My training by tutorial from developers.sap.com

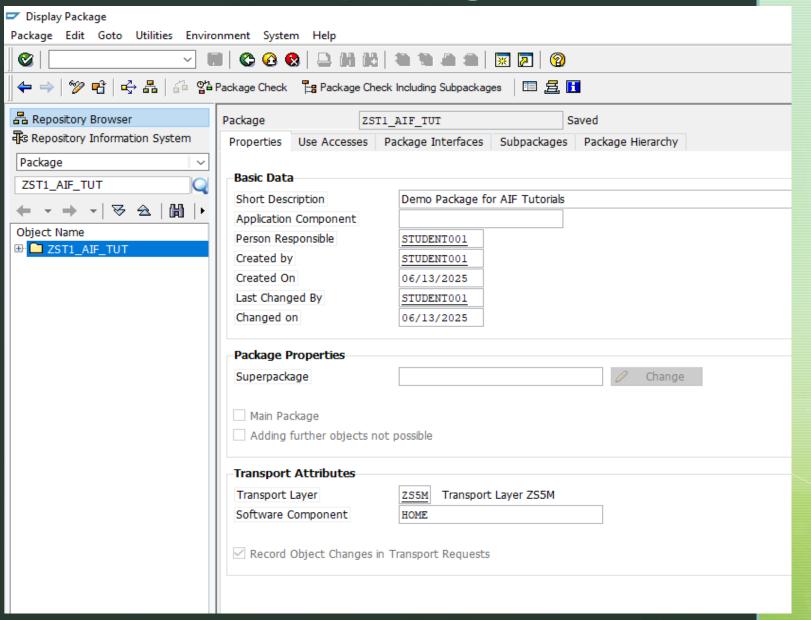
https://developers.sap.com/tutorials/aifproxy-monitoring-interface-create..html

# Create a Simple Proxy Interface

Instructions and codes are taken from tutorial "Create a Simple Proxy Interface" (https://developers.sap.com/tutori als/). All screenshots made from my

All screenshots made from my own development performed via this tutorial

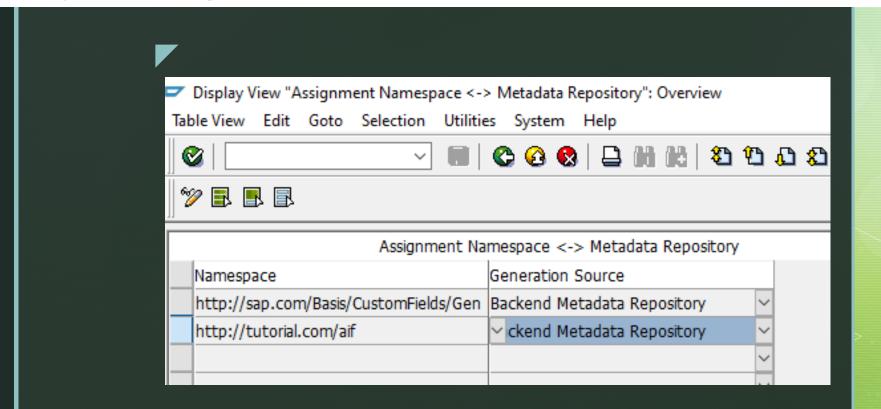
### Create a package



Next, you need to assign a new namespace to the Backend Metadata Repository. Run transaction **Assignment Namespace Generating Application** (transaction code SPXNGENAPPL).

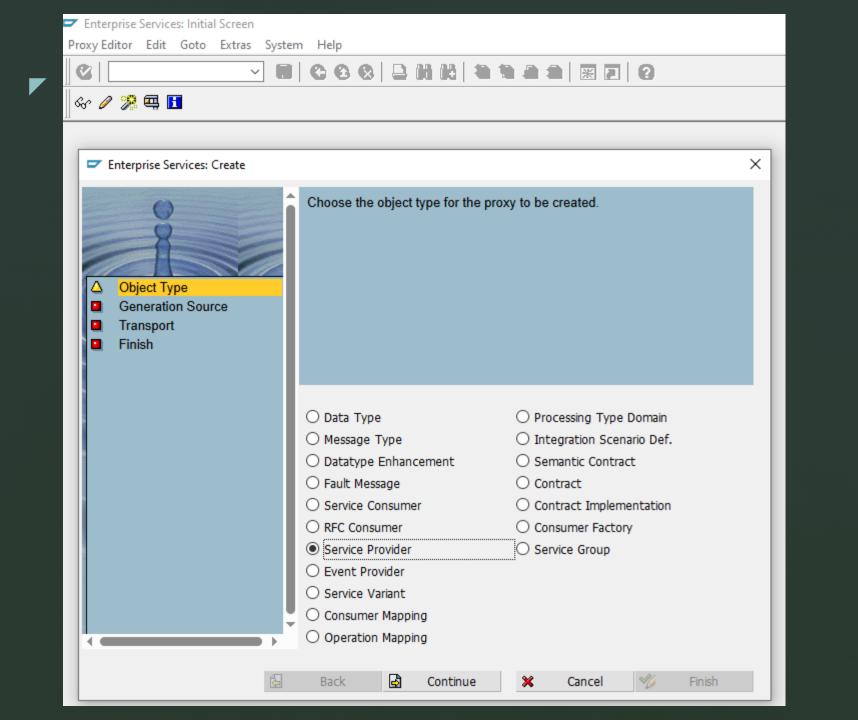
Switch to **Edit** mode, add a new entry, and enter or select the following details for your new namespace:

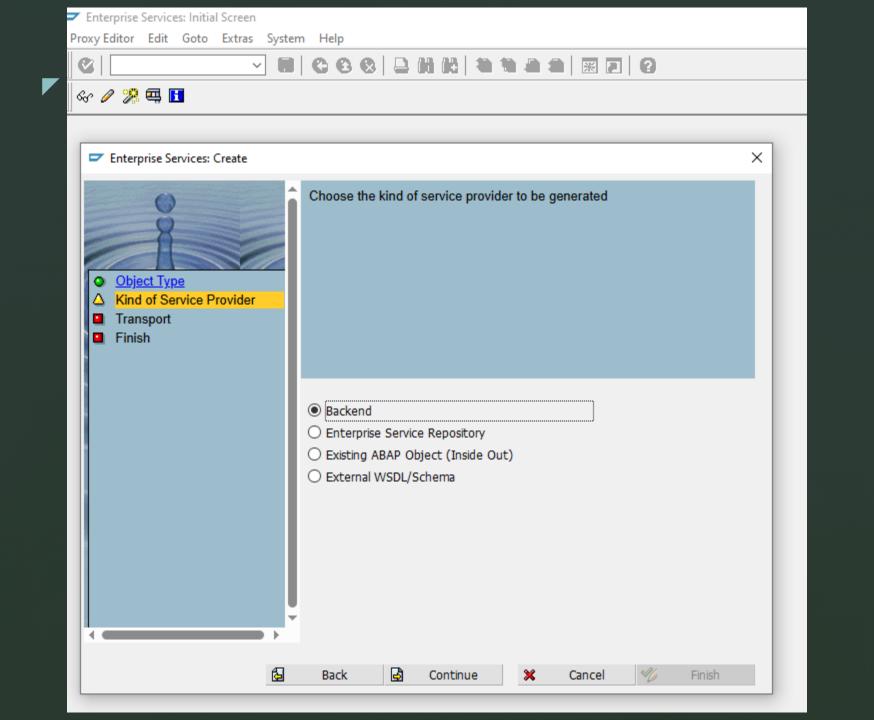
Save your changes.

