

Kofax Process Analytics for use with SAP Fiori®

Installation and Configuration Guide

Version: 1.4

KOFAX

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Overview

Continuous process performance improvement is a hallmark for the sustainable success of any organization, but it is both challenging and expensive without access to real information that is delivered in a format that easily enables analysis. Fiori KPIs are an increasingly popular choice for visualizing performance benchmarks.

The Process Analytics solution is tightly integrated with Process Director Accounts Payable (formerly known as the INVOICE COCKPIT Suite) and comes complete with sample KPIs.

SAP Fiori® is a platform that provides the porting of applications on mobile devices. It is based on SAP's technology platform, NetWeaver. SAP Fiori® enables applications to be used on desktop computers, tablets, and smartphones, and supports HTML5.

You can configure the Kofax Process Director for use with SAP Fiori® add-ons to suit the requirements of your organization.

For more information on configuring Process Director and Process Director Accounts Payable, see the following guides.

- *Process Director Import and Upgrade Guide*
- *Process Director Accounts Payable Configuration Guide*
- *Process Director Configuration Guide*
- *Work Cycle Configuration Guide*
- *Process Director Web Application Configuration Guide*

Prerequisites

To import the Process Director for use with SAP Fiori® add-ons into SAP, the following prerequisites must be met.

- UIX01CA1 100 0005 SAPK-10005INUIX01CA1 UI for Cross-Applications
- UIX01EAP 100 0007 SAPK-10007INUIX01EAP UI for ERP Central Applications
- UIX02EA4 100 0002 SAPK-10002INUIX02EA4 UI component for ERP Applications 1.0
- UIX02EAP 100 0004 SAPK-10004INUIX02EAP UI for ERP Central Applications 1.0
- FIORI ERP APPLICATIONS X2 1.0 04 (04/2015) sap.com FIORI ERP APPLICATIONS X2 1.0
- Kofax Process Director 7.5 or higher
- Kofax Process Director 7.5 or higher

Note: The Process Director for use with SAP Fiori® add-ons have been developed based on SAPUI5 1.38.18 and tested on 1.38.19 and 1.44.12.

The add-ons have been tested with Process Director 7.5 and Process Director Accounts Payable 7.5, but potentially run with older versions too.

Process Director for use with SAP Fiori® transports

The Process Director for use with SAP Fiori® add-ons have two transports.

- Front End (FE): Imported into the gateway
- Back End (BE): Imported into the ERP system

Location

The Process Director for use with SAP Fiori® add-on transports are available on request. Partners and customers should contact their local Kofax representative to place an order.

Importing the transport

See the *Process Director Import and Upgrade Guide* for information on how to import a transport into SAP.

Checking the namespaces

The Kofax_ReadSoft_Namespaces_FQAK901961.zip transport creates the /EBY/, /COCKPIT/, and /RSE/ namespaces. It is recommended that you check the settings of the /EBY/ and /COCKPIT/ namespaces. To check their settings, complete the following steps.

1. Start the SE03 SAP transaction.
2. In the **Administration** folder, double-click **Display/Change Namespaces**, and then click the **Execute** button.
3. The namespaces should be defined as follows:

Namespace	/COCKPIT/
Namespace role	C – Recipient
Correction license	13375972671823267744
Short text	Process Director - ReadSoft AG - Germany, Frankfurt/M
Owner	ReadSoft AG

Note: The /COCKPIT/ namespace is required only for Accounts Payable.

Namespace	/EBY/
Namespace role	C – Recipient
Correction license	05790374410114137903
Short text	Process Director - ReadSoft AG - Germany, Frankfurt/M
Owner	ReadSoft AG

4. In the **Administration** folder, double-click **Set System Change Option**, and then click the **Execute** button.
5. The namespaces should be defined as follows:

Namespace/Name Range	Process Director - ReadSoft AG - Germany, Frankfurt/M
Prefix	/COCKPIT/
Modifiable	X - Modifiable

Namespace/Name Range	Process Director - ReadSoft AG - Germany, Frankfurt/M
Prefix	/EBY/
Modifiable	X - Modifiable

Configuration

SAP Launchpad designer

Start the Launchpad designer

Start the launchpad designer by using the following URLs:

https://<server>:<port>/sap/bc/ui5_ui5/sap/arsvc_upb_admn/main.html

https://<server>:<port>/sap/bc/ui5_ui5/sap/arsvc_upb_admn/main.html?sap-client=<client>&scope=<CONF/CUST>


Launchpad tiles are created in catalogs. Catalogs are collections of tiles that have similar technical or business functionality (similar to the development packages in ABAP).

You can add tiles to groups. Groups are collections of tiles for specific end users and can contain tiles from different catalogs.

You can grant independent access to catalogs and groups.

Create a catalog

To create a new catalog, complete the following steps.

1. In the standard launchpad configuration, under the **Catalogs** section, in the footer, click the  button to display the **Create Catalog** dialog box.

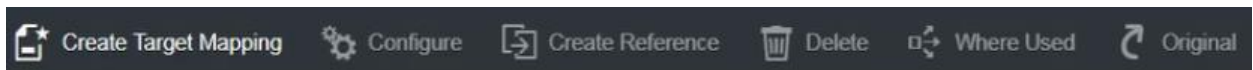
2. Enter a title and ID for the new catalog and click **Save**.

The new catalog is created.

Note: The title and ID should follow the customer-specific naming convention.

Example: zcustomer_cat1

3. Next, select the **Target Mapping** icon, and in the footer, click **Create Target Mapping** to display a new form.



4. Enter the required information. The following list provides some examples.

Semantic Object: *Fiori Application*

Action: *<TO DO >*

Title: *Process Director AP*

URL: */sap/bc/ui5_ui5/eby/ <TO DO >*

- **ID:** *eby.frap_wc*

5. Click **Save**.

Tiles

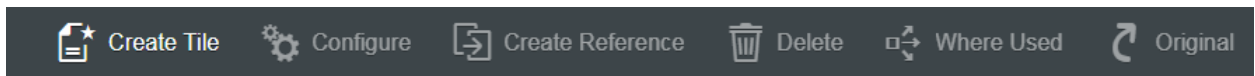
Tiles can be static or dynamic. In dynamic tiles, the data is updated from the database in near real-time (in relatively small intervals).

Note: It is recommended to use dynamic tiles so that even before entering the application, you have an overview of the number of documents that need to be processed.

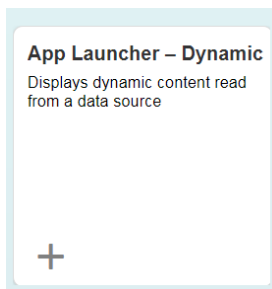
Create a dynamic tile

To create a dynamic tile, complete the following steps.

1. In the standard launchpad configuration, select the **Tiles** icon and in the footer, click **Create Tile**.



2. On the next screen, select **App Launcher – Dynamic**.



3. In the **General** section, enter the required information. The following list provides some examples.

- **Title:** Process Director AP
- **Subtitle:** Fiori App
- **Keywords:** [Optional]
- **Icon:** Select an icon. (e.g. sap-icon://Fiori2/F0102)
- **Information:** [Optional]
- **Number Unit:** Documents

4. In the **Dynamic Data** section, enter the required information. The following list provides some examples.

- To procure the number of invoices, use the following **Service URL**:

```
/sap/opu/odata/EBY/FRAP_WC/HeaderSet/$count
```

- **Refresh Interval in Seconds:** 30

This is the number of seconds after which the dynamic content is read again from the data source, and the display is refreshed.


Note: The launchpad uses a default of 10 seconds, unless you enter a higher value in this field. If the value entered is >0 and <10, it will fall back to 10 seconds. If the value entered is 0, the dynamic tile is updated only once (on loading). If the value is >= 10, this value is taken as the refresh interval.

Too small an interval will result in the database being read too often, while a large interval will make the dynamic tile similar to a static one.

5. In the **Navigation** section, enter the required information. The following list provides some examples.
 - **Use semantic object navigation:** Select the check box to use this option.
 - **Semantic Object:** Fiori Application
 - **Action:** eby_frap_wc
 - **Note:** This is a standard launchpad configuration option.
 - **Parameters:** [Optional]
 - The entries in the **Tile Actions** section are optional and not required to be filled in.
6. Click **Save**.

Create a group and add an existing tile to it


To create a new group, complete the following steps.

1. In the standard launchpad configuration, under the **Groups** section, in the footer, click the  button to display the **Create Group** dialog box.
2. Enter a title and ID for the new group and click **Save**.


The new group is created.

Note: The title and ID should follow the customer-specific naming convention.

Example: zcustomer_grp1

3. Next, in the **Show as Tiles** section, click the  icon to select the catalog that you created. The selected catalog displays the dynamic tile that you created.
4. Click the plus icon below the title to add that tile to the group.





The plus icon changes into a tick  and the tile is successfully added to the group.

Authorizations and roles

For transactional applications, ABAP backend users with corresponding roles and authorizations are necessary. The roles provide authorizations for the OData service of the apps. The roles for the transactional applications do not comprise any authorization for the business data that needs to be displayed in the application. It is assumed that these authorizations will be provided by the customer.

For every role, authorizations need to be granted according to the customer's roles and authorization concept.

To assign the Process Director for use with SAP Fiori® application to users, complete the following steps.

1. Go to the PFCG transaction.
2. Create a new role or select an existing one.
3. Click **Single Role** to create one role.
4. Enter a description for the role and click the **Save** button.
5. Switch to the **Menu** tab.
6. In the **Hierarchy** section, select the **Role Menu** folder and then from **Transaction**, select **SAP Fiori Tile Catalog**.
7. In the **Assign Tile Catalog** dialog box, select or enter a catalog ID and click the **Continue**  button.
8. The [catalog ID](#) that was created earlier has to be assigned to the authorization role.
9. In the **Hierarchy** section, select the **Role Menu** folder again and then from **SAP Fiori Tile Catalog**, select **SAP Fiori Tile Group**.
10. In the **Assign Group** dialog box, select or enter a group ID and click the **Continue**  button.
11. The [group ID](#) that was created earlier has to be assigned to the authorization role.
12. Click the **Save** button.
13. Switch to the **User** tab.
14. Enter the required user IDs and click the **Save** button to add the role to the desired users.

The authorized users can now access the required application.

Assign the Web Service to user roles

Depending on the existing authorization concepts, the Web Service may need to be added to the user roles. To assign the Web Service to a role, complete the following steps.

1. Go to the PFCG transaction.
2. Select the role that you need to modify.
3. Switch to the **Authorizations** tab.
4. Click the **Change Authorization Data** button.
5. From the **Object class AABB** drop-down list, select the **S_SERVICE** authorization object.
6. Click the edit icon next to the **SRV_NAME** node.
7. From the **Type** drop-down list, select **TADIR Service**.
8. From the **Object Type** drop-down list, select **IWSG**.
9. From the **Object Name** drop-down list, select **/EBY/FRAP_WC_0001**.
10. Save the changes.

About this guide

This guide explains how to install and configure Process Analytics. It assumes that you are already familiar with SAP NetWeaver Business Warehouse and Process Director Accounts Payable (PD AP).

Please note that this guide is available only in English.

For more information about Process Director Accounts Payable, see the following guides:

- *PROCESS DIRECTOR Accounts Payable Configuration Guide*
- *PROCESS DIRECTOR Accounts Payable User Guide*
- *PROCESS DIRECTOR Configuration Guide*
- *PROCESS DIRECTOR User Guide*

This guide contains the following main chapters:

- **About Process Analytics**
Provides an overview of Process Analytics, as well as information about the data extraction and aggregation processes.
- **Install Process Analytics in SAP ERP/ECC**
Explains how to install Process Analytics in SAP ERP/ECC. It also lists the system requirements.
- **Configure Process Analytics**
Describes the general configuration of the Process Analytics.

About Process Analytics

Process Analytics is a (near) real-time reporting solution for SAP ERP comprised of three components:

- The Evaluation Engine, abbreviated as EvE. This is the backend running in ERP, comprising maintenance, configuration and data processing modules.
- The Evaluation Engine reporting frontend. This is a web frontend with an overview dashboard and graphical capabilities for detailed reporting. For reporting users, the reporting frontend based on SAP UI5 is synonymous with Process Analytics.
- The Evaluation Engine configuration frontend. This is a web frontend that allows the creation and extension of KPIs and data flows for EvE.

Business goals

For the business user, Process Analytics is a graphical reporting frontend for SAP ERP. It is lightweight and easy to adopt. All relevant KPIs and evaluation results are shown on a dashboard overview, with the ability to drill deeper into the data. To keep the overall footprint of the application small, the drilldown capabilities are limited. Instead, the user has the option to jump directly to the focused data in the operational system.

The aggregated data for the reporting frontend is calculated by data flows which run automatically in the connected source systems. Modification and creation of data flows are done in a separate graphical frontend. Monitoring tools for the data flows ensure frictionless operation of the reporting framework.

Data flow concept

Data flows are customizable sets of classes that transform operational data into reporting-ready aggregates. A data flow can have multiple entry points that input operational data into the process. These entry points are called sources. The exit points represent the consumable reporting data, namely KPIs, aggregates and evaluations. A data flow can have many of these exit points. Intermediary nodes in a flow are filters and supplements. Filters remove data records, while supplements add data fields.

Install Process Analytics in SAP ERP/ECC


Import the workbench transport

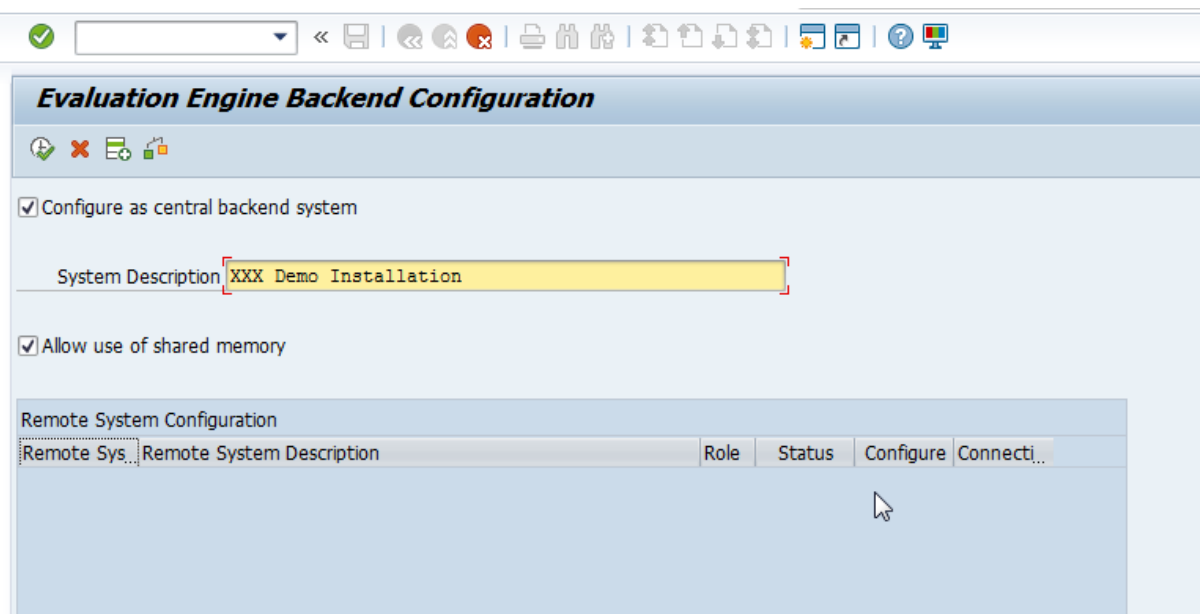
Process Analytics:

Kofax_Process_Analytics_BE_1_4_FQAK902410 Kofax Process Analytics BE 1.4.0
 Kofax_Process_Analytics_FE_1_4_FQAK902413 Kofax Process Analytics FE 1.4.0

Initial configuration in SAP

To activate Process Analytics on a single SAP backend system, complete the following steps.

