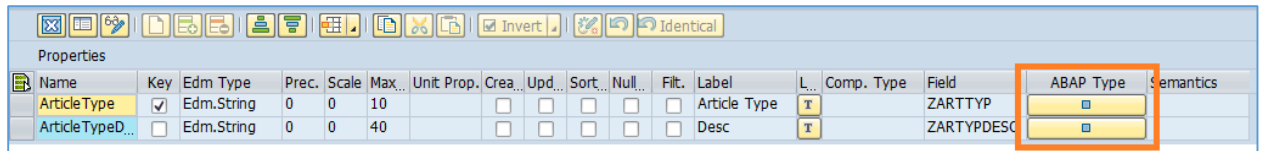# ODATA Standards

- There should not be any underscore, special characters and/or space in Entity names and entity property names.

- Follow CamelCase in Entity and property names

- While creating property names, do not use ABAP field names. Write the description of it.
  Example:
    i. MATNR – Article
    ii. MAKTX – ArticleDescr
    iii. WERKS – Site

- Property name should be such that it's easily comprehensible.

- For all the FIORI Applications, we need to follow proper process:
  Discussion -> Mockup -> EDM -> RFC Development -> ODATA -> UI
  Any deviations to be signed off from central governance team.

- Once the Odata is developed, we should avoid making changes in IMPORTING and EXPORTING parameters of RFC. Source code changes can be made at any time.

- Any addition/deletion of field or change in field semantic attributes in RFC, must be communicated to Odata developer and accordingly updated in EDM.

- All DATE fields should be marked as NULLABLE while creating ENTITY.

- In most of the cases Navigation and Associations are needed while doing expanded and create deep entity. Avoid creating navigations for simple entity set or create stream calls.

- NAVIGATION names should be short and explanatory enough to understand which two entities are being linked with it.

    o Example: EntitySet1 –   IndentHeaderSet
              EntitySet2 –   IndentItemSet
              Association – IndentHeaderItem
              Navigation -   INDENTHEADERITEMNAV

- Re-definition of methods are done only if the desired functionality is not achievable via CRUDQ methods.

- For passing date field in URL, we explicitly need to mention **datetime** keyword.
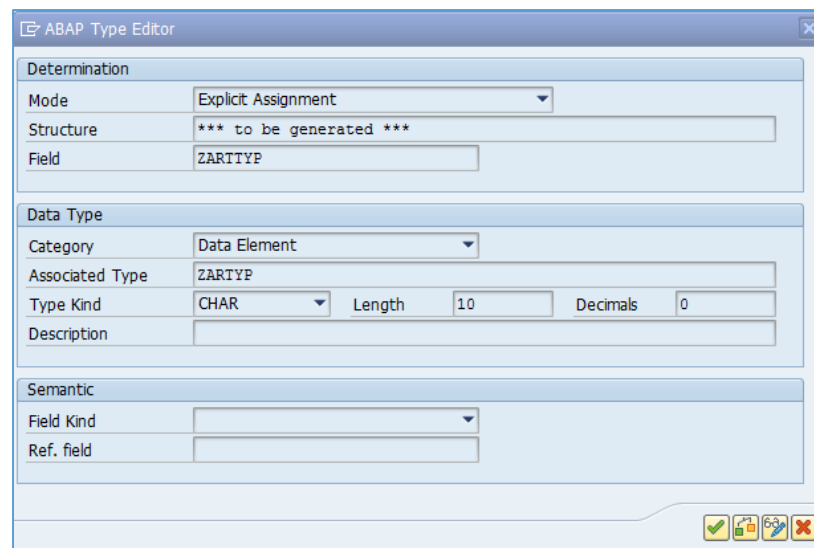
Eg: /sap/opu/odata/sap/Z_FIORI_CIH_SRV/PISSearchSet/?$filter==FromDate eq datetime'2015-01-01T00:00:00' and ToDate eq datetime'2015-11-01T00:00:00'