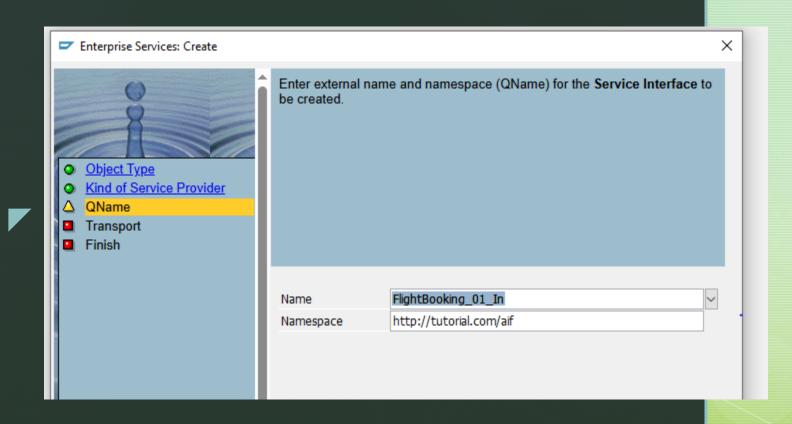


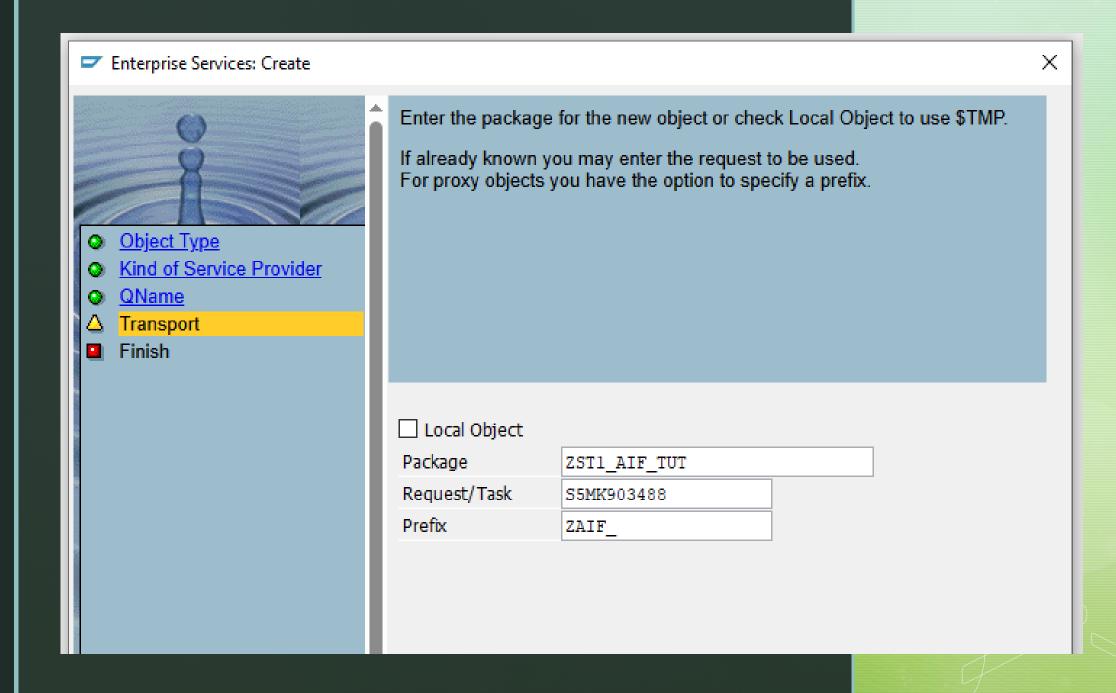
### **CREATE PROXY**

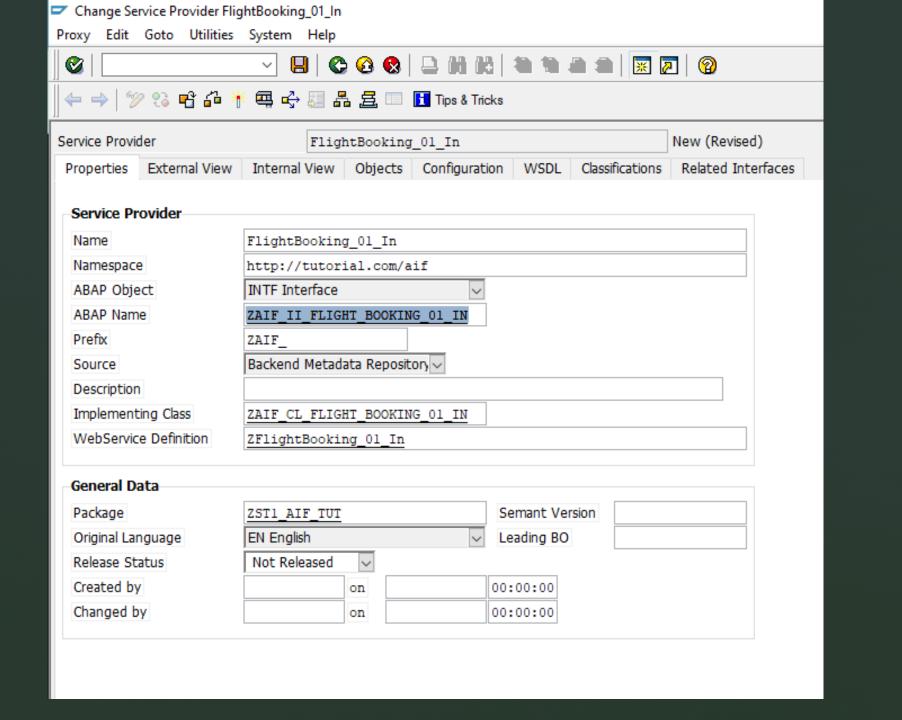
- To create a new service interface, run the **proxy editor** (transaction code SPROXY\_START).
- In Enterprise Services: Initial Screen, select Create with Wizard and carry out the following configuration steps:
- 1.As Object Type, select Service Provider. Click Continue.
- 2.As Kind of Service Provider, select Backend. Click Continue.
- 3.As Name, enter and namespace http://tutorial.com/aif.
- Click Continue.
- 4.For the transport options, enter your package ZST1\_AIF\_TUT, select a workbench request, and enter the prefix ZAIF\_.
  Select Continue.