1. Go to transaction /EBY/EVE_CONFIG and click **Lock & Edit** .
2. Select **Configure as central backend system**.



3. Enter a system description.
4. Select **Allow use of shared memory**.
5. Click **Activate Configuration** .
6. In the popup that opens, click the **Activate** button to confirm that all data will be deleted.


Activate the namespace /B507

1. Go to transaction SE03.
2. In the **Administration** group, double-click **Display/Change Namespaces**.
3. Add a new entry with the following values.

Namespace	/B507/
Namespace role	C
Repair License	23178636483082621615
Short text	BW generation namespace for /EBY/
Owner	Kofax

4. In transaction SE03, in the **Administration** group, double-click **Set System Change Option**.
5. Under **Namespace/Name Range**, set **/B507/** to **Modifiable**.

Activate the Gateway Service

1. Go to transaction SICF.
2. Click **Execute**  and activate the following services. To activate a service, navigate to the service and right-click it, then select **Activate Service**.

/default_host/sap/bc/apc/eby/bi_pfa_config_notify

/default_host/sap/bc/apc/eby/bi_pfa_update_notify

/default_host/sap/bc/bsp/eby/bi_eve_config

/default_host/sap/bc/bsp/eby/bi_fiori

/default_host/sap/bc/bsp/eby/bi_lib_eve

/default_host/sap/bc/bsp/eby/fr_lib

/default_host/sap/bc/ui5_ui5/eby/bi_eve_config

/default_host/sap/bc/ui5_ui5/eby/bi_fiori

/default_host/sap/bc/ui5_ui5/eby/bi_lib_eve

/default_host/sap/bc/ui5_ui5/eby/fr_lib

/default_host/sap/opu/odata/eby/bi_analytics_data_srv

/default_host/sap/opu/odata/eby/bi_eve_configuration_srv

/default_host/sap/opu/odata/eby/bi_eve_dynamic_tile_srv

/default_host/sap/opu/odata/eby/bi_pfa_persistence_srv

3. In transaction SPRO, go to **SAP NetWeaver > UI Technologies > SAP Fiori > Initial Setup > Initial Launchpad Configuration** and select **Service Maintenance of SAP Gateway**.
4. Assign a system alias for the following services.
 - /EBY/BI_ANALYTICS_DATA_SRV
 - /EBY/BI_EVE_CONFIGURATION_SRV
 - /EBY/BI_EVE_DYNAMIC_TILE_SRV
 - /EBY/BI_PFA_PERSISTENCE_SRV

Activate and Maintain Services

Filter Add Service Delete Service Service Details Load Metadata Error Log Request Statistics Refresh Catalog OAuth Soft State

Service Catalog

Type	Technical Service Name	V.	Service Description	External Service Name	Namespace	OAuth	Soft State	Status	Is SAP Service
SEP	/EBY/BI_ANALYTICS_DATA_SRV	1	BI Central Analytics Data Service	BI_ANALYTICS_DATA_SRV	/EBY/	<input type="checkbox"/>		Not Supported	
SEP	/EBY/BI_EVE_CONFIGURATION_SRV	1	Evaluation Engine Configuration Service	BI_EVE_CONFIGURATION_SRV	/EBY/	<input type="checkbox"/>		Not Supported	
SEP	/EBY/BI_EVE_DYNAMIC_TILE_SRV	1	Evaluation Engine Dynamic Tile Data Service	BI_EVE_DYNAMIC_TILE_SRV	/EBY/	<input type="checkbox"/>		Not Supported	
SEP	/EBY/BI_PFA_PERSISTENCE_SRV	1	PD Fiori Analytics Persistence Service	BI_PFA_PERSISTENCE_SRV	/EBY/	<input type="checkbox"/>		Not Supported	
	/IWFND/SG_MED_CATALOG	2	Catalog Service Version 2	CATALOGSERVICE	/IWFND/	<input type="checkbox"/>			
RFP	DAAG_MINGGRP	1	Data Aninn Manane Groups	DAAG_MINGGRP		<input checked="" type="checkbox"/>			

To assign a system alias, complete the following steps:

- Click on the service, then click the **Add System Alias** button.
- Add a new entry.
- In the **Service Doc. Identifier** field, type the service ID.
- Set **SAP System Alias** to LOCAL and select **Default System**.

New Entries: Overview of Added Entries

Assign SAP System Aliases to OData Service

Service Doc. Identifier	User Role	Host Name	SAP System Alias	Default System	Metadata Default	Tech. Svc. Name
/EBY/BI_ANALYTICS_DATA_SRV_0...			LOCAL	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

Define KPI groups

Before activating the tiles in the Fiori Launchpad, you must add the corresponding entry in the SAP backend.

- Go to transaction /EBY/BI.
- Select --- **Maintain at Backend** --- > **Define KPI groups**.
- Add a new entry.
- Enter the details for the group.

Change View "Define KPI Groups": Overview

New Entries

Define KPI Groups

KPI Group	Reference to	BI Descriptive Text
AP	/EBY/CL_BI_PDAP_WEB_NAVIGATOR	AP data

Activate tiles

Launchpad tiles are created in catalogs in the SAP Launchpad designer. Catalogs are collections of tiles that have similar technical or business functionality (similar to the development packages in ABAP). You can then add the tiles to groups. Groups are collections of tiles for specific end users and can contain tiles from different catalogs. You can grant independent access to catalogs and groups

Create a catalog

To create a catalog, complete the following steps.

1. In the standard Launchpad configuration, under the **Catalogs** section, in the footer, click the button to display the **Create Catalog** dialog box.
2. Enter a title and ID for the new catalog and click **Save**.

The new catalog is created.

Note: The title and ID should follow the customer-specific naming convention.

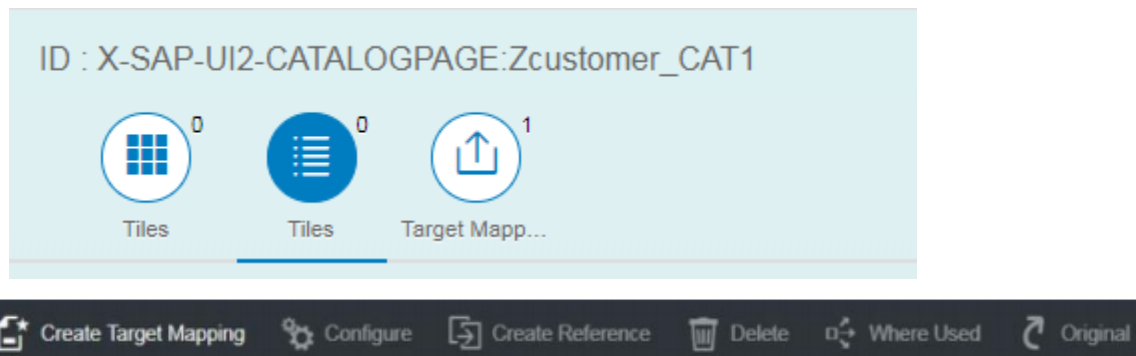
Example: zcustomer_cat1

Add the Process Analytics App to the catalog

Create the target mapping

To create the target mapping, complete the following steps.

1. Click the **Target Mapping** icon, then in the footer, click **Create Target**.



Configure: 'Target Mapping' Instance ID: 97P5O2WNLWMKJAXLL43EGZT

Target

Semantic Object:

Action:

Application Type:

Title:

URL:

ID:

Information:

Device Types: Desktop Tablet Phone

Name	Mandatory	Value	Is Regular Expression	Default Value	Target Name
Enter a name	<input type="checkbox"/>		<input type="checkbox"/>		
		Click to Select			

Allow additional parameters

2. In the form that opens, enter the following information:

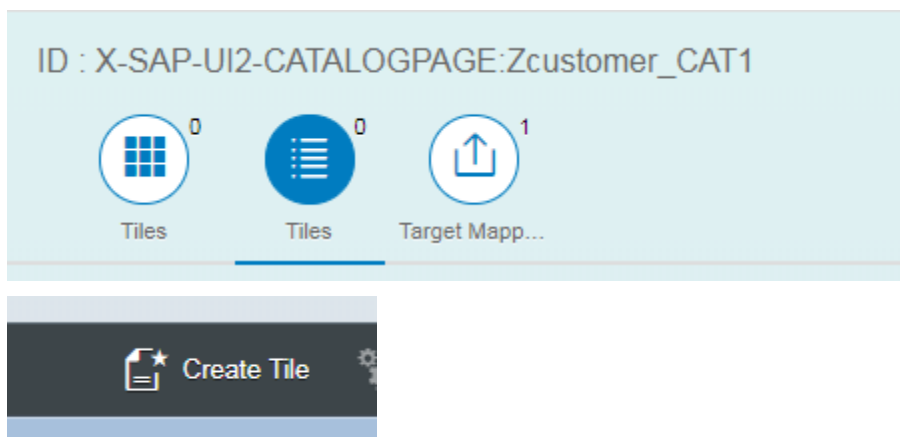
- Semantic Object: FioriApplication
- Action: toPADashboard
- Application Type: SAPUI5 Fiori App
- Title: Process Analytics Dashboard
- URL: /sap/bc/ui5_ui5/eby/BI_FIORI/
- ID: eby.eve.dashboard
- Device Type: (x) Desktop () Tablet () Phone

3. Save your changes and go back.

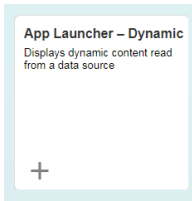
Create a tile

To create a tile within the new catalog, complete the following steps.

1. Click the **Tiles** icon, then in the footer, click **Create Tile**.



2. Click **App Launcher – Dynamic**.



Configure: 'App Launcher – Dynamic' Instance ID: 97P5O2WINLWMMK

General	Dynamic Data	Navigation	Tile Actions
Title: PA Dashboard	Service URL: /sap/opu/odata/eby/bi_eve_dynamic_tile_srv/TileData('AP')	Use semantic object navigation: <input checked="" type="checkbox"/>	Menu Item Target Type Navigation Target
Subtitle:	Refresh Interval in Seconds: 0	Semantic Object:	No data
Keywords:		Action: toPADashboard	Add
Icon: sap-icon://Fiori2/F0194		Parameters: sap-apf-configuration-id=AP.AP	
Information:		Target URL: #FioriApplication-toPADashboard?sap-apf-configuration-id=AP.AP	
Number Unit:			

3. In the form that opens, enter the following information:

- Title: PA Dashboard (or any custom text)
- Icon: sap-icon: //Fiori2/F0194 (as example)
- Service Url: /sap/opu/odata/eby/bi_eve_dynamic_tile_srv/TileData('AP')
- Semantic Object: FioriApplication
- Action: toPADashboard (= value from field Action from Target Mapping)
- Parameters: sap-apf-configuration-id=AP.AP

Note: The substrings in the fields **Service Url** and **Parameters** (here: AP) must exactly match the entry in /EBY/BI > Define KPI Groups.

Change View "Define KPI Groups": Overview

New Entries

KPI GROUP	Reference to	BI Descriptive Text
AP	/EBY/CL_BI_PDAP_WEB_NAVIGATOR	AP data

4. Save your changes.

With this approach you can group later different KPIs to different tiles.

Add the Process Analytics Configure App to the catalog

Select the previously created catalog or create a new catalog according to instructions above if you want to separate access to the Configuration App from the Process Analytics App.

Create the target mapping

To create the target mapping, complete the following steps.

1. Click the **Target Mapping** icon, then in the footer, click **Create Target**.

Configure: Target Mapping Instance ID: 97P5O2WNLWMKJAXOK926RJT1

Target

Semantic Object: FioriApplication
Action: toPACong

Application Type: SAPUI5 Fiori App
Title: Dashboard Configuration
URL: /sap/bc/ui5_ui5/eby/bi_eve_config
ID: eby.eve.flowConfig

Information:

Device Types: Desktop Tablet Phone

Name	Mandatory	Value	Is Regular Expression	Default Value	Target Name
Enter a name	<input type="checkbox"/>		<input type="checkbox"/>		

Allow additional parameters

Add Delete

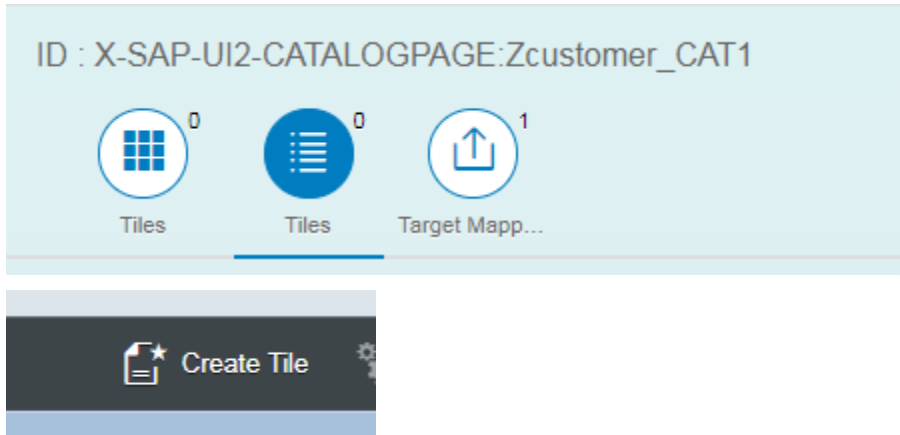
2. In the form that opens, enter the following information:

- Semantic Object: FioriApplication
- Action: toPACong
- Application Type: SAPUI5 Fiori App
- Title: Dashboard Configuration
- URL: /sap/bc/ui5_ui5/eby/bi_eve_config
- ID: eby.eve.flowConfig
- Device Type: (x) Desktop () Tablet () Phone

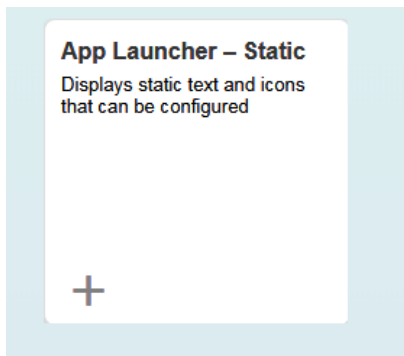
3. Save your changes.

Create a tile

1. Click the **Tiles** icon, then in the footer, click **Create Tile**.



2. Click **App Launcher – Static**.



The image shows a configuration form for a 'Dashboard Configuration' tile. The form is divided into 'General' and 'Navigation' sections. The 'General' section includes fields for Title, Subtitle, Keywords, Icon (set to 'sap-icon://add-equipment'), and Information. The 'Navigation' section includes a checked 'Use semantic object navigation' checkbox, and fields for Semantic Object (set to 'FioriApplication'), Action (set to 'toPAConfig'), Parameters, and Target URL (set to '#FioriApplication-toPAConfig').

