

Extracting Values of a Field from a Database Table in SAP ECC System Using MII 12.0



Applies to:

SAP MII 12.0

For more information, visit the [Manufacturing homepage](#).

Summary

This document gives guidelines on how to extract values of a desired field from a database table in SAP ECC system using MII 12.0

Author: Som Sarkar

Company: IBM India Pvt Ltd

Created on: 10 November 2008

Author Bio

Som Sarkar is currently working as Technical Consultant in SAP MII. He has nearly 3 years experience in software development

Table of Contents

Introduction	3
Prerequisites	3
Extracting Values of a Field	3
In ABAP Dictionary	3
In Business Logic Services	5
Related Content	9
Disclaimer and Liability Notice	10

Introduction

In many client projects, there is a requirement to filter some field values from an existing Dictionary Table in the SAP ECC System and display those in the MII Reports in different modes of list. Here I will show you guidelines on how to perform this using MII 12.0 Business Logic Services.

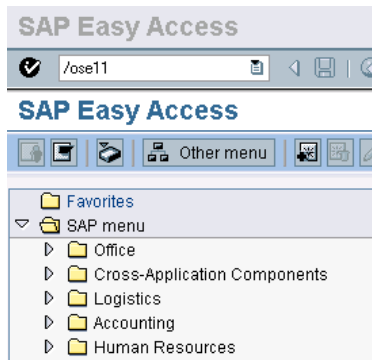
Prerequisites

Basic knowledge and experience in MII 12.0 and ABAP

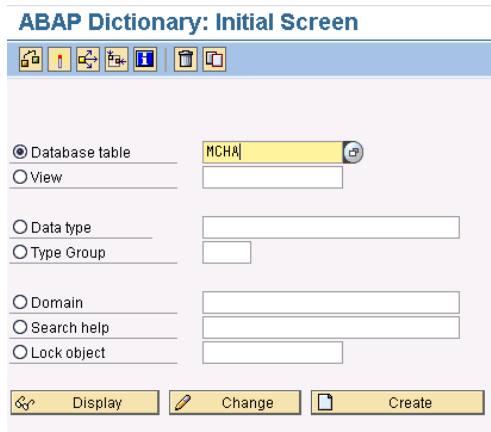
Extracting Values of a Field

In ABAP Dictionary

Use T-Code (se11) to get into ABAP Dictionary: Initial Screen



Give a database table name which gives you a data set of your desire and click 'Display' button



In next screen **Dictionary: Display Table**, there are fields with their properties are shown. Click the button 'Contents' or press Ctrl + Shift + F10 to get into next screen for selection

Dictionary: Display Table

Field	Key	Initi	Data element	Data Ty	Length	Decim	Short Description
MANDT	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	MANDT	CLNT	3		0 Client
MATNR	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	MATNR	CHAR	18		0 Material Number
WERKS	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	WERKS_D	CHAR	4		0 Plant
CHARG	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	CHARG_D	CHAR	10		0 Batch Number
LVORM	<input type="checkbox"/>	<input type="checkbox"/>	LVOCA	CHAR	1		0 Deletion Flag for All Data on a
INCLUDE	<input type="checkbox"/>	<input type="checkbox"/>	MCHI1	STRU	0		0 Data Fields for MCHA, MCH1 a
FRSDA	<input type="checkbox"/>	<input type="checkbox"/>	FRSDA	DATS	8		0 Created On

In the **Data Browser : Selection Screen**, give your desired Field values to filter/get a special field values. Here shows the entry of Material and Plant values to filter Batch values based on the Material and Plant. Press F8 (Execute) to get the filtered values for selected Material and Plant values

