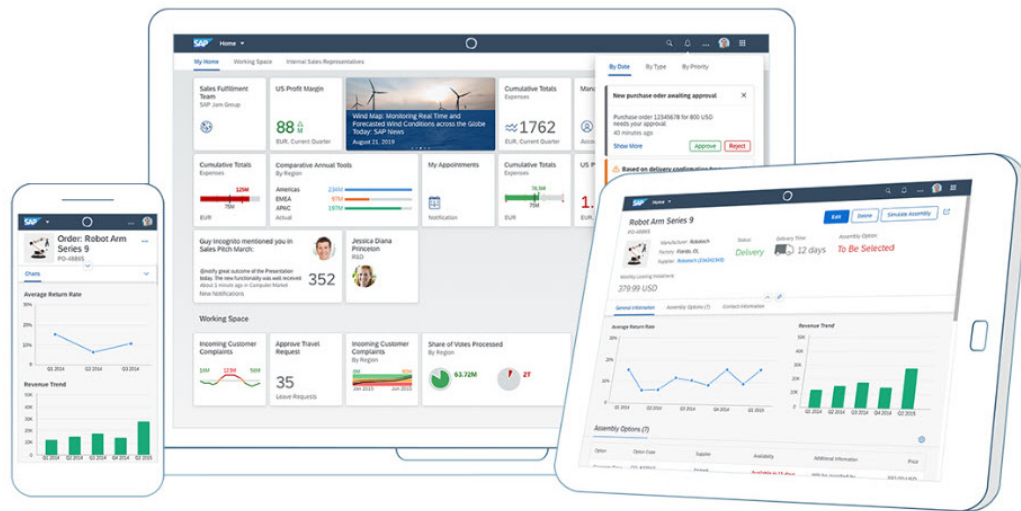


SAP FIORI APP ACTIVATION FOR S/4HANA



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SAP FIORI APP ACTIVATION FOR S/4HANA

Overview

This guide will walk you through the process of configuring the Fiori app in Launchpad. It's a process we've developed over time to form a sort of "best practice" where launchpad content is concerned. For customers looking to activate Fiori apps, the namespace they use should either start with a Z or Y. We will try to call out these and suggest customer alternatives whenever possible.

This guide will cover the following topics:

- **SAP S4 Core Back End.**
- **Fiori Front End Server Configuration**
- **Tile Catalogs and Groups**
- **Business Roles**

It is also worth exploring some terminology in this overview, as with many SAP products you will hear terminology and jargon that very often means the same thing.

Fiori Front End Server = SAP Gateway (SAP Gateway is a component of the FES)

SAP S4 Core = SAP Backend System.

Fiori App = SAPUI5 Web Application.

Classic UI = SAPGUI Transaction.

Fiori Tile = a Pointer to a Fiori App.

OData Service = a Web Service to get data to and from an SAP system.

Role = a collection of any of the above, assigned to a user to give them access to said objects.

1. Required steps before Fiori implementation

1.1 Landscape check

Fiori Launchpad configuration is managed across 2 systems, which depending on the deployment option of the Gateway (**hub/standalone or embedded**) might be done in 2 actual servers or in 1.

Till date, most of our customers have opted for the Central Gateway Hub Server, however SAP's recommended approach these days is the **embedded scenario**, it's simpler to have both the Front and Back end server existing in one SAP system.

System landscape is:

Embedded deployment (1 single server = frontend components are installed on backend);
S/4HANA on premise 1909.

1.2 List of Fiori applications

1.2.1. Availability check

You need to check list of Fiori applications are available for your system landscape. It can be checked on <http://fiori.apps.library.com> by aggregating requirements:

1. Check all Fiori applications to be installed;
2. Press "Aggregate" button in the left corner;
3. In the "First Release" column will be warning if the application doesn't exist for your landscape.

1.2.2. Required basis components and products

Transaction: SAINT and SPAM

Installation is described in detail on help.sap.com/fiori

Important note: Always use the latest support packages.

1.2.3. Notes to be implemented

Transaction: SNOTE

List of all notes needed to be implemented before Fiori implementation could be generated on <http://fiori.apps.library.com> :

1. Check all Fiori applications to be installed;
2. Press “Aggregate” button in the left corner;
3. Choose valid release and delivery date;
4. Under “Aggregated Installation Requirements” in “Required Sap Notes” will be list of all the required notes to be implemented before Fiori implementation.

1.3 Connection settings

Transaction: SM59

Considering the fact that we use Embedded deployment, no connections are required other than NONE (type I).

1.4 System Aliases definition

Transaction: SPRO

Considering the fact that we use Embedded deployment, no System Aliases are required other than LOCAL:

Important note: For some application more System Aliases might be required. For example, My Inbox application requires following system aliases:

Manage SAP System Aliases							
SAP System Alias	Description	Local SAP GW	For Local App	RFC Destination	Software Version	System ID	Client
BACK_1	BACK_1 ERP	<input type="checkbox"/>	<input type="checkbox"/>	NONE	DEFAULT		
BACK_PGW	BACK_PGW WORKFLOW	<input type="checkbox"/>	<input checked="" type="checkbox"/>	NONE	/IWPGW/BWF		
LOCAL	Local System Alias	<input checked="" type="checkbox"/>	<input type="checkbox"/>	NONE	DEFAULT	CFI	100