3. In the form that opens, enter the following information:
 - Title: Dashboard: Configuration
 - Icon: sap-icon: //add-equipment (as example)
 - Semantic Object: FioriApplication
 - Action: toPAConfig (the Action from the Target Mapping)

Add the catalog to the role in SAP


See [Authorizations and roles](#) for information on adding the catalog to the role in SAP.

Configure Process Analytics

Configuration in SAP

Define configuration users

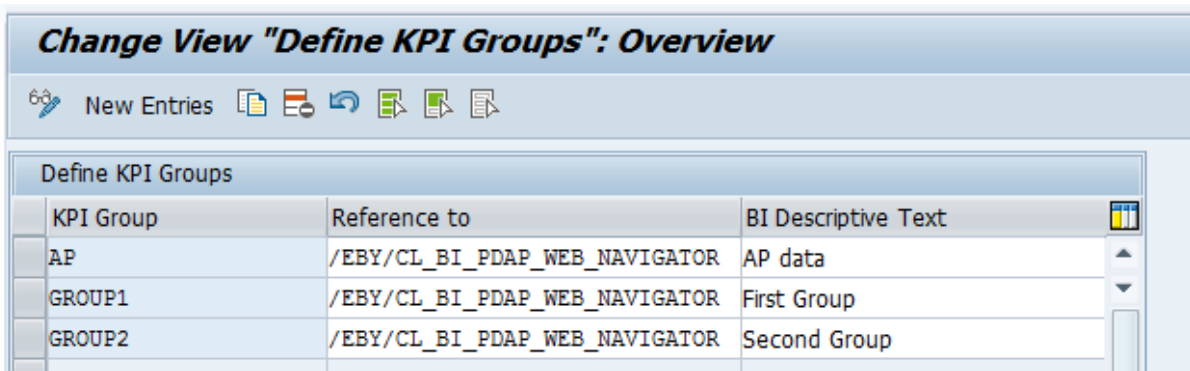
To define users who are able to customize data flows, complete the following steps.

1. Go to transaction./EBY/BI.
2. Select --- **Maintain at Backend** --- > **Define Configuration Users**.
3. Click **Display/Change**  and add a new entry.
4. Enter the user ID of each user who should have authority to create data flows.
5. Click **Save** .

Define KPI Groups

To group different dashboard tiles in different KPI groups, complete the following steps.

1. Go to transaction /EBY/BI.
2. Select --- **Maintain at Backend** --- > **Define KPI groups**.
3. Add a new entry.
4. Enter the details for the group.



Change View "Define KPI Groups": Overview		
Define KPI Groups		
KPI Group	Reference to	BI Descriptive Text
AP	/EBY/CL_BI_PDAP_WEB_NAVIGATOR	AP data
GROUP1	/EBY/CL_BI_PDAP_WEB_NAVIGATOR	First Group
GROUP2	/EBY/CL_BI_PDAP_WEB_NAVIGATOR	Second Group

Separate tiles can be created in the Fiori Launchpad Designer which are differentiated by KPI groups that are created in this activity.



Dashboard tiles then are included in a KPI group, essentially in different dashboard tiles.

Configuration in FIORI Launchpad

Define the flow

To create a new data flow, complete the following steps.

1. From the Fiori Launchpad, open the PA Configuration App and click **Add** .

Dataflow ID	Dataflow Description	Main user	Last changed on	Last changed by	
Default AP Header	Default AP Header Flow	Denis S.T.	11/4/2019, 3:26:29 PM	Denis S.T.	ON  

2. Enter an ID and a description for the new flow, then click **Submit**.





+ Create new dataflow


Dataflow ID:

Dataflow Description:

Submit Cancel

The new data flow is now visible in the overview screen of the Configuration App.

Dataflow ID	Dataflow Description	Main user	Last changed on	Last changed by	
Default AP Header	Default AP Header Flow	Denis S.T.	11/4/2019, 3:26:29 PM	Denis S.T.	ON  
MyFirstDataFlow	My first data flow	SCHACHLE	11/11/2019, 10:32:23 PM	SCHACHLE	OFF  

3. Click the button to activate your flow .

You can also create a data flow by clicking the **Copy** icon  in the row of an existing data flow.


To delete a data flow, click the Delete icon  in the row of an existing data flow.

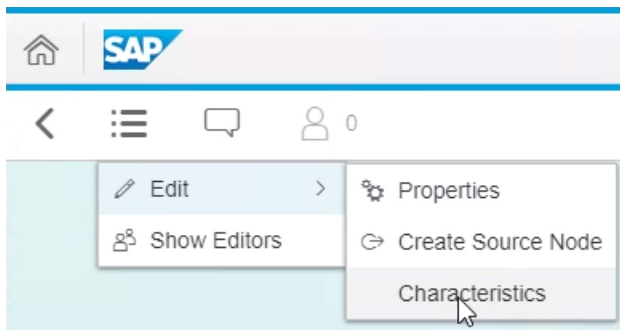
Create characteristics


A characteristic represents an additional level of detail for the KPI.


For example, the KPI “Number of unprocessed MM documents” could have additional characteristics like “Company Code” and “Document Processor”. When a user opens the KPI, additional navigation is possible to view the KPI metric in respect to company code or document processor.

To create a characteristic, complete the following steps.

1. Click on the data flow.
2. Click **Menu** , then click **Edit > Characteristics**.



3. Click the arrow  next to a characteristic to edit it.

Characteristics				
Description	Dataflow Field	Supplement		
Processing time ranges	AGING_UNTIL_POSTING	<input checked="" type="checkbox"/>		
Clearing date	AUGDT	<input type="checkbox"/>		

Bin supplement

Bin supplement is a special characteristic that is used when you want to split all numerical values in ranges.

For example, you have the KPI “Amount for documents in process”, where you want to split invoices into 3 sections: “Invoices with insignificant amount”, “Invoices with regular amount”, and “Invoices with high amount”.

Characteristics

*Characteristic: AGING_UNTIL_POSTING

*Description:

Bin Supplement

Ranges +

Description:

From: To: ✖

Description:

From: To: ✖

Description:

From: To: ✖

Available characteristics

The following Characteristics are currently available

Characteristic	Description	Data Element	Characteristic Class	Bin Supp	Date
AGING_UNTIL_POSTING	Processing time ranges	/EBY/BI_NUMERICAL_BIN	/EBY/CL_EVE_NUMERICAL_BIN_ATTR	X	
AUGDT	Clearing date	AUGDT	/EBY/CL_EVE_DATE_ATTR		
CH_USER	Document processor	/COCKPIT/DCH_USER	/EBY/CL_EVE_USER_ATTR		
COMP_CODE	Company Code	BUKRS	/EBY/CL_EVE_COMPCODE_ATTR		
DATE_DAY	Date	/EBY/BI_DATE	/EBY/CL_EVE_DATE_ATTR		X
FI_MM_FLG	FI/MM Flag	/COCKPIT/DFI_MM_FLG	/EBY/CL_EVE_FIMMFLAG_ATTR		

Characteristic	Description	Data Element	Characteristic Class	Bin Supp	Date
STATUS	Status	/COCKPIT/DPROCESS_STA TUS	/EBY/CL_EVE_AP_STATUS_ ATTR		
SYSTEM_ID	System ID	RFCDEST	/EBY/CL_EVE_SYSTEM_ID_ ATTR		
VENDOR_NO	Vendor	LIFNR	/EBY/CL_EVE_VENDOR_ATT R		


For Binary Supplement characteristics, you must define value ranges, for example:

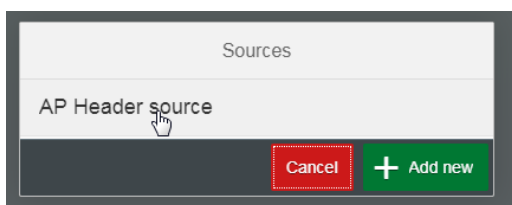
Characteristics	Description	Range Description	From	To		
AGING_UNTIL_POSTING	Processing time ranges					
		Short (less than 4 days)	0,000	4,000		
		Medium (between 4 and 7 days)	4,000	7,000		
		Long (more than 7 days)	7,000	9999,999		

Create a data source node

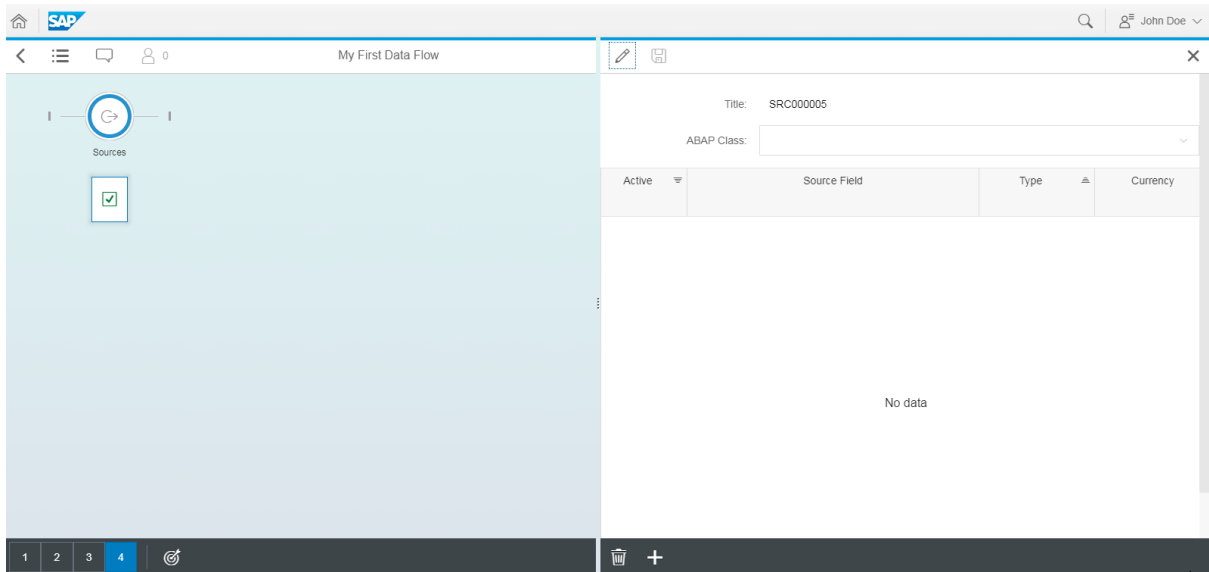
The Data Source Node is the data entry point of the flow.

To assign a data source to the flow, complete the following steps.

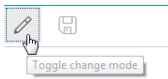
1. Click **Menu**  , then click **Edit > Create Source Node**.
2. Select the existing source (for example, AP Header source), or click Add new to create a new source node.



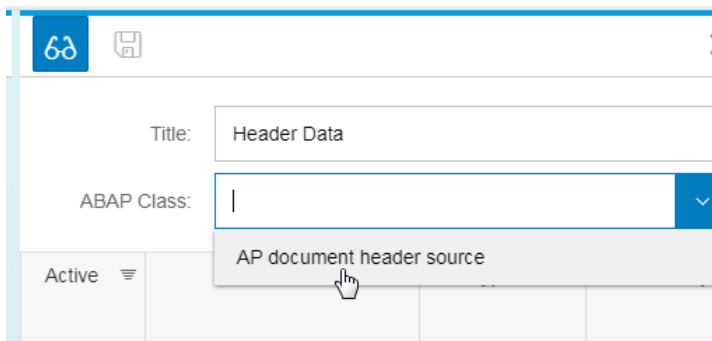
The details of the new source appear on the right side of the detail screen.



3. Click **Edit** to enter values.



4. In the **ABAP Class** list, select **AP document header source**.



5. Select the **Active** check box for each characteristic or key figure you later want to use in your evaluations.

For currency key figures, assign a value in the **Currency** column.

Active	Source Field	Type	Currency
<input checked="" type="checkbox"/>	ALLOC_NMBR	Characteristic	
<input checked="" type="checkbox"/>	AUGDT	Characteristic	
<input checked="" type="checkbox"/>	CH_USER	Characteristic	
<input checked="" type="checkbox"/>	COMP_CODE	Characteristic	
<input checked="" type="checkbox"/>	CR_TIMESTAMP	Keyfigure	
<input checked="" type="checkbox"/>	DOC_COUNTER	Keyfigure	
<input checked="" type="checkbox"/>	FI_MM_FLG	Characteristic	
<input checked="" type="checkbox"/>	GROSS_AMOUNT	Keyfigure	EUR
<input checked="" type="checkbox"/>	STATUS	Characteristic	
<input checked="" type="checkbox"/>	VENDOR_NO	Characteristic	

For your own source nodes, copy the class /EBY/CL_EVE_SOURCE_AP_HEADER into the customer name space in the SAP backend.

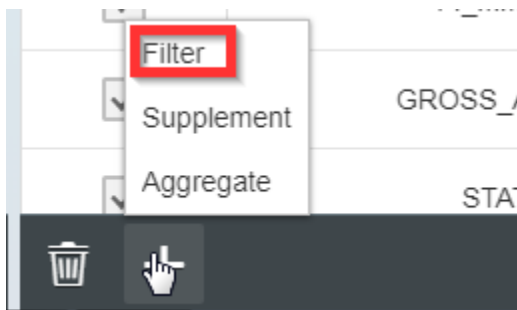
Data sources can be used in multiple flows, so any source field that is already used in a different flow cannot be removed in this flow. It appears with a 'lock' icon and is selected automatically. Only source fields that are not yet used in a different flow can be added here by selecting the Active check box.

To remove any source field from the source node, check the usage in different flows first for this field and delete the usage there before removing the source field completely from the flow.

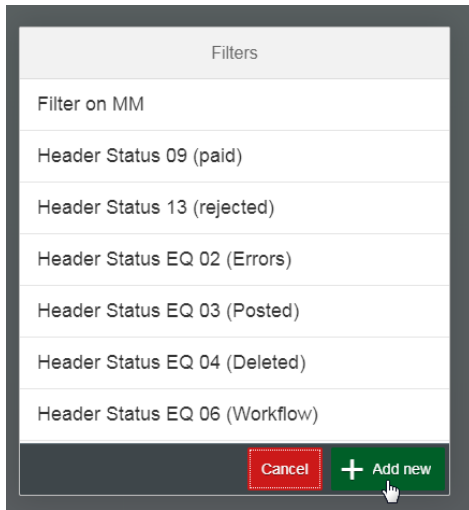
6. Click **Save modifications**

Create a filter

1. Select the new data source node and click **Create child node**, then click **Filter**.

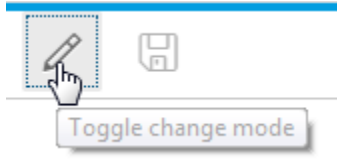


2. Select an existing filter from the list or click **Add new** to create a new filter.



The details of the filter appear on the right side of the detail screen.

3. Click **Edit** to enter values.



- a. Enter a title.
- b. Select **Generic Filter** for simple evaluations.
- c. Click **Characteristic** or **Keyfigure**.
- d. Select which characteristic you want to evaluate.
- e. Select respective comparison operator.
- f. Select the value to filter.

