Install Guide for mAssetTag 2009

Connected Worker Solutions

Copyright © 2012-2021, Innovapptive Inc. and/or its affiliates. All rights reserved

Title and Copyright

Copyright and **Terms of Use** for Install Guide for mAssetTag, a Mobile Asset Management Solution of *Connected Workforce Platform*™ .

Install Guide for mAssetTag, a Mobile Asset Management Solution of *Connected Workforce Platform*™

Product Version: *2009*

Release Date: *18 November 2020*

Document Version: *1.0*

Published Date: *18 November 2020*

Copyright © 2020, Innovapptive Inc. and/or its affiliates. All rights reserved.

Primary Author: Innovapptive Inc.

Copyright Notices: Neither our Application nor any content may be copied without inclusion of all copyright notices and/or disclaimers provided therein. Any third party provider logos or marks provided through the Application shall remain owned by such third party provider as may be indicated in a notice contained in the Application or content and you shall not modify or remove any such notice. Neither we nor our suppliers or any third party providers grant any rights or license to any logos, marks, or copyrighted material other than as expressly set forth herein.

Preface

Understand audience, know related documents and products and conventions followed in this document.

Audience

This guide is for technical configurators who Install and do related Configurations for mAssetTag, a Mobile Asset Management Solution of *Connected Workforce Platform*™ .

Related Documents and Products

- Work Order Management
- Inventory and Warehouse Management
- Operator Rounds
- Inspections Checklist
- Fixed Asset Management
- Field Procurement
- Analytics and Dashboards

Contact Innovapptive

For information on Innovapptive products, visit the Innovapptive's Support Portal at http://helpdesk.innovapptive.com.

The updates to this document are published on this support portal. Check this website periodically for updated documentation.

For additional information about this document, send an email to documentation@innovapptive.com.

Document Conventions

Table 0-1 Conventions followed in the document

Convention	Meaning
boldface	Indicates graphical user interface elements associated with an action, or terms defined in text or the glossary.
italic	Indicates book titles, emphasis, or placeholder variables for which you supply values.

Table 0-1 Conventions followed in the document (continued)

Convention	Meaning
`monospace`	Indicates commands within a paragraph, URLs, code in examples, text that appears on the screen, or text that you enter

Contents

Title and Copyright 2

Preface 3

1. Install mAssetTag 7

1.1. Install supporting systems 7

1.2. Install mAssetTag 9

2. Install RACE™ SAP® ECC and Gateway 12

2.1. Install RACE™ SAP® ECC and Gateway Add-ons and support packs 13

2.1.1. Verify SAP® ECC RACE™ Add-On 16

2.1.2. Verify SAP® GW RACE™ Add-On 18

2.2. Install RACE™ SAP® ECC and Gateway support packs 18

2.3. Activate RACE™ OData Service 23

2.4. Activate UI5 Service 25

2.5. Activate FIORI Service 27

2.6. Import RACE™ SAP® ECC and Gateway ABAP Transports 29

2.6.1. Transport Import procedure 30

2.6.2. Verify SAP® ECC RACE™ Transport 32

2.6.3. Verify SAP® GW RACE™ Transport 34

2.6.4. Activate RACE™ OData Service 34

2.6.5. Activate UI5 Service 36

2.6.6. Activate FIORI Service 38

3. Install mAssetTag SAP® ECC, Gateway, and UI5 41

3.1. Install mAssetTag SAP® ECC, Gateway, and UI5 Add-ons and support packs 42

3.1.1. Verify SAP® ECC MAT Add-On 46

3.1.2. Verify SAP® GW MAT Add-On 48

3.2. Install mAssetTag SAP® ECC, Gateway, and UI5 support packs 50

3.3. Activate mAssetTag OData Service 55

3.4. Activate Gateway UI5 Service 56

3.5. Activate Gateway FIORI Service....58
3.6. Import mAssetTag SAP® ECC, Gateway and UI5 Transports....60
3.6.1. Verify SAP® ECC MAT Transport....61
3.6.2. Verify SAP® GW MAT Transport....63
3.6.3. Activate mAssetTag OData Service....65
3.6.4. Activate Gateway UI5 Service....66
3.6.5. Activate Gateway FIORI Service....68
4. Check Schema Change Indicator....71
5. Clean SAP Gateway....73
6. Configure SAP Gateway for mAssetTag....74
6.1. Prerequisites for SAP Gateway Configuration....74
6.2. Configure application global settings....75
6.3. Configure application modules and screens....76
6.4. Configure RACE™ in SAP Gateway....77
6.5. Configure mAssetTag modules in Gateway....79
6.6. Configure Search Function Module....81
6.7. Configure extensions for mAssetTag....82
7. Configure RACE™ for mAssetTag....89
7.1. Features of RACE™....90
7.2. How to Configure RACE™ for mAssetTag....91
8. SAP transactions and tables for mAssetTag....92
9. Implement BADIs....93
9.1. List of BADIs for mAssetTag....93
10. Update Resource File....100
11. Download App and Install....107

1. Install mAssetTag

Ensure that the preinstallation requirements are met before you install mAssetTag. See *Pre Install or Pre Upgrade Configurations Guide* for information.

mAssetTag installation process involves two stages:

- Install supporting systems *(on page 7)*
- Install mAssetTag *(on page 9)*

1.1. Install supporting systems

Install the following supporting systems as part of the preinstallation requirements.

Table 1-1 Prerequisites

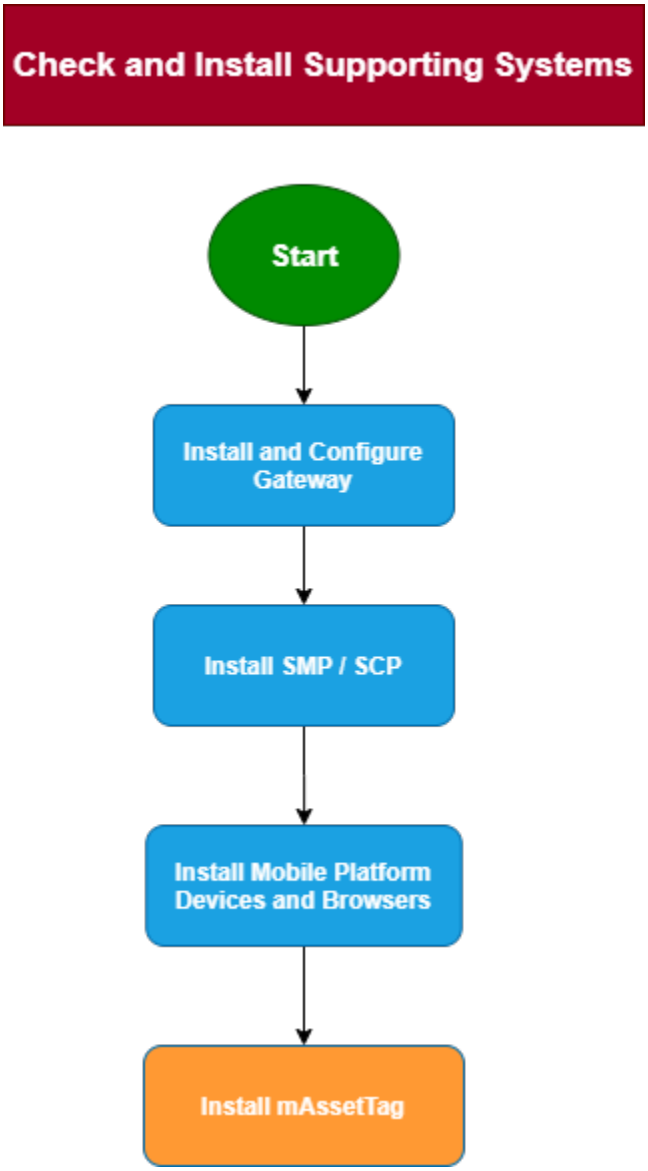
System and Software	• SAP ECC Business Suite backend 6.0 EHP 5 and above with SAP_BASIS component (702 and above) connected to the mobile infrastructure (NetWeaver gateway, SMP/SCPms). • SAP NetWeaver Gateway 7.4 and above with SAP_BASIS component (740 and above), SAP_GWFND component (SP 10 and above) and SAP_UI component (SP 13 and above). • SPAM/SAINT version with at least 69. • SMP 3.0 SP 10 and above or SCP with Cloud Connector is already configured. • SAP SCP Client Tenant. • SAP Cloud Connector minimum 2.x and above (latest version is recommended).
Access	• SAP Basis System Admin with access to 000 clients in Gateway and ECC systems. • Access to SAP File directory **usr/sap/trans/EPS/in** to upload PAT files.

Table 1-1 Prerequisites (continued)

Assumptions	Access to the RACE™ portal can be completed after the RACE™ admin user credentials setup is completed.

Install the supporting systems in the order defined in the flow.

Figure 1-1 Install Systems



1.2. Install mAssetTag

Once you complete all pre-installation requirements, begin mAssetTag installation. The following flow gives you an overview of the steps involved in installing mAssetTag.

Figure 1-2 Installation configurations for MAT

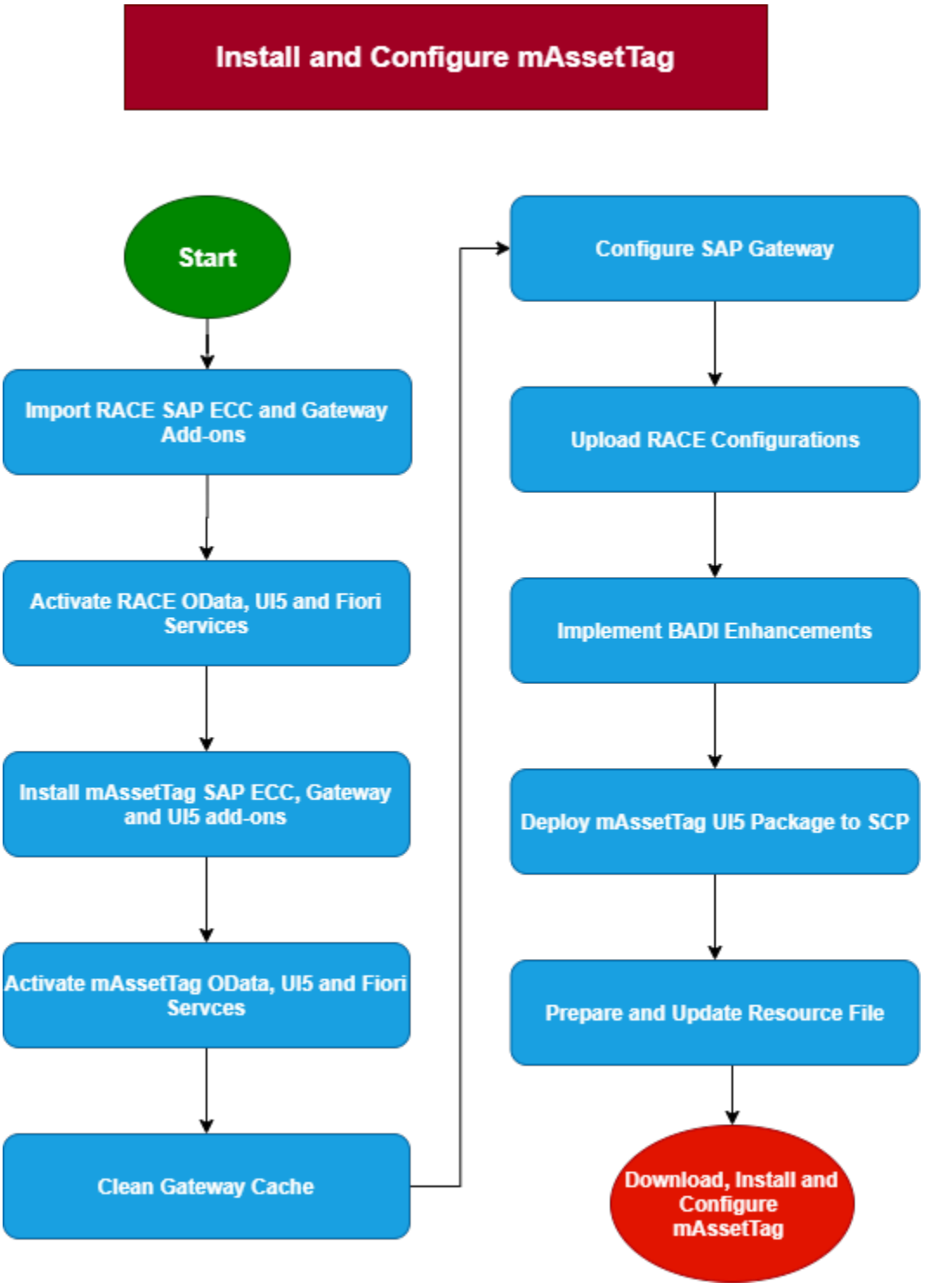


Table 1-2 References

Task	Reference to section
Install RACE™ SAP ECC and Gateway Add-ons or Support Packs / Import Transports	• Install RACE™ SAP® ECC and Gateway *(on page 12)* • Import RACE™ SAP® ECC and Gateway ABAP Transports *(on page 29)*
Activate RACE™ oData, UI5, and Fiori Services	Activate RACE™ OData Service *(on page 23)*
	Activate UI5 Service *(on page 25)*
	Activate FIORI Service *(on page 27)*
Install mAssetTag SAP ECC, Gateway and UI5 Add-ons/ Import Transports	• Install mAssetTag SAP® ECC, Gateway, and UI5 *(on page 41)* • Import mAssetTag SAP® ECC, Gateway and UI5 Transports *(on page 60)*
Activate mAssetTag oData, Gateway UI5 and Fiori Services	Activate mAssetTag OData Service *(on page 55)*
	Activate Gateway UI5 Service *(on page 56)*
	Activate Gateway FIORI Service *(on page 58)*
Check Schema Indicator	Check Schema Change Indicator *(on page 71)*
Clean Gateway Cache	Clean SAP Gateway *(on page 73)*
Configure SAP Gateway for mAssetTag	Configure SAP Gateway for mAssetTag *(on page 74)*
Upload the Configurations in Excel format to RACE™ Application	How to Configure RACE™ for mAssetTag *(on page 91)*
Implement BADI enhancements	Implement BADIs *(on page 93)*
Prepare & Update Resource File	Update Resource File *(on page 100)*
Download and Install App	Download App and Install *(on page 107)*

2. Install RACE™ SAP® ECC and Gateway

Add-On: All the transports of previous releases and the transports of the current release are packaged into a single add-on for the main release. For example, 2003, 2006 and so on. Install the add-on for the current release that is provided by Innovapptive representative.

Transport: Only the changes for that HotFix are packaged into a transport. You MUST install all the transports till date and must install them in the order they are mentioned. Even a single misplaced installation of transport could result in installation errors.

Note:
Ask your Innovapptive contact for the latest add-ons and support-packs and these components will be provided in a compressed file format, such as .zip, .rar, and sent to you either through email or through FTP.

Table 2-1 RACE™ ECC Add-On and Support Packages

Type	Add-On	Description	Dependency
Add-On	EWI0090055494_-0000006.PAT	IN-NOV:RACE™:2009:ECC Objects	None

Table 2-2 RACE™ Gateway Add-On and Support Packages

Type	Add-On	Description	Dependency
Add-On	NWH0090055495_-0000002.PAT	IN-NOV:RACE™:2009:Gate-way Objects	None
SP01 - Support Pack	NWH0090055495_-0000012.PAT	IN-NOV:RACE™:2009_-FIORI Application	Install RACE™ Add-On (NWH0090055495_-0000002.PAT) before importing SP01.

Table 2-2 RACE™ Gateway Add-On and Support Packages (continued)

Type	Add-On	Description	Dependency
Transport	NG5K907770	INNOV:RACE™: 2009_FIORI Launch-pad Configurations	Import the SP01 Support pack (NWF0090055495_-0000012.PAT) before importing the trans-port (NG5K907770).

2.1. Install RACE™ SAP® ECC and Gateway Add-ons and support packs

Install the add-ons and support packs at one go using the steps given below. However, if you have already installed add-ons and now you want to install the support packs (hotfixes), follow the procedure detailed in Support packs installation procedure *(on page 18)*.

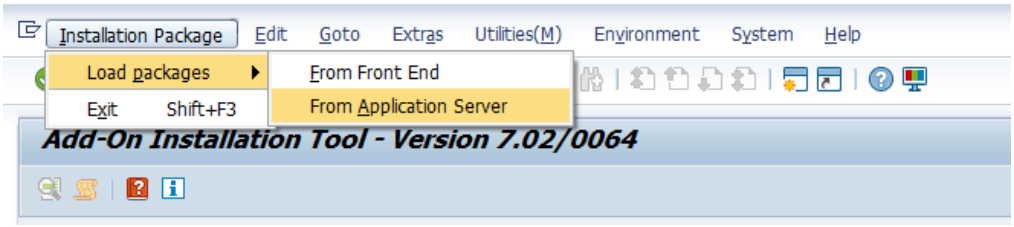
To install RACE™ SAP® ECC and Gateway add-ons:

1. Extract the zip or .rar files that you received from Innovapptive representative and save them to your local machine.
2. Upload/copy the Add-On files and Support Packs from software deployment package to the USR/SAP/TRANS/EPS/in path on SAP ECC & GW systems.

> **Note:**
> Upload all the add-ons and support packs that are mentioned in the tables.

3. Log in to **000** clients of SAP GW / ECC System (based on the Add-On being imported).
4. Navigate to the transaction code **SAINT**.
5. Navigate to **Installation Package**, **Load Packages**, **From Application Server**.

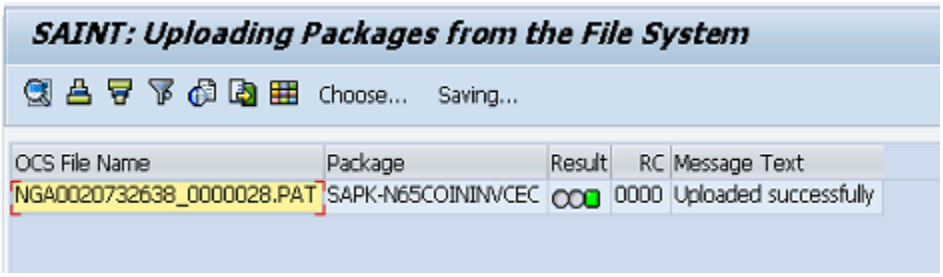
Figure 2-1 SAINT



6. Click **Yes** in the confirmation screen.

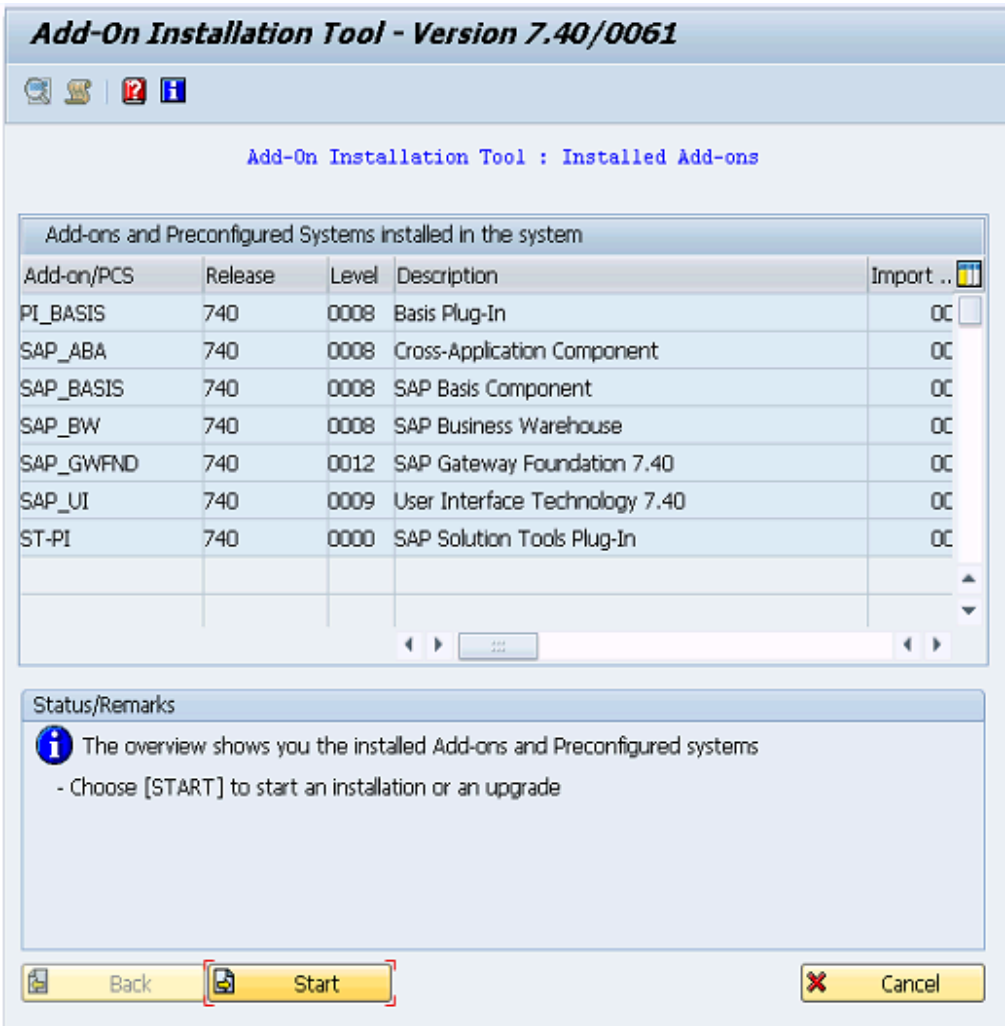
   Packages are loaded in the file system

