

# MDM Syndicator – Flattening a Hierarchy Field into Multiple Fields



## Applies to:

SAP NetWeaver Master Data Management (MDM) SP3, SP4, SP5.

## Summary

This article provides a step-by-step procedure in manually syndicate the records to a Remote System in Flat file format. A single hierarchy field in the source table may be represented by multiple fields in the remote system. In this case, the source hierarchy field must be flattened into multiple fields (one for each modal value in the source hierarchy) before mapping can occur.

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## Author Bio



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## Business Scenario

Let's take an example: In the Syndication process we have to map source hierarchy fields to destination hierarchy fields. A single hierarchy field in the source table may be represented by multiple fields in the remote system. In this case, the source hierarchy field must be flattened into multiple fields (one for each modal value in the source hierarchy) before mapping can occur.

MDM feature is Split Hierarchy field. The values in a source hierarchy field can be split into multiple fields using the Split Hierarchy Field operation. The Split Hierarchy Field operation provides options for splitting from the "root" of the hierarchy or from the "leaf" item used to populate the record.

Once the Source Hierarchy field flattened to multiple fields, map source fields and destination fields, the MDM Syndicator adds data to the syndication file in one of two ways, depending upon the syndication format. 1. On Flat text syndications. 2. On XML syndications. Execute the Syndication action.

## Syndication Process Flow Overview

1. Launch MDM Syndicator.
2. Set the Map properties.
3. Select Destination Properties.
4. Split source Hierarchy field.
5. Map Source items and Destination items.
6. Execute the Syndication action.

## MDM Syndicator Steps

1. Launch the MDM Syndicator application from your Windows desktop. You should see:

The screenshot displays the MDM Syndicator application interface. The top menu bar includes File, View, Search, Item Properties, Syndication, Configuration, Source Items, and Help. The main window is divided into several sections:

- Search Parameters:** A tree view under the 'Manufacturer' section, listing various manufacturers such as Ansell Protective Products, Bacou-Dalloz Group, Best Manufacturing Company, Boss Holding, Inc., Danaher Corporation, Estwing Manufacturing Company, Henkel KGaA, Illinois Tool Works, Inc., Norcross Safety Products L., RPM International, Inc., The Sherwin-Williams Company, The Stanley Works, Vaughan & Bushnell Mfg. Co, and Willi Hahn Corporation.
- Records:** A table with columns for Manufacturer, Part Number, and Name. It shows a record for 'New Item (2)' with Manufacturer 'AllenT', Part Number '19636', and Name '454 Piece Master Mechanic's Set'.
- Item Mapping:** A section with tabs for Map Properties, Destination Items, Custom Items, Merge Items, Search Selections, and Destination. It contains two tables:
 

Source items:			Destination items:			
Mapped	Name	Type	Order	Mapped	Include	Name
<input checked="" type="checkbox"/>	Products	Main				

2. Press the Map Properties tab, you should see:

Item Mapping	<b>Map Properties</b>	Destination Items	Custom Items	Merge Items	Search Selections
Name	Reset	Value			
Remote System	<input type="checkbox"/>	MDM			
Format	<input type="checkbox"/>	Flat			
Root	<input type="checkbox"/>				
Namespace	<input type="checkbox"/>				
XML File Output	<input type="checkbox"/>	Multiple Files (One Record per File)			
Repeatable Record Name	<input type="checkbox"/>	<none>			
Include Item Names	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			
Item Format	<input checked="" type="checkbox"/>	Variable Width			
Item Delimiter	<input checked="" type="checkbox"/>	Tab			
Custom Delimiter	<input checked="" type="checkbox"/>				
Name/Value Separator	<input checked="" type="checkbox"/>	Tab			
Custom Separator	<input checked="" type="checkbox"/>				
Name/Value Terminator	<input checked="" type="checkbox"/>	Tab			
Custom Terminator	<input checked="" type="checkbox"/>				
Language Format	<input checked="" type="checkbox"/>	2-Letter Language Code			
Date Format	<input checked="" type="checkbox"/>	YYYYMMDD			
Numeric Decimal Symbol	<input checked="" type="checkbox"/>	.			
Numeric Thousand Separator	<input checked="" type="checkbox"/>	,			
Suppress Unchanged Records	<input checked="" type="checkbox"/>	<input type="checkbox"/>			
Suppress Records Without Key	<input checked="" type="checkbox"/>	<input type="checkbox"/>			
Output Remote Systems	<input checked="" type="checkbox"/>	MDM			
Filter Multi-valued Lookup Fields	<input checked="" type="checkbox"/>	<input type="checkbox"/>			
Filter Qualified Links	<input checked="" type="checkbox"/>	<input type="checkbox"/>			
Multilingual Fields	<input type="checkbox"/>	<none>			