2. Fiori implementation

2.1 General rules

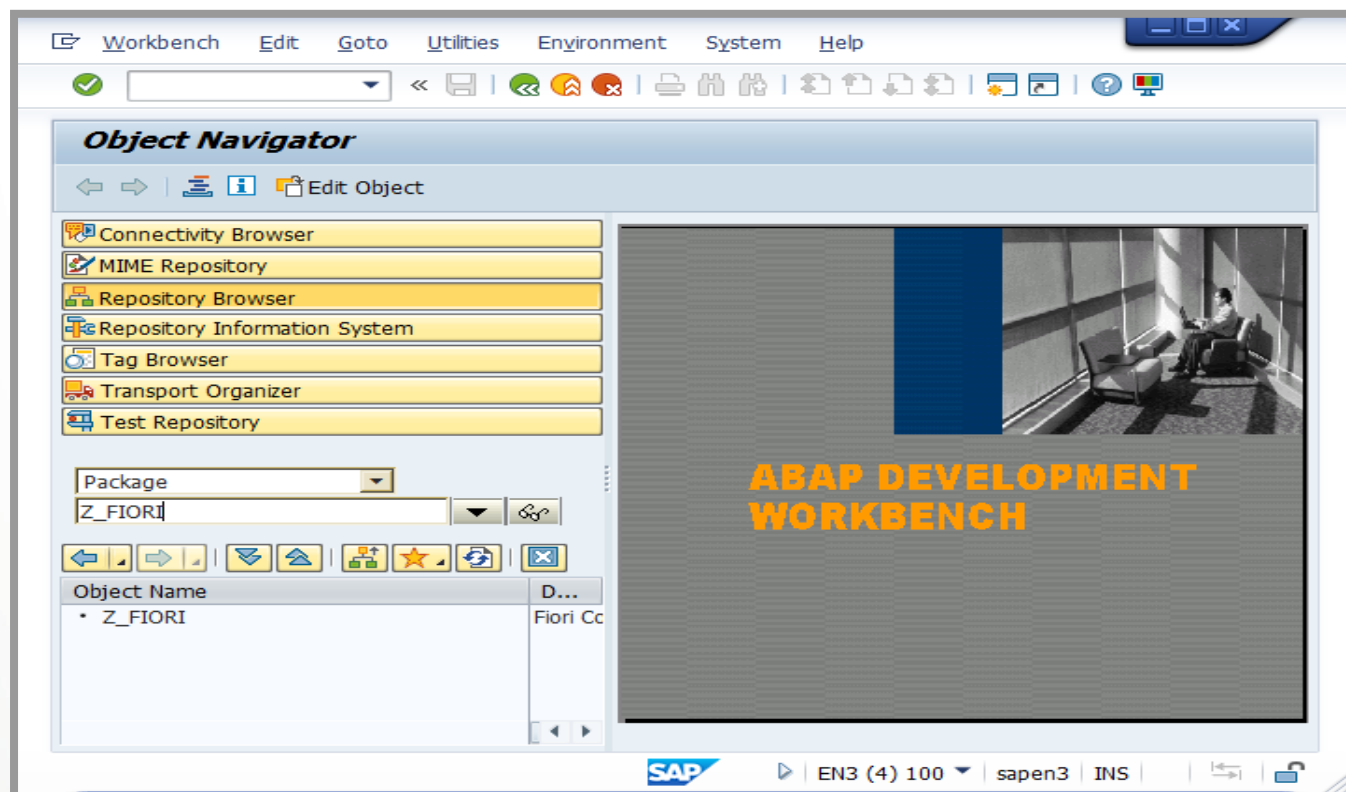
In order to launch Fiori applications following steps should be made:

- Activate basis OData services;
- Activate specific OData services;
- Activate ICF nodes;
- Add authorizations.

2.1.1. Package creation

Transaction: SE80

In order to store all objects, package (Z_FIORI/Z_FIORI_PACKAGE) should be created.



2.1.2. OData services activation

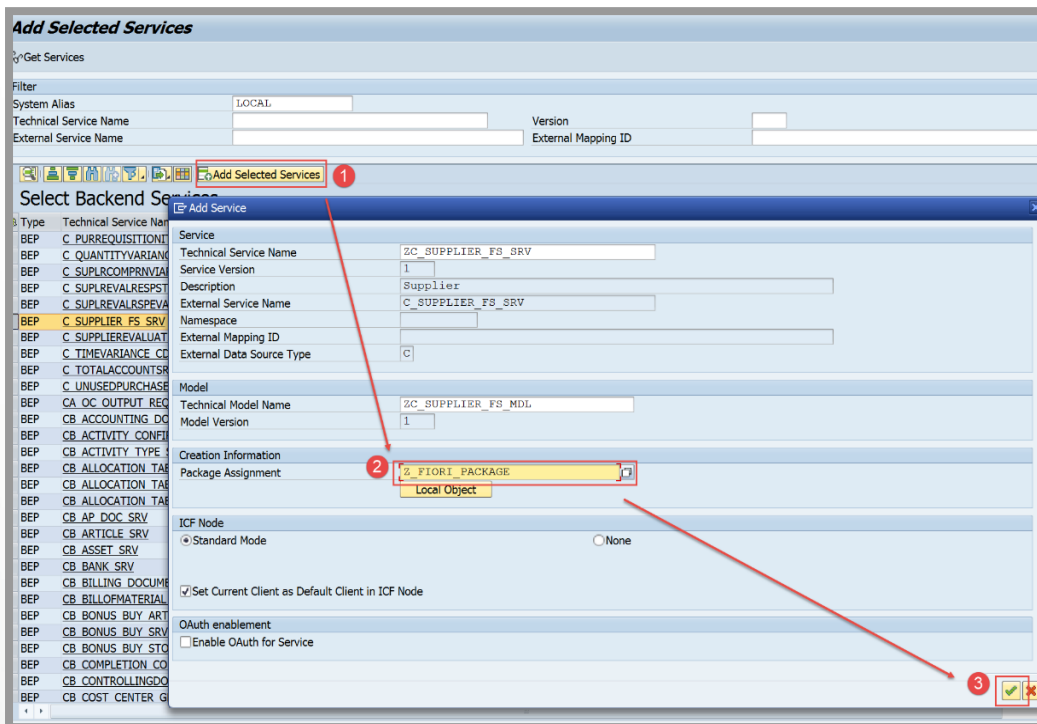
Transaction: /IWFND/MAINT_SERVICE

Basis OData Services to be activated:

- /UI2/PAGE_BUILDER_CONF -This is used by the Launchpad designer
- /UI2/PAGE_BUILDER_CUST - This is used by the Launchpad designer
- /UI2/PAGE_BUILDER_PERS - This is used by the Launchpad
- /UI2/TRANSPORT- This is used by the Launchpad designer
- /UI2/INTEROP - This is used by the Launchpad and Launchpad designer
- /UI2/LAUNCHPAD - Launchpad Data Provider

Steps to activate services:

- Click “Add service” button.
- Choose System Alias “LOCAL”.
- Repeat these steps for all specific OData services required by the Fiori Application.
- These steps might be completed separately for each OData service or collectively for any number.



