

SCM. Work Orders. Query using DFF.

Comparison OIC-VB/Fusion-VB with this basic page:

- 1) Extension App UI from VB embedded in Fusion (the free one).
- 2) OIC Visual Builder (pay per messages packs).

Introduction/Goal

Users cannot filter using Descriptive fields on the Work Orders Redwood page and neither in the Classic-ADF.

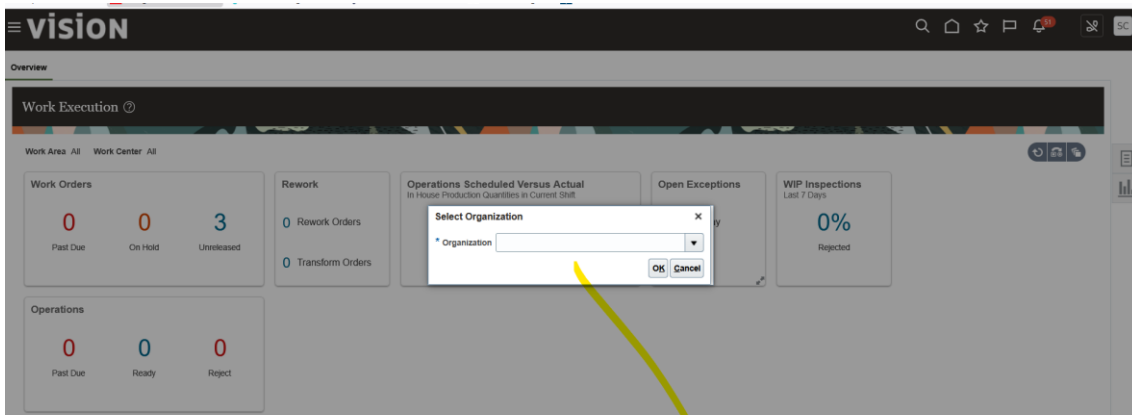
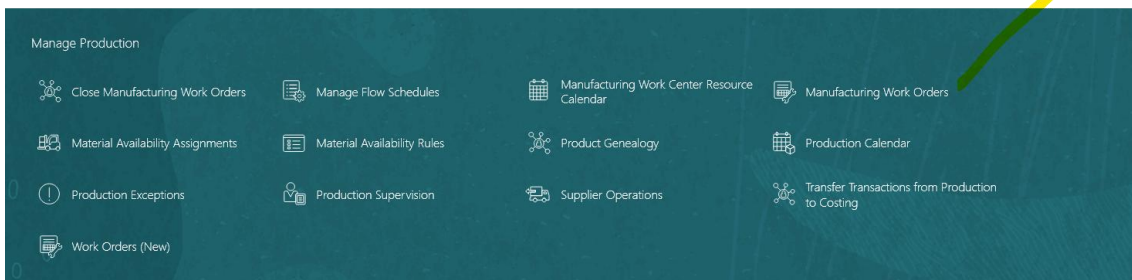
The current filters in the Redwood page are available.

The screenshot shows the Vision Work Orders page. The main table lists work orders with columns: Work Order, Priority, Item, Quantity, UOM, Expedited, Status, Start Date, and Completion Date. The right sidebar contains a 'Filters' panel with the following expandable sections: Start Date, Completion Date, Status, Actual Completion Date, Back-to-Back, Batch Quantity, Canceled Date, Canceled Reason, Closed Date, and Completed Quantity. The 'See Results' button is at the bottom right of the filters panel.

The screenshot shows the Vision Work Orders page. The main table lists work orders with columns: Work Order, Priority, Item, Quantity, UOM, Expedited, Status, Start Date, and Completion Date. The right sidebar contains a 'Filters' panel with the following expandable sections: Subtype, Task Number, Type, UOM, Version, Work Center, Work Definition Date, Work Definition, Work Method, Work Order Number, and Work Order Quantity. The 'See Results' button is at the bottom right of the filters panel.

SCM Tip.

To select the current context Organization.
In "Manufacturing work orders" selection.



