

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 Inactive (Revised)

Attributes

Import

Export

Changing

Tables

Exceptions

Source code

Classification

Function Group	<input type="text" value="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	<input type="text" value="HANA12"/>
Last Changed By	<input type="text" value="HANA12"/>
Changed on	<input type="text" value="09.01.2018"/>
Package	<input type="text" value="Z_MITI"/>
Program Name	<input type="text" value="SAPLZ_MITI_FGROUP"/>
INCLUDE Name	<input type="text" value="LZ_MITI_FGROUPU0"/>
Original Language	<input type="text" value="EN"/>
Not released	
<input type="checkbox"/> Edit Lock	
<input type="checkbox"/> 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		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Table Name
P_LOCAL_PATH	TYPE	STRING		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
P_LANGUAGE	TYPE	L001TAB-DATA	'E'	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Field of Length 128 for Lan
ROWSKIPS	TYPE	SO_INT	0	<input type="checkbox"/>	<input checked="" type="checkbox"/>	SAPoffice: Type I
ROWCOUNT	TYPE	SO_INT	0	<input type="checkbox"/>	<input checked="" type="checkbox"/>	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	<input type="checkbox"/>	Table with a 512 byte field	Create
			<input type="checkbox"/>		
			<input type="checkbox"/>		

* 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 were 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.