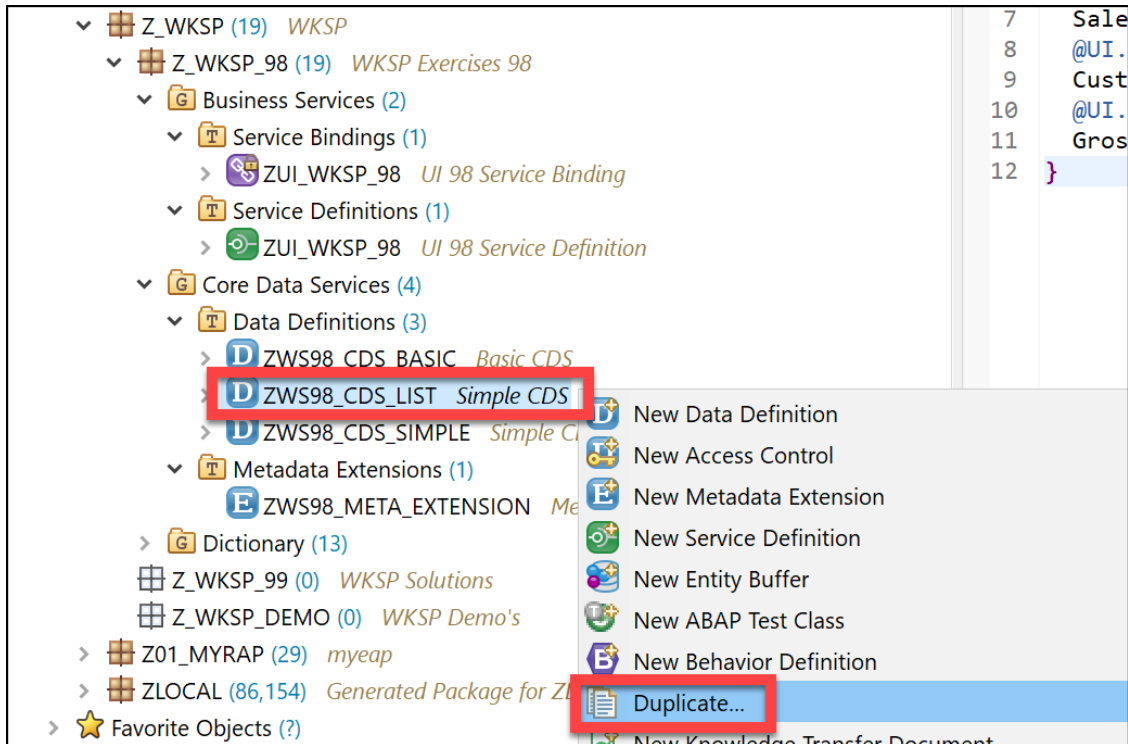# Add Search and Filters to List Report

## Task 1: Duplicate CDS **ZWS##_CDS_LIST** to **ZWS##_CDS_LIST_SEARCH**



Make sure you change the *@AbapCatalog.sqlViewName*.

Add extra field for CreationDate and Customer Email.

```
@AbapCatalog.sqlViewName: 'ZWK##CDSLISTSRCH'
@AbapCatalog.compiler.compareFilter: true
@AbapCatalog.preserveKey: true
@AccessControl.authorizationCheck: #CHECK
@EndUserText.label: 'List Report'
@UI.headerInfo.typeName: 'Sales Order'
@UI.headerInfo.typeNamePlural: 'Sales Orders'
define view ZWS##_CDS_LIST_SEARCH
  as select from ztmcds9_i_so
{
      @UI.lineItem: [{position: 10 }]
  key Id
as SalesOrderID,
      CustomerId
as CustomerID,
      @UI.lineItem: [{position: 20 },{ label: 'Customer Name' }]
      _Customer.name
```

```
    as CustomerName,
        @UI.lineItem: [{position: 30 },{ label: 'E-mail' }]
        _Customer.email
    as CustomerEmail,
        @UI.lineItem: [{position: 40 }]
        GrossAmount,
        @UI.lineItem: [{position: 50},{ label: 'Creation Date' }]
        cast( left(cast(CreationDateTime as abap.char( 30)),8) as
    abap.dats) as CreationDate
    }
```

