

S4 HANA Migration Cockpit



AGENDA

Introduction

Migration Objects

Migration Using Templates

Migration Using Tables

Migration Object Modeler

Questions



Introduction to S4 HANA Legacy Transfer Migration Cockpit



S/4HANA Migration Cockpit-Purpose

S/4 HANA migration cockpit is the migration tool which was initially designed for S/4HANA on-premise & cloud edition.

S/4 HANA Migration Cockpit is browser based (WordPro) interface. No additional setup or activation is required once we setup SAP S/4HANA system.



Key Features of Migration Cockpit

This tool is embedded and delivered with S/4HANA system.

No programming is required by the customer.

As the name suggests, this tool is used for migrating data from SAP or Non-SAP system to S/4HANA.

This tool has predefined migration object which contains the mapping for all master and transactional data. It reduces migration cost and time.

Migration activities are predefined and easy to use.

Advantages:

faster overall process (export/import), less clicks

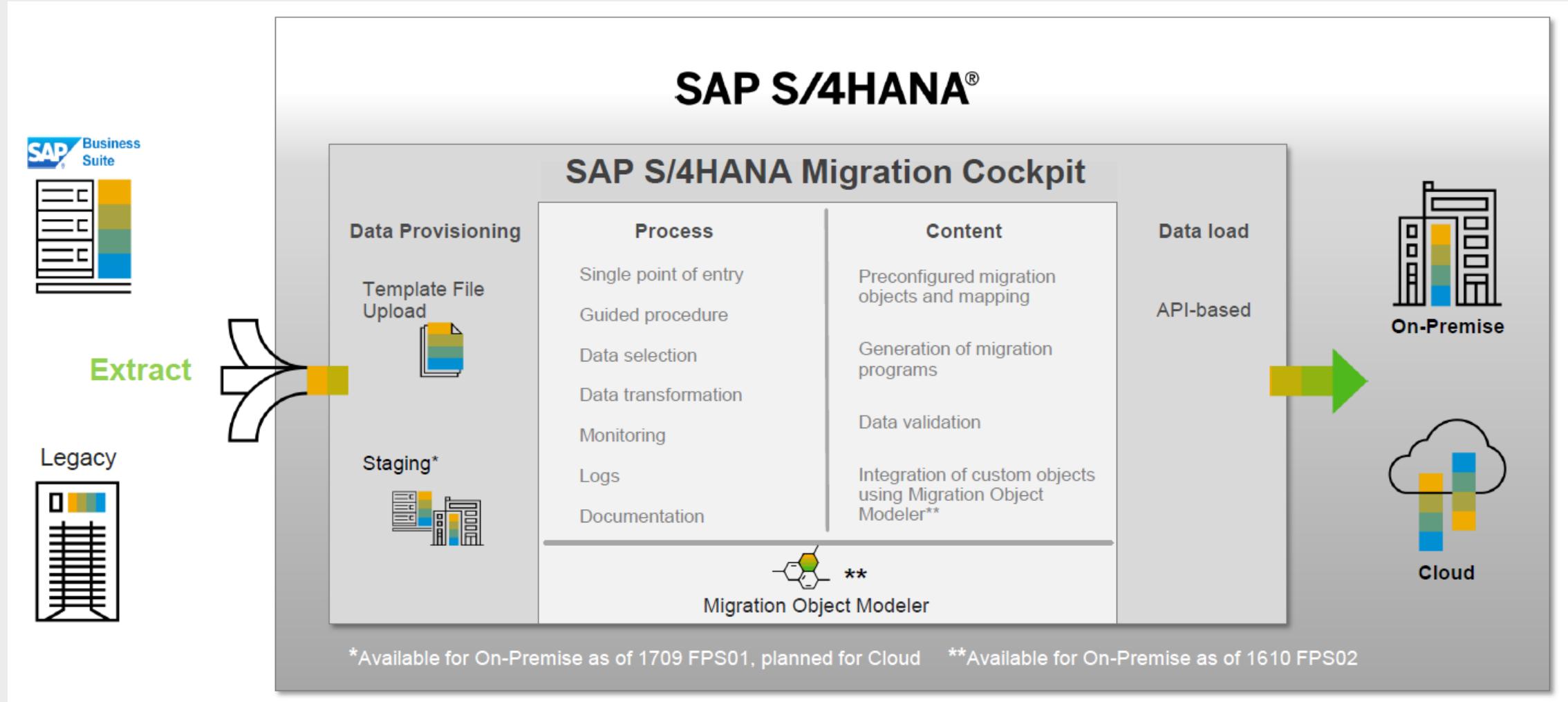
Performance

Use Database Tools to Extract and Transform

SAP S/4HANA Migration Cockpit –Overview



Cloud 1808 / On-Premise 1809



SAP S/4HANA Migration Cockpit –Migration Approaches



Transfer Data Using Files

- Download template file for relevant migration object
- Populate file with relevant business data
- Upload file to the SAP S/4HANA migration cockpit



Transfer Data Using Staging Tables

- Staging tables are created automatically (in an SAP HANA DB schema)
- Populate staging tables with business data
- Transfer data from staging tables to target SAP S/4HANA system



Planned
for 1811

Recommended
as of 1709 FPS02



Transfer Data Directly from SAP Source System (planned)

- Access source system database directly (ABAP-based SAP source systems only)
- Transfer data from SAP source system to target SAP S/4HANA system
- Supports data migration scenarios from other applications,
e.g. from SAP Apparel and Footwear (AFS) to S/4 Fashion and Vertical Business



SAP S/4HANA Migration Cockpit –File Upload –on-Premise Enhancements



- Default size limit for each uploaded XML 100 MB.
- If the file exceeds this limit, the message ‘File size too large’ is displayed.
- If you need to upload larger files, there are two options:
 - You can change a system parameter (icm/HTTP/max_request_size_KB) to increase the size limit for each uploaded XML file to 160MB.
 - You can zip several files together. Note that the combined size of all the XML files you want to add to the zip file must not exceed 160MB.**Limit for zip file is still 160 MB with adjusted system parameter.**



Cockpit tool Access:

We can access Cockpit tool in either URL or by using T-code LTMC in ERP. The below screen will be visible when you launch the Cockpit in either of above 2 ways .



SAP NetWeaver

System: DS4

Client:*

User:*

Password:*

Language: English ▾

Log On

Change Password



Once you login below screen will be visible with all available projects (or blank if new system)

SAP Migrate Your Data

Refresh

Available Migration Projects

Create Delete Open

Filter by:

| Migration Status | Name | Mass Transfer ID | Data Source |
|------------------|--|------------------|-------------|
| In Process | Test Creat Pricing condition | 00S | File |
| In Process | B2R_AR_TAMIM | 010 | File |
| In Process | B2R_CC | 00D | File |
| In Process | B2R_FA_ROL_TEST | 017 | File |
| In Process | B2R_GL | 004 | File |
| In Process | B2R_TEST_Samo | 01K | File |
| In Process | Bank_master_Data_Migration | 01N | File |
| In Process | B2R_GL | 01A | File |



Creating a New Project for Data Migration:

Click on Create New Migration Object and Select the Transfer Option – Transfer data from file.

Create Migration Project

* Name:

Transfer Options: Transfer Data from File
 Transfer Data from Staging Tables

If you want to copy content from a quality system to a productive system, the mass transfer ID must be identical in both systems.
To ensure that both systems have the same mass transfer ID, you can enter a mass transfer ID in the field below.

* Mass Transfer ID:

Data Retention Time: Days



Click on DEMO_PROJECT and it will enter the Project with all Migration Objects available.
Migration object comes with the following information:

Migration Project Details [Edit](#)

| | | | |
|----------------------|--|-------------------|-------------|
| Name: | DEMO_PROJECT | Migration Status: | Not Started |
| Data Source: | File | Mass Transfer ID: | 01W |
| Default View: | On-premise - Enterprise Management scope | | |
| Data Retention Time: | Days | | |

[Migration Objects](#) [Notifications](#) [Settings](#)

| View: | Standard View | Open | |
|------------------|---|----------------------|----------------------------|
| Migration Status | Name | Documentation | Dependent Migration Object |
| Not Started | Activity price (restricted) | Show | Activity type |
| Not Started | Activity type | Show | |
| Not Started | Bank | Show | |



Default Migration Object Auto Population with information:

- 1. Status-** Object can be active – available for migration, deactivate – not available for migration and started – migration has started on this object.
- 2. Object name-** It is migration object name which is relevant to customer master or transnational data.
- 3. Documentation-** Once we click on documentation it will open a new window where we can find all information on migration object like required structure, fields, uses.
- 4. Dependent migration object-** It shows a list of migration object that must be loaded first or already present in the system.

You can see all Conversion Objects are in Status **Not Started**.



For this Demo we are using Functional Location Object. When you Click on Functional Location Conversion Object, a popup comes asking for copying the Conversion. Click OK.

SAP

Migration Project: B2R_FA_Flow_Correction_Test

Save | Cancel | Back | Refresh | Export Content | Import Content

Migration Project Details

Migration Objects Notifications Settings

View: Standard View | Open | Filter by:

| Migration Status | Name | Documentation | Dependent Migration Object |
|------------------|---|---------------|-------------------------------|
| In Process | Fixed asset (incl. balances and transactions) | Show | Cost center |
| Not Started | Functional location | Show | |
| Not Started | Functional location task list | Show | Functional location |
| Not Started | G/L account | Show | |
| Not Started | General task list | Show | |
| Not Started | Inspection method | Show | QM/PM catalog code group/code |
| Not Started | Inspection plan | Show | Inspection method |

Warning

In order to facilitate the transfer of data, the migration object will be copied to the migration project.

Note that this may take some time.

OK **Cancel**



Migration Object Details

Migration Project: DEMO_PROJECT

Name: Functional location

Dependencies: This migration object does not have any dependencies to other objects.

Default View: On-premise - Enterprise Management scope

Active View: On-premise - Enterprise Management scope

Migration Status: In Process

Documentation: [Show](#)

No. of Data Transfer Jobs: 1

Source Files

| Migration Status | Name | Description | Size | Last Changed By | Last Changed On |
|-------------------------------------|------|-------------|------|-----------------|-----------------|
| Info No files uploaded | | | | | |
| | | | | | |
| | | | | | |

Open Delete Download Download Template Upload File Activate Deactivate Start Transfer

Search User



Migration Template overview:

Down-Load Template: From this window down load the template which you want to migrate .

For example in our case we are migrating Functional location object.

Click on down load template ,one xml file will be downloaded this is called template object and fill the data in all mandatory tabs of template according to client business .

Now before uploading the file we will first focus on one template to understand the structure of object and mandatory fields which needs to be fill the data for file upload .

A migration template (Microsoft Excel XML Spreadsheet 2003 file) consists of different sheets which are visible at the bottom of the migration template. You use the different sheets to specify the data that belongs to different data structures. For example the migration template for the migration object 'Material', contains a sheet for basic data, a sheet for plant data, and so on. Some sheets are mandatory, and some are optional.



FunctionalLocatio
n



Uploading file:

In this example we are uploading Functional Location file .After downloading the template fill the data in it and upload .

Note: All the mandatory fields needs to be fill other wise file uploaded will be failed with errors. The data should be in SAP standard format. Below screen shows the file upload process.

When we click on upload file it will show below screen.

File Upload

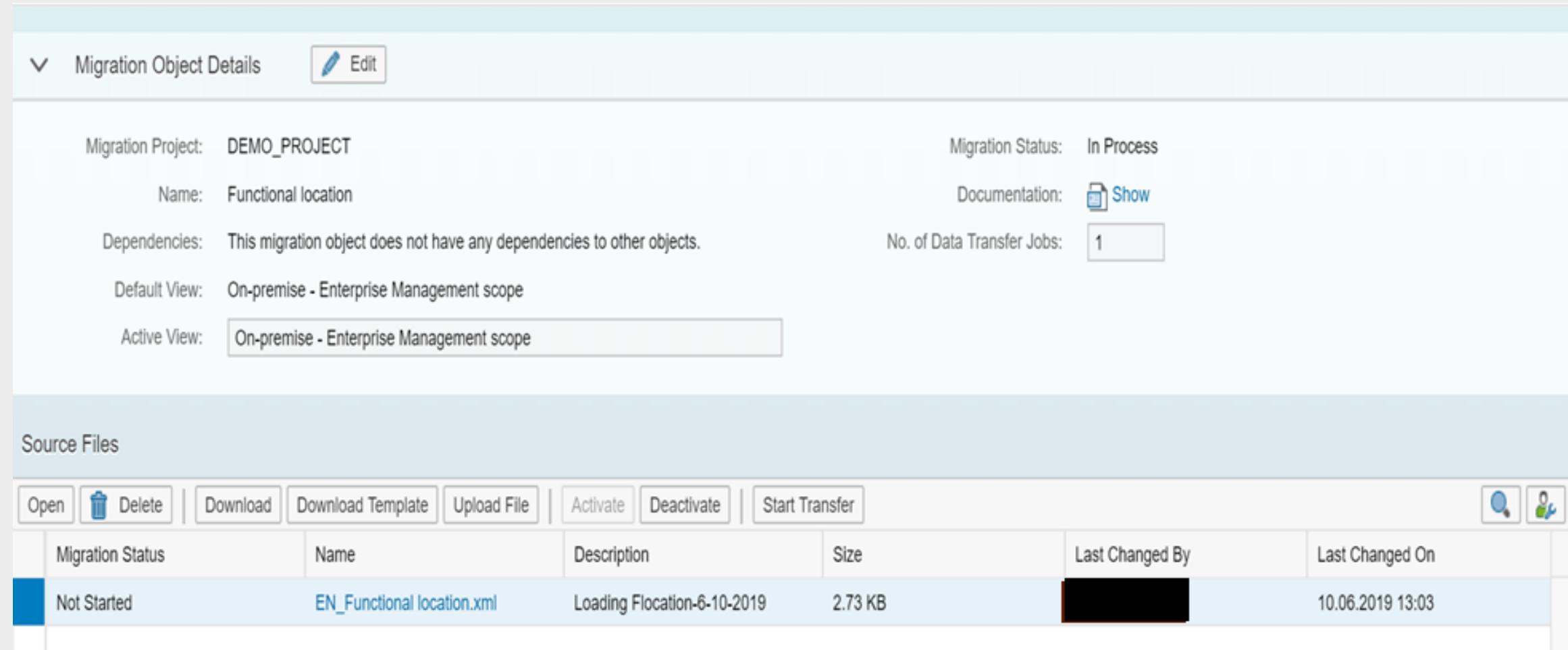
* File Name: No file chosen

Description:

Comment:

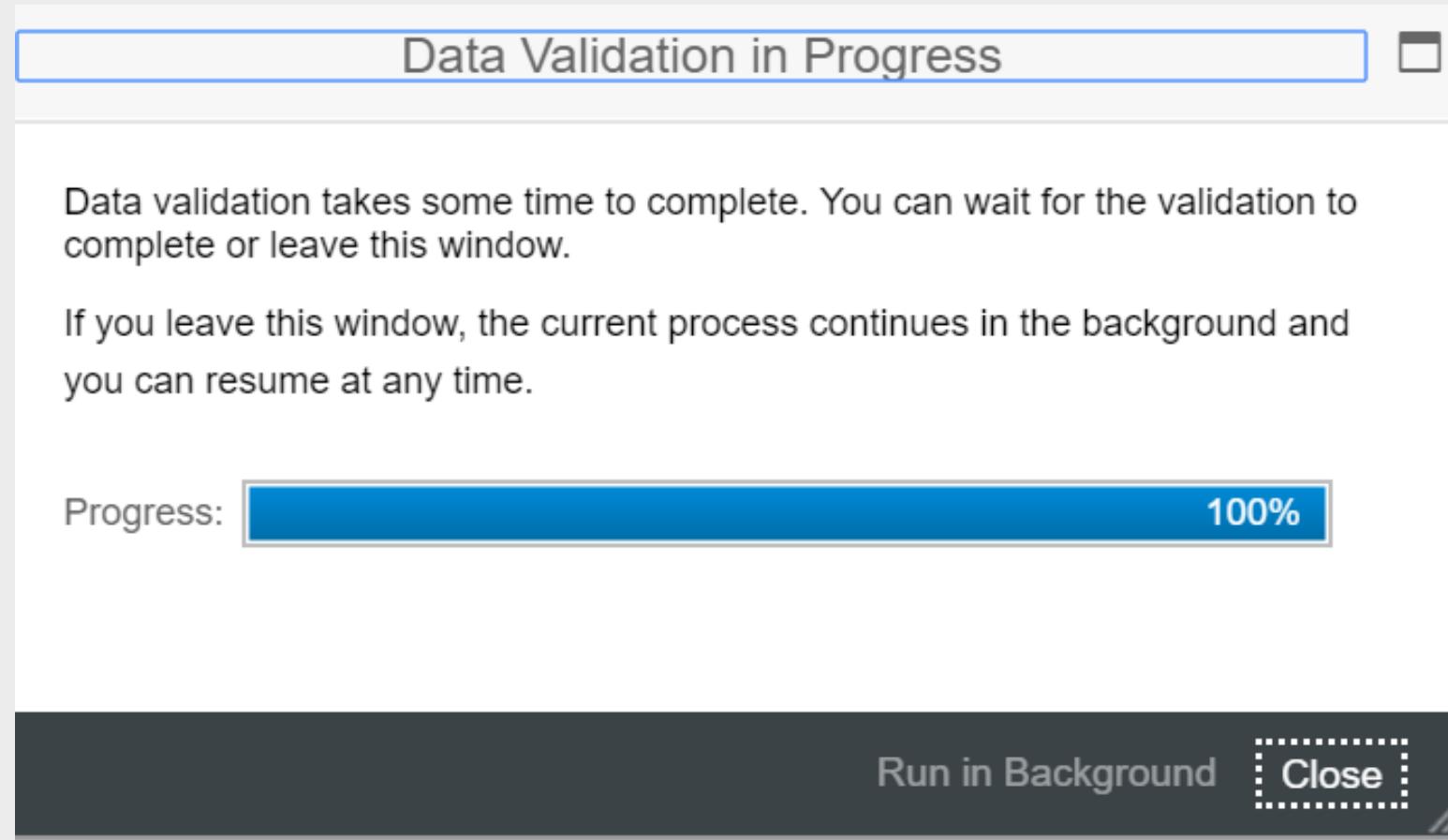
Click on upload then the below screen will be visible .

Select the below object click on activate button once activate button is disable then click on Start transfer tab.





It will give the warning .Click ok
Close below window when you see 100%





Click next in below screen:

Click next in below screen:

The validation checks the consistency of the data source, the source files or the staging tables. Review the notifications from validation and correct inconsistent values found in the data source.

| Source Files | | | | |
|----------------------------|-----------------------------|---------|-----------------|------------------|
| File Name | Description | Size | Last changed by | Last changed on |
| EN_Functional location.xml | Loading Flocation-6-10-2019 | 2.73 KB | MOHARAJU | 10.06.2019 13:10 |

Notifications from Validation

Priority: Information

| Description | Priority | Created on |
|-------------|----------|------------|
| | | |

When we click on next in above screen it will move to convert values.



SAP

Functional location: Step 2 (Convert Values)

< Previous Next > | Finish | Skip 'Simulate Import' | Cancel | Refresh

1 2 3 4

Validate Data Convert Values Simulate Import Execute Import

Process all open tasks in the worklist.

Worklist

Show: Open Process Task Confirm Mapping Values

| Status | Name |
|--------|--|
| ● | Mapping of ABC Indicator for technical object |
| ● | Mapping of Work center |
| ● | Mapping of Plant section |
| ● | Mapping of Company Code |
| ● | Mapping of Single equipment install. at Func. Loc. |
| ● | Mapping of Functional location category |

SAP

Functional location: Step 2 (Convert Values)

< Previous Next > | Finish | Skip 'Simulate Import' | Cancel | Refresh

1 2 3 4

Validate Data Convert Values Simulate Import Execute Import

Process all open tasks in the worklist.

Worklist

Show: Completed Process Task

| Status | Name |
|--------|--|
| ● | Mapping of ABC Indicator for technical object |
| ● | Mapping of Work center |
| ● | Mapping of Plant section |
| ● | Mapping of Company Code |
| ● | Mapping of Single equipment install. at Func. Loc. |
| ● | Mapping of Functional location category |
| ● | Mapping of Cost Center |
| ● | Mapping of Functional Location Structure Indicator |



When we click on next in above screen it will move to convert values.

Process all open tasks in the worklist.

Worklist

| Show: | Open | Process Task | Confirm Mapping Values |
|--------------------------|---------------------|--------------|------------------------|
| <input type="checkbox"/> | Status | | Name |
| <input type="checkbox"/> | All tasks processed | | |
| <input type="checkbox"/> | | | |
| <input type="checkbox"/> | | | |
| <input type="checkbox"/> | | | |

1 Validate Data 2 Convert Values 3 Simulate Import 4 Execute Import

< Previous Next > | Finish | Skip 'Simulate Import' | Cancel | Refresh



When we click on next in above screen it will move to below screen.

Next >

Validate Data Convert Values Simulate Import Execute Import

The simulation checks the consistency of the data source, the source files or the staging tables. Review the notifications from simulation and correct inconsistent values found in the data source.

Source Files

| File Name | Description | Size | Last changed by | Last changed on |
|----------------------------|-----------------------------|---------|-----------------|------------------|
| EN_Functional location.xml | Loading Flocation-6-10-2019 | 2.73 KB | [REDACTED] | 10.06.2019 13:10 |



Click next it will go to below screen .Click finish if you don't see any errors in below window.

< Previous | Next > | Finish | Back to 'Convert Values' | Cancel | Refresh | Repeat Import

✓ All files have been processed; choose "Finish" to complete the transfer

1 2 3 4

Validate Data Convert Values Simulate Import Execute Import

Source Files

| File Name | Description | Size | Last changed by | Last changed on |
|-----------------------|-------------|------|-----------------|-----------------|
| No active files found | | | | |

Notifications from Transfer

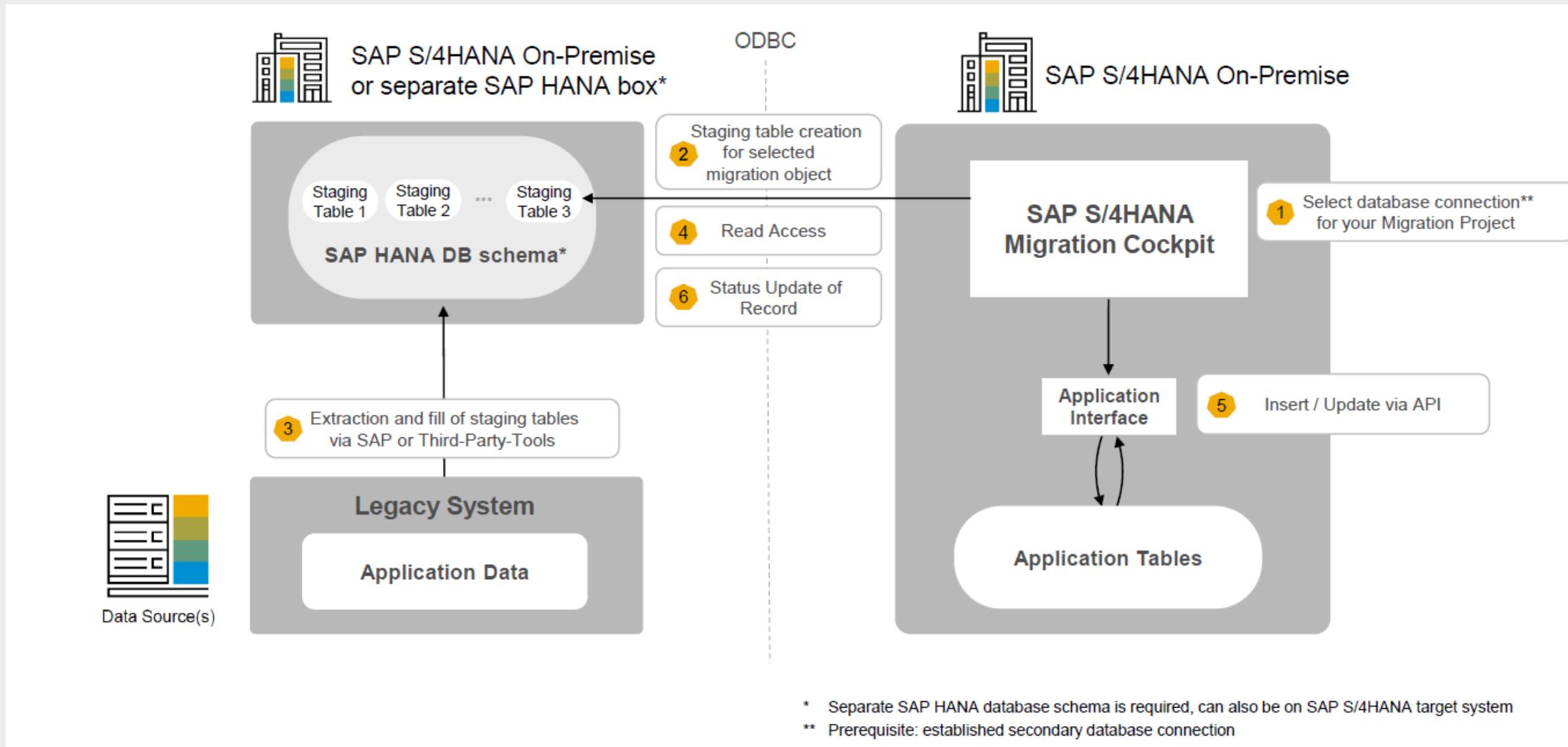
Priority: Information

| Description | Priority | Created on |
|---|-------------|---------------------|
| Start of processing for file EN_Functional location.xml | Information | 10.06.2019 13:28:33 |

SAP S/4HANA Migration Cockpit -Transfer Data Using Staging Tables



System Setup (On-Premise)



Transfer Data using Staging tables:



Using Staging tables in Migration Cockpit we can use Database Tables as a source for your Migration Project. These are called as 'Staging Tables', so you extract the data from the source system into these staging tables and import the data from there with the S/4HANA Migration Cockpit. SAP Data Services as a method to populate Staging Database.

Create a Database Connection:

The first step in using Staging table is to create a Database Connection between S/4 and the schema where the Staging tables will reside .The Staging tables can exist in a remote database or in the target S/4HANA database (but in a separate Schema).

Go to transaction DBCO to create the database connection

Display View "Description of Database Connections": Details

| | | | |
|------------------|-------------------------------------|--|--|
| | | | |
| DB Connection | STG_R10 | | |
| DBMS | HDB | | |
| User Name | STG_R10_USER | | |
| DB password | / | | |
| Conn. info | sapz00dbsd000...30059 | | |
| Permanent | <input checked="" type="checkbox"/> | | |
| Connection Limit | 0 | | |
| Optimum Conns | 0 | | |

Change View "Whitelisting of database connections"

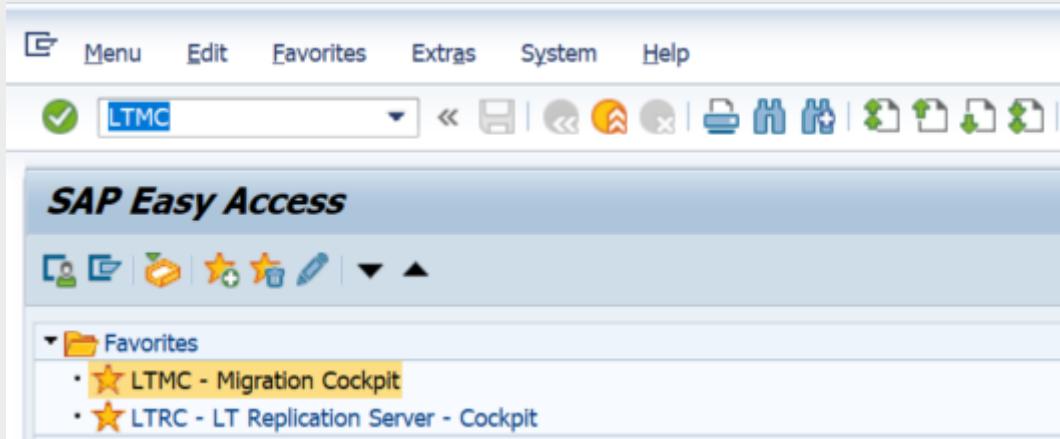
| | | | | | |
|---|---------|--|--|--|--|
| | | | | | |
| Whitelisting of database connection for on premise scenario | | | | | |
| DB Connection Name | STG_R10 | | | | |

White-List the connection in
DMC_C_WL_DBCO_OP using transaction SM30

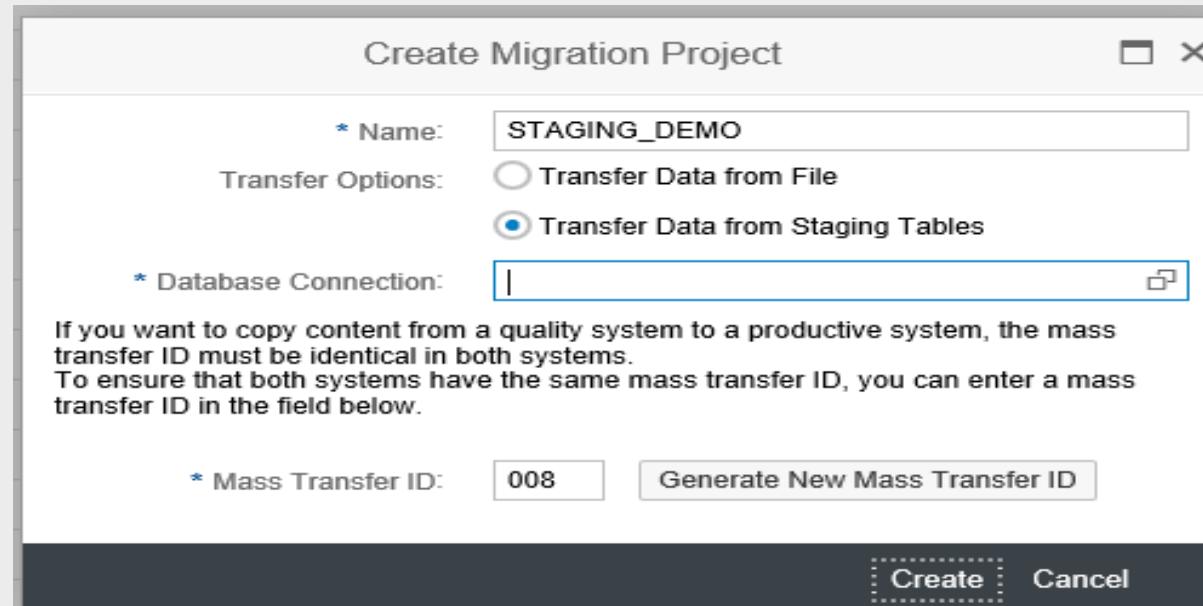
Creating a New Project for Data Migration



Go to Transaction LTMC – Migration Cockpit.