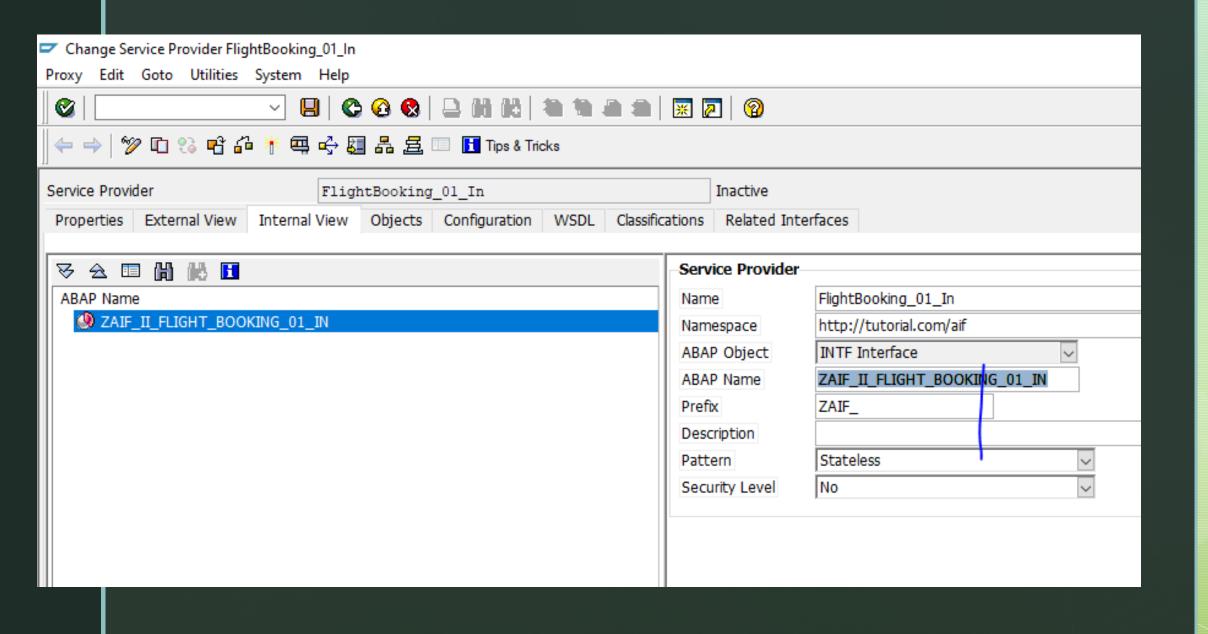


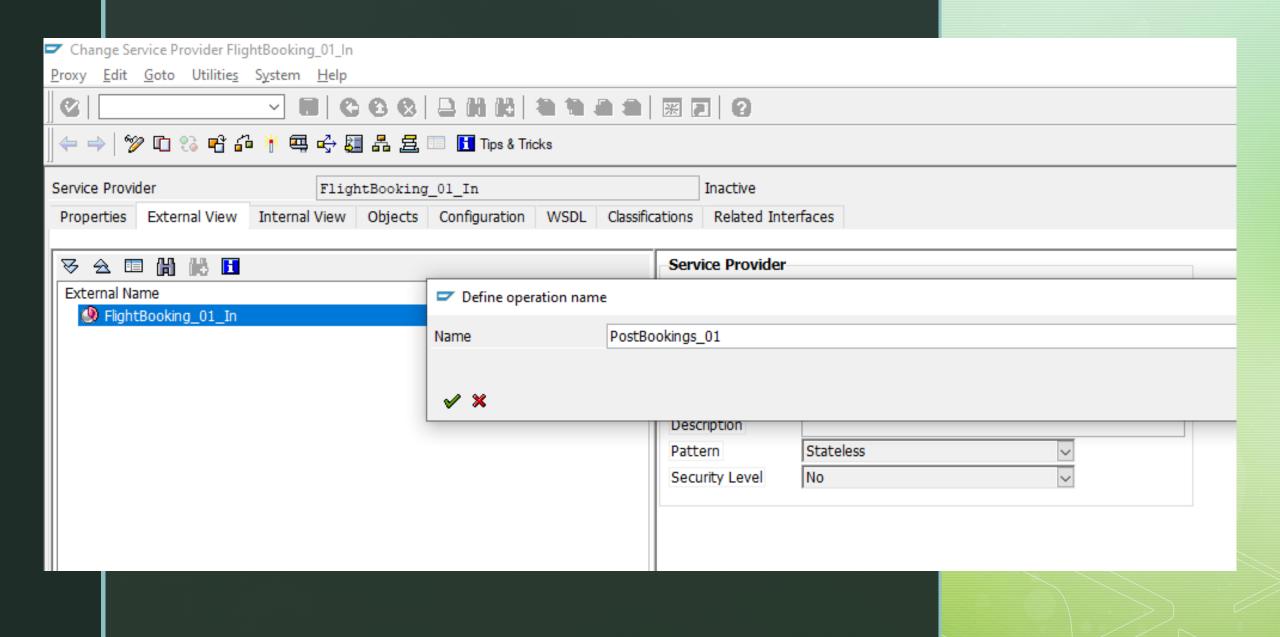












### **DEFINE PROXY STRUCTURES**

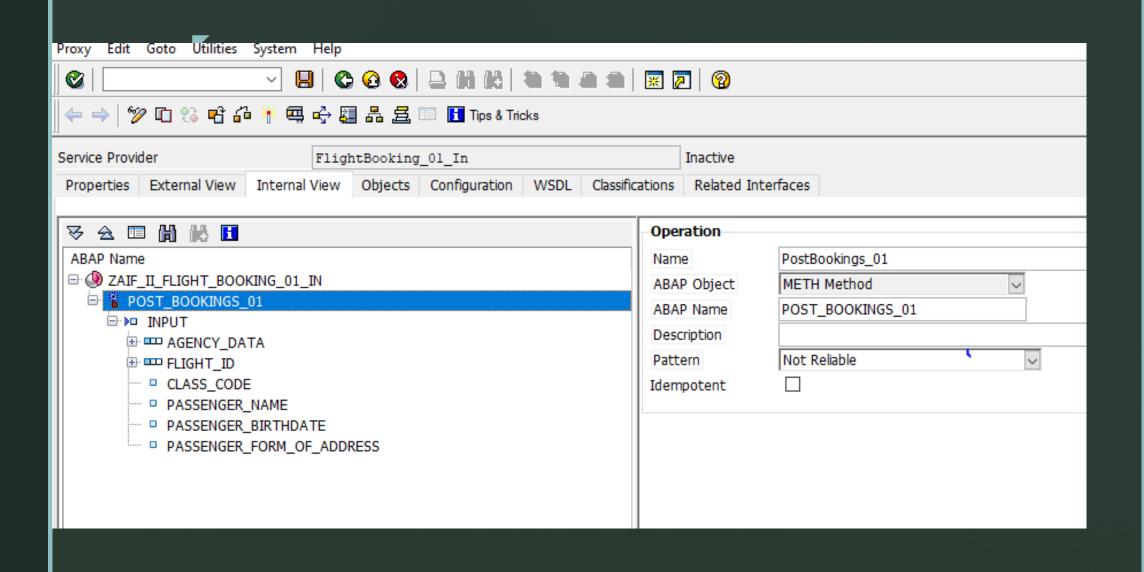
Next, you need to add an operation and a fault message type in the proxy editor.

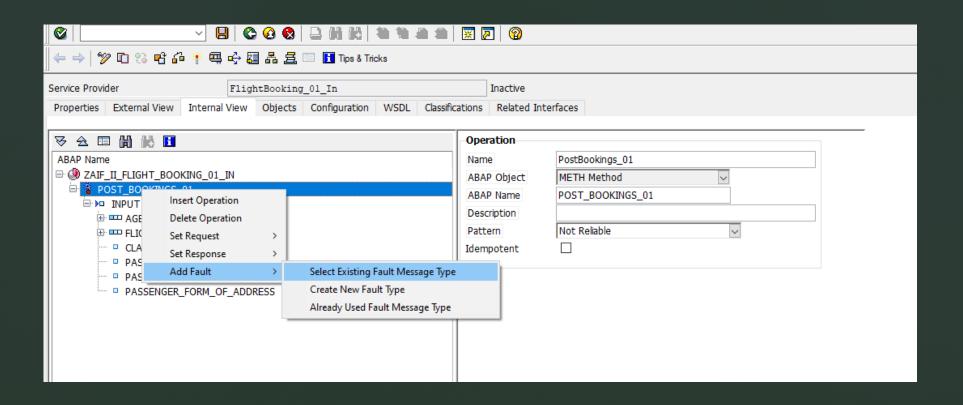
1.Switch to the Internal View tab. Right-click your service provider and select

