Deploying the Metadata Extraction ABAP Function Module for the SAP R3 Family of Bridges

Overview

The SAP Business Suite 4 HANA (S/4HANA), ECC, R/3 ERP bridge may be used to extract metadata from the SAP Data Dictionary. It does so by making use of an ABAP function module that one places on the SAP server. This function module is remotely accessible by the bridge to query and download (as a text file) the metadata containing within the SAP server. When executed, the bridge then either

- Imports metadata from an existing file already downloaded locally from a previous bridge execution.

- Invokes the ABAP module API, waits for the download, and then imports metadata from that file.

This document details the steps required to deploy* this module.

*The following instruction was compiled based on the SAP GUI v.7.2

Delivery of the Module

The module text itself is delivered as "Z_MITI_DOWNLOAD.txt" and must be requested.

Deployment of the Module

Create a Package

This step is optional and an existing package can be used.

1. Login to the SAP ECC server and open "Object Navigator" (SE80 transaction).

2. Select option "Package" from the list and enter a name for the new package (e.g. Z_MITI) then press button 'Display'

4. Press 'Yes' in the 'Create Package' window. Consequently, a window "Package Builder: Create Package" will be opened. Enter value into 'Short Description' field and press the "Continue" icon.

5. Press 'Own Requests' in the 'Prompt for local Workbench request' window. Select 'development' request.

Create a Function Group

In Object Navigator select "Function Group" from the list and type its name in the input field below (e.g. Z_MITI_FGROUP). Press View icon.

In "Create Object" window press yes to create a new function group.

Specify an appropriate description in the "Short text" field and press button "Save".

Choose a package which was prepared on the previous stage "Create a Package" and click on icon "Save".

Confirm a request by pressing icon "Continue".

Activate this Function Group.

Create the ABAP Function Module

After the function group was created and selected, right mouse click on its name in repository browser and select "Create=>Function Module".

Enter "Z_MITI_DOWNLOAD" into "Function Module" field and populate "Short text" input with proper description.

When the module has been created, specify the following information:

* navigate to the "Attributes" tab. Select

  Processing Type = Remote-Enabled Function Module.

Function module	Z_MITI_DOWNLOAD					Inactive (Revised)	
Attributes	Import	Export	Changing	Tables	Exceptions	Source code	

Classification

Function Group	Z_MITI_FGROUP	Meta Integration Function Group
Short Text	MetaIntegration function module for ECC	

Processing Type

○ Normal Function Module
◉ Remote-Enabled Module ☐ BasXML supported
○ Update Module
   ◉ Start immed.
   ○ Immediate Start, No Restart
   ○ Start Delayed
   ○ Coll.run

General Data

Person Responsible	HANA12
Last Changed By	HANA12
Changed on	09.01.2018
Package	Z_MITI
Program Name	SAPLZ_MITI_FGROUP
INCLUDE Name	LZ_MITI_FGROUPU01
Original Language	EN
Not released	
☐ Edit Lock	
☐ Global	

* navigate to the "Source code" tab. There are two ways how to deploy code for the function:

- from the main menu choose Utilities=>More Utilities=>Upload/Download=>Upload. and pick out Z_MITI_DOWNLOAD.txt file.

- alternatively, open the file, copy its content and paste into "Source code" area.

* navigate to the "Import" tab and create the following parameters, pick "Pass Value" for all of them:

     P_AREA TYPE DD02L-TABNAME (Optional = True)

     P_LOCAL_PATH TYPE STRING (Optional = True)

     P_LANGUAGE TYPE L001TAB-DATA DEFAULT 'E'

     ROWSKIPS TYPE SO_INT DEFAULT 0

     ROWCOUNT TYPE SO_INT DEFAULT 0

Function module   Z_MITI_DOWNLOAD   Inactive

Attributes	Import	Export	Changing	Tables	Exceptions	Source code

Parameter Name	Typi...	Associated Type	Default value	Optional	Pass Value	Short text
P_AREA	TYPE	DD02L-TABNAME		✓	✓	Table Name
P_LOCAL_PATH	TYPE	STRING		✓	✓	
P_LANGUAGE	TYPE	L001TAB-DATA	'E'	☐	✓	Field of Length 128 for Lan
ROWSKIPS	TYPE	SO_INT	0	☐	✓	SAPoffice: Type I
ROWCOUNT	TYPE	SO_INT	0	☐	✓	SAPoffice: Type I

* Navigate to the "Tables" tab and define the following:

       EXPORT_TABLE LIKE TAB512

Function module   Z_MITI_DOWNLOAD   Inactive (Revised)

Attributes	Import	Export	Changing	Tables	Exceptions	Source code

Parameter Name	Typing	Associated Type	Optional	Short text	Long T...
EXPORT_TABLE	LIKE	TAB512	☐	Table with a 512 byte field	Create
			☐		
			☐		

* Navigate to the "Exceptions" tab and define the following exception:

       E_EXP_GUI_DOWNLOADFAILED

Function module   Z_MITI_DOWNLOAD   Inactive (Revised)

Attributes	Import	Export	Changing	Tables	Exceptions	Source code

☐ Exceptn Classes

Exception	Short text	Long txt	
E_EXP_GUI_DOWNLOADFAILED		Create	

Save the function (press ctrl+S or choose Function Module=>Save in the main menu)

click "Activate" icon on the toolbar (ctrl+F3) and press "Continue" button in dialog window.

If prompted, you should select the generated includes to be activated along with the main function module.

Testing the Function

When all the previous steps where completed open Z_MITI_DOWNLOAD function module.

Choose "Function Module=>Test=>Test Function Module" from the main menu (or press F8).

Enter a path to the folder on the local file system into parameter P_LOCAL_PATH and press "Execute" icon on the toolbar (or press F8). Put the name of the area of interest into P_AREA field if some particular file with metadata must be downloaded or updated. When the function finishes working the folder which has been indicated in P_LOCAL_PATH parameter must contain a number of files with metadata inside. The names of files mimic areas which can be specified in P_AREA field.

The function will finish its execution and metadata will be downloaded much faster in case of launching it on the machine which has high-speed network connection with SAP ECC server.