Click on Create New Migration Object and Select the Transfer Option – Transfer Data from Staging Tables.



When you select the Database Connection from above screen, you can see the Database connection created in DBCO in previous Step.

The screenshot shows two overlapping SAP Migration Workbench windows. The top window is titled 'Create Migration Project' and contains fields for 'Name' (STAGING_DEMO), 'Transfer Options' (selected 'Transfer Data from Staging Tables'), and 'Database Connection'. Below these are notes about mass transfer IDs and a 'Mass Transfer ID' field set to 008. The bottom window is titled 'Search: Database Connection' and shows search criteria for 'DB Connection Name' and 'Connection info.', both set to 'is'. It includes a 'Personal Value List' button, a checkbox for 'Maximum Number of Results' (set to 500), and buttons for 'Search', 'Clear Entries', and 'Reset to Default'. The results list displays one result: 'STG_R10' under 'DB Connection' and 'sapz00dbsd000.e...' under 'Connection info.'

Once you Select Click on Create. Select it and Save and the Migration Object is ready for use. I have named it as STAGING_DEMO .

The screenshot shows the 'Available Migration Projects' table in the SAP Migration Workbench. The table has columns for 'Migration Status', 'Name', 'Mass Transfer ID', and 'Data Source'. It lists three projects: 'In Process' (STAGING, 007, Staging Tables), 'Not Started' (STAGING_DEMO, 008, Staging Tables), and another row for STAGING_DEMO which is highlighted with a yellow background.

| Available Migration Projects | | | | |
|------------------------------|------------------|------|------------------|-------------|
| | Migration Status | Name | Mass Transfer ID | Data Source |
| In Process | STAGING | 007 | Staging Tables | |
| Not Started | STAGING_DEMO | 008 | Staging Tables | |



You can see all Conversion Objects are in Status Not Started. For this Demo I am using BANK Master Conversion Object. When you Click on BANK Conversion Object, a popup comes asking for copying the Conversion Object and Creating Staging tables.
Click OK.

Few things that you can see here:

Status – Synchronized

Structure – S_BNKA

Staging Table – /1LT/DSR10000003

SAP

Migration Object: Bank

Save | Cancel | < Back | Refresh

Migration Object Details Edit

Migration Project: STAGING_DEMO Migration Status: In Process
Name: Bank Documentation: [Show](#)
Dependencies: This migration object does not have any dependencies to other objects. DB Connection Name: STG_R10
Default View: On-premise - Enterprise Management scope No. of Data Transfer Jobs: 1
Active View: On-premise - Enterprise Management scope

Staging Tables

Open | Start Transfer | Start Synchronization | Restart Transfer

| Migration Status | Structure | Description | Staging Table |
|------------------|-----------|-------------|------------------|
| Synchronized | S_BNKA | Bank Master | /1LT/DSR10000003 |

Click on the table /1LT/DSR10000003 and you can see there is no records right now as below.

Data Records

Processing Status: Error (0) Delete Selected Records Reset Status

| Key | Address | Control data |
|-----------------|-----------|--|
| Bank country... | Bank key* | Name of bank* Region (Stat...) House numb... City Bank branch SWIFT code... Post Office B... Bank number |

No data



Insert data into staging table using BODS or S4 HANA table
Upload methods

| SQL *SQL Console 1 "STG_R10_USER"."1LT/DSR1000003" X | | | | | | | | | | | |
|--|----------|----------|----------|---------------|----------|----------|----------|----------|----------|----|----|
| Raw Data Distinct values Analysis | | | | | | | | | | | |
| Filter pattern 1 rows retrieved - 31 ms Execute Add filter | | | | | | | | | | | |
| AB BANKS | AB BANKL | AB BANKA | AB PROVZ | AB STRAS | AB ORT01 | AB BRNCH | AB SWIFT | AB XPGRO | AB BNKLZ | AB | AB |
| AU | 345-678 | ANZ BANK | NSW | 15 HUNTER ... | SYDNEY | MAIN | SWIFT | X | 01 | 01 | |

Load the data using Migration Cockpit

The last and main Step is to Migrate this Data into S/4 using the Migration Cockpit

Migration Object Details Edit

| | |
|--------------------|--|
| Migration Project: | STAGING_DEMO |
| Name: | Bank |
| Dependencies: | This migration object does not have any dependencies to other objects. |
| Default View: | On-premise - Enterprise Management scope |
| Active View: | On-premise - Enterprise Management scope |

Staging Tables

Open | Start Transfer | Start Synchronization | Restart Transfer

| | Migration Status | Structure | Description |
|--|------------------|-----------|-------------|
| | Synchronized | S_BNKA | Bank Master |



1. The Validate Data Step will come with Errors and Warnings .

The validation checks the consistency of the data source, the source files or the staging tables. Review the notifications from validation and correct inconsistencies.

Notifications from Validation

| Description | Priority | Created on |
|---|-------------|---------------------|
| Missing translation combination added; maintain translation value | Information | 28.02.2019 04:00:32 |
| Missing translation combination added; maintain translation value | Information | 28.02.2019 04:00:32 |
| Missing translation combination added; maintain translation value | Information | 28.02.2019 04:00:32 |
| End of processing Z_BANK_MASTER_008 | Information | 28.02.2019 04:00:32 |

2. Click Next and you see the Mapping errors. These are technically not errors, but S/4 just validates the value we are passing matches the help values for that field.

| Status | Name |
|--------|--------------------------|
| Red | Mapping of Bank Key |
| Red | Mapping of Country key |
| Red | Mapping of Regional code |

3. Click on each field and just Select and Press the key

Bank: Step 2 (Convert Values)

| Name: | ID: | View: All Append Row Insert Row Delete Row | | |
|--------|----------------|--|----------------------|--|
| Status | Source Country | Source Bank key | S/4HANA Target Value | |
| AU | 345-678 | 345-678 | 345-678 | |

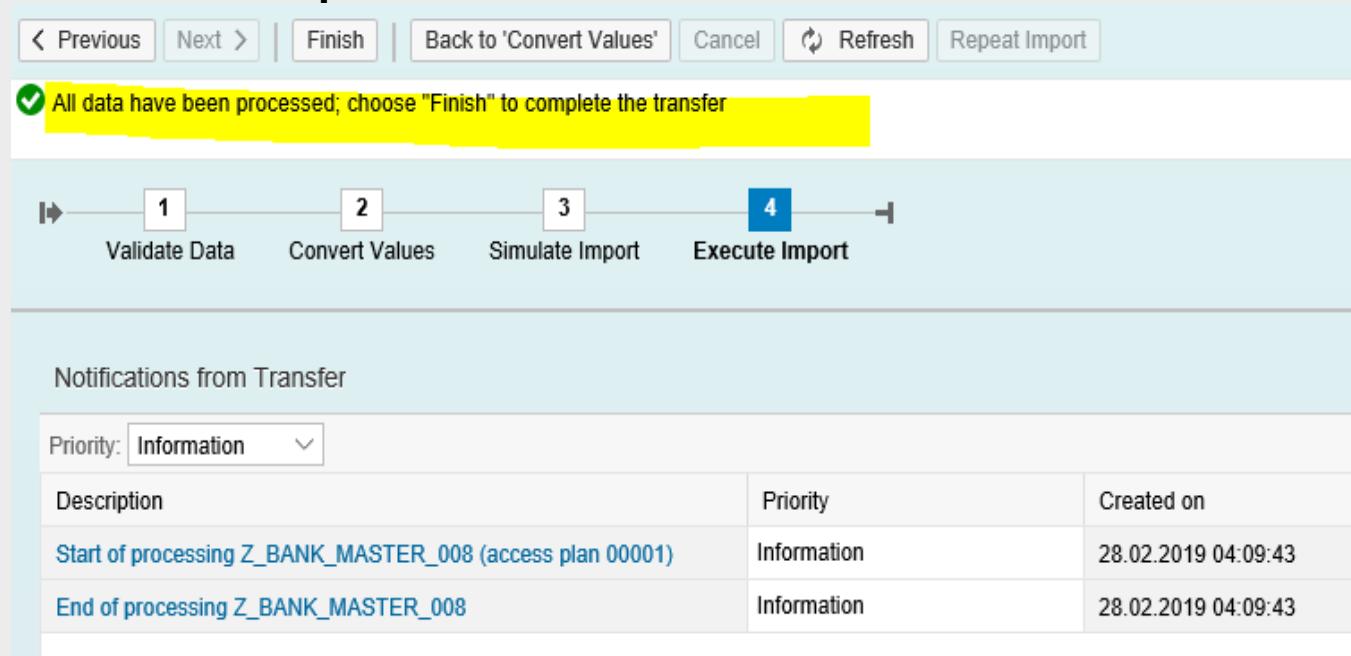
4. The field turns Green Status. DO this for all the fields in red.

Bank: Step 2 (Convert Values)

| Name: | ID: | View: All Append Row Insert Row Delete Row | | |
|--------|----------------|--|----------------------|---------------|
| Status | Source Country | Source Bank key | S/4HANA Target Value | Confirm Value |
| Green | AU | 345-678 | 345-678 | |

1. The simulate gives a Success message that the Data is good for Commit.

You get the message at the Top: All data have been processed; choose “Finish” to complete the transfer



2. Click on Finish to Finish the Load and Commit the values. The load is finished and you can see the processed records in Migration Cockpit.



The following considerations when deciding on the most suitable approach for your project:

| Consideration | Files | Staging Tables |
|-----------------------|---|--|
| Size Limit | 160MB limit for SAP S/4HANA Migration Cockpit.* | No Limit. |
| System Considerations | None. | Staging system uses an SAP HANA database. |
| Data Provisioning | Enter data manually in each Microsoft Excel XML file. | Fill tables manually or by using preferred tools (for example SAP Agile Data Preparation). |



Thank you – Day1 A yellow square icon with a red smiley face in the center. The smiley face has two black dots for eyes and a curved red line for a smile. The entire icon is surrounded by a thin blue border.

Preconfigured Business Objects (On-Premise 1809)



Migration of Master and Transactional Data

| | | | |
|-----------------------------------|--|---|-------------------------------|
| Activity Price (restricted) | Exchange rate | Material consumption | Consent |
| Customer material | Material | Characteristic | G/L account |
| Maintenance item | Batch (if Batch is unique at material level) | Fixed asset (incl. balances and transactions) | Material long text |
| Activity Type | FI –Accounts payable open item | Material –extend existing record by new org level | Cost center |
| Equipment | Material BOM | Class | General task list |
| Maintenance plan | Batch (if Batch is unique at plant level) | Functional location | Material trade classification |
| Bank | FI –Accounts receivable open item | Material inspection setting | Customer |
| Equipment task list | Material classification | Condition contract | Inspection method |
| Master inspection characteristics | Cash memo record | Functional location task list | Pricing condition(general) |
| Bank account balance | FI –G/L account balance and open/line item | Material inventory balance | Customer (deprecated) |

| | | |
|---|---|--|
| Inspection plan | Purchase order (only open PO) | QM selected set code |
| Pricing condition (purchasing) | Work center | Routing |
| Customer -extend existing record by new org levels | Purchase scheduling agreement | Sales contract |
| Internal order (restricted) | VC –Variant configuration profile | Sales order (only open SO) |
| Pricing condition (sales) | Purchasing contract | Software/Hardware constraint |
| Customer -extend existing record by new org levels (deprecated) | Work center | Sourcelist |
| Legal transaction | Purchasing info record-extend existing record | Supplier |
| Production version | Purchasing info record with conditions | Supplier (deprecated) |
| Profit center | QM/PM catalog code group/code | Supplier –extend existing record by new org levels |
| Supplier –extend existing record by new org levels (deprecated) | QM selected set | |



Working with LTMOM

LTMOM: Is used to Adding additional fields to a migration object.

To start the migration object modeler enter LTMOM TCode in the SAP GUI. NOTE: To run the necessary transaction your user needs the following role:
SAP_CA_DMC_MC_DEVELOPER.

Customization offers in two ways:

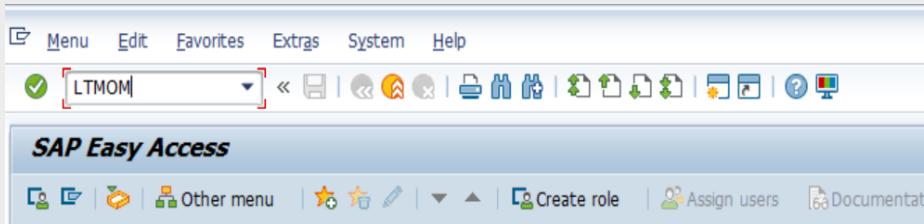
1. Existing target structure attributes addition/modification in source structure/template
2. Creating new target structure/attributes (needs ABAP customization to the function module/ZBAPI)



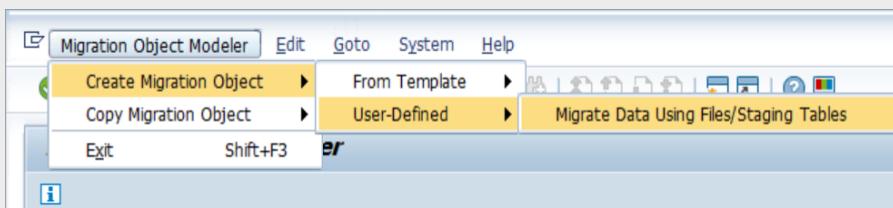
CREATING CUSTOM OBJECTS USING LTMOM



- Enter the Transaction Code **LTMOM** to start the **SAP S/4HANA Migration Object Modeler**.



- Click on **Migration Object Modeler** → **Create Migration Object** → **User-Defined** → **Migrate Data Using Files/Staging Tables**.