63 [Save] [Close]

Title: Header Status 13 (rejected)

Type: **Generic Filter** Special Filter

Field Type: **Characteristic** Keyfigure

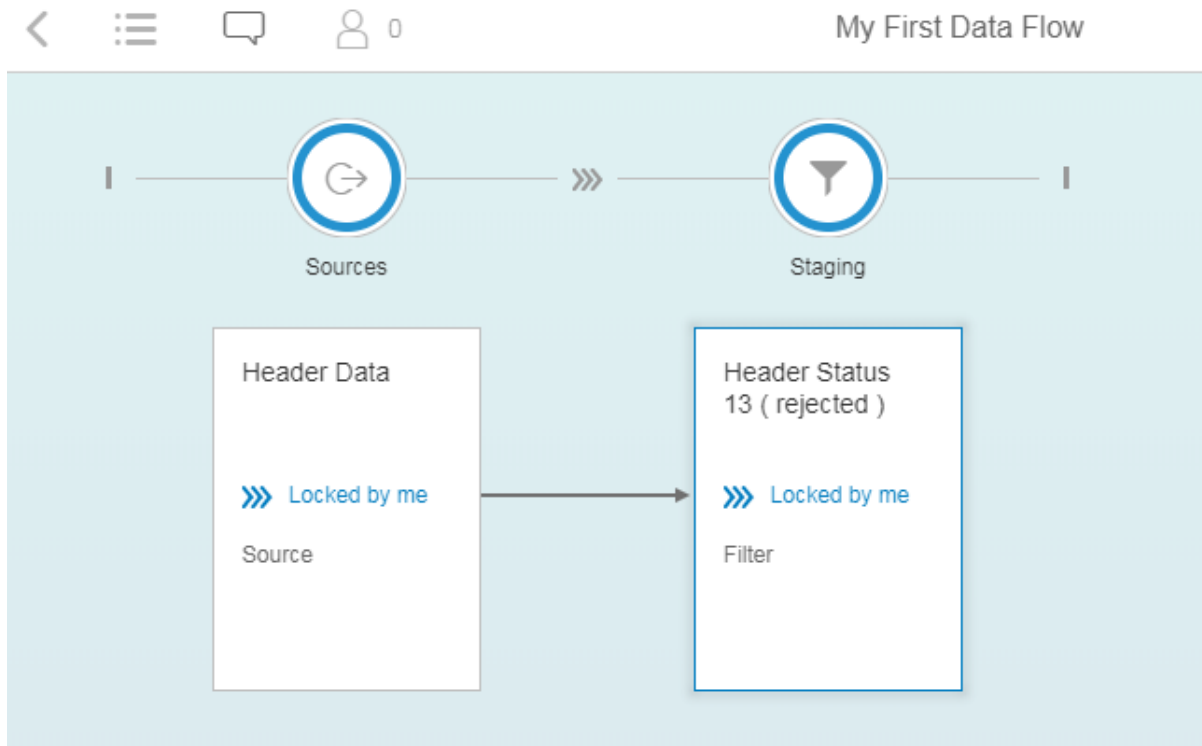
Characteristic: Status

Operator: Equals

Value: 13

4. Click **Save modifications** .

The new filter appears in the overview on the left side.



With the current filter setup, only rejected documents are evaluated. Normally, you would use the filter the other way round, that is, exclude documents with Status = 13 from the flow. This can be customized just after adding the next **Staging** step to the flow.

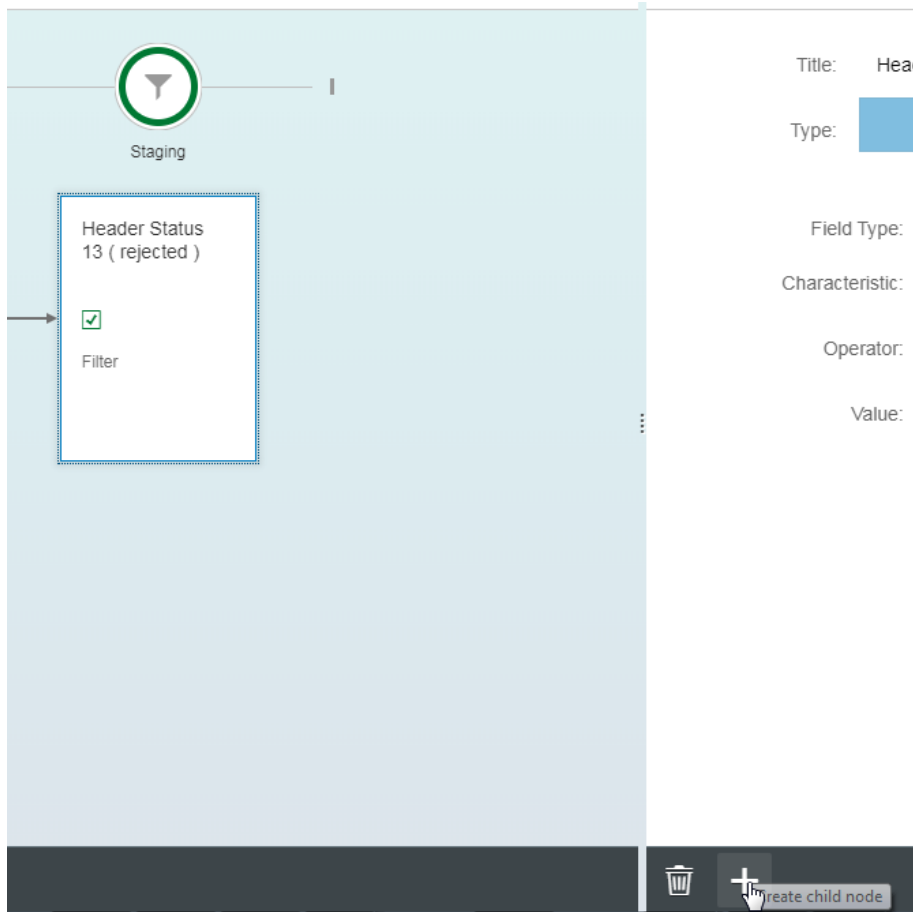
You can add now more filters or create a supplement before creating an aggregate.

Define a supplement

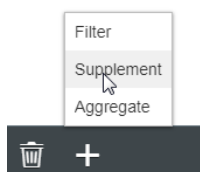
A supplement adds a new column to your data structure and fills it with data. This column can have either the “Characteristic” or “Keyfigure” type. You must provide a class which will define the supplement logic (except for a “Bin Supplement Characteristic”).

To define a supplement, complete the following steps.

1. In the data flow overview, select the new filter.



2. Click **Create child node** and select **Supplement**.



3. Select one of the existing values.



Title: Days since Creation

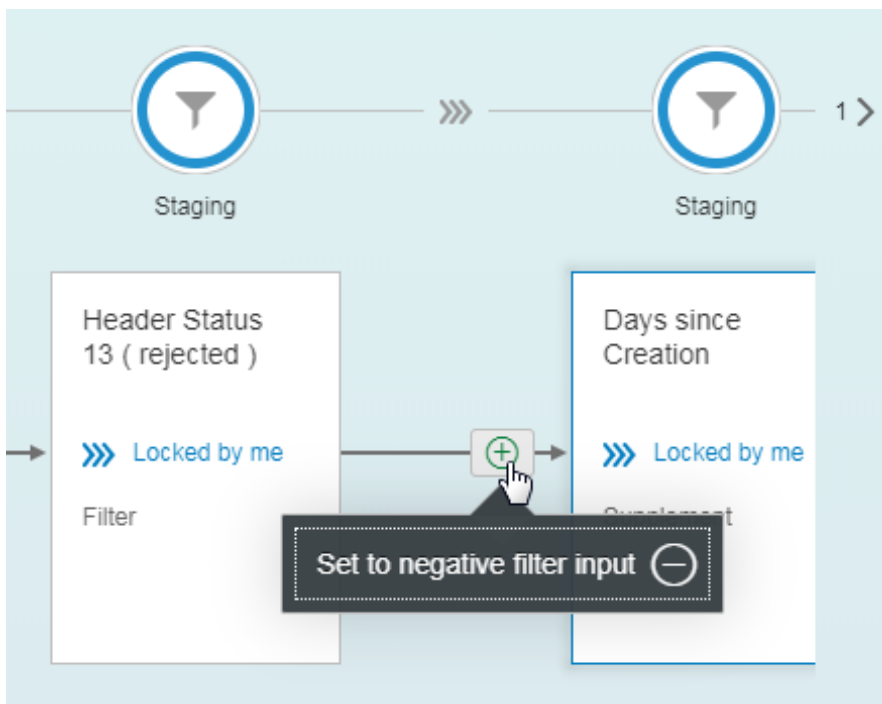
Type: **Keyfigure** Characteristic Bin Charact.

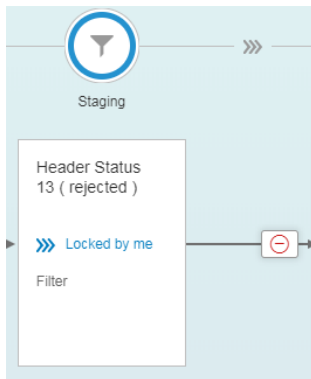
ABAP Class: /EBY/CL_EVE_DAYS_SINCE_CREATE

Keyfigure: DAYS_SINCE_CREATION

Type: **Integer** Decimal Custom

4. Click **Save modifications** .
5. You can now set the previously created filter as a 'negative filter'. In the data flow overview, click on the icon  and select **Set to negative filter input**.





Define an aggregate

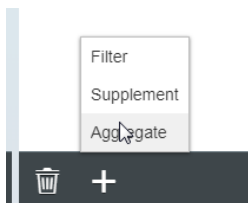
An aggregate is a table whose columns are added from “Characteristic” and “Keyfigure” fields. For example, if you select the characteristics “Vendor” and “Processor” and the key figure “Document amount”, the columns “Vendor”, “Processor” and “Document amount” will be available.

The table lines are filled with the data found during extraction.

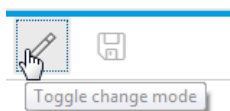
We recommend using at least one and a maximum of two characteristics per aggregate or KPI. A larger number of characteristic results in to extensive memory usage.

To define an aggregate, complete the following steps.

1. In the data flow overview, select the new supplement.
2. Click **Create child node** and select **Aggregate**.



3. Click **Edit** to enter values.



4. Enter a title (for example, “Number of invoices in process”) and select **Store in database**.

Title:

Store in database

5. Click the **Add** button and select up to two characteristics that you want to evaluate.

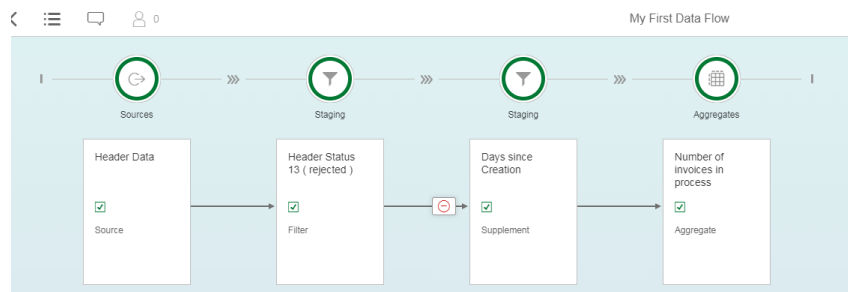
The aggregated data can now be presented as a number, for which the characteristics supplement DOC_COUNTER is used. It will later be presented as an integer value and not with a unit or currency field.

6. Click **Save modifications** .

You have now added an aggregate:

- That ignores documents with Status (13) / Filter
- Adds a supplement field Days since Creation / Supplement

The aggregate can be displayed as document counter.

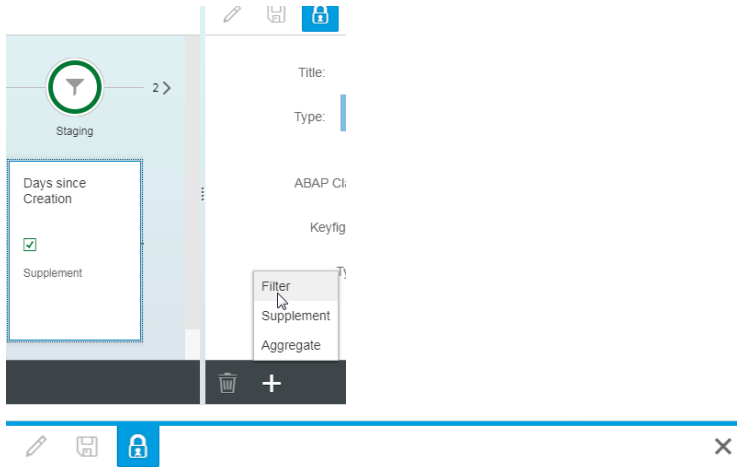


The presentation of aggregates can now be customized in a dashboard Tile. However, it is often more required to display a relation between two aggregates as a key figure, for example:

KPI Ratio of MM Invoices = Number of MM invoices in process / Number of invoices in process

You therefore need to create an additional filter for MM documents and a new aggregate on the filtered value.

1. Select the supplement **Days since Creation** and add another filter:



Title: Filter on MM

Type: **Generic Filter** Special Filter

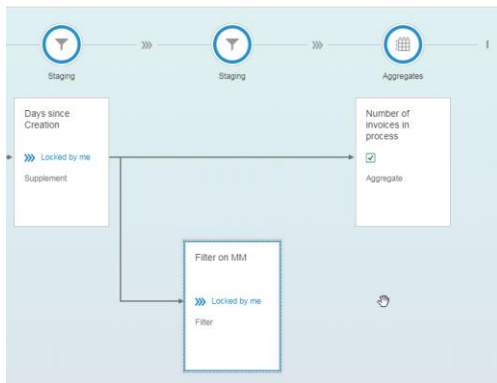
Field Type: **Characteristic** Keyfigure

Characteristic: FI/MM Flag

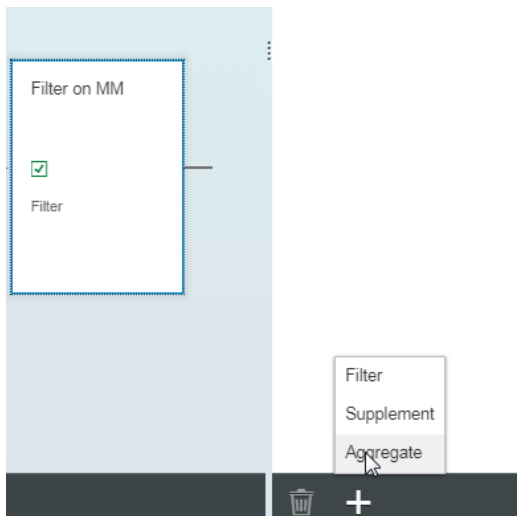
Operator: Equals

Value: MM

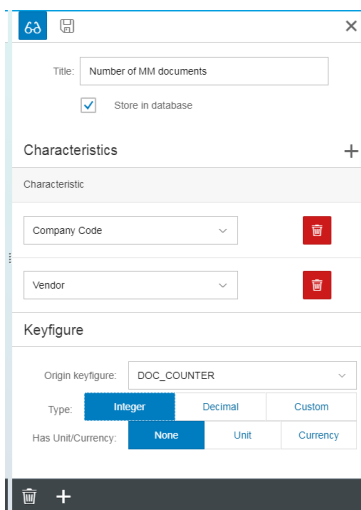
The filter appears in the correct hierarchical order and you can see that the aggregate **Number of Invoices in process** does not use the **Filter on MM** filter.



