Help

RELEASED FOR CUSTOMERS

SAP S/4HANA,on premise edition
Document Version: 1511 FPS 2 – 2016-07-20

Administration Guide for the Implementation of SAP S/4HANA, on premise edition (1511 FPS 2)

Content

1 ABOUT administrating SAP S/4HANA implementation

This guide explains administrative tasks which enable the implementation team to adapt SAP solutions to the company's needs. It contains information about how to provide the system, the implementation tools, and the solution content.

> **Note**
>
> Previous FPS versions:
>
> - Administration Guide for the Implementation of SAP S/4HANA 1511 FPS 0
> - Administration Guide for the Implementation of SAP S/4HANA 1511 FPS 1

Strategies for implementing SAP solutions

For a new implementation of SAP S/4HANA, you can initially decide whether to use best-practice implementation content (pre-configured solution packages). The possible strategies and their specifics are described below.

Implementation strategy	Specifics	Implementation procedure
Use of SAP Best Practices content	• You set up a best-practice client without configuration content from client 000. A best-practice client facilitates automatic content activation. It only contains essential configuration settings for the selected scope. It is required if you want to use the integrated model company from SAP with running integrated processes provided by the SAP Best Practices content. • Customizing activities are carried out in the transaction *SPRO*.	The SAP Best Practices content is already included in your system. You check via SAP Note **2303306** whether a more recent content version is available for download, import the **local** solution and installation data files to the solution builder and then activate the content.

Implementation strategy	Specifics	Implementation procedure
No use of SAP Best Practices content	• You set up a client with configuration content from client 000 (including all tables of delivery class C and G): This standard client is a conventional on-premise system. This makes sense if there is only little overlap between the implementation project scope and the SAP Best Practices content. • Customizing activities are carried out in the transaction *SPRO*. • Your solutions will not be compatible to future SAP Best Practices content.	Customizing projects based on implementation guide (transaction *SPRO*) Further details about this implementation procedure are not covered in this guide.

1.1 Transaction list

The following table lists the transactions referenced in this guide (excluding transactions that may be referred to in external documentation).

Transaction Code	Description
`/IWFND/MAINT_SERVICE`	*Activate and Maintain Services*
`/nOAC0`	*Display Content Repositories: Overview*
`/nOACT`	*Change View "Maintain Categories": Overview*
`BRF+`	*Business Rule Framework plus*
`PFCG`	*Role Maintenance*
`PFTC_CHG`	*Task: Maintain*
`RZ10`	*Display Profiles*
`RZ11`	*Maintain Profile Parameters*
`SA38`	*ABAP: Program Execution*
`SCC1`	*Client Copy*
`SCC4`	*Display View "Clients": Overview*
`SCCL`	*Client Copy - Copy Client*
`SCPR20`	*Business Configuration Sets: Activation*

Transaction Code	Description
SE16	*Data Browser: Initial Screen*
SE38	*ABAP Editor: Initial Screen*
SFW5	*Switch Framework*
SICF	*Maintain Services*
SKPR08	*Change View "Categories for Physical Document Classes": Overview*
SM36	*Define Background Job*
SM59	*Configuration of RFC Connections*
SMICM	*ICM Monitor*
SMLT	*Language Management*
SNOTE	*SAP Note Assistant*
SPRO	*Reference IMG*
SR13	*Change View "Administration: Display of the SAP Library"*
SSFA	*Change View "Application-Specific SSF Parameters": Overview*
STC01	*Task Manager for Technical Configuration*
STRUST	*Trust Manager*
SU01	*User Maintenance*
SU53	*Display Authorization Data*
SWU3	*Automatic Workflow Customizing*
SXMB_ADM	*Integration Engine: Administration*
SXMSIF	*Display View "Sender/Receiver Definition": Overview*
/N/SMB/BBI	*Solution Builder*
/N/SMB/SCOPE	*Display View "Customer Solution": Overview*

As UI alternative for the initial implementation of SAP S/4HANA solutions, the following apps can be used:

App Name	More information
Maintain Business User	

App Name	More information
Manage Your Solution	For more information about these apps, refer to the following guide: Phased Approach to Initial Implementation of SAP S/4HANA
Extend Core Configuration	

2 PREREQUISITE settings

This section describes the technical settings which need to be carried out as the prerequisites for providing content per implementation phase.

Required Enterprise Business Functions [page 8]

Setting up a new best-practice client [page 10]

Carrying out technical setup [page 16]

Carrying out settings for implementation [page 56]

2.1 Required Enterprise Business Functions

Functionality in this solution package requires certain Enterprise Business Functions to be active in the SAP landscape. The Enterprise Business Functions are dependent on the selected scope. In the list below you can check which Enterprise Business Functions you have to activate if you decide to implement the relevant scope items and add them to your solution. Otherwise, the Enterprise Business Functions do not need to be activated.

It is important that you activate the Enterprise Business Functions **after installing** SAP S/4HANA ON-PREMISE, but **before creating** the client in which the content delivered with the SAP Best Practices for SAP S/4HANA, on-premise edition shall be activated.

⚠ Caution

Before the activation of the SAP Best Practices content, do **NOT** activate any other Enterprise Extensions or Enterprise Business Functions than the Enterprise Business Functions that are required for the SAP Best Practices for SAP S/4HANA, on-premise edition. This can otherwise result in serious errors during content activation. Changes made by other Enterprise Extensions or Enterprise Business Functions may be incompatible with the SAP reference content.

You can still activate additional Enterprise Extensions or Enterprise Business Functions at any time **after** content activation though. This will, of course, require regression tests for the business processes as for any other system maintenance activities.

⚠ Caution

The activation of Enterprise Extensions or Enterprise Business Functions changes your system and cannot be rolled back. For more information about the impact, check the related documentation by following the link in the *Documentation* column.

Product	Business Function	Configuration or Data required	Relevance
SAP S/4HANA	FIN_FSCM_CLM		Required for scope items J77, J78, J60 (building blocks BFD, BFE, J75, J76). **Note** An additional license is necessary.
SAP S/4HANA	FIN_FSCM_BNK		Required for scope items J78, J60 (building block J83). **Note** An additional license is necessary.
SAP S/4HANA	FIN_REP_SIMPL_2		Required for building block MAL
SAP S/4HANA	FIN_REP_SIMPL_3		Required for building block MAL
SAP S/4HANA	FIN_REP_SIMPL_4		Required for building block MAL

Activating Enterprise Business Functions

Prerequisites

You have sufficient authorization for making changes in transaction `SFW5`.

Procedure

1. Access transaction `SFW5`.
2. On the *Switch Framework: Change Business Function Status* screen, select each of the entries listed above (by selecting the *Planned Status* column).

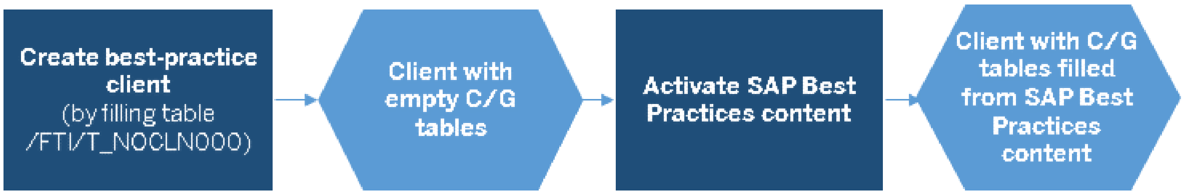
3. Choose the *Activate Changes* button.
4. The system displays an informational dialog box. Choose *Continue*.
5. Choose *Back*.

2.2 Setting up a new best-practice client

The best-practice client setup is the prerequisite to successfully activate and deploy the SAP Best Practices content. Setting up a new best-practice client requires the configuration content from client 000 and the activation of the SAP Best Practices content depending on the selected business scope.The new client shall only contain the minimum required settings from client 000; all other settings shall be created by activating the SAP Best Practices content and match the business scope.

To achieve this, only the contents of tables defined in the **whitelist** table `/FTI/TWHITEL01` (whitelist) shall be cascaded to the new target client. The whitelist is a collection of approximately 900 customer tables (delivery class C and G). These tables contain settings ranging from basic Customizing (currencies, taxes, standards, protocols, ...), screen settings (field definitions, ...) to client-dependent Customizing (user authorizations, profiles, ...). In the future, this content is intended to gradually move into the SAP Best Practices content.

The target client has to be registered in table `/FTI/T_NOCLN000`. With the appropriate client copy profiles, the customer tables on the whitelist can then be cascaded to the target client. Tables of other delivery classes will be ignored. The client 000 settings need to be available in the new client before the content activation is triggered.



Areas not covered by SAP Best Practices content

In areas for which there is currently no SAP Best Practices content available, the configuration tables are indeed empty. For implementation teams, this means additional project effort since they start with the configuration in these areas from scratch.

- Project teams might be required to deal with unconventional IMG activities that are usually not required in a project, and project team members may only have little experience.
- It is possible to copy required configuration content from client 000 via the adjustment functionality or the provided helper report `/FTI/JF24` (see SAP Note 2272406). Occasionally, this report is useful for some rare IMG activities that rely on a standard client setup, which means new entries cannot be created using the IMG UI.

Handling language imports

During a language import, translations from SAP for sample data or default values are imported without overwriting the Customizing data in a customer client.

Before you copy customer tables from client 000 to the new client, the import of required languages has to be complete. This ensures that the customer tables from the whitelist contain the latest translations when they are copied. All other translations related to customer tables are provided by the SAP Best Practices content (available in 38 languages). Depending on the selected business scope, these translations will become available after content activation.

> **Caution**
>
> To avoid errors during content activation, you **must not** use report `RSREFILL` or *Client maintenance* in transaction `SMLT` to update translations from customer tables in client 000 in your target client. The target client will otherwise contain too many table entries which are unrelated to your business scope and potentially interfere with the activation logic.

> **Note**
>
> For technical reasons, you are required to **install the complete scope of released languages** for the SAP Best Practices for SAP S/4HANA, on-premise edition in order to avoid errors during content activation. You can check the following blog post for information on how to import a large number of languages efficiently.
>
> If your system environment does not or cannot allow for these languages to be installed, a workaround is described in SAP Note 2292425. When you initially import solutions from the SAP Best Practices content, the language-dependent content for all 38 released languages will be copied. You can use report `/SMB/REMOVE_NOTINST_LANG_IMG` to remove language-dependent entries for languages that are not installed in your system. However, you have to make a conscious decision which languages you need. After removing entries with this report, you will not be able to add the language-dependent entries again. Also, be aware that selecting fewer than the installed languages or adding further languages later is currently not supported. You execute the report later in the following activity: Defining the scope of your solution [page 62].

AR	Arabic	HI	Hindi	RO	Romanian
BG	Bulgarian	HR	Croatian	RU	Russian
CA	Catalan	HU	Hungarian	SH	Serbo-Croatian
CS	Czech	IT	Italian	SK	Slovak
DA	Danish	JA	Japanese	SL	Slovenian
DE	German	KK	Kazakh	SV	Swedish
EL	Greek	KO	Korean	TH	Thai
EN	English	LT	Lithuanian	TR	Turkish

ES	Spanish	LV	Latvian	UK	Ukrainian
ET	Estonian	NL	Dutch	VI	Vietnamese
FI	Finnish	NO	Norwegian	ZF	Chinese trad.
FR	French	PL	Polish	ZH	Chinese
HE	Hebrew	PT	Portuguese		

To avoid errors, you also need to ensure that the installed languages in transaction `SMLT`, the logon languages classified in the NLS installation tool and the enabled languages in the instance profile are the same.

- Classify logon languages in transaction `SMLT`: *Goto* > *Other Tools* > *NLS installation tool*
- Check languages in instance profile: access transaction `RZ11` and display the value for parameter `zcsa/installed_languages`.

When you activate the "customer solution" later, make sure that you select all languages listed under *Released Languages* in solution builder.

More information

Running client copy for a best-practice client [page 13]

Handling whitelist table updates [page 15]

General information about language imports

When setting up the best-practice client, consider the client currency setting: Editing client currency setting [page 12]

2.2.1 Editing client currency setting

Context

The client currency setting will be created during content activation. This means, initially, before the content activation, ensure that the client currency setting has not been maintained.

Caution

Later, when your solution has already been activated and the standard currency has been set, you must not change this setting.

Procedure

1. Access transaction **SCC4**.
2. Select your activation client.

   Choose *Display*. Ensure that there is **no entry** for **standard currency**.

2.2.2 Running client copy for a best-practice client

Prerequisites

The content of the whitelist table `/FTI/TWHITEL01` is up to date. By default, the whitelist is delivered with the standard installation. Check the central note if a more recent version is available. For more information, see Handling whitelist table updates [page 15]

Context

In your system, you copy locally the contents of customer tables defined in the whitelist from client 000 to the target client. As a prerequisite, you have to add the target client to table `/FTI/T_NOCLN000` to document that this client will be set up using the whitelist.

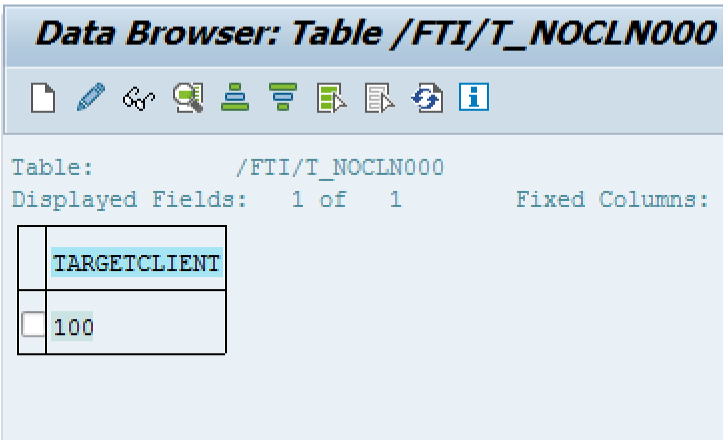
For the client copy, you can use the client copy profiles `SAP_UCUS`, `SAP_CUST`, `SAP_CUSV`, or `SAP_UCSV`. Only if the target client is referenced in table `/FTI/T_NOCLN000` will the client copy profiles recognize the customer tables from the whitelist properly. This way, only customer tables from the whitelist are considered for the client copy. Otherwise, the client copy profiles will attempt to copy the entire configuration content from client 000 to the target client. This will eventually cause the activation of the SAP reference content to fail.

You trigger the client 000 copy in the target client. We recommend setting it up as a background job to avoid timeouts.

Procedure

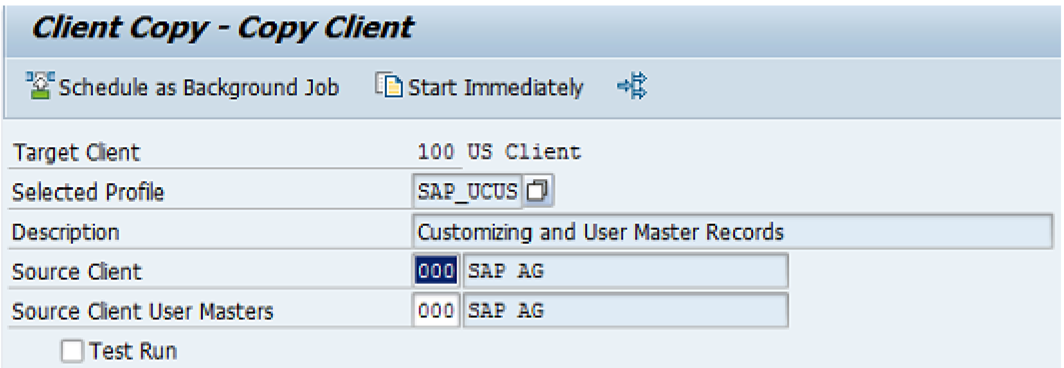
1. Create the new target client.
   a. To define your new target client, access transaction `SCC4`.
   b. On the *Display View "Clients": Overview* screen, switch to change mode and choose *New Entries*.
   c. Create settings for the new client, for example, client 100.
   d. Save.
2. Identify the new target client.

a. Access transaction `SE16`.
b. On the *Data Browser: Initial Screen*, enter the table name **`/FTI/T_NOCLN000`** and choose *Create Entries (F5)*.
c. In the *TARGETCLIENT* field, enter the target client number.



d. Save.
e. Exit the transaction and log off.

3. Copy client 000 configuration tables in the target client.
   a. Log on to the new client with the following credentials:
      - *User name*: **`SAP*`**
      - *Password*: **`PASS`**
   b. Access transaction `SCCL`.
   c. On the *Client Copy – Copy Client* screen, make the following entries:
      - Your target client
      - Choose one of the following copy profiles enabled for copying the customer tables on the whitelist: `SAP_UCUS`, `SAP_CUST`, `SAP_CUSV`, or `SAP_UCSV`
      - Enter **`000`** as source client.



   d. Choose *Schedule as Background Job*.

2.2.3 Handling whitelist table updates

Prerequisites

- The target client has been identified in table `/FTI/T_NOCLN000`.
- Ensure that no content activation is executed in parallel.

Context

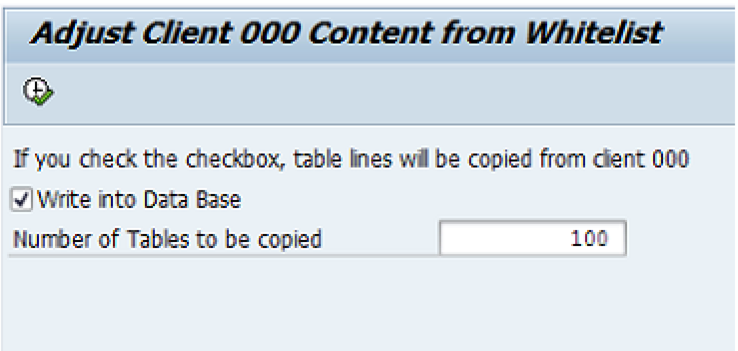
If the whitelist has been updated with additional customer tables (for example, in a support package), the next steps in the best-practice client depend on **when** the update occurred.

- **Before** executing the client copy:
  This is the standard use case. No further actions on your part are required since the client copy tool will consider the current whitelist.
- **After** executing the client copy and before content activation:
  In this case, the content of the tables updated in the whitelist has not been copied to the target client. You need to run report `/FTI/CL_COPY` to copy the new tables from client 000 to your target client. Existing table entries with the same entry key will not be updated.

  > **Note**
  >
  > Occasionally, activation errors may be caused by missing settings from client 000. If you identified missing entries as root cause, run report `/FTI/CL_COPY` and copy the missing tables from client 000 to your target client.