Figure 2-2 SAINT: Upload Packages



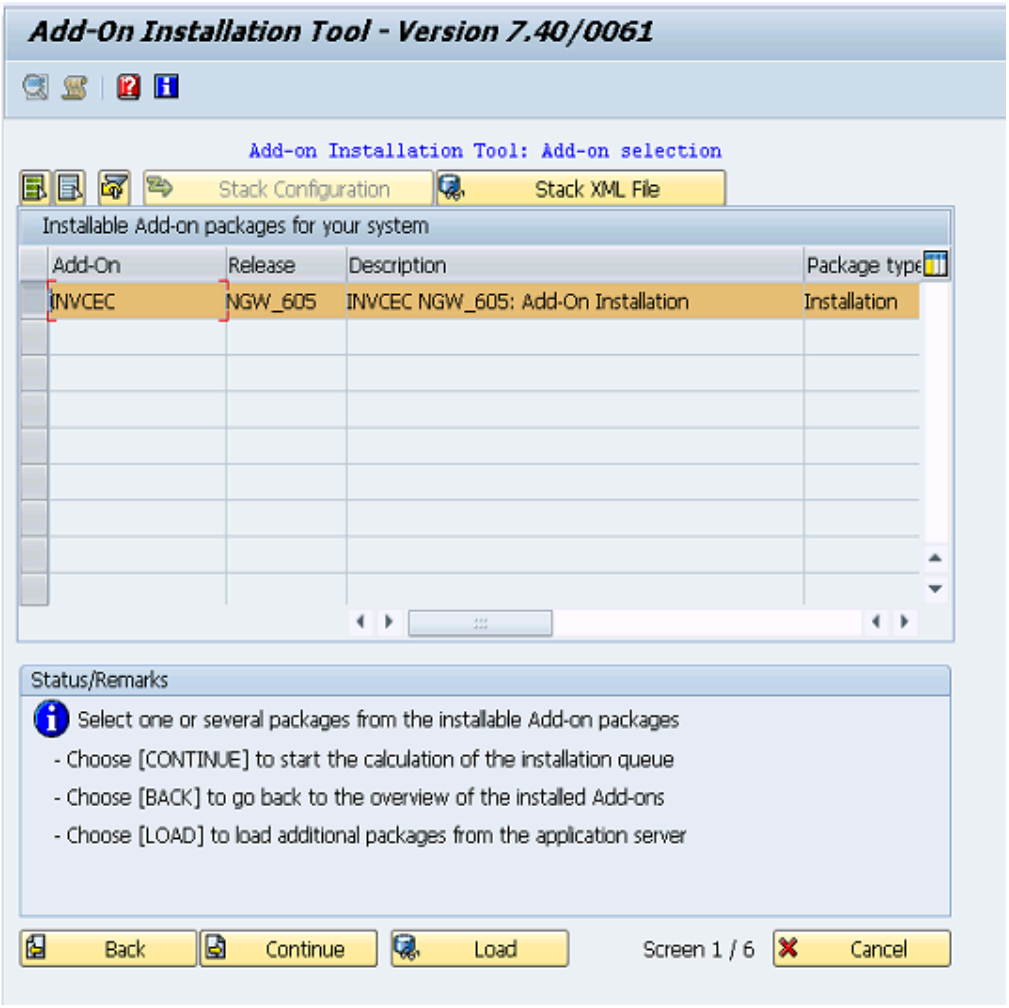
7. Once the packages are loaded, go back to the main screen, and click **Start**.

Figure 2-3 Installed Add-ons



8. Select the Add-On in the next screen and click **Continue**.

Figure 2-4 Select Add-on

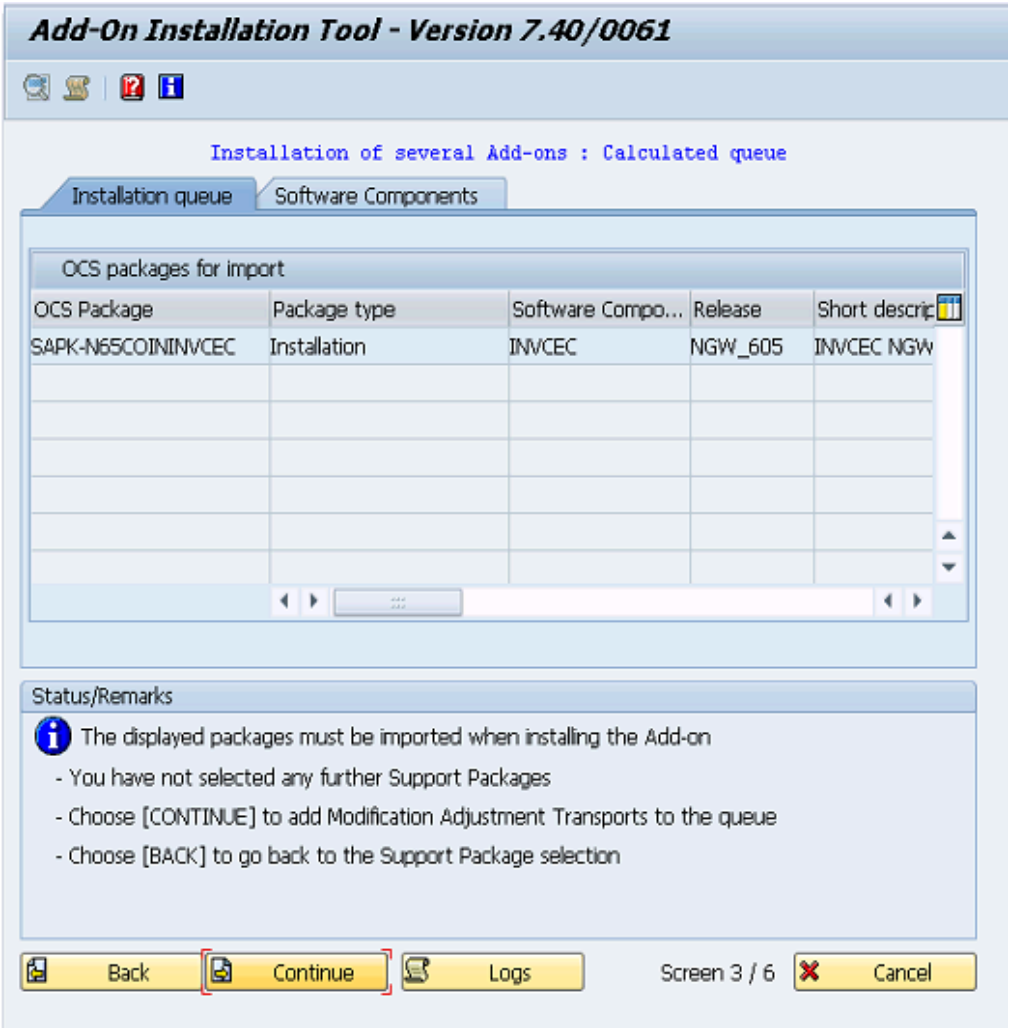


9. Click **Continue** in the next screen.

   The OCS packages that are going to be imported are displayed in the next screen.

10. Click **Continue** to proceed to the next step.

Figure 2-5 Add-on Queue



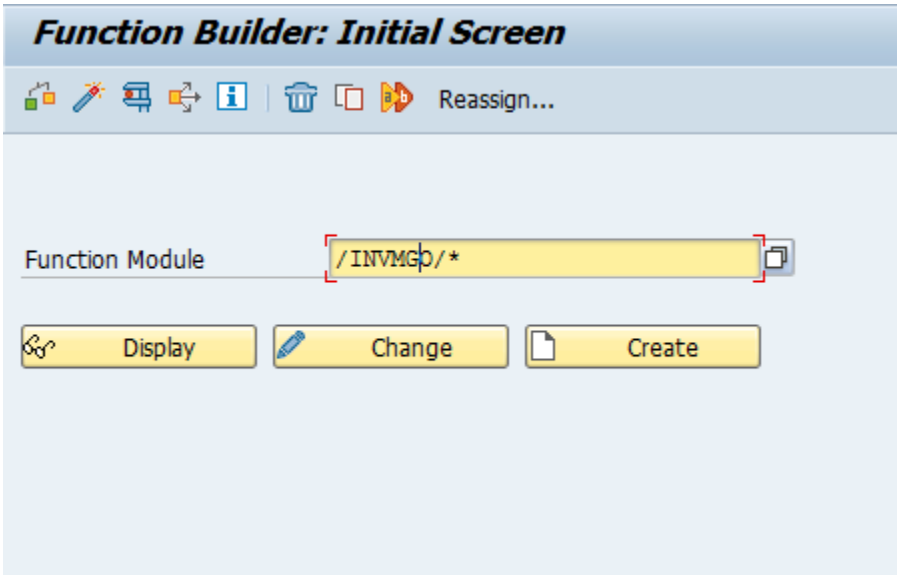
11. Click **No,** when asked to add Modification Adjustment Transports to the queue.
12. Click the **Import** icon.
13. Click **Finish**.

2.1.1. Verify SAP® ECC RACE™ Add-On

To verify the SAP® ECC RACE™ add-on:

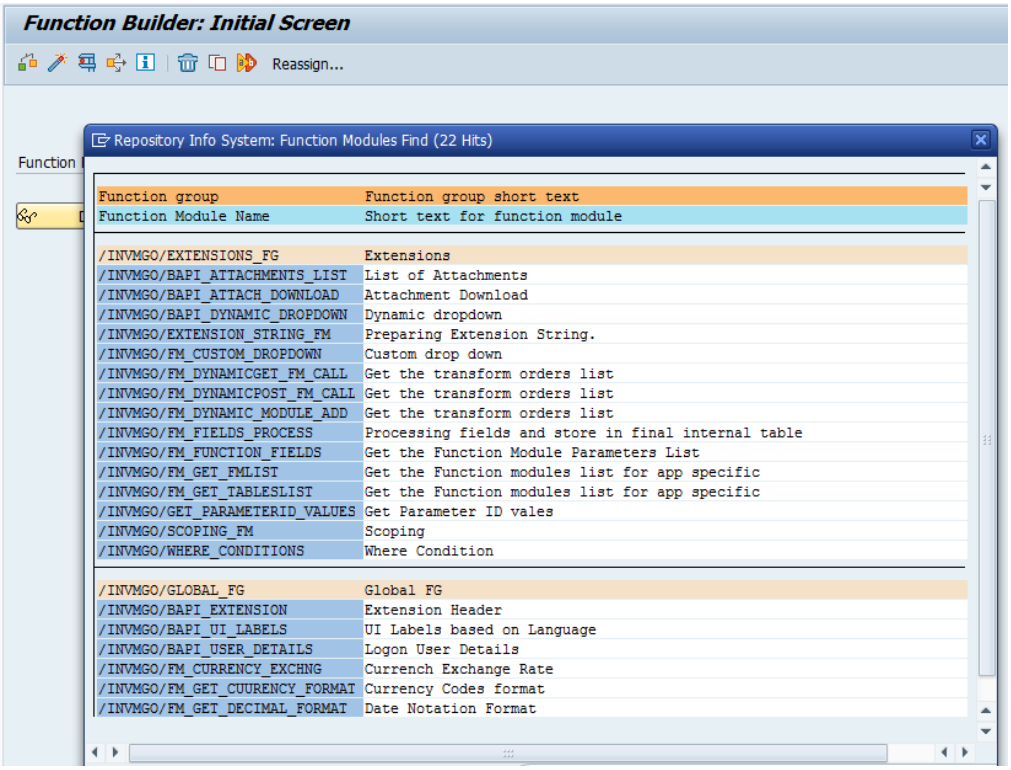
1. Run the transaction code **SE37**.
2. Enter **object type** to search for all objects **/INVMGO/***.

Figure 2-6 Function Builder Initial Screen



3. Press **<F4>** to view the list of classes and capture the screenshot(s) to share the results.

Figure 2-7 Function Module Classes

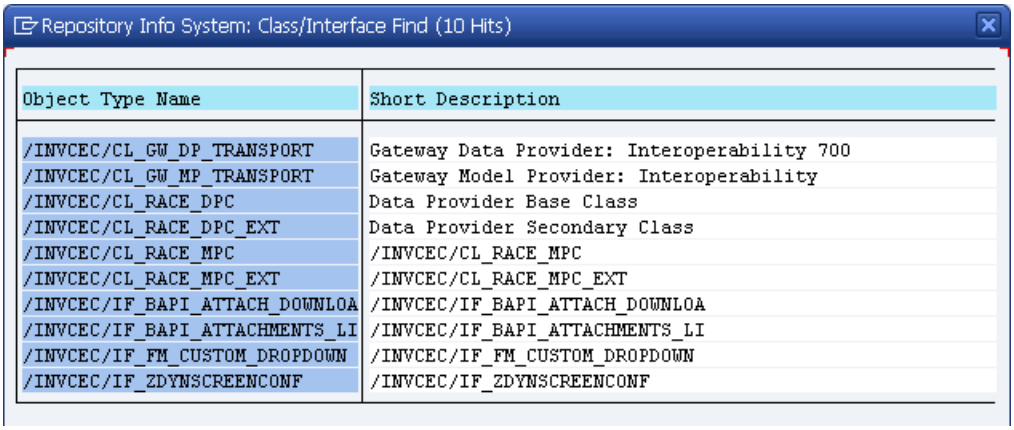


2.1.2. Verify SAP® GW RACE™ Add-On

To verify the SAP® GW RACE™ add-On:

1. Navigate to the transaction code **SE24**.
2. Enter **object type** to search for all objects **/INVCEC/***.
3. Press **<F4>** to view the list of classes and capture the screenshot(s) to share the results.

Figure 2-8 Object Classes



2.2. Install RACE™ SAP® ECC and Gateway support packs

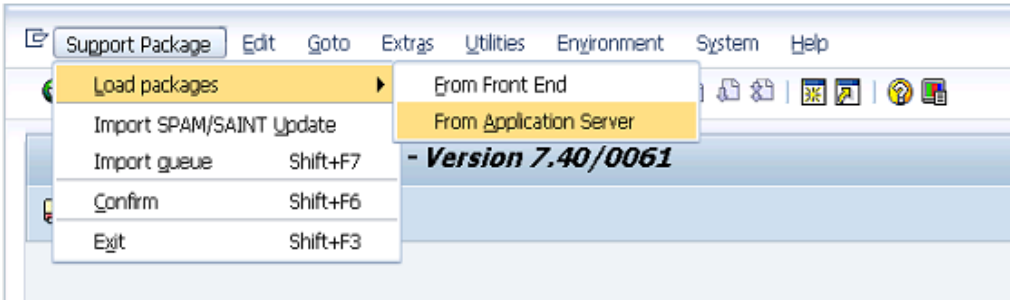
If you have installed the add-ons and are installing only the support pack (hotfixes), follow the steps described below.

To install the RACE™ SAP® ECC and Gateway support pack:

1. Log in to **000** client of SAP GW & ECC System (based on the support pack being imported).
2. Navigate to the transaction code **SPAM**.
3. Navigate to **Support Package**, **Load Packages**, **From Application Server**.

   A confirmation message appears to confirm loading of packages.

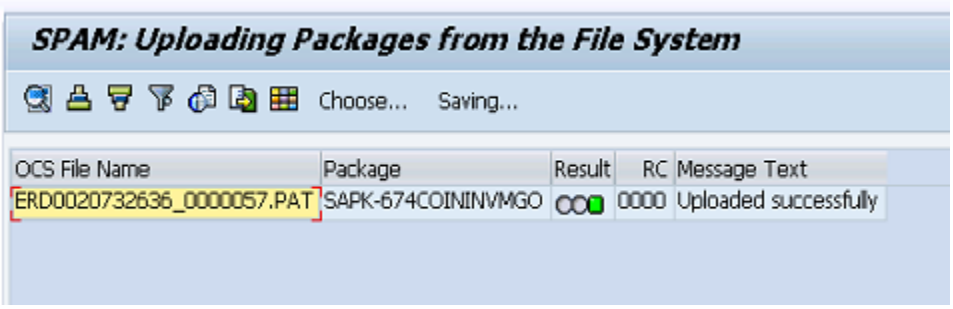
Figure 2-9 SAINT



4. Click **Yes** in the confirmation screen.

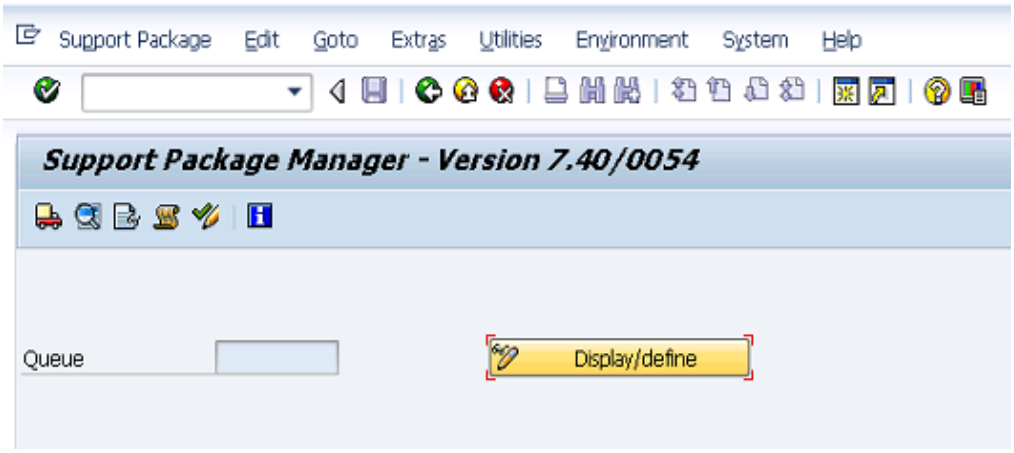
   Packages are loaded in the file system

Figure 2-10 SAINT: Upload Packages



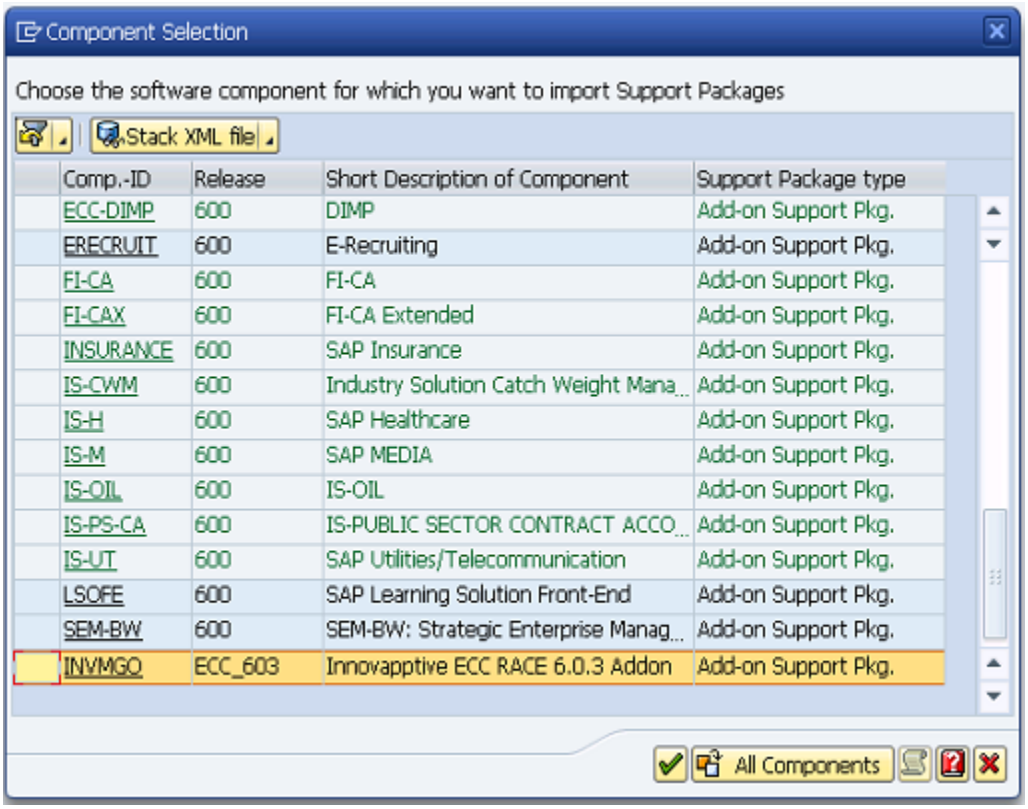
5. Once the packages are loaded, go back to the main screen, and click **Display/define**.