## Task 2: Add the new CDS to your *Service Definition*

```
@EndUserText.label: 'UI ## Service Definition'
define service ZUI_WKSP_## {
  expose ZWS##_CDS_Simple as SimpleCDS;
  expose ZWS##_CDS_Basic as BasicCDS;
  expose ZWS##_CDS_LIST as BasicList;
  expose ZWS##_CDS_LIST_SEARCH as BasicSearch;
}
```

## Task 3: Create a new Fiori elements application with the new CDS

Create a new Fiori Application using the Template Wizard for a *List Report*

| Field | Value |
|---|---|
| Data source | Connect to a System |
| System | abap-cloud-default_xx-dev (BTP) |
| Service | ZUI_WKSP_## |
| Main entity | BasicSearch |
| Module name | basic-search |
| Application title | Basic List with Search |
| Application namespace | nato.workshop |
| Description | Basic List with Search |
| Project folder path | /home/user/projects |
| Add deployment configuration | Yes |

| Field | Value |
| --- | --- |
| Add FLP configuration | Yes |
| Deployment Target | Cloud Foundry |
| Destination name | abap-cloud-default_xx(SCP) |
| Add application to managed application router | Yes |
| Semantic Object | NATO |
| Action | BasicSearch |
| Title | Basic List with Search |
| Subtitle | Workshop |

- Data Source and Service Selection

### Data Source and Service Selection
Configure the data source and select a service.

Data source *

Connect to a System

System ⑦ *

abap-cloud-default_abap-trial-d4a3a905trial-dev (BTP)

Service *

ZUI_WKSP_98 > ZUI_WKSP_98 (0001) - OData V4

- Entity Selection

### Entity Selection
Configure the selected service.

Main entity *

BasicSearch

Automatically add table columns to the list page and a section to the object page if none already exists?

◉ Yes   ○ No

- Project Attributes

# Project Attributes

Configure the main project attributes.

Module name (?) *

basic-search

Application title (?)

Basic List with Search

Application namespace (?)

nato.workshop

Description (?)

Basic List with Search

Project folder path *

/home/user/projects

Minimum SAPUI5 version (?) *

1.96.7 (Source system version)

Add deployment configuration

Yes     No

Add FLP configuration

Yes     No

Configure advanced options

Yes     No

- Deployment Configuration

## Deployment Configuration
Configure deployment settings

Please choose the target *

Cloud Foundry

Destination name *

abap-cloud-default_abap-trial-d4a3a905trial-dev(SCP) - https:/

Add application to managed application router?

Yes     No

- Fiori Launchpad Configuration

# Fiori Launchpad Configuration
Configure Fiori Launchpad settings

Semantic Object *

NATO

Action *

BasicSearch

Title *

Basic List with Search
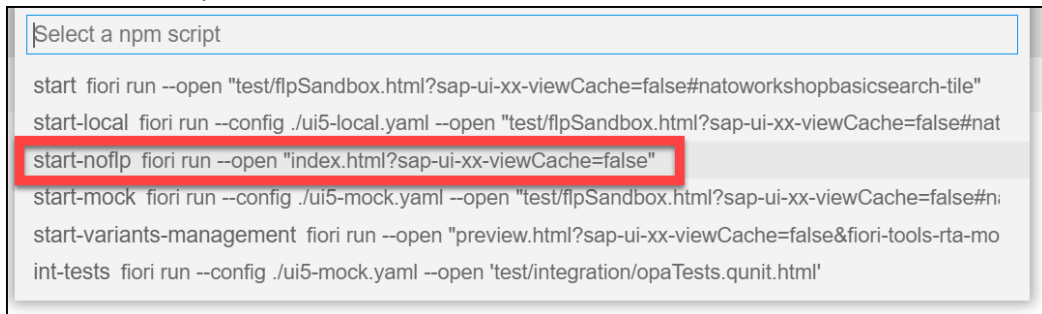
Subtitle (optional)

Workshop

- Preview Application

## </> What you can do

### ⊙ Preview Application

Choose from start scripts to run the application preview.

- Select start-noflp, this is the fastest test.

