

## SAP Mobility

SAP Fiori Approve Purchase Orders/ SAP Fiori Approve Purchase Requisitions

Adding custom fields to SAP Fiori apps in 3 steps.  
OData fields extensibility.

*A Branded Service provided by SAP Rapid Innovation Group*

### Applicable Releases:

SAP Fiori Approve Purchase Orders 1.0

SAP Fiori Approve Purchase Requisitions 1.0

SAP NetWeaver Gateway 2.0 SP 06

Version 1

June 2013



The Best-Run Businesses Run SAP™

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## Document History

Document Version	Description
1	The first release version







The Best-Run Businesses Run SAP™

## Typographic Conventions

Type Style	Description
<i>Example Text</i>	Words or characters quoted from the screen. These include field names, screen titles, pushbuttons labels, menu names, menu paths, and menu options. Cross-references to other documentation
<b>Example text</b>	Emphasized words or phrases in body text, graphic titles, and table titles
Example text	File and directory names and their paths, messages, names of variables and parameters, source text, and names of installation, upgrade and database tools.
<b>Example text</b>	User entry texts. These are words or characters that you enter in the system exactly as they appear in the documentation.
<b>&lt;Example text&gt;</b>	Variable user entry. Angle brackets indicate that you replace these words and characters with appropriate entries to make entries in the system.
EXAMPLE TEXT	Keys on the keyboard, for example, F2 or ENTER.

## Icons

Icon	Description
	Caution
	Note or Important
	Example
	Recommendation or Tip

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## 1. Business scenario

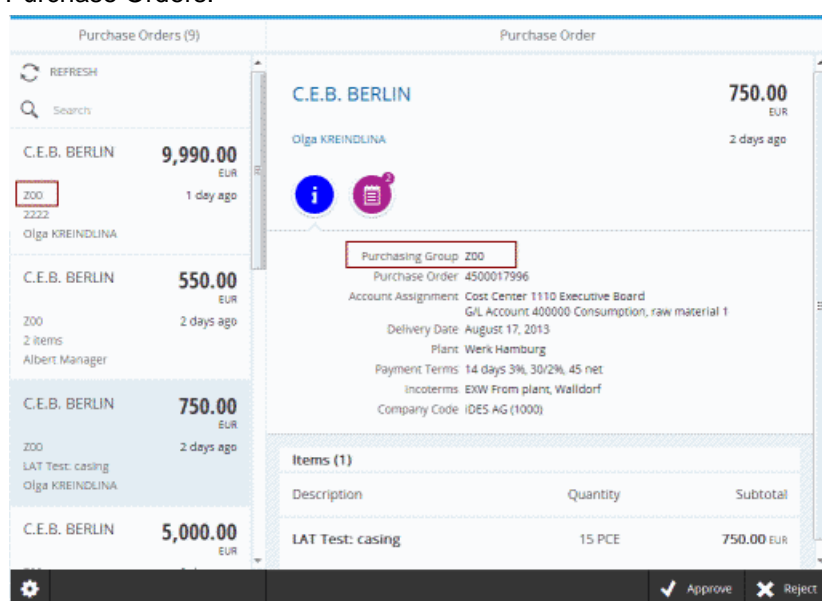
Adding custom fields in SAP Fiori apps UI is common requirement from customers. Customers have custom fields in ERP backend applications. You are a consultant to enable those customer fields in SAP Fiori apps.

There are 2 how to guides for adding custom fields.

- Part 1: Adding custom fields to SAP Fiori apps in 3 steps. OData fields extensibility.
- Part 2: Adding custom fields to SAP Fiori apps. UI fields extensibility.

### 1.1 Sample scenario

In this How to Guide we will show you how to add the “Purchasing Group” field in SAP Fiori Approve Purchase Orders.



Implementation steps are in 3 steps.

1. Extend the corresponding ABAP DDIC Structure by Append Structure
2. Extend the OData Entity in the GW Model Provider by implementing BADI
3. Fill data to the custom fields in the GW Data Provider by implementing BADI

Steps are also same for SAP Fiori Approve Purchase Requisitions.

**Note:** The standard delivered BADI is different in each app. Please look at the Installation and Configuration Guide in the <http://help.sap.com/fiori> and also look at details in the transaction SE18 and SE80

### 1.2 Prerequisites

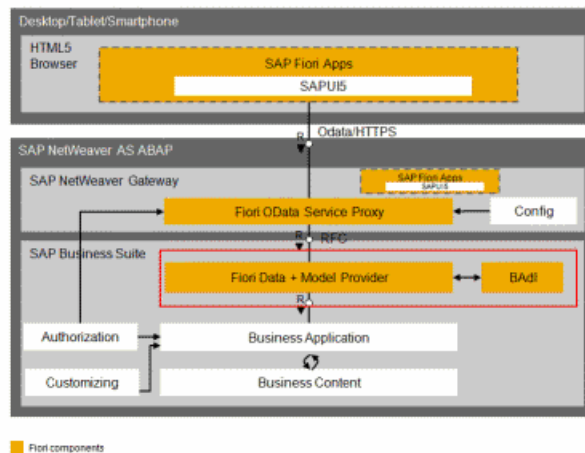
- SAP Fiori Approve Purchase Order is up and running.
- You have ABAP programming knowledge.

## 2. Architecture

### 2.1 Overview

The OData components are installed on SAP Business Suite backend.

#### Architecture – SAP Fiori components



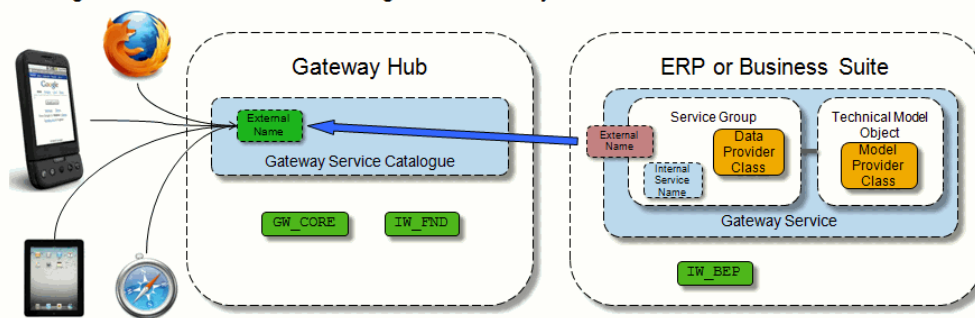
© 2013 SAP AG. All rights reserved.

It has Model Provider Class and Data Provider Class and methods have enhancement spots which call BAdI (Business Add In) implementations.

#### Gateway Service Catalogue

A Gateway Service is always developed in whichever server has component `IW_BEP` installed. (This will typically be your backend server).

In order to expose our Gateway Service to the outside world, we must create an entry in the Service Catalogue on whichever server is acting as the Gateway Hub.



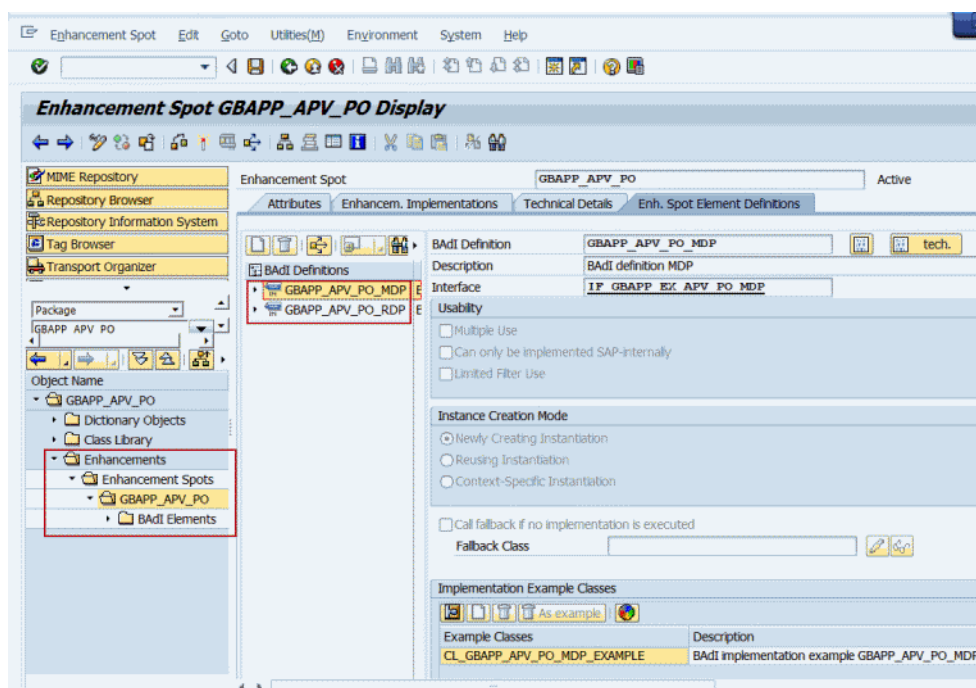
© 2013 SAP AG. All rights reserved.

