

Defaulting in Purchase Orders page when Business Rules do not allow.

Our comments.

Defaulting data saves time from users entering data, so it saves money.

DISCLAIMER: this is for investigation, use at your discretion, no guarantee provided.

Introduction/Goal

The new Redwood Purchase Orders page stores the data in a draft business object, so when we create and then navigate to a Purchase Order, there is already some data stored.

We are going to work on the following requirements:

“When the user navigates to the purchase order, some data will be defaulted without any other condition, and some data will be defaulted depending on the supplier”.

We have chosen 2 columns for learning purposes:

- a) Description in the header of the purchase order.
- b) A new flexfield attribute will be created for the demo to store a flag to control when default has been applied to not repeat indefinitely.

The defaulting provided in this demo will be basic.

Where we want our values?

Navigate from main menu.



Click to select one purchase order (create one if not available).

Purchase Orders Create Purchase Order

Invoice Holds: 1 Overdue: 116 Draft and Rejected: 74

Search:

Purchase Orders All Buyer John Dunbar Supplier Order Status Requisitioning BU Filters Clear (1)

Edit Duplicate Communicate More Actions Delete Orders Schedules Download Print

Order	Order Status	Description	Supplier	Total	Buyer	Requisition	Requisitioning BU	Requester
US165091	Incomplete	From ext 2	Building Management	0.00 USD	John Dunbar		US1 Business Unit	
US165083	Incomplete	American Telephone and Telegraph		0.00 USD	John Dunbar		US1 Business Unit	
US165082	Incomplete	Amazon		0.00 USD	John Dunbar		US1 Business Unit	
US165080	Incomplete	Amazon		0.00 USD	John Dunbar		US1 Business Unit	

For this demo we already have created some draft purchase orders.

ORACLE Purchase Order US165091 Incomplete Cancel Save Actions Submit

Sold-to Legal Entity: US1 Legal Entity Creation Date: 3/25/25

Supplier: Building Management Supplier Site: BM US1 Buyer: John Dunbar Total: 0.00 USD

Bill-to Location: Seattle Description: From ext 2

Lines Schedules Distributions Additional Order Details

Delete

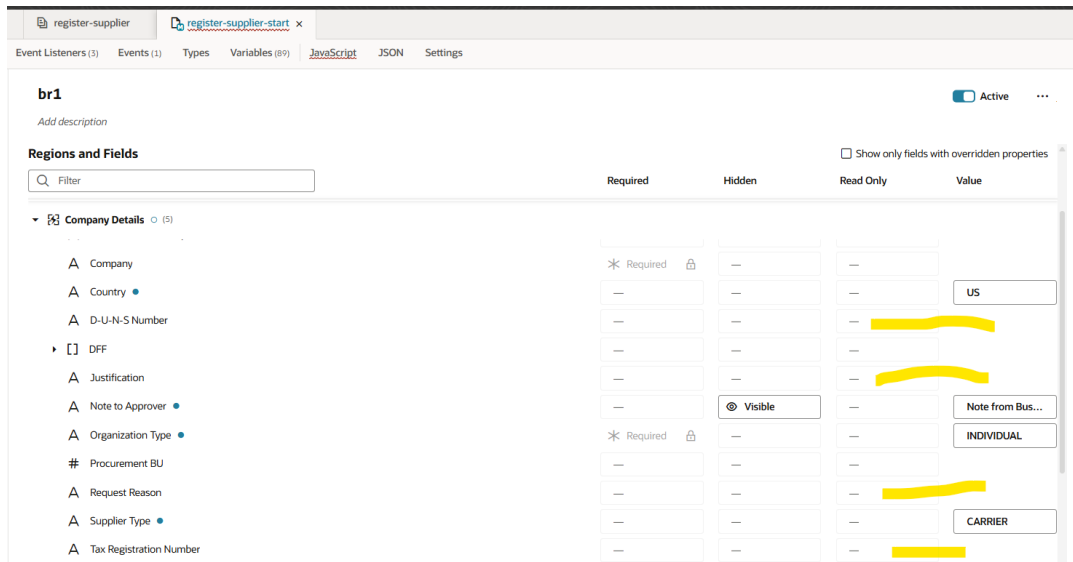
Line*	Line Type*	Item	Category Name*	Description*	Quantity	UOM	Price*	Ordered	Supplier Item	Action
1	Goods									✓ ✕

Note that defaulting is a feature not supported some times in Redwood pages.

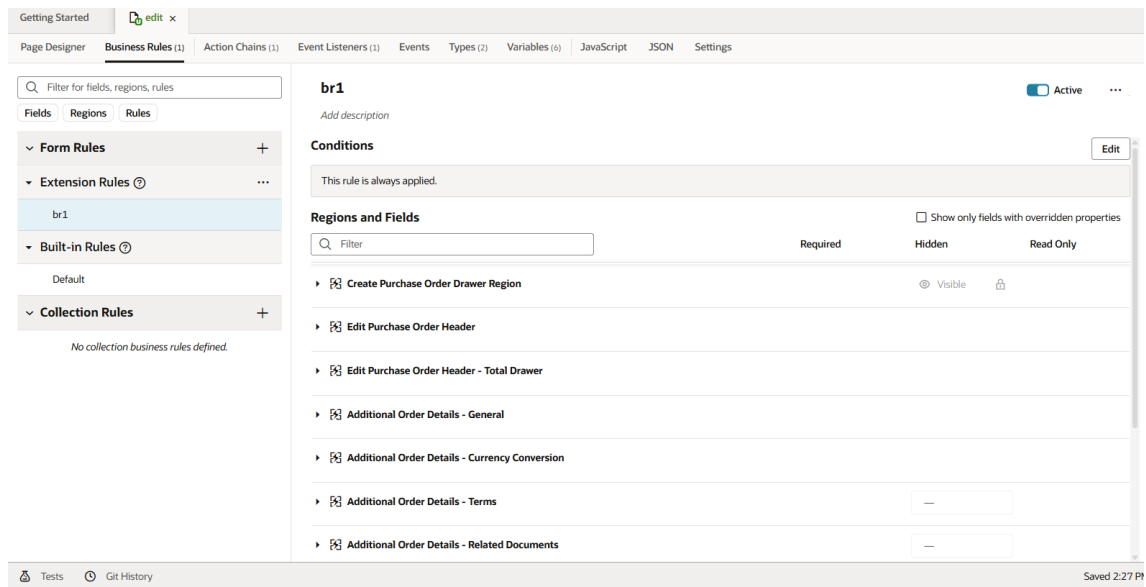
Currently (release 25A) the default values feature seems not supported in Purchase Orders Redwood page.

In the next screenshot that shows business rules for Suppliers Redwood page, defaulting it is allowed for some fields, but not for others.

Notice the column Value on the right side of the page.



In the next page for business rules of Purchase Orders page, notice it is not allowed at all.



BUT

After some investigation, we got code that allows us to default values with the desired logic.

Preparation steps.

Step 1. Activate Redwood Purchase Orders page. Roles and profile option.