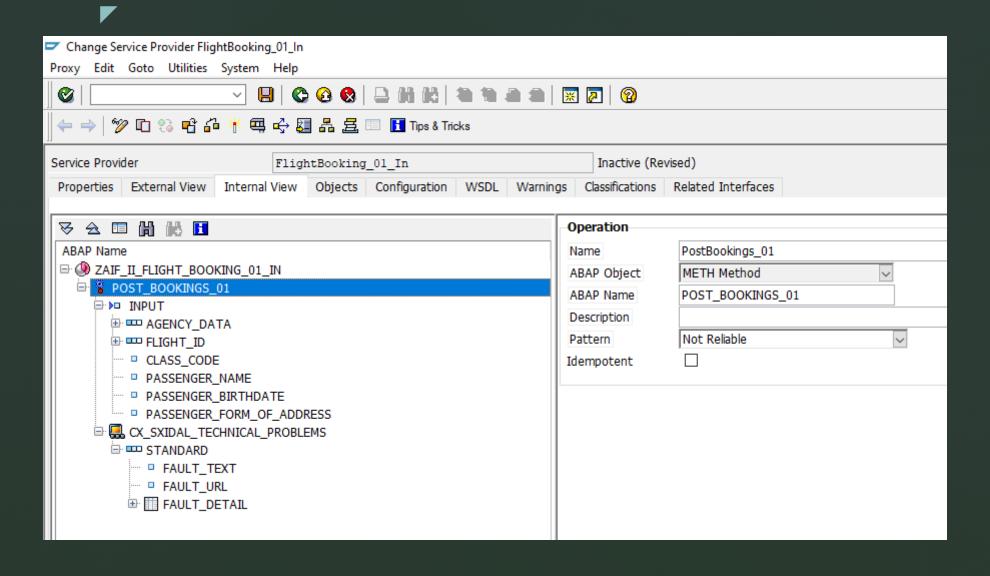
Add Operation. Enter the operation name PostBookings\_01. With the new operation selected, switch the Pattern of the operation to Not Reliable to simplify testing.

- 1.Right-click the operation and select Set Request > Select Existing

  Message Type from the context menu.
- 2.In the upcoming **Restrict Value Range** dialog, remove all filters.
- 3.Enter the message type **SXIDAL\_FBO\_REQUEST\_MT** in the **ABAP Name** search filter,
- 4. and the namespace <a href="http://sap.com/xi/XI/Demo/Airline">http://sap.com/xi/XI/Demo/Airline</a> in the Namespace search filter,
- 5.then press **Enter**. In the search result, select the found entry, and select **Copy**.
- 2.Right-click the operation and select Add Fault > Select Existing Fault Message Type.
- 3.Similar to the message type search, remove all filters. Then search for the fault message
- 4.type CX\_SXIDAL\_TECHNICAL\_PROBLEMS.
- 3.Save and activate the proxy.







### Implement proxy class method

Finally, to book the flights in your test scenario, the proxy class method needs to be implemented. Switch to the **Properties** tab.

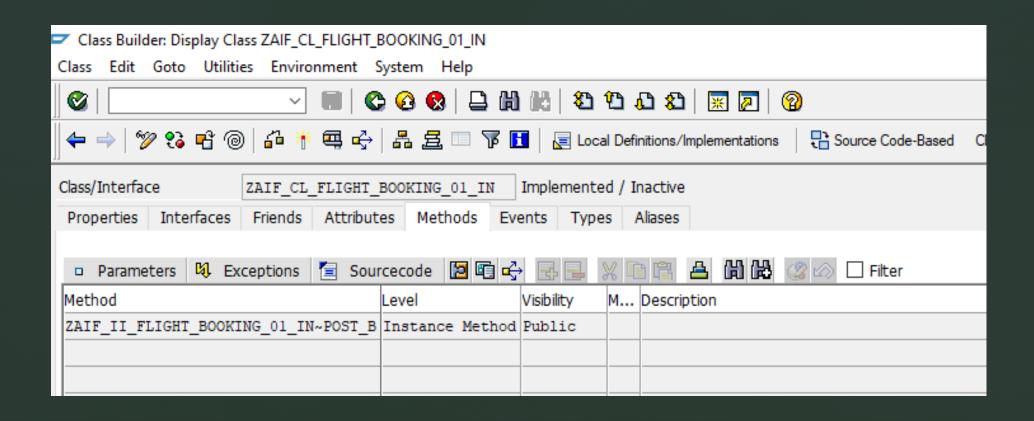
Double-click the implementing class

ZAIF\_CL\_FLIGHT\_BOOKING\_01\_IN

and then double-click the method

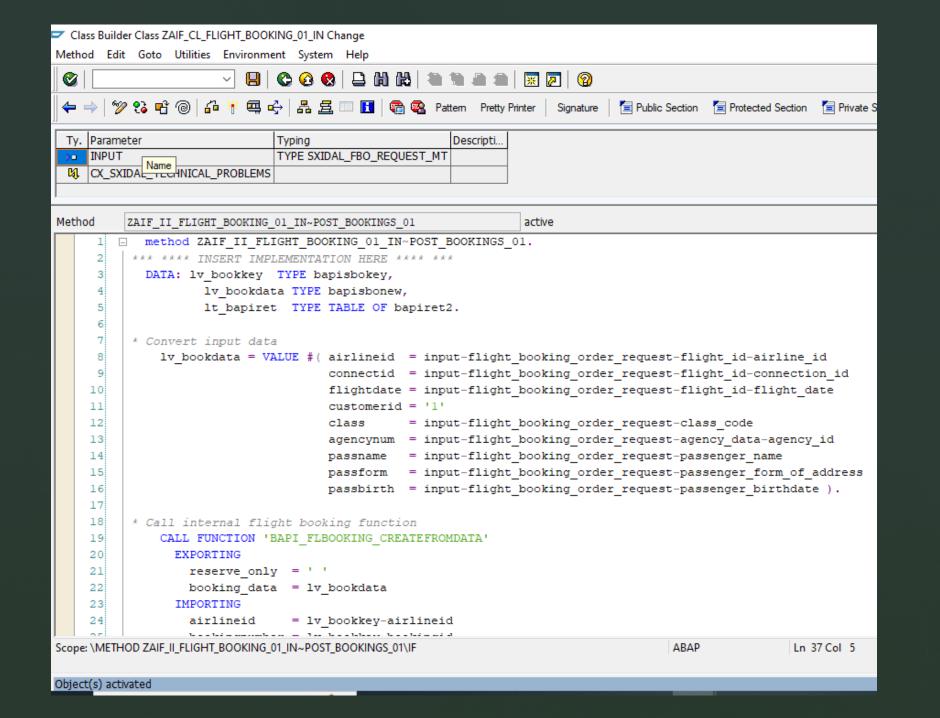
ZAIF\_II\_FLIGHT\_BOOKING\_01\_IN~POST\_BOOKINGS\_01.

Maintain the implementation of the method by copying and pasting the following:



```
method ZAIF II FLIGHT BOOKING 01 IN~POST BOOKINGS 01.
DATA: Iv_bookkey TYPE bapisbokey,
Iv_bookdata TYPE bapisbonew,
It bapiret TYPE TABLE OF bapiret2.
* Convert input data
Iv bookdata = VALUE #( airlineid = input-flight booking order request-flight id-
airline id
                connectid = input-flight booking order request-flight id-connection id
                flightdate = input-flight booking order request-flight id-flight date
                customerid = '1'
                class = input-flight booking order request-class code
                agencynum = input-flight booking order request-agency data-
agency id
                passname = input-flight_booking_order_request-passenger_name
                passform = input-flight booking order request-
passenger form of address
                passbirth = input-flight booking order request-passenger birthdate ).
```

```
* Call internal flight booking function
  CALL FUNCTION 'BAPI_FLBOOKING_CREATEFROMDATA'
   EXPORTING
    reserve only = ''
    booking data = lv bookdata
   IMPORTING
    airlineid = lv_bookkey-airlineid
    bookingnumber = lv bookkey-bookingid
   TABLES
    return = lt_bapiret.
* error case
  IF line_exists( It_bapiret[ type = 'E' id = 'BAPI' number ='001' ] ).
   CALL METHOD cl_proxy_fault=>raise
    EXPORTING
     exception_class_name = 'CX_SXIDAL_TECHNICAL_PROBLEMS'
     bapireturn tab = It bapiret.
  ENDIF.
ENDMETHOD.
```



