How to Add a Web Dynpro App to Fiori Launchpad Step-by-Step

SAP Netweaver (7.51) and SAP S/4HANA 1610

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Welcome to How to Add a Web Dynpro App to Fiori Launchpad Step-by-Step. In this white paper, you will find all the details needed to add a Web Dynpro ABAP application to your Fiori Launchpad home page.

➡ **Requirement**	• For NetWeaver 7.4 or higher version, you have installed software component version SAP_UI 750 SP00 or higher • For NetWeaver 7.31 or lower version, you have installed product UI Add-on 2.0 SP00 or higher • Fiori Launchpad has been configured on frontend system • The Web Dynpro application which you want to add to Fiori Launchpad is working fine on your backend server

ℹ **Note**	• In this white paper, we will use the following environment: SAP NetWeaver 7.51 SAP S/4HANA 1610 SAP_UI 751 SP00 Please note the steps & UI may be different if you are using the different environment • In this white paper, the frontend system is S4H and the backend system is T01. As an example, we will guide you to add a Web Dynpro application /1WDA/TEST_HELLO_WORLD on backend system T01 to Fiori Launchpad on frontend system S4H

Chapter 1
Create an HTTP Connection to Backend System

ℹ Note	• In this chapter, you are going to create a RFC destination (type H) on frontend system to connect to the backend system. This connection type is used during Launchpad runtime to start the Web Dynpro application from the Launchpad • Use the following naming convention to create the HTTP connection: <System Alias>_HTTP or <System Alias>_HTTPS • For HTTP connections, you do not need to define the System Alias somewhere on your system, but it is recommended to use the following naming convention for System Aliases: <system id>CLNT<client>

1. Run transaction **SM59** on frontend system then click on the **create** button
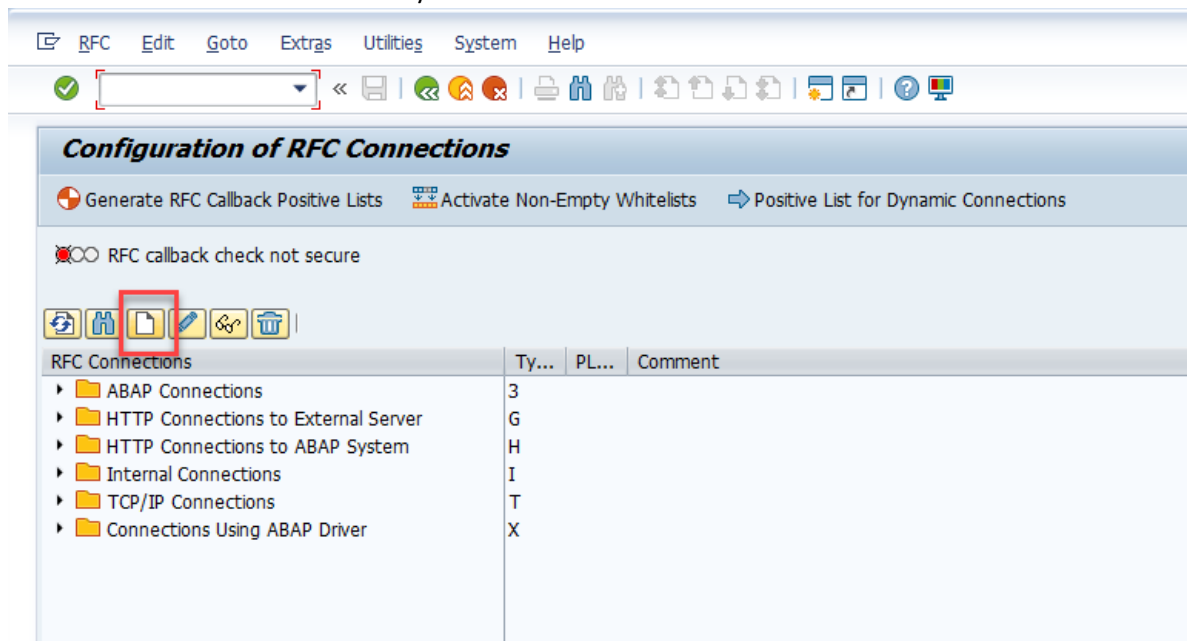
Figure 1 Create the RFC

2. Enter the following information and then click **continue** on the pop-up dialog

1	**RFC Destination:** <System Alias>_HTTPS
2	**Connection Type:** H
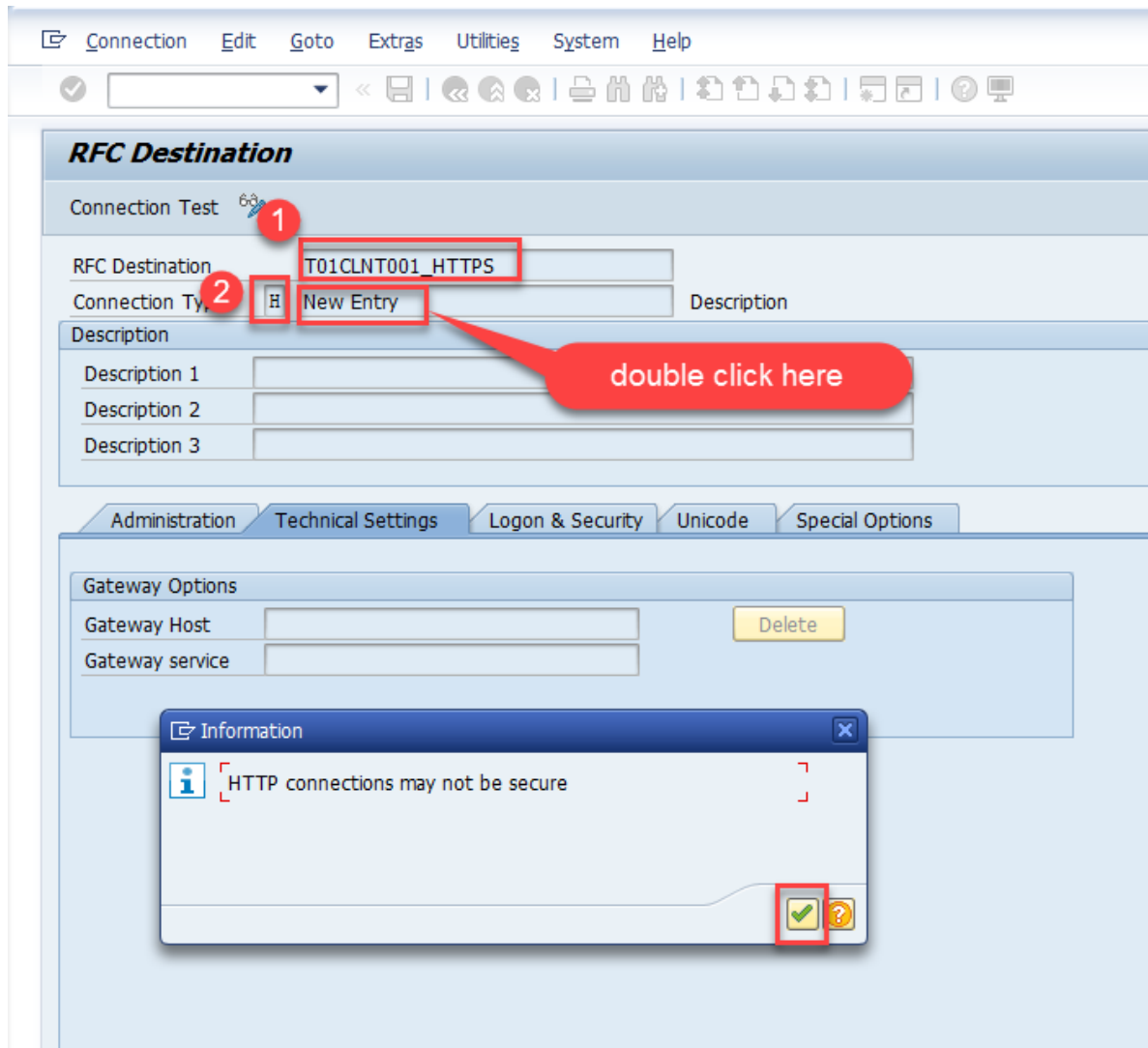
Figure 2 Create HTTP connection

3. Configure the RFC destination with the following details

1	**Description 1:**	Description of this RFC destination
2	**Target Host:**	The host of backend system
3	**Service No.:**	The port number of backend system

Figure 3 Configure Technical Settings of HTTP connection

4. Navigate to tab **Logon & Security** and configure with the following details
   a. Select **Trust Relationship** and click **Yes** on the pop-up dialog
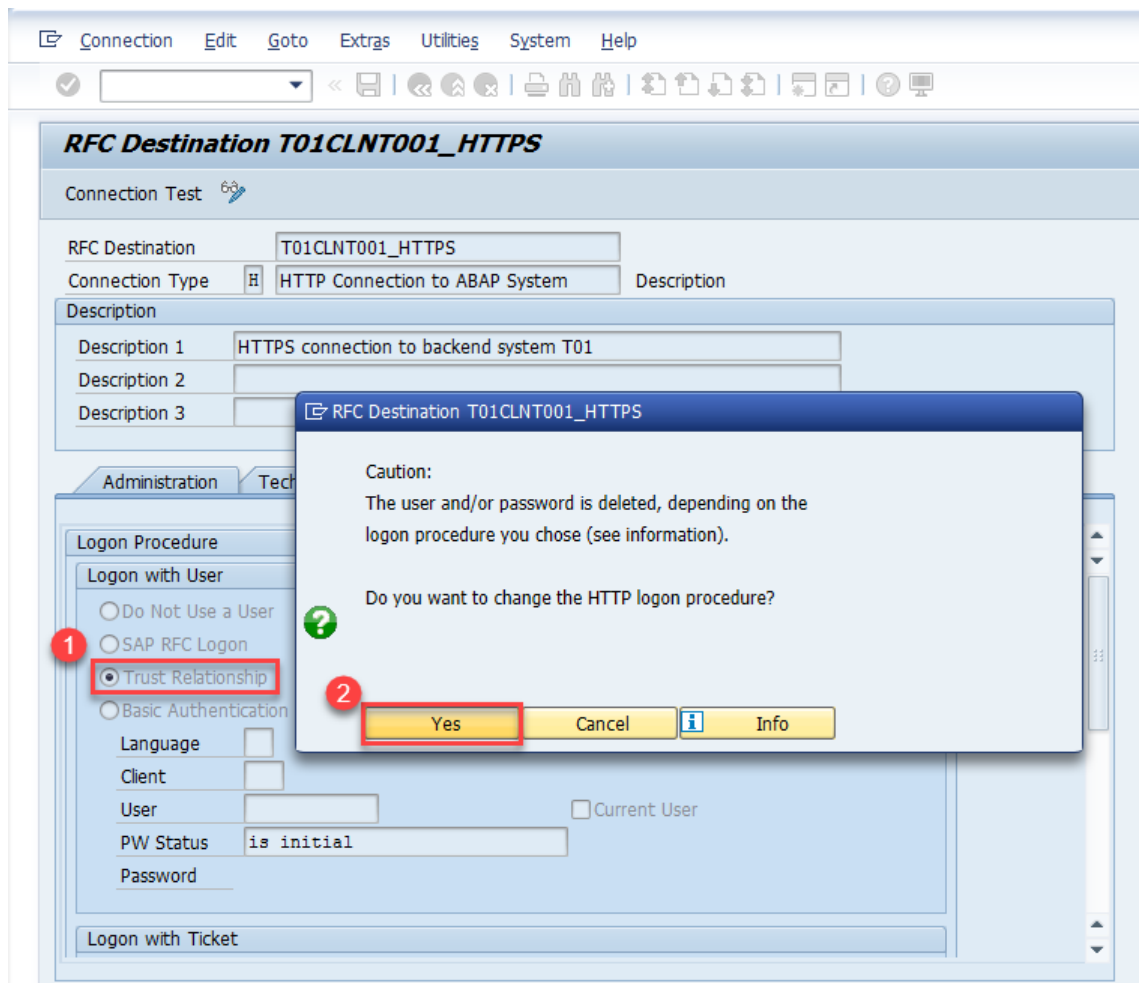
Figure 4 Logon & Security settings of HTTP connection – 1

