Fiori 101 – How to Set Up a Fiori Tile Using Web IDE

SAP NetWeaver (7.5) – Gateway Part 2

Ali Chalhoub
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# TABLE OF CONTENTS

Document History........................................................................................................................................... 2  
ABSTRACT ........................................................................................................................................................ 5  
Chapter 4 – Enabling Flight OData Service .................................................................................................... 5  
Chapter 5 – Configuring HCP and HCC............................................................................................................. 5  
Chapter 6 - Using WebIDE ................................................................................................................................ 5  
Chapter 7 - Deploying and configuring Application ......................................................................................... 5  
Chapter 8 - Using Launchpad Designer ............................................................................................................ 5  
Chapter 9 - Testing Fiori Application .................................................................................................................. 5  
Chapter 10 - Troubleshooting .......................................................................................................................... 5  
CHAPTER 4 ENABLING FLIGHT ODATA SERVICE .......................................................................................... 6  
Test Flight OData endpoint................................................................................................................................ 19  
CHAPTER 5 CONFIGURING HCP AND HCC .................................................................................................... 21  
Accessing SAP HANA Cloud Platform.................................................................................................................. 21  
Installing and configuring HANA Cloud Connector .............................................................................................. 21  
Activating Services for HCP and Fiori Launchpad ............................................................................................... 39  
Configuring the HCP destination ........................................................................................................................ 42  
CHAPTER 6 ACCESSING WEBIDE................................................................................................................... 47  
Accessing SAP WebIDE ....................................................................................................................................... 47  
Configuring the Fiori Application Template plug-in............................................................................................ 50  
Building the application ....................................................................................................................................... 53  
Testing the Fiori application in the sandbox ......................................................................................................... 62  
CHAPTER 7 - DEPLOYING AND CONFIGURING THE APPLICATION................................................................ 64  
Register as an SAP developer .............................................................................................................................. 64  
Deploying Fiori Application to Gateway ................................................................................................................ 68  
Verifying the Deployment in ABAP Workbench .................................................................................................... 76
Configure Launchpad Application.................................................................................................................. 81
Creating a Semantic Object ................................................................................................................................. 90

CHAPTER 8 - USING LAUNCHPAD DESIGNER.................................................................................................... 94
Creating Launchpad Role ..................................................................................................................................... 94
Accessing Launchpad Designer .......................................................................................................................... 97
Configuring Group .............................................................................................................................................. 102
Assign Catalog to Launchpad Role ..................................................................................................................... 106
Assign Group to Launchpad Role ....................................................................................................................... 110
Working with Tile and Target Mapping ............................................................................................................. 112
Assigning a Fiori application to a group ............................................................................................................ 127

CHAPTER 9 - TESTING FIORI APPLICATION.................................................................................................... 136
Log in to Fiori Launchpad ................................................................................................................................... 136
Testing Fiori Tile application ............................................................................................................................... 138

CHAPTER 10 – TROUBLESHOOTING.................................................................................................................. 139
1. Cannot ping on-premise NetWeaver Gateway from HCP ............................................................................... 139
2. Tile failed to load after upgrading NetWeaver Gateway 7.5 to SP04 ............................................................. 139
3. A tile accessed from Launchpad opens in a new tab with a blank screen, rather than from inside the Launchpad ......................................................................................................................... 140
4. When clicking a tile, the application does not open and an error occurs ....................................................... 140
5. Application failed to load in Fiori Launchpad Sandbox in Web IDE ............................................................. 142
6. Fiori Cache Issues ........................................................................................................................................... 142
Abstract

Chapter 4 – Enabling Flight OData Service
  4.1. Enable OData Flight endpoint
  4.2. Test Flight OData endpoint

Chapter 5 – Configuring HCP and HCC
  5.1. Accessing SAP HANA Cloud Platform
  5.2. Installing and configuring HANA Cloud Connector
  5.3. Activating Services for HCP and Fiori Launchpad
  5.4. Configuring HCP destination

Chapter 6 - Using WebIDE
  6.1. Access SAP WebIDE
  6.2. Configuring Fiori Application Template plug-in
  6.3. Building the application
  6.4. Testing the Fiori application in the sandbox

Chapter 7 - Deploying and configuring Application
  7.1. Register as an SAP developer
  7.2. Deploying Fiori Application to Gateway
  7.3. Verifying the Deployment in ABAP Workbench
  7.4. Configure Launchpad application
  7.5. Creating Semantic Object

Chapter 8 - Using Launchpad Designer
  8.1. Creating Launchpad Role
  8.2. Accessing Launchpad Designer
  8.3. Configuring Catalog
  8.4. Configuring Group
  8.5. Assign Catalogue to Launchpad Role
  8.6. Assign Group to Launchpad Role
  8.7. Working with Tile and Target Mapping
  8.8. Assigning Fiori Application to a the group

Chapter 9 - Testing Fiori Application
  9.1. Login to Fiori Launchpad
  9.2. Testing Fiori Tile application

Chapter 10 - Troubleshooting
  10.1. Unable to ping on-premise NetWeaver Gateway from HCP
  10.2. Tile failed to load after upgrading NetWeaver Gateway 7.5 to SP04
  10.3. Accessing tile from Launchpad, it opens in a new tab with a blank screen
  10.4. Application does not open and an error occurs
  10.5. Application failed to load in Fiori Launchpad Sandbox in Web IDE
  10.6. Fiori Cache Issues
This chapter describes how to enable the Flight OData endpoint that is provided with SAP Gateway service.

Before we start, test to see whether the Flight OData endpoint is already enabled in your system:

1. Open a browser, either Chrome or Internet Explorer.
2. Enter the following URL:
   \[http(s)://<\text{HOSTNAME}>:{\text{PORT}}/sap/opu/odata/IWFND/RMTSAMPLEFLIGHT/\]

\textbf{Note}

- \text{HOSTNAME}: Host name of the NetWeaver Gateway System
- \text{PORT}: the port on which NetWeaver Gateway is configured to listen.
- Make sure you are using an appropriate port for HTTP or HTTPS.
3. If Flight is configured, you should see the following result:

![Flight OData endpoint result](image)

**Note** If you are using Internet Explorer, you may be asked to open or save RMTSAMPLEFLIGHT, and be given the choice of opening it or ignoring it. These options indicate that you can access the OData endpoint.

If Flight OData endpoint is not configured, configure it:

1. Log in to your NetWeaver Gateway system.
2. Enter transaction code SPRO in the command field.

3. Click SAP Reference IMG.

Figure 2. SPRO Customizing: Execute Project

Figure 3. SAP Reference IMG
4. Expand SAP NetWeaver.

5. Now expand SAP Gateway.

6. Expand OData Channel.

7. Expand Administration.

8. Expand General Settings.

9. Click the **green checkmark** next to Activate and Maintain Services.

---

**Figure 4. Access SAP NetWeaver**

**Figure 5. Access Activate and Maintain Services**
10. You see the screen below:

Figure 6. Available Services
11. Click **Add Service**.

![Service Catalog](image)

Figure 7. Add a service
12. Now you are in the Add Selected Services screen:

![Add Selected Services Screen](image1)

Figure 8. Add Selected Services

13. Click the **square** icon next to System Alias.

![System Alias Icon](image2)

Figure 9. Access System Alias
14. Select LOCAL.

