

# Practical Usage of ABAP Query – Display of Vendor Open Items with PO Info



## Applies to:

SAP ECC6.0. The configuration can also be held as reference for R/3 470 release and 46C release. For more information, visit the [Business Process Expert homepage](#).

## Summary

ABAP Query helps in quick generation of report. This can be easily used by the functional consultants having fair idea about the tables used in SAP.

**Author:** Sridevi Pattabiraman

**Company:** Infosys Technologies Limited

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## Author Bio

Sridevi Pattabiraman is working as an FICO consultant with Infosys Technologies, Chennai. She has completed her Masters in Business administration and Computer applications

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## Scope

The aim of this guide is not to explain the procedure for creating an ABAP query, but to explain a very practical scenario which can be easily accomplished with the help of this ready-made made tool. Also, it describes the steps for assigning a transaction code to an ABAP Query

## Prerequisites

As mentioned in the scope, this article will not aim at explaining the steps of creating a query. Hence it is advisable if the user of the article has prior exposure to the basics of ABAP query – i.e. Creation of user groups, infosets etc.

## Practical Example

It is quite common requirement that for a vendor invoice, we need to know the corresponding PO associated. Though Purchase order history tab can help in getting the facts, it has its own limitations of viewing it by PO wise i.e. one PO at a time.

In this guide, steps for achieving the above said scenario with the help of ABAP query is illustrated.

## Requirement

To display Vendor Open Items with Purchase Order Information.

## Selection Screen Parameters

Company Code

Vendor number

Document Type (This is done to easily filter those financial documents that are based on PO)