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You can check the enhancement details in SE80 or SE18.

**Transaction: SE80**

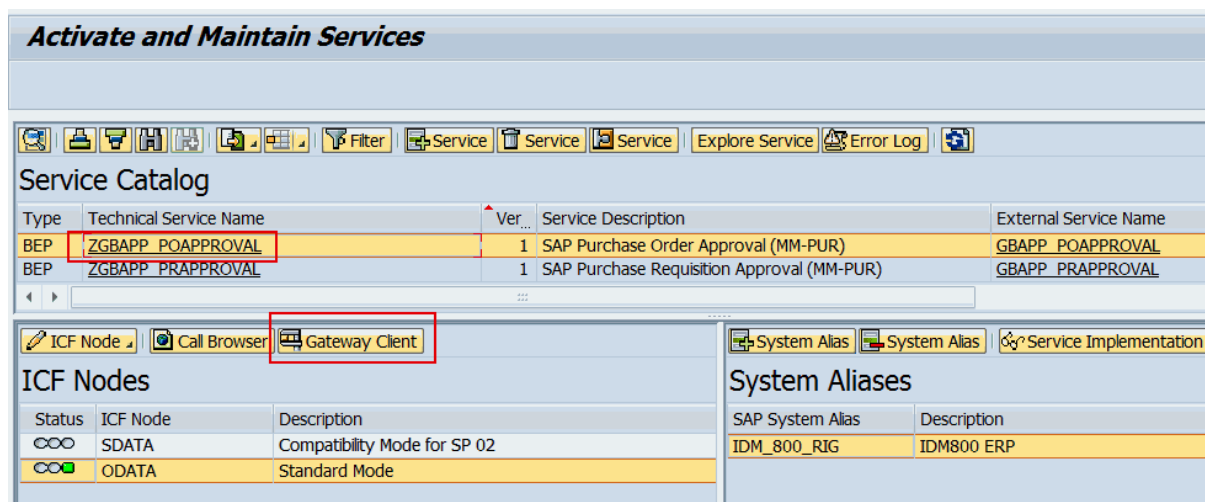
**Package: GBAPP\_APV\_PO**



## 2.2 Test OData services [Gateway]

1. Logon to NetWeaver Gateway system and call transaction /IWFND/MAINT\_SERVICE. Logon user should be the approver who has workitems for approving Purchase Orders. Test OData using Gateway Client tool.

**Transaction: /IWFND/MAINT\_SERVICE**



2. Test the \$metadata.  
/sap/opu/odata/SAP/GBAPP\_POAPPROVAL/\$metadata



**SAP NetWeaver Gateway Client**

Execute Save Maintain Service Service Implementation

HTTP Method: GET POST PUT PATCH DELETE HEAD OPTIONS

Request URI: /sap/opu/odata/SAP/GBAPP\_POAPPROVAL/\$metadata

Test Group: POA Test Case: 0 - Definition Metadata

HTTP Response

Header Name	Value
~status_code	200
~status_reason	OK

```

<?xml version="1.0" encoding="utf-8" ?>
- <edmx:Edmx Version="1.0" xmlns:edmx="http://schemas.microsoft.com/ado/2007/06/edmx"
  xmlns:m="http://schemas.microsoft.com/ado/2007/08/dataservices/metadata"
  xmlns:sap="http://www.sap.com/Protocols/SAPData">
- <edmx:DataService m:DataServiceVersion="2.0">
- <Schema Namespace="GBAPP_POAPPROVAL" xml:lang="en"
  xmlns="http://schemas.microsoft.com/ado/2008/09/edm">
+ <EntityType Name="Subscription" sap:semantics="subscriptions" sap:content-version="1">
+ <EntityType Name="Notification" sap:semantics="notifications" sap:content-version="1">
+ <EntityType Name="WorkflowTask" sap:content-version="1">
+ <EntityType Name="HeaderDetail" sap:content-version="1">
+ <Key>
  <Property Name="HeaderInfo" Type="GBAPP_POAPPROVAL.HeaderInfo" Nullable="false" />
  <Property Name="WorkitemID" Type="Edm.String" MaxLength="12" sap:label="ID" />
  <Property Name="PoNumber" Type="Edm.String" Nullable="false" MaxLength="10" sap:label
    Doc." />
  
```

There is no Property for "Purchasing Group" in Header detail.

- Test the OData service and check collections.

/sap/opu/odata/SAP/GBAPP\_POAPPROVAL?\$format=xml

**SAP NetWeaver Gateway Client**

Execute Save Maintain Service Service Implementation

HTTP Method: GET POST PUT PATCH DELETE HEAD OPTIONS

Request URI: /sap/opu/odata/SAP/GBAPP\_POAPPROVAL?\$format=xml

Test Group: POA Test Case: 0 - Definition

HTTP Response

Header Name	Value
~status_code	200
~status_reason	OK

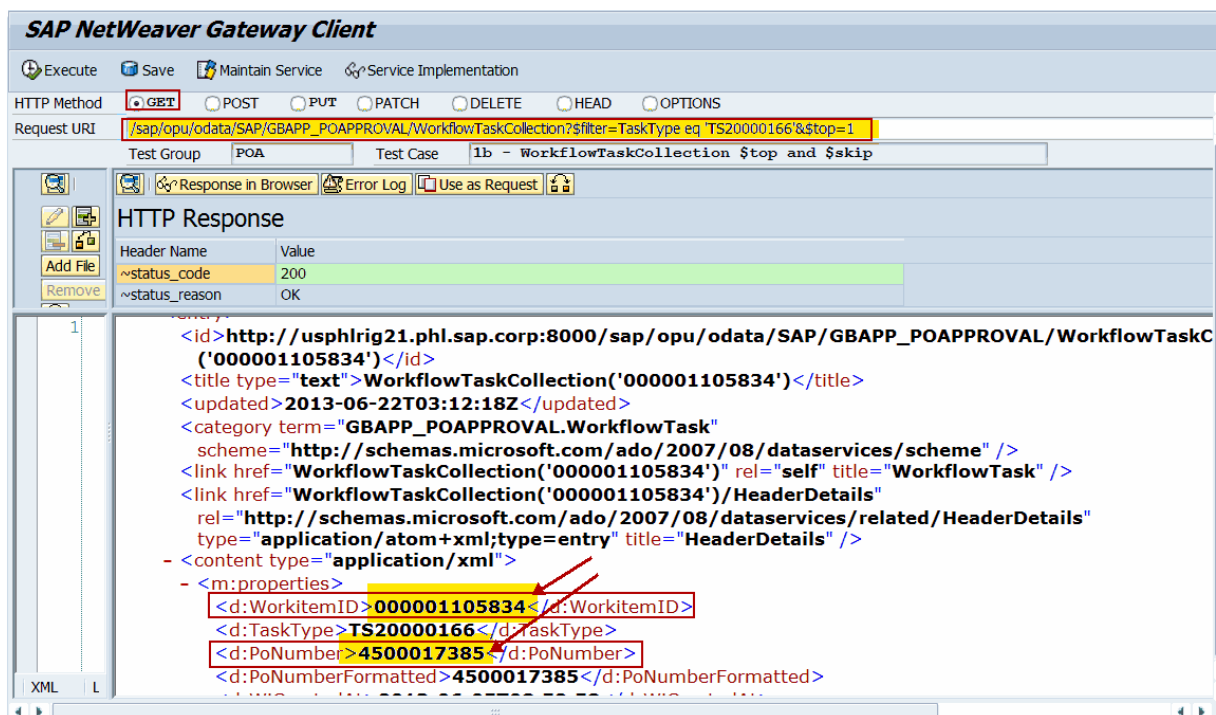
```

+ <app:collection sap:creatable="false" sap:updatable="false" sap:deletable="false" sap:addressable="false"
  version="1" href="LimitCollection">
+ <app:collection sap:creatable="false" sap:updatable="false" sap:deletable="false" sap:addressable="false"
  version="1" href="PricingConditionCollection">
+ <app:collection sap:content-version="1" href="ForwardingAgentCollection">
+ <app:collection sap:requires-filter="true" sap:content-version="1" href="AttachmentCollection">
+ <app:collection sap:content-version="1" href="NoteCollection">
+ <app:collection sap:content-version="1" href="SupplierContactCollection">
+ <app:collection sap:content-version="1" href="AccountingCollection">
+ <app:collection sap:content-version="1" href="SubscriptionCollection">
+ <app:collection sap:creatable="false" sap:updatable="false" sap:deletable="false" sap:addressable="false"
  version="1" href="NotificationCollection">
+ <app:collection sap:creatable="false" sap:updatable="false" sap:deletable="false" sap:pageable="false"
  sap:addressable="false" sap:content-version="1" href="WorkflowTaskCollection">
+ <app:collection sap:creatable="false" sap:updatable="false" sap:deletable="false" sap:addressable="false"
  version="1" href="HeaderDetailCollection">
</app:workspace>

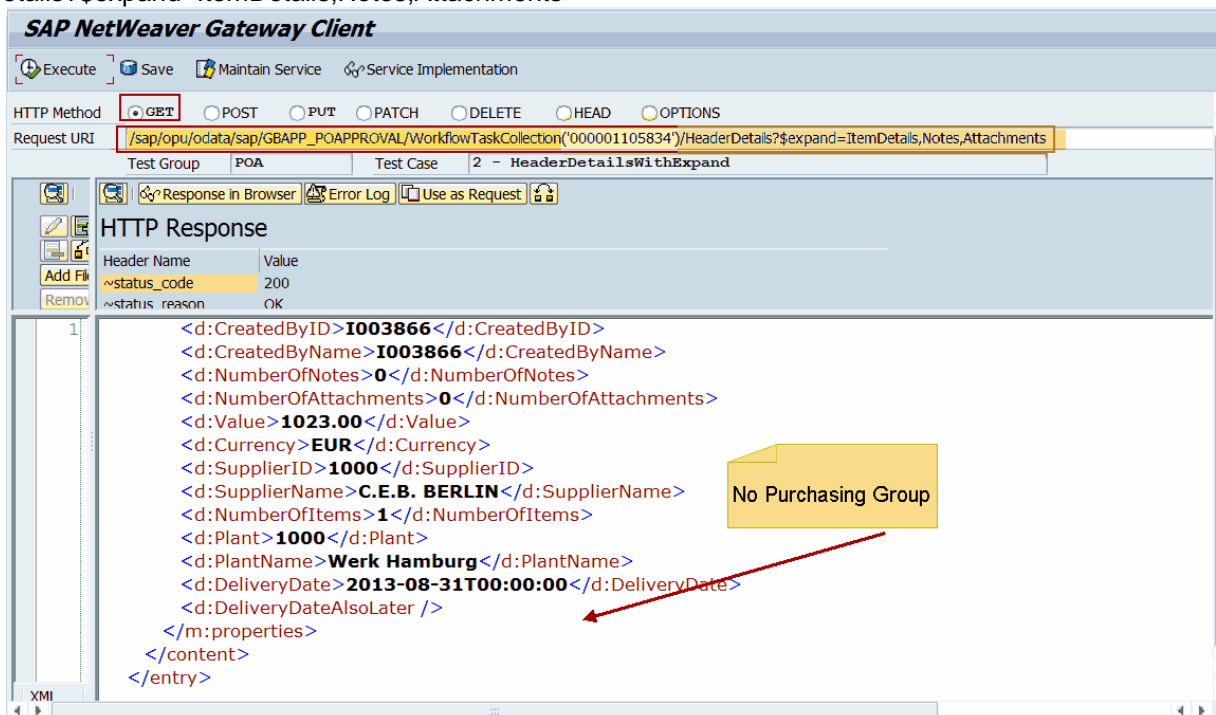
```

