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# Customizing the Source-Target-Matrix Mapping Specification Template in 8.6.1 HotFix 3

# Abstract

Informatica provides mapping specification templates that you can use to create mapping specifications in Microsoft Office Excel. This article describes how to create a custom mapping specification template based on the Source-Target-Matrix template effective in Mapping Analyst for Excel version 8.6.1 HotFix 3. The article also describes how to modify the associated metamap to read the custom template.

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# Overview

Informatica provides mapping specification templates that you can use to create mapping specifications in Microsoft Office Excel. You use the Repository Manager to import mapping specifications to PowerCenter to create mappings that can include sources, targets, and transformations. You can also export PowerCenter mappings to Microsoft Excel mapping specifications based on a mapping specification template.

Each mapping specification template has an associated metamap. The metamap contains multiple worksheets that define the cell location of metadata in a mapping specification template and import and export options. The metamap determines how the Repository Service reads the metadata.

You can customize an Informatica mapping specification template and the associated metamap so that you can create mapping specifications with the metadata that you want to use.

This article describes how to create a custom mapping specification template based on the Source-Target-Matrix template and how to modify the associated metamap to read the custom template.

# Background

As a business analyst, you want to create multiple mappings in a single mapping specification. You can use the Source-Target-Matrix template to create multiple mappings on separate worksheets. The Source-Target-Matrix template uses the worksheet name for both the mapping and target definition names. However, you want to use the names of the target database tables for the target definition names in the mapping.

The Source-Target-Matrix template does not include a target name column. To add a target name column to the template, configure a custom mapping specification template based on the Source-Target-Matrix template.

To customize the Source-Target-Matrix mapping specification template, copy and modify the following files:

- Source-Target-Matrix mapping specification template (source-target-matrix.xls).
- Source-Target-Matrix repeating sheet file (source-target-matrix-Blank.xls). Defines the common structure for multiple mappings defined in a mapping specification that is based on the Source-Target-Matrix template. When you modify the Source-Target-Matrix template, you must make the same changes to a custom version of the Source-Target-Matrix repeating sheet file.
- Source-Target-Matrix metamap (source-target-matrix-MetaMap.xls). Uses the Source-Target-Matrix repeating sheet file to define the cell location of metadata in the Source-Target-Matrix mapping specification template. When you modify the Source-Target-Matrix template and repeating sheet file, you must modify a custom version of the Source-Target-Matrix metamap to describe the modified template and repeating sheet file.

To customize the Source-Target-Matrix mapping specification template, complete the following steps:

1. Copy the mapping specification template, repeating sheet file, and metamap.
2. Associate the metamap with the repeating sheet file.
3. Edit the mapping specification template and the repeating sheet file.
4. Edit the metamap to read the repeating sheet file.

## Step 1. Copy the Mapping Specification Template, Repeating Sheet File, and Metamap

To avoid altering the original files, copy and rename the Source-Target-Matrix template, the repeating sheet file, and the associated metamap.

When you rename the files, use the following naming conventions:

| File Type | File Naming Convention |
|---|---|
| Mapping specification template | <format>.xls<br>Each file name must use the same format. For example, custom-stm.xls is a valid name. |
| Repeating sheet file | <format>-Blank.xls<br>Each file name must use the same format. For example, custom-stm-Blank.xls is a valid name. |
| Metamap | <format>-MetaMap.xls<br>Each file name must use the same format. For example, custom-stm-MetaMap.xls is a valid name. |

A metamap uses relative links to find the location of metadata in a mapping specification. Use Windows Explorer to copy the templates. If you use the Save As menu option in Microsoft Excel, the metamap may contain broken links.

Save the custom files in the same directory as the original files.

The original mapping specification template (source-target-matrix.xls) is in the following directory:

```
<PowerCenter Installation Directory>\client\bin\Sample Specifications
```

The original repeating sheet file (source-target-matrix-Blank.xls) and metamap (source-target-matrix-MetaMap.xls) are in the following directory:

```
<PowerCenter Installation Directory>\client\bin\mimb\conf\MIRModelBridgeTemplate\
MIRMicrosoftExcel
```

## Step 2. Associate the Metamap with the Repeating Sheet File

The Source-Target-Matrix metamap reads from the repeating sheet file to determine the structure of the mapping on each worksheet of a mapping specification that is based on the Source-Target-Matrix template. When you rename the

repeating sheet file, you must associate the metamap with the new repeating sheet file name to maintain the metamap links to the repeating sheet file.