2.1.3. Activation check

To ensure that OData service was activated correctly, it should be checked:

- Select OData service and click “SAP Gateway Client” button

2.1.4. ICF nodes activation

Transaction: SICF

Basis ICF services to be activated:

- sap -> bc -> ui5_ui5 -> ui2

2.1.5. Authorization creation

Transaction: PFCG

Create role Z_FIORI. It will be used to put all authorization objects (catalogues, groups)

Transaction: SU01

Basis roles to be added to users:

- **SAP_UI2_ADMIN_700/ SAP_UI2_ADMIN_750** depending on the system options

Roles required for each application (both frontend and backend) are listed in each application configuration info on <http://fioriappslibrary.com>

Add all necessary roles, including Z_FIORI, to users.

2.2 Transactional applications

In order to launch transactional application following steps should be completed:

- Activate basis OData services (see chapter 1.2);
- Activate specific to application OData service;
- Activate specific to application ICF service;
- Add specific authorization roles to users;
- Add specific catalogues and groups to Z_FIORI role.

2.3 Factsheets

Fact Sheets display master data or business documents in display mode. Fact Sheets are called from other apps like Analytical Apps by using app-to-app navigation in Fiori launchpad. Also, you can search master data or business documents in the Fiori launchpad like Google search. Facts Sheet is called by selecting the search result. Therefore, there will be no Factsheet tiles in the launchpad.

In order to be able to use factsheets following steps should be made:

- Assign **SAP_ESH_LOCAL_ADMIN** role to Administrator. This role contains the authorizations required to configure and manage Enterprise Search and operational data provisioning;

Set up SAP Fiori Search:

- Implement all necessary notes (see general note **2228932** for more information);
- Run **SAP_ESH_INITIAL_SETUP_WRK_CLIENT** task list to create Search Connectors under SAPAPPLH component;
- In transaction ESH_COCKPIT make sure that specific connectors for application exist. If not, create them manually.

2.4 Analytical applications

In order to launch analytical applications following steps should be completed:

- Specific to application roles should be assigned to user;
- Specific to application groups and catalogues should be added to Z_FIORI role;
- Specific to application OData service should be activated (usually C_*_CDS);
- Specific ICF service should be activated.
- In order to create another tile (for example, with another currency), KPI Design tiles should be used (“KPI Workspace”). In order to launch these applications following steps should be completed:
- **/SSB/SMART_BUSINESS_DESIGNTIME_SRV** OData service should be activated;
- **sb_apps_wss1** and **sb_apps_libs1** ICF services should be activated;

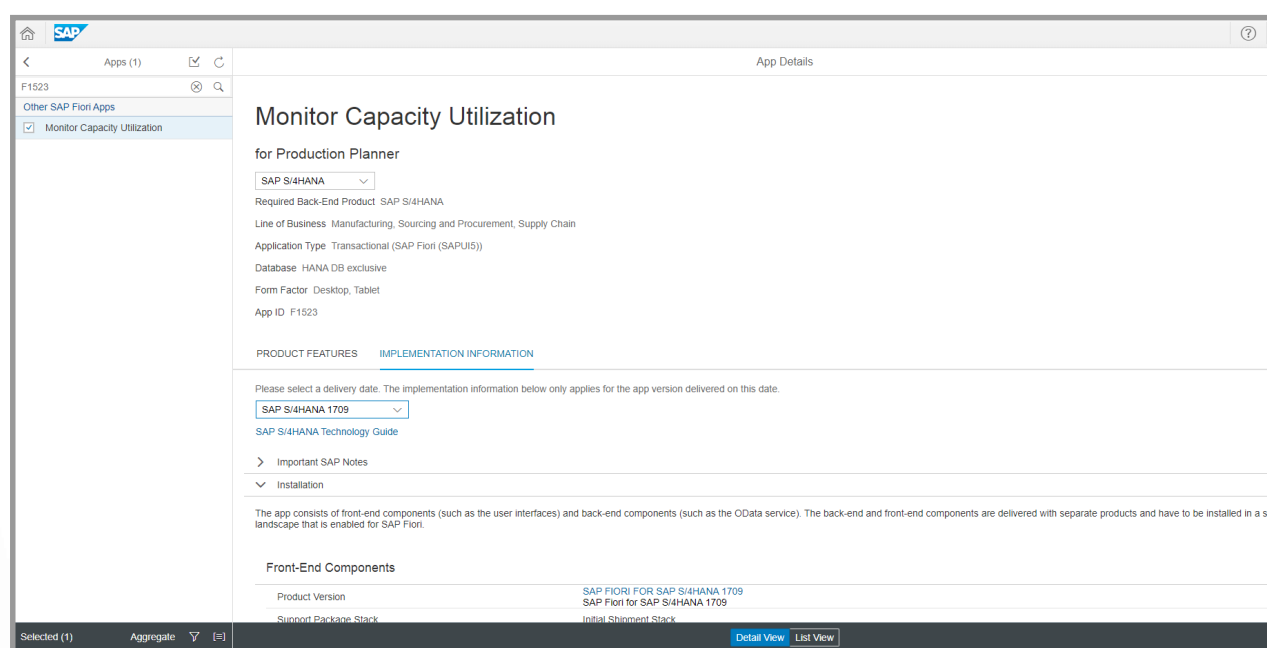
- Analysis Path Framework (APF) should be activated.