Posting Date

## Fields required in the Output

Company code

Vendor Number & name

FI document number

Document type

Purchase Order Number

Document date

Posting Date

Amount in LC

Amount in document currency

Payment Terms

Payment Block

Assignment

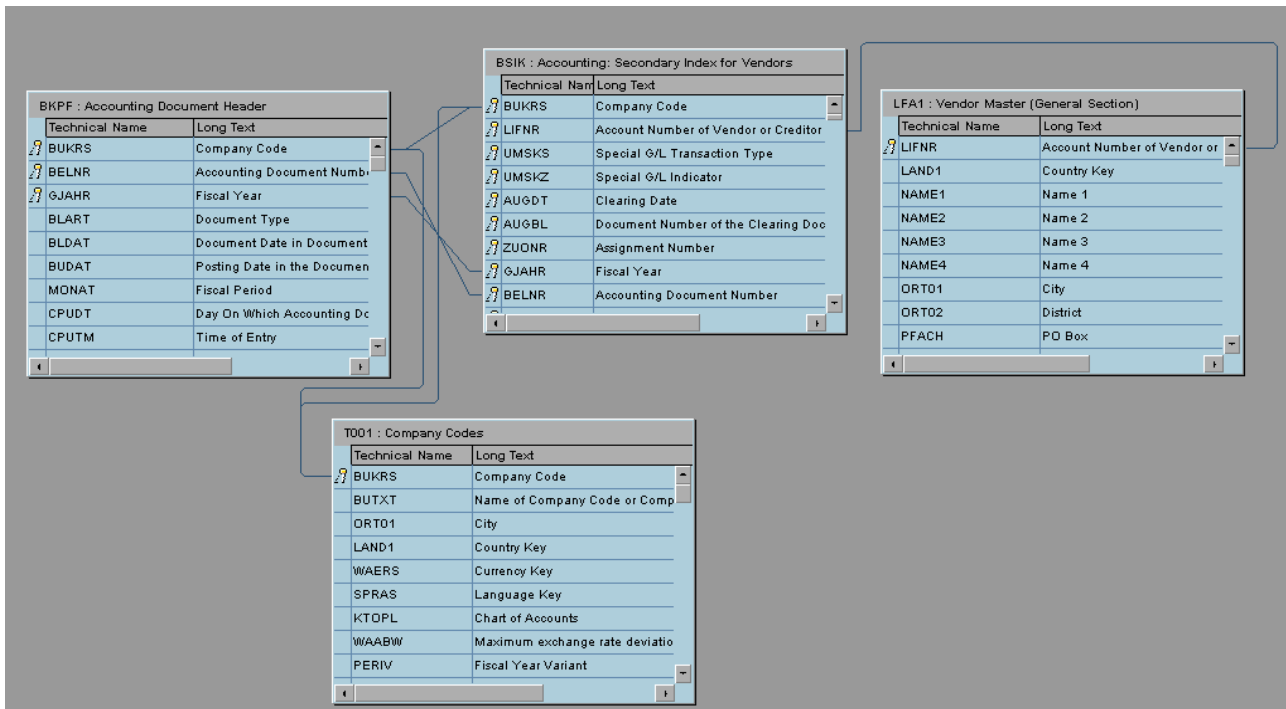
Reference

## Infosets

Transaction Code: SQ02

Create an Infoset as described below –

### Tables and Relationships



### Additional Fields

Any fields that need to be displayed apart from the fields that are linked through tables are added as 'additional fields'. In this scenario, 3 fields are added as –

Extras Selections Code Enhancements			
Sequence			
	Name	Type	Description
0	PO_NO	Addnl Field	Purchase Order #
1	DAMTCR	Addnl Field	Amt. in Document Currency
1	LAMTCR	Addnl Field	Amt. in Local Currency

1. **DAMTCR**: Amount in Document currency: This is required for showing the value of WRBTR in negative, if the value is a credit figure
2. **LAMTCR**: Amount in Local currency: This is required for showing the value of DMBTR in negative, if the value is a credit figure
3. **PO\_NO**: Purchase Order Info

**Additional Field DAMTCR**

Long text: Amt. in Document Currency  
Header: Amt. in DC

**Format**

Type P    Lngth 007    OutputLength 016    Decimals 02

LIKE Reference: **BSIK-WRBTR**

**Text identification**

Determine LIKE reference using text field

Text field: \_\_\_\_\_

**Additional Field LAMTCR**

Long text: Amt. in Local Currency  
Header: Amt. in LC

**Format**

Type P    Lngth 007    OutputLength 016    Decimals 02

LIKE Reference: **BSIK-DMBTR**

**Additional Field PO\_NO**

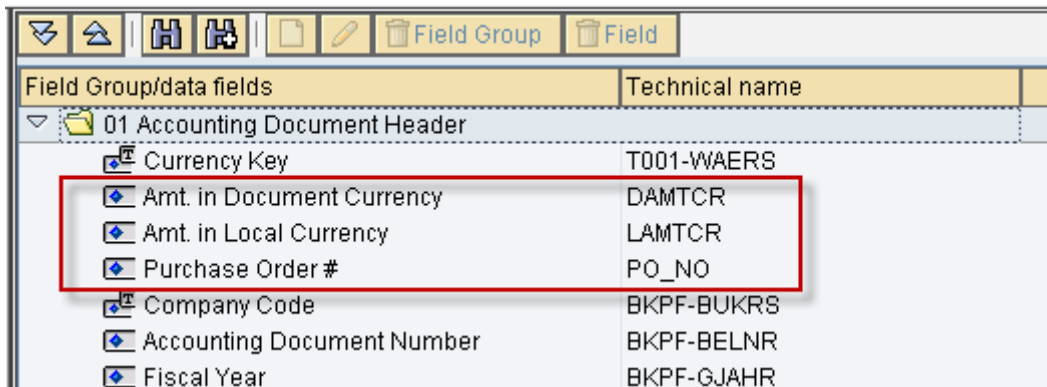
Long text: Purchase Order #  
Header: Purchase Order #

**Format**

Type C    Lngth 010    OutputLength 010    Decimals

LIKE Reference: **RSEG-EBELN**

Add the 'Additional Fields' as field groups to Accounting document header by drag and drop.