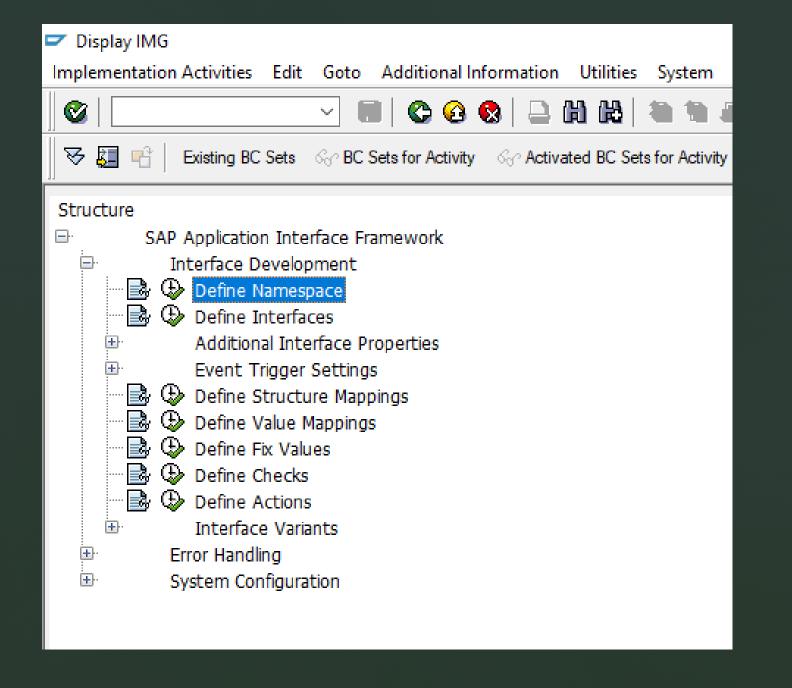
### CREATE NAMESPACE

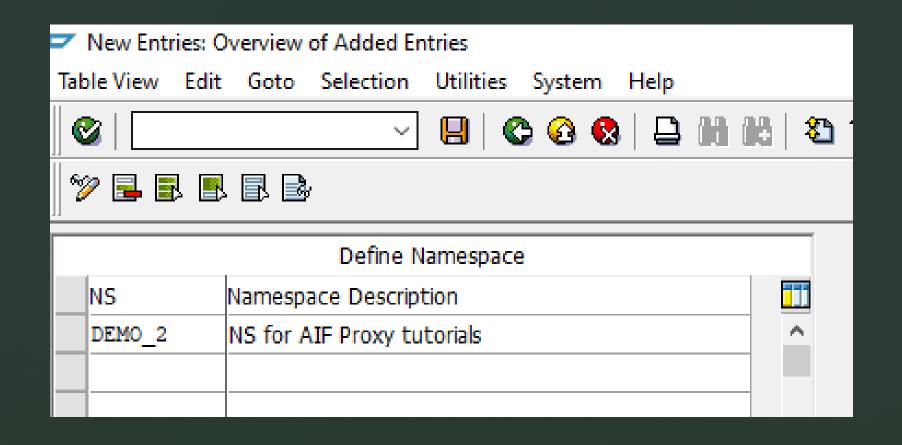
As interfaces in SAP Application Interface Framework are grouped using namespaces, you must create a namespace.

Go to **Customizing** for SAP Application Interface Framework (transaction code /n/AIF/CUST) and navigate to **Interface Development > Define Namespace**.

Select **New Entries** and enter the following name and description for your new namespace:

| Namespace | Namespace Description      |  |  |
|-----------|----------------------------|--|--|
| DEMO_2    | NS for AIF Proxy tutorials |  |  |





### CREATE INTERFACE

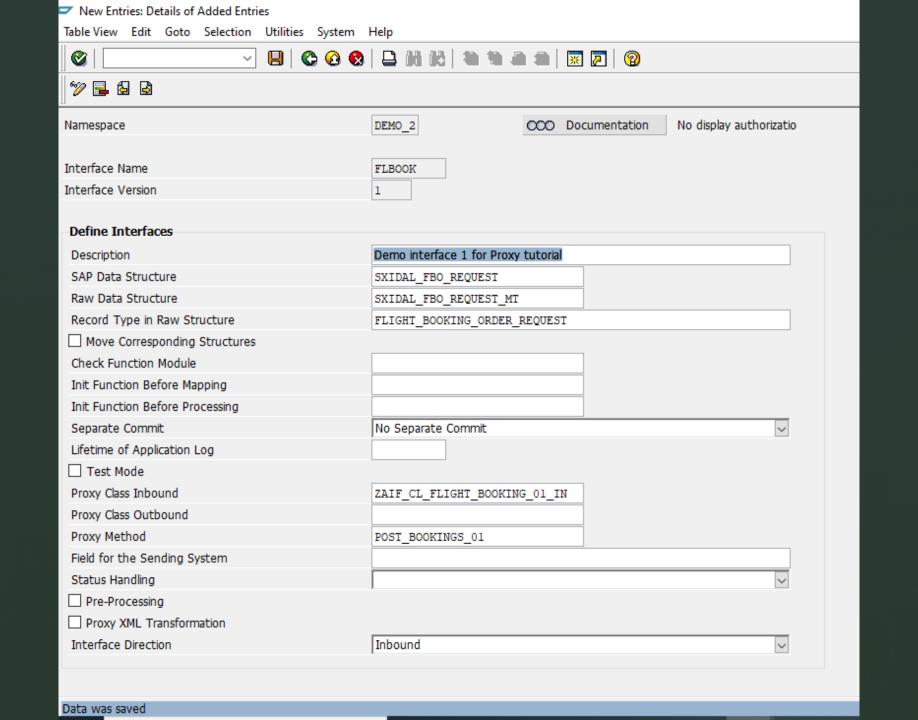
While still in **Customizing** (transaction code /n/AIF/CUST), navigate to **Interface Development** > **Define Interfaces**. In the upcoming dialog, enter your previously created namespace **DEMO\_2** and press **Enter**. Select **New Entries** and enter the following parameters based on your proxy class and implementation.

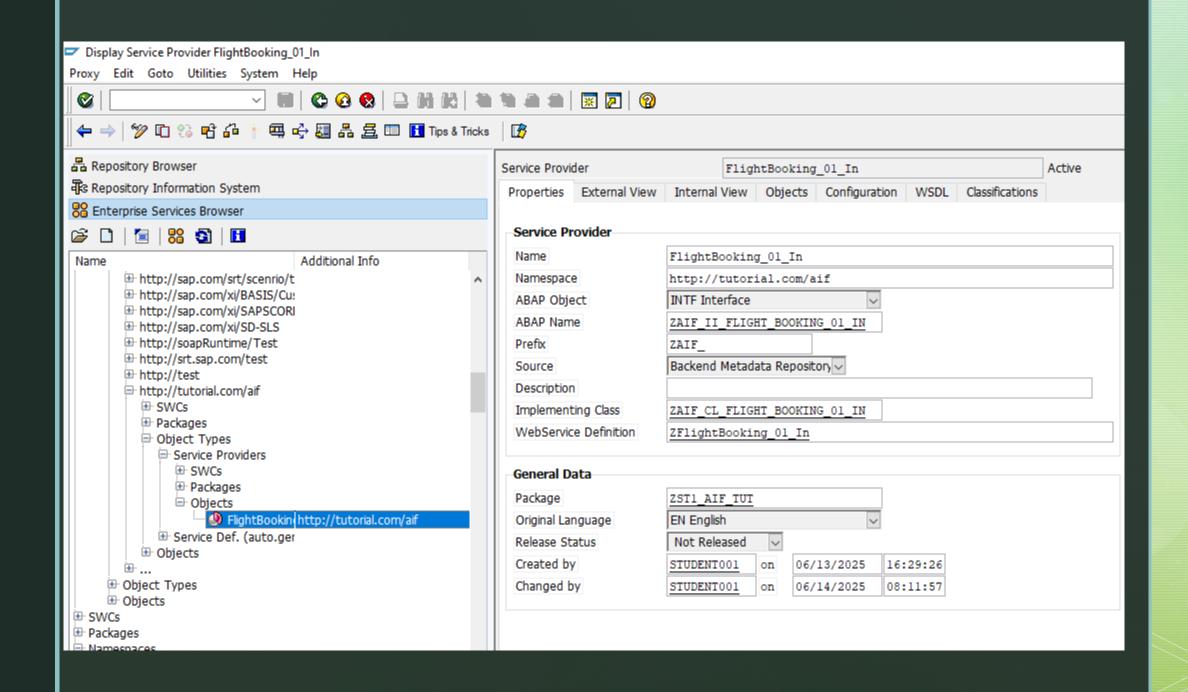
You can double-check this information in transaction code SPROXY

