



SAP

Solman

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About the Tutorial

SAP Solman is a SAP product used to provide a centralized, robust solution management product that allows you to manage technical support in distributed environment. It covers all key functions like solution deployment, IT Service Management, Business and Application Operations and continuous maintenance and improvement.

Using SAP Solman, you ensure that SAP solution environment is performing at its maximum potential with minimum cost.

Audience

This tutorial has been prepared for anyone who has a basic knowledge of SAP Product suite, SAP ECC installation, and SAP Basis. After completing this tutorial, you will find yourself at a moderate level of expertise in maintaining SAP Solution Manager effectively.

Prerequisites

Before you start proceeding with this tutorial, we assume that you are well-versed with basic meaning of terms like Work Center, IT Service Management, System Administration, SAP products. If you are not aware of these concepts, then we recommend that you first go through an overview chapter of any of these topics.

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1. SAP Solman – Overview

SAP Solution Manager is a platform to manage life cycle of your SAP solution in a distributed environment.

The key features of SAP Solman are-

- It provides tools, methods, and process management content that can be used during preparation of business blueprint, configuration, and implementation.
- Using SAP Solman you can ensure that SAP solution environment is operating at its maximum potential with minimum cost.
- SAP Solman provides integration tools for SAP BASIS Administrators to manage underlying infrastructure and application and business processes.
- It reduces the amount of effort required to manage the centralized SAP and non-SAP systems.
- In a distributed environment, SAP Solution Manager is managing system and SAP applications like- ECC, BI, and Customer Relationship module CRM and also covers the non-SAP system in solution life cycle.

Current version of SAP Solution Manager and Release date

Latest version of SAP Solution Manager is SAP Solman 7.2. This version was made available since H1/2016.

Previous SAP Solution Manager 7.1 support Package Stack 14 was released in October 2015, included various new features to run SAP Solution.

The following table shows the SAP Solution Manager Release details-

Product Name	SAP Solution Manager
Version	7.1 Support Pack Stack 14
Released Date	October 2015
Underlying based product	SAP NetWeaver 7.0 EHP2

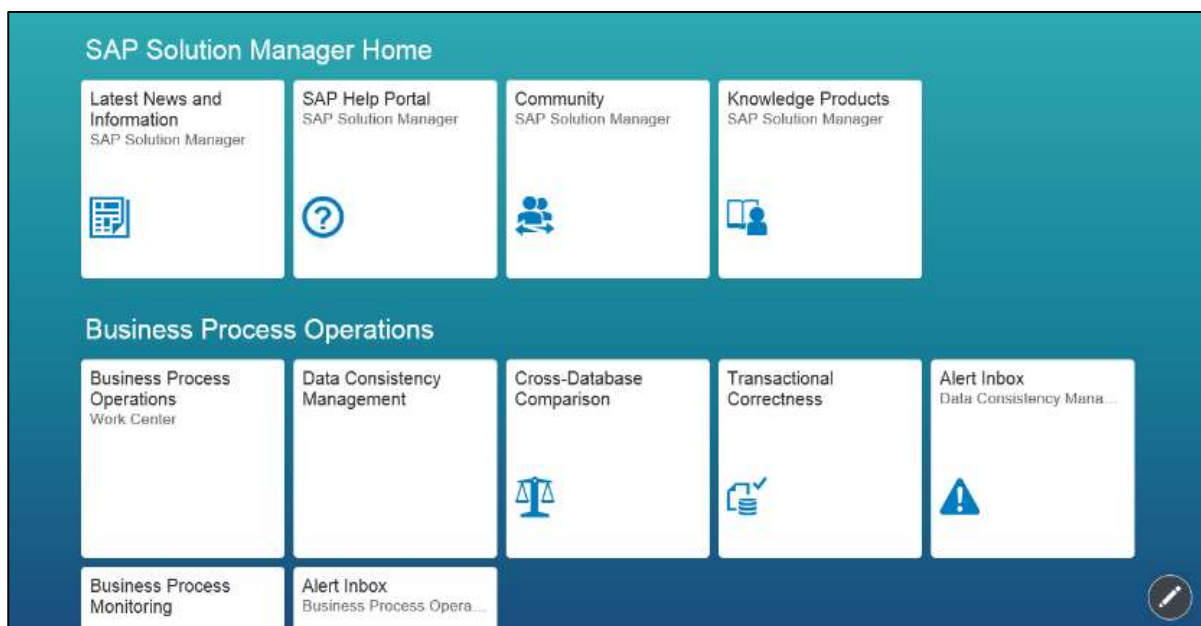
Product Name	SAP Solution Manager
Version	7.2 Support Pack Stack 3
Released Date	H1/2016
Underlying based product	SAP NetWeaver

Key Features

Key features supported in SAP Solution Manager 7.2 are-

- New User Interfaces
- New Release management
- ITSM and Change Request Management
- Adapt SAP HANA in your landscape
- New Process Management
- Enhanced Cloud Support

In the following screenshot, you can see the homepage of SAP Solution Manager 7.2 with new Fiori-based Launchpad as per defined user roles.



This Fiori-based Launchpad offers role based access to all relevant applications and Work Centers

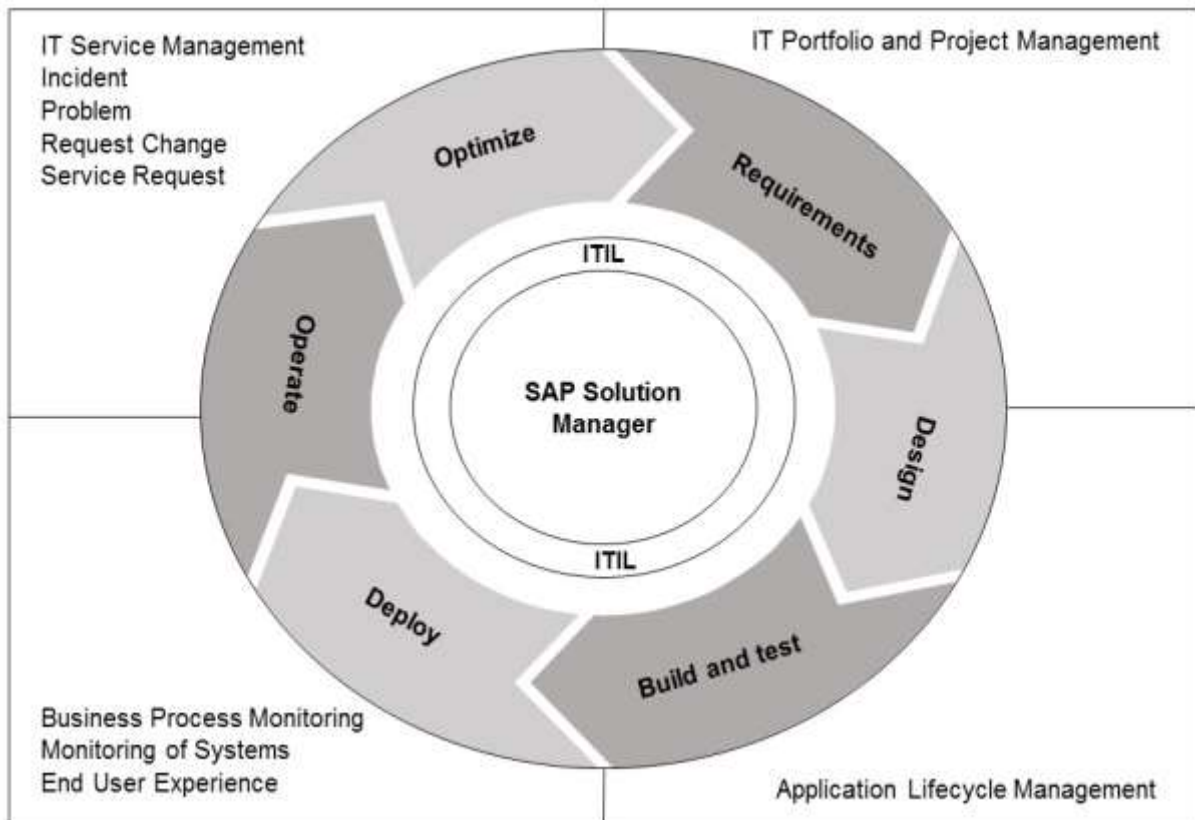
Supported Browser:

- **Microsoft Internet Explorer**
 - IE11 Desktop (recommended)
 - IE7-IE10 until Jan 2016
- **Mozilla Firefox**
 - Latest Extended Support Release Cycle (SAP recommended)
 - Latest Rapid Release Cycle (a backup browser is needed)
- **Google Chrome**
 - Cycle for Windows
- **Apple Safari**
 - On OS X for 3 years from version release date

SAP Solution Manager Product can be divided into following functional categories-

- SAP Solution Manager Operations
- SAP Engagement and Service Delivery
- Solution Implementation
- Template Management
- Test Management
- Change Control Management
- IT Service Management
- Business processes Operations
- Application Operations
- Upgrade and Maintenance

In the following illustration, you can see the SAP Solution Manager and integration with Lifecycle management, IT Service Management, IT Portfolio and Project Management and Business and Application Operations.



2. SAP Solman – Features

Following are the key features that are provided by SAP Solution Manager-

- **Centralized Administration Work Center:** Using SAP Solman, you can manage central access of all functions for administrative tasks.
- **Landscape Management Database:** It provides central source of system-landscape description data.
- **Issue Management:** You can document the problem and issue tracing using issue management feature.
- **Roadmaps:** Using Roadmaps, you can create predefined project plans to cover most important tasks and phases in project implementation as a part of solution implementation.
- **Template Management:** To roll out templates globally, you can use template management.
- **Test Management:** Using Test management, you can perform central test management from test planning to evaluation phase.
- **Change Control Management:** You can use a central change management process, which is integrated with Transport Management. You can transport ABAP and non-ABAP projects using Transport Management Infrastructure.
- **IT Service Management:** This is centrally managed and covers IT infrastructure. You can align IT management processes as per Information Technology Infrastructure Library ITIL. You can set up external Service Desk and access SAP service-support center.
- **Business Process Operations:** Automation of business processes is available in SAP Solution Manager. You can also monitor business critical processes.
- **Application Operations:** You can use Application Operations dashboards to display the availability and performance of your managed systems.
- **Maintenance Management:** You can use Maintenance Planner to create maintenance plans and stack XML files for installation using Software Update Manager (SUM). You can also use system recommendations option to find and display suitable SAP Notes. Maintenance optimizer can be used to start the maintenance process in production system. This provides you detailed instructions for downloading and installing maintenance files in the system.

3. SAP Solman – Work Center

To perform role specific functions, you can use Work Centers in SAP Solution Manager. Work Centers are work environments that allow you to access role specific options. You can access different options like alerts, notifications, messages, and reports as per the assigned role.

Work Centers provide a set of tools under SAP Solution Manager to manage complete IT Life Cycle. Work Centers perform different technical operations such as System Landscape Management, System Administration, System Monitoring, Project based, and IT Service Management Work Centers.

The available Work Centers in SAP Solution Manager 7.1 are-

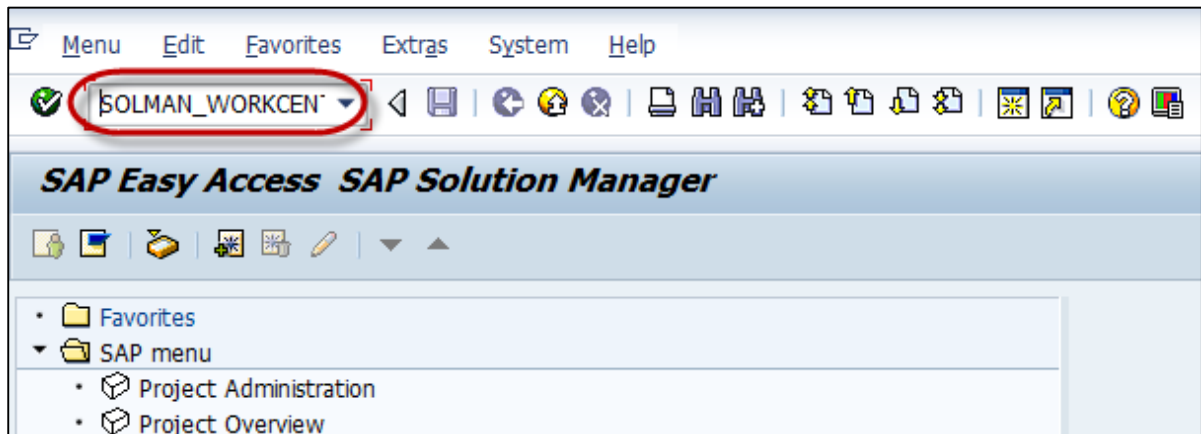
- My Home
- Implementation and Upgrade
- Solution Documentation Assistant
- Business Process Operations
- Job Management
- Root Cause Analysis
- Data Volume Management
- SAP Solution Manager Administration
- Change Management
- Test Management
- Incident Management
- SAP Engagement and Service Delivery
- Technical Administration
- System Monitoring
- Technical Monitoring
- Solution Manager Configuration

When you login to SAP Solution Manager Work Center, you can see the following options at the top-

- My Home
- Implementation/Upgrade
- Solution Manager Administration
- Technical Administration
- System Monitoring

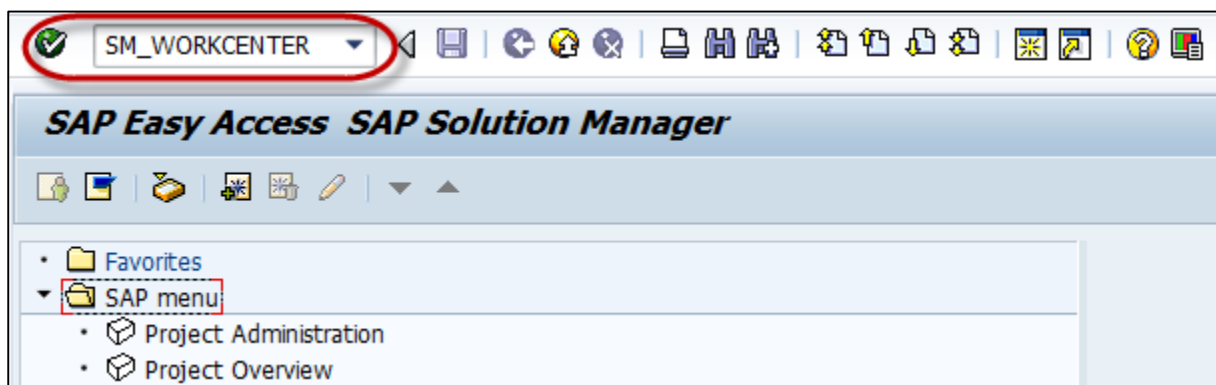
To access any of the work center, you should be authorized to access that Work Center, which means that the work center should be assigned to you.

Step 1: To run Work Center home screen, use T-Code: **SOLMAN_WORKCENTER**



Step 2: To start all work centers for which you are authorized, you can use the following transaction. For example,

In the SAP GUI for Windows, you can run the Transaction SM_WORKCENTER.



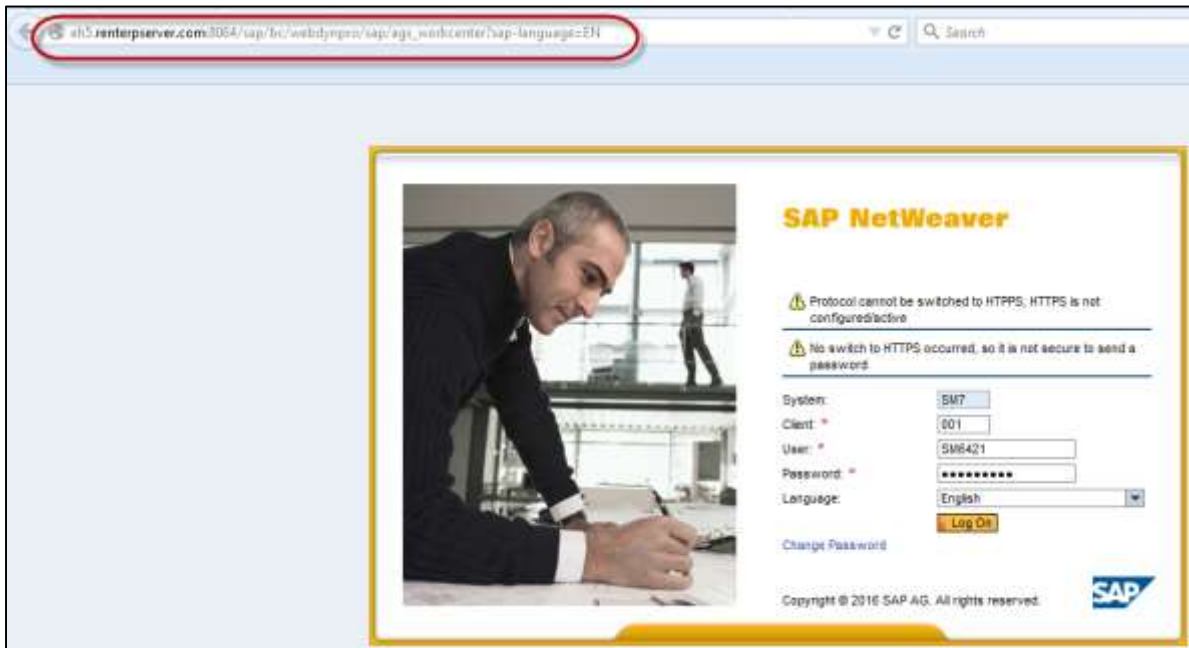
When you call the transaction, the URL for calling up the Web Dynpro application has the following format-

http://< host >:< port >/sap/bc/webdynpro/sap/ags_workcenter?sap-language=EN

Example

Enter the URL-

http://eh5.renterpserver.com:8064/sap/bc/webdynpro/sap/ags_workcenter?sap-language=EN