3. Fiori Apps Implementation steps:

3.1 Fiori-app catalog

Finding the required Fiori application in the fioriappslibrary.hana.ondemand.com directory

For example, for Monitor Capacity Utilization – [https://fioriappslibrary.hana.ondemand.com/sap/fix/externalViewer/#/detail/Apps\('F1523'\)/S6OP](https://fioriappslibrary.hana.ondemand.com/sap/fix/externalViewer/#/detail/Apps('F1523')/S6OP)

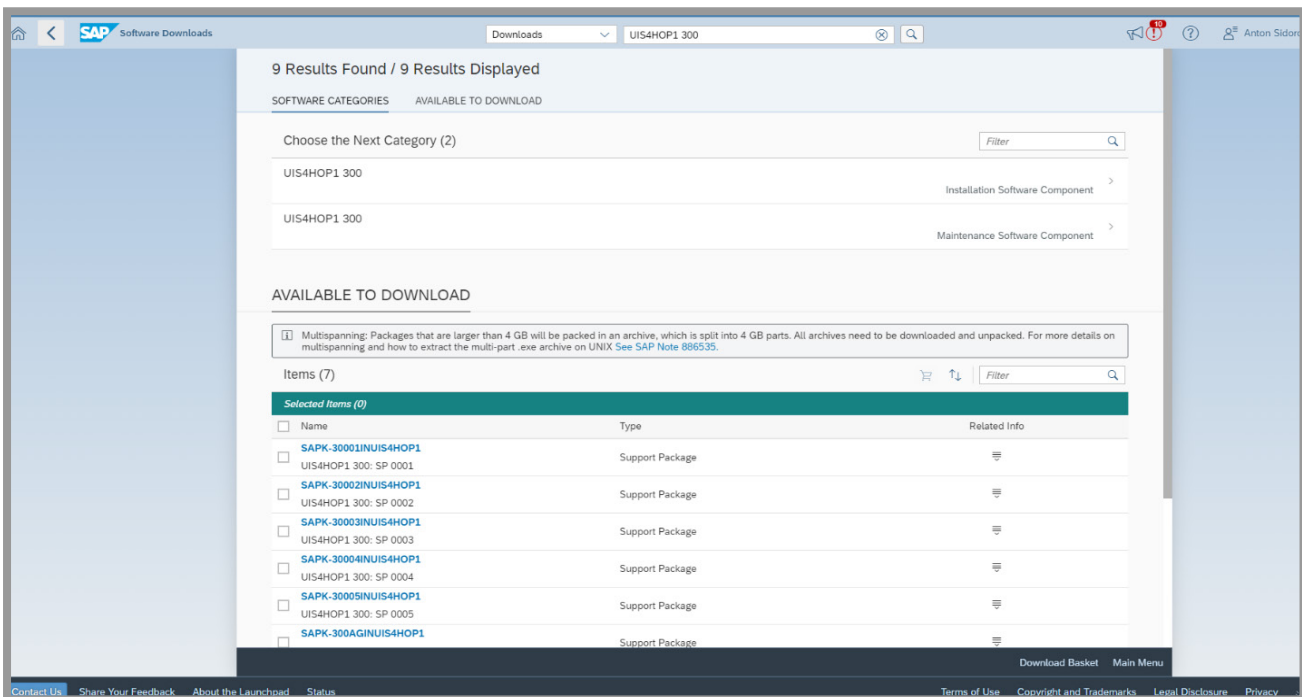


3.2 Installation in SPAM

In simple words collection of **SAP NOTES** is called as **SUPPORT PACKAGE**. Support Packages are implemented in SAP system using Transaction **SPAM** (Support Package Manager).

If you want to upgrade the release of the component, we have to perform this by using **SAINT**. Installation/verification of the installation of Front-End / Back-End components from the corresponding section for the required Fiori-app.

We verify in the **SPAM** transaction that the **UIS4HOP1 200 UI** component is installed for the Monitor Capacity Utilization Fiori application.



3.3 Settings

3.3.1 ICF-node activation

Internet Communication Framework (**ICF**) is a programming interface (API) based on interfaces and classes, used by **ABAP** programs to communicate with the Internet. **ICF** supports the Internet protocols HTTP, HTTPS, and SMTP.

Activate / verify in the **SICF** transaction that these ICF nodes are active (example for Monitor Capacity Utilization app):

```
sap/bc/ui5_ui5/sap/scm_capac_mons1
/sap/bc/ui5_ui5/sap/scm_reuse_s1
```

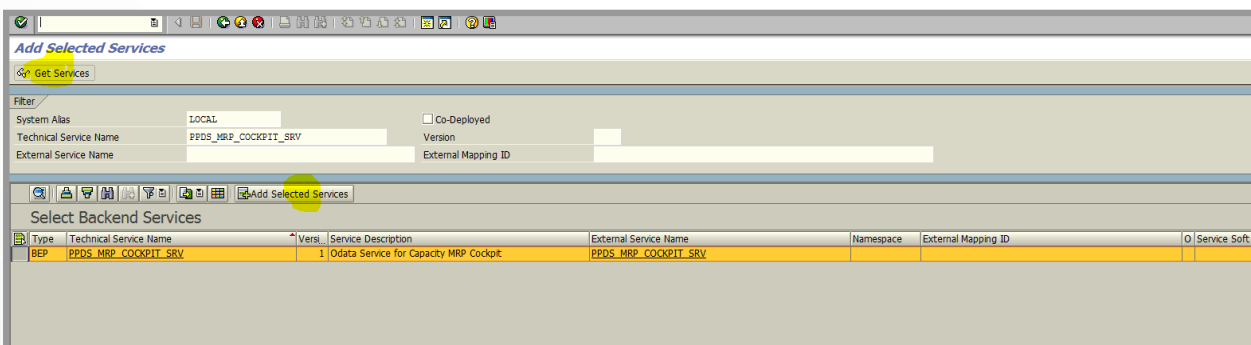
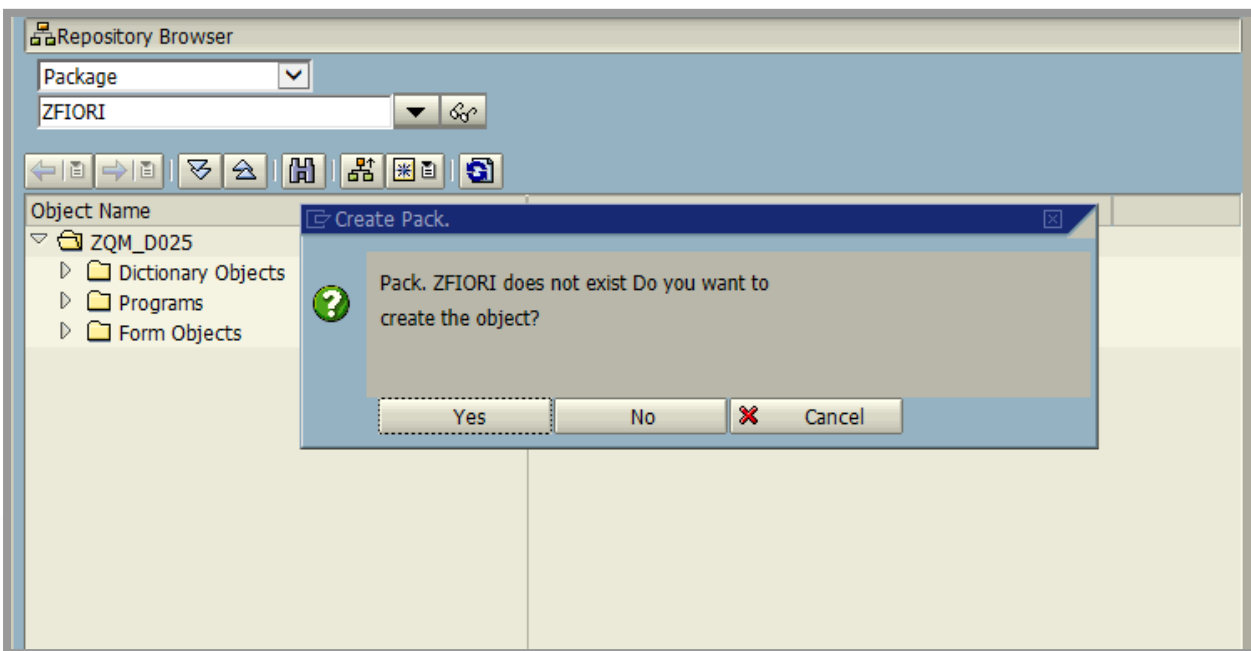
3.3.2 ODATA service activation