At the time of this writing (release 25A), Redwood Purchase Orders pages are not enabled by default.

We will show how to activate, in case your user is not able to see it.

To enable, follow these steps:

- Enable this profile option: `ORA_PO_PURCHASE_ORDERS_REDWOOD_ENABLED` at site level.
- Run the *ESS job to create index definition and perform initial ingest to OSCS* scheduled process with this index name: **Purchase Orders: fa-prc-po**.
- Create an Abstract Common role and include these privileges:
 - `PO_MANAGE_PO_WITH_REDWOOD_PRIV`
 - `PO_VIEW_PURCHASING_WORKAREA_PRIV`
 - `PO_SEARCH_PURCHASE_ORDER_PRIV`
- Assign role just created to user as needed.

Step 2. SaaS roles for customization and Purchase Orders.

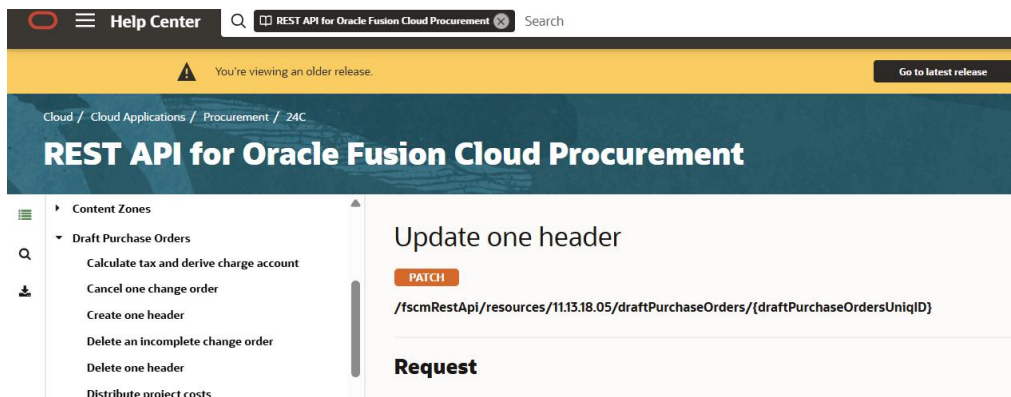
For developing this demo, we need a user with roles to access Visual Builder to work with extensions and to search and manage purchase orders.

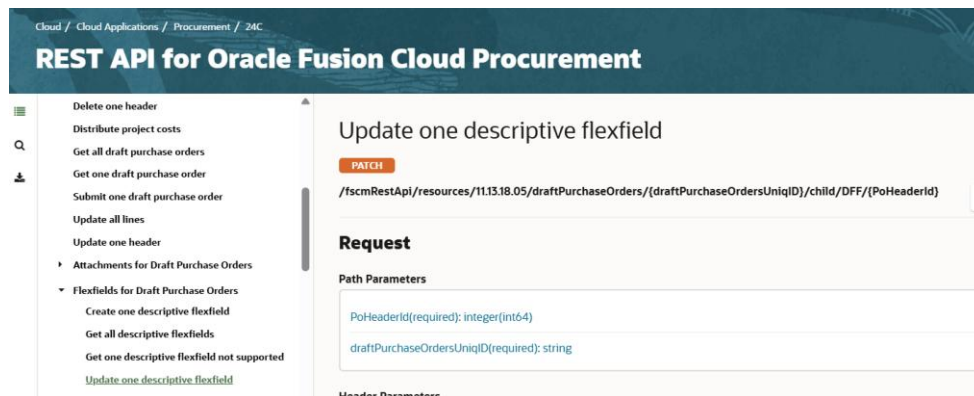
<https://www.youtube.com/watch?v=BFwOC3bOj3A>

Step 2. REST API needed.

The REST API's Endpoints needed have been the following.

<https://docs.oracle.com/en/cloud/saas/procurement/24c/fapra/op-draftpurchaseorders-draftpurchaseordersuniqid-patch.html>

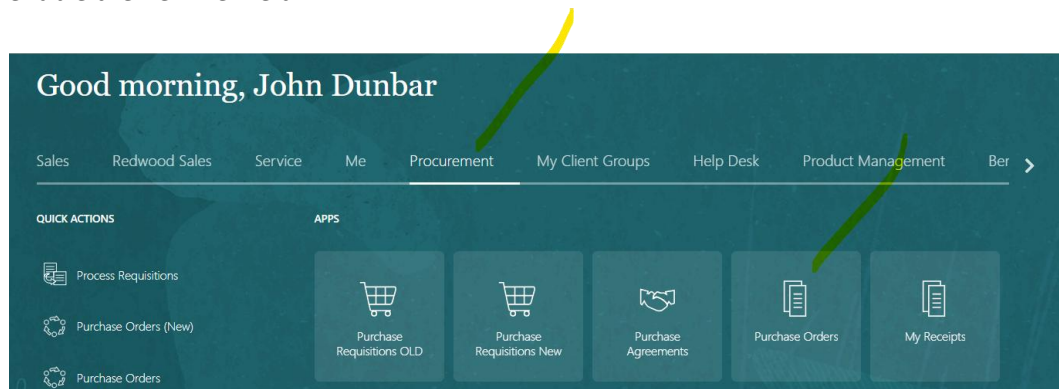




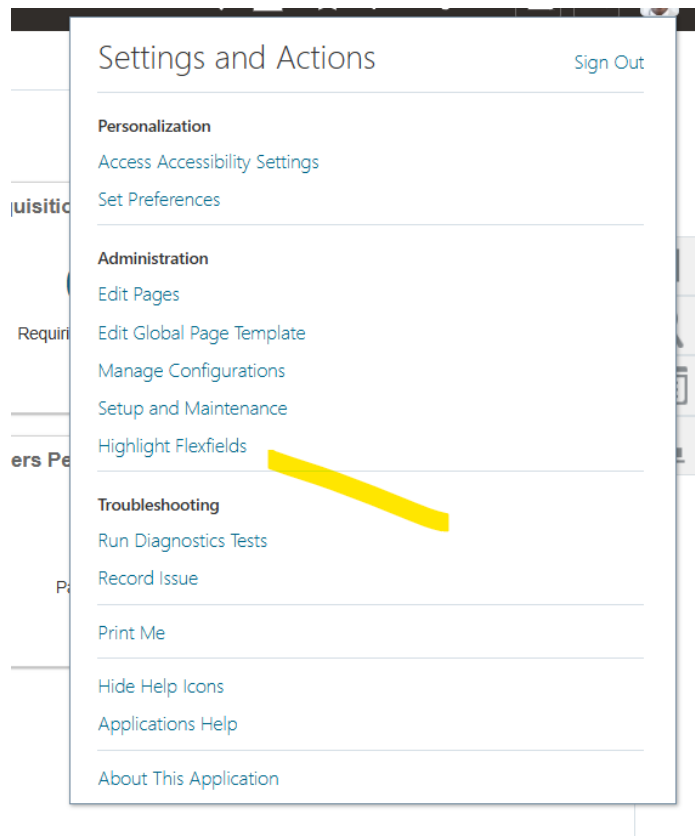
Step 3. New Flexfield setup in SaaS.