![Selecting a LOCAL system alias](image1)

**Figure 10.** Selecting a LOCAL system alias

15. Click Get Services.

![Get the services](image2)

**Figure 11.** Get the services

16. Double-click Flight from the list under Technical Service Name (/IWEP/RMTSAMPLEFLIGHT in the screen shown below):

![Select RMTSAMPLEFLIGHT to activate](image3)

**Figure 12.** Select RMTSAMPLEFLIGHT to activate
17. You should see this screen:

![Figure 13. Activate the service](image)

Figure 13. Activate the service
18. Click **Local Object**.

19. Click the **green checkmark** to continue.
20. In the confirmation dialog, click the **green checkmark** to continue.

Figure 15. Confirming the service has been added
21. Click the back button.

Figure 16. Going back to the service that has been added
22. ZRMTSAMPLEFLIGHT has been added.
Test Flight OData endpoint

1. Select `ZRMTSAMPLEFLIGHT` and click SAP Gateway Client.

![Service Catalog](image1)

Figure 18. Accessing Sample Flight

2. Under SAP Gateway Client, click **Execute**.

![SAP Gateway Client](image2)

Figure 19. Testing the newly activated Flight sample

---

**Tip**

You can use transaction `/n/IWFND/MAINT_SERVICE` to access the Activate and Maintain Services directly.
3. If everything is configured correctly, you should see the following result, which indicates that Flight Sample OData is active and working successfully:

![SAP Gateway Client interface](image)