- Get a workitem ID

/sap/opu/odata/SAP/GBAPP\_POAPPROVAL/WorkflowTaskCollection?\$filter=TaskType eq 'TS20000166'&\$top=1



5. Get the Purchase Order detail  
/sap/opu/odata/sap/GBAPP\_POAPPROVAL/WorkflowTaskCollection('000001105834')/HeaderDetails?\$expand=ItemDetails,Notes,Attachments



At the end of this How to Guide, you see Purchasing Group data in here. It means the OData service provides Purchasing Group value and HTML5 UI can consume it.

## 3. Implementation

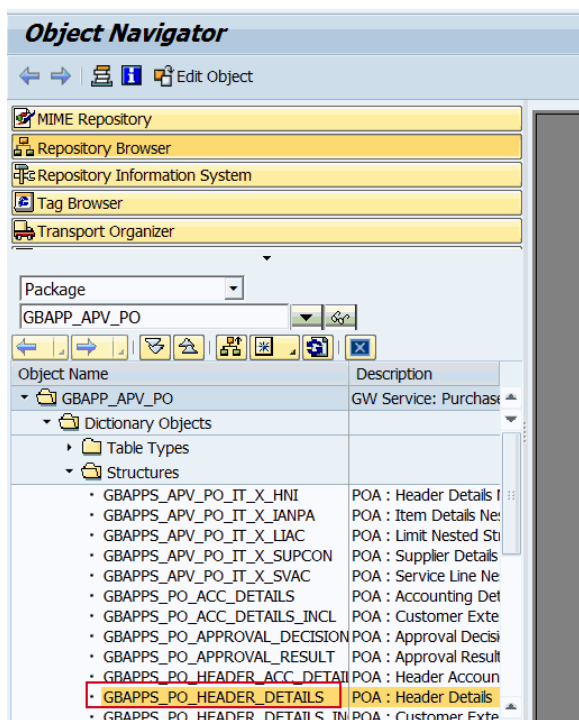
### 3.1 Step 1 . Extend the corresponding ABAP DDIC Structure by Append Structure [ERP]

In the step 1 , you are going to add the field „Purchasing Group“ in the structure of entity.

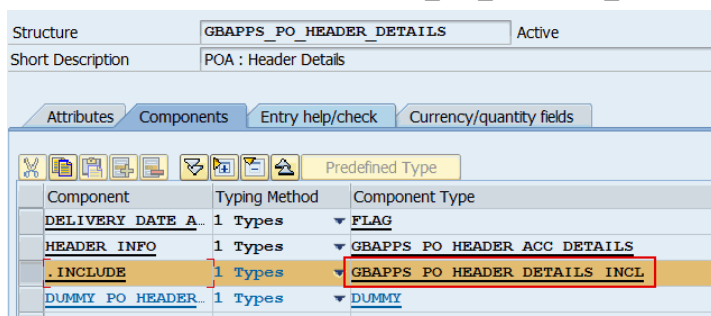
1. Open the structure

Transaction: SE80

Structure: GBAPPS\_PO\_HEADER\_DETAILS and GBAPPS\_PO\_WORKFLOW\_TASK



2. Double click the include GBAPPS\_PO\_HEADER\_DETAILS\_INCL.



3. Select the „Append Structure...“ button.

Append Structure...

Structure: GBAPPS\_PO\_HEADER\_DETAILS\_INCL Active

Short Description: POA : Customer Extensions Include - Header

Attributes Components Entry help/check Currency/quantity fields

Predefined Type

Component	Typing Method	Component Type	Data Type
DUMMY_PO_HEADER	1 Types	DUMMY	CHAR

4. Enter the Append name. For example ZPO\_H\_DETAILS..

Create Append Structure for GBAPPS\_PO\_HEADER\_DETAILS\_INCL

Append Name: ZPO\_H\_DETAILS

✓ ✗

5. Add field. For example ZZEKGRP.

Append Structure: ZPO\_H\_DETAILS New(Revised)

Short Description: Append POA Header Details

Attributes Components Entry help/check Currency/quantity fields

Predefined Type Show Appending Obj 1 / 1

Component	Typing Method	Component Type	Data Type	Length	Decim...	Short Description
ZZEKGRP	1 Types	EKGRP	AR	3	0	Purchasing Group

Information only: Purchasing Group field „EKGRP“ is in the table „EKKO“.

Dictionary: Display Table

Transp. Table: EKKO Active

Short Description: Purchasing Document Header

Attributes Delivery and Maintenance Fields Entry help/check Currency/Quantity Fields

Srch Help Predefined Type

Field	Key	Init...	Data element	Data Type	Length	Decim...	Short Description
EKORG			EKORG	CHAR	4	0	Purchasing Organization
EKGRP			EKGRP	CHAR	3	0	Purchasing Group
WAERS			WAERS	CURY	5	0	Currency Key

6. Activate the Append Structure. You should see the ZZEKGRP in the Structure GBAPPS\_PO\_HEADER\_DETAILS.

Structure: GBAPPS\_PO\_HEADER\_DETAILS Active

Short Description: POA : Header Details

Attributes Components Entry help/check Currency/quantity fields

Predefined Type

Component	Typing Method	Component Type	Data Type	Len
DELIVERY DATE A	1 Types	FLAG	CHAR	
HEADER_INFO	1 Types	GBAPPS_PO_HEADE		
.INCLUDE	1 Types	GBAPPS_PO_HEADER		
DUMMY_PO_HEADER	1 Types	DUMMY	CHAR	
.APPEND	1 Types	ZPO_H_DETAILS		
ZZEKGRP	1 Types	EKGRP	CHAR	

7. Repeat same steps for GBAPPS\_PO\_WORKFLOW\_TASK structure. There is include GBAPPS\_PO\_WORKFLOW\_TASK\_INCL.

Structure

GBAPPS PO WORKFLOW TASK

Active

Short Description

























POA : WorkFlow Task List

Attributes

Components

Entry help/check

Currency/quantity fields



Predefined Type

Component	Typing Method	Component Type	Data Type
<u>SUPPLIER ID</u>	1 Types	▼ LIFNR	CHAR
<u>SUPPLIER NAME</u>	1 Types	▼ NAME1 GP	CHAR
<u>AGG ITEM DESC</u>	1 Types	▼ STRINGVAL	STRING
<u>SEARCH FOR TEXT</u>	1 Types	▼ STRINGVAL	STRING
<u>.INCLUDE</u>	1 Types	▼ GBAPPS PO WORKF...	
<u>DUMMY PO WORKFL...</u>	1 Types	▼ DUMMY	CHAR
<u>.APPEND</u>	1 Types	▼ ZPO WF TASK	
<u>ZZEKGRP</u>	1 Types	▼ EKGRP	CHAR

## 3.2 Step 2 . Extend the OData Entity in the GW Model Provider by implementing BAdI [ERP]

In the step 2, you are going to implement a BAdI method which adds “Purchasing Group” property in the Model Provider class.

