

[Products](#)[Industries](#)[Services and Support](#)[Training](#)[Community](#)[Developer](#)[Partner](#)[About](#)[Ask a Question](#)[Write a Blog Post](#)[Login](#)**Former Member**

June 24, 2014 2 minute read

BAPI Extension for Customer added Fields

[Follow](#)[RSS feed](#)[Like](#)

6 Likes

32,538 Views

22 Comments

Introduction

Customers often have to change the standard SAP objects in order to meet their own specific requirements. This might involve passing some additional information by adding few extra fields to the standard SAP table. These fields might get updated in underlying Standard SAP tables or customer database table and ultimately serve the business purpose.

Business Scenario

For example, assume that there is extra information that we want to save to the database while creating a new purchase order. I.e. Prepared By, Checked By, Approved By.

SAP-Revenue Expense 3300000180 Created by NIKHIL

Document Overview On | Print Preview | Messages | Personal Setting

ZSRE SAP-Revenue E... [3300000180] Vendor 100021 Domestic vendor Doc. date 13.06.2014

Delivery/Invoice | Conditions | Texts | Address | Communication | Partners | Additional Data | Org. Data

Prepared By Nikhil
 Checked By Pravin
 Approved By Parvati

Vendor Quotation No
 Date

S..	Itm	A	I	Material	Short Text	PO Quantity	O...	C	Deliv. Date	Net Price	Curr...
	10	K		10000025	Computer		1EA	D	16.06.2014	100.00	INR
	20	K		10000025	Computer		2EA	D	16.06.2014	150.00	INR

Item 1 [10] 10000025 , Computer

Material Data | Quantities/Weights | Delivery Schedule | Delivery | Invoice | Conditions | Account Assignment

☒ Inv. Receipt
☐ Final Invoice

Tax code V0 Taxes

BAPI Extension Table

But this change might affect the further BAPI implementations. This is because BAPIs are designed to implement SAP standard business processes through a predefined standard interface. I.e. its import and export parameters for any BAPI are fixed. So addition of new customer fields has absolutely nothing to do with this predefined BAPI interface. This is because these fields are added to SAP database. So executing BAPI with the same import and export parameter is not sufficient. We have to pass extra information about newly added fields. This information is passed to the BAPI using **BAPI table extension**. The naming convention for BAPI table extensions is BAPI_TE_<table_name>.

Here the customer first creates a data structure that contains the customer-specific fields. In our example, it is CI_EKKODB. This structure is included in both the database table and the **BAPI table extension**. This ensures that the enhancements to the database table and in the table extension are always identical.

