



SAP BusinessObjects Data Quality Management, version for SAP NetWeaver MDM

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Introduction

1

chapter

About this guide

This guide provides a general overview of SAP BusinessObjects Data Quality Management, version for SAP NetWeaver MDM, as well as specific information for installing and integrating this product into your SAP environment.

Note:

Elsewhere in this guide and in other media, the product is called SAP BusinessObjects Data Quality Management for SAP NetWeaver MDM.

Software requirements

This product operates with SAP NetWeaver Master Data Management (MDM) 7.1 SP05 (or later service packs), and SAP BusinessObjects Data Services XI 3.2 (12.2.0).

Assumed audience

This guide assumes that the people responsible for integrating and using this product are experienced administrators and users of SAP NetWeaver MDM. This guide does not explain basic operation of the SAP environment. For questions about the SAP environment, consult the appropriate SAP documentation or SAP technical support.

This guide also does not explain the operation of SAP BusinessObjects Data Services. For specific questions about Data Services, consult the Data Services documentation.

SAP NetWeaver MDM documentation

This product uses the SAP NetWeaver MDM Enrichment Controller to integrate with SAP NetWeaver MDM. To install and use this product, you should have access to the SAP NetWeaver MDM product documentation, particularly the guide *MDM Enrichment Architecture*.

This guide is available online here:

http://help.sap.com/saphelp_nwmdm71/helpdata/en/44/aa4122e9d57454e10000000a11466f/frameset.htm



Installation



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chapter



Installation overview

This section explains the procedures for installing this product. The full installation consists of the following steps:

1. Install SAP BusinessObjects Data Services.
2. Install the files for SAP BusinessObjects Data Quality Management for SAP NetWeaver MDM.
3. Configure DQMDMProxy.
4. Logging.
5. Create a new User.
6. Add a password in the Visual Administrator.
7. Configure MDM Server to use the Enrichment Adapter
8. Update the BOBJ schema in the MDM Enrichment Controller Administration view.
9. Import XML schemas.
10. Import syndication and import maps.
11. Create a workflow.
12. Import ATL files and configure the job.
13. Publish real-time job as a Web Service.

The installation provides an ATL file that you must manually import to Data Services, according to the instructions in the Data Services documentation. The ATL file contains a sample job for real-time address cleansing. Based on this sample job, you can create a customized Data Services job, with the appropriately customized syndication and import maps, to fit your specific business needs.

Install SAP BusinessObjects Data Services

You must install SAP BusinessObjects Data Services before installing or deploying other components of this product. You can find system requirements and instructions for installing, configuring, and running SAP BusinessObjects Data Services in the *Data Services Installation Guide*.

You must have SAP BusinessObjects Data Services running during the remaining installation procedures of this product, and during its operation.

Note:

As part of the installation of Data Services, you must download and install both the Data Services Cleansing Package for the version of Data Services you are installing and the Address Directories you have purchased. The Cleansing Package is used by the Individual and Firm Cleansing jobs. The Data Services address cleansing jobs use address directories to compare address data.

Install the files for Data Quality Management for SAP NetWeaver MDM

The installation routine of this product provides the license agreement for your acceptance and then copies essential files to the target machine. It does not make changes to your Data Services configuration, your SAP NetWeaver MDM configuration, or your Windows Registry.

To run the installation routine, invoke `setup.exe` and follow the onscreen instructions.

The installation routine uses the `LINK_DIR` environment variable set by your Data Services configuration to determine the default location for the installation of this product. You can change the default installation path and specify a different path during the installation routine.

Configure DQMDMProxy

You must have installed and configured the Enrichment controller before proceeding. As part of the Enrichment controller installation, relevant EAR files are deployed, WebService Proxies are created and made available in the Visual Administrator.

Log in to the Visual Administrator and verify that `sap.com/DQMDMProxy` is available. You must configure DQMDMProxy to point to the BusinessObjects Data Services server that you created as part of the installation of Data Services.