b. Finish the Logon & Security configuration with the following details

> **1 Client:** The client of backend system
> **2 User:** Current User
> **3 SSL:** Active

Figure 5 Logon & Security settings of HTTP connection – 2

ⓘ **Note**	• If you need to configure HTTP connection <System Alias>_HTTP, set the SSL inactive here

5. Save this RFC destination and then click **Connection Test** to test the connection
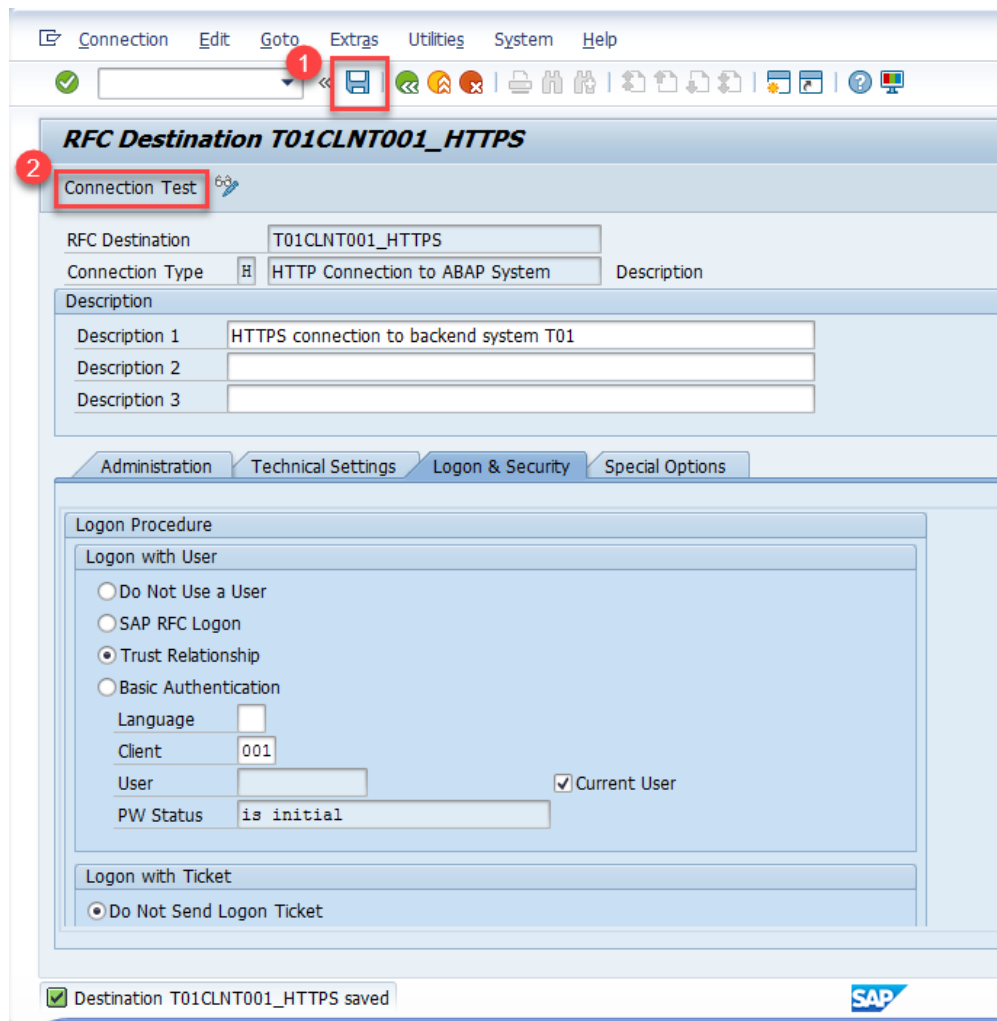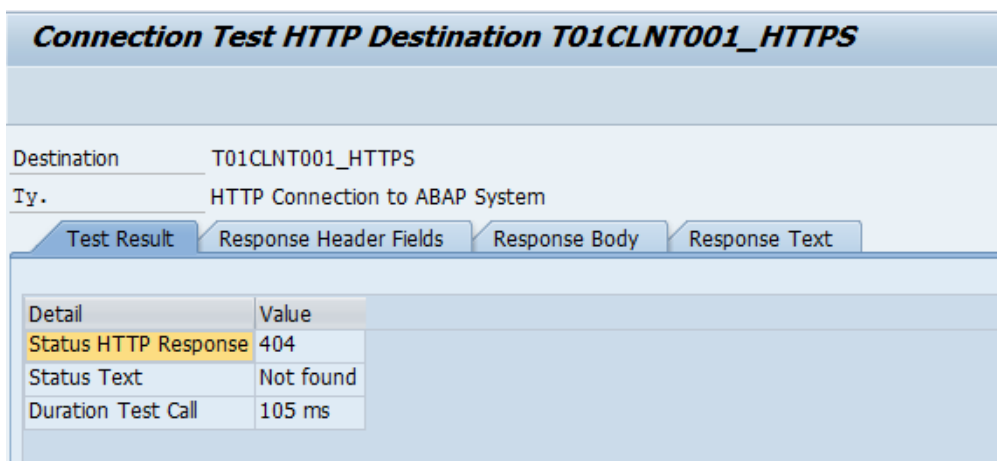
Figure 6 Test the connection

Figure 7 Connection is OK

ℹ **Note**
- The 404 response here is correct because we did not set the Path Prefix (which is not needed here) in Technical Settings of this RFC destination
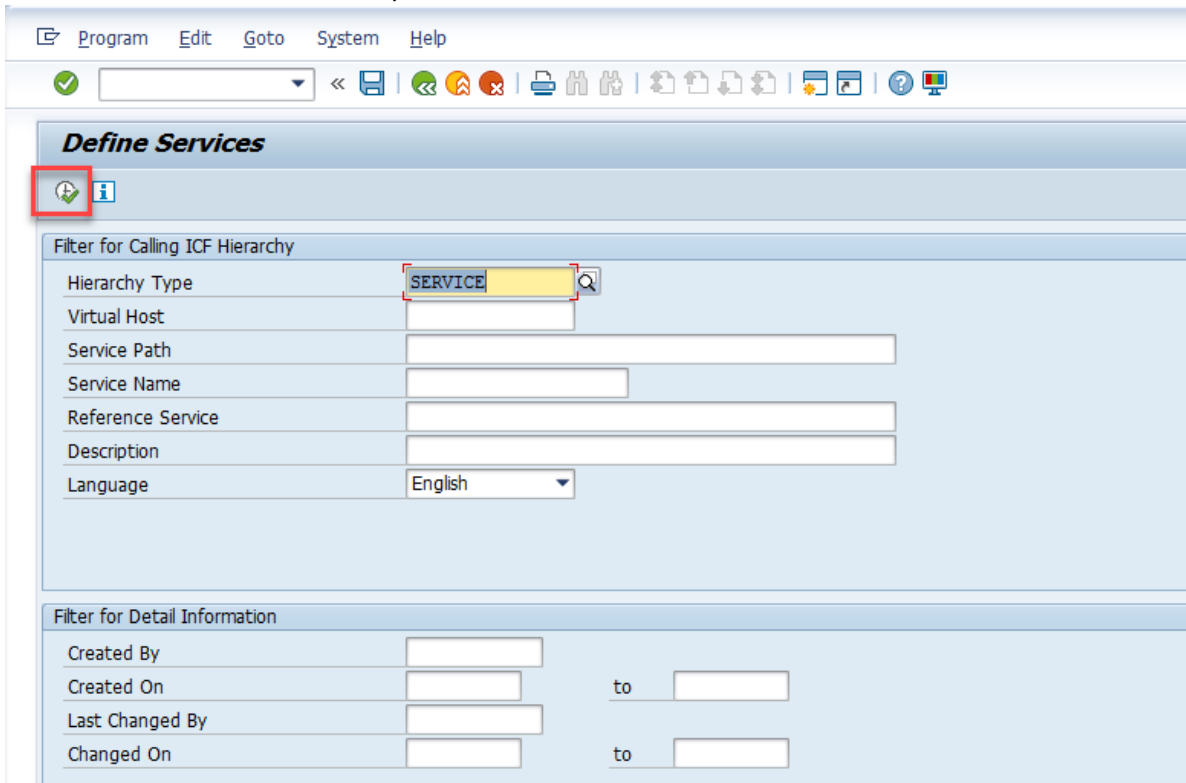
	• Fiori Launchpad uses the nwbc service to launch the Web Dynpro applications. Which means although the Web Dynpro application is working fine on your backend server, if you want to integrate it to Fiori Launchpad you need to activate the following ICF node: /sap/bc/ui2/nwbc
i Note	

