

How-To Guide: DT Import (DIF) Doc for EAM Maintenance Plan and Item

Applies to

MDG EAM Solutions by Prometheus Group

Summary

MDG for EAM include standard implementations of the Data Import Framework (DIF) that read the data from file which captured from other system. The data in the file can be saved to 'Active Area' directly or 'Staging Area' based on the options chosen in the Import Framework screen. The standard implementations support Key Mapping and value mapping.

This guide describes the necessary configuration steps for implementing DIF. This guide explains the Data Importing Framework for Object link and network. Same steps can be followed for other EAM objects.

You can perform most configuration tasks in customizing for Master Data Governance under SAP Reference IMG -> Cross Application Components -> Processes and Tools for Enterprise Applications -> Master Data Governance.

Additionally, you can use the following transactions:

- MDGIMG – IMG Master Data Governance
- FILE -- Logical File Path Definition
- IDMIMG – IMG Key Mapping

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Introduction

Data transfer represents a collection of functions and features you can use to move master data and mapping information between systems and clients. Examples of these systems include existing ERP systems and your Master Data Governance hub system.

Steps for ALE Scenario Configuration

Create a directory in AL11 for storing for Maintenance Plan files which can later be imported to transfer the data.

Note: The following configuration is required only when you want to generate XML file from an IDOC.

This guide uses the system S17 and its client 100 for example data. When you configure this scenario for your landscape, ensure you replace system ID and client ID with your own system data.

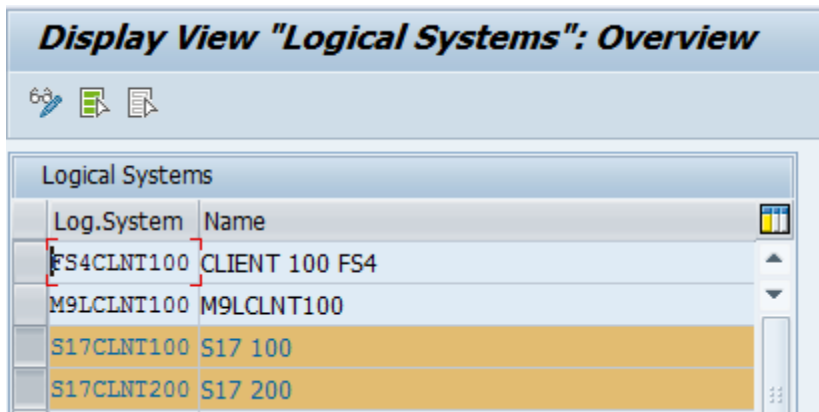
Define Logical Systems

Use the following to define a logical system:

1. Enter transaction code (t-code) BD54.
2. Click New entries to create a Logical System.
3. Enter a name for the Logical System and a description.

The Logical System names used throughout this example is MDG system S17 CLNT 100 as the source and S17 CLNT 200 as the target.

Display View "Logical Systems": Overview




Log.System	Name
FS4CLNT100	CLIENT 100 FS4
M9LCLNT100	M9LCLNT100
S17CLNT100	S17 100
S17CLNT200	S17 200


Define an RFC Connection

Use the following steps to define the RFC connection:

1. Run the transaction SALE. Navigate to tree menu Communication -> Create RFC Connections or Run the transaction SM59 to create an RFC Connection.
2. Create an RFC connection using Connection Type T (Start External Program Using TCP/IP) into the same client:

RFC Destination LOCAL_EXEC

Connection Test Unicode Test 

RFC Destination **LOCAL_EXEC** 

Connection Type **T** TCP/IP Connection Description

Description

Description 1 Starts the Program 'RFCEXEC' on Front-End Machine

Description 2 (SAP standard entry)

Description 3

Administration **Technical Settings** Logon & Security Unicode Special Options

Activation Type

☒ Start on Application Server ☐ Registered Server Program

☐ Start on Explicit Host

☐ Start on Front-End Work Station

Start on Application Server

Program **rfcexec**

Start Type of External Program

☒ Default Gateway Value

☐ Remote Execution

☐ Remote Shell

☐ Secure Shell

Define an XML Port

Use the following steps to define an XML Port:

1. Run the t-code WE21 > Create an XML File type port and enter the name of the port and relevant description. For example, MPMI_XML.
2. Enter the name of the Directory created using t-code AL11 and enter the Function module as displayed in the following screen.

Port **MPMI_XML**

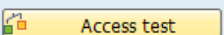
Description **XML port for Maintenance Plant**

XML format

☐ SAP Release 46

☒ Unicode

Outbound file **Outbound: Trigger**

☐ Logical directory 

☒ physical directory

Directory **\\ULABSHAN17\ZDIR_MPMI\SOURCE**

Function module **EDI_PATH_CREATE_CLIENT_DOCNUM**

Description Directory + file name in format T_Client_Docnum

Outbound file

Define Partner Profiles

Run the t-code WE20 > Locate the MDG Client S17CLNT200 under tree node Partner Profile LS > Maintain the settings for message types /UGI3/MAINTENANCE_PLAN and /UGI3/MAINTENANCE_ITEM under outbound parameters.

Partner profiles: Outbound parameters

68

Partner No. S17 200
Partn.Type Logical system
Partner Role

Message Type Maintenance Plan Idoc Message type
Message code
Message function ☐ Test

Outbound Options | Message Control | Post Processing: Permitted Agent | Tel...

Receiver port Transactional RFC S17 200
Pack. Size
☐ Queue Processing

Output Mode
☒ Pass IDoc Immediately Output Mode 2
☐ Collect IDocs

IDoc Type
Basic type IDoc for Maintenance Plan
Extension
View
☒ Cancel Processing After Syntax Error
Seg. release in IDoc type Segment Appl. Rel.

Partner profiles: Outbound parameters

68

Partner No. S17 200
Partn.Type Logical system
Partner Role

Message Type Maintenance Item Idoc Message ty...
Message code
Message function ☐ Test

Outbound Options | Message Control | Post Processing: Permitted Agent | Tel...

