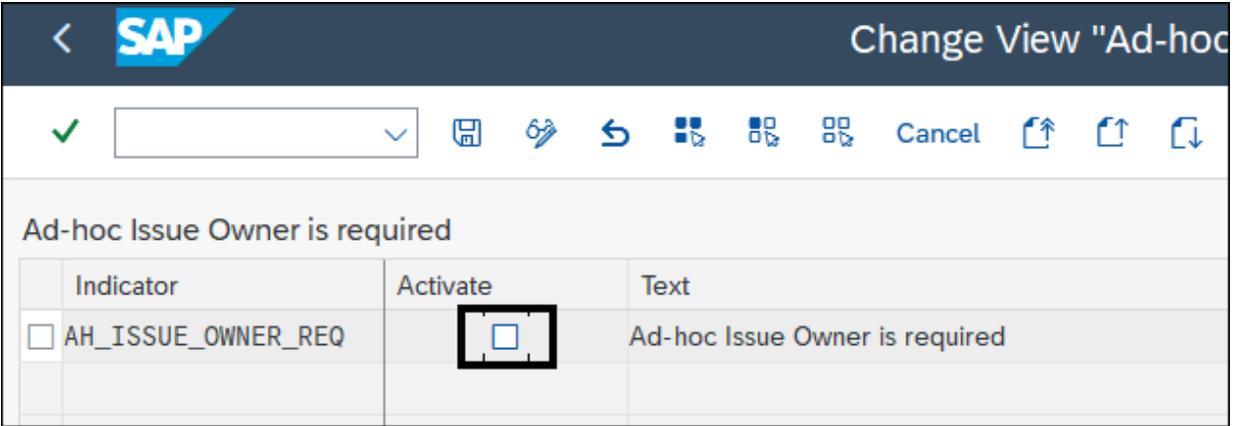
Audit Trail: Audit Trail

Notes

Payment records shows that duplicate payments were made to vendor 00012658 against the invoice number 1250000041 and 00013785 against the invoice number 1250000091

Cancel

**Figure 7.13** Details to Be Filled in by the User Reporting the Ad Hoc Issue



**Figure 7.14** Configuration to Make the Issue Owner Mandatory in Ad Hoc Issues

**Ad Hoc Issue: Adhoc Issue**

[Submit](#) | [Assign Remediation Plan](#) | [Close Without Plan](#) | [Reassign The Issue](#)

Status Submitted Created By Karthika G Created On 03.07.2023 Updated By Karthika G Updated On 26.07.2023

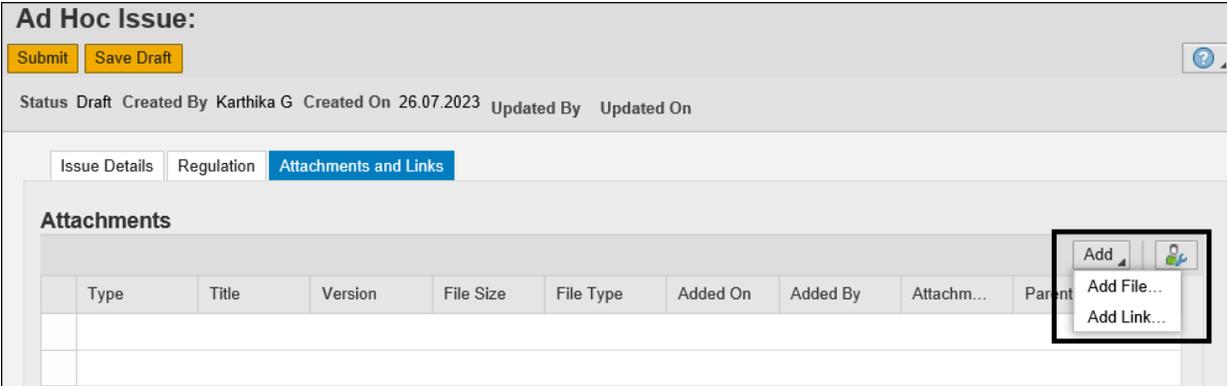
[Issue Details](#) | [Regulation](#) | [Attachments and Links](#)

### Regulations

[Add](#) [Remove](#) 

	Name	Description	Valid From	Valid To
	Sarbanes Oxley	SoX	01.01.2023	31.12.9999

**Figure 7.15** Regulation Tab



**Figure 7.16** Options Available to Attach Evidence while Reporting an Issue

Active Queries					
Workitems <a href="#">All (76)</a> <a href="#">Access Management (0)</a> <a href="#">Process Control (76)</a> <a href="#">Risk Management (0)</a>					
Workitems - Process Control					
View: * [Standard View] ▾					
Subject	Organization	Regulation	Status	Object Name	
<a href="#">Start Remediation for the Ad Hoc Issue 'Duplicate Invoice payments'</a>	Power Generation	Sarbanes Oxley	Ready	Monitor Duplicate Invoice Check Config	

**Figure 7.17** Work Inbox Screen with Items Pending for Action

**Ad Hoc Issue: Duplicate Invoice payments**

Status Submitted Created By Karthika G Created On 26.07.2023 Updated By Karthika G Updated On 26.07.2023

* Name:	Duplicate Invoice payments	<p><b>Notes</b></p> <p><b>Karthika G - 26.07.2023 19:47:34</b>          Payment records shows that duplicate payments were made to vendor 00012658 against the invoice number 1250000041 and 00013785 against the invoice number 1250000091</p> <p> Add Note</p>
* Description:	As part of the regular internal audit process, we have tested the invoice records and identified there are duplicate payments made to 2 vendors against the same invoice record	
* Priority:	High	
Object Type:	Control	
Object Name:	Monitor Duplicate Invoice Check Config <a href="#">Open</a>	
Owner:	KARTHIKA	
Source:	Continuous Monitoring	
* Issue Date:	26.07.2023	
Due Date:	27.07.2023	
Audit Trail:	<a href="#">Audit Trail</a>	

**Figure 7.18** Options Available for the Issue Owner while Responding to the Issue

**Ad Hoc Issue: Duplicate Invoice payments**

Submit Assign Remediation Plan Close Without Plan Reassign The Issue

Status Submitted Created By Karthika G Created On 26.07.2023 Updated By Karthika G Updated On 26.07.2023

Issue Details Regulation Attachments and Links

\* Name: Duplicate Invoice payments

\* Description: As part of the regular internal audit process, we have tested the invoice records and identified there are duplicate payments made to 2 vendors against the same invoice record

\* Priority: High

Object Type: Control

Object Name: Monitor Duplicate I

Owner: KARTHIKA

Source: Continuous Monito

\* Issue Date: 26.07.2023

Due Date: 27.07.2023

Audit Trail: [Audit Trail](#)

Notes

Karthika G - 26.07.2023 19:47:34  
Payment records shows that duplicate payments were made to vendor 00012658 00041 and number

**Assign Remediation Plan**

\* Plan Name: Review and recover the duplicate payment

\* Start Date: 26.07.2023

\* Due Date: 02.08.2023

\* Owner: KARTHIKA

\* Description: Work with the payments team to recover the duplicate payments made to the vendors mentioned

OK Cancel

**Figure 7.19** Issue Owner Assigning a Remediation Plan to Fix the Issue

**Ad Hoc Issue: Duplicate Invoice payments**

**Submit**

Status Submitted Created By Karthika G Created On 26.07.2023 Updated By Karthika G Updated On 26.07.2023

Issue Details Regulation **Remediation Plan** Attachments and Links

**Remediation Plan**

Name	Issue Name	Issue Owner	Start Date	Due Date	Plan Owner	Audit Trail
Review and recover the ...	Duplicate Invoice payments	Karthika G	26.07.2023	02.08.2023	Karthika G	<a href="#">Audit Trail</a>

**Review and recover the duplicate payments**

Owner:  \* Start Date:

Processor:  \* Due Date:

Description:  Carryforward Status:

Reviewed By:

**Figure 7.20** Issue Owner Submitting the Remediation Plan

**Ad Hoc Issue: Duplicate Invoice payments**

✓ Data has been saved

Status Remediation Started Created By Karthika G Created On 26.07.2023 Updated By Karthika G Updated On 26.07.2023

Issue Details Regulation **Remediation Plan** Attachments and Links

**Remediation Plan**

Reassign the Plan

Name	Issue Name	Issue Owner	Start Date	Due Date	Audit Trail	Plan Owner
Review and recover the ...	Duplicate Invoice payments	Karthika G	26.07.2023	02.08.2023	<a href="#">Audit Trail</a>	Karthika G

**Figure 7.21** Remediation Plan Created for the Ad hoc Issue

**Ad Hoc Issue: Duplicate Invoice payments**

[Submit](#)

Status Remediation Started Created By Karthika G Created On 26.07.2023 Updated By Karthika G Updated On 26.07.2023

Issue Details Regulation **Remediation Plan** Attachments and Links

**Remediation Plan**

[Reassign the Plan](#) [Start the Plan](#)

Name	Issue Name	Issue Owner	Start Date	Due Date	Plan Owner	Audit Trail
Review and recover the d...	Duplicate Invoice payments	Karthika G	26.07.2023	02.08.2023	DRISHTI	<a href="#">Audit Trail</a>

**Figure 7.22** Remediation Plan Actions

**Ad Hoc Issue: Duplicate Invoice payments**

[Submit](#)

Status Remediation Started Created By Karthika G Created On 26.07.2023 Updated By Karthika G Updated On 26.07.2023

Issue Details Regulation **Remediation Plan** Attachments and Links

**Remediation Plan**

[Assign Next Processor](#) [Complete](#) [Change Due Date](#)

Name	Issue Name	Issue Owner	Start Date	Due Date	Plan Owner	Audit Trail
Review and recover the ...	Duplicate Invoice payme...	Karthika G	26.07.2023	02.08.2023	DRISHTI	<a href="#">Audit Trail</a>

**Figure 7.23** Options Available in the Remediation Plan Implementation Window

**Ad Hoc Issue: Duplicate Invoice payments**

**Submit**

Status: Remediation Started Created By: Karthika G Created On: 26.07.2023 Updated By: Karthika G Updated On: 26.07.2023

Issue Details Regulation **Remediation Plan** Attachments and Links

**Remediation Plan**

							Assign Next Processor	Complete	Change Due Date
Name	Issue Name	Issue Owner	Start Date	Due Date	Plan Owner	Audit Trail			
Review and recover the duplica...	Duplicate Invoice payments	Karthika G	26.07.2023	02.08.2023	DRISHTI	<a href="#">Audit Trail</a>			

**Review and recover the duplicate payments**

Owner: DRISHTI \* Start Date: 26.07.2023

Processor: DRISHTI \* Due Date: 02.08.2023

Description: Work with the payments team to recover duplicate payments Carryforward Status: No Carryforward

Type: Ad Hoc Issue Reviewed By:

Status: Remediation Started Reviewed On:

Created By: Karthika G

Created On: 26.07.2023

Completion: 100%

**Figure 7.24** Remediation Owner Submitting the Work Item for the Issue Owner’s Review

Active Queries									
Workitems <a href="#">All (77)</a> <a href="#">Access Management (0)</a> <a href="#">Process Control (77)</a> <a href="#">Risk Management (0)</a>									
Workitems - Process Control									
View: * [Standard View] v							Print Version		Export
Subject	Organization	Regulation	Status	Due Date	Created On	Object Name	Created By		
Close Issue: Ad Hoc Issue	Power Generation		Ready	02.08.2023	26.07.2023 21:16:40	Monitor Duplicate Invoice Check Config	Karthika G		

**Figure 7.25** Work Inbox Screen with Items Pending for Action

**Ad Hoc Issue: Duplicate Invoice payments**

[Submit](#)

Status Remediation Started Created By Karthika G Created On 26.07.2023 Updated By DRISHTI Updated On 26.07.2023

Issue Details Regulation **Remediation Plan** Attachments and Links

**Remediation Plan**

[Close](#) [Reopen](#)

	Name	Issue Name	Issue Owner	Start Date	Due Date	Audit Trail	Plan Owner
	Review and recover the ...	Duplicate Invoice payme...	Karthika G	26.07.2023	02.08.2023	<a href="#">Audit Trail</a>	DRISHTI

**Figure 7.26** Remediation Plan Tab: Review Work Item for the Control Design Assessment

**Ad Hoc Issue: Duplicate Invoice payments**

✔ Data has been saved

Status Remediation Started Created By Karthika G Created On 27.07.2023 Updated By Karthika G Updated On 27.07.2023

Name	Issue Name	Issue Owner	Start Date	Due Date
Review and recover the ...	Duplicate Invoice payme...	Karthika G	27.07.2023	02.08.2023

**Review and recover the duplicate payments**

Owner: DRISHTI \* Start Date:

Processor: DRISHTI \* Due Date:

Description: Work with the payment team to recover the duplicate payments made Carryforward Status:

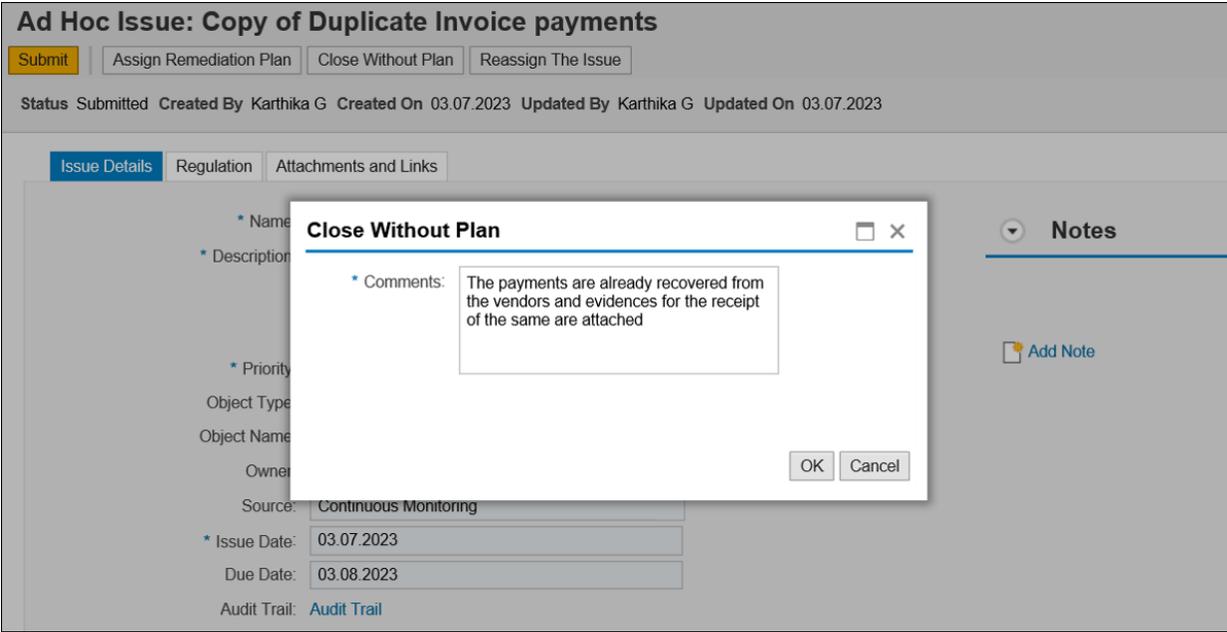
Type: Ad Hoc Issue Reviewed By:

Status: Closed Reviewed On:

Completion: 100% Created By:

Created On:

**Figure 7.27** Issue Owner Approving the Implemented Remediation Plan



**Figure 7.28** Issue Owner Closing the Issue without a Plan

**Ad Hoc Issue: Copy of Duplicate Invoice payments**

[Submit](#)

**Status** Closed Created By Karthika G Created On 03.07.2023 Updated By Karthika G Updated On 03.07.2023

[Issue Details](#) [Regulation](#) [Attachments and Links](#)

\* Name: Copy of Duplicate Invoice payments

\* Description: As part of the regular internal audit process, we have tested the invoice records and identified there are duplicate payments made to 2 vendors against the same invoice record

\* Priority: High

Object Type: Control

Object Name: Monitor Duplicate Invoice Check Config [Open](#)

Owner: KARTHIKA

Source: Continuous Monitoring

\* Issue Date: 03.07.2023

Due Date: 03.08.2023

Comments: The payments are already recovered from the vendors and evidences for the receipt of the same are attached

Audit Trail: [Audit Trail](#)

**Notes**

[Add Note](#)

**Figure 7.29** Ad Hoc Issue Closed without a Plan

## Ad Hoc issue, Remediation Plan and CAPA Plan Status

Ad Hoc issue, Remediation Plan and CAPA Plan Status

▼ Selection

Selection variant:  ▼

---

\* Period:  ▼

\* Year:  ▼

Organization:

Object Type:  ▼

Object Name:

Status:  Draft  Submitted  Initial  Remediation Started  Cancelled  Closed

Priority:  High  Medium  Low

Issue Regulation:  SOX  Sarbanes Oxley

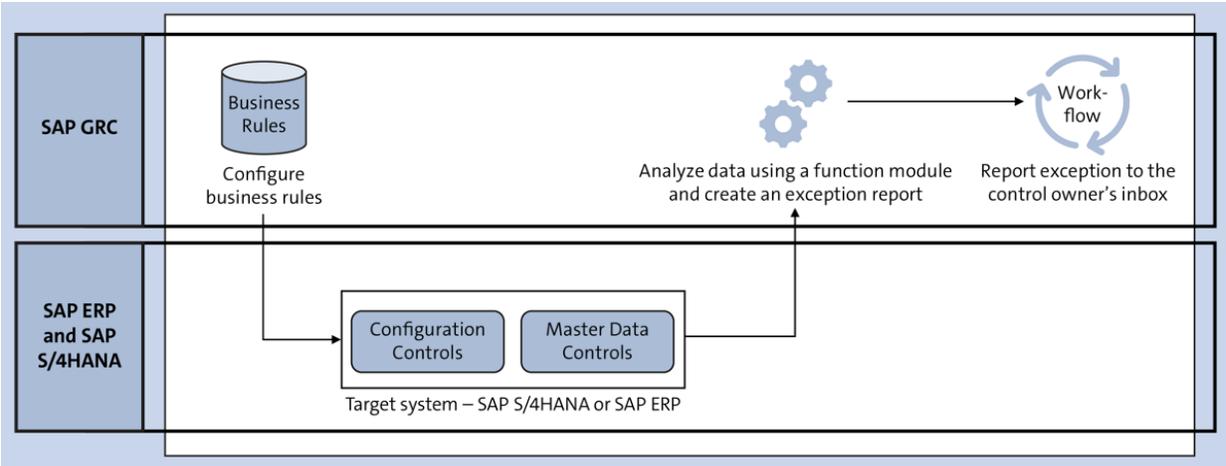
Long text:

Execution Method:  Generate Report Online  Generate Report in Background

**Figure 7.30** Selection Screen to Generate a Report of Ad Hoc Issues

Ad Hoc issue, Remediation Plan and CAPA Plan Status						Personalize		
Ad Hoc issue, Remediation Plan and CAPA Plan Status								
<a href="#">Selector</a>								
<b>Result</b>								
						Expand All	Collapse All	Print or Export
Hierarchy	Object Type	Organization	Original Object	Report by (Issue)	Issue Priority			
<ul style="list-style-type: none"> <li> <input type="checkbox"/> Ethiopian Electric Power           <ul style="list-style-type: none"> <li> <input type="checkbox"/> Power Generation               <ul style="list-style-type: none"> <li> <input checked="" type="checkbox"/> EEP Process Hierarchy                   <ul style="list-style-type: none"> <li> <input checked="" type="checkbox"/> Procure to Pay                       <ul style="list-style-type: none"> <li> <input type="checkbox"/> Duplicate Invoice payments                           <ul style="list-style-type: none"> <li> <a href="#">Review and recover the duplicate payments</a> </li> </ul> </li> <li> <input checked="" type="checkbox"/> Duplicate Invoice payments                           <ul style="list-style-type: none"> <li> <a href="#">Review and recover the duplicate payments</a> </li> </ul> </li> </ul> </li> </ul> </li> </ul> </li> </ul> </li> </ul>	Organization	Ethiopian Electric Power						
	Organization	Power Generation						
	Process	Power Generation						
	Process	Power Generation						
	Ad Hoc Issue	Power Generation	Monitor Duplicate Invoice Check Config	Karthika G	High			
	Remediation plan	Power Generation	Monitor Duplicate Invoice Check Config	Karthika G	High			
	Ad Hoc Issue	Power Generation	Monitor Duplicate Invoice Check Config	Karthika G	High			
	Remediation plan	Power Generation	Monitor Duplicate Invoice Check Config	Karthika G	High			

**Figure 7.31** Ad Hoc Issue Report to See the Details of Issues and Remediation Plans



**Figure 8.1** Process Depiction of the CCM Functionality

**Active Queries**

Data Sources **Today (18)** Fixed Date (0)

**Data Sources - Today**

[Hide Quick Criteria Maintenance](#) [Change Query](#) [Define New Query](#) [Personalize](#)

Date: 01.01.2023

View: [Standard View]

Object ID	Name	Start Date	End Date	Description
EO/50000723	TEST_MONITOR_CRITICAL_PROFILE	01.01.2022	31.12.9999	Data source is related to critical profiles monitoring
EO/50000738	Monitor program changes for custom tcode	01.01.2022	31.12.9999	Monitor if a program for a custom transaction is changed without informing Security. Table TSTC captures changes to transaction codes. Report exception if program is changed for a custom transaction.
EO/50000740	to monitor plant open and close	01.01.2022	31.12.9999	to monitor plant open and close
EO/50000742	To monitor inactive users	01.01.2022	31.12.9999	To monitor inactive users
EO/50000753	to monitor quantity in goods receipt/inv	01.01.2022	31.12.9999	To ensure all the invoice in quantity equal to respective goods receipt
EO/50000761	MONITOR ASSIGNMENT OF SAP STANDARD ROLE	01.01.2022	31.12.9999	MONITOR ASSIGNMENT OF SAP STANDARD ROLE
EO/50000772	Access to maintain profile parameters	01.01.2022	31.12.9999	Access to maintain profile parameters in production via transaction RZ10 should be limited. Ensure access to maintain profile parameters in production is restricted to appropriate roles
EO/50000777	Check Email Address is Blank for user	01.01.2022	31.12.9999	Check Email Address is Blank for user.All user should have valid Email address
EO/50000779	Monitor access to critical actions SM30	01.01.2022	31.12.9999	Monitor access to critical actions SM30
EO/50000784	Self Assignment of Role	01.01.2022	31.12.9999	Self Assignment of Role
EO/50000796	USER GROUP NOT ASSIGNED LIST	01.01.2022	31.12.9999	USER GROUP NOT ASSIGNED LIST
EO/50000852	Critical action-RZ10 data source	01.01.2022	31.12.9999	Critical action-RZ10 data source

Last Refresh 11.09.2023 12:05:20 INDIA [Refresh](#)

**Figure 8.2** Create a Data Source

**Data Source**

?

Timeframe 01.01.2023 ID 50001382 Last Modified On

**General** Object Field Attachments and Links

---

**General**

\* Data Source:  \* Valid From:

Description:  \* Valid To:

Status:

---

**Search Term**

Term 1:  Term 2:  Term 3:  Term 4:  Term 5:

**Figure 8.3** Data Source Configuration: General Tab

**Data Source**

Timeframe 01.01.2023 ID 50001382 Last Modified On

**General** Object Field Attachments and Links

**General**

\* Data Source:  \* Valid From:

Description:  \* Valid To:

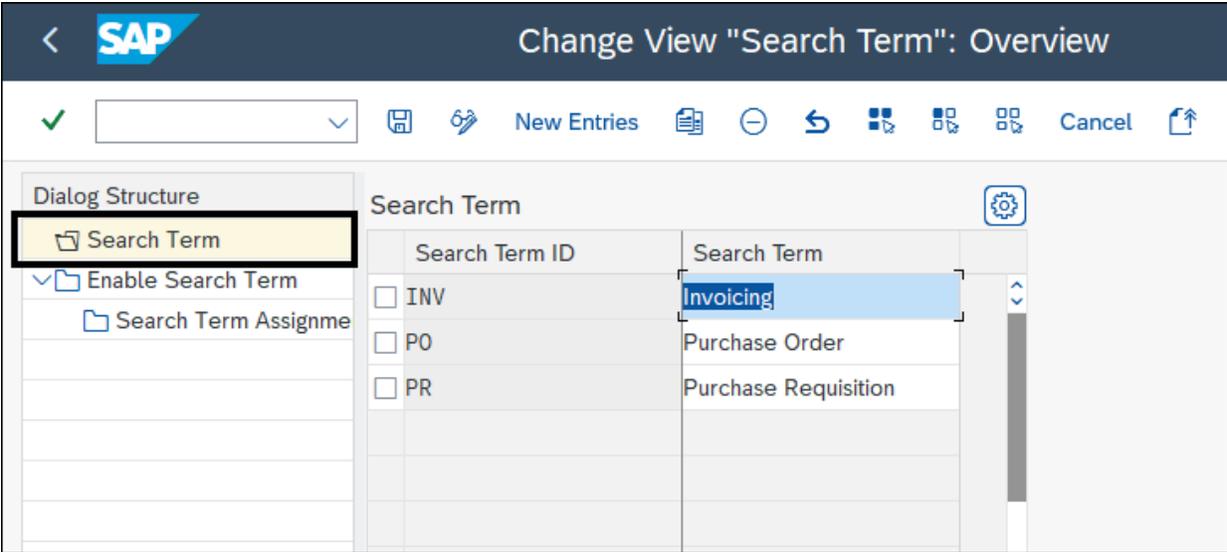
Status:

**Search Term**

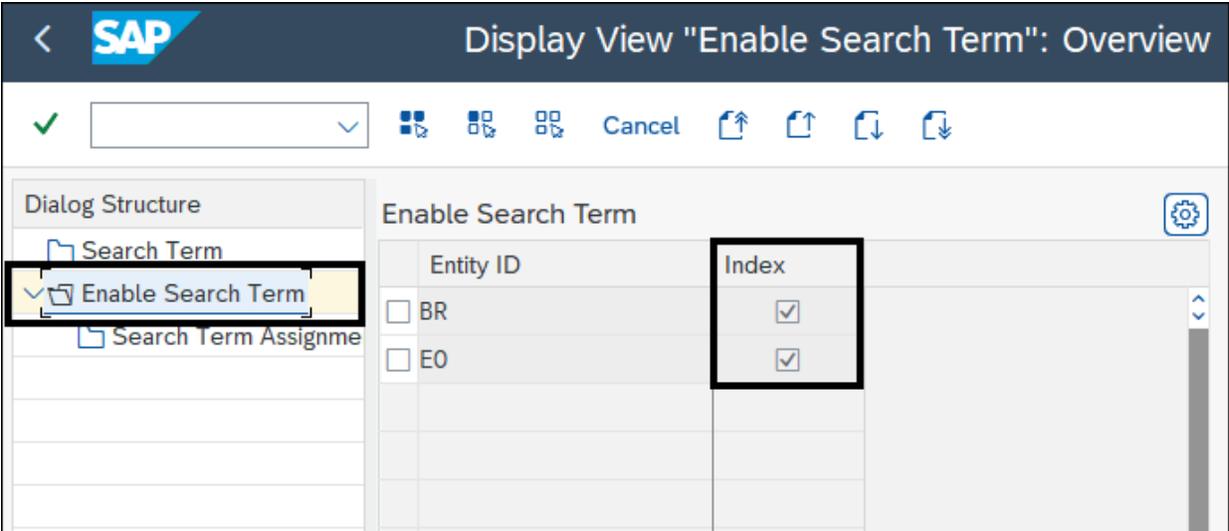
Term 1:  Term 2:  Term 3:  Term 4:  Term 5:

- Invoicing
- Purchase Order
- Purchase Requisition

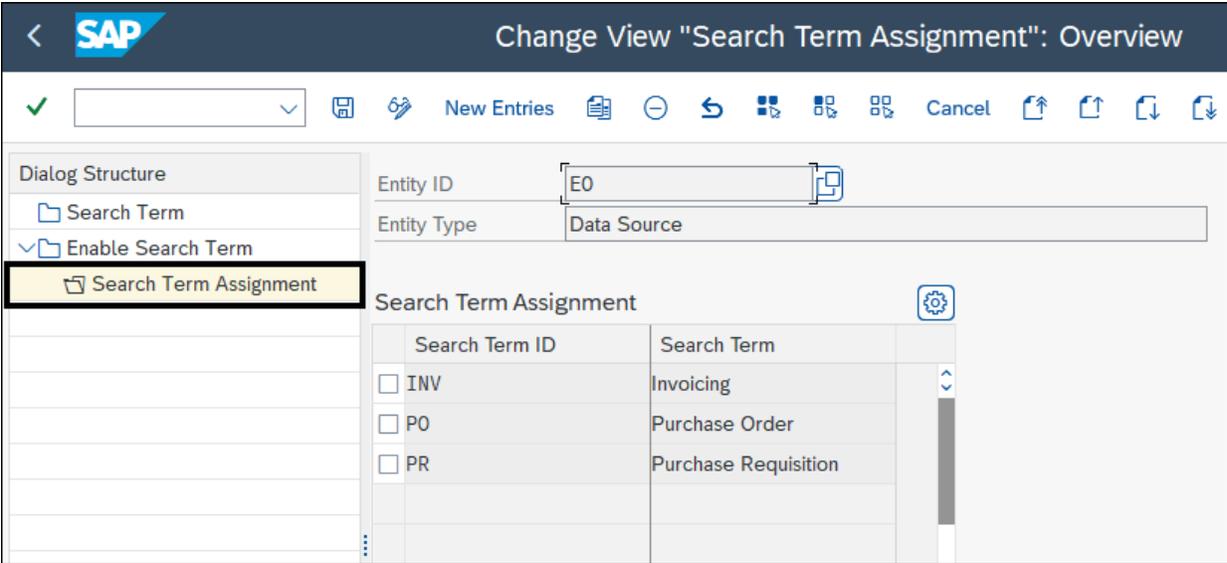
**Figure 8.4** Selection of Search Terms from Dropdowns



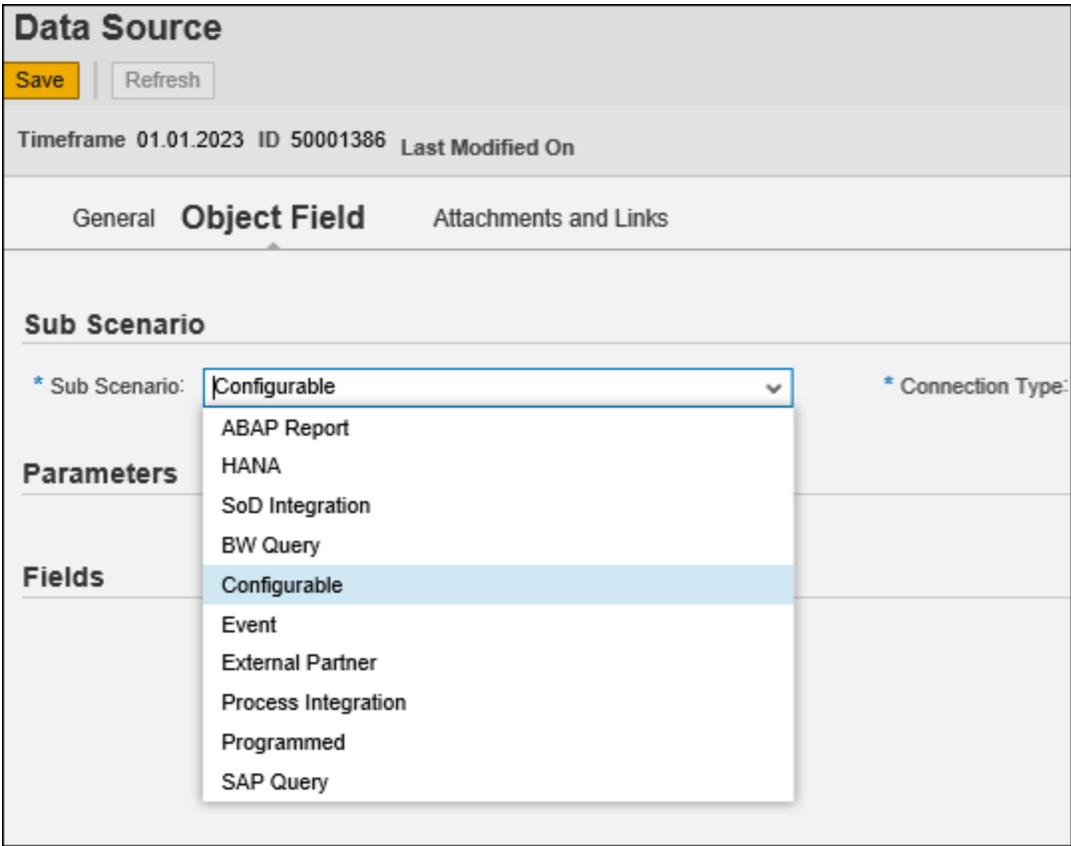
**Figure 8.5** Configuration of Search Terms



**Figure 8.6** Activation Status of Search Terms



**Figure 8.7** Configuration to Map Search Terms to Data Source



**Figure 8.8** Sub Scenario Selection in the Data Source Screen

**Data Source**

Save Refresh

Timeframe 14.11.2023 ID 50001459 Last Modified On

General **Object Field** Adhoc Query Connector Attachments and Links

**Sub Scenario**

\* Sub Scenario: Configurable \* Connection Type: SAP System

**Parameters**

Main Connector:  

Main Table:

**Fields**

**Search: Main Connector**

Target Connector	Connector Desc.
TGDCL100	GRC 12 TO TGD 100
<b>TNDCLNT100</b>	For TND client 100
TSDCLNT100	G12 to TSD 100

**Figure 8.9** Selection of the Main Connector in the Data Source

Display View "Duplicate Invoice Check": Overview

Technical Information

Duplicate Invoice Check

Co...	Name	Check co. code
<input type="checkbox"/> 0001	SAP A.G.	<input type="checkbox"/>
<input type="checkbox"/> RECO	Sondereigentum (WEG)	<input checked="" type="checkbox"/>
<input type="checkbox"/> REOB	Referenz Objektmandate	<input checked="" type="checkbox"/>
<input type="checkbox"/> RERF	WEG Referenzbuchungskreis	<input checked="" type="checkbox"/>

Screen Data

Program Name: SAPLOMRP  
Screen Number: 0024

GUI Data

Program Name: SAPLSVIM  
Status: ESLG

Field Data

Table Name: V\_169P\_DC  
Table Category: Generated view structure  
Field Name: XBUKRS  
Data Element: X\_BUKRS

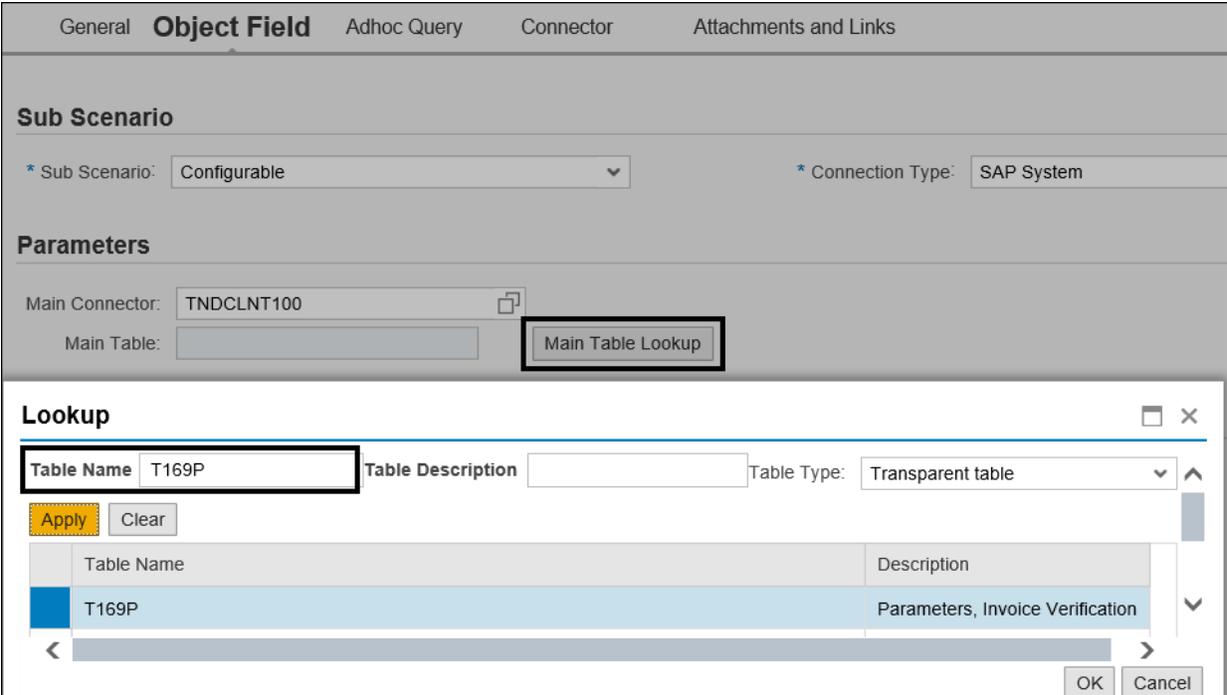
Field Description for Batch Input

Screen Field: V\_169P\_DC-XBUKRS

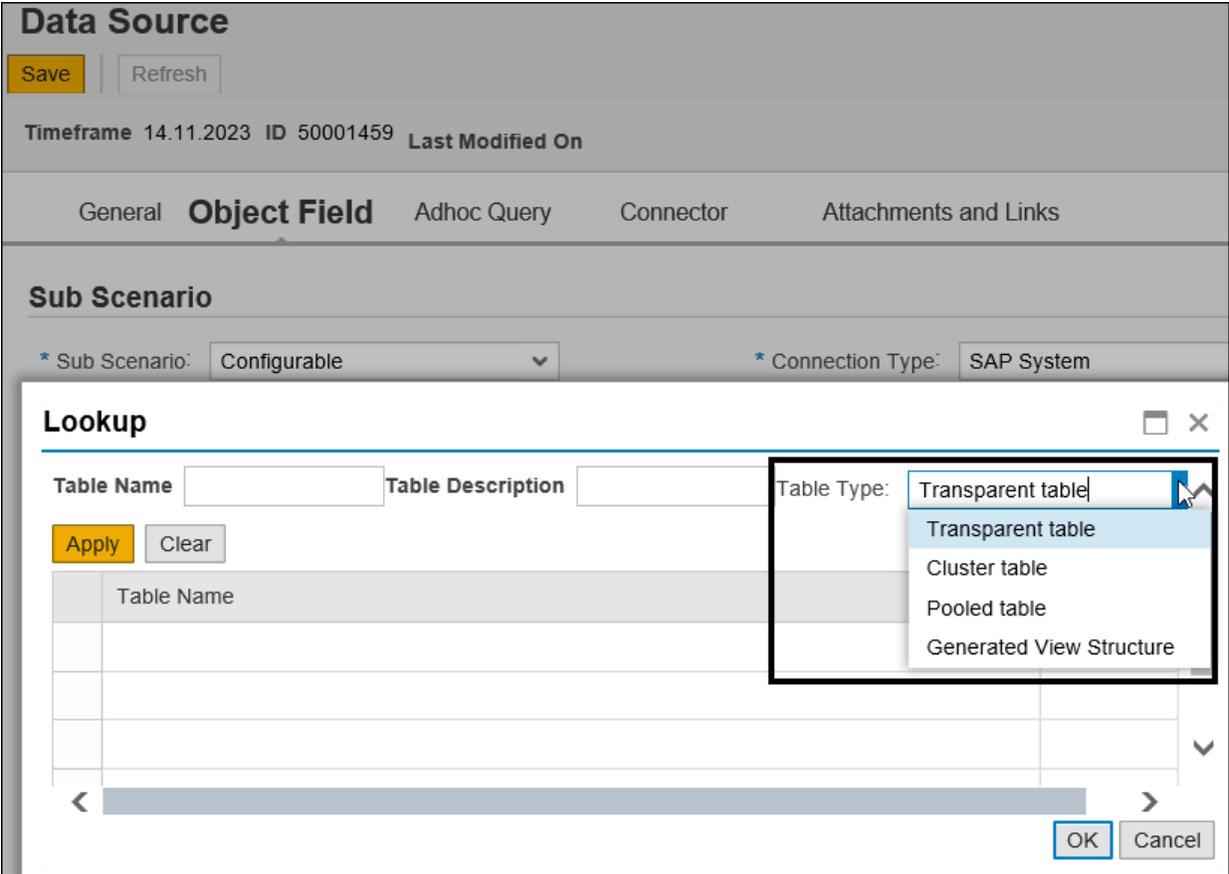
→≡ Position...

✓ Navigate ✗

**Figure 8.10** Identification of Table and Field Technical Information



**Figure 8.11** Selection of Main Table in the Data Source



**Figure 8.12** Selection of Table Types

SAP Dictionary: Display Table

Transparent Table T169P Active

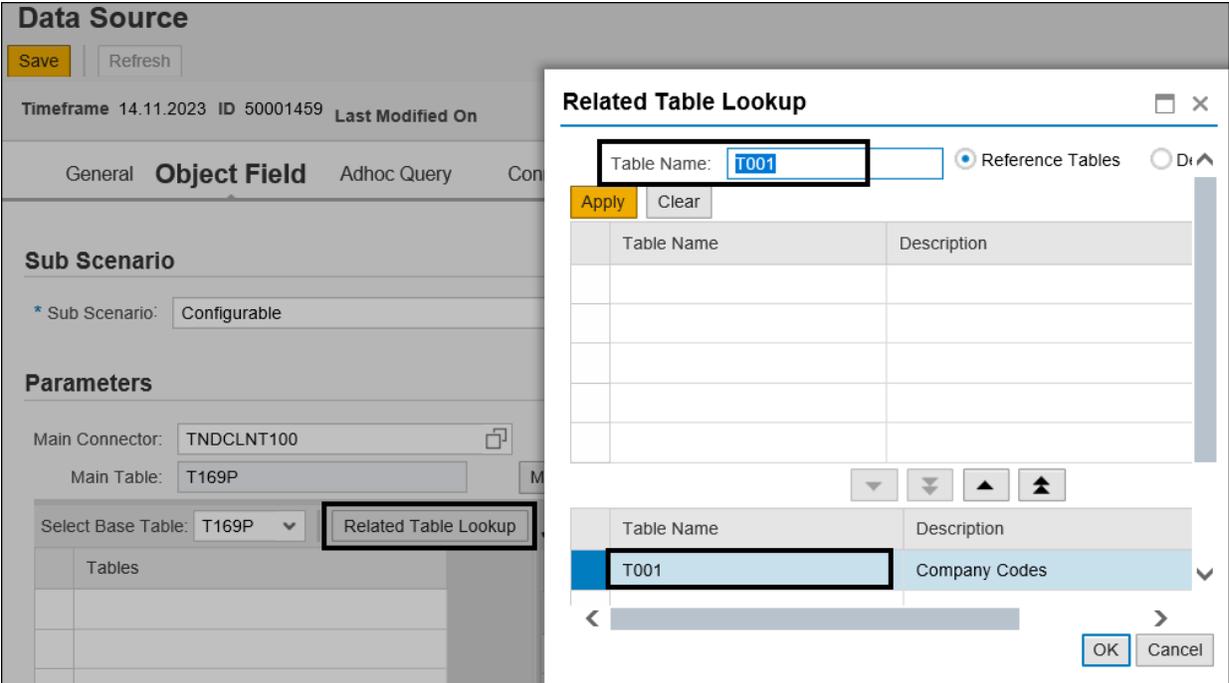
Short Description Parameters, Invoice Verification

Attributes Delivery and Maintenance **Fields** Input Help/Check Currency/Quantity Fields

1 / 31

Field	Key Init...	Data element	Data Type	Length	Deci...	Short Description
<input type="checkbox"/> MANDT	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> MANDT	CLNT	3		0 Client
<input type="checkbox"/> BUKRS	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> BUKRS	CHAR	4		0 Company Code
<input type="checkbox"/> XEKAN	<input type="checkbox"/>	<input type="checkbox"/> XEKAN	CHAR	1		0 Indicator: notification of purchase order header texts

**Figure 8.13** Identification of Table Type from Transaction SE11



**Figure 8.14** Selection of Related Table

**Data Source**

Save Refresh

Timeframe 14.11.2023 ID 50001459 Last Modified On

General **Object Field** Adhoc Query Connector Attachments and Links

**Sub Scenario**

\* Sub Scenario: Configurable \* Connection Type: SAP System

**Parameters**

Main Connector: TNDCLNT100

Main Table: T169P Main Table Lookup

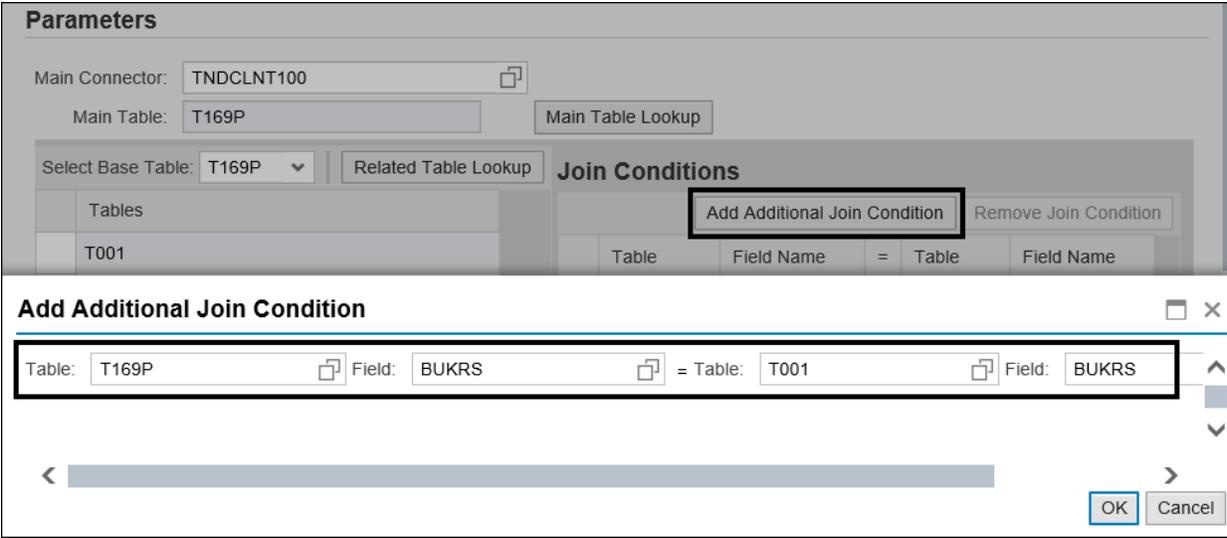
Select Base Table: T169P Related Table Lookup

**Join Conditions**

Add Additional Join Condition Remove Join Condition

Table	Field Name	=	Table	Field Name
T001	BUKRS	=	T169P	BUKRS
T001	MANDT	=	T169P	MANDT

**Figure 8.15** Join Conditions between the Two Tables



**Figure 8.16** Manual Join of Tables

**Data Source**

Save Refresh

Timeframe 14.11.2023 ID 50001459 Last Modified On

General **Object Field** Adhoc Query Connector Attachments and Links

Source Table	Source Field	Key	Field Type	Ref Field ID	Amount or Quantity	Field Description
T169P	T169P-BUKRS	<input checked="" type="checkbox"/>	C	00000000		Company Code

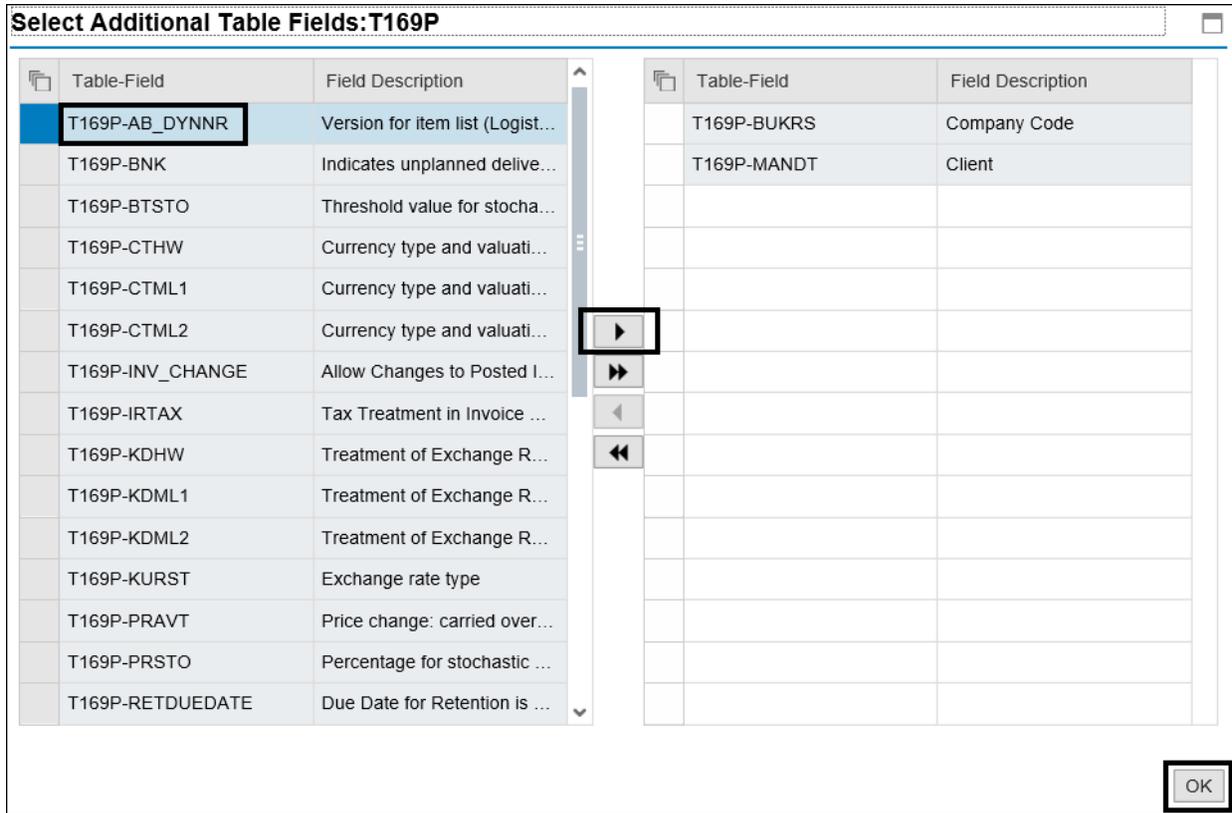
Fields

T169P Select Additional Table Fields

T169P

T001

**Figure 8.17** Selecting Tables in the Data Source Configuration



**Figure 8.18** Selection of Fields from the Table

**Data Source**

Save Refresh

Timeframe 14.11.2023 ID 50001459 Last Modified On

General **Object Field** Adhoc Query Connector Attachments and Links

**Fields**

T169P Select Additional Table Fields

Field ID	Source Table	Source Field	Key	Field Type	Ref Field ID	Amount or Quantity	Field Description
00000002	T169P	T169P-BUKRS	<input checked="" type="checkbox"/>	C	00000000		Company Code
00000004	T169P	T169P-MANDT	<input checked="" type="checkbox"/>	C	00000000		Client
00000006	T169P	T169P-XBLDAT	<input type="checkbox"/>	C	00000000		Indicator: check invoice date
00000007	T169P	T169P-XBUKRS	<input type="checkbox"/>	C	00000000		Indicator: check company code
00000008	T169P	T169P-XEKAN	<input type="checkbox"/>	C	00000000		Indicator: notification of purchase order header texts
00000009	T001	T001-BUTXT	<input type="checkbox"/>	C	00000000		Name of Company Code or Company