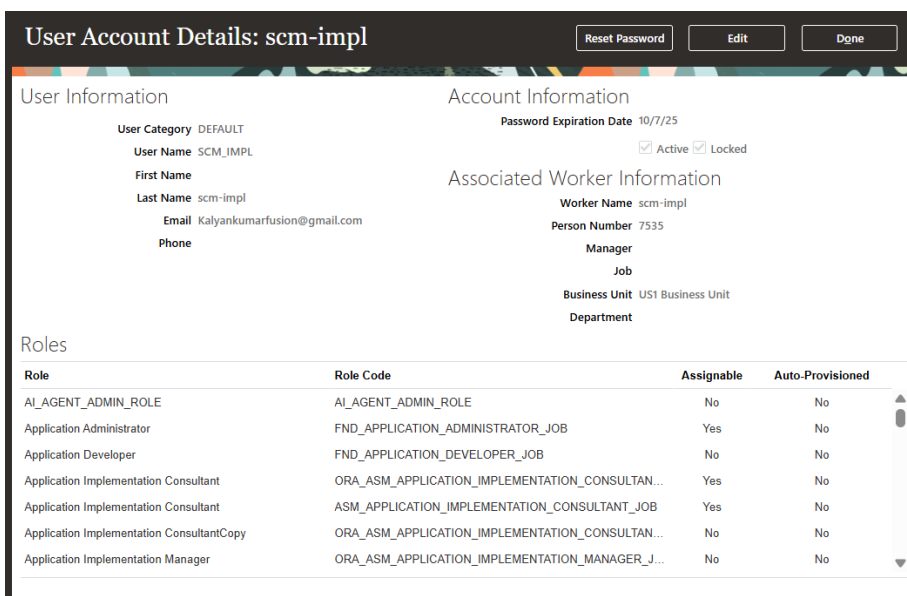
We Will build a page to get the user requirements using the 2 approaches: OIC-VB and Fusion VB-Extension.

Some of the following sections are common for both approaches.

Preparatory steps

1) Roles.

Your user would need the functional roles to access the data of Work Orders (SCM) and the following roles to work with Visual Builder in Fusion.



2) Investigate REST API's needed.

<https://www.linkedin.com/pulse/implementing-oracle-fusion-manufacturing-using-rest-apis-dendukuri-1lhwf/>

https://docs.oracle.com/en/cloud/saas/supply-chain-and-manufacturing/24b/fasrp/Roles_and_Privileges.html

We base our development on a REST API feature that some developers do not know, which is the ability to filter using child nodes.

Example:

The screenshot shows a REST client interface with a GET request to `https://eqjz.ds-fa.oraclepdemos.com:443/fscmRestApi/resources/11.13.18.05/workOrders?q=WorkOrderDFF.demoRedwood='DEMO1'`. The response is a 200 OK status with a JSON body. The JSON body contains an array of items, with the first item having the following properties:

Key	Value	Description
REST-Framework-Version	4	

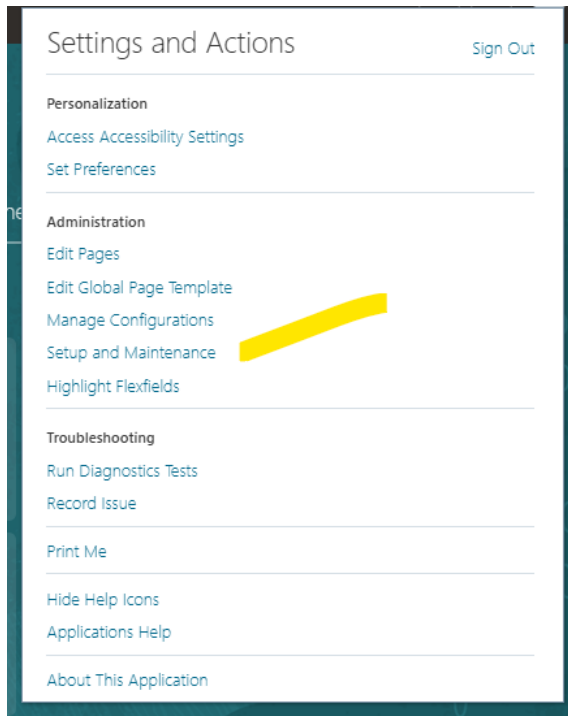
```
1 {
2   "items": [
3     {
4       "OrganizationId": 300000047274447,
5       "OrganizationCode": "002",
6       "OrganizationName": "Atlanta",
7       "WorkOrderId": 1040,
8       "WorkOrderNumber": "WO-002-1004",
```

`https://xxxx.ds-fa.oraclepdemos.com:443/fscmRestApi/resources/11.13.18.05/workOrders?q=WorkOrderDFF.demoRedwood='DEMO1'`