Logging

This product logs errors to the Category /Applications/DQMDMAdapter. It handles tracing (debug) information by storing it in a Location at com.sap.mdm.enrichment.DQMDMAdapter. You can configure aspects of logging through the Log Configurator in the Visual Administrator. See the SAP NetWeaver MDM documentation for details of using the Log Configurator.

Create a new User

You must add a new User, which will run the workflow to be created later in these procedures.

To create a new User

1. From the SAP NetWeaver MDM Console, navigate to `<repository>` > **Admin** > **Users**.
2. Add Enrich as a new user. The user ID must have sufficient privileges to run workflows on the SAP NetWeaver MDM environment.

Add a user password in the Visual Administrator

You must add a password for the new User in the Visual Administrator. For instructions, see the documentation for the MDM Enrichment Architecture.

Configure MDM Server to use the Enrichment Adapter

As part of the enrichment controller installation for SAP NetWeaver MDM, the enrichment controller configuration file, `MDM_EnrichmentControllerConfiguration.xml`, is created. As part of the installation of this product, you must edit this file to add some XML markup.

The comments in the markup instruct you when to change values to allow the markup to work with your configuration. If you used the name values described in the installation procedures in this document, you need not make changes to the attribute values in the markup. However, if you chose other name values, you must place the corresponding values in the markup. These tables show the values offered by the installation procedures.

Name	Value
User	Enrich
EnrichmentProviderSystem code	Enrichment
EnrichmentServicePort code	Bobj_DQ_Address_Cleanse
Workflow Name	Bobj_DQ_Address_Cleanse
Workflow Step	Bobj_DQ_Address_Cleanse

Name	Value
User	Enrich
EnrichmentProviderSystem code	Enrichment
EnrichmentServicePort code	Bobj_DQ_Firm Cleanse
Workflow Name	Bobj_DQ_Firm Cleanse
Workflow Step	Bobj_DQ_Firm Cleanse

Name	Value
User	Enrich
EnrichmentProviderSystem code	Enrichment
EnrichmentServicePort code	Bobj_DQ_Individual Cleanse
Workflow Name	Bobj_DQ_Individual Cleanse
Workflow Step	Bobj_DQ_Individual Cleanse

In markup for the file `MDM_EnrichmentControllerConfiguration.xml`, you must replace these attributes with values that describe your environment. You can edit the file in any XML editor.

Attribute	Value in this markup to replace
MDS Server name (the port number is required only if it is different from the default MDS port)	MDS_NAME
MDSS Server Name	MDSS_NAME
MDIS Server Name	MDIS_NAME
Repository name	REPOSITO- RY_NAME

After you make the required changes to the XML markup, save `MDM_EnrichmentControllerConfiguration.xml` and restart Enrichment Controller activities from the Enrichment Controller administration view. For more information, refer to the Enrichment Controller documentation.

Update the BOBJ schema

You must next update the BOBJ schema for use with this product.

To update the BOBJ schema

1. From the MDM Enrichment Controller Administration, click "Update SAP BusinessObjects Data Services Schema".
2. Select the required repository to be updated and click the button **Update Schema**.

The BOBJ schema is updated.

Import XML schemas

The installation routine of this product copied the XML schemas to the location you specified. You must now import the XML schemas to the target repository using the SAP NetWeaver MDM Console.

The XML schemas are in the following files:

XML schema file	Description
Bobj_DQ_Address_Cleanse_Request.xsd	Request schema used to syndicate MDM Addressdata out to BusinessObjects Data Services
Bobj_DQ_Address_Cleanse_Response.xsd	Response schema used to import the Address data response from Data Services into MDM

Note:

If you create your own Data Services job, you must instead import the XML schemas from that job instead of the schemas provided here.