2. Add a similar aggregate, as described for the **Number of Invoices in process** aggregate.



Use a different title, but the same characteristics and key figures.



After creating aggregates, you can now build a KPI from two aggregates.

Define a KPI

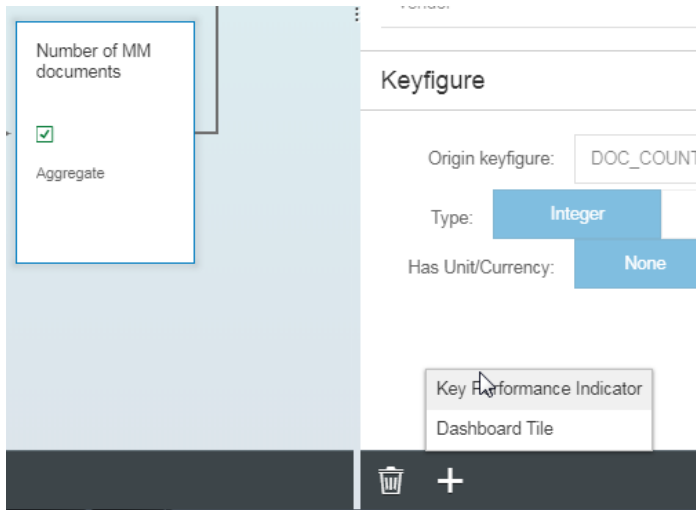
A KPI is a table with a flexible set of “Characteristic” columns and one obligatory “Keyfigure” column.

The KPI calculation is executed based on two parent aggregate objects.

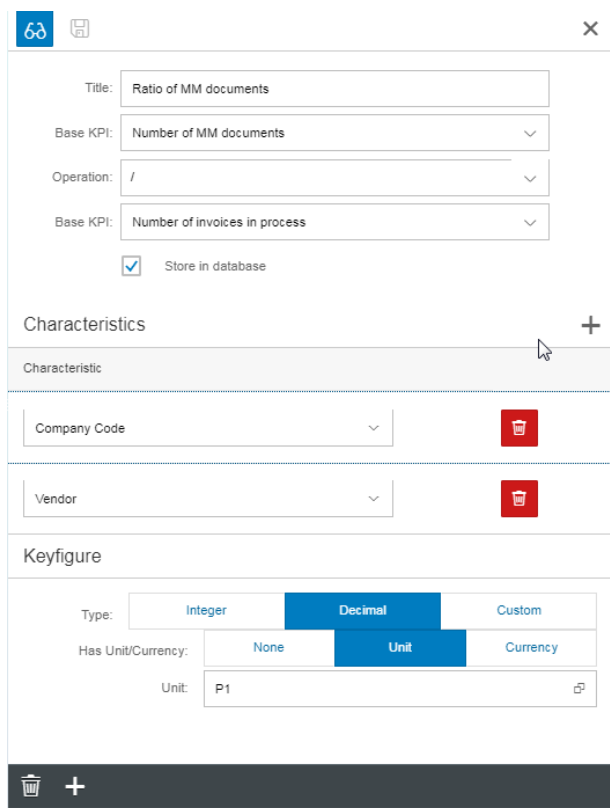
A KPI can only use the characteristics that are used in both parent aggregate objects.

To define a KPI, complete the following steps.

1. Select one of the previously created aggregates and create a key performance indicator (KPI).



The 'Ratio of displayed documents' will be calculated based on the aggregates **Number of MM documents** and **Number of invoices in process**.



2. Select **Decimal** as the type and **Unit Percentage (P1)** to display the ratio correctly in the subsequent Dashboard Tile.

Assign a dashboard tile

The dashboard tile defines how the KPI or aggregate is displayed and in which group it is displayed.

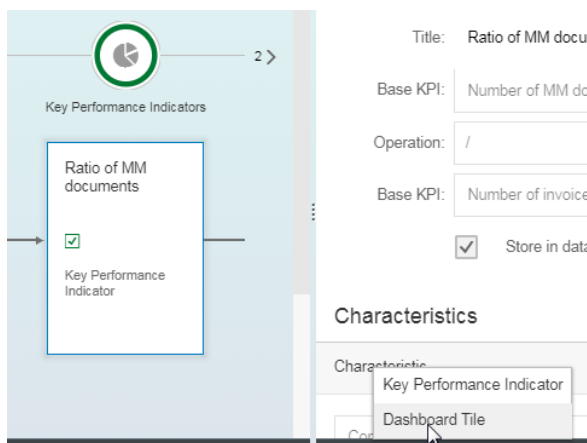
Current display types are:

- Just text
- Number
- Chart
- Chart and Number

If no dashboard tile is assigned to the KPI/aggregate, the KPI/aggregate is not be displayed.

To assign a dashboard tile, complete the following steps.

1. Select the previously created KPI and create a dashboard tile.



2. Enter a threshold value to indicate how the KPIs are displayed.

The screenshot shows a configuration window for a KPI tile. The title is 'MM invoices rate', the KPI group is 'AP data', and the display type is 'Number'. The 'Maintain ranges' checkbox is checked. Below, two range configurations are shown:

From	To	Selected
0.000	0.600	Negative
0.601	0.999	Positive

The dashboard tile is included in the AP Group (see [Define KPI Groups](#)).

The KPI will be displayed as number.

It is possible to define ranges for the display of the KPI.

In the example above, example an MM Invoice rate of more than 60% will be displayed as a positive value.

Manual activities after each configuration change

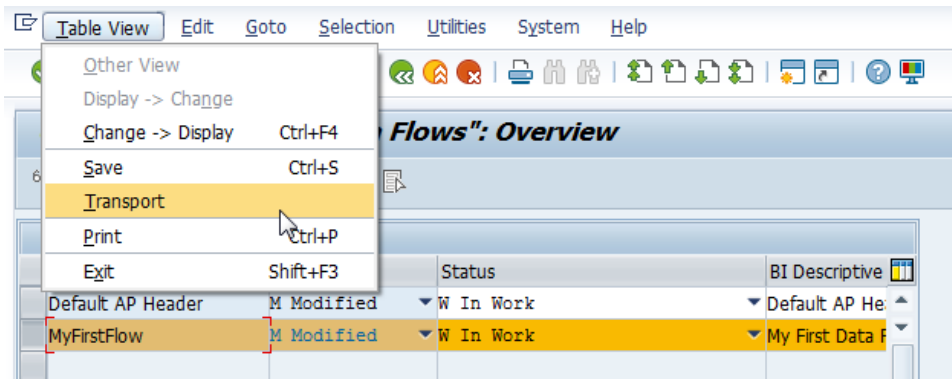
To avoid caching issues after each configuration change, complete the following steps.


- Go to transaction /IWBEP/CACHE_CLEANUP to clear the cache on the Backend and Gateway (oData cache clearing).
- Go to transaction SHMM to delete all entries that start with /eby/* to initialize Shared memories.
- Empty the browser cache.

Transport the configuration

To transport your configuration, complete the following steps.

1. Go to transaction /EBY/BI.
2. Select --- **Maintain at Backend** --- > --- **Generated by Fiori Application** --- > **Define Data Flows**.
3. In change mode, select the flow to be transported and in the **Table View** menu, click **Transport**.





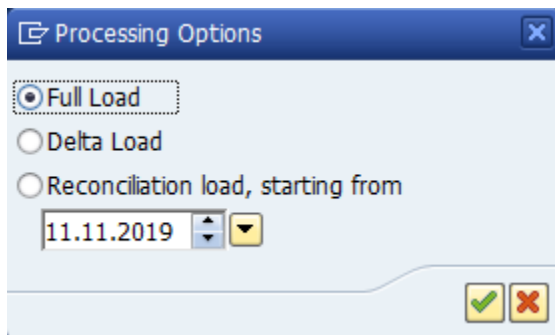
4. Include the selected entry into a customizing request and click **Save** .
All related table entries from the related maintenance objects are also saved in the same transport request.

Set up Process Analytics data load

The Process Analytics data load can be performed both manually and automatically.

Manual data load

1. Go to transaction /EBY/EVE_PROCESS.
2. Click  **Start processing....**
 - To reload the data completely, select **Full load**.
 - To load only recent data changes, select **Reconciliation load**.
 - If you have changed KPI data, you need to perform a full data refresh. First click **Reset and Lock Processing** , then click **Start processing** and select **Full load**.



Automatic data load

For automatic data load, schedule a job in transaction SM36.

Note: This will load recently changed data only. If you changed KPI data, remember to perform the steps listed [Manual data load](#).

1. Go to transaction SM36.
2. Enter a name for your new job.


Define Background Job

Start condition
Step
Job selection
Own jobs
Job wizard
Standards

General Data	
Job Name	PA_LOAD_DATA
Job Class	C
Status	Scheduled
Exec. Target	<input type="text"/> <input type="button" value="Spool List Recipient"/>

Job Start	Job Frequency
<input type="text"/>	<input type="text"/>

Job Steps

3. Click **Step** .
4. Click **ABAP Program** enter the program name /EBY/BI_EVE_BATCH_PROCESSING.

Create Step 1


User

Program values

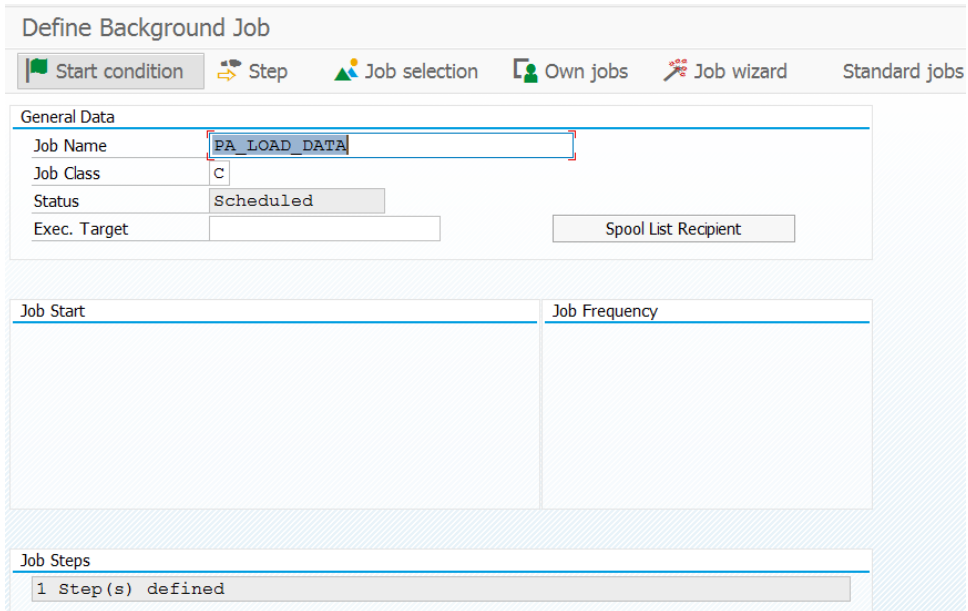
ABAP program	
Name	/EBY/BI_EVE_BATCH_PROCESSING
Variant	<input type="text"/>
Language	EN

External Command (command predefined by system administrator)	
Name	<input type="text"/>
Parameters	<input type="text"/>
OS	<input type="text"/>
Target Server	<input type="text"/>

External Program (command entered directly by system administrator)	
Name	<input type="text"/>
Parameters	<input type="text"/>
Target Server	<input type="text"/>