- Enter the corresponding **Project Name**, **Object Name** (which will be prefixed with 'Z_' and suffixed with the Mass Transfer Id depending on the selected project), **Description** (Optional). Then select the **Source Structure** (Files or Staging Tables) and **Target Structure** (in our case '**Function Module**').

Create User-Defined Migration Object

| | |
|-------------------------------|---------------------------|
| Project Name | SW_OBJECTS |
| Migration Object ID | Z_SOM_SUBS_CON _002 |
| Description | SOM Subscription Contract |
| Define Source Structure Using | Files |
| Define Target Structure Using | FUMO Function Module |

Next



- Now on the following screen, Input the **Function Module/BAPI Name** for target structure and the **Processing Business Object Instances** (Either One or Multiple Instances at a time).

Create User-Defined Migration Object

Project Name: SW_OBJECTS

Define Target Structure

Name of Function Module: CRMS4_SOM_SUBSCRPN_CONTR_MIG

Options for Processing Business Object Instances

Process One Instance at a Time

Process Multiple Instances at Once

Custom Include Programs

Include for Changing Data Before Transfer

Parameter that Returns Result

Include for Handling the Result Parameter

Simulation Settings

Parameter for Simulation

Value for Simulation

Value for Writing Data

Back



➤ Options for processing Business Object Instances –

Process One Instance at a Time: The system will only pass one instance at a time to the function module. This means if N instances are read, the function module will be called N times.

Process Multiple Instance at a Time: The system will pass all instances to the function module at once. This means that the function module is called only once.

Choose one instance per time.

- Enter the **Return Parameter Settings** and **Simulation Settings (Optional)**.

Options for Return Parameter Settings –

Return Parameter (Optional) – This should be a table with BAPIRET2 type that will store all the messages. Choose RETURN parameter.

Include for Handling the Result Parameter (Optional) – This will create an perform where you will be able to give some extra treatment to the messages.

➤ Options for Simulation Settings –

Simulation Parameter (Optional), it's the flag name that the object will know if it's or not a test execution.

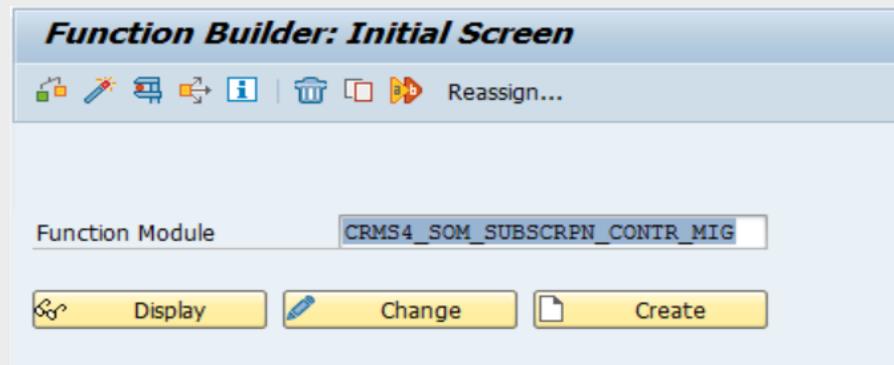
Value for Simulation (Optional), this is the value of the flag that will be used as a test flag.

Value for Writing Data (Optional), this is the value of the flag that will be used as a execute flag



Go to Function Module in SAP

- The source structure is created by taking the reference of **BAPI** that can be checked by using **Transaction Code SE37**.



- The tables and source code of the BAPI can be checked here.

| Parameter Name | Typing | Associated Type | Optional | Short text | Long T... |
|--------------------|--------|------------------------|-------------------------------------|---|-----------|
| IT_GEN_DATA | LIKE | CRMS4S_SOM_ISX_GEN_... | <input type="checkbox"/> | General Data for Subscription Order M... | |
| IT_ALT_PARTNER | LIKE | CRMS4S_SOM_ALT_PART... | <input type="checkbox"/> | List of Alternative Partners for Subscri... | |
| IT_ITEMS | LIKE | CRMS4S_SOM_ISX_ITEM... | <input type="checkbox"/> | Order Items Tab for Subscription Ord... | |
| IT_TECH_RES | LIKE | CRMS4S_SOM_ISX_TECH... | <input checked="" type="checkbox"/> | List of Technical Resources for Subscri... | |
| IT_DISCOUNT | LIKE | CRMS4S_SOM_ISX_DISC... | <input checked="" type="checkbox"/> | Discounts Tab Migration API | |
| IT_PRICE_COMPONENT | LIKE | CRMS4S_SOM_ISX_PRIC... | <input checked="" type="checkbox"/> | Pricing Component for Subscription O... | |
| ET_KEY_MAPPING | LIKE | CRMS4S_SOM_MIG_OBJ_... | <input type="checkbox"/> | Migration -Return Objects Table of Pr... | |
| ET RETURNS | LIKE | F54MIG_S_BAPIRET2 | <input type="checkbox"/> | Return Parameter Table for S/4 Migr... | |



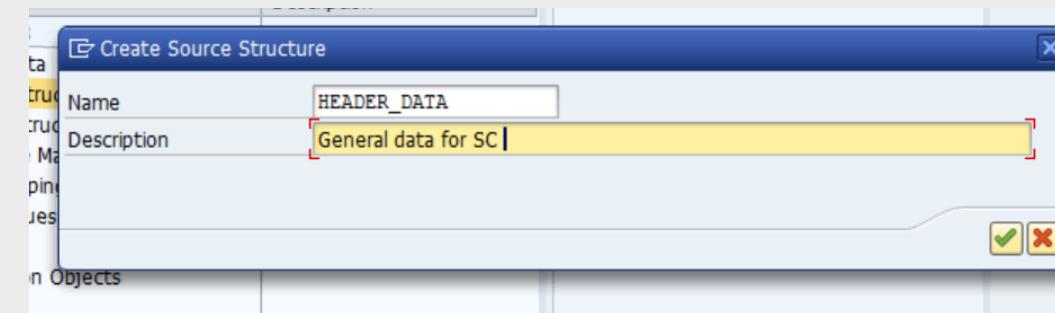
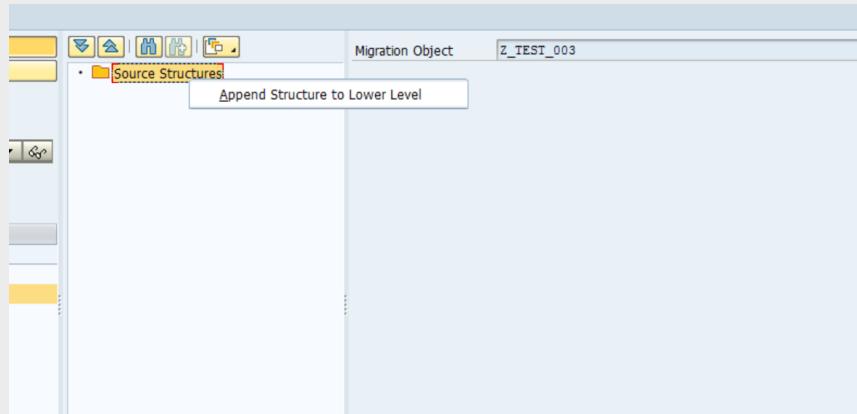
• Source Structures

For creating/ modifying the Source Structure, ensure that the corresponding object is in **Change Mode** by clicking on the **Display-Change Mode**.

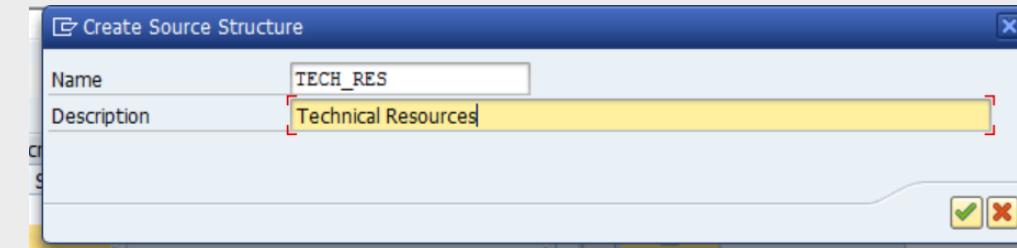
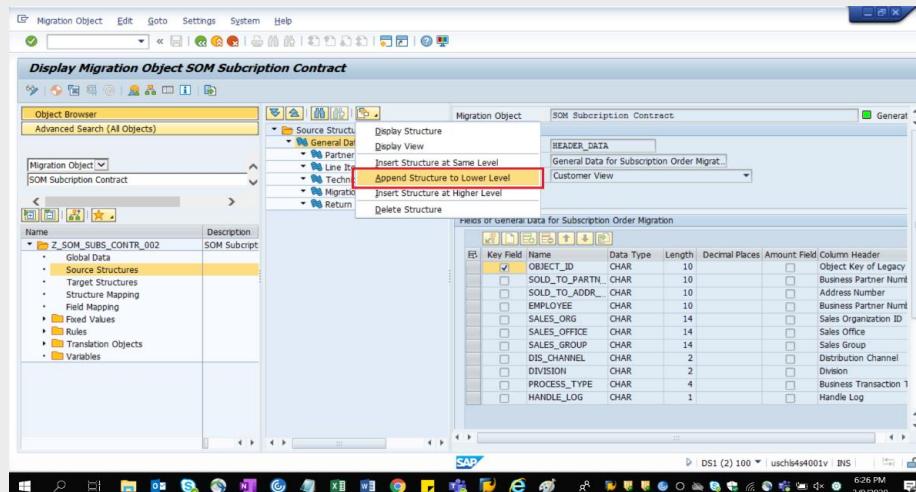
The screenshot shows the SAP Object Browser interface. The toolbar at the top includes icons for back, forward, search, and various navigation functions. Below the toolbar, the 'Object Browser' and 'Advanced Search (All Objects)' tabs are visible. In the search bar, 'Migration Object' is selected, and 'SOM Subscription Contract' is entered. The main area displays a table with two columns: 'Name' and 'Description'. A single row is shown, representing a folder named 'Z_SOM_SUBS_CONTR_001' with a description of 'SOM Subscription Contract'. This row has a plus sign next to it, indicating it can be expanded. The table also includes standard SAP navigation buttons like 'New', 'Edit', 'Delete', and 'Star' at the top left. At the bottom right of the table, there are small navigation arrows.

- Click on the **Source Structure** and right click to get a list of options adding structures at the lower, same or higher level as per required.

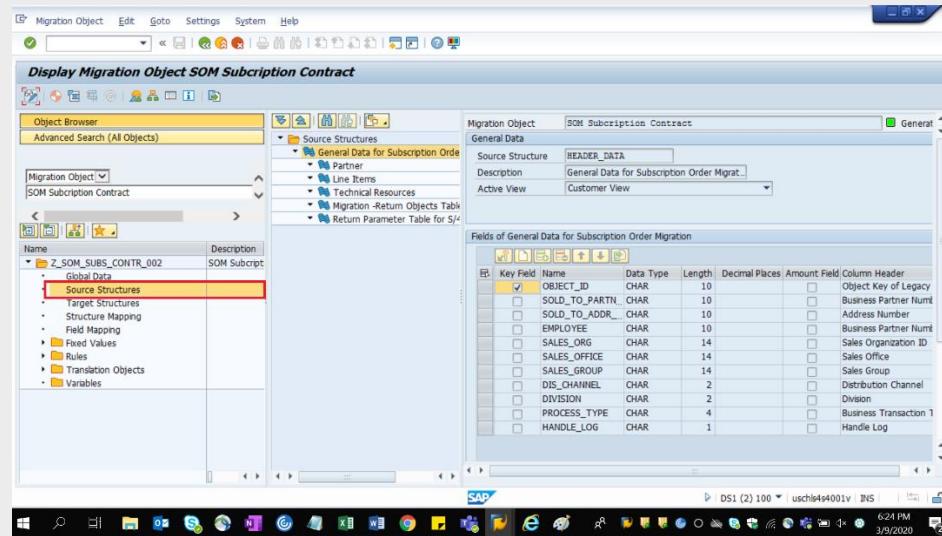
Firstly, create a Header Structure as Root. Enter a **Name** and **Description** for the structure.



- Append Child structures under Header structure.



- Final Structure for the object is created



- Choose 'Add Field' to add fields to the structure.

SAP Migration Object - Display Migration Object SOM Subscription Contract

Migration Object: SOM Subscription Contract

Source Structure: HEADER_DATA

Description: General Data for Subscription Order Migrat...

Active View: Customer View

Fields of General Data for Subscription Order Migration

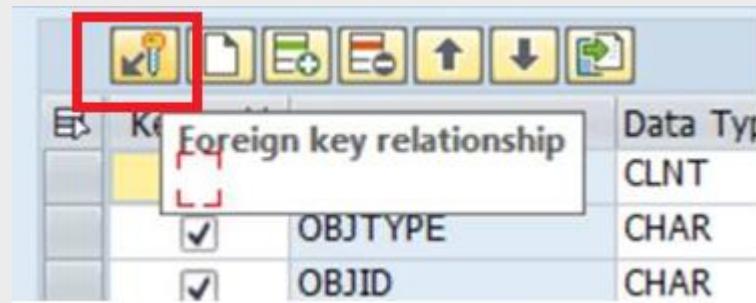
| Key Field | Name | Data Type | Length | Decimal Places | Amount Field | Column Header |
|-------------------------------------|-----------------|-----------|--------|----------------|--------------------------|------------------------|
| <input checked="" type="checkbox"/> | OBJECT_ID | CHAR | 10 | | <input type="checkbox"/> | Object Key of Legacy |
| <input type="checkbox"/> | SOLD_TO_PARTN.. | CHAR | 10 | | <input type="checkbox"/> | Business Partner Numt |
| <input type="checkbox"/> | SOLD_TO_ADDR... | CHAR | 10 | | <input type="checkbox"/> | Address Number |
| <input type="checkbox"/> | EMPLOYEE | CHAR | 10 | | <input type="checkbox"/> | Business Partner Numt |
| <input type="checkbox"/> | SALES_ORG | CHAR | 14 | | <input type="checkbox"/> | Sales Organization ID |
| <input type="checkbox"/> | SALES_OFFICE | CHAR | 14 | | <input type="checkbox"/> | Sales Office |
| <input type="checkbox"/> | SALES_GROUP | CHAR | 14 | | <input type="checkbox"/> | Sales Group |
| <input type="checkbox"/> | DIS_CHANNEL | CHAR | 2 | | <input type="checkbox"/> | Distribution Channel |
| <input type="checkbox"/> | DIVISION | CHAR | 2 | | <input type="checkbox"/> | Division |
| <input type="checkbox"/> | PROCESS_TYPE | CHAR | 4 | | <input type="checkbox"/> | Business Transaction T |
| <input type="checkbox"/> | HANDLE_LOG | CHAR | 1 | | <input type="checkbox"/> | Handle Log |