### To associate the metamap with the repeating sheet file:

1. Open the new repeating sheet file.

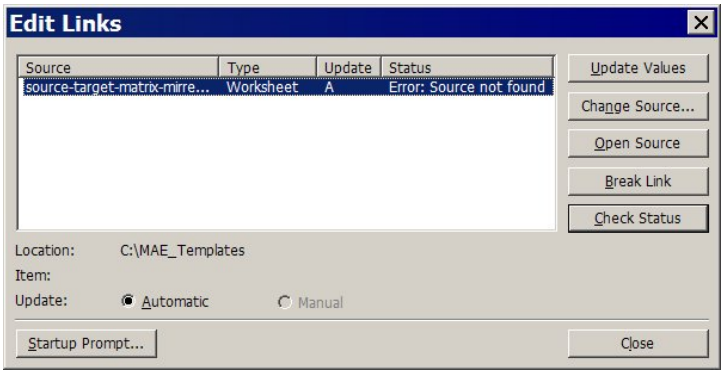
   For example, open custom-stm-Blank.xls.

2. Open the new metamap.

   For example, open custom-stm-MetaMap.xls.

3. If a security warning appears to warn against using macros, click Enable Macros to enable the validation macros.
4. If a message box states that the metamap contains links to other data sources, click Don't Update.
5. Navigate to the Overview worksheet.
6. Click Edit > Links.

   The Edit Links dialog box appears.




7. Click Change Source.
8. Navigate to the new directory, select the new repeating sheet file, and click OK.
9. Click Close to close the Edit Links dialog box.
10. Save the metamap.

## Step 3. Edit the Mapping Specification Template and the Repeating Sheet File

Add a target name column to the new mapping specification template and repeating sheet file so that you can configure names for imported target definitions.

The mapping specification template and repeating sheet file contain several columns grouped together under a Target heading. To avoid additional format changes, add a column to the right of the first target column, and then name the columns.

### To add a target name column:

1. Open the repeating sheet file.

   For example, open custom-stm-Blank.xls.

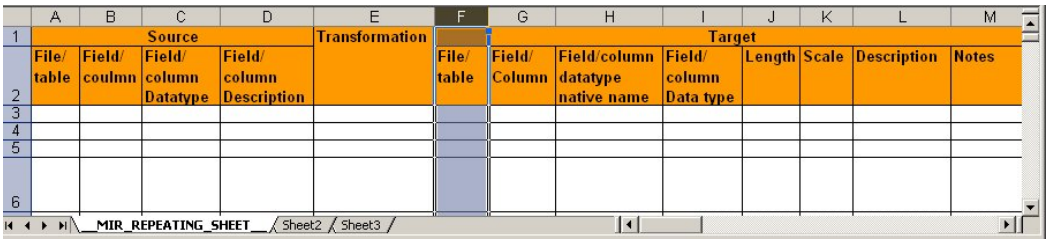
2. On the _MIR_REPEATING_SHEET_ worksheet, click in the Target Field/Column Datatype Native Name column.
3. Click Insert > Column.

A new column displays on the left side of the column.

4. In the new column, enter Field/Column for the column name.
5. Rename the original Field/Column name to File/Table.

   This is the new target name column.
6. Save the changes.

