Object Tables-How to Import and Their Importance

Applies to:

SAP NetWeaver 2004s/ MDM 5.5 SP 06. For more information, visit the Master Data Management homepage.

Summary

The purpose of this article is to discuss the importance of the object tables in terms of information enrichment and their method of Import in to MDM.

Author: Deepankar Pandit

Company: Satyam Computer Services Ltd.

Created on: 03 August 2008

Author Bio

Deepankar Pandit has been associated with satyam for 19 months and has been a part of MDM practice since February 2007.He also has ABAP experience and completed his Bachelor's degree in Electronics and Telecom Engineering.

Table of Contents

Introduction:

SAP MDM deploys repository mechanism for storage of data. It has various kinds of tables namely a Main Table, Lookup Tables, Object Tables, Special Table and system Table. In this article we will discuss the Object Tables in detail and how it helps in enriching record information.

Every MDM repository has exactly one main table. The main table consists of the primary information about each main table record. It basically contains the record set of any master data set in to a series of fields. All other tables rather than the main table are used as look ups for some particular and specific reason and every table enrich information in their own special way.

Object tables, including the Images, Sounds, Videos, Binary Objects, Text Blocks, Copy Blocks, Text HTMLs, and PDFs tables, are a special type of lookup sub table, where each object table is used to store a single type of object.

These tables stores information, as their name suggests and can provide information which helps in providing better understanding about a single record as in sound or pdf or a text block.

Description:

Table Type	Description
Images	A single table named Images. Stores image files, where each image is stored as a record in the table.
Sounds	A single table named Sounds. Stores sound files, where each sound file is stored as a record in the table.
Videos	A single table named Videos. Stores video files, where each video file is stored as a record in the table.
Binary Objects	A single table named Binary Objects. Stores other binary object files, where each binary object file is stored as a record in the table.
Text Blocks	A single table named Text Blocks. Stores blocks of text, where each text block is stored as a record in the table.
Copy Blocks	A single table named Copy Blocks. Stores blocks of text interpreted as copy, where each text block is stored as a record in the table.
Text HTMLs	A single table named Text HTMLs. Stores blocks of text interpreted as HTML, where each text block is stored as a record in the table.
PDFs	A single table named PDFs. Stores PDF files, where each PDF is stored as a record in the table.

Scenario

Consider a scenario where Customer data or a product catalogue is maintained through MDM. These scenarios always demand a bit of detail information like may be a thumbnail image of the employee/ customer or the product.

Even a piece of brief description as a text block is always welcome and a better way of organizing data providing the data end user to be more informative about the particular object. PDFs can be used to store PDF documents such as marketing brochures, specification sheets etc.

Here an example of typical employee master of a Medical Organization is displayed below.

Emp.ID	Emp. Name	DOB	Date of joining	Address	Contact no	Specialization	Image	Practice Details
ACK2794	Dr. Robert A. Smith	21 sep 1976	07 July 2001	1714 Homestead St Baltimore, MD 21318-4939	(410) 467-0784	Gynecology		He has completed his Bachelors degree from Harvard Medical School Boston, MA 02115-6092, and completed his Masters from John Hopkins School of Medicine , Baltimore, MD 21205-2196 and currently working as a junior surgeon in John Hopkins Medical college.

Data Group

As discussed above the importance of these objects is realized in account of enriching information. These objects are not directly imported in the conventional way through Import Manager GUI rather are organized through Data manager so that it is possible to locate an object or group of objects for linking to a particular record.

Objects are imported or created in to data manager and are assigned to a group. This group is known as Data Group which contains a variety of data objects in it.

Sets of data groups can be organized in to hierarchy and can even be categorized depending upon a classification scheme like nature or purpose of Data Object.

Figure 1: Image of Data manager displaying the object Tables.

Importing Images in to MDM

In MDM handling a repository of this stature containing detailed information about master object records requires thoughtful data modeling and designing aspects implemented in MDM. Here the data model has to be decided in the blueprinting stage and the fields and the data types have to be decided.

Fields

|	Pos.	Name	Type	Keyword	DF	UF
▶	[1]	Employee_ID	Text	None	[2]	
	[2]	Employee_Name	Text	None	[1]	
	[3]	Date_of_Birth	Text	Normal	[3]	
	[4]	Date_of_Joining	Text	Normal	[4]	
	[5]	Address	Text	None	[5]	
	[6]	Contact_no	Text	None	[6]	
	[7]	Specialization	Text	Normal	[7]	
	[8]	Image	Lookup [Image]	None		
	[9]	Prcatice_Profile	Lookup [Text Block] (multi-valued)	None		

Figure 2: Repository structure in MDM

Note: The object tables have a field detail pane as Multivalued with options yes/no. The object tables have this facility to assign multiple information to a single record. The Importance is displayed in the later segment of this article.

