### Create List Report Object Page

# Task 1: Duplicate CDS **ZWS##\_CDS\_LIST\_SEARCH** to **ZWS##\_CDS\_LIST\_OBJECT**

### 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;
   expose ZWS##_CDS_LIST_OBJECT as ListObject;
}
```

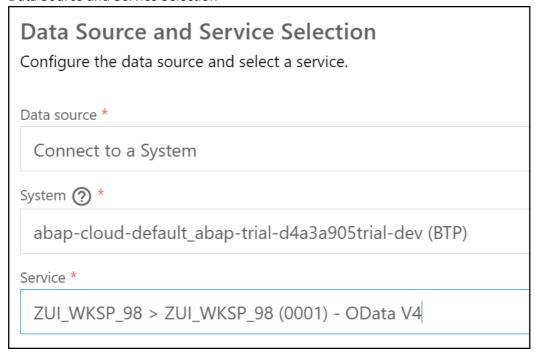
## Task 3: Create a new Fiori elements application with the new CDS

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                  | ListObject                      |
| Module name                  | basic-object                    |
| Application title            | Basic Object                    |
| Application namespace        | nato.workshop                   |
| Description                  | Basic Object                    |
| Project folder path          | /home/user/projects             |
| Add deployment configuration | Yes                             |
| Add FLP configuration        | Yes                             |
| Deployment Target            | Cloud Foundry                   |
|                              |                                 |

| Field   | Value                      |
|---|----------------------------|
| Destination name                              | abap-cloud-default_xx(SCP) |
| Add application to managed application router | Yes                        |
| Semantic Object                               | NATO                       |
| Action  | BasicObject                |
| Title   | Basic List Object          |
| Subtitle                                      | Workshop                   |

Data Source and Service Selection



• Entity Selection

| Entity Selection  |
|---|
| Configure the selected service.   |
| Main entity *   |
| ListObject  |
| Automatically add table columns to the list page and a section to the object page if none already exists?  Yes O No |

Project Attributes

# Project Attributes

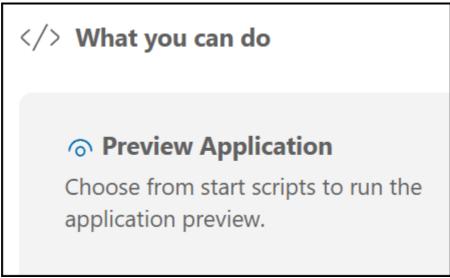
| Configure the main project attributes.   |  |
|--|--|
| Module name ② *                          |  |
| basic-object                             |  |
| Application title ②                      |  |
| Basic Ojbect                             |  |
| Application namespace <a>?</a>           |  |
| nato.workshop                            |  |
| Description ②                            |  |
| Basic Ojbect                             |  |
| Project folder path *                    |  |
| /home/user/projects                      |  |
| Minimum SAPUI5 version ② *               |  |
| 1.96.7 (Source system version)           |  |
| Add deployment configuration  O Yes O No |  |

| Add FLP configuration                                      |                            |
|--|----------------------------|
| Yes No   |                            |
| Configure advanced options                                 |                            |
| O Yes O No   |                            |
| Deployment Configuration                                   |                            |
| Deployment Configuration Configure deployment settings     |                            |
| Please choose the target *                                 |                            |
| Cloud Foundry  |                            |
| Destination name *   |                            |
| abap-cloud-default_abap-trial-d4a3a90                      | 5trial-dev(SCP) - https:// |
| Add application to managed application router?  • Yes • No |                            |

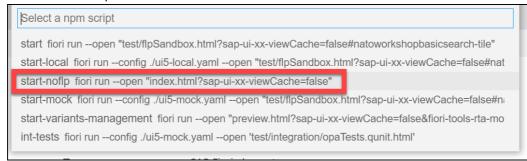
• Fiori Launchpad Configuration

# Fiori Launchpad Configuration Configure Fiori Launchpad settings Semantic Object \* NATO Action \* BasicObject Title \* Basic List Object Subtitle (optional) Workshop

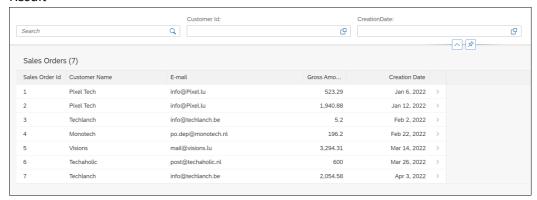
Preview Application



Select start-noflp, this is the fastest test.



### Result



### Select a line



### Task 4: Basic Object Page

- Set the title of every single sales order to the value of field **SalesOrderID**.
- Use @UI.identification and @UI.facet to add more fields to the object page

| Position | Value         |
|----------|---------------|
| 10       | SalesOrderID  |
| 20       | CustomerID    |
| 30       | CustomerName  |
| 40       | CustomerEmail |

@AbapCatalog.sqlViewName: 'ZWK##CDSLISTOBJT'
@AbapCatalog.compiler.compareFilter: true

@AbapCatalog.preserveKey: true

@AccessControl.authorizationCheck: #CHECK