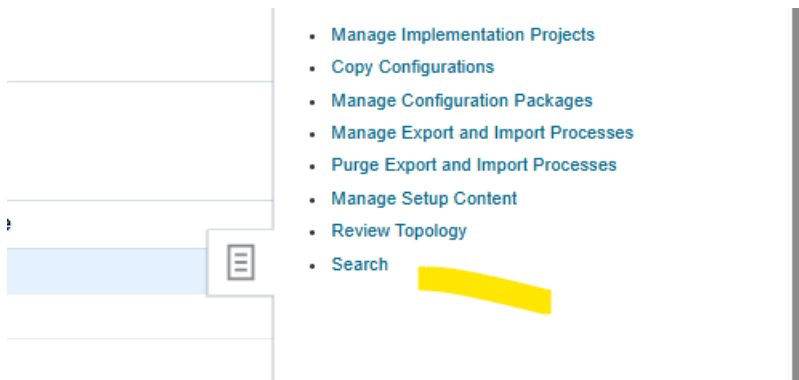
3) Create flexfield.

Search “Manage Work Execution Descriptive Flexfields” as shown.

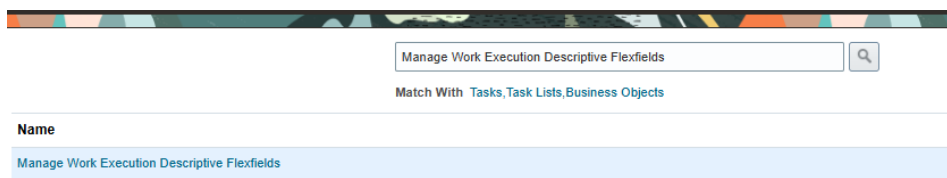
Navigate in SaaS, and select as shown.



Then select “search”.



Type as shown.



Press search button then edit as shown.

Manage Work Execution Descriptive Flexfields ?

Search

Name

Flexfield Code

Module

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
Work Order Header	De...	Work Orders	WIE_WORK_ORDERS		Additional Fields for work ...	✓		5/23/18 7:38 PM
Work Order Operation	De...	Work Orders	WIE_WO_OPERATIONS		Additional Fields for work ...	✓		5/23/18 7:38 PM
Work Order Operation Item	De...	Work Orders	WIE_WO_OPERATION_...		Additional Fields for work ...	✓		5/23/18 7:38 PM
Work Order Operation Output	De...	Work Orders	WIE_WO_OPERATION_...		Additional Fields for work ...	✓		12/19/18 2:52 AM
Work Order Operation Resource	De...	Work Orders	WIE_WO_OPERATION_...		Additional Fields for work ...	✓		5/23/18 7:38 PM
Work Order Operation Resource Instance	De...	Work Orders	WIE_WO_OPERATION_...		Additional fields for resou...	✓		9/21/18 8:06 AM
Work Order Operation Transactions	De...	Work Order Operation Tr...	WIE_OPERATION_TRA...		Additional fields for work ...	✓		5/23/18 7:53 PM
Work Order Resource Transactions	De...	Work Order Resource Tra...	WIE_RESOURCE_TRAN...		Additional fields for work ...	✓		5/23/18 7:41 PM

Access the first option, the press Icon shown.

Edit Descriptive Flexfield: Work Order Header ?

Name Work Order Header

Flexfield Code WIE_WORK_ORDERS

Description Additional Fields for work order header on the Edit and View work order page.

Global Segments

Actions View Format + Freeze Detach Wrap

* Sequence	Name	Table Column	Value Set	Prompt
No data to display.				
Columns Hidden 9				

Context Segment

* Prompt Context Segment

API Name

Value Set

Default Type

☐ Required

* Display Type List of Values

Setup flexfield as follows.

Create Segment ?



Flexfield Name Work Order Header

* Name

* Code

* API Name

Column Assignment

* Data Type

Validation

* Value Set

Value Set Description 150Char

Initial Default

Default Type

Display Properties

* Prompt

* Display Type

Display Size

Display Height

☐ Read-only

Example format: ##0.###
Display width as number of characters for the Segment.
Numeric value up to 3 digits.

Save and close x 2 and, press Deploy button.

Prepare some data.

Above flexfield setup does not always shows immediately, if you get Flexfield shown update some data for some controlle work orders using the pages, if not, this is the trick using REST API to update some data for testing purposes.