Data Browser: Table MCHA: Selection Screen

Material: QM_HA_VAR1 to

Plant: BPOY to

Batch: to

Batch Del. Flag: to

Created On: to

Created by: to

Changed by: to

Last Change: to

Data Browser: Table MCHA Select Entries 4

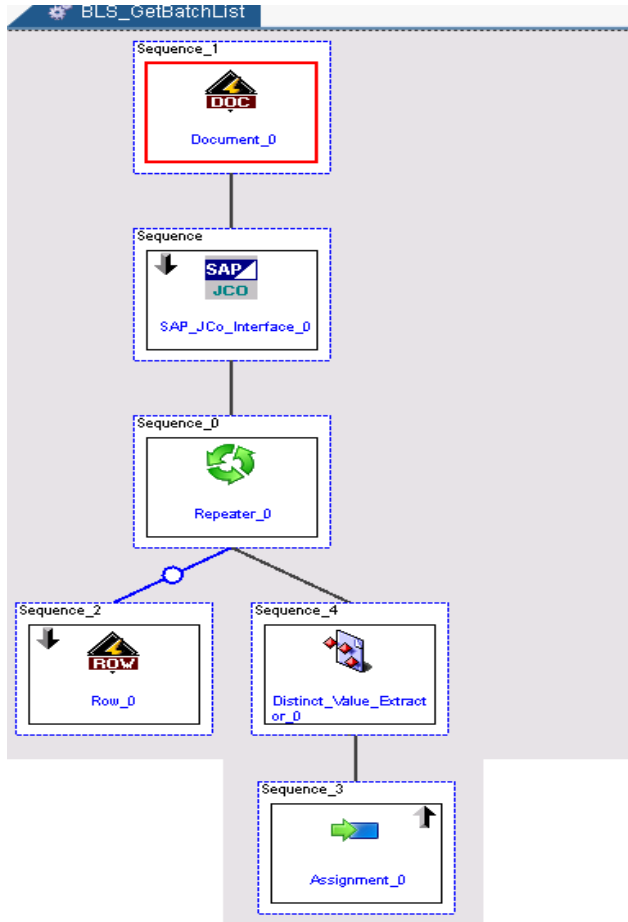
Client	Material	Plant	Batch	Batch Del. Flag	Created On
<input type="checkbox"/>	QM_HA_VAR1	BPOY	VAR1		24.10.200
<input type="checkbox"/>	QM_HA_VAR1	BPOY	VAR2		24.10.200
<input type="checkbox"/>	QM_HA_VAR1	BPOY	VAR3		27.10.200
<input type="checkbox"/>	QM_HA_VAR1	BPOY	VAR4		29.10.200

Here is shown the fields as filtered by selection of Material and Plant value

In Business Logic Services

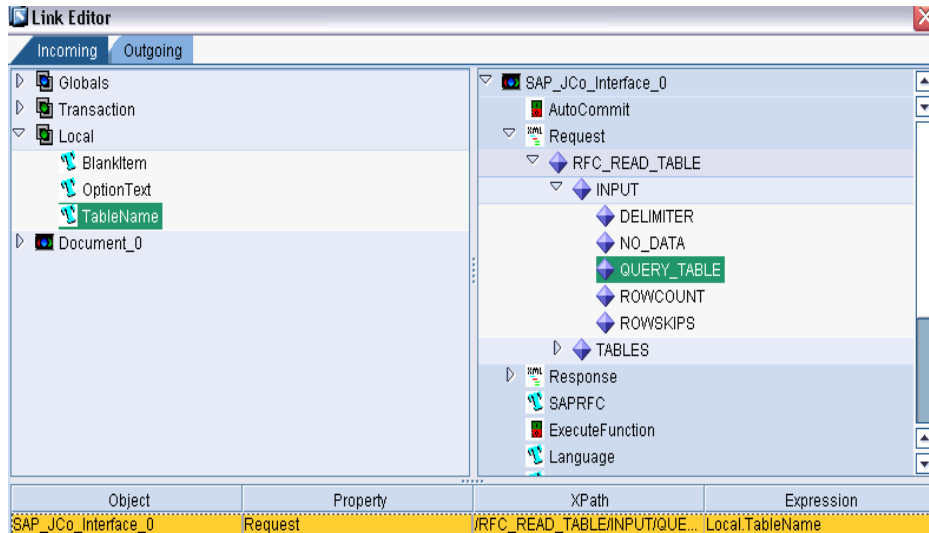
Now to filter in such way using MII, firstly we need a RFC named "RFC_READ_TABLE". Let me show you how to work with this in Business Logic Services in MII.