### 8. Display Enhancement Spot

Transaction: SE18

Enhancement Spot: GBAPP\_APV\_PO

**BAdI Builder: Initial Screen for Definitions**

Enhancement Spot: GBAPP\_APV\_PO

BAdI Name:

Display Change Create

### 9. Right click on Implementations and select “Create BAdI Implementation”.

**Enhancement Spot GBAPP\_APV\_PO Display**

Enhancement Spot: GBAPP\_APV\_PO Active

Attributes Enhancem. Implementations Technical Details Enh. Spot Element Definitions

Implementations

BAdI Definition: GBAPP\_APV\_PO\_MDP

No implementations in the system IDM

Create BAdI Implementation

### 10. Type Enhancement Implementation name

Create Enhancement Implementation

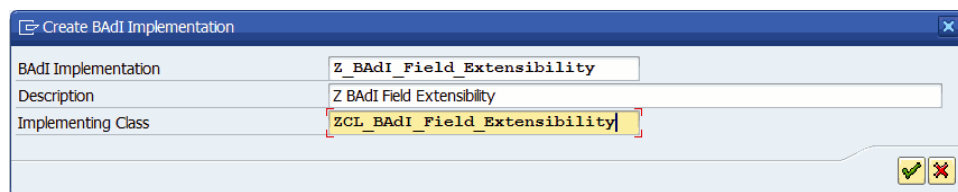
Enhancement Implementation: Z\_EI\_Field\_Extesibility

Short Text: Z Field Extensibility - Purchasing Group

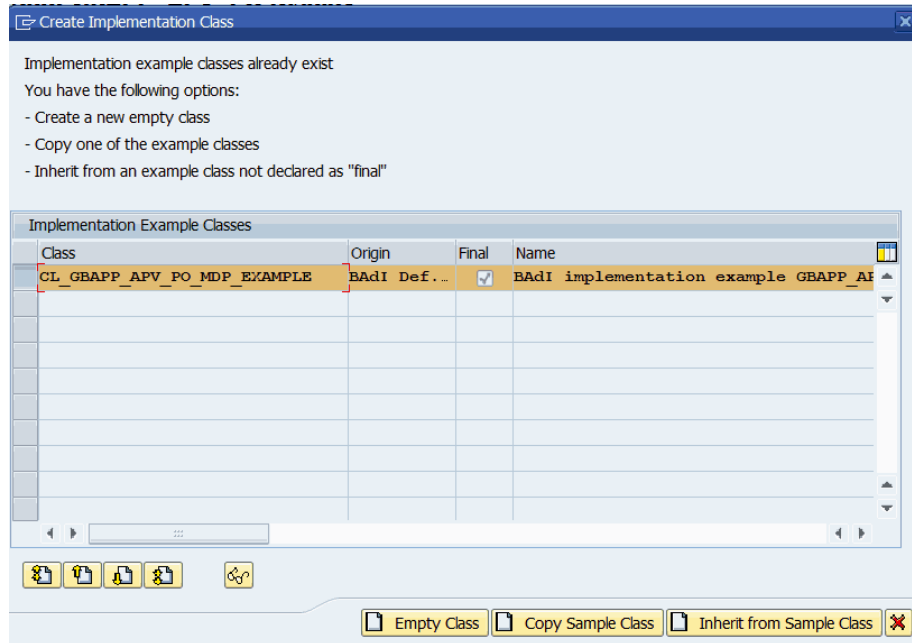
Composite Enhancement Implementation:

✓ ✗

### 11. Type BAdI Implementation name

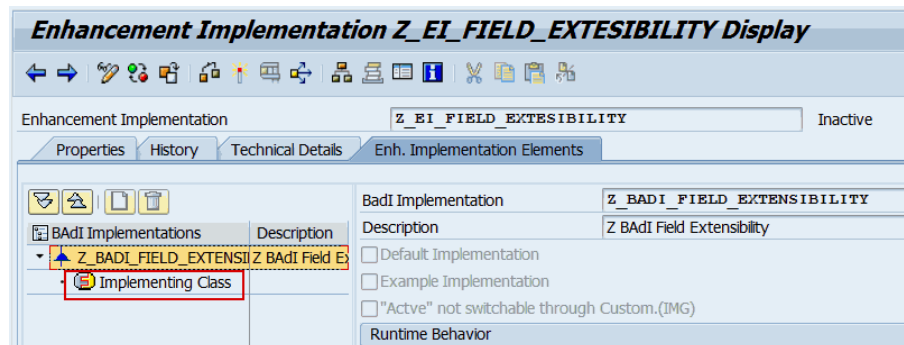


You have option for copying the sample class. In this guide, we copy the sample class.

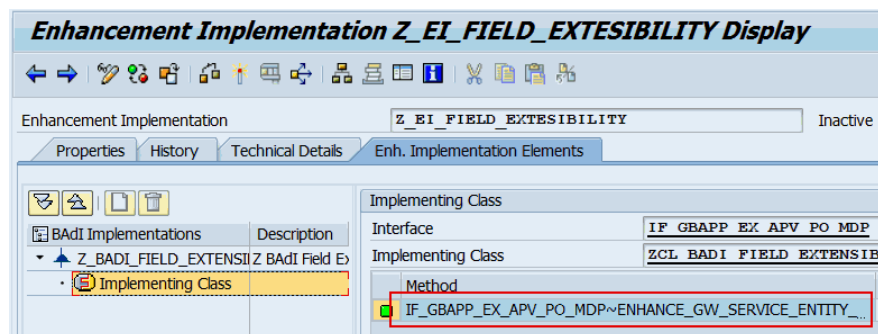


## 12. Implement the DAdI

Double click the Implementing Class.



Double click the method.



You see the sample code with comments.

**Class Builder: Class ZCL\_BADI\_FIELD\_EXTENSIBILITY Display**

Method: IF\_GBAPP\_EX\_APV\_PO\_MDP~ENHANCE\_GW\_SERVICE\_ENTITY\_MDP Inactive

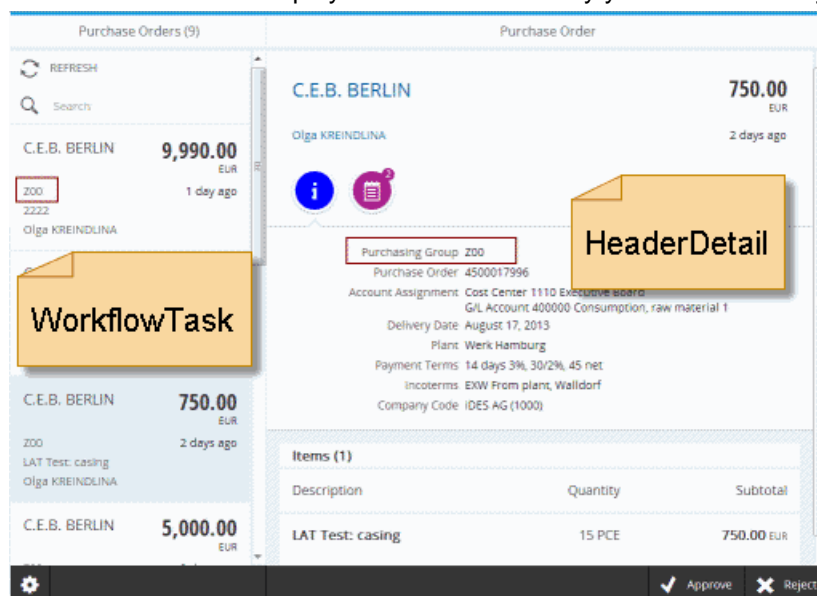
```

32 *
33 * DATA: lo_property TYPE REF TO /iwbp/if_mgw_odata_property.
34 *
35 *
36 * IF iv_entity_type_name = 'WorkflowTask'.
37 *   lo_property = io_entity_type->create_property( iv_property_name = 'CashDiscount1' iv_abap_fieldna
38 *   lo_property->set_nullable( abap_true ).
39 *   ... etc
40 *
41 *   lo_property = io_entity_type->create_property( iv_property_name = 'ProcCardCompany' iv_abap_fieldna
42 *   lo_property->set_nullable( abap_true ).
43 *   ... etc
44 *
45 *   lo_property = io_entity_type->create_property( iv_property_name = 'ProcCardNr' iv_abap_fieldna
46 *   lo_property->set_nullable( abap_true ).
47 *   ... etc
48 *
49 * ELSEIF iv_entity_type_name = 'Header'.
50 *   ... etc
51 * ENDIF.
52
53
54 *****
55 * You need also to extend the related bind structure with the new defined fields.
56 * E.g. for Entity 'WorkflowTask' -> the bind structure 'GBAPPS_PO_WORKFLOW_TASK'

```

- Go to change mode and add “ZPurchasingGroup” property in both entity “WorkflowTask” and “HeaderDetail”.