**Figure 8.19** Selected Fields for Analysis in the Data Source Configuration

**Data Source**

Save Refresh

Timeframe 14.11.2023 ID 50001459 Last Modified On

General Object Field **Adhoc Query** Connector Attachments and Links

Target Connector TNDCLNT100 Max. Rows: 100 Execute Query

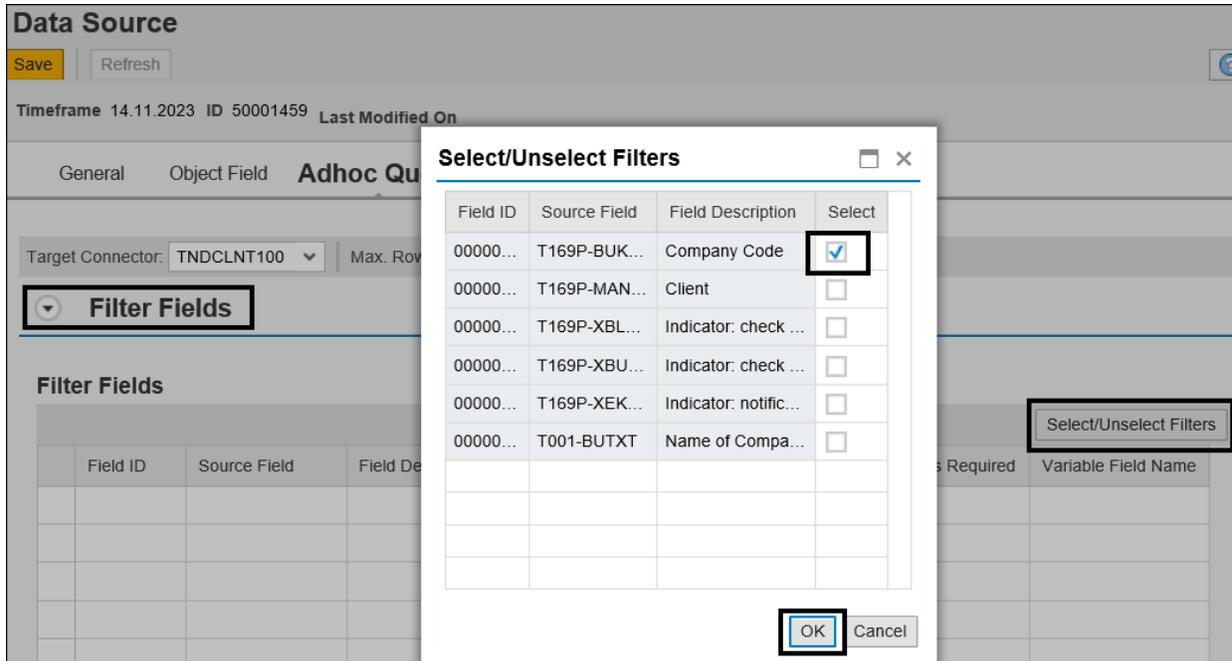
Filter Fields

**Results**

Print Version Export

Company Code	Client	Indicator: check invoice date	Indicator: check company code	Indicator: notification of purchase orde	Name of Company Code or Company
0001	100	X	X	X	SAP A.G.
RECO	100	X	X	X	Sondereigentum (WEG)
REOB	100	X	X	X	Referenz Objektmandate
RERF	100	X	X	X	WEG Referenzbuchungskreis

**Figure 8.20** Ad Hoc Query in the Data Source Screen



**Figure 8.21** Selection of Filter Fields in the Data Source Ad Hoc Query

General Object Field **Adhoc Query** Connector Attachments and Links

Target Connector: TNDCLNT100 Max. Rows: 100 **Execute Query**

**Filter Fields**

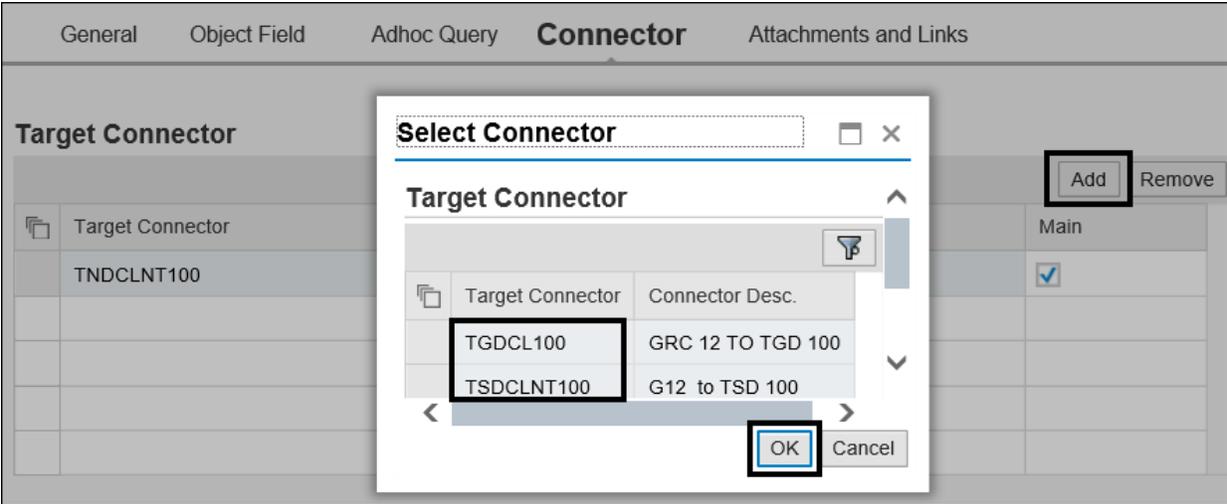
**Filter Fields** Select/Unselect Filters

	Field ID	Source Field	Field Description	Amount or Quantity	Field Type	Is Required	Variable Field Name
	00000002	T169P-BUKRS	Company Code		C	<input type="checkbox"/>	

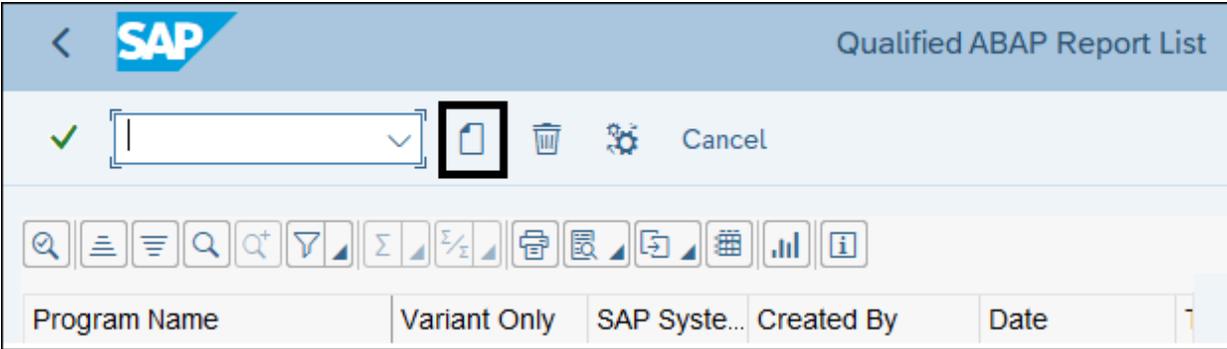
**Filter Value** Add Delete

	Sign	Option	Low	High
	Range limit included	Equals	0001	

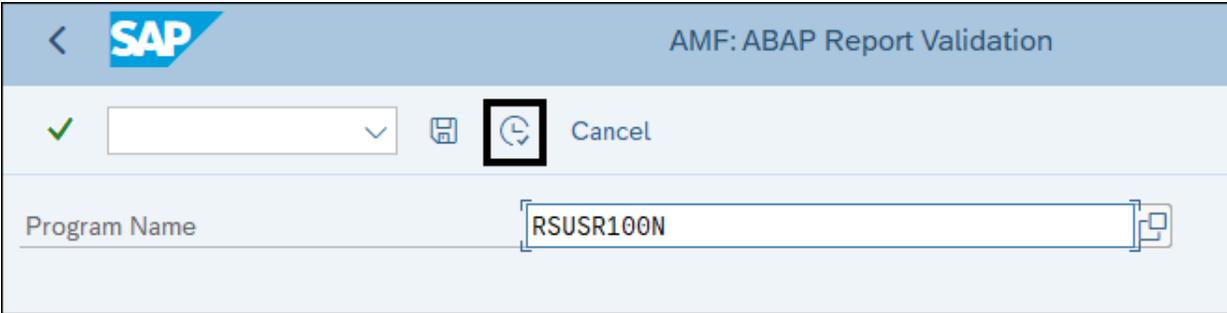
**Figure 8.22** Ad Hoc Query in the Data Source with Filtered Values



**Figure 8.23** Selection of Additional Connectors



**Figure 8.24** Option to Add the ABAP Report to the Qualified List



**Figure 8.25** Selection of the ABAP Report to Add as a Qualified Report

< **SAP** ABAP Report Requirements

✓ [ ] Cancel

**Main Check**

- Report can be executed in background mode  
T-code: SE38 -> Program -> Background Execution
- Review the ABAP report output that is displayed as expected in spool graphical mode  
T-code: SP01 -> Display Content (ICON) -> Graphic Format

**Additional Check**

- Report contains the screen elements not referring to a data element (e.g. radio button group) which will lead to input fields without description in AMF Data Source

**Exception Check**

- Report can not have nested selection screen
- Report can not have popup window
- Report can only display data, no update to database

Add **Add Table To Transport Request**

**Figure 8.26** Confirmation of Checks to Add the Report to the Qualified List

The screenshot shows the SAP 'Qualified ABAP Report List' interface. At the top, there is a header bar with the SAP logo and the title 'Qualified ABAP Report List'. Below the header, there is a toolbar with a green checkmark, a dropdown menu, a document icon, a trash icon, a settings icon (highlighted with a black box), and a 'Cancel' button. Below the toolbar, there is a row of icons for search, list, filter, and other functions. The main area contains a table with the following data:

Program Name	Variant Only	SAP System	Created By	Date	Time	Value Check ...
RSUSR100N		G12	SAIKRISHNA1	21.09.2023	14:50:48	

**Figure 8.27** Configuration to Enable the Value Check Option for an ABAP Report

The screenshot shows the SAP interface for configuring an ABAP report. The title bar reads "Configure ABAP Report for Value Check Scenario". Below the title bar, there is a navigation bar with a green checkmark, a dropdown menu, a save icon, a refresh icon (highlighted with a black box), and a "Cancel" button. The main area is titled "Input Parameters" and contains two input fields: "Program Name" with the value "RSUSR100N" and "Variant" which is empty.

Input Parameters	
Program Name	RSUSR100N
Variant	

**Figure 8.28** Selection of ABAP Report for the Value Check Scenario

The screenshot shows the SAP interface for 'Qualified ABAP Report List'. At the top, there is a navigation bar with the SAP logo and a back arrow. Below it, a toolbar contains a green checkmark, a dropdown menu, a document icon, a trash icon, a gear icon, and a 'Cancel' button. A secondary toolbar below that includes icons for search, list, filter, sort, print, and other report functions. The main content is a table with the following data:

Program Name	Variant Only	SAP System	Created By	Date	Time	Value Check ...
RSUSR100N		G12	SAIKRISHNA1	21.09.2023	14:50:48	X

**Figure 8.29** Value Check Configuration for the ABAP Report

**Data Source**

Save Refresh

Timeframe 14.11.2023 ID 50001459 Last Modified On

General **Object Field** Connector Attachments and Links

**Sub Scenario**

\* Sub Scenario: ABAP Report \* Connection Type: SAP System

**Parameters**

Main Connector: G12CLNT100 Program Lookup

ABAP Report:

Report Variant:

**Figure 8.30** Program Lookup Option in the ABAP Report Data Source

**Lookup** □ ×

ABAP Report  Report Variant

	ABAP Report	Description	Report Variant
■	RSUSR100N	Change Documents for Users	

**Figure 8.31** Selection of the ABAP Report in the Data Source

**Data Source**

Save Refresh

Timeframe 14.11.2023 ID 50001459 Last Modified On

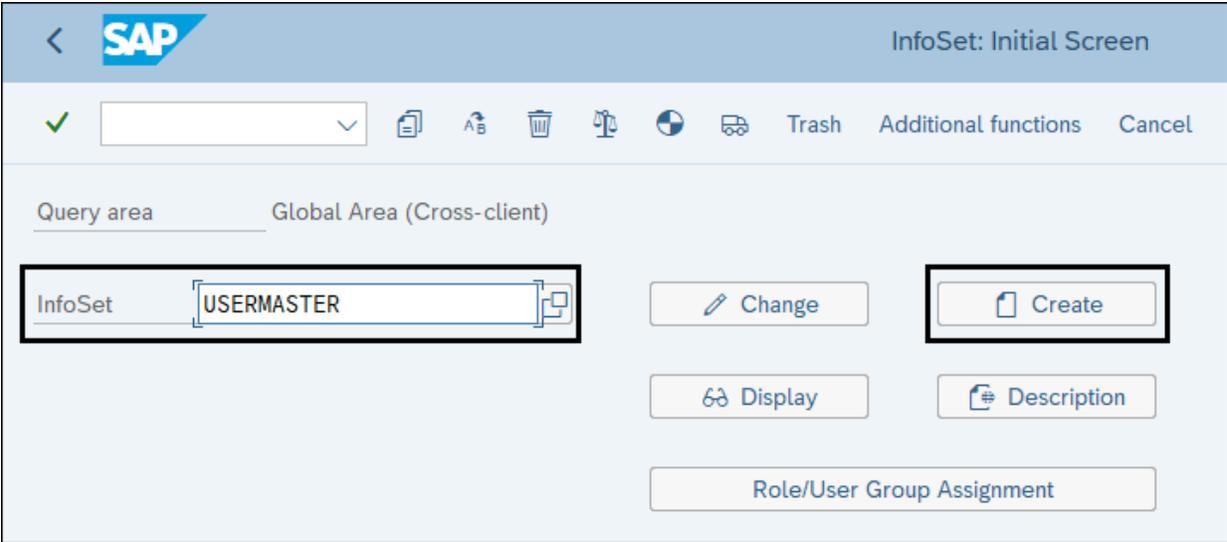
General **Object Field** Connector Attachments and Links

Main Connector: G12CLNT100  ABAP Report: RSUSR100N Report Variant:

**Fields**

Field ID	Technical information	Source Table	Source Field	Field Type	Amount or Quantity	Ref Field ID	Field Description
00000053	ROLE	RSUSR100N	ROLE	C		00000000	
00000054	F_ROLE	RSUSR100N	AGR_DEFINE-AGR_NAME	C		00000000	Role
00000055	PROF	RSUSR100N	PROF	C		00000000	
00000056	F_PROF	RSUSR100N	UST10S-PROFN	C		00000000	Profile
00000057	SYS	RSUSR100N	SYS	C		00000000	
00000058	F_SYS	RSUSR100N	USZBVSYS-SUBSYSTEM	C		00000000	Receiving system
00000059	CROLE	RSUSR100N	CROLE	C		00000000	
00000060	F_CROLE	RSUSR100N	USLA04-AGR_NAME	C		00000000	Role

**Figure 8.32** Fields Selected from the ABAP Report in the Data Source



**Figure 8.33** Creation of an InfoSet

☰
InfoSet : Title and Database
✕

Name	User Master	
Authorization group		

**Data Source**

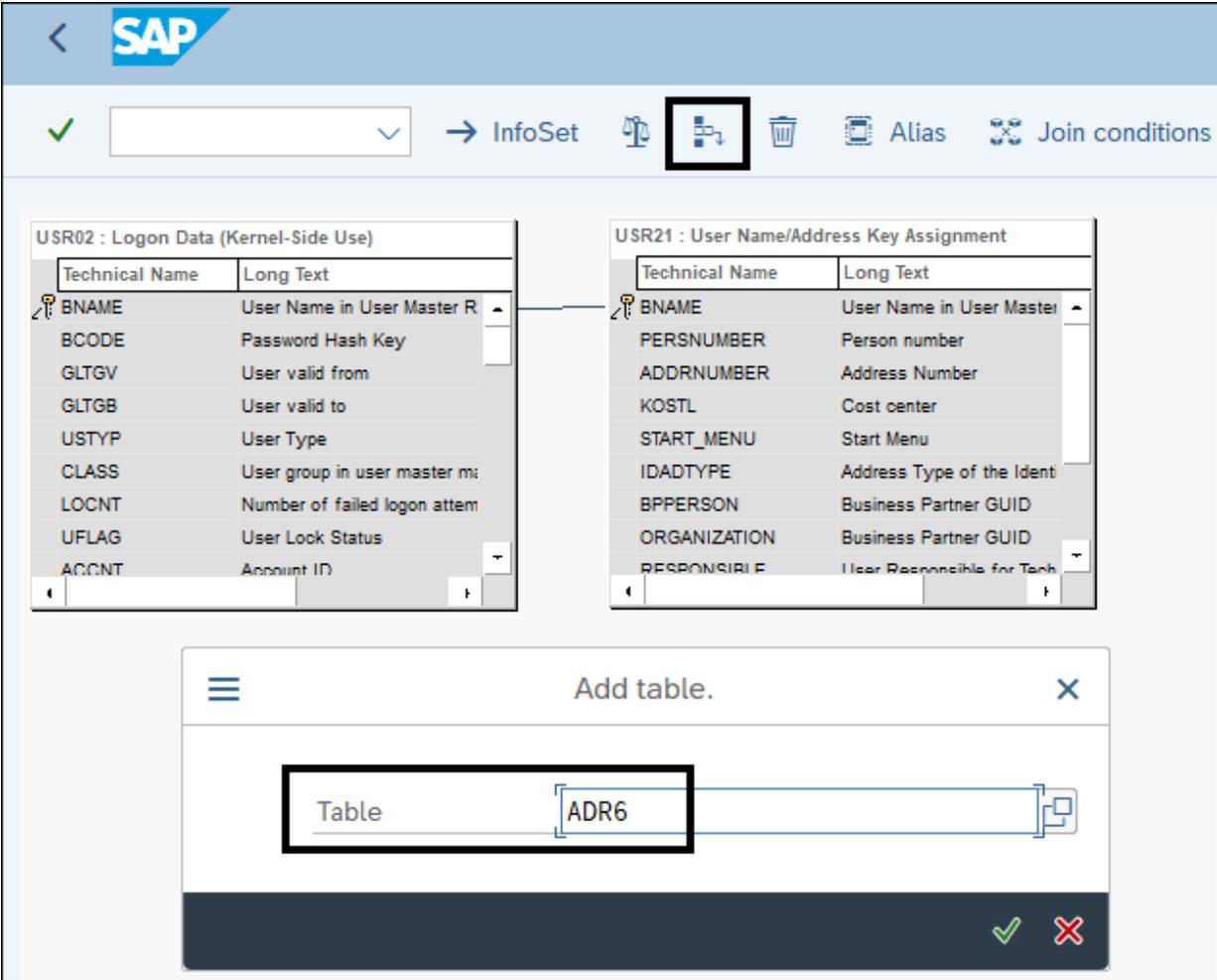
<input checked="" type="radio"/> Table join using basis table	USR02	
<input type="radio"/> Direct read of table		
<input type="radio"/> Logical database		🔍
Selection screen version		
<input type="radio"/> Data retrieval by program		
Data structure		
<input checked="" type="radio"/> Integrated program		
<input type="radio"/> External program:		

**Options**

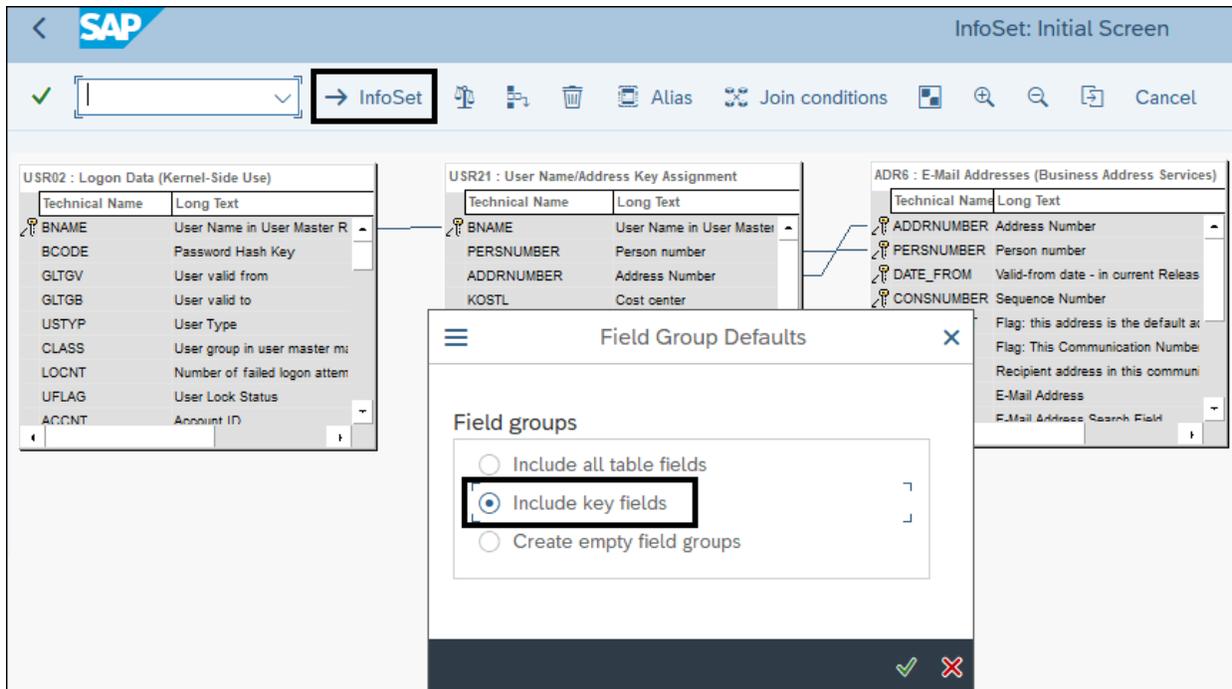
<input type="checkbox"/>	no automatic text recognition
<input checked="" type="checkbox"/>	Fixed point arithmetic

✓
⌄ Further options
✕

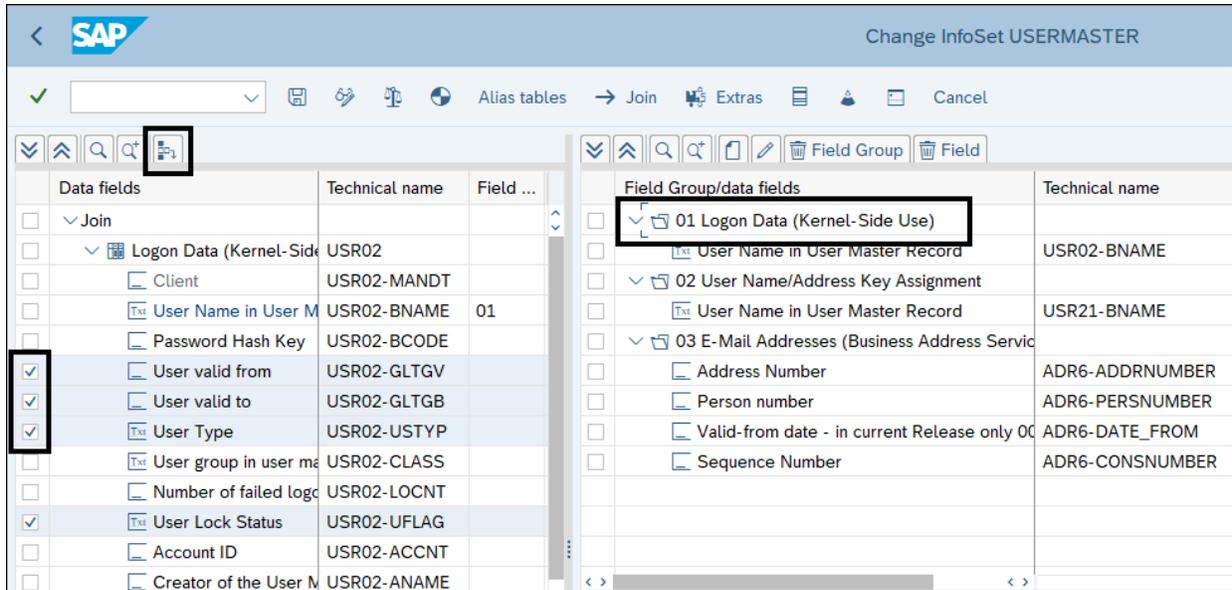
**Figure 8.34** Definition of the InfoSet



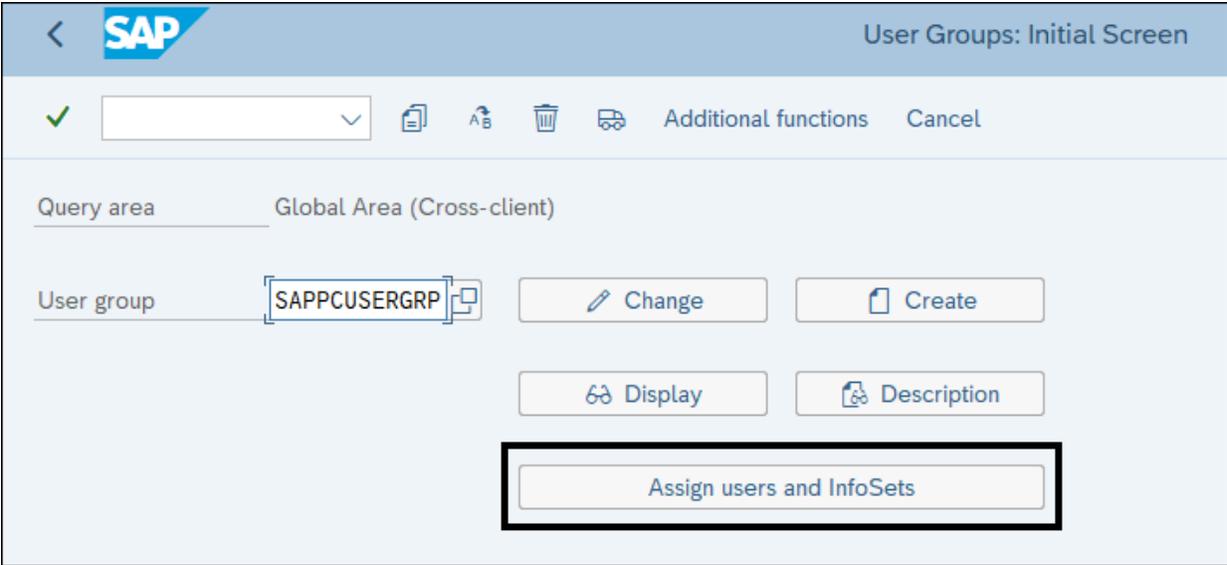
**Figure 8.35** Option to Join Additional Tables



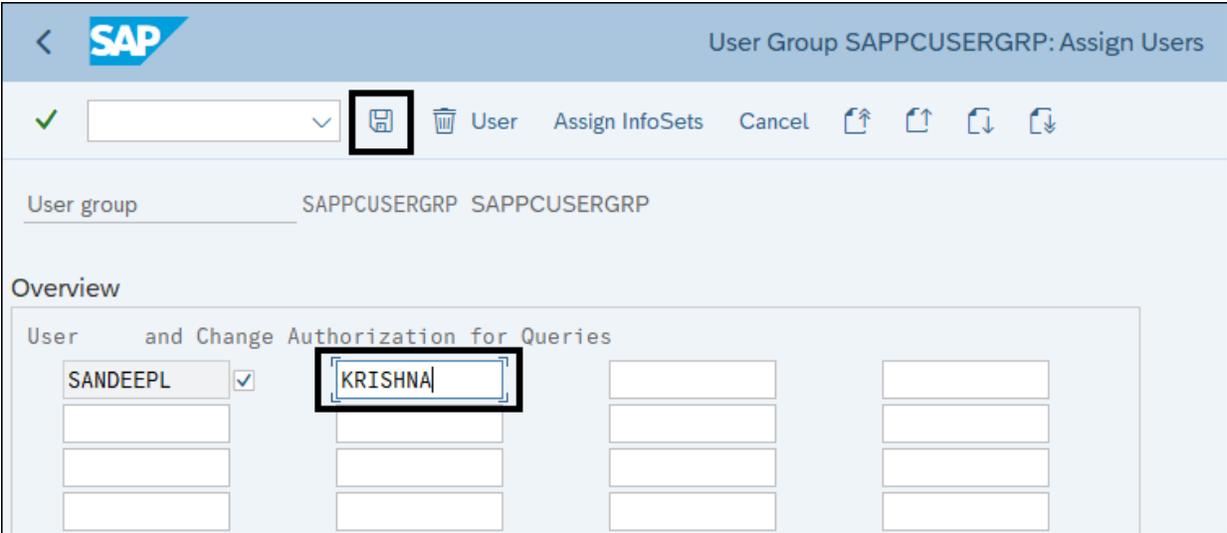
**Figure 8.36** Selection of Field Groups



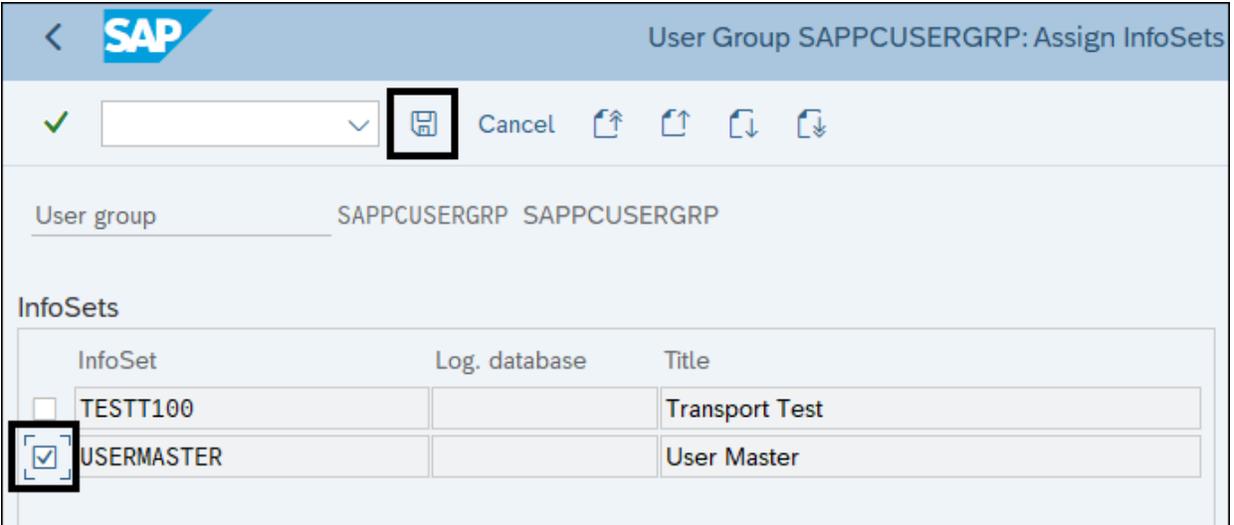
**Figure 8.37** Selection of Additional Fields in the InfoSet



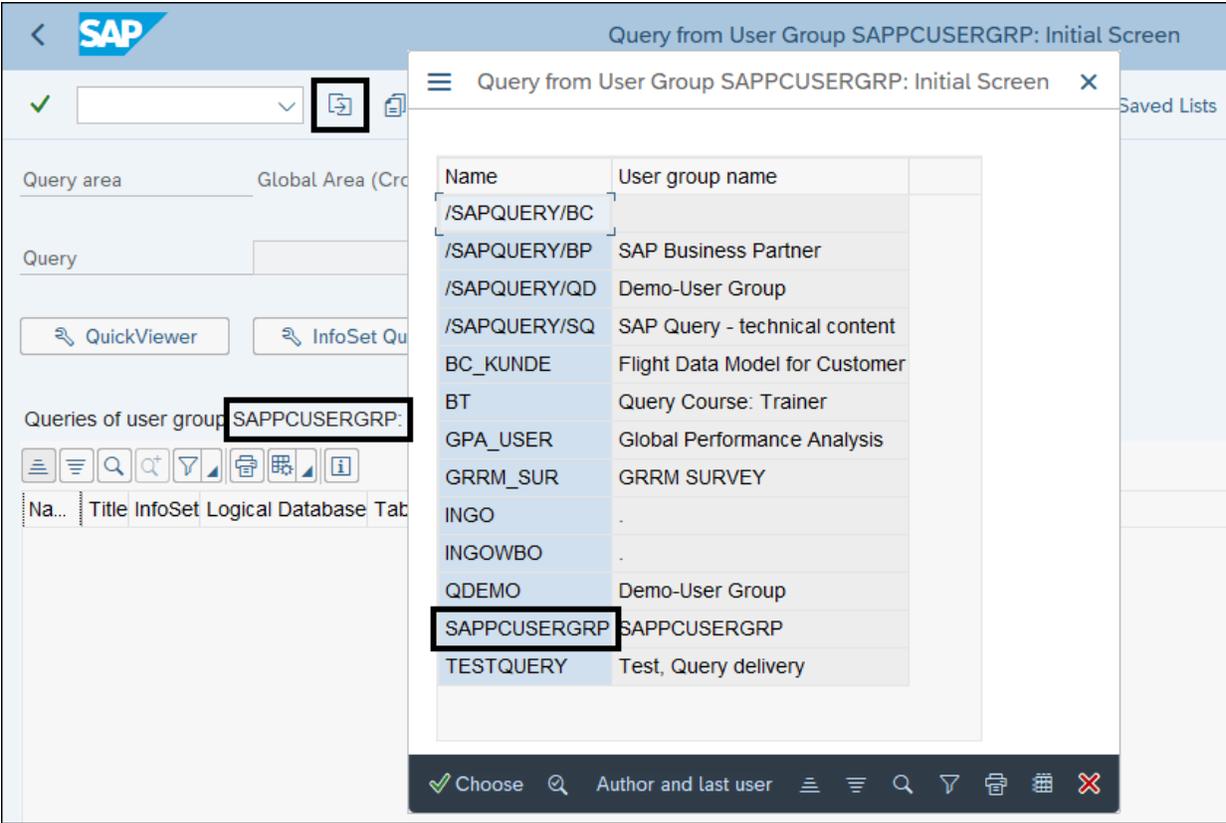
**Figure 8.38** Assigning Users and InfoSets with the User Group



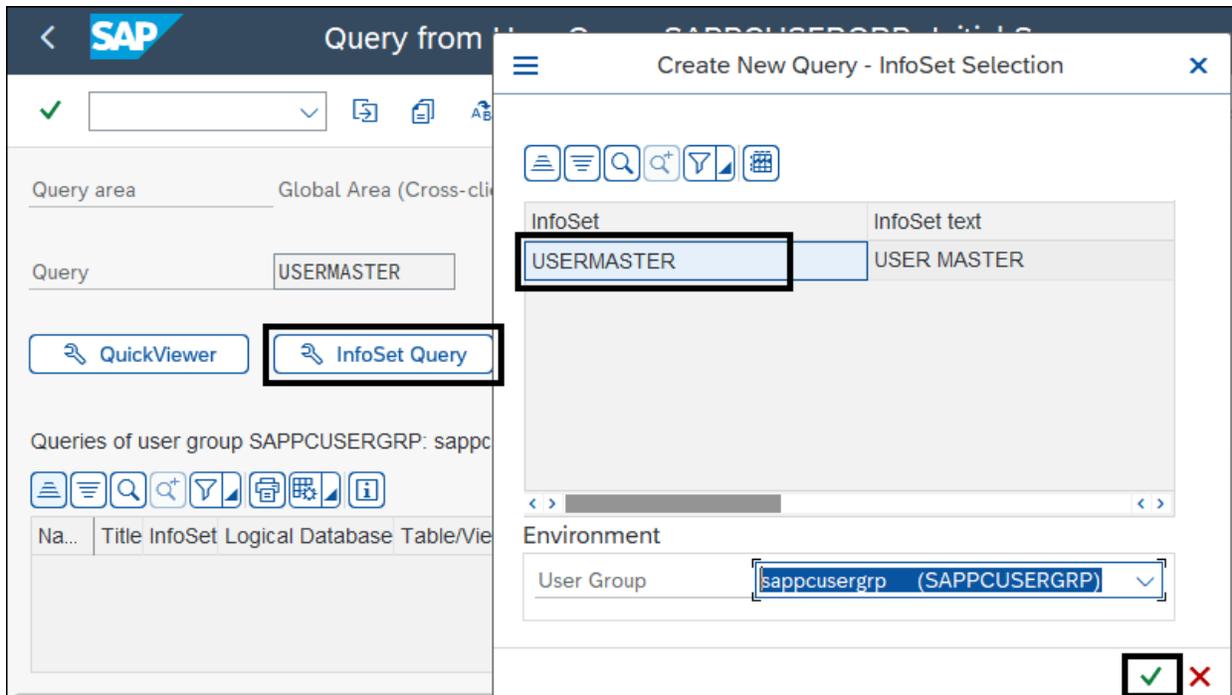
**Figure 8.39** Review of Users Mapped to the User Groups



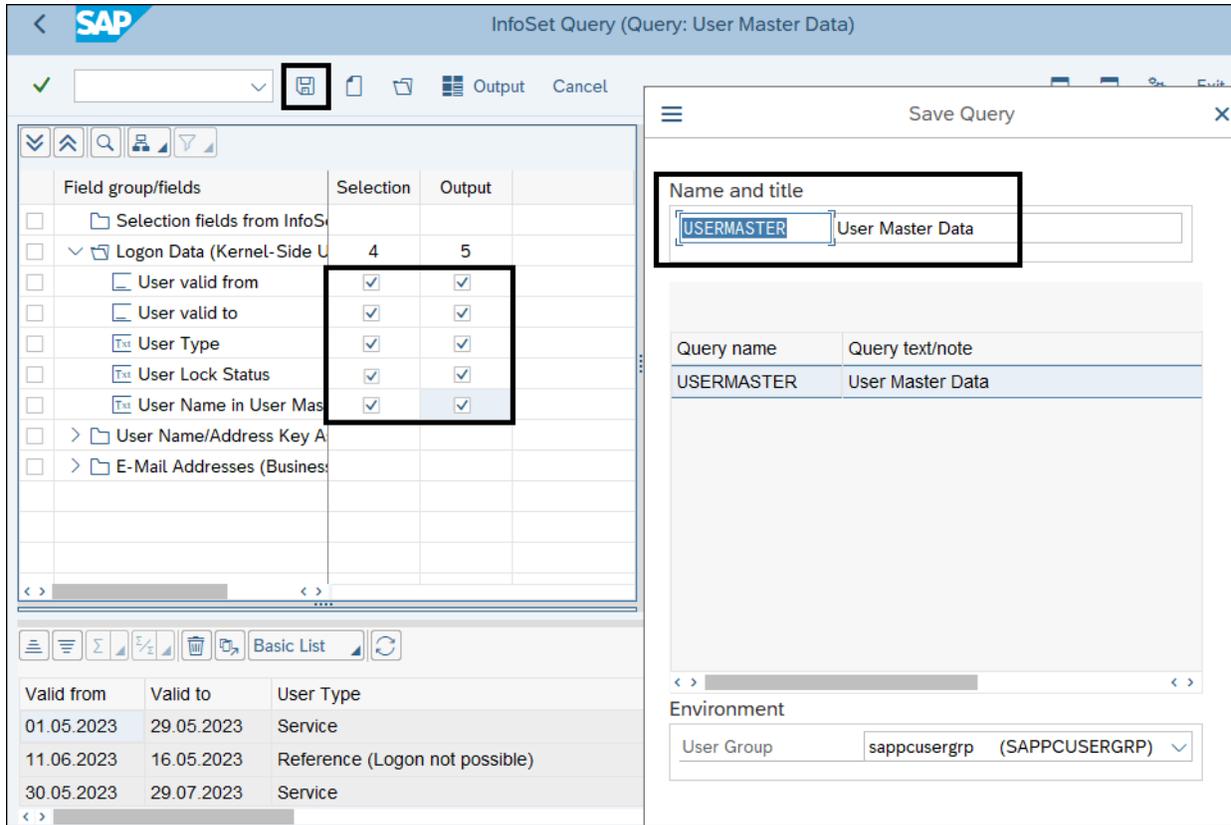
**Figure 8.40** Mapping the InfoSet to the User Group



**Figure 8.41** Selection of the User Group for Query Creation



**Figure 8.42** Selection of the InfoSet for Query Definition



**Figure 8.43** Option to Save the InfoSet Query Defined


Query from User Group SAPPUSERGRP: Initial Screen

✓  ↩ 📄 🔄 🗑️ 🔍 🔗 🕒 🕒 With variant More ▾

Query area  Global Area (Cross-client)

Query  ✎ Change 📄 Create

🔍 QuickViewer 🔍 InfoSet Query 🔗 Display 📄 Description

Queries of user group SAPPUSERGRP: sappusergrp

☰ ☰ 🔍 🔍 🔍 🔍 🔍 🔍 🔍

Name	Title	InfoSet	Logical Database	Table/View/Join	InfoSet Title
USERMASTER	User Master Data	USERMASTER		USR02 ...	USER MASTER

**Figure 8.44** Execution of the InfoSet Query

**Data Source**

Save Refresh

Timeframe 14.11.2023 ID 50001460 Last Modified On

General **Object Field** Connector Attachments and Links

**Sub Scenario**

\* Sub Scenario: SAP Query \* Connection Type: SAP System

**Parameters**

Main Connector: TNDCLNT100 Query Lookup

Query Name: Query Area: Standard

User Group:

**Fields**

**Figure 8.45** Query Lookup Option in the SAP Query Data Source

**Lookup** ☐ ×

Query Name  User Group  Query Area  ▼

Query Name	Query Text	Query Area	User Group
USERMASTER	User Master Data	Global	SAPPCUSERGRP

**Figure 8.46** Selection of the Query in the Data Source

**Data Source**

Save Refresh

Timeframe 14.11.2023 ID 50001467 Last Modified On

General **Object Field** Connector Attachments and Links

**Sub Scenario**

\* Sub Scenario: SAP Query \* Connection Type: SAP System

**Parameters**

Main Connector: TNDCLNT100 Query Lookup

Query Name: USERMASTER Query Area: Global

User Group: SAPPCUSERGRP

**Fields**

Field ID	Technical information	Source Table	Source Field	Field Type	Amount or Quantity	Ref Field ID	Field Description
00000001	D001_USR02_GLTGV	USERMASTER	USR02-GLTGV	D		00000000	User valid from
00000002	D002_USR02_GLTGB	USERMASTER	USR02-GLTGB	D		00000000	User valid to
00000003	D003_TEXT_USR02_USTYP	USERMASTER	TEXT_USR02_USTYP	C		00000000	Text:User Type
00000004	D004_TEXT_USR02_UFLAG	USERMASTER	TEXT_USR02_UFLAG	C		00000000	Text:User Lock Status

**Figure 8.47** Fields Selected from the InfoSet Query in the Data Source

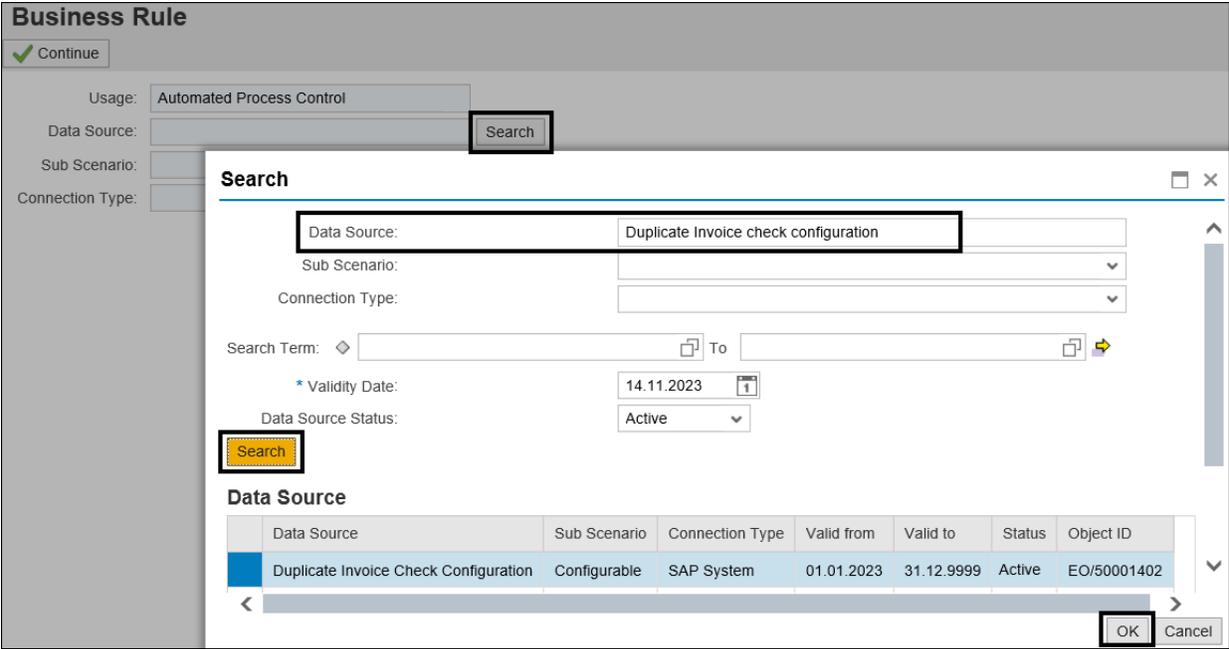
**Sub Scenario**

\* Sub Scenario:  \* Connection Type:

**Fields**

Field ID	Technical information	Source Table	Source Field	Field Type	Amount or Quantity	Ref Field ID	Field Description
00000013	IV_EXPIRED_USER		IV_EXPIRED_USER	C		00000000	Expired User
00000014	IV_LANGU		IV_LANGU	C		00000000	Language
00000015	IV_LOCKED_USER		IV_LOCKED_USER	C		00000000	Locked User
00000016	IV_OBJECT_TYPE		IV_OBJECT_TYPE	I		00000000	Object Type
00000017	IV_OFFLINE_ANALYSIS		IV_OFFLINE_ANALYSIS	C		00000000	Offline analysis
00000018	IV_REPORT_FORMAT		IV_REPORT_FORMAT	N		00000000	Report Format
00000019	IV_REPORT_VIEW		IV_REPORT_VIEW	N		00000000	Risk Analysis Report View
00000020	IV_ROLE_TYPE		IV_ROLE_TYPE	C		00000000	Role Type for risk analysis
00000021	IV_SIMU_RISK_ONLY		IV_SIMU_RISK_ONLY	C		00000000	Simulation risk only
00000022	IV_USE_SIMU_AUTH_ONLY		IV_USE_SIMU_AUTH_ONLY	C		00000000	Use simulation authorization

**Figure 8.48** SoD Integration Subscenario Configuration



**Figure 8.49** Selection of the Data Source to Create a Business Rule

**Business Rule: Step 1 of 9 (Basic Information)**

< Previous   Next >   Save

1   2   3   4   5   6   7

Basic Information   Data for Analysis   Filter Criteria   Deficiency Criteria   Conditions and Calculations   Output Format   Technical Settings

Timeframe 14.11.2023

**General**

\* Name: Duplicate Invoice Check

\* Description: Monitor changes made to duplicate invoice check configuration

\* Category: Change Log Check

\* Analysis Type: Changes

\* Status: In Review

\* Valid from: 14.11.2023

\* Valid to: 31.12.9999

Usage: Automated Process Control

Data Source: Duplicate Invoice Check Configuration

Sub Scenario: Configurable

Connection Type: SAP System

Data Source Status: Active

**Search Term**

Term 1:   Term 2:   Term 3:   Term 4:   Term 5:

**Connectors**

Target Connector	Main Connector	Applied
TNDCLNT100	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

**Figure 8.50** Basic Information Tab in the Business Rule

**Business Rule: Duplicate Invoice Check, Step 2 of 9 (Data for Analysis)**

1 **2** 3 4 5

Basic Information    **Data for Analysis**    Filter Criteria    Deficiency Criteria    Conditions and Calculations