Open xMII Workbench from SAP xMII Administration Menu and create a new Transaction with a name, say BLS_GetBatchList. The whole BLS structure is shown as below

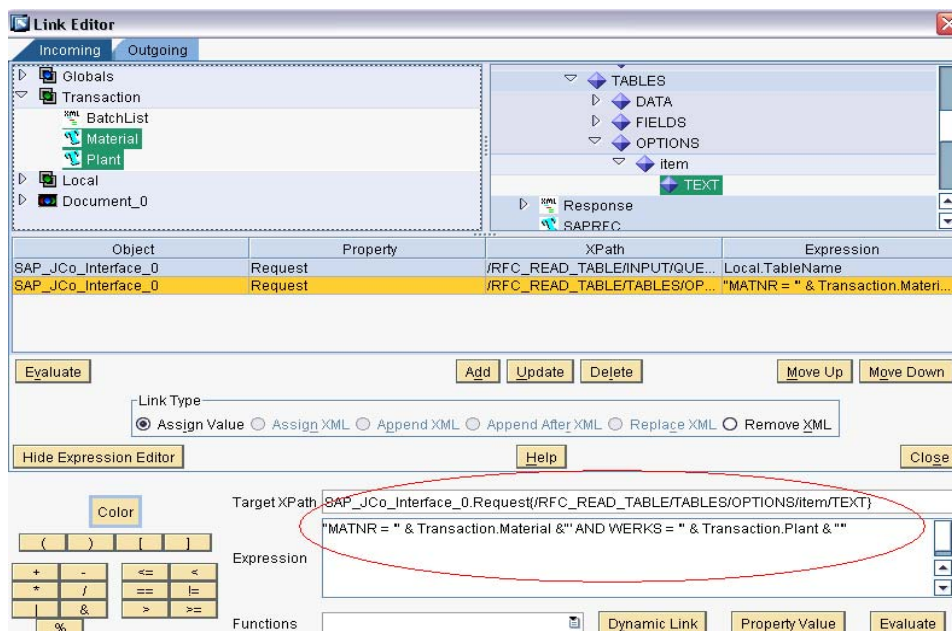


Do following as shown above,

1. First create an XML Document with a column with name 'Batch' with DataType as String.
2. Then use action SAP JCo Interface, to call RFC_READ_TABLE with full configuration of SAP ECC system where the database table is defined with data
3. In the same action above, map the name of the table to the Input Parameter 'QUERY_TABLE' in the Request of the RFC.