To import XML schemas

1. From the SAP NetWeaver MDM Console, verify that the target repository is not loaded.
 The repository should still be unloaded from previous steps.
2. Navigate to **<repository> > Admin > XML Schema**.
3. Add a new XML schema to serve as the Request schema and name it Bobj_DQ_Address_Cleanse_Request.
4. From the file management window, navigate to the machine and directory of the files installed for this product and select Bobj_DQ_Address_Cleanse_Request.xsd.
5. Save the changes.
6. Add a new XML schema to serve as the Response schema and name it Bobj_DQ_Address_Cleanse_Response.
7. From the file management window, navigate to the machine and directory of the files installed for this product and select Bobj_DQ_Address_Cleanse_Response.xsd.
8. Save the changes.

Follow the same steps for the following XML schemas:

XML schema file	Description
Bobj_DQ_Firm_Cleanse_Request.xsd	Request schema used to syndicate MDM Firmdata out to BusinessObjects Data Services
Bobj_DQ_Firm_Cleanse_Response.xsd	Response schema used to import the Firm data response from Data Services into MDM
Bobj_DQ_Individual_Cleanse_Request.xsd	Request schema used to syndicate MDM Individual data out to BusinessObjects Data Services
Bobj_DQ_Individual_Cleanse_Response.xsd	Response schema used to import the Individual data response from Data Services into MDM

Syndication and import maps

You must import the syndication and import maps to your SAP NetWeaver MDM system, and then set the maps for inbound and outbound ports.

Note:

The maps used here are for the sample Data Services jobs provided with this product and are relevant only for MDM standard delivered content customers and vendors. If you create your own Data Services job or do not use the mentioned repositories, you must instead use the SAP NetWeaver MDM Syndicator and Import Manager to create mappings appropriate to that job.

To import the syndication maps

Note:

To import the syndication maps, the target repository must be loaded.

1. From the SAP NetWeaver MDM Syndicator, select **File > New**.
2. Create the following values for these options:

Option	Value
Type	XML Schema
Remote System	Enrichment
XML Schema	Bobj_DQ_Address_Cleanse_Request
Root	EnrichmentRequest

3. Select **File > Import**.
4. Navigate to the directory where the files for this product were installed for your version of SAP NetWeaver MDM and select the file `Bobj_DQ_Address_Cleanse_Request_SynMap.syn`. Click **OK**.
5. Save the map as `Bobj_DQ_Address_Cleanse_Request_SynMap`.

Follow the same steps for the following options:

Option	Value
Type	XML Schema
Remote System	Enrichment
XML Schema	Bobj_DQ_Firm_Cleanse_Request
Root	EnrichmentRequest

Option	Value
Type	XML Schema
Remote System	Enrichment
XML Schema	Bobj_DQ_Individual Cleanse_Request
Root	EnrichmentRequest

Related Topics

- [Install the files for Data Quality Management for SAP NetWeaver MDM](#)

To import the main response import map

1. Run the SAP NetWeaver MDM Import Manager. On the startup dialog, select XML Schema.
2. Create the following values for these options:

Option	Value
Remote System	Enrichment
XML Schema	Bobj_DQ_Address_Cleanse_Response
Root	EnrichmentResponse

3. Select the file `Bobj_DQ_Address_Cleanse_Response.xml` from files installed for this product.
4. Import the file `Bobj_DQ_Address_Cleanse_Response_ImportMap.xml`. This file was installed as part of this product that are appropriate for your version of SAP NetWeaver MDM.
5. Save the map as `Bobj_DQ_Address_Cleanse_Response_ImportMap`.

Follow the same steps for the following options:

Option	Value
Remote System	Enrichment
XML Schema	Bobj_DQ_Firm_Cleanse_Response
Root	EnrichmentResponse

Option	Value
--------	-------

Option	Value
Remote System	Enrichment
XML Schema	Bobj_DQ_Individual_Cleanse_Response
Root	EnrichmentResponse

To import the country map

The purpose of the country map is to synchronize the country values returned by Data Services with the country values already present in the SAP NetWeaver MDM system. If country values are not mapped, SAP NetWeaver MDM adds the missing countries to the country table upon encountering the value.