---

**Timeframe** 14.11.2023

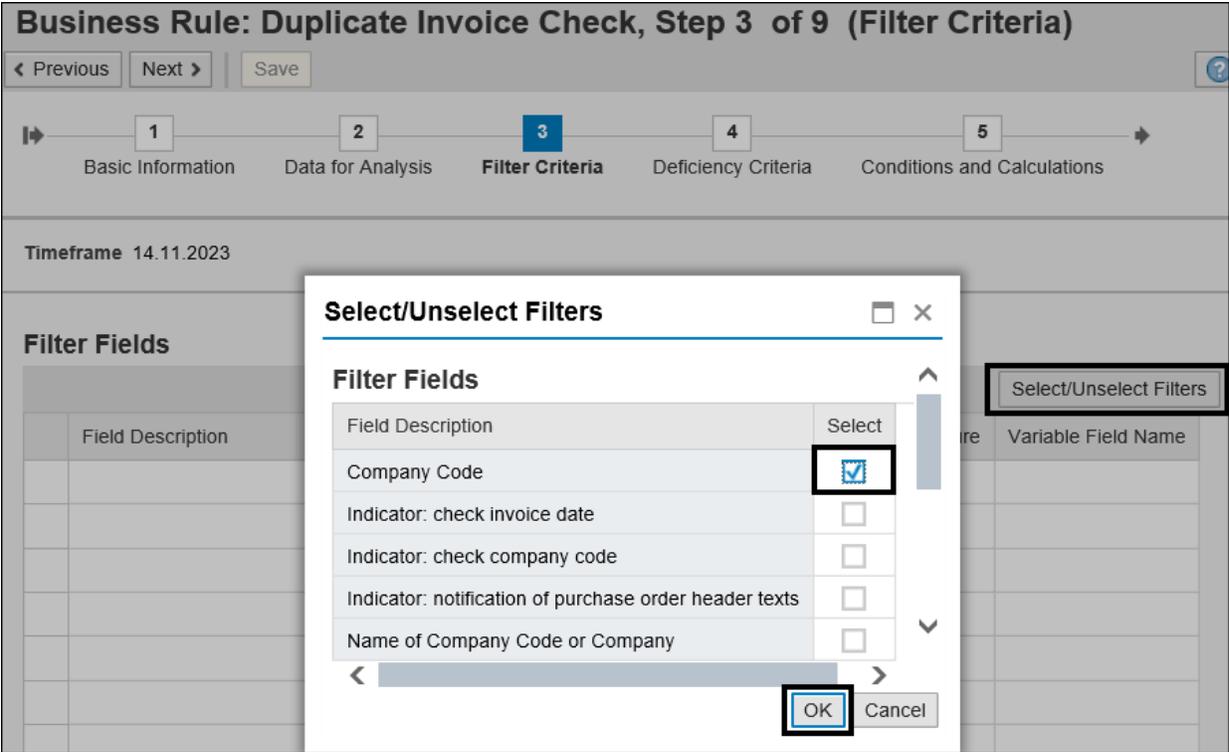
**Available Fields**

Field Description

**Selected Fields**

Field Description
Company Code
Indicator: check invoice date
Indicator: check company code
Indicator: notification of purchase order header texts
Name of Company Code or Company

**Figure 8.51** Selection of Fields for Analysis



**Figure 8.52** Selection of Fields for Filter Criteria

**Business Rule: Duplicate Invoice Check, Step 3 of 9 (Filter Criteria)**

< Previous   Next >   Save

1 Basic Information   2 Data for Analysis   **3 Filter Criteria**   4 Deficiency Criteria   5 Conditions and Calculations   6 Output Format

Timeframe 14.11.2023

**Filter Fields**

Select/Unselect Filters

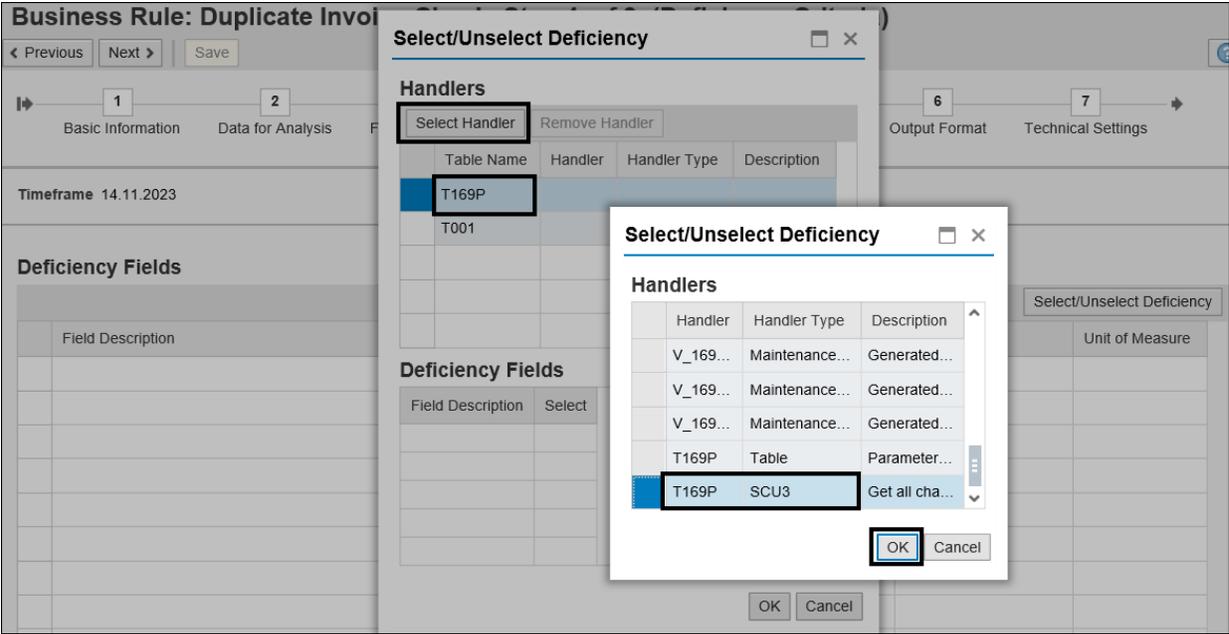
Field Description	Value Required	Field Analysis Type	Currency	Unit of Measure	Variable Field Name
Company Code		Filter			

**Filter Value**

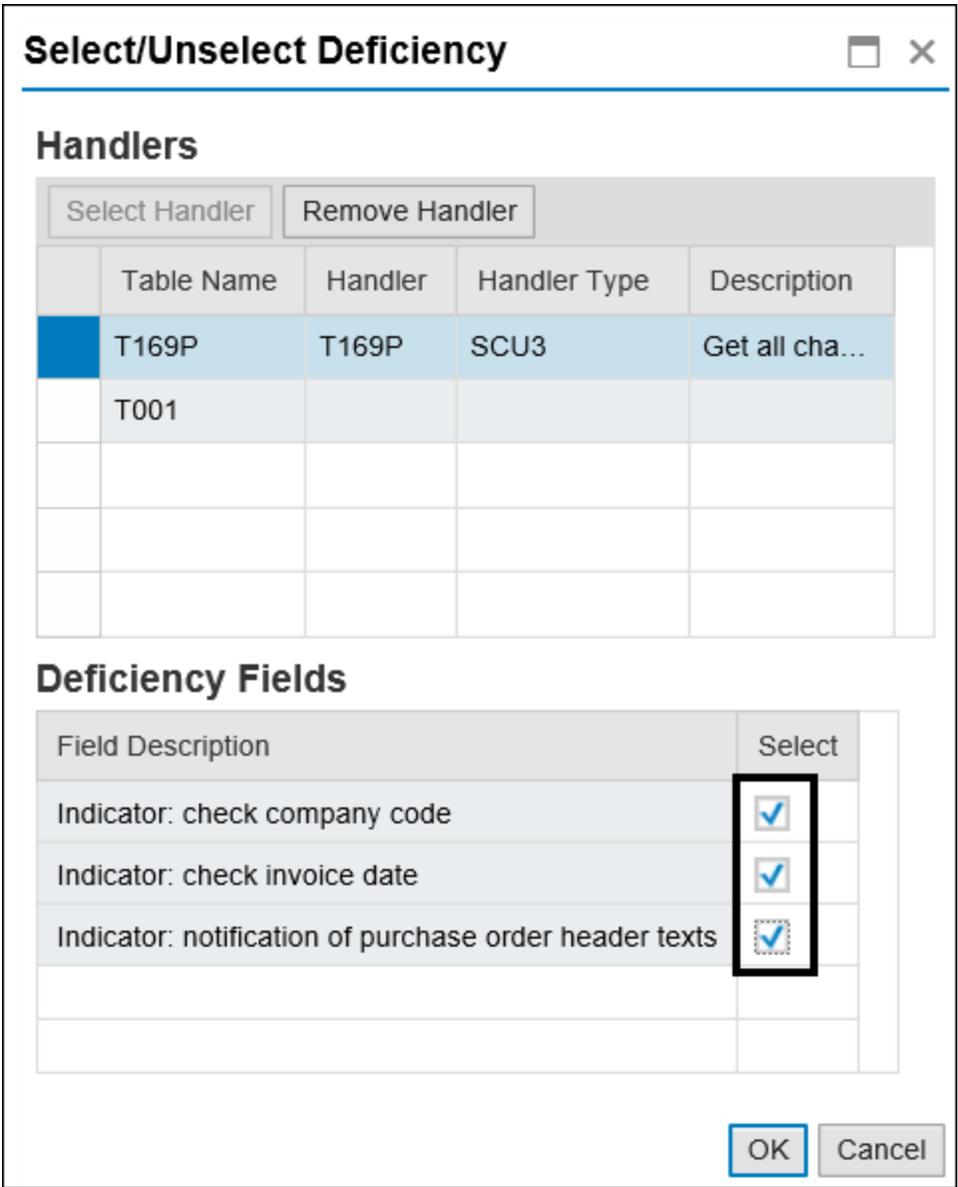
Add   Delete

Sign	Option	Low	High
Range limit inc...	Equals		0001

**Figure 8.53**   Addition of Filter Values in the Business Rule



**Figure 8.54** Selection of Handler for the Table



**Figure 8.55** Selection of Deficiency Fields

1 Basic Information    2 Data for Analysis    3 Filter Criteria    **4 Deficiency Criteria**    5 Conditions and Calculations    6 Output Format    7 Technical Settings

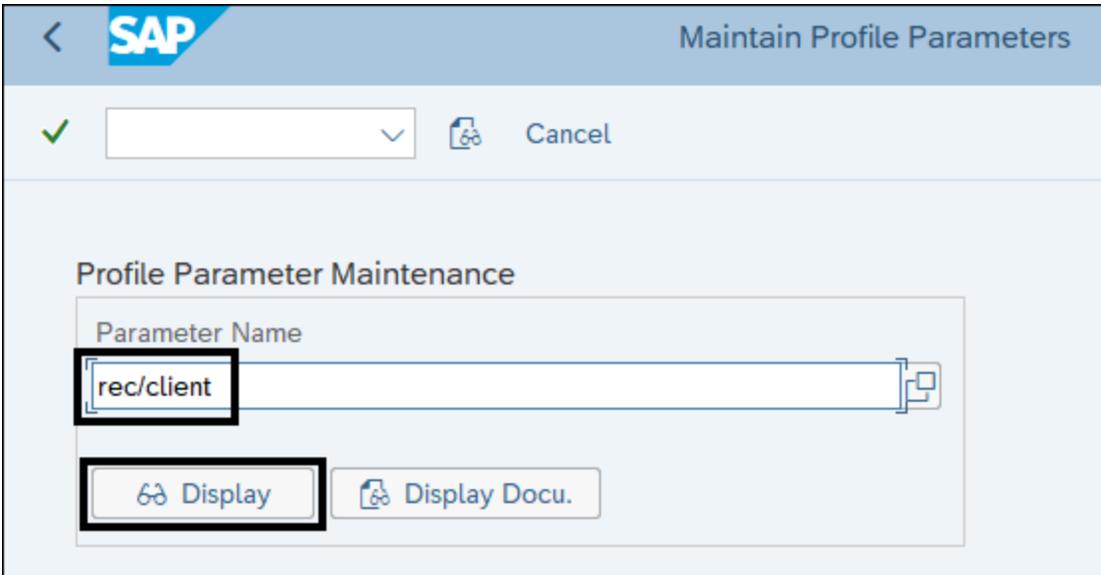
Timeframe 14.11.2023

Field Description	Calculated Field	Field Analysis Type	Currency	Unit of Measure
Indicator: check company code		Changes		
Indicator: check invoice date		Changes		
Indicator: notification of purchase order header texts		Changes		

**Deficiency Indicator**

High     Medium     Low

**Figure 8.56** Selection of Field Analysis Type and Deficiency Indicator



**Figure 8.57** Transaction RZ11: Parameter Screen

SAP Display Profile Parameter Details

✓ [ ] [ ] [ ] [ ] Cancel [ ]

**Metadata for Parameter rec/client**

Description	Value
<b>Name</b>	rec/client
<b>Type</b>	String
<b>Further Selection Criteria</b>	^(OFF ALL ([0-9]{3},){0,9}[0-9]{3})\$
<b>Unit</b>	
<b>Parameter Group</b>	Database
<b>Parameter Description</b>	Activate/Deactivate table auditing
<b>CSN Component</b>	BC-DB-DBI
<b>System-Wide Parameter</b>	No
<b>Dynamic Parameter</b>	No
<b>Vector Parameter</b>	No
<b>Has Subparameters</b>	No
<b>Check Function Exists</b>	No

**Value of Profile Parameter rec/client**

Expansion Level	Value
<b>Kernel Default</b>	OFF
<b>Default Profile</b>	ALL
<b>Instance Profile</b>	ALL
<b>Current Value</b>	ALL

Origin of Current Value: Default Profile

**Figure 8.58** Review of rec/client Parameter Values

< **SAP** Dictionary: Define Technical Settings

✓ [ ] [ ] [ ] [ ] [ ] [ ] Revised<->Active [i] Cancel

General Properties DB-Specific Properties

Logical Storage Parameters

Data Class	APPL2	Master Data, Transparent Tables
Size Category	0	Expected Data Records 2.900.000 to 110.000.000

Buffering

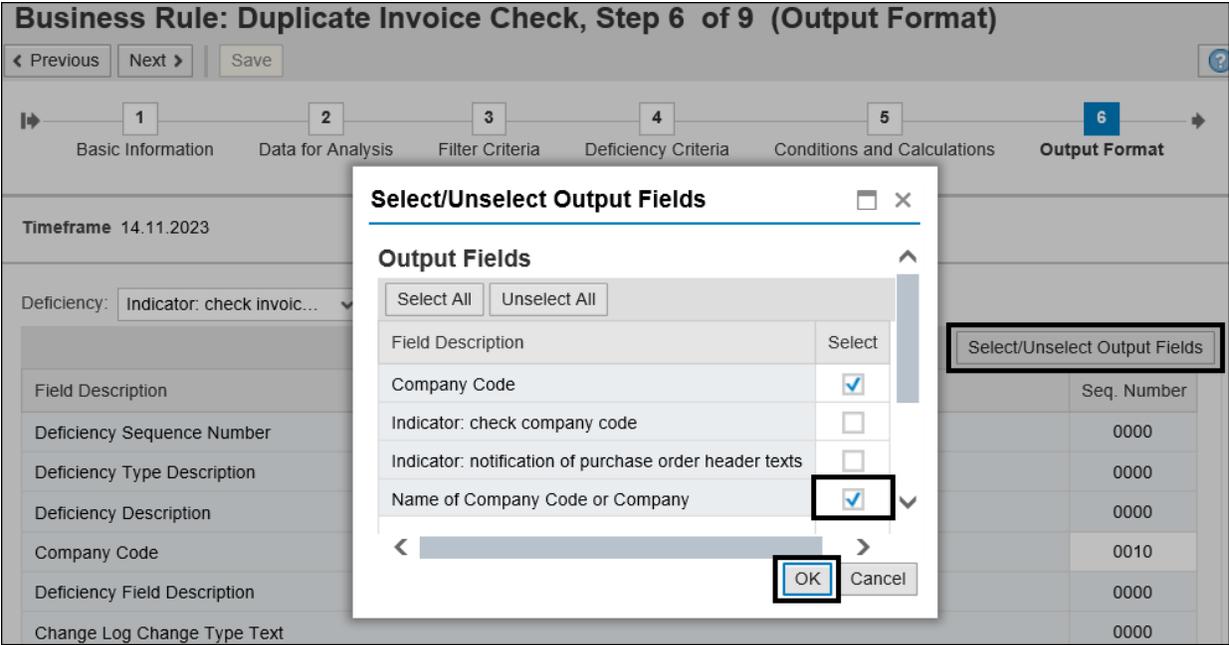
Buffering Not Allowed  
 Buffering allowed but switched off  
 Buffering Activated

Buffering Type

<input type="checkbox"/> Single Records Buffered	
<input checked="" type="checkbox"/> Generic Area Buffered	Number of Key Fields [ 1 ]
<input type="checkbox"/> Fully Buffered	

Log Data Changes  
 Writes only with JAVA

**Figure 8.59** Review the Log Data Changes Configuration for the Table



**Figure 8.60** Selection of Additional Output Fields

**Business Rule: Duplicate Invoice Check, Step 7 of 9 (Te..**

← **5** — **6** — **7** — **8** →

Conditions and Calculations    Output Format    **Technical Settings**    Ad-hoc Query

---

**Timeframe** 14.11.2023

---



Where to Calculate Deficiency:  Remotely     Locally

Communication Mode:  Asynchronization     Synchronization

Change Log Type:  Insert     Update     Delete

Max. No. of Records to Analyze:

Do Not Use OLSP

**Figure 8.61**    Technical Settings Configuration in a Business Rule

**Business Rule: Duplicate Invoice Check, Step 8 of 9 (Ad-hoc Query)**

8
9

Ad-hoc Query      Attachment and Links

---

Timeframe 14.11.2023

---

Target Connector: TNDCLNT100     
 Data Collection ▾     
 Max. Rows: 100     
 Timeframe: Year     
 Year: 2023     

View: \* [Standard View]     
     

Table Name	Field Name	AM - Deficiency Field Description	Old contents of changed field	New contents of changed field	Creation date of the change document	Change Type
T169P	XBLDAT	Check invoice date	X		27.05.2023	U
T169P	XBLDAT	Check invoice date		X	27.05.2023	U

**Figure 8.62**      Data Collection in the Business Rule Ad Hoc Query

**Business Rule: Duplicate Invoice Check, Step 8 of 9 (Ad-hoc Query)**

8
9

Ad-hoc Query
Attachment and Links

---

Timeframe 14.11.2023

---

Target Connector: TNDCLNT100
Apply Rule
Deficiency: All Deficiencies
Max. Rows:

View: [Standard View]
Print Version
Export

Sequence Number	Deficiency Type	Deficiency Description	Company Code	Name of Company Code or Company	Indicator: check invoice date	Deficiency Field Description
1	High	High	0001	SAP A.G.		Check invoice date
2	High	High	0001	SAP A.G.	X	Check invoice date

**Figure 8.63** Apply Rule Option in the Business Rule Ad Hoc Query

**Business Rule: Step 1 of 9 (Basic Information)**

< Previous   Next >   Save

1 Basic Information   2 Data for Analysis   3 Filter Criteria   4 Deficiency Criteria   5 Conditions and Calculations   6 Output Format   7 Technical Settings

Timeframe 14.11.2023

**General**

\* Name: Duplicate Invoice Check

\* Description: Monitor Values maintained for the configuration duplicate invoice check

\* Category: Value Check

\* Analysis Type: Monitor Value

\* Status: In Review

\* Valid from: 14.11.2023

\* Valid to: 31.12.9999

Usage: Automated Process Control

Data Source: Duplicate Invoice Check Configura...

Sub Scenario: Configurable

Connection Type: SAP System

Data Source Status: Active

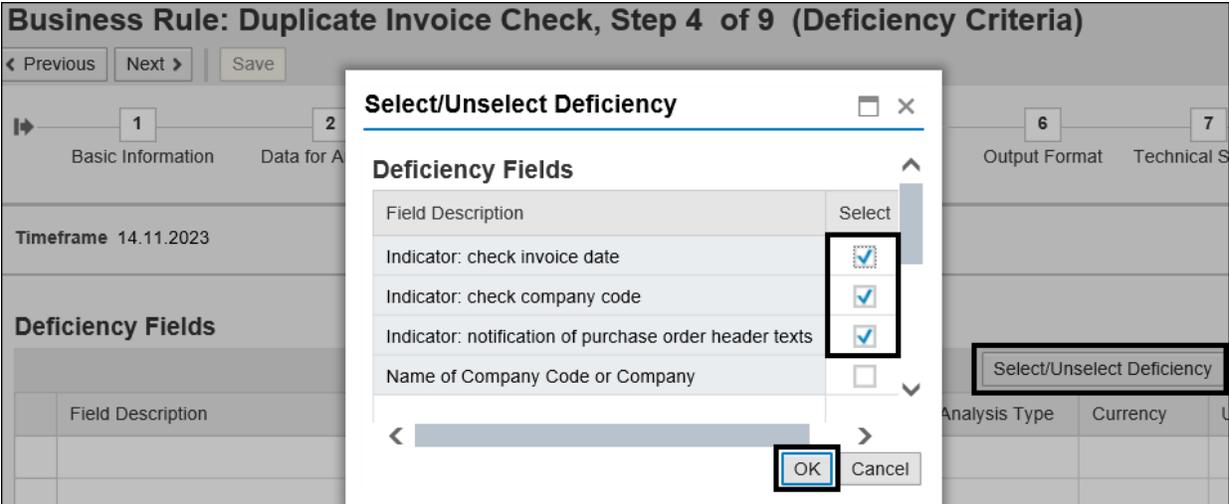
**Search Term**

Term 1:   Term 2:   Term 3:   Term 4:   Term 5:

**Connectors**

Target Connector	Main Connector	Applied
TNDCLNT100	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

**Figure 8.64** Basic Information Tab in the Value Check Business Rule



**Figure 8.65** Selection of Deficiency Fields: Value Check

**Business Rule: Duplicate Invoice Check, Step 4 of 9 (Deficiency Criteria)**

< Previous   Next >   Save

1 Basic Information   2 Data for Analysis   3 Filter Criteria   **4 Deficiency Criteria**   5 Conditions and Calculations   6 Output Format   7 Technical Settings

Timeframe 14.11.2023

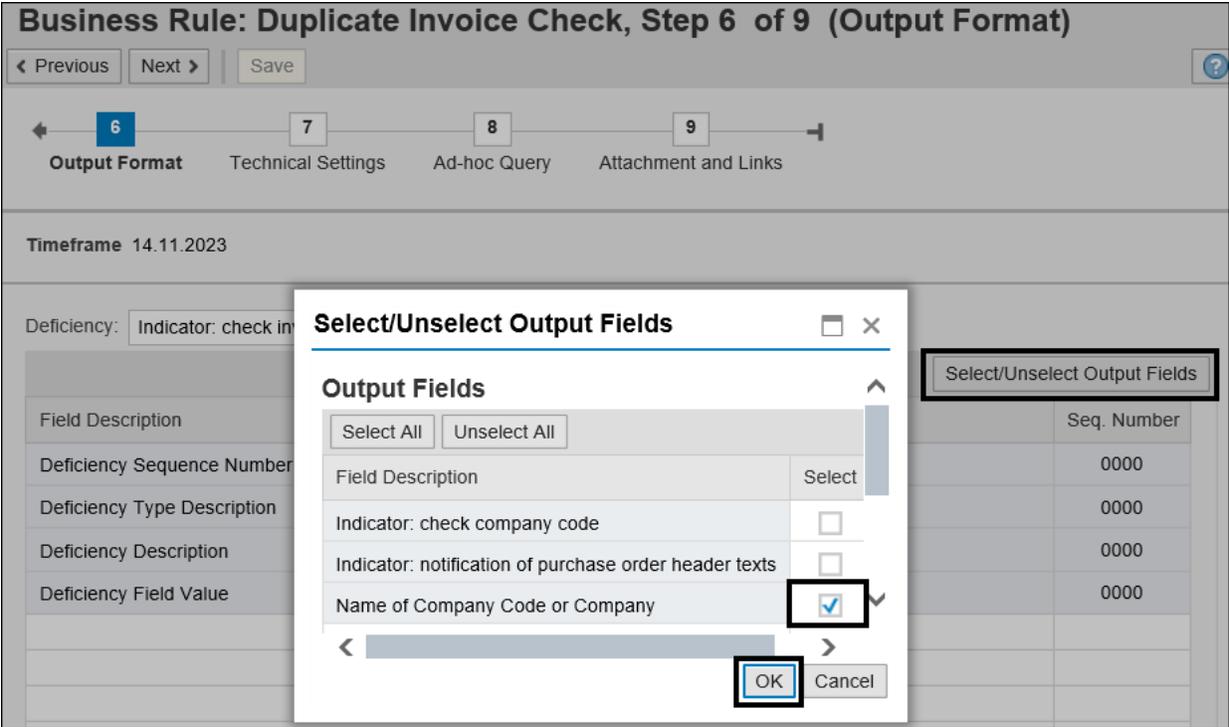
**Deficiency Fields**

Field Description	Calculated Field	Field Analysis Type	Currency	Unit of Measure
Indicator: check invoice date		Value Check		
Indicator: check company code		Value Check		
Indicator: notification of purchase order header texts		Value Check		

**Deficiency Value**

Deficiency Type	Deficiency Description	Sign	Option	Low	High		
High	Check for invoice date is not activated	Range limit includ...	Not equal to	X		+	-
Medium						+	-
Low						+	-

**Figure 8.66** Selection of Field Analysis Type and Deficiency Value



**Figure 8.67** Output Format Step in the Value Check Scenario

**Business Rule: Duplicate Invoice Check, Step 7 of 9 (Technical Settings)**

< Previous   Next >   Save

← 6   **7**   8   9 →

Output Format   **Technical Settings**   Ad-hoc Query   Attachment and Links

---

**Timeframe** 14.11.2023

---



Where to Calculate Deficiency:  Remotely    Locally

Communication Mode:  Asynchronization    Synchronization

Max. No. of Records to Analyze:

Do Not Use OLSP

**Figure 8.68** Technical Settings Configuration in a Value Check Business Rule

**Business Rule: Duplicate Invoice Check, Step 8 of 9 (Ad-hoc Query)**

?

7
8
9

Technical Settings    **Ad-hoc Query**    Attachment and Links

---

**Timeframe** 14.11.2023

---

Target Connector: 
   Data Collection 
   Max. Rows: 
   Timeframe:

Year: 
   

---

View: 
   
   
?

Name of Company Code or Company	Indicator: check invoice date	Indicator: check company code	Indicator: notification of purchase order header texts
SAP A.G.	X		X

**Figure 8.69** Data Collection in the Value Check Business Rule

**Business Rule: Duplicate Invoice Check, Step 8 of 9 (Ad-hoc Query)**

← 7
8
9 →

Technical Settings    **Ad-hoc Query**    Attachment and Links

---

**Timeframe** 14.11.2023

---

Target Connector: TNDCLNT100    Apply Rule    Deficiency: All Deficiencies

Max. Rows: 0    Timeframe: Year    Year: 2023    Start

---

View: [Standard View]    Print Version    Export

Sequence Number	Deficiency Type	Deficiency Description	Company Code	Name of Company Code or Company	Indicator: check
1	High	Check for Company Code is not activated	0001	SAP A.G.	

**Figure 8.70**    Apply Rule Option in the Value Check Business Rule

**Business Rule: CDHDR\_CDPOS**

Save ?

Timeframe 14.11.2023 ID 50001415 Last Modified On 24.09.2023 20:44:17

Basic Information    Data for Analysis    **Filter Criteria**    Deficiency Criteria    Conditions and Calculations »

**Filter Fields**

Select/Unselect Filters

Field Description	Value Required	Field Analysis Type	Currency	Unit of Measure	Variable Field Name
Creation date of the change document		Filter			

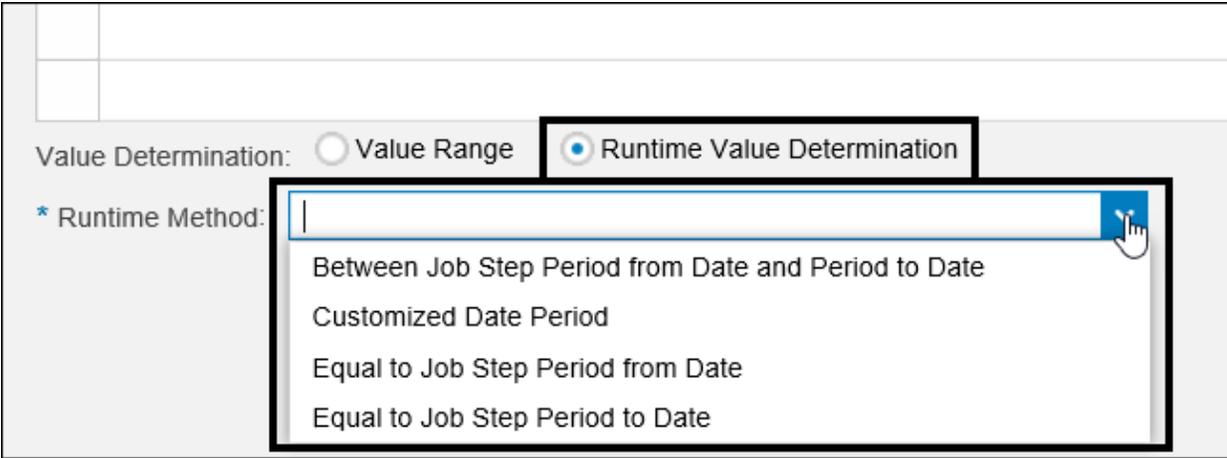
Value Determination:  Value Range     Runtime Value Determination

**Filter Value**

Add    Delete

Sign	Option	Low	High

**Figure 8.71**    Options to Add Filter Values for a Date Field



**Figure 8.72** Runtime Methods Available in Selection of Values for a Date Filter

**Business Rule: CDHDR\_CDPOS**

Save ?

Timeframe 14.11.2023 ID 50001415 Last Modified On 24.09.2023 20:44:17

**Filter Fields**

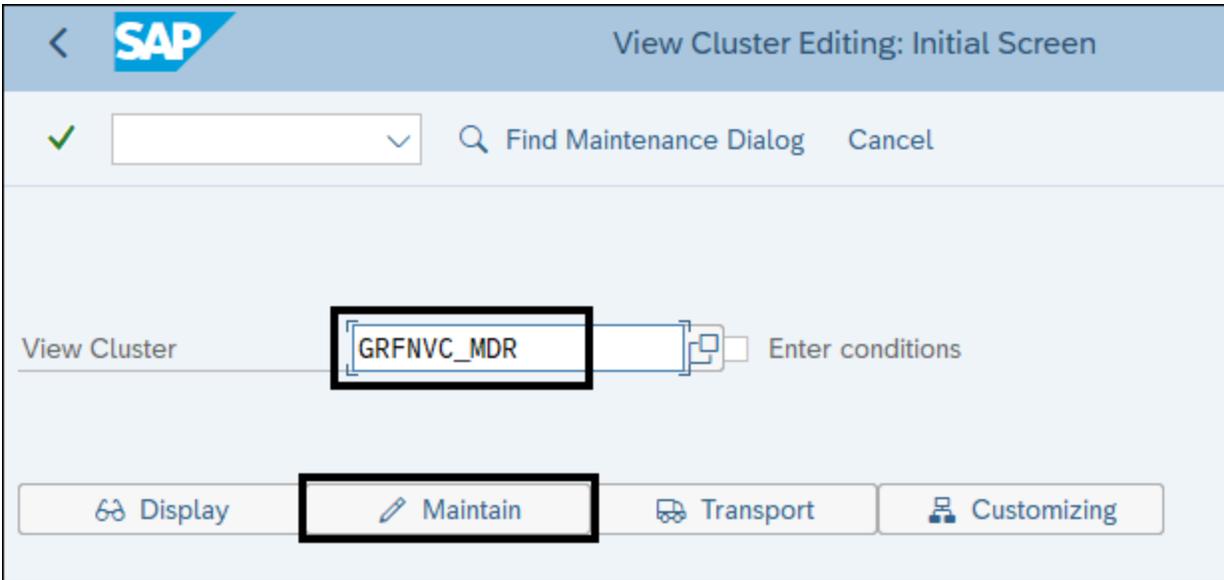
Select/Unselect Filters

	Field Description	Value Required	Field Analysis Type	Currency	Unit of Measure	Variable Field Name
<input checked="" type="checkbox"/>	Creation date of the change document		Filter			
<input type="checkbox"/>						
<input type="checkbox"/>						

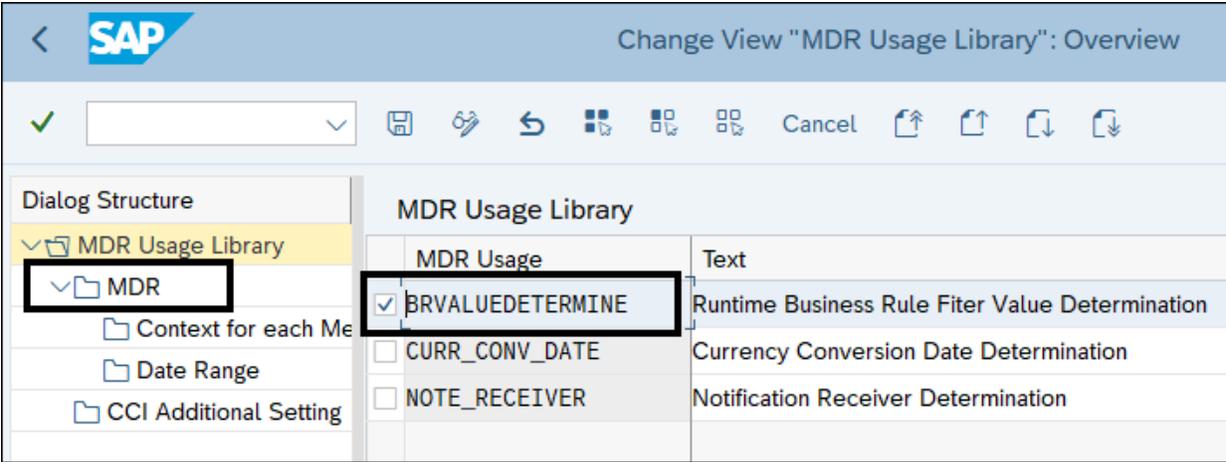
Value Determination:  Value Range  Runtime Value Determination

\* Runtime Method: Customized Date Period

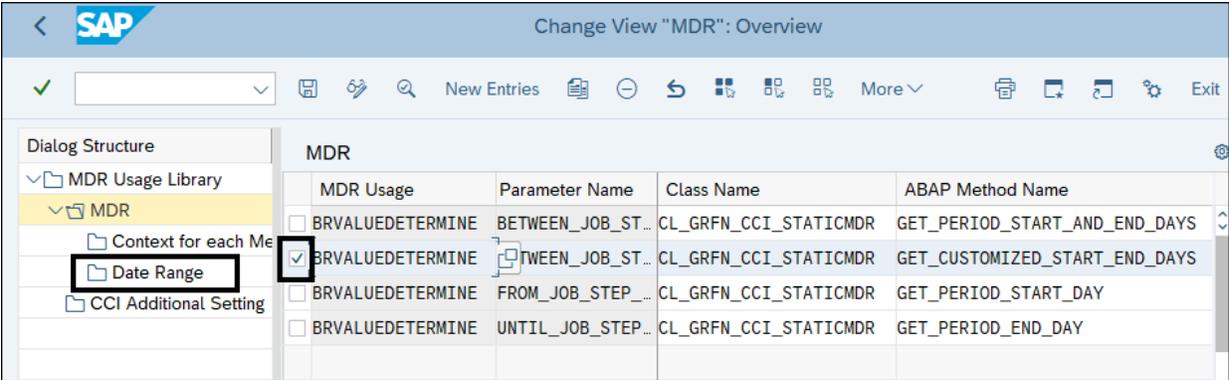
**Figure 8.73** Selection of the Customized Date Period in the Runtime Method



**Figure 8.74** Access the View Cluster from Transaction SM34



**Figure 8.75** Selection of MDR Usage BRVALUEDETERMINE



**Figure 8.76** Selection of the ABAP Method


New Entries: Overview of Added Entries

Dialog Structure		Date Range					
Param...	MDR Usage	Object ID	Start Date	Range ...	End Date	Range Value	
<input type="checkbox"/> BETWEE...	BRVALUEDE...	50001415	After	16	After	15	
<input type="checkbox"/>							
<input type="checkbox"/>							
<input type="checkbox"/>							

**Figure 8.77** Definition of Customized Date Range for a Business Rule ID

< **SAP** Maintain Table T162: Field

✓ [ ] < > Cancel [ ] [ ] [ ] [ ]

Field Selection Key **ME22** Change purchase order  
 Selection group Terms of delivery and payment

Fields

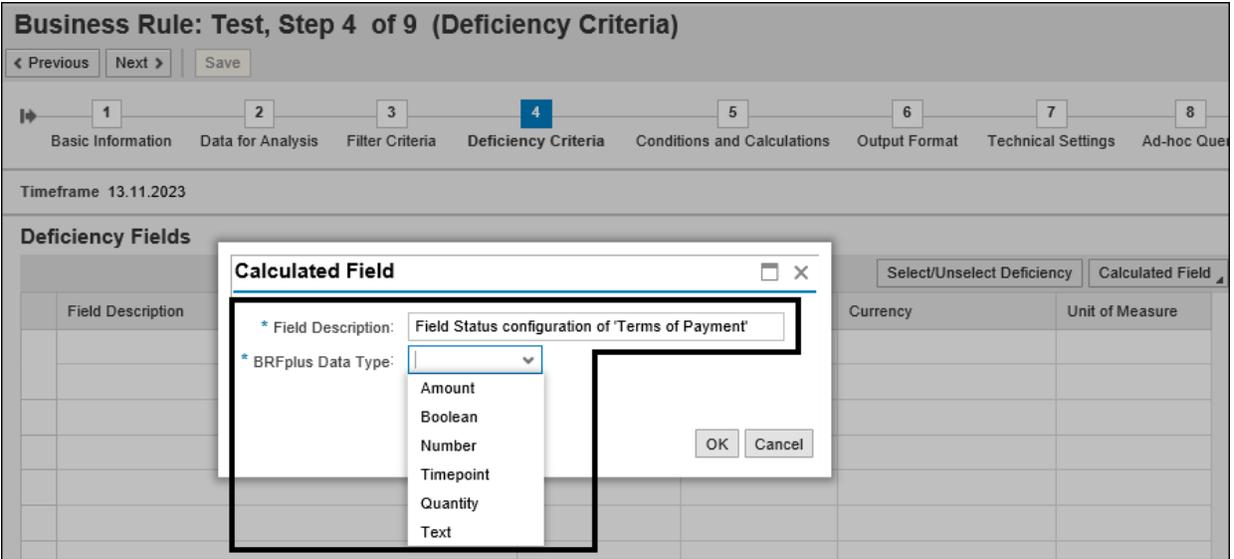
Field Label	Reqd.entry	Opt. entry	Display
Terms of payt. (days, percent)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Terms of payment	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Incoterms part 1	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Currency	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

**Figure 8.78** Field Status Configuration

The screenshot shows the SAP Data Browser interface for 'Table T162 Select Entries'. The top bar includes the SAP logo, a back arrow, and the page number '1'. Below the bar is a toolbar with various icons for navigation and actions, including a search icon, a refresh icon, and a 'Check Table...' button. The main area displays a table with the following structure:

Cl.	FldSI	Field selection string	Field selection string	Field selection string
<input type="checkbox"/>	100	ME22	.....F	.....F

**Figure 8.79** Review the Table Data and Content



**Figure 8.80** Calculated Field Data Type Options

**Business Rule: Payment Terms Field Status**

Save ?

Timeframe 14.11.2023 ID 50001423 Last Modified On 26.09.2023 15:02:30

Basic Information    Data for Analysis    Filter Criteria    **Deficiency Criteria**    Conditions and Calculations

---

**Deficiency Fields**

					Select/Unselect Deficiency	Calculated Field
Field Description	Calculated Field	Field Analysis Type	Currency	Unit of Measure		
Field Status configuration of 'Terms of Payment'	✓	Value Check				

---

**Deficiency Value**

							Clean Values	
Deficiency Type	Deficiency Description	Sign	Option	Low	High			
High	Terms of Payment is not maintained as Display	Range limit included	Not equal to	*		+	-	
Medium						+	-	
Low						+	-	

**Figure 8.81** Definition of Deficiency Criteria  
Calculated Field

**Business Rule: Payment Terms Field Status**

Save ?

Timeframe 14.11.2023 ID 50001465 Last Modified On \*00.00.0000 00:00:0

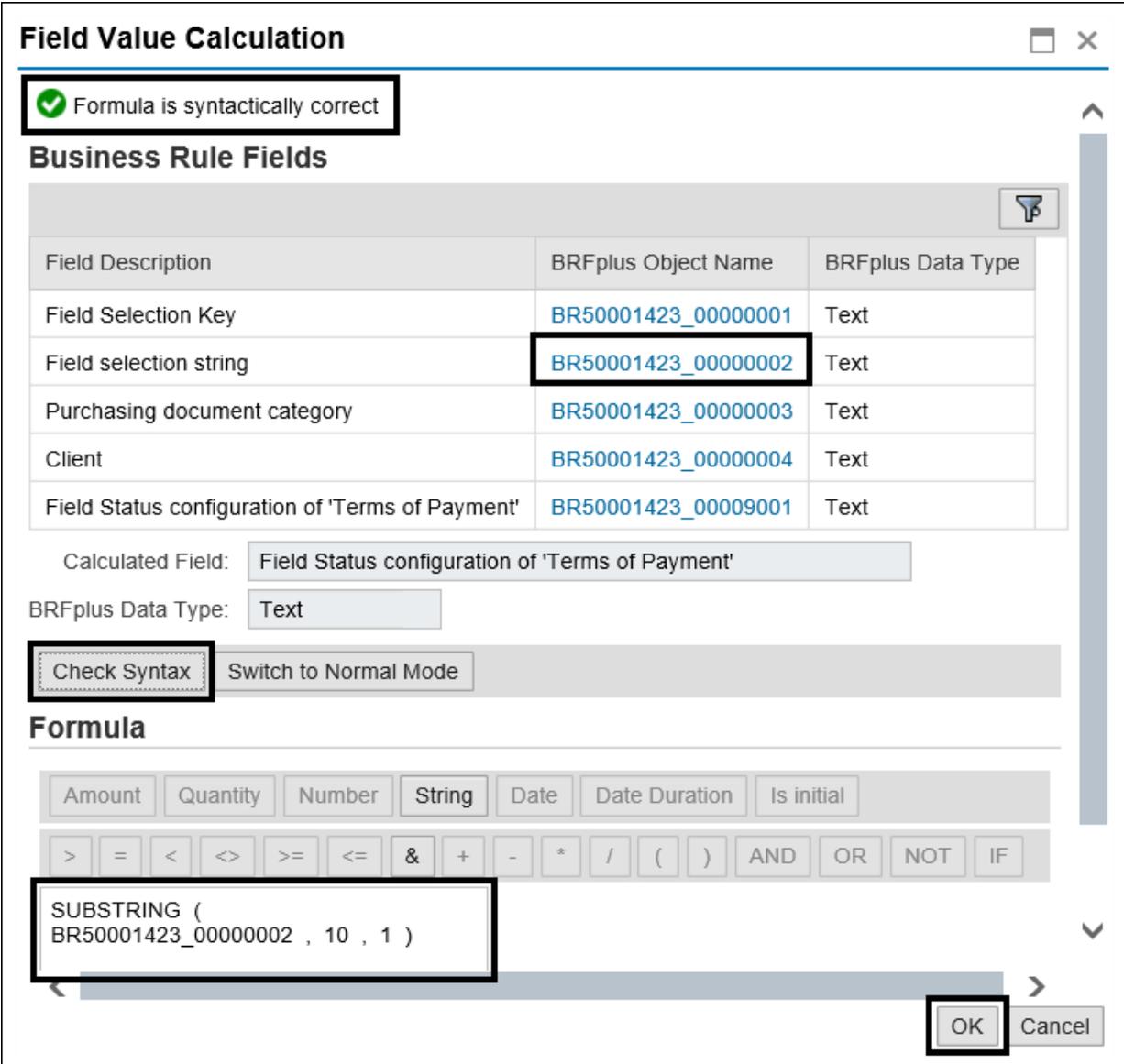
Basic Information    Data for Analysis    Filter Criteria    Deficiency Criteria    **Conditions and Calculations**    Output Format >

Deficiency: Field Status configuration of 'Terms of Payment' ▼

**BRF Plus Functions**

	Seq. Number	Function Type	Function	Condition	Calculation	Open	Delete	Move Up	Move Down
					Field Value Calculation				
					Grouping/Aggregation				

**Figure 8.82**    Selection of the Option Field Value Calculation



**Figure 8.83** Definition of the Calculation Formula

**Business Rule: Payment Terms Field Status**

Save ?