Fields of Technical Resources

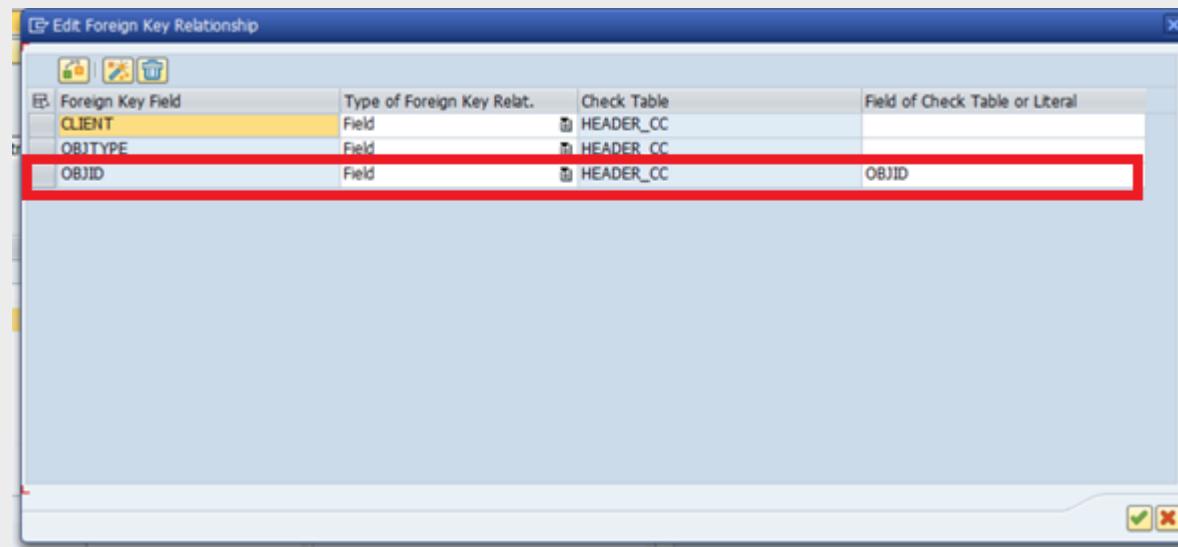
| Key | Add Field | Data Type | Length | Decimal Places | Amount Field | Column Header |
|-------------------------------------|-------------|-----------|--------|----------------|--------------------------|------------------------|
| <input checked="" type="checkbox"/> | TR_ID | CHAR | 10 | | <input type="checkbox"/> | Object Key of Legacy |
| <input checked="" type="checkbox"/> | ITEM_NUMBER | NUMC | 10 | | <input type="checkbox"/> | Item Number |
| <input type="checkbox"/> | TR_TYPE | CHAR | 2 | | <input type="checkbox"/> | Technical Resource T |
| <input type="checkbox"/> | TR_SLOT | NUMC | 6 | | <input type="checkbox"/> | Number of Technical F |
| <input type="checkbox"/> | TR_OBJ_ID | CHAR | 50 | | <input type="checkbox"/> | TC: ID of Technical Re |



- Create Foreign key relationship for every child structure with primary key of header structure.



| Key | Foreign key relationship | Data Type |
|-----|--------------------------|-----------|
| | CLNT | CHAR |
| | OBJTYPE | CHAR |
| | OBJID | CHAR |



| Foreign Key Field | Type of Foreign Key Relat. | Check Table | Field of Check Table or Literal |
|-------------------|----------------------------|-------------|---------------------------------|
| CLIENT | Field | HEADER_CC | |
| OBJTYPE | Field | HEADER_CC | |
| OBJID | Field | HEADER_CC | OBJID |



- We can change the **Structure / Fields** present by making it either **Required / Visible / Not Visible** as per need.

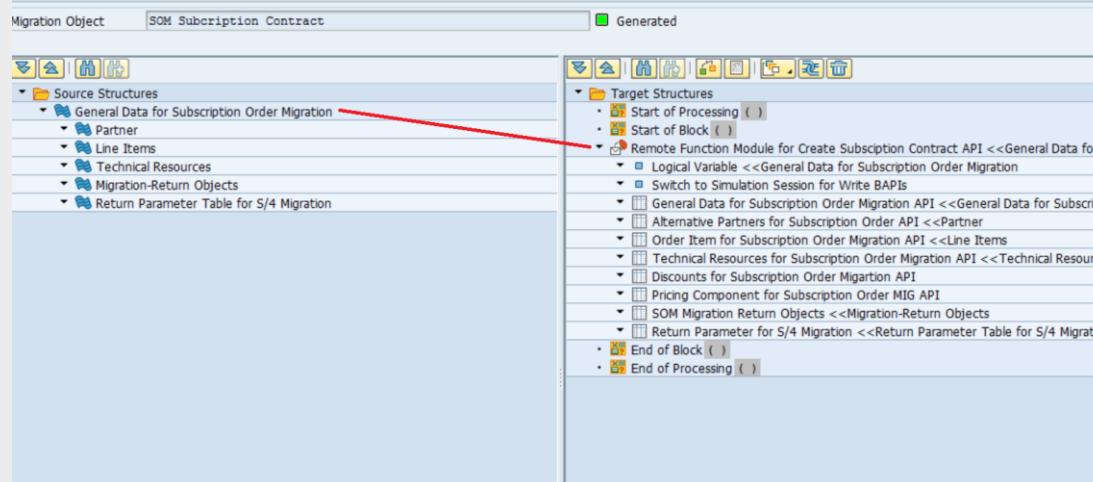
The screenshot shows the SAP Migration Workbench interface. In the top navigation bar, 'Migration Object' is set to 'SOM Subscription Contract'. A context menu is open over a table of fields, with the 'Change View' option highlighted in yellow and surrounded by a red box. The table lists fields such as OBJECT_ID, ITEM_NUMBER, TR_TYPE, TR_SLOT, TR_OBJ_ID, and TR_OBJ_KEY, each with its data type, length, decimal places, and other properties.

This screenshot shows the 'General Data for Subscription Order' view structure. It includes sections for Partner, Line Items, Technical Resources, Migration -Return Objects Table, and Return Parameter Table for S/4. The 'Technical Resources' section is currently selected.

| Type | Name | Customer View |
|-----------|---|---------------|
| Structure | General Data for Subscription Order Migration | Required |
| Field | Object Key of Legacy System | Required |
| Field | Business Partner Number | Not Visible |
| Field | Address Number | Visible |
| Field | Business Partner Number | Required |
| Field | Sales Organization ID | Not Visible |
| Field | Sales Office | Not Visible |
| Field | Sales Group | Not Visible |
| Field | Distribution Channel | Not Visible |
| Field | Division | Not Visible |
| Field | Business Transaction Type | Not Visible |
| Field | Handle Log | Not Visible |

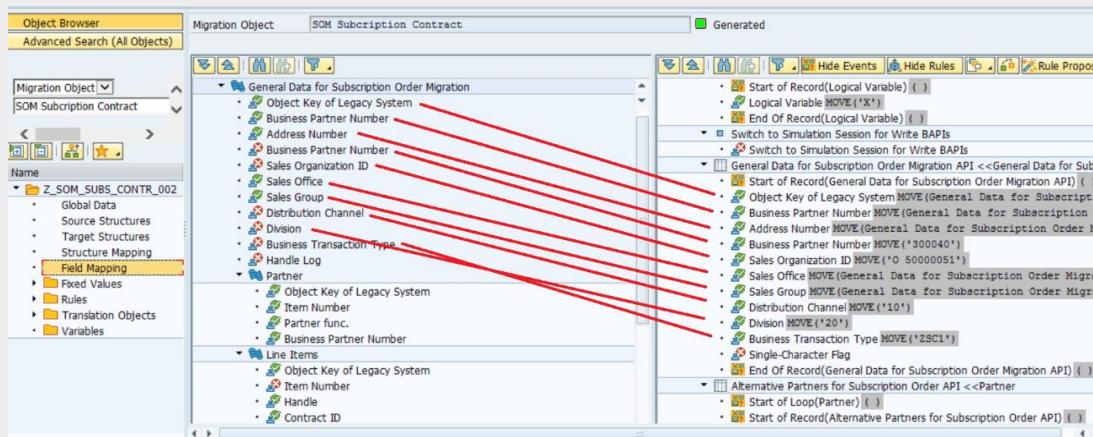


- For each source structure, map it to the relevant target structure. '<<' symbols represents that the target structure is mapped with the source structure.



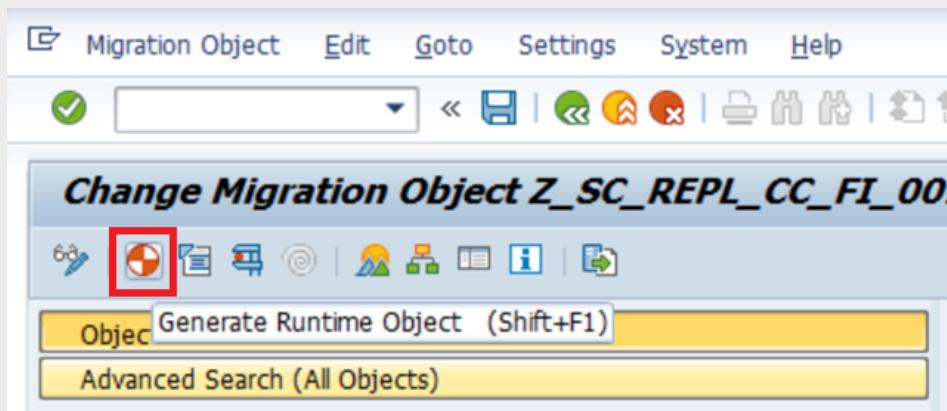
Field Mapping -

- Here we need to map the source fields by dragging it on the target fields. The mapped fields will appear in Green after successful mapping and un-mapped fields in Red.

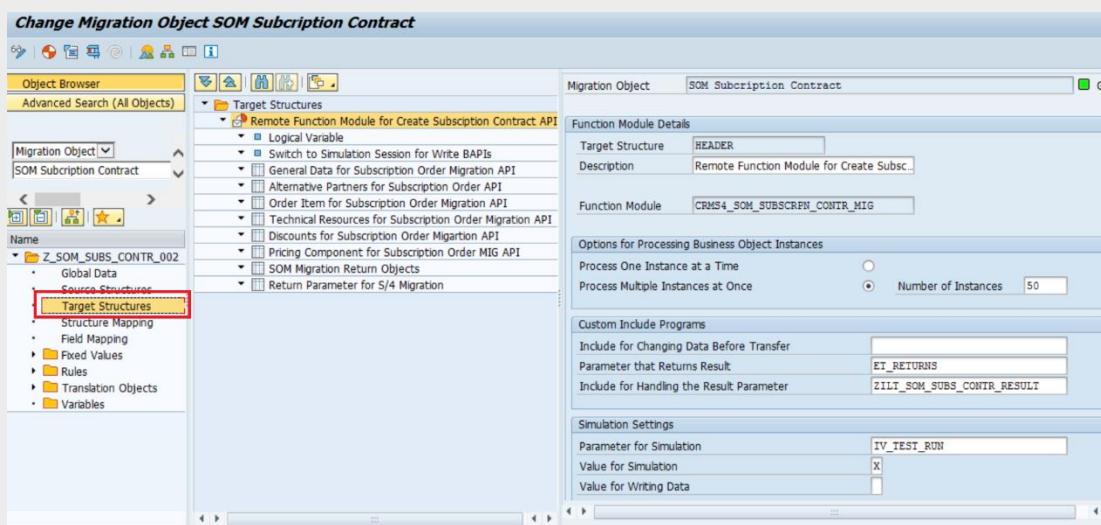




- Finally **Generate** the object.



- Target Structures** are the structures to which the sources structures are mapped. **Function Module** name also can be seen.





- Now enter the Transaction Code **LTMC** to open **Legacy Transfer Migration Cockpit** in SAP Logon.



- After selecting your respective project, look for your custom object which was created. Here, it is **SOM Subscription Contract**.

| Migration Objects | | | |
|-------------------|---------------------------|---------------|----------------------------|
| Migration Status | Name | Documentation | Dependent Migration Object |
| In Process | SOM Subscription Contract | | |

Note: At this point, you can load the object as same as other standard objects of LTMC are loaded.



Simulation Mode –

- Debugging of the object can be done in **LTMOM** and go to LTMOM T-Code click on **Change Mode** then **Simulation** option. It is also an alternative option to load.

Change Migration Object SOM Subscription Contract

Object Browse Simulation (Shift+F4) Advanced Search (All Objects)

Migration Object: SOM Subscription Contract Description: SOM Subscription Contract

Migration Object Details

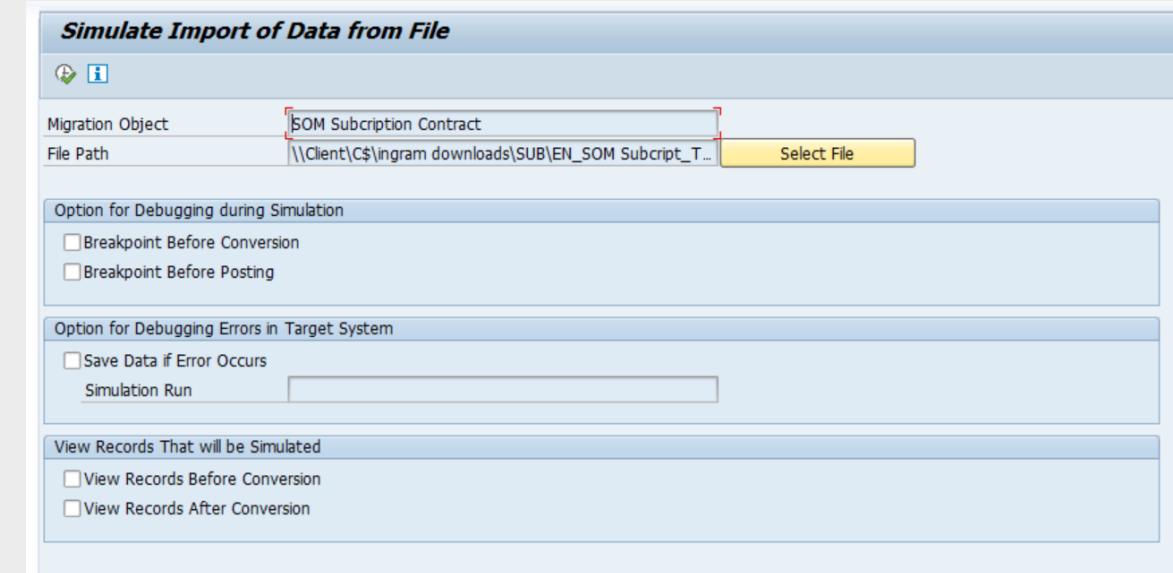
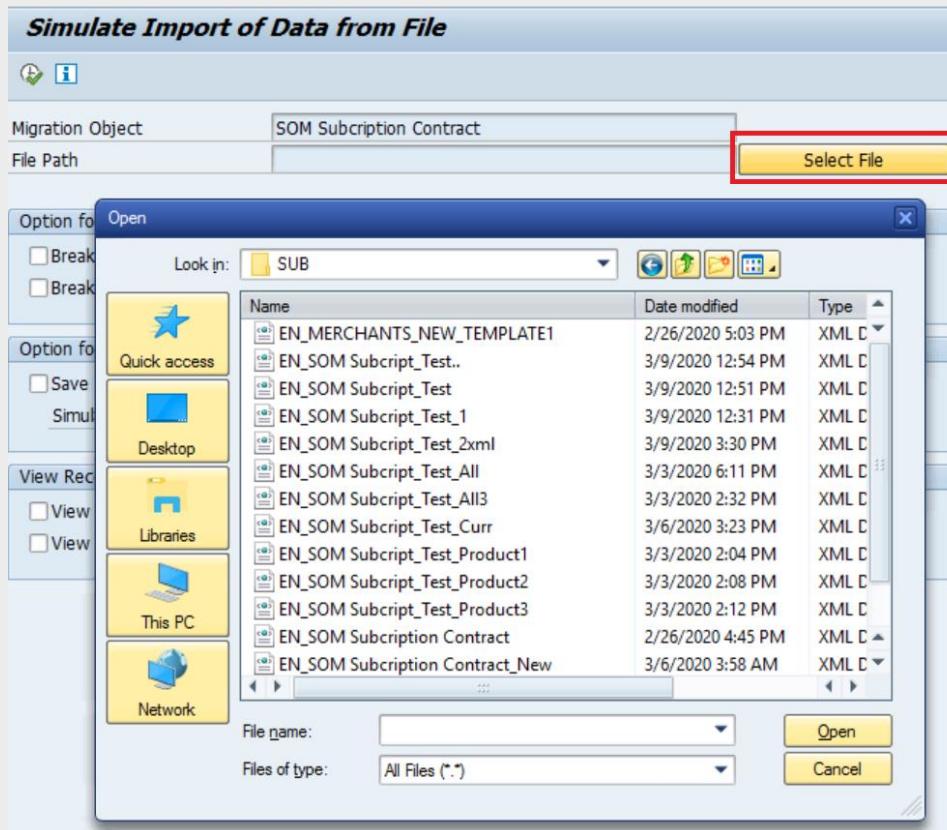
| | |
|-----------------------------|-------------------------------------|
| Type | User-Defined Migration Object |
| Approach | Migrate Data Using Files |
| Number of Uploaded Files | 2 |
| Contains Unprocessed Data | <input checked="" type="checkbox"/> |
| Max. No. Data Transfer Jobs | 01 |
| Modified | Not Applicable |
| Update Available | Not Applicable |
| Active View | Customer View |
| Application Component | |