1. Run transaction **SICF** on backend system, click **Execute**

Figure 8 transaction SICF

2. Navigate to **default_host/sap/bc/ui2/nwbc**, right click on it and select **Activate Service**

Figure 9 Activate service
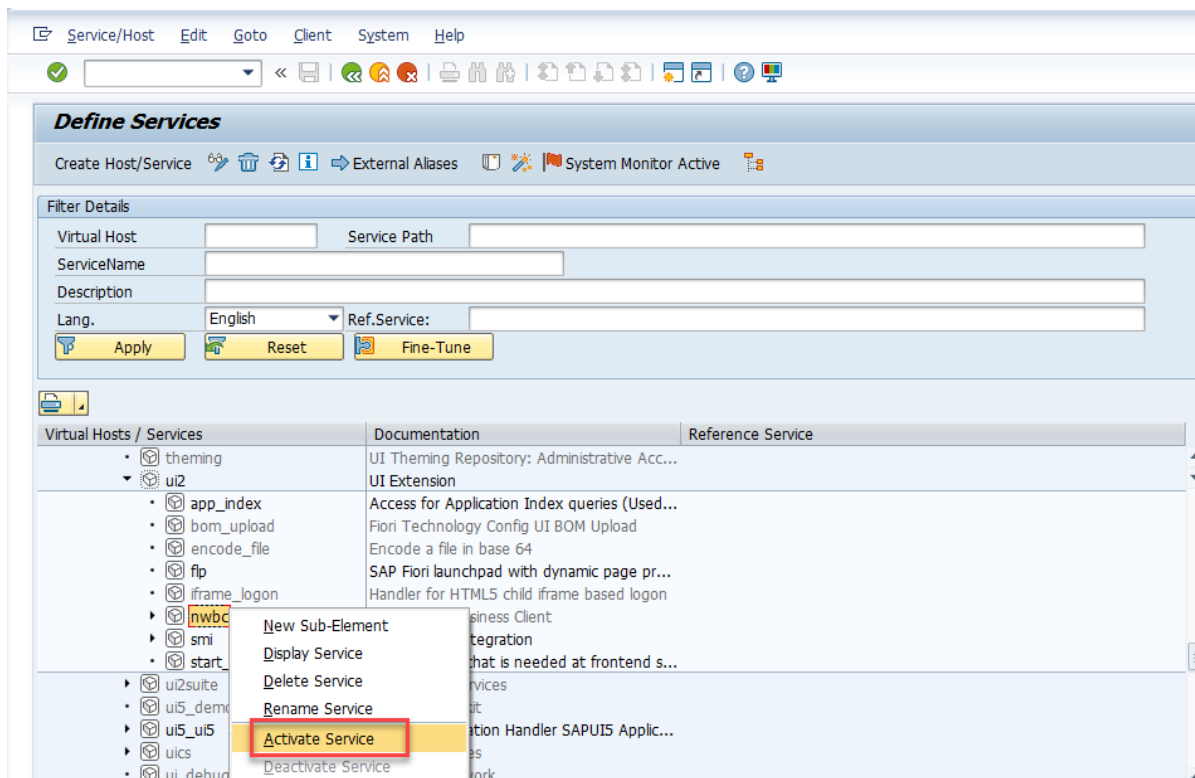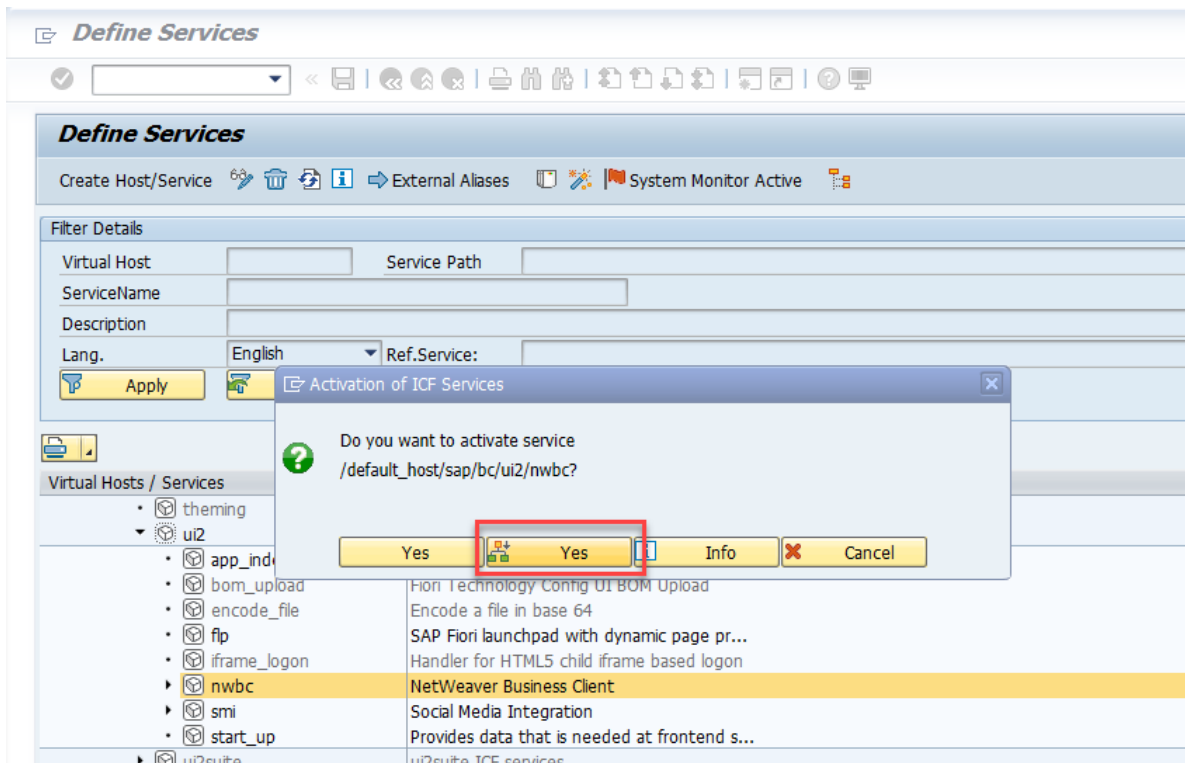
3. Click the second **Yes**

Figure 10 Activation of ICF services

3.1 Create a semantic object on frontend system

ⓘ **Note**	• Semantic objects will be used to create target mappings on Fiori Launchpad Designer • You can find the semantic objects in the following transactions: Semantic objects shipped by SAP: /n/UI2/SEMOBJ_SAP Semantic objects created by customers: /n/UI2/SEMOBJ_SAP • This section will guide you to create a custom semantic object. You can skip this section if you decide to use a semantic object shipped by SAP

1. Run transaction **/n/UI2/SEMOBJ** on frontend system then click on the **Change** button
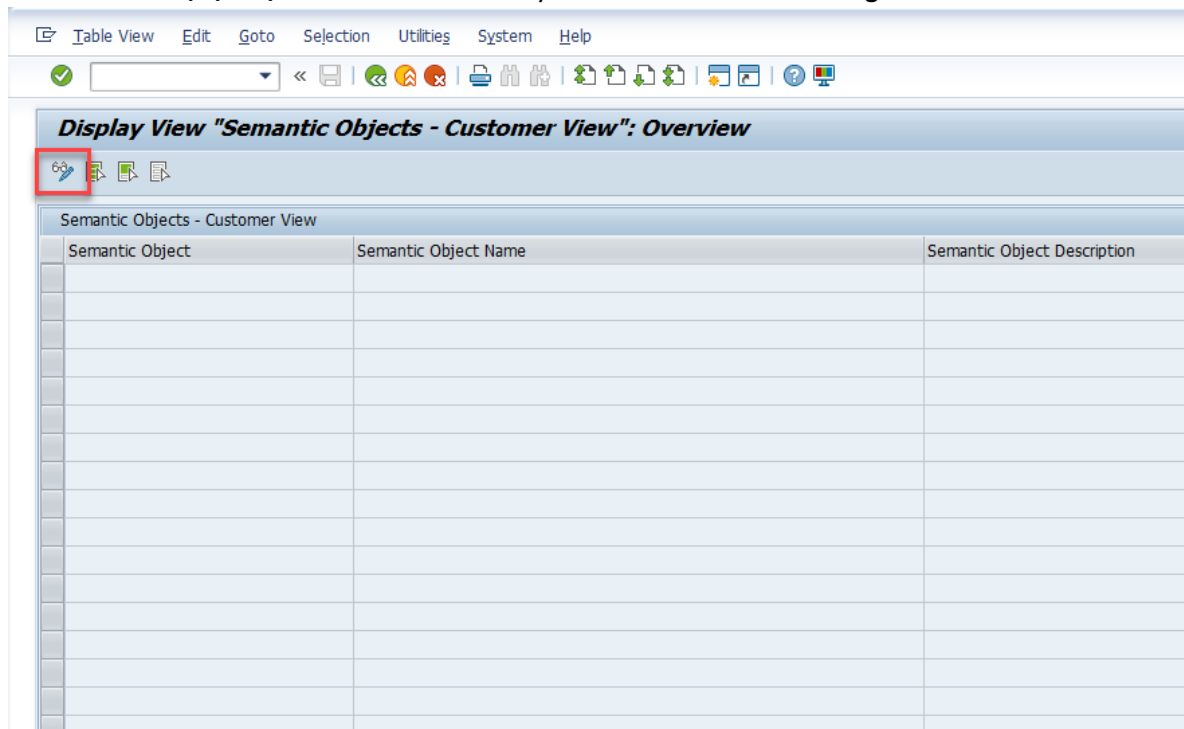

Figure 11 Run transaction /N/UI2/SEMOBJ

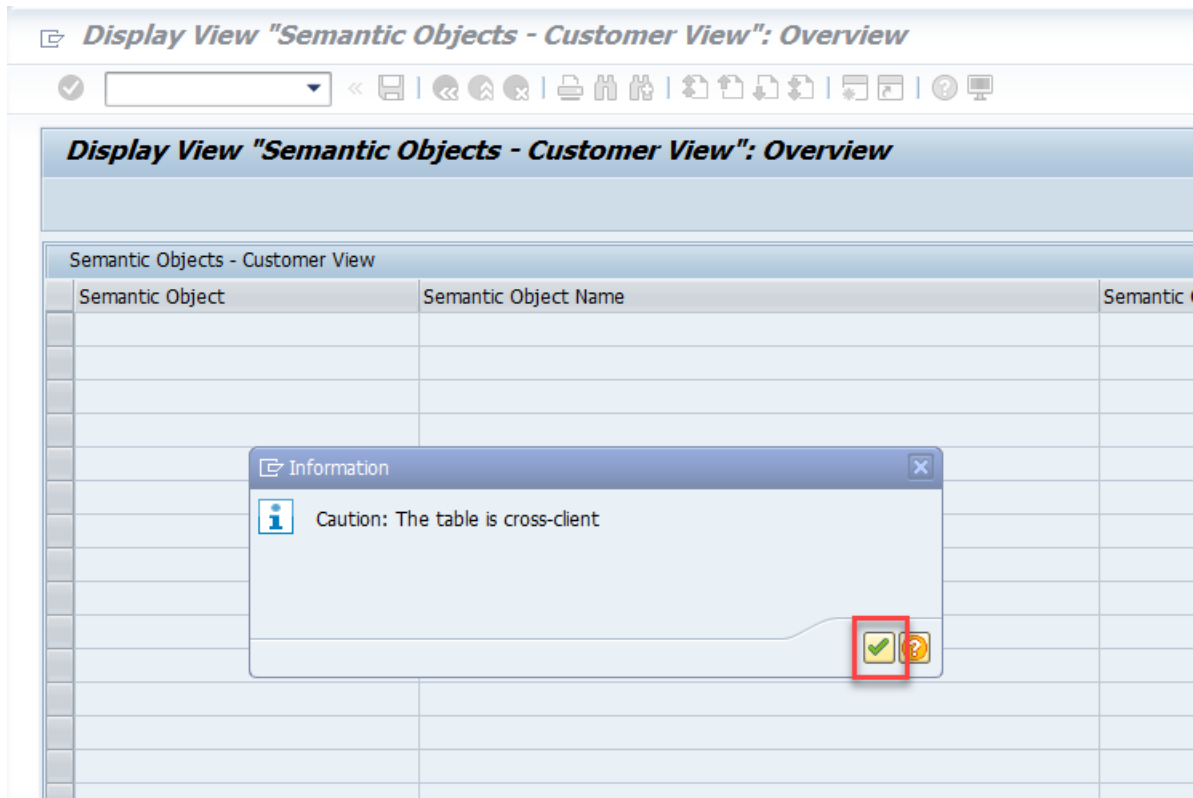2. Click **Continue** on the pop-up caution

