



Former Member

September 20, 2016 | 5 minute read

Create Fiori app using CDS with BOPF- For beginners Part 2

Follow

13 14 24,844

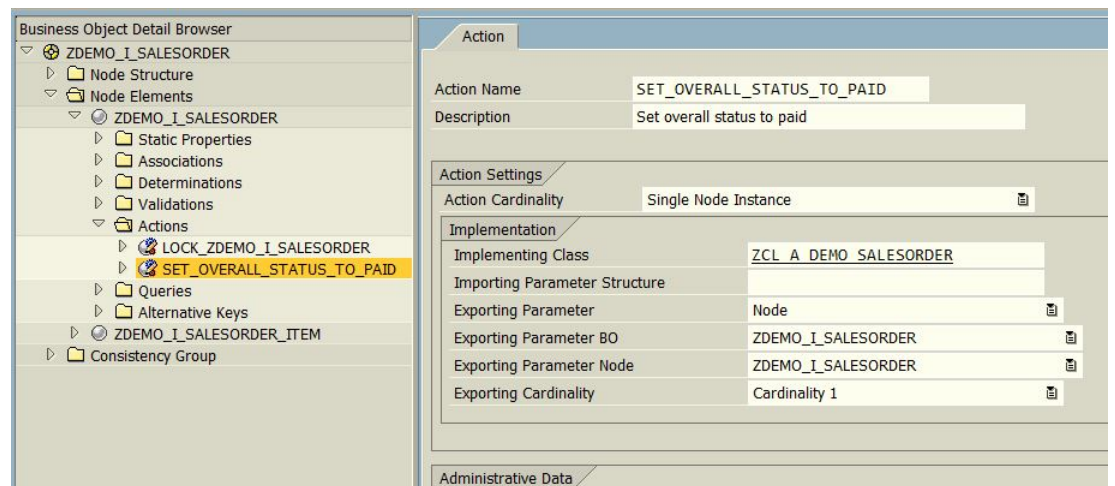
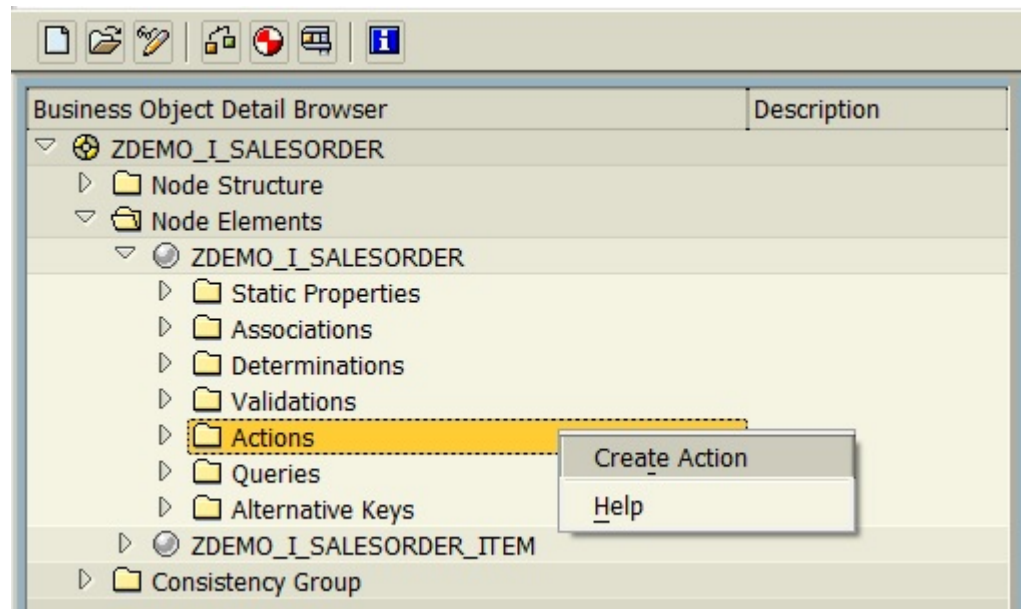
Like

RSS Feed

This blog is on continuation to [Part 1](#).

In this part we shall create the BOPF action and display the sale order scenario in the Fiori App using Smart Template.

For the BOPF action, go to BOPF Business Object ZDEMO_I_SALESORDER from Tcode BOBX. Click on change mode. Under the Node Elements, traverse to node ZDEMO_I_SALESORDER and select Action element. Right Click on Action and Click "Create".



Go to Class Builder and create the class ZCL_A-DEMO_SALESORDER.

Class Builder: Change Class ZCL_A_DEMO_SALESORDER

Class/Interface: **ZCL_A_DEMO_SALESORDER** Implemented / Active

Properties Interfaces Friends Attributes Methods Events Types Aliases

Superclass: **/BOBF/CL_LIB_A_SUPERCL_SIMPLE** ☐ Modeled Only

Description: Action class for Sales Order transaction

Instance Generation: Public

☒ Final

General Data

Message Class:

Program Status:

Category: General Object Type

Package: \$TMP

Original Language: EN

Created: 10.09.2016

Last Change: 10.09.2016

ABAP Language Version: Standard ABAP (Unicode)

☒ Fixed Point Arithmetic

☐ Shared Memory Enabled

Forward Declarations

Type Group/Object Type

Class/Interface: **ZCL_A_DEMO_SALESORDER** Implemented / Active

Properties Interfaces Friends Attributes Methods Events Types Aliases

Properties ☐ Filter

Interface	Abstract	Final	Modeled...	Description
/BOBF/IF_FRW_ACTION	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Interface for an Action

Implement the method Execute.

Class/Interface: **ZCL_A_DEMO_SALESORDER** Implemented / Active

Properties Interfaces Friends Attributes Methods Events Types Aliases

Parameters Exceptions Sourcecode ☐ Filter

Method	Level	Visibility	Me...	Description
/BOBF/IF_FRW_ACTION~EXECUTE	Instance Method	Public		Carries Out an Action
/BOBF/IF_FRW_ACTION~PREPARE	Instance Method	Public		Manipulate Object List Before Validation
/BOBF/IF_FRW_ACTION~RETRIEVE_DEFAULT_PARAM	Instance Method	Public		Gives the default parameters of an action

```

Method /BOBF/IF_FRW_ACTION~EXECUTE Active
1 method /bobf/if_frw_action~execute.
2
3 case is_ctx-act_key.
4
5 "Action - Set overall status
6 when zif_demo_i_salesorder_c=>sc_action-zdemo_i_salesorder-set_overall_status_to_paid.
7 " Get output structure of Action
8 data(lt_sales_order) = value ztdemo_i_salesorder( ).
9
10 "Read UI clicked sale order
11 io_read->retrieve(
12     exporting
13         iv_node          = is_ctx-node_key    " BO Node Name
14         it_key           = it_key             " BO Key
15     importing
16         et_data          = lt_sales_order ).  " Data Return Structure
17
18 "Assuming single instance for a action
19 read table lt_sales_order assigning field-symbol(<fs_sales_order>) index 1.
20 if sy-subrc = 0.
21     "Set the over all status to Paid ie 'P'
22     if <fs_sales_order>-lifecyclestatus is initial.
23         <fs_sales_order>-lifecyclestatus = 'P'.
24     endif.
25 endif.
26
27 "Now update the BO instance
28 io_modify->update(
29     exporting
30         iv_node          = is_ctx-node_key    " Node
31         iv_key           = <fs_sales_order>-key " Key
32         iv_root_key      = <fs_sales_order>-root_key " NodeID
33         is_data          = ref #( <fs_sales_order>-node_data ) " Data
34         it_changed_fields = value #(
35             ( zif_demo_i_salesorder_c=>sc_node_attribute-zdemo_i_salesorder-lifecyclestatus
36             ).
37
38     et_data = lt_sales_order.
39
40 "////