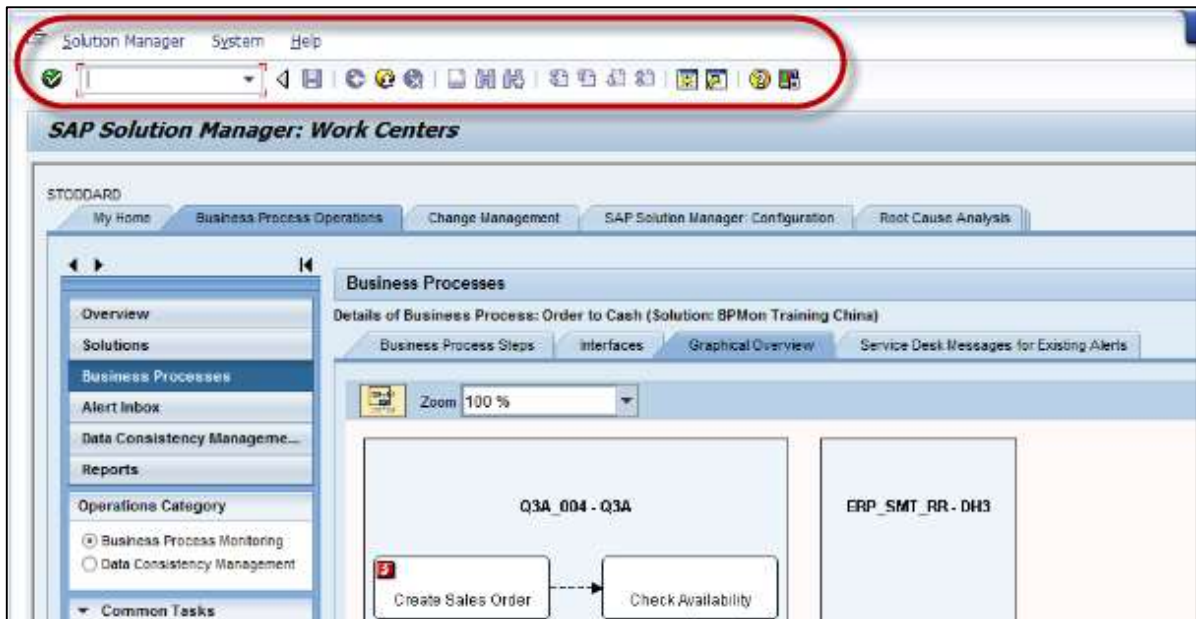
You can also start an individual work center by following Web Dynpro application directly. To open the Incident Management work center, you can use the URL-

http://<host>:<port>/sap/bc/webdynpro/sap/ags_work_incident_man?sap-language=EN

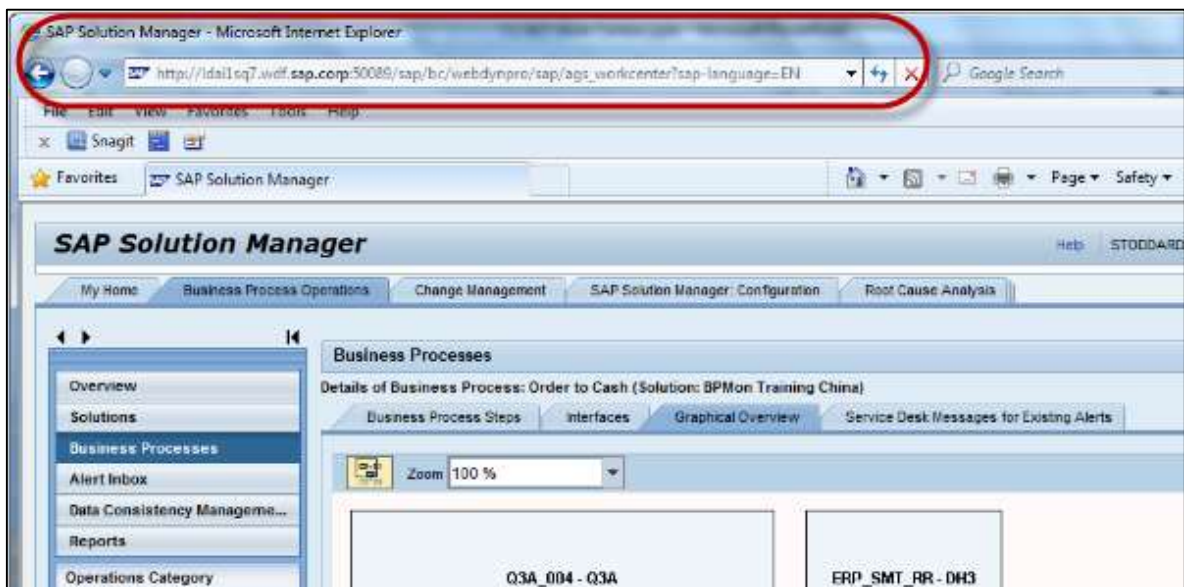
You can see all Work centers that are available under SAP Solman.



Look at the following two screen shots. Here you can see the difference between Work Center using Transaction- **SOLMAN_WORKCENTER** and Work Center with Web Browser: Service **AGS_WORKCENTER**.



The ribbons of both the Work Centers are different and are highlighted as shown below.



My Home Work Center

In SAP Solution Manager, to access My Home Work Center, you should be authorized for **My Home**. Using My Home Work Center, you can access all the key data related to other Work Centers in SAP Solman. Using hyperlinks, you can access the work centers that are assigned to you.

My Home Work Center contains the following functions-

- **Overview:** To see the overview of all the work areas under My Home Work Center.
- **Hyperlink:** You can access important links directly under Hyperlink.
- **Refresh:** To Refresh the Work Center and its tab.
- **Tasks:** You can access the assigned Task under Tasks tab.
- **Reports:** To view the available reports, quickly.

4. SAP Solman – Work Center Structure

All the work centers of SAP Solution Manager have a common user interface. It has same basic navigation features and vary slightly as per the role and use of the work center.

Each Work Center contains the following elements-

Navigation Bar

It shows first level of navigation that you use to choose the Work Center. It provides a role specific navigation bar with access to all the Work Centers associated with the role and assigned to the user who is logged in.

Navigation Area

It shows second level of navigation and you can select different references for a specific work center such as-

- Hyperlinks
- Views
- Functions

Content Area

The content area changes as per the navigation area selected.



5. SAP Solman – Implementation

SAP Solution Manager provides you with central access to all the tools, documents, functions, and methods that are required for a project implementation. It supports all the key project phases that you need to configure for business scenarios as a part of solution implementation.

As a part of solution implementation, you need to define the following Project phases-

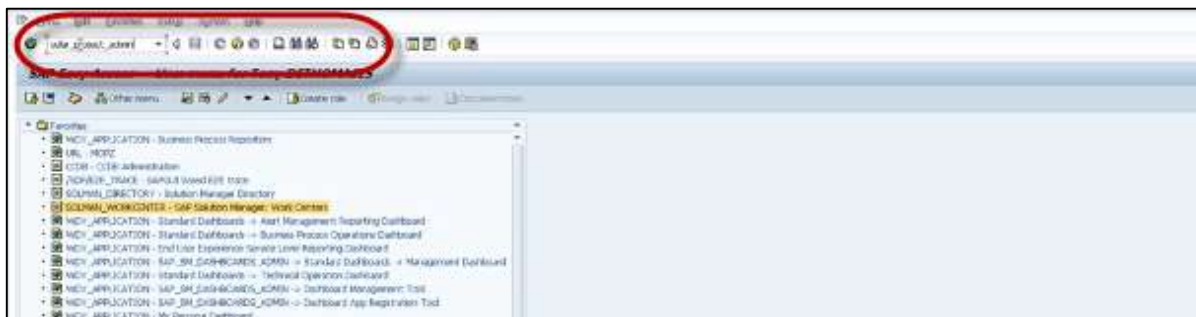
Defining a Project

First step in solution implementation is to define a project.

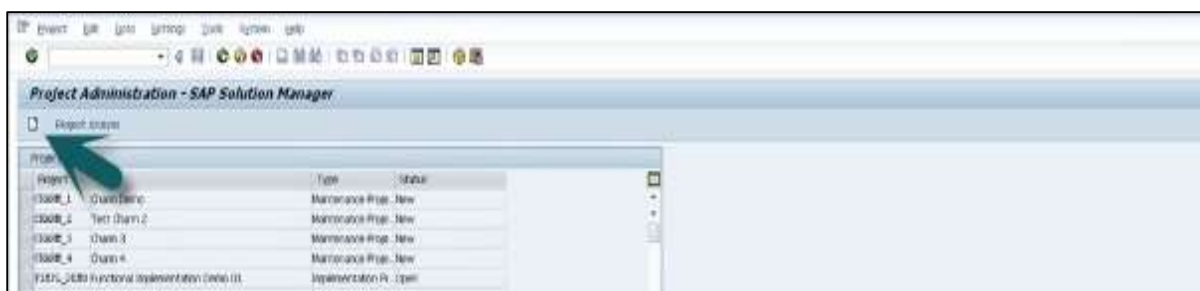
Step 1: Go to Project Administration Work Center. Create a project by defining a system landscape for phases involved in project and scope of the project. As per the scope of the project, structure hierarchy is defined for business processes and scenarios.

In SAP Solman, all the administrative tasks are performed under Project Administration work center.

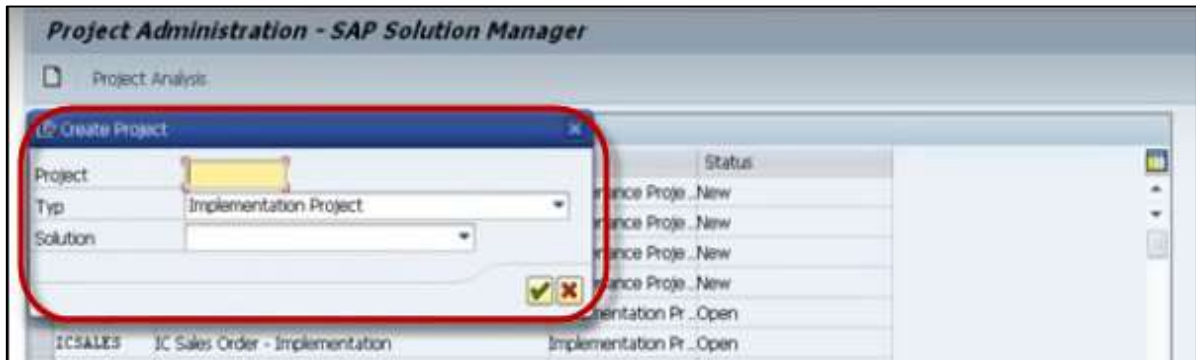
Run the Transaction Code- **SOLAR_PROJECT_ADMIN** to open Work Center. Transaction code is a predefined set of functions.



Step 2: To create new project, go to Project -> Create.



Step 3: Next, enter a project ID and title. The ID must have a combination of letters and numbers up to 10 characters and click continue.



Step 4: Enter the information under the following tabs while defining a Project. Each tab has multiple fields and a few are optional. The middle column shows the navigation for each tab and the options under it.

Functions	Navigation/Tab Name	Optional/Required
Create projects	Project -> Create	
Specify general project begin and end data	General Data tab	Optional
Project language		Required The project language cannot be changed later
Project scope. Copy templates into the project	Scope tab	Optional
Assign team members to project	Project Team Members tab	Optional
Definition of project standards (status, documentation types, keywords)	Project Standards tab	Optional
Definition of project system landscape	System Landscape tab	Required for subsequent navigation in managed systems
Distribution of IMG projects in the managed systems	System Landscape tab IMG Projects subtab	Required for configuration and customizing distribution
Create transport requests in the managed systems		
Project transport details	Transport Requests tab	Only in template projects Required for template projects whose templates are to be reused in other systems
Create, release, transport templates	Templates tab	Only in template projects
Download/Upload for Business Blueprint Projects	In a project, choose Edit -> Fill Business Blueprint	Optional
Manual deletion of persistent locks which the system does not delete automatically	Tools -> Delete Persistent Locks	Optional, if you need to unlock objects manually. For more information, see the application help.

A new screen appears to create a project.

Step 5: Select the **Project type** from the drop-down list.

Various project type options are available in SAP Solman.

Implementation project

This is required when you need a project to implement business processes in a SAP landscape.

You can select an existing structure based on business processes or you can also create a new project structure as per the following points-

- One or more user or partner templates
- Based on an existing project
- An existing solution landscape

Template project

Template project is used to create a template that defines the project structure or some part of your project. Templates can also be used in other projects by transporting the template. It is also possible to lock templates against any changes made- either completely or partially when they are used in other projects.

Optimization project

Optimization project type is used to optimize business processes.

Upgrade project

Upgrade project is used to upgrade an existing system. You can upgrade an existing function or add additional functions.

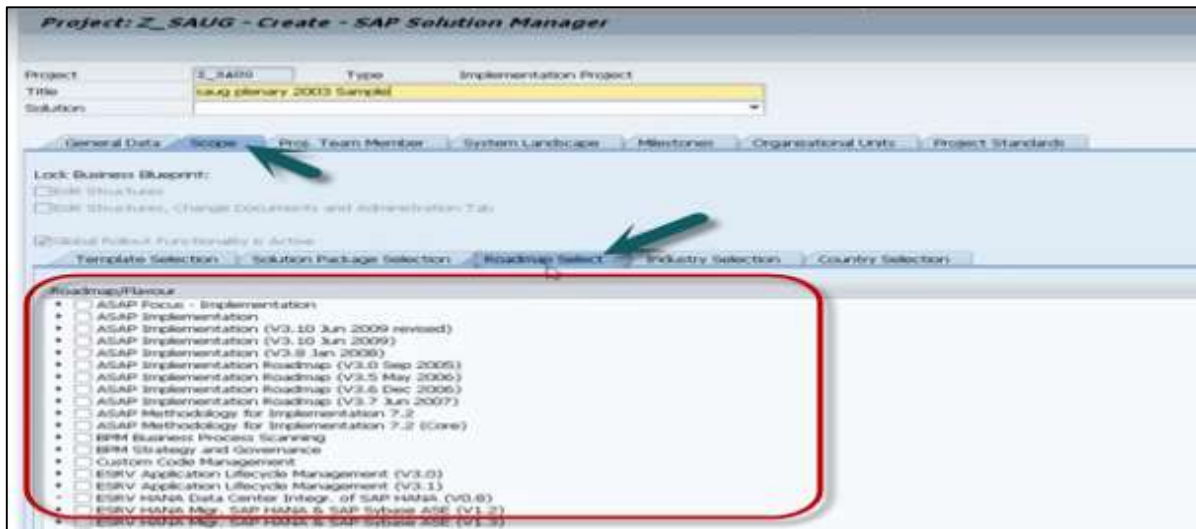
Maintenance Project

Maintenance project type is used to maintain an existing project. This can include Maintenance activities, or correct any existing solution.

Step 6: Once you select the Project type, enter the following General data-

- Person Responsible
- Project Status
- Led By and other relevant details.

Step 7: Next define the project scope. Go to the Scope tab and select the Roadmap.



Step 8: Once you select all relevant options- like Code Management, Business Process Scanning, Focus Implementation, click the save button at the top.

Step 9: Select **Enhancement** and **Release**. Click the green tick mark.



Step 10: Next is to define project Blue print. Click the Go to button at the top, Project -> Business Blueprint.



To define Business blue print, you have to select the **source** system.

Click the drop-down list. You will see the following options-

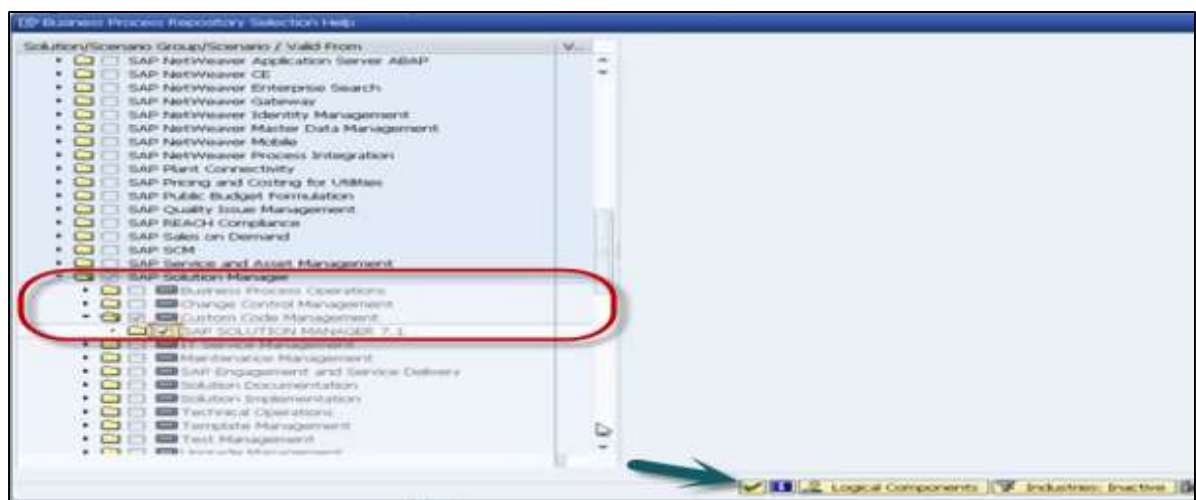
- **Business Process Repository:** To define blue Print in business process repository.
- **Solution:** You can define a business blueprint in Solution as package. (Solution in Solution Manager is explained in a separate topic).
- **Project:** You can define the business blueprint as a Project.

Step 11: Select **Business Process Repository** from the drop-down list.

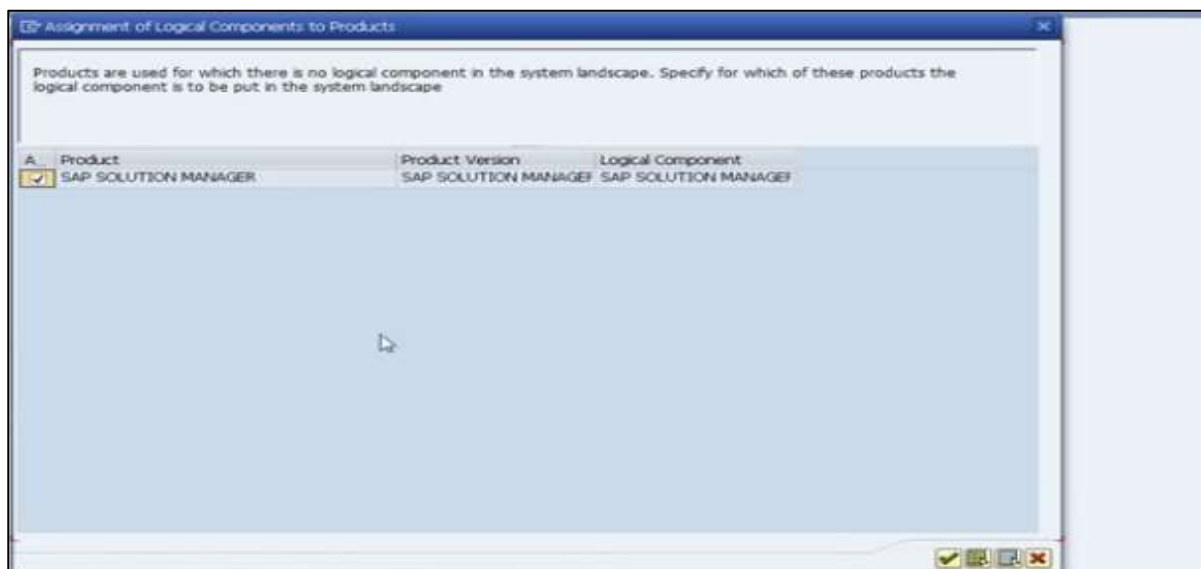


Step 12: Define the **Scenario name** as per the project scope defined. Go to SAP Solution Manager -> Custom Code Management -> SAP Solution Manager 7.1

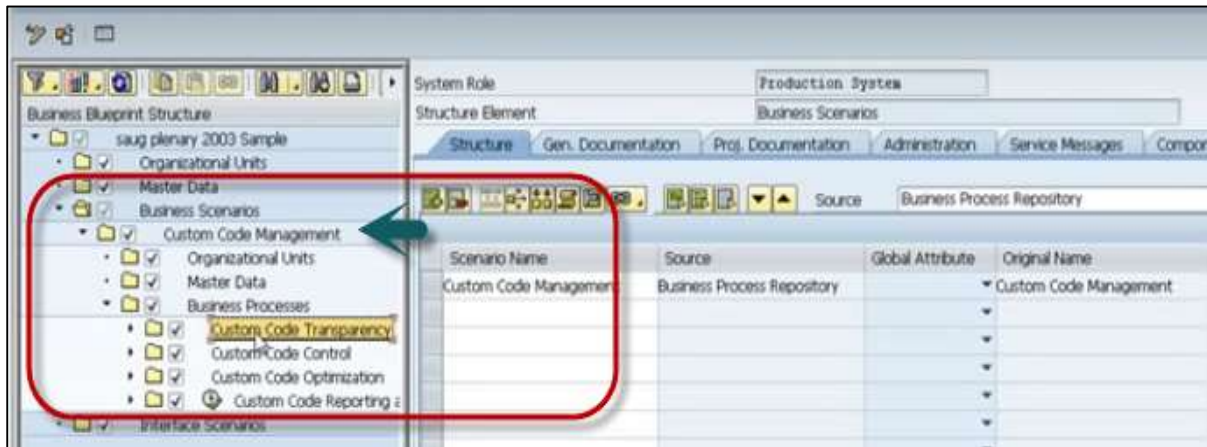
Click the green tick-mark icon.