Timeframe 14.11.2023 ID 50001423 Last Modified On 26.09.2023 15:02:30

Basic Information    Data for Analysis    Filter Criteria    Deficiency Criteria    **Conditions and Calculations** >

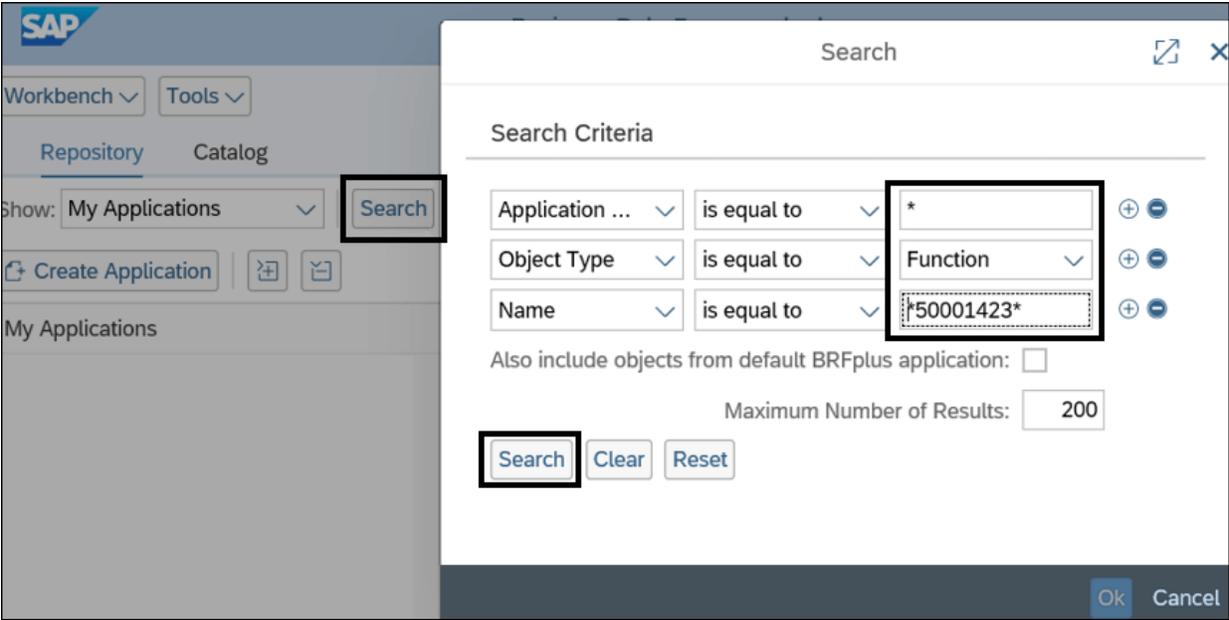
Deficiency: Field Status configuration of 'Terms of Payment' ▼

**BRF Plus Functions**

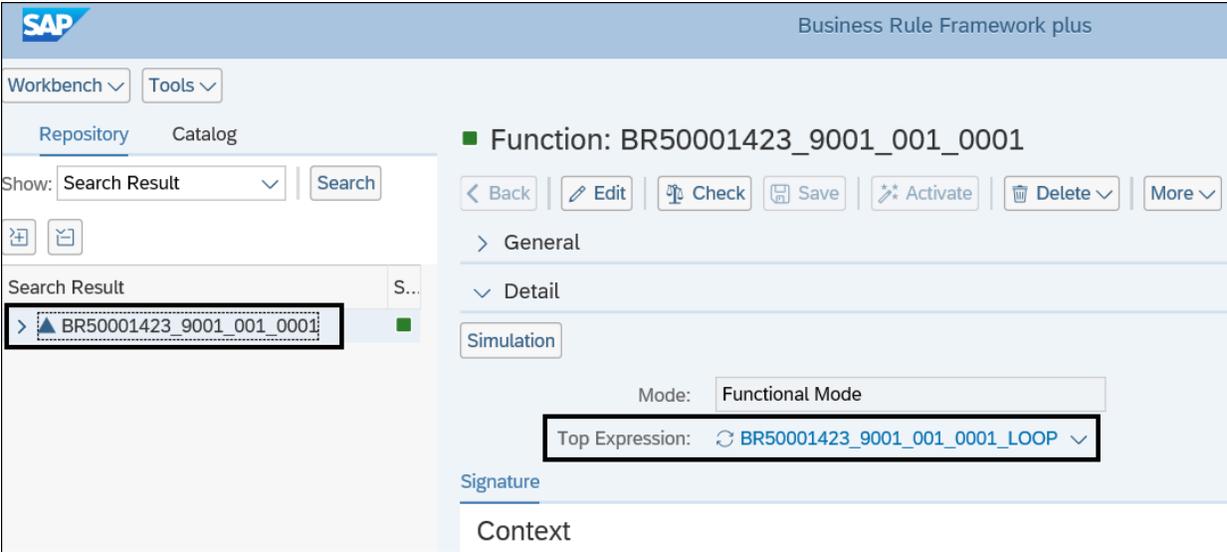
Condition    Grouping/Aggregation    Open    Delete    Move Up    Move Down

Seq. Number	Function Type	Function Name
001	Field Value Calculation	BR50001423_9001_001_0001

**Figure 8.84** Identification of the Function Name from Calculated Fields



**Figure 8.85** Option to Search for the Function



**Figure 8.86** Option to Select and Edit the Function

■ Loop: BR50001423\_9001\_001\_0001\_LOOP

[Back](#) | [Edit](#) | [Check](#) | [Save](#) | [Activate](#) | [Delete](#) | [More](#)

> General

∨ Detail

[Context Overview](#) | [Start Simulation](#)

Processing Mode:

Result Data Object: [BR50001423\\_00009001\\_ET](#) ∨

For each entry in table [BR50001423\\_00009001\\_IT](#) with line type [BR50001423\\_00009001\\_IS](#)

Repeat the following operations:

Rules

(1) Rule: BR50001423\_9001\_001\_0001\_RULE

**Process rule: [BR50001423\\_9001\\_001\\_0001\\_RULE](#)**

**Figure 8.87** Option to Select Rule to Define BRFplus Formula

Switch to Expert Mode | Context Overview | Start Simulation

Result Data Object:  
 ▲ BR500015...-Inactive Users ▾

BR500015...-Inactive Users = DT\_DURATION\_DIFF\_DAYS ( BR500015...-Last Logon Date , DT\_GET\_CURRENT\_DATE ( | ) )

< Move Cursor | Move Cursor > | < Move Token | Move Token > | Delete Token

Selected Element: DT\_GET\_CURRENT\_DATE [Documentation](#)

Context

Filter: *Press Enter after value inq* [ ] [ ]

Name	Description
<input checked="" type="radio"/> ▲ BR50001530_00000001	Last Logon Date
<input type="radio"/> ▲ BR50001530_00000002	Account ID
<input type="radio"/> ▲ BR50001530_00000003	User group in user master maintenance

Formula Functions

Filter by Category: **Date and Time F**

Name	De
<input checked="" type="radio"/> DT_GET_CURRENT_DATE	Re
<input type="radio"/> DT_GET_CURRENT_DT	Re
<input type="radio"/> DT_GET_CURRENT_TIME	Re

Calculator: / \* + - ^ & ( ) = <> , < <= > >= AND OR NOT IF

**Figure 8.88** BRFplus Workbench to Define Calculation Formula

Entity: Control    Date: 01.01.2023    Apply

Organization: ABC\*    Process:    Subprocess:    Control: Monitor Duplicate Invoice

Business Rule:    Search

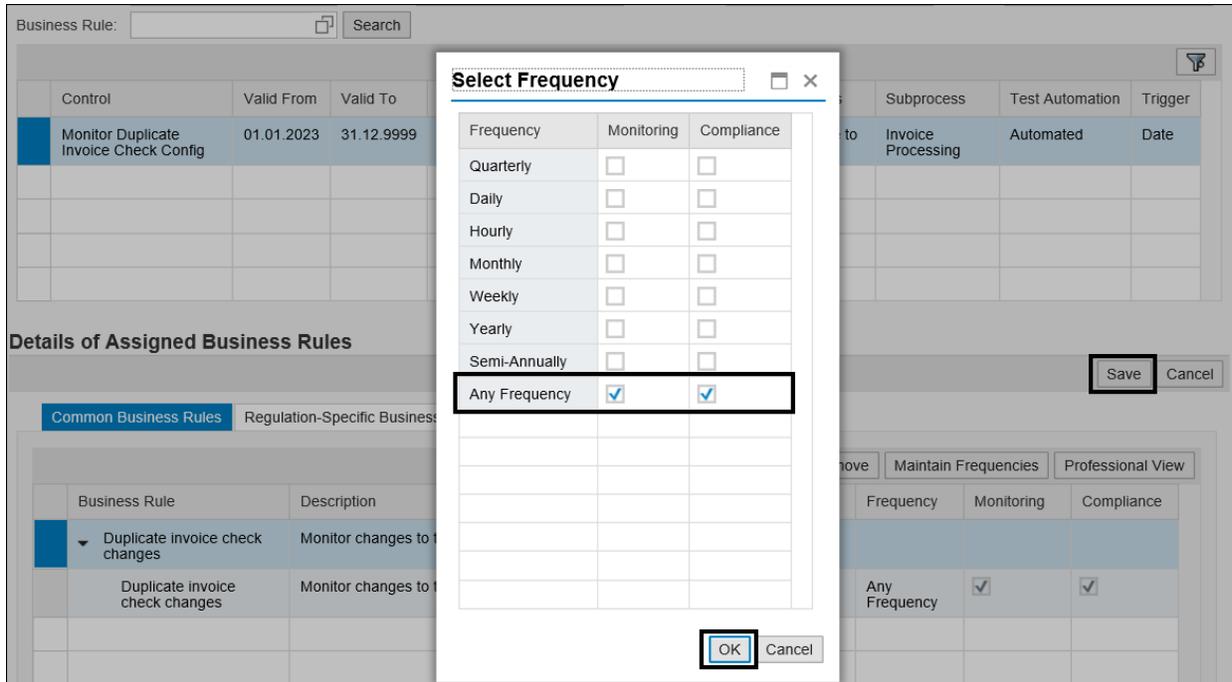
Control	Valid From	Valid To	Description	Organization	Process	Subprocess	Test Automation	Trigger
Monitor Duplicate Invoice Check Config	01.01.2023	31.12.9999	Monitor Duplicate Invoice Check Configurations	ABC India Pvt Ltd	Procure to Pay	Invoice Processing	Automated	Date

**Details of Assigned Business Rules**    Modify

Common Business Rules    Regulation-Specific Business Rules

**Figure 8.89**    Option to Search for Control to Perform the Business Rule Assignment





**Figure 8.91** Selection of Frequencies in the Business Rule Assignment

**Active Queries**

Continuous Monitoring Scheduler **All (0)**

**Continuous Monitoring Scheduler - All**

Show Quick Criteria Maintenance [Change Query](#) [Define New Query](#) [Personalize](#)

View: [Standard View] **Create Job** Cancel Job Copy Job Open Job Notification 

Job Name	Regulation	Time Frame	Year	Created On	Created Time	Created By	Changed On	Changed Time	Changed By	Status

**Figure 8.92** Create Job Option for Automated Monitoring

### Continuous Monitoring Scheduler

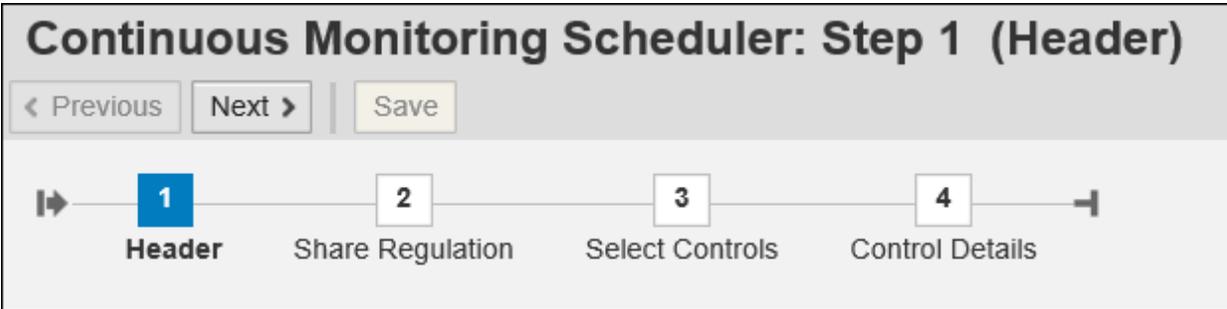
\* Timeframe:

\* Year:

\* Job Type:  

- Automated Monitoring Job
- Incoming Event Handling Job
- Standalone Job

**Figure 8.93** Selection of Job Type as an Automated Monitoring Job



**Figure 8.94** Continuous Monitoring Scheduler Job Steps

### Continuous Monitoring Scheduler: Step 1 (Header)

< Previous    Next >    Save

1 Header    2 Share Regulation    3 Select Controls    4 Control Details

Timeframe Quarter 3 2023

\* Job Type: Automated Monitoring Job

\* Job name: AM\_JOB\_Q4\_2023

\* Execution Type: Immediate

\* Frequency: Monthly

\* Test Period From: 01.10.2023

\* Test Period To: 31.12.2023

Target Connector:

Comment:

**Figure 8.95** Header Options in the Continuous Monitoring Scheduler

**Continuous Monitoring Scheduler: Step 2 (Share Regulation)**

< Previous   Next >   Save

1 Header   2 Share Regulation   3 Select Controls   4 Control Details

Timeframe Year 2023

\* Regulation: SOX

\* Monitoring Results Sharing:  Do not share    Share with some regulations    Share with all regulations

**Figure 8.96** Selection of Regulation in Scheduler

**Continuous Monitoring Scheduler: Step 3 (Select Controls)**

1 Header   
 2 Share Regulation   
 3 Select Controls   
 4 Control Details

Timeframe Year 2023

**Control Search**

Organization:    
 Process:    
 Subprocess:    
 Control:

Business Rule:    

Control	Valid From	Valid To	Description	Organization	Process	Subprocess	Test Automation	Trigger
Monitor Duplicate Invoice Check Config	01.01.2023	31.12.9999	Monitor Duplicate Invoice Check Configurations	ABC India Pvt Ltd	Procure to Pay	Invoice Processing	Automated	Date

Control	Valid From	Valid To	Description	Organization	Process	Subprocess	Test Automation	Trigger

**Figure 8.97** Option to Search for Controls to be Scheduled for Automated Monitoring

**Continuous Monitoring Scheduler: Step 4 (Control Details)**

< Previous   Next >   **Save**   Configure Submission

1 Header   2 Share Regulation   3 Select Controls   **4 Control Details**

Timeframe Year 2023

**Selected Controls**

Control	Valid From	Valid To	Description	Organization	Process	Subprocess	Test Automation	Trigger
Monitor Duplicate Invoice Check Config	01.01.2023	31.12.9999	Monitor Duplicate Invoice Check Configurations	ABC India Pvt Ltd	Procure to Pay	Invoice Processing	Automated	Date

**Control Business Rules**

Business Rule	Description	Target Connector
Duplicate invoice check changes	Monitor changes to the configuration duplicate invoice check	TNDCLNT100

**Figure 8.98** Review the Control Details to Schedule the Job

Remediate Exception: Automated Monitoring

### Sarbanes Oxley Monitoring: Monitor Duplicate Invoice Check Config

Test Period: September 2023      Status: Submitted      Organization: ABC India Pvt Ltd      Process: Procure to Pay      Subprocess: Invoice Processing

Evaluation   **Issues**   Regulation   Control Details   Requirement   Risks   Attachments and Links

**Issues**

Assign Remediation Plan   Close Without Plan   Reassign the issue   Exception   Void

Name	Priority	Status	Reported Date	Owner	Audit Trail
TNDCLNT100 : Monitor changes to the configuration duplicate invoice check	High	Submitted	24.09.2023	SAKRISHNA1	<a href="#">Audit Trail</a>

\* Issue Name: TNDCLNT100 : Monitor changes to the configur...      Type: Automated Monitoring Issue

\* Priority: High      Status: Submitted

**Figure 8.99**      Options Available for the Issue Owner

Exception													
Result													
Please select which result data to be shown: * Indicator: check company code ( 1 )													
View: [Standard View]    Print Version    Export													
Sequence Number	Deficiency Type	Deficiency Description	Company Code	Name of Company Code or Company	Indicator: check company code	Deficiency Field Description	Change Type	Changed Text	Changed On	Changed At	Changed By	Status	Comment
1	High	High	0001	SAP A.G.		Check company code	Updated	Value Updated : Old value X ; New value	24.09.2023	12:31:48	SANDEEPL	▼	

**Figure 8.100** Review of Exception Details from the Issue Work Item

**Continuous Monitoring Scheduler: Step 2 (Select Business Rules)**

< Previous   Next >   Save

1 Header   2 Select Business Rules   3 Confirm

Timeframe Year 2023

Object ID:  To

Analysis Type:  To  \* Valid From: 01.01.2023

Category:  To

Name: \*DUPLICATE\*

**Search**

**List of Business Rules**

Business Rule ID	Business Rule Status	Name	Start Date	End Date	Data Source Name	Sub Scenario
BR/50001421	Active	Duplicate invoice check ch...	01.01.2023	31.12.9999	Duplicate Invoice Check C...	Configurable

**Figure 8.101** Option to Search for Business Rule to Be Scheduled for Standalone Jobs

**Continuous Monitoring Scheduler: Step 3 (Confirm)**

< Previous   Next >   **Save**   ?

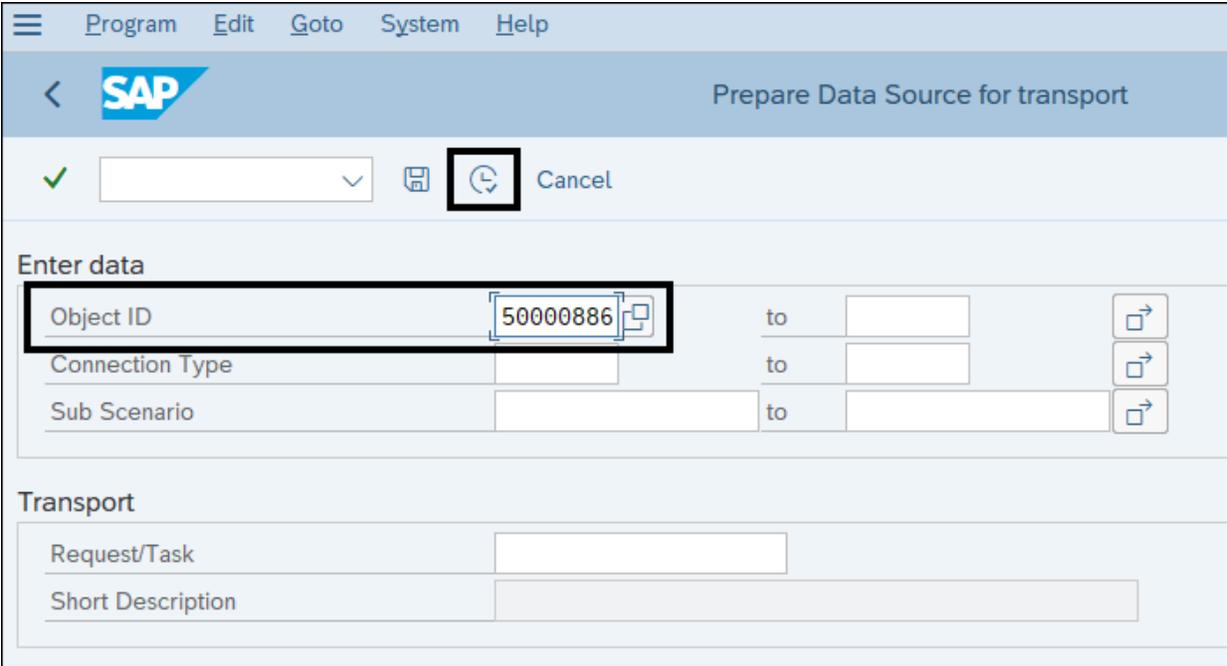
1   2   3
  
Header   Select Business Rules   Confirm

Timeframe Year 2023

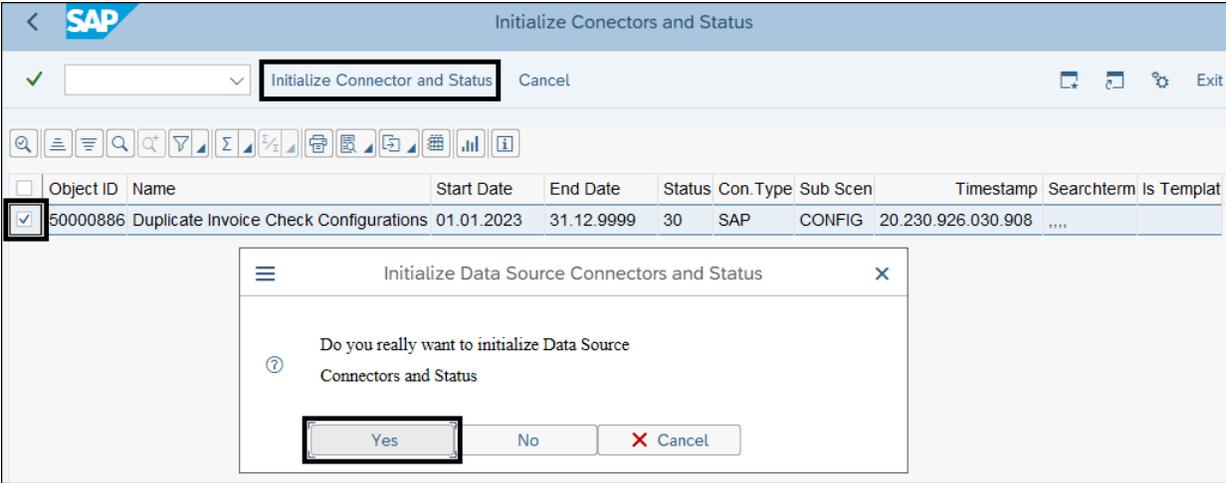
**Control Business Rules**

Business Rule ID	Status	Business Rule Description	Start Date	End Date	Data Source	Sub Scenario
BR/50001421	30	Duplicate invoice check changes	01.01.2023	31.12.9999	EO/50000886	CONFIG

**Figure 8.102**   Confirm Step



**Figure 8.103** Prepare Data Source for Transport



**Figure 8.104** Option to Initialize Connectors and Data Source

The screenshot displays the SAP Manual Transport Interface. At the top, the SAP logo is on the left, and the title "Manual Transport Interface" is on the right. Below the title bar, there is a navigation area with a green checkmark, a dropdown menu, an information icon, and buttons for "+ Transport", "- Transport", "Transport/Delete" (highlighted with a black box), and "More".

Below the navigation area, the text "Plan Ver. 01" is displayed. A toolbar with various icons (search, list, zoom, etc.) is visible. Below the toolbar is a table with the following columns: Transport, Delete, Ob, Object ID, Object ab..., Start Date, End Date, and Status.

Transport	Delete	Ob	Object ID	Object ab...	Start Date	End Date	Status	
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	OT	50000886	Duplicate In	01.01.2023	31.12.9999	Active

Below the table, a dialog box titled "Prompt for Customizing request" is open. It contains a "Request" field with the value "G12K900221" (highlighted with a black box) and a "Customizing request" button. Below the request field, the "Short Description" is "GRC PC Configuration". At the bottom of the dialog, there is a footer with a green checkmark, a document icon, the text "Own Requests", and a red X icon.

**Figure 8.105** Capturing the Data Source in a Transport Request

< **SAP** Prepare Business Rule and Data Source for transport

✓    Cancel

Enter Data

**Business Rule**

Business Rule ID	<input type="text" value="50001421"/>	to	<input type="text"/>	<input type="button" value="Copy"/>
Business Rule Usage	<input type="text"/>	to	<input type="text"/>	<input type="button" value="Copy"/>
Business Rule Type	<input type="text"/>	to	<input type="text"/>	<input type="button" value="Copy"/>
Business Rule Category	<input type="text"/>	to	<input type="text"/>	<input type="button" value="Copy"/>
Business Rule Analysis Type	<input type="text"/>	to	<input type="text"/>	<input type="button" value="Copy"/>

**Figure 8.106** Selection of the Business Rule ID

**Data Source: Duplicate Invoice Check Configurations**

Save Refresh

Timeframe 14.11.2023 ID 50000886 Last Modified On 26.09.2023 14:09:08

General **Object Field** Adhoc Query Connector Business Rule Attachments and Links

**Sub Scenario**

\* Sub Scenario: Configurable \* Connection Type: SAP System

**Parameters**

Main Connector:

Main Table: T169P Main Table Lookup

Select Base Table: T169P Related Table Lookup

**Join Conditions**

Tables		Add Additional Join Condition		Remove Join Condition	
Table	Field Name	=	Table	Field Name	
T001					
T169P	BUKRS	=	T001	BUKRS	

**Figure 8.107** Blank Connector Field after the Data Source Is Captured in a Transport

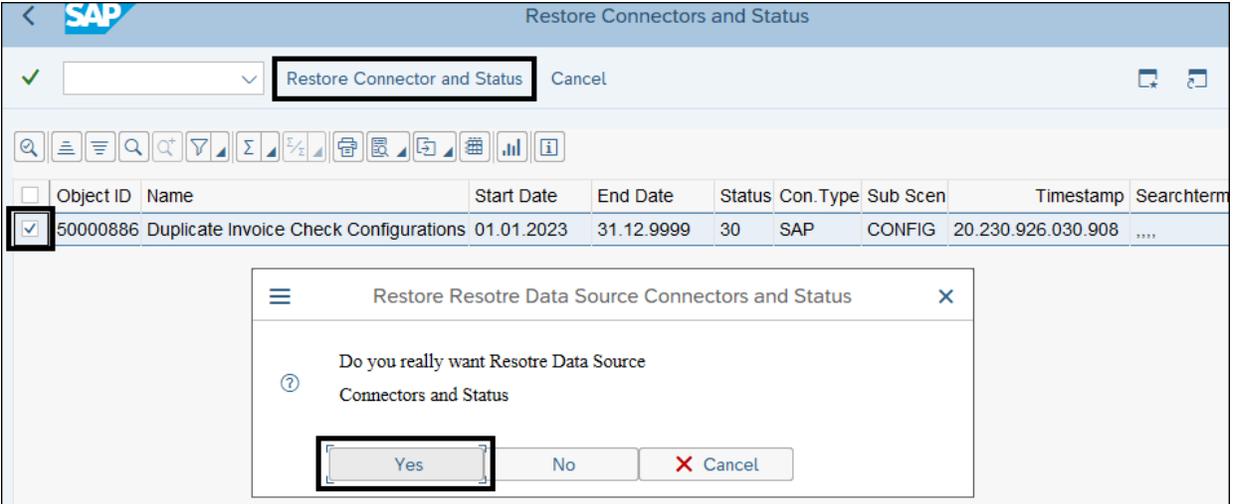
< **SAP** Reset Connector and Status of Data Sources in Orig Sys After Transport

✓

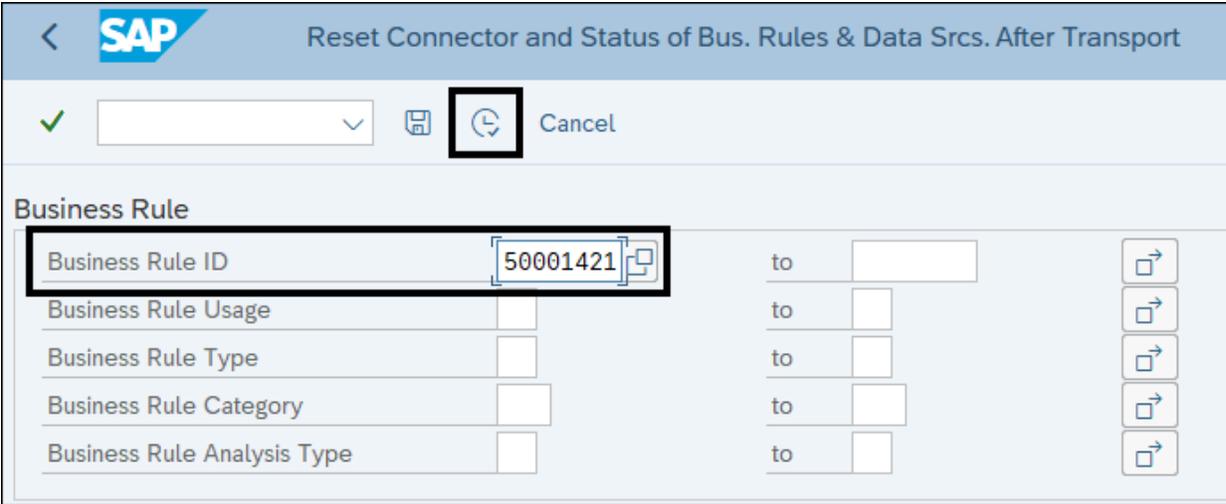
Enter data

Object ID	<input type="text" value="50000886"/>	to	<input type="text"/>	<input type="button" value="Refresh"/>
Connection Type	<input type="text"/>	to	<input type="text"/>	<input type="button" value="Refresh"/>
Sub Scenario	<input type="text"/>	to	<input type="text"/>	<input type="button" value="Refresh"/>

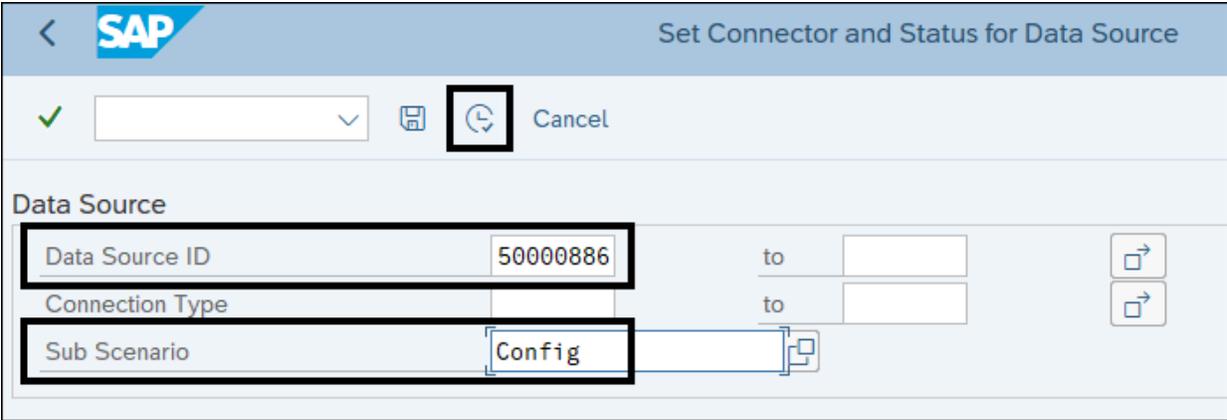
**Figure 8.108** Selection of Data Source ID to Reset the Connectors



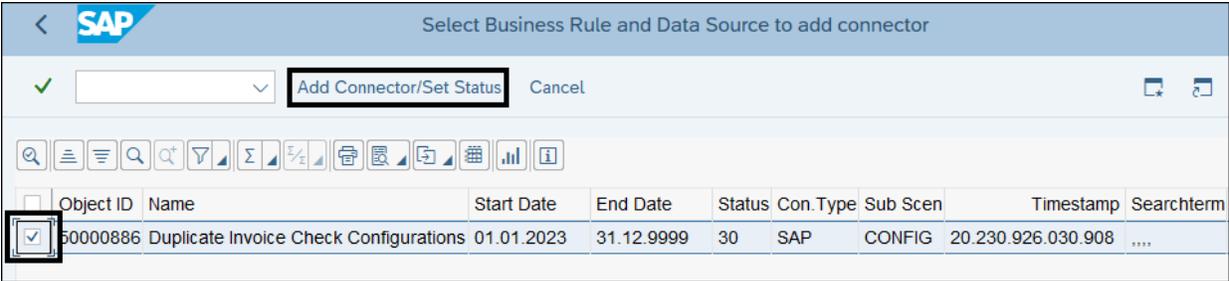
**Figure 8.109** Option to Restore Data Source Connectors and Status



**Figure 8.110** Selection of Business Rule ID to Reset the Connectors



**Figure 8.111** Selection of Data Source ID to Set Connectors



**Figure 8.112** Selection of Option to Add Connectors to a Data Source

The image shows a SAP dialog box titled "GRFN\_AMF\_TRANSPORT\_SETCONN". At the top left is the SAP logo and a back arrow. Below the title bar is a status bar with a green checkmark, a dropdown menu, a save icon, a refresh icon, and the text "Cancel". The main area is titled "Enter Data" and contains a "Target Connector" field with the value "TNDCLNT100" and a search icon. Below this are two checkboxes: "Set Status to Acitve" (checked) and "Test Run" (unchecked).

**Figure 8.113** Selection of Connector to Be Added to the Data Source

< **SAP** Select Business Rule and Data Source to add Connector and Active Status

✓

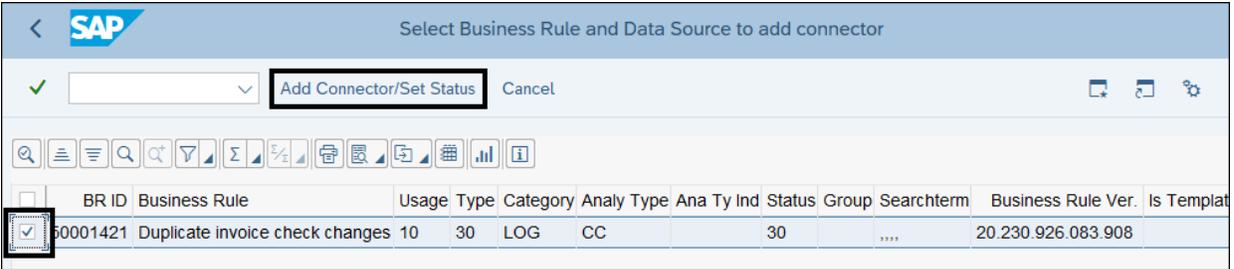
**Business Rule**

Business Rule ID	50001421	to	<input type="text"/>	<input type="button" value="→"/>
Business Rule Usage	<input type="text"/>	to	<input type="text"/>	<input type="button" value="→"/>
Business Rule Type	<input type="text"/>	to	<input type="text"/>	<input type="button" value="→"/>
Business Rule Category	<input type="text"/>	to	<input type="text"/>	<input type="button" value="→"/>
Business Rule Analysis Type	<input type="text"/>	to	<input type="text"/>	<input type="button" value="→"/>

**Data Source**

Data Source ID	<input type="text"/>	to	<input type="text"/>	<input type="button" value="→"/>
Connection Type	<input type="text"/>	to	<input type="text"/>	<input type="button" value="→"/>
Sub Scenario	Config			<input type="button" value="→"/>

**Figure 8.114** Selection of Business Rule ID to Set Connectors

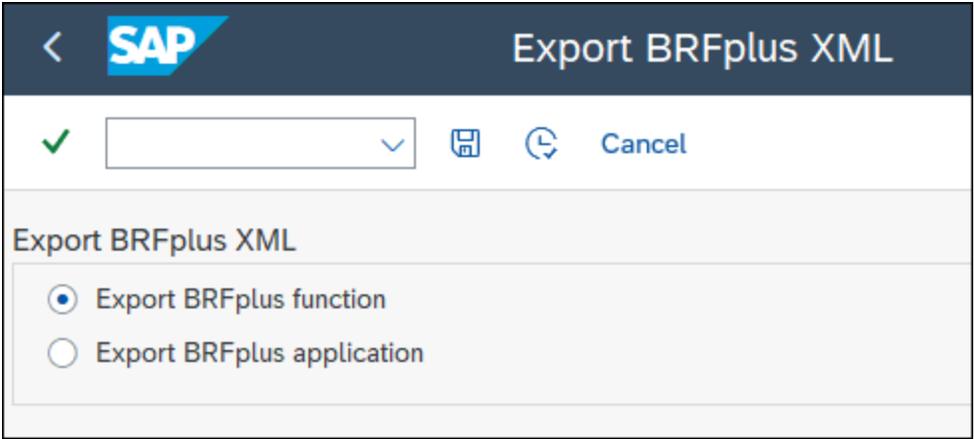


**Figure 8.115** Selection of Option to Add Connectors to a Business Rule

The screenshot shows the SAP interface for the transaction GRFN\_AMF\_TRANSPORT\_SETCONN. At the top, there is a navigation bar with the SAP logo and the transaction name. Below this, there is a header bar with a green checkmark, a dropdown menu, a save icon, a refresh icon, and a 'Cancel' button. The main area is titled 'Enter Data' and contains a table with the following data:

Field	Value
Target Connector	TNDCLNT100
<input checked="" type="checkbox"/> Set Status to Active	
<input type="checkbox"/> Test Run	

**Figure 8.116** Selection of Connector to Be Added to the Business Rule

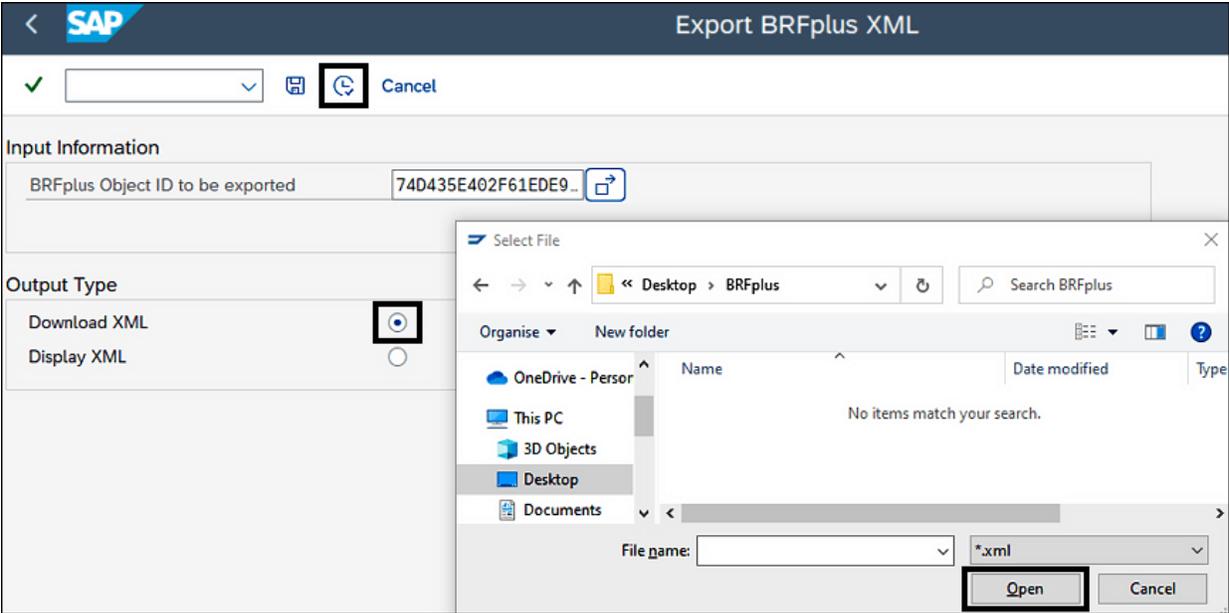


**Figure 8.117** Selection of the Export BRFplus Option

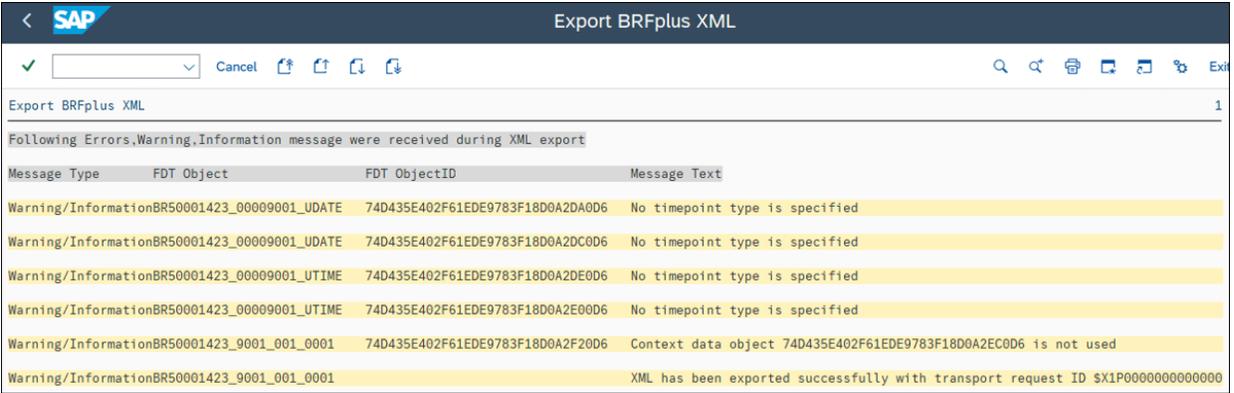
The screenshot shows the SAP Business Rule List interface. At the top, there is a header bar with the SAP logo and the title "Business Rule List". Below the header, there is a toolbar with a green checkmark icon, a dropdown menu, and buttons for "Export BRFplus Function XML" and "Cancel". Below the toolbar is a standard SAP list toolbar with icons for search, list, print, and other actions. The main area contains a table with the following data:

<input type="checkbox"/>	Name	Object ID	Exception List ID	Exception List Description	BRFplus Function ID	BRFplus Function Name
<input checked="" type="checkbox"/>	Payment Terms Field Status	50001423	9001	Field Status configuration of 'Terms of Payment'	74D435E402F61EDE9783F18D0A2F20D6	BR50001423_9001_001_0001

**Figure 8.118** Selection of Business Rule to Export to BRFplus



**Figure 8.119** Export BRFplus Function



**Figure 8.120** Message Indicating Successful Export of XML File

The screenshot displays the 'Import BRFplus XML' dialog box in SAP. At the top, there is a back arrow, the SAP logo, and the title 'Import BRFplus XML'. Below the title bar, there is a green checkmark, a dropdown menu, a save icon, a cancel icon (circled in black), and the text 'Cancel'. The main content is organized into sections: 'XML File' with a text input field containing the path 'C:\Users\TNOW\Desktop\BRFplus\XML' (circled in black); 'Action' with two radio buttons, the first of which is selected (circled in black); and 'Version' with the text 'System XML version number 1.13'.

**Figure 8.121** Selection of BRFplus File for Import



**Figure 8.122** Options to Export Data

1 Select Business Rules      2 Set Exporting Options      3 Review and Confirm

Search Criteria

Filter by Business Rule     Filter by Data Source

Object ID:  To

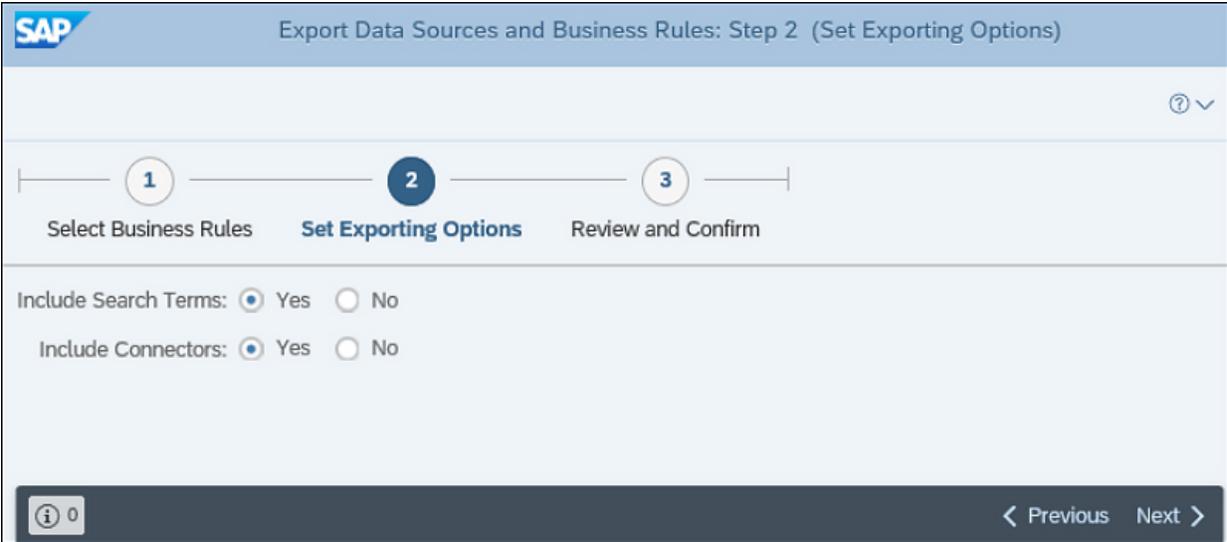
Analysis Type:  To  Name:

Category:  To  \* Valid From:

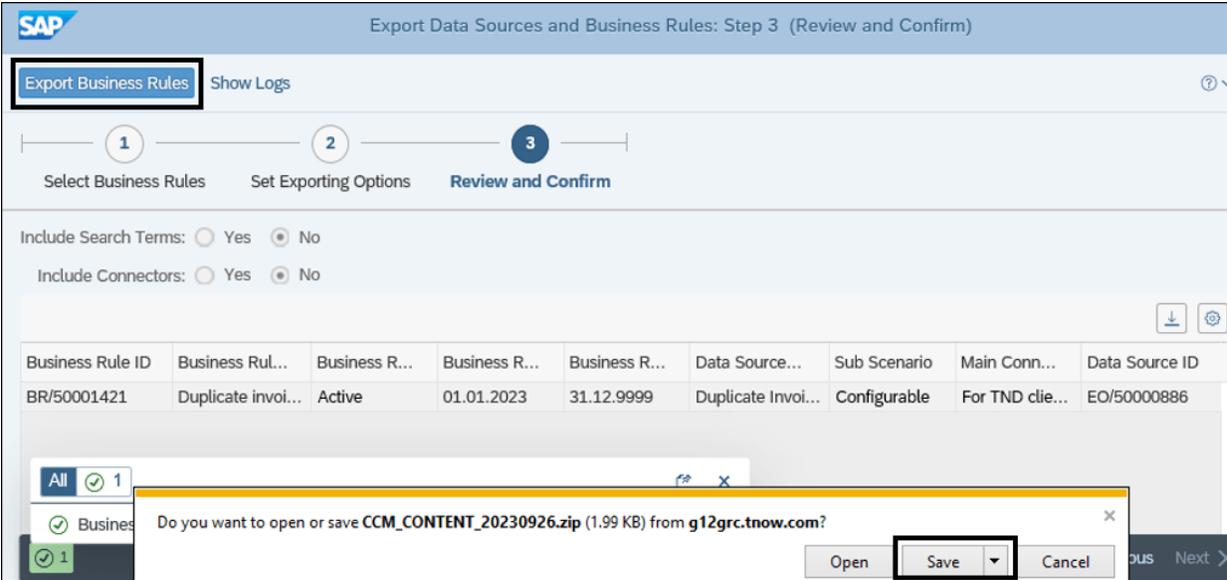
Search Term:  To

<input type="checkbox"/>	Business Rule ID	Business Rule Na...	Business Rule...	Business Rule...	Business Rule...	Data Source Name	Sub Scenario
<input checked="" type="checkbox"/>	BR/50001421	Duplicate invoice ch...	Active	01.01.2023	31.12.9999	Duplicate Invoice C...	Configurable

**Figure 8.123** Selection of Business Rules to Export



**Figure 8.124** Selection of Export Options



**Figure 8.125** Option to Export the Business Rule in a Zip File and Save It

SAP Export Data Sources and Business Rules: Step 3 (Review and Confirm)

Export: Business Rules Show Logs

1

Select Business Rules Set Export

Include Search Terms:  Yes  No

Include Connectors:  Yes  No

Business Rule ID Business ID

BR/50001421 Duplicate

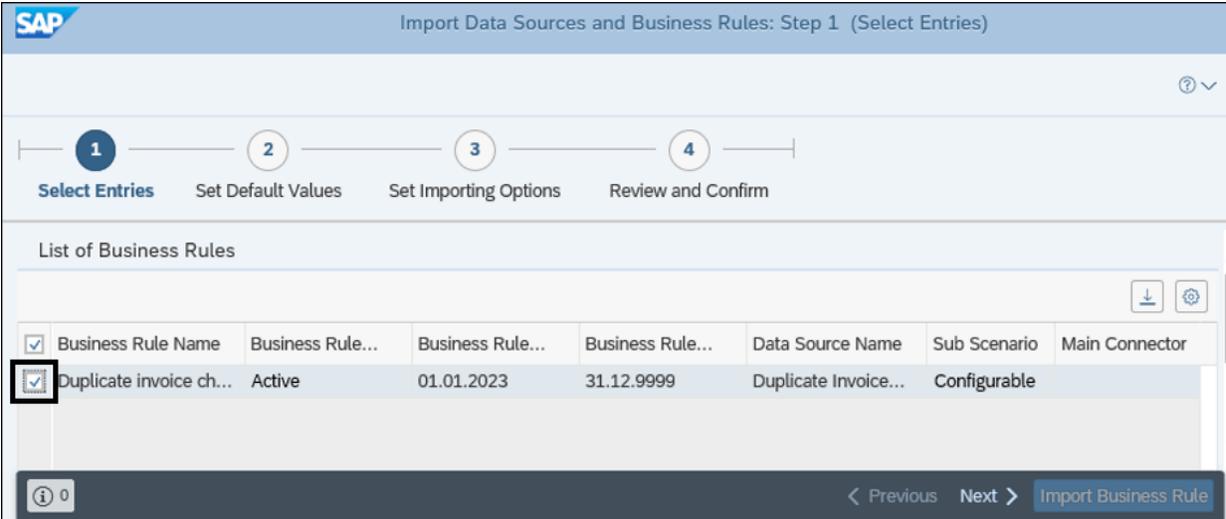
Logs

Print Version Export

Message Type	Message Class	Message Number	Message Text
■	GRFN_CLM	1	Content importing/exporting started at 2023-09-26 08:14:56
■	GRFN_CLM	69	Importing is triggered from CCM
■	GRFN_CLM	77	Key date is 2023-01-01
■	GRFN_CLM	6	System starts to export entity EO
■	GRFN_CLM	50	Metadata loaded successfully for entity EO
■	GRFN_CLM	8	Object EO/50000886(Duplicate Invoice Check Configurations) is exported successfully
■	GRFN_CLM	7	Entity EO is exported successfully
■	GRFN_CLM	6	System starts to export entity BR
■	GRFN_CLM	50	Metadata loaded successfully for entity BR
■	GRFN_CLM	8	Object BR/50001421(Duplicate invoice check changes) is exported successfully
■	GRFN_CLM	7	Entity BR is exported successfully
■	GRFN_CLM	80	Export: Object ID EO/50000886 mapping GUID 74D435E402F61EDE9782D59D5658E0D6
■	GRFN_CLM	80	Export: Object ID BR/50001421 mapping GUID 74D435E402F61EDE9782D59D565900D6
■	GRFN_CLM	2	Content importing/exporting ended at 2023-09-26 08:14:56

Close

**Figure 8.126** Option to Review the Export Logs



**Figure 8.127** Selection of Business Rules for Import

SAP Import Data Sources and Business Rules: Step 2 (Set Default Values)

1 Select Entries 2 **Set Default Values** 3 Set Importing Options 4 Review and Confirm

Default Value

"Valid From", "Valid To" will not be updated if the rule already exist in target system

Valid From: 01.01.2023  
 Valid To: 31.12.9999  
 Status:     
 Main Connector:

List of Business Rules

<input checked="" type="checkbox"/>	Business Rule Na...	Business Rule S...	Business Rule V...	Business Rule...	Data Source Name	Sub Scenario	Main Connector	Connector Stat...
<input checked="" type="checkbox"/>	Duplicate invoice ch...	Active	01.01.2023	31.12.9999	Duplicate Invoice C...	Configurable	For TND cle... <input type="text"/>	<input checked="" type="checkbox"/>

< Previous Next >

**Figure 8.128** Option to Set the Connector and Status to the Business Rules

SAP Import Data Sources and Business Rules: Step 4 (Review and Confirm)

Simulate Importing

1 Select Entries 2 Set Default Values 3 Set Importing Options 4 Review and Confirm

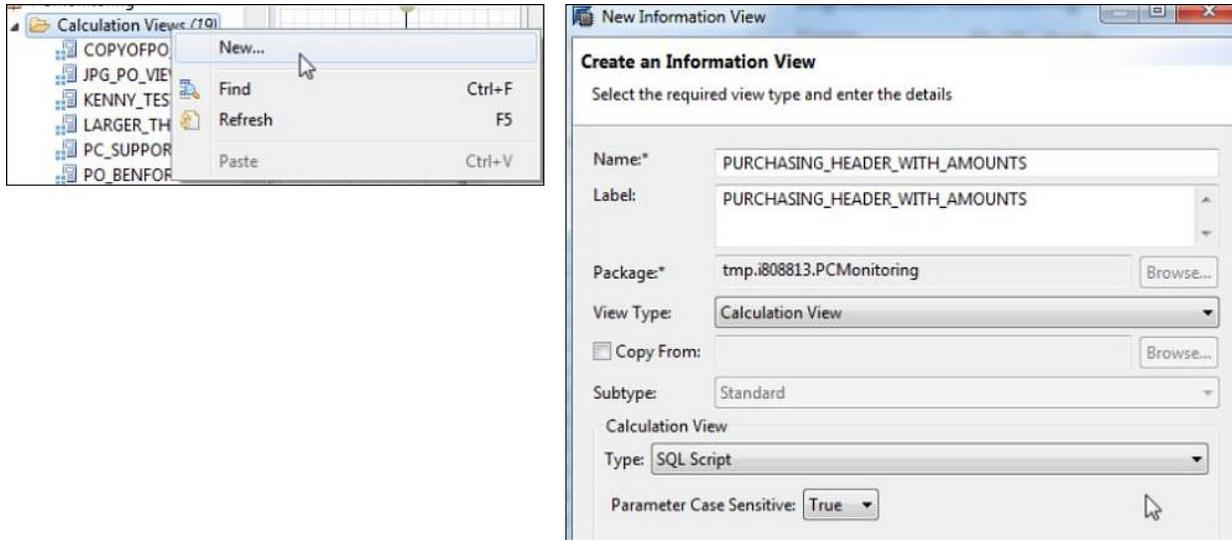
Import Search Term:  Yes  No

List of Business Rules

	Business Rule Na...	Business Rule S...	Business Rule V...	Business Rule...	Data Source Name	Main Connector	Sub Scenario	Connector Sta...
<input type="radio"/>	Duplicate invoice ch...	Active	01.01.2023	31.12.9999	Duplicate Invoice C...	For TND client 1...	Configurable	✓

< Previous Next > Import Business Rule

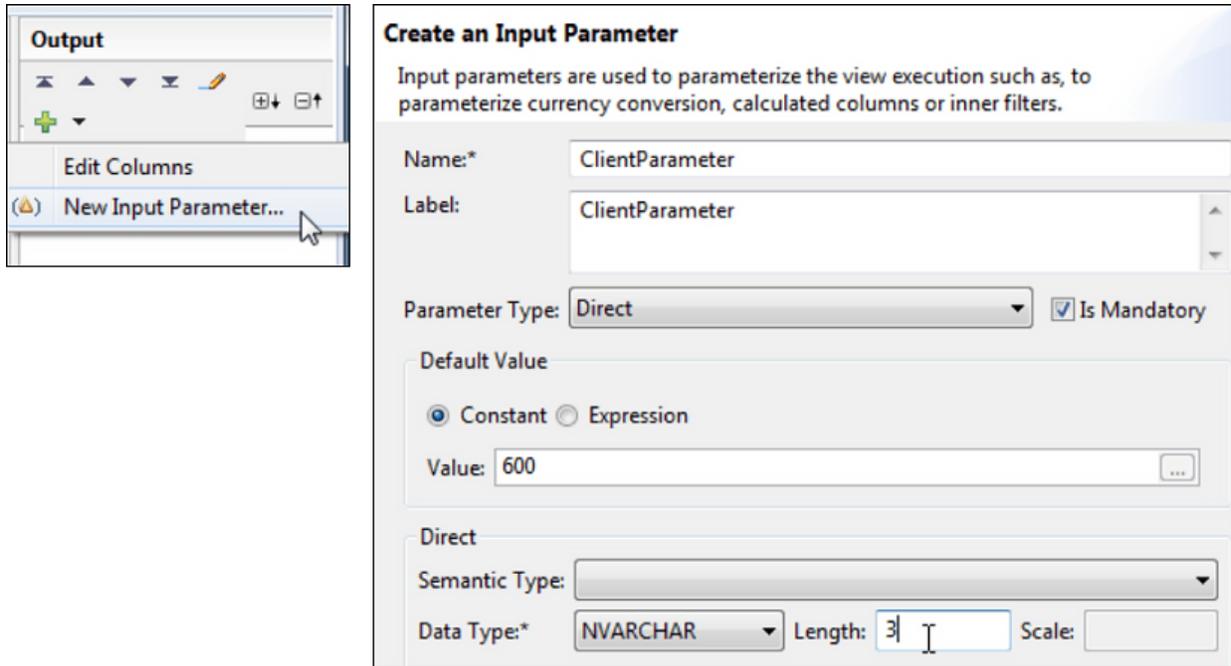
**Figure 8.129** Option to Import Business Rules