The UI screenshot helps you to understand why you handle 2 entity types.



Remember that you have looked at the meta data definition in the section 2.2.



**SAP NetWeaver Gateway Client**

Execute Select Save Maintain Service Service Implementation

HTTP Method: GET POST PUT PATCH DELETE HEAD OPTIONS

Request URI: /sap/opu/odata/sap/GBAPP\_POAPPROVAL/\$metadata?sap-documentation=all

Test Group Test Case

Response in Browser Error Log Use as Request

**HTTP Response**

Header Name	Value
~status_code	200
~status_reason	OK

```
<?xml version="1.0" encoding="utf-8" ?>
- <edmx:Edmx Version="1.0" xmlns:edmx="http://schemas.microsoft.com/ado/2007/06/edmx"
  xmlns:m="http://schemas.microsoft.com/ado/2007/08/dataservices/metadata"
  xmlns:sap="http://www.sap.com/Protocols/SAPData">
- <edmx:DataServices m:DataServiceVersion="2.0">
- <Schema Namespace="GBAPP_POAPPROVAL" xml:lang="en" xmlns="http://schemas.microsoft.com/ado
  + <EntityType Name="Subscription" sap:semantics="subscriptions" sap:content-version="1">
  + <EntityType Name="Notification" sap:semantics="notifications" sap:content-version="1">
  + <EntityType Name="WorkflowTask" sap:content-version="1">
  + <EntityType Name="HeaderDetail" sap:content-version="1">
    - <Key>
      <PropertyRef Name="PoNumber" />
    </Key>
    <Property Name="HeaderInfo" Type="GBAPP_POAPPROVAL.HeaderInfo" Nullable="false" />
    <Property Name="WorkitemID" Type="Edm.String" MaxLength="12" sap:label="ID" />
    <Property Name="PoNumber" Type="Edm.String" Nullable="false" MaxLength="10" sap:label="Purchasi
```

Program Code:

METHOD if\_gbapp\_ex\_apv\_po\_mdp~enhance\_gw\_service\_entity\_mdp.

DATA: lo\_property TYPE REF TO /iwbp/if\_mgw\_OData\_property.

IF iv\_entity\_type\_name = 'HeaderDetail' OR  
iv\_entity\_type\_name = 'WorkflowTask'.

lo\_property = io\_entity\_type->  
>create\_property( iv\_property\_name = 'ZPurchasingGroup' iv\_abap\_fieldname = 'ZZEGRP' ).  
lo\_property->set\_nullable( abap\_true ).

ENDIF.

ENDMETHOD.

**Class Builder: Class ZCL\_BADI\_FIELD\_EXTENSIBILITY Change**

Pattern Pretty Printer Signature Public Section Protected Section Private Section

Method IF\_GBAPP\_EX\_APV\_PO\_MDP~ENHANCE\_GW\_SERVICE\_ENTITY\_MDP Inactive (revised)

```
1 METHOD if_gbapp_ex_apv_po_mdp~enhance_gw_service_entity_mdp.
2
3 DATA: lo_property TYPE REF TO /iwbp/if_mgw_odata_property.
4
5 IF iv_entity_type_name = 'HeaderDetail' OR
6   iv_entity_type_name = 'WorkflowTask'.
7
8   lo_property = io_entity_type->create_property( iv_property_name = 'ZPurchasingGroup' iv_abap_fieldname
9   lo_property->set_nullable( abap_true ).
10
11 ENDIF.
12
13 ENDMETHOD.
```

14. Activate the method.



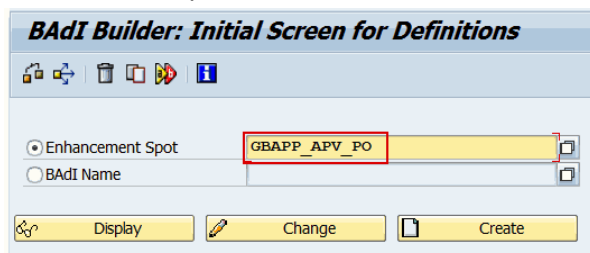
### 3.3 Step 3. Fill data to the custom fields in the GW Data Provider by implementing BAdI [ERP]

In the step 3, you are going to implement a BAdI method which fills “Purchasing Group” value in the Data Provider class.

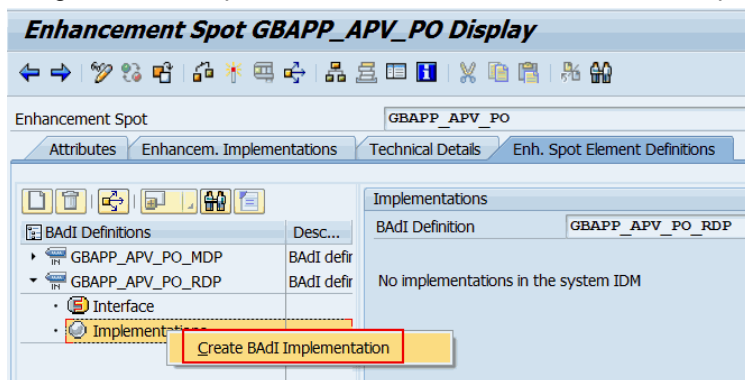
1. Open the Enhancement Spot.

Transaction: SE18

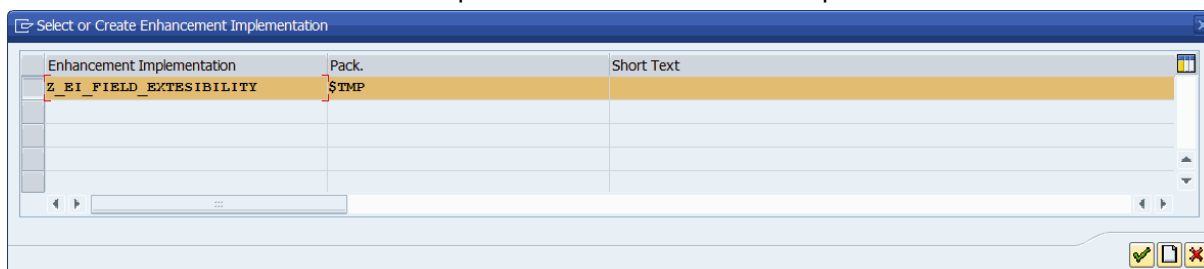
Enhancement Spot: GBAPP\_APV\_PO



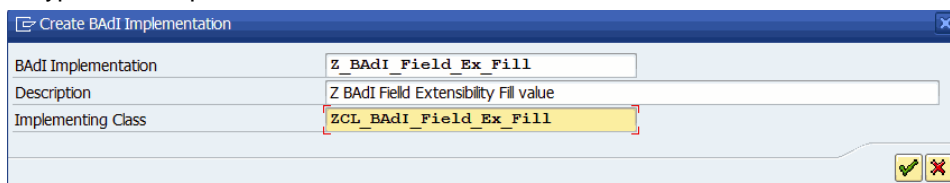
2. Right click on Implementations and select “Create BAdI Implementation”.