POST

Params Authorization Headers (11) Body Scripts Tests Settings

☐ none ☐ form-data ☐ x-www-form-urlencoded ☒ raw ☐ binary ☐ GraphQL

```
1 {
2   "demoRedwood": "DEM01"
3 }
4
```

Body Cookies (1) Headers (29) Test Results

201 Created • 2.33 s • 1.95 KB

{ } JSON Preview Visualize

```
1 {
2   "WorkOrderId": 1040,
3   "demoRedwood": "DEM01",
4   "__FLEX_Context": null,
5   "__FLEX_Context_DisplayValue": null,
6   "links": [
```

ORDERK Aa ab.* No results ↑ ↓ ≡ ×

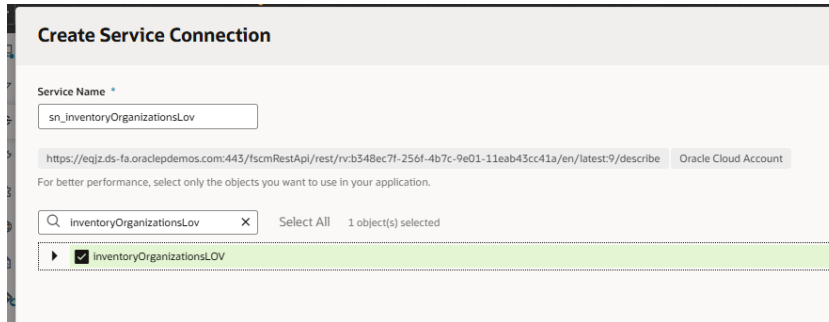
You will need the work order id to do the update shown.

Steps detailed for extension VB.

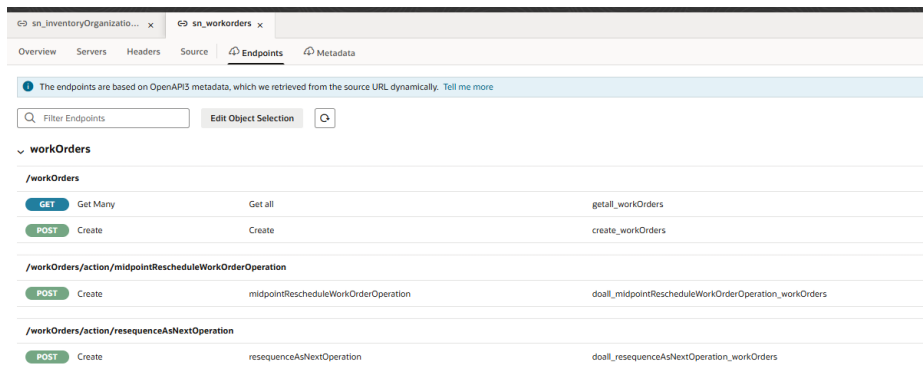
Create the project (please, see blogs or videos to not repeat).

1) Connections.

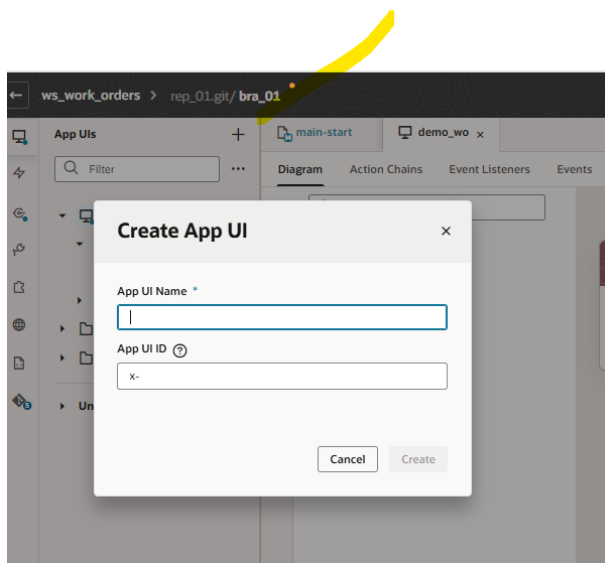
a) First connection for inventory organizations.



