

Hybrid Keyword Search



Applies to:

SAP NetWeaver 2004s/ MDM 5.5 SP 06.

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

Summary:

The article demonstrates about the concept of Hybrid Search and its advantages on Drilldown search are evaluated. It explains in details the prerequisites to be done in console. After the basic steps of mapping and importing, the “How to” of Hybrid search is explained in detail.

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Introduction

Searches in MDM: For many practical reasons, the functionality of Searches in MDM becomes inevitable. Search is one of the most important features in SAP MDM. Some of the advantages being:

1. Facilitates in locating records faster
2. The search functionality can be used for selective syndication
3. Aids in searching the records to make manipulation

Basing on the type of field on which search is performed, we have 2 kinds of searches:

1. Drilldown Search
2. Freeform Search.

1. **Drilldown Search:** It is used for search on lookup fields, qualifiers, attributes etc. This search is done under the Search parameters in Data manager.

2. **Freeform Search:** It is used to perform search on non lookup fields. It provides various techniques to do searches, by using various operators depending on the data type.

One of the important features of a free form search is the concept of **Hybrid Searches using Wild cards**.

How is Hybrid Search different?

Freeform Search on field tabs	Hybrid Search
The search value is matched only against the records of a particular field.	The keyword entered is matched against all those fields, for which Keyword is enabled in Console.
Depending on the field type, the operators for search are activated.	It allows using all the 5 wildcards (operators) for search, irrespective of any field type restrictions.
Only one search parameter against a particular field	More than one value can be given as a Search parameter.

The **Wildcards** supported are:

1. ***** Search term ***** : Contains
2. Search term ***** : Starts with
3. **=** Search term: Equals
4. **+** Search term: Sounds like
5. Search term: Stem and then Equal

Synopsis

At Console:

1. Declaring the field as Keyword enabled

At Import Manager:

1. Mapping the Fields
2. Importing Records

At Data Manager:

1. Hybrid search functionality is explained

Snapshot of the Process at Each Stage

At Console:

Fields declared at the Console:

In the Console, the fields which participate in the Hybrid search have to be Keyword enabled (Keyword = Normal) as above. In this example, fields A_PROD_DESC and A_PROD_Vendor are declared as Keyword enabled.

SAP MDM Console

Name	Type	Keyword
A_PROD_DESC	Text	Normal
A_PROD_ID	Integer	None
A_PROD_Vendor	Text	Normal

Field Detail

Name	A_PROD_DESC
Code	PROD_DESC
Description	
Type	Text
Required	No
Writable Once	No
Matrix	Normal
Multi-Lingual	No
Keyword	Normal

SAP MDM Console

Name	Type	Keyword
A_PROD_DESC	Text	Normal
A_PROD_ID	Integer	None
A_PROD_Vendor	Text	Normal

Field Detail

Name	A_PROD_Vendor
Code	Product_IDT
Description	
Type	Text
Required	No
Writable Once	No
Matrix	Normal
Multi-Lingual	No
Keyword	Normal
Display Field	Yes
Unique Field	No
Sort Index	Normal

At Import Manager

Field mapping is done as below:

The screenshot shows the SAP MDM Import Manager interface. The 'Map Fields/Values' tab is active. The 'Field mapping' section displays two tables: 'Source fields' and 'Destination fields'. The 'Source fields' table is highlighted with a red box and contains the following data:

Mapped	Name	Type	Destination Field
	[Match Level/Type]	Text	
✔	A_PROD_DESC	Text	A_PROD_DESC
✔	A_PROD_ID	Numeric	A_PROD_ID
✔	A_PROD_Vendor	Text	A_PROD_Vendor

The 'Destination fields' table contains the following data:

Match	F/D/Q/A	Name	Type	Source Field
✔	F	A_PROD_DESC	ext (50)	A_PROD_DESC
✔	F	A_PROD_ID	Integer	A_PROD_ID
✔	F	A_PROD_Vendor (DF)	Text (50)	A_PROD_Vendor
	Q	assid <sskill>	Text (50)	

Data is imported into MDM as shown below:

The screenshot shows the SAP MDM Import Manager interface with the 'Import Status' tab active. The 'Action items: Ready to import' section displays the following summary:

Table Mapping	Source	Destination	Fields Mapped
	Sheet1\$	Products	3 of 3

Below this, there are sections for 'Table Joins' and 'Field Lookups', both showing empty tables. The 'Field Mapping (without Value Mapping)' section displays the following summary:

Source	Destination	Values Converted
A_PROD_DESC	A_PROD_DESC	19 of 19
A_PROD_ID	A_PROD_ID	19 of 19
A_PROD_Vendor	A_PROD_Vendor	15 of 15

An 'MDM Import Manager' dialog box is open, showing a message: 'Finished importing records' with an information icon and an 'OK' button. The message area is highlighted with a red box.