**Figure 8.130** Option to Create New Calculation Views

	Name	Data type	Length	Scale
1	Client	NVARCHAR	3	
2	PO_ID	NVARCHAR	10	
3	CoCode	NVARCHAR	10	
4	Currency	NVARCHAR	3	
5	LastChangedOn	NVARCHAR	10	
6	isDeleted	NVARCHAR	1	
7	PO_Amt	DECIMAL	15	2
8	ItemCount	INTEGER		
9	<Click to add>			

**Figure 8.131** Definition of Output Columns



**Figure 8.132** Definition of Input Parameters

```
SQL SQL
⊖ /**** BEGIN PROCEDURE SCRIPT **** /

BEGIN

var_out =

select L.MANDT AS "Client", L.EBELN AS "PO_ID", L.BUKRS as "CoCode"
      , L.WAERS as "Currency", to_date(L.AEDAT) as "LastChangedOn"
      , L.LOEKZ as "IsDeleted",sum (R.NETWR) as "PO_Amt"
      , count (*) as "ItemCount"
from "SAPN60"."EKKO" as L right outer join "SAPN60"."EKPO" as R
AS L.MANDT = R.MANDT and L.EBELN = R.EBELN
Where
  L.MANDT like :ClientParameter
  and to_date(:DateForm) < To_date(L.AEDAT)
  and to_date(:DateTo) < To_date(L.AEDAT)
  group by L.MANDT, L.EBELN, L.BUKRS, L.WAERS, L.AEDAT, L.LOEKZ
  order by L.EBELN, L.AEDAT;

END /*****End Procedure Script *****/
```

**Figure 8.133** Sample SQL Code in a Calculation View

***New Entries: Details of Added Entries***

DB Connection	<input type="text" value="H0too"/>
DBMS	<input type="text" value="HDB"/>
User Name	<input type="text" value="sudhalkar"/>
DB password	<input type="password" value="*****"/> / <input type="password" value="*****"/>
Conn. info	<input type="text" value="ld9227:30215"/>
Permanent	<input checked="" type="checkbox"/>
Connection Limit	<input type="text" value="10"/>
Optimum Conns	<input type="text" value="5"/>

**Figure 8.134** Establishment of a New Transaction DBCO Connection

save (Ctrl+S)

***RFC Destination H0T00***

Connection Test 

RFC Destination

Connection Type  Logical Destination Description

Description

**Figure 8.135** Configuration of the Logical Connection

**Data Source**

Save Refresh

Timeframe 01.01.2023 ID 50001463 Last Modified On

General **Object Field** Adhoc Query Connector Attachments and Links

**Sub Scenario**

\* Sub Scenario: HANA \* Connection Type: HANA Database

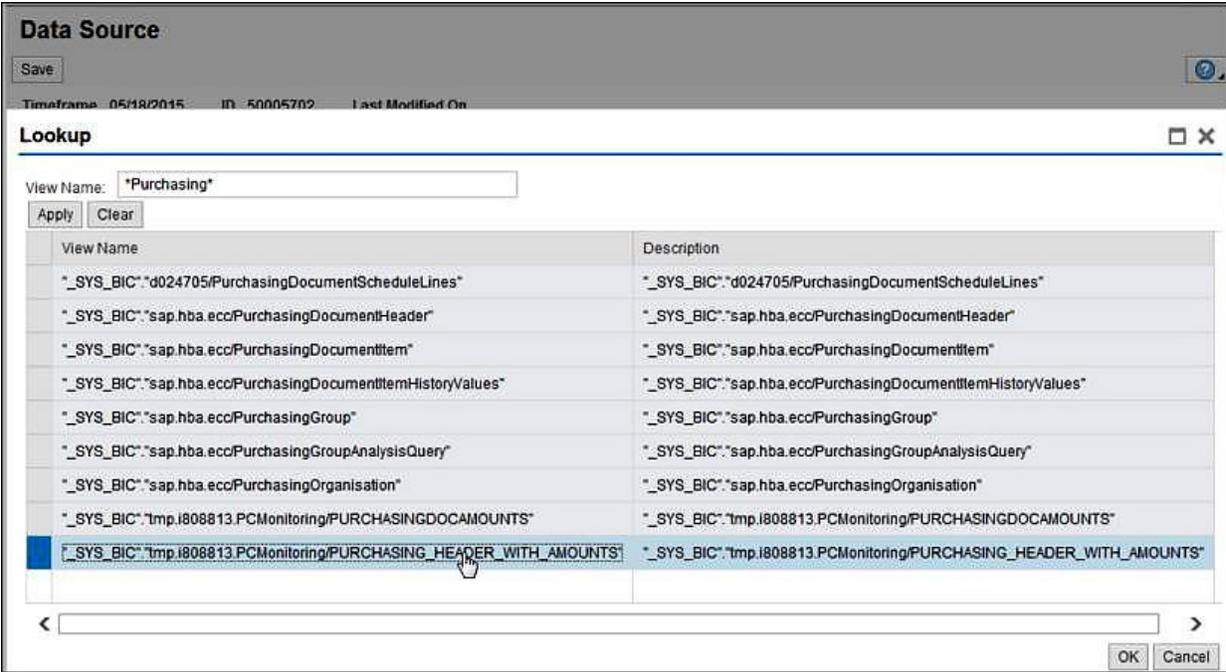
**Parameters**

Main Connector: TSDCON **Query Lookup**

View name:

**Fields**

**Figure 8.136** Query Lookup Option in the SAP HANA Data Source



**Figure 8.137** Selection of the Query in the Data Source

**Data Source**

Save

Timeframe 05/18/2015 ID 50005702 Last Modified On

General **Object Field** Adhoc Query Connector Attachments and Links

**Parameters**

Main Connector:

View name:

**Fields**

Field ID	Source Field	Field Type	Amount or Quantity	Field Description
00000001	Client	C		Client
00000002	PO_ID	C		PO_ID
00000003	CoCode	C		CoCode
00000004	Currency	C		Currency
00000005	LastChangedOn	C		LastChangedOn
00000006	IsDeleted	C		IsDeleted
00000007	PO_Amt	P		PO_Amt
00000008	ItemCount	I		ItemCount

**Figure 8.138** Fields Selected from the InfoSet Query in the Data Source

Job Monitor											
Show:		Year	2023	Apply	Max. Rows:		50				
Search Criteria Job Name: <input type="text"/> Frequency: <input type="text"/> Job Status: <input type="text"/> Execution Date From: 23.09.2023 Execution Date To: 30.09.2023 Target Connector: <input type="text"/>											
View: * [Standard View]   Print Version   Export   View Results   View Events   Business Rule   Org. Level System Parameters Snapshot   Report Ad Hoc Issue											
Regulation	Job Name	Job Step	Status	Total Deficiency Count	Deficiency Type	Execution Date	Start time	Control	Business Rule		
SOX	MONITOR POFILE PARAMETER ACCESS	185	New	0		30.09.2023	05:30:00	Monitor Critical Authorization	Access to maintain profile parameters		
SOX	MONITOR SM30 ACCESS	185	New	0		30.09.2023	05:30:00	Monitor Critical Authorization SM30	Monitor access to Critical action SM30		
SOX	MONITOR POFILE PARAMETER ACCESS	184	New	0		29.09.2023	05:30:00	Monitor Critical Authorization	Access to maintain profile parameters		
SOX	MONITOR SM30 ACCESS	184	New	0		29.09.2023	05:30:00	Monitor Critical Authorization SM30	Monitor access to Critical action SM30		
SOX	MONITOR POFILE PARAMETER ACCESS	183	New	0		28.09.2023	05:30:00	Monitor Critical Authorization	Access to maintain profile parameters		
SOX	MONITOR SM30 ACCESS	183	New	0		28.09.2023	05:30:00	Monitor Critical Authorization SM30	Monitor access to Critical action SM30		
SOX	MONITOR POFILE PARAMETER ACCESS	182	New	0		27.09.2023	05:30:00	Monitor Critical Authorization	Access to maintain profile parameters		
SOX	MONITOR SM30 ACCESS	182	New	0		27.09.2023	05:30:00	Monitor Critical Authorization SM30	Monitor access to Critical action SM30		
SOX	MONITOR POFILE PARAMETER ACCESS	181	New	0		26.09.2023	05:30:00	Monitor Critical Authorization	Access to maintain profile parameters		
SOX	MONITOR SM30 ACCESS	181	New	0		26.09.2023	05:30:00	Monitor Critical Authorization SM30	Monitor access to Critical action SM30		
SOX	MONITOR POFILE PARAMETER ACCESS	180	New	0		25.09.2023	05:30:00	Monitor Critical Authorization	Access to maintain profile parameters		
SOX	MONITOR SM30 ACCESS	180	New	0		25.09.2023	05:30:00	Monitor Critical Authorization SM30	Monitor access to Critical action SM30		
Sarbanes Oxley	AM_JOB_Q4 2023	9	Completed	3	High	25.09.2023	01:49:53	Monitor Duplicate Invoice Check Config	Duplicate invoice check changes		
Sarbanes Oxley	AM_JOB_Q4 2023	8	Completed	0	Adequate	25.09.2023	01:49:51	Monitor Duplicate Invoice Check Config	Duplicate invoice check changes		
Sarbanes Oxley	AM_JOB_Q4 2023	7	Completed	0	Adequate	25.09.2023	01:49:50	Monitor Duplicate Invoice Check Config	Duplicate invoice check changes		
Sarbanes Oxley	AM_JOB_Q4 2023	6	Completed	0	Adequate	25.09.2023	01:49:47	Monitor Duplicate Invoice Check Config	Duplicate invoice check changes		

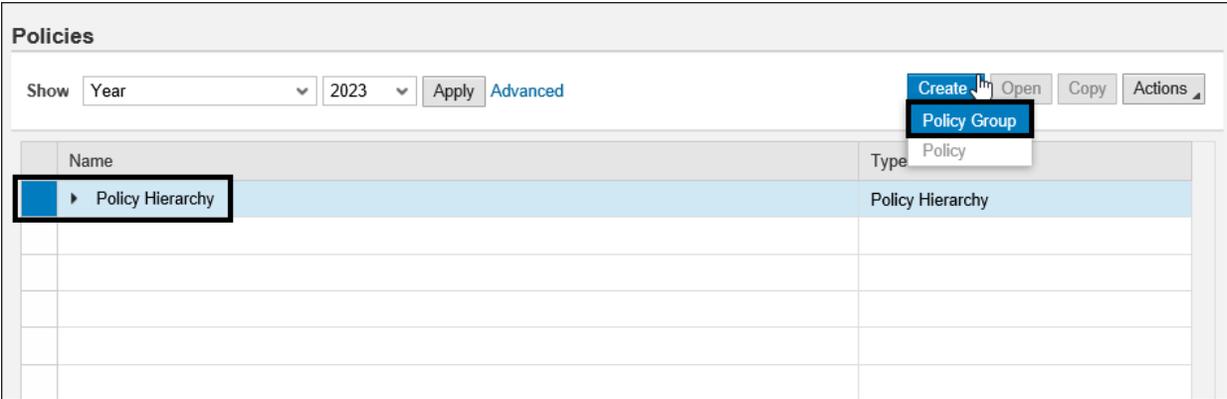
**Figure 8.139** Job Monitor Report

Monitoring Issue Status						Personal
Tabular report by subprocess showing all issues generated and their current status						
▶ Selection						
Results						
						Print or Export
Organization	Subprocess	Control	Issue	Description (Issue)	Issue Processor	
ABC India Pvt Ltd	Invoice Processing	<a href="#">Monitor Duplicate Invoice Check Config</a>	<a href="#">TNDCLNT100 : Monitor changes to the configuration duplicate invoice check</a>	2 High 2 Medium 0 Low 0		
ABC India Pvt Ltd	Invoice Processing	<a href="#">Monitor Duplicate Invoice Check Config</a>	<a href="#">TNDCLNT100 : Monitor changes to the configuration duplicate invoice check</a>	3 High 3 Medium 0 Low 0	SAIKRISHNA1	
Power Generation	Invoice Processing	<a href="#">Monitor Duplicate Invoice Check Config</a>	<a href="#">TNDCLNT100 : Monitor changes made to duplicate invoice check</a>	4 High 4 Medium 0 Low 0	Sandeep	
Power Generation	Invoice Processing	<a href="#">Monitor Duplicate Invoice Check Config</a>	<a href="#">TNDCLNT100 : Monitor changes made to duplicate invoice check</a>	4 High 4 Medium 0 Low 0	Sandeep	
Power Generation	Invoice Processing	<a href="#">Monitor Duplicate Invoice Check Config</a>	<a href="#">TNDCLNT100 : Monitor changes made to duplicate invoice check</a>	4 High 4 Medium 0 Low 0	Sandeep	
Power Generation	System Parameters	<a href="#">Monitor Password Parameter</a>	<a href="#">TNDCLNT100 : Monitor Password Parameter Settings</a>	1 High 1 Medium 0 Low 0	SAIKRISHNA1	
Power Generation	System Parameters	<a href="#">Monitor Password Parameter</a>	<a href="#">TNDCLNT100 : Monitor Password Parameter Settings</a>	1 High 1 Medium 0 Low 0	Sandeep	
Power Generation	Access Management	<a href="#">Monitor users with SAP_All access</a>	<a href="#">TNDCLNT100 : Monitor users with access to profiles : SAP_All</a>	10 High 10 Medium 0 Low 0	Sandeep	
Test	Tnow Basis	<a href="#">Control to monitor user vs standard role</a>	<a href="#">TNDCLNT100 : Business rule to monitor user vs standard role assignment</a>	7 High 7 Medium 0 Low 0	Sandeep	
Test	Tnow Basis	<a href="#">Control to monitor user vs standard role</a>	<a href="#">TNDCLNT100 : Business rule to monitor user vs standard role assignment</a>	7 High 7 Medium 0 Low 0	Sandeep	
Test	Tnow Basis	<a href="#">Control to monitor user vs standard role</a>	<a href="#">TNDCLNT100 : Business rule to monitor user vs standard role assignment</a>	7 High 7 Medium 0 Low 0	Sandeep	

**Figure 8.140** Monitoring Issue Status Report

Monitoring Remediation Status						Personalize
Tabular report showing the status of remediation plans by monitoring control						
<a href="#">Selection</a>						
<b>Results</b>						
						Print or Export
Organization	Subprocess	Control	Issue	Issue Priority	Issue Processor	
Power Generation	Invoice Processing	<a href="#">Monitor Duplicate Invoice Check Config</a>	TNDCLNT100 : Monitor changes made to duplicate invoice check	High	Sandeep	
Power Generation	Access Management	<a href="#">Monitor users with SAP_All access</a>	TNDCLNT100 : Monitor users with access to profiles : SAP_All	High	Sandeep	

**Figure 8.141** Monitoring Remediation Status Report



**Figure 9.1** Policy Group Creation Option under Policies

**Policy Group**

**Save**

Timeframe Year 2023

**General** Policy Group Document

\* Name:

Description:

\* Valid From:

\* Valid To:

\* Approval Survey:  ▼

**Figure 9.2** Configuration of Policy Group

**Policies**

Show Year 2023 Apply Advanced Create Open Copy Actions

Policy Group  
Policy

Name	
Policy Hierarchy	Policy Hierarchy
Compliance	Policy Group

**Policy Group**

Name: Compliance  
Valid From: 01.01.2023  
Valid To: 31.12.9999

**Figure 9.3** Policy Creation Option under Policy Group

**Policy: Anti Corruption Policy**

Policy Group Compliance Distribution Methods Acknowledgement, Quiz, Survey Status Draft Version 002

**General**
Policy Document Policy Scope Risks Controls Policy Sources Issues Roles Review and Approval

<p>* Name: Anti Corruption Policy</p> <p>Description: Policy to comply with anti-corruption laws</p> <p>* Policy Type: Policy</p> <p>* Distribution Methods: <input checked="" type="checkbox"/> Acknowledgement <input checked="" type="checkbox"/> Quiz <input checked="" type="checkbox"/> Survey</p> <p>Distribution Language: <input type="text"/></p> <p>* Quiz Template: Policy Quiz</p> <p>* Survey Template: Policy Survey</p> <p>* Purpose: No corruptive practices take place in the organization</p>	<p>Policy Category: Global trade related policy</p> <p>* Responsible Organization: ABC International Ltd</p> <p>Created By: SAIKRISHNA1</p> <p>Created On: 08.10.2023 22:27:31</p> <p>* Valid From: 08.10.2023</p> <p>* Valid To: 31.12.9999</p> <p>Date for Next Revision: 01.01.2024</p> <p>Note: Review the policy document</p>
--	--

**Figure 9.4** General Tab Options in Policy Creation

**Policy: Anti Corruption Policy**

?

Policy Group Compliance Distribution Methods Acknowledgement, Quiz, Survey Status Draft Version 002

General **Policy Document** Policy Scope Risks Controls Policy Sources Issues Roles Review and Approval

**Attachments**

?

Type	Title	Version	File Size	File Type	Added On	Added By	Attachmen...	Parent Object
	Anti-Corrupt...	001	12 kb	application/v...	02.10.2023...	SAIKRISHNA1	Document	Anti Corruption Policy(Version:001)

**Anti-Corruption Policy**

Title: Anti-Corruption Policy Modified On: 02.10.2023 11:26:55  
 Document Category: General Origin:  
 Version: 001 Added On: 02.10.2023 11:26:55  
 File Name: Anti Corruption Policy.docx Added By: SAIKRISHNA1  
 File Type: application/vnd.openxmlformats-officedocument.wordprocessingml.document  
 File Size: 12 kb  
 Attachment Type: Document

**Figure 9.5** Policy Document Upload Options

**Policy: Anti Corruption Policy**

Save Send for Review Submit for Approval

Policy Group Compliance Distribution Methods Acknowledgement, Quiz, Survey Status Draft Version 002

General Policy Document **Policy Scope** Risks Controls Policy Sources Issues Roles Review and Approval

**Organizations** Processes Activities People Exclusions

**Assign Organizations**

Organizations	Assignment Method	Owner
<ul style="list-style-type: none"> <li>ABC International Ltd</li> <li>ABC India Pvt Ltd</li> </ul>	<ul style="list-style-type: none"> <li>Assign Directly</li> <li>Inherited</li> </ul>	SAIKRISHNA1

Assign Remove

**Figure 9.6** Assignment of Organizations in the Scope of Policy

**Policy: Anti Corruption Policy**

Save Send for Review Submit for Approval

Policy Group Compliance Distribution Methods Acknowledgement, Quiz, Survey Status Draft Version 002

General Policy Document **Policy Scope** Risks Controls Policy Sources Issues Roles Review and Approval

Organizations **Processes** Activities People Exclusions

**Assign Processes**

Assign Remove

Processes	Type	Description	Organization	Owner
Procure to Pay	Process		ABC India Pvt Ltd	
Invoice Processing	Subprocess		ABC India Pvt Ltd	

**Figure 9.7** Processes and Subprocess Assignment Screen in Policy Definition

**Policy: Anti Corruption Policy**

**Save** | **Send for Review** | **Submit for Approval** ?

Policy Group Compliance Distribution Methods Acknowledgement, Quiz, Survey Status Draft Version 002

General Policy Document **Policy Scope** Risks Controls Policy Sources Issues Roles Review and Approval

Organizations Processes **Activities** People Exclusions

**Assign Activities**

	Activity	Organization	Owner
	PO Creation	ABC International Ltd	
	PO Creation	ABC India Pvt Ltd	

**Assign** Remove

**Figure 9.8** Assignment of Activities in the Scope of Policy

**Policy: Anti Corruption Policy**

Policy Group Compliance Distribution Methods Acknowledgement, Quiz, Survey Status Draft Version 002

General Policy Document **Policy Scope** Risks Controls Policy Sources Issues Roles Review and Approval

Organizations Processes Activities **People** Exclusions

**Select Roles**

Roles	Type
Cross Regulation Policy Viewer	GRC Role

**Select User Groups**

User Group ID	User Groups
---------------	-------------

**Select Specific Users**

People	Type	Email Address
--------	------	---------------

**Select Distribution List**

Distribution List	Type
-------------------	------

**Figure 9.9** Assignment of People in the Scope of Policy

**Policy: Anti Corruption Policy**

Save | Send for Review | Submit for Approval

Policy Group Compliance Distribution Methods Acknowledgement, Quiz, Survey Status Draft Version 002

General Policy Document **Policy Scope** Risks Controls Policy Sources Issues Roles

Organizations Processes Activities People **Exclusions**

Exclusions: Clause 1.2 mentioned in the attached policy document is applicable only to Compliance team and employees from other teams can ignore it

**Figure 9.10** Exclusions in the Scope of Policy

**Policy: Anti Corruption Policy**

Save Send for Review Submit for Approval

Policy Group Compliance Distribution Methods Acknowledgement, Quiz, Survey Status Draft Version 002

General Policy Document Policy Scope **Risks** Controls Policy Sources Issues Roles

**Risks**

Assign Remove

Risk	Organization	Activity	Classification	Owner
Anti-competition, corruption, AML laws	ABC International Ltd	PO Creation	Compliance	RAGHU

**Figure 9.11** Option to Add Risk to the Policy

**Policy: Anti Corruption Policy**

Save | Send for Review | Submit for Approval

Policy Group Compliance Distribution Methods Acknowledgement, Quiz, Survey Status Draft Version 002

General Policy Document Policy Scope Risks **Controls** Policy Sources Issues Roles Review and Approval

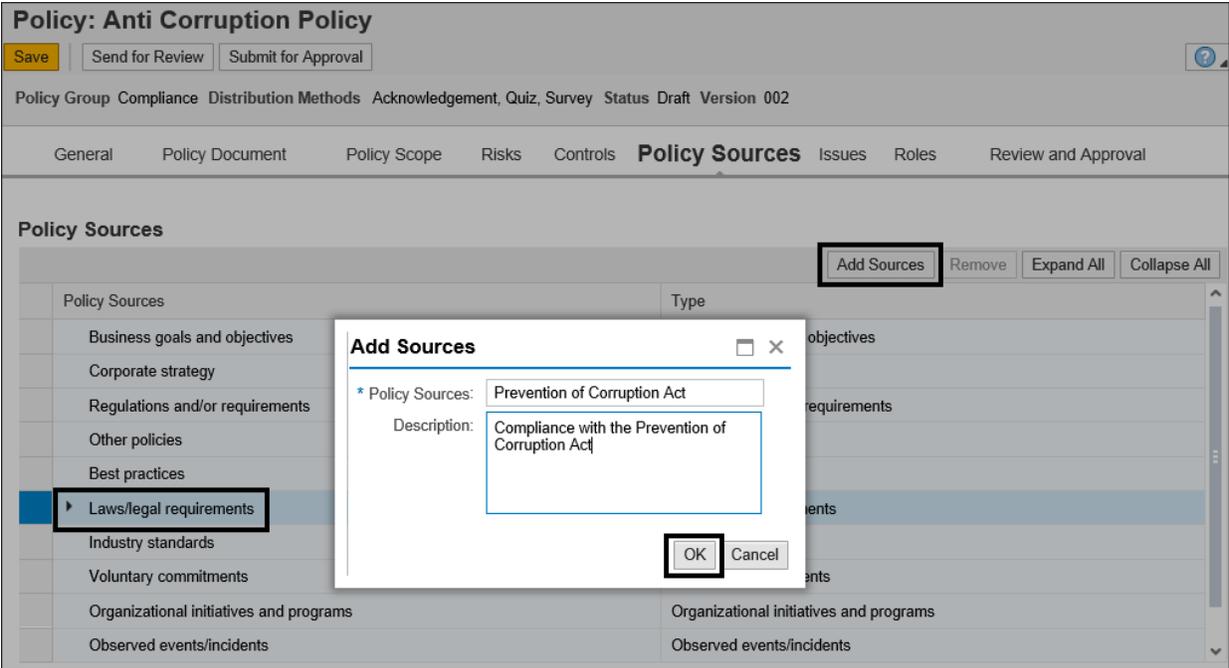
Regulation:  Personalize

**Controls**

	Name	Subprocess	Organization	Owner	Test of Effectiveness	Control Design Assessment	Self Assessment
	<a href="#">Monitor Duplicate Invoice Check Config</a>	Invoice Processing	ABC India Pvt Ltd	SAKRISHNA1	Significantly Deficient		

Assign Remove

**Figure 9.12** Option to Add Controls to the Policy



**Figure 9.13** Assignment of Policy Sources



**Policy: Anti Corruption Policy**

Save | Send for Review | Submit for Approval

Policy Group Compliance Distribution Methods Acknowledgement, Quiz, Survey Status Draft Version 002

General Policy Document Policy Scope Risks Controls Policy Sources Issues **Roles**

**Roles**

Show: All

Assign Replace Remove

Role	Name	User	Valid From	Valid To
Cross Regulation Policy Approver	DRISHTI	DRISHTI	08.10.2023	31.12.9999
Cross Regulation Policy Owner	Karthika G	KARTHIKA	08.10.2023	31.12.9999
Cross Regulation Policy Reviewer	SAIKRISHNA	SAIKRISHNA	08.10.2023	31.12.9999
Cross Regulation Policy Viewer	Praveen Kumar Sajjala	PRAVEEN	08.10.2023	31.12.9999
	RAGHU	RAGHU	08.10.2023	31.12.9999

**Figure 9.15** Assignment of Users to the Roles in the Policy

**Policy: Anti Corruption Policy**

Policy Group Compliance Distribution Methods Acknowledgement, Quiz, Survey Status Draft Version 002

[General](#)
[Policy Document](#)
[Policy Scope](#)
[Risks](#)
[Controls](#)
[Policy Sources](#)
[Issues](#)
[Roles](#)
**Review and Approval**

Approval Survey: Policy Approval Survey

**Assign Reviewers and Approvers**

Reviewers/Approvers	Name	ID
Approvers	DRISHTI	DRISHTI
Reviewers	SAIKRISHNA	SAIKRISHNA

**Figure 9.16** Reviewers and Approvers: Policy Definition

**Active Queries**

Workitems All (1) Access Management (0) Process Control (0)

**Workitems - Process Control**

View: [Standard View] v

Subject

**Review Policy Anti Corruption Policy Version 001**

---

**Policy: Anti Corruption Policy**

Save Draft | Submit Comments | Send for Review | Submit for Approval

Policy Group Compliance Distribution Methods Acknowledgement, Quiz, Survey Status Sent for Review Version 001

**General** | Policy Document | Policy Scope | Risks | Controls | Policy Sources | Issues

\* Name: Anti Corruption Policy

Description: Policy to comply with anti-corruption laws

\* Policy Type: Policy

\* Distribution Methods:  Acknowledgement  Quiz  Survey

Distribution Language:

\* Quiz Template: Policy Quiz

\* Survey Template: Policy Survey

\* Purpose: No corruptive practices take place in the organization

**Figure 9.17** Review Policy Work Item

**Policy: Anti Corruption Policy**

[Save Draft](#) [Submit Comments](#) [Send for Review](#) [Submit for Approval](#) ?

Policy Group Compliance Distribution Methods Acknowledgement, Quiz, Survey Status Sent for Review Version 001

◀ Roles **Review and Approval**

Approval Survey: Policy Approval Survey

Comment:

Details are reviewed and they are in line with the policy

[Add Comment](#)

Comment History

**Figure 9.18** Option to Submit Comments while Reviewing the Policy

**Policy: Anti Corruption Policy**

Policy Group Compliance Distribution Methods Acknowledgement, Quiz, Survey Status Submitted for Approval Version 001

**Review and Approval**

Approval Survey: Policy Approval Survey

**Questions**

Question	Answer	Comments
Is the scope defined in the policy accurate?	Yes	<a href="#">Add Comment</a>

Comment:

Approved

Comment History

10.10.2023 11:09:25 - SAIKRISHNA1 ( SAIKRISHNA1 ) on behalf of SAIKRISHNA ( SAIKRISHNA )

Details are reviewed and they are in line with the policy

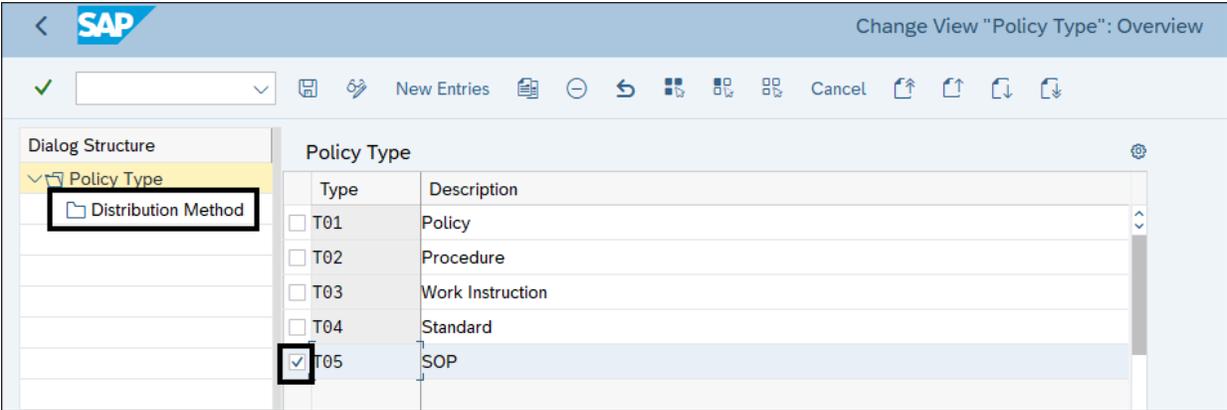
**Figure 9.19** Policy Approval Screen

**Change View "Acknowledgement option": Overview**

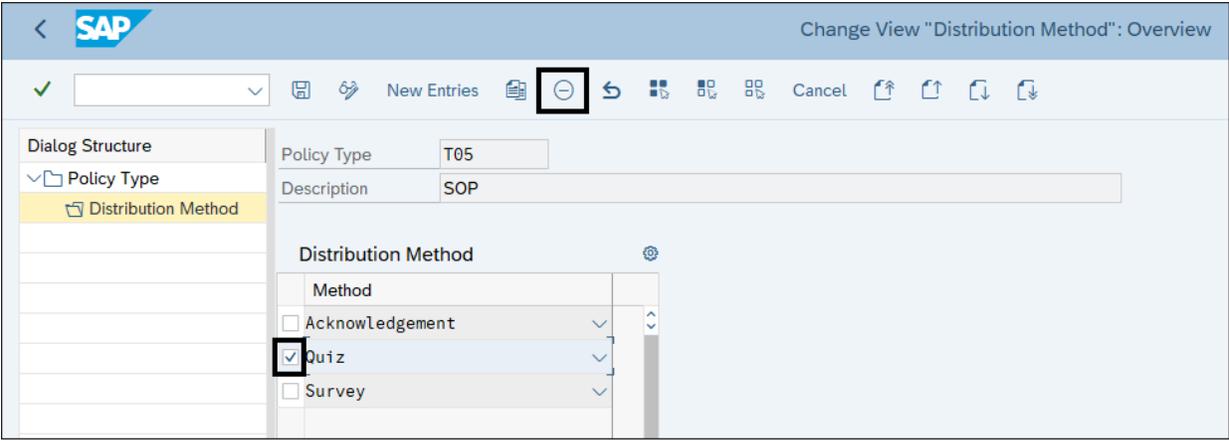
New Entries       BC Set: Change Field Values

Acknowledgement option	
Ack.	Text
Yes	I acknowledge that I have read and understood this policy.
No	I do NOT accept this policy.

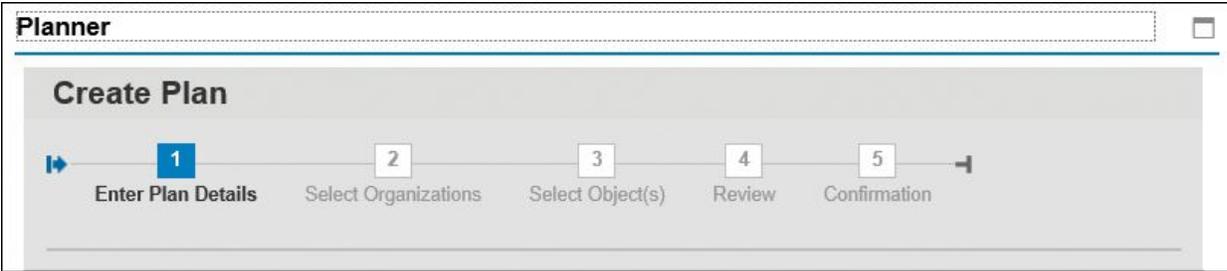
**Figure 9.20** Acknowledgement Text Definition



**Figure 9.21** Selection of the Distribution Method Option



**Figure 9.22** Delinking Distribution Methods



**Figure 9.23** Planner Functionality: New Plan

**Planner**

### Create Plan

1 Enter Plan Details   2 Select Regulation   3 Select Organizations   4 Select Object(s)   5 Review   6 Confirmation

\* Plan Name:

\* Plan Activity:

\* Survey:

Object Survey:

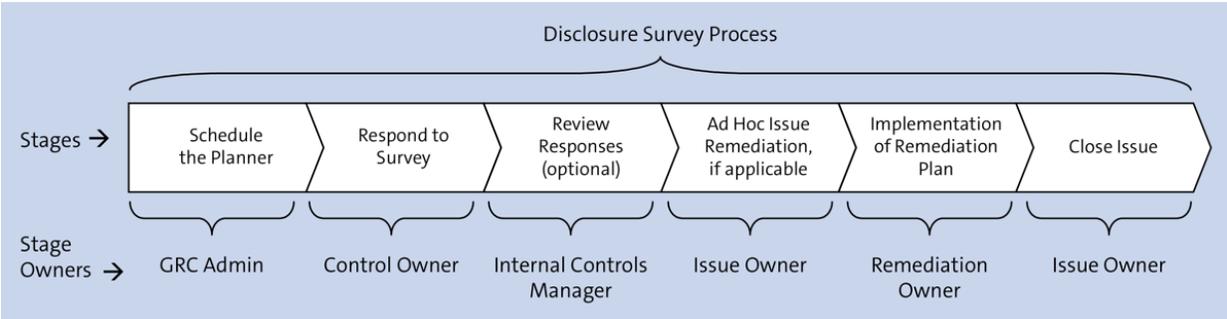
\* Period:

\* Year:

\* Start Date:

\* Due Date:

**Figure 9.24** The Enter Plan Details Tab to Schedule a Planner for Disclosure Survey



**Figure 9.25** Stages in the Control Disclosure Workflow with Owners' Information

**Active Queries**

Workitems [All \(8\)](#) [Access Management \(0\)](#) [Process Control \(8\)](#) [Risk Management \(0\)](#)

**Workitems - Process Control**

[Change Query](#) [Define New Query](#) [Personalize](#)

View: \* [Standard View] Print Version Export

Subject	Organization	Regulation	Status	Due Date	Created On	Object Name	Created By
<a href="#">Perform Disclosure Survey: Control Disclosure Survey_Q3 2023</a>	TNOW-US		Ready	16.10.2023	09.10.2023 16:09:15		Karthika G

**Figure 9.26** Perform Disclosure Survey Work Item in the Work Inbox

**Perform Disclosure Survey: Control Disclosure Survey\_Q3 2023**

Save Close Send for Review

Regulation SOX Status In Process

**Evaluation** Disclosure Attachments and Links

**Controls to be Evaluated**

Object	Entity	Description	Subprocess	Organization	Frequency	Survey Status
Changes to asset master data	Control	Changes to asset master data	Fixed Assets	TNOW-US	Monthly	
FA Account Determination Configuration	Control	Only valid changes are made to the account determination configuration to ensure accurate recording of depreciation expense to the correct general ledger account	Fixed Assets	TNOW-US	Monthly	

Surveys Ad Hoc Issues

[Survey Attachments and Links](#)

**Questions**

Question	Answer	Comments
Is the control being operated as per the policy expectations?	Yes	<a href="#">Add Comment</a>

Overall Comments:

**Figure 9.27** Evaluation Tab in Disclosure Survey

**Perform Disclosure Survey: Control Disclosure Survey\_Q3 2023**

Save Close Send for Review

Regulation SOX Status In Process

Evaluation **Disclosure** Attachments and Links

[Survey Attachments and Links](#)

**Questions**

Question	Answer	Comments
Are there any issues in the control environment which needs to be addressed?		<a href="#">Add Comment</a>

Overall Comments:

Yes

No

N/A

**Figure 9.28** Option to Respond to the Survey in the Disclosure Tab

**Perform Disclosure Survey: Control Disclosure Survey\_Q3 2023**

Save Close Send for Review

Regulation SOX Status In Process

**Evaluation** Disclosure Attachments and Links

**Controls to be Evaluated**

Object	Entity	Description	Subprocess	Organization	Frequency	Survey Status
Changes to asset master data	Control	Changes to asset master data	Fixed Assets	TNOW-US	Monthly	●
FA Account Determination Configuration	Control	Only valid changes are made to the account determination configuration to ensure accurate recording of depreciation expense to the correct general ledger account	Fixed Assets	TNOW-US	Monthly	●

Surveys **Ad Hoc Issues**

**Issues**

Create Open Copy Refresh List

Name	Priority	Owner	Status	Reported by	Reported Date	Attachments

**Figure 9.29** Option to Report Ad Hoc Issue in Disclosure Survey

**Ad Hoc Issue:**

[Submit](#) [Save Draft](#)

Status Draft Created By DRISHTI Created On 09.10.2023 Updated By Updated On

[Issue Details](#) [Regulation](#) [Attachments and Links](#)

\* Name: Capitalization process is not streamlined

\* Description: Capitalization process is not streamlined

\* Priority: High

Object Type: Control

Object Name: Changes to asset master data [Open](#)

Owner: DRISHTI

Source: Inspection

\* Issue Date: 09.10.2023

Due Date: 16.10.2023

Audit Trail: [Audit Trail](#)

**Notes**

[Add Note](#)

**Figure 9.30** Ad Hoc Issue Reporting Screen

**Active Queries**

Workitems [All \(90\)](#) [Access Management \(0\)](#) [Process Control \(90\)](#) [Risk Management \(0\)](#)

**Workitems - Process Control**

[Change Query](#) [Define New Query](#) [Personalize](#)

View: \* [Standard View] Print Version Export

Subject	Organization	Regulation	Status	Due Date	Created On	Object Name	Created By
<a href="#">Review Disclosure Survey: Control Disclosure Survey_Q3 2023</a>	TNOW-US	SOX	Ready	16.10.2023	09.10.2023 18:25:46		Karthika G

**Figure 9.31** Option for the Reviewer to Access Disclosure Survey Work Inbox Item

**Review Disclosure Survey: Control Disclosure Survey\_Q3 2023**

Save Close Check History **Finish** ?

Regulation SOX Status In Process

**Evaluation** Disclosure Attachments and Links

**Controls to be Evaluated**

Object	Entity	Description	Subprocess	Organization	Frequency	Survey Status
<a href="#">Changes to asset master data</a>	Control	Changes to asset master data	Fixed Assets	TNOW-US	Monthly	
<a href="#">FA Account Determination Configuration</a>	Control	Only valid changes are made to the account determination configuration to ensure accurate recording of depreciation expense to the correct general ledger account	Fixed Assets	TNOW-US	Monthly	

**Figure 9.32** Finish Button in Review Disclosure Survey

Change View "Maintain Issue Types for Sign-Off": Overview

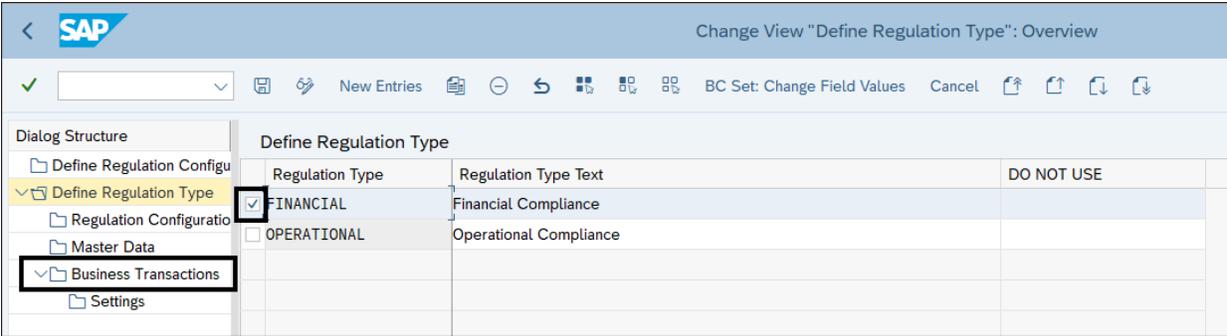
Maintain Issue Types for Sign-Off

Ca...	Category	Text	Sign-Off	Priority
<input type="checkbox"/>	G_AS CD	Control Design Assessment	<input checked="" type="checkbox"/>	Low
<input type="checkbox"/>	G_AS CE	Self-Assessment	<input checked="" type="checkbox"/>	Low
<input type="checkbox"/>	G_AS MCOU	Assessment of Indirect Entity-Level Control	<input checked="" type="checkbox"/>	Low
<input type="checkbox"/>	G_AS PD	Assessment of Subprocess Design	<input checked="" type="checkbox"/>	Low
<input type="checkbox"/>	G_TE CO	Automated Test of Effectiveness	<input checked="" type="checkbox"/>	Low
<input type="checkbox"/>	G_TE MO	Automated Monitoring	<input type="checkbox"/>	Low
<input type="checkbox"/>	G_TE MTOU	Test of Indirect Entity-Level Control	<input checked="" type="checkbox"/>	Low
<input type="checkbox"/>	G_TE TE	Manual Test of Effectiveness	<input checked="" type="checkbox"/>	Low

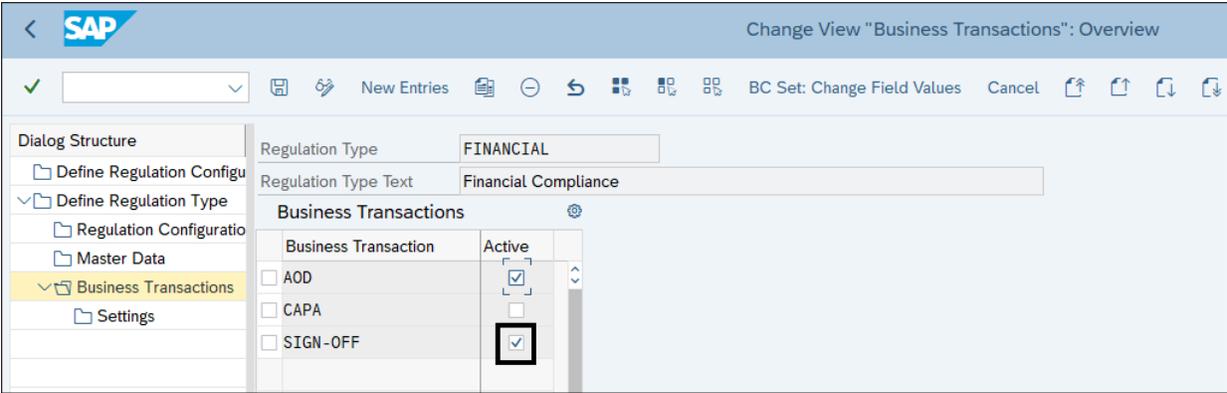
**Figure 9.33** Configuration of Maintain Issue Types Options for Sign-Off

Organization: ABC India Pvt Ltd										
Parent Organization: ABC International Ltd					ID: 50001226					
Timeframe: Year 2023					Effective Date: 01.01.2023					
K	General	Subprocess	Indirect Entity-Level Controls	Regulations	Policies	Objectives	Key Risk Indicators	Units of Measure	Risk Appetite	
* Name:		ABC India Pvt Ltd					* Valid From:		01.01.2023	
Description:							* Valid To:		31.12.9999	
							* Currency:		INR	
							Average Cost Per Control:			
							Country:			
							State:			
Subject to Sign-Off:		<input checked="" type="radio"/> Yes		<input type="radio"/> No						
Shared Services Provider:		<input type="radio"/> Yes		<input checked="" type="radio"/> No						
Deficiency Analysis Flag:		<input type="radio"/> Yes		<input checked="" type="radio"/> No						
In Scope:		<input type="radio"/> Yes		<input checked="" type="radio"/> No						
Org. Level System Parameter:										

**Figure 9.34** Sign-Off Settings at the Organization Level



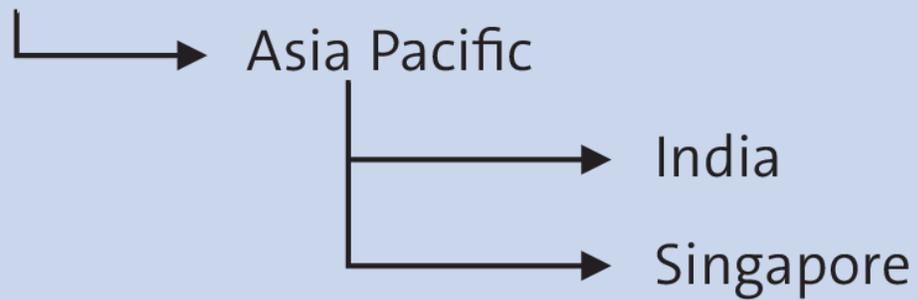
**Figure 9.35** Option to Access Business Transactions for a Regulation Type



**Figure 9.36** Option to Activate Sign-Off for a Regulation Type

# Organization Hierarchy

ABC International Ltd.



**Figure 9.37** Sample Organization Hierarchy

**Planner**

### Copy Plan

Plan Activity Perform Sign-Off Period Quarter 4 2023

1 2 3 4 5  
 Enter Plan Details Select Regulation **Select Organizations** Review Confirmation

⚠ Corporate Test is not subject to sign-off  
 ⚠ Corporate Electric Power is not subject to sign-off

#### Organizations

Show: ALL Expand All Collapse All Description

Organization	Subject to Sign-Off	Valid from	Valid to
▼ ABC International Ltd	X	01.01.2023	31.12.9999
ABC India Pvt Ltd	X	01.01.2023	31.12.9999
▼ Electric Power		28.07.2023	31.12.9999
Power Generation		01.01.2023	31.12.9999
▼ Test		01.01.2023	31.12.9999
Tnow Basis		01.01.2022	31.12.9999

Previous Next Cancel Finish Activate Plan

**Figure 9.38** Review Organizations That Are Subject to Sign-Off

**Active Queries**

Workitems [All \(91\)](#) [Access Management \(0\)](#) [Process Control \(91\)](#) [Risk Management \(0\)](#)

**Workitems - Process Control**

[Change Query](#) [Define New Query](#) [Personalize](#)

View: \* [Standard View] Print Version Export

Subject	Organization	Regulation	Status	Due Date	Created On	Object Name	Created By
Sign-Off for Organizational Unit	ABC India Pvt Ltd	Sarbanes Oxley	Reserved	05.11.2023	10.10.2023 12:32:25	ABC India Pvt Ltd	SAIKRISHNA1

**Figure 9.39** Option for the Organization Owner to Access the Sign-Off Work Inbox Item

**Sign-Off: ABC India Pvt Ltd**

1 Review    2 Respond to Survey    3 Comment & Sign-Off    4 Complete

Sign-Off Period: Quarter 3 2023

< Previous    Next >    Cancel

1. Review Issues for ABC India Pvt Ltd:  
Total Issues: 1 ( In Process: 1 )

2. Review the Details of the Sign-Off for the Subordinated Organizations in Your Area of Responsibility.

**Sarbanes Oxley Monitor Sign-Off**

Organization	Subject to Sign-Off	Signed-Off by	Signed-Off on	Comments	Open Issues	All Issues	Documents
ABC India Pvt Ltd	Yes				1	1	0 Attachment

**Issues for ABC India Pvt Ltd** □ ×

**Issues List**

Evaluation Type	Issue	Priority	Status
Automated Monitoring Issue	TNDCLNT100 : Monitor changes to the configuration duplicate invoice check	High	Submitted

Close

**Figure 9.40** Option to Review the Details of Issues Reported in the Organization

**Sign-Off: ABC India Pvt Ltd**

1 2 3 4  
Review Respond to Survey Comment & Sign-Off Complete

Sign-Off Period Quarter 3 2023

< Previous Next > Cancel

**Questions**

No	Question	Comments	Answer
1	Are you aligned with the assessments and related issues reported?		<input type="text" value=" "/> Yes No N/A

**Figure 9.41** Option to Respond to the Sign-Off Survey

**Sign-Off: ABC India Pvt Ltd**

1 Review   
 2 Respond to Survey   
 3 Comment & Sign-Off   
 4 Complete

---

Sign-Off Period: Quarter 3 2023

**Note:**

Note that by performing sign-off, you certify that operational internal controls are implemented within the organizations mentioned above. Furthermore, these and any subordinate organizations not relevant for sign-off are closed automatically, after which they cannot be changed.

You are required to comment on any open issues designated as relevant for sign-off. You enter your comment in the comment field.

You confirm sign-off by choosing *Sign-Off*. To terminate sign-off, choose *Cancel*.