1. Run the SAP NetWeaver MDM Import Manager. On the startup dialog, select Excel.
2. For the Remote System, select Enrichment.
3. Select the file `country_all.xls` from files installed for this product that are appropriate for your version of SAP NetWeaver MDM.
4. Import the file `Bobj_DQ_Country_ImportMap.xml` from the files installed for this product.
5. Save the map as `Bobj_DQ_Country_ImportMap`.
6. After resolving any conflicts and setting the proper actions (if necessary), execute the Import to update the country table.

To import the regions map

The purpose of the regions map is to synchronize the regions values returned by Data Services with the regions values already present in the SAP NetWeaver MDM system. If regions values are not mapped, SAP NetWeaver MDM adds the missing regions to the regions table upon encountering the value. Missing regions values are also automatically added to the regions table through the `Bobj_DQ_Regions_ImportMap` at run time.

1. Run the SAP NetWeaver MDM Import Manager. On the startup dialog, select Excel.

2. For the Remote System, select Enrichment.
3. Select the file `regions_all.xls` from files installed for this product.
4. Import the file `Bobj_DQ_Regions_ImportMap.xml` from the files installed for this product that are appropriate for your version of SAP NetWeaver MDM.
5. Save the map as `Bobj_DQ_Regions_ImportMap`.
6. Verify the partitions. In the Source Hierarchy pane, navigate to **Regions_all.xls > Region_Data\$ > Regions**. In the "Partitions Field/Value" tab, verify that the source partitions available fields are Code, Regions_comb, and Unique_ID.
7. Verify the mappings. In the Source Hierarchy pane, navigate to **Regions_all.xls > Region_Data\$ > Regions**. In the "Map Fields/Value" tab, verify that the source fields are mapped as follows.

Name	Destination Field
Code	Code
Regions [Partition]	Name
Regions (Clone)	Country
Unique_ID	Remote Key

8. After resolving any conflicts and setting the proper actions (if necessary), execute the Import to update the regions table.

To set maps for inbound and outbound ports

With all the maps imported to the SAP NetWeaver MDM system, you now set the maps for inbound and outbound ports.

1. From the SAP NetWeaver MDM Console, verify that the target repository is not loaded.
The repository should still be unloaded from previous steps.
2. Navigate to `<repository> > Admin > Ports`.
3. Select the outbound port `Bobj_DQ_Address_Cleanse_Request`.
You previously set the parameters for this outbound port, except for the Map field.

- Set the Map field to the syndication map you imported, Bobj_DQ_Address_Cleanse_Request_SynMap.

The fields are now as follows:

Field	Parameter
Name	Bobj_DQ_Address_Cleanse_Request
Code	Bobj_DQ_Address_Cleanse
Type	Outbound
Remote System	Enrichment
Map	Bobj_DQ_Address_Cleanse_Request_SynMap
Processing Type	Manual

- Follow the steps 1-4 above for outbound ports, Bobj_DQ_Firm_Cleanse_Request and Bobj_DQ_Individual_Cleanse_Request
- Select the inbound port Bobj_DQ_Address_Cleanse_Response. You previously set the parameters for this inbound port, except for the Map field.
- Set the Map field to the import map you imported, Bobj_DQ_Address_Cleanse_Response_ImportMap.

The fields are now as follows:

Field	Parameter
Name	Bobj_DQ_Address_Cleanse_Response
Code	Bobj_DQ_Address_Cleanse
Type	Inbound
Remote System	Enrichment
Map	Bobj_DQ_Address_Cleanse_Response_ImportMap
Format	XML Schema
XML Schema	Bobj_DQ_Address_Cleanse_Response
Processing Type	Automatic

Field	Parameter
File Aggregation Count	1
Block on Structural Exceptions	Yes
Status	Empty

8. Follow the same steps for inbound ports Bobj_DQ_Firm Cleanse_Response and Bobj_DQ_Individual Cleanse_Response.
9. Load the repository.