SAP Fiori - OData Services, **OData** is used to define best practices that are required to build and consume RESTful APIs. It helps you to find out changes, defining functions for reusable procedures and sending batch requests etc.

1. In transaction **SE80**, we must create a package for Fiori applications (for example **ZFIORI**) and assign it to transport request.
2. In transaction **/IWFND/MAINT_SERVICE** Add the ODATA service with the name specified in the IMPLEMENTATION INFORMATION section for the required Fiori-app
For Monitor Capacity Utilization:

System Alias - LOCAL

Technical Service Name - PPDS_MRP_COCKPIT_SRV

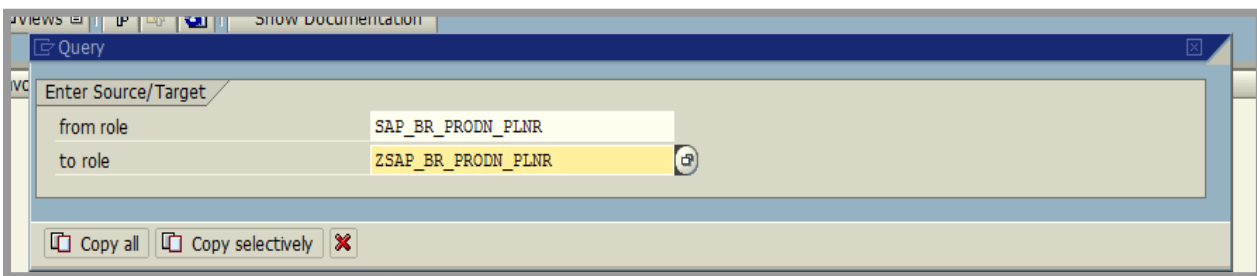


3.4 Roles

In transaction **PFCG**, create a Z-copy of the role specified in the IMPLEMENTATION INFORMATION section for the required Fiori-app

For Monitor Capacity Utilization:

SAP_BR_PRODN_PLNR > ZSAP_BR_PRODN_PLNR

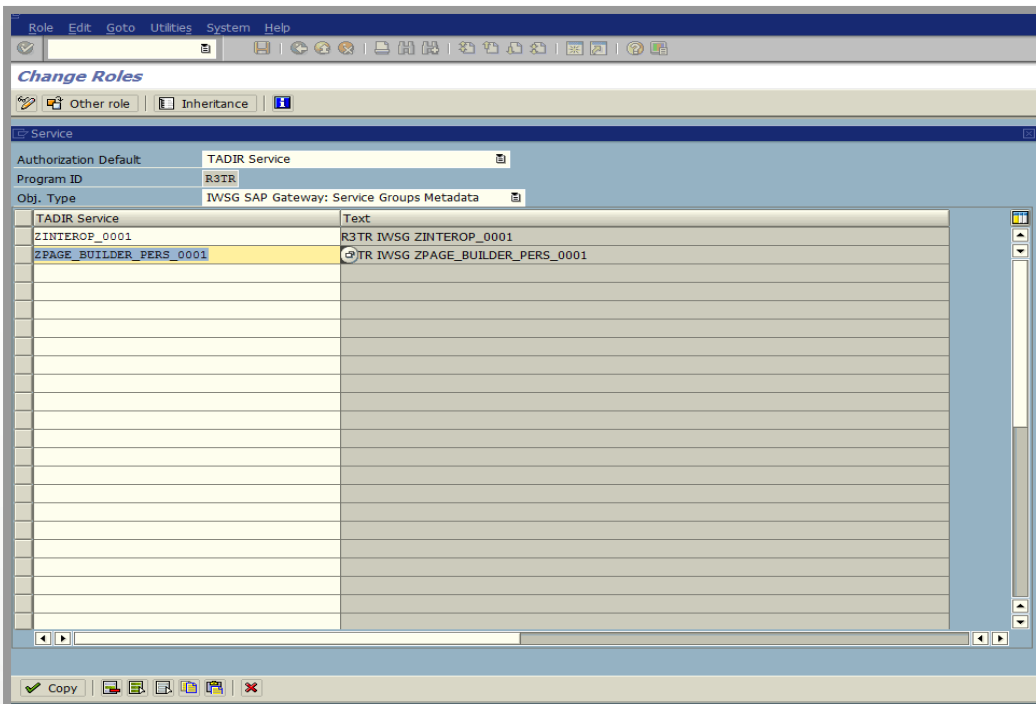


Add the role to the transport request created in step 3.2.