Figure 12 The table is cross-client
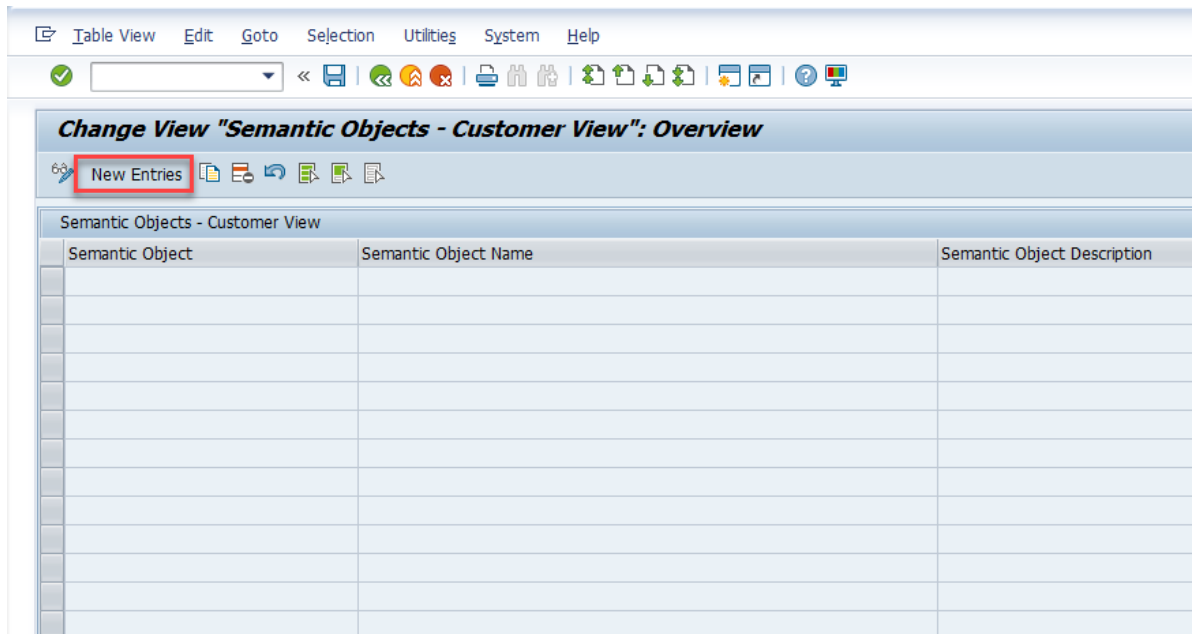
3. Click **New Entries**

Figure 13 Create a new semantic object

4. Enter the following information of your custom semantic object then click **Save**
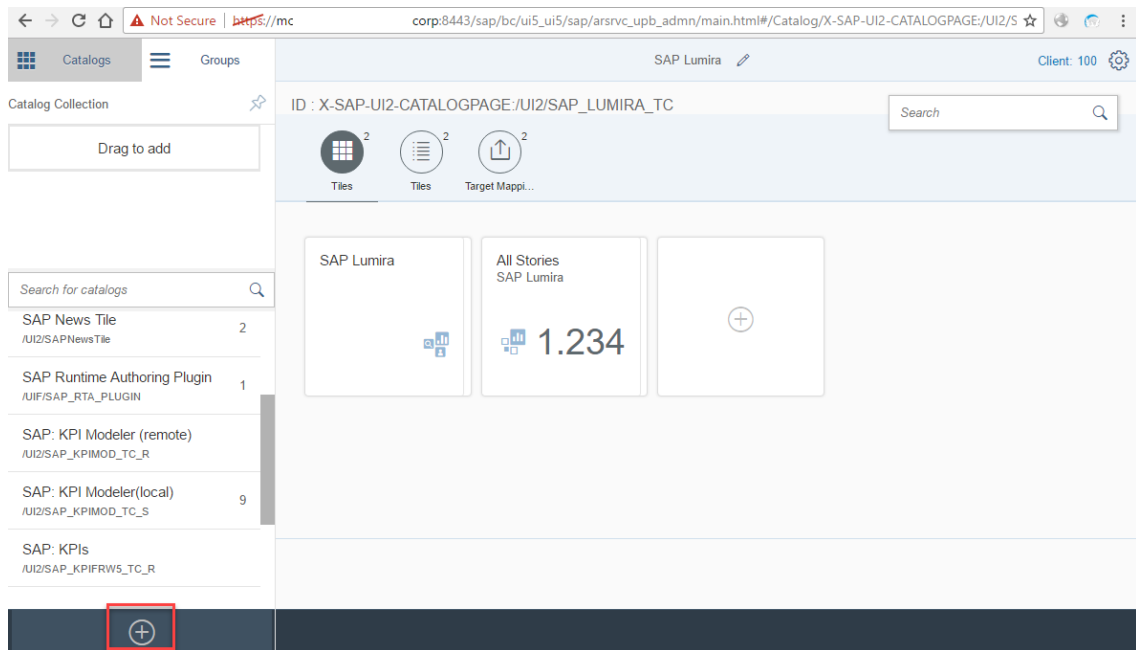
Figure 14 create a custom semantic object

5. Click **Continue** on the pop-up dialog to save your changes to a workbench request

Figure 15 save the changes to a workbench request

3.2 Create a target mapping and an app launcher tile for the Web Dynpro application

1. Open Fiori Launchpad Designer and click **Create Catalog** button

i **Note**	• You can also create the target mapping and app launcher in an existing catalog, in this case please select the existing catalog then start from step 3

Figure 16 Fiori Launchpad Designer

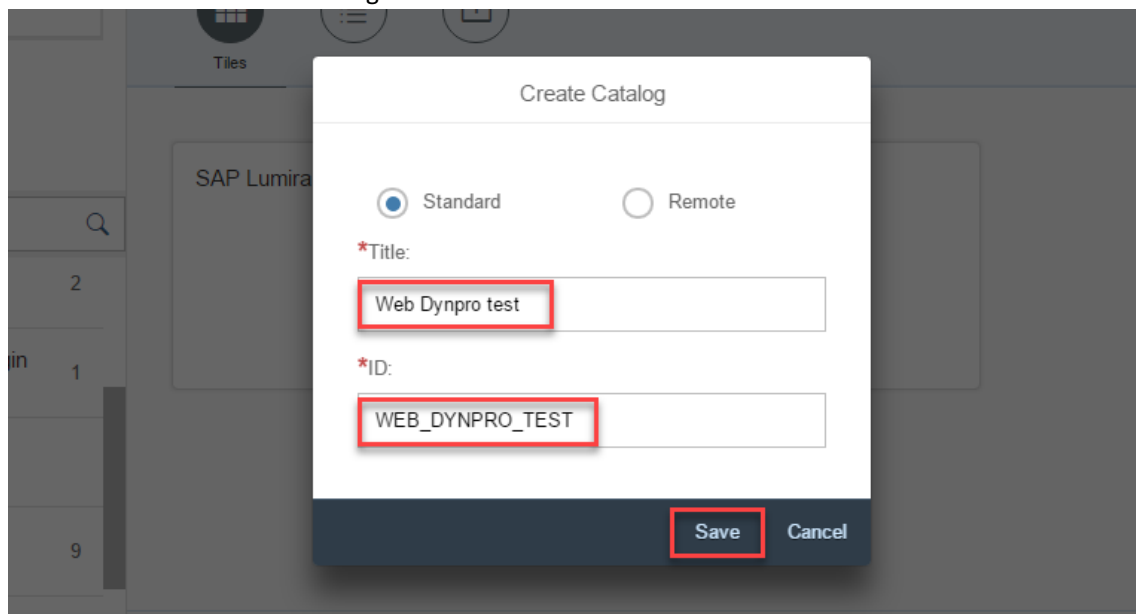2. Enter the title and ID of the catalog then click **Save**