Navigate to classic Purchase Orders page and enable to set up as shown below.

To enable the new flexfield.



Click this link to enable Flexfields.



Query some purchase orders, pressing button “Search” on the right.

Manage Orders Done

Headers Schedules

Search

Advanced Manage Watchlist Saved Search All My Orders

** Keywords

Procurement BU US1 Business Unit

** Supplier

** Buyer

** Order

** Requisition

Status

Include Closed Documents

Search Reset

Search Results

Actions View Format Freeze Detach Wrap

Order	Description	Special Handling Type	Supplier	Ordered	Currency	Status	Life Cycle	Change Order	Creation Date
No search conducted.									

Click on a purchase order link.

Manage Orders ?

Headers

Schedules

Search

Search Results

Actions

View

Format

+

Freeze

Detach

Wrap

Order	Description
US165091	From ext 2
US165083	
US165082	
US165080	

Columns Hidden 50

Click on “Tools” Icon used to set up Descriptive Flexfields.

Purchase Order: US165091 ? ★

Sold-to Legal Entity

US1 Legal Entity

Supplier Contact

Dan Cane

Bill-to BU

US1 Business Unit

Additional Contact Email

Order

US165091

Communication Method

None

Status

Incomplete

Bill-to Location

Seattle

Buyer

John Dunbar

Ship-to Location

Overriding Approver

Creation Date

3/25/25

Checklist

Terms

Notes and Attachments

Required Acknowledgment

No

Shipping Method

UPS

Payment Terms

Net 30

Freight Terms

Buyer pays freight

FOB

Origin

Additional Information

Descriptive Flexfield

DemoJJ

From ext 2

Contract Type

Add global segment

+

Contract Number

Eligible for Rebate?

Now click on Edit icon to add a new attribute (we select ATTRIBUTE10 because is the one free in our instance).

FlexModeSetup

Manage Flexfields

Manage Flexfields ?

Search Results

Actions

View

Format

Freeze

Detach

Wrap

Deploy Flexfield

Name	Type	Module	Flexfield Code	Entity Usages	Description	Deployment Status	Deployment Error Message	Deployment Date
Purchasing Document Headers	Descriptiv...	Common Purchasing Enti...	PO_HEADERS		A document header which...			6/19/21 1:36 AM

The set up data for our example.

FlexMode Setup
Manage Flexfields

Create Segment ?

Flexfield Name: Purchasing Document Headers

Flexfield Code: PO_HEADERS

Name: DemoJJ
Code: DemoJJ
API Name: demojj

Description:

☒ Enabled

Column Assignment

Data Type: Character

Table Column: ATTRIBUTE10

Validation

Value Set: 30 Characters
Value Set Description: 30 Characters, no validation

Range Type:
☐ Required

Initial Default

Default Type:

Derivation Value:

Display Properties

The result after our set up.

Edit Descriptive Flexfield: Purchasing Document Headers ?

Warning: Task Flexfield is in read-only mode because this tool is not activated in this sandbox. Activate this tool to make changes.

Manage Contexts Manage Segment Labels

Global Segments

Sequence	Name	Table Column	Value Set	Prompt
10	Contract Type	ATTRIBUTE1	ContractType	Contract Type
30	Customer PO	ATTRIBUTE2	30 Characters	Customer PO
40	Warranty Expiration Date	ATTRIBUTE_DATE1	GL_SRS_STANDARD_DATE	Warranty Expiration Date
50	Contract Number	ATTRIBUTE3	30 Characters	Contract Number
60	DemoJJ	ATTRIBUTE10	30 Characters	DemoJJ

Columns Hidden 9

Now after re-login our user we will see the new descriptive flexfield in classical ADF page.

Purchase Order: US165091 ?

View PDF Actions Refresh Done

Procurement BU: US1 Business Unit
Supplier: Building Management
Ordered: 0.00 USD
Requisitioning BU: US1 Business Unit
Supplier Site: FBM US1
Total Tax: 0.00 USD
Sold-to Legal Entity: US1 Legal Entity
Supplier Contact: FDan Cane
Total: 0.00 USD
Description: Changed from extension
Bill-to BU: US1 Business Unit
Additional Contact Email: None
Requisition
Status: Incomplete
Communication Method: None
Source Agreement
Buyer: John Dunbar
Bill-to Location: Seattle
Negotiation
Overriding Approver:
Ship-to Location:
Supplier Order
Creation Date: 3/25/25
Master Contract
Checklist

Terms Notes and Attachments

Required Acknowledgment: No
Payment Terms: Net 30
Shipping Method: UPS
Freight Terms: Buyer pays freight
FOB: Origin
Requires signature
Buyer Managed Transportation
Pay on receipt
Confirming order

Additional Information

Contract Type
Contract Number
DemoJJ
Eligible for Rebate?

Lines Schedules Distributions

And also, the new descriptive flexfield in Redwood page.

Supplier communication

Supplier Contact: Dan Cane
 Additional Contact Email:
 Communication Method: None

Additional information

Contract Type:
 Contract Number:
 Demo33 Changed from screen
 Eligible for Rebate?:

Notes

Note to Supplier:

Visual Builder customization explanation.

Navigate to:

Main Menu-Procurement-Purchase Orders (new).

Query one purchase order (or create one), afterwards navigate to it.

Purchase Order US165079 Incomplete Cancel Save Actions Submit
 Last updated 1 minute ago

Sold-to Legal Entity: US1 Legal Entity Creation Date: 3/25/25

Supplier: Amazon Supplier Site: Amazon US1 Buyer: Amy Marlin Total: 0.00 USD

Bill-to Location: 03-Sun Corporation Sales Description:

Lines (1) Schedules (1) Distributions (1) Additional Order Details

Delete

Line*	Line Type*	Item	Category Name*	Description*	Quantity	UOM	Price*	Ordered	Supplier Item	Action
2	Goods									✓ ✕
1	Fixed Price Goods		206.74 Printers	TEST			4.00			✎

Navigate to “Edit Page in Visual Builder Studio” as shown.