5. Click **Save**  and return to the **Define Background Job** view.

6. Click  **Start condition**.



Define Background Job

Start condition Step Job selection Own jobs Job wizard Standard jobs

General Data

Job Name PA_LOAD_DATA

Job Class C

Status Scheduled

Exec. Target Spool List Recipient

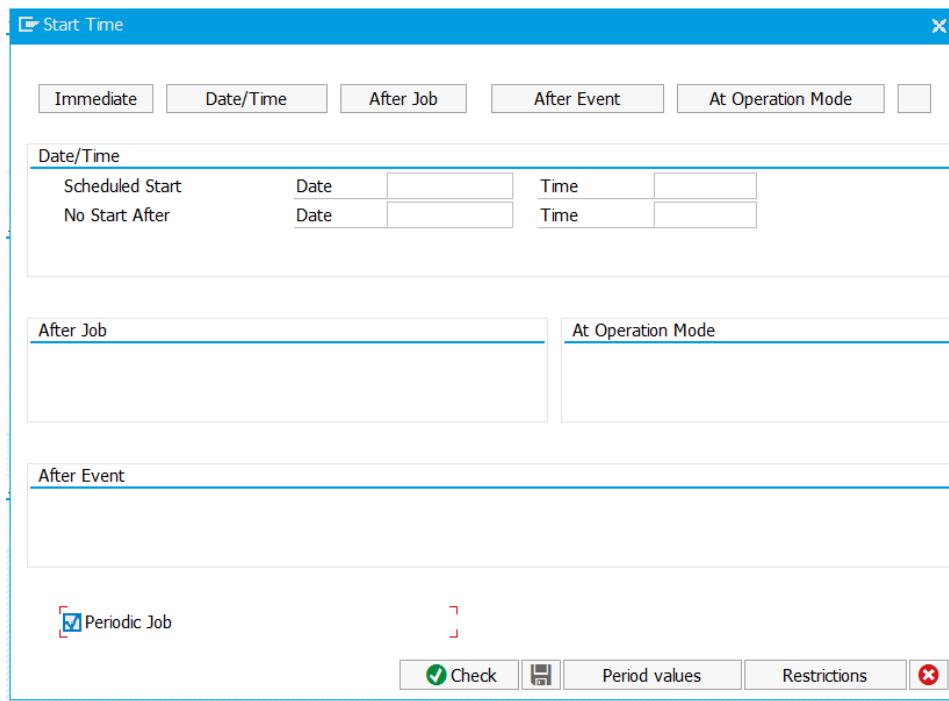
Job Start

Job Frequency

Job Steps

1 Step(s) defined

7. In the **Start Time** dialog box, select the **Periodic Job** check box.



Start Time

Immediate Date/Time After Job After Event At Operation Mode

Date/Time

Scheduled Start Date Time

No Start After Date Time

After Job

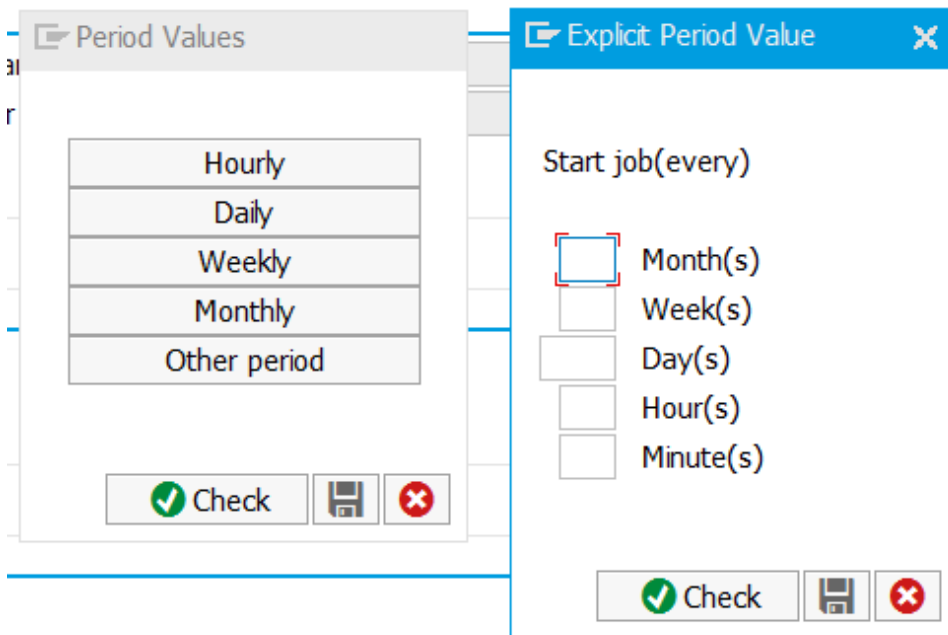
At Operation Mode




After Event

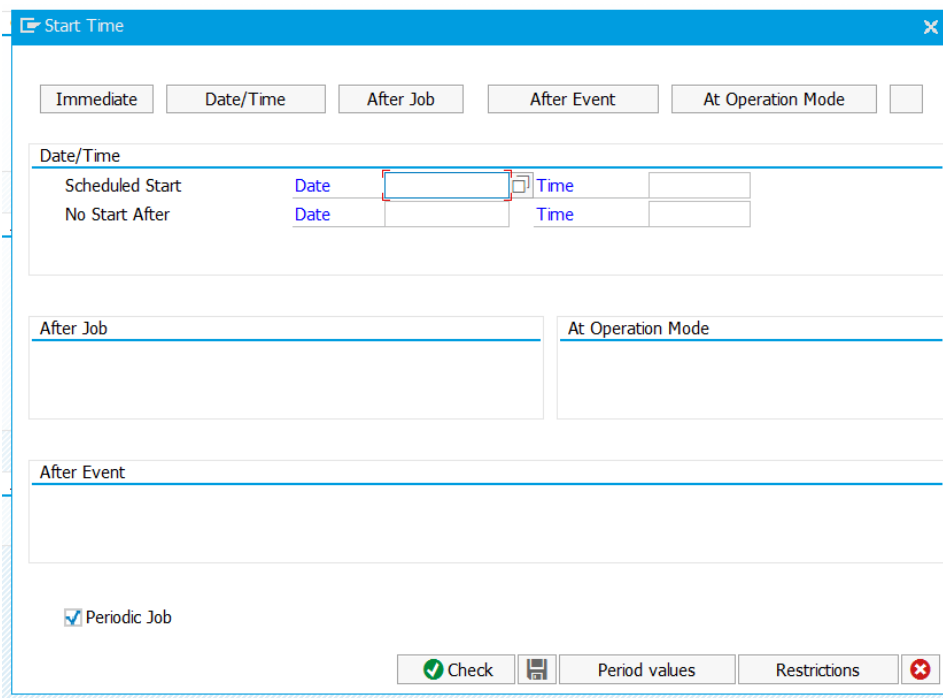
Periodic Job

Check Period values Restrictions

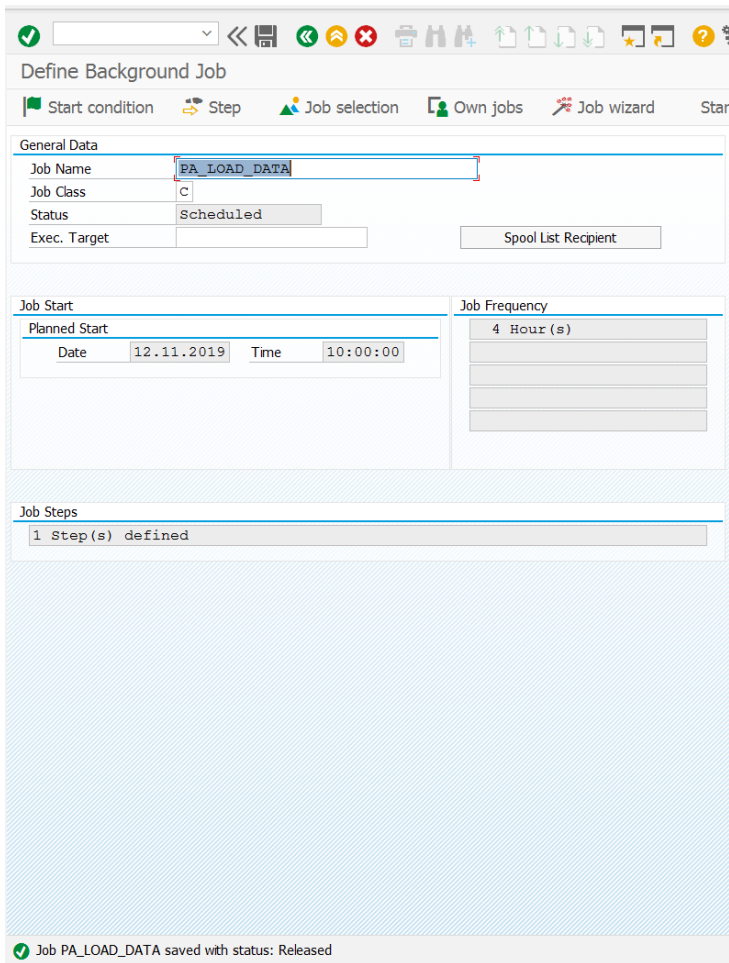
- Click **Period value** and then click **Other period**.



- Enter an interval in hour or minutes and click **Save** .
- In the **Period values** dialog box, click **Save** .
- In the **Date/Time** group, enter the scheduled start date and time, then click **Save** .



12. In the **Define Background Job** view, click **Save** .



Define Background Job

Start condition Step Job selection Own jobs Job wizard Stan

General Data

Job Name	PA_LOAD_DATA
Job Class	C
Status	Scheduled
Exec. Target	

Spool List Recipient

Job Start

Planned Start	
Date	12.11.2019
Time	10:00:00

Job Frequency

4 Hour (s)

Job Steps

1 Step(s) defined

Job PA_LOAD_DATA saved with status: Released

Troubleshooting

Introduction

This section aims at troubleshooting issues that may occur while configuring the Process Director Accounts Payable for use with SAP Fiori® application, which uses the /EBY/FRAP_WC service. For other applications, the names should be correspondingly modified.

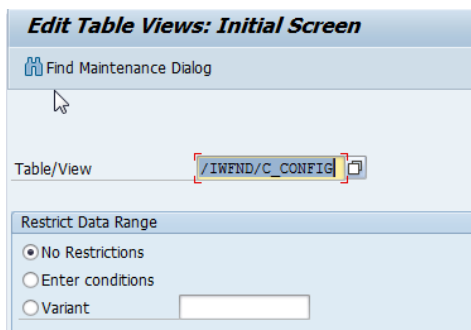
Basic system settings

Parameter: login/create_sso2_ticket

To get rid of the error message encountered in the gateway client on trying to run the oData service, modify the `login/create_sso2_ticket` system parameter.

Selection of default profile for virus scan

1. Based on the assumption that there are no other requirements for the default profile for the virus scan, run the SM30 transaction for the /IWFND/C_CONFIG table.



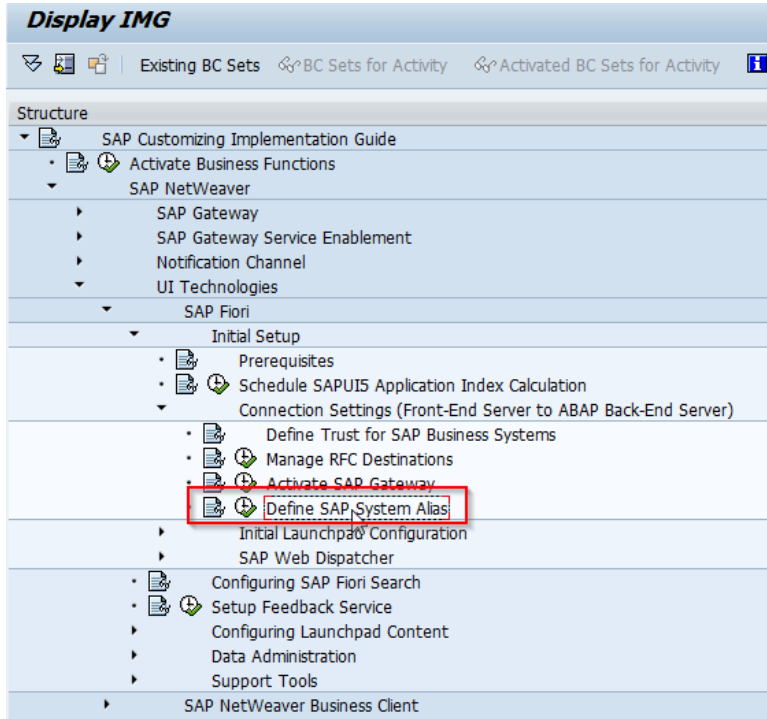
2. Modify the value for the GATEWAY_VIRUSCAN_PROFILE parameter to -.
If this parameter does not exist, add it first in the /IWFND/C_COF_PAR table.

The screenshot shows the 'Change View Configuration for SAP NetWeaver Gateway: Overview' table. The table has two columns: 'Name' and 'Configuration Value'. The row for 'GATEWAY_VIRUSCAN_PROFILE' is highlighted in yellow. The other rows are 'MED_CACHE_ENABLED' with value 'X' and 'SA_MED_CACHE_ENABLED' with value '-'. There are also some icons at the top of the table area.

Name	Configuration Value
GATEWAY_VIRUSCAN_PROFILE	-
MED_CACHE_ENABLED	X
SA_MED_CACHE_ENABLED	-

System alias

In the IMG, go to **Define SAP System Alias**.



One-system configuration (backend and frontend in one system)

Create the **LOCAL** system alias.

Change View "Manage SAP System Aliases": Overview

SAP System Alias	Description	Local SAP ...	For Local App	RFC Destination	Software Version	System ID	Client	WS Provider System
IWF_UNIT_TEST_1	Unk_Test System Alias - Do not modify	<input type="checkbox"/>	<input type="checkbox"/>	U3D_000	DEFAULT			PS_U3D_000
LOCAL	Local System Alias	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	NONE	DEFAULT			

Two-system configuration (backend and frontend in separate systems)

In this scenario, the alias works as a proxy to the remote system.

1. The user needs to have authorization for the S_RFCACL object, in both the systems.

Object class AAAB	Manually	Cross-application Authorization Objects
Authorization Object S_RFCACL	Manually	Authorization Check for RFC User (e.g. Trusted Sys...
Authorizat. T-G103000100	Manually	Berechtigungsprüfung für RFC-Benutzer (z.B. T...
RFC_SYSID	Manually	System ID (for SAP and External systems)
RFC_CLIENT	Manually	RFC client or domain
RFC_USER	Manually	RFC User (SAP or External)
RFC_EQUSER	Manually	RFC same user ID
RFC_TCODE	Manually	RFC transaction code
RFC_INFO	Manually	RFC information
ACTVT	Manually	Activity

2. Create a trusted RFC connection.

The screenshot shows the SAP configuration interface for creating a trusted RFC connection. The 'RFC Destination' is 'SAPGW1_TST_TRUSTED' and 'Connection Type' is '3 ABAP Connection'. The 'Technical Settings' tab is active, showing 'Target System Settings' with 'Load Balancing' set to 'No', 'Target Host' as 'saptst.ebydos.local', and 'Instance No.' as '00'. 'Gateway Options' are also visible.

In the **Logon and Security** tab, make sure to leave the **Language** field blank.

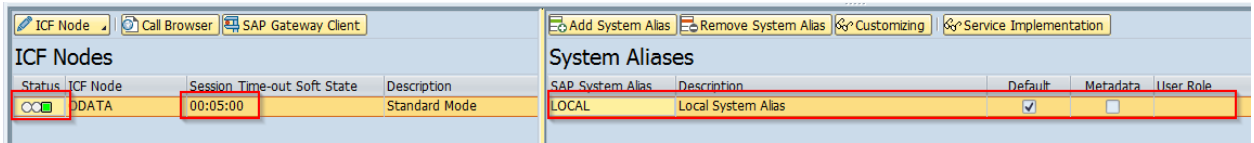
The screenshot shows the SAP configuration interface with the 'Logon & Security' tab active. The 'Logon Procedure' section has 'Language' blank, 'Client' as '100', 'User' as 'Current User', and 'PW Status' as 'is initial'. 'Trust Relationship' is set to 'Yes' and 'Status of Secure Protocol' is 'Inactive'.

3. Create the alias.

In the **System ID** field, provide the SAP system name for the backend system.

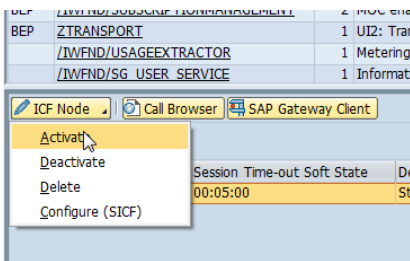
2. Verify if the /EBY/FRAP_WC service has already been preset.

- If it has a green status and in the **ICF Nodes** section, the **Session Time-out Soft State** value equals **00:05:00**, and also the system alias has been defined, the service is configured correctly.



Note: This timeout defines the time for which a document remains locked in the application. For a longer session lock period, consider modifying this parameter.

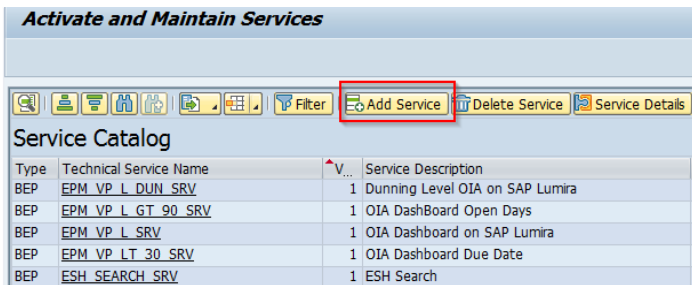
- If the **ICF Node** status is yellow, the only thing you need to do is activate it and proceed to the next step of [creating the service](#).



- If the service does not exist, or exists, but the status in the **ICF Nodes** section is blank or the **Session Time-out Soft State** value equals **00:00:00**, remove the alias and ICF Node first to remove the service.

Create the service

1. Click **Add Service**.



2. In the **Filter** section, populate the values, with /EBY/FRAP_WC as the **Technical Service Name** and FRAP_WC as the **External Service Name**.

Add Selected Services

Get Services

Filter

System Alias	TST	Version	1
Technical Service Name	/EBY/FRAP_WC	External Mapping ID	
External Service Name	FRAP_WC		

Add Selected Services

Select Backend Services

Type	Technical Service Name	Ver...	Service Description	External Service Name
------	------------------------	--------	---------------------	-----------------------

3. Press **Enter**. In the **Select Backend Services** section, select the line and click **Add Selected Services**.

Add Selected Services

Get Services

Filter

System Alias	TST	Version	1
Technical Service Name	/EBY/FRAP_WC	External Mapping ID	
External Service Name	FRAP_WC		

Add Selected Services

Select Backend Services

Type	Technical Service Name	V	Service Description	External Service Name	Namespace	Ext...
BEP	/EBY/FRAP_WC	1	PD AP WORK CYCLE for Fiori	FRAP_WC	/EBY/	

4. Correct the names suggested by the system (starting with Z*), to names starting with /EBY/*.

- Provide the **Package Assignment** as /EBY/FRAP.