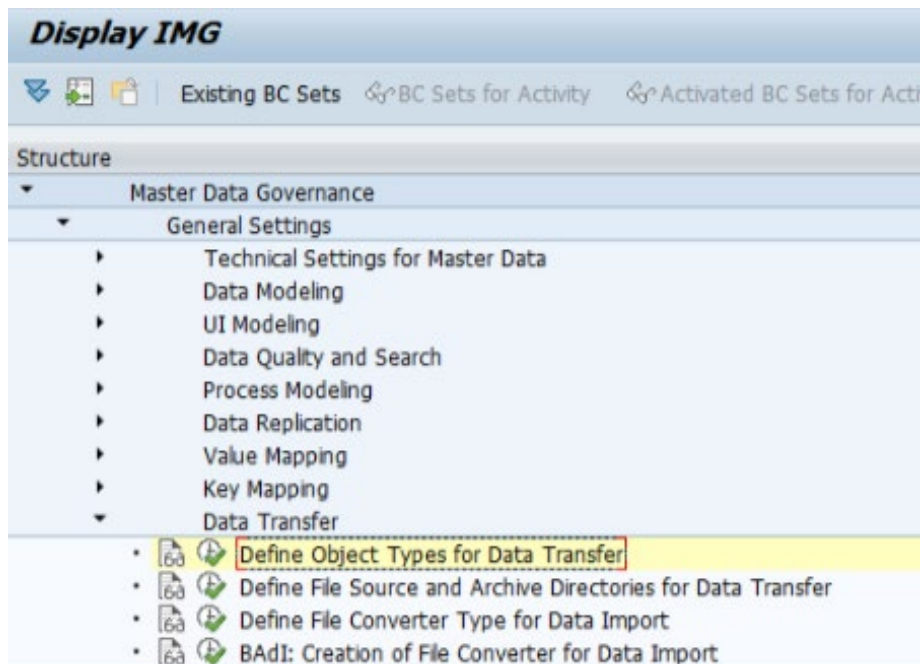
Receiver port Transactional RFC S17 200
Pack. Size
☐ Queue Processing

Output Mode
☒ Pass IDoc Immediately Output Mode 2
☐ Collect IDocs

IDoc Type
Basic type IDoc for Maintenance Item
Extension
View
☒ Cancel Processing After Syntax Error
Seg. release in IDoc type Segment Appl. Rel.

Define Object Types

Go to MDGIMG > Master Data Governance > General Settings > Data Transfer > Select Node 'Define Object Types for Data Transfer'.



Validate if the highlighted entries should be available as in the following screen.

Change View "Define Object types for Data Transfer": Overview

New Entries

Obj. Type	Description	BO Type	Description
UFTL	Functional Location Task List	/UGI/TLFL	Functional Location Task List
UGIL	General task List	/UGI/TL	General Task List
UMPM	Maint. Plan Item	1223	Maintenance Plan
UMSP	Measuring Point transfer	1230	Measuring Device

Use the following steps to set up the Data Import Framework.

1. Click on sub-node 'Detailed information for Object Types'.
2. Provide the message types to be recognized in the file while importing the data.

Change View "Detailed information for Object types": Overview

New Entries

Object Type: UMPM

Message Data Type	MDT Short Name	Namespace	Import Class	Converter Class	Act. Con.	Act. Imp.
/UGI/EAM_MAINTENANCE_PLAN_01	/UGI/EAM_MAINTENANCE_PLAN_01		/UGI/CL_MDG_EAM_MPMI_FILELOAD		<input type="checkbox"/>	<input checked="" type="checkbox"/>
/UGI/EAM_MAINTENANCE_PLAN_02	/UGI/EAM_MAINTENANCE_PLAN_02		/UGI/CL_MDG_EAM_MPMI_FILELOAD		<input type="checkbox"/>	<input checked="" type="checkbox"/>
/UGI/EAM_MAINTENANCE_PLAN_03	/UGI/EAM_MAINTENANCE_PLAN_03		/UGI/CL_MDG_EAM_MPMI_FILELOAD		<input type="checkbox"/>	<input checked="" type="checkbox"/>
_UGI3_EAM_MAINTENANCE_PLAN_01	_UGI3_EAM_MAINTENANCE_PLAN_01		/UGI/CL_MDG_EAM_MPMI_FILELOAD		<input type="checkbox"/>	<input checked="" type="checkbox"/>
_UGI3_EAM_MAINTENANCE_PLAN_02	_UGI3_EAM_MAINTENANCE_PLAN_02		/UGI/CL_MDG_EAM_MPMI_FILELOAD		<input type="checkbox"/>	<input checked="" type="checkbox"/>
_UGI3_EAM_MAINTENANCE_PLAN_03	_UGI3_EAM_MAINTENANCE_PLAN_03		/UGI/CL_MDG_EAM_MPMI_FILELOAD		<input type="checkbox"/>	<input checked="" type="checkbox"/>
_UGI3-EAM_MAINTENANCE_PLAN_01	_UGI3-EAM_MAINTENANCE_PLAN_01		/UGI/CL_MDG_EAM_MPMI_FILELOAD		<input type="checkbox"/>	<input checked="" type="checkbox"/>
_UGI3-EAM_MAINTENANCE_PLAN_02	_UGI3-EAM_MAINTENANCE_PLAN_02		/UGI/CL_MDG_EAM_MPMI_FILELOAD		<input type="checkbox"/>	<input checked="" type="checkbox"/>
_UGI3-EAM_MAINTENANCE_PLAN_03	_UGI3-EAM_MAINTENANCE_PLAN_03		/UGI/CL_MDG_EAM_MPMI_FILELOAD		<input type="checkbox"/>	<input checked="" type="checkbox"/>

- Click on the sub-node 'Maintain Business Activity'. This refers to the CR type to be created while importing the data to staging area.