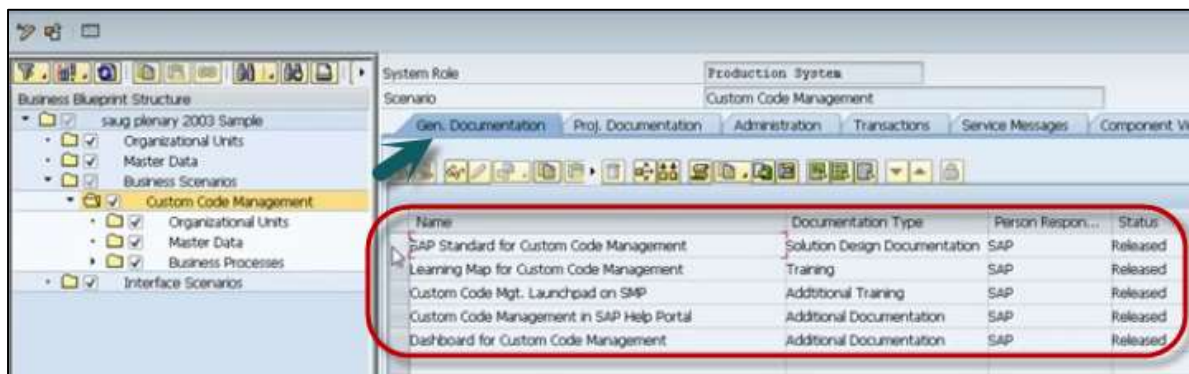
Step 13: Next step is to assign Logical components.



Step 14: Expand the hierarchy in the left pane as Business scenarios -> Custom code management -> Business Processes -> Custom Code Transparency.

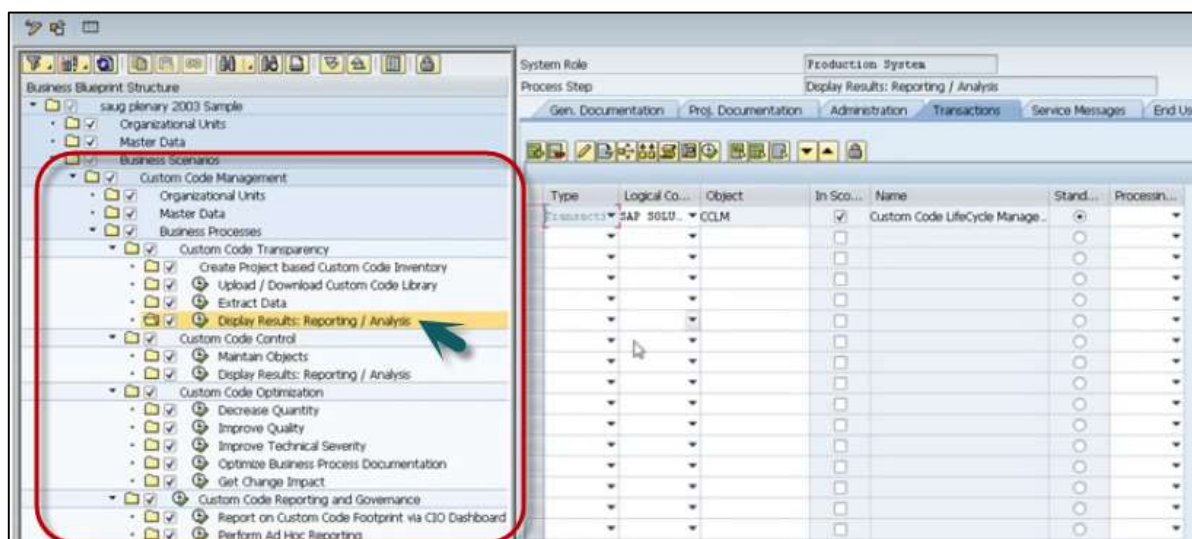


Step 15: To view the documentation under this project, click the General Documentation tab. You can see all the document types that have been created for this project.



Step 16: In a similar way, to see full hierarchy and associated document, you can expand any project in the left pane and select any component.

As shown in the following snapshot - **Display Results: Reporting/Analysis** is selected to see logical component and object name.



Step 17: Go to Get Change Impact and you will see logical component and object name for the same.

To see the roadmap, go to **Environment -> Roadmap**



The screenshot given below shows all the phases in Project Roadmap. You can check the details for each object- objective of service, prerequisites, deliverables, etc.



Roadmap - SAP Solution Manager

Roadmap Project

Roadmap Structure

- ESRV MOS Custom Code Management V1.1
 - 1 Project Setup
 - 2 Blueprint
 - 3 Realization and Testing
 - 3.1 Review Q-Gate Blueprint completed; Ready for Realization
 - 3.2 Verify if SAP Best Practices are considered by Implementation
 - 3.3 Control Creation of Documentation
 - 3.4 Support Test Scope Definition
 - 3.5 Q-Gate: Realization completed; Ready for Testing
 - 3.6 Review Q-Gate "Realization completed; Ready for Testing"
 - 3.7 Review Testing Preparation
 - 3.8 Verify Integration of the Custom Code Testing Requirements into ALM
 - 3.9 Support Testing for Custom Code Project
 - 3.9.1 SAP ESRV Business Process Performance Optimization**
 - 3.10 Q-Gate: Testing completed; Ready for Final Preparation and Handover
 - 4 Final Preparation and Handover to Production
 - 5 Operations and Continuous Improvement

SAP ESRV Business Process Performance Optimization

Objective of the Service
SAP ESRV Business Process Performance Optimization (BPPPO) with the focus on Custom Code optimization and gives technical and application advice how to optimize them.

Prerequisites for Service Delivery

- The implementation of the Custom Code functionality is finished.
- Delivery is supported by specific SAP Solution Manager session for the documentation and optimization the Business Process performance Optimization is delivered multiple times for several processes/steps Support Advisor.

Proceeding
The service supports the optimization and measurement for business processes and business process steps. KPIs agreed in the Blueprint phase are met. The results, i.e. the optimized transactions, programs, jobs, etc.

Deliverables of Service

- Completed technical performance optimization of the processes/steps in scope, i.e. Project team empowers.
- The result of the service is documented in the report and is uploaded into customer's Solution Manager.

6. SAP Solman – Infrastructure

SAP Solution manager consists of various infrastructure components- application management solution, and complete IT landscape. The solution discovers- technical monitoring and alerting infrastructure, system landscape information, integration of Solution Manager with SAP IT Infrastructure.

Integration between SAP Solman and IT infrastructure brings more advantages like-

- You can directly access data from SAP Solution Manager regarding IT Service Management processes.
- You can link Incident, Problem, and Change management to infrastructure information.
- It provides enhanced monitoring information inside SAP Solution Manager.

Technical Monitoring and Alerting Infrastructure

The infrastructure allows you to improve the health of your system in complex system landscape. It provides many advantages over common central CCMS monitoring.

You have to configure only central system- SAP Solution Manager and this configuration is distributed automatically to the managed systems.

The following functions can be performed using Technical monitoring and alerting infrastructure-

- You can perform a detailed view of all infrastructure components.
- The diagnostic agents are automatically updated and configured.
- It provides end-to-end monitoring and alerting for all the components in Landscape.
- You can monitor and manage infrastructure alerts in SAP Solution Manager Alert Inbox.

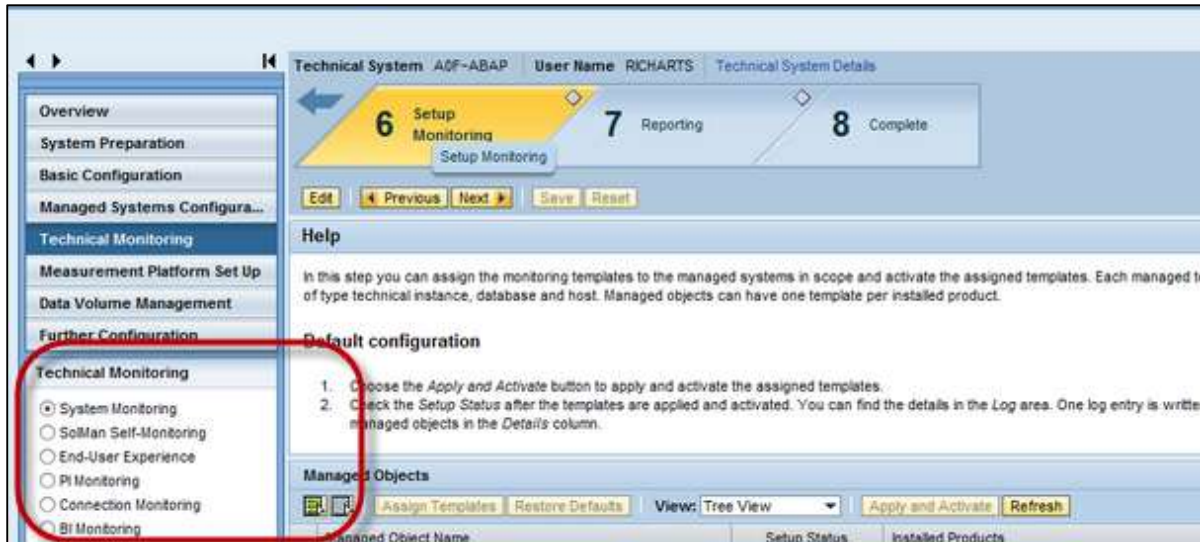
Select Technical Monitoring under Business process Operations.



Under Technical monitoring, you can perform various types of monitoring options-

- **System Monitoring:** To perform the monitoring of all the systems in SAP Solman System Landscape.
- **Connection Monitoring:** This is used to monitor connections in your IT Infrastructure.
- **BI Monitoring:** This is for Report monitoring.
- **PI Monitoring:** To monitor Process Integration between different systems. You can select and monitor each component in this landscape by using data from System Landscape Directory.
- **End-User-Experience monitoring:** To monitor the Performance and availability of technical systems from different locations.





Application Incident Management and Change Management

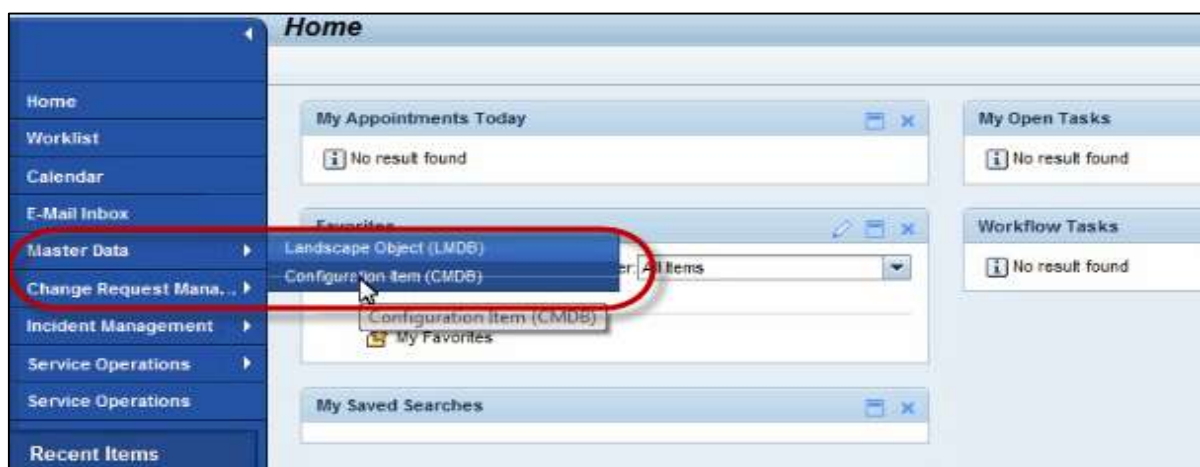
In SAP Solution Manager, **Incident management** is closely related to Service desk to manage all your issues related to Applications. When an application fails to deliver the required performance during normal service hours, you need to restore the service to normal operation as quickly as possible. This process is known as **Application Incident Management**.

Change Management process deals with managing changes in Infrastructure. Change Request can be raised for any routing activity like **Patch management**, or an urgent change to restore an application/service.

Step 1: To perform incident management and change management, you can search fields such as Function type, Manufacturer and Name of CI using the search criteria.

Step 2: From the incident name or change #, you can see the details of Configuration Item.

Step 3: Under Master data, there is a link to search CMDB and LMDB.



Step 4: To see all the transactions assigned- Incident # and Change # to a Configuration item, you can perform a search in CMDB.

Search Criteria

Product ID	is	
Description	is	
Serial No.	is	
Operating System	is	
Partner ID	is	
Partner Function	is	
Operating System	is	
OS Version	is	
Impact	is between	

Maximum Number of Results: 100

Result List

Product ID	Description	Alternative ID	Object Family	Ref. Pre
720000000011	No description entered		Configuratio...	
720000000012	No description entered		Configuratio...	
720000000020	No description entered		Configuratio...	
720000000021	No description entered		Configuratio...	
720000000022	No description entered		Configuratio...	

Step 5: By clicking on any CI, you can view all technical details, object organization data for CI as shown below-

Configuration Item (Solution Manager): 720000000041

Save | Cancel | New | Display Landscape Browser | Display Object Relationships

Parties Involved | Edit List | Show History

No result found

Service Transactions

Transaction ID	Transaction Description	Transaction Type	Employee Responsible	Requested Start	Requested End	System Status	User Status
6000001332	Test E&H	Request		26.06.2011	29.06.2011	Open	Created
6000002829	Test E&H	Incident			29.06.2011	Open	New

R3 Identification | Edit

Technical Asset Details

Technical Asset No.:
Structure Indicator:
Tech. Asset Category:
Technical Asset Type:

Further Details

Material:
Serial No.:
Master Batch:

Organizational Data for Objects from R3 | Edit

Business Area:
Controlling Area:
Cost Center:
Maintenance Plant:
Planning Plant:
Settlement Order:
Standing Order:
Valid From:

Step 6: Based on the Configuration item, product ID or object ID, you can create an Incident or Change request in Solution Manager.

CI is available under Object ID in Incident details as shown below-

Details [Edit](#)

General Data

ID: 8000002830

Description: CMDB Test Endress & Hauser

Customer:

Reporter: Philipp Kammerer

Processor:

Service Team:

Category

Category 1: Incident

Category 2: IT asset

Category 3: other

Category 4:

Solution Category:

Processing Data

Status: New

Impact: High Urga... Emergency

Recommended Priority: 1: Very High Prior... 1: Very High

Dates

Created: 26.08.2011 14:39

Changed: 26.08.2011 14:39

First Response by: 26.08.2011 15:37

IRT Status: ■ 4 %

Due by: 26.08.2011 16:37

MPT Status: ■ 2 %

Relationships

Related Problem:

Related Request for Cha:

Related Knowledge Article:

Reference Objects

Installed Base: 21159 Walldorf

Installed Base Component: 21162 WORKSTATION

Object ID: 728000000041

In SAP Solution Management infrastructure, you can use Landscape Management Database (LMDB), which is a central landscape information repository. It uses the same information as the System Landscape Directory (SLD) to enter the system information.

LMDB connection to SLD

LMDB gets all the information from the System Landscape Directory where all the system registers itself. Most of the technical systems contain data suppliers that provides direct information to SLD for registration.

The LMDB receives SLD changes automatically when a change occurs, using polling by LMDB, or active change notifications by the SLD.

Work Modes

You can use various work modes in SAP Solution Manager to perform the following activities-

- Maintenance
- System Migration
- Patch upgrades
- Customizing changes

Work modes can be divided into further two categories-

Technical work mode

Following types of Technical work modes can be used-

- **Planning Downtime:** Technical work mode is defined as the work mode during which the system is technically down and you do not have access. System administrators can use this work mode to perform planned administration tasks that can only be performed during downtime.
- **Maintenance Mode:** Work mode during which the system is technically up and you have no access. System administrators can use this work mode to perform planned administration tasks that can only be performed during maintenance.

Business Work modes

The following types of business work modes can be used-

- Peak Business Hours
- Non-Peak Business Hours
- Non-Business Hours

Note: To use the Work Mode Management reporting functionalities, Monitoring and Reporting has to be enabled for the managed systems.

Roles

The following roles are required to perform Work mode management and IT calendar activities-

- SAP_SM_DTM_DIS Work Mode Management (Display authorization)
- SAP_ITCALENDER Display of Work Modes in IT Calendar
- SAP_NOTIF_DISP Notification Management
- SAP_SMWORK_SYS_ADMIN Work Center: Technical Administration
- SAP_ITCALENDER Display of Work Modes in IT Calendar

Planning a Work Mode

To Plan a Work mode, you have to navigate to Technical Administration Work Center.

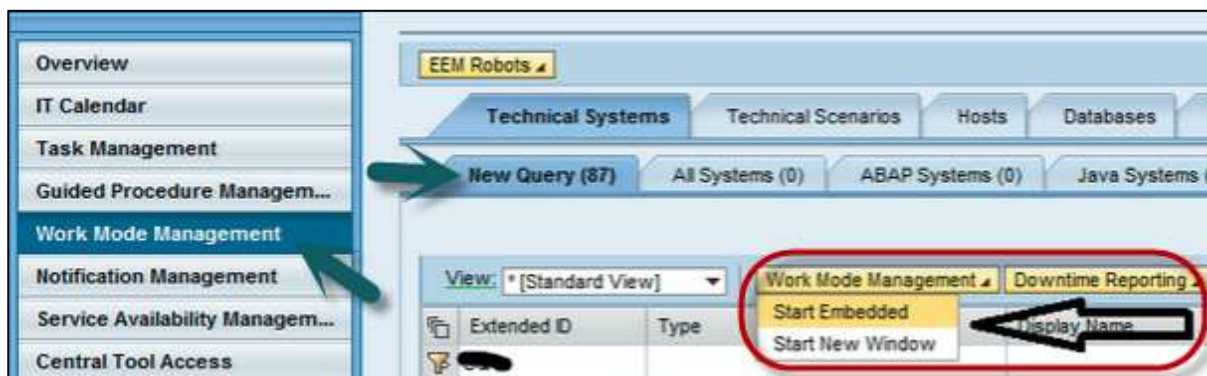
Step 1: Select Work Mode Management -> Type Selection area, select a component type.



Step 2: When you select a component type other than **EEM Robots**, perform the following-

- Go to Detailed Selection area, select a query.
- Group the technical components in queries for faster access.
- In the query, select the technical component -> Select Work Mode Management
- Display the work modes, embedded or in a new window.

(An EEM robot is used to perform End user monitoring and is a run time agent. This is used to replay the scripts and one robot per monitoring location is required to perform EEM monitoring),



Step 3: A hierarchical view of the technical components and details of the current and next work modes are displayed. Next is to select the component. You can see a list of work modes for the component.

Step 4: If you have selected the component type EEM Robots, select a robot. The list of work modes for the robot is displayed.