Procedure

1. In your target client, access transaction `SE38`.
2. In the *Program* field, enter **`/FTI/CL_COPY`** and choose *Execute (F8)*.
3. On the next screen, you have the following options:

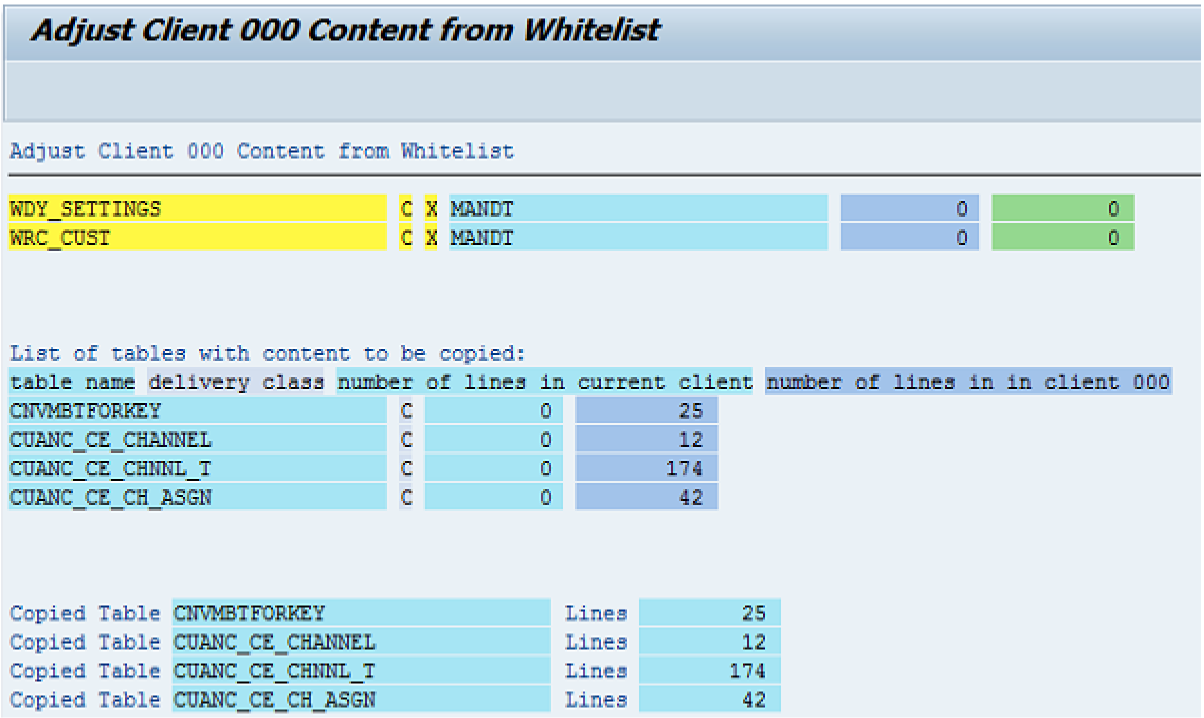


The delta of tables added to the whitelist in a feature pack should be low, and thus, not exceed 100 tables that need to be copied.

- Test run: leave the *Write into Database* checkbox unchecked
- Execute client copy: select the checkbox

4. Choose *Execute (F8)*.

Results



Check the result. If you find content missing in the target client, you may need to consider transporting tables or table entries manually.

> i Note
>
> For known issues related to missing content, refer to the following SAP Notes:
>
> - SAP Note 2272406: Missing Customizing Table Entries

2.3 Carrying out technical setup

Before you start with the activation of the SAP Best Practices content, you must have completed the following activities. Go through each step and follow the instructions in the linked topics or external documentation.

Step	Step Description	More Information
1	For content activation, ensure that you have installed the latest and appropriate SAP front-end components.	Get the latest SAP GUI front-end components. In the SAP Software Download Center (https://support.sap.com/swdc), choose *Support Packages and Patches* > *Browse our Download Catalog* > *SAP Frontend Components*. Select the SAP front-end components depending on your requirements.
2	Apply SAP notes and check latest information.	SAP Notes and messages [page 18]
3	Execute basic SAP Fiori configuration.	You have to apply the settings as described in the following configuration guides: SAP S/4HANA Fiori Foundation Configuration SAP S/4HANA Fiori Basic Network and Security Configuration SAP S/4HANA Fiori Transactional App Deployment SAP S/4HANA Fiori Launchpad Operation SAP S/4HANA Fiori Other App Type Deployment
4	Set up Vertex integration **Note** Only relevant if you activate the US solution `BP_S4BL_S4HANAX_US*` from the SAP Best Practices content. **Note** If you decide to activate without Vertex integration, you can refer to SAP Note 2247743 which provides guidance on how to activate without Vertex integration or configure tax configuration manually.	To set up Vertex Integration, you need to contact the Vertex Sales department to buy licenses and request the configuration guides. Vertex Global headquarters Phone: 800-355-3500 or 610.640.4200 Fax: 610-640-5892 Web: http://www.vertexinc.com/ContactUs/web-inquiry-form.asp Vertex European headquarters Phone: +44 (0) 20 8622 3053 Fax: +44 (0) 20 8622 3200 Web: http://www.vertexgts.co.uk
5	Configure system to connect to the System Landscape Directory of SAP NetWeaver (SLD)	For more information, see the SAP Help Portal: Configuring, Working with and Administering System Landscape Directory

Step	Step Description	More Information
6	Create basic settings in the SAP S/4HANA back-end system	Create settings as described in the following topics: Deselecting activation links in BC sets [page 21] Configuring proxy settings [page 21] Changing group currency from USD to another currency [page 65]
7	Create basic settings for using the SAP Fiori Launchpad	Create settings as described in the following topics: Assigning business roles to a user [page 25] Creating back-end authorization roles [page 29] Activating OData services for delivered scope via task list [page 30] Activating ICF services for SAP Fiori apps for delivered scope [page 41] Activating ICF services for Web Dynpro applications for delivered scope [page 49]
8	Set up SAP S/4HANA attachment services	Create settings as described in the following topics: Maintaining settings for storage systems [page 52] Maintaining categories for SOMU and DMS_C1_ST [page 55] Activating storage repository [page 54] Maintaining standard category for SOFFDB [page 55] Adjusting the Customizing in table TSOPE [page 56]
9	Set up e-mail exchange between the SAP system and SMTP mail server	For more information, see the SAP Help Portal: SMTP Configuration Guide

2.3.1 SAP Notes and messages

If issues become apparent after shipment of this SAP Best Practices content (and hence of this document), an SAP Note exists to cover such eventualities.

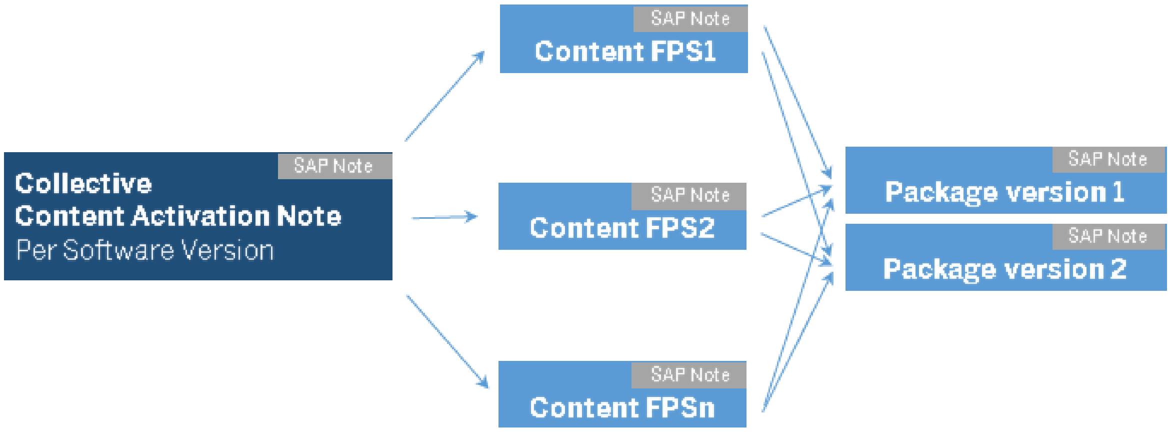
Caution

All SAP Notes must be applied to the system via the SAP Note Assistant (transaction `SNOTE`). Before you start the activation of the related SAP Best Practices scope, check the latest version of the following SAP Note to obtain updates and corrections for problems that do not become apparent until after shipment. All SAP Notes mentioned in this section must have the implementation status *Completely implemented*. Some SAP Notes require manual action before you set them to status completely implemented.

SAP Note	Content	Comments	Relevance
2244659	SAP Best Practices for SAP S/4HANA, on-premise edition, Germany (DEV2)	Before you start the activation of the related SAP Best Practices scope, check the latest information on the installation of SAP Best Practices for SAP S/4HANA, on-premise edition, Germany (DEV2)	All scope items
2247743	SAP Best Practices for SAP S/4HANA, on-premise edition, United States (USV2)	Before you start the activation of the related SAP Best Practices scope, check the latest information on the installation of SAP Best Practices for SAP S/4HANA, on-premise edition, United States (USV2)	All scope items
2226371	SAP S/4HANA content activation note	Please check the collective note for issues that require action on your part **before** the content activation.	All scope items
1972819	Setup Integrated Business Planning for Finance	Before you start the activation of the related SAP Best Practices scope, check the latest versions of this SAP Note and execute all steps as documented in this note.	This SAP Note is only required if you want to use one of the following scope items: • BEA – Revenue Planning • BEX - General Cost Center Planning • BEU - Internal Order Planning
2219726	General Information: Fiori UI Infrastructure Components - SAP S/4HANA Enterprise Management solution Q4/2015	For setting up the system landscape to run SAP Fiori apps; this SAP Note states the relevant prerequisites and provides fixes for User Interface technology for SAP NetWeaver 7.5.	All scope items
2219727	General Information: Fiori SAP Gateway for SAP S/4HANA Enterprise Management solution Q4/2015	For setting up the system landscape to run SAP Fiori apps on SAP S/4HANA Enterprise Management solution; this SAP Note states the relevant prerequisites and provides fixes for SAP Gateway on the Fiori Frontend Server 7.50.	All scope items

SAP Note	Content	Comments	Relevance
2240690	General Information: Front-end Network Bandwidth Sizing for SAP Fiori Apps		All scope items

The following graph illustrates how the information is structured in the SAP Notes:



For each software release, there will be a central content activation note. From this, you can select the SAP Note for the specific support package level with content correction transports and other content related fixes.

Building block changes and manual workarounds are documented by package version. This package version specific note is assigned to the relevant note corresponding to the support package level.

The following SAP Notes must be implemented (if not stated otherwise in the SAP Note mentioned above):

SAP Note	Content	Comments	Relevance
65343	Problems with variants after the upgrade	After an upgrade, there could be various problems with variants. The note lists all the possible issues and provides a solution for each issue.	All scope items

2.3.2 Create basic settings in the SAP S/4HANA back-end system

This section describes various activities that need to be carried out in the SAP S/4HANA back-end system.

Deselecting activation links in BC sets [page 21]

Configuring proxy settings [page 21]

Output management [page 22]

2.3.2.1 Deselecting activation links in BC sets

Context

BC sets are snapshots of customizing settings which are attributable and reusable. They are one type of technical objects that are used to deploy SAP reference content in a system via content activation.

We recommend that you turn off the creation of activation links. By doing this, you can increase activation speed significantly and avoid errors.

Procedure

1. Run the following activity:

SAP Menu	*Tools* › *Customizing* › *Business Configuration Sets* › *Activation of BC Sets*
Transaction Code	`SCPR20`

2. On the *Business Configuration Sets: Activation* screen, choose *Utilities* › *System Settings.*
3. Choose *Change* (`Shift` + `F1`).
4. In the *Activation* section, select the radio button for the *Do Not Create* parameter.
5. Choose *Enter* on the information message.
6. Save.

2.3.2.2 Configuring proxy settings

Context

Ensure that the proxy server has been configured according to your system landscape.

Procedure

1. Access transaction **SICF**.

2. Choose *Execute*.
3. Select *Client* › *Proxy Settings*.

   Maintain your proxy server for **http** and **https** depending on your system landscape.

2.3.2.3 Output management

Context

Download the BRFplus application files from SAP Note 2248229.

Procedure

1. Access transaction **BRF+**.

   > **Note**
   >
   > If required, personalize your screen and change the user mode from *Simple* to *Expert*.

2. On the *Business Rule Framework plus* screen, choose *Tools* › *XML Import*.
3. On the *Business Rule Framework plus – XML Import* screen, under *File and Transport Request*, browse for the local *.xml files you want to import. You can import the files one after the other.

Application	*.xml	Comment
OPD_EF_PURCHASE_ORDER	OPD_EF_PURCHASE_ORDER.xml	Used for Purchase Order
OPD_V2_OUTBOUND_DELIVERY	OPD_V2_OUTBOUND_DELIVERY.xml	Used for Delivery Note and Pick list
OPD_V3_BILLING_DOCUMENT	OPD_V3_BILLING_DOCUMENT.xml	Used for billing documents

4. In the *Customizing Request* field, enter an applicable Customizing Request ID.
5. Choose *Upload XML File*.
6. Choose *Back to Workbench*.

2.3.3 Creating basic settings for using SAP Fiori launchpad

This section provides general information about the SAP Fiori artefacts in SAP S/4HANA and lists basic settings for using the SAP Fiori launchpad with the delivered roles and business catalogs. It provides a list of the specific OData services and ICF nodes required for the SAP S/4HANA on-premise edition and describes how to maintain them.

Overview of SAP Fiori artefacts

The SAP Fiori launchpad is the central entry hub to all SAP Fiori apps. User roles determine which apps users can access via tiles. In the launchpad , there are services for navigation, personalization, single sign-on, and search. The launchpad and the tiles are flexible and can be adapted to your needs. If you want to modify the delivered SAP Fiori content or create your own artefacts, the following table provides a description of the different Fiori artefacts and how they relate to one another:

Fiori Entity	Description
App	Executable business functionality; represented in the Fiori UI as a tile and a related target mapping. There are different app types available, for example, transactional app, fact sheets, analytical app. For more information, see SAP Fiori App Types. For this on-premise edition, an app tile can also refer to a Web Dynpro or an HTML GUI application.
Technical catalog	A technical catalog contains all apps that make up the business scope. The apps are grouped by LOB (sub) areas. Technical catalogs are repositories that you can use to create your own role-specific business catalogs.
Business catalog	A business catalog is a task group or sub process related grouping of apps (tiles and corresponding target mappings) that is referenced from the technical catalog. If the catalog is assigned to an end user PFCG role, this catalog will be available in the SAP Fiori launchpad. Administrators and power users use the Fiori Launchpad Designer to manage catalogs. End users cannot change predefined catalogs or create new catalogs. However, they can add tiles from the catalogs to their home page in the SAP Fiori launchpad. In addition, they can open an assigned catalog and choose any tile of the catalog and trigger its intent based navigation.
Business group	A business group is a view on the list of apps of one or more business catalogs (for on-premise). The business group defines the list of apps displayed to a user by default on the entry pages of the SAP Fiori launchpad. Administrators use the SAP Fiori launchpad designer to change groups. With the assignment of a group to a role, the group is available to all users assigned to this role. Users can personalize groups by adding or removing apps. Also, they can create their own groups.

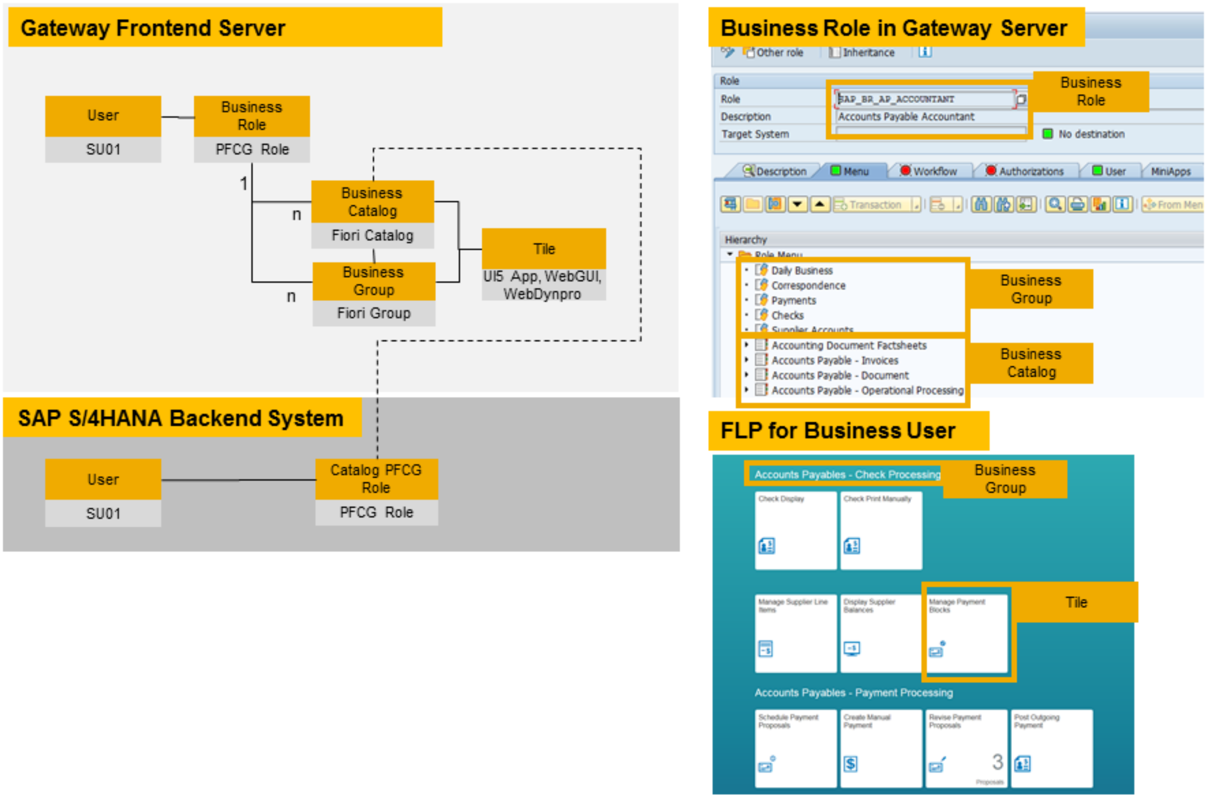
Fiori Entity	Description
Business role	A business role represents a position in a company and contains all tasks (apps) which are rele-vant to fulfill this position. The business role is a PFCG role; and the SAP Fiori relevant entities, business catalogs, and groups have dedicated entries in the PFCG menu tree. The role must be assigned to the user for the SAP Fiori launchpad to have the predefined tiles on the home page and to realize intent based navigation. The user can find the apps included in the business groups and execute all apps belonging to the business catalogs via the catalog view.

For an overview of the UI content for the current SAP Best Practices for SAP S/4HANA, on-premise edition, refer to the following list. This list has all SAP_BR* roles delivered by SAP with their assignment to business catalogs and groups and the respective apps. It is based on check report `/UI2/FLC`.

The list provides the following filter options:

- You can select a specific business role and see which predefined business catalogs / business groups are assigned to this role. A business group can reference apps from one or more business catalogs (this 1:n relationship is only valid for SAP S/4HANA, on-premise edition).
- You can select a specific business catalog and see all apps which are assigned to this catalog and which group references the app from the catalog.
  An app may belong to a catalog but is not assigned to any group, which means the app is not visible to the end user on the homepage. Only by navigating to the catalog view, the user can execute the app or add it to a group (personalization). This may apply to additional apps that are not used directly in a scope item but which fit topically to the catalog. It is possible that one catalog has two and more entries for the same app. However, in the SAP Fiori launchpad the tile only appears once. This can have the following reasons:
  1. The same app is referenced in different business groups.
  2. Target mappings for SAP Fiori apps (not for HTML GUI apps) are also listed, with the same tile name.

  Target mappings may be listed which do not have a corresponding tile even if there is an entry in column *Tile Name*. As Administrator, please always also refer to the SAP Fiori launchpad designer and the SAP Reference Library for more technical information such as OData services.
- You can filter a specific app to see which group and catalog the app belongs to. For each app, you get additional information such as semantic object and semantic action. If the app launches an HTML GUI application, you can see also which transaction is referenced, and for Web Dynpros, which Web Dynpro application is used (column *Target Mapping. Launchpad Application*).



2.3.3.1 Assigning business roles to a user

Context

If you use SAP Fiori Launchpad as user interface, a prerequisite is that you have roles assigned to your Fiori user in the NetWeaver Gateway system.

SAP delivers a bundle of business roles as templates for customers. Below, you can see a list of available SAP_BR* roles for SAP Best Practices for SAP S/4HANA, on-premise edition.

> **i Note**
>
> `SAP_BR*` roles are **not** designed to be used as productive roles. They are demo roles which enable system users to make use of the SAP Fiori Launchpad and try out the predefined scope items of the SAP Best Practices for SAP S/4HANA, on-premise edition.
>
> For productive use, you should **always copy** the delivered roles and **adjust** them as required. In addition, you define and implement an appropriate authorization concept.

You have the following options for assigning business roles:

- You assign **only roles needed for a specific scope item**. In this case, check the related test script for the required roles in the *Roles* section. You can find the test scripts in the SAP Best Practices documentation package.
- You assign **all roles needed for the SAP Best Practices for SAP S/4HANA, on-premise edition**. In this case, assign all business roles to your user.