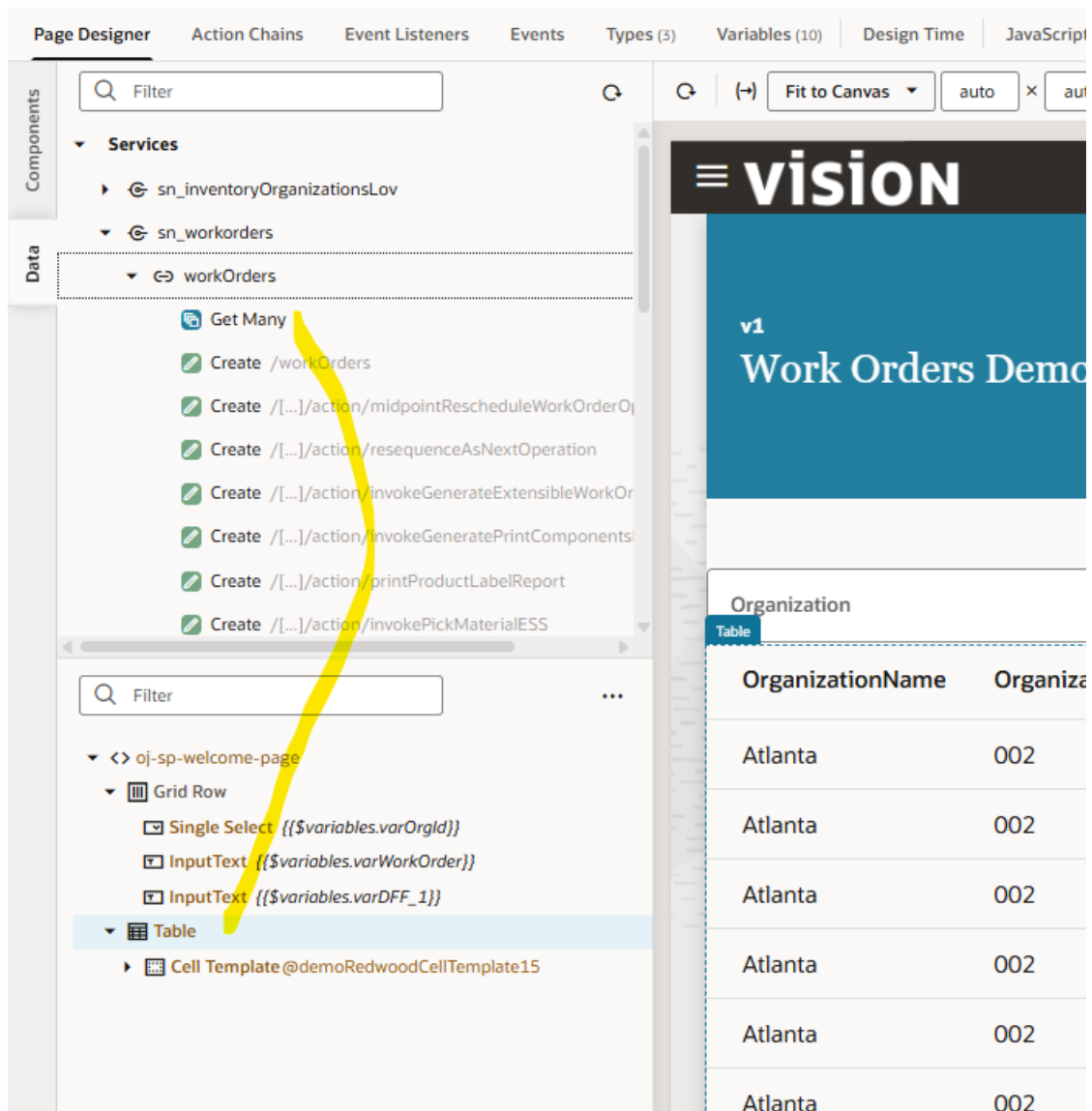
b) Second connection for work orders.



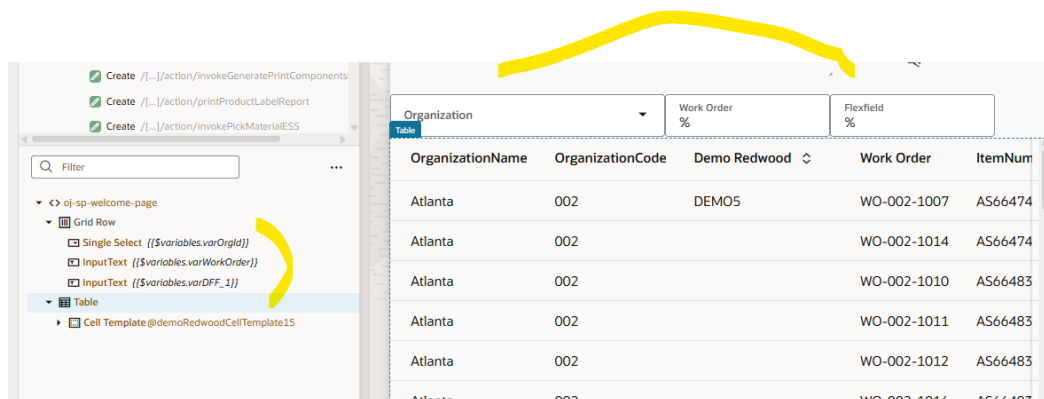
2) New App UI.



a) Select "Welcome template page".



d) Create these VB components to filter.