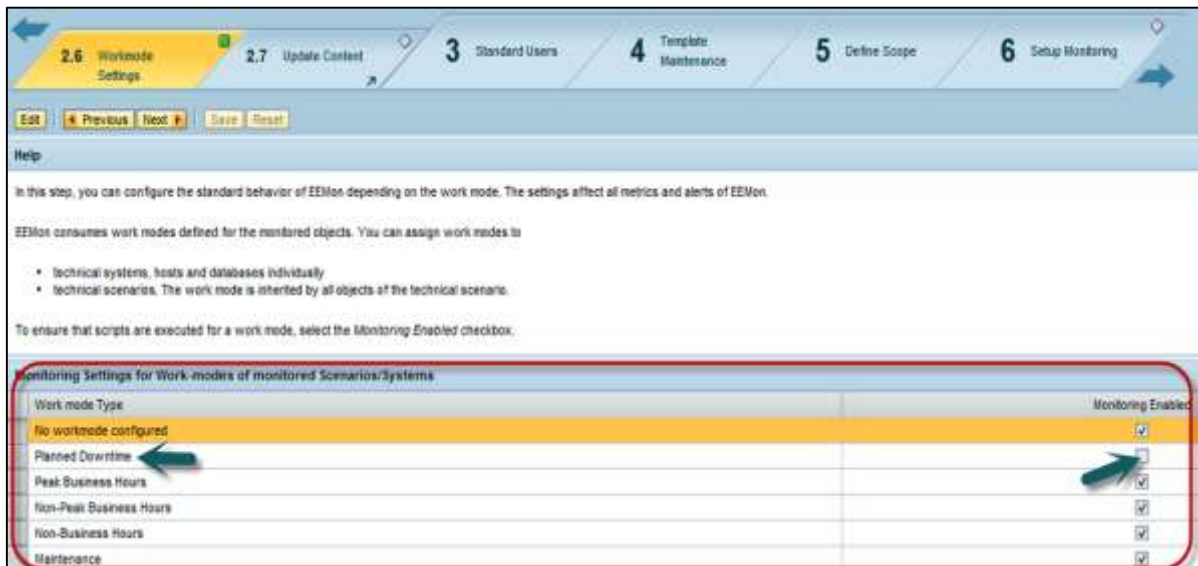
Step 5: Enter Schedule Work Modes. In the Schedule Work Mode for technical component screen area, you can enter the required data.

Note: You can plan only peak business hours, non-peak business hours, or non-business hours for an EEM robot.

Configuring Technical Monitoring as per Work Modes

In SAP Solution Manager, you can setup work modes for Technical Systems, databases and technical scenarios. You can switch off complete technical monitoring or modify single metric thresholds of specific systems.

For each work mode, you can define if monitoring is enabled or not. If you observe that the **Planned Downtime** check box is deselected, it means alerting and monitoring is disabled



7. SAP Solman – Operations

In SAP Solution Manager, you have different functions and tools to perform SAP Solution Manager Operation's activities. These are-

- **Administration Work Center:** Contains all the functions that are required to run SAP Solution Manager.
- **Landscape Management Database (LMDB):** It is the central landscape information repository and it uses the same System Landscape Directory to enter the system information.
- **Solutions:** Using solution, you can bundle the system and processes as per the requirement to monitor the operation.
- **Supportability Performance Platform (SPP):** This is used to enhance the performance of a system and to monitor performance management indicators.

Administration Work Center

You can perform various operation activities in Administration Work Center in SAP Solution Manager.



The following operation activities can be performed-

- **Overview:** To quickly see all the Work areas in this Work center.
- **Landscape:** To create RFC connections, manage system modeling and diagnostics agent.
- **Infrastructure:** To create or edit a technical system, and to manage different templates like store and extractor templates.
- **Self-Monitoring:** To monitor large number of alert types, monitoring of applications to identify key problems early on, and alerting infrastructure.

- **Projects:** To display detailed information about projects.
- **Self-Diagnosis:** To monitor SAP solution manager and all other managed systems in Landscape.
- **Work Mode Management:** To perform the following activities-
 - Maintenance
 - System Migration
 - Patch upgrades
 - Customizing changes

Landscape Management Database

In SAP Solution Management infrastructure, you can use Landscape Management Database (LMDB), which is a central landscape information repository. It uses the same information as the System Landscape Directory to enter the system information.

LMDB gets all the information from the System Landscape Directory where all the system registers itself. Most of the technical systems contains the data suppliers that provides direct information to SLD for registration.

The LMDB receives SLD changes automatically when a change occurs, using polling by LMDB, or active change notifications by the SLD.

Solutions

Using solutions, you bundle the system and processes as per the requirement to monitor the operations. When system and business processes are entered in a Solution, following applications can be used in SAP Solution Manager-

- IT Service Management
- System and Business Process Monitoring
- SAP Engagement
- Reporting

The Solution view in Administration work center contains a list of all the solutions that can be searched using a Solution type or solution ID. You can also import and export solutions between different systems-

Step 1: Click **Goto -> Solution Transfer**. Each solution can be called by its name or ID.

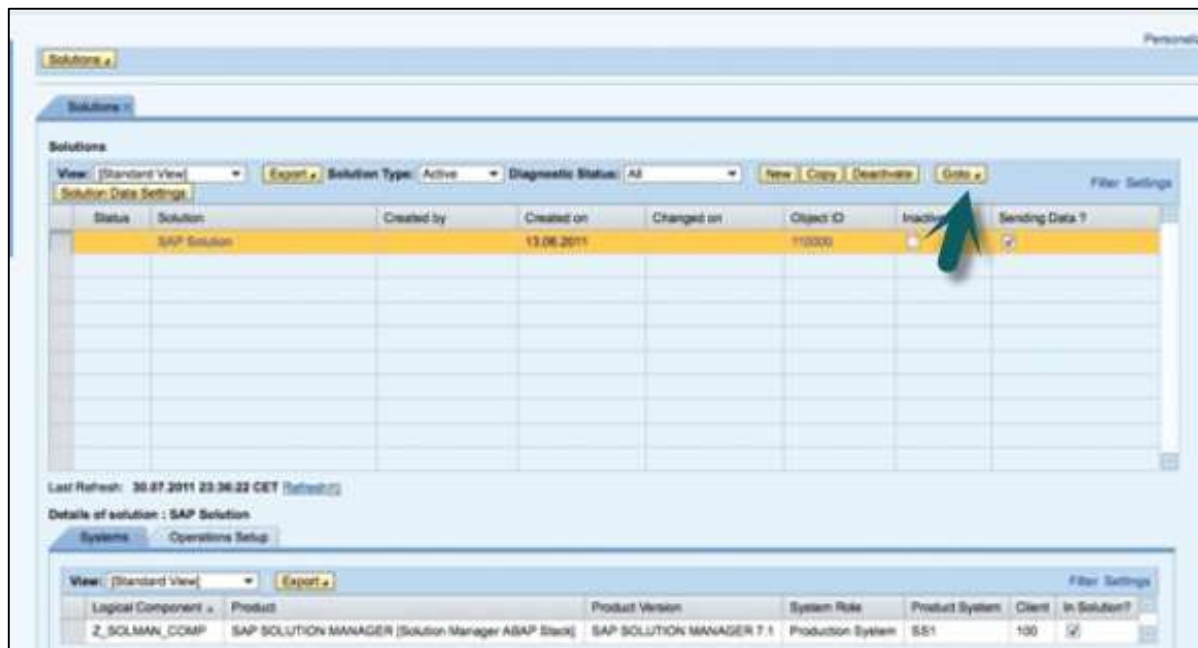
Under Solution tab, you can perform the following functions-

- Creating a new solution
- You can copy existing solutions as templates to be used to create new solutions
- Activating/Deactivating Solution
- Deleting A Solution

Step 2: To call a list of service connections for a selected solution for which you can create a system connection to SAP, Click **Goto -> Service Connection**.

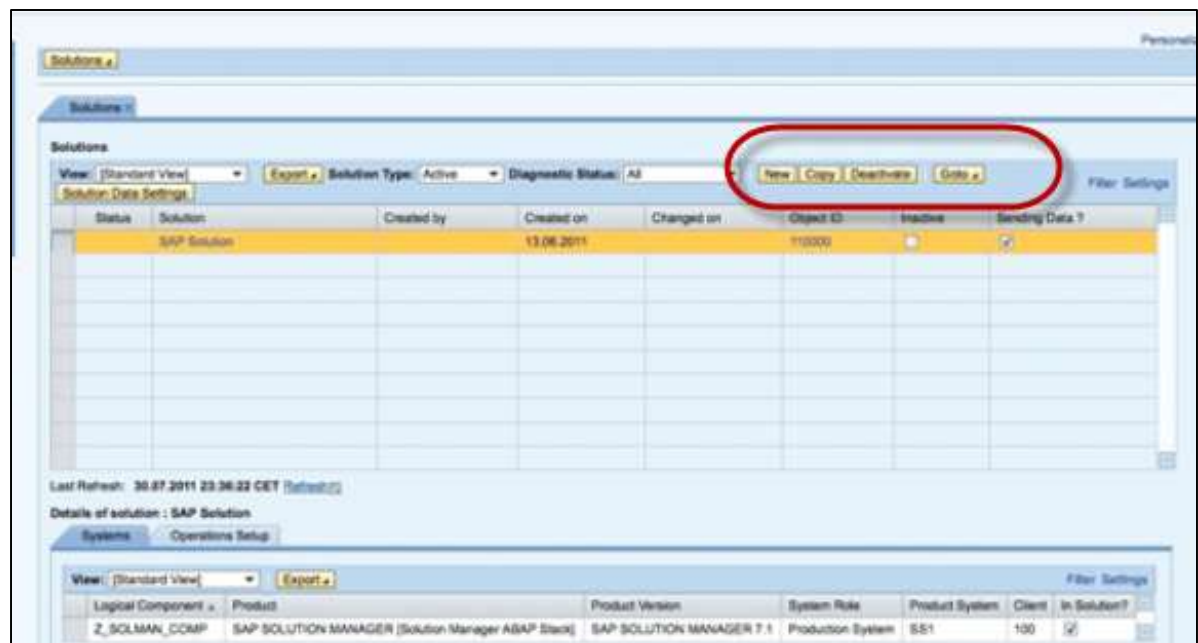
Step 3: To transfer solutions between different systems by exporting and importing them, choose Start of the navigation path **Goto -> Solution Transfer**.

Step 4: To set which solution data system should send like Production data, click **Goto -> Solution Settings**



How to create a Solution?

To create a Solution, click Create Solution. Enter the name of solution. You can edit the list of system roles.



You can also copy an existing solution by clicking the Copy button.

8. SAP Solman – System Landscape Information

We have covered some part of System Landscape information under Solution Manager Infrastructure. SAP Solution Manager applications- Technical monitoring, system maintenance captures all information regarding upgrades with Maintenance planner, alerting policy from system landscape. SAP Solman contains the detailed information about technical system landscape.

LMDB is a central repository for Solution Manager to capture all the information and it uses the same CIM model that is used by System Landscape directory. Landscape information contains two parts- SAP software catalog CR content and information sent from SLD.

LMDB connection to SLD

LMDB gets all the information from the System Landscape Directory where all the systems register itself. Most of the technical systems contain data suppliers that provides direct information to SLD for registration.

The LMDB receives SLD changes automatically when a change occurs, using polling by LMDB, or active change notifications by the SLD.

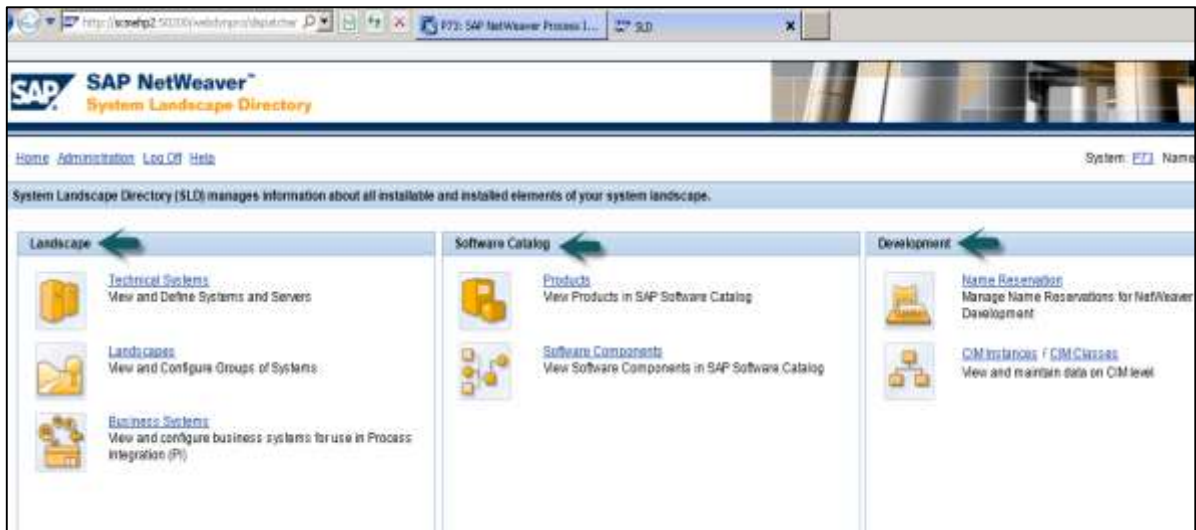
SLD contains data from managed system and their data suppliers, which automatically pass all the information in SLD. The transaction code used for ABAP system is **RZ70**.

SLD Synchronization is the most common way to transfer Landscape information to LMDB. When Solution Manager is initially set up, it transfers complete Landscape from SLD to LMDB in Solution Manager. This also includes the information from Software catalog.

Once initial full synchronization is done, an incremental synchronization is triggered every 10 minutes.

System Landscape Directory

This directory contains the information about landscape and software component versions. A SAP system can be configured to register under SLD. System Landscape Directory manages information about all installable and installed elements of your system landscape.



You can find the following links in a web page-

Landscape: Under Landscape, you can find the following options-

- **Technical Systems:** You can view and define systems and servers.
- **Landscapes:** You can view and configure group of systems.
- **Business Systems:** You can view and configure business systems for use in Process Integration (PI).

Software Catalog

- **Products:** To view products in SAP software catalog.
- **Software components:** To view software components in SAP Software catalog.
- **Development**
 - **Name Reservation:** This is used for name reservation for NW development.
 - **CIM Instances:** This is used to view and maintain data on CIM level.

System Landscape Directory is based on SAP NetWeaver. The following versions of SAP NetWeaver are supported for SLD synchronization with LMDB-

SAP NetWeaver Release of SLD System	Minimum Support Package Level of SAP NetWeaver
SAP NetWeaver 7.0	not supported
SAP NetWeaver 7.0 EHP1	not supported
SAP NetWeaver 7.0 EHP2	SP 17
SAP NetWeaver 7.1	SP 19
SAP NetWeaver 7.1 EHP1	SP 14

SAP NetWeaver 7.2	not supported
SAP NetWeaver 7.3	SP 12
SAP NetWeaver 7.3 EHP1	SP 14
SAP NetWeaver 7.4	SP 9
SAP NetWeaver 7.5 and higher	all SPs are supported

When your Central System Landscape Directory, integrated with LMDB, does not meet the requirement, you can use a local SLD and synchronize it with central SLD.

Managing Technical System Information

Technical system is known as a software element installed on host system. It can be a standalone system or software elements installed in distributed environment. Technical systems are central element of the Solution landscape in terms of software component deployment and operational activities, such as monitoring and alerting.

When a software is installed, technical components are created in the system and they are registered under System Landscape Directory. This information is forwarded to Solution Manager LMDB either manually or using synchronization between LMDB and SLD.

Technical systems are identified using their name, system id or any installation number that has been assigned. Common Technical system types can include-

- Application Server (AS) ABAP
- Application Server Java
- TREX system

In the following table, you can see different Technical system types that can be maintained in LMDB, their source and Editor.

The following technical system types can be maintained in LMDB-

Technical System Type	Source	Editor
.NET System	Manual creation	LMDB technical system editor
Apache Tomcat Server	SLD data supplier	LMDB technical system editor
Application Server ABAP	SLD data supplier	LMDB technical system editor
Application Server Java	SLD data supplier	LMDB technical system editor
SAP BusinessObjects Cluster	SLD data supplier	LMDB technical system editor
SAP Web Dispatcher	SLD data supplier	LMDB Technical System Editor
SAP HANA Database	Either SLD data supplier	LMDB technical system editor
SAP Mobile Platform	SLD data supplier	LMDB technical system editor
TREX System	SLD data supplier	LMDB technical system editor
Unspecific 3-Tier System	Manual creation	LMDB technical system editor
Unspecific Cluster System	SLD data supplier or manual creation	LMDB technical system editor
Unspecific Standalone Application System	SLD data supplier or manual creation	LMDB technical system editor

9. SAP Solman – Guided Procedure Authoring

Guided Procedure Authoring provides a set of tools such as Browser and Guided procedure logbook to create guided procedure for activities that are performed periodically. Guided procedures are executed in different scopes i.e. technical system, host, and databases and for different application areas.

Guided procedures in solution Manager can be used to achieve following benefits-

- To perform complex processes.
- Business critical processes can be executed with less risk.
- To speed up the processes.

GPA can be integrated with different application modules-

- Business Process Operations
- Application Operations
- Message flow monitoring
- Database Comparison
- IT Task Management
- Alerting and Monitoring

Launching Guided Procedure Environment

To launch Guided Procedure Environment follow the steps given below-

Using Transaction code: GPA_ADMIN or from a work center, you can open Guided Procedure Browser from the following work centers:

Root Cause Analysis -> Exception Management -> Guided Procedures or Business Process Operations -> Data Consistency Management -> Cross Database Comparison

Different tools under Guided Procedure Authoring includes-

GPA Browser

Using GPA Browser tool, you can create, delete, preview, search or export guided procedures, and update the content of delivered SAP Guided Procedure.

The screenshot given below shows you the home screen of GPA browser.

Using Application area option, you can group GP for a function area.

Search Attributes

You can apply filters to the guided procedures.

When you clear search attributes, GP browser displays all the Guided Procedures as per the functional area.

The screenshot shows the 'Guided Procedure' browser interface. The 'Content Delivery' tab is selected and highlighted with a red oval. Below it, the 'GPA Context' section shows 'Application Area' set to 'Technical Administration'. The 'Search Attributes' section is expanded and also highlighted with a red oval, showing the following filters:

- Use Case: (empty)
- Managed Object Type: T_SYSTEM
- Software Component: 67837800100100011816
- Software Component Version: 67837800100200022523

Buttons for 'Apply' and 'Reset' are visible. Below the filters, the 'Guided Procedure list of Technical Administration' is shown with a table containing two entries: 'Demo GP' and 'test gp'.

Content Delivery Pane

This option can be used to alert the customers when new content is available and it also proposes to import it.

This screenshot is identical to the one above, showing the 'Guided Procedure' browser with the 'Content Delivery' tab selected and search filters applied. The 'GPA Context' shows 'Application Area' as 'Technical Administration', and the 'Search Attributes' section lists the same filters: 'Managed Object Type: T_SYSTEM', 'Software Component: 67837800100100011816', and 'Software Component Version: 67837800100200022523'. The table below shows 'Demo GP' and 'test gp'.

Application Area

You can use the following Application areas in GPA-

- BI Monitoring
- Business Process Monitoring
- Cross Database Comparison
- Advanced Monitoring Configuration
- Data Volume Management
- End User Monitoring
- Exception Management
- Exception Management Configuration
- Interface and Connection Monitoring
- Job monitoring
- PI monitoring
- System Monitoring
- Technical Administration

Guided Procedure

Scope: [redacted]

Content Delivery

GPA Context

Application Area: Technical Administration

Help

Hide Search Attributes: (3 filter(s) set)

Search Attributes

Search Attributes

Use Case: [dropdown]

Managed Object Type: T_SYSTEM

Software Component: 67837800100100011816

Software Component Version: 67837800100200022523

Apply Reset

Guided Procedure list of 'Technical Administration'

View: [Standard View] Free Text Search Attribute: [input] Search Execute Create Edit Delete Display Display Execution Logs

Name
Demo GP
test gp

GPA Maintenance

Using the GPA Maintenance tool, you can modify, activate, transport, and review the already existing Guided Procedures. To open Guided Procedure Maintenance, you have to open GP Browser -> 3 buttons of GP Maintenance UI. These are -

- **Create button:** To create a new GP.
- **Edit button:** To modify a GP.
- **Display button:** To show the details of a GP.