3. Click on file in the Menu bar, and select Destination Properties:

The screenshot shows the SAP MDM Syndicator application. The 'File' menu is open, and 'Destination Properties...' is selected. The main window displays a 'Records' table with the following data:

Manufacturer	Name
AllenT	Basic Metric 107-pc

Below the records table, the 'Map Properties' tab is active, showing the same configuration table as in step 2.

You should see:

**Destination Properties**

Type: Flat

Remote system: MDM

Port:

XML schema:

XML file name:

Root:

OK Cancel

4. Select the Remote System as Remote System.

**Destination Properties**

Type: Flat

Remote system: Remote System

Port: MDM

XML schema:

XML file name:

Root:

OK Cancel

5. Click the "OK" button, you should see:

File View Search Item Properties Syndication Configuration Source Items Help

Products

**Search Parameters**

**Manufacturer**

- [ALL]
- Ansell Protective Products
- Bacou-Dalloz Group
- Best Manufacturing Company
- Boss Holding, Inc.
- Danaher Corporation
- Estwing Manufacturing Company
- Henkel KGaA
- Illinois Tool Works, Inc.
- Norcross Safety Products L.
- RPM International, Inc.
- The Sherwin-Williams Company
- The Stanley Works
- Vaughan & Bushnell Mfg. Co
- Willi Hahn Corporation

**Records**

Manufacturer	Part Number	Name
AllenT	19614	69 Piece 3/8" Drive Basic Mecha
AllenT	25206	Chain Nose Pliers

**Item Mapping** | Map Properties | Destination Items | Custom Items | Merge Items | Search Selections


Source items:

Mapped	Name	Type
<input checked="" type="checkbox"/>	Products	Main

Map Unmap

Destination items:

Order	Mapped	Include

6. Click on  node (products) in source items, in the item mapping tab.

**Item Mapping** | Map Properties | Destination Items | Custom Items | Merge Items | Search Selections | Destination Preview

Source items:

Mapped	Name	Type
	Products	Main

Destination items:

Order	Mapped	Include	Name	Type

Map Unmap

You should see:

**Item Mapping** | Map Properties | Destination Items | Custom Items | Merge Items | Search Selections

Source items:

Mapped	Name	Type
	Products	Main
	Manufacturer	Lookup [Hierarchy]
	Name	Lookup [Flat]
	Part Number [DF]	Text [50]
	Category	Lookup [Taxono...]
	Category [All Attributes]	Attributes
	Category [Individual Attri	Attributes
	Creation Date	Create Stamp
	Update Date	Time Stamp

Destination items:

Order	Mapped	Include	Name	Type

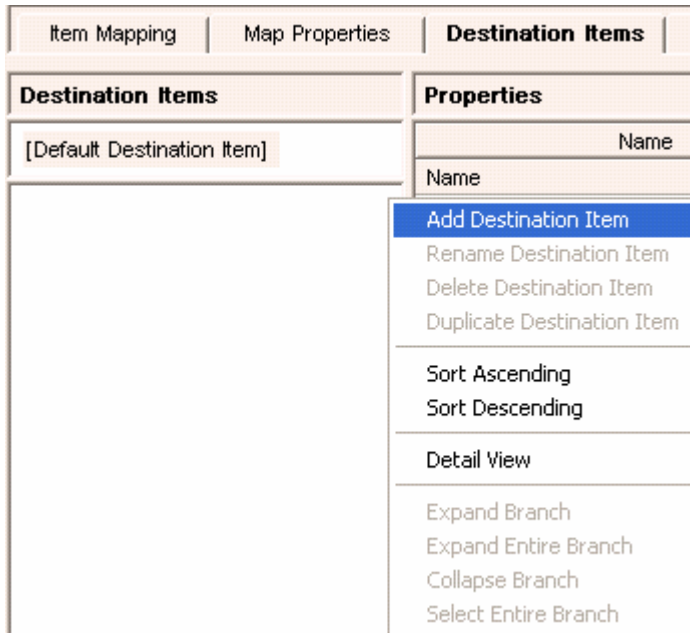
Map Unmap

7. Click on Destination items tab, you should see:

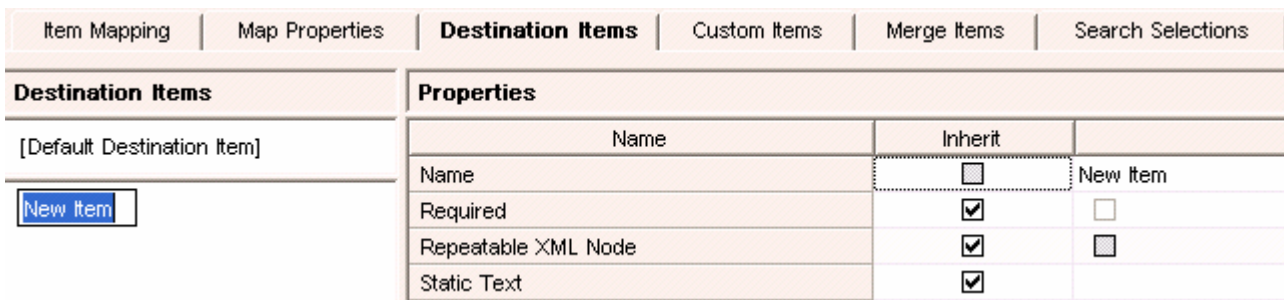
Item Mapping | Map Properties | **Destination Items** | Custom Items | Merge Items | Search Selections | Destination Preview

Destination Items	Properties																																	
[Default Destination Item]	<table border="1"> <thead> <tr> <th>Name</th> <th>Reset</th> <th>Value</th> </tr> </thead> <tbody> <tr> <td>Name</td> <td><input type="checkbox"/></td> <td>[Default Destination Item]</td> </tr> <tr> <td>Required</td> <td><input checked="" type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> <tr> <td>Repeatable XML Node</td> <td><input checked="" type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> <tr> <td>Static Text</td> <td><input checked="" type="checkbox"/></td> <td> </td> </tr> <tr> <td>Default Text</td> <td><input checked="" type="checkbox"/></td> <td> </td> </tr> <tr> <td>Hierarchy Style</td> <td><input checked="" type="checkbox"/></td> <td>Node Name Only</td> </tr> <tr> <td>Path Delimiter</td> <td><input checked="" type="checkbox"/></td> <td>&gt;</td> </tr> <tr> <td>Prepend Field Name as Root of Path Names</td> <td><input checked="" type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> <tr> <td>Number of Levels in Pathname from Root</td> <td><input checked="" type="checkbox"/></td> <td>0</td> </tr> <tr> <td>Number of Levels in Pathname from Leaf</td> <td><input checked="" type="checkbox"/></td> <td>0</td> </tr> </tbody> </table>	Name	Reset	Value	Name	<input type="checkbox"/>	[Default Destination Item]	Required	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Repeatable XML Node	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Static Text	<input checked="" type="checkbox"/>		Default Text	<input checked="" type="checkbox"/>		Hierarchy Style	<input checked="" type="checkbox"/>	Node Name Only	Path Delimiter	<input checked="" type="checkbox"/>	>	Prepend Field Name as Root of Path Names	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Number of Levels in Pathname from Root	<input checked="" type="checkbox"/>	0	Number of Levels in Pathname from Leaf	<input checked="" type="checkbox"/>	0
Name	Reset	Value																																
Name	<input type="checkbox"/>	[Default Destination Item]																																
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Number of Levels in Pathname from Root	<input checked="" type="checkbox"/>	0																																
Number of Levels in Pathname from Leaf	<input checked="" type="checkbox"/>	0																																