```

Save and Activate. Below is code for Action. Basically the code reads the selected sales order and then change the corresponding BOPF node instance with the new lifecycle status value.

```

method /bobf/if_frw_action~execute.

case is_ctx-act_key.

    "Action - Set overall status
    when zif_demo_i_salesorder_c=>sc_action-zdemo_i_salesorder-
    " Get output structure of Action
    data(lt_sales_order) = value ztdemo_i_salesorder( ).

    "Read UI clicked sale order
    io_read->retrieve(
        exporting
            iv_node          = is_ctx-node_key    " B0 Node
            it_key           = it_key             " B0 Key
        importing
            et_data          = lt_sales_order ).  " Data

    "Assuming single instance for a action

```

```

read table lt_sales_order assigning field-symbol(<fs_sale
if sy-subrc = 0.
    "Set the over all status to Paid ie 'P'
    if <fs_sales_order>-lifecyclestatus is initial.
        <fs_sales_order>-lifecyclestatus = 'P'.
    endif.
endif.

"Now update the BO instance
io_modify->update(
    exporting
        iv_node          = is_ctx-node_key      " Node
        iv_key           = <fs_sales_order>-key  " Key
        iv_root_key      = <fs_sales_order>-root_key  " N
        is_data          = ref #( <fs_sales_order>-node_data
        it_changed_fields = value #(
                                ( zif_demo_i_salesorder_c=>sc_nod
                                ).

    et_data = lt_sales_order.

when others.
    "Nothing

endcase.

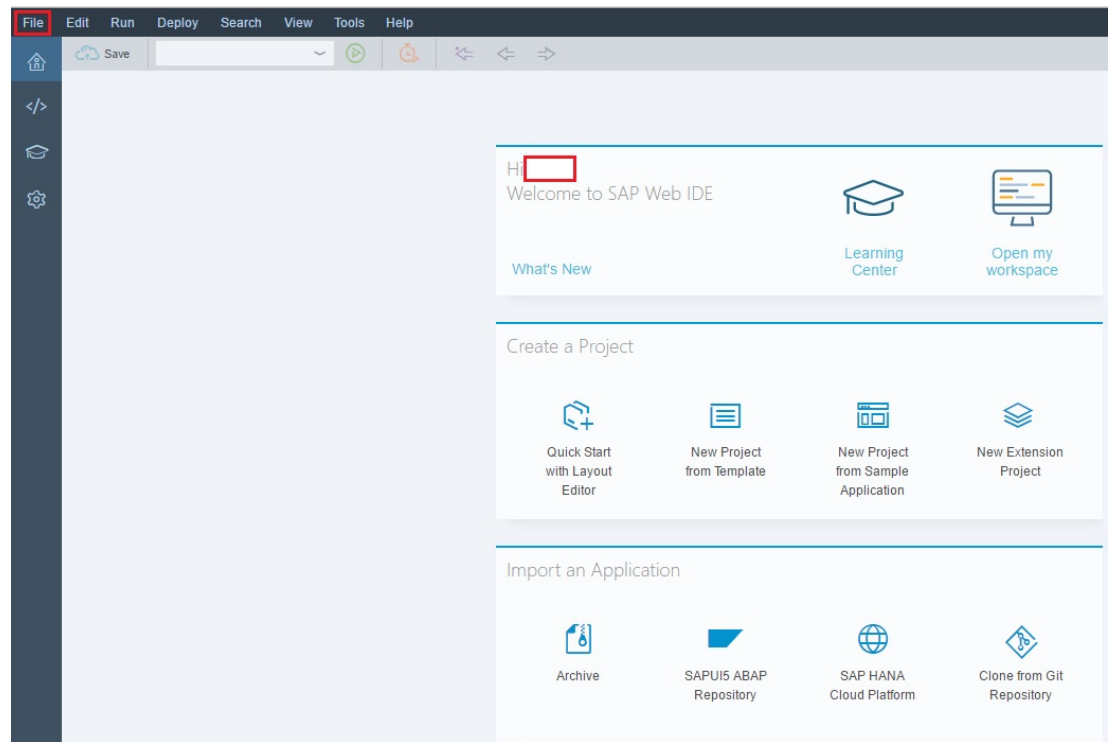
endmethod.

```

Okay we are done with all the backend stuff.

Lets display this using as Fiori App using Smart Template.

If all the Web IDE set up explained in [Part 1](#) is fine, we can proceed. Go to Web IDE. Click on File.



Click on File -> New -> Project from template

New Smart Template Application

Basic Information

Project Name*	DEMO_SALES_ORDER
App Descriptor Data	
Title*	Sales Order
Namespace	Give any name space ZDEMO_C_SALESORDER
Description	ZDEMO_C_SALESORDER

On next screen, Select Service Catalog. Click on the dropdown and select your backend system.

Data Connection

Choose a service from one of the sources listed below.

Sources

Service Catalog

Workspace

File System

Service URL

Choose a system, explore, and select a service. Optionally, you can drill down into the service details.

Odata

Once the backend system is selected, OData services in the system are listed. Look for our OData generated service
ZDEMO_C_SALESPRDER_CDS ie <final consump CDS view>_CDS

Choose a system, explore, and select a service. Optionally, you can drill down into the service details.

Search OData service

Services

zdemo_c_salesorder_c

Show Details

Service	Description	System
> ZDEMO_C_SALESPRDER_CDS	ZDEMO_C_SALESPRDER_CDS	er9

Select the Odata service. Click on Show details to check if the OData is up and running

Choose a system, explore, and select a service. Optionally, you can drill down into the service details.

Services

zdemo_c_salesorder_c

Show Details

Service	Description	System
ZDEMO_C_SALESPRDER_CDS	ZDEMO_C_SALESPRDER_CDS	er9

Here we see the OData service is running fine.

zdemo_c_salesorder_c

Hide Details

Service	Description	System
ZDEMO_C_SALESORDER_CDS	ZDEMO_C_SALESORDER_CDS	er9

ZDEMO_C_SALESORDER_CDS

Service Details

Diagram

Name: ZDEMO_C_SALESORDER_CDS

Description: ZDEMO_C_SALESORDER_CDS

Status: ✓ Running

System: er9

Type: OData

OData Version: 2.0

Author: APPUKUTTAN

Last Updated Date: (India Standard Time)

Service Version: 1

Tags:

URL: sap/opu/odata/s

Click on Next. In the Next screen the system will read and the OData service metadata file and also the CDS Annotations file(final consumption CDS). These are necessary to display the app.

The annotations in the final consumption CDS view (ZDEMO_C_SALESORDER) contain the UI line position which shall form the basis for field positioning in the app.

New Smart Template Application

Annotation Selection

Select the desired annotation files and rank them in the order in which they will be loaded.
 Note: If the annotation files overlap, the one loaded last will overwrite the previews ones.
 The selected service contains annotation data.