Guided Procedure

Scope: [REDACTED]

Content Delivery

[Install new content](#) Guided Procedure content is up to date

GPA Context

Application Area: System Monitoring

Help

[Show Search Attributes](#) (no filter set)

Guided Procedure list of 'System Monitoring'

View: * [Standard View] Free Text Search Attribute: [Search](#) [Execute](#) [Create](#) [Edit](#) [Delete](#) [Display](#)

[Display Execution Logs](#)

Name	Version	Active	Productive
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GPA Log Book

This tool of GPA is used to view instances, logs, and to export to HTML, and start new instance. You can access Guided Procedure Log from GP Browser for the selected scope and for the selected guided procedure.

You can use the filtering section to filter the logs. IT is also possible to export the logs to different formats- Excel, HTML, etc.

Guided Procedure Instances

[Export](#) [Show Details](#) [Continue](#) [Start New Instance](#) [Export to HTML](#)

[Export to Microsoft Excel](#)

Guided Procedure	Instance	Version	Last Processor	Date	Time	Managed Objects
------------------	----------	---------	----------------	------	------	-----------------

GPA Content Delivery

This tool is used to raise alerts incase when new content is available. Customer is notified about the new content at two places. First is when GP is opened and the customer executes a guided procedure, he will see a message informing him that new GP content is available.

☒ New Guided Procedure Content ready to be installed.

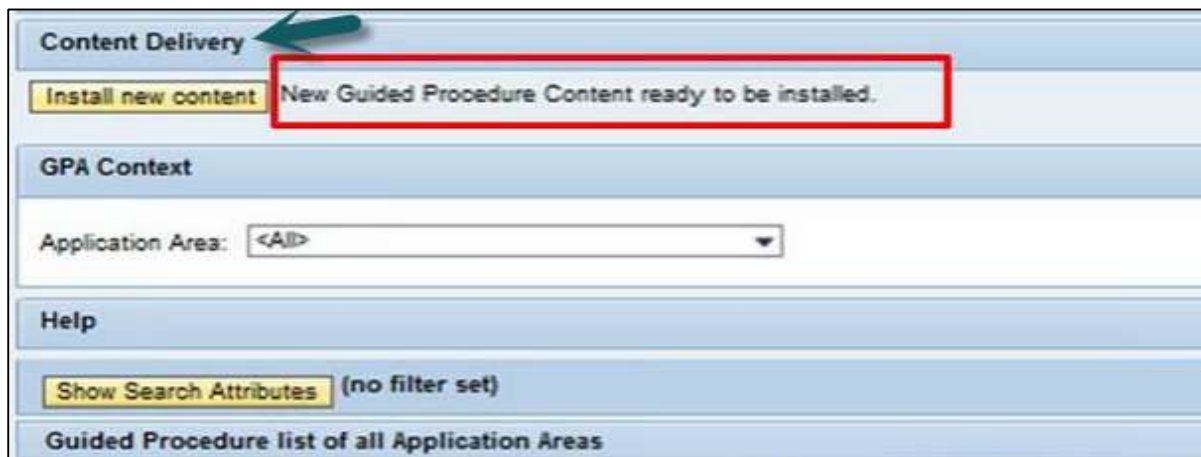
1 Overview

2 Application Cleanup

3 Cross-A Cleanup

[Read Only](#) [Previous](#) [Next](#) [Save](#) [Reset](#)

The second option is when the GP Browser is opened, a message is displayed that the Content Delivery area shows the current status of GP content.



GP Runtime

This tool is used to execute a guided procedure, to check status of execution. When you open a Guided Procedure in GP Browser UI or you can select preview in Guided Procedure Maintenance, it opens the guided procedure runtime UI and you can execute GP.

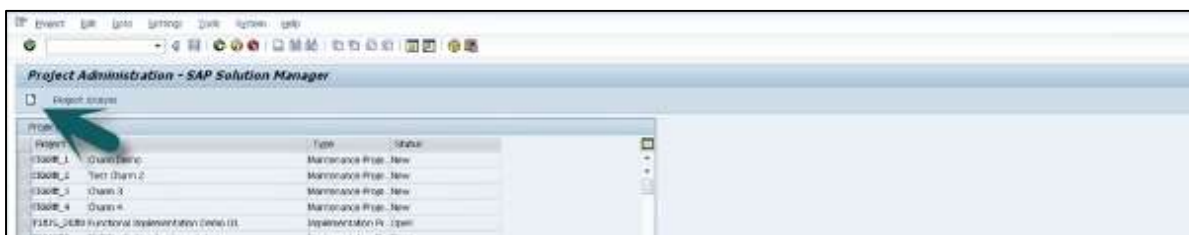
10. SAP Solman – Template Management

In SAP Solution Manager, using template management you can create templates at global level – for blueprint documents, business scenarios, and configuration and they can be distributed. The templates can be reused in other projects and solutions.

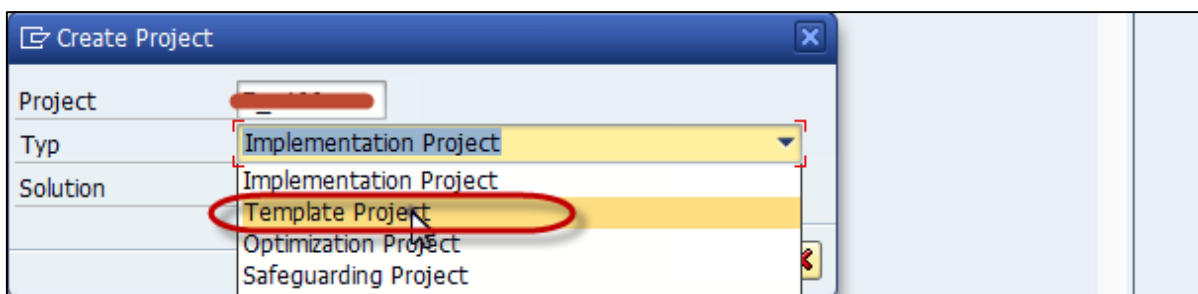
Creating a Template

In SAP Solution Manager, to create a template, you have to start with a template project.

Step 1: Go to Project Administration,



Step 2: Next, enter the Project name and select the Project Type. Project type would be the **Template Project** to create a Template. Select the Solution where you want to create this Project.

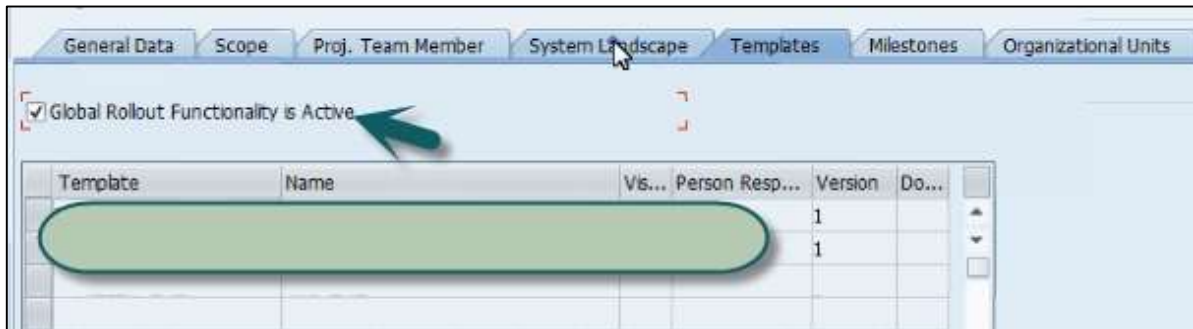


Step 3: In the next window, you have to enter the following details- Language, Project Title, Person Responsible, and other options under General tab.

Step 4: Once you enter all the details, click the save button at the top. You have to select **Enhancement version** and **Release**. Click Continue. Select Package -> Continue.

Step 5: Next click the **Templates** tab at the top. Click the **Create Template** button. Enter Template and name and click Continue.

Step 6: You can create multiple templates in one project. Select **Global Rollout Functionality is Active** for the templates.



Step 7: Go to **System Landscape** tab and select logical component/System to add to projects. You can perform a search for a particular system/logical component.

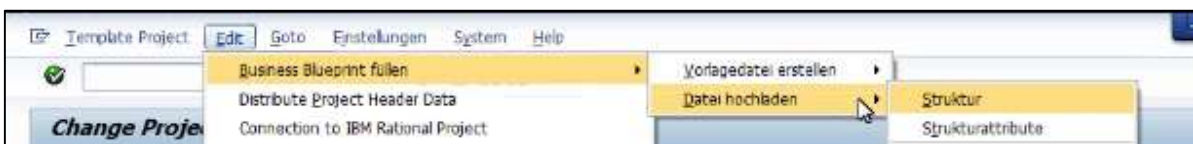


Step 8: When all the logical components are selected under System Landscape, click the Save button at the top.

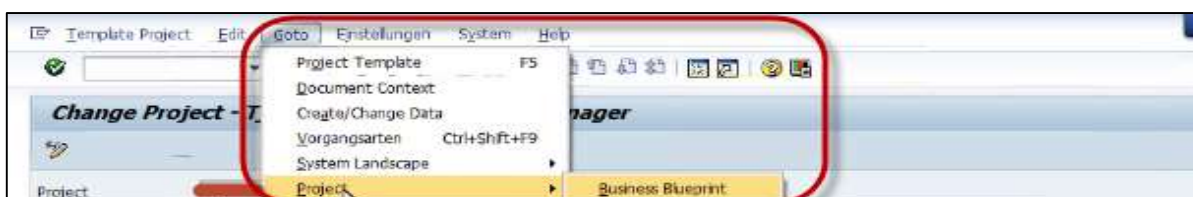


Step 9: Next define Business Blueprint structure, go to **Edit -> Business Blueprint Fill**.

Step 10: Select the structure file -> Open -> Continue.



Step 11: Next is to define Business Blueprint, click on Goto -> Project -> Business Blueprint

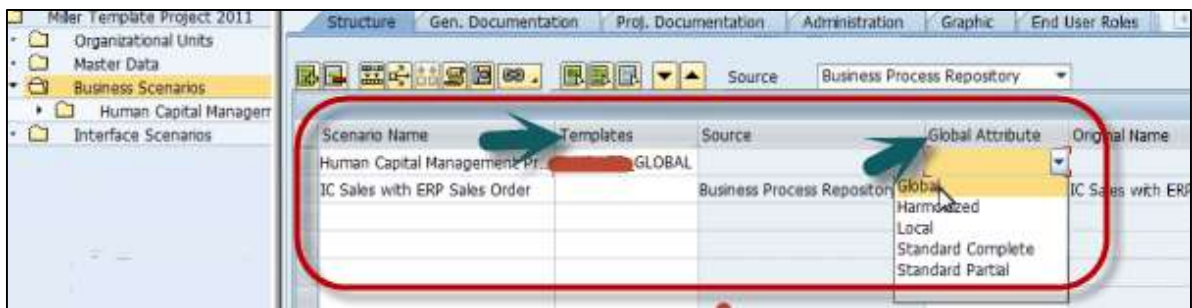


Step 12: Navigate to Business Scenarios in the left pane. Select Scenario names. Go to **Structure -> Scenario Name** and select **Scenario**.



Step 13: Assign templates and set global attributes. Go to **Template** and select the templates created.

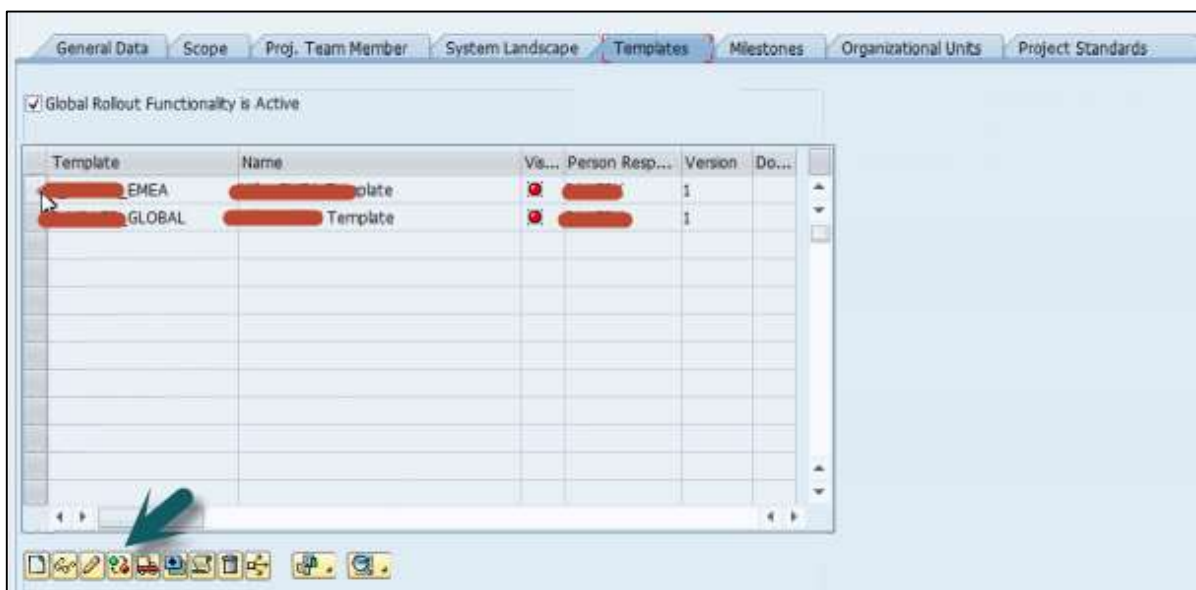
To select Attributes, go to **Global Attribute** and select Global from the drop-down list. Once you select the templates and global attributes, click the save button at the top.



Releasing Templates for the Projects

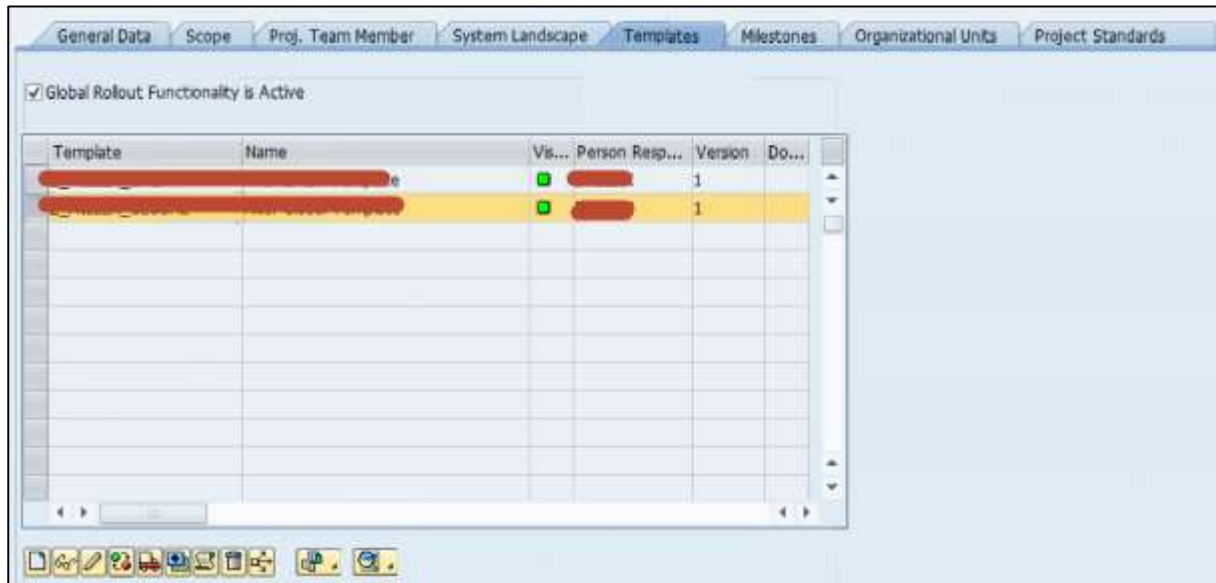
To release the templates for projects,

Step 1: Click **Goto -> Project Data** to come to the main screen. Go to the **Template** tab and select template. Click **Change Visibility** to release the templates.





Both the templates will change visibility to Green and they can be used in projects.



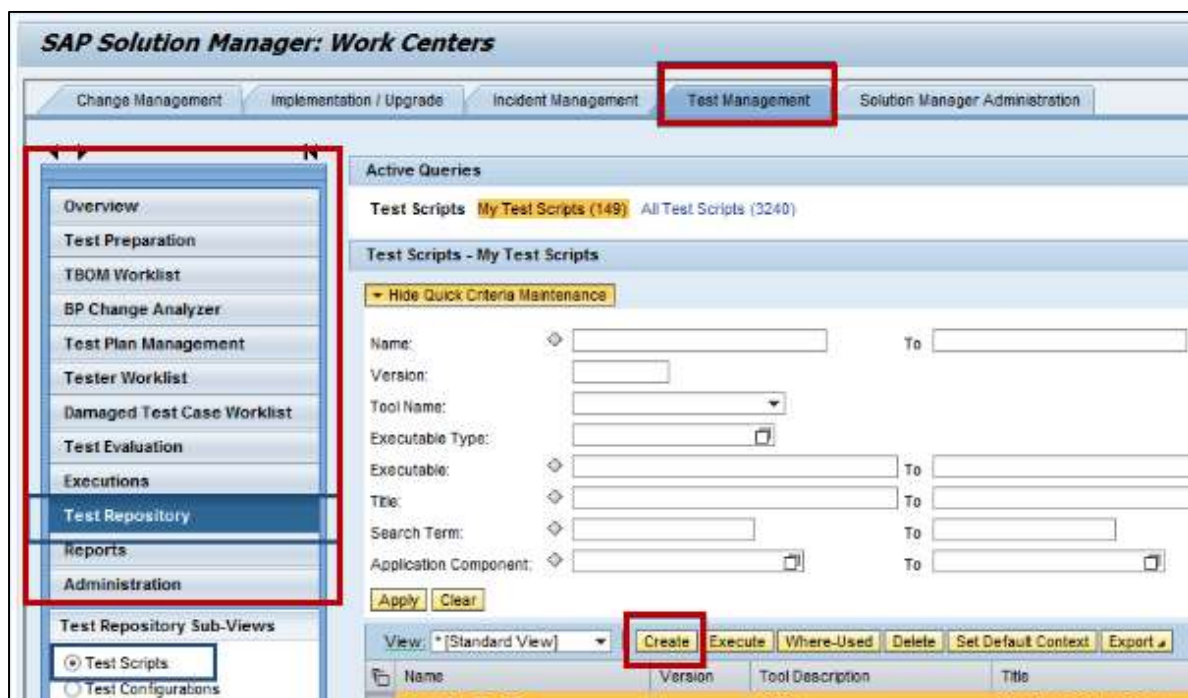
11. SAP Solman – Test Management

In SAP Solution Manager, you can perform the test-management process central and execute tests for cross system business processes.

Test Management involves the following steps-

- Defining Test Scope
- Test Planning
- Testing
- Transfer changes to production

To perform Test Management activities, you can use Test Management Work Center- to create, manage, and execute test plans.



- Under **Test Preparation**, you can create a report that allows you to get an overview of your business processes and status.
- **TBOM worklist**, is used to display your TBOM edit task.
- **BP Change Analyzer**, to analyze changes to system. You can use this to ensure how business processes will respond after changes.
- **Test Plan Management**: You can perform the following functions in Test Management Work Center -> Test Management Plan-
 - **To create Test Plan**: Select Test Plan -> Create Test Plan
 - **To copy Test Plan**: Select Test Plan -> Copy Test Plan

- **To change Test Plan:** Select Test Plan -> Edit Test Plan
 - **To change the Attributes of a Test Plan:** Click Goto -> Attributes
 - **To transport Test Plan:** Select Test Plan -> Transport Test Plan
 - **To create and Assign Test Packages:** Click Goto -> Test Package Management
 - **To sort Test Cases in Test Sequences:** Click Goto -> Sequences
 - **To assign Testers to Test Cases:** Click Goto -> Sequences
-
- **Tester Worklist:** This is used to directly access all the test cases assigned to you.
 - **Test Repository:** You can use this to create and edit automated test cases.