Change View "Maintain Business Activity": Overview

Dialog Structure

- Define Object types for
 - Detailed information
 - Additional selection f
 - Object List
 - Maintain Business Activity

Obj. Type	BO Type	Bus.Acty	Description
UFTL	/UGI/TLFL	FTLB	Functional Location Task List
UGIL	/UGI/TL	UTLB	General Task List
UMPM	1223	UMPB	Maintenance Plan
UMSP	1230	UMSB	Measuring Device

- Maintain Object List for Data Import.

Change View "Object List": Overview

New Entries BC Set: Change Field Values

Dialog Structure

- Define Object types for
 - Detailed information
 - Additional selection f
 - Object List
 - Maintain Business Activity

Object Type: UMPM

Obj. List	Seq.
UMPM	1

File Source and Archive Directories

To set up the data import, source and archive logical directories in the MDG Data Transfer Customizing activity needs to be defined.

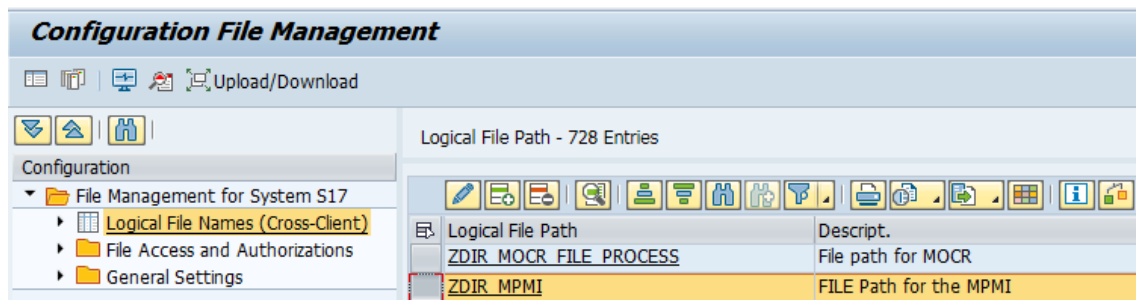
The logical file name and the logical path should be maintained to get an appropriate physical file name and physical path name.

Use the following steps to define file source and archive directories:

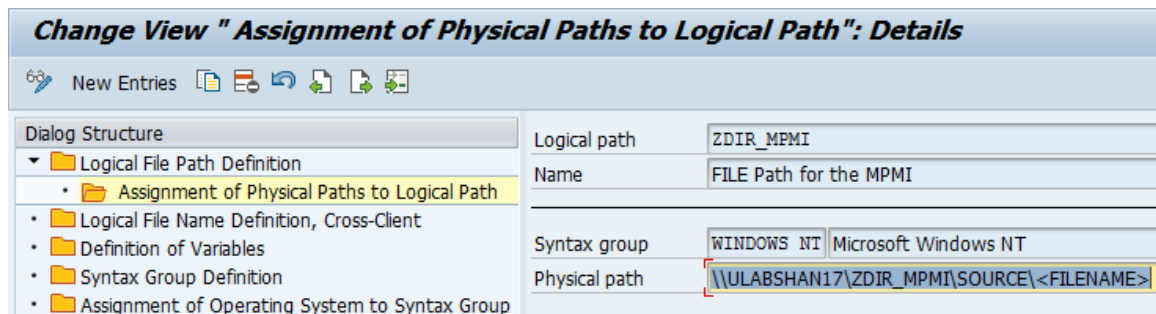
- Define a Logical Path Name: First determine the target directory in which you want to create the archive files of a certain archiving object. The physical name of this directory is stored in a logical path name.
- Define a Logical File Name: After creating the logical path name, you need to create a logical file name.
- Assign a Logical File Name to the archiving Object.
Note: Contact BASIS for directory paths creation.
- To assign directories as sources or archives, the physical directory paths must be created in the file system initially.
- Use the t-code SFILE to map them to logical names.
Run the t-code AL11 to verify the directory path creation:

ZDIR_MPMI	\\ULABSHAN17\ZDIR_MPMI
-----------	------------------------

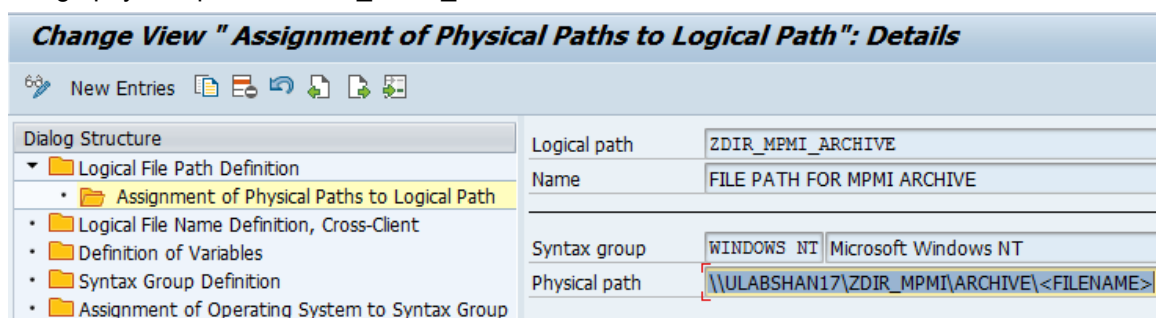
- Run the t-code SFILE to map directory path to logical names:



7. Assign physical path for ZDIR_MPMI.

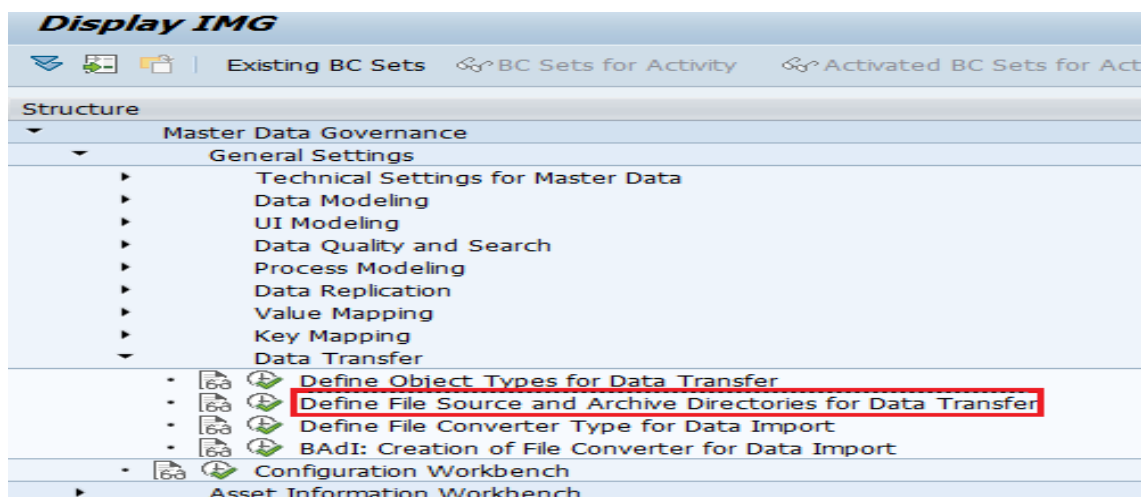


8. Assign physical path for ZDIR_MPMI_ARCHIVE.



Defining Source and Logical Directories

Go to MDGIMG > Master Data Governance > General Settings > Data Transfer > Define File Source and Archive Directories for Data Transfer.



1. Click on Data Transfer Directories -> Maintain the Equipment directory which is created in t-code SFILE.

Change View "Data Transfer Directories": Overview

New Entries

Data Transfer Directories	
Logical File Path	Descript.
ZDIR_FLOC_SOURCE	Path for FLOC
ZDIR_MPMI	MPMI DT files

2. Click on Archive Path for Object Types to maintain the archiving path of files used.

Change View "Archive Path for Object types": Overview

New Entries

Archive Path for Object types	
Obj. Type	Archive Directory
UGTL	ZDIR_TASKLIST_ARCHIVE
UMPM	ZDIR_MPMI

Define the Technical Settings for Business Systems

Go to Master Data Governance > General Settings > Key Mapping > Define Technical Settings > Define Technical Settings for Business Systems.

Structure

Master Data Governance, Central Governance
General Settings
Technical Settings for Master Data
Data Modeling
UI Modeling
Data Quality and Search
Process Modeling
Data Replication
Value Mapping
Key Mapping
Overall Information
Customize Business Objects for Key Mapping
Enhance Key Mapping Content
Define a Mapping Context for UKMS
Define Technical Settings
Define Technical Settings for Business Systems
BAdI: Determination of Local System Name

Use the following steps to define technical settings for Business Systems:

1. Define the Business System.

Change View "Define Business Systems": Overview

New Entries

Define Business Systems				
Business System	Logical System	RFC Destination	Logical File Path	
S17_ULABSHAN17_S17CLNT200	7CLNT200	S17CLNT200		
UGI_ULABSMDG75_M9TCLNT100	M9TCLNT100	M9TCLNT100		

2. Add the Maintenance Plan BO Type for the Business System:
 - BO Type 1223 (Maintenance Plan)

Change View "Define Bus. Systems, BOs": Overview

New Entries

Dialog Structure

- Define Business Systems
 - Define Bus. Systems
 - Define Bus. Systems

Business System: S17_ULABSHAN17_S17CLNT200

Define Bus. Systems, BOs

BO Type	Sys. Filt.	Outp. Mode
1223	<input type="checkbox"/>	Object-Dependent Default

3. For Key Mapping scenarios, update the communication channel settings as explained in the following section:

Change View "Define Bus. Systems, BOs, Communication Channel": Overview

New Entries

Dialog Structure

- Define Business Systems
 - Define Bus. Systems
 - Define Bus. Systems

Business System: S17_ULABSHAN17_S17CLNT200

Bus. Obj. Type: 1223

Description: Maintenance Plan

Define Bus. Systems, BOs, Communication Channel

C. Channel	Key Harm.	Upd. KM	Storage
Replication via IDoc	Key Mapping	<input checked="" type="checkbox"/>	Not Defined

Test Scenario for DIF


Use the following steps for Test Scenario for DIF:

1. Download the XML file in your local machine.
2. Go to t-code AL11 and get the directory name for file.

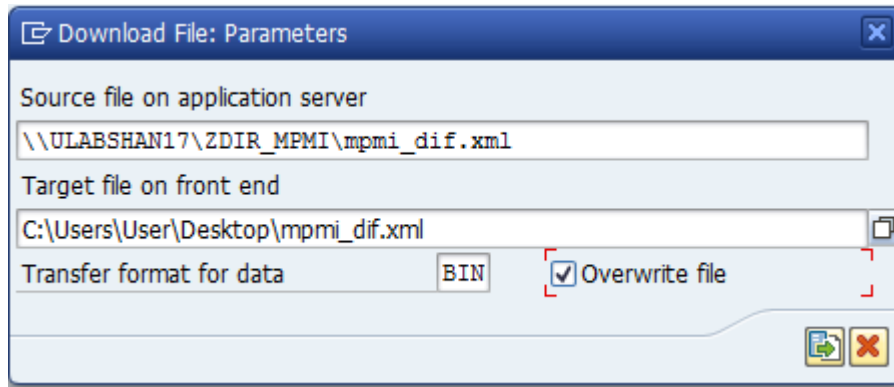
ZDIR_MPMI \\ULABSHAN17\ZDIR_MPMI

3. Open directory and get the file name to download.

Directory: \\ULABSHAN17\ZDIR_MPMI

Usable	View...	Chang...	Leng...	File Owner	Lastchange	Lastchange	File Name
		X	1		31.12.1969	19:00:01	.
		X	1		31.12.1969	19:00:01	..
				fs3adm	20.12.2016	10:48:33	ARCHIVE
X			6177	SAPServiceS17	05.10.2017	12:39:30	MPMI_DIF
				fs3adm	13.10.2017	03:15:46	SOURCE
X			10104	SAPServiceS17	14.10.2017	14:20:22	mpmi_dif.xml

4. Go to t-code CG3Y to download the file. Enter the source file name and the target file name.
5. Click on Overwrite check box, to overwrite if file exist with same name.