Be aware that entering the Proxy Class Inbound automatically fills in Raw Data Structure, Record Type in Raw Structure, and Proxy Method.

| Field name                   | Description  | VALUE                               |
|------------------------------|--|-------------------------------------|
| Interface Name               | Name of the interface to be created, for example (an abbreviation of) the basic type | FLBOOK                              |
| Interface version            | Version number of the interface  | 1                                   |
| Description                  | Description of the interface   | Demo interface 1 for Proxy tutorial |
| SAP Data structure           | Input substructure of the proxy class  | SXIDAL_FBO_REQUEST                  |
| Raw Data structure           | Input structure of the proxy class   | SXIDAL_FBO_REQUEST_MT               |
| Record Type in Raw Structure | Main component of the raw data structure   | FLIGHT_BOOKING_ORDER_REQUEST        |
| Proxy Class Inbound          | Name of the proxy class  | ZAIF_CL_FLIGHT_BOOKING_01_IN        |
| Proxy Method                 | Method name of the generated proxy class   | POST_BOOKINGS_01                    |
| Interface Direction          | Indicates the direction of the interface   | Inbound                             |
|                              |  |                                     |

Save your changes.





### SPECIFY INTEERFACE ENGINES

Next, you have to select the engines that should be used to handle the messages that are processed.

If you create a new interface, by default, SAP Application Interface Framework handles the messages as proxy messages,

so you can keep the default settings.

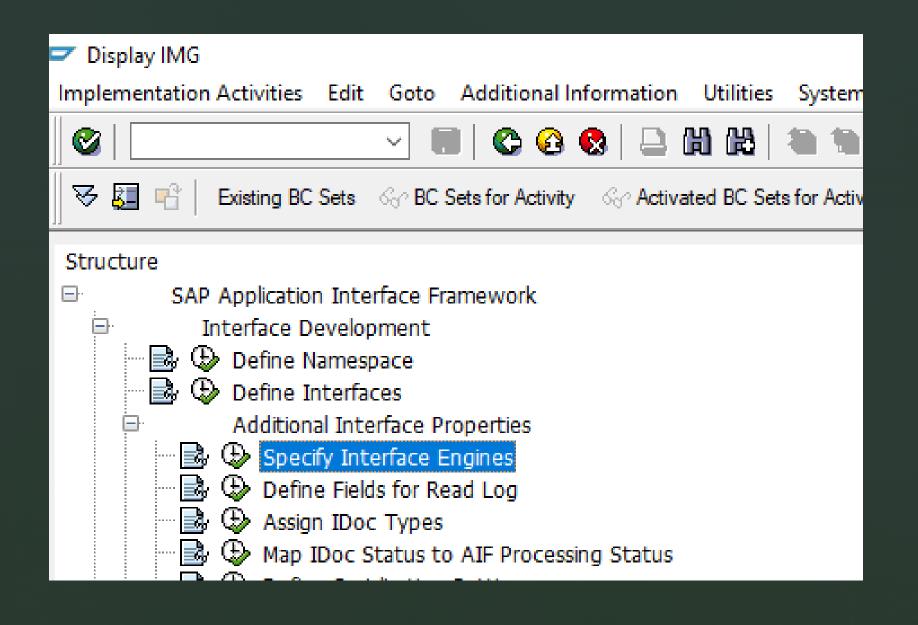
To double-check the settings, go to **Customizing** for SAP Application Interface

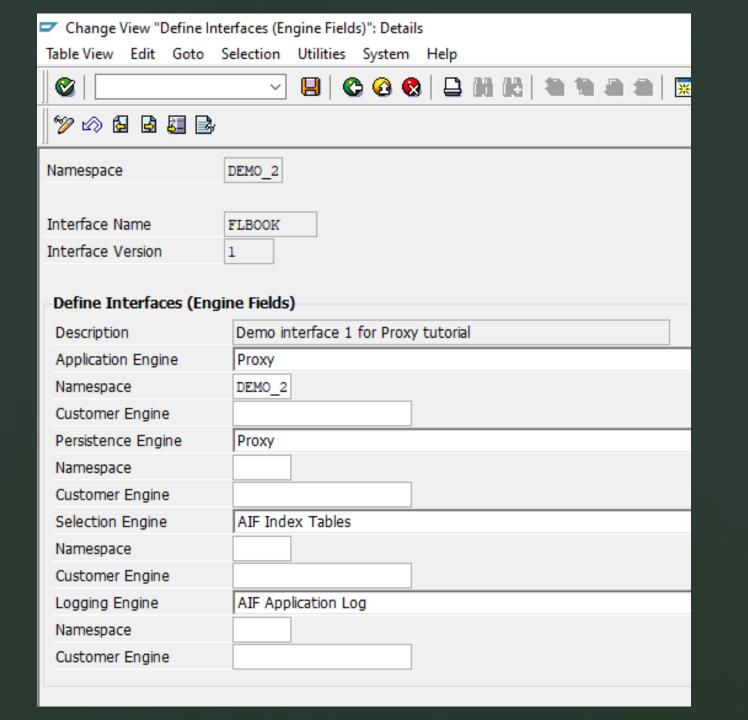
Framework (transaction code /AIF/CUST)

and navigate to Interface Development > Additional Interface Properties > Specify Interface Engines.

In the upcoming dialog, enter your beforehand created namespace **DEMO\_2**, and press **Enter**.

Check that the following engines are preselected:

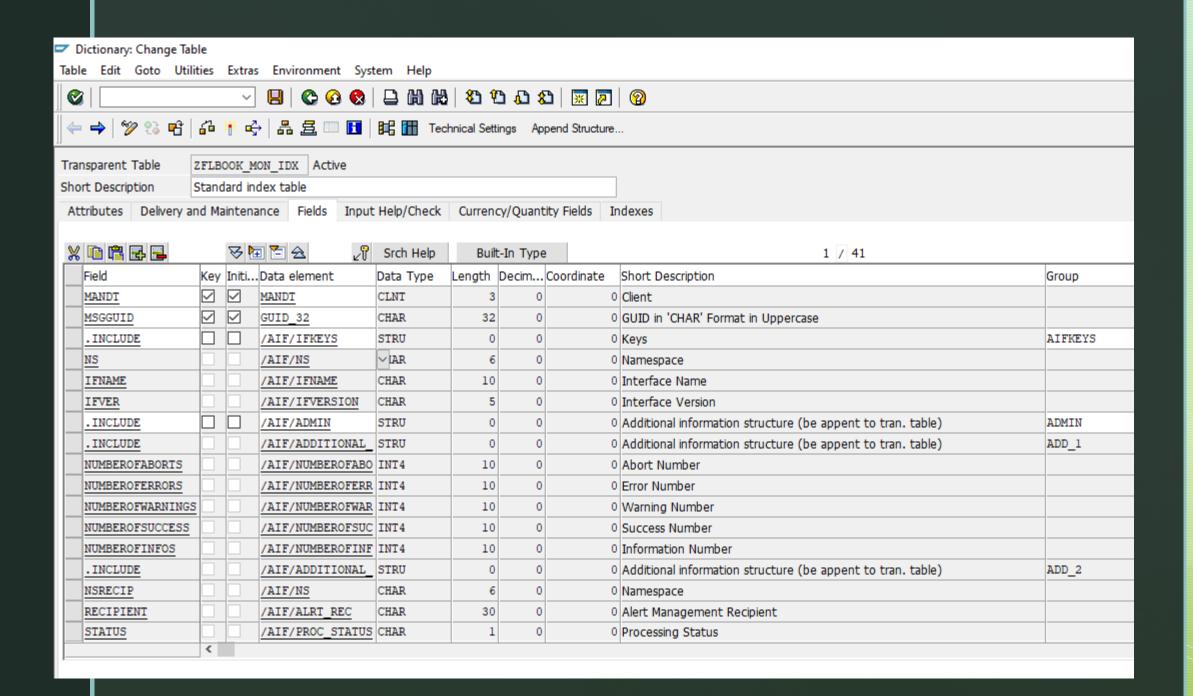


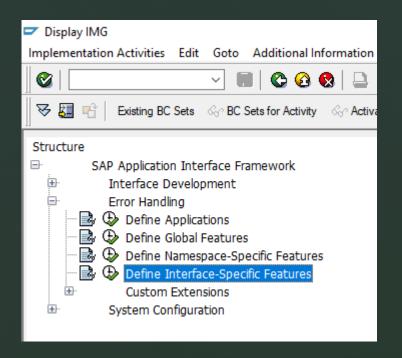


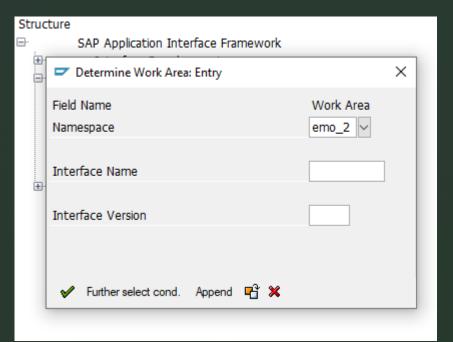
## Create interface-specific single index table

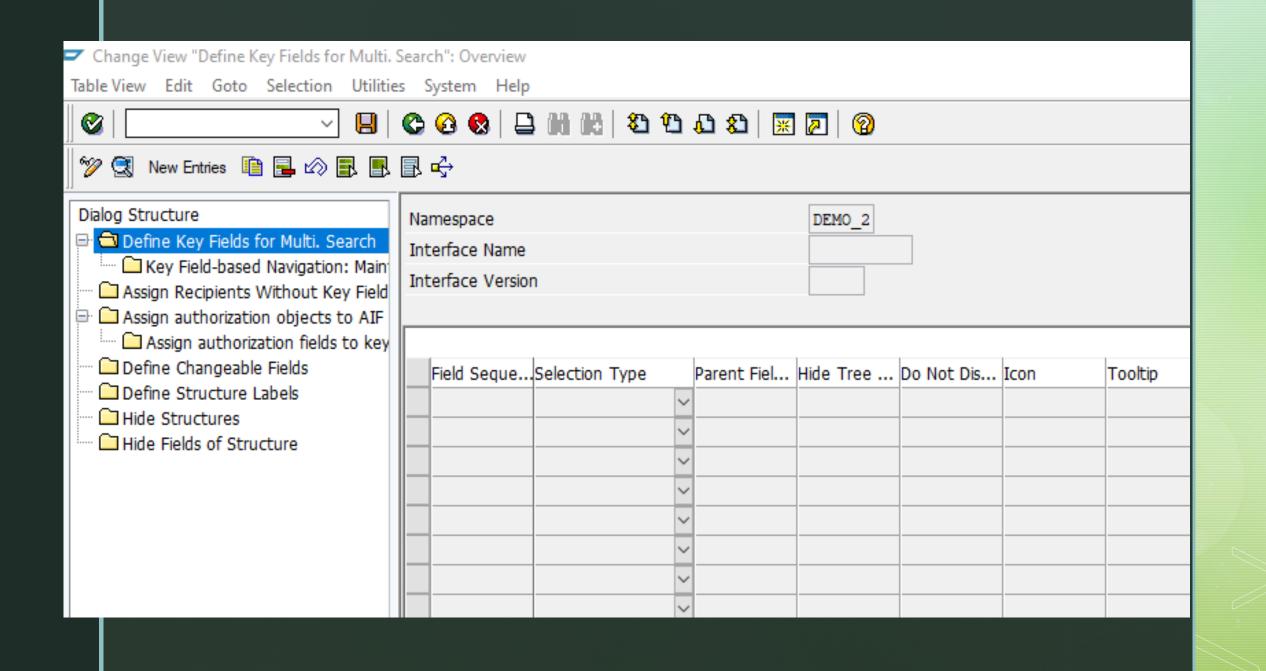
It's recommended to implement an interface-specific single index table to ensure full flexibility, especially if you expect a high load of messages or if you plan to define key fields for your interface (now or later).

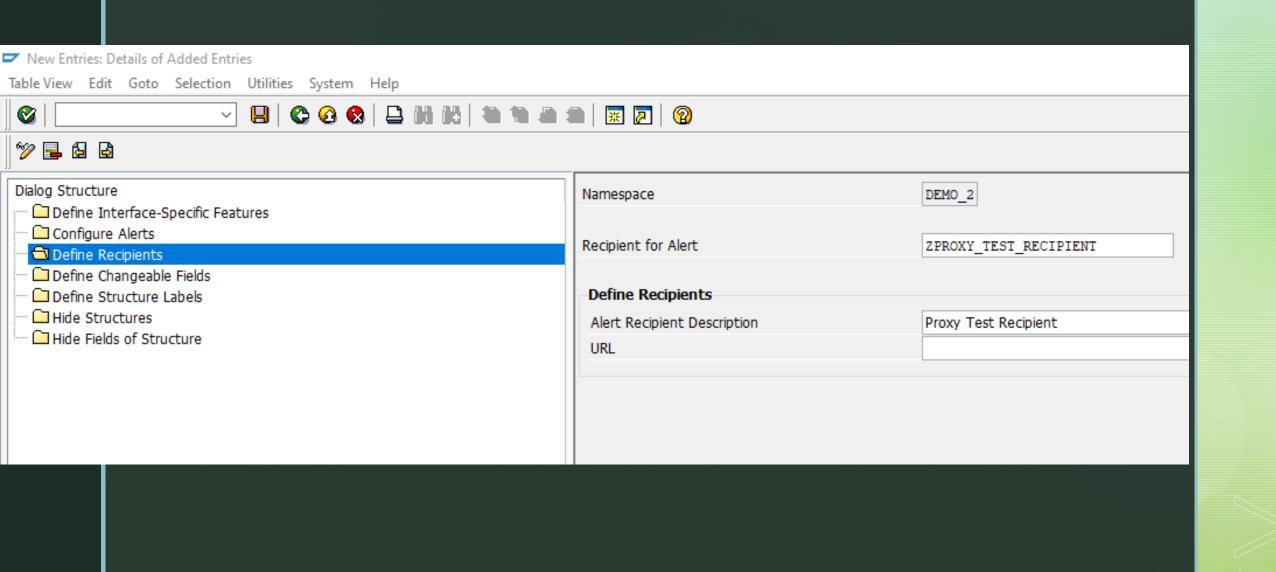
- 1.Create a table via transaction SE11. You can use table /AIF/STD\_IDX\_TBL as a template by entering /AIF/STD\_IDX\_TBL in the field **Database table**, right-clicking it and selecting **Copy....** Enter the name **ZFLBOOK\_MON\_IDX** for the new table and select **Continue**. When prompted, enter package **ZDEMO**, which you created earlier.
- 2.After creating the single index table, activate it by selecting **Display** and then **Activate**.