   The following figure shows the added Target File/Table column:



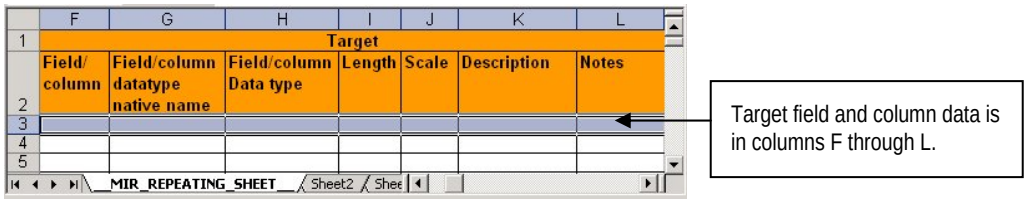

7. Open the new mapping specification template.

   For example, open custom-stm.xls.
8. Repeat steps 2 through 6 to add a target name column to the following worksheets:
   - mapping1
   - mapping2
   - mapping3

## Step 4. Edit the Metamap

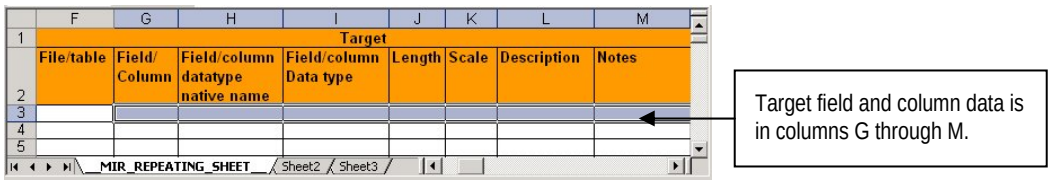
Edit the metamap to describe the location of metadata in the new repeating sheet file. When you added the target name column to the Source-Target-Matrix mapping specification template and repeating sheet file, the location of all subsequent columns changed.

The following figure shows how target field and column data is located in columns F through L in the original Source-Target-Matrix mapping specification template and repeating sheet file:




In the modified Source-Target-Matrix mapping specification template and repeating sheet file, column F contains target table and file information, and field and column data begins in column G. The location of all remaining columns changed.

The following figure shows how target field and column data is located in columns G through M in the custom Source-Target-Matrix mapping specification template and repeating sheet file:



To edit the metamap to reflect the changes to the target metadata, complete the following steps:

1. Edit the matching criteria on the Overview worksheet.
2. Edit the TargetClasses worksheet.
3. Edit the TargetAttributes worksheet.
4. Edit the FeatureMaps worksheet.
5. Save the metamap as an XML spreadsheet.

## *Edit the Matching Criteria on the Overview Worksheet*

The Overview worksheet in the metamap contains a Match Criteria section. This section contains references to cells in the associated repeating sheet file. When you import a mapping specification or export a mapping, Mapping Analyst for Excel uses the Match Criteria section to detect the associated metamap for the mapping specification.

Edit the Match Criteria section to use matching criteria that identifies the associated repeating sheet file.

### To edit the Match Criteria on the Overview worksheet:

1. Open MappingTemplate-MetaMap.xls in the following directory:

   ```
   <PowerCenter Installation Directory>\client\bin\mimb\conf\MIRModelBridgeTemplate\
   MIRMicrosoftExcel
   ```

2. Open the new repeating sheet file and metamap.

   For example, open custom-stm-Blank.xls and custom-stm-MetaMap.xls.

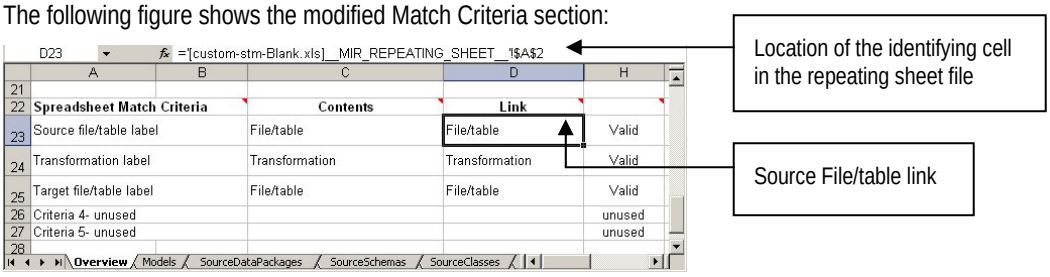
3. On the Overview worksheet of MappingTemplate-MetaMap.xls, copy the Match Criteria section.
4. On the Overview worksheet of the custom metamap, paste the Match Criteria section.
5. In the first cell of the Spreadsheet Match Criteria column, enter the following text: Source file/table label.
6. In the first cell of the Contents column, enter the following text: File/table.
7. In the repeating sheet file, navigate to the Source File/table column label, cell A2.
8. Right-click the cell and select Copy.
9. In the metamap, navigate to the Overview worksheet.
10. In the Match Criteria section, right-click the first cell of the Link column and click Paste > Special.
11. Click Paste Link.