All configurations that take place within the SAP NetWeaver MDM Console are complete.

Create a workflow

You must create a workflow within the SAP NetWeaver MDM Data Manager to control the data quality operations that are performed by this product. This section discusses creating a workflow with some requirements specific to this product. However, you should consult your SAP documentation for full instructions on creating a workflow within SAP NetWeaver MDM Data Manager.

Note:

As an alternative to creating a new workflow, you could add the data quality processes to an existing workflow. However, this section focuses on creating a new workflow.

Create the workflow as you would create any SAP NetWeaver MDM workflow. At minimum, any workflow for this product requires at least one Enrichment Controller step to trigger the enrichment process.

Example: Sample workflow

This sample workflow has the following steps: Start, Bobj_DQ_Address_Cleanse, and Stop. Note that a workflow should be created also for Firm and Individual services.

File Edit View Search Records Objects Relationships Tree Attributes Configuration Help

Workflows

Search Parameters

Free-Form Search

Keyword	Operator
Active	equals
Autolaunch	contains
Code	contains
Created	=
Created By	contains
Description	contains
Max Records	=
Max Time	=
Modified	abs =
Modified By	contains
Name	contains
Owner	contains

Records

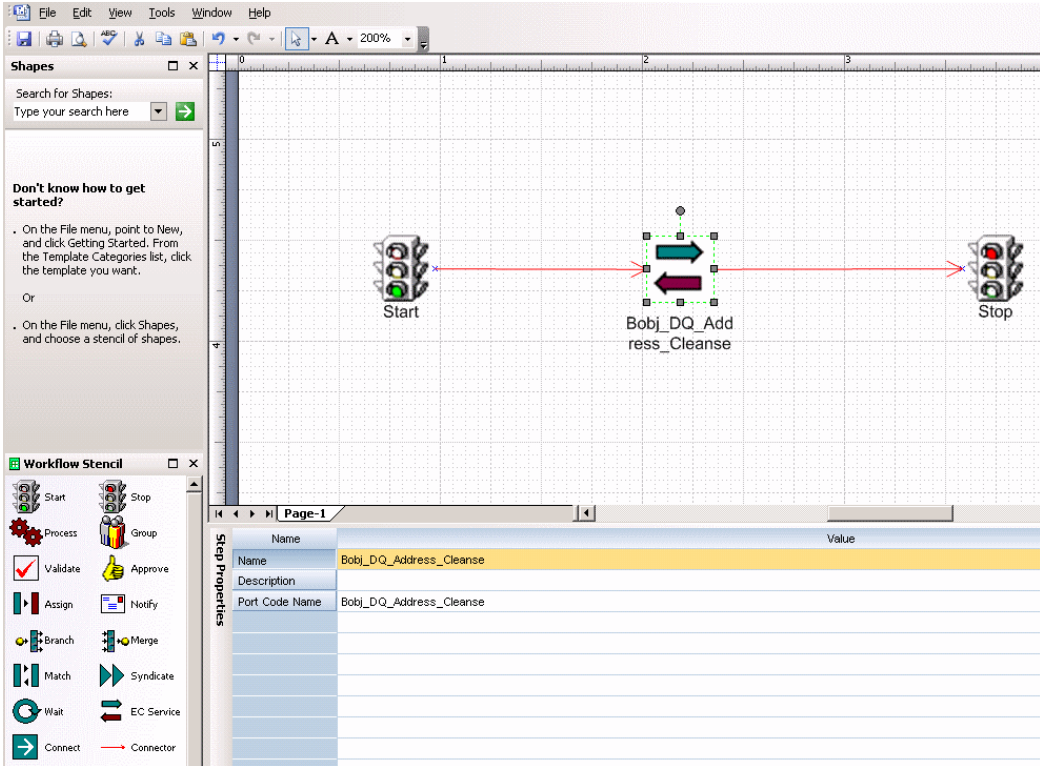
Name	Code	
MDM Mandatory Fields Validation	MDM_MANDATORY_FIELDS_VALIDATION	This workflow exe
MDM Syndication	MDM_SYNDICATION	This workflow syn
MDM Full Customer Matching	MDM_FULL_CUSTOMER_MATCHING	This workflow run:
Bobj_DQ_Address_Cleanse	Bobj_DQ_Address_Cleanse	
Bobj_DQ_Individual_Cleanse	Bobj_DQ_Individual_Cleanse	
Bobj_DQ_Firm_Cleanse	Bobj_DQ_Firm_Cleanse	
Bobj_DQ_Address_Cleanse_New	Bobj_DQ_Address_Cleanse_New	