The roles overview table lists all business roles that should be available in the system:

Role Name	Technical Role Name (Single Roles)
SAP_BR_AA_ACCOUNTANT	Asset Accountant
SAP_BR_ADMINISTRATOR	Administrator
SAP_BR_ADMINISTRATOR_HRINFO	Administrator – HR Info
SAP_BR_ADMINISTRATOR_INTFMONI	Administrator – Interface Monitoring
SAP_BR_ANALYTICS_SPECIALIST	Analytics Specialist
SAP_BR_APR_MANAGER	Accounts Payable/Receivable Manager (FI-CA)
SAP_BR_AP_ACCOUNTANT	Accounts Payable Accountant
SAP_BR_AP_ACCOUNTANT_PROCUREMT	Accounts Payable Accountant – Procurement
SAP_BR_AP_MANAGER	Accounts Payable Manager
SAP_BR_AR_ACCOUNTANT	Accounts Receivable Accountant
SAP_BR_AR_MANAGER	Accounts Receivable Manager
SAP_BR_BILLING_CLERK	Billing Clerk
SAP_BR_BPC_EXPERT	Configuration Expert – Business Process Configuration
SAP_BR_BUPA_MASTER_SPECIALIST	Master Data Specialist – Business Partner Data
SAP_BR_BUYER	Strategic Buyer
SAP_BR_CASH_MANAGER	Cash Manager
SAP_BR_CASH_SPECIALIST	Cash Management Specialist
SAP_BR_CC_MANAGER	Contract Manager – Settlement Management
SAP_BR_CI_MANAGER	Invoicing Manager (Convergent Invoicing)
SAP_BR_CONFIGURATION_EXPERT	Configuration Expert
SAP_BR_CONTROLLER	Controller
SAP_BR_CREDIT_CONTROLLER	Credit Controller

Role Name	Technical Role Name (Single Roles)
SAP_BR_EMPLOYEE	Employee
SAP_BR_EMPLOYEE_PROCUREMENT	Employee – Procurement
SAP_BR_GL_ACCOUNTANT	General Ledger Accountant
SAP_BR_INTERNAL_SALES_REP	Internal Sales Representative
SAP_BR_INTRASTAT_SPECIALIST	Intrastat Specialist
SAP_BR_INVENTORY_MANAGER	Inventory Manager
SAP_BR_BPC_EXPERT	End-to-End Implementation Experience – Implementation Cockpit
SAP_BR_MATL_PLNR_EXT_PROC	Material Planner – External Procurement
SAP_BR_PRICING_SPECIALIST	Pricing Specialist
SAP_BR_PRODN_ENG_DISC	Production Engineer – Discrete Manufacturing
SAP_BR_PRODN_ENG_PROC	Production Engineer – Process Manufacturing
SAP_BR_PRODN_OPTR_DISC	Production Operator – Discrete Manufacturing
SAP_BR_PRODN_OPTR_PROC	Production Operator – Process Manufacturing
SAP_BR_PRODN_OPTR_RPTV	Production Operator – Repetitive Manufacturing
SAP_BR_PRODN_PLNR	Production Planner
SAP_BR_PRODN_SUPERVISOR_DISC	Production Supervisor – Discrete Manufacturing
SAP_BR_PRODN_SUPERVISOR_PROC	Production Supervisor – Process Manufacturing
SAP_BR_PRODN_SUPERVISOR_RPTV	Production Supervisor – Repetitive Manufacturing
SAP_BR_PROD_MASTER_SPECIALIST	Master Data Specialist – Product Data
SAP_BR_PROJ_FIN_CONTROLLER	Project Financial Controller
SAP_BR_PROJ_LOG_CONTROLLER	Project Logistics Controller
SAP_BR_PURCHASER	Purchaser
SAP_BR_PURCHASING_MANAGER	Purchasing Manager
SAP_BR_SALES_MANAGER	Sales Manager
SAP_BR_SET_CLERK	Settlement Clerk

Role Name	Technical Role Name (Single Roles)
SAP_BR_STRATEGIC_BUYER	Strategic Buyer
SAP_BR_TREASURY_RISK_MANAGER	Treasury Risk Manager
SAP_BR_WAREHOUSE_CLERK	Warehouse Clerk

Procedure

1. In the SAP NetWeaver Gateway system, choose one of the following navigation options:

Transaction Code	SU01
SAP Menu	*Tools* › *Administration* › *User Maintenance* › *Users*

2. In the *User Maintenance* screen, enter the user ID of the user for which a role assignment shall be done.
3. Choose *Change*.
4. In the *Maintain User* view, choose the *Roles* tab.
5. In the *Role* field, enter the role name. You can use a wildcard to search for a role. You can assign several roles to a user at this stage, if necessary.
6. Choose *Enter*, save, and go back to the *SAP Easy Access* view.

Results

The roles are now assigned to the user. These roles are referred to in the test script.

> **Note**
>
> If you wish to create your own roles with your own SAP Fiori app catalogs/groups, refer to the configuration guide SAP S/4HANA Fiori Launchpad Operation (MAG), chapters: *Creating a sample catalog*, *Creating a sample group*, *Creating a sample PFCG role and assign to end users*.

2.3.3.2 Creating back-end authorization roles

Context

OData service business objects or transactions are protected by authorization objects. To access SAP Fiori applications or execute SAP transactions via Web GUI tiles, an end user requires the corresponding authorizations.

In this step, you create the back-end roles that contain the necessary authorizations for the end user's business tasks. Ideally, each front-end role corresponds to a back-end role which contains the authorizations for the SAP Fiori applications, transactions and Web Dynpros of the respective SAP_BR* front-end role. You can select the appropriate catalog from the front-end server via RFC connection and assign it to your business role. The required authorization objects for the OData services and back-end transactions are then being retrieved. You assign the back-end role to the respective end users, authorization profiles need to be maintained and generated.

For a detailed description on how to create and assign an authorization back-end role, refer to configuration guide SAP S/4HANA Fiori Apps Deployment (MAD), chapter *Create and Assign the Backend Role for a User*.

Procedure

1. In the SAP back-end system, access the activity using one of the following navigation options:

Transaction Code	`PFCG`
IMG Menu	*Tools* > *Administration* > *User Maintenance* > *Role Administration* > *Roles*

2. On the *Role Maintenance* screen, create a new role. Enter the name of your role.
3. Choose *Single Role*.
4. Enter a description and save your created role.
5. Choose the *Menu* tab.
6. Choose the *Insert Node* button and select option *SAP Fiori Tile Catalog*.
7. Choose *Remote Front-End Server* in case you are using a hub solution for the front-end server.
8. Choose the *Catalog ID* field and search for the required SAP Fiori catalog using the value help.
9. Choose *Continue* to assign the selected catalog to your role. The assigned catalog has the required authorization objects assigned to it now. You can repeat this assignment steps until the role fits to your needs.
10. Choose the *Authorizations* tab and complete/generate a profile for this role.
11. Choose the *User* tab page and input the user ID as back-end user.
12. Choose *Save*.

> **Note**
>
> SAP Best Practices does not deliver an authorization concept. All authorization profiles will have to be adapted according to the necessary requirements and the authorization concept that has to be realized, respectively.

2.3.3.3 Activating OData services for delivered scope via task list

Prerequisites

Before you can activate OData services for fact sheets, you need to have set up ESH Search in your SAP NetWeaver Gateway system. For more information, refer to configuration guide SAP S/4HANA Fiori Foundation Configuration (MAA).

Context

This step describes the mass activation for a bundle of OData services.

OData services can be activated via task list **SAP_GATEWAY_ACTIVATE_ODATA_SERV** in transaction `STC01`.

For a detailed description on how to activate OData via tasklist or manually in transaction `/IWFND/MAINT_SERVICE`, refer to configuration guide SAP S/4HANA Fiori Transactional App Deployment>, chapter *Automated Activation via Task Lists*.

Procedure

1. Access transaction **STC01** in your SAP NetWeaver Gateway system.
2. On the *Task Manager for Technical Configuration* screen, enter **SAP_GATEWAY_ACTIVATE_ODATA_SERV** in the *Task List* field.
3. Choose *Generate Task List Run (F8)*. The *Maintain Task List Run* screen is displayed.
4. For line item *Define OData Services for Activation*, select the checkbox in the *Execute* column.
5. In the *Parameter* column, choose the *Fill Parameters* icon.
6. In the input field of the dialog box, enter the OData services using the following format: **<SERVICE NAME><SPACE><VERSION>**, for example, **FAC_FINANCIALS_POSTING_SRV 1.** See the OData services overview below.
7. Choose *Continue*. Make sure that the task log shows green lights, indicating a proper task setting and configuration.

8. On the *Maintain Task List Run* screen, select the *Select System Alias for Activation* checkbox in the *Execute* column. Choose the *Fill Parameters* icon in the *Parameter* column.
9. On the *Edit Variants* screen, insert the SAP system alias in the input field.
10. Save and go back.
11. On the *Maintain Task List Run* screen, select the *Select OData Services for Activation* checkbox in the *Execute* column. Choose the *Fill Parameters* icon in the *Parameter* column.
12. On the *Select to be activated OData services* screen, select the checkboxes of all listed services.
13. Save and go back.
14. Before executing the task list, make sure that all *Execute* checkboxes are selected.

    Choose *Start/Resume Task List Run in Dialog* (or in background).

    Once the task list run has finished successfully, green lights appear in the task log.

OData services summary

Below you find a table with all OData services that are **in scope of the SAP Best Practices for SAP S/4 HANA, on-premise edition**:

> **Note**
>
> Service names may change with different support packages. Refer to the SAP Fiori apps reference library which has the most recent documentation of OData services.
>
> There may be different versions of the same service. You can find the different versions also in the SAP Fiori apps reference library. If you need to maintain a specific version of an OData service, use the following convention to enter it in the task list: <OData service> empty space <version>, for example, Taskprocessing 2

OData Services
0FCLM_BANK_TRANSFER_SRV
0FCLM_CP_TRACK_SRV
APJ_JOB_MANAGEMENT_SRV
APL_LOG_MANAGEMENT
APL_LOG_MANAGEMENT_SRV
APS_EXT_ATO_PK_CFG_SRV
APS_OM_EMAIL_QUEUE_SRV
APS_OM_EMAIL_TMPL_SRV
BANKRANKORDER

OData Services
BANKSTATEMENTIMPORTFIORI_4_SR
C_APCASHDISCOUNTFORECAST_CDS
C_APCSHDISCUTILIZATION_CDS
C_APDAYSPAYOUTST_CDS
C_APFLEXIBLEAGING_CDS
C_APFUTUREACCOUNTSPAYABLE_CDS
C_APINVOICEPROCESSINGTIME_CDS
C_APMANUALPAYMENTS_CDS
C_APOVRD_CDS
C_APVENDOROPENITEMS_CDS
C_CASHPOSITIONANALYTICS_CDS
C_CONTRACT_FS_SRV
C_CONTRACTITEM_FS_SRV
C_DAYSSALESOUTSTANDING_CDS
C_NONMNGDPURGSPEND_CDS
C_OVERDUEACCTRBLS_CDS
C_OVERDUEPO_CDS
C_PRICEVARIANCE_CDS
C_PURCHASECONTRACTEXPIRY_CDS
C_PURCHASECONTRACTLEAKAGE_CDS
C_PURCHASEORDER_FS_SRV
C_PURCHASEORDERVALUE_CDS
C_PURCHASINGCAT_FS_SRV
C_PURCHASINGGROUPANALYSIS_CDS
C_PURGINFORECORD_FS_SRV
C_PURGMATLPRICECHANGE_CDS

OData Services
C_PURGSPENDCOMPRN_CDS
C_PURGSPENDOFFCONTRACT_CDS
C_PURORDAVGDELIVTIME_CDS
C_PURREQUISITION_FS_SRV
C_PURREQUISITIONITEM_FS_SRV
C_QUANTITYVARIANCE_CDS
C_SUPLRCOMPRNVIAPURVALS_CDS
C_SUPLREVALRESPST_CDS
C_SUPLREVALRSPEVALUATEST_CDS
C_SUPPLIER_FS_SRV
C_SUPPLIEREVALUATION_CDS
C_SUPPLIERINVOICE_FS_SRV
C_TIMEVARIANCE_CDS
C_UNUSEDPURCHASECONTRACTQ_CDS
CA_OC_OUTPUT_REQUEST_SRV
CASH_DISPOSITION_SRV
CB_ACCOUNTING_DOCUMENT_SRV
CB_ACTIVITY_TYPE_SFIN_SRV
CB_ACTIVITY_TYPE_SRV
CB_BANK_SRV
CB_CONTROLLINGDOCUMENT_SFIN_SRV
CB_CONTROLLINGDOCUMENT_SRV
CB_COST_CENTER_GRP_SRV
CB_COST_CENTER_SFIN_SRV
CB_COST_CENTER_SRV
CB_COST_ELEMENT_GRP_SRV

OData Services
CB_COST_ELEMENT_SRV
CB_CUSTOMER_ACC_DOC_SRV
CB_CUSTOMERPROJECT_SRV
CB_EMPLOYEE_SRV
CB_FIXED_ASSET_SRV
CB_GL_ACCOUNT_SRV
CB_INTERNAL_ORDER_SFIN_SRV
CB_MATERIAL_SRV
CB_PROFIT_CENTER_SRV
CB_PROJECT_SRV
CB_PURCHASING_CONTRACT_SRV
CB_SFIN_CONTROL_DOC_SRV
CB_STAT_KEY_FIGURE_SFIN_SRV
CB_STATISTICAL_KEY_FIGURE_SRV
CB_SUPPLIER_INVOICE_SRV
CB_VENDOR_ACC_DOC_SRV
CDS_C_CUSTPROJPLANQUERY
CDS_C_CUSTPROJTEAMPLANQUERY
CV_ATTACHMENT_SRV
DAAG_MNGGRP
DAAG_MONOBJ
E2EIE_CC_SOLBUILDER
E2EIE_IC_CHANGEPROJECT
E2EIE_IC_CONFIG
E2EIE_IC_MNGCLDSOL
E2EIE_IC_ORGSTRUCT

OData Services
E2EIE_IC_PDF_SERVICE
E2EIE_IC_PDFSERVICE_SRV
E2EIE_IC_PROGRESS
E2EIE_IC_SCOPING
E2EIE_IC_STDPO
E2EIE_IC_SYS_STATE
E2EIE_IC_TC
E2EIE_IC_TL
EPM_OIA_APPS_GW_SERVICE_SRV
EPM_OIA_BPFACTSHEET_SRV
EPM_OIA_BPOPENINV_SRV
EPM_OIA_CTRYSALESTREND_SRV
EPM_OIA_DFG_GW_SERVICE_SRV
EPM_OIA_FIORI_SRV
EPM_OIA_GW_SALES_HISTORY_SRV
EPM_OIA_I2A_SIM_SRV
EPM_OIA_I2A_SRV
EPM_OIA_L_1_SRV_01
EPM_OIA_L_SRV
EPM_OIA_OPENINV_SRV
EPM_OIA_PRODSALESTREND_SRV
FAA_DISPLAY_WORKLIST
FAA_DISPLAY_WORKLIST_SRV
FAC_AUDIT_JOURNAL_SRV
FAC_BALANCE_CARRY_FORWARD_SRV
FAC_CHART_OF_ACCOUNTS_SRV

OData Services
FAC_FINANCIAL_DOCUMENT_SRV_01
FAC_FINANCIAL_STATEMENT_SRV
FAC_FINANCIALS_POSTING_SRV
FAC_FOREIGN_VAL_POST_SRV
FAC_GL_ACCOUNT_BALANCE_SRV
FAC_GL_ACCOUNT_LINE_ITEMS_SRV
FAC_GL_DOCUMENT_POST_SRV
FAC_PC_SRV
FAC_TAX_PAYABLE_POST_SRV
FAP_BANKPAYMENTAPPROVAL
FAP_CHECK_BOOKS_SRV
FAP_CREATE_SINGLE_PAYMENT
FAP_MANAGE_PAYMENT_BLOCKS_SRV
FAP_MANUAL_CLEARING
FAP_MANUAL_CLEARING_SRV
FAP_MYVENDORINVOICES
FAP_OUTGOING_CHECKS_SRV
FAP_PAYMENT_POST_SRV
FAP_REVISE_PAYMENT_PROPOSAL
FAP_SCHEDULE_PAYMENT_PROPOSAL
FAP_VENDOR_BALANCE_SRV
FAP_VENDOR_LINE_ITEMS_SRV
FAR_BS_ITM_REPROC_SRV
FAR_CUST_BALANCE_SRV
FAR_CUSTOMER_LINE_ITEMS
FAR_DUNNING_PROPOSAL_SRV

OData Services
FAR_MANAGE_BS_SRV
FAR_MANUAL_CLEARING_SRV
FAR_PAYMENT_POST_SRV
FARP_VALUE_HELPS_SRV
FCLM_BAM_SRV
FCLM_BM_SRV
FCLM_BRM_FBAR_SRV
FCLM_CP_PAYMENTDETAIL_SRV
FCLM_HOUSE_BANK_SRV
FCO_ACTIVITY_TYPE_SRV
FCO_CORE_SRV
FCO_INTERNAL_ORDER_SRV
FCO_MB_BUDGET_SRV
FCO_MP_SRV
FCO_MS_SPEND_SRV
FCO_MU_SRV
FCO_STATISTICAL_KEY_FIGURE_SRV
FCOM_COSTCENTER_SRV
FDMO_PROCESS_RECEIVABLES_SRV
FI_CORRESPONDENCE_SRV
FIN_AR_OVERDUE_REC_SRV
FIN_FUNCAREA_SRV
FIN_OPEN_CLOSE_PERIOD_SRV
FT_CONFIG_UI_SRV
FXM_BAL_EXP_SRV
HCM_CICO_MANAGE_SRV

OData Services
HCM_EMPLOYEE_LOOKUP_SRV
HCM_LEAVE_REQ_APPROVE_SRV
HCM_LEAVE_REQ_CREATE_SRV
HCM_MY_BENEFITS_SRV
HCM_MY_PAYSTUBS_SRV
HCM_MY_SERVICES_SRV
HCM_PEOPLE_PROFILE_SRV
HCM_TEAM_CALENDAR_SRV
HCM_TEAM_SERVICES_SRV
HCM_TIMESHEET_APPROVE_SRV
HCM_TIMESHEET_MAN_SRV
ICL_WLM_TASKS
ICL_WORKLOAD_MANAGEMENT
ILM_ARCH_VARIANT_DIST_SERVICE
ILM_DEFINE_OP_CUST
ILM_JOB_MONITOR_SERVICE
LAUNCHPAD
LORD_ODATA_ORDER_SRV
MD_BP_CONTACT_MAINTAIN_SRV
MD_COMMON_MAINTAIN_SRV
MD_CUSTOMER_MAINTAIN_SRV
MDC_PROCESS_SRV
MDG_APPROVE_CR
MDG_COSTCENTER_SRV
MDG_CUSTOMER_GENIL_SRV
MDG_CUSTOMER_SRV

OData Services
MDG_FINANCIALS
MDG_GL_ACCOUNT
mdg_material_srv
mdg_mycr_srv
MDG_PROFITCENTER_SRV
MDG_SUPPLIER_GENIL_SRV
MDG_SUPPLIER_SRV
ME2STAR_OD_SRV
ME2STAR_ODATA
MM_PUR_OA_MAINTAIN_SRV
MM_PUR_PO_MAINTAIN
MM_PUR_PR_PROCESS
MM_PUR_PR_PROCESS_SRV
MM_SOURCES_OF_SUPPLY_MANAGE
MM_SOURCES_OF_SUPPLY_MANAGE_SRV
MM_SUPPLIER_INVOICE_LIST
MM_SUPPLIER_INVOICE_LIST_SRV
MM_SUPPLIER_INVOICE_MANAGE
MMIM_GR_CANCELLATION_SRV
MMIM_GR4PO_DL_SRV
MMIM_MATDOC_SRV
MMIM_MATERIAL_DATA_SRV
MMPUR_REQ_SSP_GR_SRV
MMPUR_REQ_SSP_MAINTAIN_SRV
O2C_FICA_GENTOOLS
O2C_FICA_LOCK_ANALYSIS

OData Services
O2C_FICA_LOCK_ANALYSIS_SRV
O2C_FICA_MYWORKLIST
O2C_FICA_OVERDUEITEM_ANALYSIS
O2C_FICA_WORKLIST
O2C_FICA_WRITEOFF_ANALYSIS
O2C_FICA_WRITEOFF_ANALYSIS_SRV
PAGEBUILDER_SERVICE_V_0_1
PERP_FCLM_BTBAL_SRV
PP_MRP_COCKPIT_SRV
PPH_FCDM_MAINT
PPH_FCDM_MAINT_SRV
PPH_MRP_CTRLR_SRV
PPH_MRP_MATL_ISSUE_SRV
PPH_MRP_PERF_LOG_SRV
PS_ACTIVITY_CONFIRM
PS_BILLING_PROPOSALS
PS_MILESTONE_CONFIRM
PS_NTWKACTVTSTATCHG_SRV
PS_WBSELEMENTSTATUSCHANGE_SRV
RSAO_ODATA_SRV
SADL_V_EXP_QUERY_CDS
SADL_V_SALESORDER_BO_CDS
SBLE_BADI_CTX_REGISTRY_SRV
SC_PLAN_INT_PROJ_SRV
SC_PROJ_ENGAGMNT_MAINT_SRV
SC_PROJ_MONITOR_SRV_01

OData Services
SD_CUSTOMER_INVOICES_CREATE
SD_CUSTOMER_INVOICES_MANAGE
SD_SO_LIST_F0804_PBS_SRV
SD_SO_MAINT_F0719_SRV
SD_SOFM_CREDIT_BLOCK_SRV
SD_SOFM_DELIVERY_SRV_01
SD_SOFM_INVOICE_SRV
SD_SOFM_SRV
SM_INTEGRATION_SRV
SM_INTEGRATION_V2_SRV
SMART_BUSINESS_DESIGNTIME_SRV
SMART_BUSINESS_RUNTIME
SMART_BUSINESS_RUNTIME_SRV
SRA002_TIMESHEET_SRV
UDMO_BUSAB_SRV
UDMO_COLLECTION_WORKLIST
UDMO_MANAGE_DISPUTES_SRV
VDM_CDSVIEW_BROWSER

2.3.3.4 Activating ICF services for SAP Fiori apps for delivered scope

Context

ICF services can be activated via tasklist **SAP_BASIS_ACTIVATE_ICF_NODES** in transaction `STC01`. For a detailed description on how to activate ICF services via tasklist, refer to configuration guide SAP S/4HANA Fiori Transactional App Deployment, chapter *Automated Activation via Task Lists*.