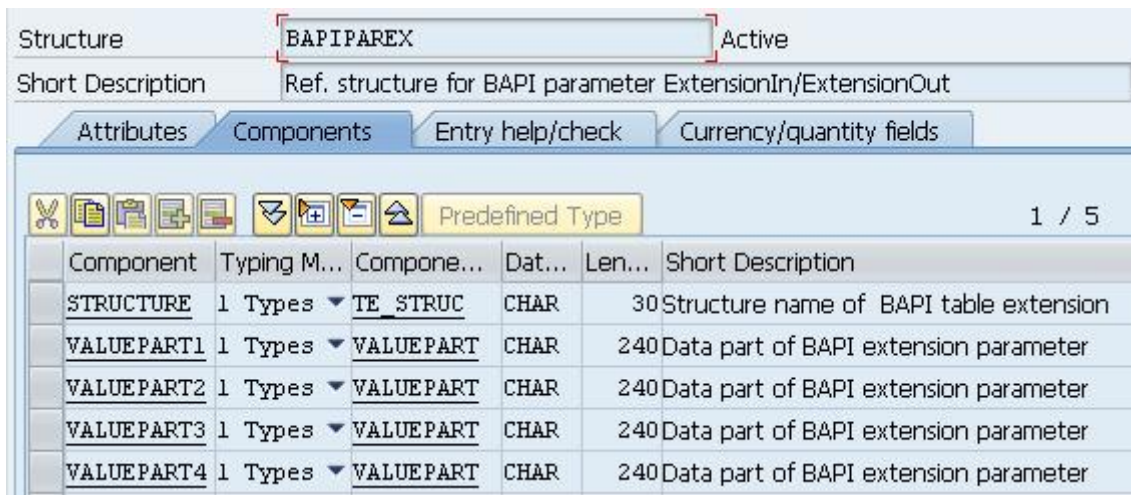
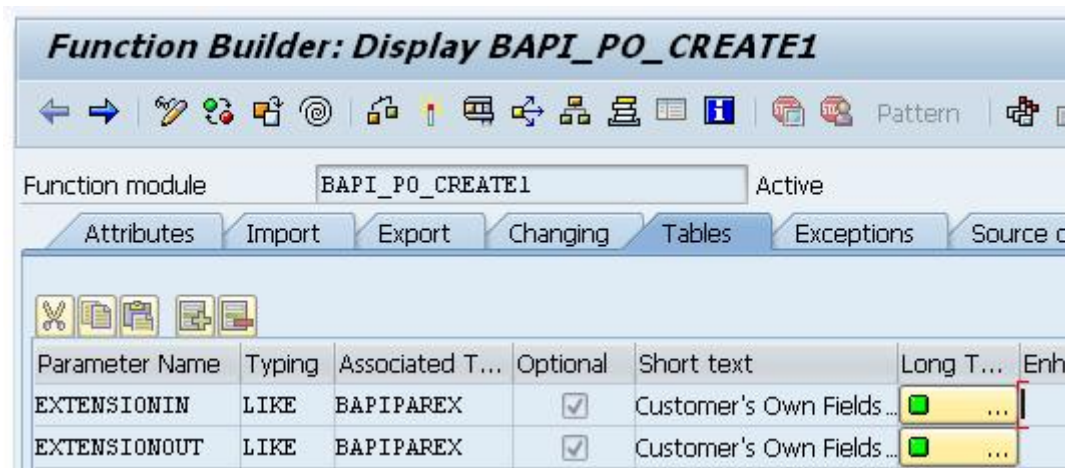
Structure CI_EKKODB Active

Short Description additional po header fields

Attributes | Components | Entry help/check | Currency/quantity fields

Predefined Type 1 / 5

Component	Typing Method	Component Type	Data Type	Length	Deci...	Short Description
ZZPRE	1 Types	ZPRE	CHAR	64	0	Prepared By
ZZCHE	1 Types	ZCHE	CHAR	64	0	Checked By
ZZAPP	1 Types	ZAPP	CHAR	64	0	Approved By
ZTEXT	1 Types	ZTEXT	CHAR	100	0	Your quotation no
ZDATE	1 Types	DATUM	DATS	8	0	Date



Here, the **STRUCTURE** refers to the name of the **BAPI table extension** though which extra information is to be sent whereas **VALUEPART1 to VALUEPART4** are the values that will be inserted in the additional table fields along with the table key field. Key field, here, purchase_order_no is the extra information that needs to be passed to know the line in the database table where the data record needs to be written.

So extension container could look like

STRUCTURE	VALUEPART1	VALUEPART2
BAPI_TE_MEPOHEADER	3300000180 Nikhil Pravin Parvati		
..			

Here, ‘3300000180’ is the key field for EKKO table specifying which row to be updated. And “Nikhil Pravin Parvati” is the extra fields of EKKO specified in BAPI_TE_MEPOHEADER.

Source Code


```

FORM customer_extension .

"Customer Field Extension in PO
DATA:
bapi_te_po      TYPE bapi_te_mepoheader      ,"Extension tables
bapi_te_pox     TYPE bapi_te_mepoheaderx     ,"Extension tables
ext_container   TYPE TABLE OF bapiparex WITH HEADER LINE."Extension container

* Preapre the Extension tables
bapi_te_po-po_number      = ''                " Key Field
bapi_te_po-zzapp          = exl_wa-approved_by " Customer Added fields
bapi_te_po-zzcche         = exl_wa-checked_by  " Customer Added fields
bapi_te_po-zzpre          = exl_wa-prepared_by " Customer Added fields

* Mark Fields for updation
bapi_te_pox-po_number     = ''                "
bapi_te_pox-zzapp         = 'X'.              "
bapi_te_pox-zzcche        = 'X'.              "
bapi_te_pox-zzpre         = 'X'.              "

* Prepare the Extension container
ext_container-structure = 'BAPI_TE_MEPOHEADER'.
ext_container-valuepart1 = bapi_te_po.

APPEND ext_container.
CLEAR ext_container.

ext_container-structure = 'BAPI_TE_MEPOHEADERX'.
ext_container-valuepart1 = bapi_te_pox.
APPEND ext_container.

ENDFORM.