HTTP Request - Processing Time = 58 ms

```xml
<?xml version="1.0" encoding="UTF-8"?>
xmlns:gp="http://www.sap.com/Protocols/SAPData/Gs
xmlns:atom="http://www.w3.org/2005/Atom" xmlns:ap
xmlns="http://www.sap.com/Protocols/SAPData/Gp
xmlns:atom="http://www.w3.org/2005/Atom"
xmlns:ap>

Data
</atom:title>
</app:collection>
</app:collection>

Figure 20. Flight is now active
Chapter 5
Configuring HCP and HCC

This chapter focuses on how to install HANA Cloud Connector (HCC) and how to configure HANA Cloud Platform (HCP) to communicate with HCC.

HCC is necessary for access to the on-premise SAP NetWeaver Gateway and to develop a custom app using WebIDE.

You’ll want to install HANA Cloud Connector on a VM or machine that lets you ping and have access to your NetWeaver Gateway system. In the example used throughout this chapter, HCC is installed and configured on a Windows 2012 Server.

Accessing SAP HANA Cloud Platform

To use HCC with SAP HANA Cloud Platform, you must have an account in HCP. To get an account:

2. Click Register.
3. Follow the registration process.
4. Provide your first and last name, your email address, and set a password.
5. Once you accept the Terms and Conditions, you will be sent the information needed to access HCP.

Installing and configuring HANA Cloud Connector

1. Download HCC version 2.8 or higher from https://tools.hana.ondemand.com/#cloud.
2. Select Windows x86_64 version 2.8.0.1 or higher.
3. Download JAVA JDK. Or, if you prefer, you can download SAP JDK 8.
4. Once downloaded, install the JDK on your VM or physical machine:
   a. By default, the installer selects the folder C:\SAP\scc20\.
b. Secure port: 8443.

c. The installer finds any existing JDK in your system.

d. Accept the defaults.

e. Make sure the service has started as shown below:

<table>
<thead>
<tr>
<th>Service</th>
<th>Network</th>
<th>Status</th>
<th>Protocol</th>
</tr>
</thead>
<tbody>
<tr>
<td>Routing and Remote Access</td>
<td>Enabled</td>
<td>Disabled</td>
<td>Local System</td>
</tr>
<tr>
<td>RPC Endpoint Mapper</td>
<td>Resolves</td>
<td>Started</td>
<td>Automatic</td>
</tr>
<tr>
<td>SAP Control Center 3.2.0</td>
<td>Provides</td>
<td>Started</td>
<td>Manual</td>
</tr>
<tr>
<td>SAP HANA Cloud Connector 2.0</td>
<td>Hosts and</td>
<td>Started</td>
<td>Automatic</td>
</tr>
</tbody>
</table>

6. Now open your browser and go to https://localhost:8443 to access the SAP HANA Cloud Connector Administration.

7. The default User ID is **Administrator** and the password is **manage**. These values are case-sensitive.

---

**Note**
a. After logging in the first time, select the Installation Type. The example uses the Master (Primary Installation).

Choose Installation Type

- Master (Primary Installation)
- Shadow (Backup Installation)

Apply

Figure 23. Choosing the installation type of HCC

b. Click Apply.

c. Change the default password.

You are required to change your password before being permitted to continue

Mandatory Password Change

Current Password: *
New Password: *
Repeat New Password: *

Save

Figure 24. Changing the default password

d. Click Save.
e. Provide your HANA Cloud Platform landscape information. The examples uses the HANA Trial landscape.

Set Up Initial Configuration

SAP HANA Cloud Connector is not configured and remains inoperative unless you provide the following settings.

**Configuration**

- **Landscape Host**: 
- **Account Name**: 
- **Display Name**: 
- **Account User**: 
- **Password**: 
- **Location ID**: 
- **Description**: 

**HTTPS Proxy**

- **Host**: 
- **Port**: 
- **User**: 
- **Password**: 

**Connector Info**

- **Description**: 

Figure 25. Setting up the initial configuration of HCC
f. The completed screen should look similar to the following:

**Set Up Initial Configuration**

SAP HANA Cloud Connector is not configured and remains inoperative unless you provide the following settings

**Configuration**

- **Landscape Host:** hanatrial.ondemand.com
- **Account Name:** your user ID including `trial`. (for example, myIDtrial)
- **Display Name:** same as the Account Name
- **Account User:** your userID without the word `trial`
- **Password:** *
- **Location ID:**
- **Description:**

**HTTPS Proxy**

- **Host:** *
- **Port:** *
- **User:** *
- **Password:** *

**Connector Info**

- **Description:**

![Apply button]

Figure 26. Filling in the landscape information

- Landscape: select hanatrial.ondemand.com from the drop-down list
- Account Name: your user ID including `trial`. (for example, myIDtrial)
- Display Name: same as the Account Name
- Account User: your userID without the word `trial`
- Your password for HCP
- HTTPS Proxy: If your environment requires you to use a proxy to access the Internet, the necessary information

g. Once you are done, click **Apply** button.
h. You should see the following screen:

### Connector State

<table>
<thead>
<tr>
<th>Landscape Host</th>
<th>hana Trial on demand.com</th>
</tr>
</thead>
<tbody>
<tr>
<td>HTTPS Proxy</td>
<td></td>
</tr>
<tr>
<td>System Certificate</td>
<td></td>
</tr>
<tr>
<td>Account User</td>
<td></td>
</tr>
<tr>
<td>Location ID</td>
<td>n.a.</td>
</tr>
<tr>
<td>Description</td>
<td>n.a.</td>
</tr>
</tbody>
</table>

### Tunnel Information

<table>
<thead>
<tr>
<th>Status</th>
<th>CONNECTED</th>
</tr>
</thead>
<tbody>
<tr>
<td>Remote Name</td>
<td>connectivity-notification.hana Trial on demand.com</td>
</tr>
<tr>
<td>Tunnel ID</td>
<td>account Trial</td>
</tr>
<tr>
<td>Local Name</td>
<td></td>
</tr>
<tr>
<td>Connector ID</td>
<td></td>
</tr>
<tr>
<td>Local IP</td>
<td></td>
</tr>
</tbody>
</table>

### Cloud Connections (0)

![Cloud Connections](image)

Figure 27. HCC connection status

### Note

If the Disconnect button says Connect, you need to click on it, in order to establish communication with SAP HANA Cloud Platform.
8. Configure HCC to connect to the on-premise SAP NetWeaver Gateway. In the HCC Administration Cockpit, click **Access Control**.

![Figure 28. Access Control](image)

9. Click **Add** to add a virtual mapping to the internal NetWeaver Gateway system.

![Figure 29. Adding virtual server](image)
10. From the System Mapping dialog, select a back-end type, and click **Next**.

![Image of System Mapping dialog](image.png)

**Figure 30.** Selecting a system mapping type
11. Select **HTTP** as the protocol.

Figure 31. Selecting protocol type
12. Provide your internal NetWeaver Gateway system and port and click **Next**:

![Add System Mapping](image)

*Figure 32. Specifying internal system*

![Note](image)

**Note** In your setup, use whatever HTTP port you have configured, if it differs from the one used in this example.

13. Provide a virtual name for your server. This name can be anything you like; however, the port number must be the same as the internal one. For example, if your internal host name is nwgtw.sap.com with
port 8001, you might want to name the virtual one virtual.nwgtw.sap.com with port 8001.

Figure 33. Assigning a virtual host name
14. Accept the default if you are using HTTP, and click **Next**:
15. Enter a description, and click **Next**.

Figure 35. Provide a description of your system mapping
16. Review the configuration, and make sure you select **Check availability of your internal host**, which allows you to test it.

![Add System Mapping](image)

*Figure 36. Verifying configuration*
17. Click **Finish**. You should see a screen similar to the following:

**Mapping Virtual To Internal System**

<table>
<thead>
<tr>
<th>State</th>
<th>Virtual Host</th>
<th>Internal Host</th>
<th>Protocol</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Resources Accessible On**

<table>
<thead>
<tr>
<th>State</th>
<th>URL Path</th>
<th>Access Policy</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Figure 37. Virtual and internal system configuration

18. Add accessible resources the server you just added. Click **Add** under Resources and Accessible.

**Mapping Virtual To Internal System**

<table>
<thead>
<tr>
<th>State</th>
<th>Virtual Host</th>
<th>Internal Host</th>
<th>Protocol</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Resources Accessible On**

<table>
<thead>
<tr>
<th>State</th>
<th>URL Path</th>
<th>Access Policy</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Figure 38. Adding resources
19. The screen you see should look similar to:

![Image of the screen](image)

**Figure 39. Adding a path to your resource**
20. Enter a forward slash in **URL Path**, then select **Path and all sub-paths**: 

![Add Resource](image)

**Figure 40. Adding path to resource**
21. Click **Save**. You should see the following:

**Figure 41.** Finalizing the configuration screen

<table>
<thead>
<tr>
<th>State</th>
<th>Virtual Host</th>
<th>Internal Host</th>
<th>Protocol</th>
</tr>