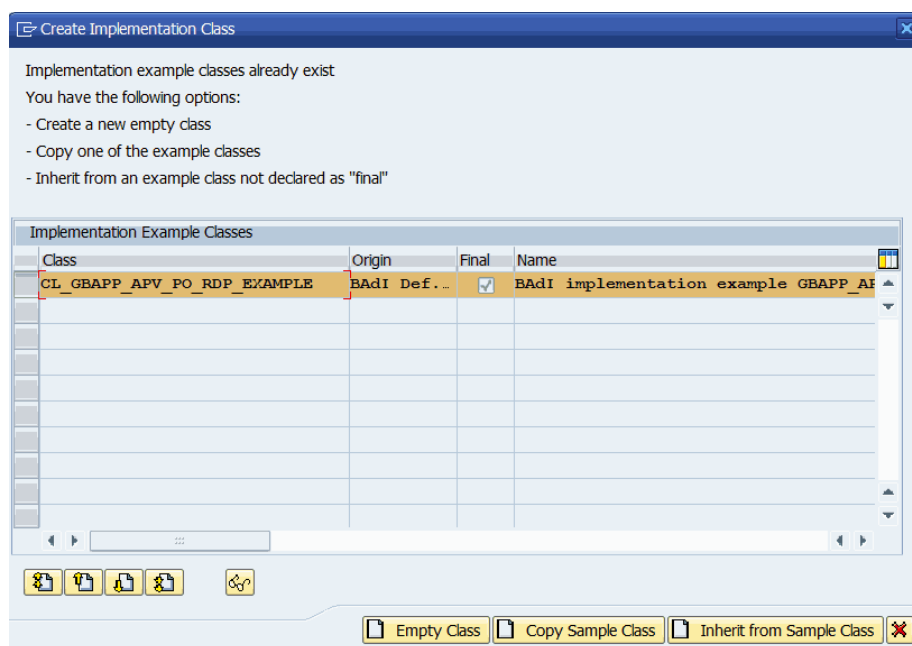
3. You can use same Enhancement Implementation created in the step 1.



4. Type BAdI Implementation name

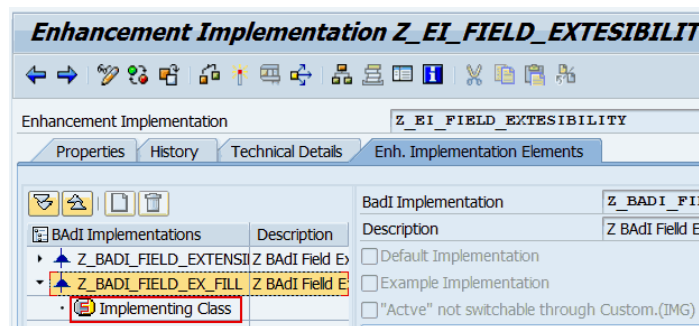


You have option for copying the sample class. In this guide, we copy the sample class.

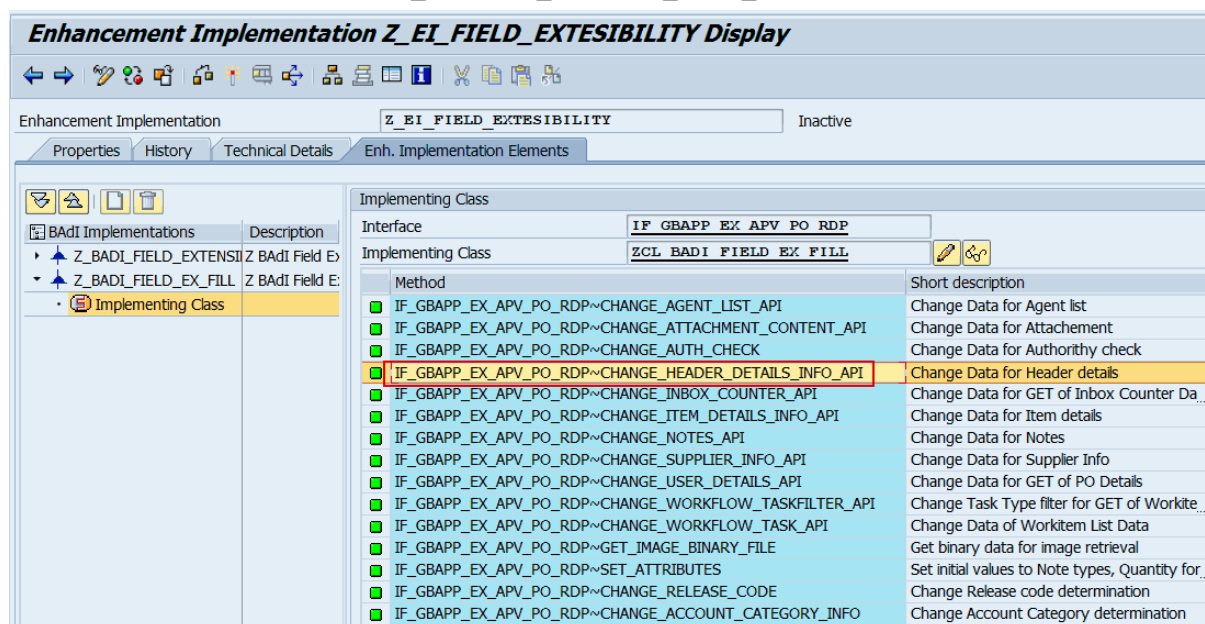


##### 5. Implement the BAdI

Double click the Implementing Class.



Double click the method CHANGE\_HEADER\_DETAILS\_INFO\_API.



You see the sample code with comments.

**Class Builder: Class ZCL\_BADI\_FIELD\_EX\_FILL Display**

Method: IF\_GBAPP\_EX\_APV\_PO\_RDP~CHANGE\_HEADER\_DETAILS\_INFO\_API Inactive

```

1  METHOD IF_GBAPP_EX_APV_PO_RDP~CHANGE_HEADER_DETAILS_INFO_API.
2
3  * Intended use:
4  * Customer uses the BAdI Enhancement Framework for own content / logik
5
6  * Here you can change/enhance the data, which is retrieved for the GET call for
7  * the Purchase Order Details.
8
9  * Note: If you need to process additional PO data, you can do the changes here
10
11  ENDMETHOD.

```

6. Check the Method definition and find the field you have to fill the value.  
Select the menu Goto -> Method Definition.

Method Edit **Goto** Utilities(M) Environment System Help

- Class Definition
- Method Definition**
- Text elements
- Public Section Shift+F4
- Protected Section Shift+F11
- Private Section Shift+F2
- Online Manual
- Back F3

**Class Builder: Class ZCL\_BADI\_FIELD\_EX\_FILL Display**

Method: IF\_GBAPP\_EX\_APV\_PO\_RDP~CHANGE\_HEADER\_DETAILS\_INFO\_API Inactive

Display Method CHANGE\_HEADER\_DETAILS\_INFO\_API

Class: IF\_GBAPP\_EX\_APV\_PO\_RDP

Method: CHANGE\_HEADER\_DETAILS\_INFO\_API

Description: Change Data for Header details

Attributes Parameters Exceptions

Methods Exceptions

Parameter	Type	Pa...	O...	Typing M...	Associated Type
IV_WORKITEM_ID	Importin...	<input type="checkbox"/>	<input type="checkbox"/>	Type	SWW_WIID
IV_USER_NAME	Importin...	<input type="checkbox"/>	<input type="checkbox"/>	Type	SYUNAME
IV_PO_NUMBER	Importin...	<input type="checkbox"/>	<input type="checkbox"/>	Type	EBELN
<b>CS_HEADER_DETAILS_X</b>	Changing	<input type="checkbox"/>	<input type="checkbox"/>	Type	<b>GBAPPS_APV_PO_IT_X_HNI</b>
		<input type="checkbox"/>	<input type="checkbox"/>	Type	

7. Open a new session and check the structure GBAPPS\_APV\_PO\_IT\_X

**ABAP Dictionary: Initial Screen**

Database table

View

☒ Data type

Type Group

Domain

Search help

Lock object

Display Change Create

ZZEKGRP is there.

**Dictionary: Display Structure**

Structure: GBAPPS\_APV\_PO\_IT\_X\_HNI Active  
Short Description: POA : Header Details Nested Structure

Attributes Components Entry help/check Currency/quantity fields

31 / 39

Component	Typing Method	Component Type	Data Type	Length	Decim...	Short Description
DELIVERY DATE AL	1 Types	FLAG	CHAR	1	0	General Flag
HEADER INFO	1 Types	GBAPPS PO HEADE	---	0	0	POA : Header Account Details
.INCLUDE	1 Types	GBAPPS PO HEADE	---	0	0	POA : Customer Extensions Inc
DUMMY PO HEADER	1 Types	DUMMY	CHAR	1	0	Dummy function in length 1
.APPEND	1 Types	ZPO H DETAILS	---	0	0	Append POA Header Details
<b>ZZEKGRP</b>	1 Types	<b>EKGRP</b>	CHAR	3	0	<b>Purchasing Group</b>
ITEMDETAILS	1 Types	GBAPPT PO ITEM	---	0	0	POA : Item Details
NOTES	1 Types	GBAPPT NOTES	---	0	0	Common : Notes
ATTACHMENTS	1 Types	GBAPPT ATTACHME	---	0	0	Common : Attachments

You have to fill the Purchasing Group value to the cs\_header\_details\_x-zzekgrp.

- Go back to the original session.