Figure 2-11 Support Package Manager



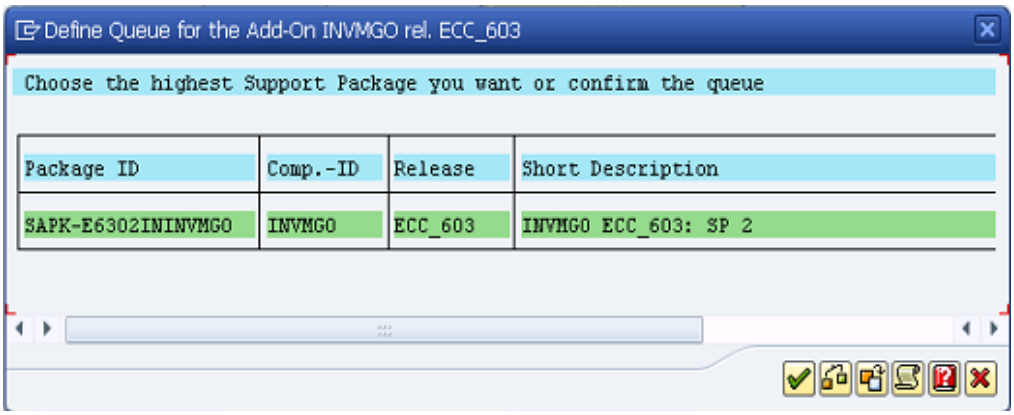
6. Choose the software component for which you want to import Support Packages and click .

Figure 2-12 Component Selection



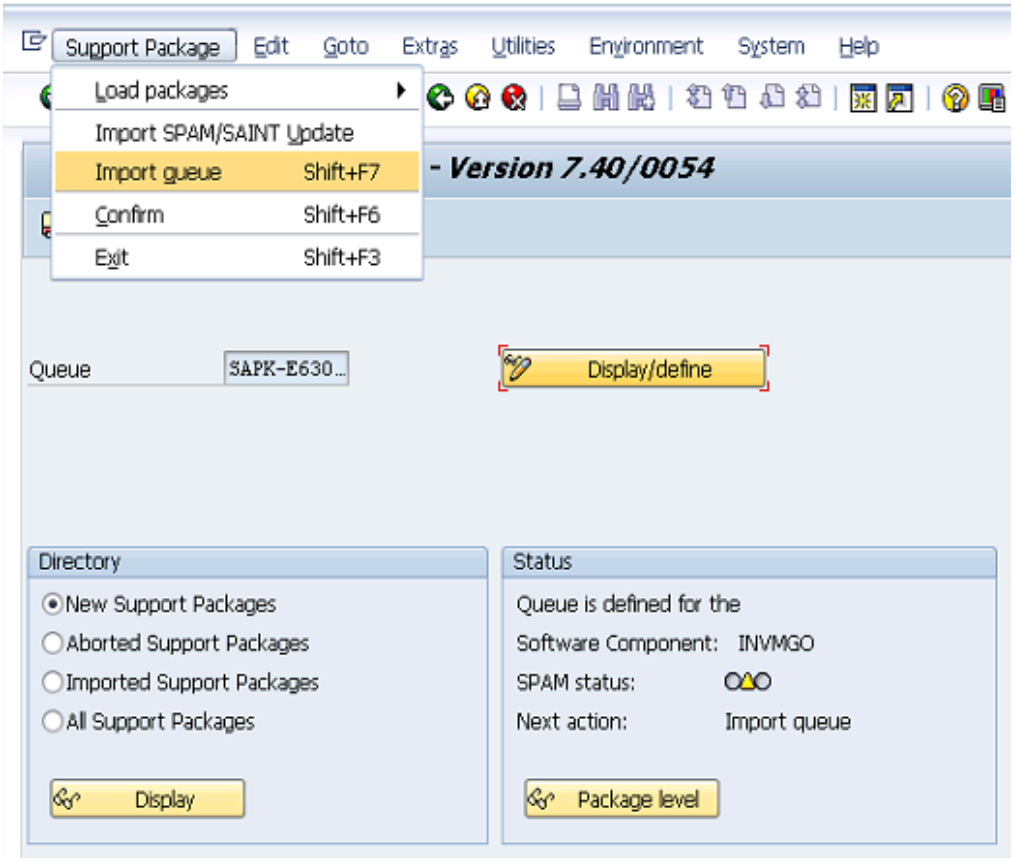
7. If all the conditions are met, and you get the package (**green**) click .

Figure 2-13 Confirm Queue



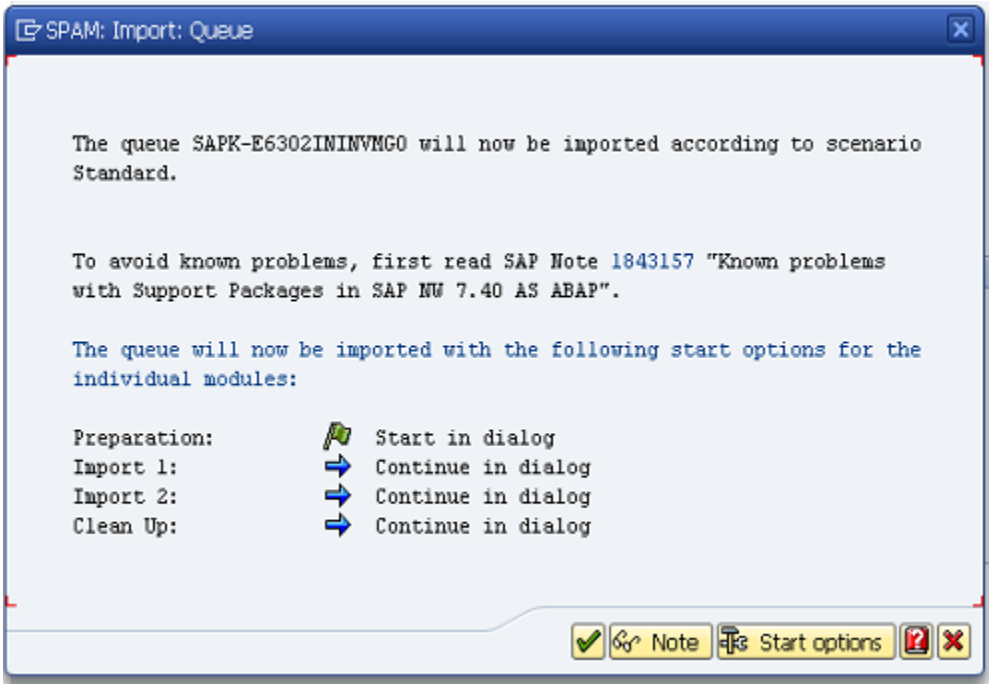
8. Click **No**, when asked to add Modification Adjustment Transports to the queue.
9. Go to **Support package** in the menu bar and click **Import Queue**.

Figure 2-14 Import Queue



10. Click to start the import process.

Figure 2-15 Import Queue Confirm



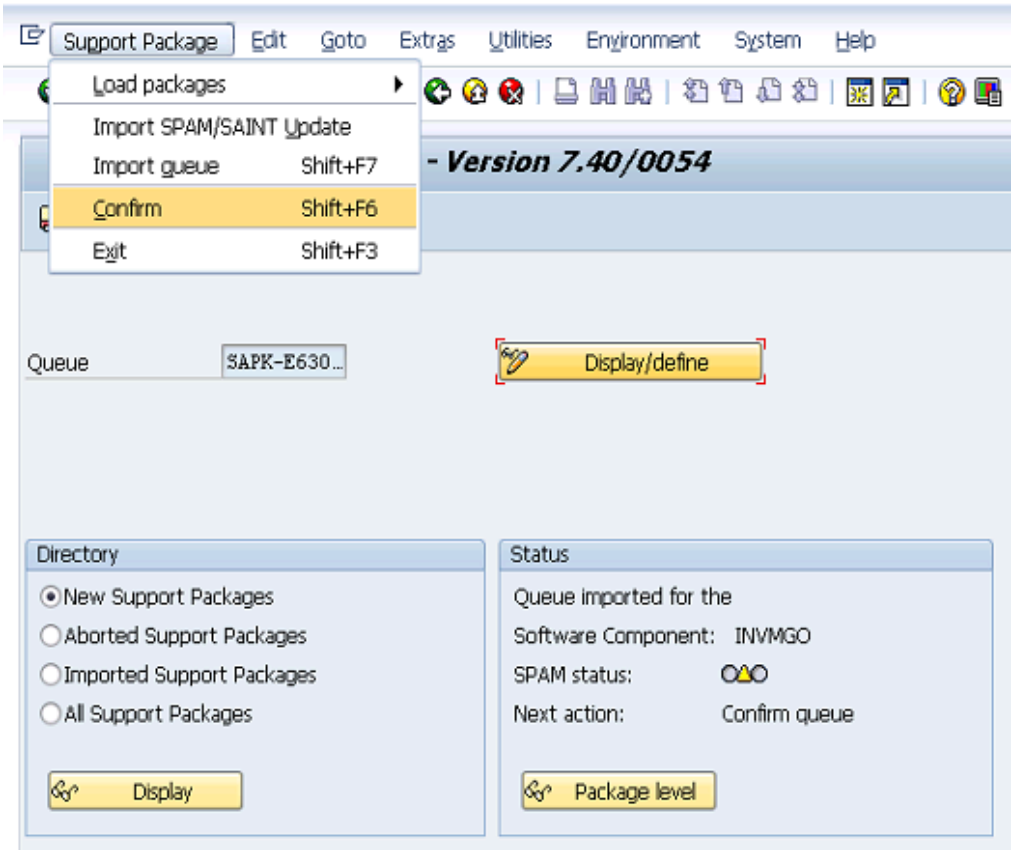
11. Once the package is imported, a confirmation screen appears. . Click in the screen.

12. Go to **Support Package** in the menu bar and click **Confirm**.

    A confirmation message appears.

> **Note:**
> If you face any issues/errors while installing the Add-On/Support pack, send log files with screenshots and details of the error to your **Innovapptive SAP Basis team** contact assigned to your project.

Figure 2-16 Confirm Support Package



2.3. Activate RACE™ OData Service

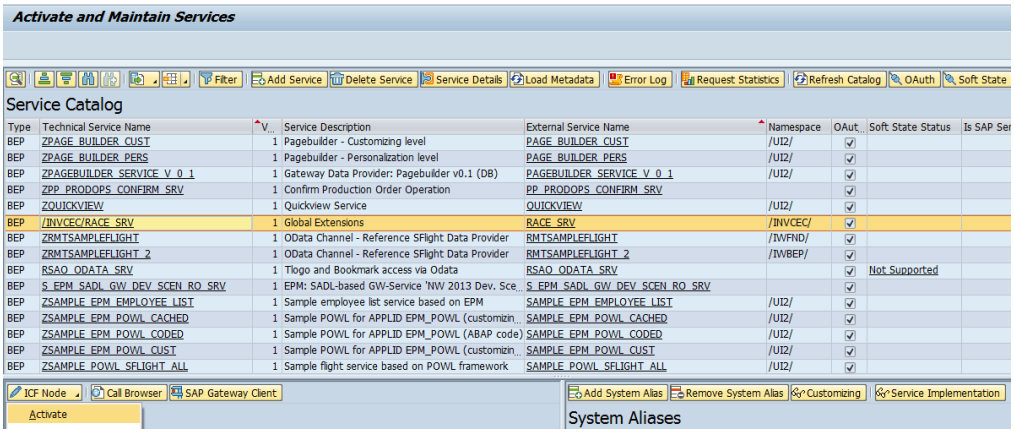
Once add-on and support packs are installed, activate RACE™ OData Service.

To activate the RACE™ OData service:

1. Login to Gateway system.
2. Navigate to the transaction **/IWFND/MAINT_SERVICE**.
3. Select the service **/INVCEC/RACE_SRV**.
4. Click **Activate** from the drop-down list of **ICF Node** options.

   A message appears notifying the package selection appears.

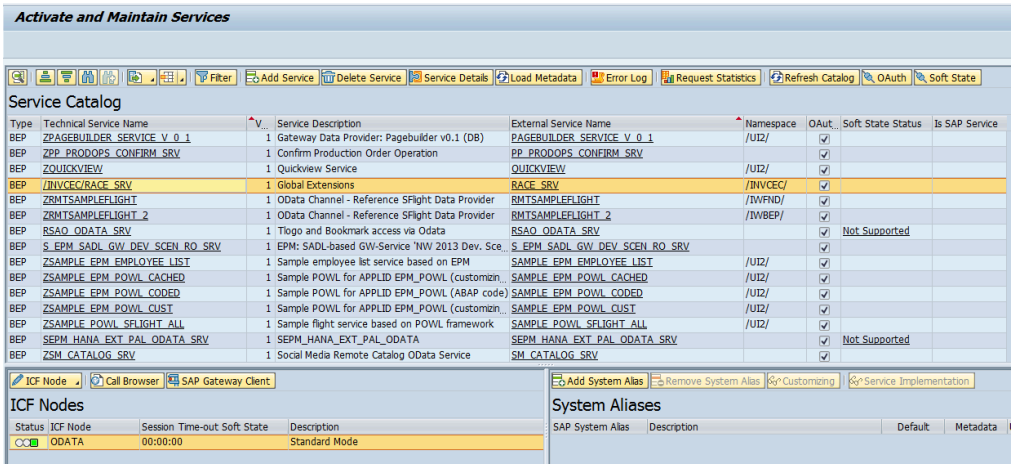
Figure 2-17 Activate and Maintain Services



5. Click the **Local Object** button and continue to activate the service.

   The OData service is activated and the status turns **green**.

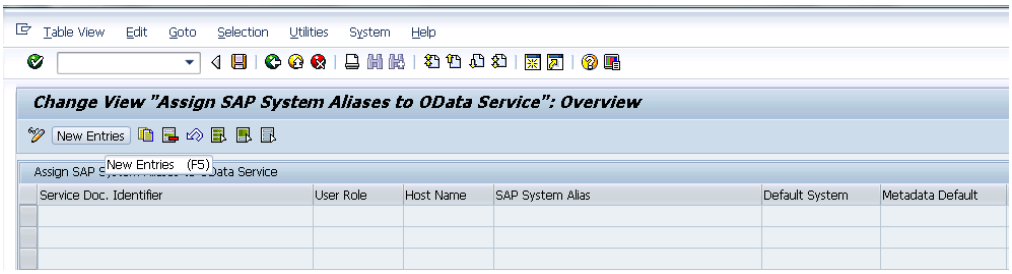
Figure 2-18 Service Status



6. Click **Add System Alias** above **System Aliases** on the right to add the SAP System alias for the selected service.

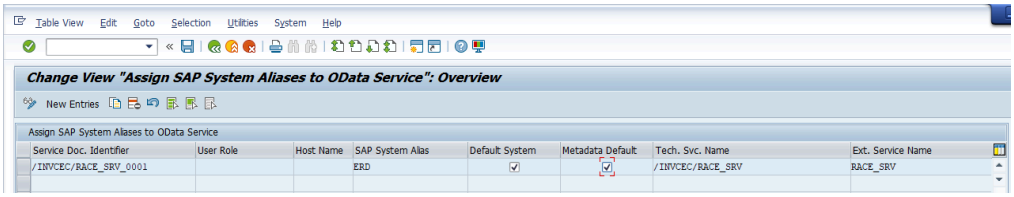
7. Click **New Entries**.

Figure 2-19 New Entries for System Alias



8. Assign the System Alias (ERD in this case) for the service and save changes.

Figure 2-20 Assign SAP System Alias to Service



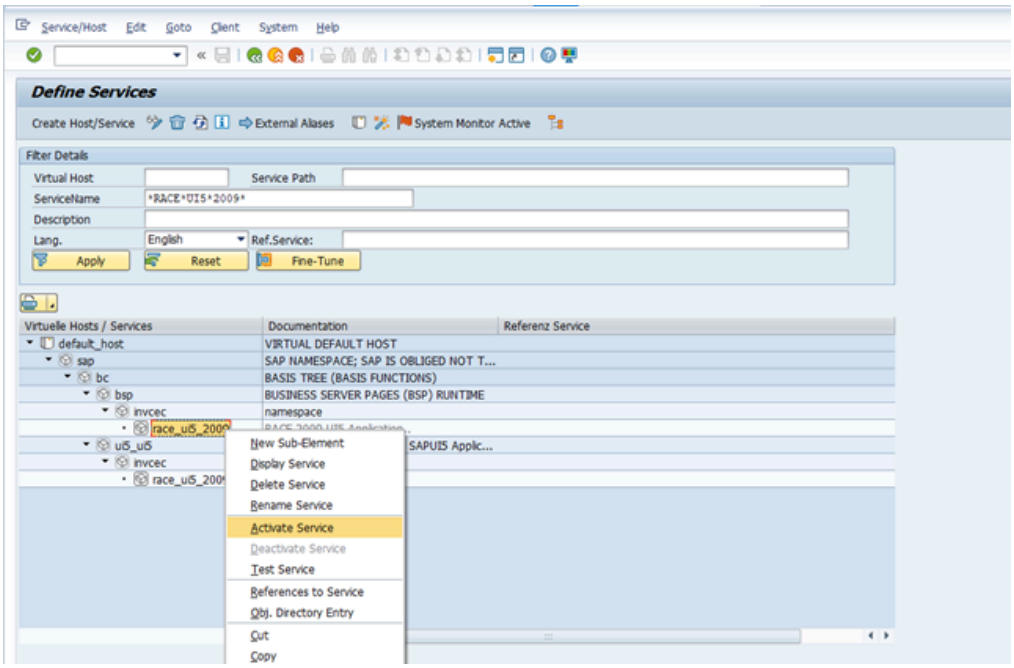
2.4. Activate UI5 Service

Activate UI5 Service once you have activated RACE™ OData Service.

To activate UI5 Service:

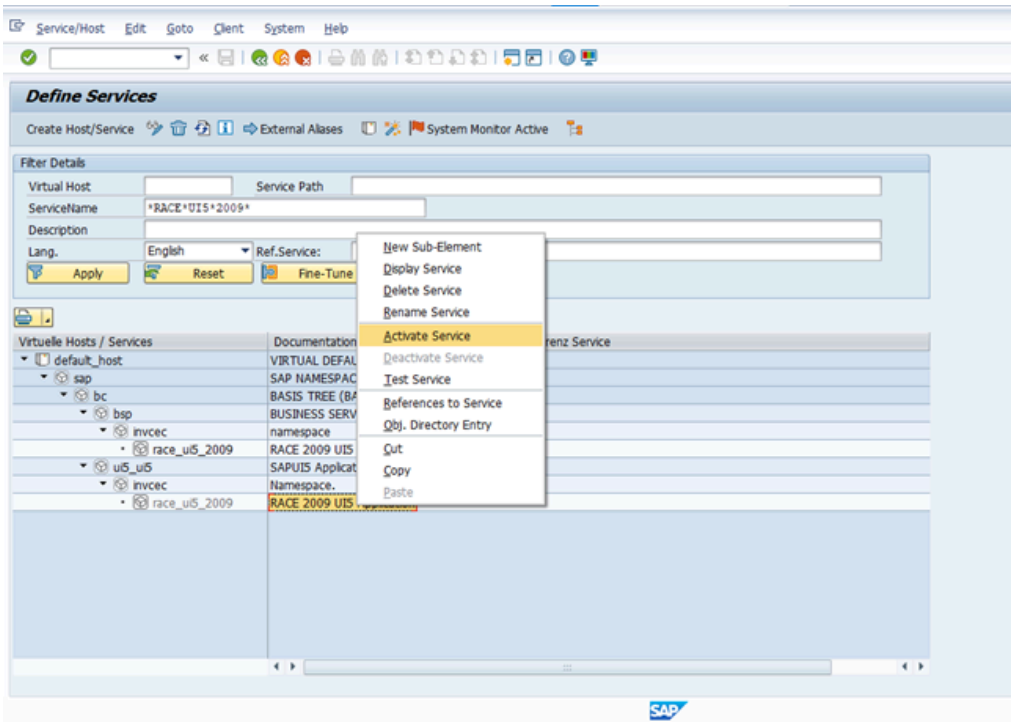
1. Go to the transaction code SICF and navigate to */default_host/sap/bc/bsp/invcec/race_ui5_2009*.
2. Right-click **RACE_ui5_2009** and click **Activate Service**.

