

Applies to:

SAP MDM and SAP BI. For more information visit the [Master Data Management Homepage](#)

Summary

The article gives the step by step process to configure a connection between SAP MDM and SAP BI System. In the coming article we will see how we can generate clean and consistent reporting in SAP BI by routing the data through SAP MDM and generating reports in SAP BI. We will also see how can we access MDM using function modules as well as class based MDM ABAP API.

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Introduction

In today's competitive world business often have disconnected and inconsistent information silos, complex and costly information integration. As a result the company's dependencies on this information can leads to loss in predictable profits. Hence before generating reports it should be ensured that the information Quality is the utmost priority for the company's information. Improving the Quality of master data in the company's information improves the accuracy of Business Processes and Analysis.

This can be achieved by using SAP MDM as a data quality engine for the existing BI System.

So in this article we are going to connect the SAP BI System with SAP MDM and will ensure the connectivity in SAP BI by using a function module of MDM ABAP API.

MDM ABAP API can be used to access MDM from BI system. It provides an interface for accessing SAP MDM 5.5 using ABAP. The MDM ABAP API empowers ABAP-based applications to control MDM servers using most of the functions available in the MDM Console and MDM Data Manager applications.

The MDM ABAP API is provided with:

- Interface and Methods(ABAP Objects)
- Function groups and function Modules.

Prerequisites

The MDM 5.5 ABAP APIs are available for download on the Service Marketplace (Support package and Patch Area, Component MDM TECHNOLOGY). You can find the files at

<http://service.sap.com/swdc> -> SAP Support Packages -> Entry by Application Group -> SAP NetWeaver -> SAP MDM -> SAP MDM 5.5 -> MDM TECHNOLOGY 5.5.4 x.xx

There are different Patch which are available in the service market place; you should download the patch which is compatible with the MDM Server patch.

You can install the MDM_TECH Add-on using the SAP Add-on installation tool 'SAINT' on the SAP BI side. Your system administrator will ensure this on the BI System. This can be checked using the Transaction 'SAINT'. Below it is shown:

Add-ons and Preconfigured Systems installed in the system				
Add-on/PCS	Release	Level	Description	Imp
BI_CONT	703	0003	Business Intelligence Content	
MDM_TECH	555_700	0003	MDM_TECH 555 : Add-On Installation	
PI_BASIS	2005_1_700	0012	PI_BASIS 2005_1_700	
SAP_BW	700	0014	SAP NetWeaver BI 7.0	

Or else you can go to the System → Status. You can see the component information. This is shown below:

SAP System data	
Component version	SAP NetWeaver 2
Installation number	0020294429
License expiration	31.12.9999
Unicode System	Yes

System: Component information				
Software Compon...	Release	Level	Highest Support ...	Short Description of Software Compon
SAP_ABA	700	0012	SAPKA70012	Cross-Application Component
SAP_BASIS	700	0012	SAPKB70012	SAP Basis Component
PI_BASIS	2005_1_700	0012	SAPKIPYJ7C	PI_BASIS 2005_1_700
SAP_BW	700	0014	SAPKW70014	SAP NetWeaver BI 7.0
MDM_TECH	555_700	0003	SAPK-57003INMDM	MDM_TECH 555 : Add-On Installation

Configuring the Add-on to Work with MDM4A

The entire configuration for the MDM_TECH is done through a single transaction MDMAPIIC. There are four steps as a part of configuration:

1. Defining the MDM Server Connection:

MDM Server Connections		
MDM Connection	Host name	IP port
10.201.103.241	10.201.103.241	20005

In this step you define the MDM Connection, the host name for the MDM Server and the IP port for the MDM server. You can also give the IP address for your MDM Server instead of name. By default the IP port should be 20005.

2. Defining the MDM DBMS Server:

Mdm Dbms Hosts		
MDM Dbms	DB Type	Host name
10.111.61.95	MS SQL Server	10.111.61.95

Here you can define the DBMS name. It's up to you what name you want to give. Then select the DBMS Type. This can be selected from the dropdown. Also mention the Host name for your DBMS server.

3. Defining the MDM Version support for the Provider:

ABAP Implementation for MDM Version Support		
MDM Provider	Provider type	Short description
55_SP05_PL00	CL_MDM_PROVIDER_55_SP05_PL00	MDM5.5 SP05 Patch 0, Server Build 5.5.40.79 - 5.5.40.xx

Here in this you will provide the information in accordance with your MDM server service pack and the patch level installed. For e.g. if the MDM Server is SP05 with patch 0 then select the above mentioned MDM Provider and the provider type. It should be strictly in accordance with MDM Server else it will not establish connection with SAP BI.