Note that there are different types of ICF nodes for a Fiori app which need to be activated. For each Fiori app, an ICF node located under the path *default host* › *sap* › *sap* › *opu* › *odata* › *sap* is activated. This is done automatically while maintaining the OData services via tasklist or manually in transaction `/IWFND/MAINT_SERVICE`.

However, additional services under the path *default host* › *sap* › *bc* › *ui5_ui5* › *sap* and *default host* › *sap* › *bc* › *bsp* › *sap* have to be activated separately via the above mentioned tasklist or by activating the complete folder.

Option 1: Activating the complete folder

Procedure

1. In your SAP NetWeaver Gateway system, access the transaction using the following navigation path:

Transaction Code	`SICF`
SAP Reference IMG Menu	*Tools* › *Administration* › *Administration* › *Network* › *HTTP Service Hierarchy Maintenance*

2. On the *Define Services* screen, choose the *Execute* icon.
3. Open the path *default host* › *sap* › *bc* › *ui5_ui5* › *sap*. The services for all UI5 applications are grouped here.
4. Navigate to the folder *default host* › *sap* › *bc* › *ui5_ui5* › *sap*.
5. Right-click and choose *Activate service* from the context menu.
6. In the *Activation of ICF Services* dialog window, choose the *Yes* button. This also activates all included services.
7. Repeat the steps for path *default host* › *sap* › *bc* › *bsp* › *sap*.

Option 2: Activating ICF services via tasklist

Procedure

1. Access transaction **STC01**.
2. On the *Task Manager for Technical Configuration* screen, insert **SAP_BASIS_ACTIVATE_ICF_NODES**in the *Task List* field.
3. Choose *Generate Task List Run (F8)*. The *Maintain Task List Run* screen is displayed.
4. In the *Execute* column, select the *Activate HTTP Services (SICF)* checkbox.
5. In the *Parameter* column, choose the *Fill Parameters* icon.

6. On the *Activation of ICF Services* screen, insert the path of the ICF service node (URL). Below you can find a list of ICF services relevant for the scope of the SAP Best Practices for SAP S/4 HANA, on-premise edition, for example **`/sap/bc/ui5_ui5/sap/FIN_GLDOCPOST.`**

Icf Services
ARSRVC_UPB_ADMN
CA_FIORI_INBOX
CI_UNBITEMS1
CM_WLM_TASKS
CM_WORKLOADMGMT
FICA_CLEARLCKS1
FICA_DUNNLCKS1
FICA_MYWRKLSTS1
FICA_POSTLCKS1
FICA_PYMTLCKS1
FICA_WORKLISTS1
FICA_WRTOFFS1
FIN_AA_MSTR_WL
FIN_ACC_LIB_CB
FIN_ANALYZEPOSI
FIN_AP_POSTPAYM
FIN_APMANCLEAR
FIN_AR_POSTPAYM
FIN_ARMANCLEAR
FIN_ARP_LIB_CL
FIN_ARP_LIB_LI
FIN_BANKPMTAPV
FIN_CASHTRAN
FIN_CHECKMNG

Icf Services
FIN_CHRTOFACCTS
FIN_CORR_REQ
FIN_CORRESPOND
FIN_CUST_LITS
FIN_DS_ANALYZE
FIN_FBAR
FIN_FUNCAREA
FIN_GLBCF
FIN_GLDOCDISP
FIN_GLDOCPOST
FIN_IO
FIN_LIB
FIN_MANAGEBGT
FIN_MNG_COA
FIN_MYUNUSITEMS
FIN_MYVENDORINV
FIN_PAYDETAIL
FIN_PROCRECEIVE
FIN_STKF
FIN_TRANSTRACK
FIN_VEN_LITS
FIN_VENDOR_BAL
FND_DAGOBJ_MON
FND_STO_OP_CUST
FSCM_COLLWORKL
FSCM_DISPUTES

Icf Services
GR4POS1
HCM_BENF_MON
HCM_CICO_MAN
HCM_COMMON
HCM_EMP_LOOKUP
HCM_LRQ_APV
HCM_LRQ_CRE
HCM_MY_SRV
HCM_PAY_MON
HCM_PEP_PROFILE
HCM_TEAM_CAL
HCM_TEAM_SRV
HCM_TSH_APV
HCM_TSH_MAN
ILM_DISTANALY
ILM_JOBMON
LE_UI_REUSES1
MANAGE_MATDOCS1
MANAGE_STOCK
MANAGE_STOCKS1
MD_SUPPLIERS1
MDG_APPROVE_CR
MDG_CONS
MDG_MY_REQ
MDG_REQ_BP
MDG_REQ_CC

Icf Services
MDG_REQ_CUST
MDG_REQ_MAT
MDG_REQ_PC
MDG_REQ_SUPPL
MM_CONF_MAINTS1
MM_CONTRITEMS1
MM_CONTRS1
MM_INFORECDS1
MM_INVOICES1
MM_PCTR_MTS1
MM_PO_CRE
MM_PO_CRES1
MM_PR_PRCS1
MM_PURDOC_LISTS1
MM_PURORDERS1
MM_REQ_MAINTS1
MM_REQNITEMS1
MM_REQNS1
MM_SOS_MANAGES1
MM_SUPPIV_LSTS1
MM_SUPPIV_MANS1
MM_SUPPLINV_MAN
MMIM_MATDOCS1
NW_APS_APJ
NW_APS_APL_LIB
NW_APS_ATO_CONF

Icf Services
NW_APS_ATO_LIB
NW_APS_ATO_REGI
NW_APS_EXT_CFL
NW_APS_LIB
NW_APS_OM_EQ
NW_APS_OM_ET
NW_APS_OM_FT
O2C_GENTOOLS
O2C_OVRDITM_MON
O2C_UNBITEM_MON
O2C_WORKLIST
O2C_WRTOFF_MON
PP_CHANGER_DTS1
PP_CHANGEREQ_DT
PP_FCDMISSUESS1
PP_MATSHOR_DTS1
PP_MATSHOR_MRS1
PP_MATSHORT_DT
PP_MRP_REUSES1
PP_PRDORDI_DTS1
PP_PRDORDI_MRS1
PP_PRDORDIS_MR
PP_UNCOVPR_DTS1
PP_UNCOVPR_MRS1
PP_UNCOVPRO_MR
PP_UNCOVSO_DT

Icf Services
PP_UNCOVSO_DTS1
PP_UNCOVSO_MRS1
PS_ACTSTA_CHGS1
PS_ACTY_CONF
PS_ACTY_CONFS1
PS_ACTYSTAT_CHG
PS_MLST_CONF
PS_MLST_CONFS1
PS_WBSELSTS_CHG
PS_WBSSTA_CHGS1
SAKP_GEN_UI_S1
SAKP_GENUI_ANN
SBRT_APPSS1
SLC_EVAL_RESPS1
SLC_PURGCATS1
SLC_QNR_RESPS1
SLC_SUP_EVALS1
SOFULFIL_MONS1
STOCK_OVERVIEW
STOCKOVERVS1
TRM_BSEXP_REVS1

> **Note**
>
> This list may not be complete. Refer to the SAP Fiori apps reference library which has the most recent documentation of ICF services.

7. Save and go back.
8. Before executing the task list, make sure that all *Execute* checkboxes are selected.

   On the *Maintain task List Run* screen choose *Start/Resume Task List Run in Dialog* (or in background).

Once the task list run has finished successfully, green lights appear in task log.

9. Repeat the steps for path *default host* › *sap* › *bc* › *bsp* › *sap*.

2.3.3.5 Activating ICF services for Web Dynpro applications for delivered scope

Option 1: Activating the complete folder

Procedure

1. Access the transaction in the back-end system using the following navigation path:

Transaction Code	SICF
SAP Reference IMG Menu	*Tools* › *Administration* › *Administration* › *Network* › *HTTP Service Hierarchy Maintenance*

2. On the *Define Services* screen, choose the *Execute* icon.
3. Navigate to the folder *default host* › *sap* › *bc* › *webdynpro* › *sap*.
4. Right-click and choose *Activate service* from the context menu.
5. In the *Activation of ICF Services* dialog window, choose the *Yes* button. This also activates all included services.

Option 2: Activating ICF services via tasklist

Procedure

1. Access transaction **STC01**.
2. On the *Task Manager for Technical Configuration* screen, enter **SAP_BASIS_ACTIVATE_ICF_NODES**in the *Task List* field.
3. Choose *Generate Task List Run (F8)*. The *Maintain Task List Run* screen is displayed.
4. In the *Execute* column, select the *Activate HTTP Services (SICF)* checkbox.
5. In the *Parameter* column, choose the *Fill Parameters* icon.
6. On the *Activation of ICF Services* screen, insert the path of the ICF service node (URL), for example, *sap/bc/webdynpro/sap/fac_gl_account* (the corresponding tile name is *Manage G/L Account Master Data*. Below, you can find a table of the ICF services for Web Dynpro applications that are in scope of the SAP Best Practices for SAP S/4HANA, on-premise edition.

Tile Name for Web Dynpro Application	Icf Services
Cost Centers – Actuals	FIS_FPM_OVP_IPCC4
Cost Centers – Plan/Actual	FIS_FPM_OVP_IPCC1
Cost Centers – Plan/Actual with Currency Translation	FIS_FPM_OVP_IPCC3
Cost Centers – Plan/Actual YTD	FIS_FPM_OVP_IPCC2
Functional Areas – Actuals	FIS_FPM_OVP_IPFA4
Functional Areas – Plan/Actual	FIS_FPM_OVP_IPFA1
Functional Areas – Plan/Actual with Currency Translation	FIS_FPM_OVP_IPFA3
Functional Areas – Plan/Actual YTD	FIS_FPM_OVP_IPFA2
Initiate Review Process	WDA_FCLM_BAM_ACC_REVIEW
Internal Orders – Actuals	FIS_FPM_OVP_IPIO4
Internal Orders – Plan/Actual	FIS_FPM_OVP_IPIO1
Internal Orders – Plan/Actual with Currency Translation	FIS_FPM_OVP_IPIO3
Internal Orders – Plan/Actual YTD	FIS_FPM_OVP_IPIO2
Journal Entry Analyzer	FIS_FPM_OVP_JEANALYZER
Maintain Signatory	WDA_FCLM_BAM_ADAPT_SIGN
Manage Activity Type Groups	FCOM_GROUP_ACTTYPE
Manage Bank Accounts	WDA_FCLM_BAM_HIERARCHY
Manage Cost Center Groups	FCOM_GROUP_COSTCENTER
Manage Cost Center Master Data	FCOM_COSTCENTER
Manage G/L Account Master Data	FAC_GL_ACCOUNT
Manage Internal Order Groups	FCOM_GROUP_INTERNALORDER
Manage Profit Center Groups	FAC_PCG
Manage Profit Center Master Data	FAC_PROFITCENTR
Market Segments – Actuals	FIS_FPM_OVP_IPMS4
Market Segments – Plan/Actual	FIS_FPM_OVP_IPMS1

Tile Name for Web Dynpro Application	Icf Services
Market Segments – Plan/Actual with Currency Translation	FIS_FPM_OVP_IPMS3
Market Segments – Plan/Actual YTD	FIS_FPM_OVP_IPMS2
Material Inventory Values – Balance Summary	FIS_FPM_OVP_ML_BALSUM
Material Inventory Values – Line Items	FIS_FPM_OVP_ML_LI
Material Inventory Values – Rounding Differences	FIS_FPM_OVP_ML_RD
Monitor Review Status	WDA_FCLM_BAM_REVIEW_REPORT
My Bank Account Worklist	IBO_WDA_INBOX
My Sent Requests	POWL
P&L – Actuals	FIS_FPM_OVP_IPPL4
P&L – Plan/Actual	FIS_FPM_OVP_IPPL1
P&L – Plan/Actual with Currency Translation	FIS_FPM_OVP_IPPL3
P&L – Plan/Actual YTD	FIS_FPM_OVP_IPPL2
Plan Cost Centers on Periods	FCO_IBP_CC1
Profit Centers – Actuals	FIS_FPM_OVP_IPPC4
Profit Centers – Plan/Actual	FIS_FPM_OVP_IPPC1
Profit Centers – Plan/Actual with Currency Translation	FIS_FPM_OVP_IPPC3
Profit Centers – Plan/Actual YTD	FIS_FPM_OVP_IPPC2
Projects – Actuals	FIS_FPM_OVP_IPPR4
Projects – Plan/Actual	FIS_FPM_OVP_IPPR1
Projects – Plan/Actual with Currency Translation	FIS_FPM_OVP_IPPR3
Projects – Plan/Actual YTD	FIS_FPM_OVP_IPPR2
Sales Orders – Actuals	FIS_FPM_OVP_IPSO4
Set Controlling Area	FCOM_SET_CO_AREA
Trial Balance	FIS_FPM_OVP_TRIAL1
Projects – Plan/Actual with Currency Translation	FIS_FPM_OVP_IPPR3

Tile Name for Web Dynpro Application	Icf Services
Incoming Sales Orders	SD_FPM_OVP_INCOMINGSLSORDERS
Sales Volume	SD_FPM_OVP_SALESVOLUME
Sent Items	WDA_FCLM_BAM_SENTITEMS
My Worklist	WDA_FCLM_BAM_WORKLIST

> **Note**
>
> This list may not be complete. Refer to the SAP Fiori apps reference library which has the most recent documentation of ICF services.

2.3.4 Setting up SAP S/4HANA attachment services

Maintaining settings for storage systems [page 52]

Maintaining SICF node [page 54]

Maintaining categories for SOMU and DMS_C1_ST [page 55]

Activating storage repository [page 54]

Maintaining standard category for SOFFDB [page 55]

Adjusting the Customizing in table TSOPE [page 56]

2.3.4.1 Maintaining settings for storage systems

Context

In this activity, you create settings for storage systems:

- for employee photo

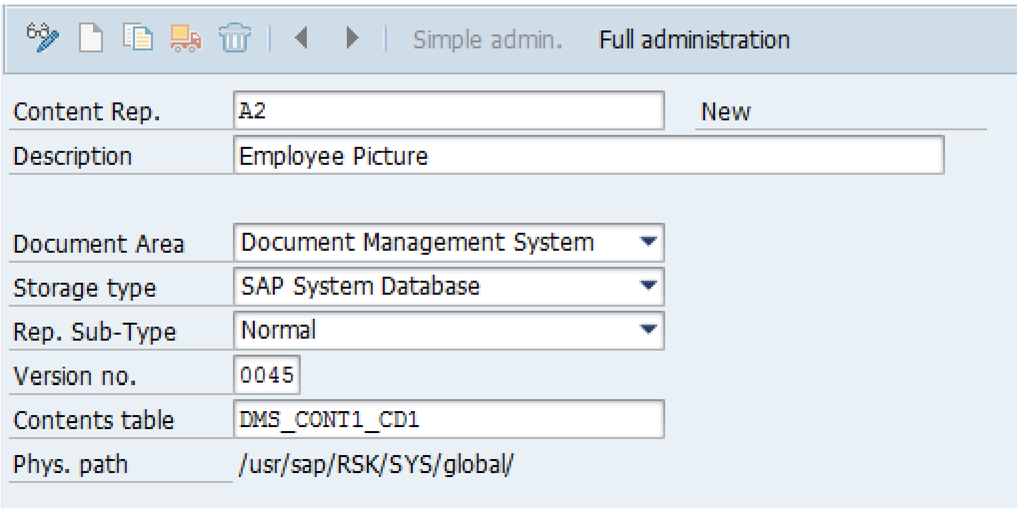
Procedure

1. To carry out the activity, choose the following navigation option:

SAP Menu	SPRO *Cross Application Components* > *Document Management* > *General Data* > *Setting for Storage Systems* > *Maintain Storage System*
Transaction Code	/nOAC0

2. Create the **storage system for Employee Photo**.
   a. Choose the *Create* button.
   b. On the *Change Content Repositories: Detail* screen, create a new entry for A2 (Employee photo).

Field name	User action and values	Notes
Content Repository	**A2**	
Description	**Employee Photo**	
Document Area	**Document Management System**	
Storage type	**SAP System Database**	
Rep. Sub-Type	**Normal**	
Version no.	**0045**	
Content Table	**DMS_CONT1_CD1**	



3. Save.

2.3.4.2 Maintaining SICF node

Procedure

1. Access transaction `SICF` in the back-end system.
2. On the *Maintain Services* screen, enter **`contentserver`** in the *Service Name* field. Choose *Execute*.
3. Navigate to the service. Right-click and choose *Activate service* in the context menu.
4. Double-click to open the service.
5. On the *Logon Data* tab. Enter the client number, system user, and password.

   The system user does not require any role or authorization profile.
6. Save and close.