Figure 2-21 Activate RACE BSP Service



3. Click **Yes**.
4. Go to */default_host/sap/bc/ui5_ui5/ invcec/race_ui5_2009*.

Figure 2-22 Activate RACE UI5 service



5. Right-click **RACE_UI5_2009** and click **Activate Service**.
6. Click **Yes**.

   Access the SAPUI5 web application by replacing the **host name, port number and client number** in the following template's URLs to match your SAP NetWeaver Gateway instance:

   - http://**<hostname>**:**<port_number>**/sap/bc/ui5_ui5/invcec/race_ui5_2009/index.html?sap-client=**100**
   - http://**<hostname>**:**<port_number>**/sap/bc/ui5_ui5/invcec/race_ui5_2009/index.html?sap-client=**100**&sap-ui-language=EN&sap-ui-appcache=false

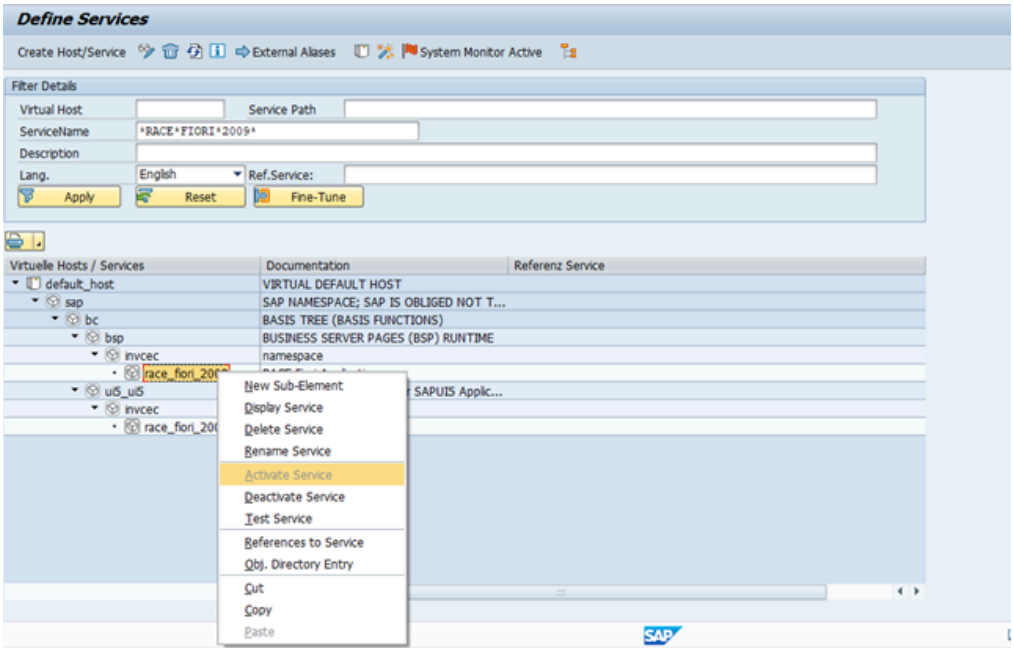
2.5. Activate FIORI Service

Activate FIORI service after you have activated UI5 service.

To activate FIORI Service:

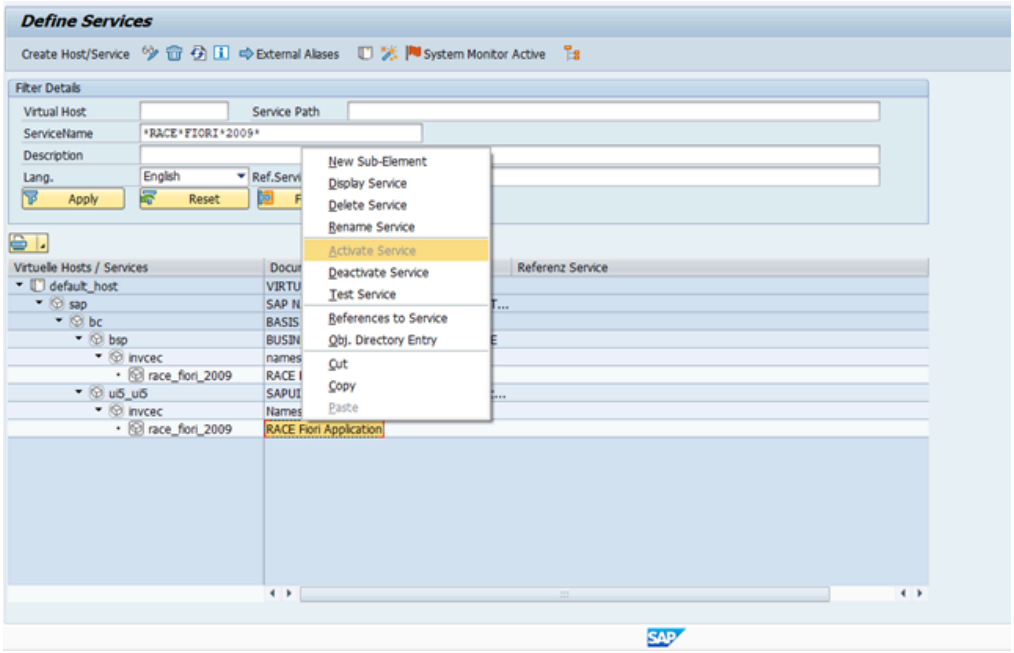
1. Go to the transaction code SICF and navigate to **/default_host/sap/bc/bsp/invcec/race_fiori_2009**.
2. Right-click **RACE_FIORI_2009** and click **Activate Service**.

Figure 2-23 Activate RACE FIORI Service



3. Click Yes.
4. Go to **/default_host/sap/bc/ui5_ui5/invcec/race_fiori_2009**.

Figure 2-24 Activate RACE FIORI service



5. Right-click **RACE_FIORI_2009** and click **Activate Service**.
6. Click **Yes**.

   Access the SAP Fiori web application by transaction code **/N/UI2/FLP**. You are redirected to the below template URLs to match your SAP NetWeaver Gateway instance:

   - http://**<hostname>**:**<port_number>**/sap/bc/ui5_ui5/invcec/race_fiori_2009/index.html?sap-client=**100**
   - http://**<hostname>**:**<port_number>**/sap/bc/ui5_ui5/invcec/race_fiori_2009/index.html?sap-client=**100**&sap-ui-language=EN&sap-ui-appcache=false.

2.6. Import RACE™ SAP® ECC and Gateway ABAP Transports

Innovapptive recommends that you install Add-ons instead of importing Transports for error free installation. However, if you prefer to import Transports, import them in the order listed in the table.

Note:
Ask your Innovapptive contact for the latest transports and these components will be provided in a compressed file format, such as .zip, .rar, and sent to you either through email or through FTP.

Table 2-3 RACE™ SAP® ECC Transports

Transport	Description	Dependency
ERDK909294	INNOV: RACE™:2009: ECC Objects	None

Table 2-4 RACE™ Gateway Transports

Transport	Description	Dependency
NG5K902535	INNOV RACE™ 2009 Gateway Objects	None
NG5K902509	INNOV RACE™ 2009 UI5 Application	Import NG5K902535 before importing NG5K902509
NG5K902543	INNOV RACE™ 2009 Fiori Application	Import NG5K902509 before importing NG5K902543

Table 2-4 RACE™ Gateway Transports (continued)

Transport	Description	Dependency
NG5K902344	INNOV RACE™ 2009 Fiori Launchpad Configurations	Import NG5K902305 before importing NG5K902344

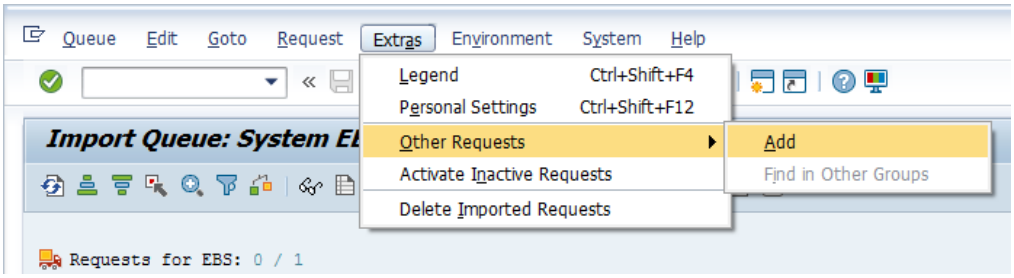
2.6.1. Transport Import procedure

Import transports in the order of dependency.

To install Transports:

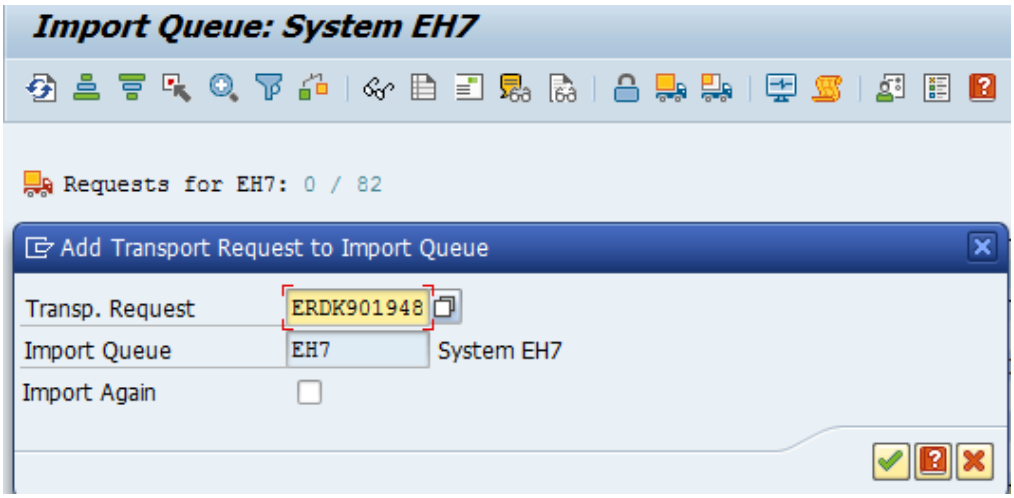
1. Extract the zip or .rar files that you received from Innovapptive representative and save the files to your local machine.
2. Extract and upload/copy the files to the SAP ECC & GW System Directories.
    a. Extract the zip files and copy all co-files (files starting with '**K90***') from software deployment package to the *USR/SAP/TRANS/COFILES* path on SAP ECC & GW system.
    b. Extract the zip files and copy all the data files **R90*** provided in the software deployment package to the specified path on the SAP ECC &GW system *USR/SAP/TRANS/DATA*.
3. Log in to the SAP GW or ECC System (based on the transport being imported).
4. Navigate to the transaction code **STMS_Import**.
5. Navigate to **Extras**, **Other Requests**, **Add**.

Figure 2-25 STMS_Import



6. Enter the transport number in the Transp. Request field and confirm by pressing the **ENTER** key (or click the green-colored icon) to attach transports to the import queue.

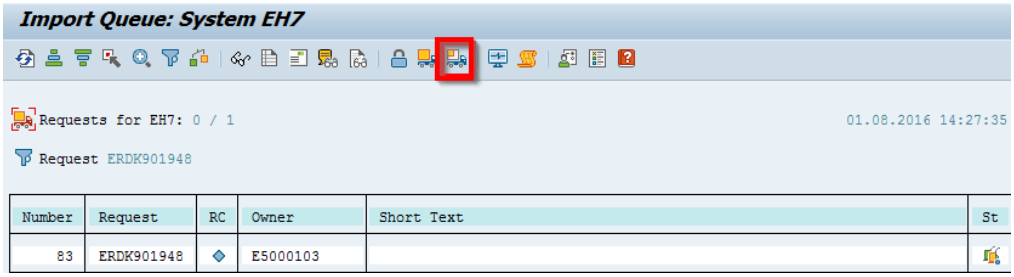
Figure 2-26 Add Transport Request to Queue



7. Click **Yes** to proceed to the next step.

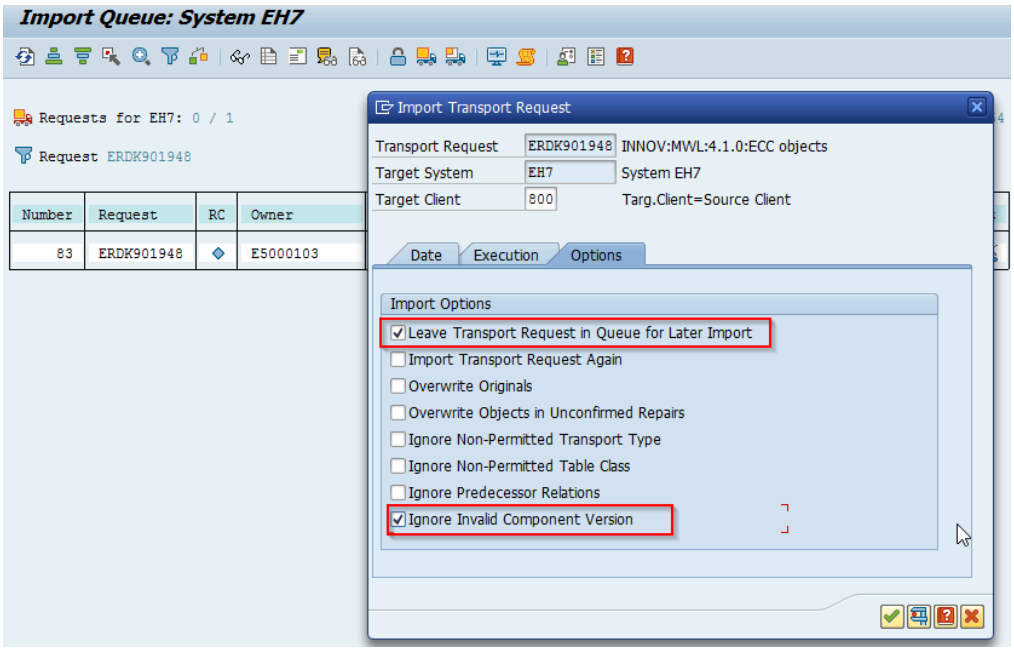
   Select the transport request and click the **Truck** icon (highlighted by red in the screenshot).

Figure 2-27 Import Queue



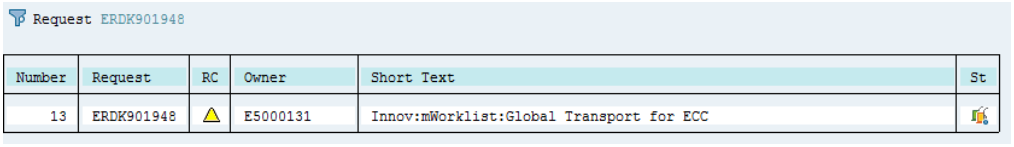
8. Enter the target client number in **Target Client** field.
9. Select **Leave Transport Request in Queue for Later Import** and **Ignore Invalid Component Version**.
10. Click .

Figure 2-28 Import Transport Options



11. Click **Yes** in the confirmation screen.
12. Capture the screenshots of the imported transports.

Figure 2-29 Imported Transports



13. Add all transports in the order specified.

> **Note:**
> If you face any issues/errors while importing the Transports, send the log files with screenshots and details of the error to your **Innovapptive SAP Basis team** contact assigned to your project.

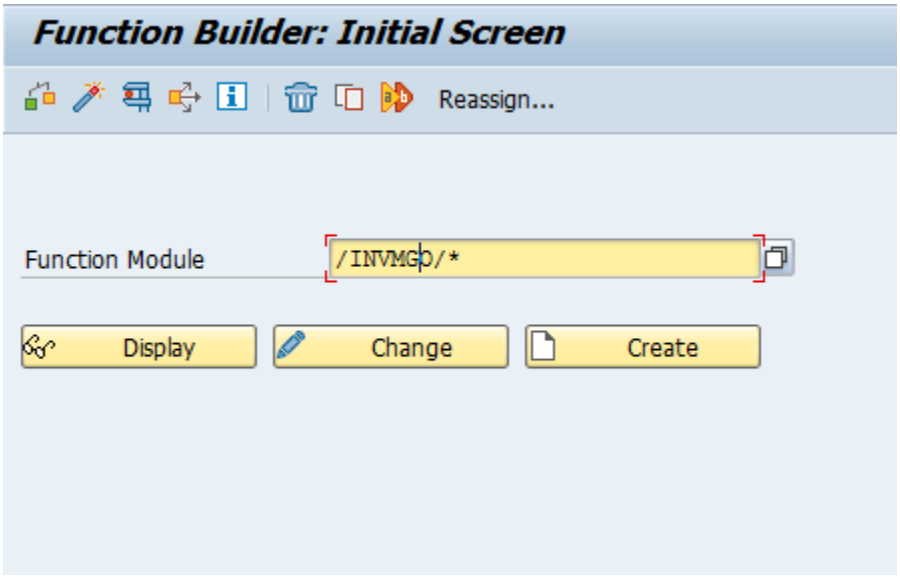
2.6.2. Verify SAP® ECC RACE™ Transport

If you have imported SAP® ECC RACE™ Transport, verify whether it was successful.

To verify the SAP® ECC Transport:

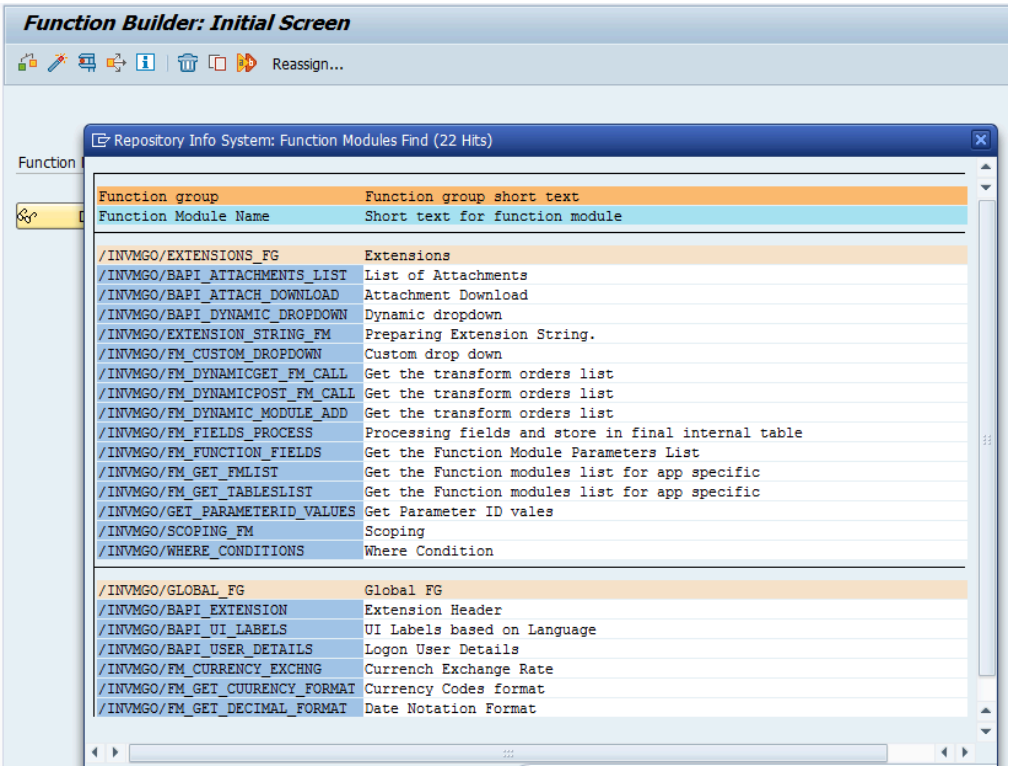
1. Run the transaction code **SE37**.
2. Enter **object type** to search for all objects **/INVMGO/***.

Figure 2-30 Function Builder Initial Screen



3. Press **<F4>** to view the list of classes and capture the screenshot(s).

Figure 2-31 Function Module Classes



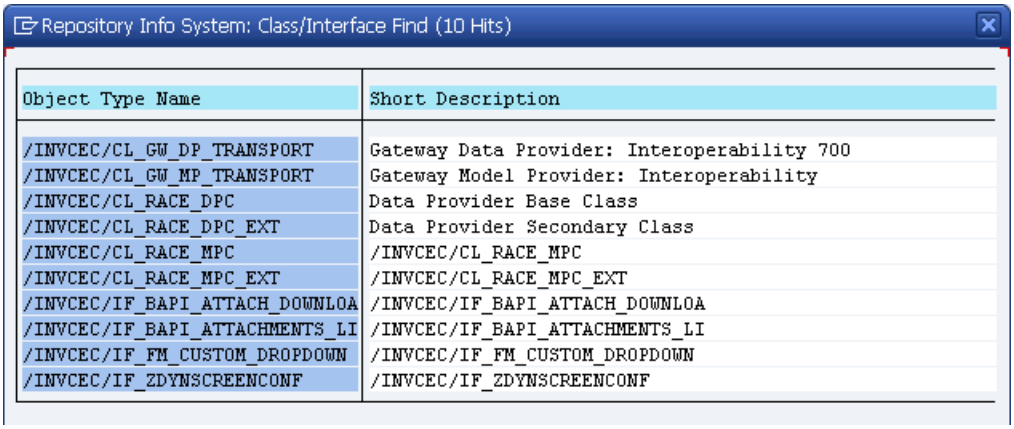
2.6.3. Verify SAP® GW RACE™ Transport

If you have imported SAP® GW RACE™ Transport, verify whether it was successful.

To verify the SAP® GW Transport:

1. Navigate to the transaction code **SE24**.
2. Enter **object type** to search for all objects **/INVCEC/***.
3. Press **<F4>** to view the list of classes and capture the screenshot(s) to share the results.