```
@EndUserText.label: 'Object Page'
@UI.headerInfo.typeName: 'Sales Order'
@UI.headerInfo.typeNamePlural: 'Sales Orders'
@UI.headerInfo.title.value: 'SalesOrderID'
@Search.searchable: true
define view ZWS##_CDS_LIST_OBJECT
  as select from ztmcds9_i_so
  association [1] to ztmcds9_c_vh_cust as _CustomerVH on
$projection.CustomerID = _CustomerVH.SoldToParty
{
      @UI.facet: [
       {
         id: 'COLLFAC1',
         label: 'General Information',
         type: #COLLECTION,
         position: 10
       },
         label: 'General Information',
         type: #IDENTIFICATION_REFERENCE,
         parentId: 'COLLFAC1',
         position: 10
       }
      1
      @UI.lineItem: [{position: 10 }]
      @UI.identification: [{position: 10}]
  key Id
as SalesOrderID,
      @UI.selectionField: [{position: 10}]
      @UI.identification: [{position: 20}]
      @Consumption.valueHelpDefinition: [{ entity:{ name:
'ZTMCDS9_C_VH_CUST', element: 'SoldToParty' }}]
      CustomerId
as CustomerID,
      @UI.lineItem: [{position: 20 },{ label: 'Customer Name' }]
      @UI.identification: [{position: 30}]
      @Search.defaultSearchElement: true
      @Search.fuzzinessThreshold: 0.6
      _Customer.name
as CustomerName,
      @UI.lineItem: [{position: 30 },{ label: 'E-mail' }]
      @UI.identification: [{position: 40}]
      @Search.defaultSearchElement: true
      Customer.email
as CustomerEmail,
      @UI.lineItem: [{position: 40 }]
```

```
GrossAmount,
NetAmount,
TaxAmount,
DeliveryStatus,
BillingStatus,
@UI.lineItem: [{position: 50},{ label: 'Creation Date' }]
@Consumption.filter.selectionType: #INTERVAL
cast( left(cast(CreationDateTime as abap.char( 30)),8) as
abap.dats) as CreationDate,
CreationUser,
@UI.hidden: true
CurrencyCode,
__CustomerVH
}
```

### Result



### Task 5: Add Header Facets

• Create two header facets: AMOUNT and STATUS

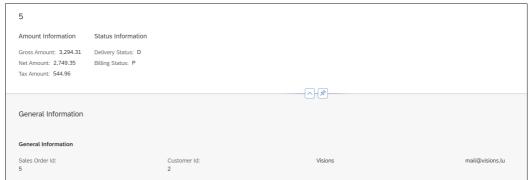
| Group  | Position | Field          |
|--------|----------|----------------|
| AMOUNT | 10       | GrossAmount    |
| AMOUNT | 20       | NetAmount      |
| AMOUNT | 30       | TaxAmound      |
| STATUS | 10       | DeliveryStatus |
| STATUS | 20       | BillingStatus  |