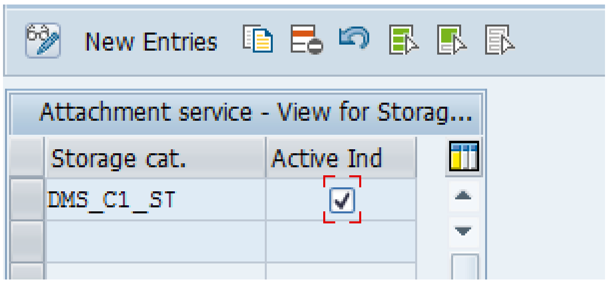
2.3.4.3 Activating storage repository

Procedure

1. To carry out the activity, choose the following navigation option:

SAP Menu	`SPRO` ▶ *Cross Application Components* ▶ *Document Management* ▶ *Additional Settings – Simplification* ▶ *Attachment Service – Storage Repository Activation* ▶

2. Create a new entry for `DMS_C1_ST` and select the *Active Ind* checkbox.



3. Save.

2.3.4.4 Maintaining standard category for SOFFDB

Procedure

1. To carry out the activity, access transaction `SE16`.
2. Enter `SDOKPHCL` as table name and choose *Table Contents*.
3. Modify the content of the table. Search for entries with *PH_CLASS* **`SOFFPHIO`**. Set the flag (**`X`**) in the*CAT_MAINT* column.
4. Set the standard category for `SOFFDB` to `DMS_C1_ST`.

   Choose one of the following navigation options:

SAP Menu	`SPRO` *SAP NetWeaver* › *Knowledge management* › *Setting in Knowledge Warehouse Management* › *Document Management Services* › *Define Standard Category*
Transaction Code	`SKPR08`

5. On the *Change View "Categories for Physical Document Classes": Overview* screen, make sure that the following settings are available:

Class	Previous cat.	New cat.	Description
SOFFPHIO	SOFFDB	**`DMS_C1_ST`**	Physical information object for SAPoffice

6. Save.

2.3.4.5 Maintaining categories for SOMU and DMS_C1_ST

Procedure

1. To carry out the activity, choose the following navigation option:

SAP Menu	`SPRO` *Cross Application Components* › *Document Management* › *General Data* › *Setting for Storage Systems* › *Maintain Storage Category*
Transaction Code	`/nOACT`

2. On the *Change View "Maintain Categories": Overview* screen, create the following settings.

Category	Description	Document Area	Content Repository
DMS_C1_ST	**Default storage DMS (main files)**	**DMS**	**DMS_C1**

> **Note**
>
> To create an entry for the content repository of type SOMU (Output Management Utilities), refer to the following SAP Note 2279725.

3. Save your entries. You can ignore any warning message that may occur during saving.

2.3.4.6 Adjusting the Customizing in table TSOPE

Procedure

1. To carry out the activity, access transaction SM30.
2. In the field *Table/View*, enter TSOPE as table name and choose *Maintain*.
3. In the row *TXT*, remove the checkmark for *ASCII*.
4. Save your entries and enter a transport request.

2.4 Carrying out settings for implementation

Context

This section describes preparatory tasks which need to be carried out in order to use the implementation tools.

Procedure

1. Provide users for content activation [page 57].
2. Create a dialog user for content activation [page 57].

3. [Prevent out of memory dumps [page 59]](#)

2.4.1 Providing users for content activation

Context

To carry out the activation of best-practices solution content, you need to provide specific users.

Procedure

1. Provide **dialog users** who will use the activation function of the *solution builder* as follows:
   a. Create the dialog user [page 57].
   b. Add the permissions for the objects **/SMB/START** and **/SMB/IMP** with activity *****
2. Provide **technical users** for content activation, which is carried out in the background:
   a. For content activation via self-service configuration apps, create the technical user **SAP_SYSTEM** with permission **SAP_ALL**.
   b. For content activation caused by **content corrections**, create the technical user **SAP_LMADM** with permission **SAP_ALL**.

2.4.2 Creating a dialog user for content activation

Prerequisites

You have chosen one of the following possibilities to provide the authorization profile for the dialog user:

- You created a new project-specific authorization profile.
  In the transaction *PFCG* (Role Maintenance), you created a role with all the authorizations needed to configure the solution scope.
- You decided to use the existing authorization profile *SAP_ALL*.
  This profile contains all the authorizations, so that no authorization issues can hinder the activation. If you restricted the rights of the user according to your internal authorization guidelines, you used transaction *SU53* to check whether all required authorizations are available.

Context

For each member of the implementation team who will perform the content activation in the solution builder, you need to create a dialog user and assign the required authorization profile.

Procedure

1. Open the *User Maintenance* transaction *SU01*.
2. Enter the user ID and choose *Create*.
3. Open the *Address* tab and enter the last name and the first name of the user.
4. Open the *Logon Data* tab and enter the following values:

Option	Description
Password	<initial password>
User type	Dialog

5. Open the *Defaults* tab and enter the following values:

Option	Description
Logon language	EN
Decimal notation	1.234.567,89
Date format	DD.MM.YYYY

> **Note**
>
> The activation will only work, if you entered the decimal notation exactly as shown above.

6. Open the *Profiles* tab and assign the authorization profile.
7. Save.

Next Steps

> **Recommendation**
>
> For security reasons, after activation of the solution content, remove the authorization profile you have assigned to the user who has performed the activation.

2.4.3 Preventing out of memory dumps

Context

Some activities like the upload of installation data or defining the scope of customer solutions might cause a high memory consumption. Problems can be prevented by setting the memory to 6 GB.

Procedure

1. Open the transaction **RZ10**.
2. Set the parameter *abap/heap_area_dia* to 6 GB.
   For more information see: abap/heap_area_dia: Heap Memory Limit for Dialog Work Processes
3. Make sure that the parameter *PHYS_MEMSIZE* is set correctly.
4. Restart the server.

3 IMPLEMENTATION

3.1 Getting the most recent SAP Best Practices content

Context

Before activating a solution, you should always get the most recent SAP Best Practices content. This content is attached to SAP Notes, which are integrated into the central note 2303306. You download the transport containing the data file with the content from the SAP Note and import it manually in client 000.

> **Note**
>
> If no content is provided via the note, proceed with Importing solutions from SAP Best Practices content [page 61].

Procedure

1. Download the zip archive locally.

   Unzip the archive. It contains two files: R<6 digits>.<source system> (= data file) and K<6 digits>.<source system> (= attribute file). Place them into the relevant folder of your system.
   - R<6 digits>.<source system> (= data file): place the file into the `/usr/sap/trans/data` folder
   - K<6 digits>.<source system> (= attribute file): place the file into the `/usr/sap/trans/cofiles` folder
2. Log on to client 000 of your system.
3. Access transaction `STMS_IMPORT`.
4. From the menu, choose *Extras* > *Other Requests* > *Add*.
5. In the dialog box, enter the transport request that you have imported (Request ID corresponds to the file name: <source system><6 digits>). Choose *Continue*.
6. Confirm that you want to add the transport request to the import queue.
7. Select a transport that you want to import.
8. Choose *Import Request*.
9. Choose target client 000.

10. On the *Options* tab, select the *Ignore Invalid Component Version* flag.
11. Choose *Continue*.

3.2 Importing solutions from SAP Best Practices content

Context

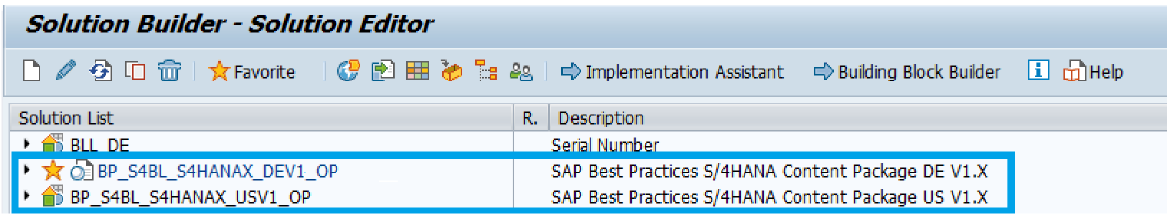
As a basis for defining customer solutions , you first need to import the recent solutions from the SAP Best Practices content.

Procedure

1. Open the *solution builder* via the transaction **/n/SMB/BBI**.
2. Choose *Solution* › *Import* › *Solution (XML)* › *From reference content*.

   > **Note**
   >
   > In exceptional cases, you can also import the content *from a local file*.

3. Decide which country version you want to implement. Select the solution files of the most recent country-specific solution version available in the current release (with **"_OP"** in the file name).

4. Choose *Solution* › *Import* › *Installation Data* › *From reference content*.

   > **Note**
   >
   > In exceptional cases, you can also import the content *from a local file*.

5. Select the installation data files of the most recent country-specific solution version available in the current release (with **"_OP"** in the file name).

3.3 Defining the scope of your solution

Context

After having loaded a country solution from the SAP Best Practices content, you create your own copy and specify the scope of your solution (country-specific solution version). You can choose from the available scope items and select the ones that fit your requirements. Later, you will only need to activate these selected scope items. Scope items are self-contained and bring their own list of building blocks that need to be activated in order to implement the scope item.

> **Note**
>
> You can only define the scope of your solution based on the country-specific solution versions supported in the current release. Only the solution you define is relevant for further usage.

To learn more about which scope items are included, you can refer to the *content library* for the country version and check the fact sheets. The content library also has the link to the *prerequisite matrix* which will give you an overview of the sequence in which the building blocks need to be applied to implement a scope item.

- SAP Best Practices for SAP S/4HANA, on-premise edition (Germany)
- SAP Best Practices for SAP S/4HANA, on-premise edition (United States)

Procedure

1. Open the *solution builder* via the transaction **`/n/SMB/BBI`**.
2. Create your own copy of the SAP Best Practices solution.
   a. Select the solution and choose *Copy Solution*.
   b. In the dialog box, enter the solution name.

   > **Recommendation**
   >
   > Enter a meaningful name, preferably starting with **`Z`** and ending with the country key, for example **`Z_MY_SOLUTION_US`**.

   c. Select the *Copy Installation Data* checkbox.
   d. Choose *OK*.
3. > **Note**
   >
   > This step is **only relevant** if your system has fewer than the 38 languages installed for which the SAP Best Practices content has been releaed (check transaction `SMLT`). To enable the content activation, the report removes language-dependent entries for languages that are not installed in your system.

   Execute report `/SMB/REMOVE_NOTINST_LANG_IMG` provided with SAP Note 2292425.

4. Define the scope of your solution.
   a. On the *Solution Builder - Solution Editor* screen, select your solution and choose *Favorite* to set it as favorite.
   b. Double-click your solution.
   c. In the *Change Solution* dialog, choose the scope items you want to implement. By default, all scope items are selected. Deselect the scope items you do not need.
   d. Choose *OK*.

3.4 Activating your solution

Prerequisites

You have checked the SAP S/4HANA content activation note 2303306 for any issues that require action on your part **before** the content activation and completed these tasks.

Client currency setting

Before the content activation, ensure that the client currency setting has not been maintained.

During activation, the default group currency USD will be set up. If you want to use another currency, you need to adapt the setting directly in the solution builder before starting the activation.

For more information, see Changing group currency from USD to another currency [page 65]

Context

The activation process writes the application and configuration data corresponding to the scope of your solution into the respective system tables - and thus makes the business content ready for use. The activation functions are offered by the *implementation assistant* of the solution builder.

> Note
>
> You can activate several country solutions in the same client. In case of multi-country activation, consider the following **order**: *DE* > *US*.

Procedure

1. Log on to the system with language *English* - and NOT your local language. (This is required for all activation activities.)

2. Activate each of your country-specific solution versions (without demo data).

> **Note**
>
> For generic information about the activation process, see Activating a solution in the online help of the solution builder.

> **Note**
>
> **Language selection:**
>
> To avoid errors during activation, you have to select all languages listed under *Released Languages* in solution builder.
>
> As target language for activation, we recommend the following settings:
>
> - If you intend to activate **more than one country solution in one client**, you choose **English**. The target language has an impact on settings that will be activated like language-specific settings but that are, in fact, technically not language-dependent. English is the best option since the solutions share global building blocks that are included in each solution. To ensure activation without errors, the target language setting has to be consistent for all solutions. The target language, however, has no impact on any other language-dependent installation data. The translations will be available based on the selected released languages.
> - If you intend to activate **only one country solution in one client** and have no plans to add more country solutions, you can choose a **country-specific language** (for example, German for Germany).

3. Carry out the post-activation and troubleshooting activities as required.
    - Prerequisite settings for activation [page 64]
    - Changing the SAP Best Practices content [page 68]
    - Error handling: installation errors during activation [page 72]
    - Carrying out post-activation steps [page 75]

Results

- The business consultant can evaluate the business content [page 98] and review the scope items.
- The scope items can be tested in the system. Before testing, the following prerequisites [page 99] need to be fulfilled.

3.4.1 Prerequisite settings for activation

Changing group currency from USD to another currency [page 65]

Setting links to fact sheets [page 66]

3.4.1.1 Changing group currency from USD to another currency

Prerequisites

You have already imported the SAP Best Practices content and defined a solution.

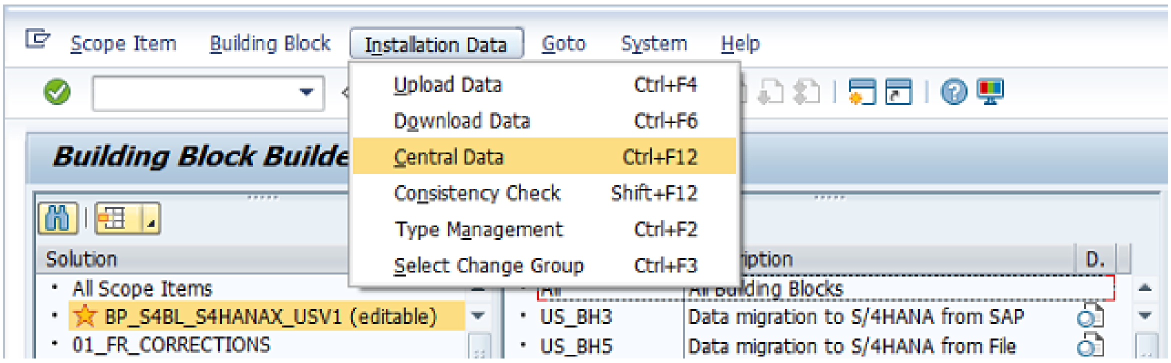
Context

The default group currency delivered with the SAP Best Practices content is **USD**. If you want to use another currency, for example, for the material ledger, you need to adapt the setting directly in the solution builder before beginning with the content activation.

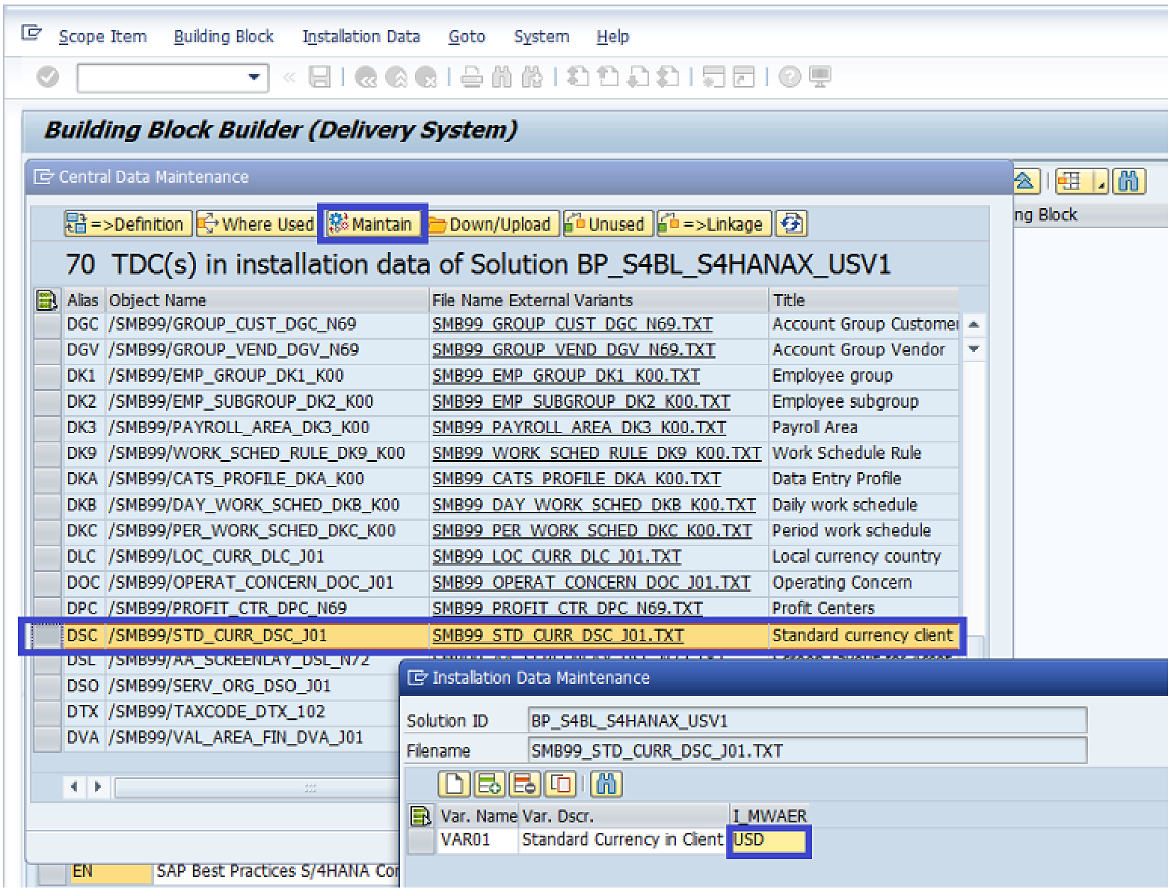
In solution builder, you have to change the value in the corresponding test data container. You have to make this change for **each solution** that you intend to activate. For example: If you change the value from USD to EUR for a solution for Germany, you use the same setting for the next solution to ensure consistency when you activate the latter.

Procedure

1. Change the currency in the central test data container: On the *Solution Builder - Solution Editor* screen, choose *Building Block Builder*.
2. To change the value for your favorite solution, choose *Installation Data* > *Central Data* in the menu bar



3. In the *Central Data Maintenance*In solution builder, you have to change the value in the corresponding test data dialog box, select object **/SMB99/STD_CURR_DSC_J01** and choose *Maintain*.
4. In the *Installation Data Maintenance*. If you want to use another currency, for example, for dialog box, edit the currency and change the value from **USD** to another currency.



5. Save.
6. Choose *Cancel* to close the dialog box.
7. Choose *Back* to return to the *Solution Builder - Solution Editor* screen.

Repeat the **whole procedure** for **each** solution you intend to activate. The central data is solution dependent.

3.4.1.2 Setting links to fact sheets

Prerequisites

You have imported the solutions from the SAP Best Practices content.

Context

In order to make it possible for users to open the fact sheet information available for scope items and scope item groups, you need to set the correspondent user-specific parameter (and make sure that this parameter is set for each member of the implementation team).