</thead>
<tbody>
<tr>
<td>✔</td>
<td><strong>[Redacted]</strong>:8001</td>
<td><strong>[Redacted]</strong>:8001</td>
<td>HTTP</td>
</tr>
</tbody>
</table>

**Resources Accessible On** **[Redacted]**:8001

<table>
<thead>
<tr>
<th>State</th>
<th>URL Path</th>
<th>Access Policy</th>
</tr>
</thead>
<tbody>
<tr>
<td>✔</td>
<td>/</td>
<td>Path and all sub-paths</td>
</tr>
</tbody>
</table>

**Note** State is turned green, that means the server now can communicate with your internal NetWeaver Gateway system.
Activating Services for HCP and Fiori Launchpad

Before configuring HCP to talk to HCC, activate the following services in NetWeaver Gateway:

- `/sap/bc/adt`
- `/sap/bc/ui5_ui5`
- `/sap/opu/odata`

1. Log in to your SAP NetWeaver Gateway system.
2. Execute `SICF` or `/nSICF` in your command field.
3. In the Service Path, type `/sap/bc/adt` and click **Execute**:

   ![Figure 42. Activate service](image-url)

   **Figure 42. Activate service**
4. You should see this screen:

![Define Services](image)

Figure 43. Services needing to be activated

5. Right-click **bc**. If **Activate Service** is dimmed, you can skip this step, otherwise, click it.

![Activate Service](image)

Figure 44. Activate a service
6. Select Yes:

Figure 45. Activate /sap/bc/adt

7. Your screen should now look like this:

Figure 46. Service is activated
8. Repeat the same steps for the following:
   a. /sap/bc/ui5_ui5
   b. /sap/opu/odata

   Note: If these services are already activated, you do not need to do anything, you can skip this step.

Configuring the HCP destination

Log in to SAP HANA Cloud Platform Trial landscape to configure a destination.

1. Open your browser.
3. Provide your user ID and password.
4. Click Connectivity to verify whether your HCC is connecting to your HCP Trial landscape account.

Figure 47. Successful connection from HCC to HCP Trial
5. **Select Destinations** from the left menu.

![Diagram showing the left menu with Destinations highlighted]

**Figure 48. Accessing destinations**
6. Create a new destination to HCC using the virtual host name you created. Click **New Destination**.

![Figure 49. Adding a destination](image)

7. Now fill in the information as shown below:

- **Name**: Any name you like. The example uses FioriGateway.
- **Description**: Enter the same value used for Name. This appears in the deployment section when you deploy the application through Web IDE to the NetWeaver system.
- **URL**: The virtual URL you created in HCC of form `http://<VIRTUAL-HOSTNAME>:<PORT>`
- **Authentication**: The example uses BasicAuthentication.
- **Proxy Type**: on-premise

8. Add property for this destination, by clicking **New Property**.

![Figure 50. Adding properties](image)
9. Add another property, **WebIDEEnabled**, with the value **true**:

![Destination Configuration](image)

10. Add another property, **WebIDESystem**, with the value of your NetWeaver system ID.

11. Add another property for **WebIDEUsage** with these values:

   odata_abap, dev_abap, ui5_execute_abap, bsp_execute_abap

12. The end result should look similar to:

    ![Additional Properties](image)

    | Property            | Value                                |
    |---------------------|--------------------------------------|
    | WebIDEEnabled       | true                                 |
    | WebIDESystem       | NW1                                  |
    | WebIDEUsage         | .execute_abap, bsp_execute_abap      |

13. Click **Save**.

14. It will now take about 5 minutes before the system is available with the changes you’ve just made.

15. Once it is available, click the destination that you have created.
16. Now you should see the following:

![Destination Configuration](image)

17. Click **Check Connection**. If everything is configured correctly, you should see the following:

![Check Connection](image)

*Note* If the test failed, check the Troubleshooting section to learn how to fix the issue.
You can now create a custom Fiori application that consumes the Flight OData endpoint using WebIDE.

Accessing SAP WebIDE

1. Access SAP WebIDE directly by going to

   ! Note  
   Make sure <ACCOUNT-ID> is replaced with your account.

   a. Alternatively, you can access WebIDE directly from HCP Trial Cockpit.
      i. Log in to HCP by going to https://account.hanatrial.ondemand.com.
ii. Select **Services** from the menu shown below:

![Figure 51. Access services from HCP Trial Cockpit](image)

iii. Enter **Web IDE** in the search box, as shown below:

![Figure 52. Filter HCP services](image)
iv. If WebIDE shows as **Enabled**, click it to access it, or enable it if it is not enabled.

![Figure 53. Access SAP Web IDE](image1)

v. Click **Open SAP Web IDE**:

![Figure 54. Open SAP Web IDE](image2)
vi. You see this screen:

![Web IDE Interface](image)

Figure 55. Web IDE Interface

Configuring the Fiori Application Template plug-in

The next step is to configure the SAP Fiori Plug-in.

1. In SAP Web IDE, click **Preferences**:

![SAP Web IDE preferences](image)

Figure 56. SAP Web IDE preferences
2. From preferences, click **Plugins**:

![Plugins](image)

Figure 57. Access Plugins

3. You see all the plugins that are enabled or not enabled. Make sure the Overview Page Application is enabled by switching the button to the **ON** position.

![Overview Page Application](image)

Figure 58. Enable Overview Page Application
4. Scroll down and click **Save**.

![Figure 59. Save your changes](image)

5. Click **Refresh** for your changes to take effect.

![Figure 60. Refresh SAP Web IDE plugins](image)
Building the application

You can now start building a Fiori Custom Application.

1. Select **File -> New -> Project From Template**:

![Selecting a new project from template](figure61.png)

**Figure 61. Selecting a new project from template**

2. From the existing templates, select **SAP Fiori Application**:

![Selecting templates](figure62.png)

**Figure 62. Selecting templates**
Make sure the SAPUI5 library is already installed, and select the one in the “Available versions”. For example if you are using SAPUI5 library 1.28 and you select version 1.36, you receive the following error, “*.js is not found.”. You can check the version by running your browser and executing http(s)://<HOSTNAME>:<PORT>/sap/public/bc/ui5_ui5/index.html

3. Select SAP Fiori Worklist and click Next.

![New SAP Fiori Worklist Application](image1)

![New SAP Fiori Worklist Application](image2)

**Figure 63. Select SAP Fiori Worklist Application**
4. Give the project a name, which can be anything you like. The example uses **ZMYFIORIFLIGHTWORKLIST**.

![New SAP Fiori Worklist Application](image)

**Mobile Enablement**

- Enable native mobile device functionality
  
  After creating your project, you can configure your application using Cordova plugins to enable native mobile device functionality

---

**Figure 64. Name the project**

5. Next, define a data connection. Select the on-premise SAP NetWeaver Gateway system using the virtual destination we created in HCP.
From the Select System menu, select the virtual destination, which in for the example is **FioriGateway**. Click **Service Catalog** and select the system you have defined.

**New SAP Fiori Worklist Application**  
**Data Connection**

Choose a service from one of the sources listed below.

Source:
- Service Catalog
- Workspace
- File System
- Service URL

Choose system, explore and select service. Optionally you can drill down into service details.

Figure 65. Create a data connection

6. You see all the services that are available in that system.

**New SAP Fiori Worklist Application**  
**Data Connection**

Choose a service from one of the sources listed below.

Source:
- Service Catalog
- Workspace
- File System
- Service URL

Choose system, explore and select service. Optionally you can drill down into service details.

Figure 66. Filter Flight OData service endpoint
7. Select **RMTSAMPLEFLIGHT** and click **Next**

![Image of the New SAP Fiori Worklist Application interface with a highlighted service selection and note on expanding service in the search list.](image)

**Note** You can expand the service in the search list to see the list of entity sets, which ensure that you have full access.

**Note** This example has been tested against **RMTSAMPLEFLIGHT** and not **RMTSAMPLEFLIGHT_2**. If you have installed **RMTSAMPLEFLIGHT_2**, please make sure you test against **RMTSAMPLEFLIGHT**.
8. Set the **Type**, **Title**, and **Namespace**, which are mandatory.

**New SAP Fiori Worklist Application**

**Template Customization**

<table>
<thead>
<tr>
<th>Application Settings</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Type</strong></td>
<td>App for SAP Fiori Launchpad</td>
</tr>
<tr>