6. Click on “Download” button to download the file in the specified location.

The following steps are required to run the DIF for Maintenance Plan and Item:

You can run the DIF for Maintenance Plan and Item in Manual Processing/Defined by Change Request/Governance modes with/without Key Mapping.

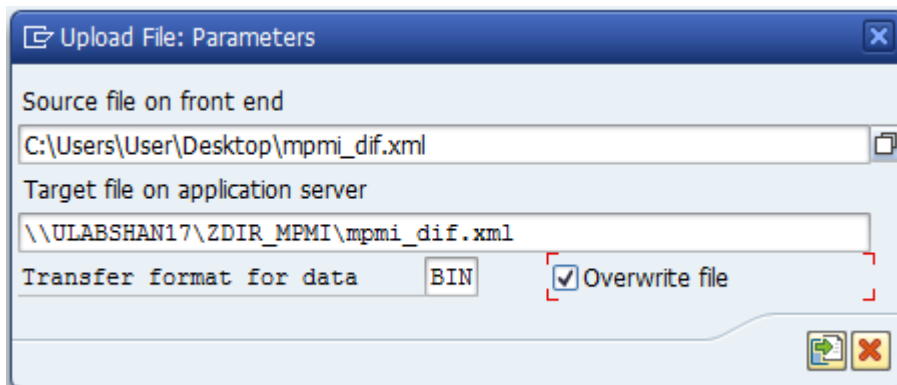
Use the following steps to test the DIF:

7. Received the enclosed IDOC XML file for DIF Import from client system:



mpmi_dif.xml

8. Upload the file.
9. Run the t-code CG3Z > Choose the upload file Parameters-Source file on front end and Target file on application server paths > Click on Upload icon.



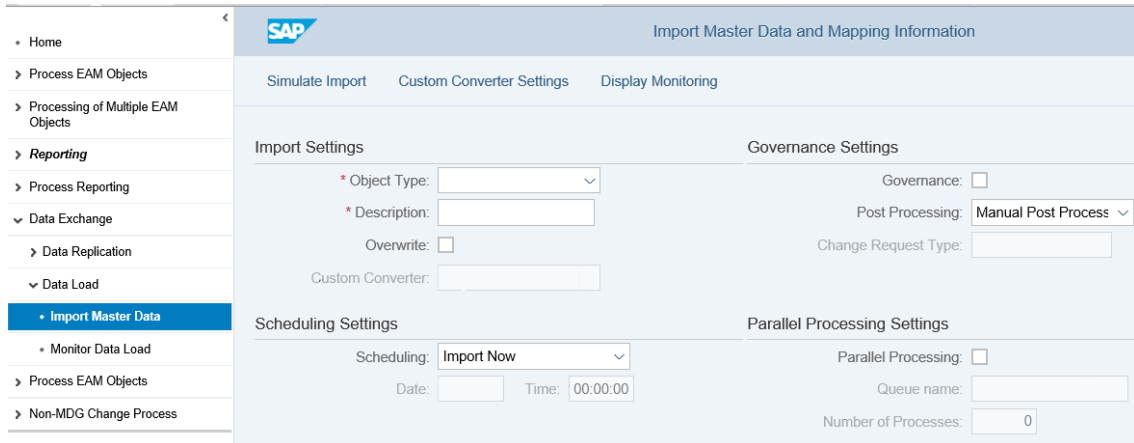
10. Check file in AL11 System.

X			10104	SAPServiceS17	14.10.2017	14:20:22	mpmi_dif.xml
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Data Import

Use the following steps to import data:

1. Navigate to the Data Exchange tab > Data Load > Import Master Data



Import Master Data and Mapping Information

Simulate Import Custom Converter Settings Display Monitoring

Import Settings

* Object Type:
 * Description:
 Overwrite: ☐
 Custom Converter:

Governance Settings

Governance: ☐
 Post Processing: **Manual Post Process**
 Change Request Type:

Scheduling Settings

Scheduling: **Import Now**
 Date: Time:

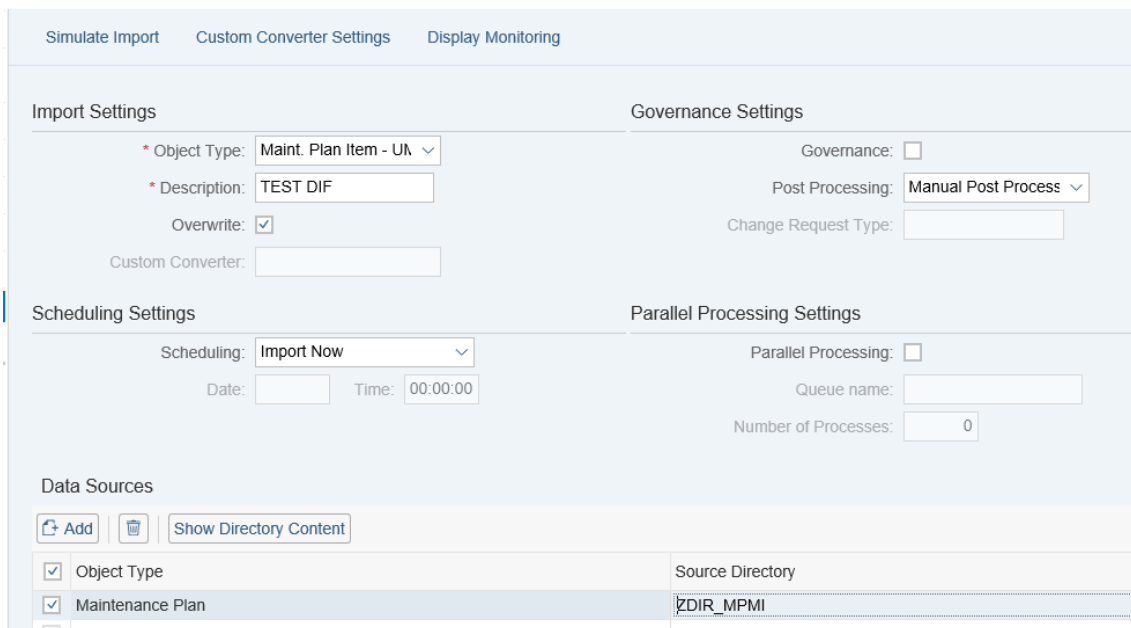
Parallel Processing Settings

Parallel Processing: ☐
 Queue name:
 Number of Processes:

2. Scenario 1 – Manual Post Processing.

a. Enter the following details in the new Data Import screen:

- Object Type – UMPM
- Provide mandatory description
- Choose overwrite check box if you want the object to be overwritten
- Select the Post processing – Manual Post Processing
- Data Sources – Add the Object Type “Maintenance Plan” and Source Directory ZDIR_MPMI



Simulate Import Custom Converter Settings Display Monitoring

Import Settings

* Object Type: **Maint. Plan Item - UA**
 * Description: **TEST DIF**
 Overwrite: ☒
 Custom Converter:

Governance Settings

Governance: ☐
 Post Processing: **Manual Post Process**
 Change Request Type:

Scheduling Settings

Scheduling: **Import Now**
 Date: Time:

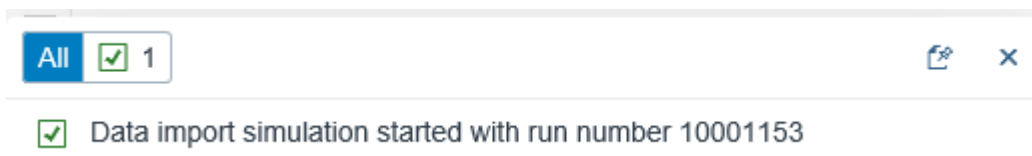
Parallel Processing Settings

Parallel Processing: ☐
 Queue name:
 Number of Processes:

Data Sources

Object Type	Source Directory
<input checked="" type="checkbox"/> Maintenance Plan	ZDIR_MPMI

b. Click on “Import” button.



All ☒ 1


☒ Data import simulation started with run number 10001153

c. Click on “Display Monitoring” button to check the import log > Click on Run number to see details log.

	Propagated Type/Date/Time/User
<input checked="" type="radio"/>	12.10.2017 09:10:08 [REDACTED]
<input type="radio"/>	Description: TEST DIF
<input type="radio"/>	Object Type Processing Sequence: Maintenance Plan
<input type="radio"/>	Processing files from directory \\ULABSHAN17\ZDIR_MPMI\SOURCE\
<input type="radio"/>	Message Type _UGI3_-EAM_MAINTENANCE_PLAN_02 detected for file SINGLE.XML
<input type="radio"/>	Data check complete; see application log for details
<input type="radio"/>	Maintenance item 413 created
<input type="radio"/>	Data check complete; see application log for details
<input type="radio"/>	Maintenance item 413 created
<input type="radio"/>	Data check complete; see application log for details

d. Check in t-code IP03 whether Maintenance Plan is created.

Display Maintenance Plan: Single cycle plan 000000000328

Maintenance plan SINGLE CYCLE PLAN PERF BASED NOC 



Maint. plan hea...

Maintenance plan cycle Maintenance plan scheduling parameters Maintenance plan additional data

Cycle/Unit KW

Cycle text

Offset/Unit KW

Counter   INPUT RATING KW

Item overview Item Item location

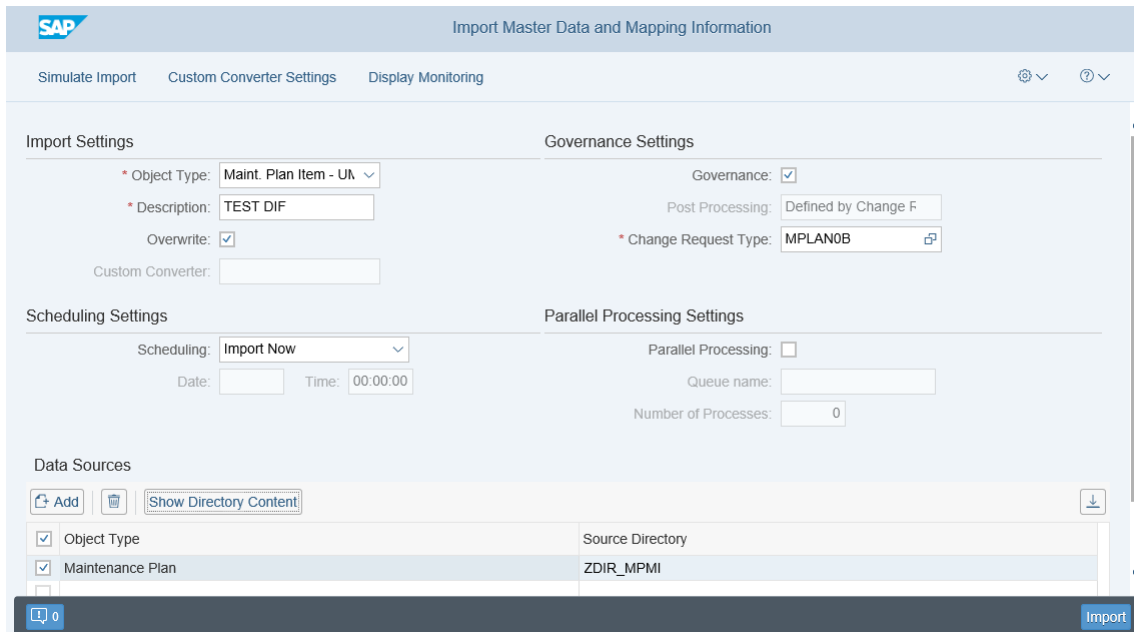
Maintenance Item	Maintenance Item Text	Functional Location
<u>417</u>	SINGLE CYCLE PLAN PERF BASED NO	<u>FLOC-DRF-002</u>
<u>418</u>	SINGLE CYCLE PLAN PERF BASED NO	<u>FLOC-DRF-002</u>

3. Scenario 2 – Defined by Change Request with governance.

a. Enter the following details in the new window:

- Object Type – UMPM
- Provide mandatory description
- Choose overwrite check box if you want the object to be overwritten
- Select the Post processing – Define by Change Request
- Select Governance Check box

- Choose the Change Request type “MPLAN0B”
- Data Sources – Add the Object Type “Maintenance Plan” and Source Directory ZDIR_MPMI



Import Master Data and Mapping Information

Simulate Import Custom Converter Settings Display Monitoring

Import Settings

- * Object Type: Maint. Plan Item - UM
- * Description: TEST DIF
- Overwrite: ☒
- Custom Converter:

Governance Settings

- Governance: ☒
- Post Processing: Defined by Change F
- * Change Request Type: MPLAN0B

Scheduling Settings

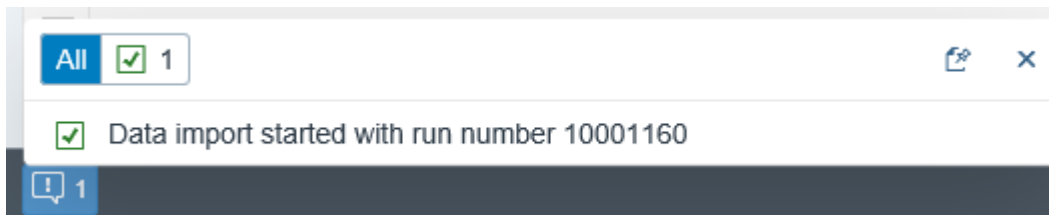
- Scheduling: Import Now
- Date: Time: 00:00:00

Parallel Processing Settings

- Parallel Processing: ☐
- Queue name:
- Number of Processes: 0

Data Sources

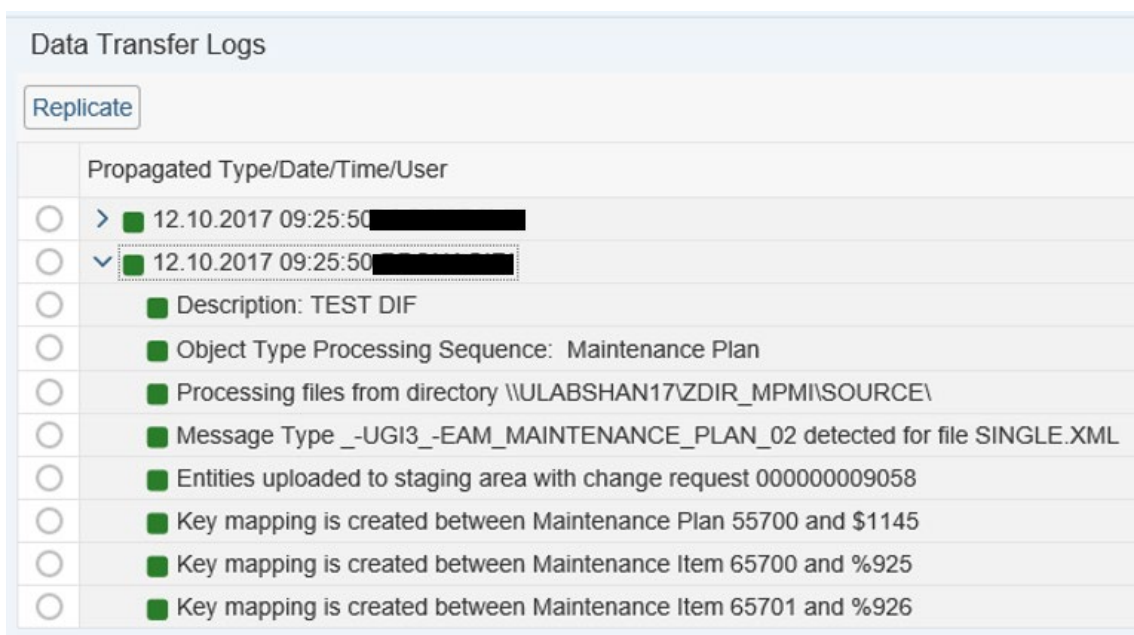
Object Type	Source Directory
<input checked="" type="checkbox"/> Maintenance Plan	ZDIR_MPMI



All ☒ 1

☒ Data import started with run number 10001160

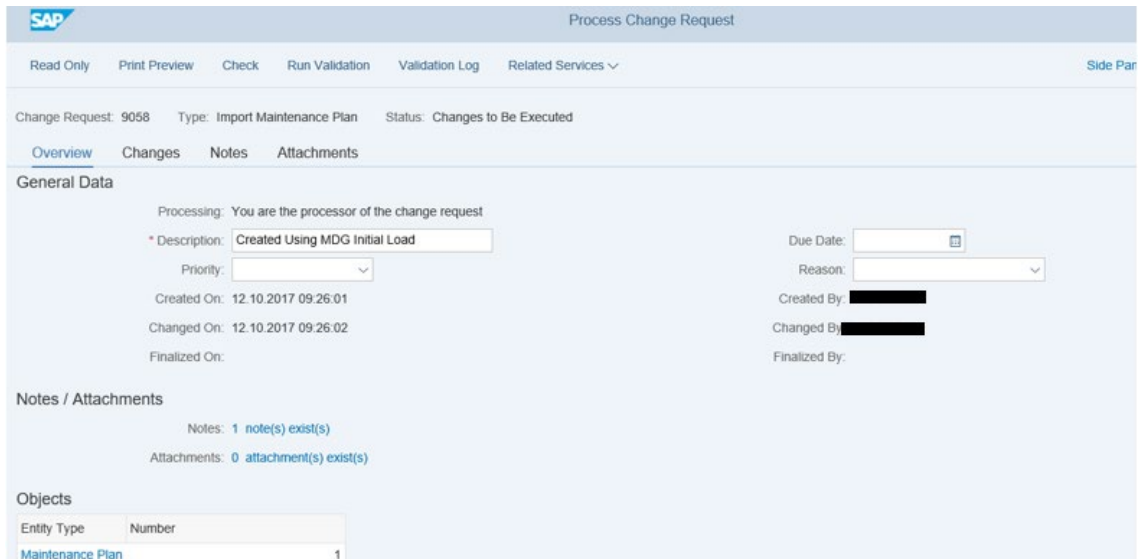
- Click on “Display Monitoring” button to check the import log > Click on Run number to see details log.