Fields

	Pos.	Name	Type	Keyword	DF	UF
	[1]	Employee_ID	Text	None	[2]	
	[2]	Employee_Name	Text	None	[1]	
	[3]	Date_of_Birth	Text	Normal	[3]	
	[4]	Date_of_Joining	Text	Normal	[4]	
	[5]	Address	Text	None	[5]	
	[6]	Contact_no	Text	None	[6]	
	[7]	Specialization	Text	Normal	[7]	
	[8]	Image	Lookup [Image]	None		
▶	[9]	Prcatice_Profile	Lookup [Text Block] (multi-valued)	None		

Field Detail

Name	Prcatice_Profile
Code	Practice_Profile
Description	
Type	Lookup [Text Block] (multi-valued)
Required	No
Writable Once	No
Matrix	Normal
Multi-Lingual	
Keyword	None
Display Field	No
Unique Field	No
Sort Index	None
Calculated	
Calculation	
Search Tab	Yes
Multi-Valued	Yes
Lookup Table	Text Blocks

Figure 3: Checking the multivalued option.

In the Data Manager data groups have to be created which are just like containers (Analogy) which will contain the data objects. It can be done by selecting Objects->Edit Data Groups from the main
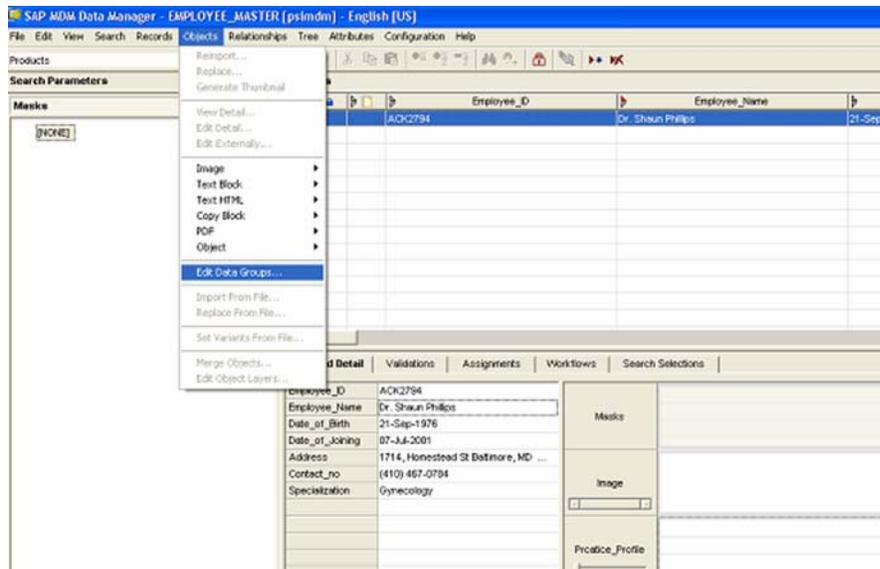
menu.

Data groups can be added in the prompted dialog box.

Figure 2: Creating Data Group

The import of images is done following the creation of data groups. Images can be added in the image tables by adding the image from the local disk where it is stored. This can be done in 2 ways:

1) **Adding new records directly on an object table.**
2) **Choosing Add/Link from the object lookup field context menu**.
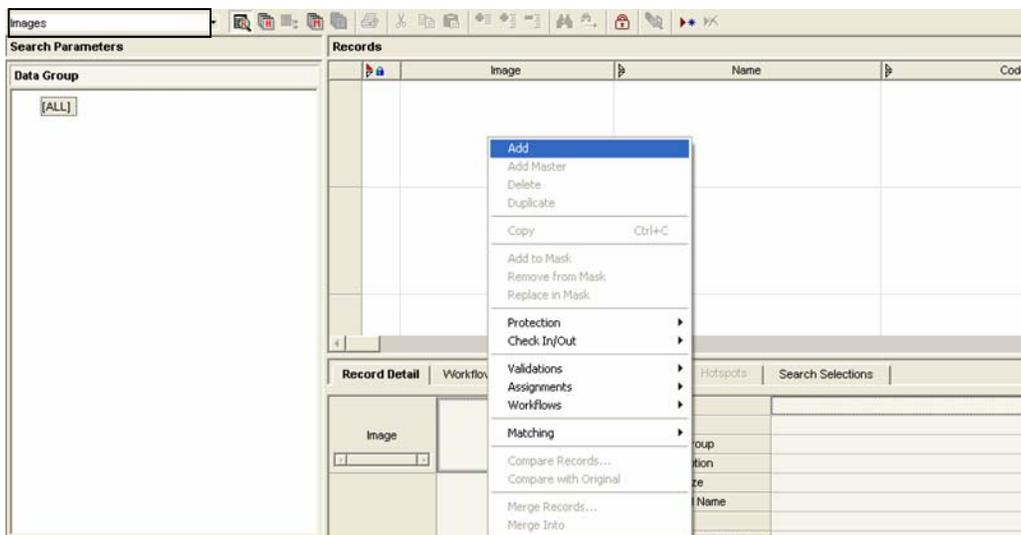
Figure 3: Adding new records directly on an object table.
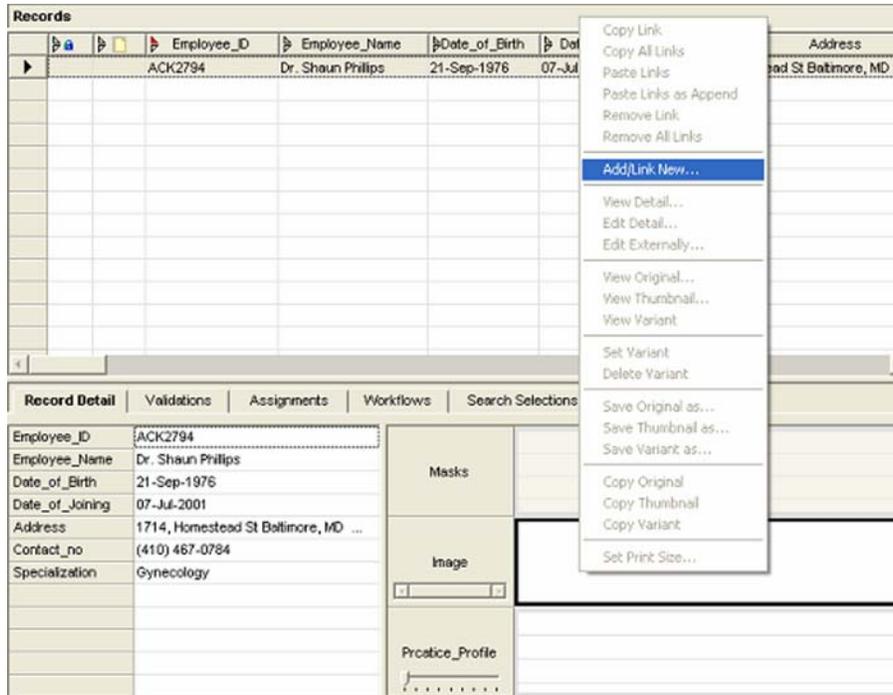
Figure 4: Choosing Add/Link from the object lookup field context menu

Upon choosing any of these methods, the MDM Data Manager opens an Add Objects dialog. Here the object to be added is mentioned and is then imported.
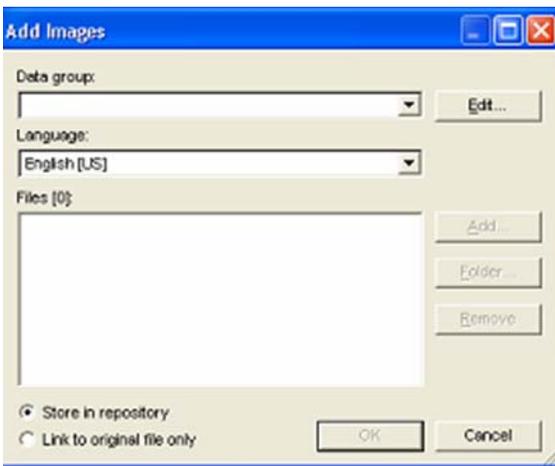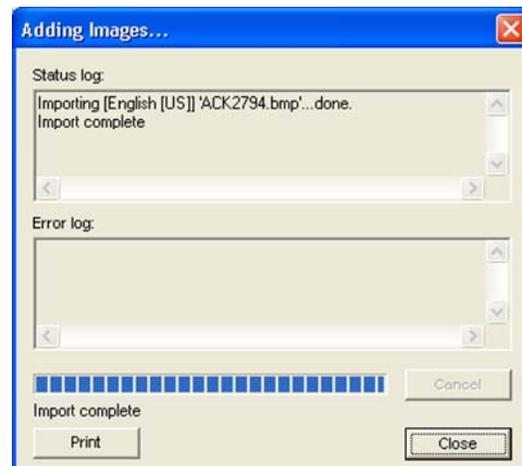

Figure 5: Add Object Dialog

Figure 6: Object Imported

Note: There are two options namely "Store in the repository/Link to original file only". While the earlier option imports the image itself to the repository which has to be done by following the import command, the later option links the image file to the repository and MDM expects to find the object file in the original source location**.**

Linking Object Files to records

Steps to link an object to an object lookup field:

1. In the Records pane, select the record(s) containing the lookup fields you want to link to an object.

2. In the Record Detail pane, double-click in the object lookup field's cell to open the object selector dialog.
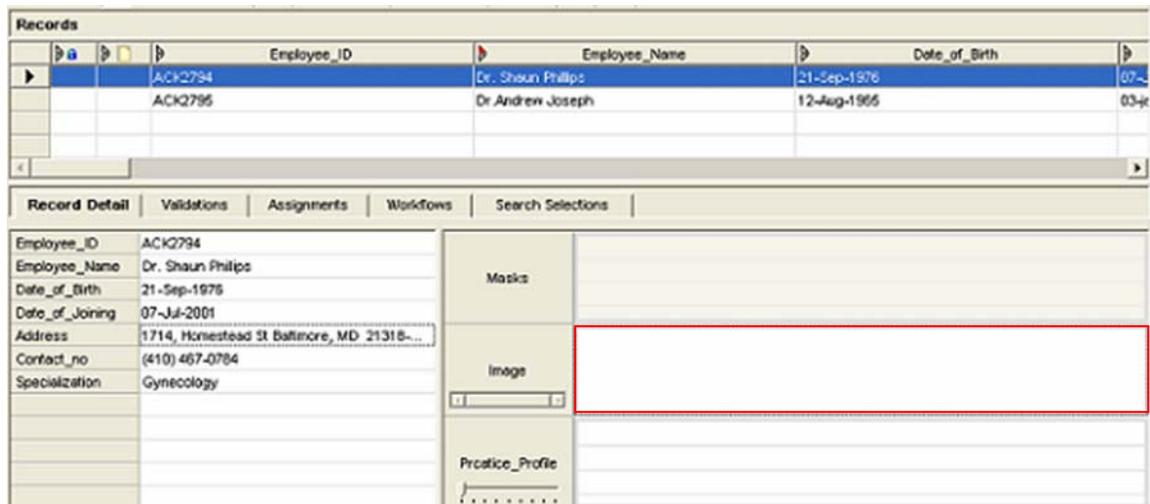

Figure 7: Clicking the Object pane which has to be linked.

3. In the object selector dialog, click on the Data Groups tab and select the data group(s) containing the object(s) you want to link to the lookup field.
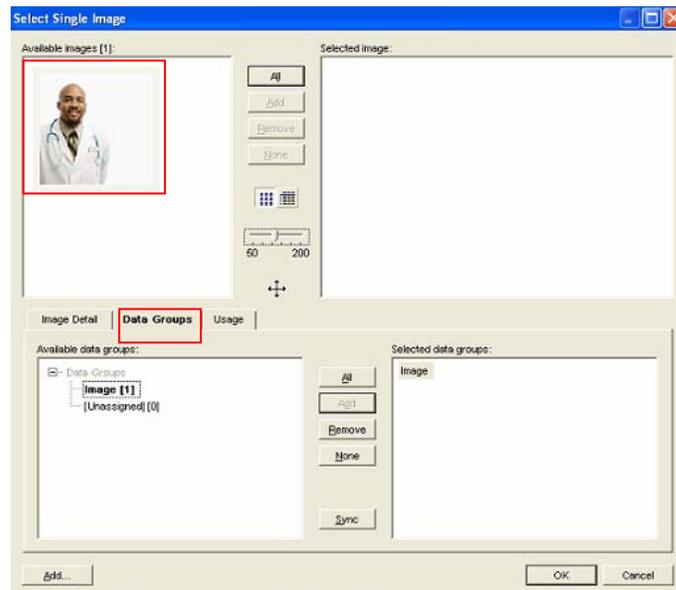

Figure 8: Adding Data Groups

4. In the Available objects pane, select the object(s) you want to link and add them to the selected objects pane.
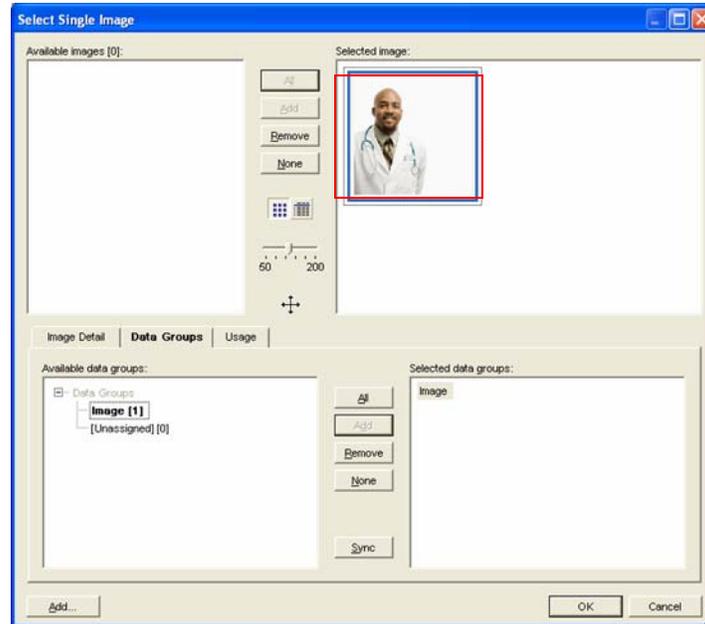
Figure 9: Adding the image to be mapped