Name: Z_SOM_SUBS_CONTR_002 Description: SOM Subscription Contract

- Global Data
- Source Structures
- Target Structures
- Structure Mapping
- Field Mapping
- Fixed Values
- Rules
- Translation Objects
- Variables



- Click on **Select File** and select the required file.



Breakpoint before Conversion: This is used for putting a breakpoint before converting the input data.

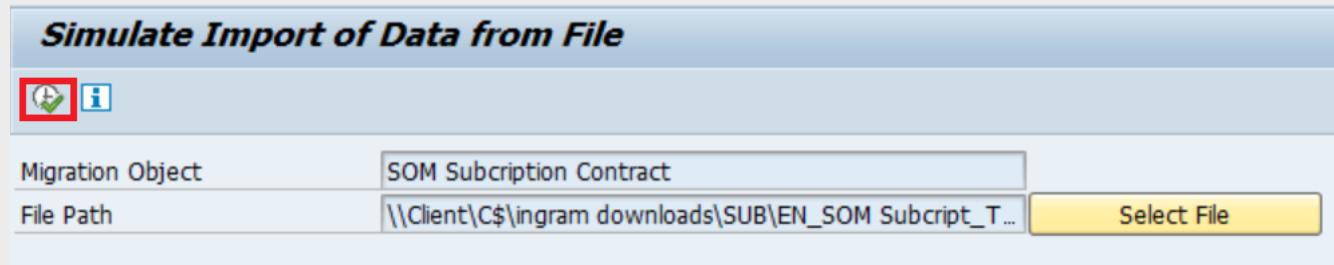
Breakpoint before Posting: This is used for putting a breakpoint before loading the converted input data.

View Records before Conversion: Records can be viewed before conversion.

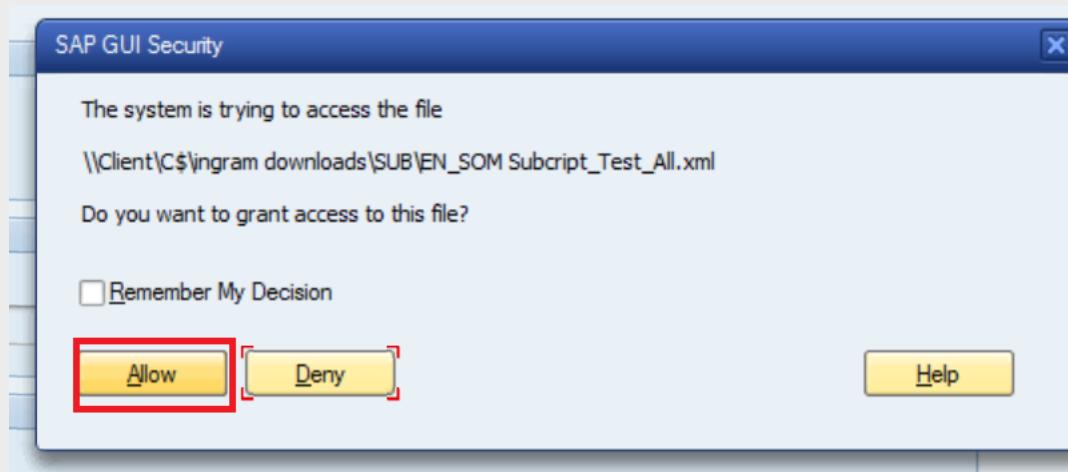
View Records after Conversion: Records can be viewed after conversion.



- Now click on **Execute**.



- Proceed by clicking on **Allow**.





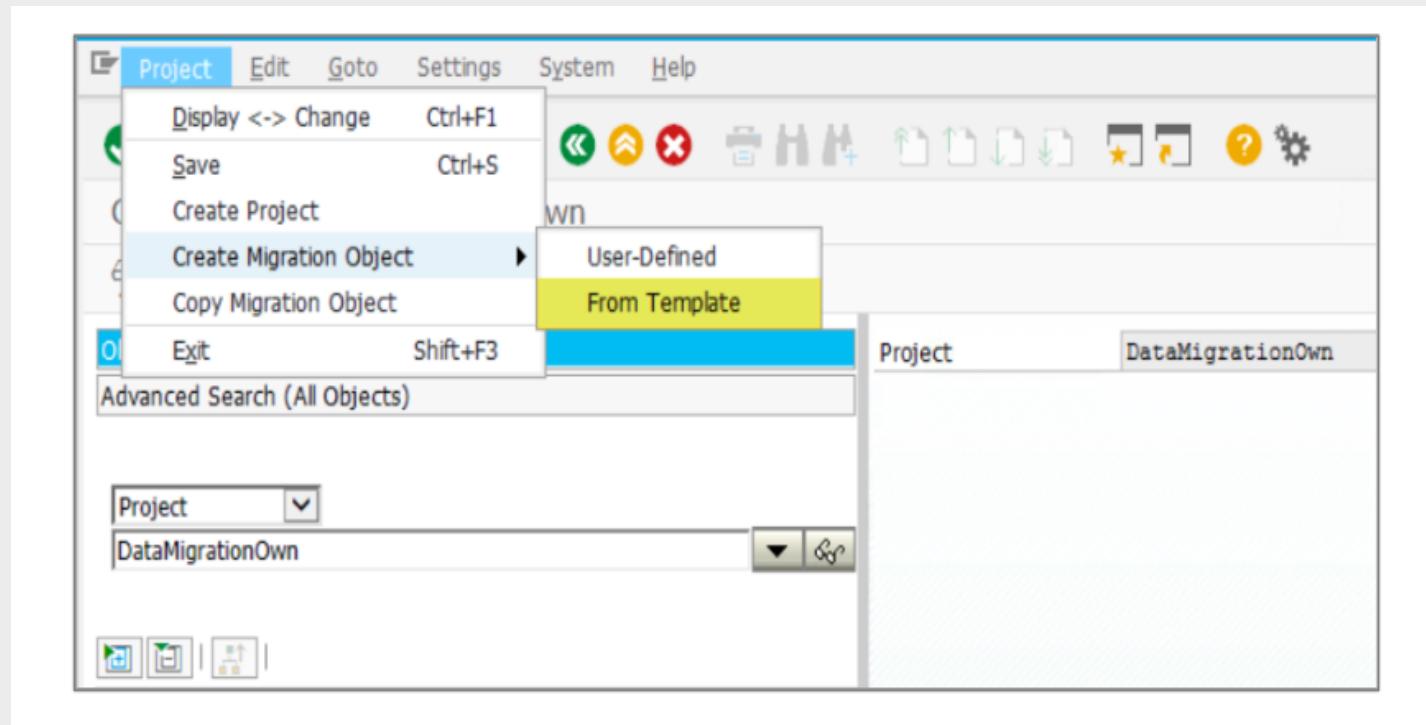
- Check the **Simulation Log** screen as shown below.

| Import Simulation Log for Migration Object SOM Subscription Cont | | |
|---|----------|---------|
| Messages | Longtext | Context |
| | Link | |
| • ⚠ Test migration Z_SOM_SUBS_CONTR_002: no extended validations, no updates in receiver system | | |
| • ⚠ Source record OBJECT_ID = 7000072 already transferred to target system | | |
| • ⚠ Source record OBJECT_ID = 7000073 already transferred to target system | | |
| • ⚠ Source record OBJECT_ID = 7000074 already transferred to target system | | |
| • 💡 Run 000000001 started at 20200309 053716 | | |
| • 💡 Structure HEADER_DATA: Number of imported sender records 0000000003 | | |
| • 💡 Structure PARTNER_DATA: Number of imported sender records 0000000000 | | |
| • 💡 Structure ITEMS_DATA: Number of imported sender records 0000000003 | | |
| • 💡 Structure TECH_RES: Number of imported sender records 0000000003 | | |
| • 💡 Structure ET_KEY_MAPPING: Number of imported sender records 0000000000 | | |
| • 💡 Structure ET RETURNS: Number of imported sender records 0000000000 | | |
| • 💡 Structure HEADER: Number of recipient records generated 0000000000 | | |
| • 💡 Structure R_IV_IS_MIGRATION: Number of recipient records generated 0000000000 | | |
| • 💡 Structure R_IT_GEN_DATA: Number of recipient records generated 0000000000 | | |
| • 💡 Structure R_IT_ALT_PARTNER: Number of recipient records generated 0000000000 | | |
| • 💡 Structure R_IT_ITEMS: Number of recipient records generated 0000000000 | | |
| • 💡 Structure R_IT_TECH_RES: Number of recipient records generated 0000000000 | | |
| • 💡 Structure R_ET_KEY_MAPPING: Number of recipient records generated 0000000000 | | |
| • 💡 Structure R_ET RETURNS: Number of recipient records generated 0000000000 | | |
| • 💡 Run 000000001 finished on 20200309 at 053716 | | |
| • 💡 End of processing SOM Subscription Contract | | |



With the Existing target structure attributes addition/modification to source structure/template

In the following steps, you copy the migration object called Material to your migration project, so that the rules that are used in the migration object Material are available in the migration project. You can use these pre-delivered rules (if necessary) and do not have to create your own rules. Your project is automatically selected in the Project Name field. Just choose Next.



Selected Template of material will open the Migration Object copied to you the custom project

The screenshot shows the 'Display Migration Object Material' dialog. The left side has tabs for 'Object Browser' (selected) and 'Advanced Search (All Objects)'. The right side displays 'Migration Object Details' for 'Material'. The 'Name' column lists 'Z_MATERIAL_003' and the 'Description' column lists 'Material'. Under 'Migration Object Details', the 'Type' is 'Template Migration Object', 'Scenario' is 'Data Transferred from File', 'Number of Uploaded Files' is 0, 'Contains Unprocessed Data' is unchecked, 'Copied from' is 'Material', 'Modified' is 'Yes', and 'Update Available' is 'No'. The 'Object Browser' tab shows a tree view with nodes like 'Global Data', 'Source Structures', 'Target Structures', 'Structure Mapping', 'Field Mapping', 'Fixed Values', 'Rules', 'Translation Objects', and 'Variables'.



Source Structures : Double Click source structure, to display all existing structure as per the hierarchy.

In the Section 'Source Structure' it is possible to add new Fields to existing structure, open the fields that are hidden in standard template and add new Structures.

Display Migration Object Material

Object Browser Advanced Search (All Objects)

Migration Object: Material

Name Description

- Z_MATERIAL_003
 - Global Data
 - Source Structures
 - Target Structures
 - Structure Mapping
 - Field Mapping
 - Fixed Values
 - Rules
 - Translation Objects
 - Variables

Source Structures

- Basic Data
 - Plant Data
 - Storage Location Data
 - Forecast Parameters
 - Production Resource Data
 - Warehouse Number Data
 - Storage Type Data
 - Accounting Data
 - Sales Data
 - Material Descriptions
 - Alternative Units of Measure
 - Additional EAN's
 - Tax Classification
 - Maintenance Status Setting

Migration Object: Material

Fields of Basic Data

Source Structure: S_MARA

Description: Basic Data

| Key Field | Name | Data Type | Length |
|-------------------------------------|-------|-----------|--------|
| <input checked="" type="checkbox"/> | MATNR | CHAR | 80 |
| <input type="checkbox"/> | SPRAS | CHAR | 80 |
| <input type="checkbox"/> | MAKTX | CHAR | 40 |
| <input type="checkbox"/> | MBRSH | CHAR | 80 |
| <input type="checkbox"/> | MTART | CHAR | 80 |
| <input type="checkbox"/> | GROUP | CHAR | 80 |
| <input type="checkbox"/> | XCHPF | CHAR | 1 |
| <input type="checkbox"/> | SERLV | CHAR | 80 |
| <input type="checkbox"/> | MSTAE | CHAR | 80 |
| <input type="checkbox"/> | MSTDE | DATS | 8 |
| <input type="checkbox"/> | MATKL | CHAR | 80 |
| <input type="checkbox"/> | EXTWG | CHAR | 80 |
| <input type="checkbox"/> | MEINS | CHAR | 80 |
| <input type="checkbox"/> | BISMT | CHAR | 40 |
| <input type="checkbox"/> | SPART | CHAR | 80 |
| <input type="checkbox"/> | PRDHA | CHAR | 80 |



Adding New Field/Attribute:

Right click Plant data and click display view
choose 'Add Field +' to add fields at the end of the structure. choose 'insert Field' to insert the field at the cursor position. The arrows allows us to swap the order of fields to appear in the template

Change Migration Object Bank

Object Browser Advanced Search (All Objects) Migration Object: Bank

Name Desc...
Z_BANK_MASTER_004 Bank

- Global Data
- Source Structures
- Target Structures
- Structure Mapping
- Field Mapping
- Fixed Values
- Rules
- Translation Objects
- Variables