Figure 17 Create catalog

3. Navigate to **Target Mapping** tab on the catalog page then click **Create Target Mapping**
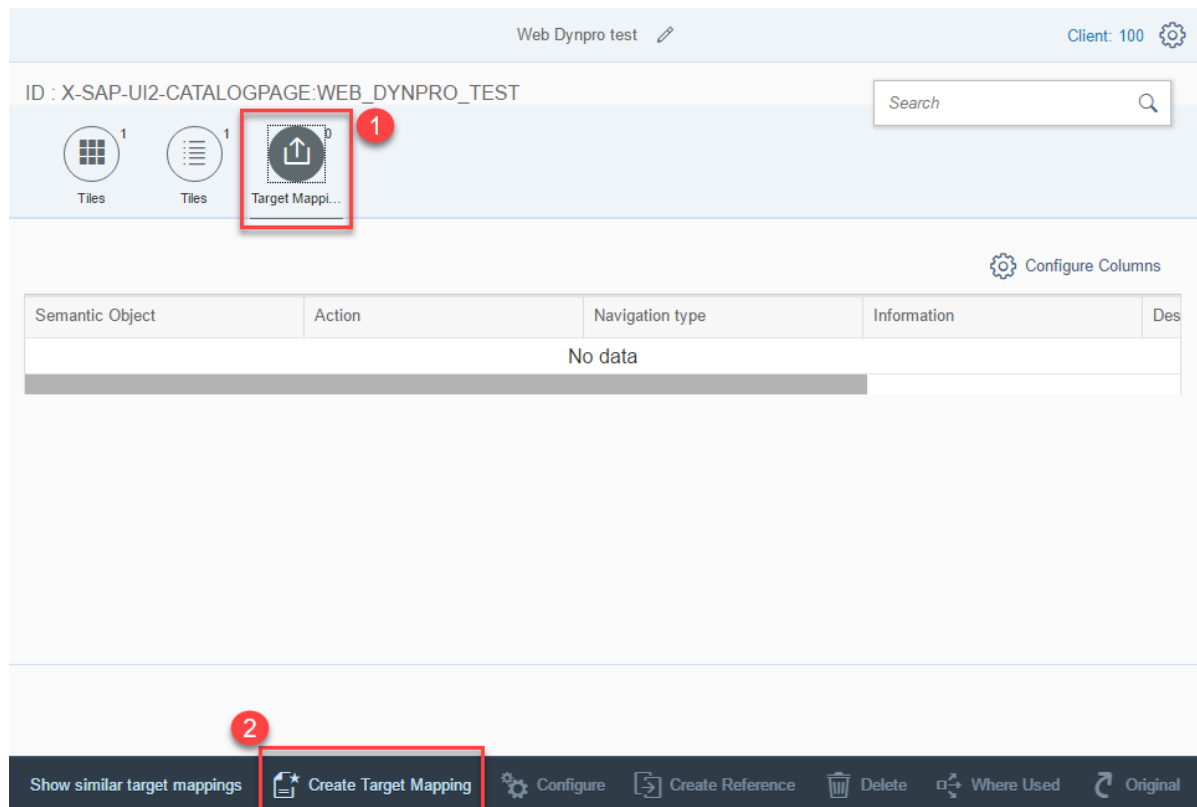
Figure 18 Create target mapping

4. Create the target mapping with the following details then click **Save**

   1   **Semantic Object:** Choose a semantic object. Here I used the custom semantic object WDAtest created in section 3.1

   2   **Action:** define an action name

   3   **Application Type:** Web Dynpro

   4   **Title:** The title you want to display to end users after you launched the Web Dynpro application from Fiori Launchpad

   5   **Application:** The name of the Web Dynpro application

   6   **System Alias:** The system alias you used to create the HTTP connection in chapter 1

Figure 19 target mapping WDAtest-helloWorld

> ℹ **Note**
> - Here I used the standard SAP delivered Web Dynpro application /1WDA/TEST_HELLO_WORLD as an example. With transaction SE84, you can find all the Web Dynpro applications in your system

5. Navigate to **Tiles** tab on the catalog page then click **Add Tile**

Figure 20 Add tile

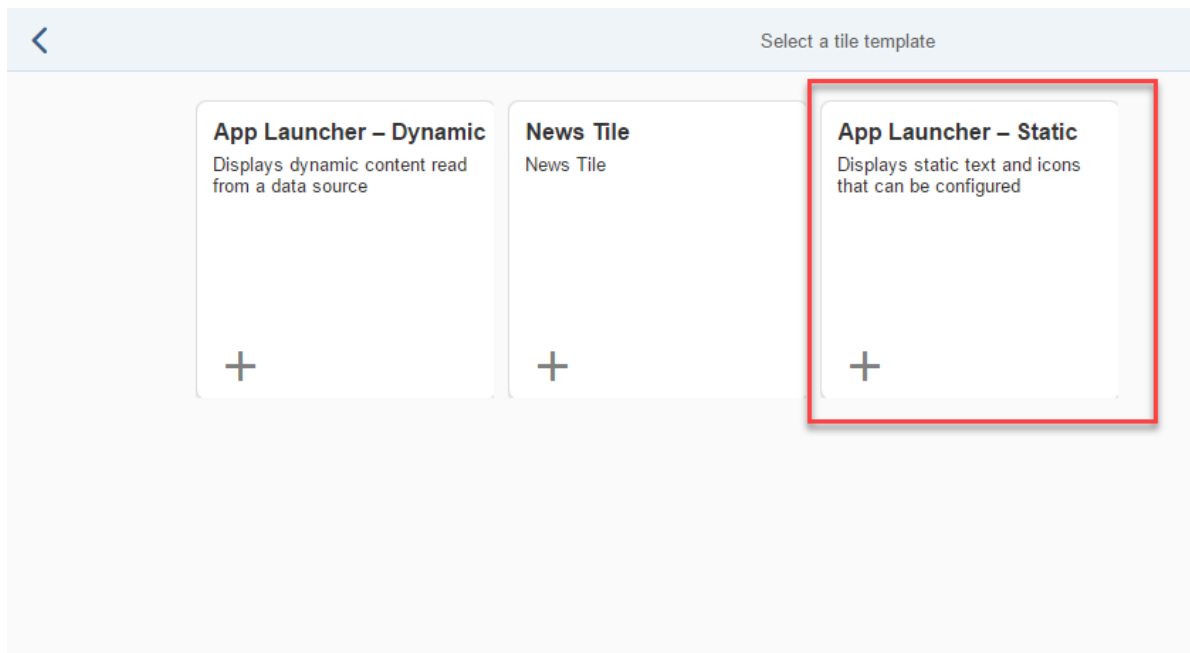6. Select the tile template **App Launcher - Static**

Figure 21 Select tile template

7. Enter the following details then click **Save**

> 1. **Title:** the name of the tile
> 2. **Subtitle:** (optional) the subtitle of the tile
> 3. **Semantic Object:** the semantic object you entered when creating the target mapping (step 4)
> 4. **Action:** the action you entered when creating the target mapping (step 4)

Figure 22 Configure the tile

3.3 Add the tile to a group

i **Note**	• In this section, you are going to add the tile to a group on Fiori Launchpad Designer • You can also access the tile on the tile catalog page (App Finder) on Fiori Launchpad, so you can skip this section if you don't want to add the tile to a predefined group

1. Navigate to tab **Group**, click **Create Group**, enter the **Title** and **ID** then click **Save**

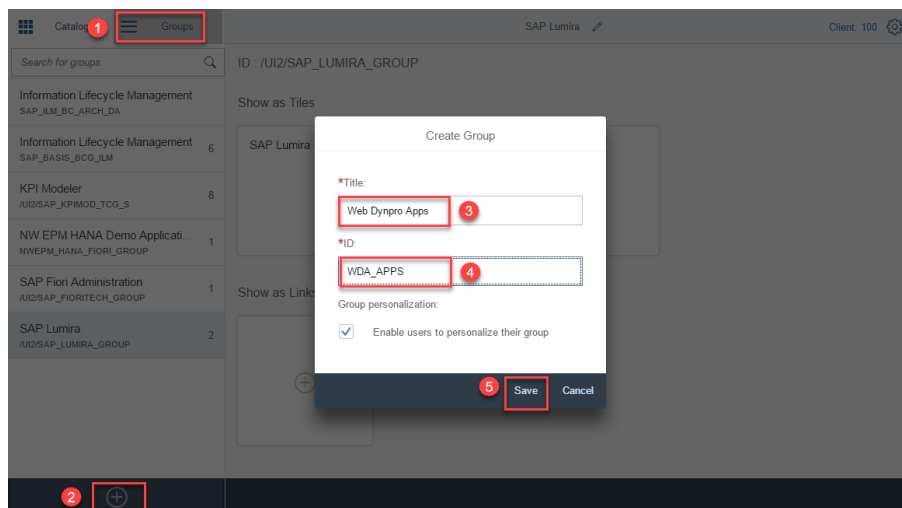|	
i **Note**	• You can also add the tile to an existing group, in this case please select the existing group then start from step 2

Figure 23 Create a group
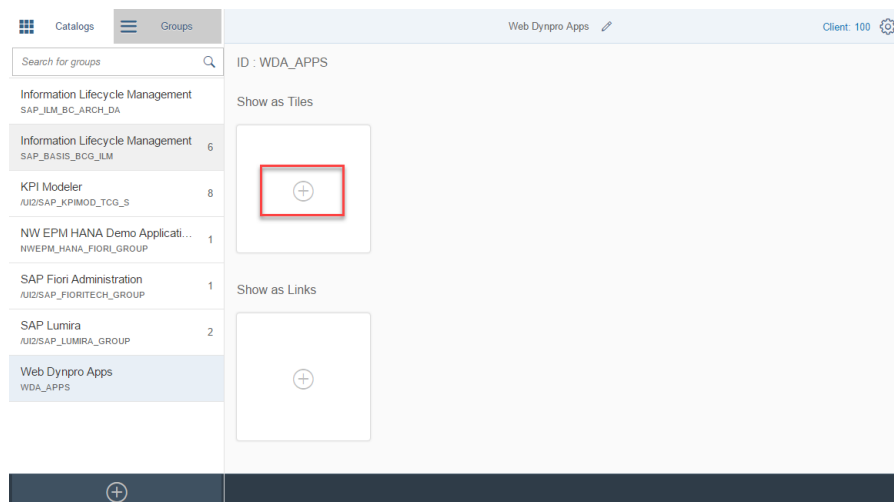
2. Click **Add Tile**