Procedure

1. Open the solution builder via transaction **/N/SMB/BBI**.
2. Select a solution and make it your favorite solution by choosing *Favorite*.
3. Choose *Goto* > *User Settings* > *External Documents*.
4. Switch the change mode on.
5. Enter the following data:

Option	Description
Parameter	DOCUMENTATION
Value	**https://support.sap.com/content/dam/SAAP/Sol_Pack/Library/FactSheets/**

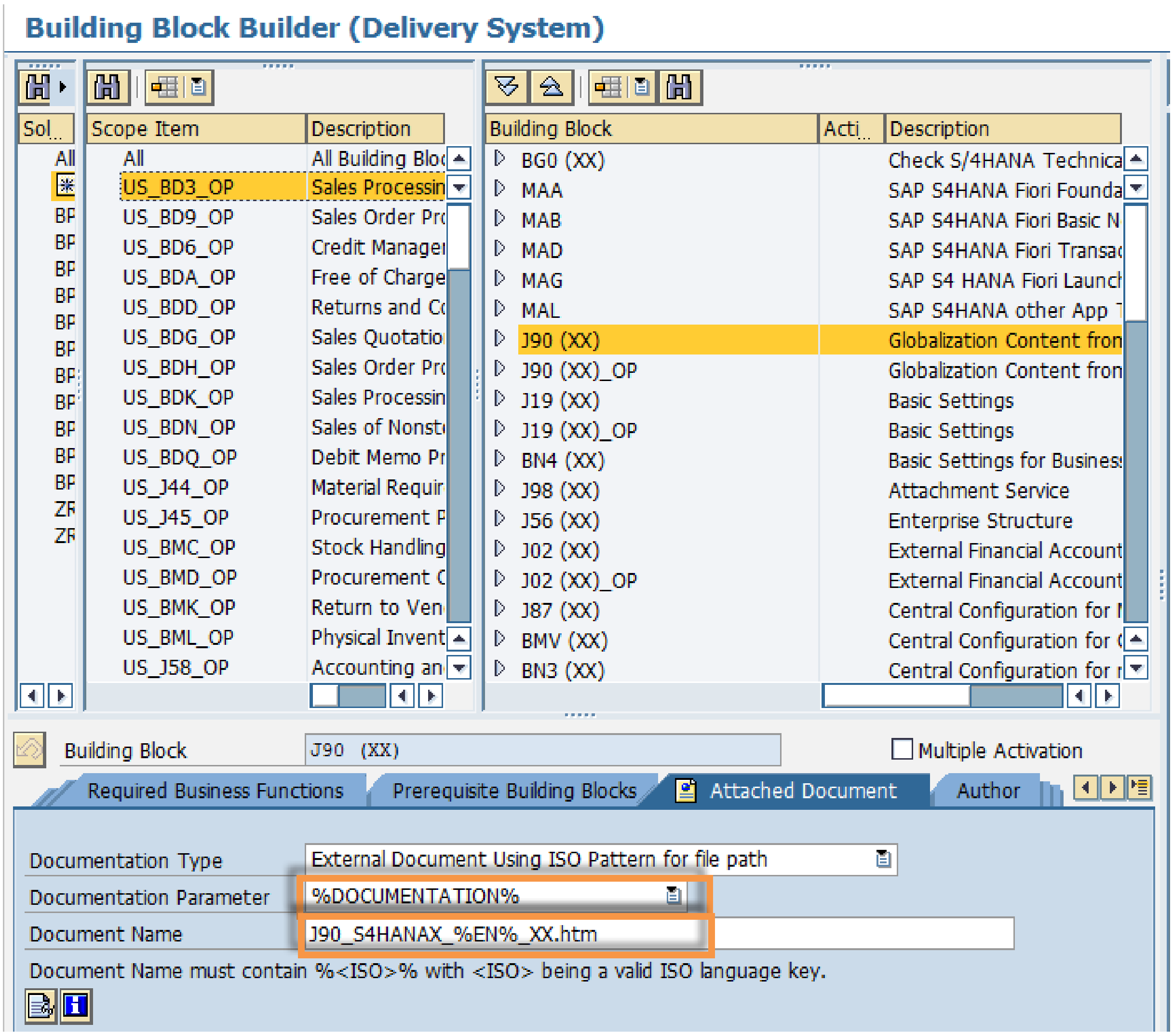
6. Confirm the entries.

Results

The system can now retrieve the scope item fact sheets for any solution. The URL which opens the scope item fact sheet is composed of the value added for the *Documentation Parameter* and the *Document Name*. You can see the *Document Name* in the building block builder if you open the *Attached Documents* tab of a scope item (screenshot below).

Example

https://support.sap.com/content/dam/SAAP/Sol_Pack/Library/FactSheets/J90_S4HANAX_EN_XX.htm



3.4.2 Changing the SAP Best Practices content

In the following situations you may need to make changes to the delivered SAP Best Practices content:

- Issues occur during the content activation and require manual intervention
- Errors require you to adapt the active content after the activation
- Adaptations are not supported by guided configuration

Related Information

Solving errors during activation of automated task [page 69]
Adapting SAP Best Practices content after activation [page 70]

3.4.2.1 Solving errors during activation of automated task

Context

When an activation of an automated task runs into errors, the activation stops at the point of the error. No further implementation can be done until the error is resolved.

You try to execute the configuration activity manually by following the instructions in the configuration guide. Open a new session and access the Customizing activity directly in transaction `SPRO`. Make sure you have sufficient authorization in the back-end system.

Procedure

1. On the *Implementation Assistant – Solution View* screen, select a task that has a red light in the *Current status* column.
2. Expand the task and choose the log that is assigned to this task. Detailed information about the error is displayed in the *Error List* pane.
3. In the *Error List* pane, choose *Display Detailed Log*. The detailed log information about an eCATT or BC set activation is displayed.
4. In the information log, check entries with a red light to identify the reason for the error.

   If the error can be solved based on the log information, run the eCATT or BC set again.

   > **Note**
   >
   > If the activation fails because of locked objects, ensure that no objects are locked by any users. Try to activate the activity again.

   > **Note**
   >
   > In case of eCATT issues, perform the activation by switching the eCATT to run in foreground mode.

5. If the log information is insufficient to solve the problem, proceed as follows:

   Execute the task manually: follow the instructions in the related section of the configuration guide to execute the task.

   If executing the task manually also fails, create a customer message for this problem and choose one of the following components:

   - SV-CLD-FRM: Implementation Framework
   - SV-CLD-LOC: Cloud Edition localized content
   - SV-CLD-SCRM: Simplified CRM (S/4HANA)
   - SV-CLD-SFIN: Simplified Finance (S/4HANA)
   - SV-CLD-SINT: Integration (S/4HANA)

- SV-CLD-SLOG: Simplified Logistics (S/4HANA)
- SV-CLD-SPRO: Professional Services (S/4HANA)

> **Caution**
>
> Do **not** delete solution builder scope items **once** they have been activated. If you delete scope items, the activation history and the respective logs are lost, and it is not possible to find the root cause of possible errors with tenable efforts.
>
> In such cases, **no SAP support can be provided**.

6. Choose *Display*.
7. When you have solved the problem (either you executed the task manually, or a solution has been provided via customer message), choose the *Change* button (in the *Old Status* column to the right of the task).

> **Caution**
>
> Do **not** proceed with installation if the problem has not been solved. If you continue without solving the problem, severe errors may occur in subsequent installation steps that cause incalculable efforts to fix.
>
> In such cases, **no SAP support can be provided**.

8. On the *Confirmation* dialog box, choose *OK* to manually change the status to *successful*.
9. On the *Information* dialog box, enter a reason for changing the status. Choose *Continue*.

> **Note**
>
> The information is saved in a log. To view details for a changed task, choose the red light in the *Original Status* column for that task. A dialog box displays the user who performed the change, the date of the change, and the reason for the change. Choose *Continue* to close the dialog box.

10. Choose *Activate* to continue with the installation.

3.4.2.2 Adapting SAP Best Practices content after activation

Context

Once the SAP Best Practices content has been activated, you can make changes in configuration activities:

- For activities of type *IMG activity*, you capture settings for the subobjects directly in the Customizing (transaction `SPRO`).
- For activities of type *eCATT* or *BC Set*, you modify records in the installation data in solution builder.

Procedure

1. On the *Implementation Assistant – Solution View* screen, identify the configuration activity where you want to make changes.
2. Choose *Building Block Builder*.
3. In the scope item list, choose *All Building Blocks* to display the list of building blocks.
4. In the building block list, choose *Find* to search for the configuration activity.

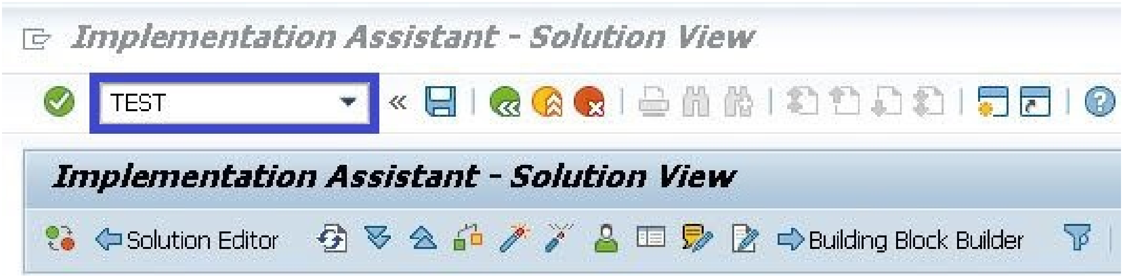
   The search results are highlighted. Double-click an occurrence to display the details of the configuration activity at the bottom of the screen.
5. Choose the *Solution-Specific* tab.
   - For activities of type *IMG activity*:
     1. The tab displays the subobjects belonging to this activity. Select the subobject that you want to change and choose *Customizing* to navigate directly to the related IMG activity.
     2. Make your changes in the IMG activity and save your entries.
     3. Assign your changes to a valid transport request.
   - For activities using an *eCATT* or *BC Set*:

     > **Note**
     >
     > The SAP Best Practices content uses the following decimal notation:
     > - *Decimal Notation*: 1.234.567,89
     > - *Date Format*: DD.MM.YYYY
     >
     > When you modify installation data, you have to ensure that these parameters are configured for your user. This prevents that conversion exits inadvertently change the installation data.
     >
     > Verify your user settings in transaction `SU3` and adjust them if necessary. After changing the user parameters, log off and log on again for the changed user parameters to take effect.

     1. Choose *Installation Data*.
     2. In the dialog box, select the *Maintain Variant* checkbox and choose *Save*.
        The *Installation Data Maintenance* dialog opens.
     3. Adapt the records as required.
     4. Save your entries.
6. Reactivate the complete configuration activity in **test mode**.

   Test mode is required because it is more comprehensive. It ensures that the reactivation also encompasses any other occurrence of the scope item / building block (especially if they are global) in other solutions.

   a. Choose *Goto* > *Implementation Assistant*.
   a. To switch on the test mode, enter **`TEST`** in the command field and choose *Enter*.



A system message confirms that the test mode is switched on.

b. Select the configuration activity, and in the context menu, choose *Execute (Test mode)*.
c. After the reactivation, switch off the test mode. Enter **TEST** in the command field and choose *Enter*.

3.4.3 Error handling: installation errors during activation

The following information helps you to solve problems that might occur during the installation process.

> **Caution**
>
> Before performing detailed error analysis and error processing as described below, proceed as follows.
>
> Activate your solution or the respective scope item in the solution builder implementation assistant again. It may be the case that the error will not reoccur. In this case, no correctional activities are needed, and you can proceed with the installation.

3.4.3.1 Warnings in BC set logs

If an eCATT terminates with status `red` (error), check the eCATT log with regard to the BC sets that have been activated by this eCATT.

If the eCATT log shows an error because the BC sets have been activated with warnings (use the BC set log to check this), you can ignore the eCATT error. If the BC set was activated successfully, set the installation status manually to `green`.

3.4.3.2 eCATT error: variable xyz does not exist

If an eCATT terminates with status `red` (error), check the eCATT log with regard to the BC sets that have been activated by this eCATT.

If the error message is `variable xyz does not exist`, ignore the eCATT error if the BC sets have been activated successfully (use the BC set log to confirm this). If the BC set was activated successfully, set the installation status manually to `green`.

3.4.3.3 eCATT error: activation freezes (no progress in activation) at eCATT step /SMB99/RSA5_0001_106 (for example)

Problem Description

The activation terminates at activation step eCATT `/SMB99 /RSA5_0001_106`, for example. The application is unresponsive and no progress of the activation can be seen. The eCATT log is `green` and shows the information `The test case has been active for [xx:yy:zz h] minutes.`

Root Cause

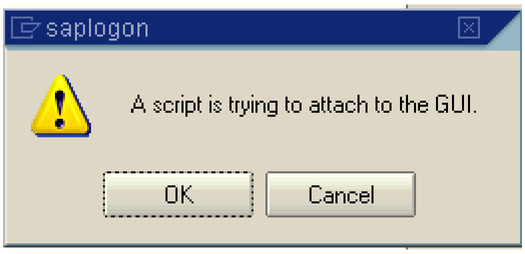
This error is caused by the usage of an outdated SAP GUI installation. As outlined in the document *Software and Delivery Requirements*, always use the latest SAP GUI version.

Error Solution Procedure

Install the latest available SAP GUI front-end version. Restart the activation of SAP Best Practices.

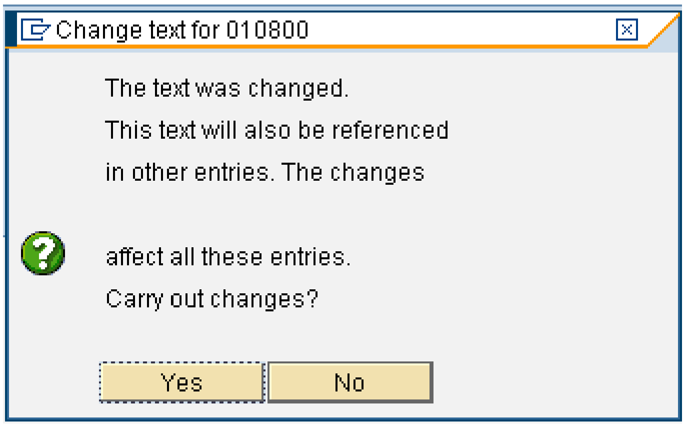
3.4.3.4 Dialog box appears during activation: A script is trying to attach to the GUI

If the system displays the dialog box `A script is trying to attach to the GUI` during the installation process with the solution builder, choose *OK*.



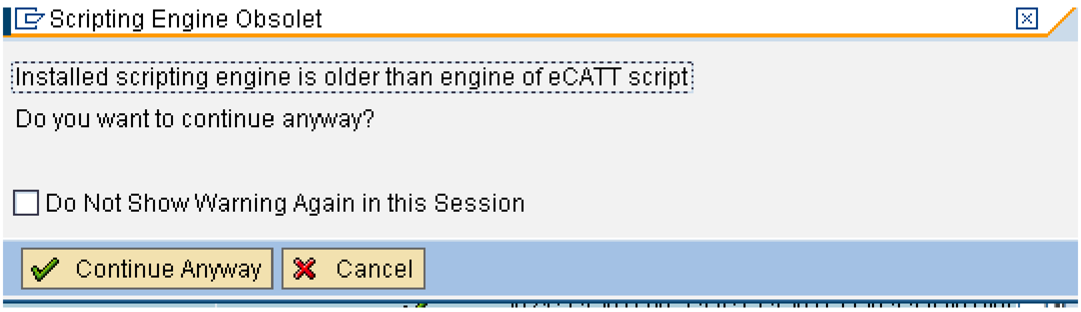
3.4.3.5 Dialog box appears during activation asking to confirm text changes

If the system displays the dialog box below during the activation process with the solution builder, confirm the information dialog box with *Yes*.



3.4.3.6 Issue with SAP GUI

If you receive the error message *Installed scripting engine is older than engine of eCATT script.* (see screenshot below), or if you receive the error message that the scripting engine is not installed, update your SAP GUI to solve this issue.



Do not continue with the activation until you have updated your SAP GUI and installed the latest scripting engine. If you continue without updating, serious errors may occur.

3.4.3.7 Processing scope-item-specific errors

Building Block	Error Message	Error Resolution
BLG BR1	Error in eCATT /SMB99/CHARACTERISTIC_O209_J01: some or all variants terminate with status red	If the eCATT /SMB99/CHARACTERISTIC_O209_J01 *Create Release Procedure Characteristics* shows an error (some of the eCATT variants have status red), restart the activation of the scope item in solution builder again. During the second activation, the status of variants which ended with status red during the first run is now green; however, the status of variants that ended with status green is now red. This is not an error. It only shows that the characteristics are already there. After the second activation, you can access transaction CT04 and check if the following characteristics are available: • R2R_PURCH_GRP, • R2R_PURCH_ORD_TYPE and • R2R_PURCH_ORD_VALUE If these characteristics exist, you can change the status of the eCATT activity to okay and proceed with the activation.
BR1	Error in eCATT /SMB99/CL20N_PO_O001_J01: some or all variants terminate with status red	If the eCATT /SMB99/CL20N_PO_O001_J01 *Define Release Procedure for Purchase Orders – Set Criteria* shows an error (some of the eCATT variants have status red), start the activation of the scope item in solution builder again. The error should no longer occur.
J52	Error generating table KOMPAKE, Message no. KE434; eCATT /SMB15/KEA0_O042_J17	If the eCATT /SMB15/KEA0_O042_J17 *Activate Operating Concern* shows the message `Error generating table KOMPAKE, Message no. KE434. Diagnosis: An error occurred while Table KOMPAKE was being generated`, start the activation of the scope item in solution builder again. The error should no longer occur.

3.4.4 Carrying out post-activation steps

After the content activation, you have to carry out the following activities:

Step	Step Description	More Information
1	Creating SAP NetWeaver Gateway settings	Create settings as described in the following topics: PO approval My Inbox - tiles and catalog [page 77] Maintaining task names and decision options [page 79]

Step	Step Description	More Information
2	Creating settings in the SAP S/4HANA back-end system	Create settings as described in the following topics: Workflow basic customizing [page 80] Agent assignment attribute for PFTC_CHG workflow [page 81] Setting up default print queues [page 82] Configuring the Web Service Runtime [page 83]
3	Set up FSN connectivity for SAP S/4HANA Note Only relevant if scope items J59, J60, J78 or BHA are in scope of your customer solution.	Create settings as described in the following topics: Activating XI engine in transaction SICF [page 84] Defining the logical system in table LCRT_CLNTCACHE [page 85] Configuring integration engine in SXMB_ADM [page 86] Activating queues for XI message processing [page 86] Creating interface-specific XI configuration [page 86] STRUST configuration [page 90] Maintaining SSFA parameters for the FSN connector [page 91] Configuring SSF BSNAGT PSE [page 92] Configuring message level security [page 93]
4	Create settings in Ariba Network and the SAP S/4HANA back-end system	You need to apply the settings as described in the following configuration guides in this sequence: 1. Technical Integration Configuration 2. Ariba Network and Backend Customizing
5	Make settings to secure your data and processes	Security settings in the SAP S/4HANA back-end system [page 94] To get an overview of security-relevant information, refer to the following guide: SAP Credit Management Security Guide
6	Create user assistance settings	You need to create the following settings to enable context-sensitive user assistance for SAP S/4HANA, on-premise edition: UI Technology Guide, chapter *Configure Context-Sensitive User Assistance for SAP Fiori Launchpad* Configuring settings in the back-end system for context-sensitive user assistance [page 97]

Step	Step Description	More Information
7	Set up the integration between BI Platform and SAP Fiori launchpad Note **Only relevant** if you decide to implement one of the following analytical scope items: • Analytical Content for S/4HANA: Procure-to-Pay (BHF) • Analytical Content for S/4HANA: Order-to-Cash (BHI) • Analytical Content for S/4 HANA: Core Finance (BHA)	For the analytical scope items, you have to apply the settings as described in the following configuration guide: Integration Between BI Platform and Fiori Launchpad

3.4.4.1 Creating SAP NetWeaver Gateway settings

PO approval My Inbox - tiles and catalog [page 77]

Maintaining task names and decision options [page 79]

3.4.4.1.1 PO approval My Inbox - tiles and catalog

Context

You configure workflow settings in the gateway.