Record Detail Search Selections

Name	Bobj_DQ_Address_Cleanse
Code	Bobj_DQ_Address_Cleanse
Description	
Table	Customers
Workflow	[Microsoft Visio Document]
Owner	Enrich
Active	Yes
Trigger Actions	Manual
Autolaunch	Immediate
Max Records	100
Max Time	1 d
Created By	Admin
Created	01/25/2010 18:26:22
Modified By	Admin
Modified	05/12/2010 11:17:05

2 | Installation

Import the ATL file and configure the job



Though you can give the process steps any name, the remaining installation steps assume the names used in this example. If you use different names, you must substitute those names for the examples used here.

Import the ATL file and configure the job

The installation routine of this product copied the file `DQ_MDM_Enrich.atl` to the location you specified. You must now import `DQ_MDM_Enrich.atl` into BusinessObjects Data Services, which will make available the project `MDM_DQ_Enrich`, which contains the job `RTJob_MDM_DQ_Addr`, which in turn contains the dataflow `DF_Realtime_DQ_MDM_Addr_discrete`. You must then configure this job before using this product by performing the following tasks:

- Change the Root directory parameters
- Disable unpurchased address cleanse engines

- Configure the test file locations

To import the ATL files

1. From the Data Services Designer with the desired repository open, click **Tools > Import from file**.
A window opens for you to specify the file to import.
2. Navigate to the location of DQ_MDM_Enrich.atl, select the file, and click **Open**.
3. Navigate to the location of DQ_MDM_Enrich_Substitutions.atl, select the file, and click **Open**.
Data Services imports the files to the repository.

The project, jobs, and dataflows used by this product are now available in Data Services.

To disable address cleanse engines

For this product to function properly, you must disable the address cleanse engines for countries you did not purchase. From the dataflow DF_Realtime_DQ_MDM_Addr_discrete:

1. Open the Global Address cleanse Transform.
2. Select the Options tab.
The address cleanse engines are displayed.
3. Disable the engine for every address cleanse engine you have not purchased.

To set substitution parameter path

You must set the path for the substitution parameter \$\$DQ_MDM_Sample_WorkDir. To set the path:

1. On the Canvas of the Data Services Designer, go to **Tools > Substitution Parameter Configurations**.
2. Change the path for the \$\$DQ_MDM_Sample_WorkDir parameter to the correct path to the location of test files.

For example, if default installation paths were used, the path set for this parameter would be `C:\Program Files\Business Objects\Data Quality Mgmt for SAP NW MDM\DQ_MDM_MDMComponents\MDM71`.

3. Click **OK** to save changes.

Publish real-time job as a Web Service

This section describes the procedure required for BusinessObjects Data Services to publish the real-time job as a Web Service.

The term “real-time” means that Data Services reacts to messages as they are sent, performing predefined operations and responding appropriately.

For more information about real-time jobs and Web Services in Data Services, see the Data Services documentation.