```
@AbapCatalog.sqlViewName: 'ZWK##CDSLISTOBJT'
@AbapCatalog.compiler.compareFilter: true
@AbapCatalog.preserveKey: true
@AccessControl.authorizationCheck: #CHECK
@EndUserText.label: 'Object Page'
@UI.headerInfo.typeName: 'Sales Order'
@UI.headerInfo.typeNamePlural: 'Sales Orders'
@UI.headerInfo.title.value: 'SalesOrderID'
```

```
@Search.searchable: true
define view ZWS##_CDS_LIST_OBJECT
  as select from ztmcds9_i_so
 association [1] to ztmcds9_c_vh_cust as _CustomerVH on
$projection.CustomerID = _CustomerVH.SoldToParty
      @UI.facet: [
      id: 'COLLFAC1',
      label: 'General Information',
      type: #COLLECTION,
      position: 10
      },
      label: 'General Information',
      type: #IDENTIFICATION_REFERENCE,
      parentId: 'COLLFAC1',
      position: 10
      },
      label: 'Amount Information',
      purpose: #HEADER,
      type: #FIELDGROUP_REFERENCE,
      targetQualifier: 'AMOUNT',
      position: 10
      },
      label: 'Status Information',
      purpose: #HEADER,
      type: #FIELDGROUP_REFERENCE,
      targetQualifier: 'STATUS',
      position: 10
      @UI.lineItem: [{position: 10 }]
      @UI.identification: [{position: 10}]
  key Id
as SalesOrderID,
      @UI.selectionField: [{position: 10}]
      @UI.identification: [{position: 20}]
      @Consumption.valueHelpDefinition: [{ entity:{ name:
'ZTMCDS9_C_VH_CUST', element: 'SoldToParty' }}]
      CustomerId
as CustomerID,
      @UI.lineItem: [{position: 20 },{ label: 'Customer Name' }]
      @UI.identification: [{position: 30}]
```

```
@Search.defaultSearchElement: true
      @Search.fuzzinessThreshold: 0.6
      _Customer.name
as CustomerName,
      @UI.lineItem: [{position: 30 },{ label: 'E-mail' }]
      @UI.identification: [{position: 40}]
      @Search.defaultSearchElement: true
      _Customer.email
as CustomerEmail,
      @UI.lineItem: [{position: 40 }]
      @UI.fieldGroup: [{position: 10, qualifier: 'AMOUNT'}]
      GrossAmount,
      @UI.fieldGroup: [{position: 20, qualifier: 'AMOUNT'}]
      NetAmount,
      @UI.fieldGroup: [{position: 30, qualifier: 'AMOUNT'}]
      TaxAmount,
      @UI.fieldGroup: [{position: 10, qualifier: 'STATUS'}]
      DeliveryStatus,
      @UI.fieldGroup: [{position: 20, qualifier: 'STATUS'}]
      BillingStatus,
      @UI.lineItem: [{position: 50},{ label: 'Creation Date' }]
      @Consumption.filter.selectionType: #INTERVAL
      cast( left(cast(CreationDateTime as abap.char( 30)),8) as
abap.dats) as CreationDate,
      CreationUser,
      @UI.hidden: true
      CurrencyCode,
      _CustomerVH
}
```

### Result



### Task 6: Add Sections

- Create a collection facet for General information.
- Create a collection facet for *More information*.
- Assign qualifiers **AMOUNT** and **STATUS** to collection *More information*.