At Data Manager

Why and How of Hybrid Search:

- Search is done in record mode
- Each of the search term should be separated by a space

The screenshot shows the SAP MDM Data Manager interface with the 'Records' tab selected. The search parameters are set to 'Free-Form Search' with the following configuration:

Field	Operator
Keyword	(progressive)
Expression	is TRUE
A_PROD_DESC	contains
A_PROD_ID	=
A_PROD_Vendor	contains
Category	contains
Current Date	abs =
DOB	abs =

The 'Records' table displays the following data:

A_PROD_ID	A_PROD_DESC	A_PROD_Vendor
112	Xent Washed Machinery	Xent
113	Cooker Zenar	Zenar
114	Dent Iron Box	Dent
115	Quar Vacuum Cleaner	Quar
116	Kewll Advanced Gyser	Wint Kewll
117	Portable Cloths Washer	Portable
118	Unique Cloths Dryer	Unique
119	Kewll Refrigerator	Kewll
120	Phil Television	Phil
121	Axil Water Heater	Axil
122	Phil CD Player	Phil
123	Kewll Washed Machines	Kewll
124	Cloths Washer Zen	Zen
125	Nize Micro Wave	Nize
126	Asan Paint Brush	Asan

As shown below, to use all the wildcards, select "Progressive" under the Operator column of Search parameters tab.

The screenshot shows the 'Free-Form Search' configuration in the SAP MDM Data Manager. The 'Operator' dropdown menu is open, showing the following options:

Field	Operator	Value
Keyword	(progressive)	
Expression	(progressive)	
A_PROD_DESC	keyword contains	
A_PROD_ID	keyword starts with	
A_PROD_Vendor	keyword equals	
Category	keyword sounds like	
Category	contains	
Current Date	abs =	

To showcase the power of the Hybrid search concept, let us consider some examples, using the wildcards for searching the records based on different requirements.

1. Requirement: To find the records starting with “Zen” and containing the word “wash”.
For this kind of search we have to pass 2 search parameters to find the records.

The screenshot shows the SAP MDM Data Manager interface. The 'Search Parameters' section is expanded to 'Free-Form Search'. The 'Keyword' field contains '(progressive)' and the 'Value' field contains 'Zen* *wash*'. The 'Records' table shows three results:

A_PROD_ID	A_PROD_DESC	A_PROD_Vendor
124	Cloths Washer Zen	Zen
111	Zen Dish washer	Zen
127	Zenar Washing Machine	Zenar

Here, Value = Zen * * wash *

2. Requirement: To find the records *containing the words “wash”* and having the words which *sounds like “machine”*.

The screenshot shows the SAP MDM Data Manager interface. The 'Search Parameters' section is expanded to 'Free-Form Search'. The 'Keyword' field contains '(progressive)' and the 'Value' field contains '*wash* +machine'. The 'Records' table shows three results:

A_PROD_ID	A_PROD_DESC	A_PROD_Vendor
123	Kewil Washed Machines	Kewil
112	Xent Washed Machinery	Xent
127	Zenar Washing Machine	Zenar

Here, Value = * wash * +machine

3. Requirement: To find the records which starts with “Ke”, equal to” Wint” and sounds like” Advnced”.

Here, the search parameters are found in **2 different fields** and the resultant record is as below.

The screenshot shows the SAP MDM Data Manager interface. The 'Search Parameters' section is on the left, and the 'Records' section is on the right. The 'Free-Form Search' table is highlighted with a red box, showing the following data:

	Operator	Value
Keyword	(progressive)	*Ke =Wint +Advnced
Exoression	is TRUE	

The 'Records' table shows the following data:

	A_PROD_ID	A_PROD_DESC	A_PROD_Vendor
	116	Kewll Advanced Gyser	Wint Kewll

Here, Value = *Ke* =Wint +Advnced

In this way we can use the Hybrid search feature in case of more than one search parameter, and to be searched in more than 1 field.

Benefits

The usage of Hybrid has the following advantages:

1. More than one value can be used given as a Search parameter
2. No restriction on the wildcards (operators to be used)
3. The search for the same vales can be done in more than 1 field, for the same record.

Summary

Here, we saw the why and how of using Hybrid search. It explains in details the basic steps with examples. It is one of the most flexible search facility supported in SAP MDM.

Related Content

http://help.sap.com/saphelp_mdm550/helpdata/en/43/e0615f82b40a2ee10000000a11466f/frameset.htm

www.sdn.sap.com/irj/sdn/mdm-elearning

<https://www.sdn.sap.com/irj/scn/forums>

MDM Reference Guides: Data Manager

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

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