Detailed code.

```

8 <div class="oj-flex">
9
10 <oj-select-single label-hint="Organization" class="oj-flex-item oj-sm-12 oj-form-control-width-sm oj-md-5"
11 data="[{$variables.inventoryOrganizationsLOVListSDP}]" item-text="OrganizationName"
12 value="{ $variables.varOrgId }"></oj-select-single>
13
14 <oj-c-input-text label-hint="Work Order" class="oj-flex-item oj-sm-3 oj-md-3"
15 value="{ $variables.varWorkOrder }"></oj-c-input-text>
16
17 <oj-c-input-text label-hint="Flexfield" class="oj-flex-item oj-sm-3 oj-md-3" value="{ $variables.varDFF_1 }">
18
19 </oj-c-input-text>
20
21 </div>
22

```

a) Add filters in SDP linked to table as shown.

Map Variables To Parameters

Sources

- Page (main-start) +
 - Variables
 - backgroundColor
 - illustrationBackground
 - illustrationForeground
 - imageStretch
 - inventoryOrganizationsLOVListSDP
 - mobileImage
 - varDFF_1
 - varOrgId
 - varWorkOrder

Parameters

- finder
- limit
- links
- offset
- onlyData
- orderBy
- q
- totalResults
- filterCriterion
- mergeTransformOptions
- pagingCriteria
- sortCriteria

Builder

Include items: ☒ Match All ☐ Match Any

IF OrganizationId equals \$variables.varOrgId

AND WorkOrderNumber contains \$variables.varWorkOrder

AND WorkOrderDFF.demoRedwood contains \$variables.varDFF_1

Cancel Save

Table

Source	Parameter	Status
varWorkOrder	q	Not Mapped
workOrdersListSDP	totalResults	Not Mapped
	filterCriterion	Mapped
	mergeTransformOptions	Not Mapped
	pagingCriteria	Not Mapped
	sortCriteria	Not Mapped

Type *

getallWorkOrdersResponse

Go to Type

Items Path

b) For publishing your extension, you will need a Sandbox in SaaS and proper roles.

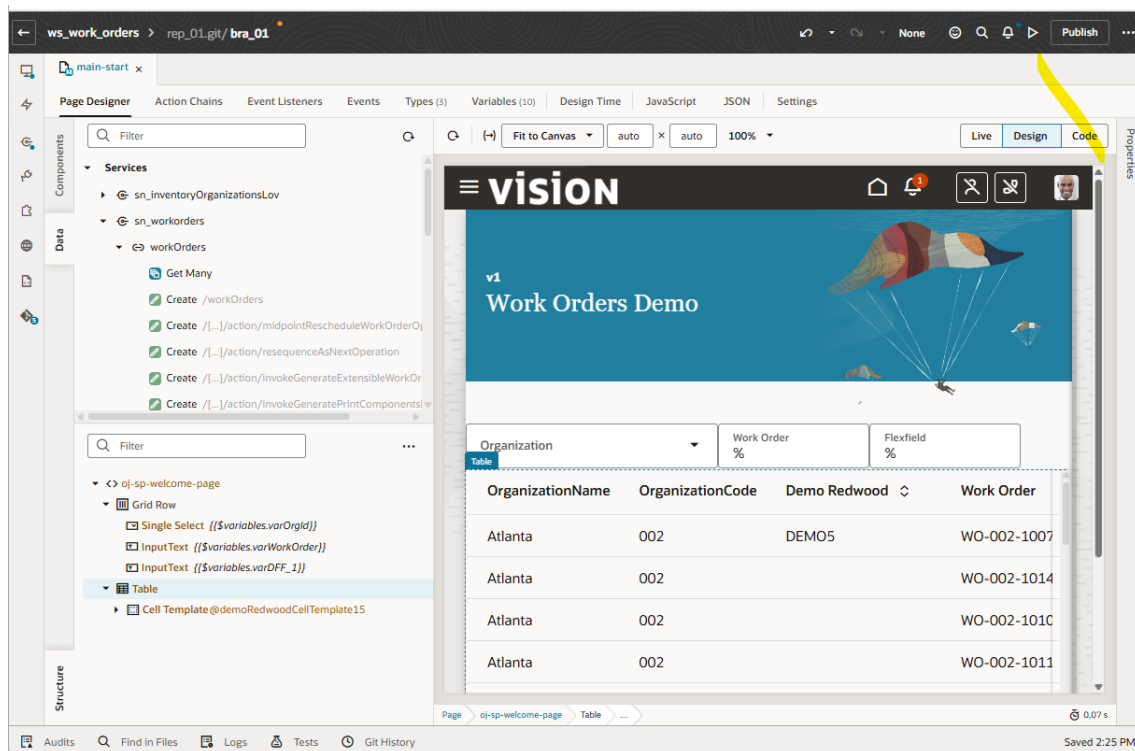
You have plenty of blogs that will tell you how to do this task.