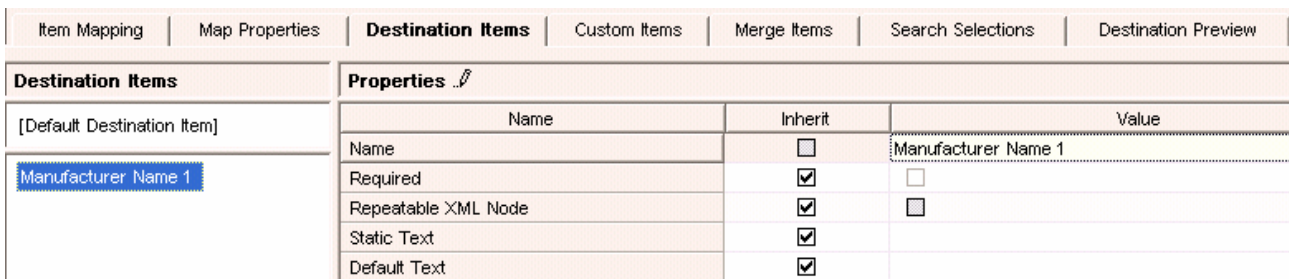
8. In the Destination items right click, from the context menu select “Add Destination Item”.



You should see:



9. For the newly created Destination item name it as “Manufacturer Name 1”, you should see:



10. Now repeat steps 8 to 9 to add Destination items, as shown in the following table:

Destination Item
Manufacturer Name 2
Manufacturer Name 3
Part Number
UNS PSC Name

You should see:

Item Mapping	Map Properties	Destination Items	Custom Items	Merge Items	Search Selections	Destination Preview
<b>Destination Items</b>		<b>Properties</b>				
[Default Destination Item]		Name	Inherit	Value		
Manufacturer Name 1		Required	<input checked="" type="checkbox"/>	<input type="checkbox"/> UNS PSC Name		
Manufacturer Name 2		Repeatable XML Node	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
Manufacturer Name 3		Static Text	<input checked="" type="checkbox"/>			
Part Number		Default Text	<input checked="" type="checkbox"/>			
UNS PSC Name		Hierarchy Style	<input checked="" type="checkbox"/>	Node Name Only		
		Path Delimiter	<input checked="" type="checkbox"/>	>		
		Prepend Field Name as Root of Path Names	<input checked="" type="checkbox"/>	<input type="checkbox"/>		

11. “Click on the Item Mapping tab. You should see:”

Item Mapping	Map Properties	Destination Items	Custom Items	Merge Items	Search Selections	Destination Preview			
Source items:		Destination items:							
Mapped	Name	Type	Order			Mapped	Include	Name	Type
	Products	Main	[1]	<input type="checkbox"/>	Manufacturer Name 1	Text			
	Manufacturer	Lookup [Hierarchy]	[2]	<input type="checkbox"/>	Manufacturer Name 2	Text			
	Part Number [DF]	Text [75]	[3]	<input type="checkbox"/>	Manufacturer Name 3	Text			
	Name	Lookup [Flat]	[4]	<input type="checkbox"/>	Part Number	Text			
	InQuera Demo - Categor Lookup (Taxono...		[5]	<input type="checkbox"/>	UNS PSC Name	Text			