4. Configure the Repository:

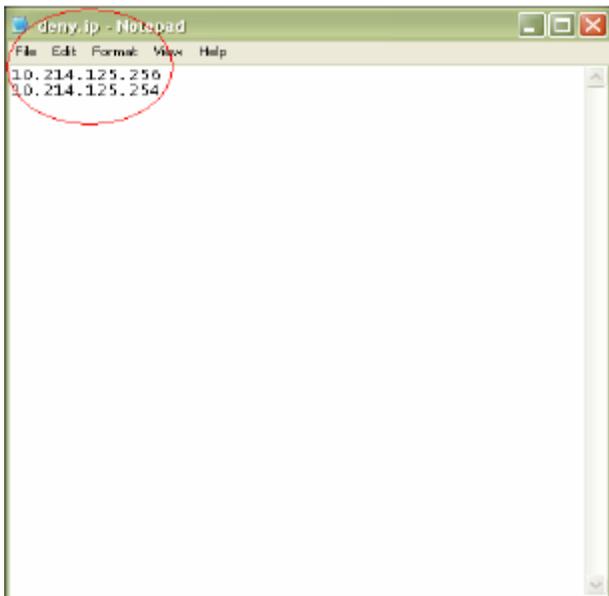
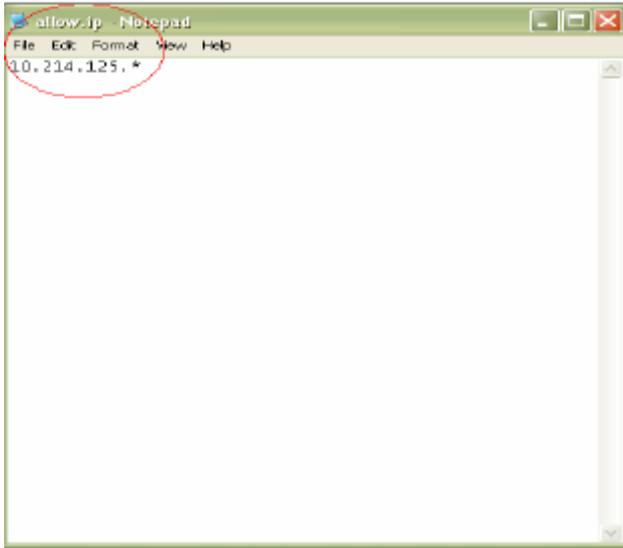
Object name	MDM_INT		
MDM Repositories			
MDM Repository	RFBC		
MDM Connection	MDM_MDM	10.210.103.241	1521
MDM Dbms	MDM_DBMS	10.201.103.241	Oracle
MDM Provider	55_SP05_PL00	CL_MDM_PROVIDER_55_SP05_PL00	MDM5.5 SP05 Patch 0, Server Build 5.5.40.79 - 5.5.40.xx

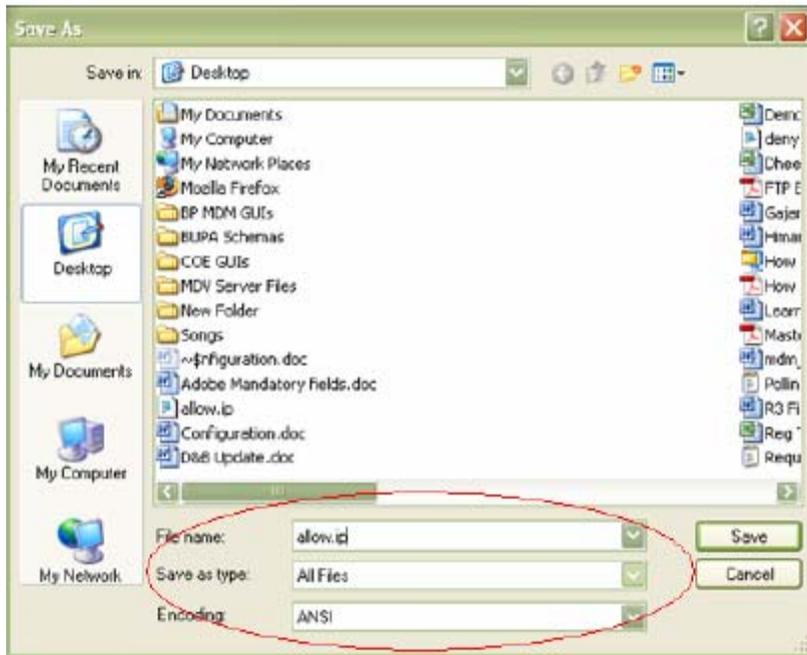
The object name is arbitrary and specifies the possible values defined so far in the configuration like below. The repository name should be given same as it is there in the SAP MDM else it will send error. All the other information like MDM Connection, MDM DBMS, and MDM Provider will be automatically pulled up from the previous configuration made. The MDM ABAP API will reference to the only Unique Object name given for the connection for the all the configuration made. So make sure that the Object name should be unique for a single configuration.