+ Add Annotation Files

Rank	Name	Source
1	Selected Service Metadata	Remote
2	ZDEMO_C_SALESORDER_CDS_VAN	Remote

Click Next. In OData collection, select the consumption view(where OData was published). Our final consumption view has an association to Item. Hence here the OData navigation refers to “_item”.

New Smart Template Application

Template Customization

Data Binding

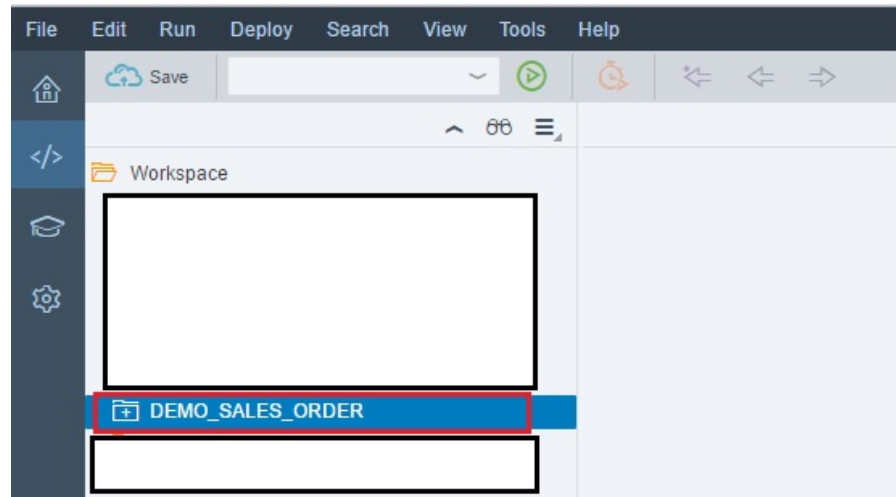
OData Collection*

Zdemo_C_Salesorder

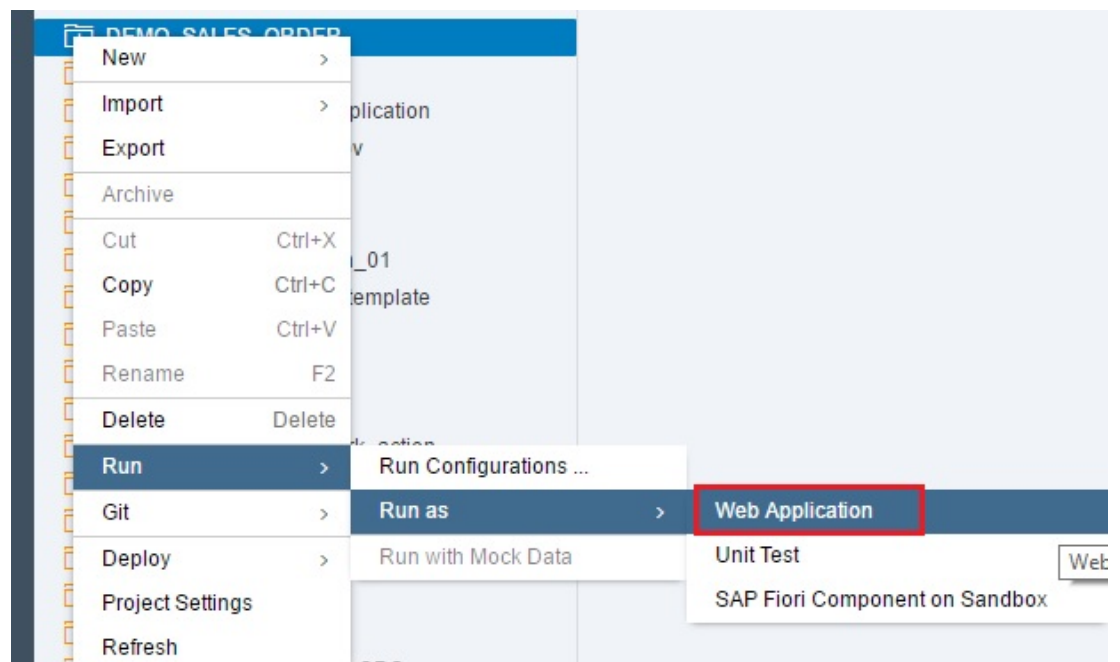
OData Navigation

to_Item

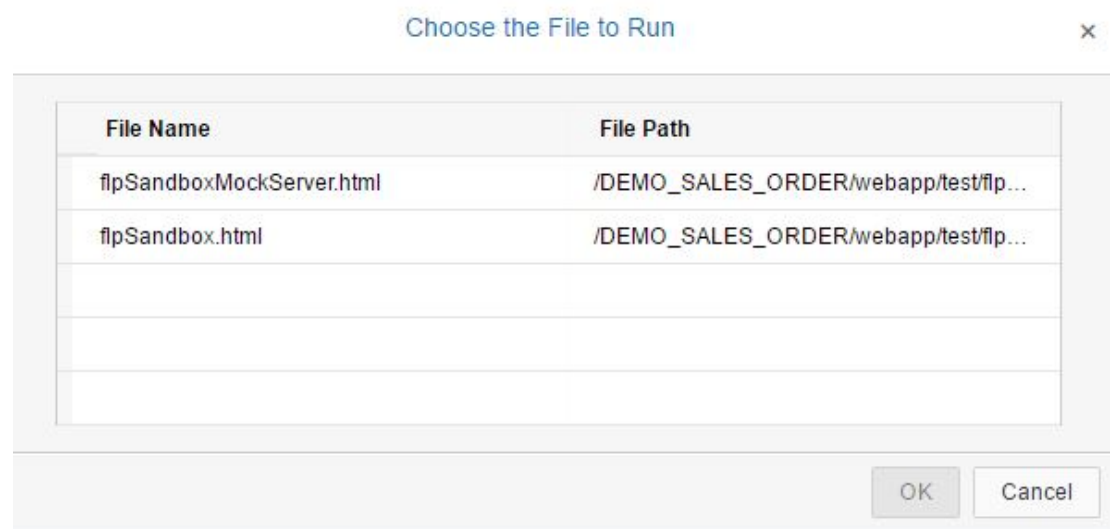
Click Next or Finish and its done !



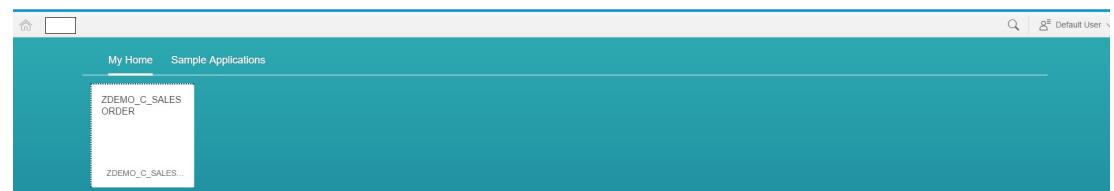
The project name is visible under the workspace. Right click on the project. Click Run as -> Web Application



If prompted, choose flp sandbox.html. These are used to for test data basically.



Click Ok. If prompted, for login credentials, enter the backend system details. Finally the app icon is displayed in the Catalog Tile.



Click on the App. If prompted for the login credentials, enter the back-end system details.

Click on Go in the app to display the sales order records.