ORACLE

Purchase Order US165091 Incomplete Cancel

Sold-to Legal Entity: US1 Legal Entity Creation Date: 3/25/25

Supplier: Building Management Supplier Site: BM US1 Total: 0.00 USD

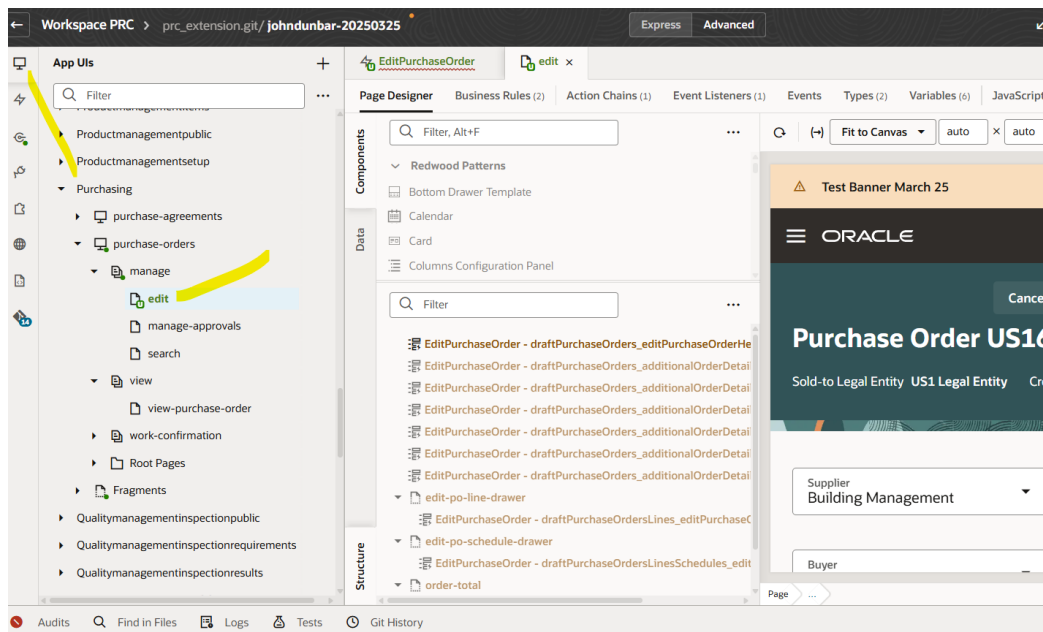
Bill-to Location: Seattle Description: From ext 2

Lines Schedules Distributions Additional Order Details

Settings and Actions [Sign Out](#)

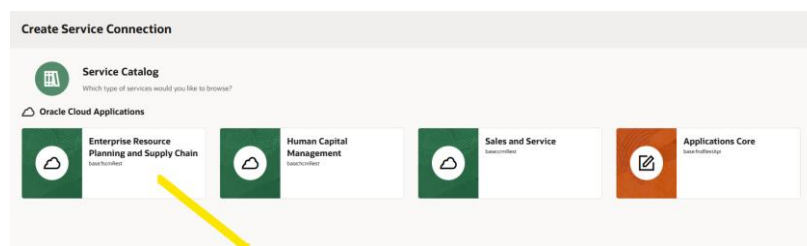
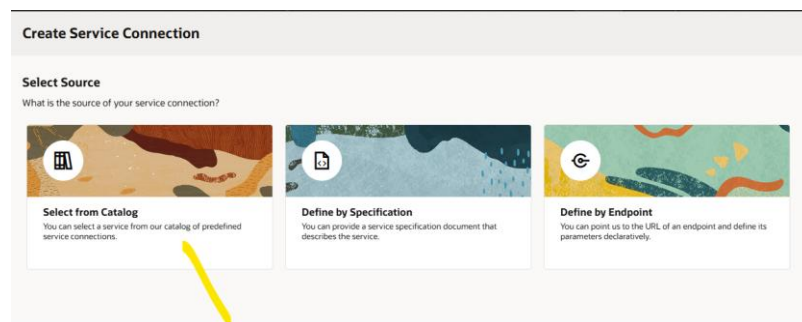
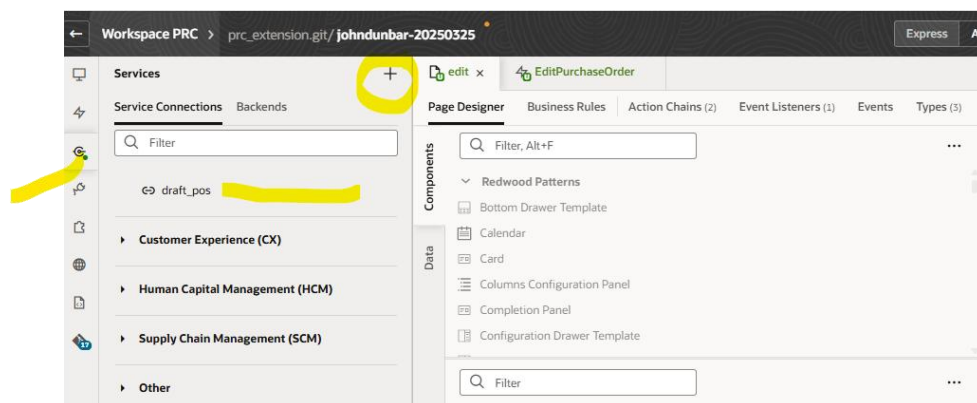
- Personalization
 - [Set Preferences](#)
- Administration
 - [Edit Page in Visual Builder Studio](#)
- Troubleshooting
 - [Run Diagnostics Tests](#)
- [Applications Help](#)
- [About This Application](#)

After opening Visual Builder navigate here.



And now the following steps:

- Create new connection.



Now you Will have to wait a bit, while the definition of REST API's available show.

Assign a name and search as shown.

Create Service Connection

Service Name *

draft_pos

https://fa-etit-saasfademo1.ds-fa.oraclepdemos.com:443/fscmRestApi/rest/rv:8530b475-4bf1-4c96

For better performance, select only the objects you want to use in your application.

Search: draft Select All 1 object(s) selected

- ☒ draftPurchaseOrders
- ☐ draftSupplierNegotiationResponses (Draft Supplier Negotiation Responses)

Click “Create” pressing below-right button.

Services

Service Connections Backends

Filter

draft_pos

Customer Experience (CX)

Human Capital Management

Supply Chain Management (E)

Other

Getting Started edit draft_pos x

Overview Servers Headers Source Endpoints Metadata

The endpoints are based on OpenAPIs metadata, which we retrieved from the source URL dynamically. Tell me more

Filter Endpoints Edit Object Selection

draftPurchaseOrders

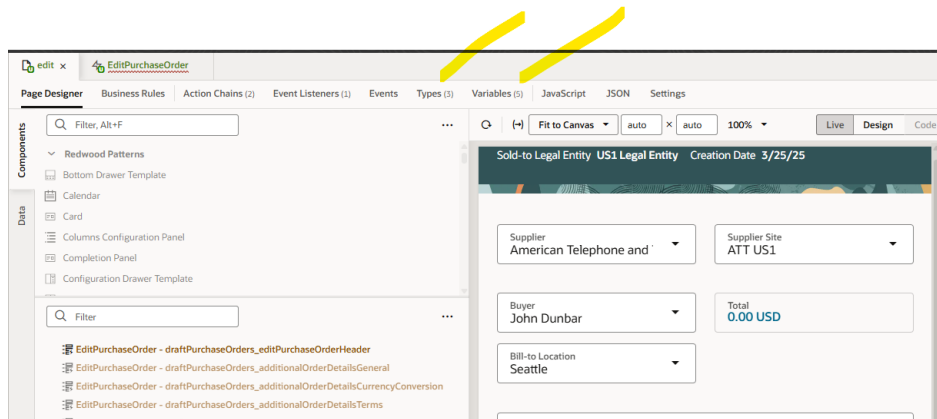
Method	Operation	Description	Endpoint
GET	Get Many	Get all	get_all_draftPurchaseOrders
POST	Create	Create	create_draftPurchaseOrders
GET	Get One	Get	get_draftPurchaseOrders
PATCH	Update	Update	update_draftPurchaseOrders
DELETE	Delete	Delete	delete_draftPurchaseOrders

- Now add JavaScript code to our page in JavaScript Tab.