Figure 2-32 Object Classes



2.6.4. Activate RACE™ OData Service

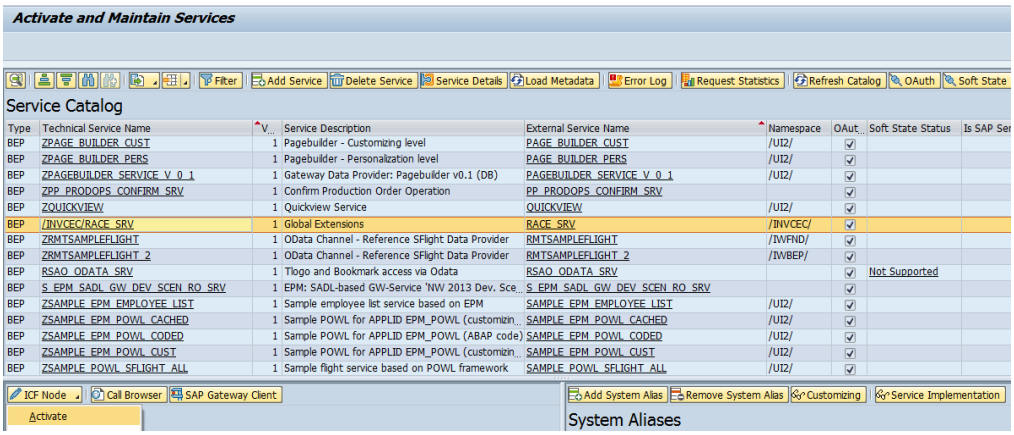
Once add-on and support packs are installed, activate RACE™ OData Service.

To activate the RACE™ OData service:

1. Login to Gateway system.
2. Navigate to the transaction **/IWFND/MAINT_SERVICE**.
3. Select the service **/INVCEC/RACE_SRV**.
4. Click **Activate** from the drop-down list of **ICF Node** options.

   A message appears notifying the package selection appears.

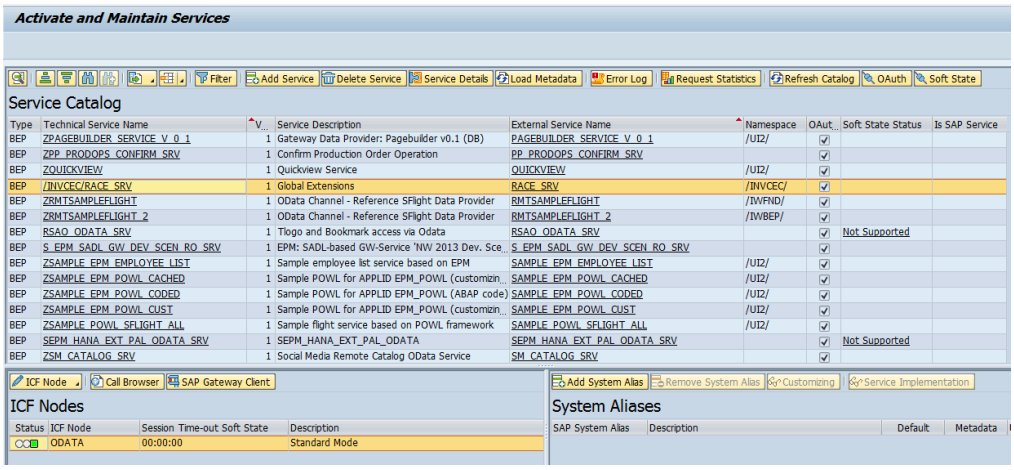
Figure 2-33 Activate and Maintain Services



5. Click the **Local Object** button and continue to activate the service.

   The OData service is activated and the status turns **green**.

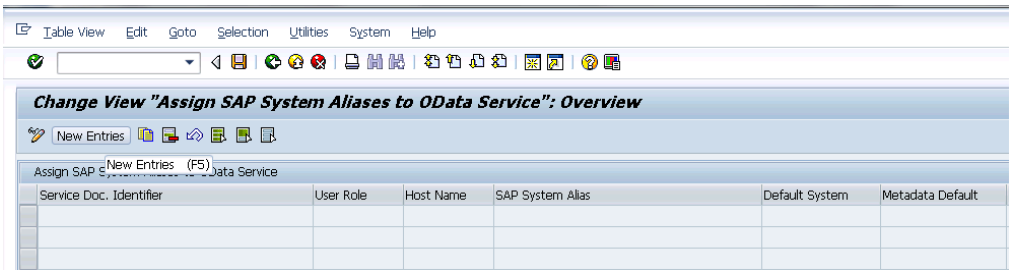
Figure 2-34 Service Status



6. Click **Add System Alias** above **System Aliases** on the right to add the SAP System alias for the selected service.

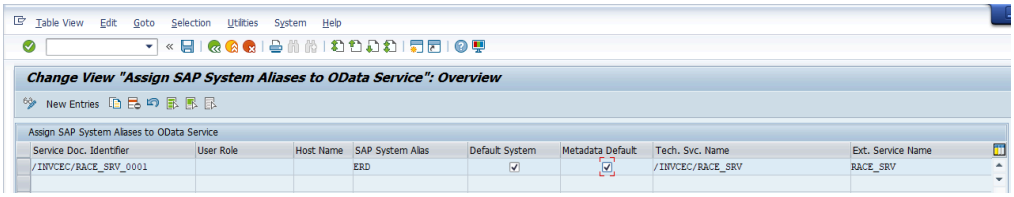
7. Click **New Entries**.

Figure 2-35 New Entries for System Alias



8. Assign the System Alias (ERD in this case) for the service and save changes.

Figure 2-36 Assign SAP System Alias to Service



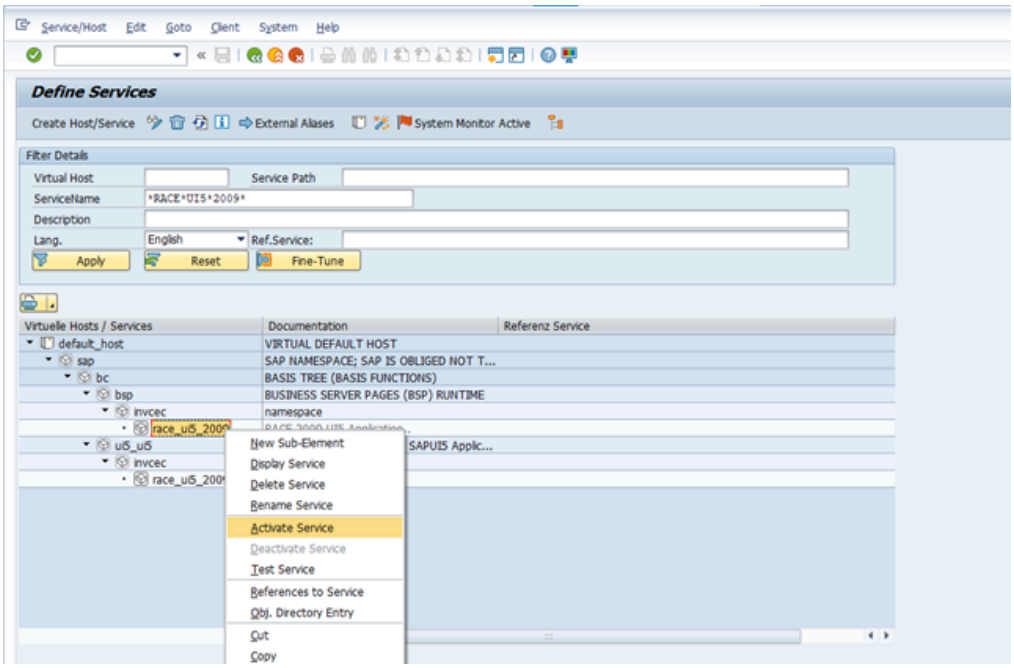
2.6.5. Activate UI5 Service

Activate UI5 Service once you have activated RACE™ OData Service.

To activate UI5 Service:

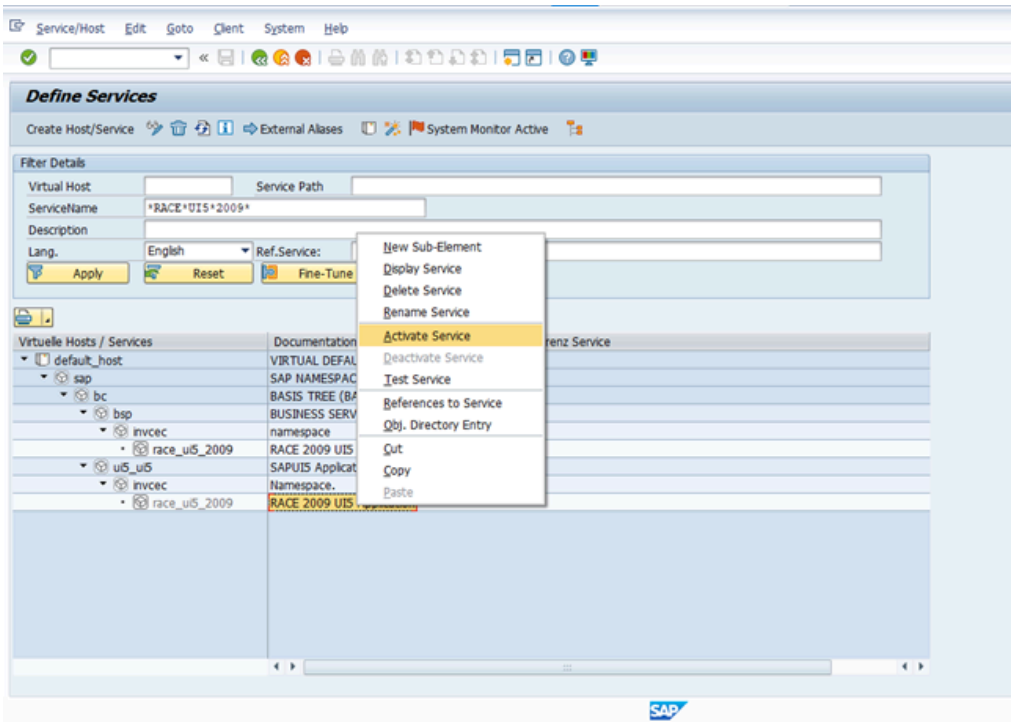
1. Go to the transaction code SICF and navigate to */default_host/sap/bc/bsp/invcec/race_ui5_2009*.
2. Right-click **RACE_ui5_2009** and click **Activate Service**.

Figure 2-37 Activate RACE BSP Service



3. Click **Yes**.
4. Go to */default_host/sap/bc/ui5_ui5/ invcec/race_ui5_2009*.

Figure 2-38 Activate RACE UI5 service



5. Right-click **RACE_UI5_2009** and click **Activate Service**.
6. Click **Yes**.

   Access the SAPUI5 web application by replacing the **host name, port number and client number** in the following template's URLs to match your SAP NetWeaver Gateway instance:

   - http://**<hostname>**:**<port_number>**/sap/bc/ui5_ui5/invcec/race_ui5_2009/index.html?sap-client=**100**
   - http://**<hostname>**:**<port_number>**/sap/bc/ui5_ui5/invcec/race_ui5_2009/index.html?sap-client=**100**&sap-ui-language=EN&sap-ui-appcache=false

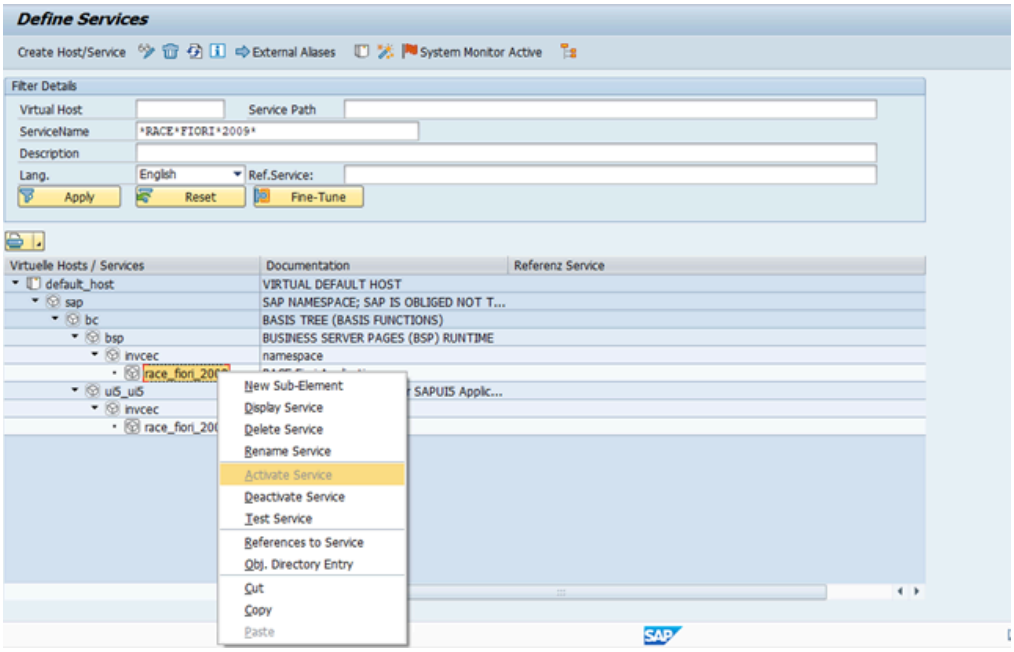
2.6.6. Activate FIORI Service

Activate FIORI service after you have activated UI5 service.

To activate FIORI Service:

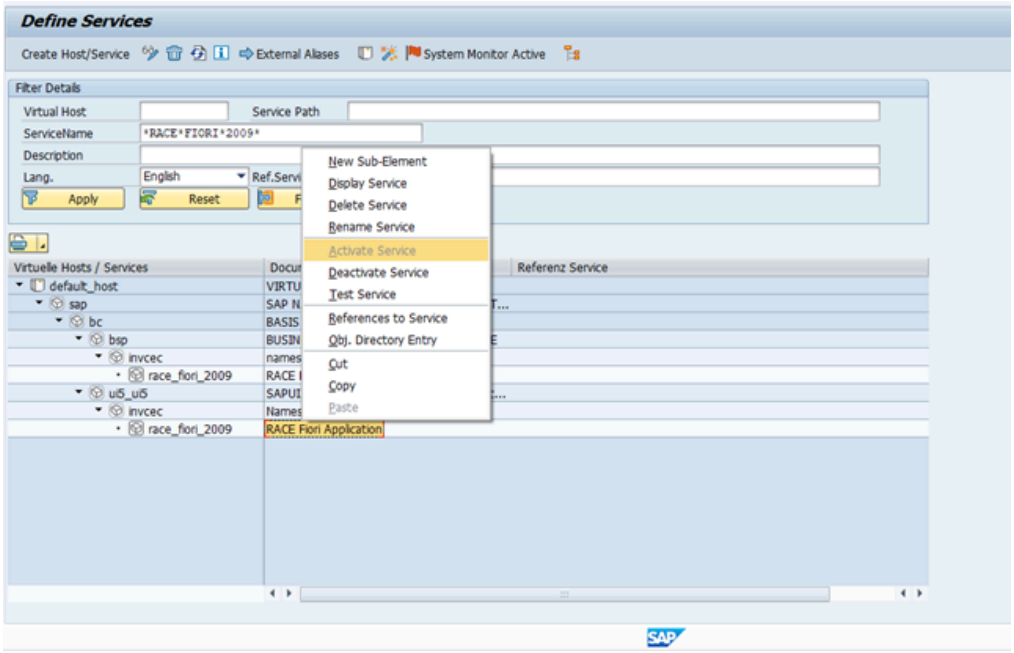
1. Go to the transaction code SICF and navigate to **/default_host/sap/bc/bsp/invcec/race_fiori_2009**.
2. Right-click **RACE_FIORI_2009** and click **Activate Service**.

Figure 2-39 Activate RACE FIORI Service



3. Click Yes.
4. Go to **/default_host/sap/bc/ui5_ui5/invcec/race_fiori_2009**.

Figure 2-40 Activate RACE FIORI service



5. Right-click **RACE_FIORI_2009** and click **Activate Service**.
6. Click **Yes**.

   Access the SAP Fiori web application by transaction code **/N/UI2/FLP**. You are redirected to the below template URLs to match your SAP NetWeaver Gateway instance:

   - http://**<hostname>**:**<port_number>**/sap/bc/ui5_ui5/invcec/race_fiori_2009/index.html?sap-client=**100**
   - http://**<hostname>**:**<port_number>**/sap/bc/ui5_ui5/invcec/race_fiori_2009/index.html?sap-client=**100**&sap-ui-language=EN&sap-ui-appcache=false.

3. Install mAssetTag SAP® ECC, Gateway, and UI5

Add-On: All the transports of previous releases and the transports of the current release are packaged into a single add-on for the main release. For example, 2003, 2006 and so on. Install the add-on for the current release that is provided by Innovapptive representative.

Transport: Only the changes for that HotFix are packaged into a transport. You MUST install all the transports till date and must install them in the order they are mentioned. Even a single misplaced installation of transport could result in installation errors.

Note:
Ask your Innovapptive contact for the latest add-ons and support-packs and these components will be provided in a compressed file format, such as .zip, .rar, and sent to you either through email or through FTP.

Table 3-1 MAT ECC Add-On and Support Packages:

Type	Add-On	Description	Dependency
Add-on	EWH0090055494_0000002.PAT	IN-NOV:MAT:2009:ECC Objects	Install RACE™ Add-On (EWH0090055494_0000006.PAT) before installing the MAT Add-On (EWH0090055494_0000002.PAT)

Table 3-2 MAT Gateway Add-On and Support Packages

Type	Add-On	Description	Dependency
Add-on	NWH0090055495_0000004.PAT	IN-NOV:MAT:2009:Gateway Objects and UI5 application	Install RACE™ Add-on (NWH0090055495_0000002.PAT) before installing the MAT Add-On (NWH0090055495_0000004.PAT)

Table 3-2 MAT Gateway Add-On and Support Packages (continued)

Type	Add-On	Description	Dependency
Add-on	NWH0090055495_-0000010.PAT	INNOV:MAT:2009: Fiori application	Install RACE™ Add-on (NWH0090055495_-0000002.PAT) before installing the MAT Add-On (NWH0090055495_-0000010.PAT)

For steps to install Add-ons, see Install mAssetTag SAP® ECC, Gateway, and UI5 Add-ons and support packs *(on page 42)*.

3.1. Install mAssetTag SAP® ECC, Gateway, and UI5 Add-ons and support packs

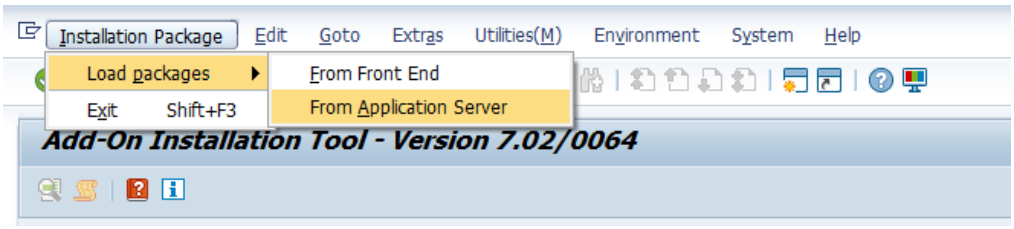
Install the add-ons and support packs at one go using the steps given below. However, if you have already installed add-ons and now you want to install the support packs (hotfixes), follow the procedure detailed in Install mAssetTag SAP® ECC, Gateway, and UI5 support packs *(on page 50)*.

To install mAssetTag SAP® ECC, Gateway, and UI5 add-ons:

1. Extract the zip or .rar files that you received from Innovapptive representative and save them to your local machine.
2. Upload/copy the Add-On files and Support Packs from software deployment package to the USR/SAP/TRANS/EPS/in path on SAP ECC & GW systems.

   Note:
   Upload all the add-ons and support packs that are mentioned in the tables.
3. Log in to **000** clients of SAP GW / ECC System (based on the Add-On being imported).
4. Navigate to the transaction code **SAINT**.
5. Navigate to **Installation Package**, **Load Packages**, **From Application Server**.