Default User

Sales Order

Standard

Hide Filter Bar

Filters

Go

Sales Order ID:

Business Partner ID:

Standard

Set Lifecycle status to Paid

Delete

+

Sales Order ID	Business Partner ID	Currency	Total Gross Amount	Total Net Amount	Total Tax Amount	SO Lifecycle Status	
<input type="radio"/> 500003423	CARMEN	INR	3,300.000	900.000	100.000		>
<input type="radio"/> 500003430	SOFTTECH	INR	1,000.000	900.000	100.000		>
<input type="radio"/> 500003440	SAP LABS	INR	1,100.000	900.000	200.000	P	>
<input type="radio"/> 500003443	INDIGO	INR	1,100.000	900.000	200.000		>
<input type="radio"/> 500003448	SPICEJET	INR	1,100.000	900.000	200.000		>
<input type="radio"/> 500003449	AIRINDIA	INR	1,100.000	900.000	200.000	P	>
<input type="radio"/> 1000000001	LUFTHANSA	INR	1,000.000	910.000	100.000	P	>
<input type="radio"/> 1000000006	EMIRATES	INR	1,000.000	900.000	100.000	P	>
<input type="radio"/> 1000000008	AIRASIA	INR	1,000.000	900.000	100.000	P	>

Select the record by selecting the radio button and clicking. The navigation happens to the detail screen.

Default User

Sales Order

500003423

Edit

Delete

GrossAmount:

3,300.000

LifecycleStatus:

NetAmount:

900.000

TaxAmount:

100.000

GENERAL INFORMATION

SECOND FACET

General Information

Sales Order ID:

500003423

Business Partner ID:

CARMEN

Currency:

INR

Total Gross Amount:

3,300.000

SECOND FACET

Sales Order ID	Item Position	Currency	Total Gross Amount	Total Net Amount	Total Tax Amount
500003423	10	INR	3,000.00 INR	2,800.00 INR	200.00 INR

Click on Edit. For example, lets update the Gross Amount and click on Save.

Default User

Sales Order

500003423

GENERAL INFORMATIONSECOND FACET

General Information

Sales Order ID:
500003423

Business Partner ID:
CARMEN

Currency:
INR

Total Gross Amount:
3,500.000

SECOND FACET

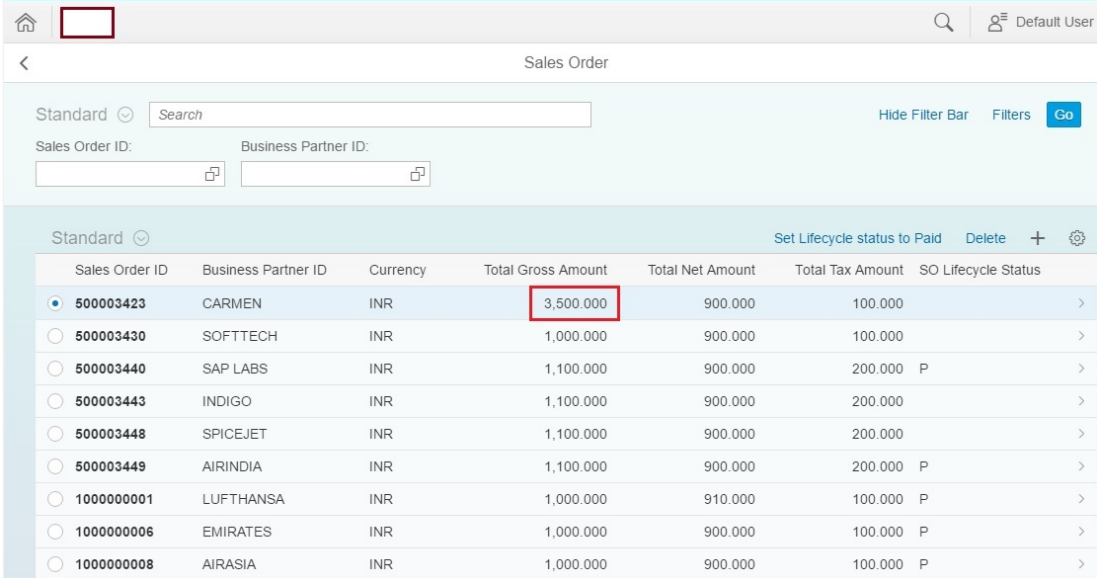
Sales Order ID	Item Position	Currency	Total Gross Amount	Total Net Amount	Total Tax Amount
500003423	10	INR	3,000.00 INR	2,800.00 INR	200.00 INR

SaveCancel

The Gross amount value is edited to 3500 INR. Click Save.

“Object saved” message appears. Go back to previous app page.

The new Gross amount is reflected here.



The screenshot shows the SAP Fiori Sales Order app interface. At the top, there is a search bar and a user profile icon labeled 'Default User'. Below the search bar, there are input fields for 'Sales Order ID' and 'Business Partner ID'. The main part of the screen displays a table of sales orders. The first row is selected, and the 'Total Gross Amount' of 3,500,000 is highlighted with a red box. The table has columns for Sales Order ID, Business Partner ID, Currency, Total Gross Amount, Total Net Amount, Total Tax Amount, and SO Lifecycle Status. There are also buttons for 'Set Lifecycle status to Paid', 'Delete', and a plus icon for creating new records.

Sales Order ID	Business Partner ID	Currency	Total Gross Amount	Total Net Amount	Total Tax Amount	SO Lifecycle Status
500003423	CARMEN	INR	3,500,000	900,000	100,000	
500003430	SOFTTECH	INR	1,000,000	900,000	100,000	
500003440	SAP LABS	INR	1,100,000	900,000	200,000	P
500003443	INDIGO	INR	1,100,000	900,000	200,000	
500003448	SPICEJET	INR	1,100,000	900,000	200,000	
500003449	AIRINDIA	INR	1,100,000	900,000	200,000	P
1000000001	LUFTHANSA	INR	1,000,000	910,000	100,000	P
1000000006	EMIRATES	INR	1,000,000	900,000	100,000	P
1000000008	AIRASIA	INR	1,000,000	900,000	100,000	P

The Edit is executed in BOPF via CDS and the particular BOPF node instance is edited. This is achieved as we have given the create/update/delete enabled in the final consumption CDS which delegates to the Basic CDS and then to BOPF.

```
@ObjectModel.createEnabled: true
@ObjectModel.updateEnabled: true
@ObjectModel.deleteEnabled: true
```

Create a new record.

In the basic CDS ZDEMO_I_SALESORDER, we have maintained the annotation @objectmodel.create enabled: true which means the create logic is taken care by BOPF.

Click on + icon in the app to create a new sales header record.

Enter the values and click on Save.

Home | Search | Default User

< Sales Order

New Sales Order 4000000000

GENERAL INFORMATION

General Information

*Sales Order ID:
4000000000

Business Partner ID:
PARTNER XY

Currency:
INR

Total Gross Amount:
888,888.000

1 | Save | Cancel

An object saved message appears. The record is saved. Go to previous page and see the newly created record.