<td><strong>Title</strong></td>
<td>Fiori Carrier Collection</td>
</tr>
<tr>
<td><strong>Namespace</strong></td>
<td>com.sap.nw1.flightcarrier</td>
</tr>
</tbody>
</table>

Note: The namespace is important, and you should make a note of it. It can be anything you like; the example follows this format `com.<COMPANY>.<SYSTEMID>.<APPNAME>`

| Description | (Optional) Fiori Flight Sample OData |

9. Fill in the Data Binding collection using the information in this table to set the values:

<table>
<thead>
<tr>
<th>Object Collection</th>
<th>CarrierCollection</th>
</tr>
</thead>
<tbody>
<tr>
<td>Object Collection ID</td>
<td>carrid</td>
</tr>
<tr>
<td>Object Title</td>
<td>CARRNAME</td>
</tr>
<tr>
<td>Object Numeric Attribute</td>
<td>Leave blank</td>
</tr>
<tr>
<td>Object Unit of Measure</td>
<td>URL</td>
</tr>
</tbody>
</table>
The final configuration screen should look similar to:

**New SAP Fiori Worklist Application**

Template Customization

<table>
<thead>
<tr>
<th>Application Settings</th>
<th>Type*</th>
<th>App for SAP Fiori Launchpad</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Title*</td>
<td>Fiori Carrier Collection</td>
</tr>
<tr>
<td></td>
<td>Namespace*</td>
<td>com.sap.mw1.flightcarrier</td>
</tr>
<tr>
<td></td>
<td>Description</td>
<td>Fiori Flight Sample OData</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Data Binding</th>
<th>Object Collection*</th>
<th>CarrierCollection</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Object Collection ID*</td>
<td>carid</td>
</tr>
<tr>
<td></td>
<td>Object Title*</td>
<td>CARRNAME</td>
</tr>
<tr>
<td></td>
<td>Object Numeric Attribute</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Object Unit of Measure</td>
<td>URL</td>
</tr>
</tbody>
</table>

Figure 69. Final application configuration
10. Click **Next**. You see a confirmation.

![Confirmation screen](image)

**New SAP Fiori Worklist Application**

**Confirmation**

Click **Finish**. A new project named `ZMYFIORIFLIGHTWORKLIST` is created in your workspace.

![Figure 70. Confirmation screen](image)
11. Click **Finish** to goto your project.

Figure 71. Workspace project
Testing the Fiori application in the sandbox

1. You can now test and run the application. Right-click the project name select **Run -> App in FLP Sandbox**.

![Diagram showing the steps to run the Fiori custom application](image)

**Figure 72. Running the Fiori custom application**

*Note* If you are using SAPUI5 library version 1.28, the option may be **Run with Mock server** or **Run with server** rather than **App in FLP Sandbox**. You can choose either option.
2. A new tab is opened with the application showing the result.

![Image](image.png)

Figure 73. Result of running the application in the Fiori Launchpad sandbox

**Note**

If you are on NetWeaver 7.4 or if Flight sample data was not generated, you may see a “No CarrierCollection data…” error message. To generate the data, run the report SAPBC_DATA_GENERATOR in SE38.
This chapter discusses how to deploy and configure your application to the on-premise NetWeaver Gateway system. However, the SAP user ID that you use to connect to the on-premise NetWeaver Gateway system must be an SAP registered developer.

Register as an SAP developer

You must register your user ID with SAP and receive a developer key. This SAP Note explains how to get one: https://service.sap.com/sap/support/notes/86161.

Once you get the key, perform the following steps:

1. Log in to your NetWeaver Gateway system.
2. In the command field, type transaction code **SE38**.

![ABAP Editor: Initial Screen](image)

Figure 74. SE38 transaction code to test creation of a program

3. Enter **ZTESTREGISTRATION** as the program name.

![ABAP Editor: Initial Screen](image)

Figure 75. Specify the program name to create
4. Click Create.

![ABAP Editor: Initial Screen]

Figure 76. Registration screen as a developer

5. Enter your access key and click Continue and follow the rest of the instructions.
   a. Enter a title
b. Set the type of registration, for example, under **Attributes**, select **Executable program**.

Executable program. See screen below:

c. Finally, click **Save** (or **Local Object**) to use the default ($TMP$).
Deploying Fiori Application to Gateway

After you register and enter your access developer key, go back to the Web IDE.

1. Right-click your project, select **Deploy**, then select **Deploy to SAPUI5 ABAP Repository**.

   ![Figure 77. Deploy a Fiori application to the on-premise NetWeaver Gateway system](image)

   **Note**
   Make sure that the HANA Cloud Connector shows a status of Connected or the new process will time out with an error.

2. Select **Deploy a new application**, then select the virtual system.
a.

**Figure 78. Select the virtual system**
3. Once the server successfully communicates with your on-premise NetWeaver Gateway system, click Next.

**Deployment Options**

![Deployment Options](image)

**Deploy to SAPUI5 ABAP Repository**

**Deployment Options**

- **System**: FloriGateway
  - Deploy a new application
  - Update an existing application

4. You see the deployment screen.

**Deploy to SAPUI5 ABAP Repository**

**Deploy a New Application**

- **Name**
- **Description**
- **Package**

![Deployment Options](image)

**Figure 79. Web IDE successfully established a connection with the on-premise system**

**Figure 80. Deploy to SAPUI5 ABAP Repository**
• Name: Name of your application in the NetWeaver Gateway system. The name can be anything you like (the example uses ZCARRCOLIST).

  
  Note

  The name must start with letter Z.

• Description: Description of the application
• Package: Where you want this application to be stored on the NetWeaver Gateway System (for example, $TMP)

5. After entering the name and descriptions, the Next button remains disabled. You must set the package in which the application will be stored. Click Browse.

![Figure 81. Selecting a package to store the application in](image)

  
  Note

  In some systems, the package may already be populated. If it is not; however, follow the steps below.
6. You see the Package selection.

Figure 82. Package Selection dialog
7. Enter your package name, $TMP:

Figure 83. Selecting $TMP package
8. Click **OK**. The screen should look similar to:

![Deploy to SAPUI5 ABAP Repository](image)

**Figure 84. Deploy a New Application section**

9. Click **Next**.

![Deploy to SAPUI5 ABAP Repository Confirmation](image)

*Click Finish to deploy your application to the SAPUI5 ABAP Repository.*

**Figure 85. Confirmation screen**
10. Click Finish.

Figure 86. Deploy application to the on-premise NetWeaver Gateway system

If you cannot see the Console window as shown in Figure 224:

**Note**

1. In the Web IDE menu bar, click **View**.
2. From the View menu, select **Console** or press **CTRL+SHIFT+M**.
3. The message “The application has been deployed to FioriGateway” indicates that the application is now available in the SAP NetWeaver Gateway system.

### Note

Verifying the Deployment in ABAP Workbench

Now that you have deployed the Fiori custom application to the NetWeaver Gateway system, you can configure the Launchpad application. First, verify that the application exists on the SAP NetWeaver Gateway system.

1. Log in to SAP NetWeaver Gateway system.
2. In the command field, execute SE80 or /nSE80.
3. You should see the following screen, which is the ABAP Workbench:

![ABAP Workbench](image)

Figure 87. ABAP Workbench
4. To check the application you just deployed, change the object category to **BSP Application**. Click the drop-down list for Object Category:

![Object Navigator](image1)

**Figure 88. Access the object category drop-down list**

5. **Select BSP Application**:

![Object Navigator](image2)

**Figure 89. Select BSP Application**
6. Enter the name of the application you deployed to the NetWeaver Gateway system. The example uses **ZCARRCOLIST**. Type the name of the application or type the letter **Z** (if you have used the same name as the example), and select the application from the list.

   ![Object Navigator](image1)

   **Figure 90. Typing the Object Name**

7. Your screen should look similar to:

   ![Object Navigator](image2)

   **Figure 91. ABAP Object Navigator**
8. Expand **Page Fragments**.

![Object Navigator](image)

**Figure 92. Access Page Fragments**

9. Double-click **Component.js**.

![Web Application Builder: Display Page ZCARRCOLIST](image)

**Figure 93. Access Component.js**

10. Under Layout, you see the source code for Component.js. Copy everything in `UIComponent.extend("...")` except the word Component. For example we copy `com.sap.nw1.flightcarrier` for later use. If you named your namespace differently, copy whatever inside the quotation and exclude the word Component:

```javascript
UIComponent.extend("com.sap.nw1.flightcarrier",

function (UIComponent, Device, models, models, ErrorHandler) {

/* The component is initialized by UI5 automatically during the sta
   In this function, the FLF and device models are set and the rout*/

/*
 *
*
*
*/

return UIComponent.extend("com.sap.nw1.flightcarrier_Component",

});
```

The namespace `com.sap.nw1.flightcarrier` is only an example. Replace it with your project namespace.
sap.ui.define(['
    sap/ui/core/UIComponent,
    sap/ui/Device,
    "com/sap/nw1/flightcarrier/model/models",
    "com/sap/nw1/flightcarrier/controller/ErrorHandler"
], function (UIComponent, Device, models, ErrorHandler) {

    "use strict";

    return UIComponent.extend("com.sap.nw1.flightcarrier.Component", {
        metadata : {
            manifest: "json"
        },

        /**
         * The component is initialized by UI5 automatically during the startup of the app.
         * In this function, you can write code which is only executed when the component has been
         * @public
         * @override
         */
        init : function () {
            // call the base component's init function
            UIComponent.prototype.init.apply(this, arguments);

            // initialize the error handler with the component
            this._oErrorHandler = new ErrorHandler(this);
        }
    });
});

Figure 94. Access the component name
Configure Launchpad Application

Configure the Launchpad for your Fiori custom application.

1. Log in to your SAP NetWeaver Gateway system.
2. In the command field, enter \LPD\_CUST or \nlLPD\_CUST.
3. You should see the following screen:

![Image of Overview of Launchpads](image)

Figure 95. Overview of Launchpads

4. Click New Launchpad.

![Image of Creating New Launchpad](image)

Figure 96. Creating New Launchpad
5. You should see the following screen. Fill the information as shown below or whatever name you prefer as long as it starts with the letter Z.

![create new role form]

Figure 97. Create a new role

<table>
<thead>
<tr>
<th>Role</th>
<th>ZFLCARR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Instance</td>
<td>ZFLCARR</td>
</tr>
<tr>
<td>Description</td>
<td>Flight Carrier Collection</td>
</tr>
</tbody>
</table>

6. Click the **green check** button to continue.
7. Now you should see the following:

![namespace warning]

Figure 98. Namespace warning confirmation

8. Click **Yes** to continue.
9. You should see the following screen:

![Change Launchpad screen](image)

Figure 99. Change Launchpad screen

10. Click **New Application**.

![Create a new application for the new role](image)

Figure 100. Create a new application for the new role

11. Complete the Link Text and Application Type as shown below.

![Set the application type](image)

Figure 101. Set the application type
<table>
<thead>
<tr>
<th>Link Text</th>
<th>Fiori Flight Carrier Collection</th>
</tr>
</thead>
<tbody>
<tr>
<td>Application Type</td>
<td>URL</td>
</tr>
</tbody>
</table>

12. Under Application Parameter, in the blank text field, enter `/sap/bc/ui5_ui5/sap/zcarrcolist`.

![Link Details](image1)

![Application Type](image2)

![Application Parameter](image3)

**Figure 102. Specify the URL**

**Note**

The path must be `/sap/bc/ui5_ui5/sap/`, followed by the application name.
13. Click **Show Advanced (Optional) Parameters**: 

![Image showing advanced parameters](image)

**Figure 103. Access Advanced Parameters**

14. Define an application alias, which can be named anything you like. The example uses **zcarrcolistalias**.
a. Click the Editor Application Alias button.

Figure 104. Accessing Application alias editor
b. In the text field enter the application alias name.
c. Under **Additional Information**, enter the name of the component you copied from page 168. Your screen should look like this screen below:

![Figure 105. Specify additional information](image)

Figure 105. Specify additional information
15. Click **Save**.

![Figure 106. Save changes](image)

16. You see a confirmation on the bottom taskbar:

![Figure 107. Confirming data saved](image)
Creating a Semantic Object

After configuring the Fiori Application Launchpad using transaction LPD_CUST, create a semantic object for your Fiori custom application.

1. Log in to your NetWeaver Gateway system.
2. In the command field, enter /n/UI2/SEMOBJ.

Note: Make sure you type /n before the transaction code /UI2/SEMOBJ; if you do not, you’ll see an error: “This function is not possible”

3. Click the edit button to create a new semantic object for our Fiori custom application.

4. In the information dialog, click the green checkbox to continue.
5. Now click **New Entries**: 

![Figure 110. Selecting New Entries](image)

6. You see the following screen: 

![Figure 111. New Entries: Overview of Added Entries](image)

7. Enter the name of your semantic object (for example, **ZCARRSEMOBJ**), use the same name for the Semantic Object Name, and provide a description. 

![Figure 112. Final configuration of the semantic object](image)
8. Click **Save**.

![Image of semantic objects](image1.png)

**Figure 113. Save changes to a semantic object**

9. Save the new request by clicking the **green check** button which is the continue button:

![Image of request entry](image2.png)

**Figure 114 Add the new request**

- **Note**: If the Request field is empty, create a new request by clicking the white page button. Enter a description and click **Save**. When you return to the screen above, click **Save**.
10. Click the **continue** button again to create the task:

![Create Task](image1.png)

Figure 115. Continue the task creation

11. You should see the following confirmation on the bottom of the screen.

![Confirmation](image2.png)

Figure 116. Semantic object is saved

12. Now if you click the **back** button, you see the new semantic object has been created:

![Semantic Object](image3.png)

Figure 117. Semantic object is created
Chapter 8 -
Using Launchpad Designer

You are now ready to access the Launchpad Designer to create your Fiori Tile application. Before continuing, however, you must:

1. Create a new role for the Fiori Launchpad.
2. Assign your user ID to this role.
3. Access Fiori Launchpad Designer.
4. Create a catalog.
5. Create a group.
6. Assign the catalog to this role.
7. Assign the group to this role.
8. Create a tile.
9. Assign the tile to a group.

Creating Launchpad Role

1. Log in to the NetWeaver Gateway system.
2. In the command field, enter PFCG or /nPFCG.
3. In the Role field, enter ZFIORILAUNCHPAD.

![Role Maintenance](image)

Figure 118. Create Fiori Launchpad new role
4. Click **Single Role**.

![Role Maintenance](image1)

**Figure 119. Click the Single Role button**

5. You should see the following screen:

![Create Roles](image2)

**Figure 120. New role configuration screen**

6. Click **Save**.
7. Click the **User** tab.
8. Enter the user ID you are logged in as, so you can be assigned to this role:

```
96
```

Figure 121. Add logged-in user to Launchpad role

9. Save your changes.