Figure 24 Add tile

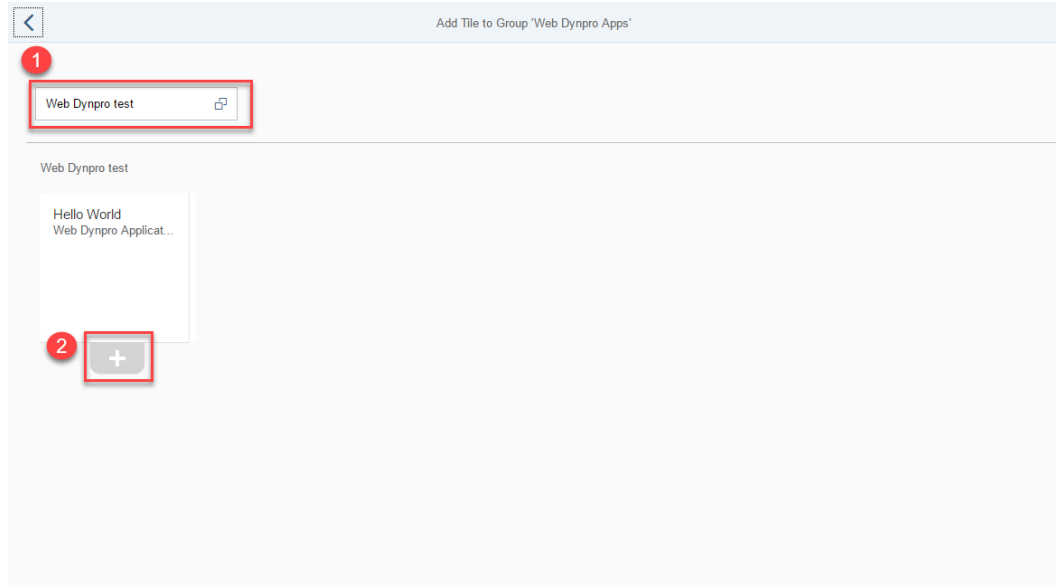3. Select the catalog where you created the tile then click the add button to add the tile to this group
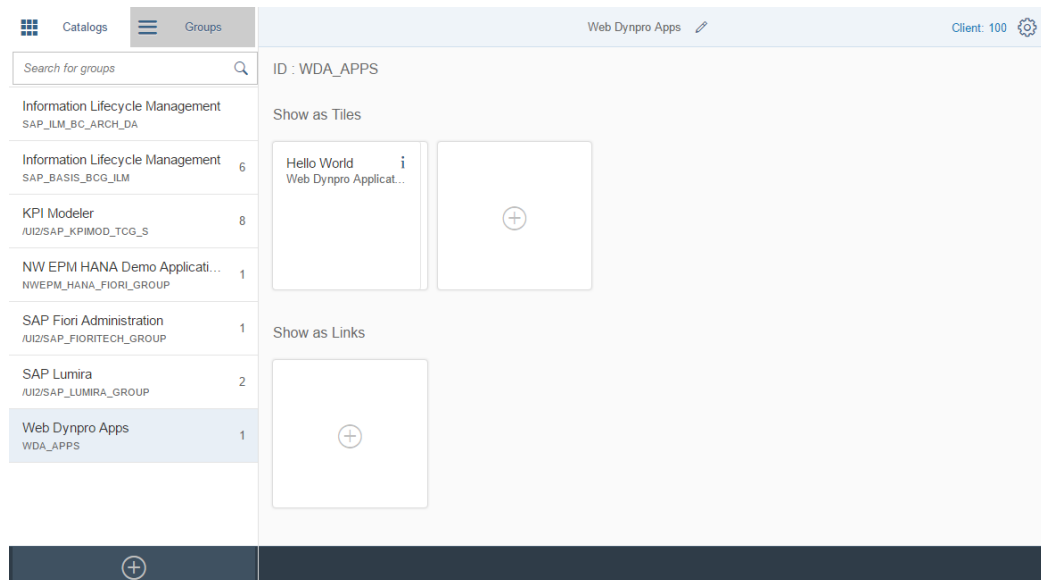

Figure 25 Add a tile to the group

Figure 26 Tile added successfully

3.4 Assign authorization to end users

ⓘ Note	• To ensure the end user(s) has the authorization for the tile, you have to assign the tile catalog to a PFCG role then assign this role to the end user(s) • To ensure the end user(s) has the authorization to a predefined group which contains the tile, you have to assign the group to a PFCG role then assign this role to the end user(s) • Skip the step 6-7 if you skipped section 3.3

1. Run transaction **PFCG** on frontend system
2. Enter a role name then click on the **Create Single Role** button

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ⁱ **Note**
- You can also use an existing role to assign the authorization
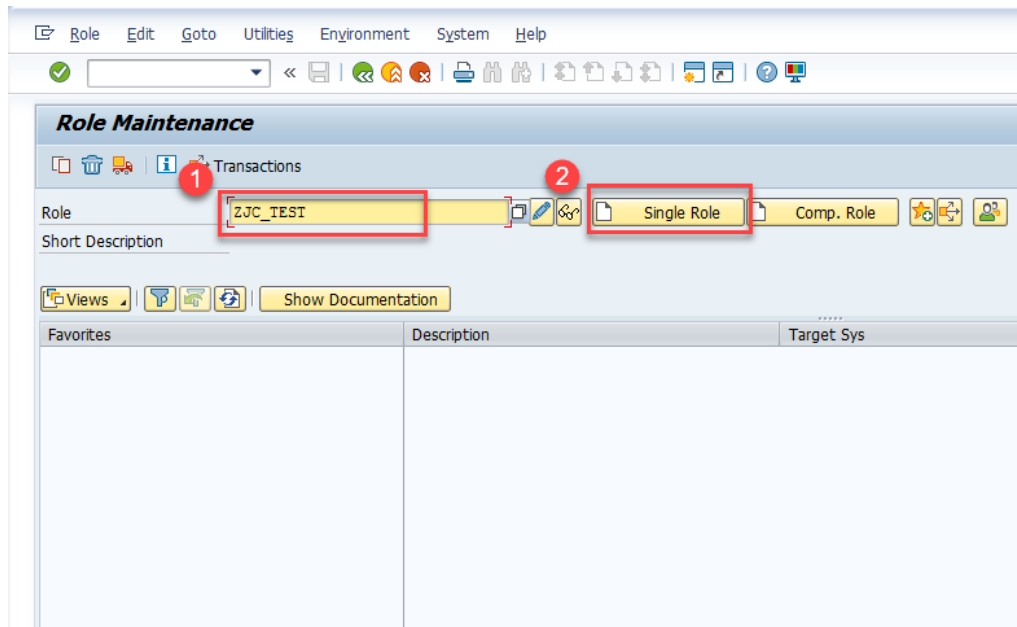

Figure 27 Create a PFCG role

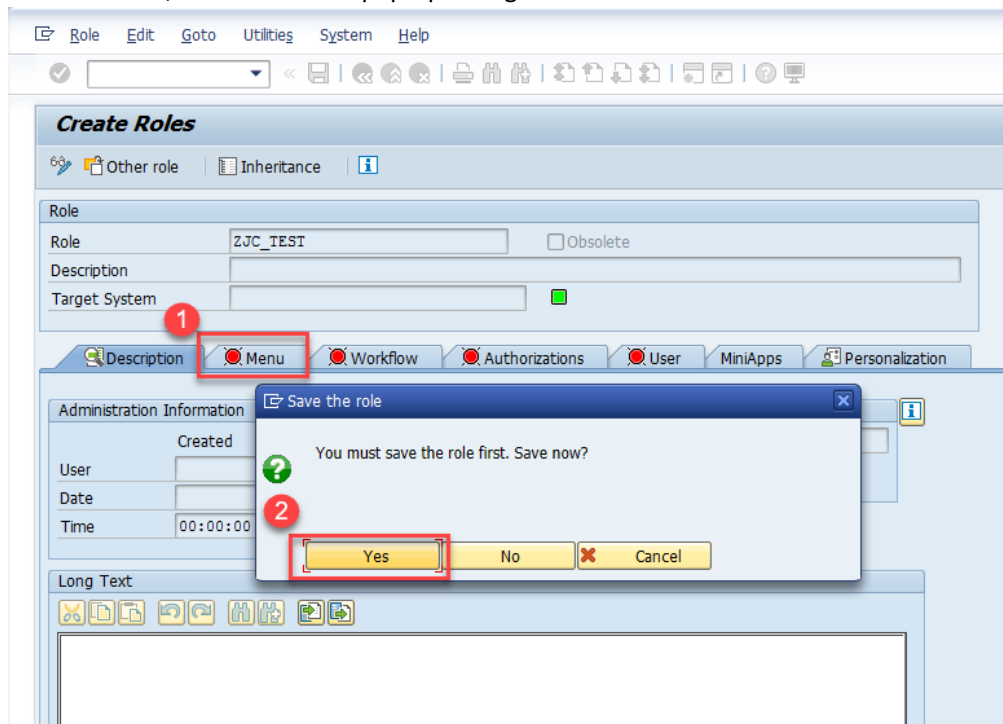3. Navigate to **Menu** tab, click **Yes** on the pop-up dialog

Figure 28 Save the role

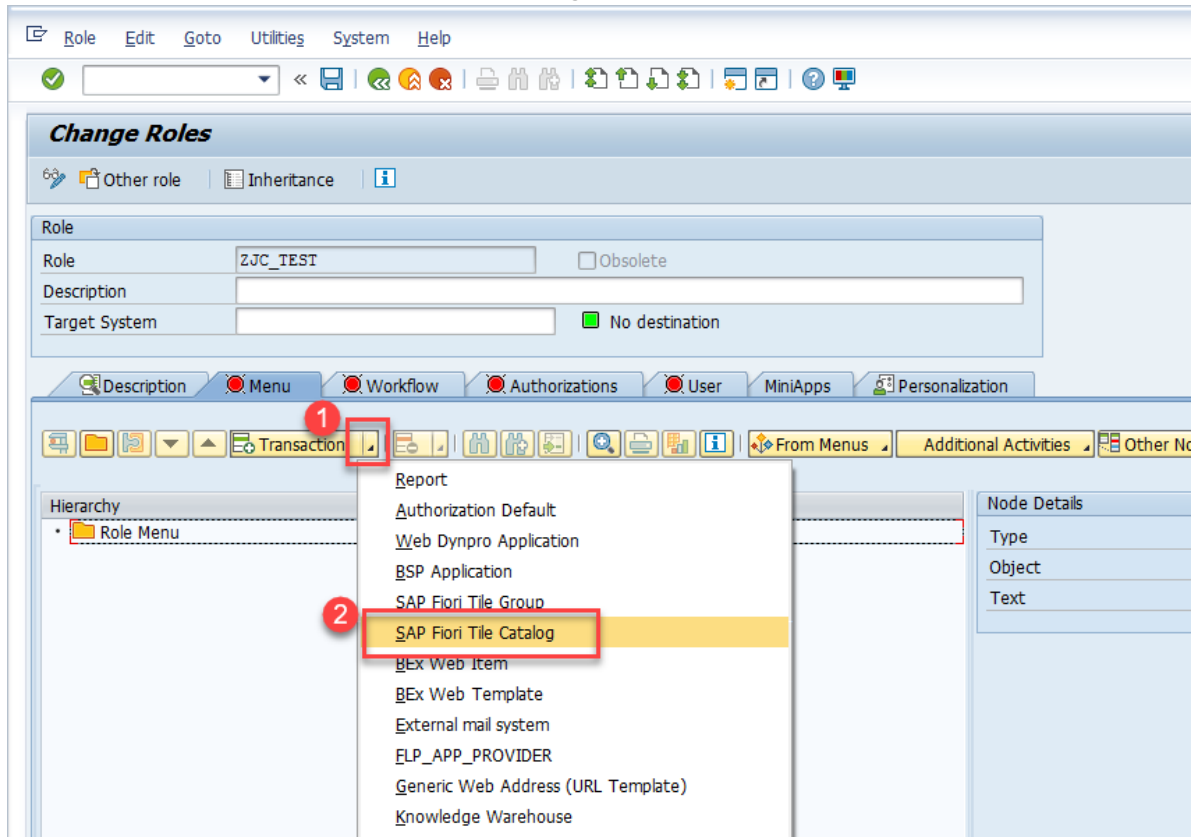4. Click **Insert Node** then select **SAP Fiori Tile Catalog**