Some chapters of our books also tell you how to accomplish the publishing task.

https://www.amazon.com/s?k=juan+jesus+montero&crd=3SOUOIW32IMZ&sprefix=%2Caps%2C144&ref=nb_sb_ss_recent_1_0_recent

c) Testing.

Run preview.



Then use filters to check if the page works as expected.

Blind query when we access the page.

Redwood cookbook 2026-Extension VERSION

Work Orders Demo

Organization

Work Order %


Flexfield %

OrganizationName	OrganizationCode	Demo Redwood	Work Order	ItemNumber	Item Description
PLNT B	410		WO-410-1042	FIT5000	Virtual Reality Trainer with 22 inch display
Boise	004		WO-004-CM-1001	AS7751100	Vision Slimline 5100 Tablet, 128 GB, 8" Display
Atlanta	002	DEMO1	WO-002-1004	AT6751000*110*	Vision Slimline 5000 Custom Tablet
Shanghai	050		WO-050-1000	SB6845110	One 32 GB DDR3-1600 DIMM
Shanghai	050		WO-050-1001	SB6845100	One 16 GB DDR3-1600 DIMM
Shenzhen	051		WO-051-1000	AS5841200	Vision Server X4-4-200
Shenzhen	051		WO-051-1001	AS5841100	Vision Server X4-4-100
Shenzhen	051		WO-051-1002	AS5841100	Vision Server X4-4-100

After filtering by Inventory Organization.

Redwood cookbook 2026-Extension VERSION

Work Orders Demo




Organization Dallas	Work Order %	Flexfield %			
OrganizationName	OrganizationCode	Demo Redwood	Work Order	ItemNumber	Item Description
Dallas	005	DEMO3	WO-005-1006	SB6651108	Ultra Mobile Superfast Tablet SSHD - 16GB, expandable upto
Dallas	005	DEMO4	WO-005-1007	SB6651109	Ultra Mobile Superfast Tablet SSHD - 32GB, expandable upto

After filtering by our Flexfield.

Redwood cookbook 2026-Extension VERSION

Work Orders Demo



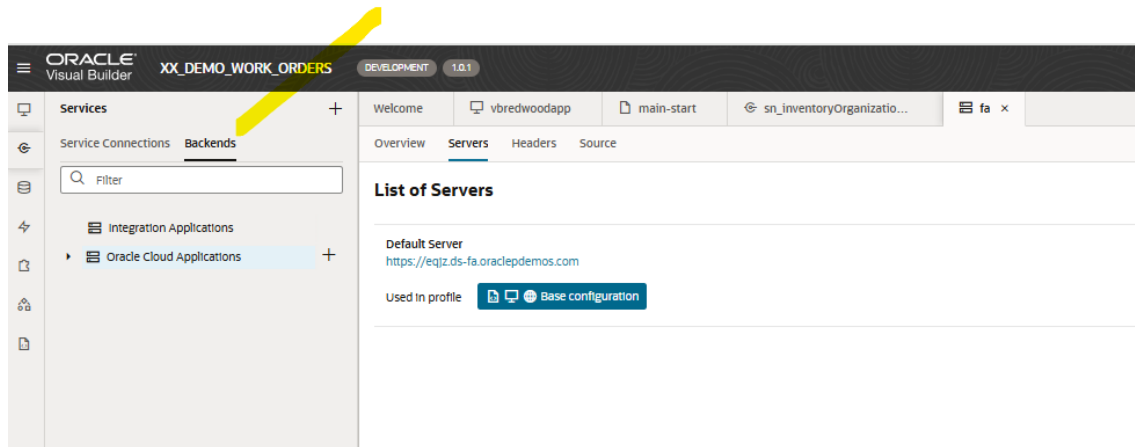
Organization Dallas	Work Order %	Flexfield DEMO4			
OrganizationName	OrganizationCode	Demo Redwood	Work Order	ItemNumber	Item Description
Dallas	005	DEMO4	WO-005-1007	SB6651109	Ultra Mobile Superfast Tablet SSHD - 32GB, expandable upto

d) Na.