Procedure

1. Access the activity using the following navigation option:

Transaction Code	`SPRO`

SAP Reference IMG Menu	*SAP NetWeaver* > *SAP Gateway Service Enablement* > *Content* > *Task Gateway* > *Task Gateway Service* > *Scenario Definition*

2. On the *Change View 'Scenario Definition' Overview* screen, choose *New Entries* and create the following entries:

Scenario Identifier	`PO_RELEASE`	`SIV_RELEASE`
Scenario Display Name	`Release PO`	`Release Supplier Invoice`
Technical Service Name	`/IWPGW/TASKPROCESSING`	`/IWPGW/TASKPROCESSING`
Version	`2`	`2`
EntitySet External Name	`Task`	`Task`
Property External Name	`TaskDefinitionID`	`TaskDefinitionID`
Default Sort by Property	`CreatedOn`	`CreatedOn`

3. Save your entries.
4. On the *Scenario Definition* screen, select *PO_RELEASE* and in the *Dialog Structure* pane, double-click *Assign -Consumer Type to Scenario*.
5. Choose *New Entries* and create the following entry:

Field Name	User Action and Values
Task Gateway Consumer Type	`TABLET`

6. On the *Scenario Definition* screen, select *PO_RELEASE* and in the *Dialog Structure* pane, double-click *Task Definition for Scenario*.
7. Create the following entry:

Field Name	User Action and Values
Task Type	`TS20000166`
SAP System Alias	`LOCAL_PGW`

8. Save and go back.
9. On the *Scenario Definition* screen, select *SIV_RELEASE* and in the *Dialog Structure* pane, double-click *Assign -Consumer Type to Scenario*.
10. Choose New Entries and create the following entries:

Field Name	User Action and Values
Task Gateway Consumer Type	`DESKTOP` `TABLET`

11. On the *Scenario Definition* screen, select *SIV_RELEASE* and in the *Dialog Structure* pane, double-click *Task Definition for Scenario*.
12. Create the following entry:

Field Name	User Action and Values
Task Type	**TS08900001**
SAP System Alias	**LOCAL**

13. Save and go back.
14. Save your entries.

3.4.4.1.2 Maintaining task names and decision options

Procedure

1. Access the activity using one of the following navigation options:

Transaction Code	SPRO
SAP Reference IMG Menu	*SAP NetWeaver* > *SAP Gateway Service Enablement* > *Content* > *Workflow Settings* > *Maintain Task Names and Decision Options*

2. On the *Change View 'Step Name': Overview* screen, choose *New Entries* and create the following entries:

Workflow ID	Step ID	Icon MIME Repository Path
WS08900002	0000000004	**Release Supplier Invoice**
WS20000075	0000000093	**Release Purchase Order**

3. Save your entries.
4. On the *Change View 'Decision Keys': Overview* screen, select the Workflow ID *WS08900002* and in the *Dialog Structure* pane, double-click *Decision Keys*.
5. Create the following entries:

Key	Decision Text	Nature
1	**Approve**	**POSITIVE**
2	**Reject**	**NEGATIVE**

6. Save and go back.

   Repeat the previous steps for workflow ID *WS20000075*.

3.4.4.2 Creating settings in the SAP S/4HANA back-end system

3.4.4.2.1 Workflow basic customizing

Context

You can use this function to carry out the activities necessary for executing the workflow, and to check the current status of workflow customizing.

Access transaction `SWU3`.

Features

Automatic workflow Customizing is made up of several areas:

- In the *Runtime* area, all activities are executed that are necessary for the execution of workflows.
- In the *Definition time* area, activities are executed that are necessary for a smooth modeling of workflows.
- In the *Maintain additional settings and services* area, you find activities that are needed to use specific special functions of the workflow.
- The area *Classify tasks as general* has various sub-areas in which tasks of a function area can be set to general.

The activities checked automatically upon calling are displayed. The result of the check is shown with a graphical symbol. The overall result of the check of an area is also assessed.

If an activity is shown as having errors, execute *Automatic Customizing*. To go directly to maintenance of the relevant activity, select *Execute*.

Automatic Customizing

Automatic Customizing covers all the activities that concern the **technical basic settings**. The following standard settings are amongst those made:

- Configuring a client-specific RFC destination
  If there is not one already, a user (including password) is created for the logical destination `WORKFLOW_LOCAL_<client>`. Specify a user that was created in the current client with the user type `background` and that has the authorization `SAP_ALL`. If this function is executed automatically, the user `WF-BATCH` is created. If it does not exist already, this user is assigned your authorization profile. To facilitate error-free running of the workflow system, ensure that the user `WF-BATCH` is assigned the authorization `SAP_ALL`.
- Scheduling all background jobs for the workflow system
- Setting an active plan version
  The active plan version is set to 01 if no active plan version has been maintained yet.
- Classifying SAP tasks and SAP workflows as general tasks
  The generic decision task (standard task for user decision) and other tasks that are used in the SAP workflows that are supplied are classified as “general tasks”. Some SAP workflows can also be classified as general.
- Maintaining a workflow system administrator
  If no workflow system administrator has been maintained yet, your user name (the current `SY-UNAME`) is entered as the system administrator.

3.4.4.2.2 Agent assignment attribute for PFTC_CHG workflow

Context

These steps are required for the FI workflow configuration.

Procedure

1. Access transaction **`PFTC_CHG`** .
2. On the *Task: Maintain* screen, make the following entries:

Field Name	User Action and Values
Task type	**`Standard task`**
Task	**`50100025`**

3. Choose *Change*.

   In the information dialog box, choose *Continue*.
4. On the *Standard Task: Change* screen, go to the menu bar and choose *Additional Data* > *Agent Assignment* > *Maintain*.
5. On the *Standard Task: Maintain Agent Assignment* screen, choose *Attributes*.
6. On the *Task: screen*, choose **General Task** and *Continue*.

   Repeat this procedure for the following task numbers : **50100026, 50100066, 50100075**

3.4.4.2.3 Setting up default print queues

Prerequisites

Context

For on-premise systems, only spool configuration is supported; therefore, default spool printer LP01 has to be assigned.

For more information, refer to the standard SAP Printing Guide.

3.4.4.2.4 Setting up country-specific queues

Procedure

1. Access transaction **SE38**.
2. Run the report **RSPOPQ_UTIL_2** as user DDIC.
3. On the *Print Queue Operations Test Program* screen, enter a print queue name, for example, **QUEUE_XX** (replace XX with a country code) and select the *Create Print Queue* radio button.
4. Choose Execute.
5. In the dialog, choose the default value and choose *Continue*.
6. Enter the queue description, for example, **Central Queue for US**.

   Repeat these steps for any other country that is in your scope.

3.4.4.2.5 Configuring the Web Service Runtime

Use

To be able to use Web Services with Web Services Reliable Messaging, you must have the Web service runtime configured.

The configuration of the Web service runtime is client-specific and must be performed in each productive client and in client 000.

Prerequisites

You need the appropriate user administrator authorizations. For further information, refer to the section entitled Setting Up User and Authorization Administrators.

Procedure

1. In the ABAP program execution screen (transaction **SA38**), call the report **SRT_ADMIN** in each productive client and in client 000. Choose *Execute Technical Setup* and execute the report (F8).
   Using the report `SRT_ADMIN`, you create a service destination for communication through RFC and you perform the settings for the bgRFC (Background Remote Function Call) .
   SOAP requests are processed using the Internet Communication Framework (ICF). The SAP NetWeaver Application Server uses the HTTP protocol of the ICF for communication between the Web service consumer and the Web service provider. The ICF provides the infrastructure for handling HTTP requests in work processes in an SAP system. An HTTP request calls a service in the ICF server. This service contains one or more HTTP request handlers that are responsible for running the ABAP functions.
   Using report `SRT_ADMIN`, all the ICF services required for standard functions of the Web service runtime are created.
   The log and trace levels can be selected using the report `SRT_ADMIN` or directly in the SOA Manager under *Logs and Traces* .
   Pay close attention to the guidelines in SAP Note 1110741.
   If there are any problems, you can also perform the configuration in single steps.
   - Create a service destination
   - Performing Settings for bgRFC

   Afterwards, you should check the configuration .

   Note

   The configuration can be reset using the function module `SRT_TECHNICAL_SETUP_RESET`. Pay close attention to the guidelines in SAP Note 163844.

2. Start the background request `SAP_SOAP_RUNTIME_MANAGEMENT` for component BC. Call transaction **SM36**, and choose *Standard Jobs - Standard Scheduling* . You must schedule the job hourly.

3.4.4.3 Setting up FSN connectivity for SAP S/4HANA

3.4.4.3.1 Activating XI engine in transaction SICF

Prerequisites

Make sure that SICF node path `/sap/xi/engine` is active.

Procedure

1. Access the activity using one of the following navigation options:

SAP Menu	*Architecture and Technology* > *System Administration* > *Administration* > *Network* > *HTTP Service Hierarchy Maintenance*
Transaction Code	`SICF`

2. Choose *Execute (F8)*.
3. Navigate the following path: `/sap/xi/engine`
4. Check that the following services are activated:

`/sap/xi/engine`

/sap/xi/adapter_plain

/sap/xi/cache_ssl

/sap/xi/cache

/sap/bc/bsp/sap/sxms_alertrules

/sap/bc/bsp/sap/alertinbox

/sap/xi/cache_gui

/sap/xi/cache_gui_ssl

/sap/xi/simulation

/sap/bc/webdynpro/sap/appl_bckgnd_moni_jobs

/sap/public/bc/webicons

/sap/public/bc/pictograms

/sap/bc/webdynpro/sap/c_srt_seq_mon

/sap/bc/webdynpro/sap/appl_log_trc_viewer

5. If the services are not activated, right-click the service and choose *Activate service*.

3.4.4.3.2 Defining the logical system in table LCRT_CLNTCACHE

Context

If not available, define the logical system in table LCRT_CLNTCACHE (Cross-client Customizing needs to be allowed)

Procedure

1. To carry out the activity, access transaction SE16.
2. Enter LCRT_CLNTCACHE as table name and choose *Create Entries*.
3. Make the following entries:

Field name	User actions and values
SRTFD	<SID><client>, for example, **ER9500**
AEDAT	Enter current date.

Field name	User actions and values
BS KEY NAME	<SID>_<client>, for example, **ER9_500**
BS ROLE	**LOC**
BS CAPTION	<SID>_<client>, for example, **ER9_500**

4. Save.

3.4.4.3.3 Configuring integration engine in SXMB_ADM

Procedure

1. Access the activity using the following navigation option:

Transaction Code	`SXMB_ADM`

2. Choose *Integration Engine* > *Configuration* > *Integration Engine Configuration*
3. In the menu bar, choose *Edit* > *Change Selected Configuration Data*
4. As role of business system, select *Application System*.

3.4.4.3.4 Activating queues for XI message processing

Procedure

1. Access the activity using the following navigation option:

Transaction Code	`SXMB_ADM`

2. Choose *Integration Engine* > *Administration* > *Manage Queues*
3. Choose *Register Queues*.

3.4.4.3.5 Creating interface-specific XI configuration

Creation of Sender/Receiver

Context

The following sender/receiver have to be created:

- FSN Payment
- FSN Connector Pull
- FSN Connector Acknowledgment

Procedure

1. Access the transaction using the following navigation option:

Transaction Code	SXMSIF

2. Choose *Edit*. Then choose *New Entries* and create the following settings:

FSN Payment	
Sender/ReceiverID	**FSN_PAYMENT**
Description	**FSN Payment**
Component	*****
Interface Name	**FSNInterface_Out**
Interface Namespace	http://sapcd.com/fsnagt

FSN Connector Pull	
Sender/ReceiverID	**FSN_PULL**
Description	**FSN Connector Pull**
Component	*****
Interface Name	**FSNInterfaceSync_Out**
Interface Namespace	http://sapcd.com/fsnagt

FSN Connector Acknowledgment	
Sender/ReceiverID	**FSN_ACK**
Description	**FSN Connector Acknowledgment**
Component	*****
Interface Name	**FSNInterface_Pull_Receipt_Out**

FSN Connector Acknowledgment	
Interface Namespace	http://sapcd.com/fsnagt

Creation of RFC

Context

Creation of RFC

An RFC connection has to be created for each Sender/Receiver.

Procedure

1. Access the activity using one of the following navigation options:

SAP Menu	*Architecture and Technology* › *System Administration* › *Administration* › *Network* › *RFC Destinations*
Transaction Code	`SM59`

2. On the *Configuration of RFC Connections* screen, choose *Create*. Create the following RFC connections one after the other.

RFC connection for FSN_Payment

Field name	User actions and values
RFC Destination	**FSN_CORP_PAYMENTS-<CLIENT>**
Type	**G**
Target Host	**<Corporate FSN Tenant host>**
Path Prefix	**/cxf/fsn/corp/payments_<SIDCLNT>**
Service No	**443**
Proxy	None, use existing global configuration
Change to the *Logon & Security/ Security Options* tab	
Status of Secure Protocol	**SSL Active**
SSL Certificate	**DFAULT**

RFC connection for FSN_Pull

Field name	User actions and values
RFC Destination	**FSN_CORP_PULL-<CLIENT>**
Type	**G**
Target Host	**<Corporate FSN Tenant host>**
Path Prefix	**/cxf/fsn/corp/statements/pull_<SIDCLNT>**
Service No	**443**
Proxy	None, use existing global configuration
Change to the *Logon & Security/ Security Options* tab	
Status of Secure Protocol	**SSL Active**
SSL Certificate	**DFAULT**

RFC connection for FSN_ACK

Field name	User actions and values
RFC Destination	**FSN_CORP_ACK-<CLIENT>**
Type	**G**
Target Host	**<Corporate FSN Tenant host>**
Path Prefix	**/cxf/fsn/corp/statements/ack_<SIDCLNT>**
Service No	**443**
Proxy	None, use existing global configuration
Change to the *Logon & Security/ Security Options* tab	
Status of Secure Protocol	**SSL Active**
SSL Certificate	**DEFAULT**

Specify interface-specific integration server URL

Context

Specify interface-specific integration server URL

You need to set up an interface-specific integration server URL for each sender/receiver. To do this, you specify the related RFC destination for each sender/receiver ID.

Procedure

1. Access the transaction using the following navigation option:

Transaction Code	SXMB_ADM

2. Choose *Integration Engine* > *Configuration* > *Integration Engine Configuration*
3. Choose *Configuration*.
4. Switch to change mode. From the menu bar, choose *Edit* > *New Entries*
5. Create the following settings:

	Category	Parameters	Subparameter	Current Value
Entry for FSN_PAYMENT	**RUNTIME**	**IS_URL**	**FSN_PAYMENT**	**dest://FSN_CORP_PAYMENTS-<CLIENT>**
Entry for FSN_PULL	**RUNTIME**	**IS_URL**	**FSN_PULL**	**dest://FSN_CORP_PULL-<CLIENT>**
Entry for FSN_ACK	**RUNTIME**	**IS_URL**	**FSN_ACK**	**dest://FSN_CORP_ACK-<CLIENT>**

6. Save your entries.

3.4.4.3.6 STRUST configuration

Configure the SSL Client Standard PSE

Context

Import the root CA of the FSN Load Balancers on Prod landscape: GTECyberTrustGlobalRoot.crt and BaltimoreCyberTrustRoot.crt

If not yet done, download the root CA and the intermediate CA for the FSN landscape (GTECyberTrustGlobalRoot.crt and BaltimoreCyberTrustRoot.crt)

Procedure

1. Access transaction STRUST.

2. Navigate to the PSE for **SSL Client Standard** and open it by double-clicking the PSE.
3. Switch to edit mode.
4. Choose the *Import certificate* button.
5. In the *Import Certificate* dialog box, enter or select the path to the provided certificates and choose *Enter*
   The certificate is displayed in the *Certificate* area.
6. Choose *Add to Certificate List* to add the certificate to the *Certificate List* of the SSL Server Standard PSE.
7. Save your entries.

Forward the SSL Client Standard PSE to Cloud Service Center FSN

Procedure

1. Access transaction `STRUST`.
2. Navigate to the PSE for **SSL Client Standard** and open it by double-clicking the PSE.
3. Switch to edit mode.
4. Double-click the *Subject* under *Own Certificate* to display the certificate.
5. Choose the *Export certificate* button.
6. Send the certificate to the FSN Service Center *DL Cloud Service Center FSN Onboarding*.

3.4.4.3.7 Maintaining SSFA parameters for the FSN connector

Procedure

1. Access transaction `SSFA`.
2. On the *Change View "Application-Specific SSF Parameters": Overview* screen, choose *New Entries*.
3. On the *New Entries: Details of Added Entries* screen, in the *SSF Application* field, enter **`BSNAGT`** and choose *Enter*.
4. Create the following settings:

Field name	User actions and values
SSF Profile ID (opt)	**`CN=SID SSF BSNAGT, OU=Installation Number, OU=SAP Web AS, O=SAP Trust Community, C=DE`**
Hash Algorithm	**`SHA256.`**

Field name	User actions and values
Encryption Algorithm	**AES128-CBC.**
Include Certificates	Select checkbox.
Digital Signature with Data	Select checkbox.

5. Save your entries.

3.4.4.3.8 Configuring SSF BSNAGT PSE

Configure the SSL Client Standard PSE

Context

Import the root CA of the FSN Load Balancers on Prod landscape: GTECyberTrustGlobalRoot.crt and BaltimoreCyberTrustRoot.crt

If not yet done, download the root CA and the intermediate CA for the FSN landscape (GTECyberTrustGlobalRoot.crt and BaltimoreCyberTrustRoot.crt)

Procedure

1. Access transaction `STRUST`.
2. In the context menu of *SSF BSNAGT*, choose *Create*.
3. Change the algorithm to **RSA with SHA-256**.
4. Set the key length to **2048**.
5. Save your entries.
6. Navigate to the PSE for **SSF BSNAGT** and open it by double-clicking the PSE.
7. Switch to edit mode.
8. Double-click the *Subject* under *Own Certificate* to display the certificate.
9. Choose the *Export certificate* button.
10. Send the BSNAGT certificate to the FSN Service Center *DL Cloud Service Center FSN Onboarding*.

Import the FSN tenant certificate into SSF BSNAGT PSE

Context

The certificates together with the URL are provided by the *Cloud Service Center FSN*.

Procedure

1. To add the certificate to the *Certificate List* of the SSL BSNAGT PSE, choose *Import Certificate*. Select the provided file and start the upload.
2. Choose the *Add to Certificate List* button.
3. Save your entries.
4. Click the *Certificate Details* button and copy the **subject line** to a temporary text file.
   This information is required in the section Configuring message level security [page 93].
5. Call transaction `SMICM` and restart ICM (*Administration* > *ICM* > *Exit soft* > *Global*).

3.4.4.3.9 Configuring message level security

Procedure

1. Access the transaction using the following navigation option:

Transaction Code	`SPRO`
SAP Menu	*SAP Reference IMG* > *Financial Services Network Connector* > *Maintain Secure Store and Forward (SSF) Profile Data*

2. On the *Change View "Maintain Secure Store and Forward (SSF) Profile Data": Overview* screen, create the following settings for each of the message types:
   - `PAIN.001.001.03`
   - `CAMT.053.001.02`
   - `PAIN.002.001.03`

   Maintain the field *Signatory/Recipient Name* using the data from the temporary text file (see Configuring SSF BSNAGT PSE [page 92]).

Message Type	SenderID ReceiverID	Appl.	Signatory/ Recipient Name	Sign	Encrypt	Decrypt	Verify
PAIN. 001.001.03		BSNAGT	CN=_EDX_00163E0732641EE3BC907ECD36C4DB8D, OU=I000000000740018331 - Business ByDesign, O=SAP Trust Community, C=DE	Yes	Yes	Yes	Yes

3. Save your entries.

3.4.4.4 Security settings in the SAP S/4HANA back-end system

Basic Concepts

A VSI 2.0 compliant virus scanner needs to be installed and run in the system landscape. At different stages in the processing (for example, upload, download, passage through gateway, and so on), SAP S/4HANA applications will call the scanner through a dedicated interface, which can be customized by the customer with the help of scan profiles.

For more information about virus scan profiles and details of customization, see the SAP NetWeaver documentation on the SAP Help Portal:

Virus Scan Interface

Additional information is available in the SAP Notes 786179 and 1494278.

The example below shows the basic concepts being applied in the area of file uploads.

Example: Virus Scanning in File Uploads

Uploaded files need to be scanned for malware. Their type needs to be verified against a whitelist of MIMEtypes. Both is achieved by a VSI 2.0 compliant virus scanner that is installed and being run in the customer landscape. The pre-delivered scan profile **/SCMS/KPRO_CREATE** has to be adapted according to customer needs. At runtime, the virus scanner will reject the upload of documents that are not compliant with the rules specified in the scan profile. Be aware that changes to this profile have a broad effect; that means, all uploads (ending up in KPro) will apply the same virus scan settings at runtime.

Once uploaded to the SAP S/4HANA system, such documents will be displayed in SAP Fiori apps without further security-related checks. If a document contains malicious content, unintended actions could be triggered on the UI during download or display, which might lead, for example, to cross-site scripting vulnerabilities. For this reason, proper virus scanning during upload is an essential first line of defense against (stored) XSS attacks. For a technical description of this problem, see the SAP NetWeaver Security Guide in the SAP Help Portal.