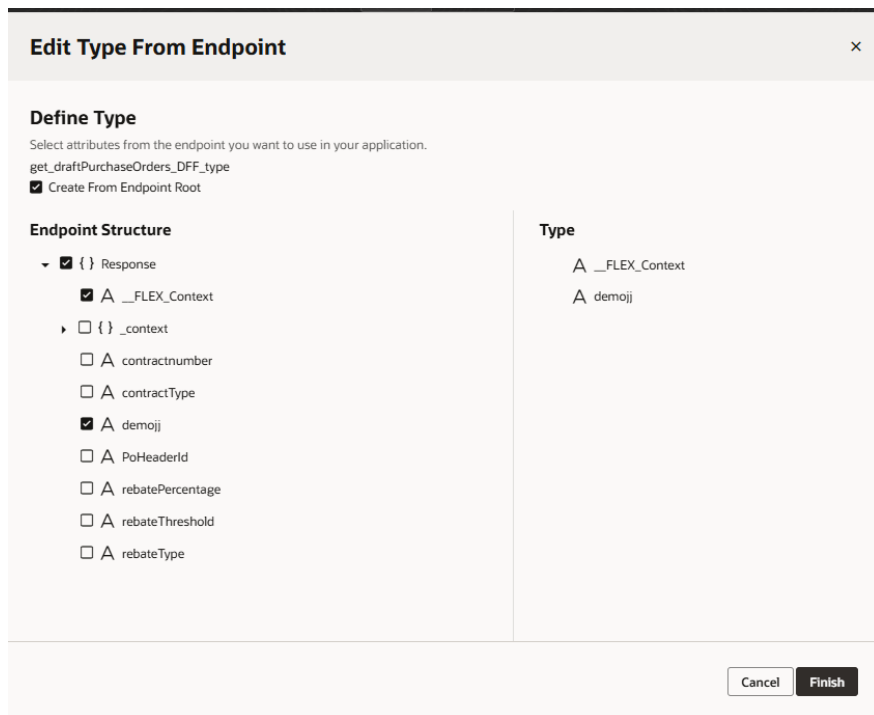
Code provided in file: po_default_javascript.txt

```
1 define([], () => {
2   'use strict';
3
4   class PageModule {
5   }
6
7   PageModule.prototype.default_js = function () {
8     alert('Hi from VB_REDWOOD_COOKBOOK_2025-1');
9   };
10
11   PageModule.prototype.getPoHeaderId = function () {
12
13
14     let a = location.href;
15     let b = a.indexOf("poHeaderId");
16     let d = a.substring(b + 11);
17
18     //alert('Hi from VB_REDWOOD_COOKBOOK_2025-2. po_id: ' + d);
19
20     return d;
21
22   };
23
24   return PageModule;
25
26 });
27
28
```

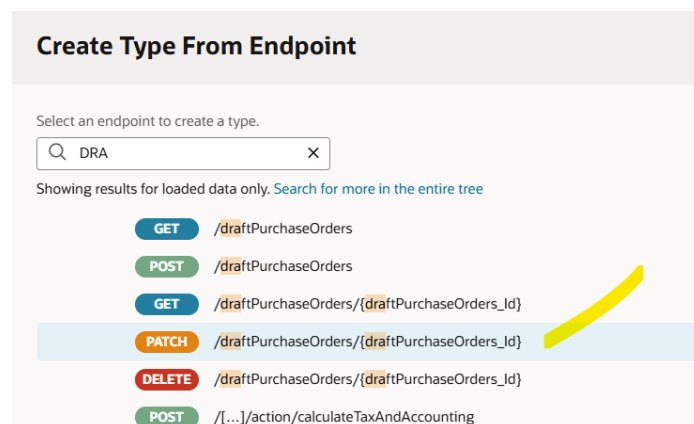
- Create types from “Endpoint”:



- Type 1: `get_draftPurchaseOrders_DFF_type`.



- Type 2: `update_draftPurchaseOrders_type`



Create Type From Endpoint

Define Type
Select attributes from the endpoint you want to use in your application.
update_draftPurchaseOrders
☒ Create From Endpoint Root

Endpoint Structure

- ☐ DefaultTaxationCountry
- ☐ DefaultTaxationCountryCode
- ☒ Description
- ☐ DFF
 - ☐ DocumentCreationMethod
 - ☐ DocumentFiscalClassification
 - ☐ DocumentFiscalClassificationCode
 - ☐ DocumentFiscalClassificationId
 - ☐ DocumentStyle
 - ☐ DocumentStyleId

Type

- ☒ Description

[< Back](#) [Cancel](#) [Finish](#)

- Type 3: create_draftPurchaseOrders_DFF_type

Edit Type From Endpoint

Define Type
Select attributes from the endpoint you want to use in your application.
create_draftPurchaseOrders_DFF
☒ Create From Endpoint Root

Endpoint Structure

- ☒ Request
 - ☒ FLEX_Context
 - ☐ contractnumber
 - ☐ contractType
 - ☒ demojj
 - ☐ PoHeaderId

Type

- ☒ FLEX_Context
- ☒ demojj

[< Back](#) [Cancel](#) [Finish](#)

- Create variables.
 - Variable 1: var_update_draftPurchaseOrders.

Variable

General **Events** **Design Time**

ID *
var_update_draftPurchaseOrders

Type * [Create](#)
update_draftPurchaseOrders_type

[Go to Type](#)

Label

Description *

- Variable 2: varDraftPoDFF.

Variable

General

Events

Design Time

ID *

varDraftPoDFF

Type *

create_draftPurchaseOrders_DFF_type

Create

Go to Type

This is the final picture of the main action chain. Explanation of steps below.