12. SAP Solman – IT Task Management

In SAP Solution Manager, you can use IT Task Management to manage objects such as Technical system, databases by Operations team. Tasks can be created using Guided Procedure in standard and expert mode.

Creating Tasks under IT Task Management

You can create new tasks by going to Technical Administration Work Center -> IT Task Management. These tasks can be created by scheduling Guided Procedures for managed objects.



Step 1: Go to IT Task Planning embedded or in a new window.

Step 2: In **Plan** pushbutton, you have to select Guided Procedure- Standard or Guided Procedure- Expert.

Step 3: For GP Standard, select one or more guided procedures from the available guided procedures list and you need to enter the scheduling information.

Step 4: Click Assign/Change and choose **Managed Objects**.

Step 5: Managed Object dialog box appears. Enter the required managed objects and click **Add button -> choose OK**.

Integration of GP Management and Task Management

Using integration between Guided Procedure (GP) and Task management, allows you to define recurring administrative tasks as GP in GPA environment. It allows you to plan the execution of the defined guided procedures and you can execute Guided procedures centrally.

Using Guided Procedure, it supports daily IT operation tasks by performing the following activities-

- Step-by-step execution
- Detailed activity description

- Central access to required managed system functions
- Automatic steps or activities
- Logging of every activity

GP Authoring Tools

Different tools under Guided Procedure Authoring include-

GPA Browser

Using GPA Browser tool, you can create, delete, preview, search or export guided procedures, and update the content of delivered SAP Guided Procedure.

GPA Maintenance

Using GPA Maintenance tool, you can modify, activate, transport, and review the already existing Guided Procedures. To open Guided Procedure Maintenance, you have to open GP Browser -> 3 buttons of GP Maintenance UI. These are -

- **Create button:** To create a new GP.
- **Edit button:** To modify a GP.
- **Display button:** To show the details of a GP.

GPA Log Book

GPA Log Book is used to view instances, logs, and to export to HTML, and start new instance. You can access Guided Procedure Log from GP Browser for the selected scope and for the selected guided procedure.

GPA Content Delivery

The GPA Content Delivery tool is used to raise alerts incase when new content is available. Customer is notified about new content at two places. First is when GP is opened and customer executes a guided procedure, he will see a message informing him that new GP content is available.

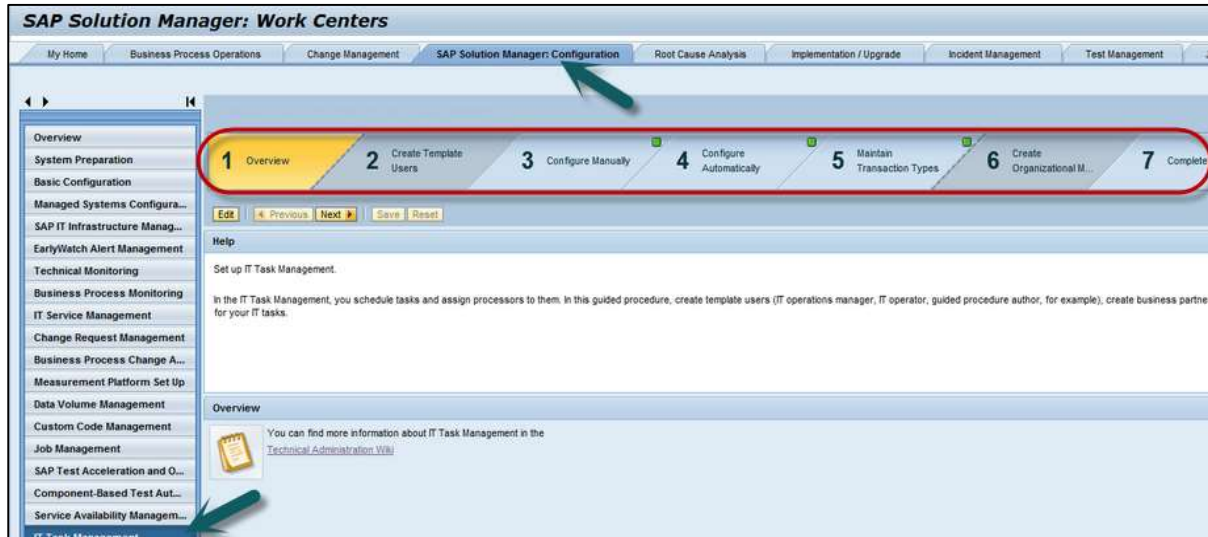
GP Runtime

The GP Runtime tool is used to execute a guided procedure, to check status of execution. When you open a Guided Procedure in GP Browser UI or you can select preview in Guided Procedure Maintenance, it opens the guided procedure runtime UI and you can execute GP.

IT Task Management Configuration

In SAP Solution Manager SP12 or higher, you can perform IT Task Manager Configuration using Guided Procedures. Run Transaction Code: SOLMAN_SETUP

SAP provides predefined users and roles to perform IT task management scenarios. The following user types and roles are needed to configure IT Task management-



GPA User

A GPA user is required to create custom guided procedures. Using GPA user, you can perform-

- Display Business partner queries
- Access Technical Administration WC
- Task Inbox
- Maintain Guided Procedures

Required Roles under GPA user-

- SAP_SMWORK_BASIC_TECHADMIN
- SAP_SM_BP_DISPLAY
- SAP_SM_GP_ADMIN
- SAP_SYSTEM_REPOSITORY_DIS

IT Task Planning User

IT Task Planning User is required to perform single or periodic operation activities and to check the status of all the activities using GP log book.

Roles under IT Task Planning

The following roles are required under IT Task Planning-

- SAP_SM_GP_DIS

- SAP_TASK_INBOX_DIS
- SAP_TASK_PLANNING_ALL
- SAP_SMWORK_BASIC_TECHADMIN
- SAP_SM_BP_DISPLAY
- SAP_SM_IT_EVENTS_DISP
- SAP_SYSTEM_REPOSITORY_DIS
- SAP_TASK_INBOX_ALL
- SAP_ITCALENDER_DIS

IT Operator User

IT Operators are used to execute the task or Guided Procedures assigned in Task Inbox.

Required roles under IT Operator

The following roles are required under IT Operator-

- SAP_SM_BP_DISPLAY
- SAP_SM_GP_EXE
- SAP_SMWORK_BASIC_TECHADMIN
- SAP_TASK_INBOX_ALL
- SAP_TASK_PLANNING_DIS
- SAP_SYSTEM_REPOSITORY_DIS

13. SAP Solman – Change Control Management

Change Control Management in SAP Solution Manager is used to manage changes such as implementation and upgradation in all the projects. Change requests are raised for application components and technical components, and implemented as per requirement.

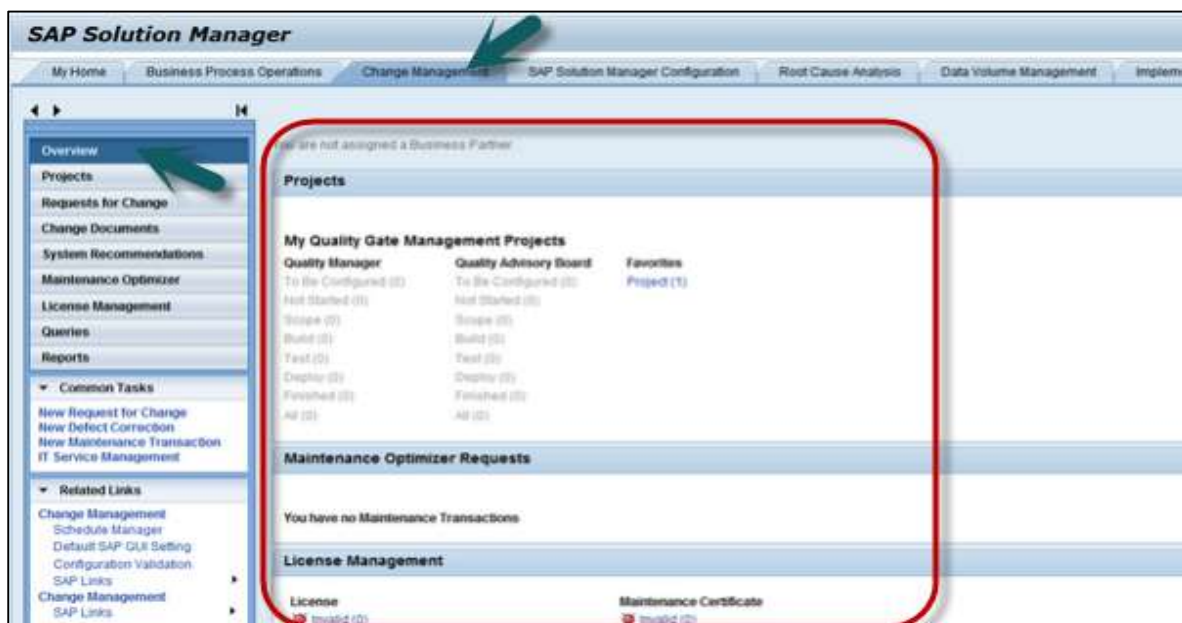
Change Control administration consists of the following key activities-

- **Change and Transport System:** This allows you to distribute changes in ABAP and non-ABAP objects. Use central Change and Transport system to perform the changes.
- **Quality Gate Management:** Quality gates allow to remove the lock on systems and change implementation is possible.
- **Change Request Management:** It allows you to execute projects globally in Solman- includes planning, cost management and change management activities.

Change Management Work Center

This work center allows you to manage all the changes in the project and provides central access to all the tools. To access Work Center, you should be authorized to view this.

To open Change Management Work Center, use Transaction SM_WORKCENTER.



This work center consists of the following functions-

Overview

The **Overview** tab consists of the summary of all functions in Change Management such as-

- You can view Quality gate management projects assigned to your business partner.
- All the requests for change assigned to your business partner.
- You can also view all the changed documents assigned to your business partner and they can be further filtered based on different parameters.
- License management information.

Projects: In this tab, Quality Manager and Quality Advisor boards can view status of software changes phase wise in system landscape.

Request for Change: Using this tab, you can view the list of all change requests and to further drill the details of each request. You can display or edit a change request by clicking on the request.

Change Documents: This tab is used to view all change documents, you can display and edit change documents by clicking on any document and also you can apply filter status wise.

System Recommendations: This tab is used to view system recommendations for an active solution.

Maintenance Optimizer: This tab is used to view the list of all product maintenance transaction and you can edit and display a specific product maintenance transaction.

License Management: This tab is used to manage the licenses centrally and to maintain certificates in system Landscape. You can also download licenses and certificates locally or can also activate/deactivate distribution of certificates on a system.

Queries: To perform complex searches, you can use queries that allows you to search by change documents, change requests, etc.

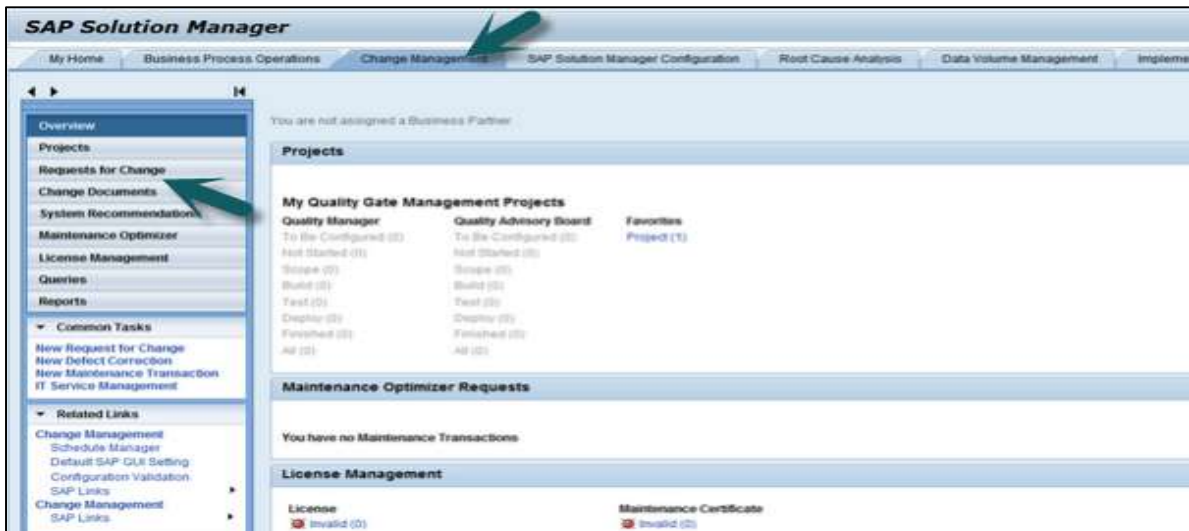
Reports: This is used for analyzing change management process- change requests and change documents.

Creating a Change Request

To create a change request, role **SAP_CM_REQUESTER** should be assigned.

You can create a new change request from the start or by using the copy option from an existing template.

Step 1: To create a request, go to Request for Change -> Create.



Step 2: Enter all the mandatory fields, like-

- Description
- Sold to Party
- Requester
- Change Manager/ Approver details
- Approval Procedure

Step 3: Click the save button to create change request. A change request can be created from the following reference objects-

- From WebUI Client
- From an Existing Template
- From Business Blueprint
- From a Solution
- From a Roadmap
- From an Incident
- From a Job Request
- From System Recommendations
- From a Project Task

Note: When a change request is created in the system, it is assigned to the Change Manager for validation and approval. The Change Manager can access the request in his worklist and take an action such as Validation, Approval, Rejection, or further clarification.

Change Document:

When a Change request is approved by the Change Manager/ Person Responsible to validate and approve change, change document is created automatically in the system. The status of document is marked as being implemented.

A Change document structure consists of the following components-

- **Header Level:** It is used to store general data like developer ID, reference object details, project name for which change is created, and other information.
- **Assignment Blocks:** It contains the data required for processing of change request. This includes information about, processing log files, transport requests, details of project/solution, incident, and the information about the test management.

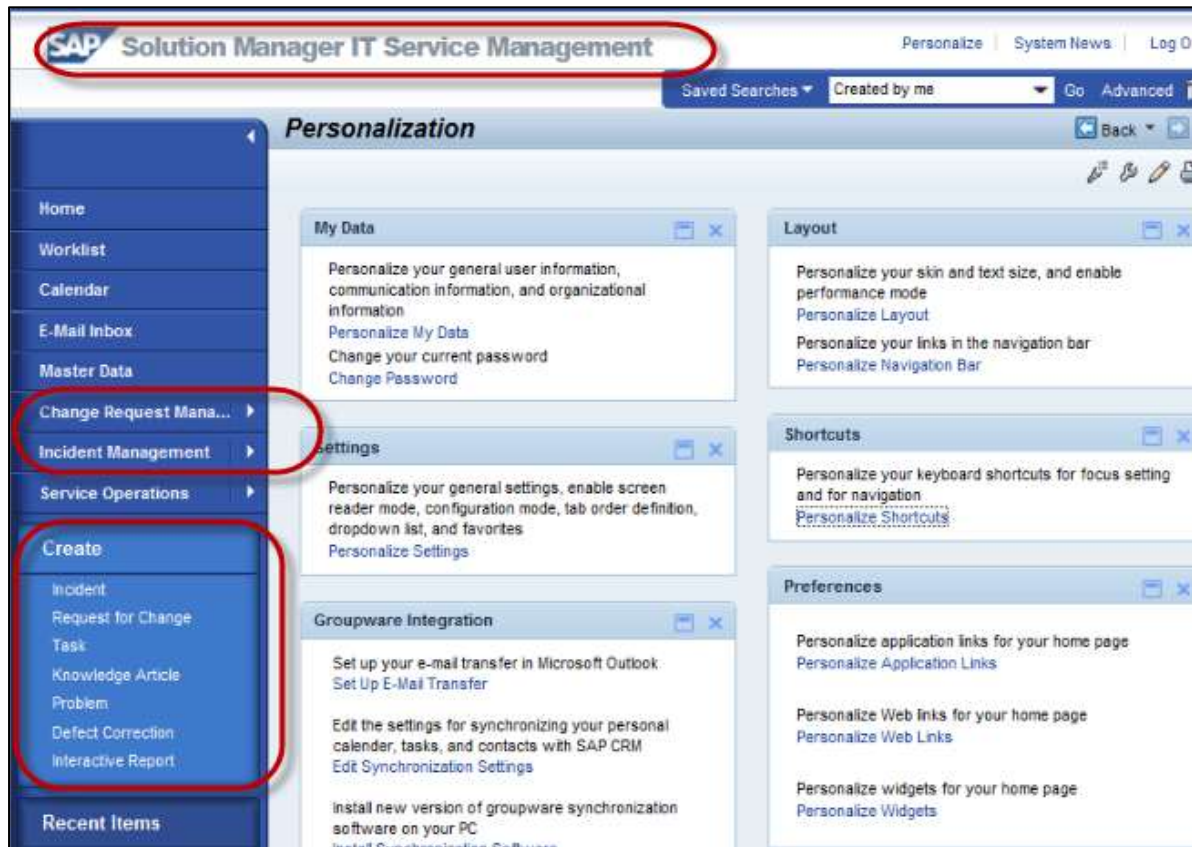
14. SAP Solman – Incident Management

When an issue occurs in SAP system, an end user can create an incident message. Incident Management process deals with resolving incidents, raised by end users, system alerts using monitoring service or by key users. Incident, Problem and Change Management is part of IT Service Management Work Center in Solution Manager that provides central management of processes and messages.

ITSM is based on ITIL standards, and is designed to support Business Processes, Incident, Problem, Change Management, and Service Desk Operations. SAP Solution Manager provides a set of standard, predefined ITSM functions that can be set up using a guided configuration procedure.

IT Service Management is based on the integration of CRM ITSM processes and SAP Solution Manager. It provides the following functions-

- Problem management to setup an ITIL verified process.
- Extensibility with SAP CRM 7.0 Service or SAP ERP functions .
- Improved knowledge management process.
- Template Support.
- SLA Management and Escalation management.
- Improved Web user interface to manage ITSM task.
- Additional inbound channels.
- Advanced reporting features: ITSM predefined BI queries, Interactive user Dashboard.
- Integration of Application Lifecycle management to IT Service Management and Solution Manager.
- Predefined Business Roles for IT Service Management: IT Service Requester, Solution Manager Professional and IT Service Desk.



Structure of an Incident

An Incident consists of header and additional assignment blocks that can be used to provide other information. Header consists of the following fields:

- General Data
- Processing Data
- Dates
- SAP Data
- Reference Objects

Assignment block

This is used to specify any other information in the incident.

15. SAP Solman – Service Desk

When you create a Support message, it is directly assigned to the Solution Manager Service Desk.

The screenshot shows the Service Desk homepage.

The screenshot displays the SAP Solman Service Desk homepage. The main form is titled 'Details' and contains several sections:

- General Data:** ID: 8000007143, Description: Performance is low, Customer: SAP AG, Reporter: Mr. Tobias Hauk, Processor: David Birkenbach, Service Team: 1stLevel 1st Level Support.
- Processing Data:** Status: New, Impact: (empty), Urgency: (empty), Recommended Priority: (empty), Priority: 3: Medium.
- Dates:** Created: 28.01.2011 08:18, Changed: 28.01.2011 08:18, First Response by: 28.01.2011 16:14:55, IRT Status: 1%, Due by: 31.01.2011 15:14:55, MPT Status: 0%.
- Category:** Level 1: Service Request, Level 2: Hardware, Level 3: Database, Level 4: (empty), Solution Category: (empty).
- Relationships:** Related Problem, Related Request for Change, Related Knowledge Article.
- Reference Objects:** Installed Base: 1 SAP Solution Manager installations, Installed Base Component: 503 Q5J 0020270862 402.