12. “In the Source Items, “Manufacturer” is a Hierarchy field; this field is represented by multiple fields in the remote system. In this case, the source hierarchy field must be flattened into multiple fields. Select & Right click on the field “Manufacturer” and from the context menu choose “Split Hierarchy Field – From Leaf”:

Item Mapping	Map Properties	Destination Items	Custom Items	Merge Items	Search Selections	Destination Preview
Source items:		Destination items:				
Mapped	Name	Type	Order	Mapped	Include	Name
	Products	Main	[1]	<input type="checkbox"/>		Manufacturer Name 1
	Manufacturer		[2]	<input type="checkbox"/>		Manufacturer Name 2
	Part Number [DF]		[3]	<input type="checkbox"/>		Manufacturer Name 3
	Name		[4]	<input type="checkbox"/>		Part Number
	InQuera Demo - Categ			<input type="checkbox"/>		UNS PSC Name



You should see:

**Item Mapping** | Map Properties | Destination Items | Custom Items | Merge Items | Search Selections | Destination Preview

Source items:

Mapped	Name	Type
	Products	Main
	Manufacturer	Lookup [Hierarchy]
	Manufacturer [Leaf]	Lookup [Hierarchy]
	Manufacturer [Leaf-1]	Lookup [Hierarchy]
	Manufacturer [Leaf-2]	Lookup [Hierarchy]
	Name [DF]	Text [120]

Destination items:

Order	Mapped	Include	Name	Type
[1]	<input type="checkbox"/>	<input type="checkbox"/>	Manufacturer Name 1	Text
[2]	<input type="checkbox"/>	<input type="checkbox"/>	Manufacturer Name 2	Text
[3]	<input type="checkbox"/>	<input type="checkbox"/>	Manufacturer Name 3	Text
[4]	<input type="checkbox"/>	<input type="checkbox"/>	Part Number	Text
[5]	<input type="checkbox"/>	<input type="checkbox"/>	UNS PSC Name	Text

13. After mapping Source fields to Destination fields, you should see:

**Item Mapping** | Map Properties | Destination Items | Custom Items | Merge Items | Search Selections | Destination Preview

Source items:

Mapped	Name	Type
	Products	Main
	Manufacturer	Lookup [Hierarchy]
↕	Manufacturer [Leaf]	Lookup [Hierarchy]
↕	Manufacturer [Leaf-1]	Lookup [Hierarchy]
↕	Manufacturer [Leaf-2]	Lookup [Hierarchy]
	Name [DF]	Text [120]
	Logo	Lookup [Image]
	URL	Text [100]
	Auto ID	Auto ID
	location	Text [50]
↕	Part Number [DF]	Text [75]
	Name	Lookup [Flat]
	InQuera Demo - Categor Lookup [Taxono...	

Destination items:

Order	Mapped	Include	Name	Type
[1]	↕	<input checked="" type="checkbox"/>	Manufacturer Name 1	Text
[2]	↕	<input checked="" type="checkbox"/>	Manufacturer Name 2	Text
[3]	↕	<input checked="" type="checkbox"/>	Manufacturer Name 3	Text
[4]	↕	<input checked="" type="checkbox"/>	Part Number	Text
[5]	↕	<input checked="" type="checkbox"/>	UNS PSC Name	Text

14. Click on the Search Selections Tab, you should see:

Item Mapping | Map Properties | Destination Items | Custom Items | Merge Items | **Search Selections** | Destination Preview

**Manufacturer:** KD Tools®

**Name:** ALL

**InQuera Demo - Categories:** ALL

**Image Details:** ALL

**UNSPSC:** ALL



**Pricing:** ALL

15. “Click on the Destination Preview Tab. You should see:”