Click on the 'Menu' tab in the new Z-role and add 'Authorization Default'

Add IWSG authorizations for: ZINTEROP_0001 and ZPAGE_BUILDER_PERS_0001

- R3TR IWSG ZINTEROP_0001 (Menu Authorization default)
- R3TR IWSG ZPAGE_BUILDER_PERS_0001 (Menu Authorization default)



- Generate a profile for the new Z-role and verify that the Role Menu has an SAP Fiori Tile Group for the required Fiori application.

3.5. Verifying in Launchpad Designer

In transaction /UI2/FLPD_CUST (Launchpad Designer), we can verify Fiori – group, and Fiori – catalog and Target Mapping, indicated in the IMPLEMENTATION INFORMATION section for the required Fiori application.

Target Mapping(s)			
Semantic Object	Semantic Action	Parameter Key	Parameter Value
CRPRResource	monitor		
Business Catalog(s)			Extend Apps Selection
<input checked="" type="checkbox"/> Catalog Name		Catalog Description	
<input checked="" type="checkbox"/> SAP_SCM_BC_CAPA_PLAN		Capacity Planning	
Business Group(s)			
Business Group		Group Description	
SAP_SCM_BCG_CAPA_PLAN		Capacity Planning	
Business Role(s)			Extend Apps Selection
<input checked="" type="checkbox"/> Role Name		Role Description	
<input checked="" type="checkbox"/> SAP_BR_PRODN_PLNR		Production Planner	
Extensibility			

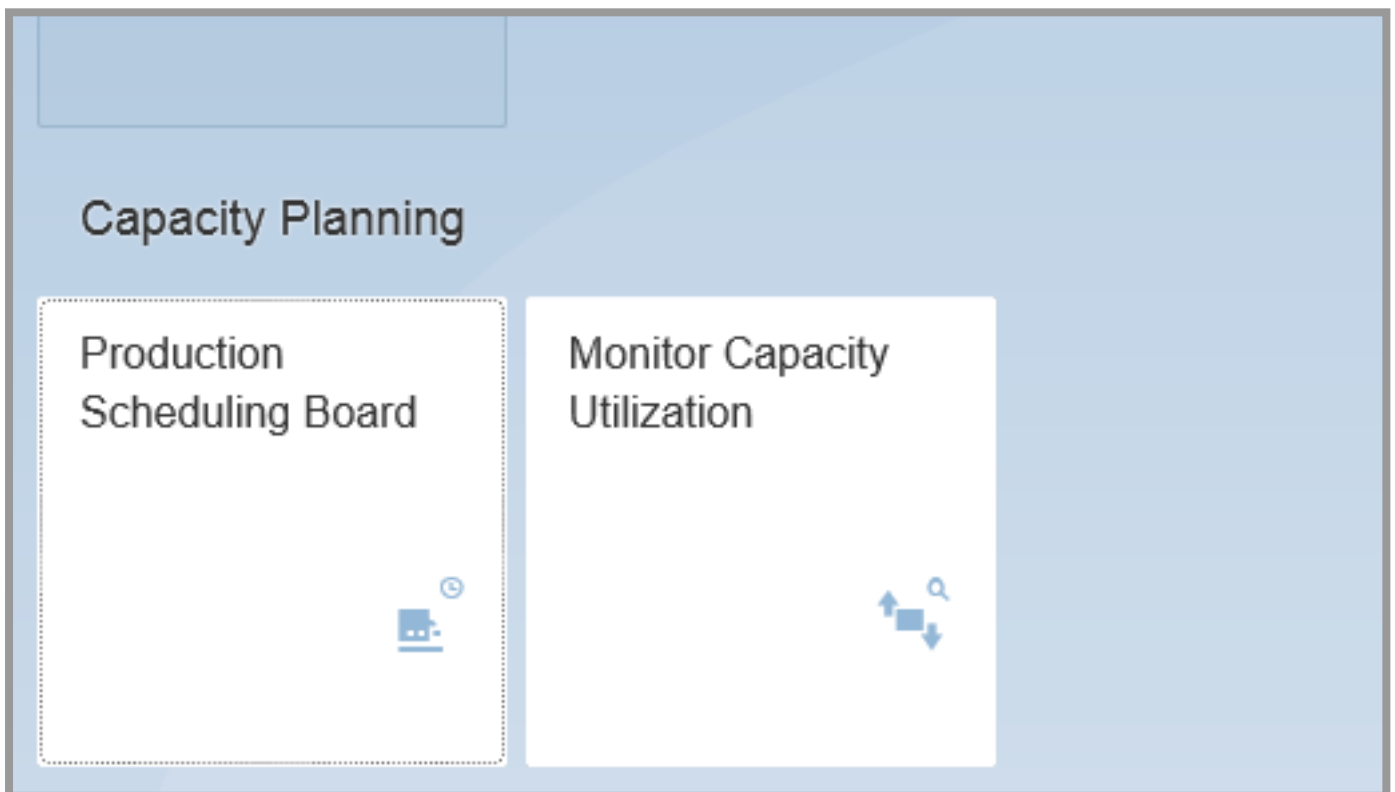
Catalogs		Groups		Capacity Planning						
Catalog Collection		ID : X-SAP-UI2-CATALOGPAGE:SAP_SCM_BC_CAPA_PLAN								
Drag to add		Target Map...								
Semantic Object	Action	Navigation Type	Information	Desktop	Tablet	Phone	Outdated	Refere...		
CRPRResource	schedule	SAPUI5 Fiori App		✓	✗	✗		✓		
CRPRResource	monitor	SAPUI5 Fiori App		✓	✓	✓		✓		
		Other		✓	✓	✓		✓		
		Other		✓	✓	✓		✓		
CRPRResource	detail	SAPUI5 Fiori App		✓	✓	✓		✓		

3.6. End-User Verification

In transaction SU01, we add the created role to the end-user.

For required Fiori-app this is new Z-role **ZSAP_BR_PRODN_PLNR** created in Step 4

In transaction /UI2/FLP (SAP Fiori Launchpad) we can check that the tiles of this Fiori application are available to the user.