To publish real-time job as a Web Service

This procedure requires that you set service names to correspond to real-time jobs in Data Services. The following table shows the service names and jobs for this procedure

Service name	Job
Bobj_DQ_Address_Cleanse	RTJob_DQ_MDM_Addr
Bobj_DQ_Firm_Cleanse	RTJob_DQ_MDM_Firm_Cleanse
Bobj_DQ_Individual_Cleanse	RTJob_DQ_MDM_Individual_Cleanse

1. From the Data Services Management Console, navigate to **Administrator > Real-Time Services** and select the "Real-Time Services Configuration" tab.
2. Click **Add**.
3. Set the service name to `Bobj_DQ_Address_Cleanse`.
The service name must be the same as the port code for the inbound and outbound ports.
4. Click the **Browse Jobs** button, and select the corresponding real-time job.

5. In the "Service Provider" section of the screen, click **Add**.
6. Select **Job Server**.
7. Click **Apply**.
8. Click the "Real-Time Services Status" tab. Check the box for the Web Service that you just added and then click **Start** to start the Web Service job.

Note:

The page does not automatically refresh, so you must manually refresh it.

The Web Service is now ready to be published on the Web Server.

9. On the Data Services Administrator, navigate to **Web Services > Web Services Configuration**.
10. From the drop-down list, select "Add Real_Time Service", and click **Apply**.
11. Select Bobj_DQ_Address_Cleanse and click **Add**.
12. Repeat these steps for the services Bobj_DQ_Firm_Cleanse and Bobj_DQ_Individual_Cleanse.

The Web services are now deployed and available for use.



Using Data Quality Management



chapter



Overview

After you have installed this product, you can run Data Quality Management jobs as you would run any other jobs on SAP NetWeaver MDM. See your SAP NetWeaver MDM documentation for information about running jobs in SAP NetWeaver MDM.

This section describes issues that are specific to running this product on SAP NetWeaver MDM.

Updating regions

The Region_lookup Query transform in the dataflow is responsible for executing a custom function (CF_DQ_MDM_lookupRegion) to look up the region string that is to be returned by the address cleansing dataflow.

If you make any changes to the function CF_DQ_MDM_lookupRegion, you must coordinate those changes with the import mappings and key mappings of SAP NetWeaver MDM.

To access this function, go to the Data Services Designer. On the left pane of the canvas labeled as "Local Object Repository", choose the "Custom Function" tab and double click on CF_DQ_MDM_lookupRegion. See the SAP NetWeaver MDM documentation for details of the import mappings and key mappings.

Adding fields to request and response schemas

You may want to add fields to request and response schemas. This sample markup shows how request and response schemas should be defined.

```
<?xml version="1.0" encoding="UTF-8"?>
<xsd:schema
xmlns:xsd="http://www.w3.org/2001/XMLSchema">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">
      XML Schema generated by Data Services
    </xsd:documentation>
  </xsd:annotation>
```

```
<xsd:simpleType name="DIType-varchar-10">
  <xsd:restriction base="xsd:string">
    <xsd:maxLength value="10"/>
  </xsd:restriction>
</xsd:simpleType>
<xsd:simpleType name="DIType-varchar-60">
  <xsd:restriction base="xsd:string">
    <xsd:maxLength value="60"/>
  </xsd:restriction>
</xsd:simpleType>
<xsd:simpleType name="DIType-varchar-40">
  <xsd:restriction base="xsd:string">
    <xsd:maxLength value="40"/>
  </xsd:restriction>
</xsd:simpleType>
<xsd:simpleType name="DIType-varchar-20">
  <xsd:restriction base="xsd:string">
    <xsd:maxLength value="20"/>
  </xsd:restriction>
</xsd:simpleType>

<!-- The section below represents how an xsd element
should
    be defined for use with this product. -->

<xsd:element name="EnrichmentRequest" >
  <xsd:complexType>
    <xsd:sequence>
      <xsd:element name="Record" maxOccurs="unbounded">
        <xsd:complexType>
          <xsd:sequence>
            <xsd:element name="id" type = "DIType-varchar-20"/>
            <xsd:element name="housetno" type = "DIType-varchar-
10"/>
            <xsd:element name="street" type = "DIType-varchar-
60"/>
            <xsd:element name="city" type = "DIType-varchar-40"/>

            <xsd:element name="region" type = "DIType-varchar-
40"/>
            <xsd:element name="zip" type = "DIType-varchar-10"/>

            <xsd:element name="country" type = "DIType-varchar-
40"/>
          </xsd:sequence>
        </xsd:complexType>
      </xsd:element>
    </xsd:sequence>
  </xsd:complexType>
</xsd:element>
```

```
</xsd:element>  
  
</xsd:schema>
```