Item Mapping	Map Properties	Destination Items	Custom Items	Merge Items	Search Selections	Destination Preview
Manufacturer Name 1	Manufacturer Name 2	Manufacturer Name 3	Part Number	UNS	PSC	Name
KD Tools@	Danaher Tool Group	Danaher Corporation	45706			Longnose pliers
KD Tools@	Danaher Tool Group	Danaher Corporation	45708			Slip or groove joint pliers
KD Tools@	Danaher Tool Group	Danaher Corporation	45610			Linemans pliers
KD Tools@	Danaher Tool Group	Danaher Corporation	45607			Longnose pliers
KD Tools@	Danaher Tool Group	Danaher Corporation	45710			Slip or groove joint pliers
KD Tools@	Danaher Tool Group	Danaher Corporation	45613			Longnose pliers
KD Tools@	Danaher Tool Group	Danaher Corporation	61061			Retaining ring pliers
KD Tools@	Danaher Tool Group	Danaher Corporation	45712			Tongue and groove pliers
KD Tools@	Danaher Tool Group	Danaher Corporation	457			Corner clamps
KD Tools@	Danaher Tool Group	Danaher Corporation	45704			Longnose pliers
KD Tools@	Danaher Tool Group	Danaher Corporation	3483			Retaining ring pliers
KD Tools@	Danaher Tool Group	Danaher Corporation	3443			Round nose pliers
KD Tools@	Danaher Tool Group	Danaher Corporation	3451			Retaining ring pliers
KD Tools@	Danaher Tool Group	Danaher Corporation	3491			Retaining ring pliers
KD Tools@	Danaher Tool Group	Danaher Corporation	3489			Retaining ring pliers

16. “Execute the syndication by pressing the  icon as shown:”

File View Search Item Properties Syndication Configuration Source Items Help

Products  

**Search Parameters**

**Manufacturer**

- [ALL]
- [NULL]
- Ansell Protective Product:
- Bacou-Dalloz Group
  - Dalloz Safety
  - Uvex Safety
- Howard Leight Indust
- Best Manufacturing Comp.
- Boss Holding, Inc.
- Boss Manufacturing C
- Danaher Corporation