```

Once the BAPI Extension Table and Extension Container are filled, Execute the BAPI by passing Extension Container as an table type argument.

```

*&-----
*&  FM FOR "CREATING P.O"
*&-----
CALL FUNCTION 'BAPI_PO_CREATE1'
  EXPORTING
    poheader      = tbl_poheader
    poheaderx     = tbl_poheaderx
    no_price_from_po = 'X'
  IMPORTING
    exppurchaseorder = exppurchaseorder
  TABLES
    return          = tbl_return[]
    extensionin     = ext_container[]
    poitem          = tbl_poitem[]
    poitemx         = tbl_poitemx[]
    poaccount       = tbl_poaccass[]
    poaccountx      = tbl_poaccassx[]

"TRANSACTION COMMIT
"-----
CALL FUNCTION 'BAPI_TRANSACTION_COMMIT'.

```

Alert Moderator

Assigned tags

[ABAP Development](#) | [bapi extension](#) | [bapiextension](#) | [customer fields](#) |

Related Blog Posts

[Handling Customer Fields in BAPIs which doesn't have Extension Structure](#)

By **Former Member** , Dec 11, 2013

[Tips to solve the extension\(customer fields\) problem in BAPI even though the extension structures are maintained](#)

By **Former Member** , Jan 24, 2014

[My CDS view self study tutorial – Part 10 How does CDS view key user extensibility work in S4](#)

By **Jerry Wang** , Jan 05, 2017

Related Questions

[custom fields for bapi_alm_notif_create in extension in not working?](#)

By **A. de Smidt** , Feb 23, 2018

[bapi extension for BAPI_PO_CREATE1](#)

By **Former Member** , Apr 11, 2018

[BAPI Extension structure for BAPI_RE_PL_CREATE to add custom fields](#)

By **Suneel uggina** , May 28, 2018

22 Comments

You must be [Logged on](#) to comment or reply to a post.



Former Member

June 24, 2014 at 8:50 am

Thank a lot Nikhil.

Apparently I am struggling with BAPI extension. I read many posts but didn't get any satisfactory suggestions so far.

I will go through the document and will revert back asap. 😊

Like (0)



Former Member | Post author

June 24, 2014 at 9:03 am

Thanks Deepa for your feedback.

Personally, I struggled a lot to learn BAPI with extension. Could not find any good information on internet.

It was a really good exercise. I thought I should document it.

Regards,

NG 😊

Like (0)



Naveen Vishal

June 24, 2014 at 8:50 am

Good work Nikhil..keep it up ..!

Regards,

Naveen

Like (0)



Former Member | Post author

June 24, 2014 at 9:04 am

Thank you very much Naveen.

Regards,

NG 😊

Like (0)



Former Member

[June 25, 2014 at 3:51 am](#)

Thanx a lot Nikhil...

i searched a lott for BAPI with extension but didnt got any easy to understand material here..

Good Job n once again thnx a lottt for such a beautiful presentation of BAPI with extension..

Keep it up... all the best... 😊

Like (0)



Former Member | Post author

[June 26, 2014 at 5:39 am](#)

Thanks for your Interest Amit 😊

Like (0)



Former Member

[March 5, 2015 at 5:54 am](#)

Hi Nikhil – Very nice explanations & detailed document. I wanted to know on the logic of routtne “customer_extension”. Where exactly we need to write it. is it on customer enhancement ‘SAPL2012’ – FM “EXIT_SAPL2012_001”.

Like (0)



Former Member | Post author

[March 5, 2015 at 8:53 am](#)

Hi [Manjunath MS](#)

Scope of this document is only to cover the BAPI extension fields **after the customer fields has been added.**

So logic need to be incorporated only when we are calling respective BAPI (FM). So mostly in customized reports in which that BAPI needs to be called.