    Microsoft Excel pastes the location of the identifying cell in the repeating sheet file. The cell location displays in the function bar.

12. Repeat steps 5 through 11 to configure the following matching criteria:

| Spreadsheet Match Criteria | Contents | Link |
|---|---|---|
| Transformation label | Transformation | Transformation label, cell E1 |
| Target file/table label | File/table | Target file/table label, cell F2 |

The following figure shows the modified Match Criteria section:



## *Edit the TargetClasses Worksheet*

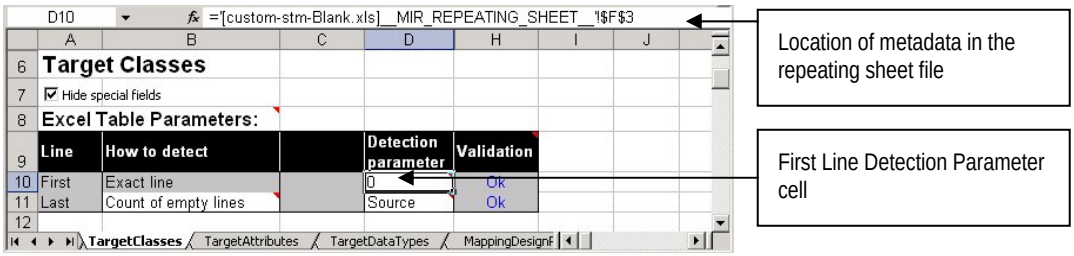
The TargetClasses worksheet in the metamap defines the metadata location of the name of target files or relational tables.

### To edit the TargetClasses worksheet:

1. In the repeating sheet file, navigate to the first cell in the new Target File/Table column, cell F3.
2. Right-click the cell and select Copy.
3. In the metamap, navigate to the TargetClasses worksheet.
4. In the Excel Table Parameters section, right-click the First Line Detection Parameter cell and click Paste > Special.
5. Click Paste Link.

   Microsoft Excel pastes the new location to start reading for a target table or file name. The cell location displays in the function bar. In this example, the new location is cell F3.

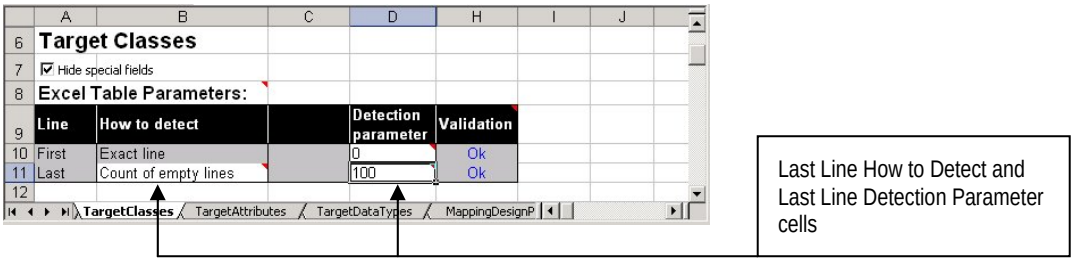
   The following figure shows the modified First Line Detection Parameter cell on the TargetClasses worksheet:




6. Set the Last Line How to Detect cell to Count of Empty Lines.
7. Set the Last Line Detection Parameter cell to 100.

   With this setting, the Repository Service allows 100 blank lines in the target File/Table column before it stops reading for another target table or file name. This allows 100 column or field names for each target. If you require more columns or fields for targets, increase the Last Line Detection Parameter.

