Automated Initial Setup
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Automated Initial Setup of ABAP Systems Based on SAP NetWeaver

SAP

Content

1 Document History

Before you start, make sure you have the latest version of this document.

The following table provides an overview of the most important document changes.

Table 1:

Version	Date	Description
1.0	2014-06-05	Initial version
2.0	2014-07-03	Technical Configuration Automation Content for SAP Fiori removed.
3.0	2014-11-28	Minor changes
4.0	2015-10-14	The prerequisites for an initial setup have been enhanced. For more information, see Prerequisites [page 5].
5.0	2017-07-06	Links to related information have been updated. For more information, see Introduction [page 4].

2 Introduction

You perform ABAP system configuration tasks in an automated way by using predefined task lists.

SAP offers predefined task lists for the following use cases:

- Initial System Setup
  After you have installed a new SAP system, you have to perform an initial setup and configuration of the system to enable its usage. For example, you have to install an SAP license, create logon groups, and configure the Transport Management System and security settings.
- System Checks
  You check the Basis system or Secure Sockets Layer configuration.

The following use cases are not described in this guide:

- SAP Fiori Setup
  This use case is not described in this guide.
  You perform system configuration tasks for SAP Gateway or SAP Fiori Launchpad. For example, you perform basic configuration steps for SAP Gateway or activate launchpad OData and HTTP services on an SAP Gateway system.
  For more information, see the SAP Help Portal at https://help.sap.com/viewer/p/FIORI_IMPLEMENTATION.
- ABAP Post-Copy Automation
  This use case is not described in this guide.
  For more information about ABAP post-copy automation, see the Installation and Configuration Guides on SAP Help Portal at https://help.sap.com/viewer/p/ABAP_POST-COPY_AUTOMATION.
- Embedded Search
  You perform configuration tasks to automate Embedded Search configuration and administration.
  For more information, see chapter Automatic Configuration Using Task Manager Task Lists on SAP Help Portal.

SAP offers the ABAP task manager for lifecycle management automation that supports you in performing configuration tasks in an automated way.

Table 2:

Transaction	Description
STC01	ABAP task manager for lifecycle management automation
STC02	Task list run monitor

Related Information

Automated Initial Setup of ABAP-Based Systems
ABAP Technical Configuration

3   Prerequisites

This section describes the minimum requirements for an automated technical configuration.

The predefined task lists are part of every SAP NetWeaver ABAP system as of the following release and Support Package level:

> **i Note**
>
> More recent releases and support packages already contain the latest updates.

Table 3:

SAP NetWeaver Release	Task Lists
SAP NetWeaver 7.4 Support Package 02	• Task List Initial Setup Use Case - Configuration Tasks [page 6]
SAP NetWeaver 7.4 Support Package 05	Enhancement of task list • Task List Initial Setup Use Case - Configuration Tasks [page 6]
SAP NetWeaver 7.4 Support Package 06	Implement SAP Note 2017302 to receive the following task lists: • Task List Initial Setup Use Case - Enable SSO between 2 ABAP systems [page 7] • Task List Initial Setup Use Case - Create ABAP Trust on Client Side [page 7] • Task List Initial Setup Use Case - Create ABAP Trust on Server Side [page 8] • Task List Smoke Test Use Case - Basis SSL Check [page 9] • Task List Smoke Test Use Case - Basis System Check [page 9]
SAP NetWeaver 7.4 Support Package 08 (SR2)	Implement the following SAP Notes to receive enhancements for task list Task List Initial Setup Use Case - Configuration Tasks [page 6] and task list Task List Smoke Test Use Case - Basis System Check [page 9]: • 2139341 Initial Setup: Automated Configuration • 2157126 Initial Setup: Automated Configuration (1.Improvements) • 2194049 Initial Setup: Automated Configuration (2.Improvements) • 2217147 Initial Setup: Automated Configuration (3.Improvements)

4 Predefined Task Lists for Initial System Setup

After the installation of a new SAP system based on SAP NetWeaver ABAP, you have to carry out several configuration steps on the ABAP system.

SAP offers predefined task lists for an automated initial setup. Each task list consists of a set of configuration tasks.

> After the installation of a new SAP system based on SAP NetWeaver ABAP, you use task list
> `SAP_BASIS_SETUP_INITIAL_CONFIG` to run required configuration steps automatically.