Creating the Trusted Relationship:

To be able to connect to BI system to MDM, a trusted relationship has to be there between MDM and all other outside system which the MDM system is connected with. The purpose for this is that MDM should identify to which system it has to communicate with. For this we have to create two files allow.ip and deny.ip. Allow.ip will contain the IP Address of the BI system. This can be done through a simple notepad file and saving it as a .ip file name. Make sure that it should have a file name as allow.ip and deny.ip. Else it will give the error that the connection is not trusted.

This is shown below:





The allow.ip and deny.ip files must be located in the MDM Server directory. Place these files in the location where your mds.ini files are located on the MDM Server.

\\Program files\SAP MDM 5.5\Server

Accelerators	File Folder	7/6/2007 11:30 AM
Archives	File Folder	6/25/2008 8:15 PM
BACKUP	File Folder	5/6/2008 2:39 PM
Distributions	File Folder	6/26/2008 4:31 PM
lang	File Folder	5/6/2008 2:36 PM
LangStrings	File Folder	5/6/2008 2:35 PM
Lexicons	File Folder	5/6/2008 2:35 PM
Logs	File Folder	6/25/2008 10:32 PM
PubXMLBuiltIns	File Folder	5/6/2008 2:35 PM
Reports	File Folder	6/26/2008 4:30 PM
deny.ip	0 KB IP File	2/29/2008 5:19 PM
mcs_list.ini	1 KB Configuration Settings	6/10/2008 6:09 PM
allow.ip	1 KB IP File	6/23/2008 5:18 PM
KeyMappingSortIndexes.acl	1 KB ACL File	5/14/2008 10:46 AM
mcs_ini0.bak	1 KB BAK File	7/3/2007 4:39 PM
mdm_ccms.ini	2 KB Configuration Settings	11/10/2006 4:06 PM

This Configuration will make your connection to be trusted one between MDM and BI.

Testing the BI Connectivity

Connect to SAP BI. Go to the Transaction se37 which is for function modules. Enter the function module MDM_ACCESSOR_CONNECT. Execute it. Enter the logical object name which was used in the configuration. It will give the status if the BI system that the connection is successful. This is shown below:

Transaction se37:

The screenshot shows the SAP Transaction se37 interface. The 'Function Module' field contains the text 'MDM_ACCESSOR_CONNECT'. Below the field are three buttons: 'Display' (with a magnifying glass icon), 'Change' (with a pencil icon), and 'Create' (with a document icon).

Enter the logical object name defined in the configuration and then execute:

The screenshot shows the 'Test data directory' dialog box in SAP. The 'Test for function group' is 'FG_MDM_ACCESSOR' and the 'Function module' is 'MDM_ACCESSOR_CONNECT'. The 'Uppercase/Lowercase' checkbox is unchecked. The 'RFC target sys:' field is empty. Below the dialog is a table with two columns: 'Import parameters' and 'Value'.

Import parameters	Value
IV_LOG_OBJECT_NAME	
IS_REPOSITORY_LANGUAGE	

Status will be shown:

```

Test for function group    FG_MDM_ACCESSOR
Function module           MDM_ACCESSOR_CONNECT
Uppercase/Lowercase      

Runtime:                  94.561 Microseconds

Exception                 EX_SERVER_RC_CODE
Message ID:               00
Message number:           001
Message:

```

Summary

Here in this article we have discussed the connection and the configuration parameters which are essential for establishing a trusted connection between SAP MDM and SAP BI. Once the connection has been established between SAP MDM and SAP BI we can move on to the next part of communication between them where we are going to use a concept of Open hub destination in SAP BI to communicate with the MDM. This will be discussed in the next article.

Related Contents:

http://help.sap.com/saphelp_nw70/helpdata/en/45/5d3bfaa9ef3bdf10000000a1553f7/frameset.htm

https://www.sdn.sap.com/irj/sdn/advancedsearch?cat=sdn_all&query=bi+7++and++mdm++support+pack&adv=false&sortby=cm_rnd_rankvalue

[Integrating MDM with BI part 2](#)

[Integrating MDM with BI part 3](#)

For more information, visit the [Master Data Management homepage](#).

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