The form is framed by a red border. The top menu bar includes 'Save', 'Display', 'Cancel', 'New', 'New from Template', 'Create Follow-Up', 'Actions', and 'More'. The bottom bar includes 'Text', 'Add Text', 'Insert Text Template', and 'Maintain Text Templates'.

Example

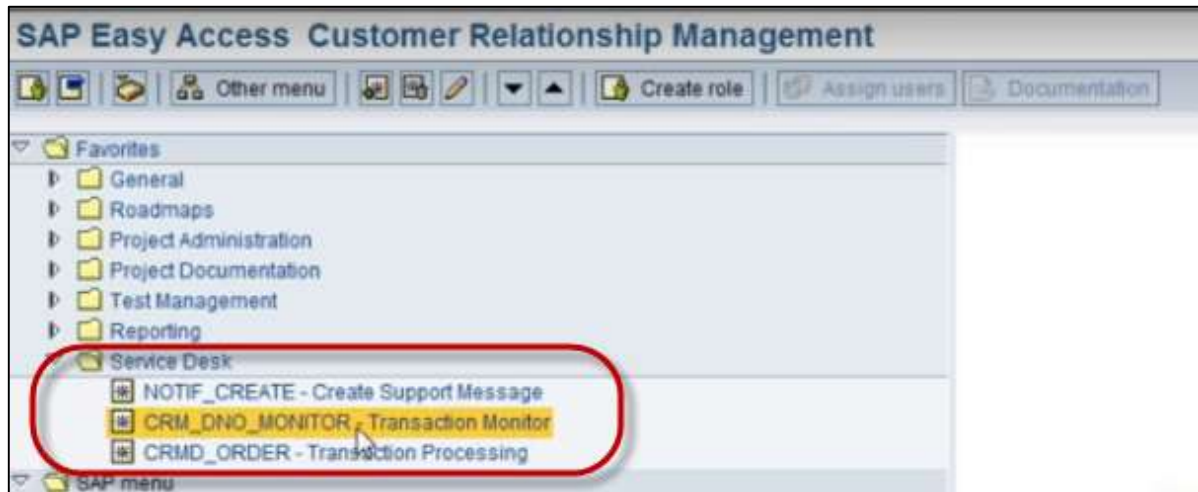
Let us say you want to create a new Sales Order and an Order type is missing.

Step 1: Go to Help -> Create Support Message

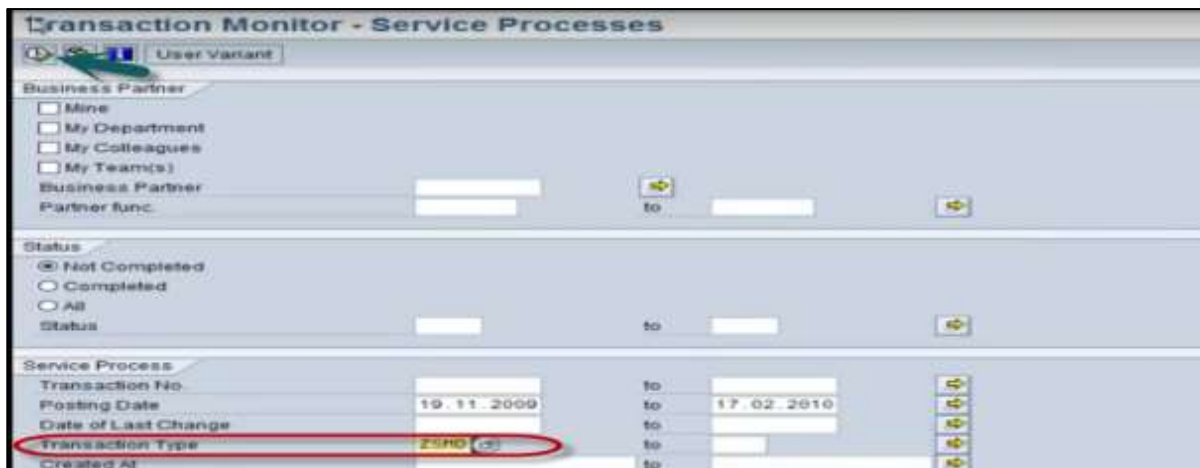
The screenshot shows the 'Create Sales Order: Initial Screen' in SAP Solman. The 'Order Type' is set to 'YC'. A red box highlights the 'Create Message' button. Below it, the 'Component' is 'SD-SLS', 'Short text' is 'Missing Order Type', and 'Priority' is 'Low'. A message box at the bottom states: 'Message 8100000393 successfully created in Support Desk System'. The bottom status bar shows 'Ln 1, Co 42' and 'Ln 1 - Ln 1 of 1 lines'.

Step 2: Enter short text and message description and click the Submit button. You will get a prompt- message XXXXX successfully created in support Desk system.

Step 3: To create an Incident, go to the Transaction Monitor under Service Desk in Solman.



Step 4: In Transaction Monitor, select Transaction Type- ZSMD Service Desk Message Type, and click Execute.



Step 5: You will see the Support Message created in the list as shown below. Open the Support message.

Monitor	Valid To	ID	Priority	User Status	Transaction Description	Status SAP	SAPNet-Notif Number
	25.11.2009	8100000331	High	New	test EM		
	07.12.2009	8100000341	Medium	New	Problem in QA11		
	09.12.2009	8100000351			Change Requir		
		8100000361			Incident resolve		
	11.12.2009	8100000342			Problem mess:		
	13.12.2009	8100000362			Problem mess:		
	16.02.2010	8100000382			Forward to 2nd		
	17.02.2010	8100000391	Critical		Missing Notification Type		
		8100000392	Medium	New	Order Type Missing		
		8100000393	New		Missing Order Type		

Step 6: Click the Edit button and change the status to **In Process**. Once you make the changes, click the save button at the top.

Edit: Support Message ITSM 8100000393

Normal Correction | Normal Change ITSM | ITSM Change Request | Business Partner Cockpit | Business Transaction

Fast Entry | Transaction Data

Service Process
Support Message ITSM: 8100000393

Status: **In process 1st level** | Release Items | Further Statuses

Description: Missing order type

Reference

Reported by	112	Richard LABIS / Crawley	Priority	Medium
First Level Support	130	1ST LEVEL SUPPORT / Saarbrücken	Category	Software
Second Level Support	122	08H-2nd / Crawley	Ext Reference No.	999000322
Message Processor	112	Richard LABIS / Crawley	Reference Date	
IBase / Component	3252	ECC 002008059 400	Subject	
Product ID				

Start customer requirement: WIE 17.02.2010 20:21 CET | Current Date + Time

End customer requirement: WIE 17.02.2010 20:21 CET | Start + required time

Step 7: First level support team can see if the issue has occurred before. They can check solution database to find any similar issues.

Problem Search Criteria

Find Results:
- with ANY of the words:
Missing order type
- with ALL of the words:
- WITHOUT the words:

Type: Description

Reference
Problem Number

Number of Problem Record (1): 5 Entries found

Prob.	Problem Description	Type	Subty	Application Area
11	test sold to party	QM	03	PHARMACEUTICAL
12	Material Number not in Quality Notificat	QM		
13	Material Number not Copied	QM		
14	Business Partner Sold to Party not copie	SM		
15	Test	QM		

Step 8: In case there is no solution that matches the description, Service Desk support forwards the incident to the 2nd level support.

Edit: Support Message ITSM 8100000393

Normal Correction | Normal Change ITSM | ITSM Change Request | Business Partner Cockpit | Business Transaction

Fast Entry | Transaction Data

Service Process
Support Message ITSM: 8100000393

Status: **In process 1st level** | Release Items | Further Statuses

Description: Missing order type

Reference

Reported by	112	Richard LABIS / Crawley	Priority	Med
First Level Support	130	1ST LEVEL SUPPORT / Saarbrücken	Category	Soft
Second Level Support	122	08H-2nd / Crawley	Ext Reference No.	999
Message Processor	112	Richard LABIS / Crawley	Reference Date	
IBase / Component	3252	ECC 002008059 400	Subject	
Product ID				

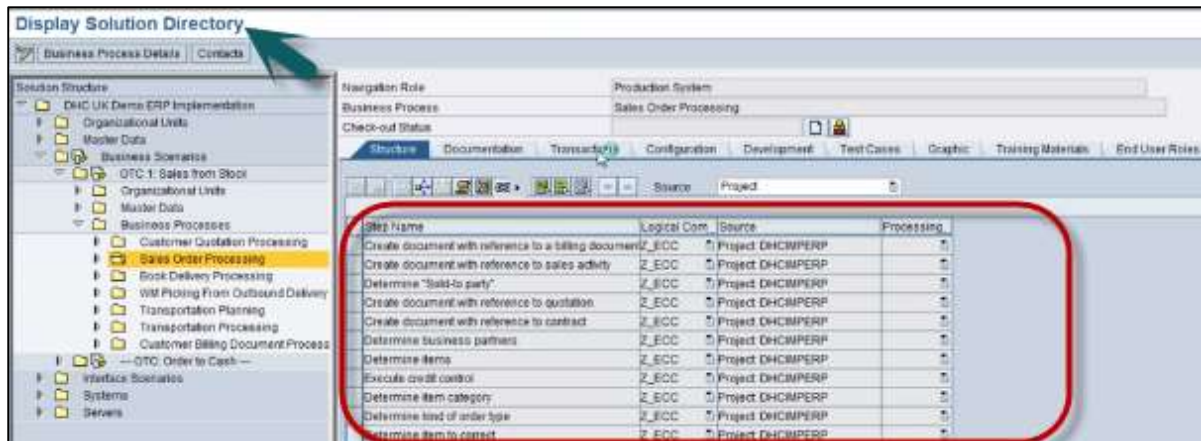
Start customer requirement: WIE 17.02.2010 20:21 CET | Current Date + Time

End customer requirement: WIE 17.02.2010 20:21 CET | Start + required time

Status dropdown menu options:

- New
- Request information 1st level
- New Major Incident
- Forward to 2nd level support**
- Request information 2nd level
- Sent to SAP
- Change Required
- Change in Progress
- Incident resolved
- Problem message required
- Incident Closed

Step 9: The 2nd Level support team can check the Solution directory to find any past records matching this incident description. If the solution is not available, they can also check SAP Market Place. If no solution is provided, Incident can be forwarded to SAP Global support team.



Step 10: To send the message to SAP Active Global support, click Actions -> Send Message to SAP.



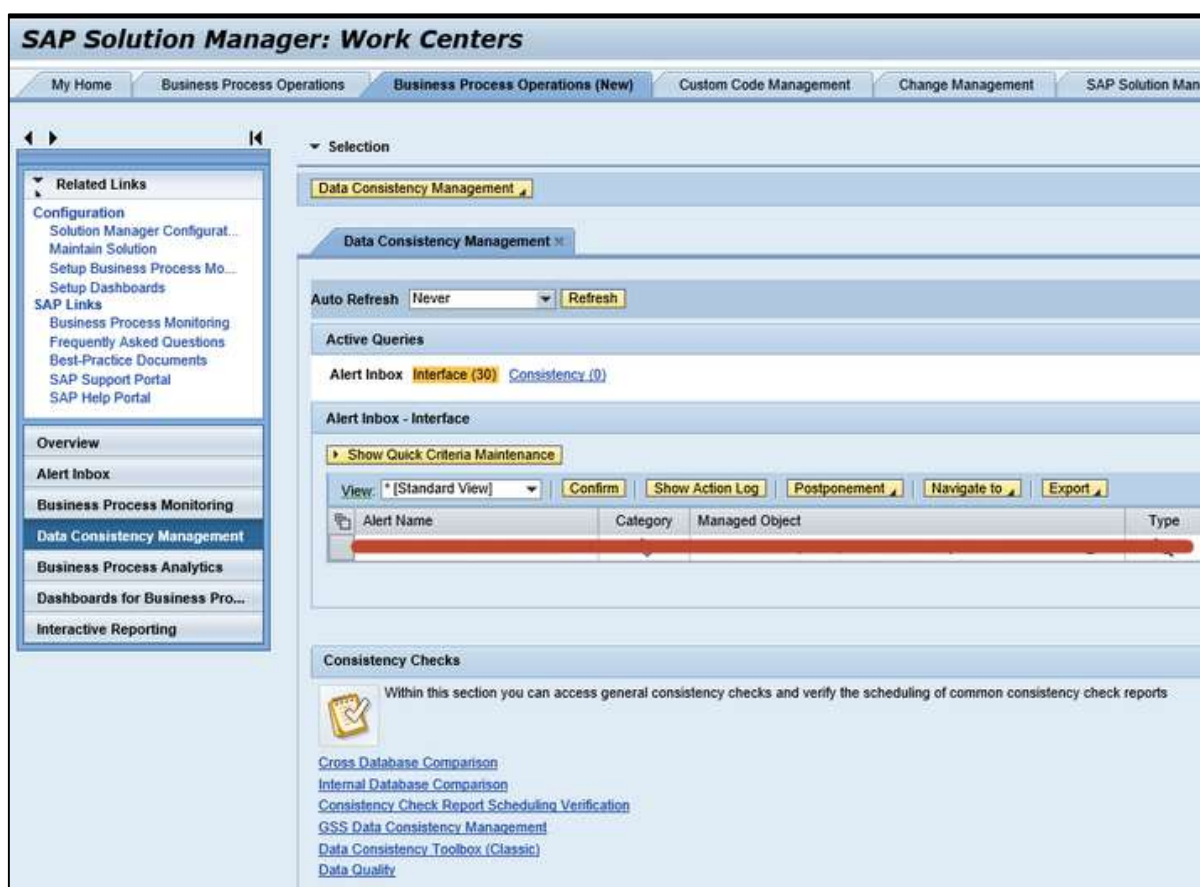
Once the issue is fixed, you can move to **Incident Closure** with documentation of all the steps that have been performed to fix the issues.

16. SAP Solman – Business Process Operations

In this Work Center, you can perform the functions that support your core business processes. In SAP Solution Manager, you have two types of Business Process Monitoring work centers. Both the work centers allow you to access all the key functions related to business processes. Business Process Monitoring Work Center also provides monitoring of relevant functions and reporting.

You can see the following two tabs-

- Business Process Operations (new) Work Center
- Business Process Operations Work Center



In the left pane, you will see the following functions-

- **Overview:** Using the Overview tab, you can access all other work areas in this Work Center.
- **Alert Inbox:** In Alert Inbox, you can check all the critical alerts for which there are open alert groups for your monitored business processes.
- **Business Process Monitoring:** Under Business Process Monitoring, you can access all metrics as per Monitoring and Alerting Infrastructure.

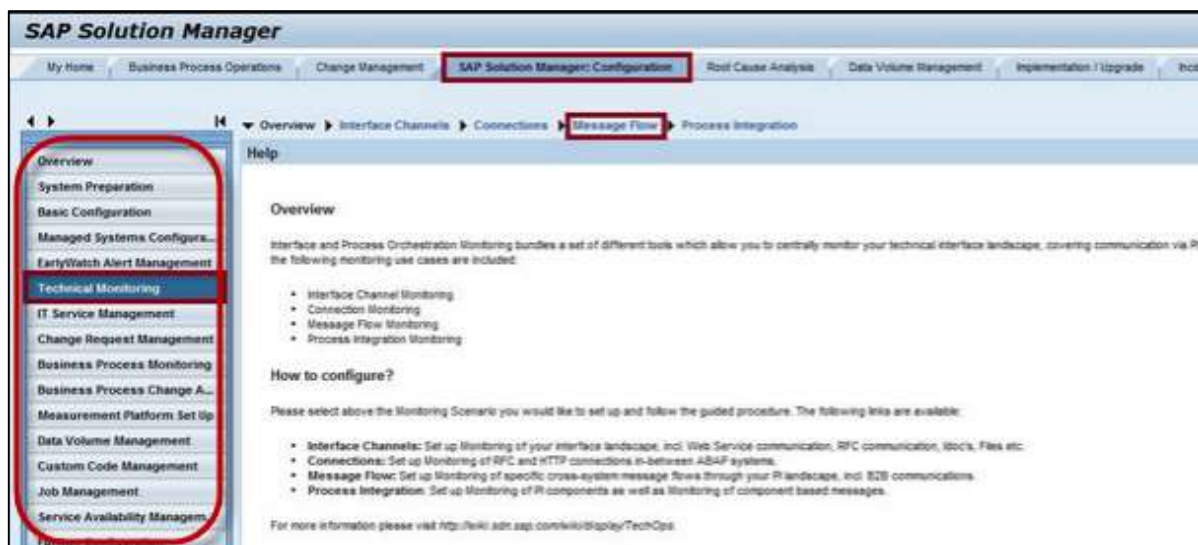
- **Data Consistency Management:** You can use this to get a filtered view of the Alert inbox for all relevant open alert groups in BPM.
- **Business Process Analytics:** This work area allows you to access key figures such as comparing OU's, business document backlogs, etc.
- **Dashboard for Business Processes:** The data from business processes can be displayed in the form of Dashboards like Graphics.
- **Interactive Reporting:** This work area is used to display the metrics in Business Process Monitoring.

17. SAP Solman – Application Operations

In SAP Solution Manager, you can use Application Operations work center to perform all activities related to central monitoring, alerting, and to analyze the solutions. You can use the reporting function to run the reports and also to monitor the status of complex landscapes.

You can perform data volume analysis in your system landscape and you can reduce the total cost by decreasing the size of database.

Using **Root Cause Analysis** and **Exception Management**, you can find the root cause of an incident and implement a solution for distributed environment.



You have the following work areas under **Application Operations Work Center**-

Technical Monitoring Work Center

The **Technical Monitoring** work center can be configured using Transaction: **SOLMAN_SETUP**

Using **System Monitoring**, you can monitor the status of hosts, systems, and databases in the Solution Manager System landscape.

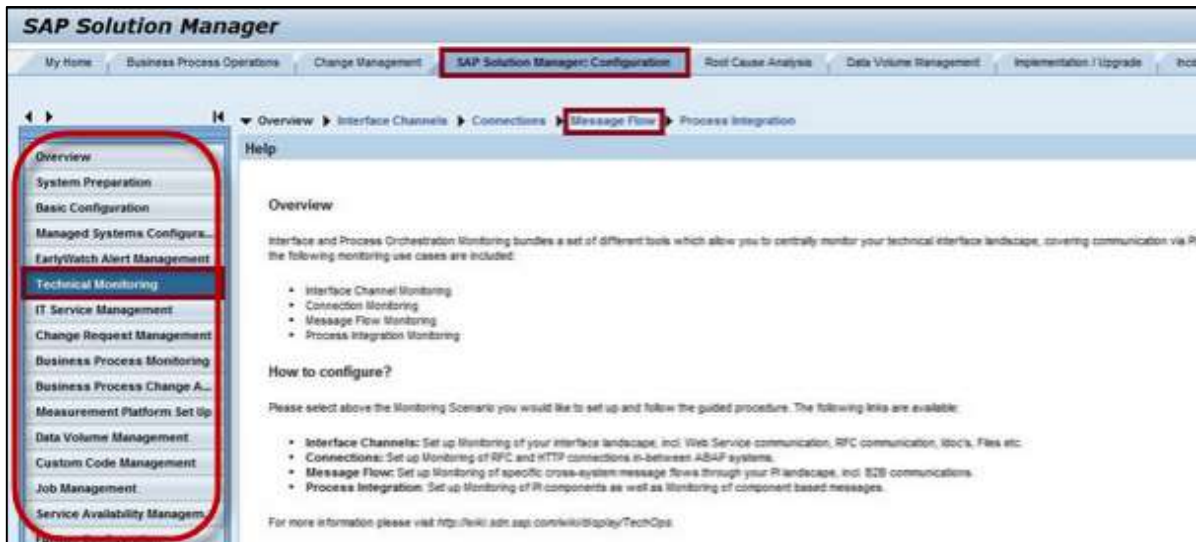
The Technical monitoring also involves **Integration Monitoring**, where you can perform-

- PI Monitoring
- Interface and Connection Monitoring
- Message Flow Monitoring
- Connection Monitoring
- Workflow Monitoring

Other Work Centers that come under Application Operations are-

- Technical Administration Work Center
- Root Cause Analysis Work Center
- Data Volume Management Work Center: You can perform data volume analysis in your system landscape and you can reduce the total cost by decreasing the size of database.