For example, you want to write a code to upload Purchase Order data in mass.

I hope I have answered your query.

Like (0)



Nandakumar S Nair

March 5, 2015 at 8:36 am

Hi Nikhil,

Very good document. Keep posting. 😊

Thanks & regards,

Nandakumar S

Like (1)



Former Member | Post author

March 5, 2015 at 8:46 am

Hi Nandakumar.

Thanks for your Interest. 😊

Like (0)



Former Member

May 8, 2016 at 6:53 am

Very nice helpful document to clearly understanding BAPI extension.

Thank you for posting .

Like (1)



Former Member | Post author

June 1, 2016 at 10:56 am

You are welcome Jatin Singhal 😊

I am happy to know that you found this a useful content.

Like (0)



Pras Venkat

June 1, 2016 at 12:47 pm

Hi Nikhil,

That's a wonderful article !

Like (1)



Former Member | Post author

June 5, 2016 at 8:35 am

Hi [Jatin Singhal](#) & [Pras Venkat](#),

I am glad to know that you found this article good enough.

Kindly provide your fair ratings...



Like (0)



Former Member

September 24, 2016 at 1:21 am

Great presentation with a very clear and precise explanation ! bravo Nikhil ! 😊

Like (1)



Former Member | Post author

September 25, 2016 at 4:49 pm

Thanks for your compliment 😊

Like (0)



Former Member

March 27, 2017 at 8:39 pm

Hi Nikhil/All,

Do you have an idea about using E1BPPAREX in LSMW?

For example, Object class, investment profile, scale, investment reason are already existing fields in table COAS but these fields are not in structure E1BP2075_7.

How can I use the E1BPPAREX to pass the values of the above fields?

E1BPPAREX Ref. Structure for BAPI Parameter EXTENSIONIN/EXTENSIONOUT

Fields

- BEGIN_OF_RECORD** Before Using Conversion Rules
 - Rule : Default Settings
 - Code: g_edidd_segnam = 'E2BPPAREX000'.
g_edidd_segnum = '0004'.
g_edidd_psgnum = '000000'.
g_edidd_hlevel = '02'.
clear E1BPPAREX.
- STRUCTURE** Structure name of BAPI table extension
- VALUEPART1** Data part of BAPI extension parameter
- VALUEPART2** Data part of BAPI extension parameter
- VALUEPART3** Data part of BAPI extension parameter
- VALUEPART4** Data part of BAPI extension parameter
- END_OF_RECORD** After Using Conversion Rules
 - Rule : Default Settings
 - Code: transfer_record.

Thanks in advance.

Like (0)



Kalyani Vaidyanathan

July 23, 2017 at 2:32 am

Very clear explanation. Thanks you.

Like (0)



Former Member

May 11, 2018 at 3:42 am

Hi Nikhil,

In the example, length of valuepart1 is only 240 characters while the length of all custom fields is 310 characters. Should the value be splitted into valuepart2 and how?

Thanks,
Steven

Like (0)



Akshay Rajpurohit

May 18, 2018 at 10:14 am

Hi Nikhil,

There is one BAPI For FIXED Asset BAPI_FIXEDASSET_CREATE1 , We are adding custom Field on data base table ANLA , BAPI table extensions is BAPI_TE_ not available for ANLA table .

Please suggest for this case of BAPI .

Like (0)



Jyoti Bhagat

June 14, 2018 at 7:33 am

Hi Akshay,

I guess the extension you are looking for is BAPI_TE_ANLU, since the custom fields of asset master are stored in the table ANLU instead of ANLA.

Thanks!

Like (0)



Stanley J

October 9, 2018 at 9:45 am

Hi Nikhil,

We have appended a structure with five fields each 250 characters in VBAK table and its customer enhancement tables. When we try to generate an IDOC(SALESORDER_CREATEFROMDAT202) we are getting run time error saying the total length of all the fields in customer enhancement table should not exceed more than 990 char of IDOC segment BAPIPAREX.. Please suggest a right approach.

Regards,

Stanley

18/2/2025

Share & Follow

Privacy

Terms of Use

Legal Disclosure

Copyright

Trademark

Cookie Preferences

Sitemap

Newsletter