Service

Technical Service Name: /EBY/FRAP_WC

Service Version: 1

Description: PD AP WORK CYCLE for Fiori

External Service Name: FRAP_WC

Namespace: /EBY/

External Mapping ID:

External Data Source Type: C

Model

Technical Model Name: /EBY/FRAP_WC_MDL

Model Version: 1

Creation Information

Package Assignment: /EBY/FRAP

Local Object

ICF Node

Standard Mode None

Set Current Client as Default Client in ICF Node

OAuth enablement

Enable OAuth for Service

- Go back to the service list.

Assign the alias

- Click **Add System Alias**.

Activate and Maintain Services

Service Catalog

Type	Technical Service Name	Service Description	External Service Name	Nsp.	OAuth	Soft State	Process
BEP	ZFIN_USER_DEFAULTPARAMETER	1 User Default Parameter	FIN_USER_DEFAULTPARAMETER		<input type="checkbox"/>	Not Supported	Routing-
BEP	/EBY/FRAP_WC	1 PD AP WORK CYCLE for Fiori	FRAP_WC	/EBY/	<input checked="" type="checkbox"/>	Active	Routing-
BEP	/EBY/FRPD_PO	1 PROCESS DIRECTOR: Fiori (FR) for Requisitions	FRPD_PO	/EBY/	<input type="checkbox"/>	Active	Routing-

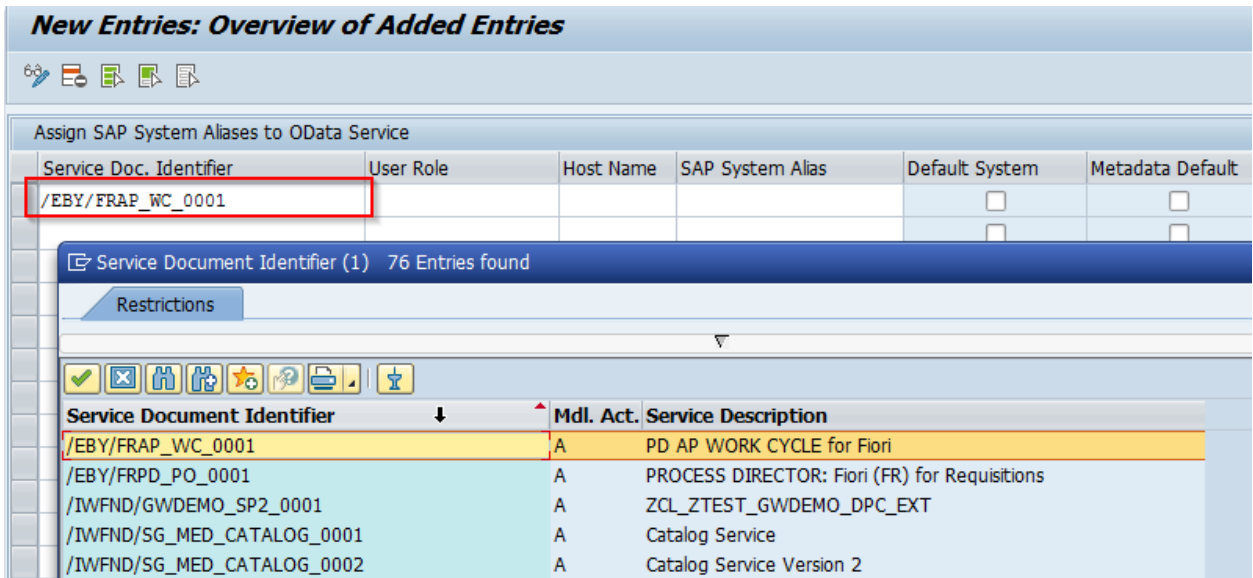
ICF Nodes

Status	ICF Node	Session Time-out	Soft State	Description
<input checked="" type="checkbox"/>	ODATA	00:05:00		Standard Mode

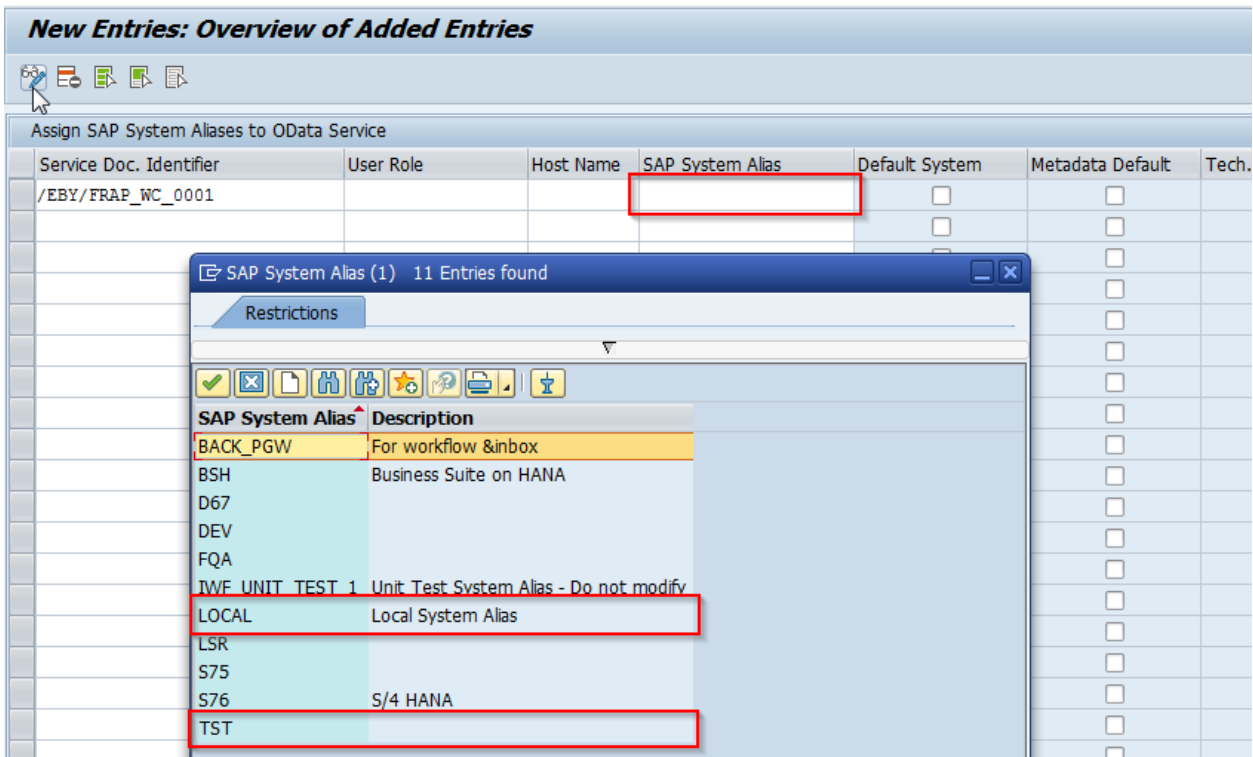
System Aliases

SAP System Alias	Description	Default	Metadata	User Role	Host Name

- Use the search help to select the /EBY/FRAP_WC_0001 service.



- Assign the **LOCAL** or remote system alias, depending on if you have one- or two-system configuration.



Note: TST is an example of an additional remote system. Depending on the requirements of your system landscape, you can use any suitable name for the remote system alias.

Change View "Assign SAP System Aliases to OData Service": Overview

New Entries

Service Doc. Identifier	User Role	Host Name	SAP System Alias	Default System	Metadata Default	Tech. Svc. Name	Ext. Service Name
/EBY/FRAP_WC_0001			LOCAL	<input checked="" type="checkbox"/>	<input type="checkbox"/>	/EBY/FRAP_WC	FRAP_WC

Change View "Assign SAP System Aliases to OData Service": Overview

New Entries

Service Doc. Identifier	User Role	Host Name	SAP System Alias	Default System	Metadata Default	Tech. Svc. Name	Ext. Service Name
/EBY/FRAP_WC_0001			TST	<input type="checkbox"/>	<input type="checkbox"/>	/EBY/FRAP_WC	FRAP_WC

4. Go back to the service list.

Activate and Maintain Services

ICF Node | Call Browser | SAP Gateway Client

Filter | Add Service | Delete Service | Service Details | Load Metadata | Error Log | Request Statistics | Refresh Catalog | OAuth | Soft State

Service Catalog

Type	Technical Service Name	Service Description	External Service Name	Namespace	OAut.	Soft State	Status	Is SAP Serv
BEP	/EBY/FRAP_WC	1 PD AP WORK CYCLE for Fiori	FRAP_WC	/EBY/	<input type="checkbox"/>	Active		
BEP	/EBY/FRPD_PO	1 PROCESS DIRECTOR: Fiori (FR) for Requisitions	FRPD_PO	/EBY/	<input type="checkbox"/>	Active		
BEP	/IWFND/GWDEMO_SP2	1 ZCL_ZTEST_GWDEMO_DPC_EXT	GWDEMO_SP2	/IWBEP/	<input type="checkbox"/>			
BEP	ILM_ARCH_VARIANT_DIST_SERVICE	1 Service for archiving distribution app	ILM_ARCH_VARIANT_DIST_SERVICE		<input checked="" type="checkbox"/>			
BEP	ILM_JOB_MONITOR_SERVICE	1 ILM Job Monitor Service	ILM_JOB_MONITOR_SERVICE		<input type="checkbox"/>			
BEP	ZINTEROP	1 Gateway Service of Interoperability	INTEROP	/UI2/	<input type="checkbox"/>	Not Supported		
BEP	IRWC	1 ILM Reporting Work Center	IRWC		<input checked="" type="checkbox"/>			
BEP	ZLAUNCHPAD	1 Launchpad Data Provider	LAUNCHPAD	/UI2/	<input type="checkbox"/>			
BEP	LORD_MY_QUOTATION	1 My Quotation Odata Service	LORD_MY_QUOTATION		<input checked="" type="checkbox"/>			
BEP	LORD_ODATA_ORDER	1 OData Service for Sales Order	LORD_ODATA_ORDER		<input checked="" type="checkbox"/>			

ICF Nodes

Status	ICF Node	Session Time-out	Soft State	Description
<input checked="" type="checkbox"/>	ODATA	00:05:00		Standard Mode

System Aliases

SAP System Alias	Description	Default	Metadata	User Role
LOCAL	Local System Alias	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

Activate and Maintain Services

ICF Node | Call Browser | SAP Gateway Client

Filter | Add Service | Delete Service | Service Details | Load Metadata | Error Log | Request Statistics | Refresh Catalog | OAuth | Soft State

Service Catalog

Type	Technical Service Name	Service Description	External Service Name	Nsp.	OAut.	Soft State	Processing Mode
BEP	ZFI_CORRESPONDENCE	1 Finance Correspondence	FI_CORRESPONDENCE		<input type="checkbox"/>	Not Supported	Routing-based
BEP	ZFIORI_CATALOGS	1 Fiori Catalogs	FIORI_CATALOGS	/UI2/	<input type="checkbox"/>	Not Supported	Routing-based
BEP	/EBY/FRAP_WC	1 PD AP WORK CYCLE for Fiori	FRAP_WC	/EBY/	<input type="checkbox"/>	Inactive	Routing-based
BEP	/EBY/FRPD_PO	1 PROCESS DIRECTOR: Fiori (FR) for Requisitions	FRPD_PO	/EBY/	<input type="checkbox"/>	Active	Routing-based
BEP	ZFT_CONFIG_UI	1 Fiori Technology Config UI	FT_CONFIG_UI	/UI2/	<input type="checkbox"/>	Not Supported	Routing-based
BEP	/IWFND/GWDEMO_SP2	1 ZCL_ZTEST_GWDEMO_DPC_EXT	GWDEMO_SP2	/IWBEP/	<input type="checkbox"/>		Routing-based
BEP	ZINTEROP	1 Gateway Service of Interoperability	INTEROP	/UI2/	<input type="checkbox"/>	Not Supported	Routing-based
BEP	ZLAUNCHPAD	1 Launchpad Data Provider	LAUNCHPAD	/UI2/	<input type="checkbox"/>	Not Supported	Routing-based

ICF Nodes

Status	ICF Node	Session Time-out	Soft State	Description
<input checked="" type="checkbox"/>	ODATA	00:00:00		Standard Mode

System Aliases

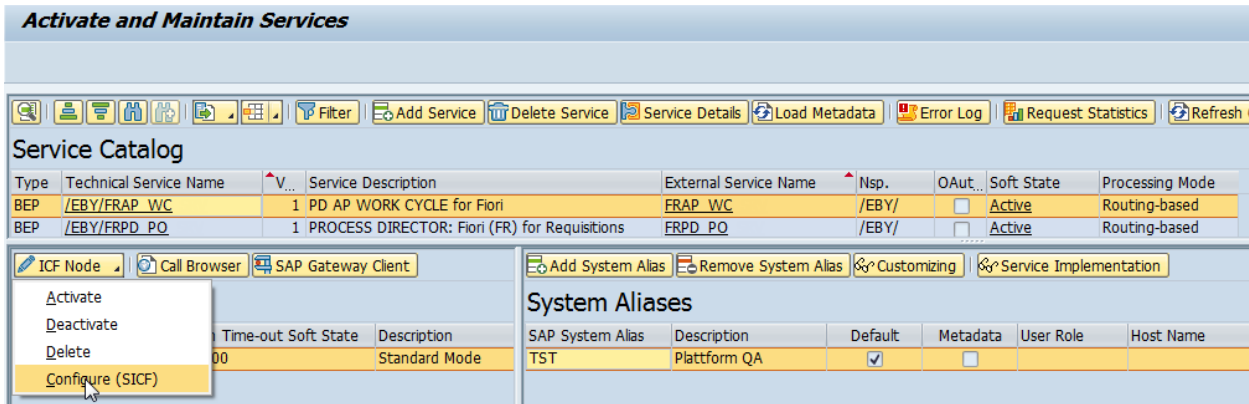
SAP System Alias	Description	Default	Metadata	User Role
TST		<input type="checkbox"/>	<input type="checkbox"/>	

ICF Node

The Process Director Accounts Payable for use with SAP Fiori(r) application uses two ICF Nodes:

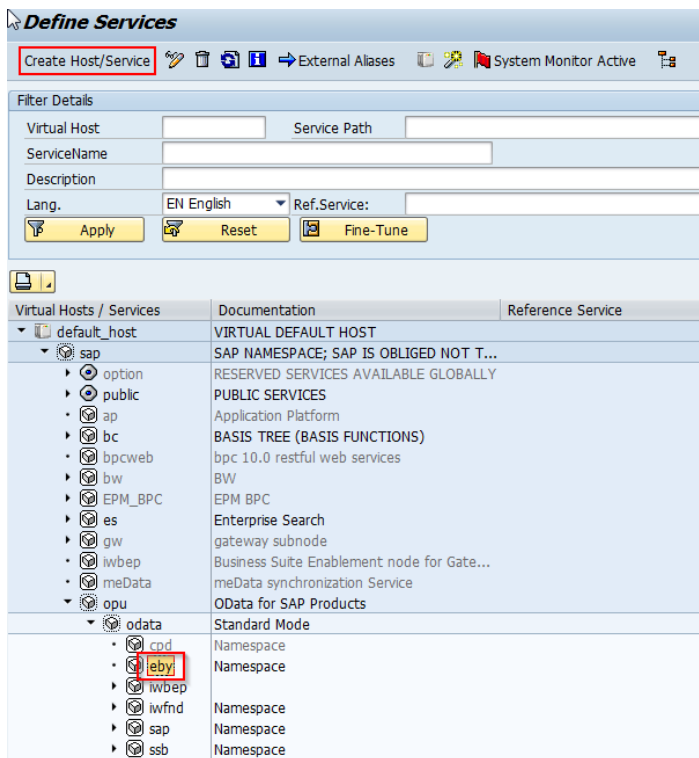
- Odata
- Application services.