Home | Search | Default User

< Sales Order

Standard Search | Hide Filter Bar | Filters | Go

Sales Order ID: | Business Partner ID: |

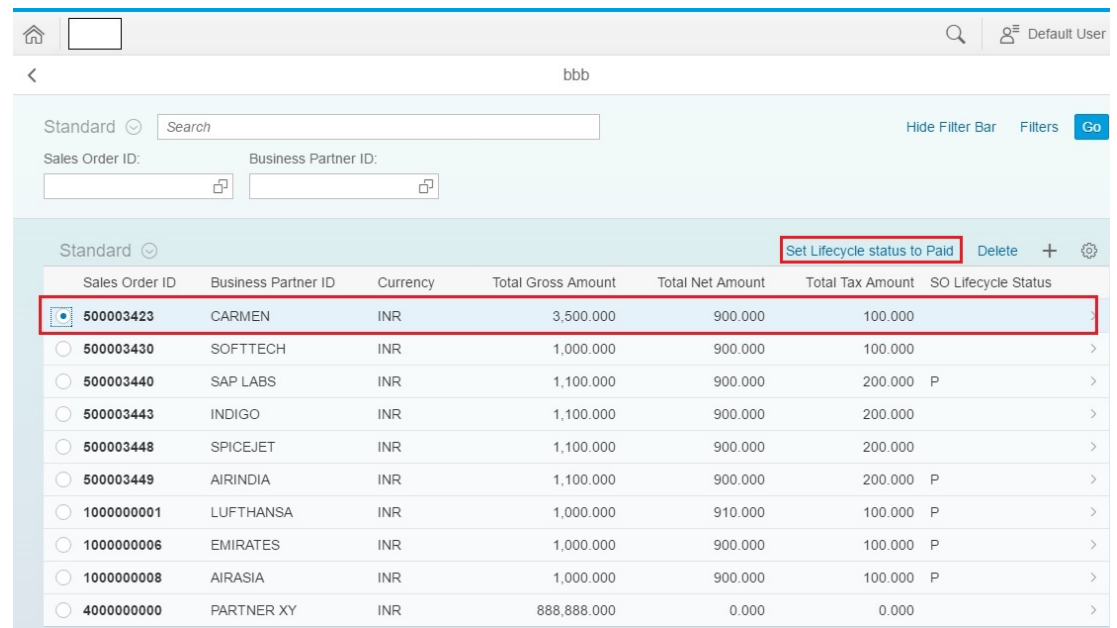
Standard | Set Lifecycle status to Paid | Delete | + |

	Sales Order ID	Business Partner ID	Currency	Total Gross Amount	Total Net Amount	Total Tax Amount	SO Lifecycle Status	
<input type="radio"/>	500003423	CARMEN	INR	3,500.000	900.000	100.000	P	>
<input type="radio"/>	500003430	SOFTTECH	INR	1,000.000	900.000	100.000		>
<input type="radio"/>	500003440	SAP LABS	INR	1,100.000	900.000	200.000	P	>
<input type="radio"/>	500003443	INDIGO	INR	1,100.000	900.000	200.000		>
<input type="radio"/>	500003448	SPICEJET	INR	1,100.000	900.000	200.000		>
<input type="radio"/>	500003449	AIRINDIA	INR	1,100.000	900.000	200.000	P	>
<input type="radio"/>	1000000001	LUFTHANSA	INR	1,000.000	910.000	100.000	P	>
<input type="radio"/>	1000000006	EMIRATES	INR	1,000.000	900.000	100.000	P	>
<input type="radio"/>	1000000008	AIRASIA	INR	1,000.000	900.000	100.000	P	>
<input type="radio"/>	4000000000	PARTNER XY	INR	888,888.000	0.000	0.000		>

The delete icon works the same way. Just select an record and click on delete.

Change the sales order Lifecycle status

Select an sales order which has initial status and click on icon “Set Lifecycle Status to Paid”. The code which we have written for the BOPF Action is triggered and the status is changed to P.



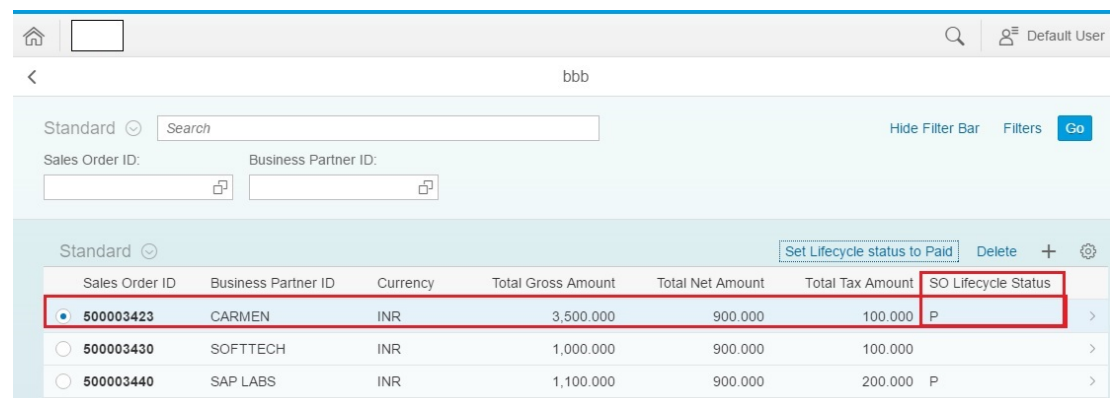
Standard Hide Filter Bar Filters Go

Sales Order ID: Business Partner ID:

Standard Set Lifecycle status to Paid Delete +

Sales Order ID	Business Partner ID	Currency	Total Gross Amount	Total Net Amount	Total Tax Amount	SO Lifecycle Status
500003423	CARMEN	INR	3,500.000	900.000	100.000	
500003430	SOFTTECH	INR	1,000.000	900.000	100.000	
500003440	SAP LABS	INR	1,100.000	900.000	200.000	P
500003443	INDIGO	INR	1,100.000	900.000	200.000	
500003448	SPICEJET	INR	1,100.000	900.000	200.000	
500003449	AIRINDIA	INR	1,100.000	900.000	200.000	P
1000000001	LUFTHANSA	INR	1,000.000	910.000	100.000	P
1000000006	EMIRATES	INR	1,000.000	900.000	100.000	P
1000000008	AIRASIA	INR	1,000.000	900.000	100.000	P
4000000000	PARTNER XY	INR	888,888.000	0.000	0.000	

Lifecycle status has changed to P(Paid)



Standard Hide Filter Bar Filters Go

Sales Order ID: Business Partner ID:

Standard Set Lifecycle status to Paid Delete +

Sales Order ID	Business Partner ID	Currency	Total Gross Amount	Total Net Amount	Total Tax Amount	SO Lifecycle Status
500003423	CARMEN	INR	3,500.000	900.000	100.000	P
500003430	SOFTTECH	INR	1,000.000	900.000	100.000	
500003440	SAP LABS	INR	1,100.000	900.000	200.000	P

That's it. Hope this is helpful.

The same technique can be used for SAP Standard tables. Below is an quick example of using Standard tables VBAK and VBAP.