Source Structures

Bank Master

Migration Object: Bank

Fields of Bank Master

Source Structure: S_BNKA
Description: Bank Master

| Key Field | Name | Data Type | Length | Decimal Places | Amount Field | Column |
|-------------------------------------|-------|-----------|--------|----------------|--------------|--------|
| <input checked="" type="checkbox"/> | BANKS | CHAR | 80 | | | Bank |
| <input checked="" type="checkbox"/> | BANKL | CHAR | 80 | | | Bank |
| <input type="checkbox"/> | BANKA | CHAR | 60 | | | Nam |
| <input type="checkbox"/> | PROVZ | CHAR | 80 | | | Regi |
| <input type="checkbox"/> | STRAS | CHAR | 35 | | | Hous |
| <input type="checkbox"/> | ORT01 | CHAR | 35 | | | City |
| <input type="checkbox"/> | BRNCH | CHAR | 15 | | | Bank |
| <input type="checkbox"/> | SWIFT | CHAR | 11 | | | SWIf |
| <input type="checkbox"/> | XPGRO | CHAR | 1 | | | Post |
| <input type="checkbox"/> | BNKLZ | CHAR | 15 | | | Bank |
| <input type="checkbox"/> | BGRUP | CHAR | 2 | | | Bank |



Open up the hidden fields:

You also have the possibility to make the field (required ,visible or non-Visible) in the excel template Right click on the structure->Display view will open the below view

Display Migration Object Material

Object Browser Advanced Search (All Objects)

Migration Object: Material

Name: Z_MATERIAL_005

Source Structures

- Basic Data
 - Plant Data
 - Storage Location Data
 - Forecast Parameters
 - Production Resource Data
 - Warehouse Number Data
 - Storage Type Data
 - Accounting Data
 - Sales Data
 - Material Descriptions
 - Alternative Units of Measure
 - Additional EAN's
 - Tax Classification
 - Maintenance Status Setting

Migration Object: Material

Views on Plant Data

| Type | Name | Cloud - Enterprise Management | On-premise - Enterp |
|-------|--|-------------------------------|---------------------|
| Field | Safety time indicator | Visible | Visible |
| Field | Safety time (in workdays) | Visible | Visible |
| Field | Period Indicator | Visible | Visible |
| Field | Fiscal Year Variant | Visible | Visible |
| Field | Splitting indicator | Visible | Visible |
| Field | Ind. Reset forecast model auto | Visible | Visible |
| Field | Ind. correction factors | Visible | Visible |
| Field | Ref Material for consumption | Not Visible | Not Visible |
| Field | Ref Plant for consumption | Not Visible | Not Visible |
| Field | Date to | Not Visible | Not Visible |
| Field | Multiplier | Not Visible | Not Visible |
| Field | Planning strategy group | Visible | Visible |
| Field | Consumption mode | Visible | Visible |
| Field | Consumption period: backward | Visible | Visible |
| Field | Consumption period: forward | Visible | Visible |
| Field | Mixed MRP indicator | Visible | Visible |
| Field | Planning Material | Visible | Visible |
| Field | Planning Plant | Visible | Visible |
| Field | Plng. conv. factor | Visible | Visible |
| Field | Total replenishment lead time in workday | Visible | Visible |
| Field | Cross-project | Visible | Visible |
| Field | Method for Selecting Alternative BOM | Not Visible | Visible |

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Add new Source Structures:

The structures are shown in a hierarchy way which are visible in different tabs shown in the excel template in Migration cockpit.

Migration Object Edit Goto Settings System Help

Display Migration Object Material

Object Browser Advanced Search (All Objects)

Migration Object Material

Name Z_MATERIAL_003

Source Structures

Key Field Name Data Type Length Decimal Places Amount Field Column Header

| Key Field | Name | Data Type | Length | Decimal Places | Amount Field | Column Header |
|------------|------|-----------|--------|----------------|--------------|-----------------------|
| MATNR | CHAR | 80 | | | | Material Number |
| SPRAS | CHAR | 80 | | | | Language Key |
| MAKTX | CHAR | 40 | | | | Material description |
| MBRSH | CHAR | 80 | | | | Industry sector |
| MTART | CHAR | 80 | | | | Material type |
| GROUP | CHAR | 80 | | | | Material Views |
| XCHPF | CHAR | 1 | | | | Batch management |
| SERLV | CHAR | 80 | | | | Level of Explicitness |
| MSTAE | CHAR | 80 | | | | X-Plant matl status |
| MSTDE | DATS | 8 | | | | Valid from Date fc |
| MATKL | CHAR | 80 | | | | Material Group |
| EXTWG | CHAR | 80 | | | | External Material c |
| MEINS | CHAR | 80 | | | | Base Unit of Meas |
| BISMT | CHAR | 40 | | | | Old material numt |
| SPART | CHAR | 80 | | | | Division |
| PRDHA | CHAR | 80 | | | | Product hierarchy |
| MTPOS_MARA | CHAR | 80 | | | | General item categor |
| BRGEW | QUAN | 13 | 3 | | | Gross Weight |
| NTGEW | QUAN | 13 | 3 | | | Net Weight |
| GEWEI | CHAR | 80 | | | | Unit of Weight |
| VOLUM | QUAN | 12 | 2 | | | Volume |

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Target Structures: Target Structures are the structures to which the sources structures are mapped .They can be single or multiple fields or tables.
There is a Function Module on the top of the structure which is used transfer data from source structure to relevant target structure to S/4 System.

Change Migration Object Material

Object Browser Advanced Search (All Objects)

Migration Object: Material

Name: Z_MATERIAL_003

- Global Data
- Source Structures
- Target Structures**
- Structure Mapping
- Field Mapping
- Fixed Values
- Rules
- Translation Objects
- Variables

BAPI for Mass Maintenance of Material Data

- Do Not Write an Application Log
- Do Not Write Change Documents
- Switch to Simulation Session for Write BAPIs
- Response if Fields Are Inactive
- Switch to Simulation Session for Write BAPIs
- Switch to Simulation Session for Write BAPIs
- Header Segment with Control Information
- Material Data at Client Level
- Checkbox Structure for BAPIE1MARA
- Material Data at Plant Level**
- Checkbox Structure for BAPIE1MARC
- Forecast Parameters
- Checkbox Structure for BAPIE1MPOP
- Change Document Structure for Material Mast
- Checkbox Structure for BAPIE1MPGD
- Material Data at Storage Location Level
- Checkbox Structure for BAPIE1MARD
- Valuation Data
- Checkbox Structure for BAPIE1MBEW
- Warehouse Number Data
- Checkbox Structure for BAPIE1MLGN
- Sales Data
- Checkbox Structure for BAPIE1MVAKE

Migration Object: Material

Fields of Material Data at Plant Level

Target Structure: T04_PLANTDATA

Description: Material Data at Plant Level

| Key field | Name | Data Type | Length | Decimal Places | Description |
|-----------|-------------------|-----------|--------|----------------|--|
| | IUID_RELEVANT | CHAR | 1 | | IUID-Relevant |
| | IUID_TYPE | CHAR | 10 | | IUID Type |
| | UID_IEA | CHAR | 1 | | External Allocation of UII |
| | SEGMENTATION_STR | CHAR | 8 | | Segmentation Strategy |
| | SEGMENTATION_STA | CHAR | 1 | | Seg. Status MRP |
| | CONSUMPTION_PRIO | CHAR | 1 | | Consumption Priority |
| | DISCRETE_BATCH_FL | CHAR | 1 | | Discrete Batch No. |
| | STOCK_PROTECTION | CHAR | 1 | | Stock Protection Indicator |
| | DEFAULT_STOCK_SE | CHAR | 16 | | Default Stock Segment value |
| | ADV_PLNG_IND | CHAR | 1 | | Advanced Planning |
| | MATERIAL_LONG | CHAR | 40 | | Material No. |
| | FOLLOW_UP_LONG | CHAR | 40 | | Follow-Up Material |
| | REFMATCONS_LONG | CHAR | 40 | | ReMatl: consumption |
| | ORIGINAL_BATCH_RE | CHAR | 40 | | OB Reference Materl |
| | DEF_SEG_LONG | CHAR | 40 | | Default Stock Segment value |
| | ORDER_ALLOCATION | CHAR | 1 | | Supply Assignment (ARun) |
| | FIX_BATCH_IN_ARUN | CHAR | 1 | | Assign Batches in Supply Assignment (ARun) |



Structure Mapping: '>>' this symbol represents that the Target structure is mapped with the source structure. You can also Drag and Drop for the structure mapping in the edit mode.

Display Migration Object Bank

Object Browser Advanced Search (All Objects)

Migration Object Rank

Name Description

- Z_BANK_MASTER_004 Bank
 - Global Data
 - Source Structures
 - Target Structures
 - Structure Mapping
 - Field Mapping
 - Fixed Values
 - Rules
 - Translation Objects
 - Variables

Migration Object Bank Not Generated

Source Structures

Bank Master

Target Structures

- Start of Processing ()
- Start of Block ()
- Migration of Bank <<Bank Master
 - Bank country key <<Bank Master
 - Bank Keys <<Bank Master
 - Transfer structure object 1011: Bank address <<Bank Master
 - Check digit calculation method
 - Format of File with Bank Data
 - BAPI Reference Structure for Addresses (Org./Company)
 - Checkbox
 - IBAN Rule
 - Support of SEPA B2B Direct Debit
 - Support of SEPA COR1 Direct Debit
 - Support of SEPA Returned Debits (R Transactions)
 - Internal bank category
 - Return Parameter
- End of Block ()
- End of Processing ()



Field Mapping : This section display all the fields which are mapped and also not mapped

Mapped target fields are displayed with green icon and the others with red.

You can also drag and drop the fields then MOVE statement will appear showing that the field is mapped.

Display Migration Object Material

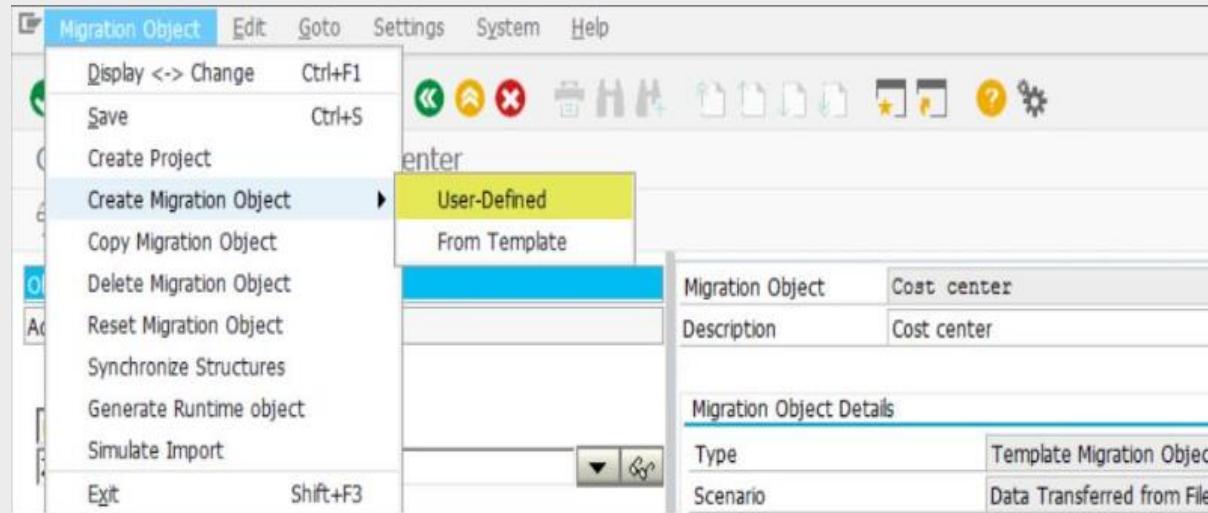
The screenshot shows the SAP Fiori interface for displaying migration objects. The title bar says "Display Migration Object Material". The left sidebar has tabs for "Object Browser" and "Advanced Search (All Objects)". Below that, a dropdown menu shows "Migration Object" selected, with "Material" as the current choice. The main area shows a tree view under "Z_MATERIAL_003" with several nodes like "Global Data", "Structure Mapping", "Field Mapping" (which is highlighted), and "Fixed Values". On the right, a large list of fields is displayed, each with a small icon and some text. Many of these icons are green, indicating they are mapped. Some fields have a red icon or are underlined in red, indicating they are not mapped. The list includes: Priority Center, Purchasing group, Automatic purchase order allo..., Quota arrangement usage, Indicator: Source list require..., Export/Import Group, Country of origin, Region of origin, Control code, Material CFOP category, MRP Group, ABC Indicator, MRP Type, Reorder Point, Planning time fence, Planning Cycle, MRP controller, Lot sizing Procedure, Minimum Lot Size, Maximum Lot Size, Fixed lot size, Maximum stock level, Assembly scrap (%), Takt time, Special Procurement type for Costing, Production unit, Production Unit in ISO Code SET_UOM_MAT (Plant Data-Production unit (ISO format)), Issue Storage Location CVT_LGORT (Plant Data-Plant, Plant Data-Prod.stor. Location), MRP Group CVT_DISGR (Plant Data-Plant, Plant Data-MRP Group), Component Scrap in Percent MOVE (Plant Data-Component scrap in percent), Certificate Type CVT_QZKTyp (Plant Data-Certificate type), Takt time MOVE (Plant Data-Takt time), Range of coverage profile CVT_RWPROM (Plant Data-Plant, Plant Data-Range of coverage pro...), Physical Inventory Indicator for Cycle Counting, Variance Key CVT_AWSLS (Plant Data-Variance key), Serial Number Profile CVT_SERAIL (Plant Data-Serial Number Profile), Repetitive Manufacturing Profile CVT_SFEP (Plant Data-Repetitive manufacturing profile), Negative stocks allowed in plant SET_BOLIND (Plant Data-Negative stocks allowed in plant, Required QM System for Supplier CVT_QSSYS (Plant Data-Target QM system), Planning cycle CVT_LFRHY (Plant Data-Planning Cycle), Rounding Profile CVT_RDPRF (Plant Data-Plant, Plant Data-Rounding Profile), Reference material for consumption, To date of the material to be copied for consumption MOVE (Plant Data-Date to), Multiplier for reference material for consumption MOVE (Plant Data-Multiplier), Reset Forecast Model Automatically SET_BOLIND (Plant Data-Ind. Reset forecast model auto, Exemption certificate: Indicator for legal control, Exemption certificate number for legal control, Exemption certificate: Issue date of exemption certificate.



Creating new Object or target structure/attributes

In the following steps, you create your own migration object.

Choose Migration Object Create Migration Object User Defined



You have to enter a technical name for your migration object. The first field contains the technical name of the migration object, the second field is the mass transfer ID. The mass transfer ID is derived from the project. The system will add the prefix Z_ to your technical name. Enter <KOSTL_TEXT> in the Migration Object ID field.