```
96
```

Figure 122. Save changes to the Launchpad role
Accessing Launchpad Designer

Next, access Launchpad Designer to create a catalog and group.

Fiori Launchpad Designer uses the following URL format:

http(s)://<HOST-NAME>:PORT/sap/bc/ui5_ui5/sap/arsrvc_upb_admn/main.html

Note: If you are using the HTTP protocol, the default port is 8001. If you are using HTTPS, the default port is 8443.

1. Log in to your NetWeaver Gateway system or use the browser to access the URL directly.
2. You see the following screen:

Figure 124. SAP Easy Access user menu
3. Click **Launchpad Designer**, or you can access it directly in the browser by providing the URL.

![Fiori Launchpad Designer logon screen](image)

*Figure 125. Fiori Launchpad Designer logon screen*

**Note**

Use Chrome for Fiori Launchpad Designer.
4. Once you are logged in, you see the Launchpad Designer:

![Launchpad Designer screenshot](image)

*Figure 126. Fiori Launchpad Designer*

**Note** If you get a Launchpad Designer screen that is completely blank, you have mistakenly opened Launchpad rather than Launchpad Designer. Close the browser and reselect Launchpad Designer from the SAP GUI.
5. Create a catalog by clicking the plus sign.

Figure 127. Add a catalog
6. You see the Create Catalog screen:

![Create Catalog Screen](image)

Figure 128. Create catalog

7. Assign any name and ID to the catalog, but make a note of the values, as you’ll need the ID to assign the catalog to the Fiori Launchpad role. Make sure Standard is selected.

![Assign Catalog Name and ID](image)

Figure 129 Assign a catalog name and ID

8. Click Save.
9. You should see the following screen:

![Fiori Launchpad Designer configuration](image)

**Figure 130. Fiori Launchpad Designer configuration**

### Configuring Group

Next, create a group.
1. Click **Groups**:

![Clicking Groups](image)

**Figure 131. Create a new group**
2. Click the **plus sign** at the bottom of the screen to create a new group:

![Image of the interface showing the plus sign to create a group](image)

**Figure 132.** Click the plus sign to create a group
3. Give your group a title and an ID as shown below:

![Create Group](image)

Figure 133. Enter a group title and ID

4. Click Save. You should see the following screen:

![Group has been created](image)

Figure 134. Group has been created
Assign Catalog to Launchpad Role

Assign the catalog to the Launchpad role you have already created.

1. Log in into your NetWeaver Gateway system.
2. In the command field, enter PFCG or /nPFCG.
3. Enter the role you have created for the Launchpad. In the example, the role is named ZFIORILAUNCHPAD. Click the change button.

Figure 135. Edit Launchpad role

4. You should see the following screen:

Figure 136. Change roles configuration
5. Click the **Menu** tab, then click the **Insert Node** button.

![Figure 137. Select the Menu tab](image)

6. Select **SAP Fiori Tile Catalog**.

![Figure 138. Select SAP Fiori Tile Catalog](image)

7. You should see the following screen:

![Figure 139. Assign tile catalog](image)
8. Click the Catalog ID to select it:

![Assign Tile Catalog](image1)

**Figure 140.** Select the catalog ID

**Note** If the Profile square icon doesn’t appear, click in the Profile box first, then click the square icon.

9. Next select the catalog ID you created in the Fiori Launchpad Designer.

![Catalog ID Table](image2)

**Figure 141.** Selecting MyFioriCatalogue1 ID
10. You should see the following screen:

![Assign Tile Catalog](image1)

Figure 142. Catalog ID is selected

11. Click the **green check** button to continue.

12. Your screen should look like this:

![Change Roles](image2)

Figure 143. Catalog ID has been assigned
Assign Group to Launchpad Role

Next, assign the group that we have created to the Launchpad Role.

1. Click the **insert node**.

   ![Insert Node Image](image1)

   **Figure 144** Select insert node for group ID

2. Select **SAP Fiori Tile Group**:

   ![Select SAP Fiori Image](image2)

   **Figure 145**. Select SAP Fiori tile group

3. Select the group you created. If it is not on the list, manually enter its ID.

   ![Select Group ID Image](image3)

   **Figure 146**. Select group ID
4. Select My Fiori Group 1 ID and click the green check mark.

![Image of a screen showing a list of group IDs with My Fiori Group 1 selected.]

**Figure 147. Select a Fiori group ID**

**Note**

If you are on NetWeaver 7.4, you may not see the Group ID that was created in the Fiori Designer. To list the Group IDs, you must apply SAP Note 2031538. For more details, please refer to the following documentation:

http://help.sap.com/saphelp_scm700_ehp03/helpdata/en/1f/b206d06c074c068edf1418cf301899/content.htm

5. 

You should see the following screen:

![Image of a screen showing the assignment of My Fiori Group 1 ID to a role.]

**Figure 148. Assign My Fiori Group 1 ID to the role**
6. Continue by clicking the **green check button**.

![Image of Change Roles screen](image)

**Figure 149. Final assignment to the Launchpad Role**

7. Click **Save**.

**Working with Tile and Target Mapping**

Log back into Fiori Launchpad Designer using Chrome.

1. After logging in, click the **Catalogs** button.
2. Click **MyFioriCatalogue**.
3. Click the blank tile with the plus sign in the middle to create a new tile.

![Image of creating a new tile](image)

**Figure 150. Create a new tile**
4. Click App Launcher – Static tile.

Figure 151. Select a Fiori template

5. Configure the tile using the following values:
   - Title: A title for your tile.
   - Subtitle: A subtitle.
   - Icon: Select an icon to represent your tile
   - Semantic Object: the semantic object you created
   - Action: of the type of action you want to perform.

Figure 152. Tile configuration
6. Set the Title and Subtitle:

Figure 153. Set Title and Subtitle

<table>
<thead>
<tr>
<th>Title</th>
<th>Fiori Carrier Collection</th>
</tr>
</thead>
<tbody>
<tr>
<td>Subtitle</td>
<td>Flight Sample</td>
</tr>
</tbody>
</table>
7. Select an icon.

Figure 154. Select an icon
8. Click **OK**. Your screen should look like this:

![Figure 155. Set static tile configuration](image)

9. Click the selection list.

![Figure 156. Semantic object selection](image)
10. Select the semantic object you created, **ZCARRSEMOBJ**. You can start typing the first few characters as shown below:

![Select semantic object ZCARRSEMOBJ](image)

*Figure 157. Select semantic object ZCARRSEMOBJ*
11. Select **display**.

![Table of Actions](image)

**Note**: If you are using a version of NetWeaver earlier than 7.5, enter the action value, **display**, manually.
12. Your final screen should look like this:

![Final configuration screen for new tile](image)

**Figure 159.** Final configuration screen for new tile
13. **Click Save.**

![Figure 160 Tile has been created](image)

Figure 160 Tile has been created
14. Click **back** on the new tile and confirm that the semantic object is set, if it is you can exit this screen and return the main page of the Launchpad Designer.

15. Next, click **Target Mapping** and make sure you have selected your catalog:

![Target Mapping](image)

*Figure 161. Target mapping*
16. Click **Create Target Mapping** which is located at the bottom of the screen:

![Create Target Mapping](image)

**Figure 162. Select Create Target Mapping**

17. You see the screen below:

![Screen](image)

**Figure 163. Going back to the main page**

**Note** If you are using a version of NetWeaver earlier than 7.5, enter the action value, display, manually.
18. Select ZCARRSEMOBJ, and the **display** action.

![Semantic Object and Action Selection](image)

*Figure 164. Select semantic object and action*
19. Change the application type from SAPUI5 Fiori App to SAP Fiori App Using LPD_CUST.

Figure 165. Set up the application type to use LPD_CUST

In earlier versions that NetWeaver 7.5, you may see Other SAP Fiori App rather than SAP Fiori App using LPD_CUST.
20. Set the Launchpad role that by clicking the selection list. In the example, the role name is ZFLCARR as shown below:

<table>
<thead>
<tr>
<th>Launchpad Role</th>
<th>Launchpad Instance</th>
</tr>
</thead>
<tbody>
<tr>
<td>ZFLIGHTDEM</td>
<td>ZFLIGHTDEM</td>
</tr>
<tr>
<td>ZALIFLIGHT</td>
<td>ZALIFLIGHT</td>
</tr>
<tr>
<td>ZFIORIWORK</td>
<td>ZFIORIWORK</td>
</tr>
<tr>
<td>ZFIORIKOLA</td>
<td>ZFIORIKOLA</td>
</tr>
<tr>
<td>ZFLIGHTLIS</td>
<td>ZFLIGHTLIS</td>
</tr>
<tr>
<td><strong>ZFLCARR</strong></td>
<td><strong>ZFLCARR</strong></td>
</tr>
</tbody>
</table>

Figure 166. Select Launchpad role from LPD_CUST

21. Your screen should now look like this:

Figure 167. Assign Launchpad role from LPD_CUST

22. Next, select the application alias. The example uses zcarrcolistalias.
23. Your screen should now look like this:

Figure 168. Configuration of target mapping

24. Save your configuration by clicking **save** at the bottom right of your screen.

25. Your screen should look like this

Figure 169. New target mapping created
Assigning a Fiori application to a group

Assign your Fiori custom application to the group you created.

1. Click the **Groups** tab.

![Figure 170. Click Groups tab](image)

<table>
<thead>
<tr>
<th>Group Name</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>BW Monitors</td>
<td>1</td>
</tr>
<tr>
<td>KPI Modeler</td>
<td>8</td>
</tr>
<tr>
<td>Mobile Technology</td>
<td>5</td>
</tr>
<tr>
<td>MyFioriGroup</td>
<td></td>
</tr>
<tr>
<td>NW EPM HANA Demo Applicati...</td>
<td>1</td>
</tr>
<tr>
<td>SAP AGS GROUP</td>
<td>1</td>
</tr>
<tr>
<td>SAP Lumira</td>
<td>2</td>
</tr>
</tbody>
</table>
2. Select the group you created. The example uses **MyFioriGroup1**.

![Image of groups]

**Figure 171. Select group to add the tile to it**
3. Click **Show as tiles**: 

![Figure 172 Assign the newly created tile](image)

<table>
<thead>
<tr>
<th>Catalogs</th>
<th>Groups</th>
</tr>
</thead>
<tbody>
<tr>
<td>BW Monitors</td>
<td></td>
</tr>
<tr>
<td>RS_BW_WHM_MONITORS_GROUP</td>
<td>1</td>
</tr>
<tr>
<td>KPI Modeler</td>
<td></td>
</tr>
<tr>
<td>/UI2/SAP_KPIMOD_TCG_5</td>
<td>8</td>
</tr>
<tr>
<td>Mobile Technology</td>
<td></td>
</tr>
<tr>
<td>mobiletechnology1</td>
<td>5</td>
</tr>
<tr>
<td>MyFioriGroup</td>
<td></td>
</tr>
<tr>
<td>MyFioriGroup1</td>
<td></td>
</tr>
<tr>
<td>NW EPM HANA Demo Applicati...</td>
<td>1</td>
</tr>
<tr>
<td>NW_EPM_HANA_FIORI_GROUP</td>
<td></td>
</tr>
<tr>
<td>SAP AGS GROUP</td>
<td></td>
</tr>
<tr>
<td>sapagsgroup1</td>
<td>1</td>
</tr>
<tr>
<td>SAP Lumira</td>
<td></td>
</tr>
<tr>
<td>/UI2/SAP_LUMIRA_GROUP</td>
<td>2</td>
</tr>
</tbody>
</table>

**Figure 172 Assign the newly created tile**
4. You see the following screen:

Figure 173. Add tile to a group
5. Click the **Catalogs** list to select **MyFioriCatalogue**.

![Figure 174. Select a catalog](image)

6. Select **MyFioriCatalogue**.

![Figure 175. Select MyFioriCatalogue](image)
7. You should see the following screen:

![Tiles available in this catalog](image)

Figure 176. Tiles available in this catalog
8. Click the **plus** button to add this tile to the group:

Figure 177 Select the tile to add
9. After selecting the tile, the screen should look like this:

![Figure 178. Tile has been selected](image)

10. Return to the main screen by clicking the left arrow at the top left of the screen
11. Now you can see the tile added as shown below:

![Image of Fiori custom application tile configuration]

Figure 179. Fiori custom application tile has been configured
Once your Fiori custom application has been configured successfully, you can test it.

Log in to Fiori Launchpad

To test our Fiori application, all we have to do is log in to Fiori Launchpad.

1. Open Chrome.
2. Enter the Fiori Launchpad URL
   
   \texttt{https://<HOST>:8443/sap/bc/ui5_ui5/ui2/ushell/shells/abap/FioriLaunchpad.html}

   OR

   \texttt{http://<HOST>:8001/sap/bc/ui5_ui5/ui2/ushell/shells/abap/FioriLaunchpad.html}

   3. You should see the Fiori Logon screen. If you started the Launchpad from your Favorites list in the SAP Easy Access menu, you should be logged in automatically.
Figure 180. Fiori Logon screen
Testing Fiori Tile application

1. As you can see now our newly created Fiori Tile. Click on the tile

![Image of Fiori Tile](image1.png)

Figure 181. Fiori Launchpad accessing Fiori custom application

2. Here is the end result

![Image of Fiori Carrier Collection](image2.png)
This chapter discusses many of the issues we identified while writing this document.

1. Cannot ping on-premise NetWeaver Gateway from HCP

When trying to ping NetWeaver Gateway from HCP, the following error was happening:

![Check Connection](image)

**Resolution:**

Upgrade HANA Cloud Connector from 2.6 to 2.8.

2. Tile failed to load after upgrading NetWeaver Gateway 7.5 to SP04

After upgrading NetWeaver Gateway 7.5 to SP04, the following error occurred when trying to access the tile that uses CarrierCollection EntitySet:

![Error](image)

**Error:**
service/sap/opu/odata/IWBEP/RMTSAMPLEFLIGHT_2/CarrierCollection terminated because of an error. The following error text was processed in system: Type conflict in ASSIGN in program /IWCOR/CL_DS_EP_WRITER_JSON===CP. The error occurred on the application server. The termination type was: RABAX_STATE. If the termination type is RABAX_STATE, you will find more information in transaction ST22. If the termination type is ABORT_MESSAGE_STATE, you will find more information on the cause of termination in transaction SM21. If the termination type is ERROR_MESSAGE_STATE, you can search for further information in the trace file for the work process in transaction ST11. You may also need to analyze the trace files of other work processes. If you do not yet have a user ID, contact your system administrator.

Resolution:

Use RMTSAMPLEFLIGHT instead of RMTSAMPLEFLIGHT_2.

3. A tile accessed from Launchpad opens in a new tab with a blank screen, rather than from inside the Launchpad.

Resolution:

The alias of the tile is not set properly.

4. When clicking a tile, the application does not open and an error occurs.

   Error:
   Uncaught TypeError: Cannot read property 'metadataLoaded' of undefined.

   Cause:
   You have developed your app on a version of SAPUI5 that is later than your Gateway Server.

   Resolution:
   Execute this command to identify the latest version of SAPUI5 installed on the front-end server:


   You see something similar to:
Figure 182. Determining SAPUI5 version on the front-end Gateway system

Your front-end server supports SAPUI5 1.38.1 or lower to the minimum version 1.30.10. To solve the issue:

1. Create a new project in Web IDE.
2. Set the SAPUI5 version to the latest version that your front-end server supports.
5. Application failed to load in Fiori Launchpad Sandbox in Web IDE.

**Cause:**

The application name includes a single quote (for example, Mysample’s app).

**Resolution:**

Remove the single quote from the application name.

6. Fiori Cache Issues

**Cause:**

You have applied some support package or note, but you cannot see the changes in your Fiori Launchpad.

**Resolution:**

The cache must be invalidated in three different places: the client, the front-end system, and the Back-end system.

**Client:**

Use your browser’s settings to delete its cache. If you are using Fiori Client, you can do it manually using Settings -> Clear Cache.

**Front end:**

1. Invalidate the ICM cache by going to the SMICM Menu and selecting Goto -> HTTP Plug-in -> Server Cache -> Invalidate Globally.

2. Invalidate UI2 cache by going to transaction SE38 and executing report /UI2/INVALIDATE_GLOBAL_CACHES.

   You can run this report in either "test mode" or "execute mode". The test mode shows a list of the caches to be invalidated but no invalidation is done. To invalidate the caches, use execution mode.

3. Invalidate metadata cache by executing the /IWBEP/CACHE_CLEANUP transaction.

   You must invalidate the metadata cache for the gateway in the back-end system as well. To do so, execute transaction /IWBEP/CACHE_CLEANUP on the back-end system.