Data Transfer Logs

	Propagated Type/Date/Time/User
<input type="radio"/>	> <input checked="" type="checkbox"/> 12.10.2017 09:25:50 [REDACTED]
<input type="radio"/>	▼ <input checked="" type="checkbox"/> 12.10.2017 09:25:50 [REDACTED]
<input type="radio"/>	<input checked="" type="checkbox"/> Description: TEST DIF
<input type="radio"/>	<input checked="" type="checkbox"/> Object Type Processing Sequence: Maintenance Plan
<input type="radio"/>	<input checked="" type="checkbox"/> Processing files from directory \\ULABSHAN17\ZDIR_MPMI\SOURCE\
<input type="radio"/>	<input checked="" type="checkbox"/> Message Type _-UGI3_-EAM_MAINTENANCE_PLAN_02 detected for file SINGLE.XML
<input type="radio"/>	<input checked="" type="checkbox"/> Entities uploaded to staging area with change request 000000009058
<input type="radio"/>	<input checked="" type="checkbox"/> Key mapping is created between Maintenance Plan 55700 and \$1145
<input type="radio"/>	<input checked="" type="checkbox"/> Key mapping is created between Maintenance Item 65700 and %925
<input type="radio"/>	<input checked="" type="checkbox"/> Key mapping is created between Maintenance Item 65701 and %926

- Change Request 9058 created in MDG system.



SAP Process Change Request

Read Only | Print Preview | Check | Run Validation | Validation Log | Related Services ▾ | Side Panel

Change Request: 9058 | Type: Import Maintenance Plan | Status: Changes to Be Executed

Overview | Changes | Notes | Attachments

General Data

Processing: You are the processor of the change request


* Description: Created Using MDG Initial Load

Priority: ▾


Created On: 12.10.2017 09:26:01


Changed On: 12.10.2017 09:26:02

Finalized On:

Due Date: 

Reason: ▾

Created By: 

Changed By: 

Finalized By:

Notes / Attachments

Notes: 1 note(s) exist(s)

Attachments: 0 attachment(s) exist(s)

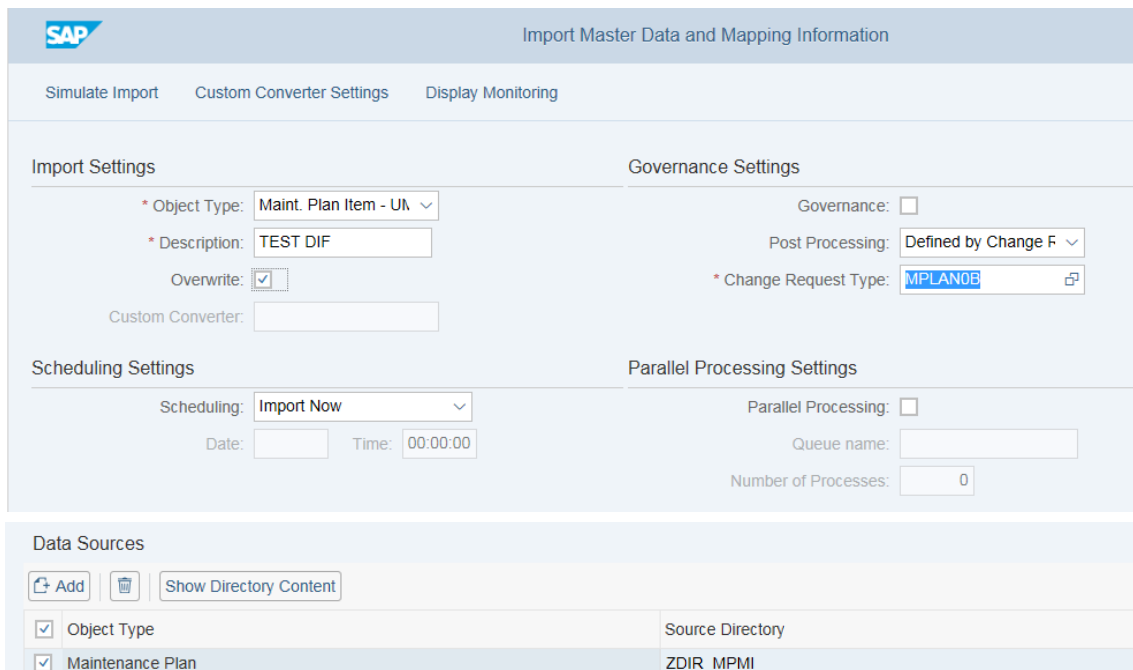
Objects

Entity Type	Number
Maintenance Plan	1

4. Scenario 3 – Defined by Change Request without governance

- Enter the following details in the new Data Import screen:

- Object Type – UMPM
- Enter the Description
- Select overwrite check box if you want the object to be overwritten
- Select the Post Processing – Defined by Change Request
- Choose the Change Request type as “MPLAN0B”
- Data Sources – Add the Object Type “Maintenance Plan” and Source Directory ZDIR_MPMI



SAP Import Master Data and Mapping Information

Simulate Import | Custom Converter Settings | Display Monitoring

Import Settings

* Object Type: Maint. Plan Item - UI ▾

* Description: TEST DIF


Overwrite: ☒

Custom Converter:

Governance Settings

Governance: ☐

Post Processing: Defined by Change F ▾

* Change Request Type: MPLAN0B 

Scheduling Settings

Scheduling: Import Now ▾

Date: Time: 00:00:00



Parallel Processing Settings

Parallel Processing: ☐

Queue name:

Number of Processes: 0

Data Sources

 Add |  | Show Directory Content

Object Type	Source Directory
<input checked="" type="checkbox"/> Maintenance Plan	ZDIR_MPMI