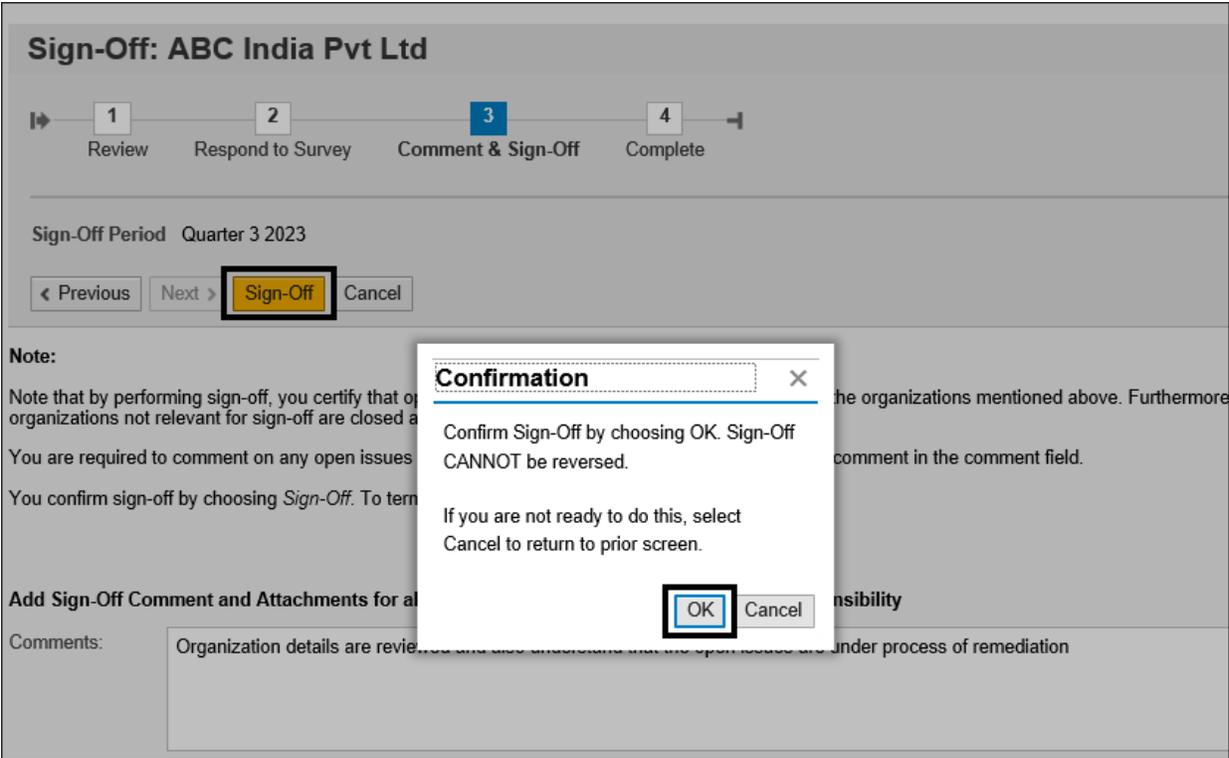
**Add Sign-Off Comment and Attachments for all Open Issues within Your Entire Area of Responsibility**

Comments:

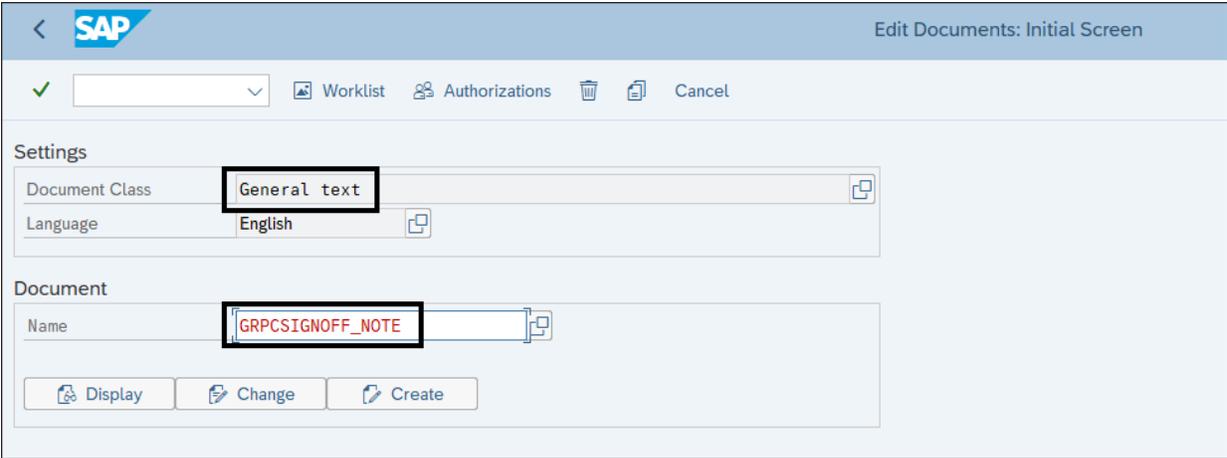
**Attachments**

Type	Title	Version	File Size	File Type	Added On	Added By	Attachment Ty...

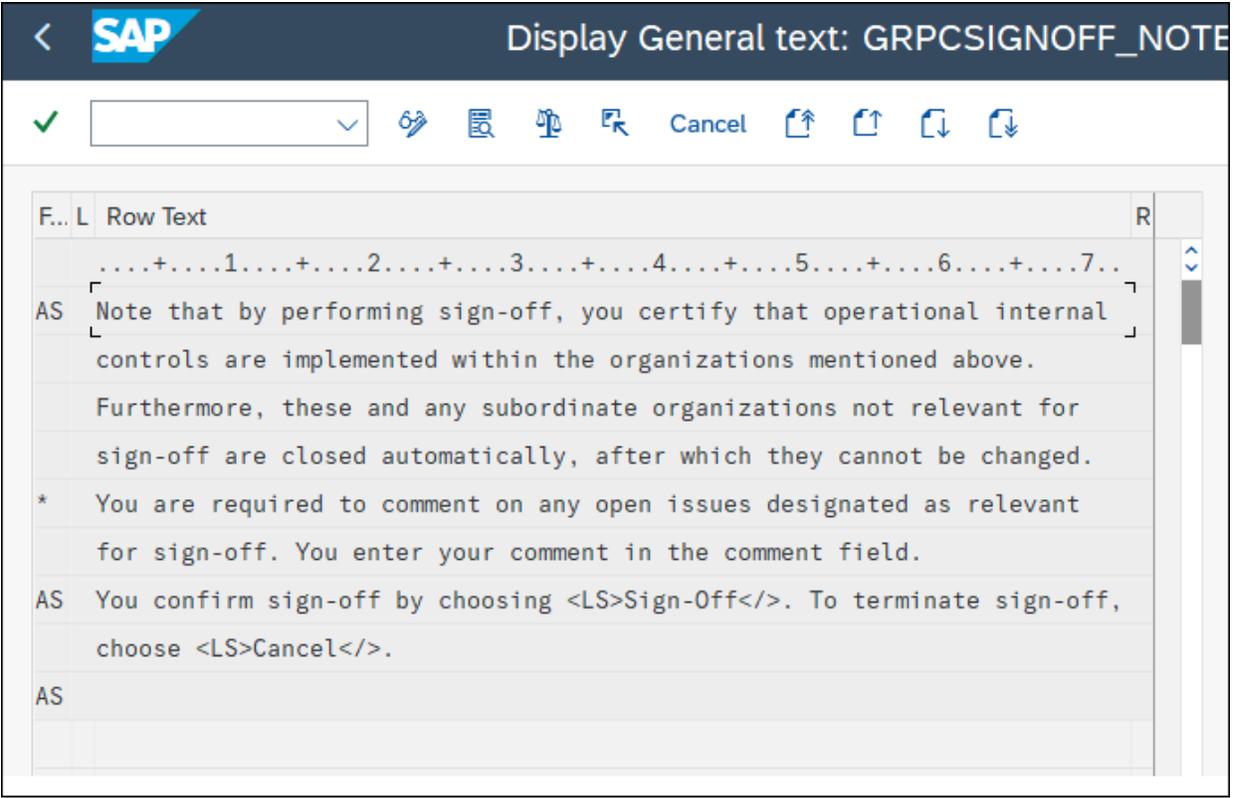
**Figure 9.42** Option to Enter Comments and Add Attachments before Providing Sign-Off



**Figure 9.43** Sign-Off Confirmation Screen



**Figure 9.44** Transaction SE61: Document Class Maintenance Screen



**Figure 9.45** Option to Modify the Sign-Off Note

**Sign-Off: ABC International Ltd**

1 Review   
 2 Respond to Survey   
 3 Comment & Sign-Off   
 4 Complete

---

Sign-Off Period Year 2023

1. Review Issues for ABC International Ltd:  
 Total Issues: 0 ( In Process: 0 )

2. Review the Details of the Sign-Off for the Subordinated Organizations in Your Area of Responsibility.

**Sarbanes Oxley Monitor Sign-Off**

Organization	Subject to Sign-Off	Signed-Off by	Signed-Off on	Comments	Open Issues	All Issues	Documents
<input type="checkbox"/> ABC International Ltd	Yes	(Missing);(Missing)			0	0	0 Attachment
<input type="checkbox"/> ABC India Pvt Ltd	Yes	SAIKRISHNA1	07.10.2023	Organization details are reviewed and also understand that the open issues are under process of remediation	2	2	0 Attachment

**Figure 9.46** Review Screen: Corporate Owner

**Organizations**

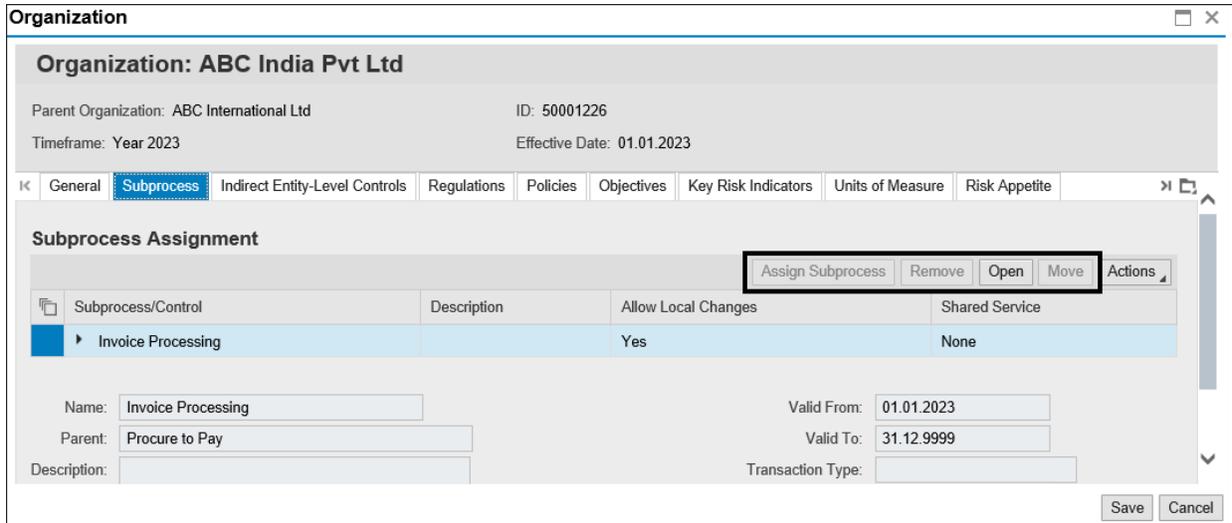
View: Standard Hierarchy

Show Year 2023 Apply Advanced Open Add Remove Actions

Name
Organization Hierarchy
ABC International Ltd
ABC India Pvt Ltd
Electric Power
Test
Test Org
TNOW-US

⚠ Data cannot be changed due to the sign-off lock until 20231231

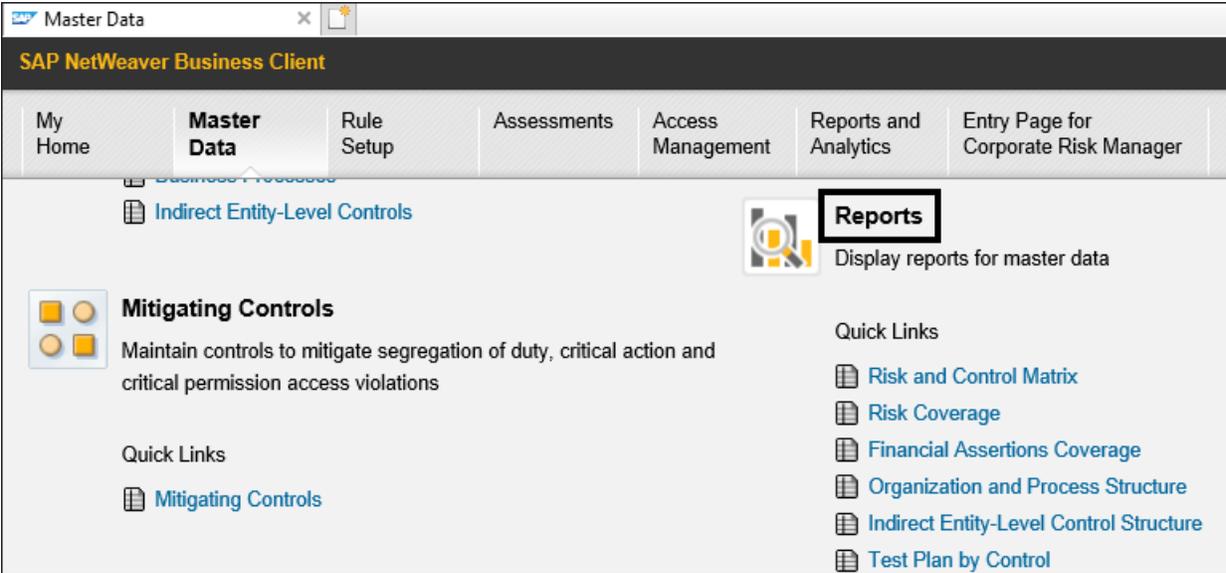
**Figure 9.47** Lock Message When the Signed-Off Organization Is Accessed



**Figure 9.48** Organization Screen Elements in Display Mode

Monitor Sign-Off					
Show:	Year	2023	Sarbanes Oxley	Apply	Actions
	Organization	Subject to Sign-Off	Signed-Off by	Signed-Off on	Documents
▼	ABC International Ltd	Yes	Karthika G;(Missing)	07.10.2023	0 Attachment
	ABC India Pvt Ltd	Yes	SAIKRISHNA1	07.10.2023	0 Attachment
▼	Electric Power	No			
	Power Generation	No			
▼	Test	No			
	Tnow Basis	No			

**Figure 9.49** Monitor Sign-Off Report



**Figure 10.1** Master Data Reports

Risk and Control Matrix						Personalize	
A tabular report showing the master data of risk and control matrix							
▶ Selection							
<b>Results</b>							
						Print or Export	
Organization	Process	Subprocess	Risk	Control	Owner (Control)		
ABC India Pvt Ltd	Procure to Pay	Invoice Processing		<a href="#">Monitor Duplicate Invoice Check Config</a>	SAIKRISHNA1		
Power Ltd	Record to Report	GL Account Maintenance		<a href="#">Maintenance of GL Accounts</a>	SAIKRISHNA1		
Power Generation	Procure to Pay	Invoice Processing		<a href="#">Monitor Duplicate Invoice Check Config</a>	Sandeep		
Power Generation	Procure to Pay	Maintain Vendor Master Data	Improperly trained staff	<a href="#">Vendor master changes</a>			
Power Generation	Procure to Pay	Maintain Vendor Master Data		<a href="#">Duplicate invoice parameter changes</a>			
Power Generation	IT General Controls	System Parameters		<a href="#">Monitor Password Parameter</a>	SAIKRISHNA1		
Power Generation	IT General Controls	Access Management		<a href="#">Monitor users with SAP_All access</a>	Sandeep		

**Figure 10.2** Risk and Control Matrix

Risk Coverage <span style="float: right;">Personalize</span>					
Tabular report showing process/risk catalog by organization					
▶ Selection					
<b>Results</b>					
					Print or Export 
Organization	Subprocess	Risk Source	Risk	Risk Level	Control
Power Generation	Maintain Vendor Master Data	Inherent to Subprocess	Improperly trained staff		Vendor master changes
Power Generation	Maintain Vendor Master Data	Account Group: Accounts Payable ( Account Group Assertion: Completeness, Presentation and Disclosure, Completeness, Presentation and Disclosure)	Incorrect interpretation of Acctg. rules		
Power Generation	Maintain Vendor Master Data	Control Objective: Accurate Accounting Records	Global consolidation process		
Tnow Basis	Maintain Vendor Master Data	Inherent to Subprocess	Improperly trained staff		Vendor master changes
Tnow Basis	Maintain Vendor Master Data	Account Group: Accounts Payable ( Account Group Assertion: Completeness, Presentation and Disclosure, Completeness, Presentation and Disclosure)	Incorrect interpretation of Acctg. rules		
Tnow Basis	Maintain Vendor Master Data	Control Objective: Accurate Accounting Records	Global consolidation process		

**Figure 10.3** Risk Coverage Report

Financial Assertions Coverage						Personalize	
Tabular report showing Account Group Assertion by organization							
▶ Selection							
Results							
						Print or Export	
Regulation	Organization	Subprocess	Account Group	Assertion	Control		
Sarbanes Oxley	Power Generation	Maintain Vendor Master Data	Accounts Payable	Completeness			
Sarbanes Oxley	Power Generation	Maintain Vendor Master Data	Accounts Payable	Existence Or Occurrence			
Sarbanes Oxley	Power Generation	Maintain Vendor Master Data	Accounts Payable	Presentation and Disclosure			
Sarbanes Oxley	Power Generation	Maintain Vendor Master Data	Accounts Payable	Rights and Obligations			
Sarbanes Oxley	Power Generation	Maintain Vendor Master Data	Accounts Payable	Valuation or Allocation			
Sarbanes Oxley	Tnow Basis	Maintain Vendor Master Data	Accounts Payable	Completeness	Monitor maintenance of vendor master		
Sarbanes Oxley	Tnow Basis	Maintain Vendor Master Data	Accounts Payable	Existence Or Occurrence			
Sarbanes Oxley	Tnow Basis	Maintain Vendor Master Data	Accounts Payable	Presentation and Disclosure			
Sarbanes Oxley	Tnow Basis	Maintain Vendor Master Data	Accounts Payable	Rights and Obligations			
Sarbanes Oxley	Tnow Basis	Maintain Vendor Master Data	Accounts Payable	Valuation or Allocation			

**Figure 10.4** Financial Assertion Coverage Report

Organization and Process Structure				
A hierarchical report which shows the overall organization and process structure				
▶ Selection				
<b>Result</b>				
<input type="button" value="Expand All"/>				
Hierarchy	Object Type	Owner	Significance	Assigned Regulations (Control)
▼ <input type="checkbox"/> ABC International Ltd	Organization			
▼ <input type="checkbox"/> ABC India Pvt Ltd	Organization			
▼  Process Hierarchy	Process			
▼  Procure to Pay	Process			
▼  Invoice Processing	Subprocess			
Monitor Duplicate Invoice Check Config	Control	SAIKRISHNA1	Key Control	Sarbanes Oxley
▼ <input type="checkbox"/> Power Ltd	Organization			
▼  Record to Report	Process			
▼  GL Account Maintenance	Subprocess			
Maintenance of GL Accounts	Control	SAIKRISHNA1		Sarbanes Oxley

**Figure 10.5** Organization and Process Structure

Change Analysis					
A summary report that chronologically shows all object changes and details, that occurred within specified time period					
<a href="#">▶ Selection</a>					
Results					
Object Name	Object Type	Change Type	Field Changed	Old value	New value
TNOW	Organization	Modify	Valid from (Organization)	20210625	20230101
TNOW	Organization	Modify	Valid to (Organization)	20221231	99991231
TNOW	Organization	Modify	Currency (Organization)		ETB
TNOW	Organization	Modify	Validate iELC Effectiveness Test		Use Central Setting
TNOW	Organization	Modify	Validate iELC Assessment		Use Central Setting
TNOW	Organization	Modify	Retest iELC Effectiveness Test		Use Central Setting
TNOW	Organization	Modify	Retest iELC Assessment		Use Central Setting
TNOW	Organization	Modify	Organization	TNOW	Test

**Figure 10.6** Change Analysis Report

Data Source Business Rule assignment						Personalize		
Data Source Business Rule Assignment								
▶ Selection								
Result								
						Expand All	Collapse All	Print or Export
Hierarchy	Object Type	Data Source ID	Data Source	Data Source Description	Connection Type Key			
▼ TEST_MONITOR_CRITICAL_PROFILE	Data Source	50000723	TEST_MONITOR_CRITICAL_PROFILE	Data source is related to critical profiles monitoring	SAP			
▼ TEST_MONITOR_CRITICAL_PROFILE	Business Rule	50000723	TEST_MONITOR_CRITICAL_PROFILE	Data source is related to critical profiles monitoring	SAP			
20230314112956	BR Version	50000723	TEST_MONITOR_CRITICAL_PROFILE	Data source is related to critical profiles monitoring	SAP			
20230314113037	BR Version	50000723	TEST_MONITOR_CRITICAL_PROFILE	Data source is related to critical profiles monitoring	SAP			
20230314113051	BR Version	50000723	TEST_MONITOR_CRITICAL_PROFILE	Data source is related to critical profiles monitoring	SAP			
▼ Monitor program changes for custom tcode	Data Source	50000738	Monitor program changes for custom tcode	Monitor if a program for a custom transaction is changed without informing Security. Table TSTC captures changes to transaction codes. Report exception if program is	SAP			

**Figure 10.7** Data Source Business Rule Assignment Report

Monitoring Issue Status						Personaliz	
Tabular report by subprocess showing all issues generated and their current status							
<a href="#">Selection</a>							
Results							
						Print or Export	
Organization	Subprocess	Control	Issue	Description (Issue)	Issue Processor		
ABC India Pvt Ltd	Invoice Processing	<a href="#">Monitor Duplicate Invoice Check Config</a>	<a href="#">TNDCLNT100 : Monitor changes to the configuration duplicate invoice check</a>	2 High 2 Medium 0 Low 0			
ABC India Pvt Ltd	Invoice Processing	<a href="#">Monitor Duplicate Invoice Check Config</a>	<a href="#">TNDCLNT100 : Monitor changes to the configuration duplicate invoice check</a>	3 High 3 Medium 0 Low 0	SAIKRISHNA1		
Power Ltd	GL Account Maintenance	<a href="#">Maintenance of GL Accounts</a>	<a href="#">TGDCL100 : Monitor maintenance of GL Account</a>	1 High 1 Medium 0 Low 0	SAIKRISHNA1		
Power Ltd	GL Account Maintenance	<a href="#">Maintenance of GL Accounts</a>	<a href="#">TGDCL100 : Monitor maintenance of GL Account</a>	1 High 1 Medium 0 Low 0	SAIKRISHNA1		
Power Generation	Invoice Processing	<a href="#">Monitor Duplicate Invoice Check Config</a>	<a href="#">TNDCLNT100 : Monitor changes made to duplicate invoice check</a>	4 High 4 Medium 0 Low 0	Sandeep		
Power Generation	Invoice Processing	<a href="#">Monitor Duplicate Invoice Check Config</a>	<a href="#">TNDCLNT100 : Monitor changes made to duplicate invoice check</a>	4 High 4 Medium 0 Low 0			

**Figure 10.8** Monitoring Issue Status Report

Monitoring Remediation Status <span style="float: right;">Personalize</span>					
Tabular report showing the status of remediation plans by monitoring control					
<a href="#">Selection</a>					
Results					
Organization	Subprocess	Control	Remediation Plan	Status (Remediation Plan)	Remediator
Power Ltd	GL Account Maintenance	<a href="#">Maintenance of GL Accounts</a>	<a href="#">Update the configuration of GL</a>	Closed	Karthika G
Power Ltd	GL Account Maintenance	<a href="#">Maintenance of GL Accounts</a>	<a href="#">Update the GL Account Configuration</a>	Closed	Karthika G
Power Generation	Invoice Processing	<a href="#">Monitor Duplicate Invoice Check Config</a>	<a href="#">Gather the evidences of approval</a>	Closed	SAIKRISHNA SAI
Power Generation	Access Management	<a href="#">Monitor users with SAP_All access</a>	<a href="#">Remove access to non-relevant users</a>	Closed	SAIKRISHNA1

**Figure 10.9** Monitoring Remediation Status Report

Evaluation Results by Organization <span style="float: right;">Personalized</span>						
A hierarchical report which shows the list of organizations and their overall assessment ratings						
▸ Selection						
<b>Result</b>						
				Expand All	Collapse All	Print or Export
Hierarchy	Object Type	Rating (Symbol)	Control Design Rating (Sym)	Self-Assessment Rating (Sym)	Owner	
▼ <input type="checkbox"/> Test	Organization					
▼  Process Hierarchy	Process					
▼  Procure to Pay	Process					
▼  Invoice Processing	Subprocess	Significantly Deficient	Significantly Deficient			
Monitor Duplicate Invoice Check Config	Control	Significantly Deficient	Significantly Deficient		DRISHTI	
▼  IT General Controls	Process					
▼  Access Management	Subprocess	Significantly Deficient	Significantly Deficient			
Monitor users with SAP_All access	Control	Significantly Deficient	Significantly Deficient		DRISHTI	

**Figure 10.10** Evaluation Results by Organization

Assessment Survey Details <span style="float: right;">Personalize...</span>					
Tabular report showing the assessment survey details of the scheduled surveys					
Results					
Organization	Control	Control Design Rating (Sym)	Survey Name	Question	Answer
Test	Monitor Duplicate Invoice Check Config	Significantly Deficient			
Test	Monitor Duplicate Invoice Check Config		Quarterly design assessment	Are all the company codes in scope of the control are accurate and valid?	No, new company
Test	Monitor Duplicate Invoice Check Config		Quarterly design assessment	Is the design of the control meeting the standards of ICS of the organization?	No
Test	Monitor users with SAP_All access	Significantly Deficient			
Test	Monitor users with SAP_All access		Survey for Control Design _01	Is the design of the control meeting the standards of ICS of the organization?	No
Test	Self Assignment of Role	Adequate			
Test	Self Assignment of Role		critical basis access	need access to critical tcodes related to basis?	Yes
Tnow Basis	Self Assignment of Role	Significantly Deficient			
Tnow Basis	Self Assignment of Role		Survey for Control Design _01	Is the design of the control meeting the standards of ICS of the organization?	No
Tnow Basis	Global Accounting Manual	Significantly Deficient			
Tnow Basis	Global Accounting Manual		Survey for Control Design _01	Is the design of the control meeting the standards of ICS of the organization?	No

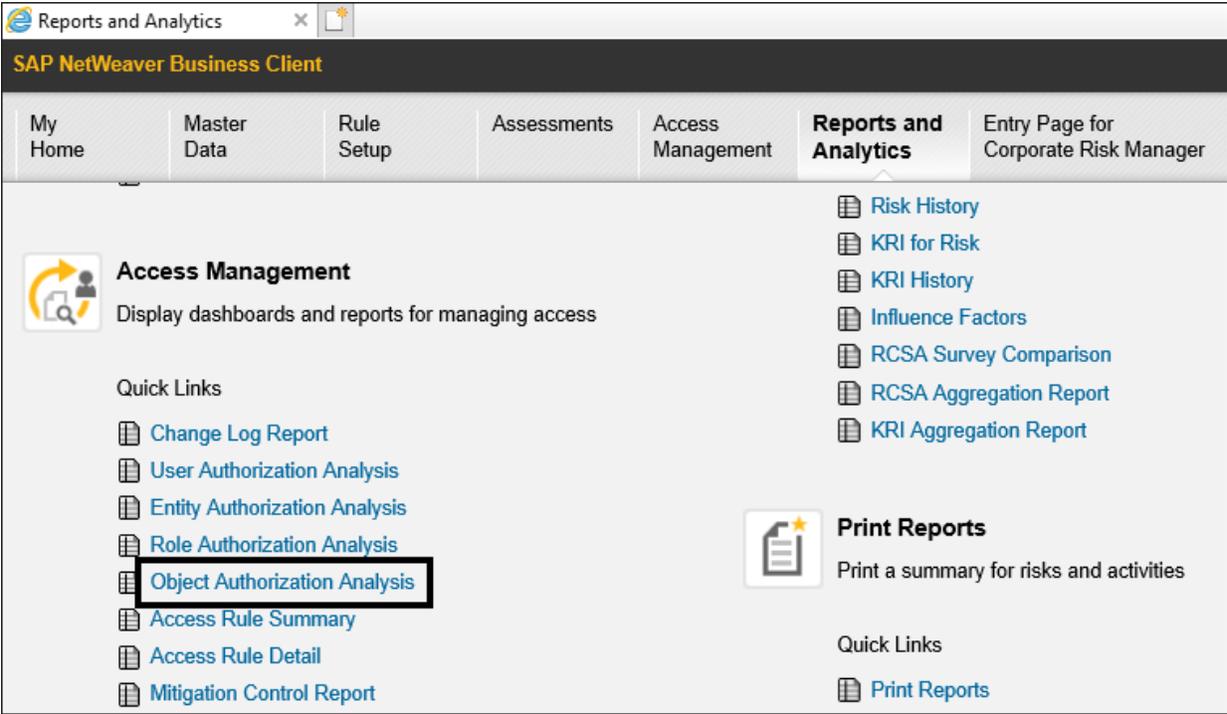
**Figure 10.11** Assessment Survey Details Report

Issue Status <span style="float: right;">Personalize</span>					
Tabular report by subprocess showing all issues generated and their current status					
▶ Selection					
Results <span style="float: right;">Print or Export </span>					
Organization	Control	Issue	Issue Type	Duration in Days	Issue Status
Test	Monitor Duplicate Invoice Check Config	<a href="#">New Company codes are not in scope of the control</a>	Control Design Assessment Issue	1	Closed
Test	Monitor Duplicate Invoice Check Config	<a href="#">Duplicate Inv Checks</a>	Control Design Assessment Issue	122	In Process
Test	Monitor Duplicate Invoice Check Config	<a href="#">Remediate Issue</a>	Control Design Assessment Issue	53	In Process
Test	Monitor Duplicate Invoice Check Config	<a href="#">New Company Codes are not in scope of the control</a>	Control Design Assessment Issue	1	Closed
Test	Monitor Duplicate Invoice Check Config	<a href="#">New company codes are not in scope of the control</a>	Control Design Assessment Issue	1	Closed
Test	Monitor Duplicate Invoice Check Config	<a href="#">New Company Codes are not in scope of the control</a>	Control Design Assessment Issue	46	In Process
Test	Monitor users with SAP_All access	<a href="#">New company codes are not in scope of the coor</a>	Control Design Assessment Issue	47	Review
Tnow Basis	Self Assignment of Role	<a href="#">New company codes are not in scope of the control</a>	Control Design Assessment Issue	47	Review
Tnow Basis	Global Accounting Manual	<a href="#">New company codes are not in scope of the coor</a>	Control Design Assessment Issue	48	Review

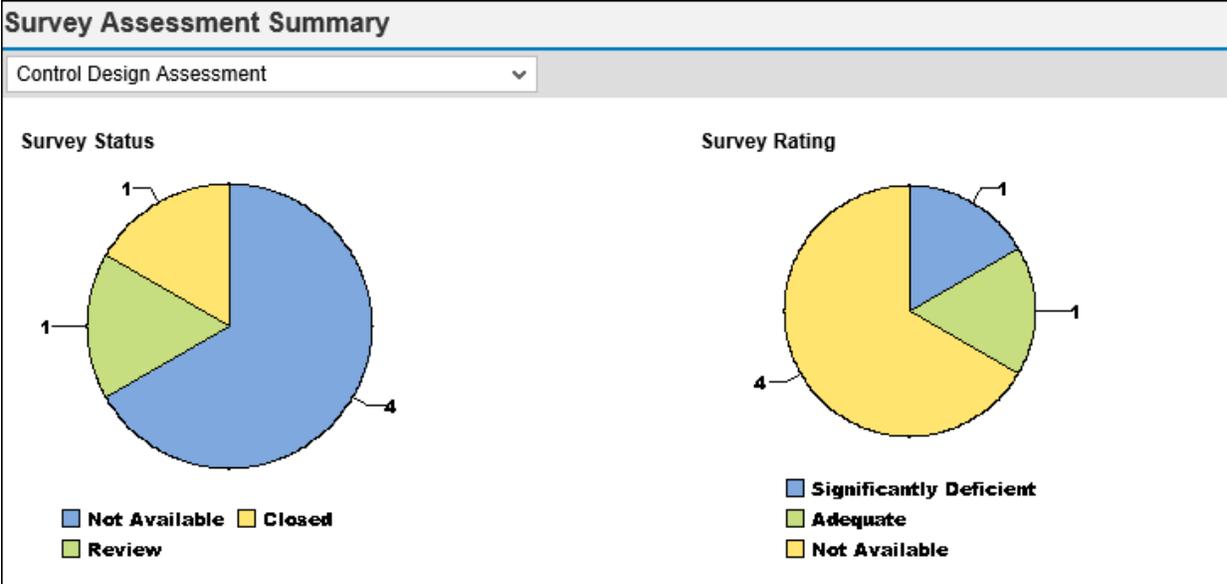
**Figure 10.12** Issue Status Report

Remediation Status						Personalize...	
Tabular report showing the status of remediation plans by subprocess and control							
<a href="#">Selection</a>							
Results						Print or Export	
Control	Remediation Plan	Remediator	Reported by (Remediation Plan)	Status (Remediation Plan)	Duration (Remediation Plan)		
Monitor Duplicate Invoice Check Config	<a href="#">Duplicate Inv Checks</a>	Sandeep	Karthika G	Closed		1	
Monitor Duplicate Invoice Check Config	<a href="#">Duplicate Inv Checks</a>	Sandeep	Sandeep	Remediation Started		122	
Monitor Duplicate Invoice Check Config	<a href="#">Duplicate Inv Checks</a>	SAIKRISHNA1	Karthika G	Draft		53	
Monitor Duplicate Invoice Check Config	<a href="#">Duplicate Invoice Checks</a>	Sandeep	Karthika G	Closed		1	
Monitor Duplicate Invoice Check Config	<a href="#">Duplicate Inv Checks</a>	Karthika G	Karthika G	Closed		1	
Monitor Duplicate Invoice Check Config	<a href="#">Duplicate Inv Checks</a>	Sandeep	Karthika G	Resolved		1	

**Figure 10.13** Remediation Status Report



**Figure 10.14** Location to Access Reports and Analytics Reports



**Figure 10.15** Evaluations Status Dashboard

Object Authorization Analysis <span style="float: right;">Personalize</span>					
Object Authorization Analysis					
▶ Selection					
Results <span style="float: right;">Print or Export </span>					
Object Type	Object Name	Role ID	User ID	Role	Start Date
Organization	Power Generation	SAP_GRC_RM_API_ORG_OWNER	KARTHIKA	Organization Owner	20.08.2023
Organization	ABC International Ltd	SAP_GRC_RM_API_CEO_CFO	KARTHIKA	CEO/CFO	06.10.2023
Organization	ABC India Pvt Ltd	SAP_GRC_RM_API_ORG_OWNER	SAKRISHNA1	Organization Owner	06.10.2023
Control	Monitor_quantity_in_goods_receipt_or_inv	SAP_GRC_SPC_CRS_CTL_OWNER	DRISHTI	Cross Regulation Control Owner	12.09.2023
Control	Self Assignment of Role	SAP_GRC_SPC_CRS_CTL_OWNER	DRISHTI	Cross Regulation Control Owner	12.09.2023
Control	Monitor Password Parameter	SAP_GRC_SPC_CRS_CTL_OWNER	SAKRISHNA1	Cross Regulation Control Owner	28.05.2023
Control	Monitor Password Parameter	Z_SAP_GRC_SPC_CRS_REM_OWNER	SANDEEPL	Cross Regulation Remediation Owner	28.05.2023
Control	Global Accounting Manual	SAP_GRC_SPC_CRS_PRC_TESTER	SAKRISHNA1	Cross Regulation Control Tester	29.05.2023

**Figure 10.16** Object Authorization Analysis Report

**Risk and Control Matrix**

A tabular report showing the master data of risk and control matrix

Personalize

Personalize Fields

Report Personalization

Personalize General Reporting Settings

Print Settings

Selection

Selection variant: [ ] Delete Variant Save Variant...

\* Period: First Half of Year

\* Year: 2023

\* Report structure: Separate Regulation by Row

Regulation:  SOX  Companies Act  Sarbanes Oxley

Organization: [ ]

In Scope (Organiz... : All

Process: [ ]

Subprocess: [ ]

In Scope (Subproc... : All

Control: [ ]

Control Category: All

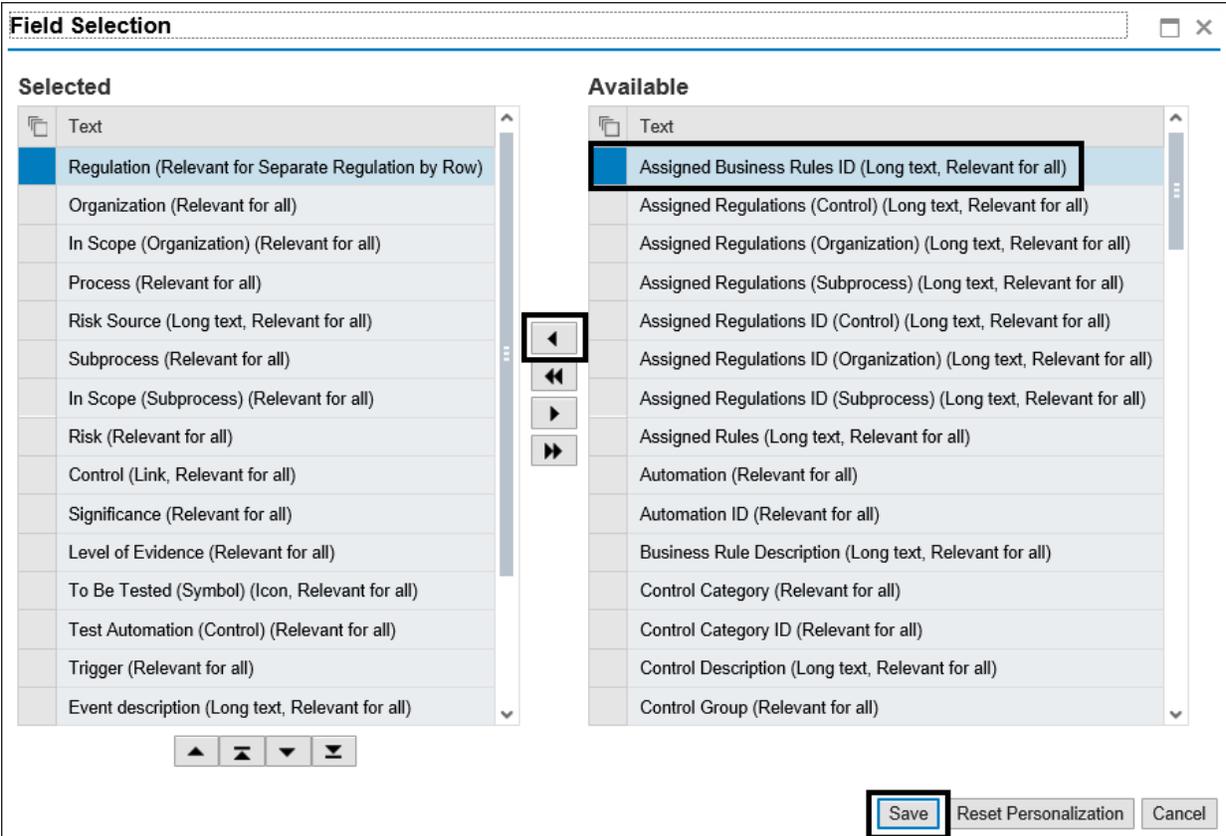
Significance: All

Level of Evidence: All

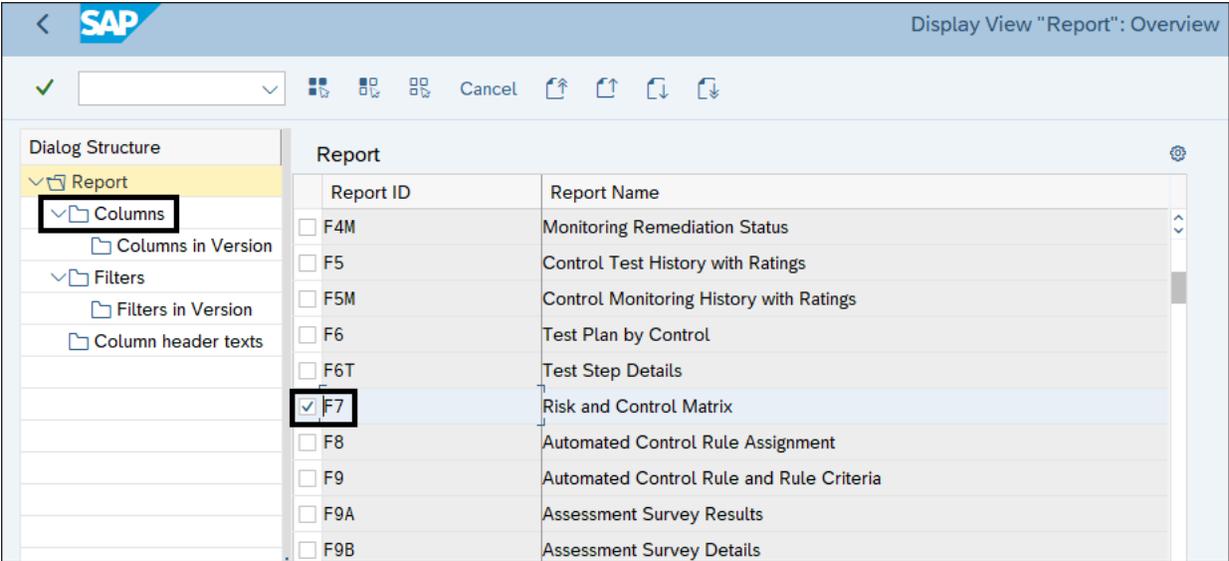
Long text:

Execution Method:  Generate Report Online  Generate Report in Background

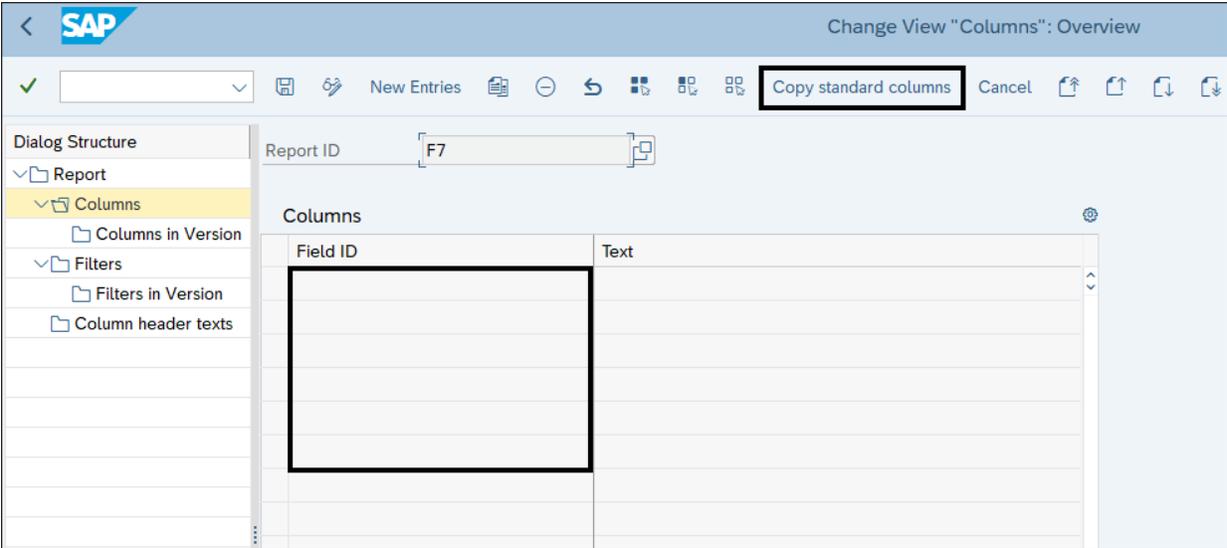
**Figure 10.17** Option to Access Personalize Fields



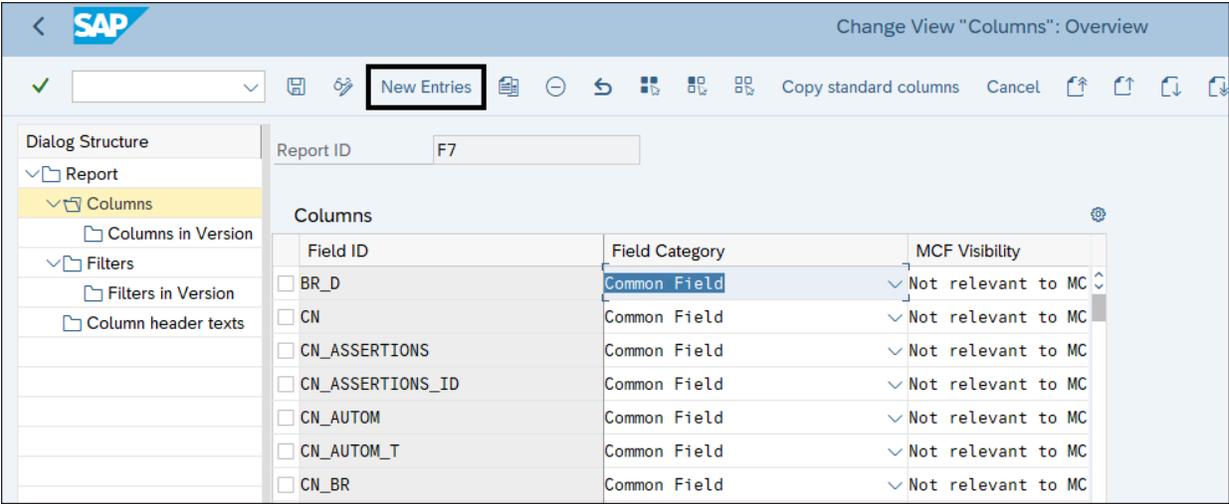
**Figure 10.18** Maintenance of Report Output Fields Using the Personalize Fields Option



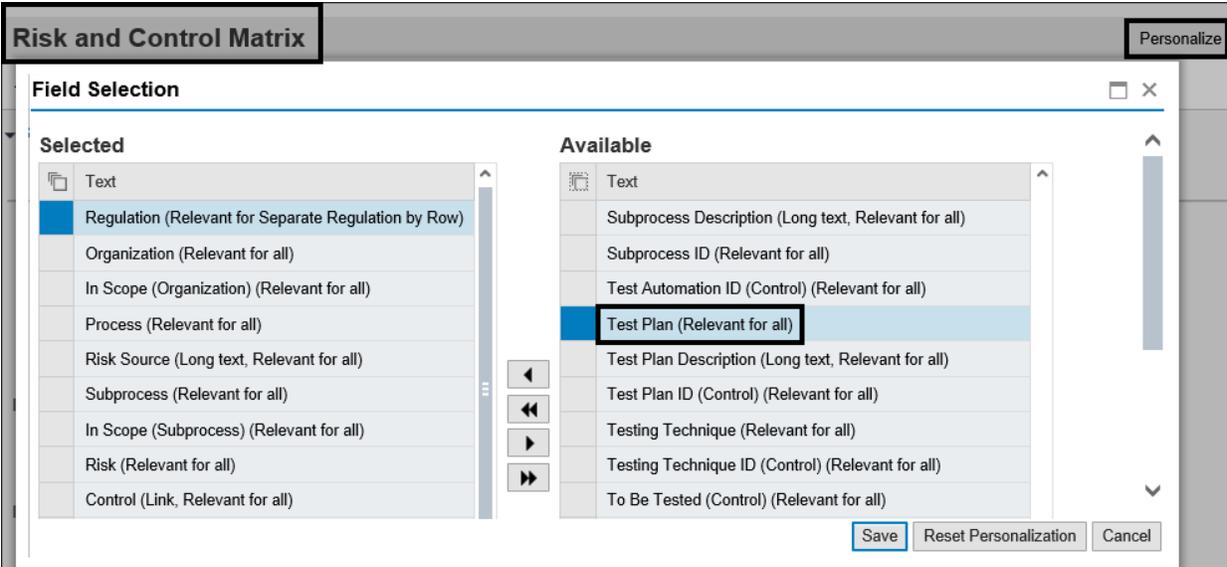
**Figure 10.19** Selection of Columns to Maintain from the Dialog Structure



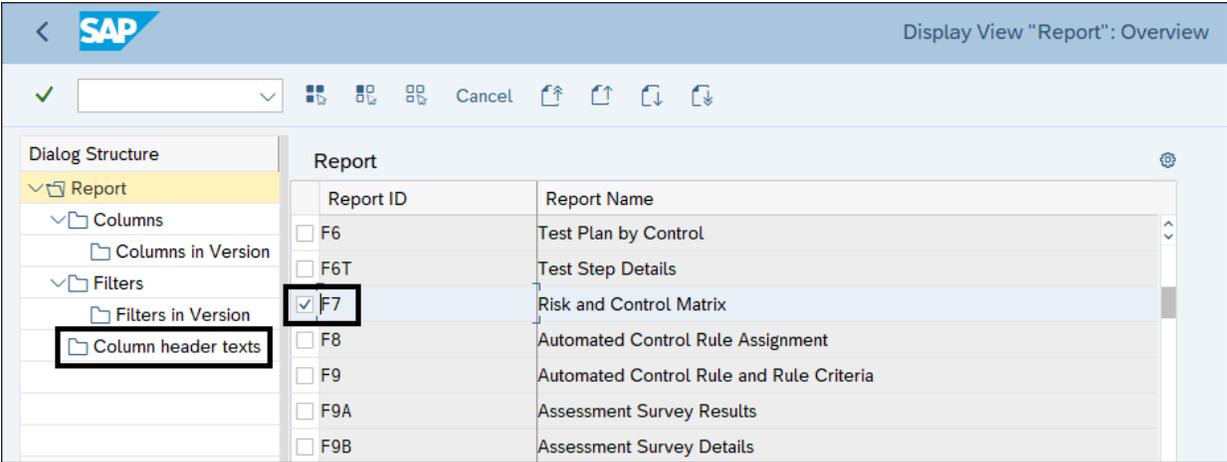
**Figure 10.20** Option to Populate Standard Columns in the Configuration



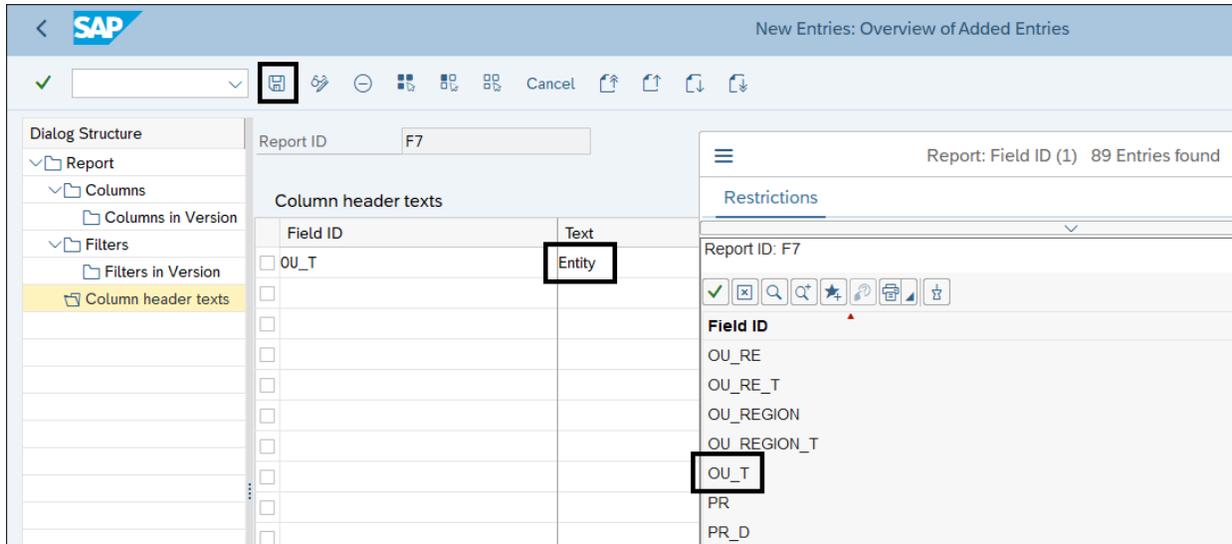
**Figure 10.21** Option to Add New Columns to the Report



**Figure 10.22** Review the Newly Added Field to the Report Structure



**Figure 10.23** Configuration to Update Column Header Texts



**Figure 10.24** Option to Update the Report Column Header Texts

Change View "Maintain Users Responsible for Entity": Overview

✓ [ ] New Entries More

Maintain Users Responsible for Entity

Entity ID	Rep. Area	Role
<input type="checkbox"/> ACTIVITY	RM Reports	▼ SAP_GRC_RM_API_ACTIVITY_OWNER
<input type="checkbox"/> CONTROL	PC Reports	▼ SAP_GRC_SPC_CRS_CTL_OWNER
<input type="checkbox"/> CORPORATE	RM Reports	▼ SAP_GRC_RM_API_CENTRAL_RM
<input type="checkbox"/> CORPORATE	PC Reports	▼ SAP_GRC_SPC_CRS_ICMAN
<input type="checkbox"/> LOSS_EVENT	RM Reports	▼ SAP_GRC_RM_OB_API_OPRISK_MNGR
<input type="checkbox"/> OPP	RM Reports	▼ SAP_GRC_RM_API_OPP_OWNER
<input type="checkbox"/> ORGUNIT	RM Reports	▼ SAP_GRC_RM_API_ORG_OWNER
<input type="checkbox"/> ORGUNIT	PC Reports	▼ SAP_GRC_SPC_GLOBAL_ORG_OWNER
<input type="checkbox"/> POLICY	RM Reports	▼ SAP_GRC_SPC_CRS_POLICY_OWNER
<input type="checkbox"/> POLICY	PC Reports	▼ SAP_GRC_SPC_CRS_POLICY_OWNER
<input type="checkbox"/> PROCESS	RM Reports	▼ SAP_GRC_SPC_GLOBAL_PRC_ADMIN
<input type="checkbox"/> PROCESS	PC Reports	▼ SAP_GRC_SPC_GLOBAL_PRC_ADMIN
<input type="checkbox"/> RISK	RM Reports	▼ SAP_GRC_RM_API_RISK_OWNER

**Figure 10.25** Configuration to Maintain Users Responsible for an Entity

**Risk and Control Matrix** Personalize

A tabular report showing the master data of risk and control matrix

▼ Selection

Selection variant:  Delete Variant Save Variant...

