SAP-MDM: Automatic Import Requirement – Creation of a Value Mapping Template

Applies to:

SAP MDM 5.5 SP04, SP05 and SP06. For more information, visit the Master Data Management Homepage.

Summary

This article illustrates one of the very important requirements in MDM Automatic import. This article will demonstrate the need of creation of an Import Value mapping template, the process of creation of the template and the benefits of do so.

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Author Bio

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Problem Definition

Inspite of performing the basic settings required for execution of the Automatic Import in MDM, we commonly face two main cases:

- Import XML File does not get imported successfully as there are sometimes new values for the look-up tables in the Source file which are not mapped in the current Import Map. This happens because the source file which was used to create the import map was not having the complete set of values for the Look-up Tables. Hence the value mapping is absent in some cases and hence Import File goes into the Exception Folder.

- There might be fields in several Look-up tables which are maintained only in MDM. That means those fields do not get imported through a source file into MDM but are already maintained in MDM. The problem can be better understood by the example explained below.

Example

Let's take an example of 3 Look up tables **- Country of Origin, Divisions** and **Material Types.** These look up flat table has 2 fields each. The details are given below

Country of origin	**Lookup Flat**
--> Country	Text, 3
--> Name	Text, 50

Divisions	**Lookup Flat**
--> Division	Text, 2
--> Name	Text, 50

Material Types	**Lookup Flat**
--> Material type	Text, 4
--> Description	Text, 50

Now as mentioned in the problem definition, Country, Division and Material Type fields are getting imported through a source XML file and the name/description of the each field is maintained only in MDM.

Let's have a look at the sample data for each look-up flat table.

Country of Origin

Country	**Name**
AD	Andorra
AE	Utd.Arab Emir.
AF	Afghanistan
AG	Antigua/Barbuda
AI	Anguilla
AL	Albania
AM	Armenia

Divisions

Division	**Name**
12	Product Division 1
13	Training
15	Product Division 2
16	Inspection
17	Equipment
18	Paid Service

Material Types

Material type	**Description**
DIEN	Service
HALB	Semifinished Product
UNBW	Non-Valuated Materials
LEIH	Returnable packaging
NLAG	Non-stock materials
VERP	Packaging
WETT	Competitor Products
ROH	Raw Materials
PROD	Product Groups
FHMI	Production Resource/Tool
HIBE	Operating Supplies

MDM Options available with Automatic Importing

The import map has to be saved with a source file which should ideally have all the Look-Up table values. In case, the original import map that we saved did not have the complete set of values, there are options available which might solve the problem. However, we will see that in certain cases, the automatic import does not function and we then have to manually open import Manager and process the import File. The options are:

1. **Save Map** – If suppose we encounter some new value in the Import File, we can go to the Import Manager and then perform the Value mapping and save the Map. However, this does not solve the problem as this map then becomes the latest map which might not cover all the Look-up Values and hence will not help in Automatic Importing.
2. **Automap Unmapped Values** – This property helps us auto mapping the values in case the values were not mapped in the Import Map. However, in the example given above, the MDM repository has 2 fields and only 1 field is getting imported in each case. In this case, the Automap feature will not work as there is no match between the names of the source file values and the MDM repository Look-up table values. For example, if the Import Map is not complete and we try to import a file with value of Valuation Class being

Source File	MDM Repository
3000	3000; Raw Materials 1

In this case, the value in the Source side will not get auto mapped with the Destination side as the names do not match with each other.

3. **Default MDIS Unmapped Value Handling configuration option** – This feature allows us to either ignore or add the unmapped values. However, in most of the business cases, we can neither ignore nor add any value to the Look-up values as it might be a duplication to the existing values.

Solution Approach

The approach which best suites for such requirements is to create a Value Mapping template for importing Look-up table values. This would act like a source file which would be used to create an Import Map. This import map will be saved in the Inbound Port properties in Console.

In case, an Import map is already created and as demonstrated, it's not working to the expectations, you can still create a complete template with all the values of the Look-up tables and then use the option of **SAVE UPDATE** present in the File in Import Manager.

In case, there are certain values which have to be added in a look-up table, those values should be firstly added in the MDM repository under the respective Look-up table and then should also be accommodated in the import template created. The template should then be used to SAVE UPDATE the existing import map.

Creation of Template

Follow the step to create a template.