> After the installation of a new SAP system based on SAP NetWeaver ABAP, you use task list
> `SAP_ABAP2ABAP_SSO_CONFIG` to configure an SAP system to accept assertion tickets from an SAP
> system for message-based web service communication.

> After the installation of a new SAP system based on SAP NetWeaver ABAP, you use task list
> `SAP_ABAP2ABAP_TRUST_CLIENT_CFG` to configure an SAP client system as a trusted-system.

> After the installation of a new SAP system based on SAP NetWeaver ABAP, you use task list
> `SAP_ABAP2ABAP_TRUST_SERVER_CFG` to configure an SAP server system as trusting-system.

Related Information

Automated Initial Setup of ABAP-Based Systems

4.1 Task List Initial Setup Use Case - Configuration Tasks

After the installation of a new SAP system based on SAP NetWeaver ABAP, you use task list
`SAP_BASIS_SETUP_INITIAL_CONFIG` to run required configuration steps automatically.

You do not have to maintain parameters for the preselected tasks in this task list. If you select further tasks for execution, maintain the required parameters.

Related Information

4.2 Task List Initial Setup Use Case - Enable SSO between 2 ABAP systems

After the installation of a new SAP system based on SAP NetWeaver ABAP, you use task list `SAP_ABAP2ABAP_SSO_CONFIG` to configure an SAP system to accept assertion tickets from an SAP system for message-based web service communication.

The task list sets required single sign on (SSO) profile parameters and imports the system PSE certificates from the SAP system.

> **i Note**
>
> You have to execute this task list in dialog.

Related Information

Displaying Task List Documentation [page 18]

4.3 Task List Initial Setup Use Case - Create ABAP Trust on Client Side

After the installation of a new SAP system based on SAP NetWeaver ABAP, you use task list `SAP_ABAP2ABAP_TRUST_CLIENT_CFG` to configure an SAP client system as a trusted-system.

The task list allows checking of required authorizations and creates or allows selecting the corresponding remote function call destination that is required for the trusted relationship between SAP systems.

Related Information

Displaying Task List Documentation [page 18]

4.4 Task List Initial Setup Use Case - Create ABAP Trust on Server Side

After the installation of a new SAP system based on SAP NetWeaver ABAP, you use task list `SAP_ABAP2ABAP_TRUST_SERVER_CFG` to configure an SAP server system as trusting-system.

The task list creates or allows selecting the required remote function call destination for the trusting relationship between SAP systems and the configuration of a trusted system.

> **i Note**
>
> You have to execute this task list in dialog.

Related Information

Displaying Task List Documentation [page 18]

5 Predefined Task Lists for System Check

You use task list `SAP_BASIS_SSL_CHECK` to check SSL (Secure Sockets Layer) configuration.

You use task list `SAP_BASIS_SYSTEM_CONFIG_CHECK` to check Basis system configuration.

5.1 Task List Smoke Test Use Case - Basis SSL Check

You use task list `SAP_BASIS_SSL_CHECK` to check SSL (Secure Sockets Layer) configuration.

Related Information

5.2 Task List Smoke Test Use Case - Basis System Check

You use task list `SAP_BASIS_SYSTEM_CONFIG_CHECK` to check Basis system configuration.

Related Information

6   Security Considerations

The security considerations provide an overview of the security-relevant information that applies to automated technical configuration ABAP.

Standard Roles and Permissions [page 10]
> The table below shows the standard roles and permissions that are used for automated technical configuration activities.

Assigning Roles [page 12]
> To execute automated technical configuration activities, you must assign the corresponding `SAP_BC_STC` roles to the administrator (dialog user) responsible for ABAP technical configruation activities and to the technical users that are used from SAP Landscape Virtualization Management using remote access.

6.1   Standard Roles and Permissions

The table below shows the standard roles and permissions that are used for automated technical configuration activities.