Select a npm script

```
start  fiori run --open "test/flpSandbox.html?sap-ui-xx-viewCache=false#natoworkshopbasicsearch-tile"
start-local  fiori run --config ./ui5-local.yaml --open "test/flpSandbox.html?sap-ui-xx-viewCache=false#nat
start-noflp  fiori run --open "index.html?sap-ui-xx-viewCache=false"
start-mock  fiori run --config ./ui5-mock.yaml --open "test/flpSandbox.html?sap-ui-xx-viewCache=false#n:
start-variants-management  fiori run --open "preview.html?sap-ui-xx-viewCache=false&fiori-tools-rta-mo
int-tests  fiori run --config ./ui5-mock.yaml --open 'test/integration/opaTests.qunit.html'
```

- Result

**Sales Orders (7)**

| Sales Order Id | Customer Name | Gross Amo... | | | |
|---|---|---|---|---|---|
| 1 | Pixel Tech | 523.29 | | Jan 6, 2022 | > |
| 2 | Pixel Tech | 1,940.88 | | Jan 12, 2022 | > |
| 3 | Techlanch | 5.2 | | Feb 2, 2022 | > |
| 4 | Monotech | 196.2 | | Feb 22, 2022 | > |
| 5 | Visions | 3,294.31 | | Mar 14, 2022 | > |
| 6 | Techaholic | 600 | | Mar 26, 2022 | > |
| 7 | Techlanch | 2,054.58 | | Apr 3, 2022 | > |

## Task 4: Add Search to CDS view

- Add a *@Search.searchable: true* annotation to your CDS view before the `define view...`.
- Set fields *CustomerName* and *CustomerEmail* as default search elements.
- Set Fuzzy search level at 60%.
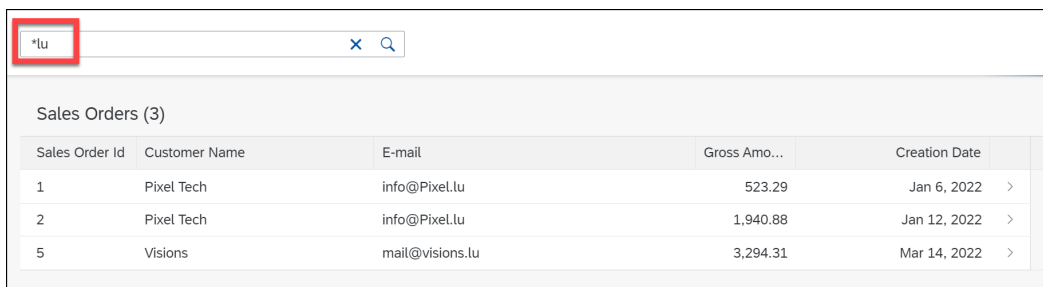- Activate your CDS and Reload your fiori application to see the results.

```
@AbapCatalog.sqlViewName: 'ZWK##CDSLISTSRCH'
@AbapCatalog.compiler.compareFilter: true
@AbapCatalog.preserveKey: true
@AccessControl.authorizationCheck: #CHECK
@EndUserText.label: 'List Report'
@UI.headerInfo.typeName: 'Sales Order'
@UI.headerInfo.typeNamePlural: 'Sales Orders'
@Search.searchable: true
define view ZWS##_CDS_LIST_SEARCH
  as select from ztmcds9_i_so
{
    @UI.lineItem: [{position: 10 }]
  key Id
as SalesOrderID,
```

```
        CustomerId
as CustomerID,
      @UI.lineItem: [{position: 20 },{ label: 'Customer Name' }]
      @Search.defaultSearchElement: true
      _Customer.name
as CustomerName,
      @UI.lineItem: [{position: 30 },{ label: 'E-mail' }]
      @Search.defaultSearchElement: true
      @Search.fuzzinessThreshold : 0.6
      _Customer.email
as CustomerEmail,
      @UI.lineItem: [{position: 40 }]
      GrossAmount,
      @UI.lineItem: [{position: 50},{ label: 'Creation Date' }]
      cast( left(cast(CreationDateTime as abap.char( 30)),8) as
abap.dats) as CreationDate
}
```

- Result

| Sales Order Id | Customer Name | E-mail | Gross Amo... | Creation Date | |
|---|---|---|---|---|---|
| 1 | Pixel Tech | info@Pixel.lu | 523.29 | Jan 6, 2022 | > |
| 2 | Pixel Tech | info@Pixel.lu | 1,940.88 | Jan 12, 2022 | > |
| 5 | Visions | mail@visions.lu | 3,294.31 | Mar 14, 2022 | > |

Sales Orders (3)

- Play a bit with the fuzzy search levels.