5. Click OK to close the object selector dialog and link the selected object(s).

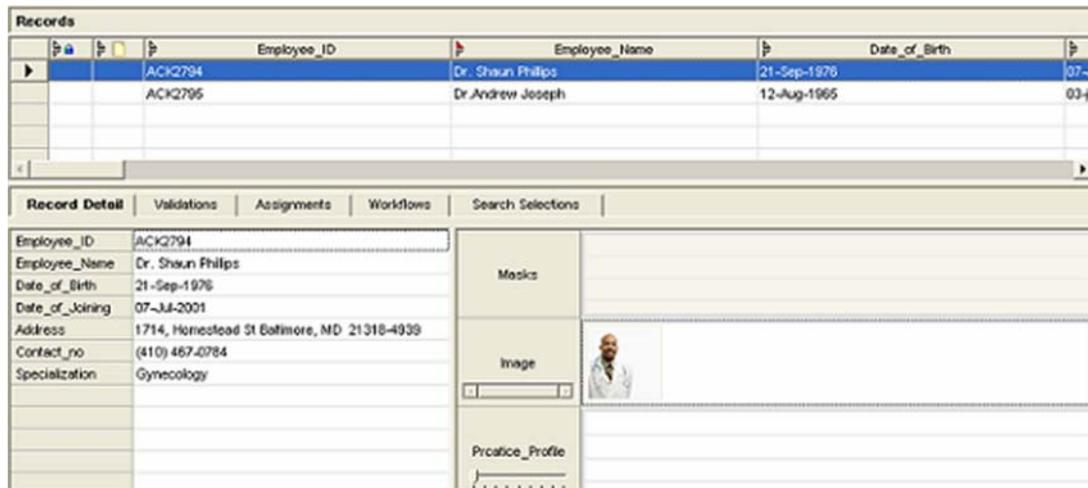6. The Data Manager displays the linked object(s) in the lookup field.

Figure 10: Image Mapped and visible in data Manager

The image can be unlinked for a record by selecting the record and selecting the option "Remove Link" after right clicking on the object from the object pane.

The Image detail can be viewed in two ways:

1) It can be done by right-clicking on the object (whose detail is desired) and selecting "View Detail" or selecting the object table from the menu and selecting the option Objects->View detail from the main menu.

2) The second method is double clicking the object pane and it will show all the objects entitled to the particular record with the details.
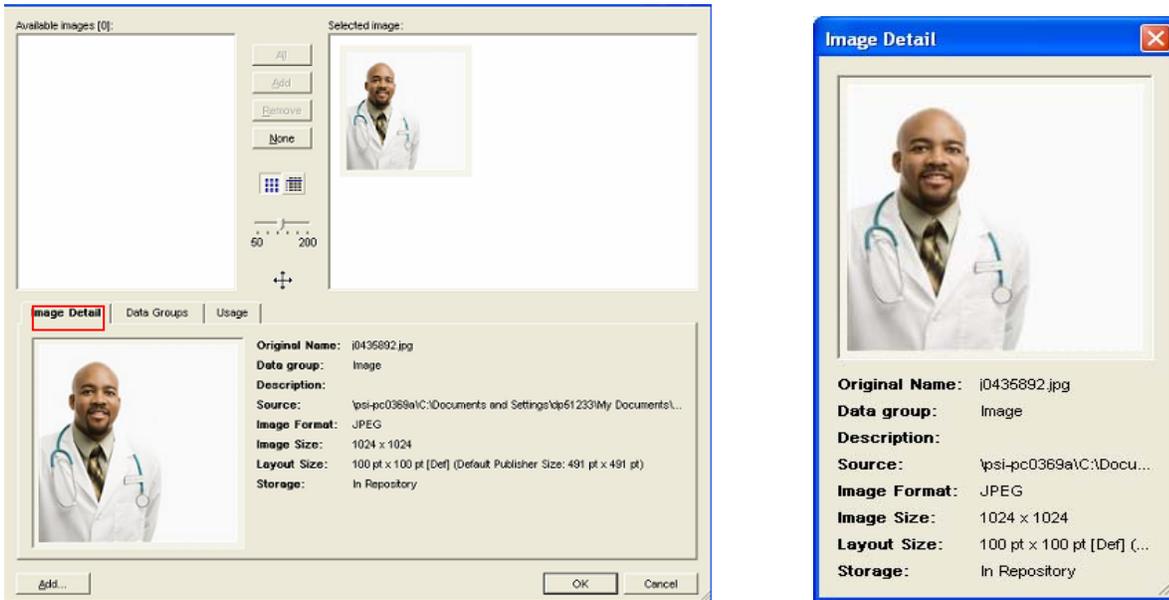
In this scenario the data model is designed to have a single image to ensure a single image per record of an employee as per the requirement but this may vary as per the scenario.