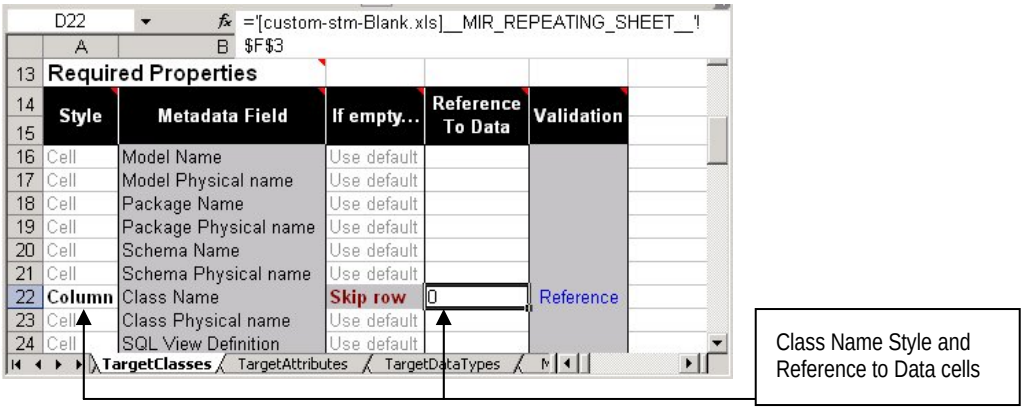
   The following figure shows the modified Last Line How to Detect and Last Line Detection Parameter cells on the Target Classes worksheet:




   In the Required Properties section, set the Class Name Style cell to Column.

8. In the repeating sheet file, navigate to the first cell in the new Target File/Table column, cell F3.
9. Right-click the cell and select Copy.
10. In the metamap, navigate to the TargetClasses worksheet.
11. In the Class Name Reference to Data cell, right-click and choose Paste Special.
12. Click Paste Link.

The following figure shows the modified Class Name metadata field on the TargetClasses worksheet:




13. Save the changes.

## *Edit the TargetAttributes Worksheet*

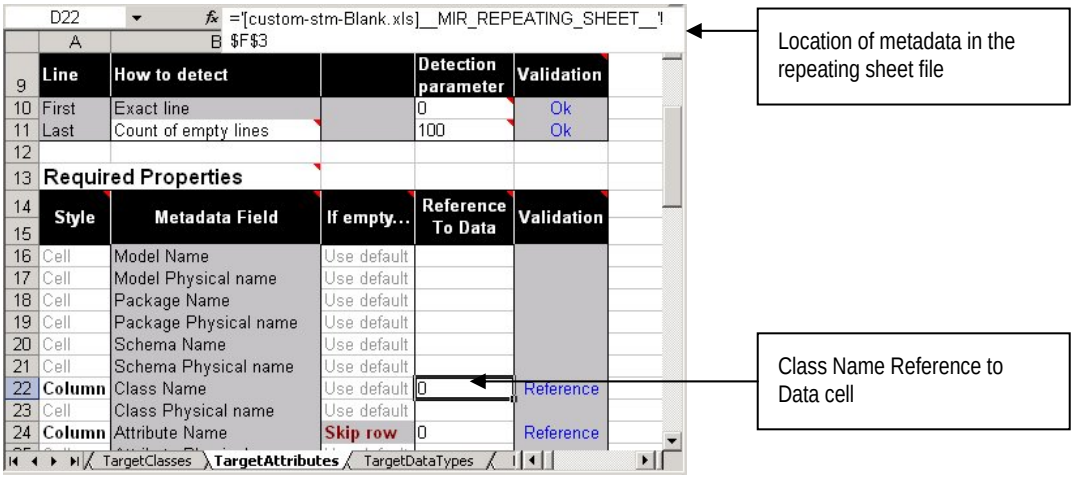
The TargetAttributes worksheet in the metamap defines the metadata location of fields or columns in a target file or relational table.

### To edit the TargetAttributes worksheet:

1. In the repeating sheet file, navigate to the first cell in the new Target File/Table column, cell F3.
2. Right-click the cell and select Copy.
3. In the metamap, navigate to the TargetAttributes worksheet.
4. On the TargetAttributes worksheet, set the Class Name Style cell to Column.
5. In the Class Name Reference to Data cell, right-click and choose Paste Special.
6. Click Paste Link.