JS

// GET PO_ID FROM URL USING JAVASCRIPT

varPoHeaderId = **Call Function** \$functions.getPoHeaderId

⌂

// GET PO-DRAFT DATA

response = **Call REST** site_prc_extension:draft_pos/get_draftPurchaseOrders-DFF

URI Parameters

draftPurchaseOrders_DFF_Id: varPoHeaderId

draftPurchaseOrders_Id: varPoHeaderId

Parameters

responseBodyFormat: 'json'

responseType: 'get_draftPurchaseOrders_DFF_type'

⚙️

// IF FLAG NO SET WE WILL UPDATE WITH DEFAULTS

if (response.body.demojj !== 'UPDATED-BY-EXTENSION')

⌂

responsePO = **Call REST** site_prc_extension:draft_pos/get_draftPurchaseOrders

URI Parameters

draftPurchaseOrders_Id: varPoHeaderId

Parameters

responseBodyFormat: 'json'

⚙️

// DEPENDING ON THE SUPPLIER WE SET DEFAULT DATA

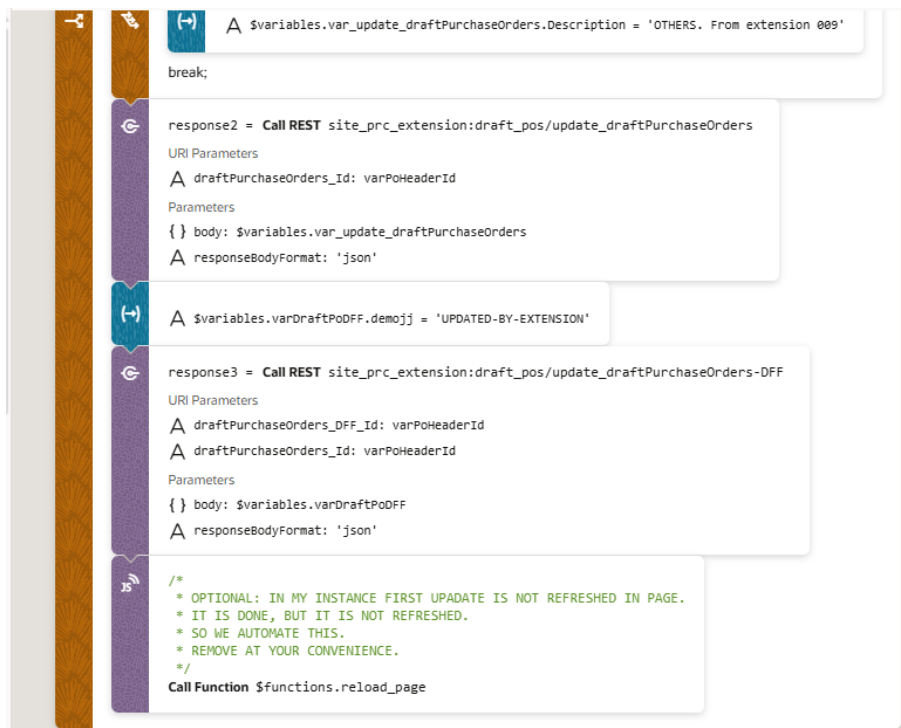
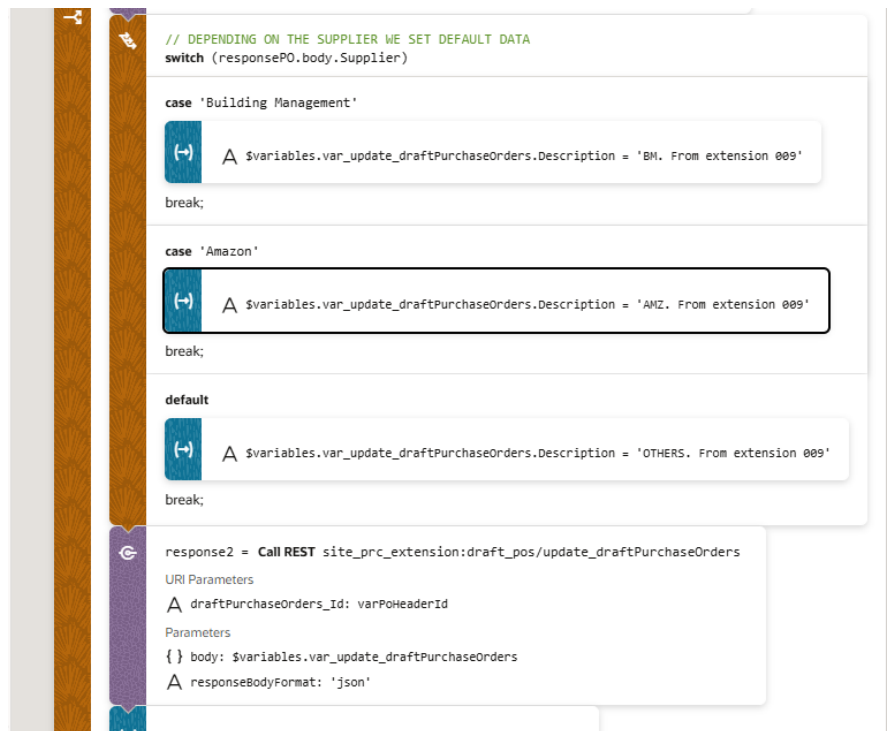
switch (responsePO.body.Supplier)

case 'Building Management'

⚡

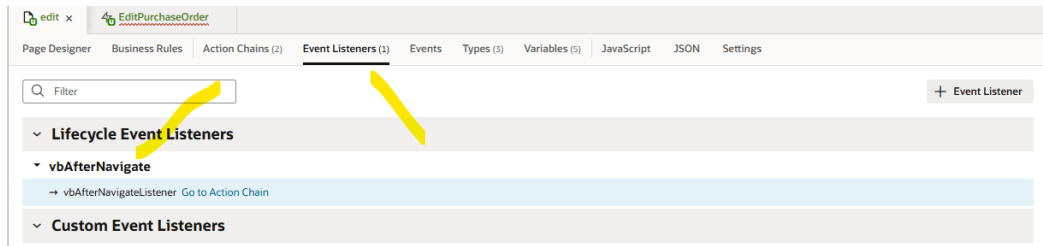
\$variables.var_update_draftPurchaseOrders.Description = 'BM. From extension 009'

REDWOOD_COOKBOOK_2026. Page.: 14



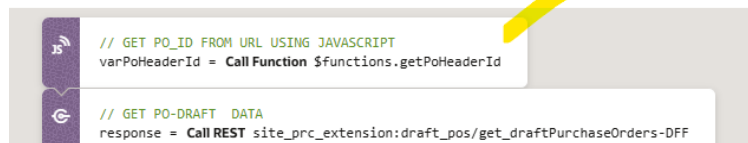
Steps followed.

- 1) Add Event listener for “vbAfterNavigateListener”.

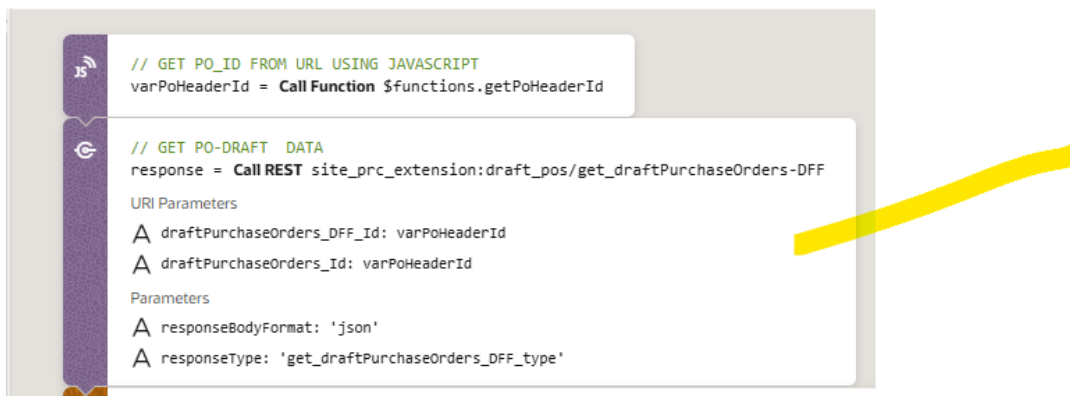


2) After create Action Chain:

- a. Find the Purchase Order Id with JavaScript code.