For e.g. in a catalogue a single record may have more than one images depending on the specifications of the item.

Since the look up image is not multivalued thus the "Add/Link new" option is grayed out upon its mapping.
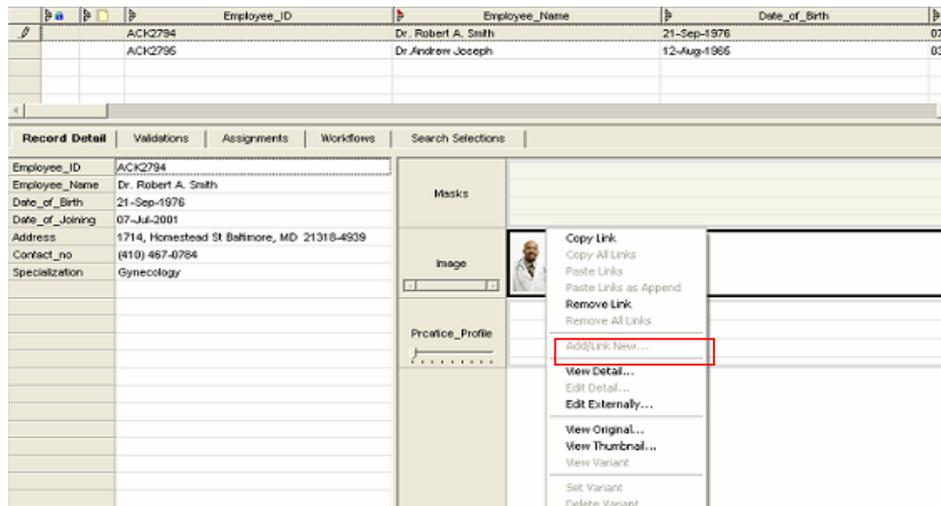

Figure 116: Multiple mappings prohibited.

Importing a Multi valued Text Block

During the data modeling in MDM the "practice profile" is decided to be a look – up text and is kept multivalued purposely because such a detail may be updated periodically if not frequently.

The basic procedure of importing a Text block is same as that of an image .The steps are the same apart the only fact that they are carried out in the object pane of text block.

Having a multivalued option it facilitates to add more objects to a single record.

While adding text block it gives user two options namely Files or Text Block both of which have their own significance. The option "files" allows the user to add a text block that is stored in form of .txt files. MDM internally links to the text file .Whereas selecting the option "Text Block" will directly import the text contained in the file and upon import will add it to MDM.
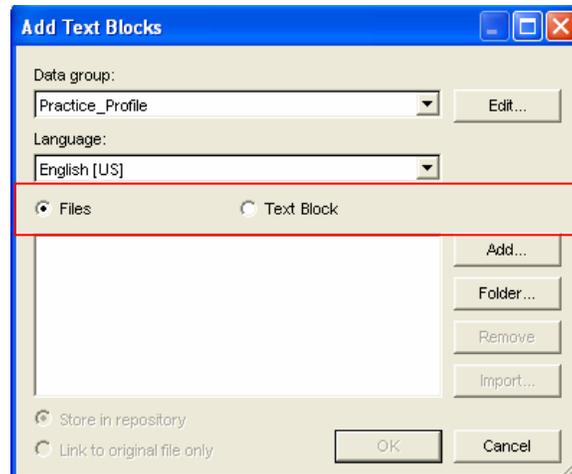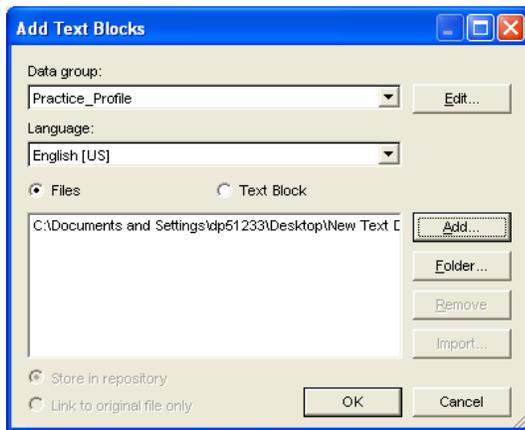
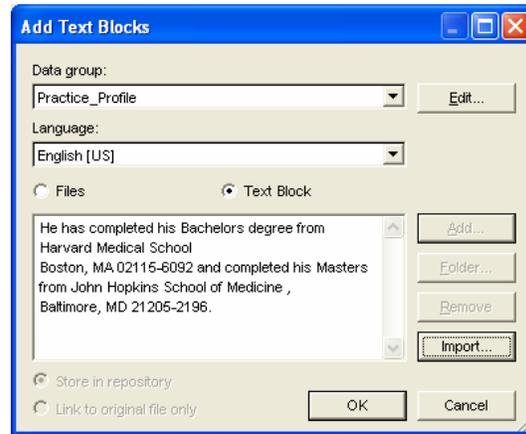Figure 128: Linking to a text block file.   Figure 139: Importing a text block directly.