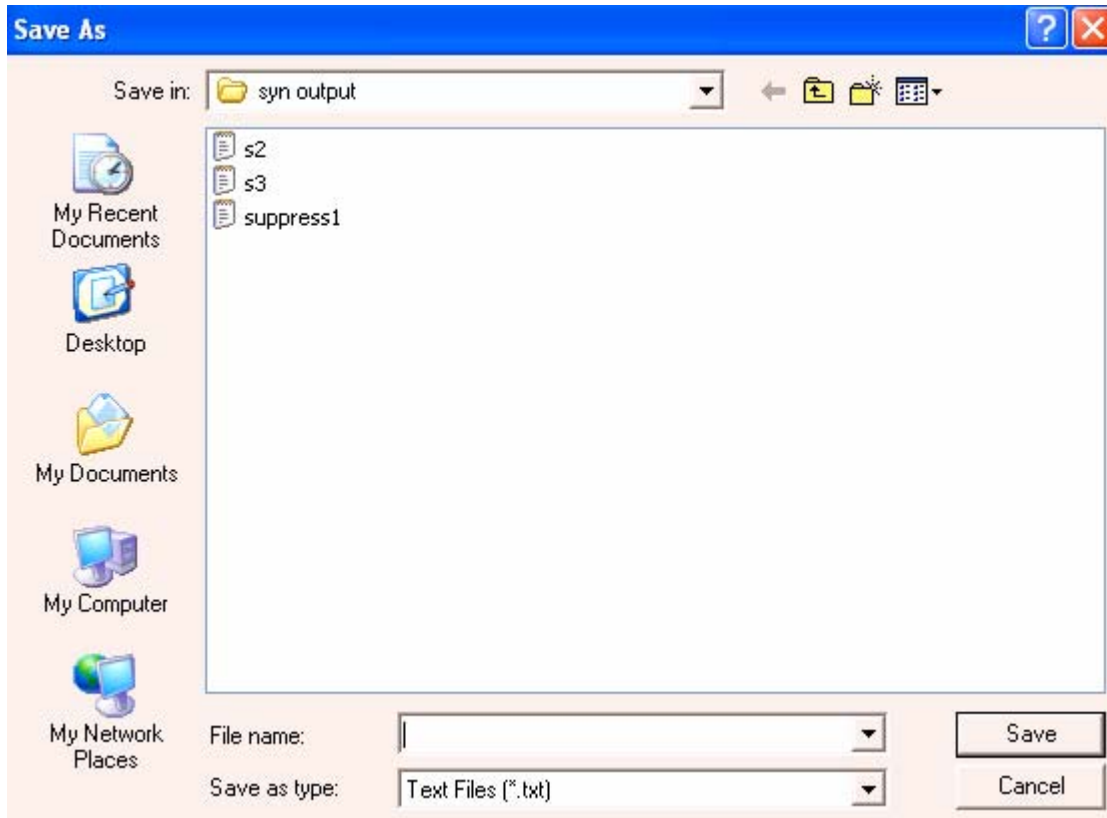
**Records**

Manufacturer	Part Number	Name	InQuera Demo - Cat
KD Tools@	45706	6" Curved Needle-Nose Pliers	Pliers (units)
KD Tools@	45708	Combination Slip-Joint Pliers	Pliers (units)

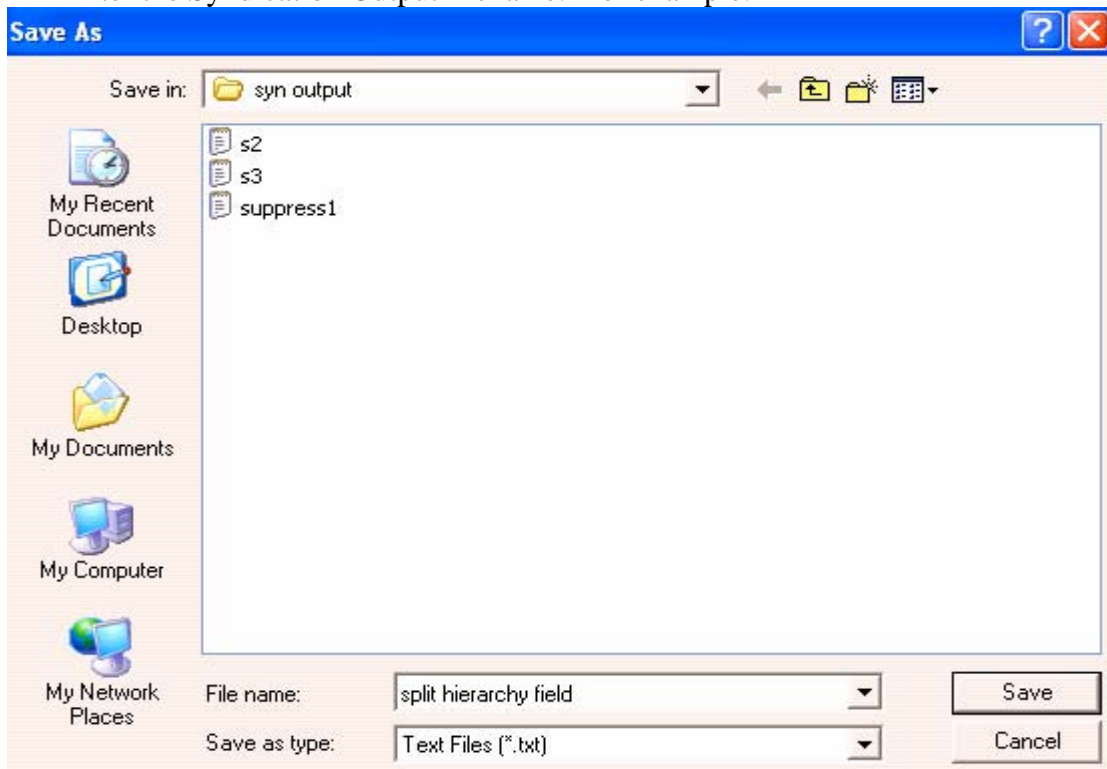
Item Mapping | Map Properties | Destination Items | Custom Items | Merge Items | Search Selections | **Destination Preview**