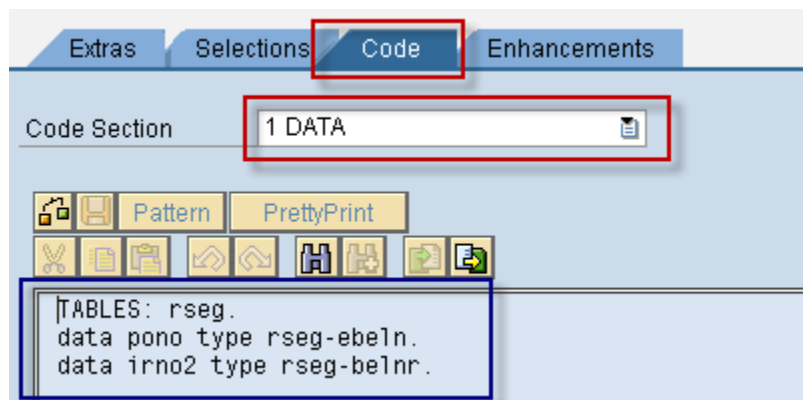


Field Group/data fields	Technical name
01 Accounting Document Header	
☑ Currency Key	T001-WAERS
☑ Amt. in Document Currency	DAMTCR
☑ Amt. in Local Currency	LAMTCR
☑ Purchase Order #	PO_NO
☑ Company Code	BKPF-BUKRS
☑ Accounting Document Number	BKPF-BELNR
☑ Fiscal Year	BKPF-GJAHR

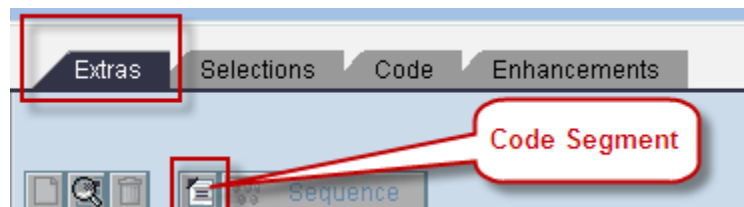
## Extras

'Extras' is used to fetch data from SAP tables through simple ABAP code.

1. In the 'Code' tab, and for the Code section – 'Data' declare all the variables required.



2. The logic required for the additional fields are entered through the code segment available in the 'Extras' tab



3. Select the PO\_NO in the 'Extras' tab and click the code segment. The first 10 characters of BKPF-AWKEY (Reference key) hold the material document number (BELNR). Hence the logic required are keyed here.

```

move bkp-awkey+0(10) to irno2.
select single ebeln
  from rseg
  into PO_NO
  where BELNR = irno2.

```

- Select DAMTCR in the 'Extras' tab and select the code segment. This is for showing the value in negative in case of credit balance.

```
damtcr = bsik-wrbtr.
if bsik-SHKZG = 'H'.
    damtcr = damtcr * -1.
endif.
```

- Select LAMTCR in the 'Extras' tab and select the code segment. This is for showing the value in negative in case of credit balance.

```
lamtcr = bsik-dmbtr.
if bsik-SHKZG = 'H'.
    lamtcr = lamtcr * -1.
endif.
```

### Query

Transaction code: SQ01

For the fields that are required to be displayed in the selection screen are to be *checked* under selection fields.

Data fields	List fields	Selection Fields
Accounting Document Header	4	3
Company Code	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Accounting Document Number	<input type="checkbox"/>	<input type="checkbox"/>
Fiscal Year	<input type="checkbox"/>	<input type="checkbox"/>
Document Type	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Document Date in Document	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Posting Date in the Document	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Fiscal Period	<input type="checkbox"/>	<input type="checkbox"/>
Day On Which Accounting Document	<input type="checkbox"/>	<input type="checkbox"/>
Time of Entry	<input type="checkbox"/>	<input type="checkbox"/>
Date of the Last Document Check	<input type="checkbox"/>	<input type="checkbox"/>
Accounting: Secondary Index for	7	1
Company Code	<input type="checkbox"/>	<input type="checkbox"/>
Account Number of Vendor or	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Special G/L Transaction Type	<input type="checkbox"/>	<input type="checkbox"/>
Special G/L Indicator	<input type="checkbox"/>	<input type="checkbox"/>

Similarly, all the fields required in the output are to be *checked* under the 'List fields'. The order and format are set on the right side.

....+....1....+....2....+....3....+....4....+....5....+....6....+....7....+....8.