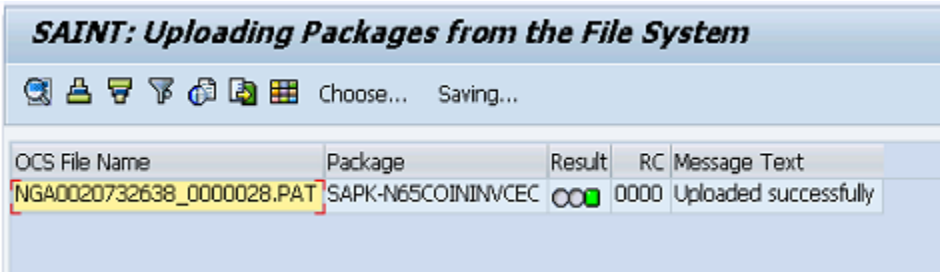
Figure 3-1 SAINT



6. Click **Yes** in the confirmation screen.

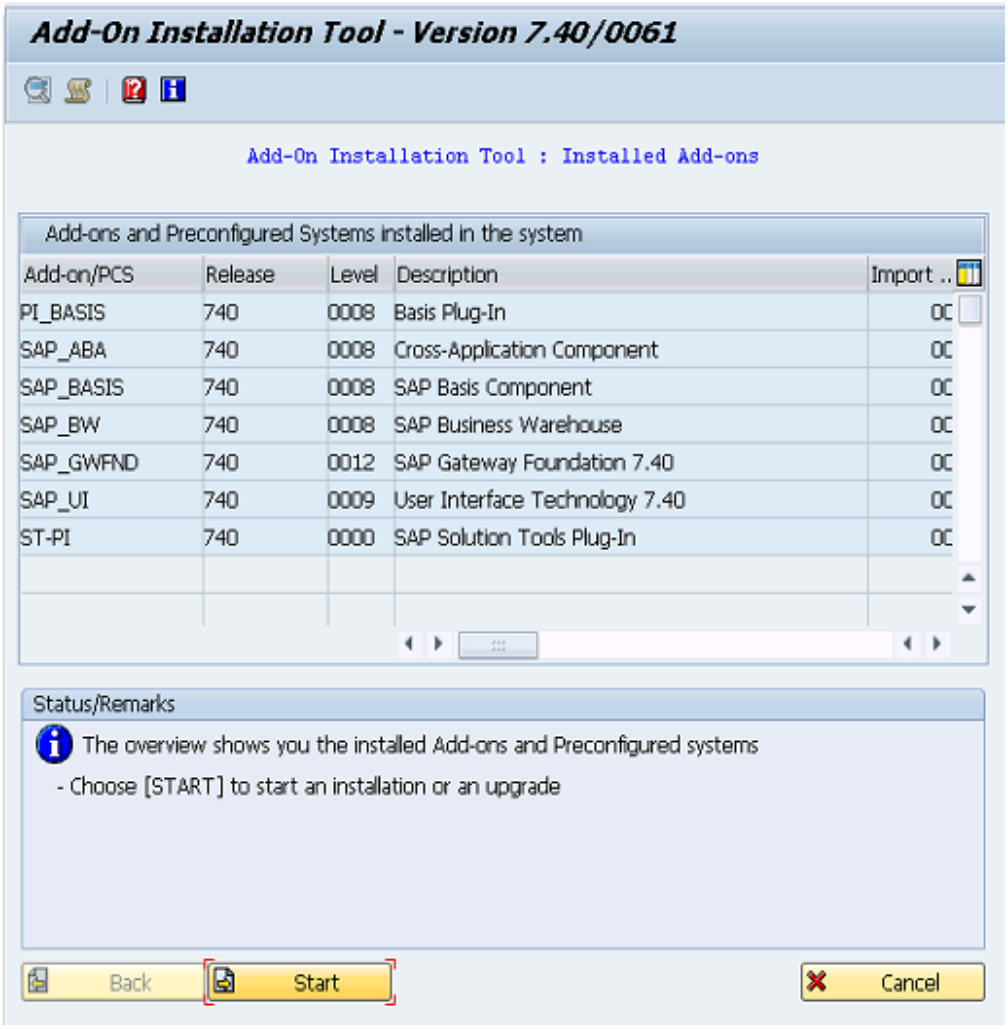
   Packages are loaded in the file system

Figure 3-2 SAINT: Upload Packages



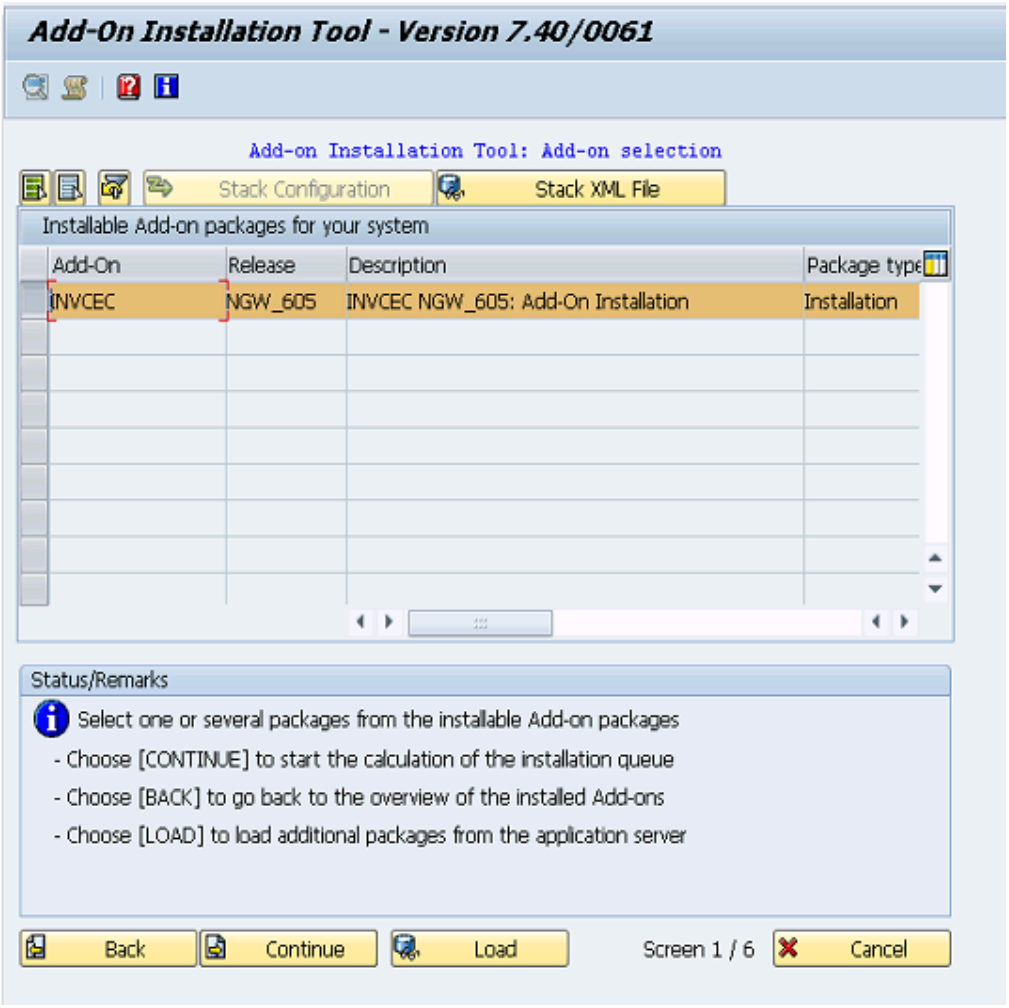
7. Once the packages are loaded, go back to the main screen, and click **Start**.

Figure 3-3 Installed Add-ons



8. Select the Add-On in the next screen and click **Continue**.

Figure 3-4 Select Add-on

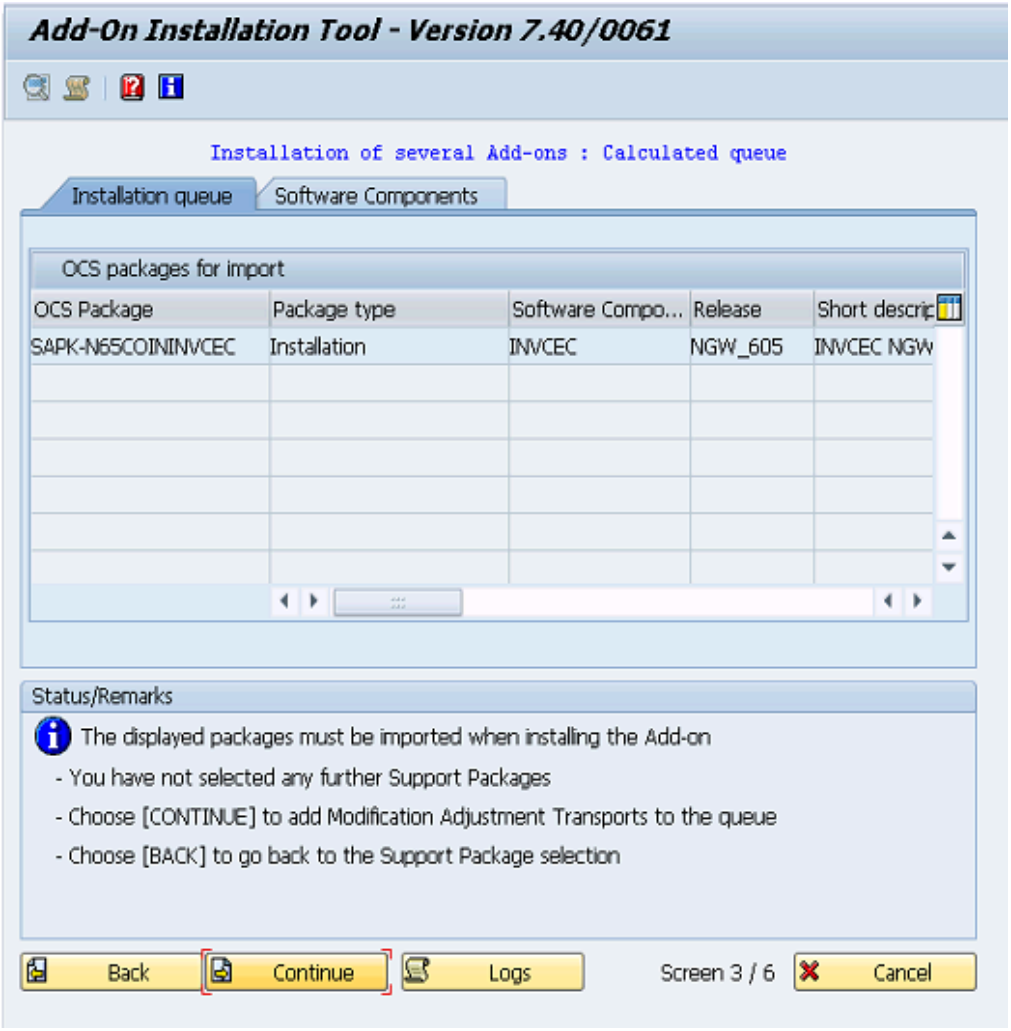


9. Click **Continue** in the next screen.

   The OCS packages that are going to be imported are displayed in the next screen.

10. Click **Continue** to proceed to the next step.

Figure 3-5 Add-on Queue



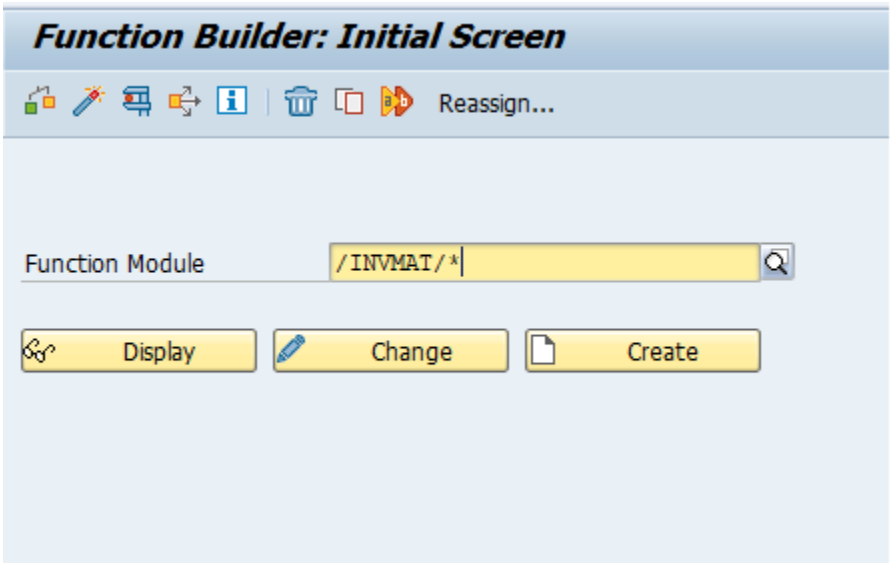
11. Click **No,** when asked to add Modification Adjustment Transports to the queue.
12. Click the **Import** icon.
13. Click **Finish**.

3.1.1. Verify SAP® ECC MAT Add-On

To verify the SAP® ECC MAT add-on:

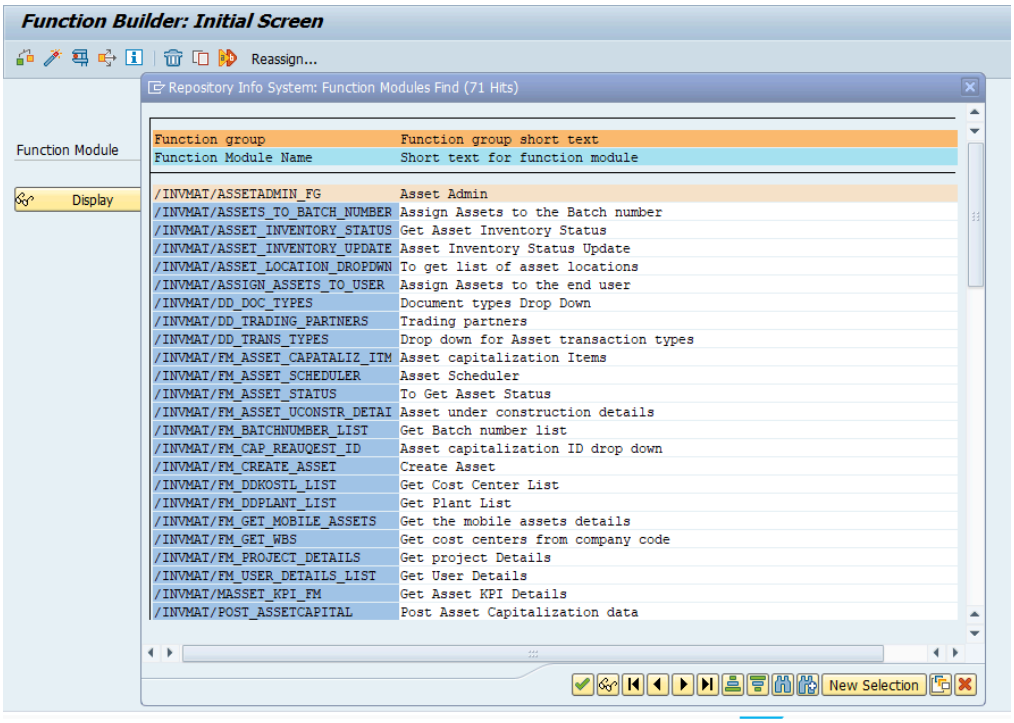
1. Run the transaction code **SE37**.
2. Enter the program name as **/INVMAT/*** in the **Function Module** field.

Figure 3-6 Function Builder Initial Screen



3. Press **<F4>** to view the list of functional modules and capture the screenshot(s) to share the results.

Figure 3-7 Function Modules

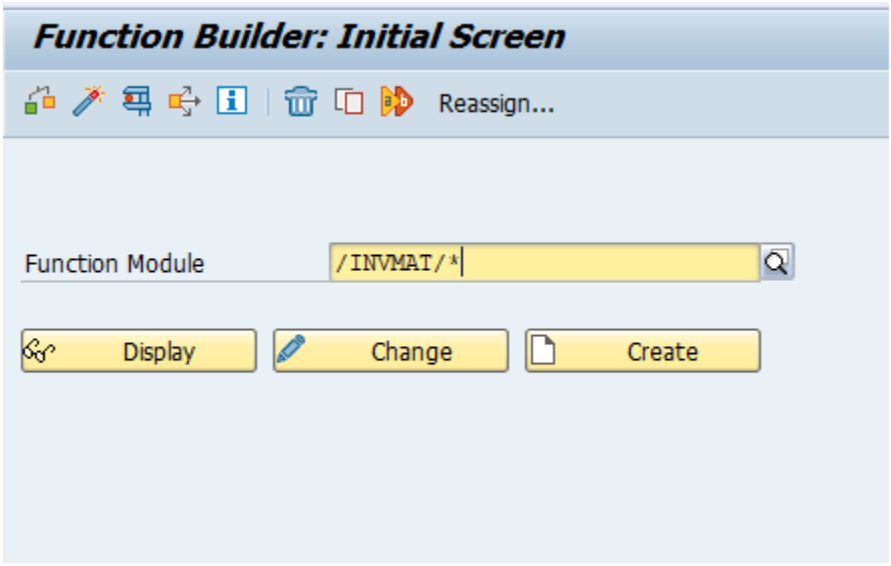


3.1.2. Verify SAP® GW MAT Add-On

To verify the SAP® GW MAT add-On:

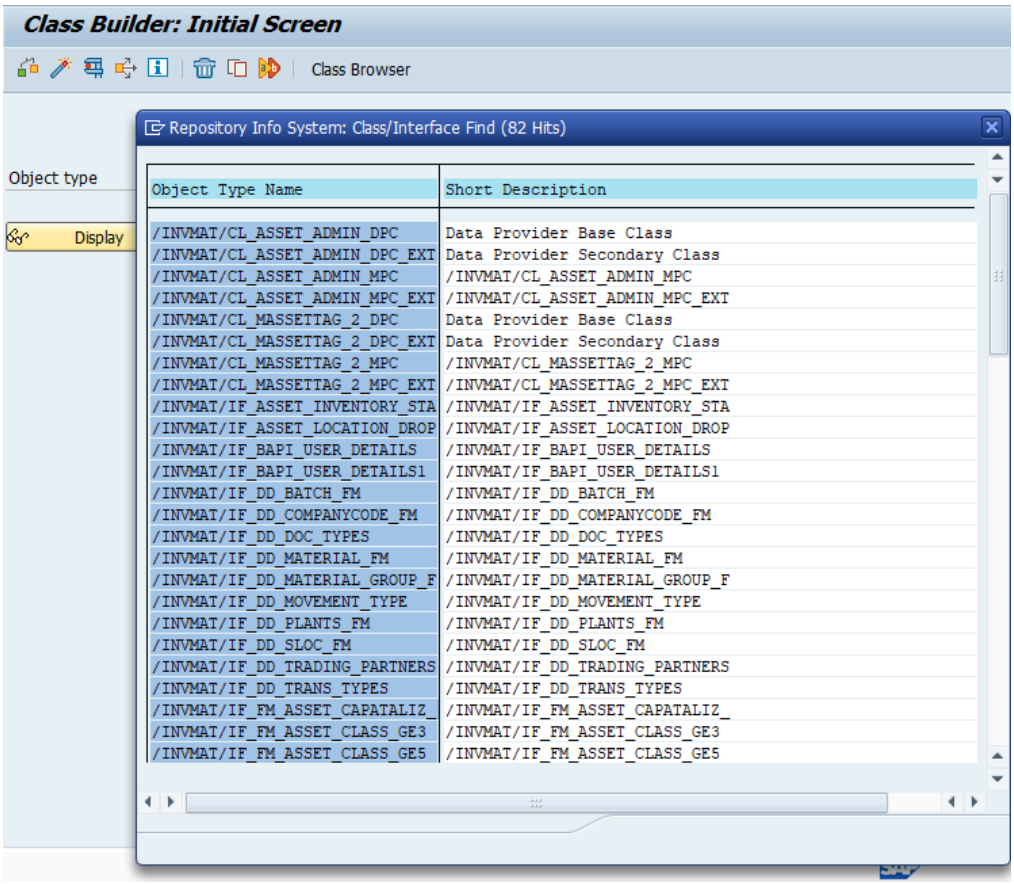
1. Navigate to the transaction code **SE24**.
2. Enter **object type** to search for all objects **/INVMAT/***.

Figure 3-8 Function Builder Initial Screen



3. Press **<F4>** to view the list of classes and capture the screenshot(s) to share the results.

Figure 3-9 Object Classes



3.2. Install mAssetTag SAP® ECC, Gateway, and UI5 support packs

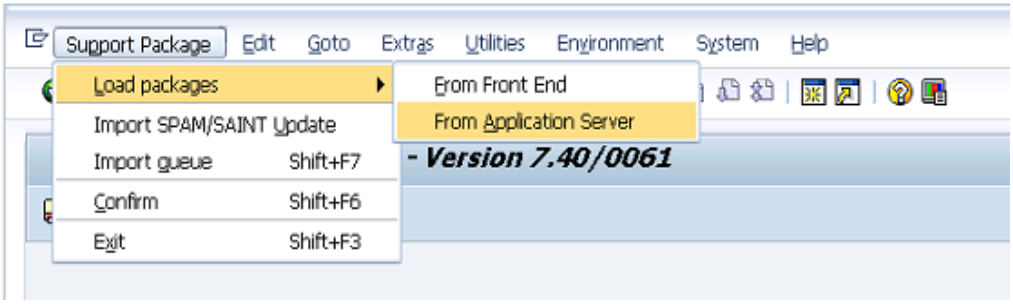
If you have installed the add-ons and are installing only the support pack (hotfixes), follow the steps described below.

To install the mAssetTag SAP® ECC, Gateway, and UI5 support pack:

1. Log in to **000** client of SAP GW & ECC System (based on the support pack being imported).
2. Navigate to the transaction code **SPAM**.
3. Navigate to **Support Package**, **Load Packages**, **From Application Server**.