- In case of adding property to the existing entity, we explicitly need to mention DATA ELEMENT.

  i. Click on ABAP Type

	Name	Key	Edm Type	Prec.	Scale	Max...	Unit Prop.	Crea...	Upd...	Sort...	Null...	Filt.	Label	L...	Comp. Type	Field	ABAP Type	Semantics
	ArticleType	✓	Edm.String	0	0	10		☐	☐	☐	☐	☐	Article Type	T		ZARTTYP	▫	
	ArticleTypeD...	☐	Edm.String	0	0	40		☐	☐	☐	☐	☐	Desc	T		ZARTYPDESC	▫	

  ii. Select Mode as **Explicit assignment** and Category as **Data Element.**
      In Associated Type, we mention the associated Data element. So that its property comes in Odata as well.

ABAP Type Editor

Determination

Mode	Explicit Assignment
Structure	*** to be generated ***
Field	ZARTTYP

Data Type

Category	Data Element
Associated Type	ZARTYP
Type Kind	CHAR Length 10 Decimals 0
Description	

Semantic

Field Kind	
Ref. field	

- Avoid deleting the Odata project which is already created. Along with Odata projects 7-8 runtime artifacts are generated and they are not deleted when project is deleted from SEGW.

- Re-definition of any method should only be done in extension classes – *MPC_EXT, *DPC_EXT.

- Do not make any changes in DPC and MPC classes which are auto generated on the basis of mapping done in SEGW. Always re-define the respective method in *MPC_EXT, *DPC_EXT.

- When using Create/Get stream, always mark the respective entity as media type and redefine DEFINE method of MPC class.

- While implementing the CREATE_ENTITY, we need to re-define the same method in EXT class and comment the READ call. We pass RETURN message explicitly in success scenario.

- On implementing the CREATE_DEEP and EXPANDED_ENTITY, the deep structure name should be same as navigation property name.

- The navigation name should end with NAV and the entire name should be in capital letters. Example – HEADERITEMNAV or HEADER_ITEM_NAV.

- In case of ENTITY_SET, if a particular property needs to be passed with multiple input values it should be separated with **OR**.

   Example:
   sap/opu/odata/sap/Z_FIORI_FD33_SRV/CustomerCreditDetailSet/?$filter=(CustomerId eq '660097911' or CustomerId eq '660091320') and CCArea eq 'CREL'

- Entities should always have KEY field(s) which uniquely identifies each record in output.

- Messages can be transferred to HTTP Header using:
   - ADD_MESSAGE method of interface /IWBEP/IF_MESSAGE_CONTAINER
   - Passing name and value in HTTP framework – IHTTPNVP

- URLs format for CRUDQ operation:
   - **GET_ENTITY** - /sap/opu/odata/sap/ABC_SRV/EntitySet(KeyField1='TEST1', KeyField2='TEST2')

   - **GET_ENTITY_SET** - /sap/opu/odata/sap/ABC_SRV/EntitySet
      /sap/opu/odata/sap/ABC_SRV/EntitySet/?$filter=Field1 eq 'test1' and Field2 eq 'test2'

   - **CREATE/CREATE_DEEP** - /sap/opu/odata/sap/ABC_SRV/EntitySet

   - **UPDATE** - /sap/opu/odata/sap/ABC_SRV/EntitySet(KeyField1='TEST1', KeyField2='TEST2')

   - **DELETE** - /sap/opu/odata/sap/ABC_SRV/EntitySet(KeyField1='TEST1', KeyField2='TEST2')

   - **GET_EXPANDED_ENTITY** – /sap/opu/odata/sap/ABC_SRV/EntitySet(KeyField1='TEST1', KeyField2='TEST2')/?$expand=NAVIGATION

   - **CREATE_STREAM** - /sap/opu/odata/sap/ABC_SRV/EntitySet

   - **GET_STREAM** - /sap/opu/odata/sap/ABC_SRV/EntitySet(KeyField1='TEST1', KeyField2='TEST2')/$value