The OData service should either already exist and have been activated, or should be created (recreated) for the newly added /EBY/FRAP_WC service.



If this ICF Node has a blank status or the **Session Time-out Soft State** value is set to **00:00:00**, the node needs to be created, or deleted and recreated.

1. Run the SICF transaction, click the **Execute** button, and then go to the following path.



2. Select the **eby** position and click **Create Host/Service**.
3. Confirm the popup and in the **Name of Service Element to Be Created** field, enter **frap_wc**.
4. Click **OK**.
5. Provide a description and in the **Session Timeout** field, enter the required time interval (for example, [00:05:00](#)).

Create/Change a Service

Path /default_host/sap/opu/odata/eby

Service Name Service (Inactive)

Lang. (undefined) [Other Languages](#)

Description

Description 1	<input type="text" value="frap_wc"/>
Description 2	<input type="text"/>
Description 3	<input type="text"/>

Service Data | Logon Data | Handler List | Error Pages | Administration

Service Options

Web Service

Ignore inherited settings

Load Balancing

SAP Authoriz.

Session Timeout (HH:MM:SS)

Compression

Interactive Options

GUI Interface [GUI Configuration](#)

Support Accessibility

6. Switch to the **Handler List** tab.

7. Add /IWFND/CL_SODATA_HTTP_HANDLER to the Handler List.

Create/Change a Service

Path: /default_host/sap/opu/odata/eby

Service Name: frap_wc Service (Inactive)

Lang.: EN English (undefined) [Other Languages](#)

Description

Description 1: frap_wc

Description 2:

Description 3:

Service Data Logon Data **Handler List** Error Pages Administration

Handler List (in Order of Execution)

N..	Handler
1	/IWFND/CL_SODATA_HTTP_HANDLER
2	
3	
4	
5	
6	
7	

- Go back to the service list and activate the service.

Define Services

Create Host/Service External Aliases System Monitor Active

Filter Details

Virtual Host: Service Path:

ServiceName:

Description:

Lang.: Ref.Service:

Virtual Hosts / Services	Documentation	Ret
▼ default_host	VIRTUAL DEFAULT HOST	
▼ sap	SAP NAMESPACE; SAP IS OBLIGED NOT T...	
▶ option	RESERVED SERVICES AVAILABLE GLOBALLY	
▶ public	PUBLIC SERVICES	
• ap	Application Platform	
▶ bc	BASIS TREE (BASIS FUNCTIONS)	
• bpcweb	bpc 10.0 restful web services	
▶ bw	BW	
▶ EPM_BPC	EPM BPC	
▶ es	Enterprise Search	
▶ gw	gateway subnode	
• iwbsp	Business Suite Enablement node for Gate...	
• meData	meData synchronization Service	
▼ opu	OData for SAP Products	
▼ odata	Standard Mode	
• cpd	Namespace	
▼ eby	Namespace	
• ifrap_w...	frap_wc_srv	
▶ iwbsp	Namespace	
▶ iwfn	Namespace	
▶ sap	Namespace	
▶ ssb	Namespace	
▶ ui2	Namespace	
• odata4	Gateway OData V4	
▶ utils	y services	
• transfer	Proxy Transfer Service, supports Fref...	
▶ xi	ange Infrastructure (XI)	

Context menu for iwbsp:

- New Sub-Element
- Display Service
- Delete Service
- Rename Service
- Activate Service**
- Deactivate Service
- Test Service

Activate the soft state in the services list

Verify if the soft state of the /EBY/FRAP_WC service is active. If not, click **Soft State** to activate it.

Activate and Maintain Services

Filter | Add Service | Delete Service | Service Details | Load Metadata | Error Log | Request Statistics | Refresh Catalog | OAuth | **Soft State** | Processing Mode

Type	Technical Service Name	Service Description	External Service Name	Nsp.	OAut.	Soft State	Processing Mode
BEP	ADI	Gateway service for ADT	ADT_SRV		<input checked="" type="checkbox"/>	Not Supported	Routing-based
BEP	CA_DATA_MODEL_SRV	Odata service for data model	CA_DATA_MODEL_SRV		<input type="checkbox"/>	Not Supported	Routing-based
BEP	CA_INFORMATION_SRV	Information Management	CA_INFORMATION_SRV		<input type="checkbox"/>	Not Supported	Routing-based
	/IWFND/SG_MED_CATALOG	Catalog Service	CATALOGSERVICE	/IWFND/	<input checked="" type="checkbox"/>	Not Supported	Routing-based
	/IWFND/SG_MED_CATALOG	Catalog Service Version 2	CATALOGSERVICE	/IWFND/	<input checked="" type="checkbox"/>		Routing-based
BEP	DAAG_DTG_SRV	Odata for DTG app	DAAG_DTG_SRV		<input type="checkbox"/>	Not Supported	Routing-based
BEP	EPM_OIA_L_1_SRV_01	OIA Service	EPM_OIA_L_1_SRV_01		<input checked="" type="checkbox"/>		Routing-based
BEP	EPM_OIA_L_SRV	OIA using SAP Lumira	EPM_OIA_L_SRV		<input checked="" type="checkbox"/>		Routing-based
BEP	EPM_VP_L_BT_30_60_SRV	OIA Dashboard Open Days	EPM_VP_L_BT_30_60_SRV		<input checked="" type="checkbox"/>		Routing-based
BEP	EPM_VP_L_BT_60_90_SRV	OIA Dashboard Open Days	EPM_VP_L_BT_60_90_SRV		<input checked="" type="checkbox"/>		Routing-based
BEP	EPM_VP_L_DUN_SRV	Dunning Level OIA on SAP Lumira	EPM_VP_L_DUN_SRV		<input checked="" type="checkbox"/>		Routing-based
BEP	EPM_VP_L_GT_90_SRV	OIA Dashboard Open Days	EPM_VP_L_GT_90_SRV		<input checked="" type="checkbox"/>		Routing-based
BEP	EPM_VP_L_SRV	OIA Dashboard on SAP Lumira	EPM_VP_L_SRV		<input checked="" type="checkbox"/>		Routing-based
BEP	EPM_VP_LT_30_SRV	OIA Dashboard Due Date	EPM_VP_LT_30_SRV		<input checked="" type="checkbox"/>	Not Supported	Routing-based
BEP	/EBY/FRAP_WC	PD AP WORK CYCLE for Fiori	FRAP_WC	/EBY/	<input type="checkbox"/>	Inactive	Routing-based
BEP	/EBY/FRPD_PO	PROCESS DIRECTOR: Fiori (FR) for Requisitions	FRPD_PO	/EBY/	<input type="checkbox"/>	Active	Routing-based
BEP	ZFI_CONFIG_UI_SRV	Fiori Technology Config UI	FT_CONFIG_UI_SRV	/UI2/	<input type="checkbox"/>		Routing-based
BEP	/IWFND/GWDEMO_SP2	ZCL_ZTEST_GWDEMO_DPC_EXT	GWDEMO_SP2	/IWBEP/	<input type="checkbox"/>		Routing-based

SAP Internet Communication Framework

The SICF (SAP Internet Communication Framework) standard transaction code is used to maintain the services for HTTP communication in the SAP system, using the Internet Communication Manager (ICM) and the Internet Communication Framework (ICF).

Application service activation

This applies only to the one-system configuration or to the frontend system in the two-system configuration.

For the two-system configuration, the OData service exists in both the backend and frontend systems. The application service exists only in the frontend system.

You have to verify if the application service is active. If it is not, you need to activate it.

Activate the service element tree nodes

To activate the service element tree node, complete the following steps.

1. Run the SICF transaction.
2. In the **Service Name** field, enter `frap_wc` and click the **Execute** button.
3. Right-click the `frap_wc` tree nodes and select **Activate Service**.

Virtuelle Hosts / Services	Documentation
default_host	VIRTUAL DEFAULT HOST
sap	SAP NAMESPACE; SAP IS OBLIGED NOT TO DELI...
bc	BASIS TREE (BASIS FUNCTIONS)
bsp	BUSINESS SERVER PAGES (BSP) RUNTIME
eby	namespace
frap_wc	Fiori for Process Director Accounts Payable
ui5_ui5	SAPUI5 Application Handler SAPUI5 Application call...
eby	namespace
frap_wc	Process Director AP Workcycle application
opu	OData for SAP Products
odata	Standard Mode
eby	Namespace
frap_wc	Backend service for PD AP approval application

- Run the SICF transaction again.
- In the **Service Name** field, enter `fr_lib` and click the **Execute** button.
- Now, right-click the **fr_lib** tree nodes and select **Activate Service**.

Virtuelle Hosts / Services	Documentation
default_host	VIRTUAL DEFAULT HOST
sap	SAP NAMESPACE; SAP IS OBLIGED NOT TO DELI...
bc	BASIS TREE (BASIS FUNCTIONS)
bsp	BUSINESS SERVER PAGES (BSP) RUNTIME
eby	namespace
fr_lib	Kofax UI5 Frontend Library
ui5_ui5	SAPUI5 Application Handler SAPUI5 Application call...
eby	namespace
fr_lib	Kofax UI5 Frontend Library

Note: Both `frap_wc` and `fr_lib` need to be activated, regardless of the sequence you follow. If the customer's SAP runtime environment is set up correctly, you can now start the application.

- Right-click any **fr_lib** entry and select **Test Service**.
- Activate it.

Deactivate the parallelization of batch requests

If the parallelization of batch requests is active, soft state does not work. It can be activated globally, and deactivated for each service.

To deactivate it for a service, complete the following steps.

1. In the service maintenance (/IWFND/MAINT_SERVICE) transaction, click **Service Implementation**.

Activate and Maintain Services

Service Catalog

Type	Technical Service Name	Service Description	External Service Name	Nsp.	OAut.	Soft State	Processing Mode
BEP	ZFI_CORRESPONDENCE_SRV	1 Finance Correspondence	FI_CORRESPONDENCE_SRV		<input type="checkbox"/>	Not Supported	Routing-based
BEP	ZFIORI_CATALOGS	1 Fiori Catalogs	FIORI_CATALOGS	/UI2/	<input type="checkbox"/>	Not Supported	Routing-based
BEP	/EBY/FRAP_WC	1 PD AP WORK CYCLE for Fiori	FRAP_WC	/EBY/	<input type="checkbox"/>	Inactive	Routing-based
BEP	/EBY/FRPD_PO	1 PROCESS DIRECTOR: Fiori (FR) for Requestions	FRPD_PO	/EBY/	<input type="checkbox"/>	Active	Routing-based
BEP	ZFT_CONFIG_UI_SRV	1 Fiori Technology Config UI	FT_CONFIG_UI_SRV	/UI2/	<input type="checkbox"/>	Not Supported	Routing-based
BEP	/IWFND/GWDEMO_SP2	1 ZCL_ZTEST_GWDEMO_DPC_EXT	GWDEMO_SP2	/IWBEP/	<input type="checkbox"/>		Routing-based
BEP	ZINTEROP	1 Gateway Service of Interoperability	INTEROP	/UI2/	<input type="checkbox"/>	Not Supported	Routing-based
BEP	ZLAUNCHPAD	1 Launchpad Data Provider	LAUNCHPAD	/UI2/	<input type="checkbox"/>	Not Supported	Routing-based

ICF Nodes

Status	ICF Node	Session Time-out	Soft State	Description
<input checked="" type="checkbox"/>	ODATA	00:00:00		Standard Mode

System Aliases

SAP System Alias	Description	Default	Metadata	User Role
TST		<input type="checkbox"/>	<input type="checkbox"/>	

2. Click **Configuration**.

Display Service

Cleanup Cache **Configuration**

Service Information

Technical Service Name	/EBY/FRAP_WC
Service Version	1
Description	PD AP WORK CYCLE for Fiori
External Service Name	FRAP_WC
Namespace	/EBY/
Data Provider Class	/EBY/CL_FRAP_WC_DPC_EXT
Created By	SKOLIMOWSKI
Changed By	
Package	/EBY/FRAP_ODATA

3. Deselect the **Deactivate Parallelization of Batch Requests** check box.

Change Configuration

Service Information

Technical Service Name	/EBY/FRAP_WC
Service Version	1

Service Settings

Deactivate Soft-State based Query Result Cache

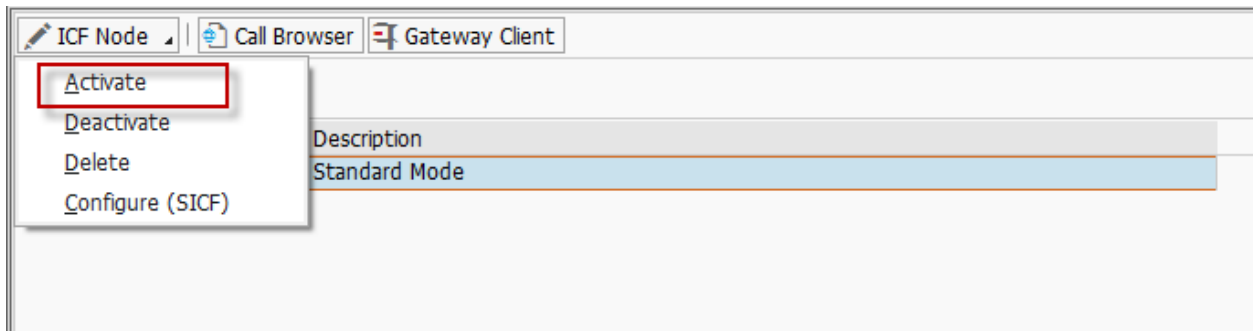
Deactivate Parallelization of Batch Requests

! Parallelization of batch requests not possible if the service has been activated for soft-state

Activate and maintain services

The OData service for the Process Director for use with SAP Fiori® application is a part of the transport and should be automatically activated in the customer system. To check this, complete the following steps.

1. Go to the / IWFND/ MAINT_SERVICE transaction.
2. Select the / EBY/ FRAP_WC technical service name.
3. Activate the **ICF Node** for the Odata service.



4. Click **Call Browser**.

A browser window displays the metadata of the OData service, in the XML format.

SAP Gateway troubleshooting

In case of errors, it is still viable to use the ST22 transaction to check for them. However, this does not cover web-specific errors. Web-specific errors are logged in the / IWFND/ ERROR_LOG (SAP Gateway Error Log) transaction.

View model troubleshooting

Although the first **Environment** field in the configuration of the view model settings is not mandatory and the system environment should be automatically used, if an error is encountered, ensure that this field is filled in.

For more information about view model configuration, refer to the *Process Director Configuration Guide*.