Basic Sales Order header CDS


```

1 @AbapCatalog.sqlViewName: 'ZDL_I_SALESORDER'
2 @AbapCatalog.compiler.compareFilter: true
3 @AccessControl.authorizationCheck: #NOT_REQUIRED
4 @EndUserText.label: 'SALESORDER TEST'
5
6 //VDM
7 @VDM.viewType: #BASIC
8
9 //BOPF
10 @ObjectModel: {
11     compositionRoot: true,
12     transactionalProcessingEnabled: true,
13     writeActivePersistence: 'VBAK',
14     semanticKey: 'VBELN',
15     representativeKey: 'VBELN',
16     createEnabled: true,
17     updateEnabled: true,
18     deleteEnabled: true
19 }
20
21 define view Z I Salesorder
22 as select from vbak
23
24 association [0..*] to Z_I_SalesOrderItem as _Item on $projection.vbeln = _Item.vbeln
25 {
26
27     key vbak.vbeln,
28         vbak.vbtyp,
29         vbak.auart,
30
31     @ObjectModel.association.type: #TO_COMPOSITION_CHILD
32     _Item
33 }
34

```

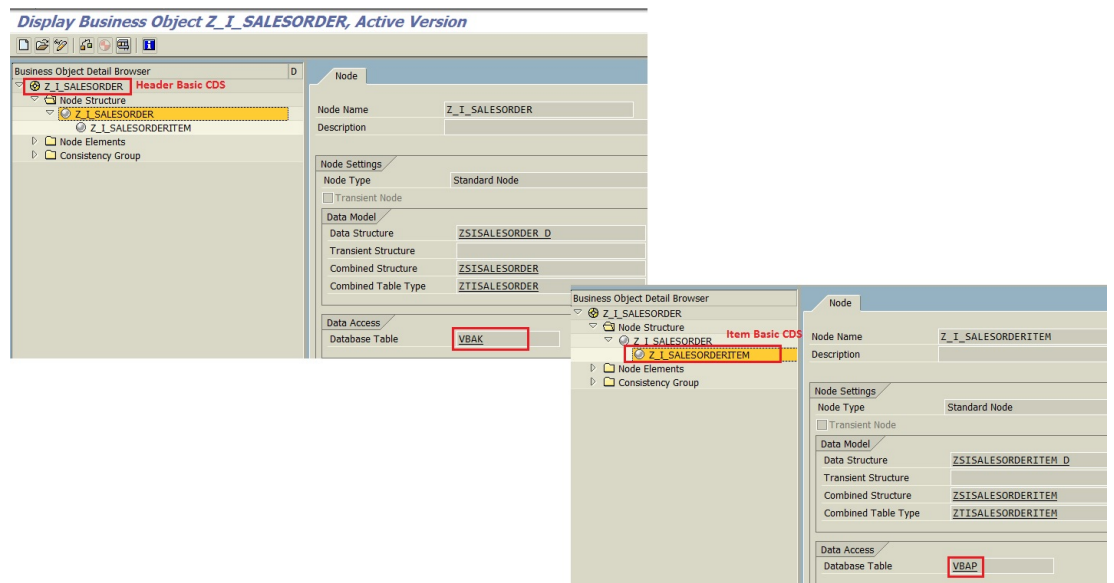
Basic Sales Order Item CDS

```

1 @AbapCatalog.sqlViewName: 'ZDDL_I_SLSORDITM'
2 @AbapCatalog.compiler.compareFilter: true
3 @AccessControl.authorizationCheck: #NOT_REQUIRED
4 @EndUserText.label: 'SALES ORDER ITEM'
5
6 //VDM
7 @VDM.viewType: #BASIC
8
9 //BOPF
10 @ObjectModel: {
11     writeActivePersistence: 'VBAP',
12     semanticKey: [ 'VBELN', 'POSNR' ],
13     representativeKey: 'POSNR',
14     createEnabled: true,
15     updateEnabled: true,
16     deleteEnabled: true
17 }
18
19 define view Z I SalesOrderItem
20 as select from vbap
21
22 association [1..1] to Z_I_Salesorder as _Header on $projection.vbeln = _Header.vbeln
23 {
24
25     key vbap.vbeln,
26     key vbap.posnr, //as SalesDocumentItem,
27         vbap.pstyp, //as SalesDocumentItemCategory,
28         vbap.posar, //as SalesDocumentItemType,
29         vbap.shkzg, //as IsReturnsItem,
30
31     @ObjectModel.association.type: [#TO_COMPOSITION_PARENT, #TO_COMPOSITION_ROOT]
32     _Header
33 }
34
35

```

And here are corresponding BOPF objects generated using the CDS annotations.



These are just the Basic CDS views. Use these in the consumption CDS similar to the example demonstrated in Part 1.

Alert Moderator

Assigned tags

ABAP Development

SAP Fiori

SAPUI5

cds abap

cds annotations

cds associations

cds bopf

[View more...](#) >

Similar Blog Posts

[Create Fiori app using CDS with BOPF- For beginners Part 1](#)

By Former Member Sep 20, 2016

[Creating a draft enabled Sales Order Fiori App using the new ABAP Programming Model - Part 1: Overview](#)

By Geert-Jan Klaps Mar 11, 2019

Getting Started with ABAP Core Data Services (CDS)

By Carine Tchoutouo Djomo Feb 01, 2016

Related Questions



CDS + BOPF + UI5. Call BAPI?

By Suwandi Cahyadi Jun 24, 2019

Why need multiple authorization check for FIORI app?

By Akshath LT Dec 14, 2018

Interactive / Draft Fiori Apps in NW 7.51 SP1 ?

By Attila Berencsi Feb 08, 2017

Join the Conversation



SAP TechEd

Tune in for tech talk. Stay for inspiration. Upskill your future.



Coffee Corner

Join the new Coffee Corner Discussion Group.

13 Comments

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



Shankar Agarwal

September 22, 2016 at 8:33 am

So we are not supposed to write any UI5 code for the events?

Like 0 | Share



Former Member | Blog Post Author

September 22, 2016 at 2:52 pm

I have used Smart templates here. Coding can be done once the controllers and xml files are generated. Else you can try using Smart control's.

Like 0 | Share



Former Member

October 11, 2016 at 8:27 pm

Hi, I couldn't find the code example for BOPF action.

Like 0 | Share



Former Member | Blog Post Author

October 16, 2016 at 2:21 pm

Hi Pedro,

During the transition to new SCN UI, I guess the code was missed somewhere. I have re-provided the Action class code now.

Regards,
Sujin

Like 0 | Share

Christian Drumm

December 1, 2016 at 7:41 am

Hi Sujin,

first of all great blog!

I tried to follow your examples but ran into a problem when executing the generated Web application. When I start the app I only see the header of the page. However, the content is not loaded. I looked at the error console and network traffic in Chrome and saw the following error messages:

- Annotation Helper: Spaces are not allowed in ID parts. Please check the annotations, probably something is wrong there

- Uncaught (in promise) Error:
"TEST_PROG_MODEL::sap.suite.ui.generic.template.ListReport.view.ListReport::Zcd_C_Salesorder--action::ERROR: Mandatory Value for Action not found" is not a valid ID.

Do you have any idea what the cause of these errors could be and how to solve them?

Thanks
Christian

Like 0 | Share



Former Member

February 16, 2017 at 9:10 pm

My question is that for using CDS view, we need to know the SAP tables inside and out for all the fields and rules and then it wouldn't count the customer enhancements. Can we build CDS views with BAPI calls to validate?

I've always used BAPI or known FM to report; This way all the custom enhancement at least at the Business Object layer include automatically in the reporting. Is this something in plan with SAP?