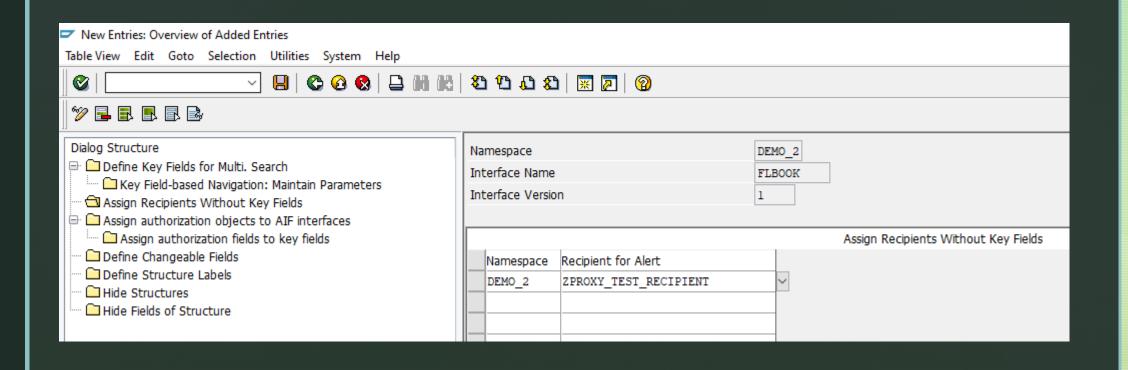


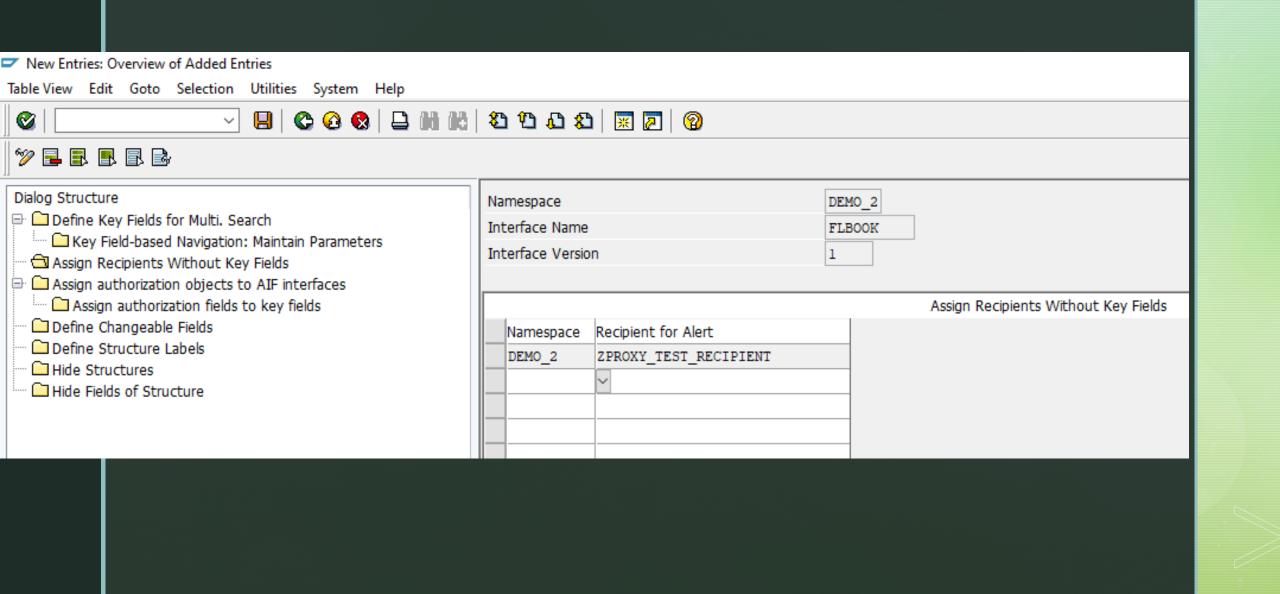




### ASSIGN RECIPIENT TO INTERFACE

To be able to see any data in the Interface Monitor or the Message Dashboard, a recipient must be assigned to the interface you want to monitor. Go to Customizing (transaction code /AIF/CUST) and navigate to SAP Application Interface Framework > Error Handling > Define Interface-Specific Features. Enter or select your namespace DEMO\_2, as well as your interface name FLBOOK and interface version 1. Select Continue. In the menu on the left, double-click Assign Recipients Without Key Fields and create a new entry. Enter or select the namespace and the recipient you created before.

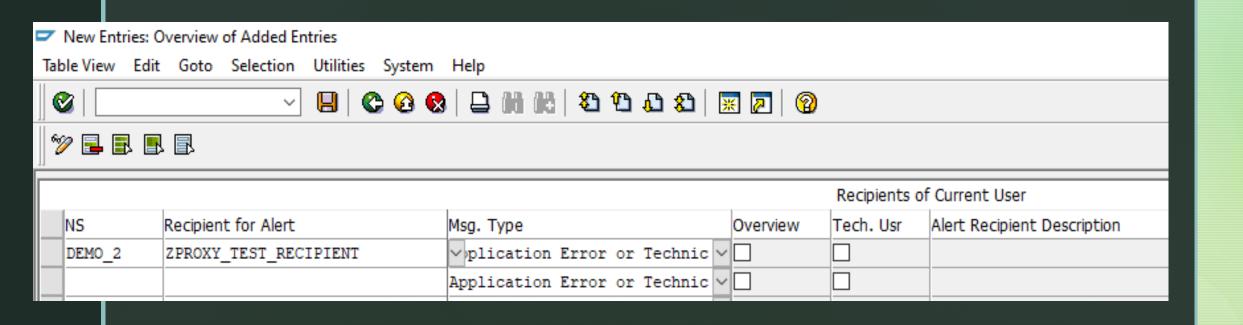




### ASSIGN USERS TO RECIPIENT

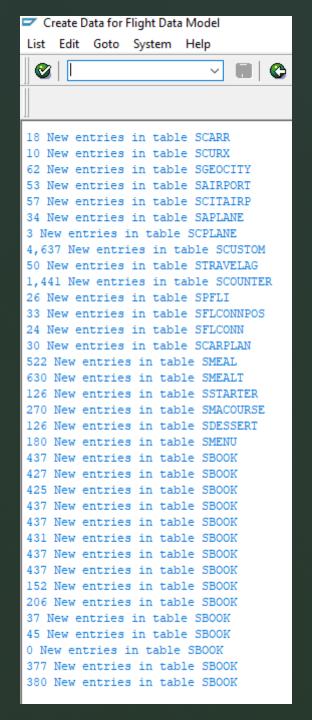
Now the users in charge of monitoring the proxy must be assigned to the recipient.

Run transaction /AIF/MYRECIPIENTS and create a new entry. Select the namespace **DEMO\_2** and recipient **ZPROXY\_TEST\_RECIPIENT** you created in the steps before. Check the boxes for **Overview** and **Technical User**.



### CREATE TEST DATA

Before you can create flight bookings, you need to generate test data. To do so, run transaction BC\_DATA\_GEN, select the standard data record, and execute the report.



### Create Data for Flight Data Model

Large data records can only be created in the background.







#### Dataset

|                      |   | Approxi | Approximate Number of Entries |           |  |
|----------------------|---|---------|-------------------------------|-----------|--|
|                      |   | SPFLI   | SFLIGHT                       | SBO       |  |
| Delete Table Entries | 0 | 0       | 0                             | 0         |  |
|                      |   |         |                               |           |  |
| Minimum Data Record  | 0 | 14      | 95                            | 28,500    |  |
| Standard Data Record | • | 26      | 350                           | 100,000   |  |
| Maximum Data Record  | 0 | 46      | 1300                          | 274,000   |  |
| Monster Data Record  | 0 | 46      | 4900                          | 1,300,000 |  |
|                      |   |         |                               |           |  |

✓ Canceled Entries in SBOOK

### TO BE CONTINUED