   A confirmation message appears to confirm loading of packages.

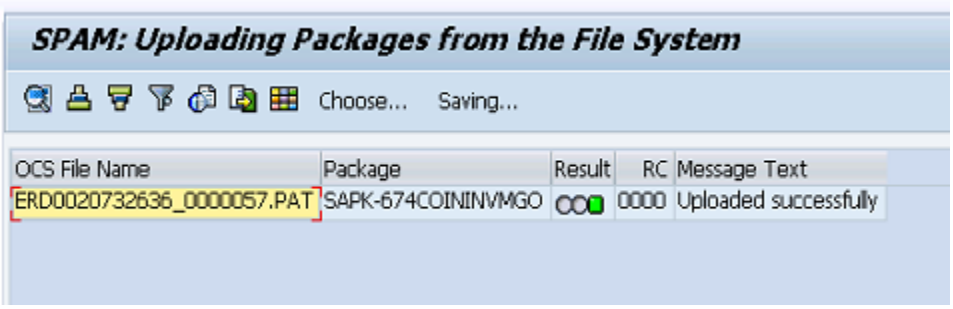
Figure 3-10 SAINT



4. Click **Yes** in the confirmation screen.

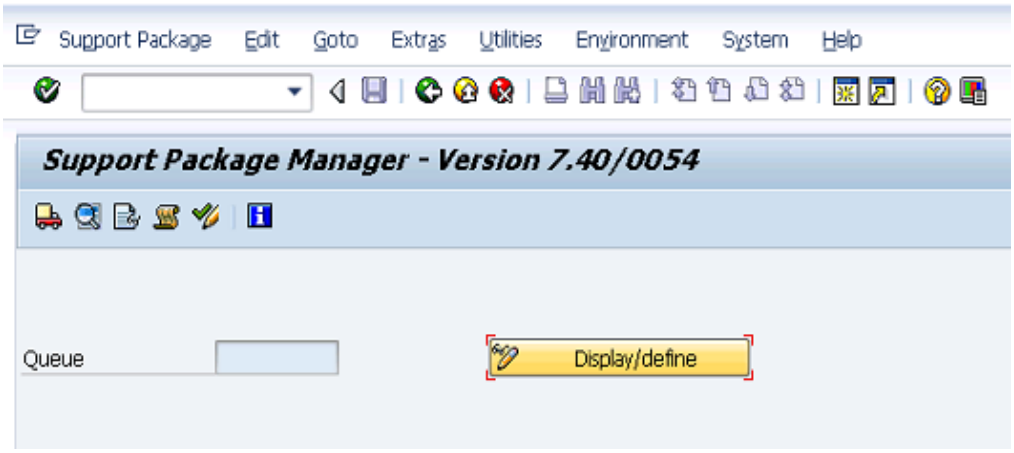
   Packages are loaded in the file system

Figure 3-11 SAINT: Upload Packages



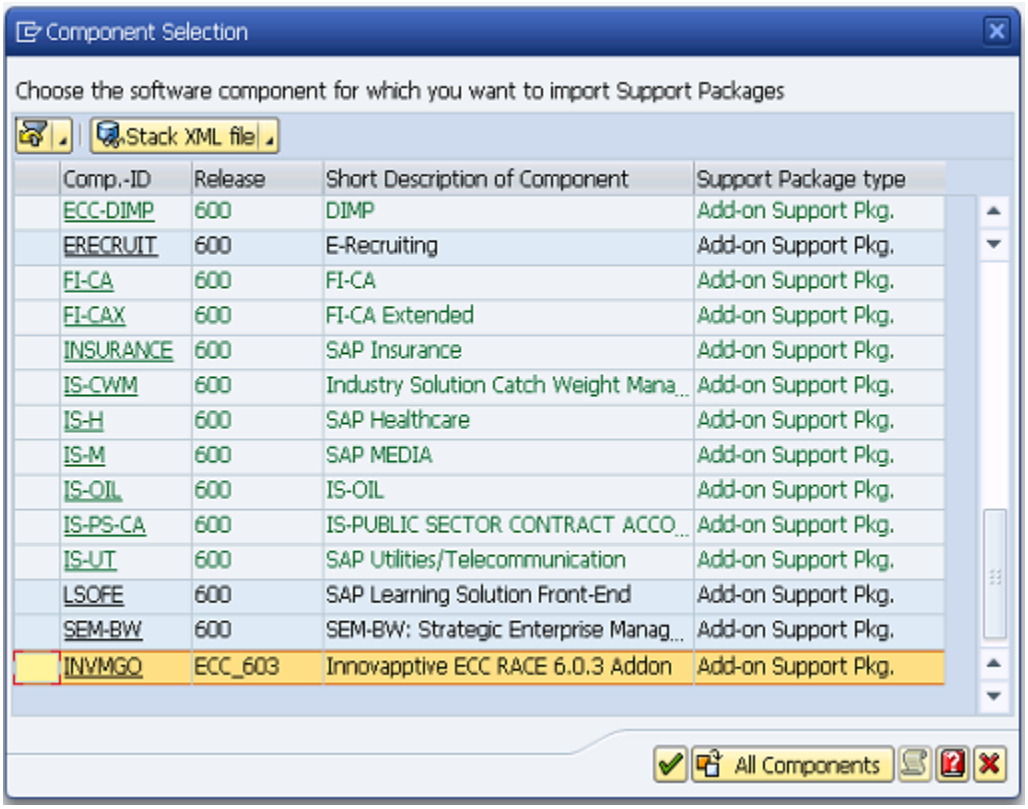
5. Once the packages are loaded, go back to the main screen, and click **Display/define**.

Figure 3-12 Support Package Manager



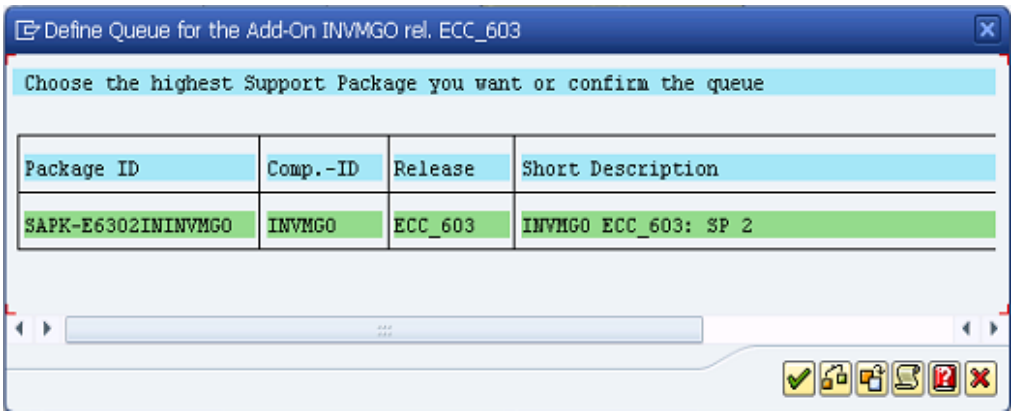
6. Choose the software component for which you want to import Support Packages and click .

Figure 3-13 Component Selection



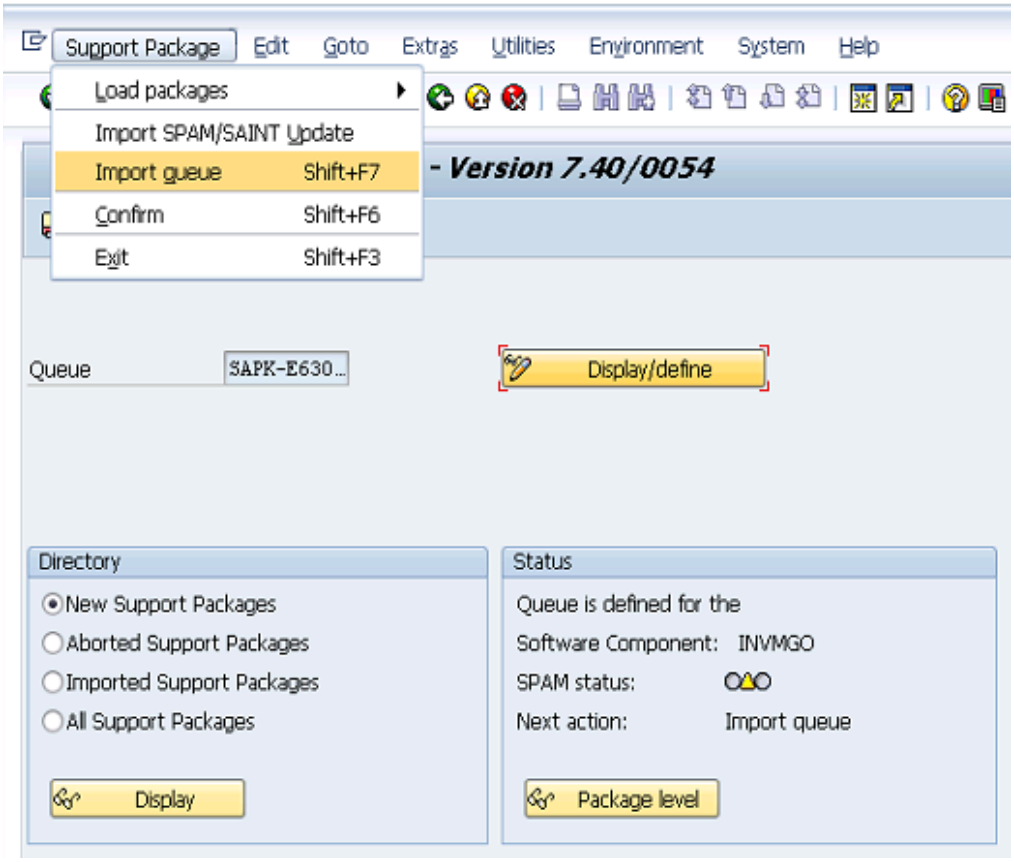
7. If all the conditions are met, and you get the package (**green**) click .

Figure 3-14 Confirm Queue



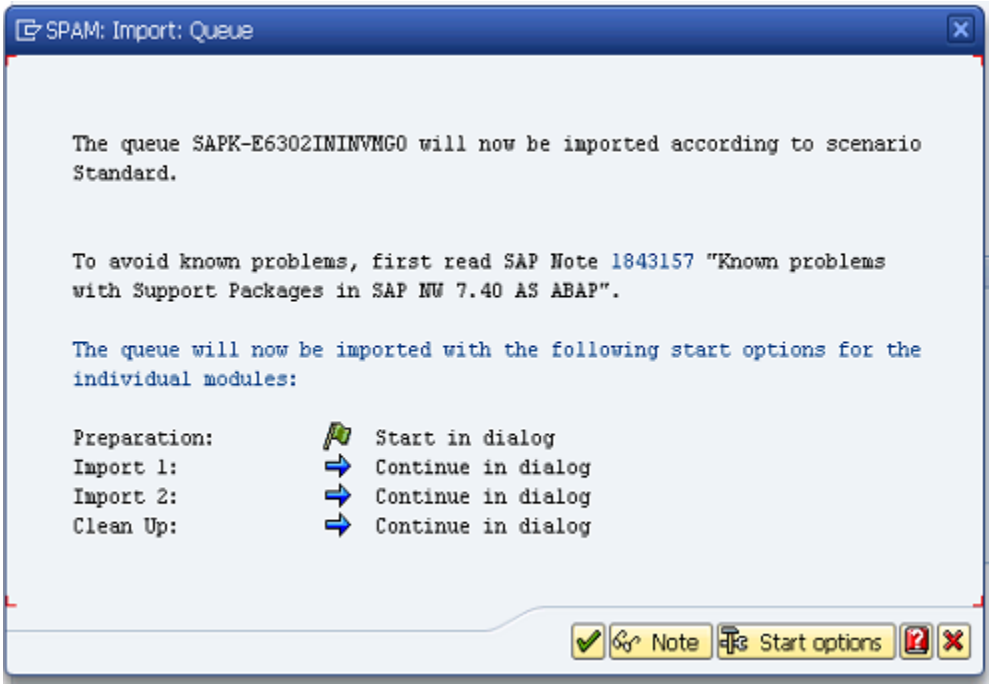
8. Click **No**, when asked to add Modification Adjustment Transports to the queue.
9. Go to **Support package** in the menu bar and click **Import Queue**.

Figure 3-15 Import Queue



10. Click ✔ to start the import process.

Figure 3-16 Import Queue Confirm



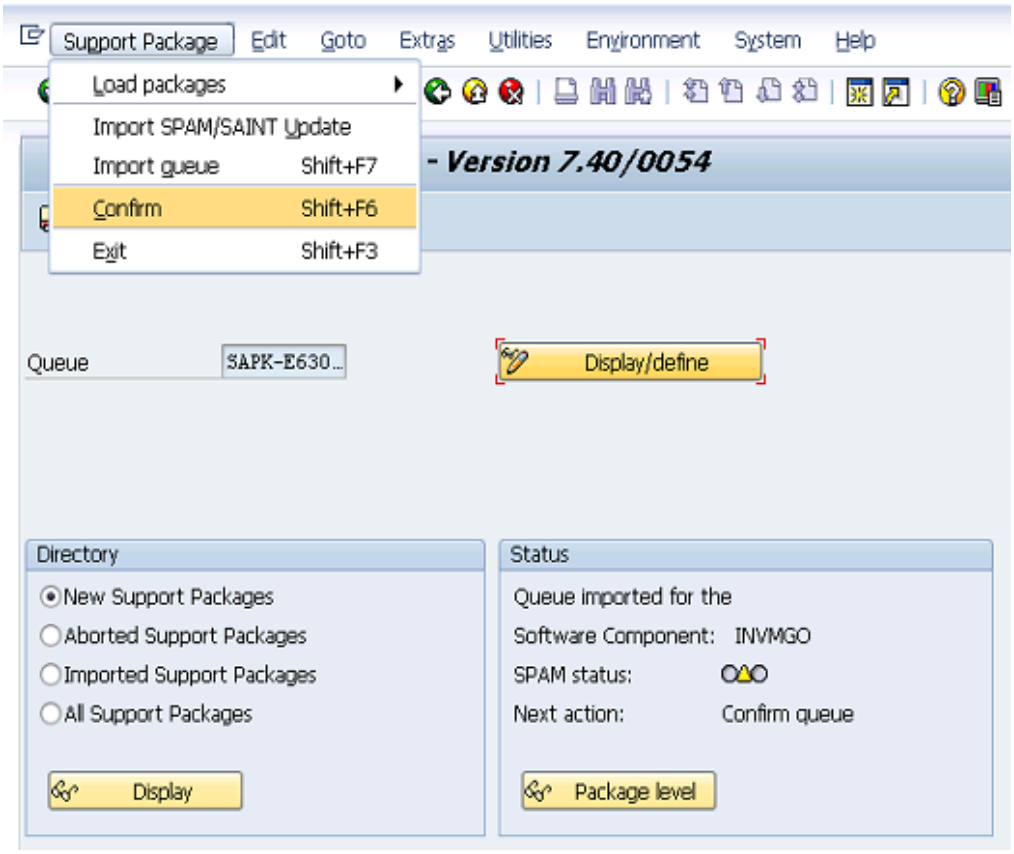
11. Once the package is imported, a confirmation screen appears. . Click in the screen.

12. Go to **Support Package** in the menu bar and click **Confirm**.

    A confirmation message appears.

> **Note:**
> If you face any issues/errors while installing the Add-On/Support pack, send log files with screenshots and details of the error to your **Innovapptive SAP Basis team** contact assigned to your project.

Figure 3-17 Confirm Support Package



3.3. Activate mAssetTag OData Service

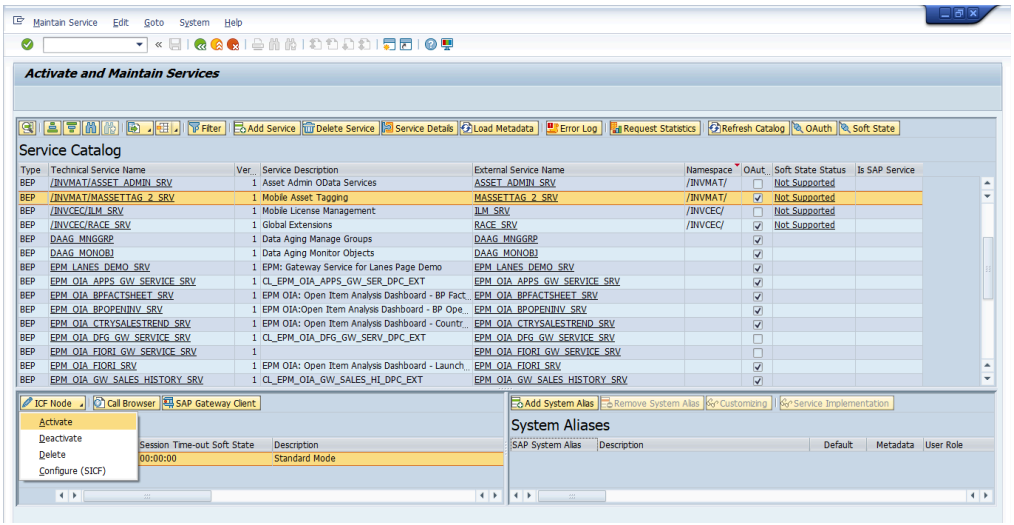
Once add-on and support packs / transports are installed, activate mAssetTag OData service.

To activate OData services for mAssetTag :

1. Run transaction **/IWFND/MAINT_SERVICE**.
2. Select the service: **/INVMAT/ MASSETTAG_2_SRV**.
3. Click **Activate** from the drop-down list of **ICF Node** options.

   A message appears notifying the package selection.

Figure 3-18 Activate and Maintain Services



4. Click the **Local Object** button and continue to activate the service.

   The OData service is activated and the status turns **green**.
5. Click **Add System Alias** above **System Aliases** on the right to add the SAP System alias for the selected service.
6. Click **New Entries**.
7. Assign the System Alias (ETT in this case) for the service and save changes.
   Repeat the steps 3 to 7 to activate service: **/INVMAT/ASSET_ADMIN_SRV**.

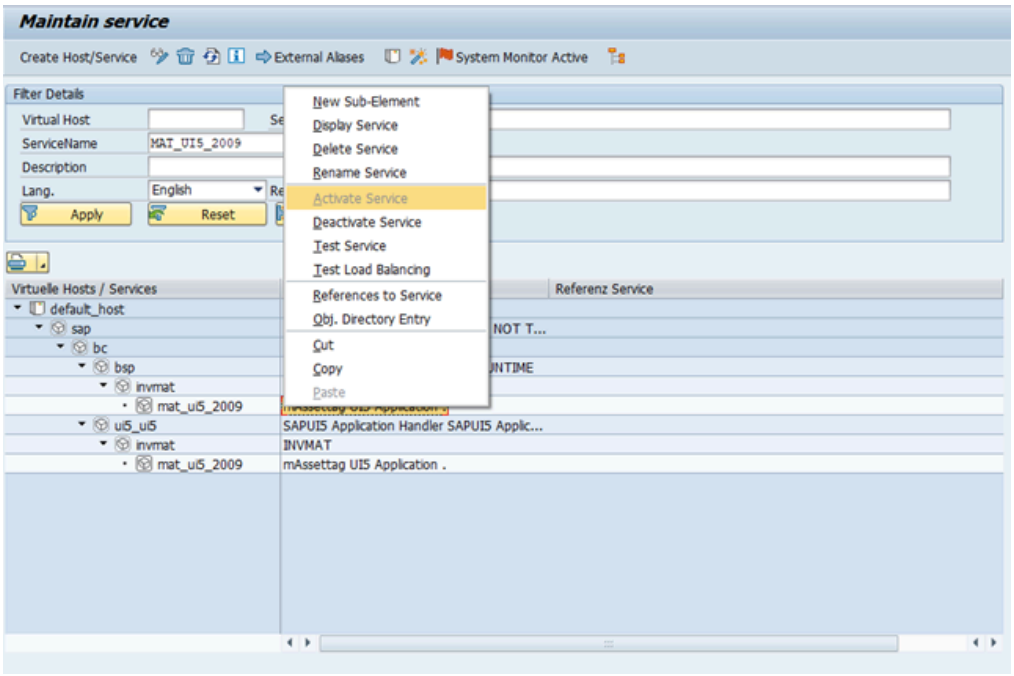
3.4. Activate Gateway UI5 Service

Activate gateway UI5 service, once mAssetTag OData service is activated.