---

\* Period:

\* Year:

\* Report structure:

Regulation:  SOX  Companies Act  Sarbanes Oxley

Organization:  📄

In Scope (Organiz... :

Process:  📄

Subprocess:  📄

In Scope (Subproc... :

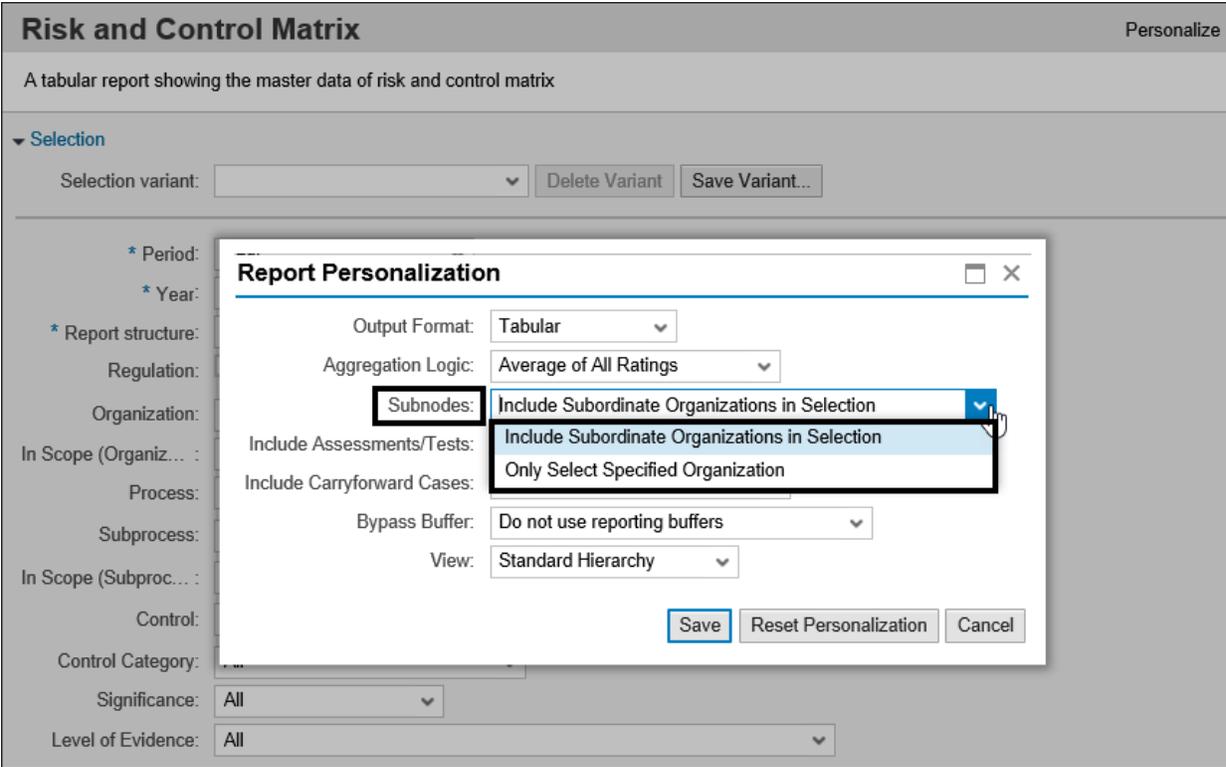
Personalize Fields

**Report Personalization**

Personalize General Reporting Settings

Print Settings

**Figure 10.26** Selection of the Report Personalization Option



**Figure 10.27** Maintenance of the Subnodes Option in Report Personalization

**Risk and Control Matrix** Personalize

A tabular report showing the master data of risk and control matrix

**Selection**

Selection variant:

\* Period: Year

\* Year: 2023

\* Report structure: Aggregate Regulations

Organization: **Power Ltd**

In Scope (Organiz... : All

Process:

Subprocess:

In Scope (Subproc... : All

**Report Personalization**

Output Format: Tabular

Aggregation Logic: Average of All Ratings

Subnodes: **Include Subordinate Organizations in Selection**

Include Assessments/Tests: Most Recent Assessments/Tests with Rating

Include Carryforward Cases: Include Carryforward Cases

Bypass Buffer: Do not use reporting buffers

View: Standard Hierarchy

**Results** Print or Export

Organization	Process	Subprocess	Risk	Control	Owner (Control)
<b>Power Ltd</b>	Record to Report	GL Account Maintenance		Maintenance of GL Accounts	SAIKRISHNA1
<b>Power Generation</b>	Procure to Pay	Invoice Processing		Monitor Duplicate Invoice Check Config	Sandeep
Power Generation	Procure to Pay	Maintain Vendor Master Data	Improperly trained staff	Vendor master changes	
Power Generation	Procure to Pay	Maintain Vendor Master Data		Duplicate invoice parameter changes	

**Figure 10.28** Results of the Include Subordinate Organization in Selection Option

**Risk and Control Matrix** Personalize

A tabular report showing the master data of risk and control matrix

▼ Selection

Selection variant:  Delete Variant

\* Period: Year

\* Year: 2023

\* Report structure: Aggregate Regulations

Organization: **Power Ltd**

In Scope (Organiz...): All

Process:

Subprocess:

In Scope (Subproc...): All

**Report Personalization**

Output Format: Tabular

Aggregation Logic: Average of All Ratings

Subnodes: **Only Select Specified Organization**

Include Assessments/Tests: Most Recent Assessments/Tests with Rating

Include Carryforward Cases: Include Carryforward Cases

Bypass Buffer: Do not use reporting buffers

View: Standard Hierarchy

Save Reset Personalization Cancel

**Results** Print or Export

Organization	Process	Subprocess	Risk	Control	Owner (Control)
<b>Power Ltd</b>	Record to Report	GL Account Maintenance		Maintenance of GL Accounts	SAKRISHNA1

**Figure 10.29** Results of the Only Select Specified Organization Option

### Evaluation Results by Organization

A hierarchical report which shows the list of organizations and their overall assessment ratings

▼ Selection

Selection variant:

\* Period:  ▼

\* Year:  ▼

\* Report structure:  ▼

Organization:

Process:

Subprocess:

Control:

Evaluation type:  Subprocess Design Assessment  Control Design Assessment  
 Self-Assessment  Effectiveness

Long text:

Execution Method:  Generate Report Online  Generate Report in Background

**Figure 10.30** Time Frame Filter while Executing the Reports

### Evaluation Results by Organization

A hierarchical report which shows the list of organizations and their overall assessment ratings

▼ Selection

Selection variant:  ▼

---

\* Period:  ▼

\* Year:  ▼

\* Report structure:  ▼

- Separate Regulation by Hierarchy
- Aggregate Regulations

Regulation:  es Oxley

Organization:

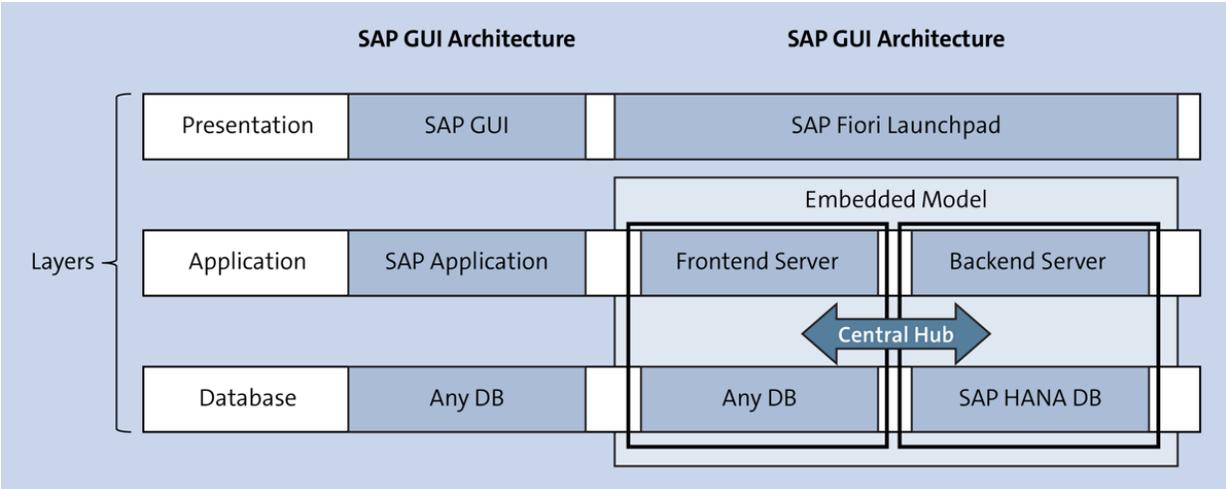
Process:

Subprocess:

**Figure 10.31** Selection of Report Structure while Executing the Reports

Evaluation Results by Organization			
A hierarchical report which shows the list of organizations and their overall assessment ratings			
▶ Selection			
Result			
Hierarchy	Regulation	Control Design Rating (Sym)	Self-Assessment Rating (Sym)
▼ <input type="checkbox"/> Tnow Basis	SOX		
▼  Process Hierarchy	SOX		
Procure to Pay	SOX		
▼  Record To Report	SOX		
▼  Fixed Assets	SOX		
Changes to asset master data	SOX		
▼  Other Processes	SOX		
▼  BS00	SOX		
▼  Tnow Basis	SOX	Significantly Deficient	
Self Assignment of Role	SOX	Significantly Deficient	
Record to Report	SOX		

**Figure 10.32** Execution of Report for a Specific Time Frame and Regulation



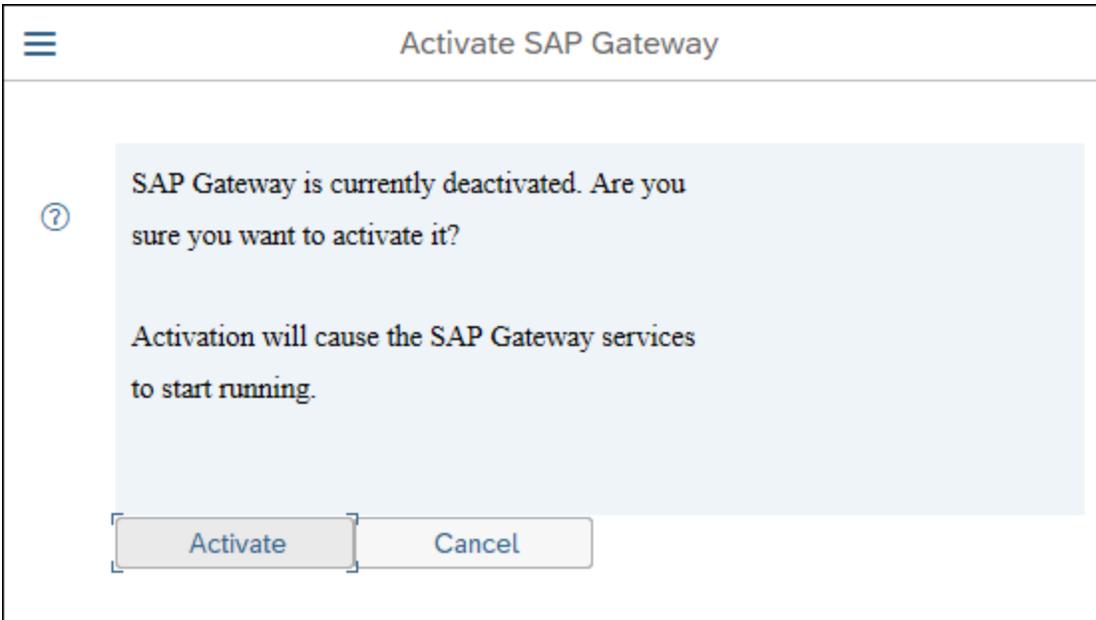
**Figure 11.1** Difference between SAP GUI Architecture and SAP Fiori Architecture

Installed Software

Installed Software Component Versions    Installed Product Versions

Component	Release	SP-Level	Support Package	Short Description of Component
SAP_BASIS	752	0007	SAPK-75207INSAPBASIS	SAP Basis Component
SAP_ABA	752	0007	SAPK-75207INSAPABA	Cross-Application Component
SAP_GWFND	752	0007	SAPK-75207INSAPGWFND	SAP Gateway Foundation
SAP_UI	754	0012	SAPK-75412INSAPUI	User Interface Technology
ST-PI	740	0014	SAPK-74014INSTPI	SAP Solution Tools Plug-In
SAP_BW	752	0007	SAPK-75207INSAPBW	SAP Business Warehouse
UIBAS001	300	0007	SAPK-30007INUIBAS001	UI for Basis Applications 1.0
GRCFND_A	V1200	0011	SAPK-V1211INGRCFNDA	GRC Foundation ABAP
GRCPINW	V1200_750	0011	SAPK-V1211INGRCPINW	SAP GRC NetWeaver Plug-In
UIGRAC01	100	0002	SAPK-10002INUIGRAC01	SAP FIORI FOR SAP AC 1.0
<b>UIGRRMPC</b>	<b>100</b>	<b>0003</b>	SAPK-10003INUIGRRMPC	Fiori UI for SAP Process Control and Risk Management 100
CLEMATIS	100_741	0000	-	Clematis Add-on Tool for Smart Client and ARC

**Figure 11.2**    Installed Component Versions



**Figure 11.3** SAP Gateway Activation Screen

Filter for Service Catalog

Technical Service Name	<input type="text" value="/UI2/PAGE_BUILDER_CONF"/>
Version	<input type="text"/>
Description	<input type="text"/>
External Service Name	<input type="text"/>
Namespace	<input type="text"/>
External Mapping ID	<input type="text"/>

✓ 🗑️ ✖

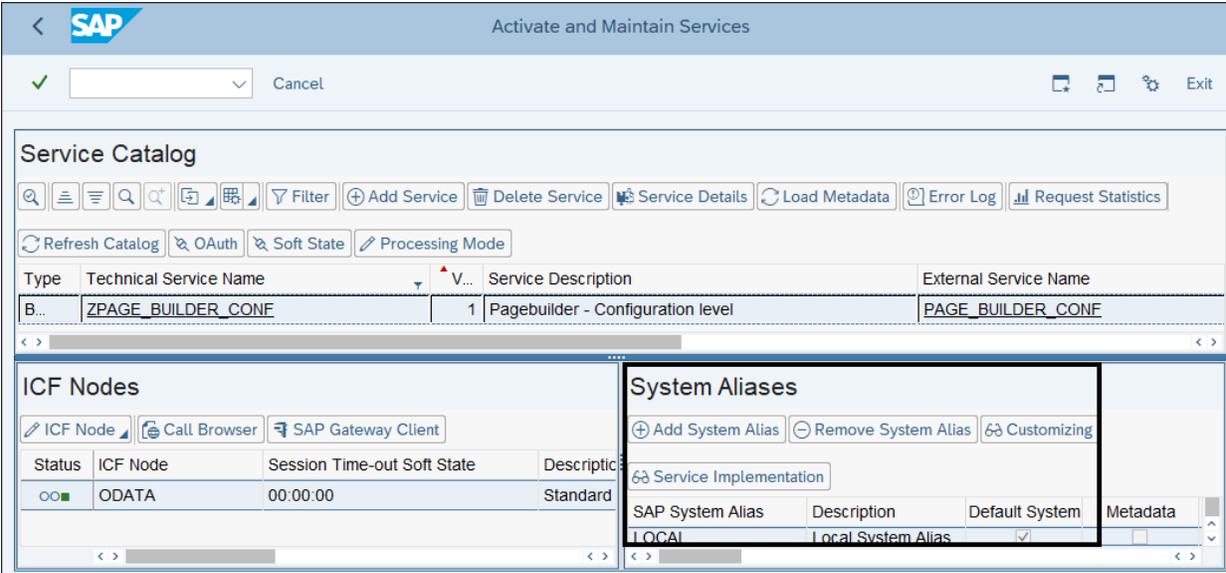
**Figure 11.4** Search Service Using Filter Conditions

Change View "Assign SAP System Aliases to OData Service": Overview

Assign SAP System Aliases to OData Service

	Service Doc. Identifier	User Role	Host Name	SAP System Alias	Default System	Metadata Default
<input type="checkbox"/>	ZPAGE_BUILDER_CONF_0001			LOCAL	<input checked="" type="checkbox"/>	<input type="checkbox"/>

**Figure 11.5** Adding System Alias



**Figure 11.6** Screen That Appears after System Alias Addition

**Service Catalog**

Filter Add Service Delete Service Service Details Load Metadata Error Log Request Statistics

Refresh Catalog OAuth Soft State Processing Mode

Type	Technical Service Name	V...	Service Description	External Service Name	Namespace	OAuth...	Soft State	Status
BEP	ZGRC_ACCESSREQUEST_APPROVE	1	Access Request Approval	GRC_ACCESSREQUEST_APPROVE				Not Supported

---

**ICF Nodes**

ICF Node Call Browser SAP Gateway Client

Status	ICF Node	Session Time-out	Soft State	Description
o	ODATA	00:00:00		Standard Mode

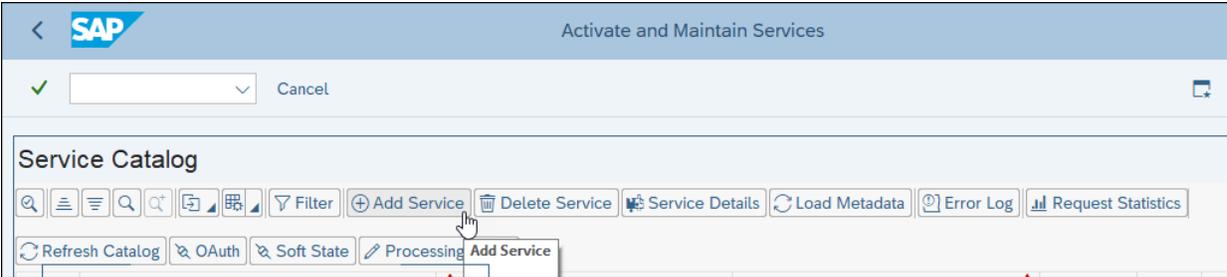
**System Aliases**

Add System Alias Remove System Alias Customizing

Service Implementation

SAP System Alias	Description	Dt
GRECLNT900	GRE System	

**Figure 11.7** System Aliases Option in the Frontend Services Hub Model



**Figure 11.8** Add Service Button

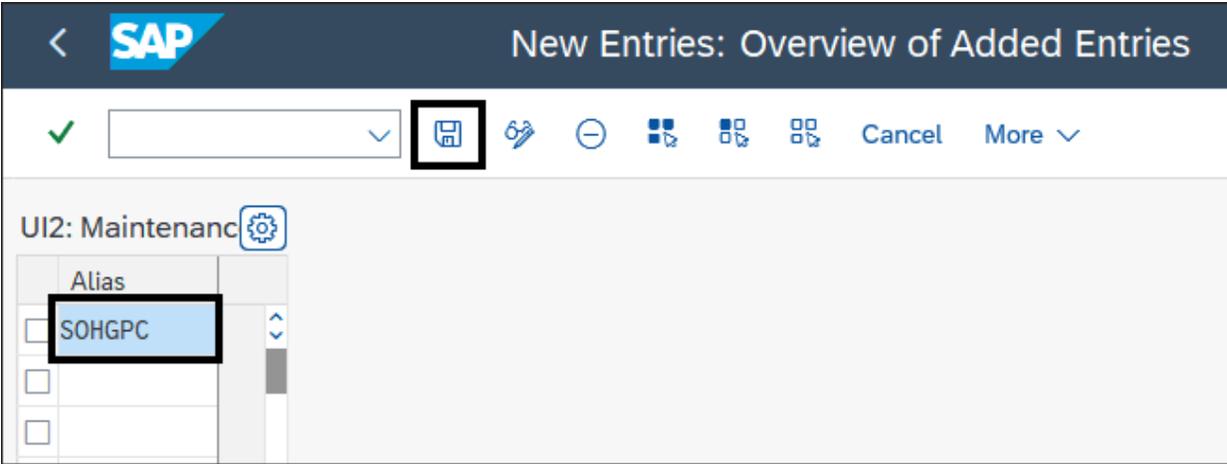
< **SAP** Add Selected Services

✓ [ ] ⌵ ⌵ Get Services Cancel

Filter

System Alias	LOCAL	<input type="checkbox"/> Co-Deployed
Technical Service Name	/UI2/PAGE_BUILDER_CONF	Version
External Service Name		External Mapping ID

**Figure 11.9** Loading the Missing Service

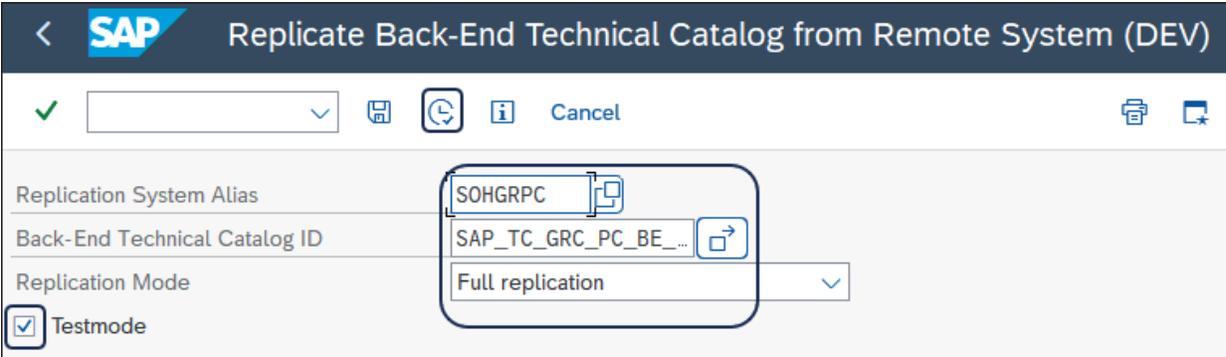


**Figure 11.10** Maintenance of the System Alias for SAP Process Control

The screenshot displays the SAP UI2 interface for 'Maintenance of System Alias Mapping'. The title bar shows the SAP logo and the text 'New Entries: Overview of Added Entries'. Below the title bar is a toolbar with a green checkmark, a dropdown menu, a save icon (highlighted with a black box), a pencil icon, a minus sign, and a 'More' dropdown. To the right of the toolbar are icons for print, share, refresh, settings, and an 'Exit' button. The main content area is titled 'UI2: Maintenance of System Alias Mapping' and contains a table with the following data:

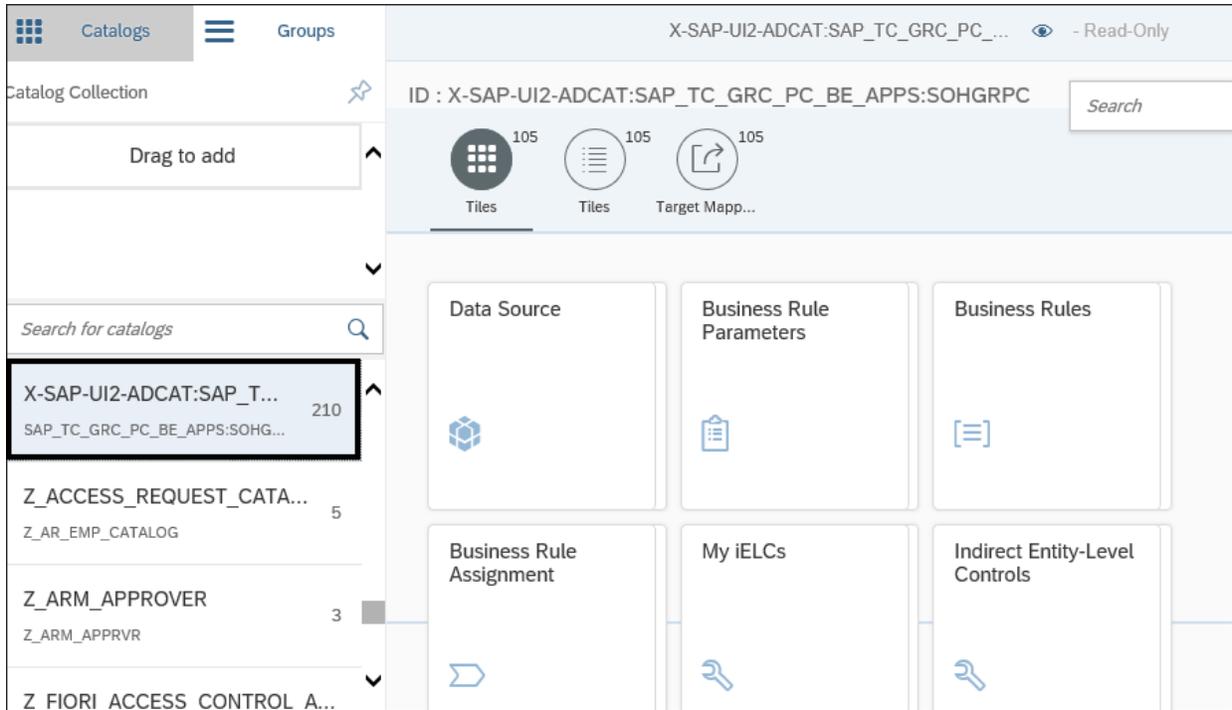
	Client	Source System Alias	Target System Alias
<input type="checkbox"/>	100	SOHGRPC	G12CLNT100
<input type="checkbox"/>			
<input type="checkbox"/>			
<input type="checkbox"/>			

**Figure 11.11** Maintenance of System Alias Mapping for SAP Process Control

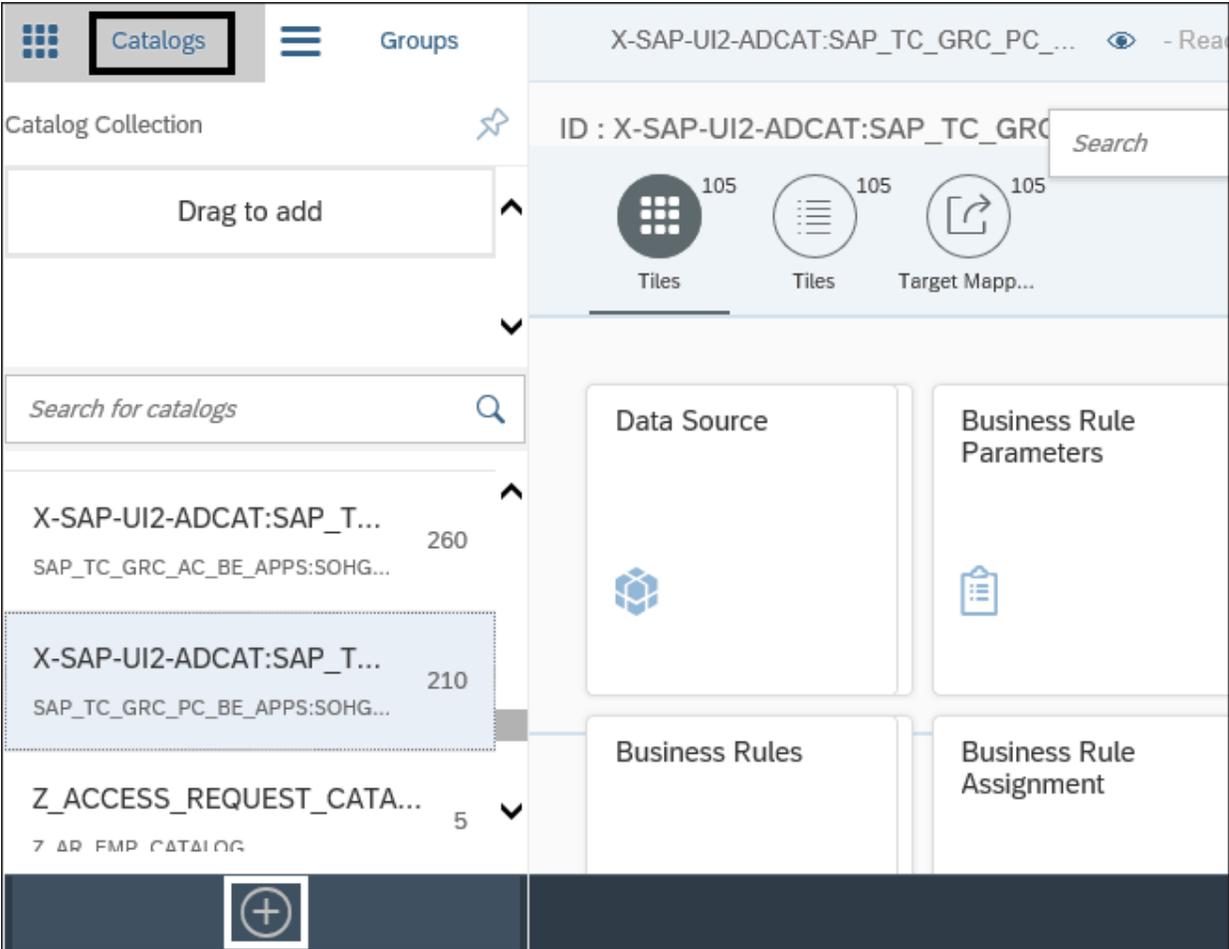


**Figure 11.12** Replication of Backend Technical Catalog for SAP Process Control

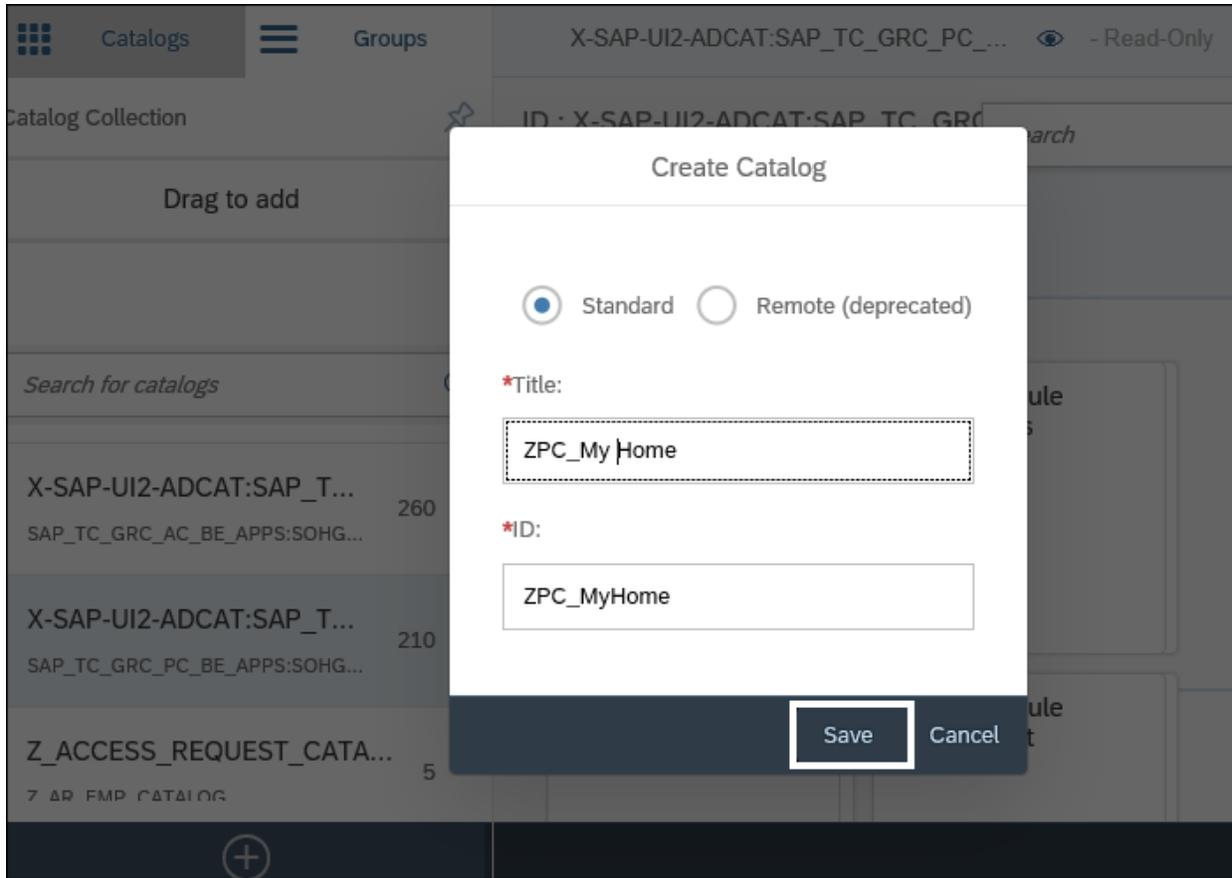




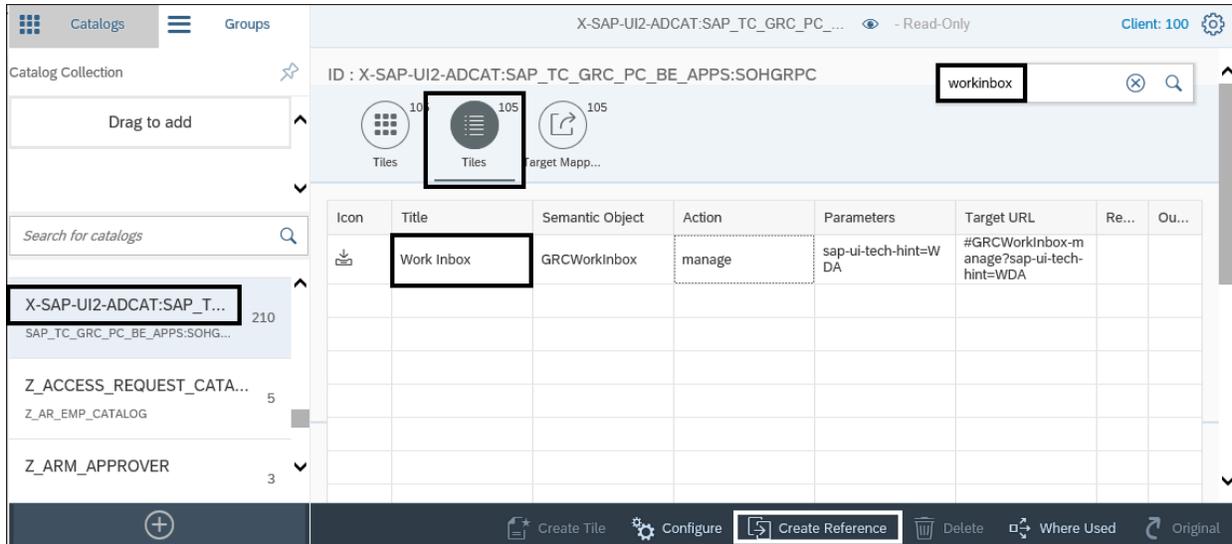
**Figure 11.14** Review of Replicated SAP Process Control Catalog



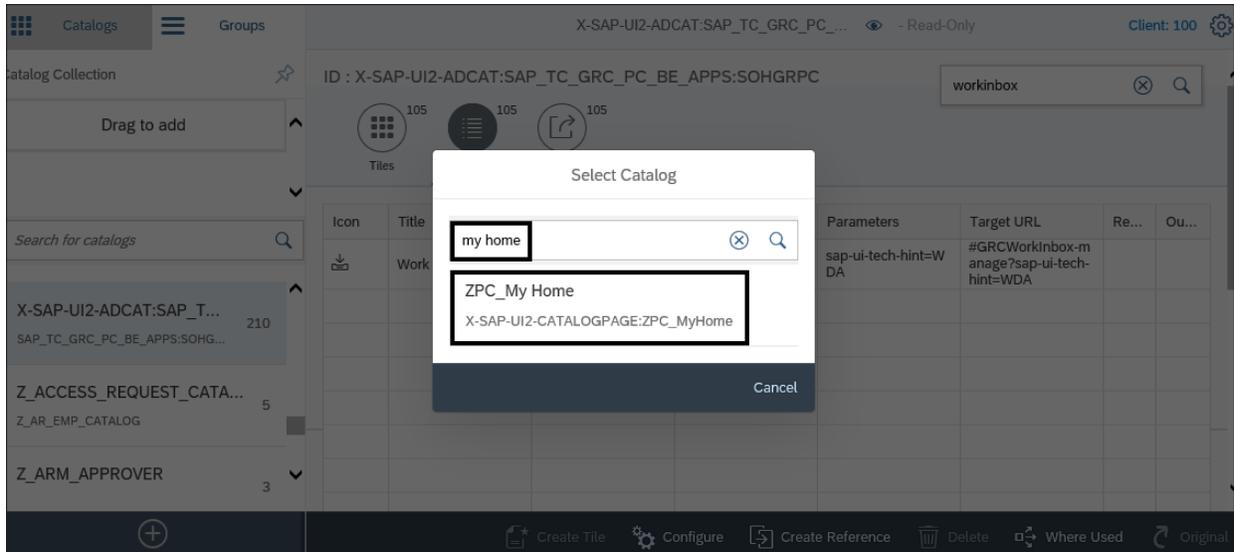
**Figure 11.15** Option to Create a New Custom Catalog



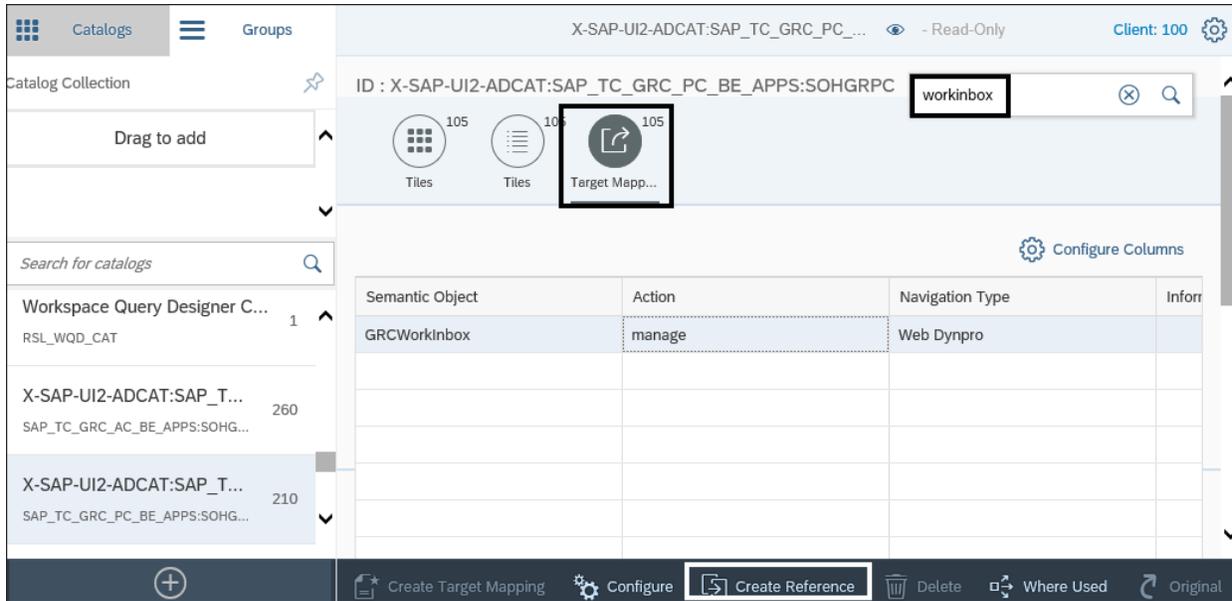
**Figure 11.16** Custom Catalog Creation Screen



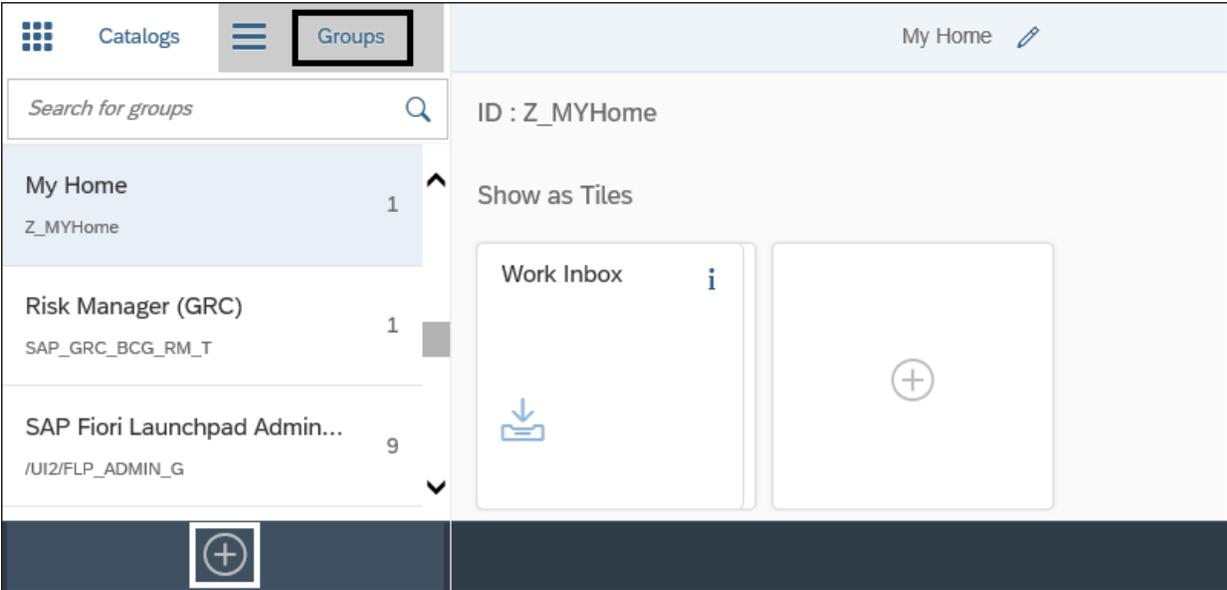
**Figure 11.17** Adding Tiles to a Custom Catalog



**Figure 11.18** Option to Select the Custom Catalog for Reference Mapping



**Figure 11.19** Create Reference of Target Mapping for the Custom Catalog



**Figure 11.20** Creating a Custom Group

Create Group

---

\*Title:

My Home

\*ID:

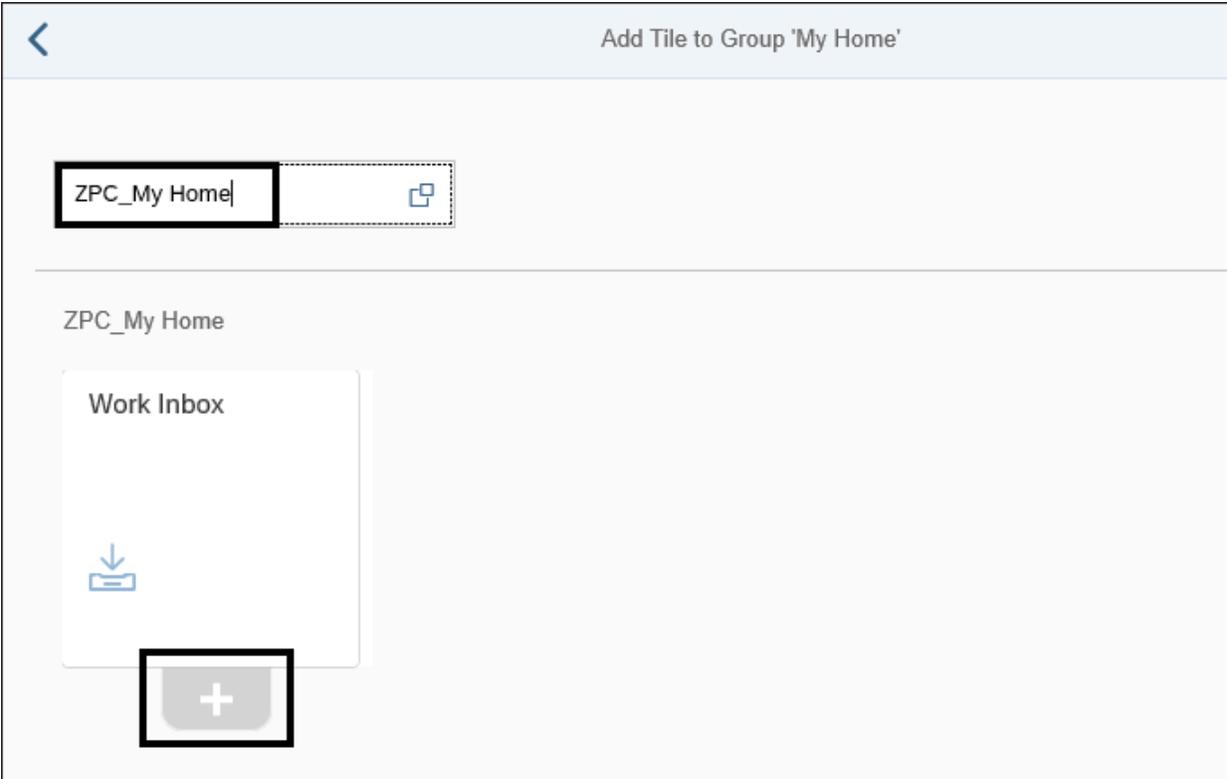
Z\_MYHome

Group personalization:

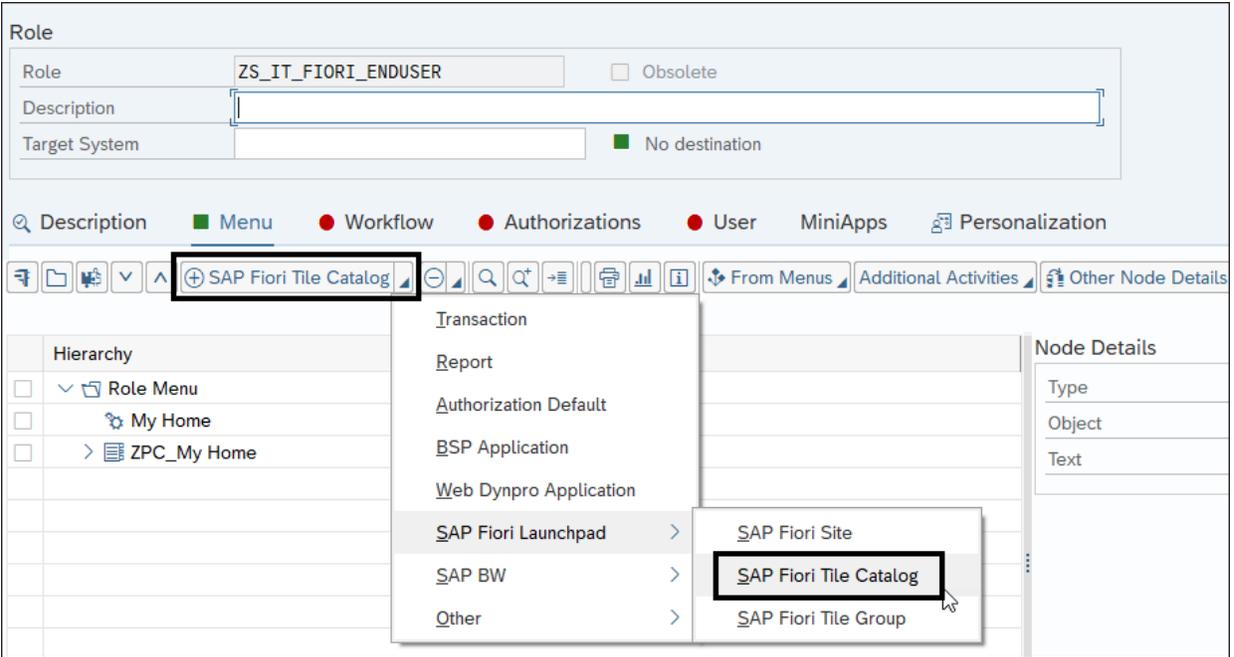
Enable users to personalize their group

Save    Cancel

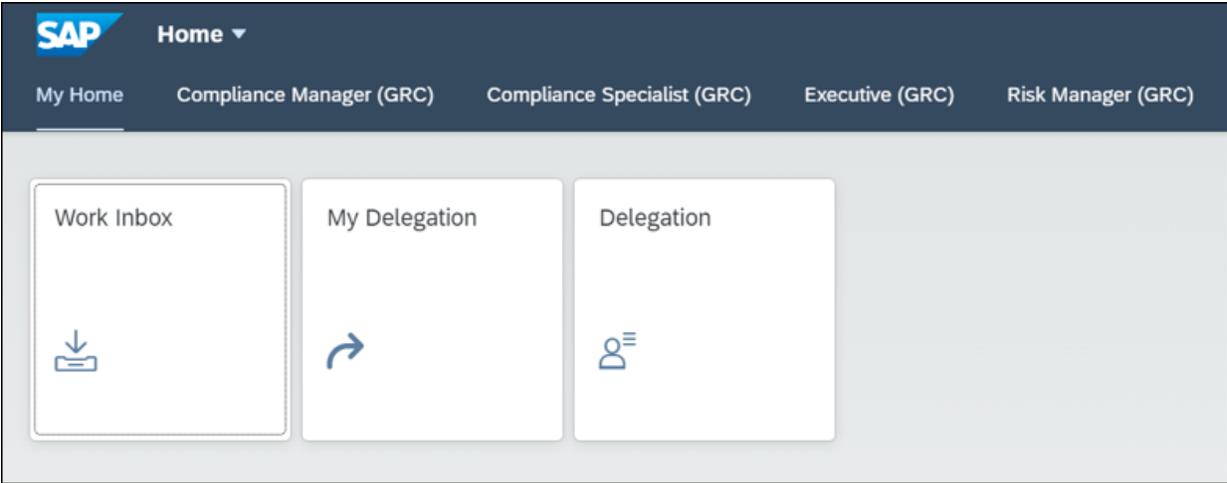
**Figure 11.21** Custom Group Creation Screen