Vendor Line item Display (Open Items) with PO Information							
CoCd	Vendor	Name 1	DocumentNo	DoPDoc.	Date		
Pstng Date	Amt. in LC	Amt. in DC	PayT	PM	P		
Assignment	Reference						
4000	6010003	LUIS DE ANGOITIA BECERRA	1700000111	WAA07/31/2008			
07/31/2008	12345678,901.23	EUR	12,345,678,901.23	USD	ABCD	ABC	A
ABCDEF	GHIJKLMNOPQR	14606	CREDITMEMO				
<b>Overall Total</b>		12345678,901.23	EUR	12,345,678,901.23	USD	*	

**Totaling fields**  
 Amt. in Local Cu  
 Amt. in Document

### Sample Selection Screen

Based on the value checked in 'Selection Fields', the fields will get displayed in the selection screen.

In the variant screen pop-up leave it blank and enter the number of records to be displayed as desired.

**Vendor Open Items with Purchase Order Info.**

Report-specific selections

Company Code: 4000

Account Number of Vendor: [ ] to [ ]

Document Type: RE to [ ]

Posting Date in the Docum: [ ] to [ ]

Output specification

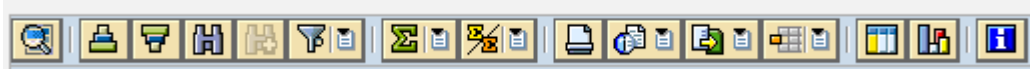
Layout: [ ]

### Vendor Open Items with Purchase Order Info.

CoCd	Vendor	N	DocumentNo	Do	Purchase Order #	Doc. Date	Pstng Date	≙ Amt. in LC	Crcy	≙ Amt. in DC	Crcy	PayT	PM	PBK	Assignment	Reference
4000	6010073	C	5100002525	RE	5500000225	10/01/2008	10/07/2008	578.64	USD	578.64	USD	Z010				66068749
4000	6010073	C	5100002526	RE	5500000198	10/01/2008	10/07/2008	17,985.60	USD	17,985.60	USD	Z010				66068749 B
4000	6010073	C	5100002527	RE	5500000478	10/01/2008	10/07/2008	34,718.40	USD	34,718.40	USD	Z010				66068749 C
4000	6010073	C	5100002528	RE	5500000222	10/01/2008	10/07/2008	34,718.40	USD	34,718.40	USD	Z010				66068749 D
4000	6010073	C	5100002529	RE	5500000228	10/01/2008	10/07/2008	34,718.40	USD	34,718.40	USD	Z010				66068749 E
4000	6010038	Bf	5100002574	RE	5500000188	10/01/2008	10/07/2008	7,920.00	USD	7,920.00	USD	Z010				181779
4000	6010044	Bf	5100002664	RE	5500000393	10/01/2008	10/09/2008	5,941.80	USD	5,941.80	USD	Z010				224891
4000	6010082	C	5100001766	RE	5500000620	08/04/2008	09/22/2008	4,619.00	USD	4,619.00	USD	Z010	R			6560 A
4000	6010082	C	5100001767	RE	5500000620	08/04/2008	09/22/2008	4,619.00	USD	4,619.00	USD	Z010	R			6560 A
4000	6010037	Bf	5100001768	RE	5500000620	08/04/2008	09/22/2008	5,173.28	USD	5,173.28	USD	Z010	R			6560
4000	6010582	Pl	5100001847	RE	4500000603	09/13/2008	09/23/2008	13.75	USD	13.75	USD	Z025				D083674
4000	6010037	Bf	5100001878	RE	5500000620	08/04/2008	09/22/2008	5,173.28	USD	5,173.28	USD	Z010	R			6560
4000	6010044	Bf	5100001606	RE	5500000393	09/05/2008	09/16/2008	17,825.40	USD	17,825.40	USD	Z010	B			224705



The main advantage of using ABAP query is that standard features available in SAP report will be available.



For example, using subtotal will display the report as below.