## Task 4: Add Selection fields for Filtering

- Add filters for fields *CustomerId* and *CreationDate*.

```
@AbapCatalog.sqlViewName: 'ZWK##CDSLISTSRCH'
@AbapCatalog.compiler.compareFilter: true
@AbapCatalog.preserveKey: true
@AccessControl.authorizationCheck: #CHECK
@EndUserText.label: 'List Report'
@UI.headerInfo.typeName: 'Sales Order'
@UI.headerInfo.typeNamePlural: 'Sales Orders'
@Search.searchable: true
define view ZWS##_CDS_LIST_SEARCH
  as select from ztmcds9_i_so
{
      @UI.lineItem: [{position: 10 }]
  key Id
```

```
as SalesOrderID,
      @UI.selectionField: [{position: 10}]
      CustomerId
as CustomerID,
      @UI.lineItem: [{position: 20 },{ label: 'Customer Name' }]
      @Search.defaultSearchElement: true
      @Search.fuzzinessThreshold : 0.6
      _Customer.name
as CustomerName,
      @UI.lineItem: [{position: 30 },{ label: 'E-mail' }]
      @Search.defaultSearchElement: true
      _Customer.email
as CustomerEmail,
      @UI.lineItem: [{position: 40 }]
      GrossAmount,
      @UI.lineItem: [{position: 50},{ label: 'Creation Date' }]
      @UI.selectionField: [{position: 20}]
      cast( left(cast(CreationDateTime as abap.char( 30)),8) as
abap.dats) as CreationDate
}
```

- Result



- With active filter

- Basic Filter Screen



## Task 5: Add Value Helps to Filters

- Have a look at CDS **ZTMCDS9_C_VH_CUST** in package **Z_TMC**.
- Use this CDS as Value Help for the *CustomerId*.
- Add *@Consumption.filter.selectionType: #INTERVAL* to the *CreationDate* filter and see the result.

```
@AbapCatalog.sqlViewName: 'ZWK##CDSLISTSRCH'
@AbapCatalog.compiler.compareFilter: true
@AbapCatalog.preserveKey: true
@AccessControl.authorizationCheck: #CHECK
@EndUserText.label: 'List Report'
@UI.headerInfo.typeName: 'Sales Order'
@UI.headerInfo.typeNamePlural: 'Sales Orders'
@Search.searchable: true
define view ZWS##_CDS_LIST_SEARCH
  as select from ztmcds9_i_so
  association [1] to ztmcds9_c_vh_cust as _CustomerVH
    on $projection.CustomerID = _CustomerVH.SoldToParty
{
      @UI.lineItem: [{position: 10 }]
  key Id
as SalesOrderID,
```

```
      @UI.selectionField: [{position: 10}]
      @Consumption.valueHelpDefinition: [{ entity:{ name:
'ZTMCDS9_C_VH_CUST', element: 'SoldToParty' }}]
      CustomerId
as CustomerID,
      @UI.lineItem: [{position: 20 },{ label: 'Customer Name' }]
      @Search.defaultSearchElement: true
      @Search.fuzzinessThreshold : 0.6
      _Customer.name
as CustomerName,
      @UI.lineItem: [{position: 30 },{ label: 'E-mail' }]
      @Search.defaultSearchElement: true
      _Customer.email
as CustomerEmail,
      @UI.lineItem: [{position: 40 }]
      GrossAmount,
      @UI.lineItem: [{position: 50},{ label: 'Creation Date' }]
      @UI.selectionField: [{position: 20}]
      @Consumption.filter.selectionType: #INTERVAL
      cast( left(cast(CreationDateTime as abap.char( 30)),8) as
abap.dats) as CreationDate,
      _CustomerVH
}
```

- Filter for *CustomerId*

- Filter for *CreationDate*

CreationDate:

Time Period

Date

| Date | |
| From | |
| To | |
| Date Range | |
| Today | May 8, 2022 |
| Yesterday | May 7, 2022 |
| Tomorrow | May 9, 2022 |
| Today -X / +Y days | |
| Last X days | |
| Next X days | |
| This week | May 8, 2022 - May 14, 2022 |
| Last week | May 1, 2022 - May 7, 2022 |
| Last X weeks | |
| Next week | May 15, 2022 - May 21, 2022 |
| Next X weeks | |
| Month | |
| This month | May 1, 2022 - May 31, 2022 |
| Last month | Apr 1, 2022 - Apr 30, 2022 |
| Last X months | |
| Next month | Jun 1, 2022 - Jun 30, 2022 |
| Next X months | |
| This quarter | Apr 1, 2022 - Jun 30, 2022 |

OK   Cancel