Figure 29 Insert node

5. Enter the **Catalog ID** of the catalog you used to create the tile and target mapping in section 3.2, then click **Continue**
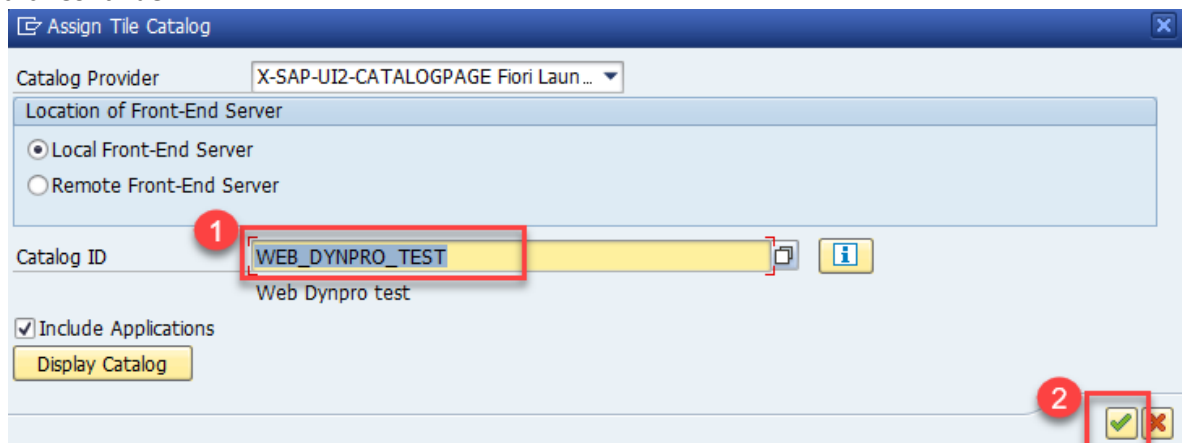

Figure 30 Assign tile catalog

ℹ **Note**
- You can use F4 help to select the catalog ID

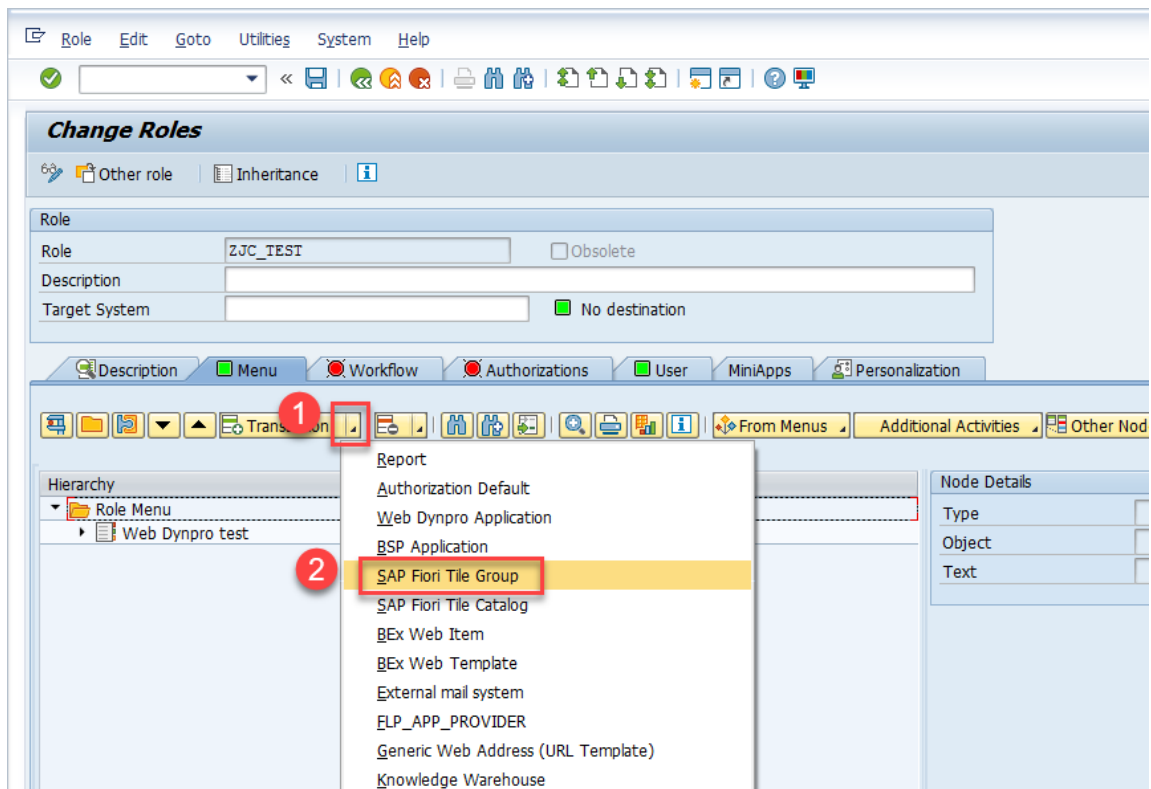6. Click **Insert Node** then select **SAP Fiori Tile Group**

Figure 31 insert tile group

7. Enter the **Group ID** of the Group you created in section 3.3 then click **Continue**
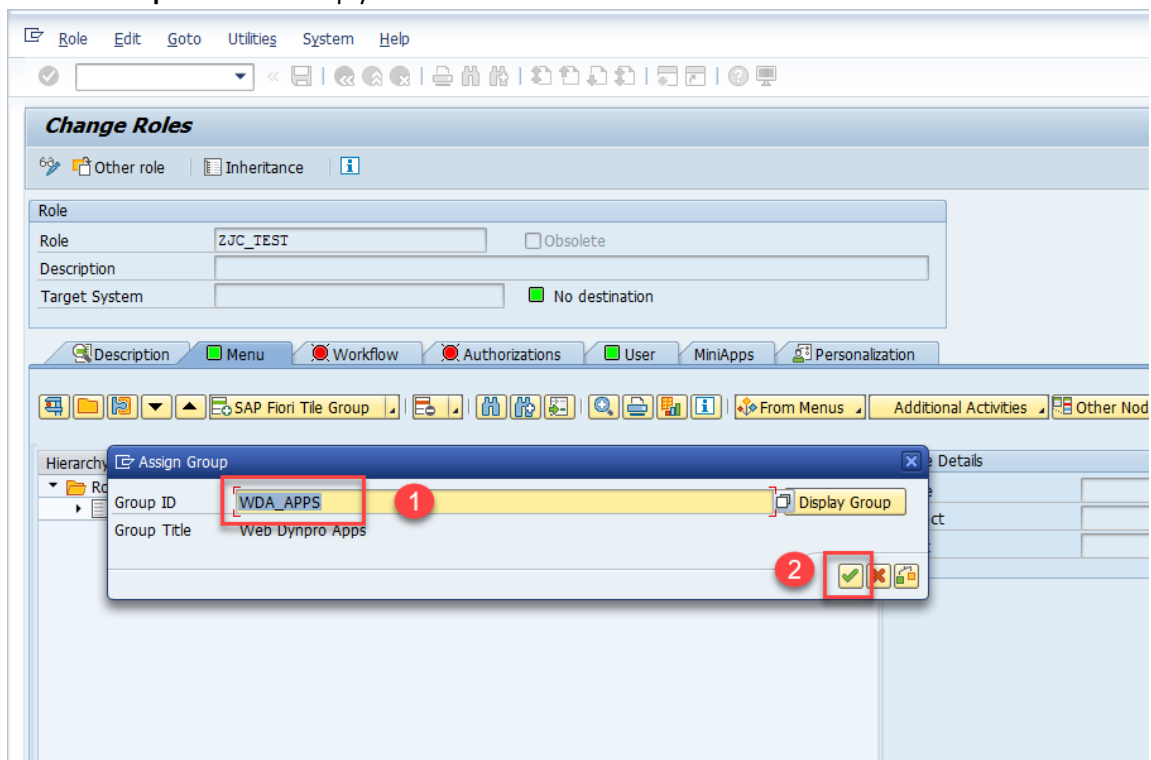

Figure 32 assign group

i	**Note**	•	You can use F4 help to select the group ID

8. Navigate to **User** tab, enter the **User ID** of the user(s) you want to offer the authorization, then click **Save**
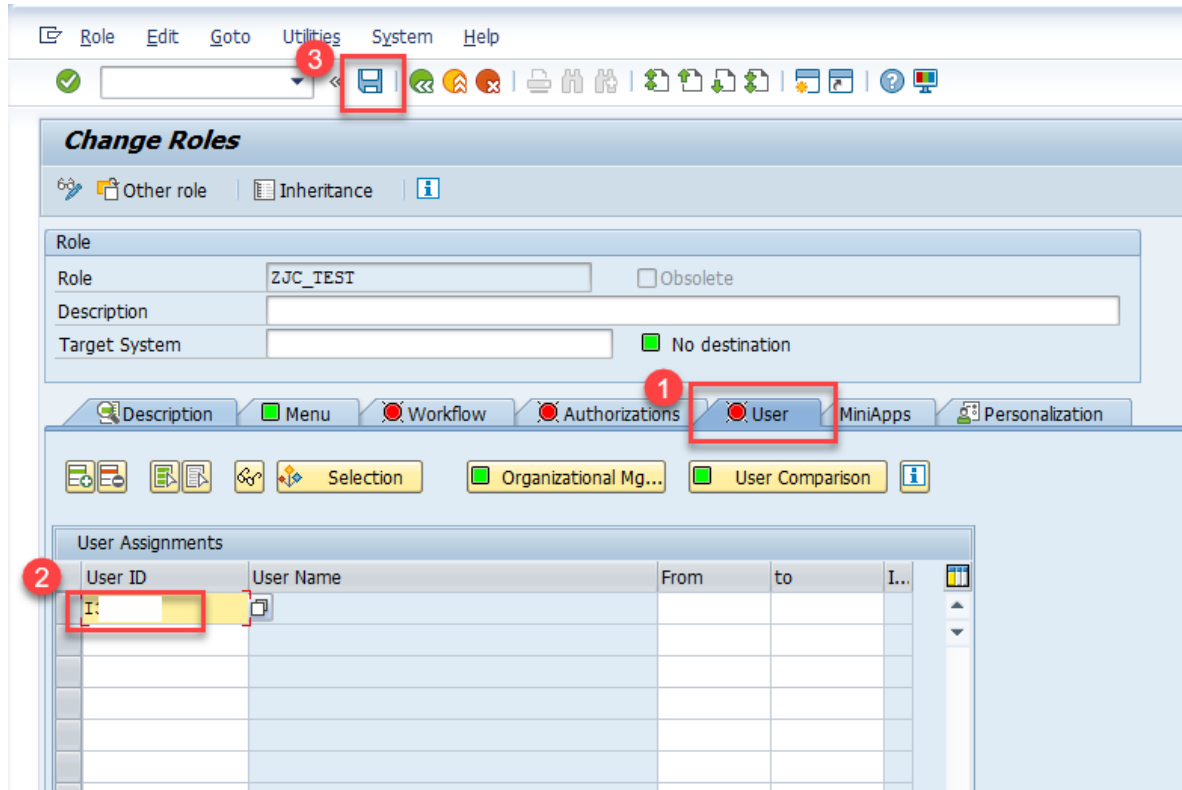