Steps OIC-Visual Builder version.

After creating the application.

Take care of setting up the backend with an username and password with proper roles.



Technical steps to build will be basically the same: create connections, create variables, create components, apply filters in SDP are not different from used in building the extension.

Testing as above.

Blind query.

The screenshot shows the 'Work Orders Query with Flexfield V.01' application. The header includes the text 'Redwood cookbook 2026-OIC VERSION'. The table below displays work order data with the following columns: OrganizationName, Work Order, Demo Redwood, Item Description, ItemNumber, Priority, and WorkOr. The data is filtered by OrganizationName (Atlanta) and Work Order (WO-002-1007).

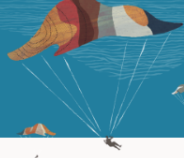
OrganizationName	Work Order	Demo Redwood	Item Description	ItemNumber	Priority	WorkOr
Atlanta	WO-002-1007	DEMO5	Vision Slimline 5100 Tablet, 32GB, 8" Display	AS6647432		ORA_Cl
Atlanta	WO-002-1014		Vision Slimline 5100 Tablet, 32GB, 8" Display	AS6647432		ORA_Cl
Atlanta	WO-002-1010		Vision InTab Air Series 6000 Slimline Tablet, 64GB, 10.1" Display	AS6648333		ORA_Cl
Atlanta	WO-002-1011		Vision InTab Air Series 6000 Slimline Tablet, 64GB, 10.1" Display	AS6648333		ORA_Cl
Atlanta	WO-002-1012		Vision InTab Air Series 6000 Slimline Tablet, 128GB, 10.1" Display	AS6648334		ORA_Cl
Atlanta	WO-002-1016		Vision InTab Air Series 6000 Slimline Tablet, 128GB, 10.1" Display	AS6648334		ORA_Cl
Dallas	WO-005-1006	DEMO3	Ultra Mobile Superfast Tablet SSHD - 16GB, expandable upto 128GB	SB6651108		ORA_Cl
Dallas	WO-005-1008		Ultra Mobile Superfast Tablet SSHD - 16GB, expandable upto 128GB	SB6651108		ORA_Cl

Filter with Inventory Organization.

Redwood cookbook 2026-OIC VERSION

Work Orders Query with Flexfield V.01

Redwood cookbook 2026. OIC VERSION



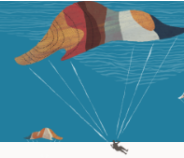
OrganizationName Dallas	Work Order %	Flexfield Demo %				
OrganizationName	Work Order	Demo Redwood	Item Description	ItemNumber	Priority	WorkOrder
Dallas	WO-005-1006	DEMO3	Ultra Mobile Superfast Tablet SSHD - 16GB, expandable upto 128GB	SB6651108		ORA_CLO
Dallas	WO-005-1007	DEMO4	Ultra Mobile Superfast Tablet SSHD - 32GB, expandable upto 128GB	SB6651109		ORA_CLO

Filter using flexfield.

Redwood cookbook 2026-OIC VERSION

Work Orders Query with Flexfield V.01

Redwood cookbook 2026. OIC VERSION



OrganizationName Dallas	Work Order %%	Flexfield Demo DEMO3				
OrganizationName	Work Order	Demo Redwood	Item Description	ItemNumber	Priority	WorkOrder
Dallas	WO-005-1006	DEMO3	Ultra Mobile Superfast Tablet SSHD - 16GB, expandable upto 128GB	SB6651108		ORA_CLO

Conclusion.

We have built an extension for building a page to query Work Orders using flexfield.

Then we repeated the exercise with the OIC Visual Builder instance.

Technical

Code in: https://github.com/juanjesusmontero/oracle_redwood_cookbook

Code example	Comments
XX_EXTENSION_WORKSPACE_DEMO_WORK_ORDERS_v4.zip	App UI Extension. Used in this demo.
XX_OIC_VB_DEMO_WORK_ORDERS-1.0.1.zip	OIC-Visual builder application. Same as above but using OIC-VB.