Like 0 | Share

Saranya sakthivel

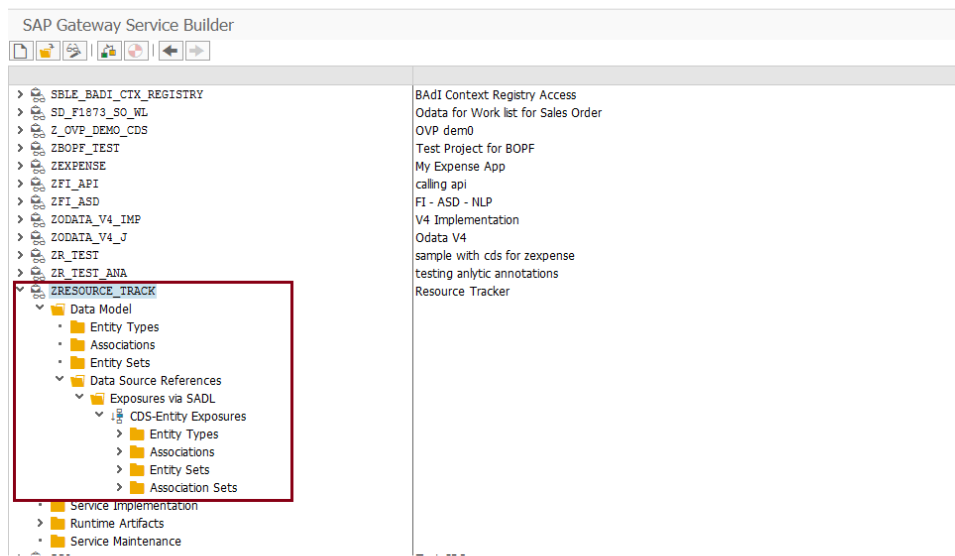
March 3, 2017 at 10:38 am

Hi Sujin,

Good Day .

we are trying to create a UI application with the CDS , Gateway and BOPF framework. The issue is, **BOPF actions are not retrieved as Function imports in the gateway service.**

1. We have created a CDS view, with the annotations for generating Business Object.
2. Business object is created in the back end . We have created one custom Action for our BO object .
3. We are not directly exposing CDS as service. we are using Gateway client for this.
4. We have imported the CDS as below. But it is not bringing the Function imports here (which is implemented as Action in BO object)



Please help us here with your suggestions.

Thanks & Regards,

Saranya Sakthi.

Like 0 | Share

Samson Moses

January 9, 2020 at 12:55 am

Hi Saranya,

I have the exact situation where the CDS + BOPF is exposed as OData service. In SEGW we used reference data source to build our service model.

But I not seeing the function import (BOPF Action nodes). Can you provide some insights of how you had resolved the same?

Regards,

Samson.

Like 0 | Share

Sebastian Gesiarz

April 14, 2017 at 11:03 am

Hello Sujin,

Thank you for a great tutorial.

My OData service does not seem to be running in web IDE. In results in the "Service is not available" error. Could you please tell what could be the possible cause? It is running fine in SEGW. The service & metadata has been published successfully.

Like in the snapshots below. Please take a look.

Service status – Green

The screenshot displays the 'Get Services' interface in SAP Web IDE. The 'Filter' section at the top includes fields for 'System Alias' (LOCAL), 'Technical Service Name' (ZDEMO_C_SALESORDER_CDS), 'Version' (1), 'External Service Name' (ZDEMO_C_SALESORDER_CDS), and 'External Mapping ID'. Below this is the 'Add Service' button and a detailed configuration form for the service. The form includes sections for 'Service' (Technical Service Name, Service Version, Description, External Service Name, Namespace, External Mapping ID, External Data Source Type), 'Model' (Technical Model Name, Model Version), 'Creation Information' (Package Assignment, Local Object), 'ICF Node' (Standard Mode, None, Set Current Client as Default Client in ICF Node), and 'OAuth enablement' (Enable OAuth for Service). An 'Information' dialog box is overlaid on the right, displaying a success message: 'Service 'ZDEMO_C_SALESORDER_CDS' was created and its metadata was loaded succesfully.' The dialog has a green checkmark icon and a question mark icon at the bottom right.

Get Services

Filter

System Alias: LOCAL

Technical Service Name: ZDEMO_C_SALESORDER_CDS

Version: 1

External Service Name: ZDEMO_C_SALESORDER_CDS

External Mapping ID:

Add Service

Service

Technical Service Name: ZDEMO_C_SALESORDER_CDS

Service Version: 1

Description: ZDEMO_C_SALESORDER

External Service Name: ZDEMO_C_SALESORDER_CDS

Namespace:

External Mapping ID:

External Data Source Type: C

Model

Technical Model Name: ZDEMO_C_SALESORDER_CDS

Model Version: 1

Creation Information

Package Assignment: \$TMP

Local Object

ICF Node

Standard Mode

None

Set Current Client as Default Client in ICF Node

OAuth enablement

Enable OAuth for Service

Information

Service 'ZDEMO_C_SALESORDER_CDS' was created and its metadata was loaded succesfully.

ICF Node	Call Browser	SAP Gateway Client										
<h3>ICF Nodes</h3> <table><thead><tr><th>Status</th><th>ICF Node</th><th>Session Time-out Soft State</th><th>Description</th></tr></thead><tbody><tr><td></td><td>ODATA</td><td>00:00:00</td><td>Standard Mode</td></tr></tbody></table>			Status	ICF Node	Session Time-out Soft State	Description		ODATA	00:00:00	Standard Mode		
Status	ICF Node	Session Time-out Soft State	Description									
	ODATA	00:00:00	Standard Mode									
<h3>System Aliases</h3> <table><thead><tr><th>SAP System Alias</th><th>Description</th><th>Default</th><th>Metadata</th><th>User Role</th></tr></thead><tbody><tr><td>LOCAL_PGWS</td><td>Local System PGW</td><td><input checked="" type="checkbox"/></td><td><input type="checkbox"/></td><td></td></tr></tbody></table>			SAP System Alias	Description	Default	Metadata	User Role	LOCAL_PGWS	Local System PGW	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
SAP System Alias	Description	Default	Metadata	User Role								
LOCAL_PGWS	Local System PGW	<input checked="" type="checkbox"/>	<input type="checkbox"/>									

Odata request checks – all OK

HTTP Method: ☒ GET ☐ POST ☐ PUT ☐ PATCH ☐ MERGE ☐ DELETE ☐ Reuse HTTP Connection (e.g. for Soft State)

Request URI: /sap/opu/odata/sap/ZDEMO_C_SALESORDER_CDS/Zdemo_C_Salesorder

Protocol: ☒ HTTP ☐ HTTPS

Test Case:

HTTP Response - Processing Time = 383 ms

Header Name	Value
~status_code	200
~status_reason	OK
sap-processing-info	microhub=,crp=,st=,MedCacheHub=SHM,MedCacheBEP=SHM,codeployed=X,soft...

```

- <feed xmlns="http://www.w3.org/2005/Atom"
  xmlns:m="http://schemas.microsoft.com/ado/2007/08/dataservices/metadata"
  xmlns:d="http://schemas.microsoft.com/ado/2007/08/dataservices" xml:base="http://s4demo21.sap-cc.com:50000/sap/opu/odata/sap/ZDEMO_C_SALESORDER_CDS/">
  <id>http://s4demo21.sap-cc.com:50000/sap/opu/odata/sap/ZDEMO_C_SALESORDER_CDS/Zdemo_C_Salesorder</id>
  <title type="text">Zdemo_C_Salesorder</title>
  <updated>2017-04-14T10:52:47Z</updated>
  <author>
    <name />
  </author>
  <link href="Zdemo_C_Salesorder" rel="self" title="Zdemo_C_Salesorder" />
  <entry>
    <id>http://s4demo21.sap-cc.com:50000/sap/opu/odata/sap/ZDEMO_C_SALESORDER_CDS/Zdemo_C_Salesorder('111111111')</id>
    <title type="text">Zdemo_C_Salesorder('111111111')</title>
    <updated>2017-04-14T10:52:47Z</updated>
    <category term="ZDEMO_C_SALESORDER_CDS.Zdemo_C_SalesorderType"
      scheme="http://schemas.microsoft.com/ado/2007/08/dataservices/scheme" />
    <link href="Zdemo_C_Salesorder('111111111') rel="edit" title="Zdemo_C_SalesorderType" />
    <link href="Zdemo_C_Salesorder('111111111')/to_Item"
      rel="http://schemas.microsoft.com/ado/2007/08/dataservices/related/to_Item"
  </entry>
  </feed>

```

Error while selecting from Web IDE:

State Selection Basic Information Data Connection Annotation Selection Template Customization Confirmation

New List Report Application

Data Connection

Service ZDEMO_C_SALESORDER_CDS is unavailable.