To understand how not to define an xsd element block for use with this product, compare the following block with the offset block of the previous example. The content is fundamentally the same, but written in this style, this markup will not work with this product.

```
<xsd:element name="Record">  
  <xsd:complexType>  
    <xsd:sequence>  
      <xsd:element ref="id" />  
      <xsd:element ref="housetno" />  
      <xsd:element ref="street" />  
      <xsd:element ref="city" />  
      <xsd:element ref="region" />  
      <xsd:element ref="zip" />  
      <xsd:element ref="country" />  
    </xsd:sequence>  
  </xsd:complexType>  
</xsd:element>  
<xsd:element name="EnrichmentRequest">  
  <xsd:complexType>  
    <xsd:sequence>  
      <xsd:element ref="Record" maxOccurs="unbounded" />  
    </xsd:sequence>  
  </xsd:complexType>  
</xsd:element>  
<xsd:element name="id" type = "DIType-varchar-20"/>  
<xsd:element name="housetno" type = "DIType-varchar-10"/>  
<xsd:element name="street" type = "DIType-varchar-60"/>  
<xsd:element name="city" type = "DIType-varchar-40"/>  
<xsd:element name="region" type = "DIType-varchar-40"/>  
  <xsd:element name="zip" type = "DIType-varchar-10"/>  
<xsd:element name="country" type = "DIType-varchar-40"/>
```

After you have created the schemas, next create new XML schemas in Data Services Designer. See the Data Services documentation for instructions on creating XML schemas in Data Services.

You must replace the existing XML readers in the dataflow with the new XML Source readers and Targets writers. Make sure that you “passthrough” the added fields through the dataflow or use them in processing, or else data in

those fields will not reach the target writer. Import these same schemas into SAP NetWeaver MDM and use the import and syndication managers to map the fields into and out of MDM.

Consideration for custom Data Services data flows

For any custom Data Services data flows you create to use with this product, ensure that the final XML response (XML Message Target) transform has these two check boxes unchecked:

- "Print Comment"
- "Include Schema Location"

For information on editing Data Services transforms, see the Data Services documentation.

Importing maps for custom Data Services schemas

This section describes a recommended procedure for importing maps for custom Data Services schemas. You can perform this procedure if you have created a custom XML schema to output data from Data Services.

Note:

Make sure the custom schema follows the overall structure as defined in the section "Adding fields to request and response schemas." The root element for the output schema in the Data Services dataflow must always be `EnrichmentResponse`.

Related Topics

- [Adding fields to request and response schemas](#)

To import maps for custom Data Services schemas

1. From the Data Services Designer, open the dataflow you created with the custom schema.
2. Double-click the XML Target Message transform.

The XML Target Message transform opens.

3. Define the parameter XML test file, and check the box for "Delete and re-create file".

This file will be used later to create the import map.

4. Define the XML test file for the XML Source Message transform. Usually this file is the output of syndicating a few sample records using the SAP MDM Syndication Manager, possibly using a custom Syndication map.

5. From the Data Services Designer, navigate to **Debug > Execute** to run the real-time job.

The job executes using data from the test file defined for the XML Source Message transform. This data is sent through the dataflow and the result of the processing is written to the location specified in the XML Target Message transform.

6. Use the XML file created by the XML Target Message transform as a sample for the SAP MDM Import Manager.
7. Map the fields to appropriate fields in SAP MDM's table and save the map.
8. When you have finished all modifications to the dataflow, delete and recreate the Web Service using the Data Services Management Console.