Figure 33 User assignment

1. Log on Fiori Launchpad

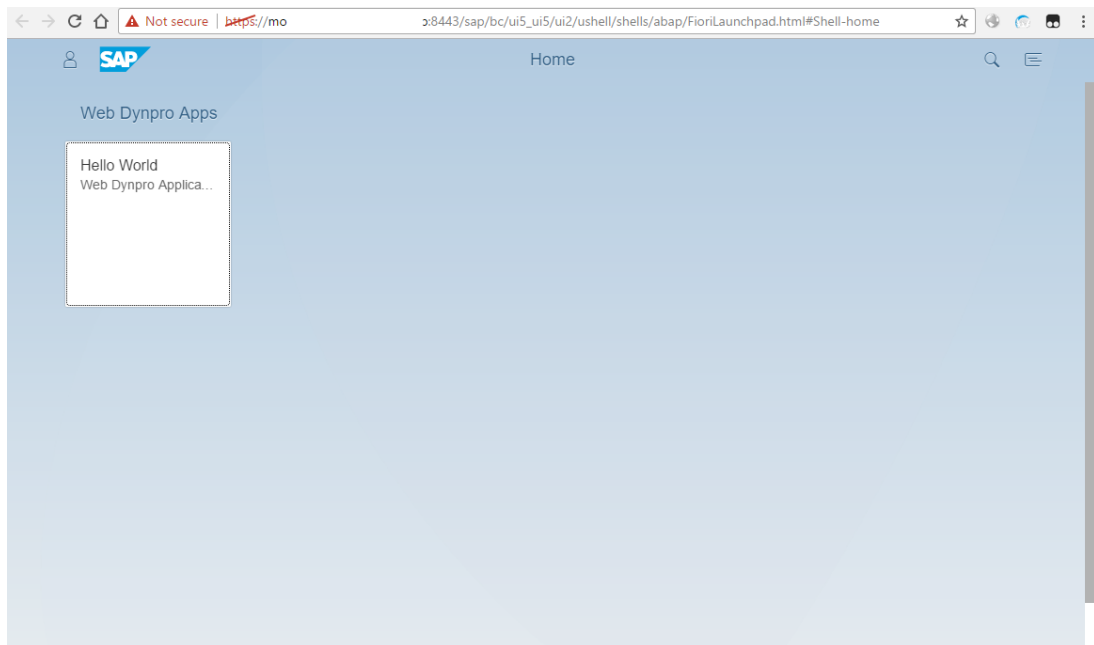| i **Note**	• If you skipped section 3.3, there will not be a predefined group with the tile inside on your Fiori Launchpad home page as displayed in the figure below

Figure 34 Fiori Launchpad home page

2. Click the button on the top-right corner to enter the "Me Area", then click **App Finder**
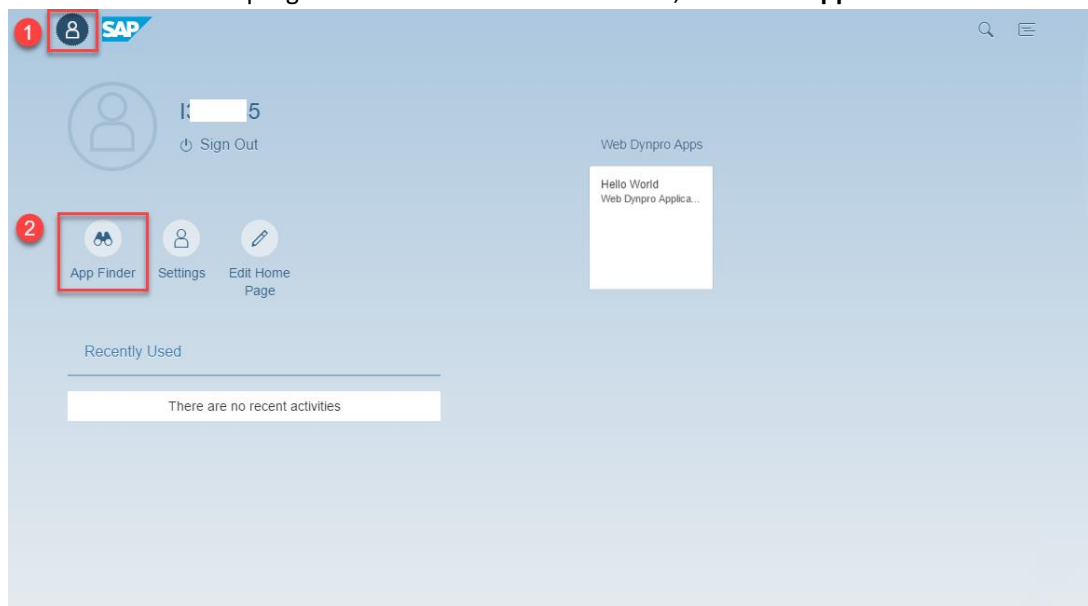

Figure 35 Me Area

3. You can find the tile in the corresponding tile catalog. You can also add the tile to any group (or a new group) on your Fiori Launchpad home page as displayed in the figure below
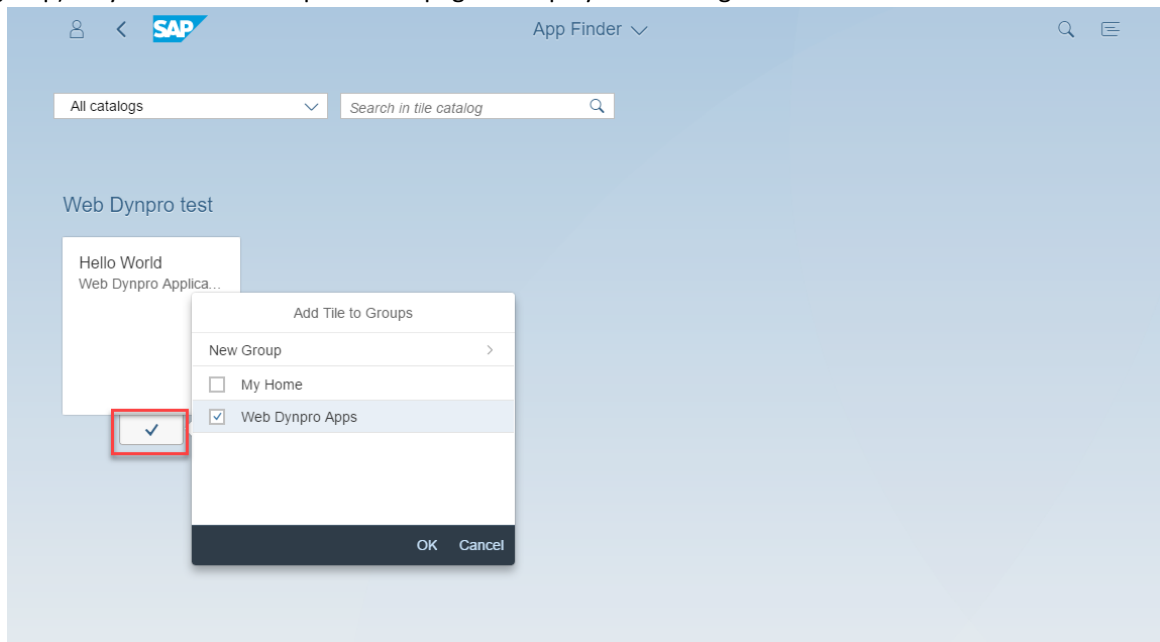

Figure 36 App Finder

4. Click on the tile to test the Web Dynpro application

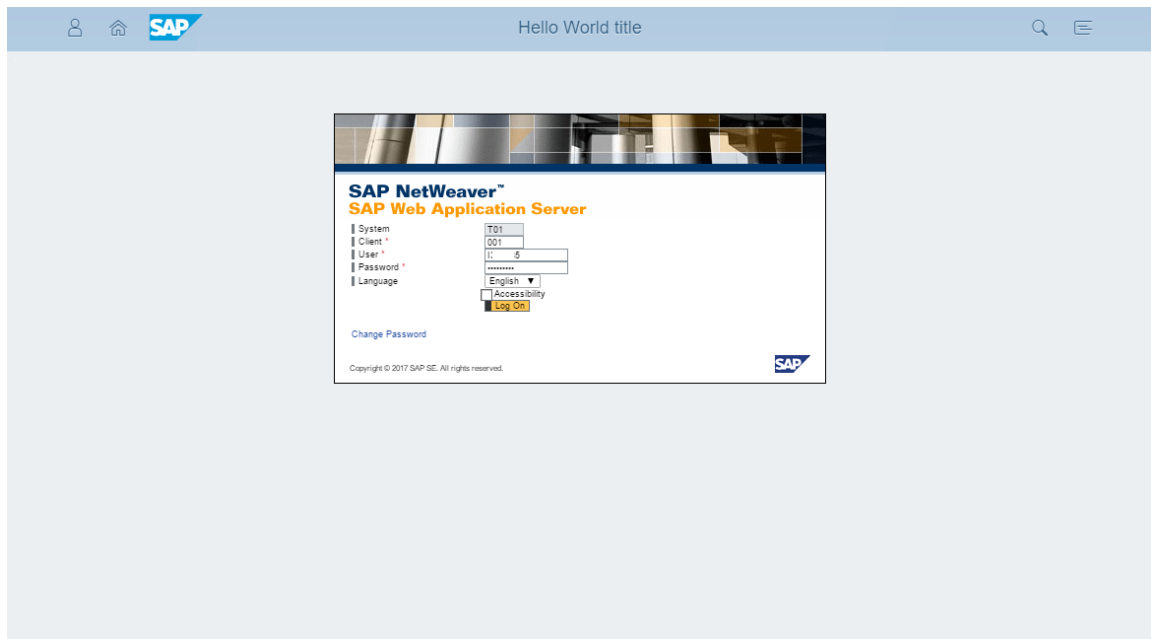| ℹ **Note**	• The Web Dynpro applications will be launched in a new browser tab
	• You may need to enter the logon data for the backend system

Figure 37 Enter the logon data for backend system

Figure 38 Web Dynpro application is loaded successfully