The following screenshot shows the SAP Solution Manager Configuration-



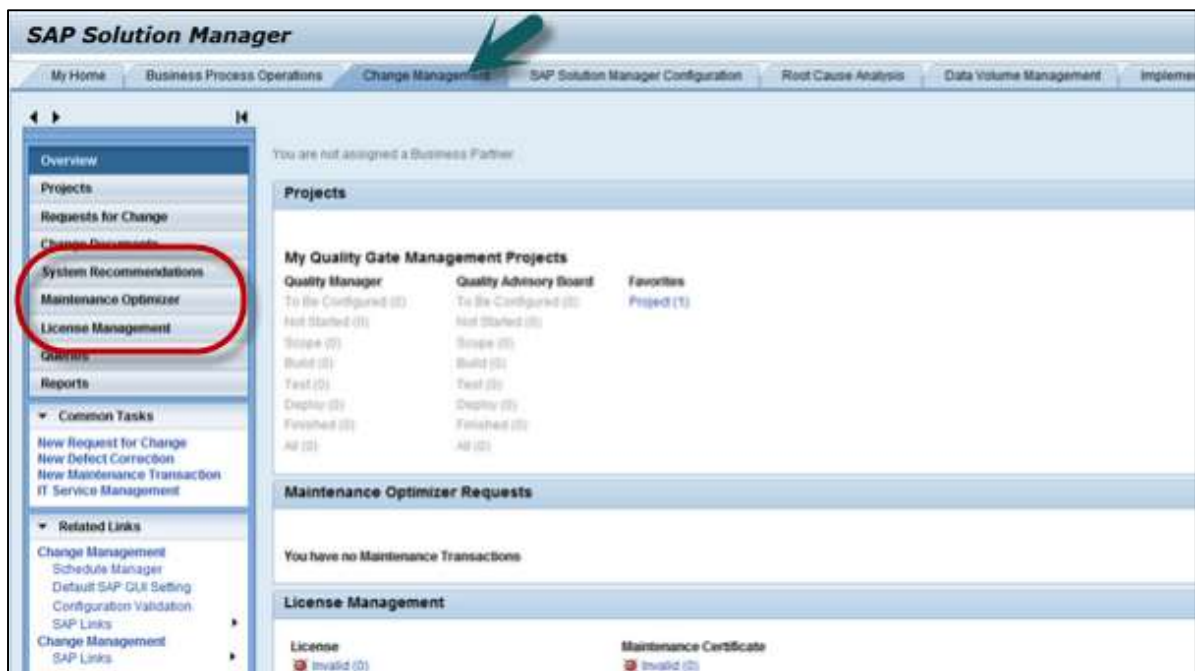
18. SAP Solman – Maintenance Management

Maintenance Management includes importing enhancement and support packages, and implementing critical SAP Notes. This function allows you to perform multiple functions for system Landscape.

The following work areas come under Maintenance Management-

- **System Recommendations:** You can use this work area to implement Security notes, Performance notes and correction notes for technical systems. This work area comes under Change Management Work Center.
- **Maintenance Planner:** You can use Maintenance Planner to create maintenance plans and stack XML files for installation using Software Update Manager SUM. IT replaces Maintenance Optimizer in Solution Manager to perform updates, and upgrades installation.
- **Maintenance Optimizer:** Maintenance optimizer can be used to start maintenance process in production system. This provides you detailed instruction for downloading and installing maintenance files in the system.
- **License Management:** To download SAP Support Packages, you need license and maintenance certificates. This function is available under Change Management Work Center.
- **Scope and Effort Analyzer:** This work area is used to analyze and calculate the scope and effort required to implement support and Enhance packages on Technical systems. This work area can be started from the following Work Centers-
 - Change Management Work Center
 - Test Management Work Center
 - Custom Code Management Work Center

The following screenshot shows the work centers of Maintenance Management.



To use this function, you need the following roles-

- **SAP_SEA_ALL_COMP:** Full Authorization of scope and effort analyzer composite Role
- **SAP_SEA_DIS_COMP:** Display Authorization of scope and effort analyzer composite Role

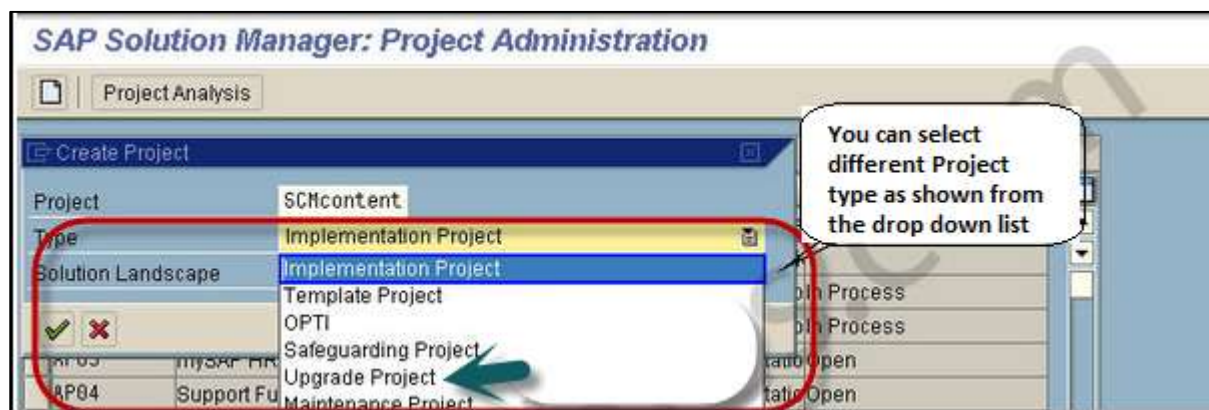
19. SAP Solman – Upgrade Project

To manage Upgrade management, SAP Solution Manager provides you with an access to all functions required to perform an upgrade. Using SAP Upgrade Roadmap in Solman, you can perform standard methodology to plan and execute an SAP upgrade project. Various predefined templates are provided in Solution Manager to effectively manage the upgrade project end-to-end. It allows SAP customers to better understand and manage the major technical risks and challenges within an upgrade project.

To perform Upgrade management, you need to implement a new upgrade project under Project Administration. Following are the key phases in an Upgrade project-

Creating an Upgrade Project

To define a new upgrade project, you have to go to Project Administration Work Center. You have to select Project type as Upgrade project and define the scope of the project. You can also use an existing project as a base project to copy.



Evaluating System Landscape

Before an upgrade, you need to evaluate current business processes and existing system Landscape. Various applications can be installed on current System Landscape- SAP CRM, SAP SCM, etc. Using dependency analysis of upgrades and use of other tools, you can analyze if your current functions will be available once the upgrade is performed.

Planning Phase

Planning phase includes defining blueprints and Roadmap of the upgrade project. Under Business Blueprint, you enhance the project structure for the business processes. You separate business scenarios and business processes and assign different transactions, functions to the structure items.

Testing

In Testing phase, updated business processes and scenarios are tested.

Transferring Business Processes to Production

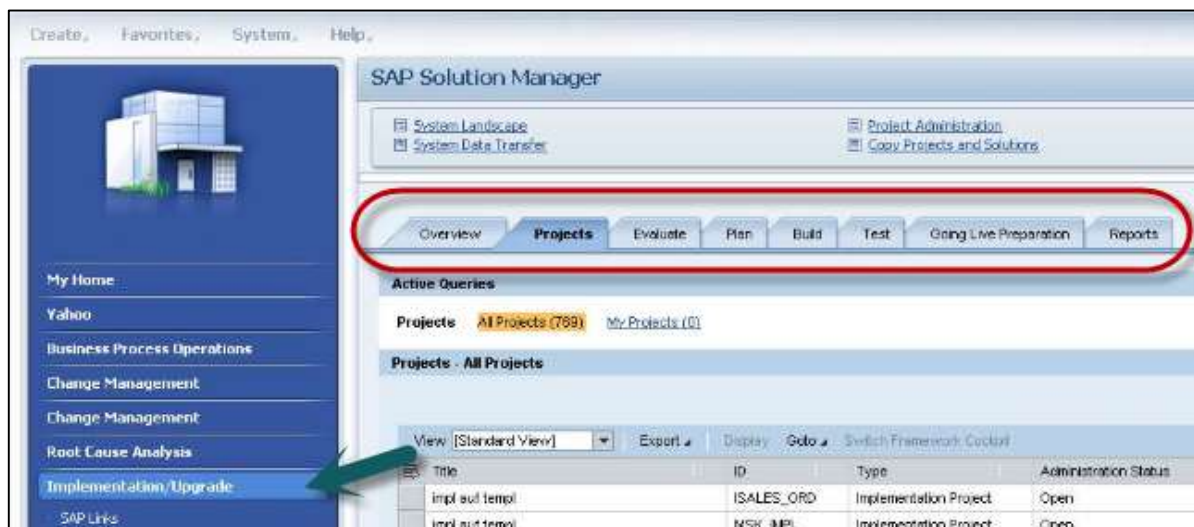
In this phase, you transfer the business processes and scenarios to customer specific location like Solution Directory where business processes are monitored under operations.

Reporting

In this phase, you create phase wise reports for full upgrade project.

Implementation/Upgrade Work Center

The following screenshot shows the Implementation/Upgrade Work Center.



You have the following work areas under this work center-

- **Overview:** The Overview tab shows you the structured diagram of your project status. You can navigate to My Projects, which shows the project to which you are assigned. The **All Projects** option shows a list of all the authorized projects you can view.
- **Projects:** In the Projects work area, you can see a list of all projects as per the project type, status, etc. When you select any of the project, you can check the header details and blueprint locks in the project.
- **Evaluate:** In this work area, you can access- SAP Standard Scenarios, Business maps, and business functions.
- **Plan:** In this work area, you can create and edit projects, display Roadmaps, and specify Business Blueprints.
- **Build:** In this work area, you can access Technical Configuration, customizing distributions, BC sets, and manage learning materials.
 - **Going Live Preparation:** The following links can be accessed in this work area-
 - **Solution Directory:** To transfer an upgrade project to solution.
 - **SAP GoingLive:** This is used to check production start.

- **SAP EarlyWatch Alert:** This is used for production processing and to monitor the solution in SAP Solution Manager. Report can be displayed as an HTML document or a word document. This can be used to identify and avoid key potential problems in the system.
- **Report:** This work area is used to run the reports for project phases and key activities.

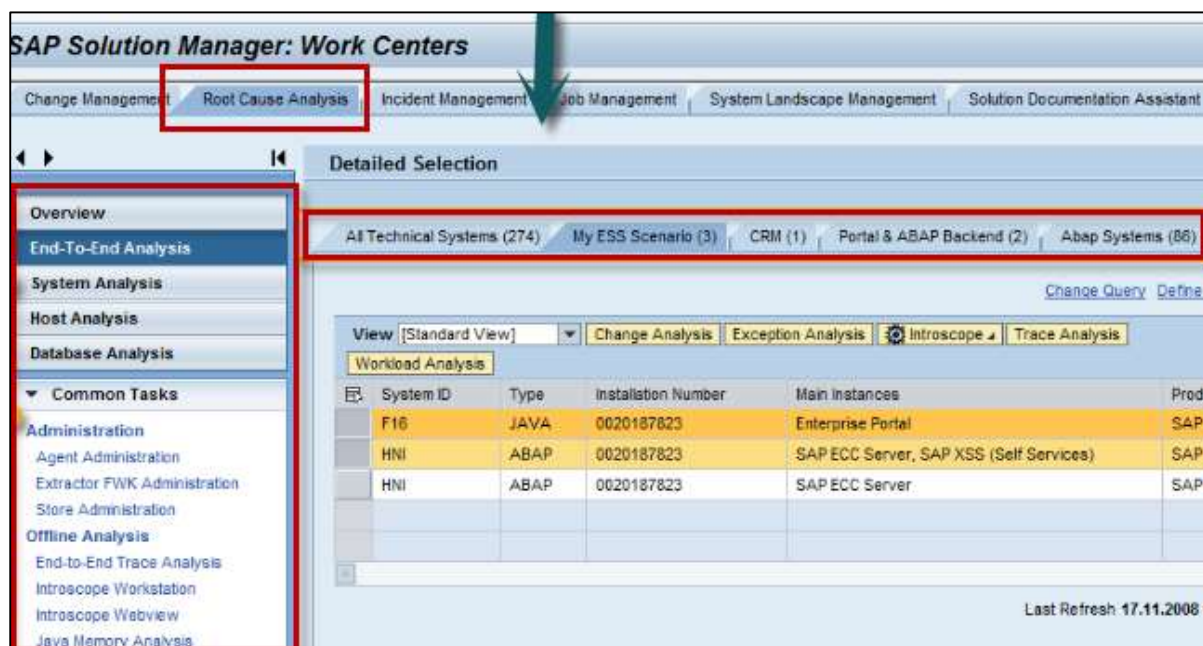
20. SAP Solman – Root Cause Analysis

Root Cause Analysis is used to monitor and analyze the SAP Solman Landscape and to identify the component causing the problem. Using Root Cause diagnostic agent, you can perform an end-to-end diagnostics that provides a structured evaluation method to find the root causes of an undesired outcome and the actions adequate to prevent recurrence.

End-to-End Root Cause Analysis in SAP Solution Manager offers capabilities for cross system and technology root cause analysis. In heterogeneous landscapes especially, it is important to isolate a problem causing component as fast as possible and involve the right experts for problem resolution.

With the tool set provided by Root Cause Analysis, this is possible with the same tool regardless of the technology an application is based on. It allows a first in depth analysis by a generalist avoiding the ping-pong game during an analysis between different expert groups.

The screenshot shows the Root Cause Analysis work center provided.



Each tab contains the further work areas to perform the diagnostic for different technical objects-

- **End-to-End analysis-**
 - End-to-End Change Analysis
 - End-to-End Exception Analysis
 - End-to-End Trace Analysis
 - End-to-End Workload Analysis
- **System Analysis-**
 - Change Reporting
 - Expert Analysis
 - Log Viewer

- **Host Analysis-**
 - File System Browser

- **OS Command Console**
 - Database Analysis-
 - Database Monitoring

21. SAP Solman – Reporting

You can create various interactive reports and Dashboards in SAP Solution Manager.

Interactive Reporting

Interactive reporting allows you to display most important metrics of the objects in System Landscape. The following object types are available-

- Systems
- Hosts
- Databases
- Scenarios

You can use SAP BW system to move these metrics. Reports are created to get a quick view of the Key Performance Indicators. Reports can be created for the following metric values-

- Capacity Reports
- Availability Reports
- Performance Reports
- Usage

Application Dashboards

Application Dashboards allow you create Dashboards to ensure that your technical systems and scenarios are available and performing as per the requirement. Application Dashboard can show the following values-

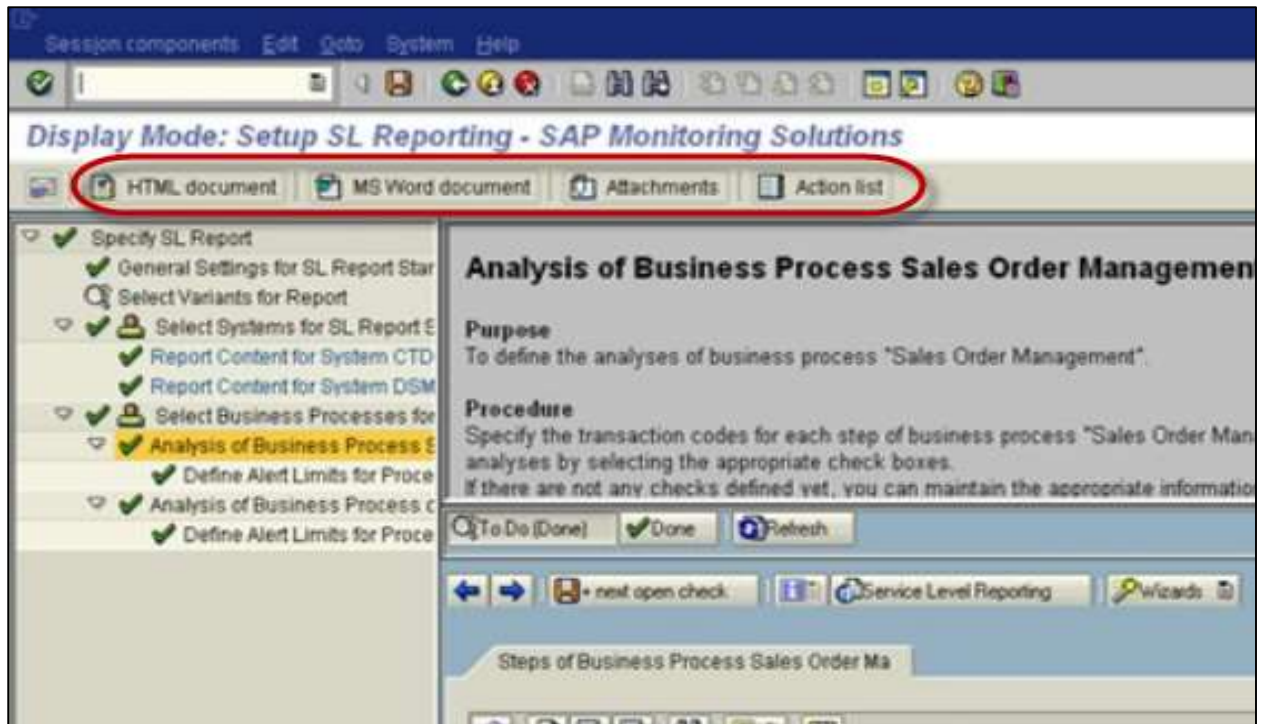
- System Availability
- System Performance
- EUE Reporting

Service Level Reporting

Service Level Reporting is used to monitor internal and external service level agreement. This report is based on SAP Early Watch Alert. This report consistently performs check on KPI's:

- System Availability
- Threshold Report
- Periodic reports as per specific time period.

Note: The **Service Level Reports** can be stored in HTML format or MS Word format.



To create a Service Level Report, go to Service Level Report view.

To create HTML report-

- Select the link to a Service Level Report.
- In HTML format, you can the report in mail as an attachment to multiple recipients.

To create MS Word document report-

To get Service Level Report in doc format, click the Word format symbol and select the report that you want in Doc format. This report comes as an attachment in Report view.

22. SAP Solman – Consultant Responsibilities

Following are the key job responsibilities of a SAP Solution Manager Consultant-

- Person should have an experience in Configuring and Supporting Solution Manager 7.0 and 7.1.
- Experience in setting up and troubleshooting BPM.
- Should be able to present and interact business process owners in the environment.
- Must have good working experience on other components of Solman system Admin and Monitoring, Remote Supportability, Solution Manager Work Centers.
- Managed SAP Solman Implementation from top to bottom starting with change management and project planning, to physical transports of changes from the development environment into the productive environment.
- Performance Optimization of Systems connected to Solman System.
- Managing SAP Operations, System Landscape Information, IT Task Management and GPA, Template Management, Test Management activities.
- Excellent documentation skills for configuration, troubleshooting and ongoing maintenance of the environment.