Table 4:

Role	Description	Permissions
`SAP_BC_STC_DISPLAY`	Role for displaying task lists. This role allows task lists and corresponding objects (task list runs and task list variants) used for technical configuration to be displayed.	• Display task lists (transaction `STC01`) • Display task list variants (transaction `STC01`) • Display task list runs (transaction `STC02`)
`SAP_BC_STC_USER`	Role for a configuration user. This role reflects the typical usage of the ABAP task manager for lifecycle management automation.	• Display task lists (transaction `STC01`) • Execute task lists (transaction `STC01`) • Define task list variants (transaction `STC01`) • Display task list variants (transaction `STC01`) • Display task list runs (transaction `STC02`)

Role	Description	Permissions
SAP_BC_STC_AUTHOR	Role for authoring task lists. This role allows task lists used for technical configuration to be authored.	• Create task lists (transaction STC01) • Copy task lists (transaction STC01) • Change existing task lists (transaction STC01) • Delete task lists (transaction STC01) • Display task lists (transaction STC01) • Display task list variants (transaction STC01) • Display task list runs (transaction STC02)
SAP_BC_STC_REORG	Role for cleaning up runtime data. This role allows task list runs executed during technical configuration to be cleaned up.	• Display task lists (transaction STC01) • Display task list variants (transaction STC01) • Display task list runs (transaction STC02) • Delete task list runs (transaction STC02)
SAP_BC_STC_REMOTE	Role for remote access. This role contains the authorizations which are necessary to operate on technical configuration task lists remotely.	To perform particular actions, further authorizations are necessary. See other SAP_BC_STC_* roles.
SAP_BC_STC_CUST	Role for customizing task lists or task list variants. This role contains the authorization for transporting task list variants between systems.	• Display task lists (transaction STC01) • Display task list runs (transaction STC02) • Create task list variants (transaction STC01 • Define task list variants (transaction STC01) • Transport task list variants (transaction STC01)

Role	Description	Permissions
SAP_BC_STC_ADMIN	Role contains all permissions of the following roles: • SAP_BC_STC_DISPLAY • SAP_BC_STC_USER • SAP_BC_STC_AUTHOR • SAP_BC_STC_REORG • SAP_BC_STC_REMOTE • SAP_BC_STC_CUST	• Display task lists (transaction STC01) • Display task list variants (transaction STC01) • Display task list runs (transaction STC02) • Execute task lists (transaction STC01) • Define task list variants (transaction STC01) • Create task lists (transaction STC01) • Create task list variants (transaction STC01 • Copy task lists (transaction STC01) • Change existing task lists (transaction STC01) • Delete task lists (transaction STC01) • Delete task list runs (transaction STC02)

6.2   Assigning Roles

To execute automated technical configuration activities, you must assign the corresponding SAP_BC_STC roles to the administrator (dialog user) responsible for ABAP technical configruation activities and to the technical users that are used from SAP Landscape Virtualization Management using remote access.

Procedure

1. Log on to your ABAP system.
2. Call transaction PFCG.
3. Assign the role SAP_BC_STC_USER to the dialog user and the technical user.
4. Assign the role SAP_BC_STC_REMOTE to the technical user.
5. Assign the role SAP_BC_CTC with authorization object S_CTC and activity 16 to the technical user.

7 Customizing Technical Configuration Content

You adapt technical configuration content to your needs by using the ABAP task manager for lifecycle management automation (transaction `STC01`).

> You customize a task list according to your needs.

> You add reports to a task list.

> You transport task list variants between different systems. In the target system, variants are imported into the specified client only. Transportable task list variants are part of customizing and a customizing request is required if they need to be recorded.

7.1 Creating Task List Variants

You customize a task list according to your needs.

Procedure

1. Log on to your ABAP system with logon language English.
2. Call transaction `STC01`.
3. Enter the name of the task list you want to customize.
4. Choose .
5. Enter the name for the task list variant.
6. Choose .
   The ABAP task manager for lifecylce management automation displays a list of the tasks that are defined for the chosen technical configuration scenario in the order of their execution. Mandatory and necessary tasks are preselected for execution.
7. Adapt the task list to your needs.
   a. If you want some tasks to be skipped, deselect them.
      - You cannot deselect mandatory tasks.
      - If tasks depend on each other, the ABAP task manager for lifecylce management automation allows them to be selected or deselected together only.
      - If you deselect tasks, the technical configuration scenario is not configured completely after the execution of the task list. Make sure that you carry out the skipped configuration steps manually.

b. Some tasks require your input, choose ✐ or ✐ in the *Parameter* column of each task, if applicable.

Decide for each task if you want to edit the parameters or copy the settings from an existing variant. If you do not edit mandatory parameters, the ABAP task manager for lifecylce management automation uses default settings, if any, or stops and prompts you for your input. After you have made your settings, save them and go back to the task list.