On double –clicking the Object pane for look up text block in the object pane the dialog box opens in the same way as opened for the image. The slider in the middle decides the number of lines desired to be viewed at a time. It has a capacity of 9 lines. The text blocks that needs to be added can be selected and added to the "Selected text blocks" pane.

Even the view can be selected as to maintain a detailed view or a thumbnail view from the icons above the slider.
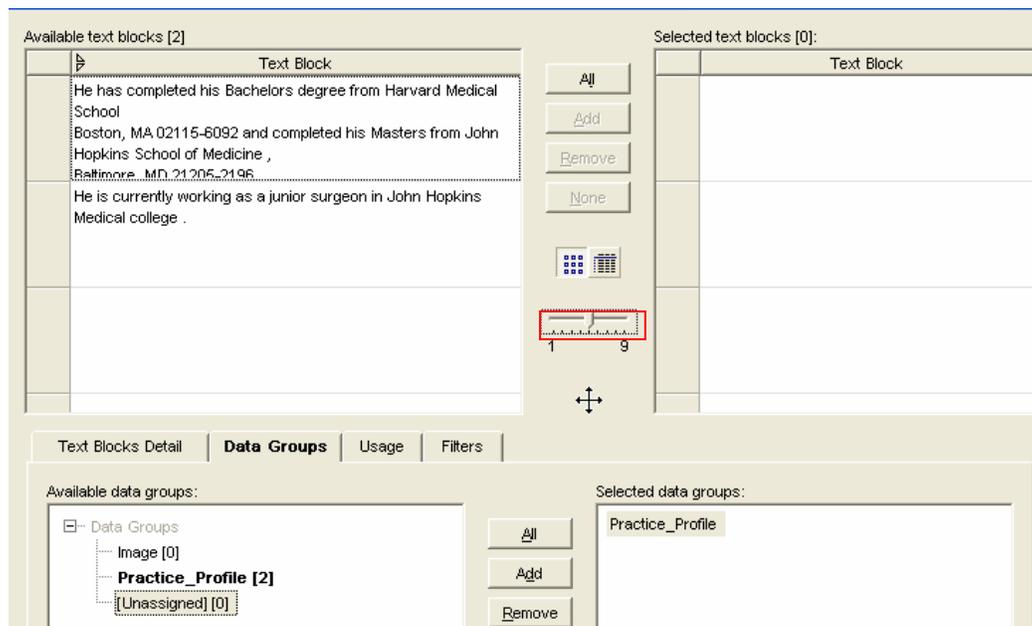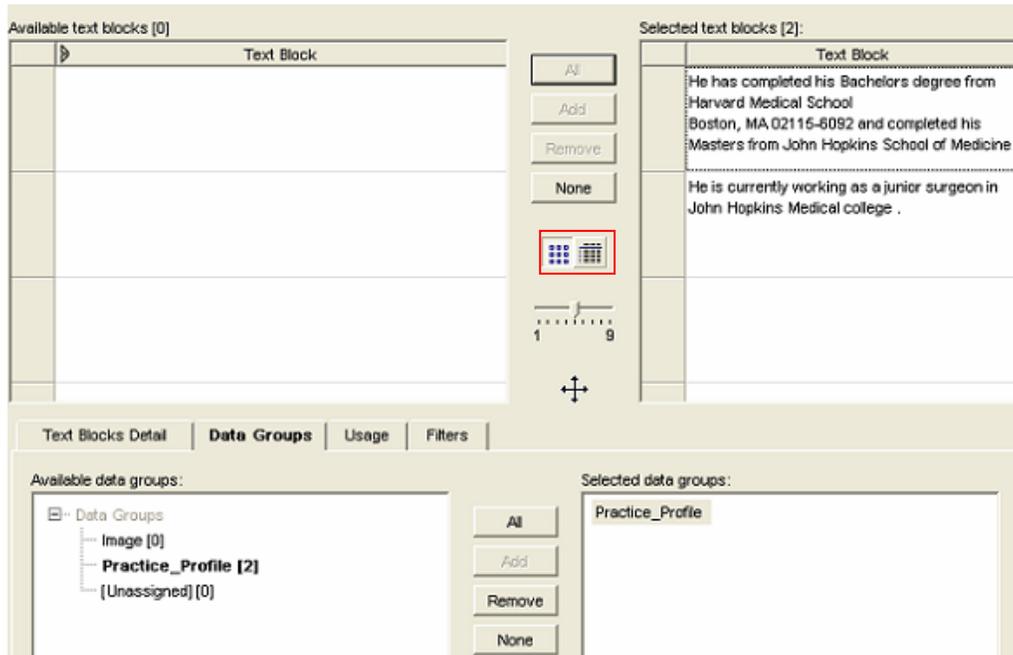
Figure 14: Adding Data Groups