   Microsoft Excel pastes the new location to start reading for a target table or file name. The cell location displays in the function bar. In this example, the new location is cell F3.

   The following figure shows the modified Class Name Reference to Data cell on the TargetAttributes worksheet:



7. Repeat steps 1 through 6 for each target column in the repeating sheet file as described in the following table:

| Copy from Repeating Sheet File | | Paste as Link in the Metamap | |
|---|---|---|---|
| For Target Column | Copy Start Cell | On the Metamap Worksheet | Paste Link for |
| Field/Column | G3 | TargetAttributes | Attribute Name Reference to Data cell |
| Field/Column Datatype Native Name | H3 | TargetAttributes | Datatype Native Name Reference to Data cell |
| Field/Column Datatype | I3 | TargetAttributes | Datatype Name Reference to Data cell |
| Length | J3 | TargetAttributes | Datatype Length Reference to Data cell |
| Scale | K3 | TargetAttributes | Datatype Scale Reference to Data cell |
| Description | L3 | TargetAttributes | Attribute Description Reference to Data cell |
| Notes | M3 | TargetAttributes | Attribute Comment Reference to Data cell |

8. Save the changes.

## *Edit the FeatureMaps Worksheet*

The FeatureMaps worksheet in the metamap defines a mapping between a source and target.

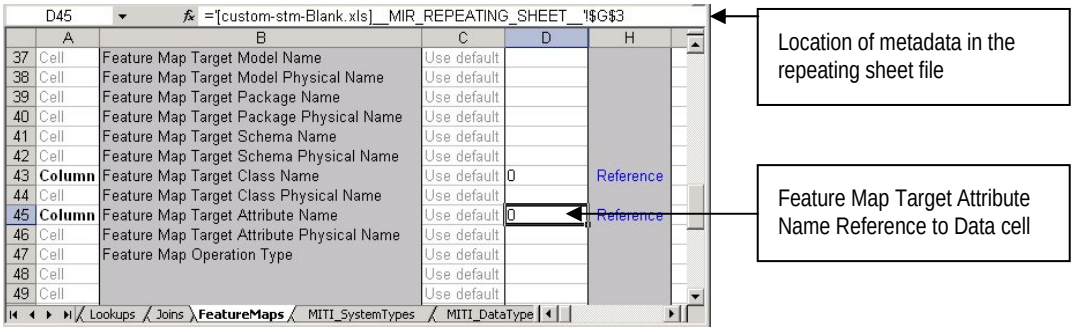
### To edit the FeatureMaps worksheet:

1. In the repeating sheet file, navigate to the first cell in the new Target File/Table column, cell F3.
2. Right-click the cell and select Copy.
3. In the metamap, navigate to the FeatureMaps worksheet.
4. In the Feature Map Target Class Name Reference to Data cell, right-click and choose Paste Special.
5. Click Paste Link.

   Microsoft Excel pastes the new location to start reading for a target table or file name. The cell location displays in the function bar. In this example, the new location is cell F3.
6. In the repeating sheet file, navigate to the first cell in the new Target Field/Column column, cell G3.
7. Right-click the cell and select Copy.
8. In the metamap, navigate to the FeatureMaps worksheet.
9. In the Feature Map Target Attribute Name Reference to Data cell, right-click and choose Paste Special.
10. Click Paste Link.

    Microsoft Excel pastes the new location to start reading for a target column or field name. The cell location displays in the function bar. In this example, the new location is cell G3.

The following figure shows the modified Feature Map Target Attribute Name Reference to Data cell on the FeatureMaps worksheet:




11. Save the changes.

## *Save the Metamap as an XML Spreadsheet*

When you finish editing the metamap, save the metamap as an XML spreadsheet. You use an XML version of the metamap when you import or export mapping specifications.

### To save the metamap as an XML spreadsheet:

1. In the metamap, click File > Save As.
2. For Save As Type, select XML Spreadsheet.
3. Click Save.

You can now use the new mapping specification template and metamap to create and import mappings that include user-defined names for target definitions.

# Author

Alison Taylor
Technical Writer