```
@AbapCatalog.sqlViewName: 'ZWK##CDSLISTOBJT'
@AbapCatalog.compiler.compareFilter: true
@AbapCatalog.preserveKey: true
@AccessControl.authorizationCheck: #CHECK
@EndUserText.label: 'Object Page'
@UI.headerInfo.typeName: 'Sales Order'
@UI.headerInfo.typeNamePlural: 'Sales Orders'
@UI.headerInfo.title.value: 'SalesOrderID'
@Search.searchable: true
define view ZWS##_CDS_LIST_OBJECT
  as select from ztmcds9 i so
  association [1] to ztmcds9_c_vh_cust as _CustomerVH on
$projection.CustomerID = CustomerVH.SoldToParty
 @UI.facet: [
   {
     id: 'COLLFAC1',
     label: 'General Information',
     type: #COLLECTION,
     position: 10
   },
   {
     id: 'COLLFAC2',
     label: 'More Information',
     type: #COLLECTION,
     position: 20
   },
     label: 'General Information',
     type: #IDENTIFICATION REFERENCE,
     parentId: 'COLLFAC1',
     position: 10
   },
     label: 'Amount Information',
     parentId: 'COLLFAC2',
     type: #FIELDGROUP_REFERENCE,
     targetQualifier: 'AMOUNT',
     position: 10
   },
     label: 'Status Information',
     parentId: 'COLLFAC2',
     type: #FIELDGROUP_REFERENCE,
     targetQualifier: 'STATUS',
     position: 20
```

```
]
      @UI.lineItem: [{position: 10 }]
      @UI.identification: [{position: 10}]
 key Id
as SalesOrderID,
      @UI.selectionField: [{position: 10}]
      @UI.identification: [{position: 20}]
      @Consumption.valueHelpDefinition: [{ entity:{ name:
'ZTMCDS9_C_VH_CUST', element: 'SoldToParty' }}]
      CustomerId
as CustomerID,
      @UI.lineItem: [{position: 20 },{ label: 'Customer Name' }]
      @UI.identification: [{position: 30}]
      @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 }]
      @UI.identification: [{position: 40}]
      @UI.fieldGroup: [{position: 10, qualifier: 'AMOUNT'}]
      GrossAmount,
      @UI.identification: [{position: 50}]
      @UI.fieldGroup: [{position: 20, qualifier: 'AMOUNT'}]
      NetAmount,
      @UI.identification: [{position: 60}]
      @UI.fieldGroup: [{position: 30, qualifier: 'AMOUNT'}]
      TaxAmount,
      @UI.fieldGroup: [{position: 10, qualifier: 'STATUS'}]
      DeliveryStatus,
      @UI.fieldGroup: [{position: 20, qualifier: 'STATUS'}]
      BillingStatus,
      @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,
      CreationUser,
      @UI.hidden: true
      CurrencyCode,
      _CustomerVH
}
```

Result Result

### Task 7: Move Annotations to Metadata Extension (Optional)

- Duplicate ZWS## CDS LIST OBJECT to ZWS## CDS C LO
- Add annotation @Metadata.allowExtensions: true
- Create a Metadata Extenstion ZWS## ME CDS C LO
- Move all UI annotations to the Metadata Extenstion
- Add ZWS##\_CDS\_C\_LO\*\* to your Service Definition
- Create a new Fiori Application using the Template Wizard for a List Report

```
@AbapCatalog.sqlViewName: 'ZWK98CDSCLISTOBJ'
@AbapCatalog.compiler.compareFilter: true
@AbapCatalog.preserveKey: true
@AccessControl.authorizationCheck: #CHECK
@EndUserText.label: 'Object Page'
@Metadata.allowExtensions: true
define view ZWS98_CDS_C_LO
  as select from ztmcds9 i so
  association [1] to ztmcds9_c_vh_cust as _CustomerVH on
$projection.CustomerID = _CustomerVH.SoldToParty
  key Id
as SalesOrderID,
      CustomerId
as CustomerID,
      _Customer.name
as CustomerName,
      _Customer.email
as CustomerEmail,
      GrossAmount,
      NetAmount,
      TaxAmount,
      DeliveryStatus,
      BillingStatus,
      cast( left(cast(CreationDateTime as abap.char( 30)),8) as
abap.dats) as CreationDate,
      CreationUser,
      CurrencyCode,
      _CustomerVH
}
```