The screenshot shows the 'Create User-Defined Migration Object' dialog. The fields are filled as follows:

| | |
|-------------------------------|------------------|
| Project Name | DataMigrationOwn |
| Migration Object ID | Z_KOSTL_TEXT_003 |
| Description | Cost center text |
| Define Source Structure Using | Files |
| Define Target Structure Using | Function Module |

At the bottom right, there are 'Next' and 'Cancel' buttons.



In this example, we are using a standard function module **BAPI_COSTCENTER_CHANGEMULTIPLE** to add the descriptions in additional languages for the cost center. If you use a standard function module, you have to check that the API is released to customers.

Note: If you want to create your own function modules to facilitate the transfer of data to the SAP S/4HANA system, please check the following **SAP Note 2590165**. There you can find a guide attached with further information.

Create User-Defined Migration Object

Project Name: DataMigrationOwn

Define Target Structure

Name of Function Module: **BAPI_COSTCENTER_CHANGEMULTIPLE**

Options for Processing Business Object Instances

Process One Instance at a Time

Process Multiple Instances at Once

Return Parameter Settings

Parameter that Returns Result: []

Include for Handling the Result Parameter: []



Business Object Instance: One instance & multiple instance

Return Parameter Setting: COSTCENTERLIST, RETURN, EXTENSIONIN, EXTENSIONOUT

Simulation Setting: ControllingArea, TestRun, Master_Data_Inactive, Rest_Filled_Fields

Create User-Defined Migration Object

| | |
|--|----------------------------------|
| Project Name | DataMigrationOwn |
| Define Target Structure | |
| Name of Function Module | BAPI_COSTCENTER_CHANGEMULTIPLE |
| Options for Processing Business Object Instances | |
| Process One Instance at a Time | <input checked="" type="radio"/> |
| Process Multiple Instances at Once | <input type="radio"/> |
| Return Parameter Settings | |
| Parameter that Returns Result | RETURN |
| Include for Handling the Result Parameter | |
| Simulation Settings | |
| Parameter for Simulation | TESTRUN |
| Value for Simulation | X |
| Value for Writing Data | |

Back

Migration Object Edit Goto Settings System Help

Change Migration Object Cost center text

Object Browser Advanced Search (All Objects)

| | |
|------------------|------------------|
| Migration Object | Cost center text |
| Description | Cost center text |

Migration Object Details

| | |
|----------|-------------------------------|
| Type | User-Defined Migration Object |
| Scenario | Data Transferred from File |

Z_KOSTL_TEXT_003



Creating Source Structure & Adding Fields to Source Structure:

Change Migration Object Cost center text

Object Browser

Advanced Search (All Objects)

Migration Object Z_KOSTL_TEXT_003

Name Description

- Z_KOSTL_TEXT_003 Cost center text
- Global Data
- Source Structures
- Target Structures
- Structure Mapping
- Field Mapping

Migration Object Cost center text

Append Structure to Lower Level

Create Source Structure

Name S_CSKT

Description Cost center text

Checkmark and X icons

Change Migration Object Cost center text

Object Browser

Advanced Search (All Objects)

Migration Object Z_KOSTL_TEXT_003

Name Description

- Z_KOSTL_TEXT_003 Cost center text
- Global Data
- Source Structures
- Target Structures
- Structure Mapping
- Field Mapping
- Fixed Values
- Rules
- Translation Objects
- Variables

Migration Object Cost center text

Fields of Cost center text

Source Structure S_CSKT

Description Cost center text

| Key field | Name | Data Type | Length | Decimal Places | Amount Field |
|-------------------------------------|-------|-----------|--------|----------------|--------------|
| <input checked="" type="checkbox"/> | KOKRS | CHAR | 10 | | |
| <input checked="" type="checkbox"/> | KOSTL | CHAR | 80 | | |
| <input checked="" type="checkbox"/> | DATAB | DATS | 8 | | |
| <input checked="" type="checkbox"/> | DATBI | DATS | 8 | | |
| <input checked="" type="checkbox"/> | LANGU | CHAR | 10 | | |
| <input type="checkbox"/> | KTEXT | CHAR | 20 | | |
| <input type="checkbox"/> | LTEXT | CHAR | 40 | | |

You can either add the source fields manually or select the Upload button to upload the relevant source structure, if you have a csv.file

Once the fields are added, click Display view on Source Structure and make the fields as required(mandatory) and visible accordingly.



Mapping the Source Structure to the Target Structure:

Double-click Structure Mapping to open the area.

To map a source structure to a target structure, select the target structure HEADER and choose Edit Structure Mapping.

Note: To be able to define field mappings in the next step, you need to map one or more source structures to a target structure in this step.

The screenshot shows the SAP SE80 Structure Mapping interface. On the left, under 'Source Structures', there is a folder icon labeled 'Source Structures' and a file icon labeled 'S_CSKT'. On the right, under 'Target Structures', there is a folder icon labeled 'Target Structures'. Inside it, there are several entries: 'Start of Processing ()', 'Start of Block ()', 'HEADER' (which is highlighted with a green border), 'End of Block ()', and 'End of Processing ()'. A toolbar at the top has various icons, and a button labeled 'Edit Structure Mapping' is visible on the far right of the toolbar area.



The Edit Structure Mapping Screen appears from above.

Choose Add Row. Alternatively, you can also drag & drop the source structure field S._CSKT to the target structure field HEADER.

The fields Access Type, Mapping Type, source and target cardinality and Data Path Type are filled with default values.

Select S_CSKT in the drop-down menu for field Source Structure. Make sure that the following applies:

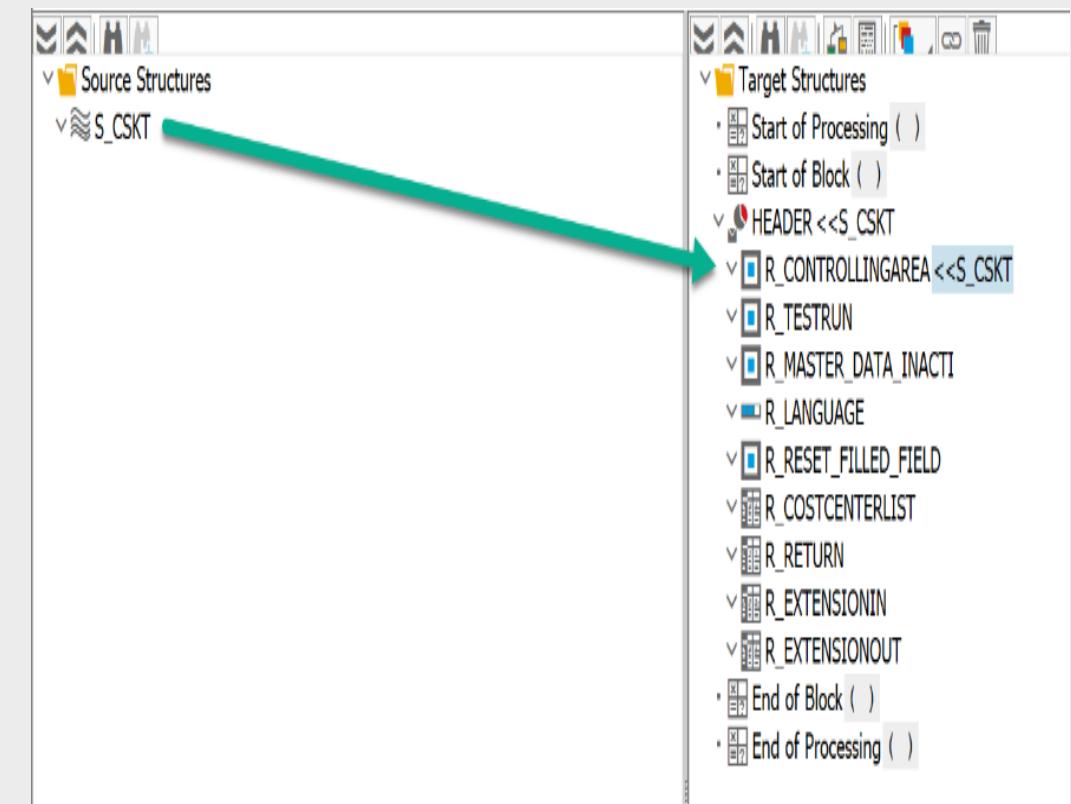
Access Type: LOOP AT TABLE

Mapping Type: 1:1 Relation

Data Path Type: Default Path

Edit Structure Mapping

| Target Structure | HEADER | | | | | |
|----------------------------|---------------------------------|--------------|----------|---------|----------------|-----------|
| Description | Change One or More Cost Centers | | | | | |
| Assigned Source Structures | | | | | | |
| Source Structure | Access Type | Mapping Type | Sourc... | Targ... | Data Path Type | Data Path |
| S_CSKT | LOOP AT TABLE | 1:1 Relation | 1 | 1 | Default Path | |





Drag & Drop the source structure S_CSkt to the following target structure fields:
R_CONTROLLINAREA(Controlling Area), R_LANGUAGE(BAPI: Profit Center Language)
R_COSTCENTERLIST(Interface Structure: Create Cost Center Input List).

The following parameters are selected automatically

Access Type: Mapping only

Mapping Type: 1:1 Relation

Data Path Type: Not Applicable

The suffix << S_CSkt has been added to the target structure to indicate that the source structure is mapped to the target structure. Save Changes and continue with the previously learnt field mapping. ☺

The screenshot shows the SAP GUI interface with the 'Target Structures' tree view. The tree includes nodes for 'Start of Processing', 'Start of Block', 'HEADER <<S_CSkt' (which is expanded), and 'End of Processing'. Under 'HEADER <<S_CSkt', several nodes are listed, including 'R_CONTROLLINGAREA <<S_CSkt', 'R_TESTRUN', 'R_MASTER_DATA_INACTI', 'R_LANGUAGE <<S_CSkt', 'R_RESET_FILLED_FIELD', 'R_COSTCENTERLIST <<S_CSkt' (this node is highlighted with a red border and a green box around it), 'R_RETURN', 'R_EXTENSIONIN', and 'R_EXTENSIONOUT'. The 'R_COSTCENTERLIST <<S_CSkt' node is the target for the mapping.

Structure Mapping Preview

| | |
|------------------|------------------|
| Project | DataMigrationOwn |
| Migration Object | Cost center text |

Structure Mapping

| Target Structure | Source Structure | Access Type | Mapping Type | Data Path Type |
|-------------------|------------------|---------------|--------------|----------------|
| HEADER | S_CSkt | LOOP AT TABLE | 1:1 Relation | Default Path |
| R_CONTROLLINGAREA | S_CSkt | Mapping only | 1:1 Relation | Not Applicable |
| R_LANGUAGE | S_CSkt | Mapping only | 1:1 Relation | Not Applicable |
| R_COSTCENTERLIST | S_CSkt | Mapping only | 1:1 Relation | Not Applicable |

Field Mapping:

Migration Object: Z_KOSTL_TEXT_003 Not Generated

Source Structures: S_CSkt (KOKRS, KOSTL, DATAB, DATBI, LANGU, KTEXT, LTEXT)

Target Structures:

- HEADER <<S_CSkt
 - Start of Loop(S_CSkt) ()
 - Start of Record(HEADER) ()
 - End Of Record(HEADER) ()
- R_CONTROLLINGAREA <<S_CSkt
 - Start of Loop(S_CSkt) ()
 - Start of Record(R_CONTROLLINGAREA) ()
 - CONTROLLINGAREA (red circle)
 - End Of Record(R_CONTROLLINGAREA) ()
 - After Loop(S_CSkt) ()
- R_TESTRUN
 - TESTRUN (red circle)
- R_MASTER_DATA_INACTI
 - MASTER_DATA_INACTIVE (red circle)
- R_LANGUAGE <<S_CSkt
 - Start of Loop(S_CSkt) ()
 - Start of Record(R_LANGUAGE) ()
 - LANGU (red circle)
 - LANGU_ISO
 - End Of Record(R_LANGUAGE) ()
 - After Loop(S_CSkt) ()
- R_RESET_FILLED_FIELD
 - RESET_FILLED_FIELDS (red circle)
- R_COSTCENTERLIST <<S_CSkt
 - Start of Loop(S_CSkt) ()
 - Start of Record(R_COSTCENTERLIST) ()
 - COSTCENTER (red circle)
 - VALID_FROM (red circle)
 - VALID_TO (red circle)

Target Structures:

- HEADER <<S_CSkt
 - Start of Loop(S_CSkt) ()
 - Start of Record(HEADER) ()
 - End Of Record(HEADER) ()
- R_CONTROLLINGAREA <<S_CSkt
 - Start of Record(R_CONTROLLINGAREA) ()
 - CONTROLLINGAREA_CVT_KOKRS (S_CSkt-KOKRS) (green checkmark)
 - End Of Record(R_CONTROLLINGAREA) ()
- R_TESTRUN
- R_MASTER_DATA_INACTI
- R_LANGUAGE <<S_CSkt
 - Start of Record(R_LANGUAGE) ()
 - LANGU_CVT_SPRAS (S_CSkt-LANGU) (green checkmark)
 - End Of Record(R_LANGUAGE) ()
- R_RESET_FILLED_FIELD
- R_COSTCENTERLIST <<S_CSkt
 - Start of Record(R_COSTCENTERLIST) ()
 - COSTCENTER_CVT_KOSTL (S_CSkt-KOSTL, S_CSkt-KOSTL) (green checkmark)
 - VALID_FROM_MOVE (S_CSkt-DATAB) (green checkmark)
 - VALID_TO_MOVE (S_CSkt-DATBI) (green checkmark)
 - NAME_MOVE (S_CSkt-KTEXT) (green checkmark)
 - DESCRIPT_MOVE (S_CSkt-LTEXT) (green checkmark)
 - End Of Record(R_COSTCENTERLIST) ()
- R_RETURN
- R_EXTENSIONIN
- R_EXTENSIONOUT
- After Loop(S_CSkt) ()



Generate Runtime Object

Choose Generate Runtime Object

Change Migration Object Z_KOSTL_TEXT_003

Object Browser Migration Object

Advanced Search (All Objects)

Information(8) Longtext

Messages

- Target structure R_TESTRUN is not mapped to any source structure
- Target structure R_MASTER_DATA_INACTI is not mapped to any source structure
- Target structure R_RESET_FILLED_FIELD is not mapped to any source structure
- Target structure R_RETURN is not mapped to any source structure
- Target structure R_EXTENSIONIN is not mapped to any source structure
- Target structure R_EXTENSIONOUT is not mapped to any source structure
- No differences found during DDIC comparison

Change Migration Object Z_KOSTL_TEXT_003

Object Browser Migration Object

Advanced Search (All Objects)

Function Group /1LT/SAPLHE48000000000000052 Active

```
1 * ****
2 * System-defined Include-files.
3 *
4 INCLUDE /1LT/LHE48000000000000052TOP.
5 INCLUDE /1LT/LHE48000000000000052UXX.
6 " Global Declarations
   " Function Modules
```



THANK YOU