Troubleshooting

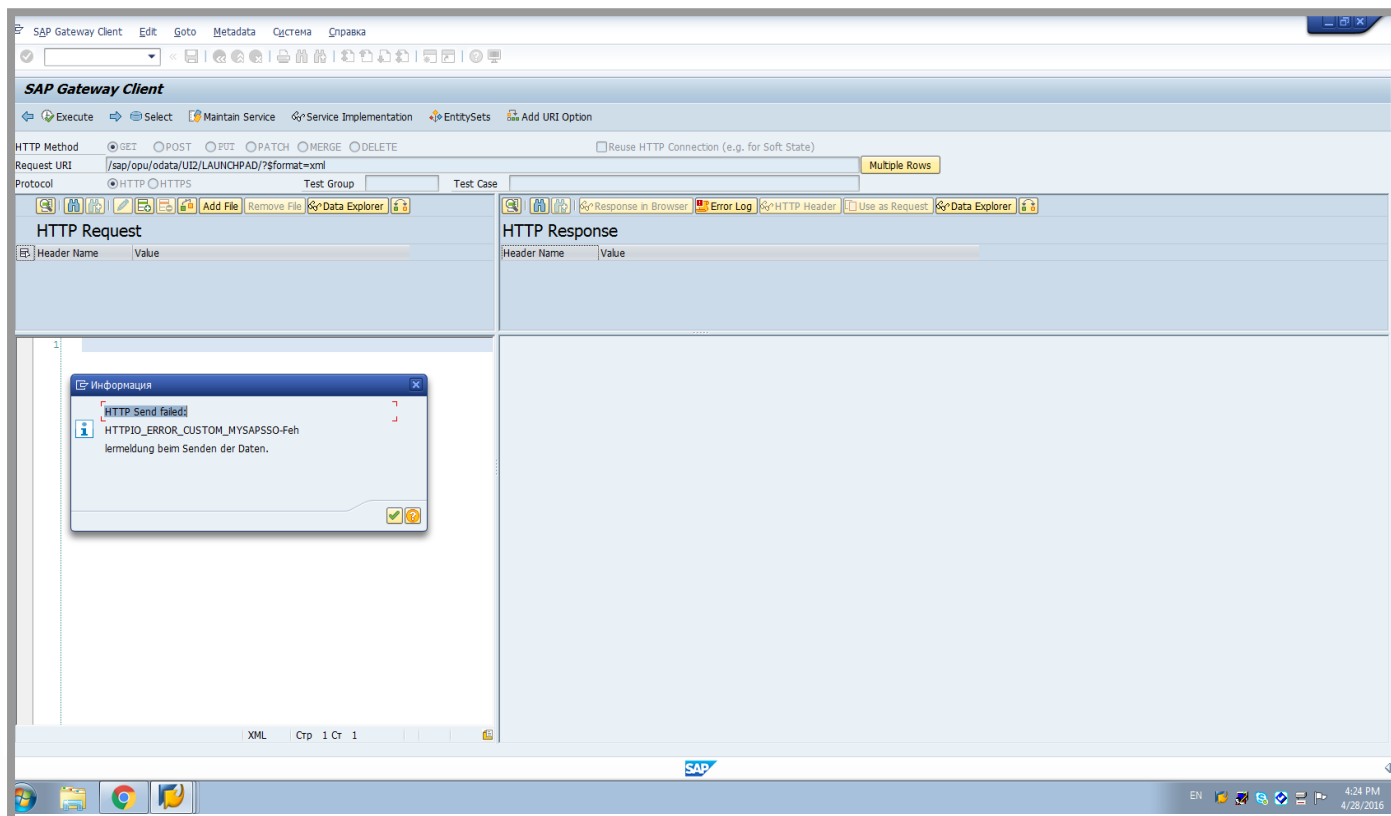
We can use transactions:

/IWFND/TRACES

/IWFND/ERROR_LOG for errors investigation.

4. Errors and solutions

4.1 Error while testing OData Service



Error description:

HTTP Send failed:

HTTPIO_ERROR_CUSTOM_MYSAPSSO-Feh

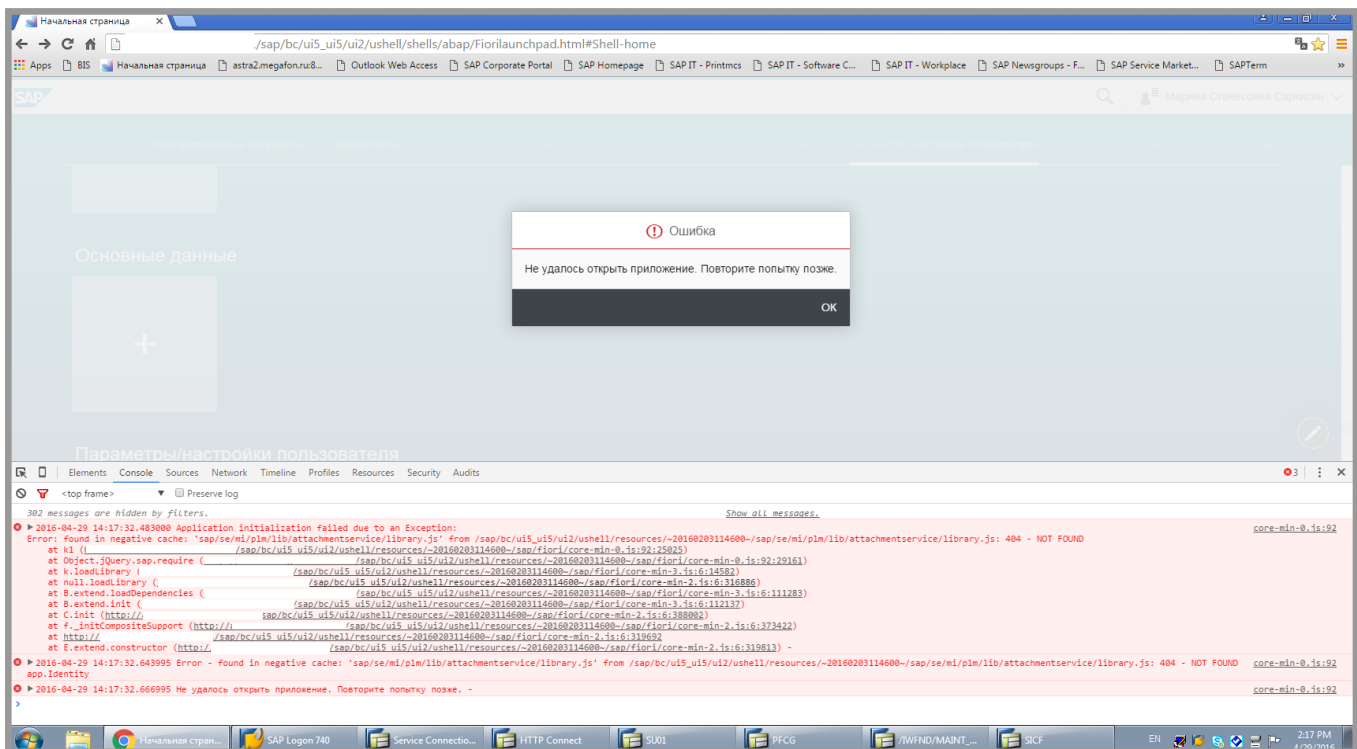
Solution:

System parameters should be set as following:

login/accept_sso2_ticket = 1

login/create_sso2_ticket = 2

4.2 Error while launching an application



Error description:

Could not open app. Please try later.

Solution:

There might be different reasons for that kind of mistakes.

- Make sure that all necessary roles are added to user;
- Make sure all OData and ICF services are activated;
- Clear cache of your browser (even in incognito mode) and hard reload;
- Clear all caches of the system in SPRO:
- SAP NetWeaver -> SAP Gateway -> OData Channel -> Administration -> Cache Settings -> Clean Up Cache and Persistency;
- SAP NetWeaver -> SAP Gateway -> OData Channel -> Administration -> Cache Settings -> Metadata -> Clear Cache;

- SAP NetWeaver -> SAP Gateway Service Enablement -> Backend OData Channel -> Support Utilities -> Clear Cache.
- Run Report /UI2/INVALIDATE_global_CACHES

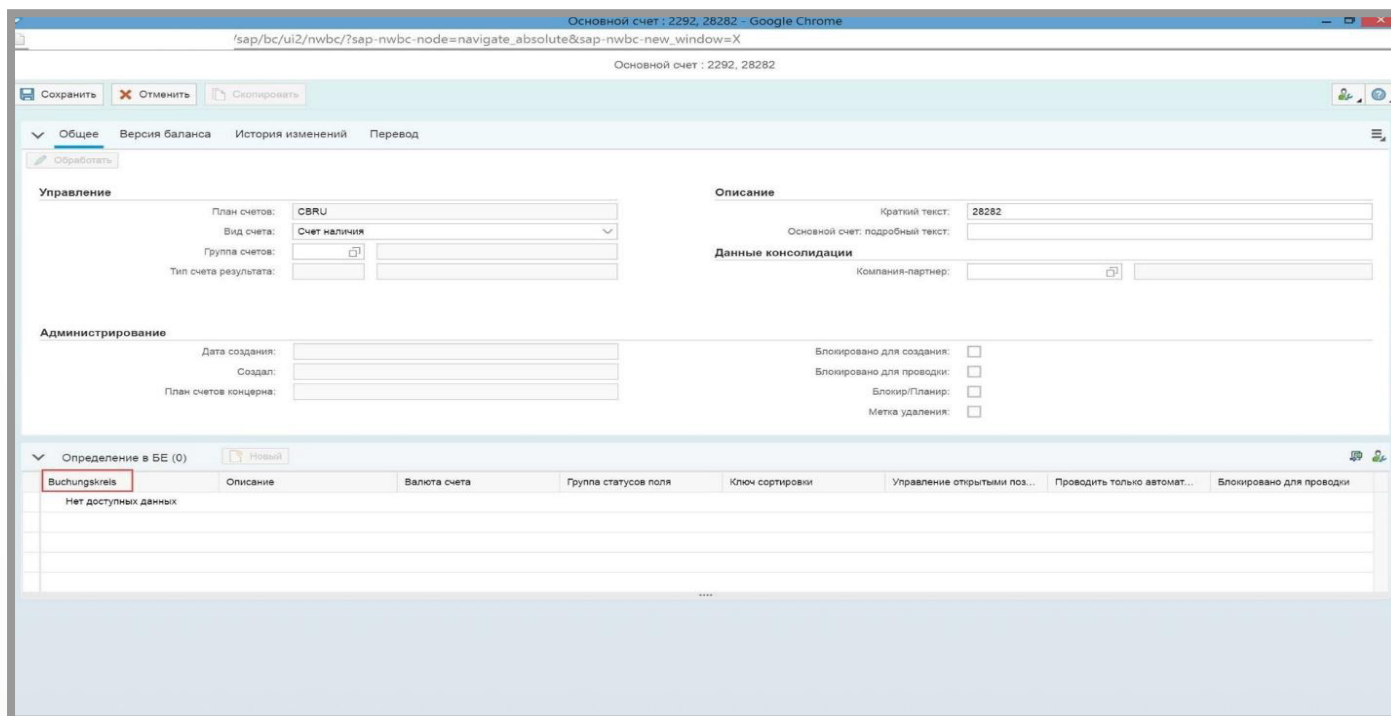
4.3 Error while activating OData service

Error description:

Metadata not loaded

Solution: Contact basis team in order to activate relevant business functions.

4.4 Error with language



Error description:

When running Fiori application not in English (for example, Russian), not all the texts are translated.

Solution:

Apply note 110910.

4.5 Error with currency

Error description:

There is an “ERROR” instead of currency in some applications.

Solution:

Apply note 2279848.

LMTEQ works on SAP Fiori implementation <https://www.lmteq.com/services/sap-fiori-implementation/> and support for various domains of your business.

Activate Fiori apps for [HR](#), [MM](#), [SD](#), [CRM](#) etc from our Fiori experts for a redefined user experience

Disclaimer:

This guide gives insights on SAP Fiori app activation for S/4HANA on a high level. In order to perform an end to end activation process, get in touch with our SAP experts today.

Drop an email to us at info@lmteq.com