- attachments to business documents
- template files that are used to render data on the UI (for example, e-mail HTML templates)

Several functionalities of the system allow uploading of files. Examples may include:

General Recommendations for Virus Scan Profiles

Adapt the pre-delivered scan profiles and enable all of them. Consider their impact on performance and discuss with the customer if some profiles can be disabled.

Some scan profiles do take effect at download time. Scanning at download time bears the positive effect that virus signatures may have been updated in the meanwhile (since upload). So at upload time, a file may have run into the system without alert, while later at download time, it is discovered to carry a virus. However, download scanning implies performance impacts on the system: a file is uploaded only once by definition, but it is downloaded potentially many times. It may be considered a waste of computing power to keep scanning the file over and over again. If you require to lower this download performance penalty, you may disable the following scan profiles:

- /SCET/GUI_DOWNLOAD
- /SIHTTP/HTTP_DOWNLOAD
- /SOAP_CORE/WS_SEND

Try to organize scan profiles by setting up the following customer profiles for later reference

- ZBASIC: pure virus scanning
- ZEXTENDED: plus check for active content, plus MIME type detection, mark as default profile

All active profiles should refer to ZEXTENDED, except the following (which should refer to ZBASIC):

- /SAPC_RUNTIME/APC_WS_MESSAGE_GET
- /SAPC_RUNTIME/APC_WS_MESSAGE_SET
- /SCET/GUI_UPLOAD
- /SIHTTP/HTTP_UPLOAD
- /SMIM_API/PUT
- /SOAP_CORE/WS_RECEIVE
- /UI5/UI5_INFRA_APP/REP_DT_PUT

For ZEXTENDED, the following settings are recommended:

CUST_ACTIVE_CONTENT = 1

CUST_CHECK_MIME_TYPE = 1

CUST_MIME_TYPES_ARE_BLACKLIST = 0 (that is, whitelisting is used)

These settings tell the virus scanner to scan for active content and check MIME types according to the specified whitelist of file types.

Activate virus scanning in gateway with profile ZBASIC. Use file type whitelisting wherever possible. The following should be considered: The scanner whitelist should be as restrictive as possible.

As a compromise, the whitelist will also need to contain the complete set of file types required in all active customer scenarios.

If major extensions to the whitelist seem required, at least make sure it only contains MIME types from the IANA list . As a starting point for detailed consideration by the customer, see the template list of file types below. All file types that are not needed should be removed from the customer's whitelist. The final whitelist will, by necessity, be a compromise between security (as restrictive as possible) and functionality (as flexible in types as needed).

- application/arj
- application/msword
- application/pdf
- application/postscript
- application/vnd.ms-excel
- application/vnd.ms-powerpoint
- application/vnd.openxmlformats-officedocument.spreadsheetml.sheet
- application/vnd.openxmlformats-officedocument.presentationml.presentation
- application/vnd.openxmlformats-officedocument.wordprocessingml.document
- application/x-compressed
- application/x-dvi
- application/x-gzip
- application/x-zip-compressed
- application/xml
- application/zip
- image/bmp
- image/jpeg
- image/png
- image/vnd.dwg
- image/x-dwg
- text/plain
- text/richtext
- text/xml

Further Protection against Malicious Active Content

Virus scanning, and thus not uploading files with malicious content, is the first line of defense. As a second line of defense the, SAP WebDispatcher (or alternatively, ICM = Internet Communication Manager) allows some level of protection against malicious active content being executed in the front-end. This can be achieved with additional HTTP response headers which instruct browsers to behave in a specific way. SAP WebDispatcher and ICM both offer the possibility to modify HTTP response headers. For more information, see the SAP NetWeaver documentation for ICM in the SAP Help Portal.

SAP recommends the following:

Add the following headers:

- `SetResponseHeader X-Content-Type-Options "nosniff"`
- `SetResponseHeader X-XSS-Protection "1; mode=block"`

Consider the following example of script code in order to provide some idea how the security level could be improved further. Details need to be be adapted to the individual customer use case:

```
If %{RESPONSE_HEADER:Content-Disposition} regimatch ^inline [AND]
```

```
If %{RESPONSE_HEADER:Content-Type} regimatch html|xml|xsl Begin
SetResponseHeader Content-Security-Policy "script-src 'none'; sandbox"
SetResponseHeader X-Content-Security-Policy "script-src 'none'; sandbox" End
```

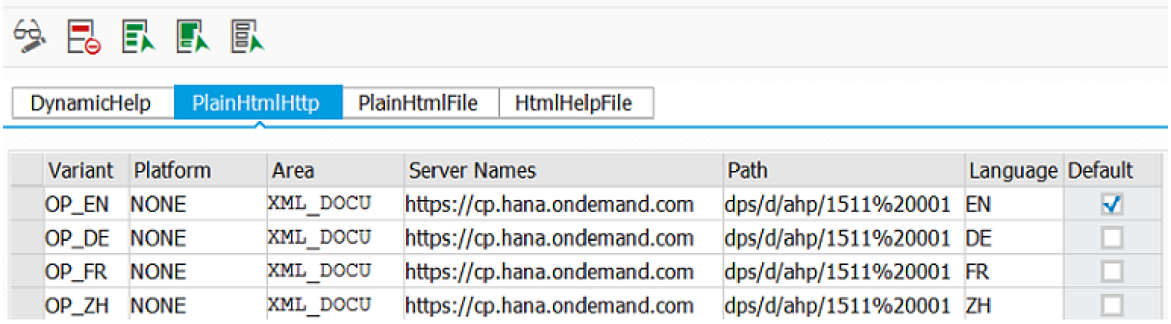
If such a content security policy header is added to HTTP responses containing previously uploaded files (when displayed inline and having content type containing html, xml or xsl), the execution of JavaScript will be prevented in the front-end by all up-to-date browser versions.

3.4.4.5 Configuring settings in the back-end system for context-sensitive user assistance

Procedure

1. Access transaction `SR13`.
2. Go to the *PlainHtmlHttp* tab.
3. Choose *New Entries* and create settings for each language you want to use:

Variant	Platform	Area	Path	Server Names	Language
OP_<language that you use in the system>, for example, OP_EN	NONE	XML_DOCU	**dps/d/ahp/1511%20002**	https://cp.hana.ondemand.com	<language that you use in the system>, for example, EN



Variant	Platform	Area	Server Names	Path	Language	Default
OP_EN	NONE	XML_DOCU	https://cp.hana.ondemand.com	dps/d/ahp/1511%20001	EN	☑
OP_DE	NONE	XML_DOCU	https://cp.hana.ondemand.com	dps/d/ahp/1511%20001	DE	☐
OP_FR	NONE	XML_DOCU	https://cp.hana.ondemand.com	dps/d/ahp/1511%20001	FR	☐
OP_ZH	NONE	XML_DOCU	https://cp.hana.ondemand.com	dps/d/ahp/1511%20001	ZH	☐

4. Select **one** entry as default per platform.
5. Save your entries.

3.4.5 Evaluating business content / scope items

The following sections address the **business consultant** who is taking care that the business processes work as desired.

Review of business scope items

For an overview and detailed information of the SAP Best Practices scope items in the system, the business consultant can refer to the following deliverables in the documentation package available in the SAP Service Marketplace. The country-specific documentation package can be downloaded from the SAP Software Download Center.

You can use the documents to review the business scope items that interest you. With test scripts, you can run through scope items in the system.

Deliverable	Content
Test scripts	Provide a detailed process step description of the business scope item.
Master data scripts	Describe how you can create your own master data before you test the processes.
Process diagrams	Comprise a graphical overview of the scope item process flow.
Configuration guides	Describe crucial parts of the system configuration of the respective scope item. Together with the configuration guides of the underlying building blocks, you can track which system settings have been configured. For technical reasons, not all scope items have configuration applied on a top level. For those scope items, the necessary configuration is described in the configuration guides of the underlying building blocks.

3.4.6 Prerequisites for testing scope items

This section lists activities that need to be carried out before the start of the process test of scope items in the system.

Description	More Information
For certain scope items, it is required that you run through the master data script BNU and BNZ before the start of the process test of scope items in the system.	Refer to the *Testcycle Overview* document. It gives you an overview of the dependencies between scope items, and thus, provides guidance on the sequence in which they can be tested in a meaningful way. The document also specifies for scope items which master data scripts you have to go through in order to create the prerequisite settings in the system. You can use the following links: Testcycle overview Master data scripts

3.5 Executing manual rework activities

Prerequisites

The System Administrator has to ensure that the transport landscape is set up in a way that transport requests (Workbench and Customizing request) created in the client in which the solution package was initially activated can be released to the target system/client(s).

In the back-end system, the System Administrator uses transaction `SCC1` to copy transports requests to specific target client(s).

Context

When you initially activate your solution in the DEV or QA system, there are some required Customizing or configuration activities and master data that **cannot** be recorded in transport requests. Nevertheless, to bring these settings into the P system, you need to run a manual rework procedure. This procedure compiles all activities that are flagged as relevant for manual rework in the SAP Best Practices content in a dedicated solution.

The target client in the P system has been set up with transports based on the initial activation of the solution excluding the settings for which manual configuration is required. You import the manual rework solution into the target client and execute the tasks manually.

Generating manual rework solution

Context

You run the procedure in the client in which your solution was initially activated.

Procedure

1. Access transaction **/n/SMB/BBI**.
2. On the *Solution Builder - Solution Editor* screen, select the solution you have activated before and choose *Favorite* to set it as favorite.
3. In the menu bar, choose *Solution* > *Procedures* > *Start a procedure*.
4. In the *Execute a Solution Processing Procedure* dialog box, choose the procedure *Manual Rework Required* and choose *OK*.

Results

The system generates a manual rework solution *MRR_<solution name>* which consists of scope items and building blocks with the same prefix. The manual rework solution also contains manual steps which were added based on metadata in the reference solution.

Transferring manual rework solution to target client

Prerequisites

On the *Solution Builder - Solution Editor* screen, the manual rework solution is set as favorite.

Context

The manual rework solution can be transferred to the target client for execution. You download the solution file in the client in which you have generated the solution.

Procedure

1. Download the manual rework solution from the activation client.
   a. On the *Solution Builder - Solution Editor* screen, to download the solution file, choose *Solution* > *Export* > *Solution (XML)* in the menu bar.
   b. Save the XML solution file locally.
2. Import the manual rework solution in the target client.
   a. Log on to the target client.
   b. Access transaction **/n/SMB/BBI**.
   c. On the *Solution Builder - Solution Editor* screen, choose *Solution* > *Import* > *Solution (XML)* > *From local file* in the menu bar.
   d. Select the XML solution file and upload the file.

Activating manual rework solution

Procedure

1. Start the activation of the manual rework solution in the target client.

   Note

   For generic information about the activation process, see Activating a solution in the online help of the solution builder.

2. Process manual tasks according to the building block configuration guide.

   Refer to the *Manual Rework* section in the configuration guide. Follow the instructions which transaction or IMG activity you need to access to check the manual rework steps.

   Note

   Consider that some activities can be transported manually from the client in which the solution was initially activated into the target client. If this is possible, you execute the step in the source client and then transport it to the target client. This information is provided in the configuration guide.

   Note

   You can access the configuration guides via the Content Library:

   - SAP Best Practices for SAP S/4HANA, on-premise edition (Germany)
   - SAP Best Practices for SAP S/4HANA, on-premise edition (United States)

3. Confirm manual steps after processing them in the target client.

Results

When evaluating the business content, the business consultant checks whether all required settings and master data are available in the target client and the business processes run as described in the test scripts.

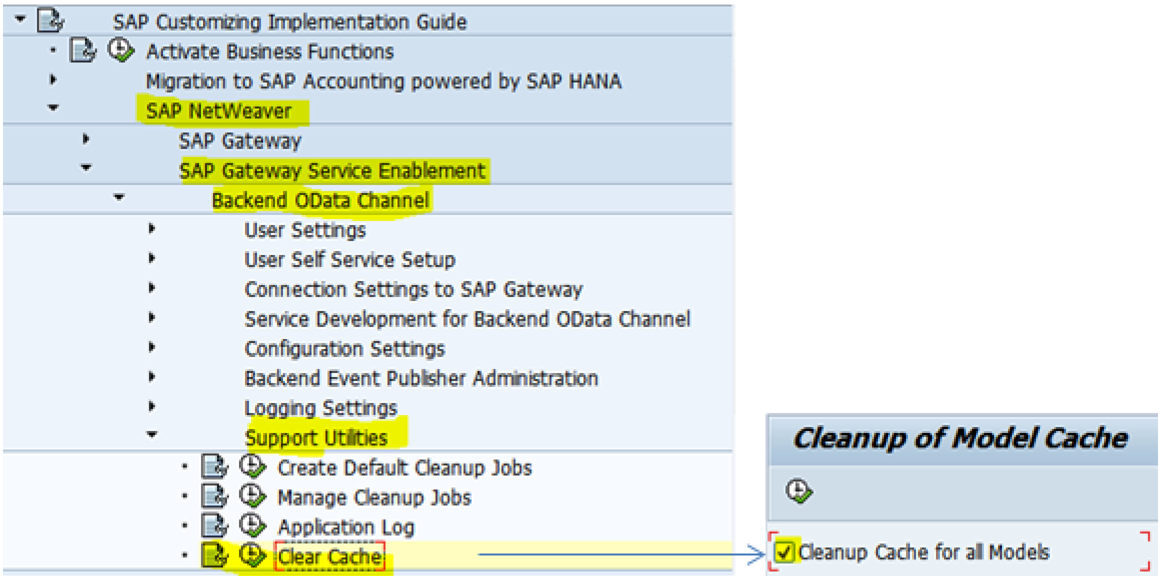
3.6 Deleting the metadata cache

Context

As metadata are cached, it is required to delete the cache after the finalization of complex processes like the activation and the export/import of solutions.

Procedure

1. Start the transaction **SPRO**.
2. Open the *SAP Reference IMG*.
3. Choose *SAP NetWeaver* > *SAP Gateway Service Enablement* > *Backend OData Channel* > *Support Utilities* > *Clear Cache*.
4. Choose *Cleanup Cache for all Models*.
5. Choose *Execute*.



3.7 Checking and releasing the transports

Context

Before releasing the transports to the QA system (from where you will transport them to the P system), you need to check the workbench transport request and the customizing transport request created for the following cases:

User activity that caused changes	Relevant transport requests
Activation	All transport requests entered by implementation team members when starting the activation from the *Implementation Assistant* of the *Solution Builder*
Configuration changes carried out in transaction `SPRO` in order to correct settings which caused activa-tion errors.	All transports created via transaction `SPRO`.

4 UPGRADE

4.1 Feature Pack Stack 1

The following section lists all activities that need to be carried out if you upgrade to SP1.

Relevant SAP Notes

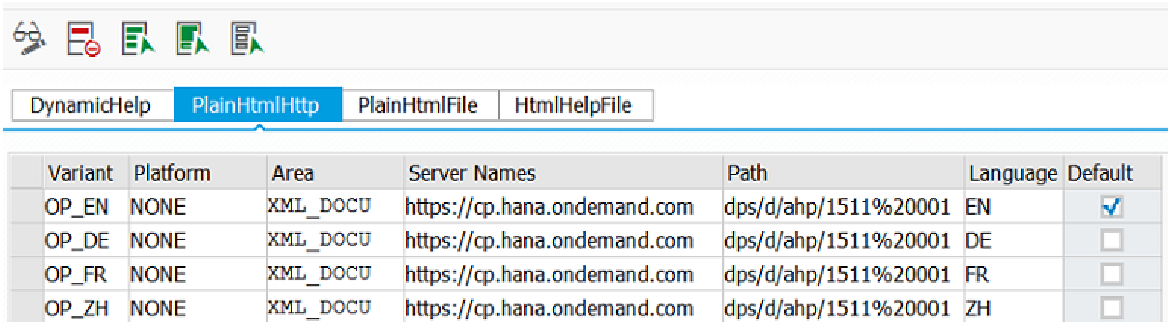
SAP Note	Content	Comments
2244659	SAP Best Practices for SAP S/4HANA, on-premise edition, Germany (DEV2)	Before you start the activation of the related SAP Best Practices scope, check the latest information on the installation of SAP Best Practices for SAP S/4HANA, on-premise edition, Germany (DEV2)
2247743	SAP Best Practices for SAP S/4HANA, on-premise edition, United States (USV2)	Before you start the activation of the related SAP Best Practices scope, check the latest information on the installation of SAP Best Practices for SAP S/4HANA, on-premise edition, United States (USV2)
2303306	SAP S/4HANA content activation note	Please check the collective note for issues that require action on your part **before** the content activation.

4.1.1 Configuring settings in the back-end system for context-sensitive user assistance

Procedure

1. Access transaction `SR13`.
2. Go to the *PlainHtmlHttp* tab.
3. Choose *New Entries* and create settings for each language you want to use:

Variant	Platform	Area	Path	Server Names	Language
OP_<language that you use in the system>, for example, OP_EN	NONE	XML_DOCU	**`dps/d/ahp/1511%20002`**	https://cp.hana.ondemand.com	<language that you use in the system>, for example, EN



Variant	Platform	Area	Server Names	Path	Language	Default
OP_EN	NONE	XML_DOCU	https://cp.hana.ondemand.com	dps/d/ahp/1511%20001	EN	✓
OP_DE	NONE	XML_DOCU	https://cp.hana.ondemand.com	dps/d/ahp/1511%20001	DE	
OP_FR	NONE	XML_DOCU	https://cp.hana.ondemand.com	dps/d/ahp/1511%20001	FR	
OP_ZH	NONE	XML_DOCU	https://cp.hana.ondemand.com	dps/d/ahp/1511%20001	ZH	

4. Select **one** entry as default per platform.
5. Save your entries.

5 Glossary

This topic explains the terms used to denote the content in its life-cycle stages from delivery to usage.

Term	Description
SAP Best Practices content	The entire inactive content (all solution packages) delivered by SAP. It serves as a reference for updates: Each new delivery is checked against the existing content before the content is updated. The SAP Best Practices content is the source from which the required solution packages are copied from.
Solution	The solution file and the installation data files which represent a solution package. These files are copied from the SAP Best Practices content to the solution builder. Country-specific solution versions are referred to as solutions.
Solution scope	Selection of scope items contained in one solution package or in several solution packages. This selection of scope items is saved under an own ID and represents the customer solution.
Customer solution	The solution scope used by the customer. Each country-specific customer solution scope is saved under an own solution ID.
Content activation	Process of writing the content of the customer solution into system tables.
Active content	Content of the customer solution which has been activated.
Customer adaptation content	Content adapted by the customer (so that it differs from the SAP Best Practices content)
Solution update	Unchanged solution file, but new or changed values in the installation files. Delivered as change packages.
Solution improvement	Changed solution file and adapted installation data files. Delivered as a new solution.
Change package	Solution builder artifact to track customer changes
Whitelist	Table containing a collection of customer tables that have to be cascaded to a new best-practice client before the content activation is triggered. Technically, these settings cannot be deployed via the solution builder.
Scope item	Smallest unit of the scope offered by a solution package, that can be used to create the implementation scope of a solution (with the implementation functions of the Solution Builder). A scope item can be, for example, a business process within an application area of a solution package.
Building block	A self-contained and reusable entity of business content. It is the smallest logical unit in the SAP Best Practices content architecture and includes customizing and/or master data steps for the respective piece of business content.

Important Disclaimers and Legal Information

Coding Samples

Any software coding and/or code lines / strings ("Code") included in this documentation are only examples and are not intended to be used in a productive system environment. The Code is only intended to better explain and visualize the syntax and phrasing rules of certain coding. SAP does not warrant the correctness and completeness of the Code given herein, and SAP shall not be liable for errors or damages caused by the usage of the Code, unless damages were caused by SAP intentionally or by SAP's gross negligence.

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Internet Hyperlinks

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