Choose a service from one of the sources listed below.

Sources

Service Catalog

Workspace

File System

Service URL

Choose a system, explore, and select a service. Optionally, you can drill down into the service details.

Service	Description	System
ZDEMO_C_SALESORDER_CDS	ZDEMO C SALESORDER CDS	SAP
ZXRH_OV_AIRLINE_CDS	ZXRH OV AIRLINE CDS	SAP
ZXSHC_AIRLINEQUERY_CDS	ZXSHC AIRLINEQUERY CDS	SAP

Service: ZDEMO_C_SALESORDER_CDS

Service Details

Diagram

Name: ZDEMO_C_SALESORDER_CDS

Description: ZDEMO_C_SALESORDER_CDS

Status: Service is unavailable.

System: SAP

Type: OData

OData Version: 4.0

Author: SAP

Last Updated Date: Fri Apr 14 2017 12:32:58 GMT+0200 (Central European Daylight Time)

Service Version: 1

Tags:

URL: https://webide-p1940928801nai.dispatcher.hanabial.ondemand.com/destinations/S4V/sap/opu/...

for example those two are working OK

I'm looking forward to your reply.

Thank you & Best regards,

Sebastian

Like 0 | Share

Prasenjit Singh Bist

July 15, 2017 at 4:51 pm

Hi,

I am myself a big fan of the BOPF framework for quite sometime now but isn't it an overkill to go for such ways when a simple oDATA as function import. That would have been a rather simple way to go.

Xie Zhanli

December 12, 2017 at 11:25 am

Hi Former Member,

I also encountered the same error reported by [Christian Drumm](#)

【Annotation Helper: Spaces are not allowed in ID parts. Please check the annotations, probably something is wrong there】.

Could anyone can help on solving this issue?

```

❌ ▶ Failed to load resource: the server responded with a status of 404 (Not found: http://localhost:8080/file/XIEZAC-OrionContent/ZBOPF_UI5/webapp/i18n/ObjectPage/ZDEMO_C_SA sinon.js?eval
LESORDER_ITEM/i18n_zh_CN.properties)
❌ ▶ Failed to load resource: the server responded with a status of 404 (Not found: http://localhost:8080/file/XIEZAC-OrionContent/ZBOPF_UI5/webapp/i18n/ObjectPage/ZDEMO_C_SA sinon.js?eval
LESORDER_ITEM/i18n_zh.properties)
❌ ▶ Failed to load resource: the server responded with a status of 404 (Not found: http://localhost:8080/file/XIEZAC-OrionContent/ZBOPF_UI5/webapp/i18n/ObjectPage/ZDEMO_C_SA sinon.js?eval
LESORDER_ITEM/i18n_en.properties)
❌ ▶ Failed to load resource: the server responded with a status of 404 (Not Found) sinon.js?eval
❌ ▶ 2017-12-12 18:47:07.122040 Could not load theme parameters from: /resources/sap/collaboration/themes/sap_belize/library-parameters.json - Not Found jquery.sap.global-dbg.js:999
❌ ▶ Failed to load resource: the server responded with a status of 404 (Not Found) library.css
❌ ▶ 2017-12-12 18:47:07.239699 TemplateComponent: no valid cache key segment last modification date provided by the OData Model - jquery.sap.global-dbg.js:999
❌ ▶ Failed to load resource: the server responded with a status of 404 (Not Found) library.css
❌ ▼ 2017-12-12 18:47:07.598235 Annotation Helper: Spaces are not allowed in ID parts. Please check the annotations, probably something is wrong there. - jquery.sap.global-dbg.js:999
K @ jquery.sap.global-dbg.js:999

❌ ▶ 2017-12-12 18:47:07.598520 The function import ERROR: Mandatory Value for Action not found is not defined in the metadata. Buttons that call this function jquery.sap.global-dbg.js:999
import will not behave as expected. -
❌ ▶ 2017-12-12 18:47:07.606675 Annotation Helper: Spaces are not allowed in ID parts. Please check the annotations, probably something is wrong there. - jquery.sap.global-dbg.js:999
❌ ▼ 2017-12-12 18:47:07.698739 sap.ui.comp.navpopover.SemanticObjectController: Please be aware that in case of a large amount of semantic objects the
performance may suffer significantly and the received links will be created out of context - jquery.sap.global-dbg.js:999
K @ jquery.sap.global-dbg.js:999

❌ Uncaught (in promise) Error: "ZBOPF_UI5zbopf_ui5::sap.suite.ui.generic.template.ListReport.view.ListReport::ZDEMO_C_SALESORDER--action::ERROR: Mandatory Value ManagedObject-dbg.js:381
for Action not found" is not a valid ID.
    at f.constructor (ManagedObject-dbg.js:381)
    at f.constructor (Element-dbg.js:99)
    at f.constructor (Control-dbg.js:103)
    at new f (Metadata-dbg.js:346)
    at k (eval at evalModuleStr (jquery.sap.global-dbg.js:3315), <anonymous>:572:6343)
    at h (eval at evalModuleStr (jquery.sap.global-dbg.js:3315), <anonymous>:572:2754)
    at g (eval at evalModuleStr (jquery.sap.global-dbg.js:3315), <anonymous>:572:2497)
    at Q (eval at evalModuleStr (jquery.sap.global-dbg.js:3315), <anonymous>:572:5485)
    at P (eval at evalModuleStr (jquery.sap.global-dbg.js:3315), <anonymous>:572:5101)
    at k (eval at evalModuleStr (jquery.sap.global-dbg.js:3315), <anonymous>:572:6172)
```

Best Regards,

Zac,Xie

Like 0 | Share

Vikki Asati

October 10, 2019 at 1:29 pm

Hi,

Thanks for awesome blog.

I have applied same concept in one example. Need to populate some common data from Header to line item while creating line item.

I have no idea about how to achieve auto fill line item record from header one. Please give suggest to complete my requirement.

Like 0 | Share

Nilesh Puranik

May 17, 2020 at 5:15 pm

Hello,

Thank you very much for a very informative blog.

1 question.

If i wish to update multiple records for the BOPF action, what changes should i need to do ?

(1) The table displayed should have Multiselect instead of Single select ? —> How ?

(2) The action defined should be 'MultiInstance' instead of 'Single instance' ??? —> Is that correct?

Please advice,

Br

Nilesh

Like 0 | Share

Find us on

Privacy	Terms of Use
Legal Disclosure	Copyright
Trademark	Cookie Preferences
Newsletter	Support