**Class Builder: Class ZCL\_BADI\_FIELD\_EX\_FILL Display**

Method: IF\_GBAPP\_EX\_APV\_PO\_RDP~CHANGE\_HEADER\_DETAILS\_INFO\_API Inactive

```

1  METHOD IF_GBAPP_EX_APV_PO_RDP~CHANGE_HEADER_DETAILS_INFO_API.
2
3  * Intended use:
4  * Customer uses the BAdI Enhancement Framework for own content / logik
5
6  * Here you can change/enhance the data, which is retrieved for the GET call for
7  * the Purchase Order Details.
8
9  * Note: If you need to process additional PO data, you can do the changes here
10
11  ENDMETHOD.

```

- Switch to change mode and implement the code.

Program Code:

**METHOD** if\_gbapp\_ex\_apv\_po\_rdp~change\_header\_details\_info\_api.

**DATA:** lv\_po\_number **TYPE** ebeln.

lv\_po\_number = cs\_header\_details\_x-po\_number.

**SELECT SINGLE** ekgrp **FROM** ekko **INTO** cs\_header\_details\_x-zzekgrp **WHERE** ebeln = lv\_po\_number .

**ENDMETHOD..**

**Class Builder: Class ZCL\_BADI\_FIELD\_EX\_FILL Change**

Method: IF\_GBAPP\_EX\_APV\_PO\_RDP~CHANGE\_HEADER\_DETAILS\_INFO\_API Inactive (revised)

```

1  METHOD IF_GBAPP_EX_APV_PO_RDP~CHANGE_HEADER_DETAILS_INFO_API.
2
3      DATA: lv_po_number TYPE ebeln.
4
5      lv_po_number = cs_header_details_x-po_number.
6
7      SELECT SINGLE ekgrp FROM ekko INTO cs_header_details_x-zzekgrp WHERE ebeln = lv_po_number .
8
9  ENDMETHOD.

```

10. Activate the method. Status should be Active.
11. Repeat same step for CHANGE\_WORKFLOW\_TASK\_API method.

**Enhancement Implementation Z\_EI\_FIELD\_EXTESIBILITY Display**

Enhancement Implementation: Z\_EI\_FIELD\_EXTESIBILITY Active

Properties History Technical Details Enh. Implementation Elements

Implementing Class	Interface	Method	Short description
ZCL_BADI_FIELD_EX_FILL	IF_GBAPP_EX_APV_PO_RDP	IF_GBAPP_EX_APV_PO_RDP~CHANGE_AGENT_LIST_API	Change Data for Agent list
		IF_GBAPP_EX_APV_PO_RDP~CHANGE_ATTACHMENT_CONTENT...	Change Data for Attachment
		IF_GBAPP_EX_APV_PO_RDP~CHANGE_AUTH_CHECK	Change Data for Authority check
		IF_GBAPP_EX_APV_PO_RDP~CHANGE_HEADER_DETAILS_INFO...	Change Data for Header details
		IF_GBAPP_EX_APV_PO_RDP~CHANGE_INBOX_COUNTER_API	Change Data for GET of Inbox Counter Da...
		IF_GBAPP_EX_APV_PO_RDP~CHANGE_ITEM_DETAILS_INFO_API	Change Data for Item details
		IF_GBAPP_EX_APV_PO_RDP~CHANGE_NOTES_API	Change Data for Notes
		IF_GBAPP_EX_APV_PO_RDP~CHANGE_SUPPLIER_INFO_API	Change Data for Supplier Info
		IF_GBAPP_EX_APV_PO_RDP~CHANGE_USER_DETAILS_API	Change Data for GET of PO Details
		IF_GBAPP_EX_APV_PO_RDP~CHANGE_WORKFLOW_TASKFILTE	Change Task Type filter for GET of Workite...
		<b>IF_GBAPP_EX_APV_PO_RDP~CHANGE_WORKFLOW_TASK_API</b>	<b>Change Data of Workitem List Data</b>
		IF_GBAPP_EX_APV_PO_RDP~GET_IMAGE_BINARY_FILE	Get binary data for image retrieval
		IF_GBAPP_EX_APV_PO_RDP~SET_ATTRIBUTES	Set initial values to Note types, Quantity for

Program Code:

```

METHOD IF_GBAPP_EX_APV_PO_RDP~CHANGE_WORKFLOW_TASK_API.

DATA: lv_po_number TYPE ebeln.
FIELD-SYMBOLS: <ls_workflow_list> TYPE GBAPPS_PO_WORKFLOW_TASK.

LOOP AT CT_WORKFLOW_LIST ASSIGNING <ls_workflow_list>.
    lv_po_number = <ls_workflow_list>-po_number.
    SELECT SINGLE ekgrp FROM ekko INTO <ls_workflow_list>-
    zzekgrp WHERE ebeln = lv_po_number .
ENDLOOP.

ENDMETHOD..

```

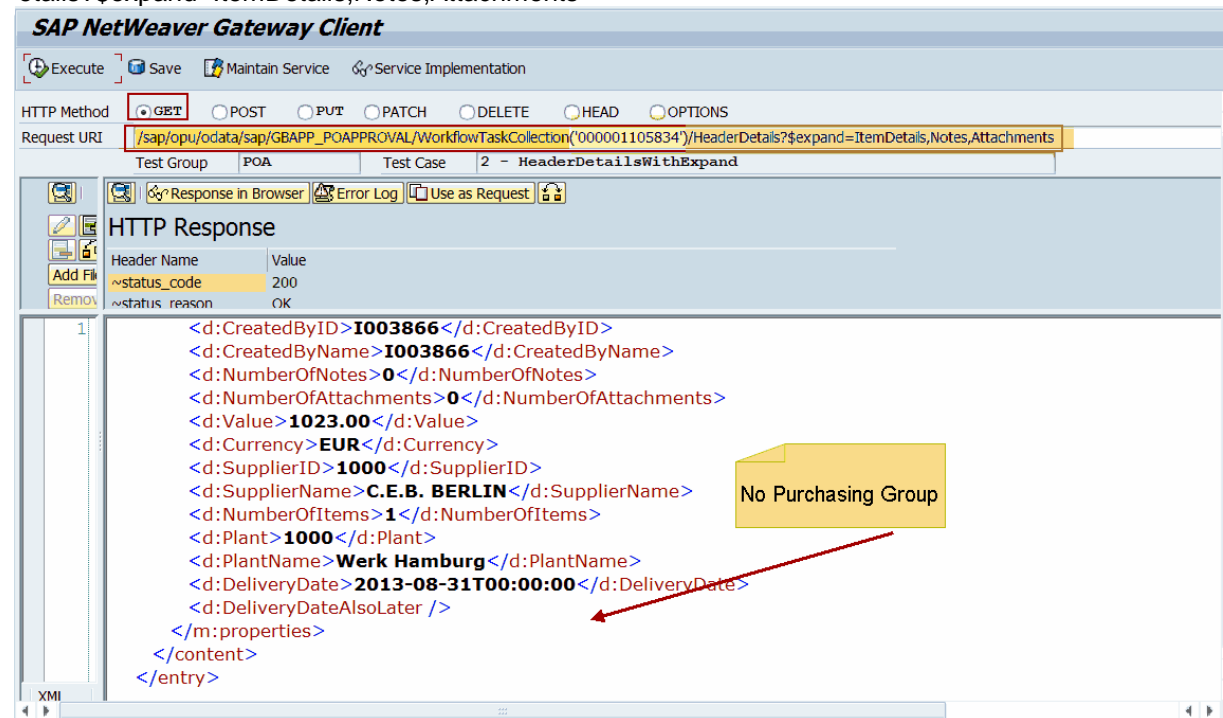
## 4. Test the OData service

Before implementing 3 steps, there was no OData for Purchasing Group.

### 4.1 Check the OData service - Before

Get the Purchase Order detail

/sap/opu/odata/sap/GBAPP\_POAPPROVAL/WorkflowTaskCollection('000001105834')/HeaderDetails?\$expand=ItemDetails,Notes,Attachments



**SAP NetWeaver Gateway Client**

HTTP Method: ☒ GET ☐ POST ☐ PUT ☐ PATCH ☐ DELETE ☐ HEAD ☐ OPTIONS

Request URI: /sap/opu/odata/sap/GBAPP\_POAPPROVAL/WorkflowTaskCollection('000001105834')/HeaderDetails?\$expand=ItemDetails,Notes,Attachments

Test Group: POA Test Case: 2 - HeaderDetailsWithExpand

**HTTP Response**

Header Name	Value
~status_code	200
~status_reason	OK

```

<d:CreatedByID>1003866</d:CreatedByID>
<d:CreatedByName>1003866</d:CreatedByName>
<d:NumberOfNotes>0</d:NumberOfNotes>
<d:NumberOfAttachments>0</d:NumberOfAttachments>
<d:Value>1023.00</d:Value>
<d:Currency>EUR</d:Currency>
<d:SupplierID>1000</d:SupplierID>
<d:SupplierName>C.E.B. BERLIN</d:SupplierName>
<d:NumberOfItems>1</d:NumberOfItems>
<d:Plant>1000</d:Plant>
<d:PlantName>Werk Hamburg</d:PlantName>
<d:DeliveryDate>2013-08-31T00:00:00</d:DeliveryDate>
<d:DeliveryDateAlsoLater />
</m:properties>
</content>
</entry>
  
```

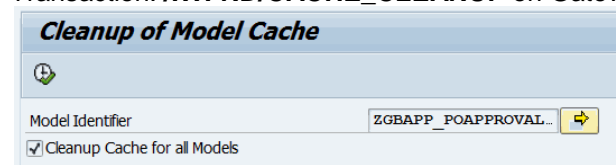
No Purchasing Group

There was no Purchasing Group in the end of xml.