Figure 15: Adding Text Blocks

Thus the Data group is just like a container where data objects can be stored. The files imported are grouped at one place and the dialog box may act just like a palette (analogy) from where objects can be selected and mapped to various records as per the requirement.

Finally we can see the complete information about the employee. The detail of this object can be viewed in the same way as the detail of the image is viewed.
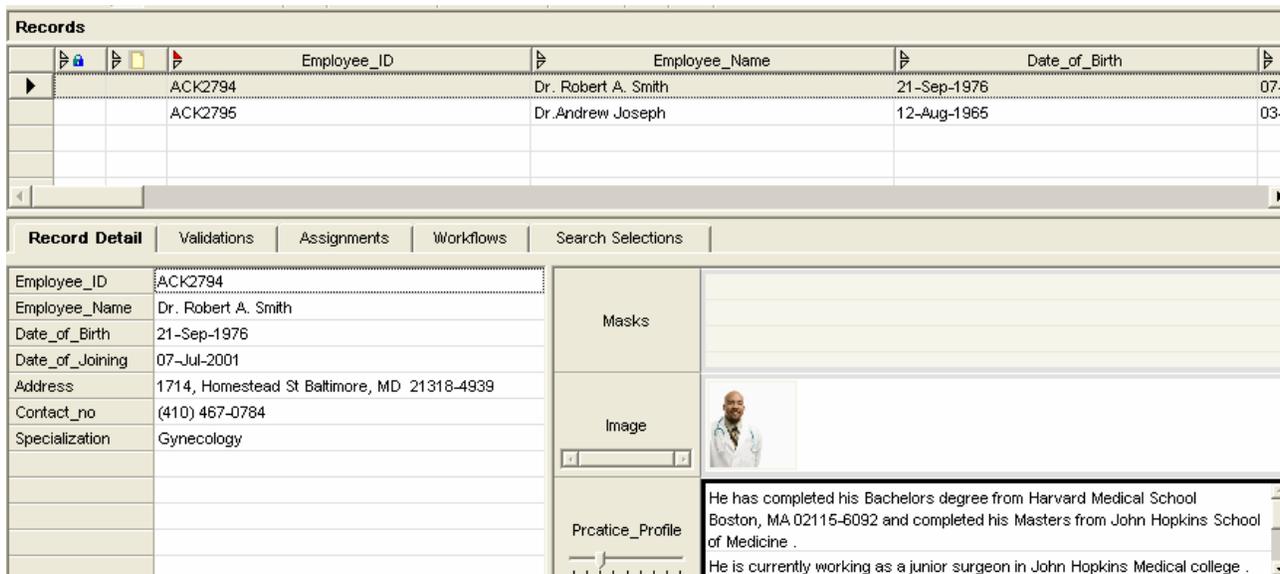

Figure 16: Text Block Mapped

Note: In case of importing PDF it may sometime happen that a PDF may not get imported. In that case just check the repository properties as "Yes" for the option "Allow Invalid PDFs" located in the console**.**

Summary

Object tables are certainly a value add in terms of information enrichment and has an essential role to play in catalogue management.

Related Content

[MDM Console Reference Guides](#)

[MDM Data Manager Reference Guides – Part-1](#)

[MDM Data Manager Reference Guides- Part-2](#)

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

Disclaimer and Liability Notice

This document may discuss sample coding or other information that does not include SAP official interfaces and therefore is not supported by SAP. Changes made based on this information are not supported and can be overwritten during an upgrade.

SAP will not be held liable for any damages caused by using or misusing the information, code or methods suggested in this document, and anyone using these methods does so at his/her own risk.

SAP offers no guarantees and assumes no responsibility or liability of any type with respect to the content of this technical article or code sample, including any liability resulting from incompatibility between the content within this document and the materials and services offered by SAP. You agree that you will not hold, or seek to hold, SAP responsible or liable with respect to the content of this document.