**Vendor Open Items with Purchase Order Info.**

CoCd	Vendor	N	DocumentNo	Do	Purchase Order	Doc. Date	Pstng Date	Amt. in LC	Crcy	Amt. in DC	Crcy	PayT	PM	PBk	Assignment	Reference
4000	6010040	B	5100003761	RE	5500000457	11/04/2008	11/13/2008	4,667.04	USD	4,667.04	USD	Z010				55337 C
4000		B	5100003762	RE	5500000186	11/04/2008	11/13/2008	13,104.00	USD	13,104.00	USD	Z010				55337 E
4000		B	5100003763	RE	5500000187	11/04/2008	11/13/2008	13,639.68	USD	13,639.68	USD	Z010				55337 D
4000		B	5100003764	RE	5500000392	11/06/2008	11/13/2008	3,949.18	USD	3,949.18	USD	Z010				55348 A
4000		B	5100003765	RE	5500000383	11/06/2008	11/13/2008	6,128.64	USD	6,128.64	USD	Z010				55348 B
4000		B	5100003766	RE	5500000458	11/06/2008	11/13/2008	4,432.50	USD	4,432.50	USD	Z010				55348 C
4000		B	5100003767	RE	5500000457	11/06/2008	11/13/2008	4,667.04	USD	4,667.04	USD	Z010				55348 D
4000		B	5100003768	RE	5500000187	11/06/2008	11/13/2008	6,819.84	USD	6,819.84	USD	Z010				55348 E
4000		B	5100003769	RE	5500000186	11/06/2008	11/13/2008	3,276.00	USD	3,276.00	USD	Z010				55348 F
4000		B	5100003770	RE	5500000172	11/07/2008	11/13/2008	12,456.44	USD	12,456.44	USD	Z010				55365
									<b>170,772.00</b>	<b>USD</b>	<b>170,772.00</b>	<b>USD</b>				
4000	6010040	B	5100003477	RE	5500000752	10/30/2008	11/05/2008	2,805.00	USD	2,805.00	USD	Z010				18686
4000		B	5100003478	RE	5500000753	10/30/2008	11/05/2008	653.40	USD	653.40	USD	Z010				18687
4000		B	5100003479	RE	5500000687	10/30/2008	11/05/2008	1,288.00	USD	1,288.00	USD	Z010				18688
4000		B	5100003480	RE	5500000696	10/30/2008	11/05/2008	2,202.48	USD	2,202.48	USD	Z010				18689
4000		B	5100003481	RE	5500000697	10/30/2008	11/05/2008	1,855.36	USD	1,855.36	USD	Z010				18690
4000		B	5100003482	RE	5500000665	10/30/2008	11/05/2008	1,913.76	USD	1,913.76	USD	Z010				18691
4000		B	5100003483	RE	5500000666	10/30/2008	11/05/2008	1,720.32	USD	1,720.32	USD	Z010				18692
									<b>12,438.32</b>	<b>USD</b>	<b>12,438.32</b>	<b>USD</b>				
4000	6010044	B	5100002664	RE	5500000393	10/01/2008	10/09/2008	5,941.80	USD	5,941.80	USD	Z010				224891
4000		B	5100001606	RE	5500000393	09/05/2008	09/16/2008	17,825.40	USD	17,825.40	USD	Z010	B			224705
4000		B	5100003435	RE	5500000393	09/05/2008	11/03/2008	17,825.40	USD	17,825.40	USD	Z010	B			224705
4000		B	5100003165	RE	5500000393	10/10/2008	10/22/2008	11,883.60	USD	11,883.60	USD	Z010				224963
									<b>17,825.40</b>	<b>USD</b>	<b>17,825.40</b>	<b>USD</b>				
4000	6010062	C	5100002850	RE	5500000019	10/08/2008	10/13/2008	12,144.60	USD	12,144.60	USD	Z010				C04310
									<b>12,144.60</b>	<b>USD</b>	<b>12,144.60</b>	<b>USD</b>				

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[http://help.sap.com/saphelp\\_45b/helpdata/EN/35/26b413afab52b9e10000009b38f974/content.htm](http://help.sap.com/saphelp_45b/helpdata/EN/35/26b413afab52b9e10000009b38f974/content.htm)

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