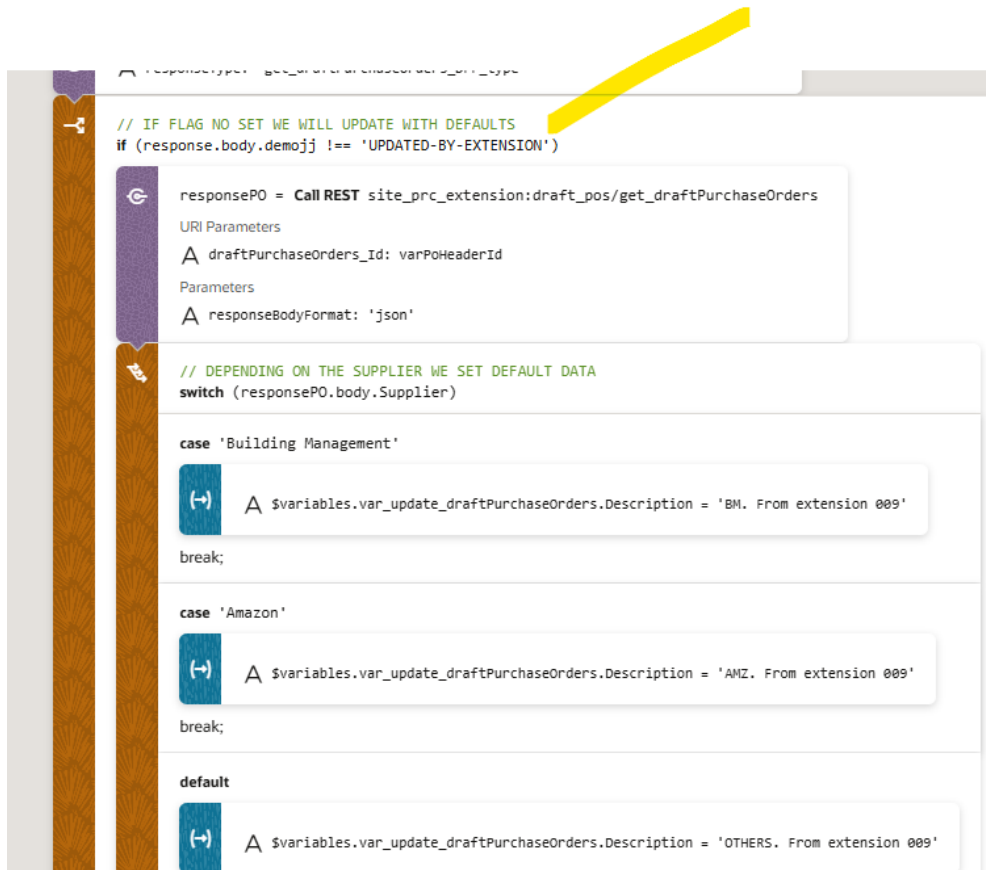
- b. Call REST API to get data from purchase order obtained above.



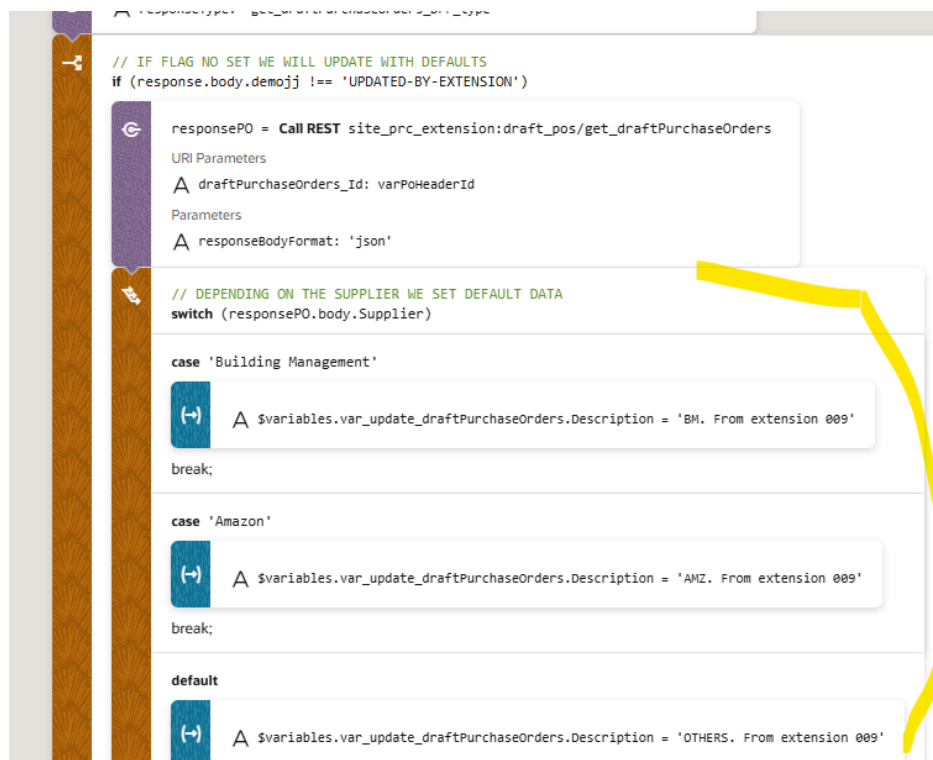
The mapping would be as shown.



- c. Ask if we have already defaulted the data reviewing the flag "UPDATED-BY-EXTENSION" in flexfield.