Manufacturer Name 1	Manufacturer Name 2	Manufacturer Name 3	Part Number	UNS	PSC	Name
KD Tools@	Danaher Tool Group	Danaher Corporation	45706			Longnose pliers
KD Tools@	Danaher Tool Group	Danaher Corporation	45708			Slip or groove joint pliers
KD Tools@	Danaher Tool Group	Danaher Corporation	45610			Linemans pliers
KD Tools@	Danaher Tool Group	Danaher Corporation	45607			Longnose pliers
KD Tools@	Danaher Tool Group	Danaher Corporation	45710			Slip or groove joint pliers

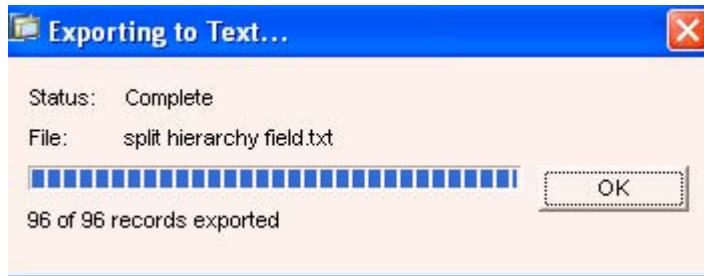
You should see:



17. "Enter the Syndication Output filename. For example:"



18. Click on Save Button. You should see:



You have syndicated the Products data into Flat file successfully.

## Snapshot of Syndicated Flat File

Manufacturer	Name 1	Manufacturer	Name 2	Manufacturer	Name 3	Part Number	UNS PSC Name
KD Tools®	Danaher Tool Group	Danaher Corporation			45706		Longnose pliers
KD Tools®	Danaher Tool Group	Danaher Corporation			45708		Slip or groove joint pliers
KD Tools®	Danaher Tool Group	Danaher Corporation			45610		Linemans pliers
KD Tools®	Danaher Tool Group	Danaher Corporation			45607		Longnose pliers
KD Tools®	Danaher Tool Group	Danaher Corporation			45710		Slip or groove joint pliers
KD Tools®	Danaher Tool Group	Danaher Corporation			45613		Longnose pliers
KD Tools®	Danaher Tool Group	Danaher Corporation			61061		Retaining ring pliers
KD Tools®	Danaher Tool Group	Danaher Corporation			45712		Tongue and groove pliers
KD Tools®	Danaher Tool Group	Danaher Corporation			457		Corner clamps
KD Tools®	Danaher Tool Group	Danaher Corporation			45704		Longnose pliers
KD Tools®	Danaher Tool Group	Danaher Corporation			3483		Retaining ring pliers
KD Tools®	Danaher Tool Group	Danaher Corporation			3443		Round nose pliers
KD Tools®	Danaher Tool Group	Danaher Corporation			3451		Retaining ring pliers
KD Tools®	Danaher Tool Group	Danaher Corporation			3491		Retaining ring pliers
KD Tools®	Danaher Tool Group	Danaher Corporation			3489		Retaining ring pliers
KD Tools®	Danaher Tool Group	Danaher Corporation			3374		Round nose pliers
KD Tools®	Danaher Tool Group	Danaher Corporation			3487		Retaining ring pliers

## Related Content

[http://help.sap.com/saphelp\\_mdm550/helpdata/en/ff/37e4c6857449388ddb6c77f160ac4f/frameset.htm](http://help.sap.com/saphelp_mdm550/helpdata/en/ff/37e4c6857449388ddb6c77f160ac4f/frameset.htm)

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