**Figure 11.22** Selection of Tiles in the Group



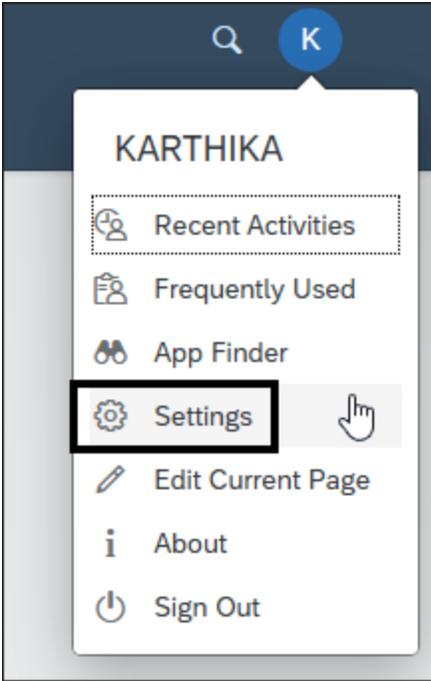
**Figure 11.23** Selection of the SAP Fiori Tile Catalog Option in Transaction PFCG



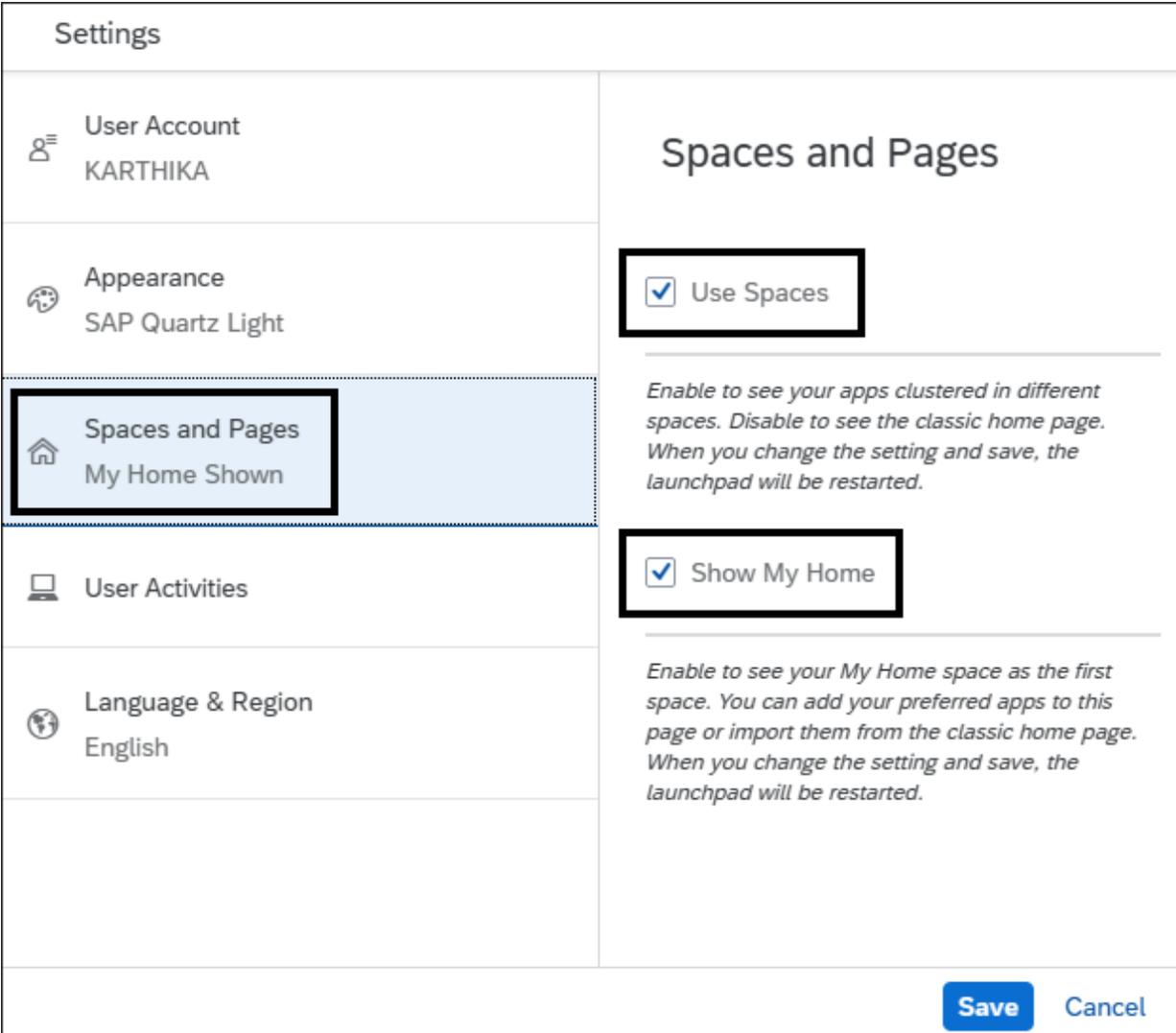
**Figure 11.24** End-User SAP Fiori Launchpad Screen



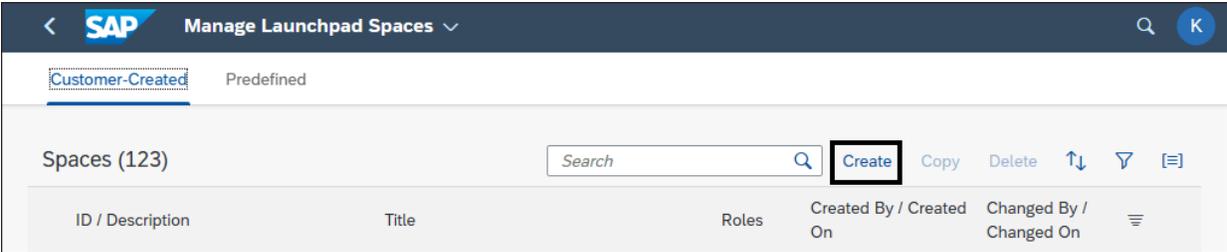
**Figure 11.25** New SAP Fiori Structure



**Figure 11.26** Settings Option in SAP Fiori Launchpad



**Figure 11.27** Enabling Spaces and Pages



**Figure 11.28** Create Option in the Manage Launchpad Spaces Page

**Create Space**

Space ID: \*  
ZFAP\_SP\_Display

Space Description: \*  
Account Payable for Display

Space Title: \*  
Account Payable Display

Also create a page

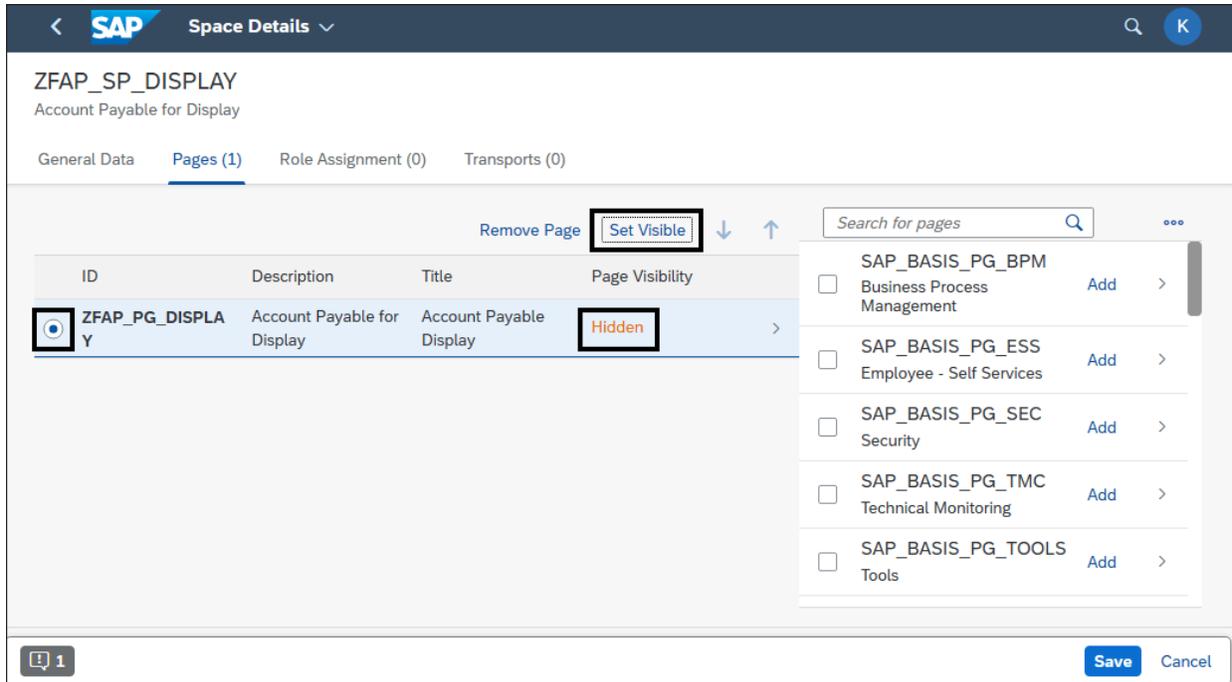
Page ID: \*  
ZFAP\_PG\_Display

Page Description: \*  
Account Payable for Display

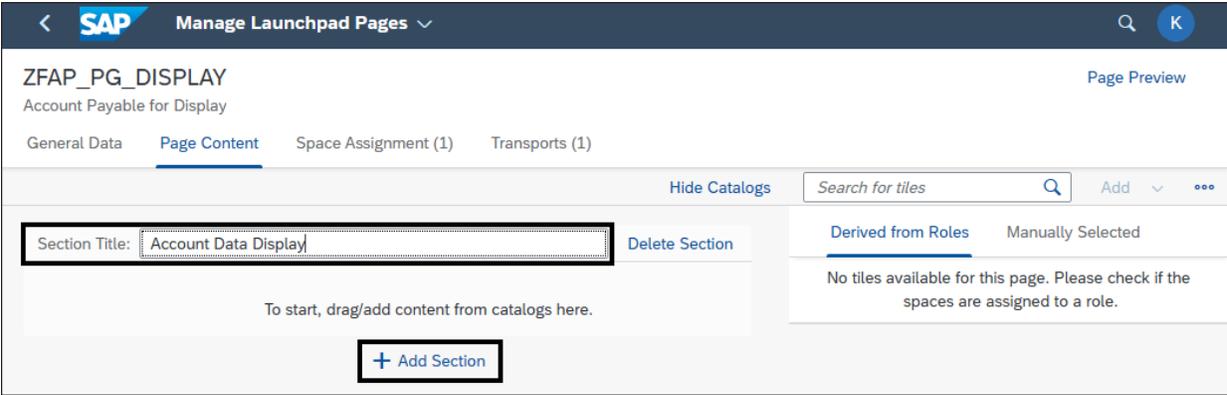
Page Title: \*  
Account Payable Display

**Create** Cancel

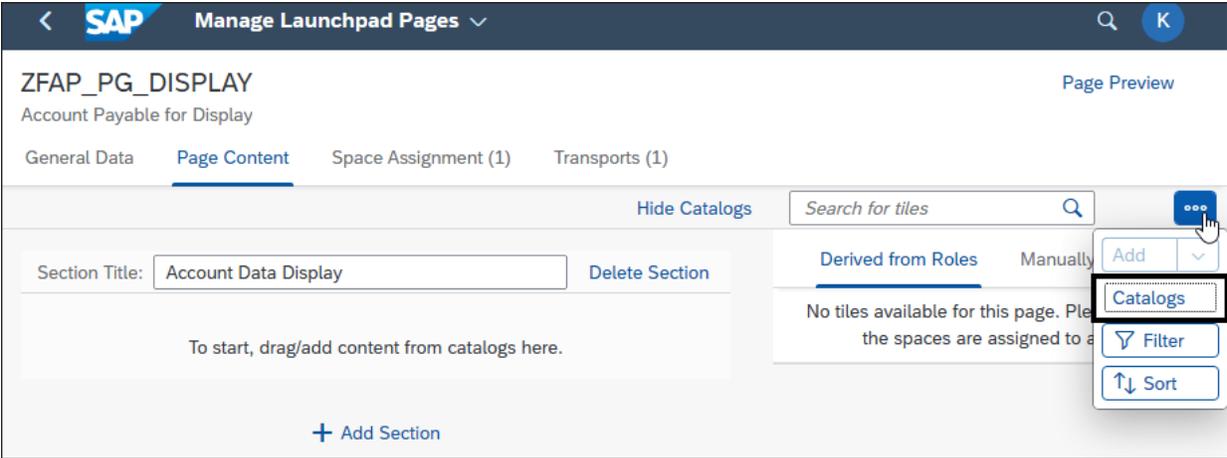
**Figure 11.29** Create Space Options



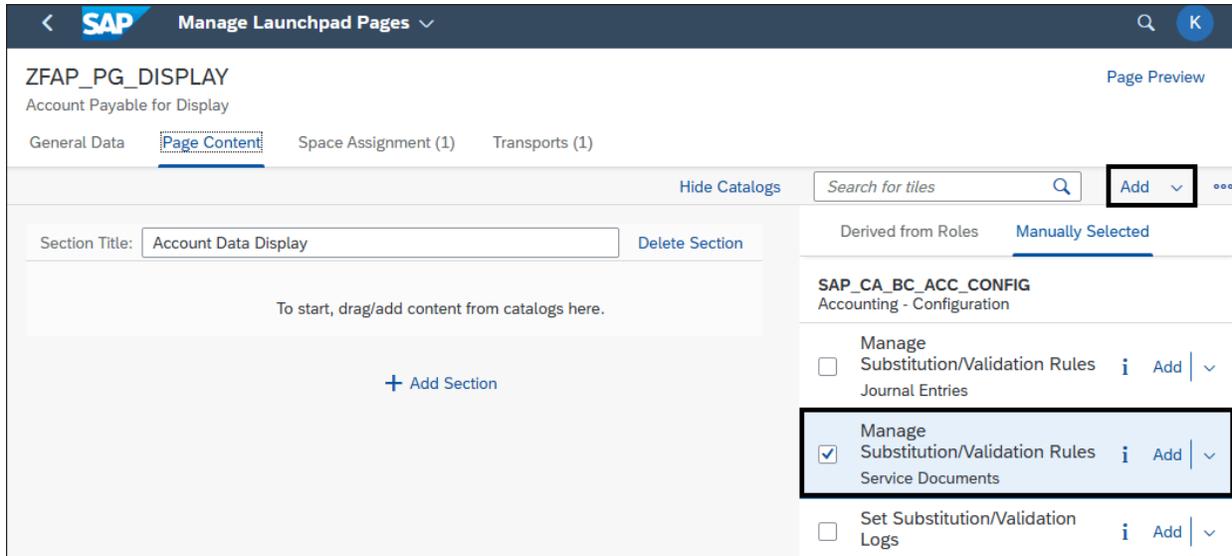
**Figure 11.30** Maintaining Pages



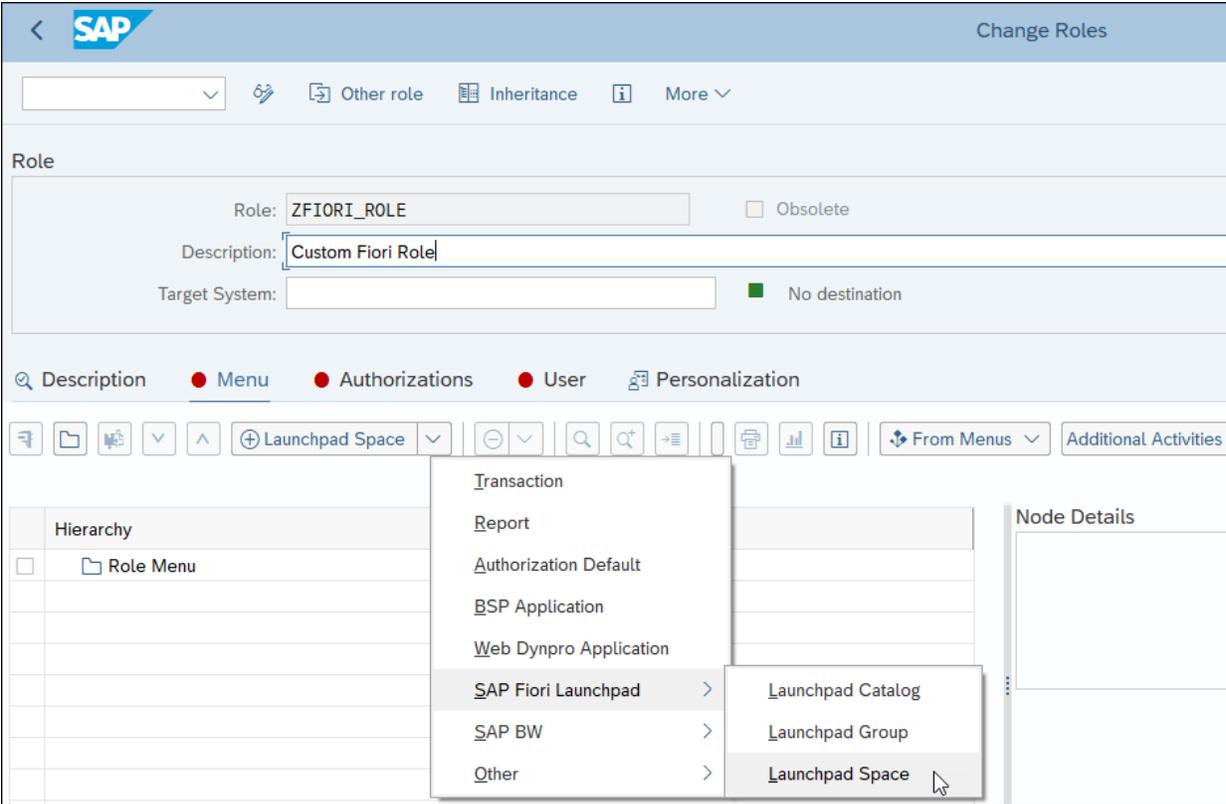
**Figure 11.31** Section Definition



**Figure 11.32** Adding Apps from the Catalog



**Figure 11.33** Assigning Apps to Sections from Catalogs



**Figure 11.34** Adding Launchpad Space in the Transaction PFCG Role

SAP Manage Controls

Standard

Editing Status: All Significance: Control Risk Level: Go Adapt Filters (1)

Controls (26) Mass Edit Create

<input type="checkbox"/>	Name	Significance	Control Risk Level	Latest Effectiveness	Latest Control Perf...	Latest Control Asse...	Changed On	Validity Period
<input type="checkbox"/>	Check Assets 8	Key Control	High	○-○-○- ○-○	○-○-○- ○-○	○-○-○- ○-○	Dec 6, 2023, 5:57:49 PM	Jan 1, 2021 - Dec 31, 9999
<input type="checkbox"/>	Vendors Without VAT ID 24	Key Control	High	○-○-○- ○-○	⊗-⊗-⊗- ⊗-⊗	○-○-○- ○-○	Dec 2, 2023, 3:30:19 AM	Jan 1, 2021 - Dec 31, 9999
<input type="checkbox"/>	Period End Cut-Off 5	Key Control	High	○-○-○- ○-○	⊗-○-○- ⊗-⊗	○-○-○- ○-○	Dec 1, 2023, 12:00:12 PM	Jan 1, 2021 - Dec 31, 9999

**Figure 12.1** Option to Create a Control

< **SAP** Manage Controls Q JP

## New: Manage Controls

27

**Header** | General Information | Description | Additional Information | Procedures | Related Objects | Attachments and Links | Attachments and Links (Deprecated)

Name: \*  Significance:  Control Risk Level:

ID: 27

### General Information

Valid From: \*  Recommended Monitoring Frequency:  Control Group:   
*MMM d, y*

Valid To: \*  Control Owner:   
*MMM d, y*

### Description

**B** *i* U  Verdana  12 pt

**Create** Discard Draft

**Figure 12.2** New Manage Controls Screen

**CRG International Ltd - Entities** Copy ▾ Retire 🔄 ✕

L1

---

**General Information**   Hierarchy   Attachments (0)

---

**General Information** Edit

Validity Period: Dec 31, 2021 - Dec 31, 9999   Description

---

**Hierarchy** Search Q Preview ⚙️

ID	Name	Type
▾ L1	CRG International Ltd - Entities	Root
▸ L1.1	UKI	Org
▸ L1.2	Americas	Org
L1.3	Japan	Org
L1.4	Germany	Org

**Figure 12.3**   Organization Hierarchy

The image shows a web form titled "New Org Hierarchy" with a header bar containing a share icon, a refresh icon, and a close icon. The form is divided into a "General Information" section. It contains the following fields:

- ID: \***: A text input field.
- Name: \***: A text input field.
- Description:**: A large text area.
- Valid From\***: A date picker field showing "Dec 20, 2023".
- Valid To\***: A date picker field showing "Dec 31, 9999".

At the bottom right of the form, there are two buttons: "Create" (in blue) and "Cancel".

**Figure 12.4** Details to Be Configured while Defining an Organization

**New Process Catalog** 🔗 ↺ ✕

---

**General Information**

ID: \*

Name: \*

Valid From \*  📅

Valid To \*  📅

Description:

**Figure 12.5** Details to Be Configured while Defining a Process

## ABAC Regulation

Internal Control System (ICS)-2211-00000004

[Copy](#) [Retire](#) [🔗](#)

▼

General Information
Requirements (0)
Attachments (0)

Save Cancel

Name: \*

Description:

Description

Category:

Internal Control System (ICS)

---

Valid From: \*

 📅

Valid To: \*

 📅

Requirements (0)

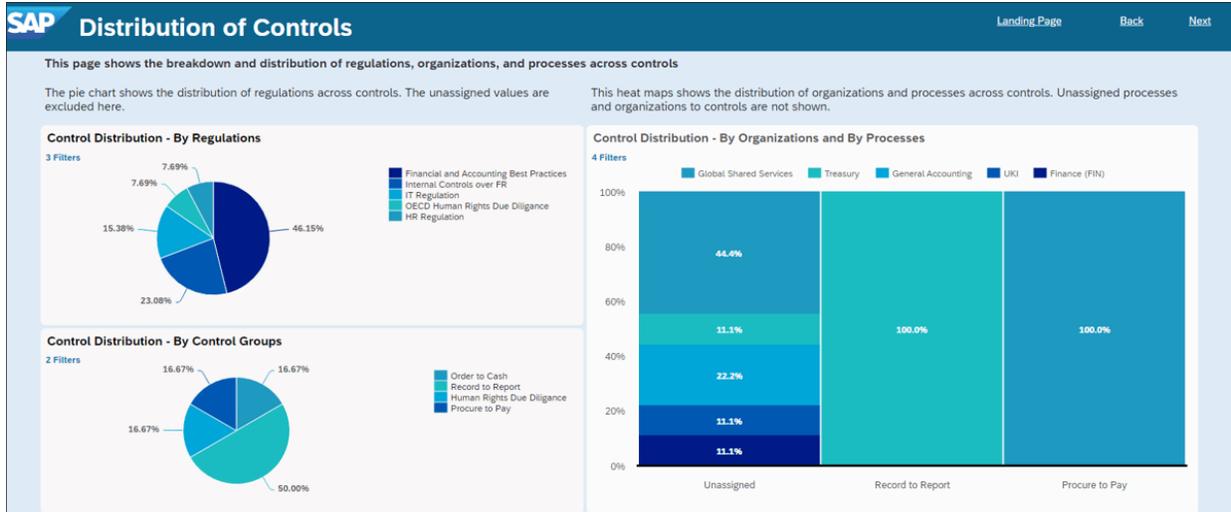
🔍

Create Activate ⚙️

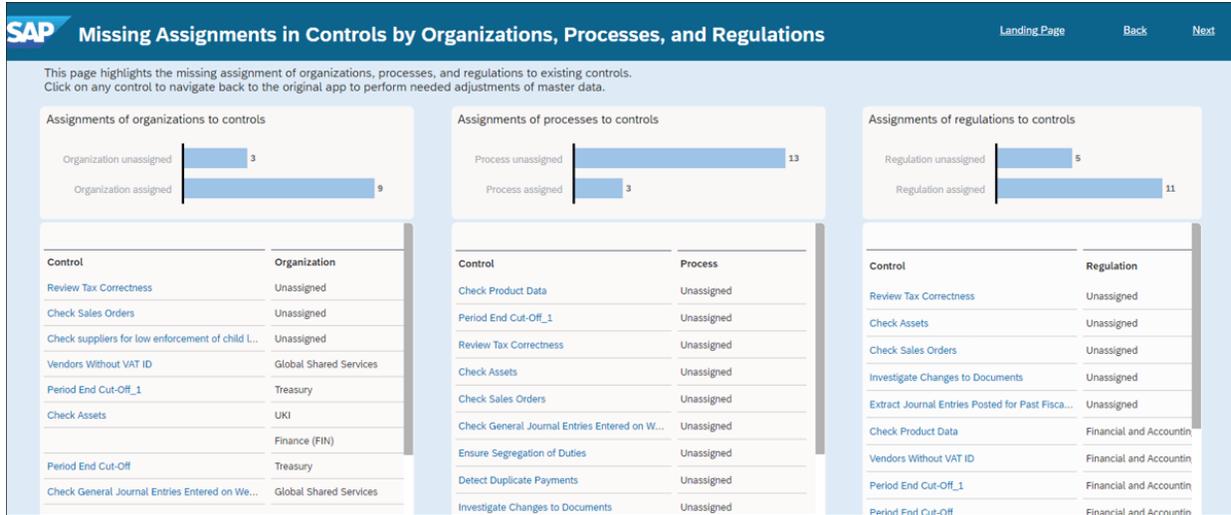
<input type="checkbox"/>	ID	Name	Status
No data available			

Attachments (0)

**Figure 12.6** Details to Be Configured while Defining a Regulation



**Figure 12.7** Sample Dashboard: Distribution of Controls



**Figure 12.8** Sample Dashboard: Missing Assignments in Controls

< **SAP** Manage Automated Procedures ▼ Q JP

**Standard** ▼

Name:  System Type: ▼ Status: ▼ Adapt Filters

*Search* Q 🔗 🌟

**Procedures (141)** Create ⚙️ 📄 ▼

System Type	Name	Status	Last Changed On
☰ SAP S/4HANA Cloud	AP Vendors Without VAT ID v2	Active	Nov 15, 2023, 3:18:30 PM >
☰ SAP S/4HANA Cloud	AP Vendors Without VAT ID	Active	Jul 10, 2023, 4:07:46 PM >
☰ SAP S/4HANA Cloud	Extract Journal Entries Posted for Past Fiscal Period HM	Active	Jun 15, 2023, 12:59:46 PM >
☰ SAP S/4HANA Cloud	Contract Accounting Tax Determination Code	Error	May 3, 2023, 12:28:15 PM >
☰ SAP S/4HANA Cloud	Operational Journal Entry	Active	May 3, 2023, 12:14:40 PM >
☰ SAP S/4HANA Cloud	Operational Journal Entry Item	Active	May 2, 2023, 4:55:40 PM >
☰ SAP S/4HANA Cloud	Track contract account	Error	May 3, 2023, 10:15:08 AM >
☰ SAP S/4HANA Cloud	Test für EOT	Draft	Mar 20, 2023, 10:17:11 PM >
☰ SAP S/4HANA On-Premise	Manual Postings Created By Dialog Users_1	Draft	Jan 30, 2023, 5:47:15 PM >
☰ SAP S/4HANA On-Premise	Manual Postings Created By Dialog Users_OP	Active	Feb 16, 2023, 12:48:28 PM >
☰ SAP S/4HANA On-Premise	Extract Journal Entries Posted for Past Fiscal Period_OP	Draft	Jan 30, 2023, 5:49:44 PM >
☰ SAP S/4HANA Cloud	Extract Journal Entries Posted for Past Fiscal Period	Active	Nov 4, 2022, 11:48:20 AM >
☰ SAP S/4HANA Cloud	Manual Postings Created By Dialog User Accounts	Active	Nov 4, 2022, 11:48:06 AM >
☰ SAP S/4HANA Cloud	Customers with No Payment Terms Defined	Active	Nov 4, 2022, 11:47:52 AM >
☰ SAP S/4HANA Cloud	Extract Blocked Sales Documents Released Manually	Active	Nov 4, 2022, 11:47:39 AM >
☰ SAP S/4HANA Cloud	Extract Journal Entries Posted for Past Fiscal Period_FP	Active	Nov 4, 2022, 11:47:25 AM >
☰ SAP S/4HANA Cloud	Manual Postings Created By Dialog User Accounts_FP	Active	Nov 4, 2022, 11:47:11 AM >
☰ SAP S/4HANA Cloud	Suspended Performance Obligations	Draft	Oct 26, 2022, 1:26:37 PM >
☰ SAP S/4HANA On-Premise	Suspended Performance Obligations	Draft	Oct 26, 2022, 1:26:37 PM >

**Figure 12.9** Option to Create an Automated Procedure

## Extract Journal Entries Posted for Past Fiscal Period\_FP

[Export](#)

ID: 2

---

System Type: SAP S/4HANA Cloud Source Type: OData Service OData Service Name: /sap/opu/odata/sap/c_jrnEntrtmPriorFscIperd_cds OData Entity Set Name: C_JrnEntrtmPriorFscIperd	Created On: Nov 4, 2022, 11:47:03 AM Created By: <span style="background-color: #ccc; border: 1px solid #ccc; padding: 2px;">[REDACTED]</span> Last Changed On: Nov 4, 2022, 11:47:25 AM Last Changed By: C5251505	<b>Uses Personal Information</b> No	<b>Status</b> Active
--	---	--	-------------------------

^ ✖

**Description**    Run Settings ▾

This automated procedure finds all journal entries that were posted for a fiscal period that took place before the fiscal period in which the entries were created. The automated procedure compares the Creation Date with fiscal period information. Journal entries that have a Creation Date that is after the fiscal period end date but posting data pertains to before the fiscal period end date are classified as postings for past fiscal periods. These journal entries appear in the results. The automated procedure only finds journal entries where the Source Ledger and Ledger are the same. Reversals are excluded from the results.

### Run Settings

#### Systems

**Destinations (1)**

Name	Type
FCMS4HC	Primary

#### Time-Related Settings

Reference Period: Fiscal Period	Field for Time Selection: Fiscal Year Period
------------------------------------	---

#### Parameters

**Fields (7)**

Name	Mandatory

**Figure 12.10**    Configuration of Automated Procedure

Manual Procedures (6)					Export	Copy	Create	Delete				
ID	Name	Status	Assurance Activity	Manual Procedure Type								
<input type="checkbox"/> 9	MP Party does not violate child labour policy	Active	Control Performance	Steps								
Changed By: Changed On: Sep 27, 2023, 1:14:38 PM												
<input type="checkbox"/> 8	My MP	Draft	Control Effectiveness Test	Steps								
Changed By: Changed On: Jul 18, 2023, 7:32:41 PM												
<input type="checkbox"/> 1	Cut-Off Testing	Active	Control Performance	Steps								
Changed By: Changed On: Jul 18, 2023, 6:41:33 PM												

**Figure 12.11** Option to Create a New/Review Manual Procedure

## Cut-Off Testing

1

Created On: Oct 26, 2022, 1:36:45 PM    Assurance Activity    Manual Procedure Type    Status  
 Created By: system    Control Performance    Steps    Active  
 Changed On: Jul 18, 2023, 6:41:33 PM  
 Changed By:

[Edit](#)   [Delete](#)   [Copy](#)   [Display Instances](#)

[Description](#)   [Steps](#)   [Reference Documents](#)   [Content Package](#)

This manual procedure involves testing the adequacy of period end cut-off procedures, inquiring about any unrecorded liabilities, examining disbursement records and unmatched reports, and reviewing any fluctuations in purchases near the period end.

### Steps

Steps (5) | **Standard** ▾   

Step ↑	Name	
1	Identify and test cut-off procedures	>
Description: Identify and test the adequacy of cut-off procedures for period end accounts payable.		
2	Inquire about unrecorded liabilities	>
Description: Inquire about potential sources of unrecorded liabilities, for example, inventory that has been rece... <a href="#">More</a>		
3	Examine disbursement records after the balance sheet date	>
Description: Examine disbursements records for the period after the balance sheet date. Determine if selected inv... <a href="#">More</a>		
4	Examine files of unmatched receiving reports or invoices	>
Description: Examine files of unmatched receiving reports or unmatched or unpaid vendor invoices, files of pendin... <a href="#">More</a>		
5	Review fluctuations in purchases or returns near period end	>
Description: Consider key performance indicators and management information that would indicate unusual fluctuati... <a href="#">More</a>		

**Figure 12.12** Configuration of a Manual Procedure

**Standard** ▼

Editing Status: All ▼ Run Frequency: ▼ Recurrence Range: MMM d, y - MMM d, y 📅 Go Adapt Filters (1)

Open (2) **In Process (5)** Completed (13) Error (7)

**Work Packages** Terminate Create ▼ ☰ ⊖ ⚙️ 📄 ▼

<input type="checkbox"/>	Name	Status	Assurance Activity	Recurrence Range	Run Frequency	
<input type="checkbox"/>	WP Period End Cut-Off 2023 21	In Process	Control Performance	Jan 31, 2023 - End of Current Fiscal Year	Every Fiscal	<ul style="list-style-type: none"> <li>Control Performance</li> <li>Control Effectiveness Test</li> <li><b>Control Assessment</b></li> </ul>
<input type="checkbox"/>	WP Customer payments testing manual effectiveness test 26	In Process	Control Effectiveness Test	Jan 1, 2023 - Dec 31, 2023	Run Once on Activation	>

**Figure 12.13** Manage Work Packages App



**WP Period End Cut-Off 2023** Copy Terminate  

21 

General Information Description **Runs** Controls and Procedures

---

**Runs** 

Scheduled Run Time 	Actual Run Time	Recurrence Range	Status	Checking Period	Progress	
Dec 1, 2023, 12:00:00 PM Asia/Calcutta	Dec 1, 2023, 12:00:04 PM Asia/Calcutta	Dec 1, 2023 - Dec 31, 2023	In Process	011.2023 - 011.2023	<div style="width: 100%;"><div style="width: 100%;"></div></div> 100%	
Nov 1, 2023, 12:00:00 PM Asia/Calcutta	Nov 1, 2023, 12:00:27 PM Asia/Calcutta	Nov 1, 2023 - Nov 30, 2023	In Process	010.2023 - 010.2023	<div style="width: 100%;"><div style="width: 100%;"></div></div> 100%	
Oct 1, 2023, 12:00:00 PM Asia/Calcutta	Oct 10, 2023, 3:55:01 PM Asia/Calcutta	Oct 1, 2023 - Oct 31, 2023	In Process	009.2023 - 009.2023	<div style="width: 100%;"><div style="width: 100%;"></div></div> 100%	

**Figure 12.15** Work Package Run Details

**WP Period End Cut-Off 2023** [Copy](#) [Terminate](#)

20

General Information **Runs (7)** Controls and Procedures

May 1, 2023, 12:00:00 PM Asia/Calcutta	In Process	004.2023 - 004.2023	Jul 19, 2023, 9:23:02 PM Asia/Calcutta	>
Apr 1, 2023, 12:00:00 PM Asia/Calcutta	In Process	003.2023 - 003.2023	Jul 19, 2023, 9:23:02 PM Asia/Calcutta	>

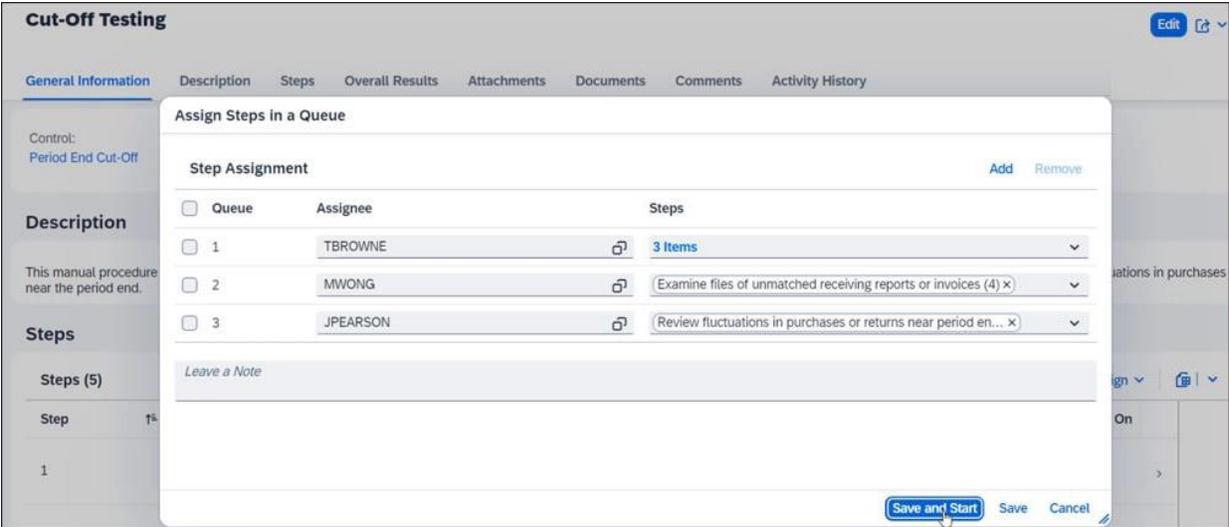
**More**  
[ 5 / 7 ]

**Controls and Procedures**

**i** In the column Enabled Destinations, you can define which destinations are enabled for an automated procedure. You can also edit the parameter values. These changes will come into effect for future work package runs.

Name	ID	Enabled Destinations	Assignees	Item Type
Period End Cut-Off	5			Control
Extract Journal Entries Posted for Past Fiscal Period_FP	2	1		Automated Procedure
Cut-Off Testing	1		1	Manual Procedure

**Figure 12.16** Details of Controls and Procedures in a Work Package



**Figure 12.17** Assign Steps in a Queue Screen

SAP Manual Procedure Search In: "Apps" TB

**Cut-Off Testing** Draft

Header General Information Description **Steps** Overall Results Attachments Documents Comments Activity History

Steps (5) Search Q Check Progress

Step	Name	Results	Last Changed By	Last Changed On
2	<b>Inquire about unrecorded liabilities</b> Inquire about potential sources of unrecorded liabilities, for example, inventory that has been rece... <a href="#">More</a>	Completed Without Found Items		
3	<b>Examine disbursement records after the balance sheet date</b> Examine disbursements records for the period after the balance sheet date. Determine if selected inv... <a href="#">More</a>	Completed Without Found Items		
4	<b>Examine files of unmatched receiving reports or invoices</b> Examine files of unmatched receiving reports or unmatched or unpaid vendor invoices, files of pendin... <a href="#">More</a>			
5	<b>Review fluctuations in purchases or returns near period end</b> Consider key performance indicators and management information that would indicate unusual fluctuati... <a href="#">More</a>			

Draft updated Save Discard Draft

**Figure 12.18** Responses to the Manual Procedure

**10052** Draft Internal Controls over Financial Reporting

Internal Controls over Financial Reporting

Comments Internal Controls over Financial Reporting Details **Investigation and Remediation** Conclusion

### Investigation and Remediation

Task Lists (2) Search Send Create Delete

<input type="checkbox"/> Sent	Task List Type	Origin Issue ID	Task List Template	Task List Owner
<input type="checkbox"/> Yes	Investigation	10052	General Finance Investigation	>
<input type="checkbox"/> Yes	Remediation	10052	General Finance Remediation	>

### Conclusion

Conclusion: \*

Confirmed

Confirmed  
False Positive  
Omitted  
Withdrawn

Save Discard Draft

**Figure 12.19** Conclusion on the Reported Issues

**10052** Internal Controls over Financial Reporting

Internal Controls over Financial Reporting Details **Investigation and Remediation** Conclusion

### Investigation and Remediation

Task Lists (2) Search Q Send [Menu] [Close] [Settings]

<input type="checkbox"/> Sent	Task List Type	Task List Template	Task List Owner	
<input type="checkbox"/> Yes	Investigation	General Finance Investigation	Jessica Pearson	>
<input type="checkbox"/> No	Remediation	General Finance Remediation	Jessica Pearson	>

### Conclusion

Conclusion: Confirmed

Conclusion Detail: High likelihood this will result in financial exposure in the short term

**Figure 12.20** Options to Create Investigation and Remediation Tasks for the Issues

**10052** Draft 🔗

Internal Controls over Financial Reporting

Conclusion: Confirmed Medium Completed

Created By: system

Created On: Jul 18, 2023, 5:49:20 PM

Changed By:

Changed On: Dec 20, 2023, 12:48:47 PM

Transfer Status: Not Transferred

Issue Creation: Standard

⬆️ ⚙️

**Comments** Internal Controls over Financial Reporting Details Investigation and Remediation Conclusion

  >

255 characters remaining

(No Comments)

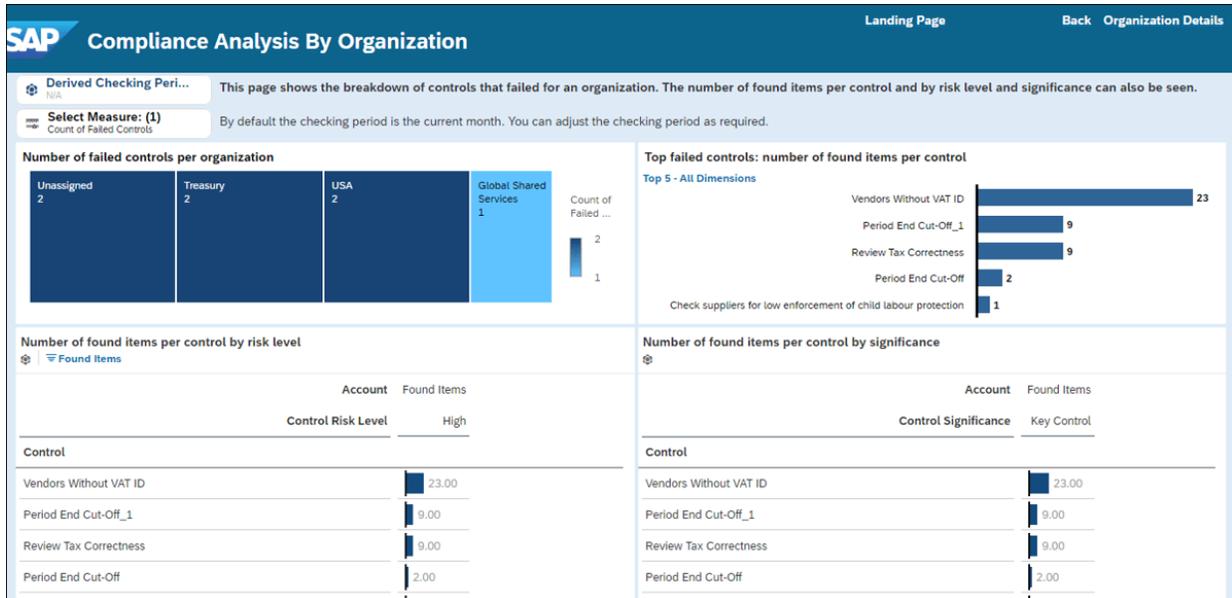
**Internal Controls over Financial Reporting**

ICFR Severity: \* Material Weakness Issue Association: Control

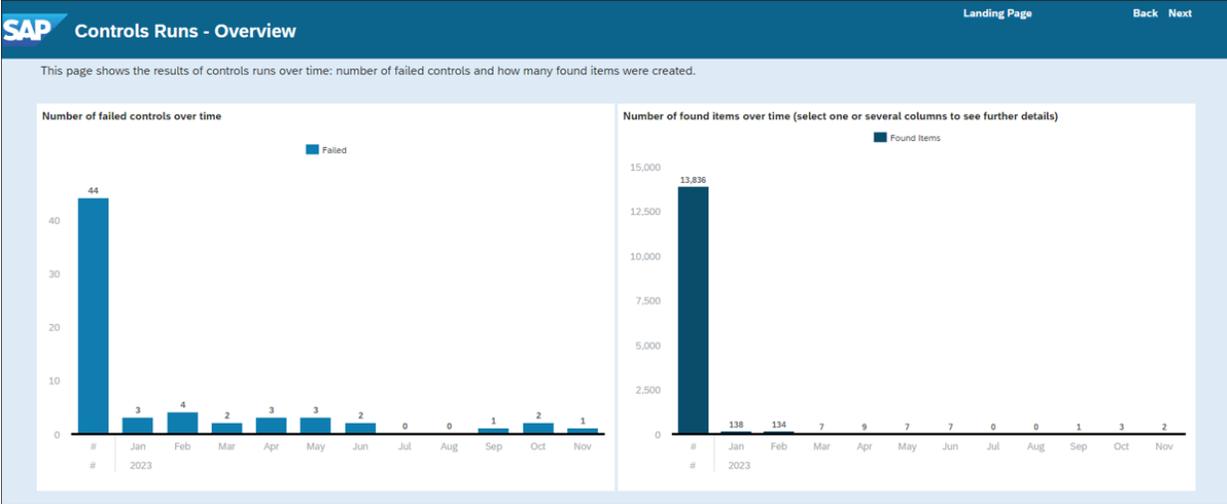
Relevant For: \* Line of Business

Save Discard Draft

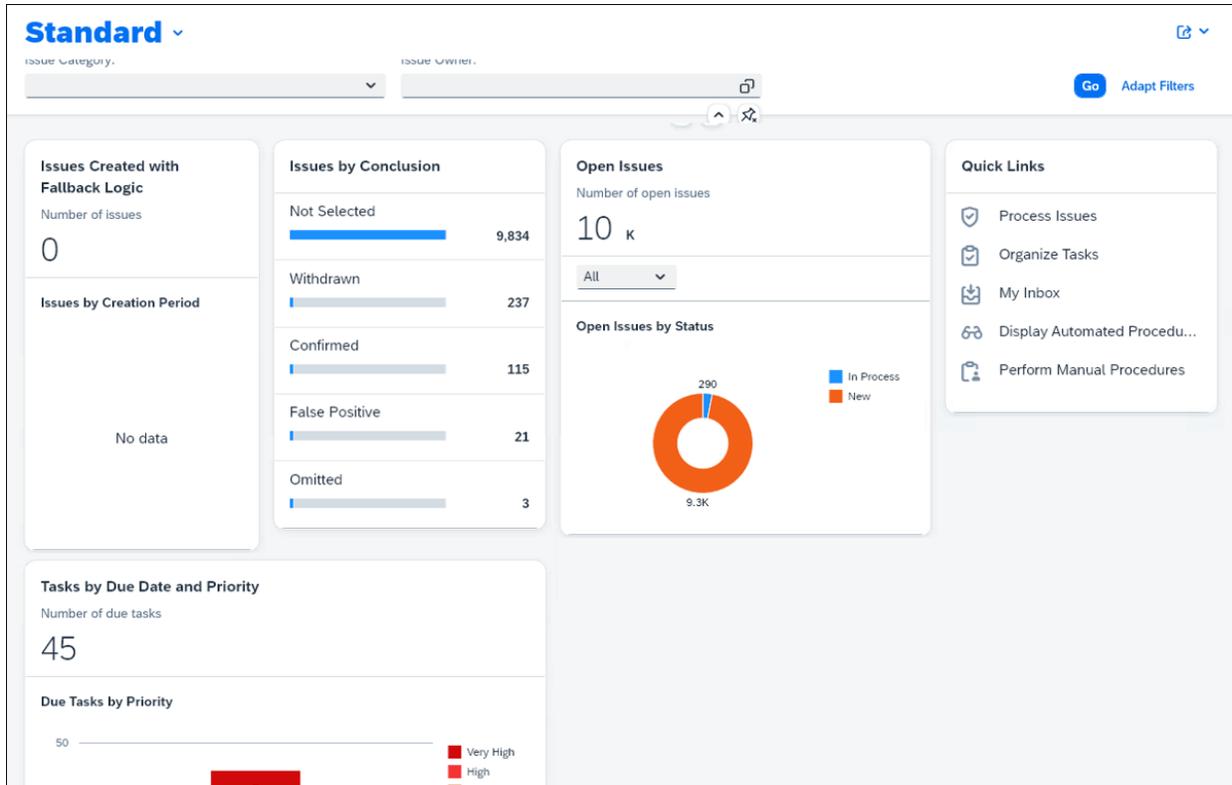
**Figure 12.21** Responses to the Investigation or Remediation Task List



**Figure 12.22** Compliance Analysis Dashboard



**Figure 12.23** Control Runs - Overview Dashboard



**Figure 12.24** Issue Overview Dashboard



