

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

Data Source and Service Selection

Configure the data source and select a service.

Data source *

Connect to a System

System (?) *

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 *

ListObject


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

Configure the main project attributes.

Module name  *

basic-object

Application title 

Basic Object

Application namespace 

nato.workshop

Description 

Basic Object

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 *


Action *

Title *

Subtitle (optional)

- 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

Search

Customer Id:

CreationDate:

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	>
3	Techlanch	info@techlanch.be	5.2	Feb 2, 2022	>
4	Monotech	po.dep@monotech.nl	196.2	Feb 22, 2022	>
5	Visions	mail@visions.lu	3,294.31	Mar 14, 2022	>
6	Techaholic	post@techaholic.nl	600	Mar 26, 2022	>
7	Techlanch	info@techlanch.be	2,054.58	Apr 3, 2022	>

- Select a line

General Information

Sales Order Id: 3	CustomerName: Techlanch	Gross Amount: 5.2
Customer Id: 5	CustomerEmail: info@techlanch.be	CreationDate: Feb 2, 2022

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
    }
  ]

  @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

5			
General Information			
General Information			
Sales Order Id: 5	Customer Id: 2	Visions	mail@visions.lu

Task 5: Add Header Facets

- Create two header facets: *AMOUNT* and *STATUS*

Group	Position	Field
AMOUNT	10	GrossAmount
AMOUNT	20	NetAmount
AMOUNT	30	TaxAmount
STATUS	10	DeliveryStatus
STATUS	20	BillingStatus

```
@AbapCatalog.sqlViewName: 'ZWK##CDSLSTOBT'  
@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

5	
Amount Information	Status Information
Gross Amount: 3,294.31	Delivery Status: D
Net Amount: 2,749.35	Billing Status: P
Tax Amount: 544.96	
General Information	
General Information	
Sales Order Id: 5	Customer Id: 2
Visions mail@visions.lu	

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##CDSLSTOBT'
@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:
'ZTMCD59_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 Extension* **ZWS##_ME_CDS_C_LO**
- Move all UI annotations to the *Metadata Extension*
- 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:
'ZTMCD9_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

5

Basic Information

User Name: Robert

Creation Date: Mar 14, 2022

General Information

More Information

General Information

Sales Order Id:
5

Customer Id:
2

Visions

Gross Amount:
3,294.31

Net Amount:
2,749.35

Tax Amount:
544.96

More Information

Amount Information

Gross Amount:
3,294.31

Net Amount:
2,749.35

Tax Amount:
544.96

Status Information

Delivery Status:
D

Billing Status:
P

17 / 17