8. Save the task list variant.

9. To run a task list in check mode, choose ⬚.
   The ABAP task manager for lifecylce management automation checks whether the prerequisites for the selected tasks are met. The task list is not executed during this run.

Related Information

7.2   Adding Reports

You add reports to a task list.

Prerequisites

The report you want to add to the task list can be executed in background.

Context

> ℹ **Note**
>
> Default values for the reports are not included automatically.
>
> Create a report variant for each report with selection criteria and check the values of the report variant in the task list.

Procedure

1. Log on to your ABAP system with logon language English.

2. Call transaction `STC01`.

3. Enter the name of the task list to which you want to add a report.

4. Choose ✏.
   The ABAP task manager for lifecycle management automation displays the task list.

5. Choose 🗐.

6. (Optional) On the *Task Reports* tab, enter your search criteria.

7. Choose ✔.

8. Select the report you want to add.

9. Choose ✔.

10. If required, rearrange the task sequence.

11. Save the changes.

7.3   Transporting Task List Variants

You transport task list variants between different systems. In the target system, variants are imported into the specified client only. Transportable task list variants are part of customizing and a customizing request is required if they need to be recorded.

Prerequisites

- You have the authorization to transport task list variants.
- The task list variant in the source system starts with the prefix `CUS&`.
- The corresponding task list exists in the source and the target system.

Context

> ℹ **Note**
>
> During a client copy, all variants (local and transportable variants) are copied from the source to the destination client. During installation and upgrade, the delivered SAP variants with the prefix SAP&, are imported into all clients. Existing variants are overwritten.

Procedure

1. Log on to your ABAP system with logon language English.

2. Call transaction STC01.

3. Enter the name of the task list that you want to transport.

4. Choose .

5. Choose ▶ *Task List Variant* ❯ *Transport* ❯.

6. Enter an existing customizing transport request.

8 Executing Task Lists with the ABAP Task Manager for Lifecycle Management Automation

Prerequisites

- Optional: You have created a task list variant.
  For more information, see Creating Task List Variants [page 13].

Procedure

1. Log on to your ABAP system with logon language English.
2. Call transaction `STC01`.
3. Enter `<Task list>` in the *Task List* field.
4. Choose ⏲ or ⏲*With Variant*.
   The ABAP task manager for lifecycle management automation assigns a name to the task list run automatically and displays a list of the tasks that are defined for the initial system configuration scenario in the order of their execution. Mandatory and necessary tasks are preselected for execution.
5. Some tasks require your input. Choose 🖉 or 🖉 in the *Parameter* column of each task, if applicable. If you do not define mandatory parameters, the ABAP task manager for lifecycle management automation uses default settings, if any, or stops and prompts you for your input. After you have made your settings, save them and go back to the task list.
6. Choose 🔲.

   > **i** Note
   >
   > For the following task lists, choose *Start/Resume Task List Run in Dialog*:
   > - `SAP_ABAP2ABAP_SSO_CONFIG`
   > - `SAP_ABAP2ABAP_TRUST_SERVER_CFG`
   > - `SAP_SAP2GATEWAY_TRUSTED_CONFIG`

7. To get the current status of the task list run, choose 🔄 .

Next Steps

Displaying Log Information for Task List Runs [page 18]

Related Information

8.1 Displaying Task List Documentation

Procedure

1. Log on to your ABAP system with logon language English.
2. Call transaction STC01.
3. Enter the name of the task list.
4. Choose 🔧.
5. Choose ▌ *Goto* ❯ *Documentation* ❯ *Display with Task Docu* ▐.

Results

You get the complete documentation of the task list with a detailed task description.

8.2 Displaying Log Information for Task List Runs

You view detailed log information about a task list run.

Prerequisites

You have executed a task list or task list variant.

Procedure

1. Log on to your ABAP system with logon language English.
2. Call transaction STC02.

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Executing Task Lists with the ABAP Task Manager for Lifecycle Management
Automation

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3. Search for the task list run you want to view.

4. Choose ▌▶ *Task List Run* ❯ *Display Log* ▌.

Results

The system displays the following:

- Task list run header information
- Task list information
- Task overview
- Task details

Next Steps

To download a ZIP file with the log information, choose .

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9   Troubleshooting

This section contains troubleshooting information that helps you to check and solve any problems that occur.

A central entry point for all issues is the SAP Technology Troubleshooting Guide. For more information, see SAP Technology Troubleshooting Guide .

Important Disclaimers and Legal Information

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