### 4.2 Clear the Cache

When you changed the Model, you have to clear Gateway cache in both Gateway and ERP backend.

Transaction: /IWFND/CACHE\_CLEANUP on Gateway server

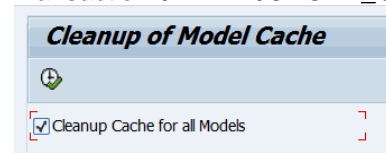


**Cleanup of Model Cache**

Model Identifier: ZGBAPP\_POAPPROVAL

☒ Cleanup Cache for all Models

Transaction: /IWBEP/CACHE\_CLEANUP on ERP Server



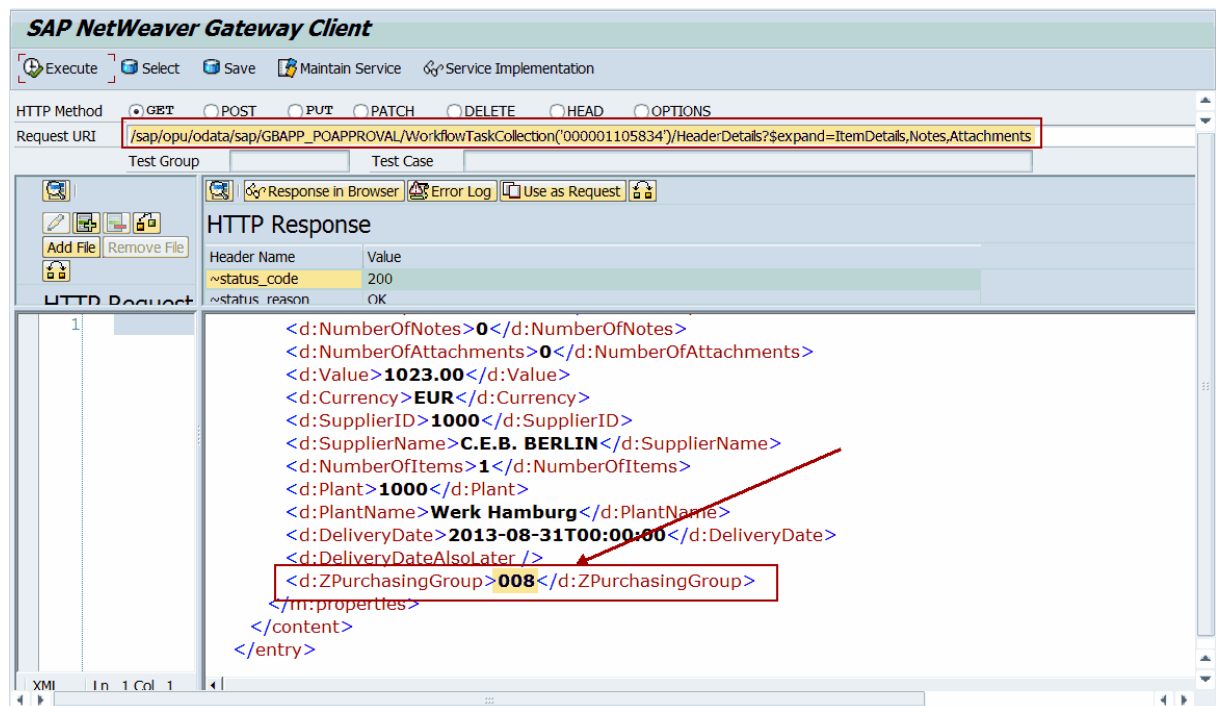
**Cleanup of Model Cache**

☒ Cleanup Cache for all Models

### 4.3 Test the OData service - after

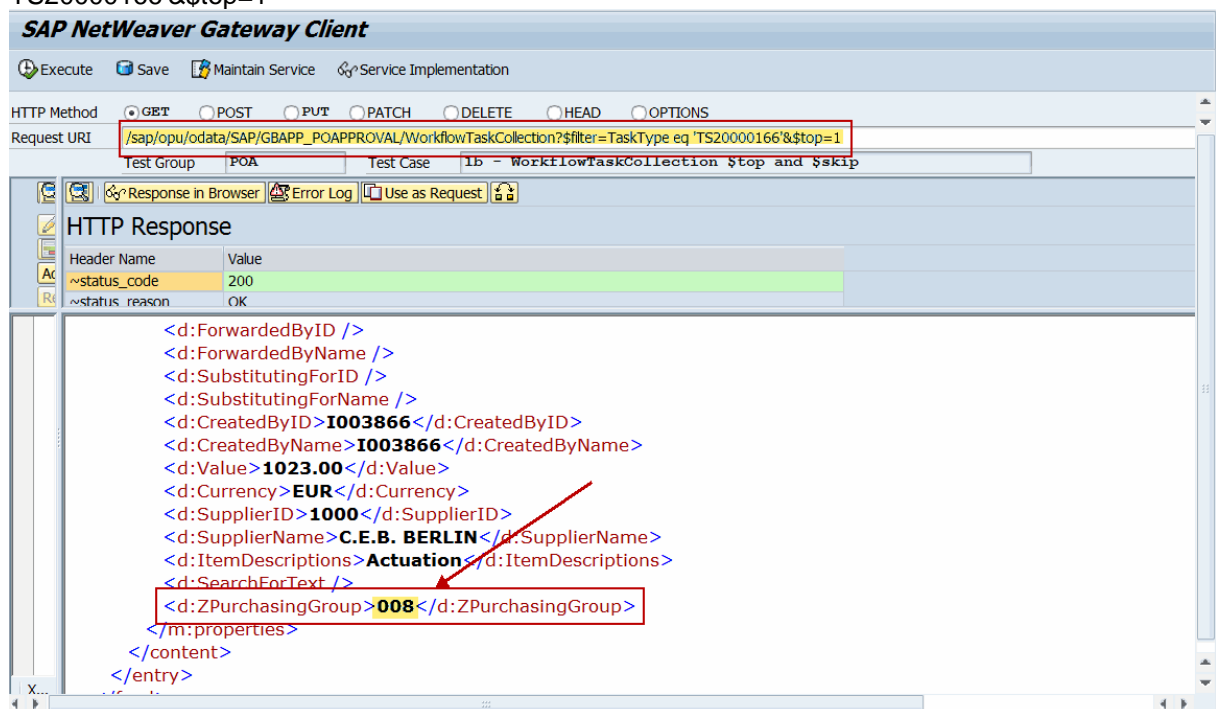
Get the Purchase Order detail

/sap/opu/odata/sap/GBAPP\_POAPPROVAL/WorkflowTaskCollection('000001105834')/HeaderDetails?\$expand=ItemDetails,Notes,Attachments



The Workflow Task entity has also Purchasing Group value.

/sap/opu/odata/SAP/GBAPP\_POAPPROVAL/WorkflowTaskCollection?\$filter=TaskType eq 'TS20000166'&\$top=1



## 4.4 UI extensibility

The next step is you are going to display the Purchasing Group field in the UI. Please refer to the separate How to Guide “Adding custom fields to SAP Fiori apps. UI fields extensibility”.

Purchase Orders (9)

REFRESH

Search

C.E.B. BERLIN

9,990.00

EUR

1 day ago

Z00

2222

Olga KREINDLINA

C.E.B. BERLIN

550.00

EUR

2 days ago

Z00

2 items

Albert Manager

C.E.B. BERLIN

750.00

EUR

2 days ago

Z00

LAT Test: casing

Olga KREINDLINA

C.E.B. BERLIN

5,000.00

EUR

Purchase Order

C.E.B. BERLIN

750.00

EUR

2 days ago

Olga KREINDLINA

?

?

Purchasing Group: Z00

Purchase Order: 4500017996

Account Assignment: Cost Center 1110 Executive Board

G/L Account 400000 Consumption, raw material 1

Delivery Date: August 17, 2013

Plant: Werk Hamburg

Payment Terms: 14 days 3%, 30/2%, 45 net

Incoterms: EXW From plant, Walldorf

Company Code: IDES AG (1000)

Items (1)

Description	Quantity	Subtotal
LAT Test: casing	15 PCE	750.00 EUR

✓ Approve

✗ Reject





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[www.sdn.sap.com/irj/sdn/howtoguides](http://www.sdn.sap.com/irj/sdn/howtoguides)



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