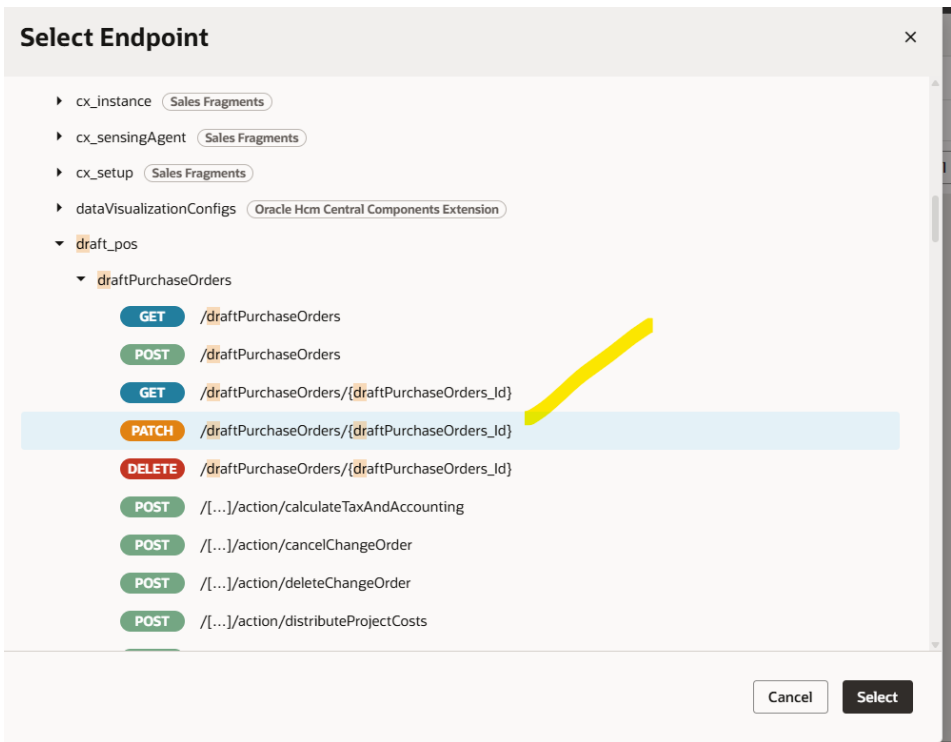


d. Assign values depending on the supplier.

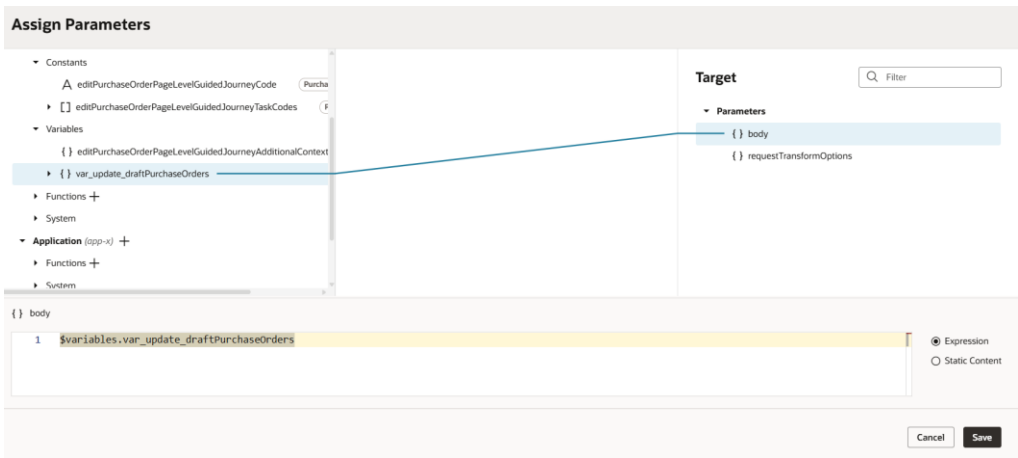


e. Call REST API to update depending on the suppliers.

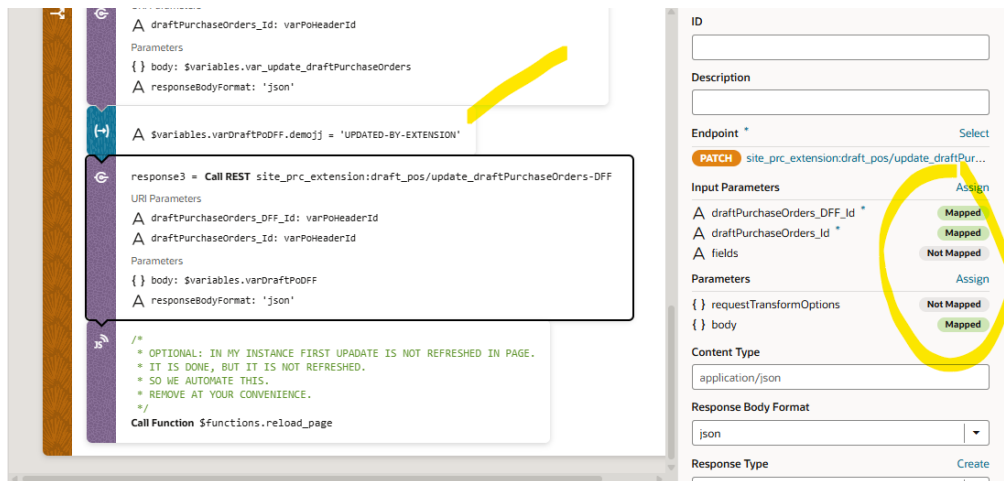
Added REST API call 1.



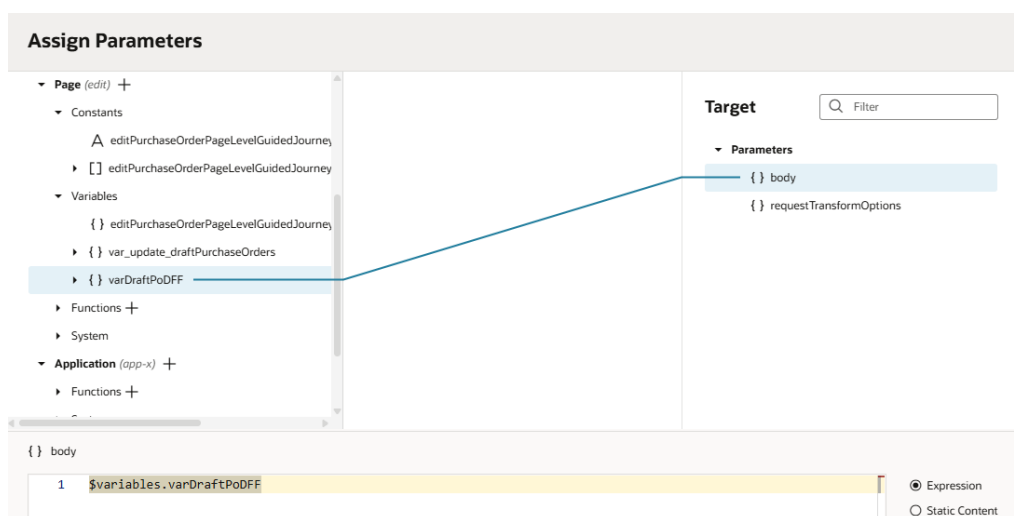
Mapping would be as shown.



f. Assign value to variable and call REST API to update our flag.



Mapping would be as shown.



- g. In our tests sometimes the first update of “Description” is not refreshed on the page, but below scenes it is actually done, so we refresh the page with JavaScript command.



Feel free to remove this command and suggest the user to refresh the page manually (with F5) with a Notification message.

Technical

Code example	Comments
po_defaulting_fra_demo-test_22521_1-1.0.zip	Visual Builder application extension used in demo.
po_default_javascript.txt	JavaScript code.
po_default_action_chain_code.txt	Action chain code, called from listener “vbAfterNavigateListener”.