```
@Metadata.layer: #CUSTOMER
@UI.headerInfo.typeName: 'Sales Order'
@UI.headerInfo.typeNamePlural: 'Sales Orders'
@UI.headerInfo.title.value: 'SalesOrderID'
@Search.searchable: true
annotate view ZWS98_CDS_C_LO
    with
{
  @UI.facet: [
   {
     id: 'COLLFAC1',
     label: 'General Information',
     type: #COLLECTION,
     position: 10
   },
     id: 'COLLFAC2',
     label: 'More Information',
     type: #COLLECTION,
     position: 20
   },
   {
      label: 'Basic Information',
      purpose: #HEADER,
      type: #FIELDGROUP REFERENCE,
      targetQualifier: 'BASIC',
      position: 10
      },
     label: 'General Information',
     type: #IDENTIFICATION_REFERENCE,
     parentId: 'COLLFAC1',
     position: 10
   },
     label: 'Amount Information',
     parentId: 'COLLFAC2',
     type: #FIELDGROUP REFERENCE,
     targetQualifier: 'AMOUNT',
     position: 10
   },
     label: 'Status Information',
     parentId: 'COLLFAC2',
     type: #FIELDGROUP_REFERENCE,
     targetQualifier: 'STATUS',
     position: 20
```

```
@UI.lineItem: [{position: 10 }]
      @UI.identification: [{position: 10}]
      SalesOrderID;
      @UI.selectionField: [{position: 10}]
      @UI.identification: [{position: 20}]
      @Consumption.valueHelpDefinition: [{ entity:{ name:
'ZTMCDS9_C_VH_CUST', element: 'SoldToParty' }}]
      CustomerID;
      @UI.lineItem: [{position: 20 },{ label: 'Customer Name' }]
      @UI.identification: [{position: 30}]
      @Search.defaultSearchElement: true
      @Search.fuzzinessThreshold : 0.6
      CustomerName;
      @UI.lineItem: [{position: 30 },{ label: 'E-mail' }]
      @Search.defaultSearchElement: true
      CustomerEmail;
      @UI.lineItem: [{position: 40 }]
      @UI.identification: [{position: 40}]
      @UI.fieldGroup: [{position: 10, qualifier: 'AMOUNT'}]
      GrossAmount;
      @UI.identification: [{position: 50}]
      @UI.fieldGroup: [{position: 20, qualifier: 'AMOUNT'}]
      NetAmount;
      @UI.identification: [{position: 60}]
      @UI.fieldGroup: [{position: 30, qualifier: 'AMOUNT'}]
      TaxAmount;
      @UI.fieldGroup: [{position: 10, qualifier: 'STATUS'}]
      DeliveryStatus;
      @UI.fieldGroup: [{position: 20, qualifier: 'STATUS'}]
      BillingStatus;
      @UI.lineItem: [{position: 50},{ label: 'Creation Date' }]
      @UI.selectionField: [{position: 20}]
      @Consumption.filter.selectionType: #INTERVAL
      @UI.fieldGroup: [{position: 20, qualifier: 'BASIC', label:
'Creation Date'}]
      CreationDate;
      @UI.fieldGroup: [{position: 10, qualifier: 'BASIC'}]
      CreationUser;
      @UI.hidden: true
      CurrencyCode;
}
```

```
@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;
   expose ZWS##_CDS_LIST_OBJECT as ListObject;
   expose ZWS98_CDS_C_LO as ListObjectME;
}
```

| Field                 | Value  |
|-----------------------|--|
| Data source           | Connect to a System                                  |
| System                | abap-cloud-default_xx-dev (BTP)                      |
| Service               | ZUI_WKSP_##  |
| Main entity           | ListObjectME   |
| Module name           | basic-object   |
| Application title     | Basic List with Object Page using Metadata Extension |
| Application namespace | nato.workshop  |
| Description           | Basic List with Object Page using Metadata Extension |
| Semantic Object       | NATO   |
| Action                | BasicObjectME  |
| Title                 | Basic List Object (ME)                               |
| Subtitle              | Workshop   |

### • Result