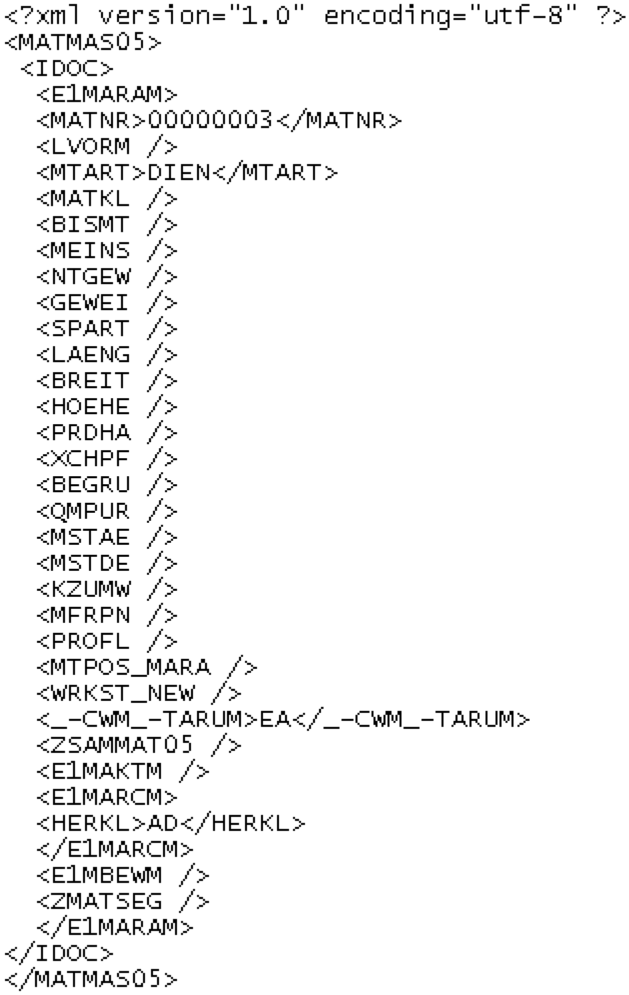
1. Take an Import XML file for a sample.
2. Open that XML file in a notepad.
3. You should then know the ECC Technical field names of the Look-up table fields you want to accommodate in the template.
4. You should also know the segments under which those fields come.
5. The order of the fields in the XML should not be changed as it will not be processed by the MDIS.

Let’s take the example which has been mentioned above.

The Technical names and the segments of the Look-up fields in this case are:

- Country - HERKL (E1MARCM)
- Division - SPART (E1MARAM)
- Material Type - MTART (E1MARAM)

The original Source file opened in a notepad looks like this:

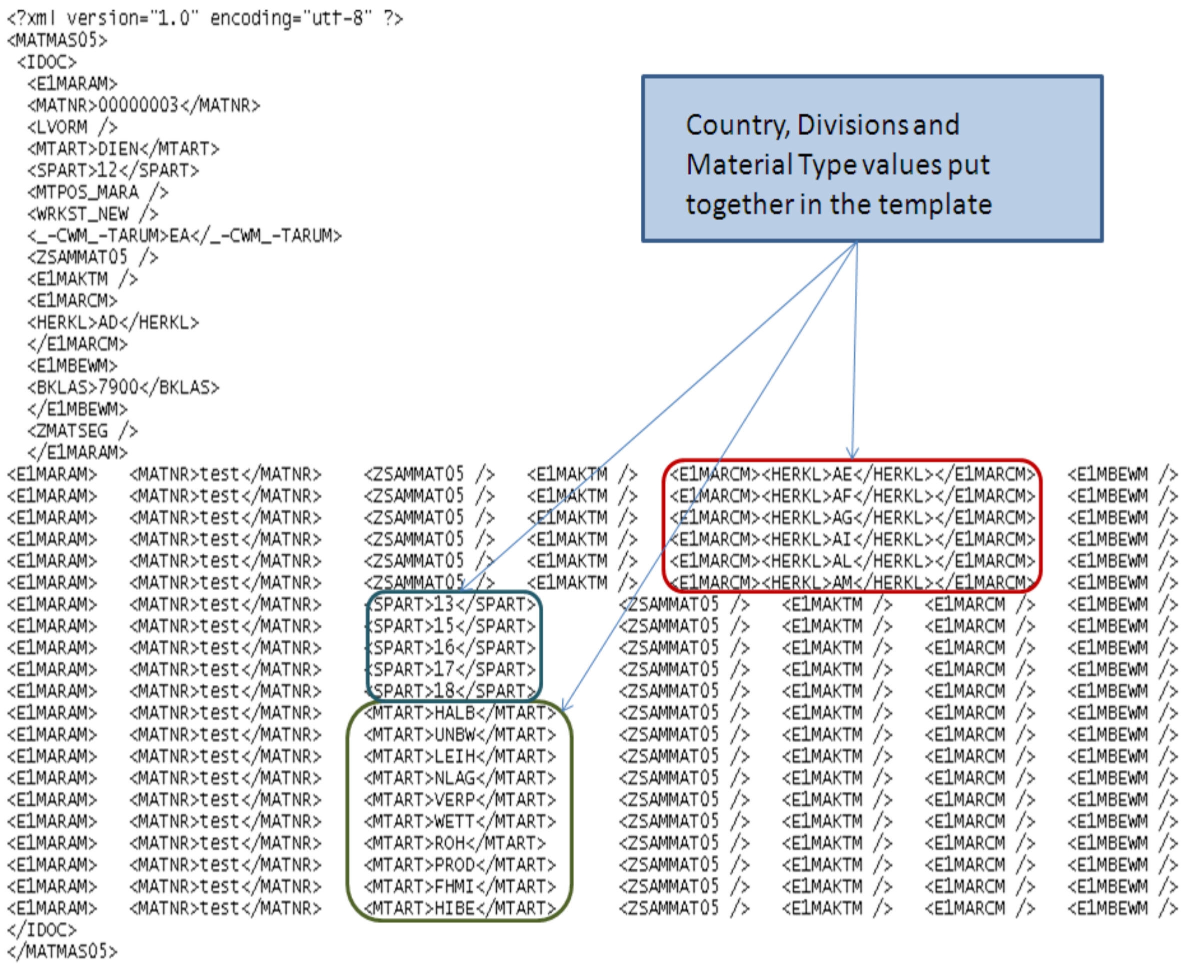


```
<?xml version="1.0" encoding="utf-8" ?>
<MATMAS05>
 <IDOC>
  <E1MARAM>
  <MATNR>00000003</MATNR>
  <LVORM />
  <MTART>DIEN</MTART>
  <MATKL />
  <BISMT />
  <MEINS />
  <NTGEW />
  <GEWEI />
  <SPART />
  <LAENG />
  <BREIT />
  <HOEHE />
  <PRDHA />
  <XCHPF />
  <BEGRU />
  <QMPUR />
  <MSTAE />
  <MSTDE />
  <KZUMW />
  <MFRPN />
  <PROFL />
  <MTPOS_MARA />
  <WRKST_NEW />
  <_-CWM_-TARUM>EA</_-CWM_-TARUM>
  <ZSAMMAT05 />
  <E1MAKTM />
  <E1MARCM>
  <HERKL>AD</HERKL>
  </E1MARCM>
  <E1MBEWM />
  <ZMATSEG />
  </E1MARAM>
</IDOC>
</MATMAS05>
```

We need to now include all the values (which have been mentioned in the example above) for our look-up table fields.

The XML can be edited either manually or by using any tool such as XML Editor. However, our motive is to get the consolidated file and use it for value Mapping.

This is how the template will look like after accommodating all the values for the look-up fields.



```
<?xml version="1.0" encoding="utf-8" ?>
<MATMAS05>
 <IDOC>
  <E1MARAM>
  <MATNR>00000003</MATNR>
  <LVORM />
  <MTART>DIEN</MTART>
  <SPART>12</SPART>
  <MTPOS_MARA />
  <WRKST_NEW />
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  <ZSAMMAT05 />
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  <E1MARCM>
  <HERKL>AD</HERKL>
  </E1MARCM>
  <E1MBEWM>
  <BKLAS>7900</BKLAS>
  </E1MBEWM>
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  </E1MARAM>
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<E1MARAM>   <MATNR>test</MATNR>   <MTART>FHMI</MTART>     <ZSAMMAT05 />   <E1MAKTM />   <E1MARCM />   <E1MBEWM />
<E1MARAM>   <MATNR>test</MATNR>   <MTART>HIBE</MTART>     <ZSAMMAT05 />   <E1MAKTM />   <E1MARCM />   <E1MBEWM />
</IDOC>
</MATMAS05>
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Country, Divisions and Material Type values put together in the template

Summary

In-order to successfully import the data into MDM it can be made as a best practice to create this value mapping template and save the import map using this template. This would enable the MDIS to process the Import files successfully into MDM.

Related Content

Master Data Management Import Server and Master Data Management Syndication Server

SAP-MDM Import Manager

SDN

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