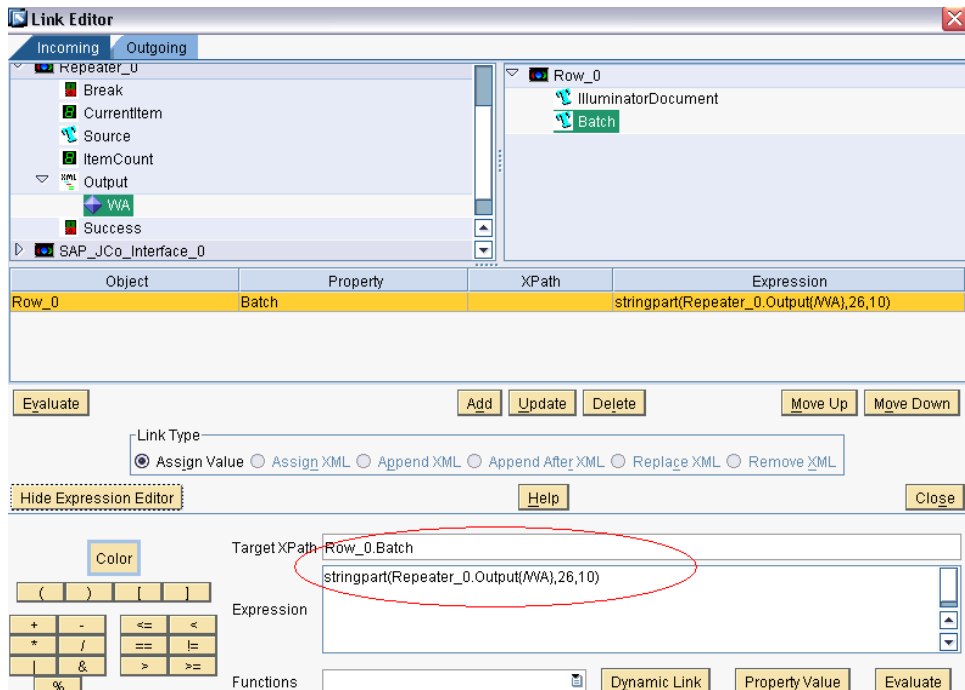


4. Use the expression as shown below to map this to the TABLES > OPTIONS > item > TEXT in the Request of the RFC



Here two transaction parameters – Material and Plant are used in the expression to be passed as a TEXT in the OPTIONS where the fields 'MATNR' and 'WERKS' are the fields of the database table.

5. User action 'Repeater' to loop the item of Response of the RFC
6. Under the loop of Repeater, use action 'Row' to append just the string part of the WA which will display only values for field 'Batch'



Here the numbers 26 and 10 are used as parameters : Start and Length respectively in the Built-In function stringpart. The parameters for Start and Length are determined by looking into the Field's one property 'Length' in the Dictionary: Display Table in the SAP ECC System.

Dictionary: Display Table

The screenshot shows the SAP Dictionary: Display Table for 'Transp. Table'. The 'Fields' tab is active, showing a table of fields with their lengths. Red annotations explain the calculation for the 'Start' parameter: 3 + 18 + 4 + 1 = 26. The 'Length' parameter is 10.

Field	Key	Initi	Data element	Data Ty.	Length	Decim	Short Description
MANDT	✓	✓	MANDT	CLNT	3		Ø Client
MATNR	✓	✓	MATNR	CHAR	18		Ø Material Number
WERKS	✓	✓	WERKS_D	CHAR	4		Ø Plant
CHARG	✓	✓	CHARG_D	CHAR	10		Ø Batch Number
LVORM	□	□	LVOGA	CHAR	1		Ø Deletion Flag for All Data on a Batch at a Plant

7. Use action 'Distinct Value Extract' outside the loop of the Repeater, which will extract the distinct values from the list of Batch coming from the XML output of the XML Document, since there may be duplicate values on same field

- Finally assign the output of previous action (created in 7) to the transaction output parameter with XML as datatype

Thus, the BLS is created which will get the input parameters Material and Plant and will display the list of Batch from the SAP ECC system. This BLS is saved and an Xacute Query is created with this BLS.

Finally A display template with iBrowser type is created with its only one column to be displayed – Batch. Remember to keep the mode of this display template as DropDown Mode.

Prepare an IRPT page which will display the drop down list of Batch as same as below

Material	<input type="text" value="QM_HA_VAR1"/>	
Production Plant	<input type="text" value="BP0Y"/>	
Batch Number	<input type="text" value="--Select-"/>	<input type="button" value="Get List"/>
Order Type	<div style="border: 1px solid black; padding: 2px;"> <div style="border-bottom: 1px solid black; padding: 2px;">--Select--</div> <div style="border-bottom: 1px solid black; padding: 2px;">VAR1</div> <div style="border-bottom: 1px solid black; padding: 2px;">VAR2</div> <div style="border-bottom: 1px solid black; padding: 2px; background-color: #e0e0e0;">VAR3</div> <div style="padding: 2px;">VAR4</div> </div>	

Related Content

[SAP MII12.0 Help](#)

For more information, visit the [Manufacturing 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.