To activate Gateway UI5 Service:

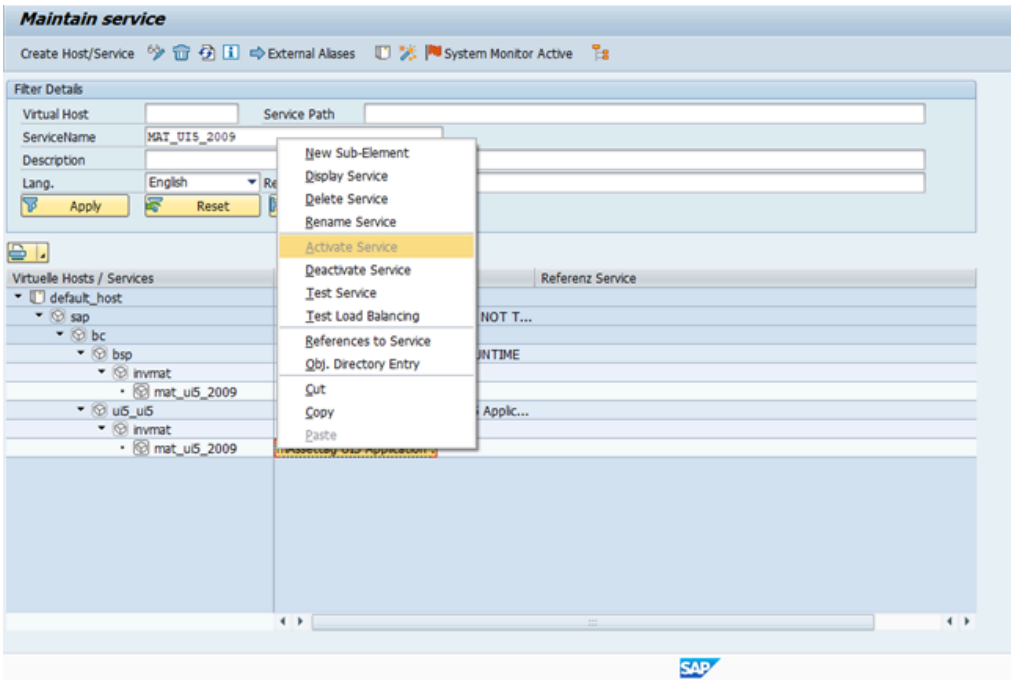
1. Go to transaction code SICF and search for the service **mat_ui5_2009**.
2. Right-click the mAssetTagui5 service under *default_host* > *sap* > *bc* > *ui5_ui5* > *INVMAT* > *mat_ui5_2009* and click **Activate Service**.

Figure 3-19 Activate MAT UI5 Service



3. Right-click the mAssetTagui5 service under *default_host* > *sap* > *bc* > *bsp* > *INVMAT* >*mat_ui5_2009* and click **Activate Service**.
   A message prompts you to activate the service.

Figure 3-20 Activate MAT UI5 Service



4. Click **Yes**.

   Access the SAPUI5 web application by replacing the **host name, port number and client number** in the following template URLs to match your SAP NetWeaver Gateway instance:

   - http://**<hostname>**:**<port_number>**/sap/bc/ui5_ui5/invmat/mat_ui5_2009/index.html?sap-client=**100**.
   - http://**<hostname>**:**<port_number>**/sap/bc/ui5_ui5/invmat/mat_ui5_2009/index.html?sap-client=**100**&sap-ui-language=EN&sap-ui-appcache=false

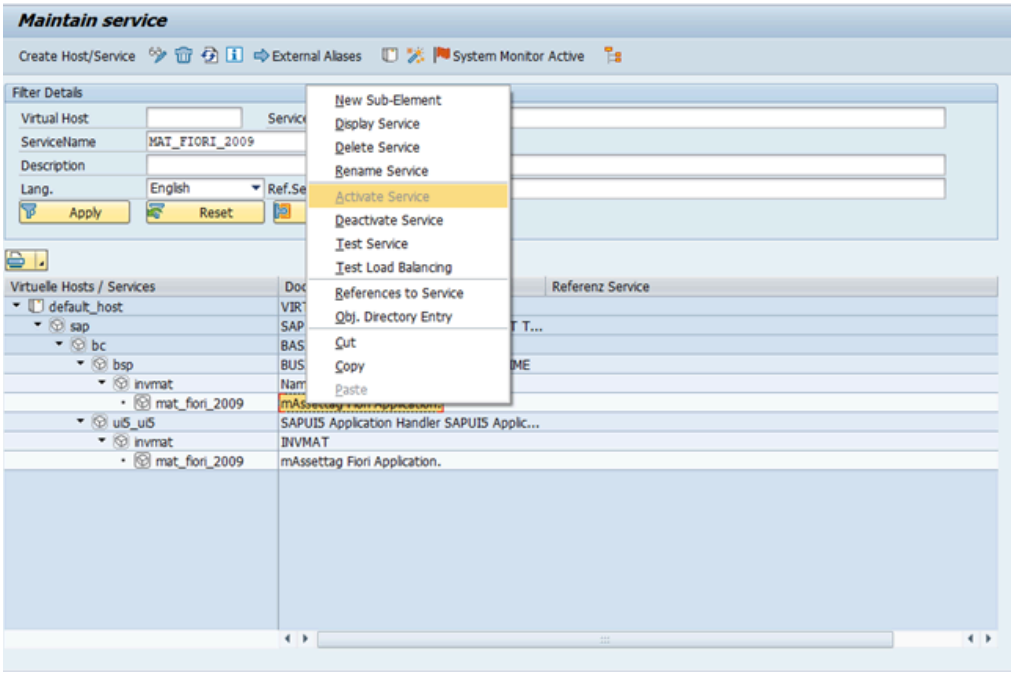
3.5. Activate Gateway FIORI Service

Activate gateway FIORI service, once gateway UI5 service is activated

To activate the Gateway FIORI Service:

1. Go to transaction code SICF and search for the service **mat_fiori_2009**.
2. Right-click the mAssetTagui5 service under *default_host* > *sap* >*bc* > *ui5_ui5* > *INVMAT* > *mat_fiori_2009* and click **Activate Service**.

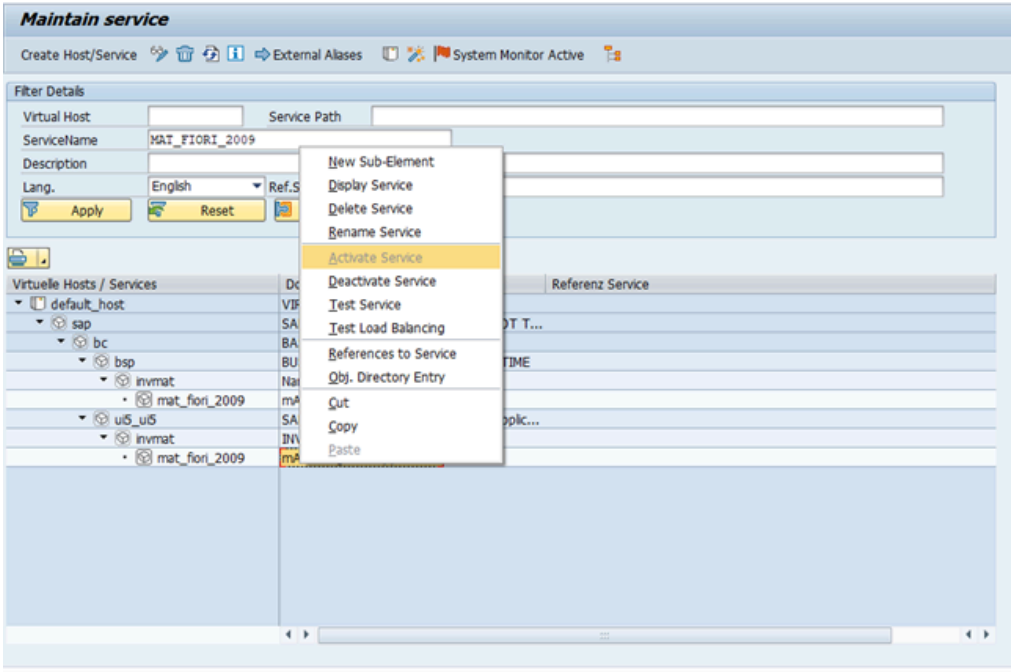
Figure 3-21 Activate MAT FIORI Service



3. Right-click the mAssetTagui5 service under *default_host* > *sap* > *bc* > *bsp* > *INVMAT* > *mat_fiori_2009* and click **Activate Service**

   A message prompts you to activate the service.

Figure 3-22 Activate MAT FIORI Service



4. Click **Yes**.

   Access the SAPUI5 web application by replacing the **host name, port number and client number** in the following template URLs to match your SAP NetWeaver Gateway instance:

   - http://**<hostname>**:**<port_number>**/sap/bc/ui5_ui5/invmat/mat_fiori_2009/index.html?sap-client=**100**.
   - http://**<hostname>**:**<port_number>**/sap/bc/ui5_ui5/invmat/mat_fiori_2009/index.html?sap-client=**100**&sap-ui-language=EN&sap-ui-appcache=false.

3.6. Import mAssetTag SAP® ECC, Gateway and UI5 Transports

Innovapptive recommends installing Add-ons instead of importing Transports for an error free installation. However, if you prefer to import Transports, import them in the order listed in the table.

Note:
Ask your Innovapptive contact for the latest transports and these components will be provided in a compressed file format, such as .zip, .rar, and sent to you either through email or through FTP.

Table 3-3 MAT SAP® ECC Transports

Transport	Description	Dependency
ERDK908620	INNOV:MAT:2006:ECC Objects	Import ERDK908517 before importing ERDK908620

Table 3-4 MAT SAP® Gateway Transports

Transport	Description	Dependency
NGTK907389	INNOV:MAT:2006:Gateway Objects	Import NG5K902295 before importing NGTK907389

Table 3-5 MAT UI5 Application Transports

Transport	Description	Dependency
NGTK907431	INNOV:MAT:2006: mAssetTag Admin UI5	Import TR Number: NGTK907389 before importing NGTK907431
NGTK907433	Innov MAT 2006 FIORI Application	Import TR Number: NGTK907389 before importing NGTK907433
NGTK907438	Innov MAT 2006 FIORI Tile configuration	Import TR Number: NGTK907433 before importing NGTK907438
NGTK907436	Innov MAT 2006 FIORI launchpad config	Import TR Number: NGTK907433 before importing NGTK907436

For steps to import Transports, see Transport Import procedure *(on page 30)*.

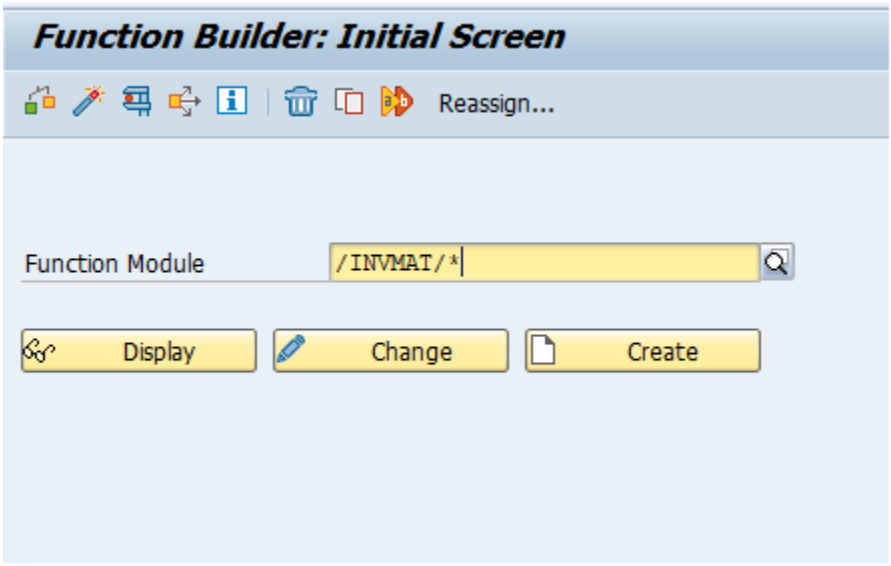
3.6.1. Verify SAP® ECC MAT Transport

If you have imported SAP® ECC MAT Transport, verify whether it was successful.

To verify the SAP® ECC Transport:

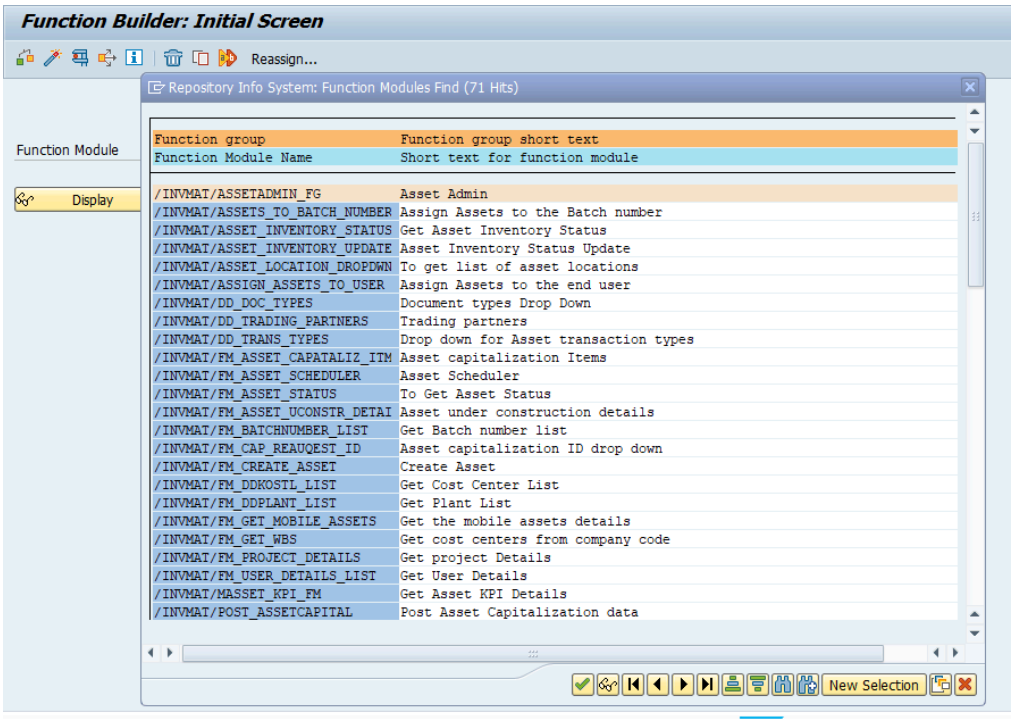
1. Run the transaction code **SE37**.
2. Enter the program name as **/INVMAT/*** in the **Function Module** field.

Figure 3-23 Function Builder Initial Screen



3. Press **<F4>** to view the list of functional modules and capture the screenshot(s).

Figure 3-24 Function Module Classes



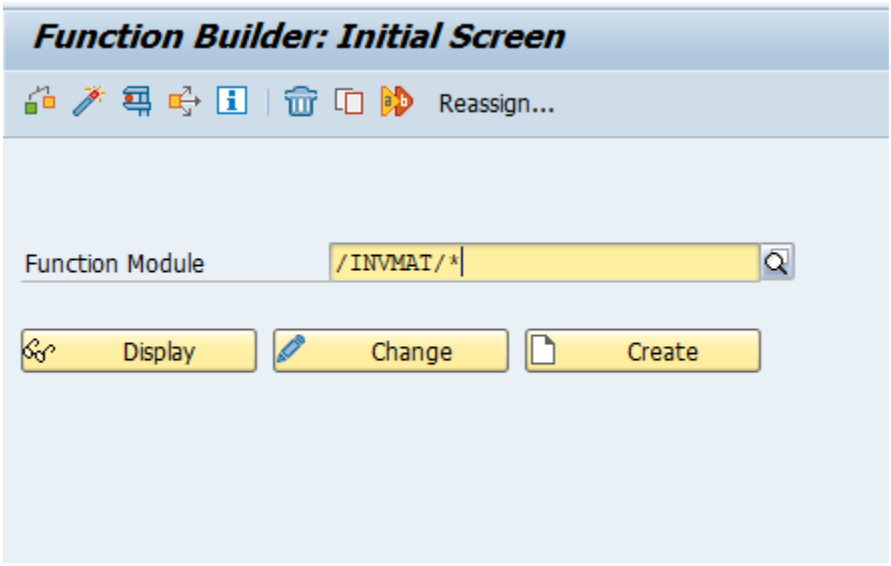
3.6.2. Verify SAP® GW MAT Transport

If you have imported SAP® GW MAT Transport, verify whether it was successful.

To verify the SAP® GW Transport:

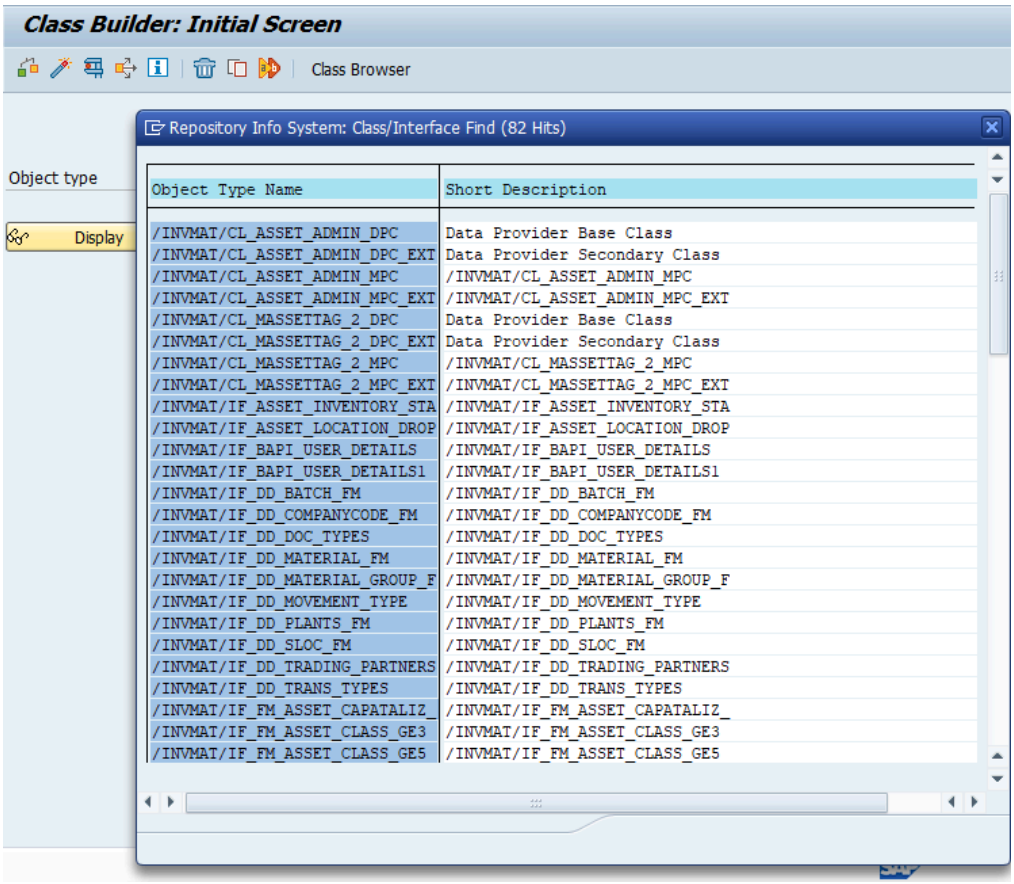
1. Navigate to the transaction code **SE24**.
2. Enter **object type** to search for all objects **/INVMAT/***.

Figure 3-25 Function Builder Initial Screen



3. Press **<F4>** to view the list of classes and capture the screenshot(s) to share the results.

Figure 3-26 Object Classes



3.6.3. Activate mAssetTag OData Service

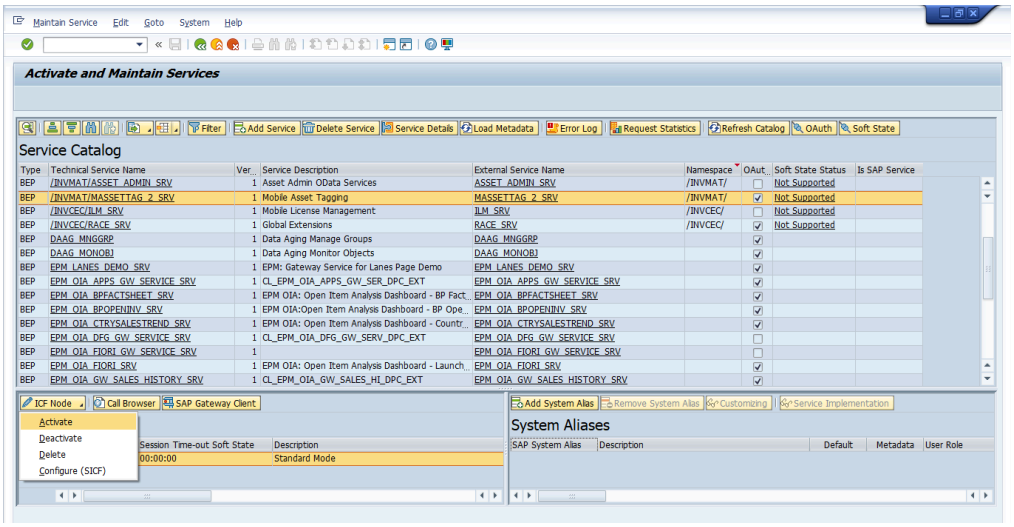
Once add-on and support packs / transports are installed, activate mAssetTag OData service.

To activate OData services for mAssetTag :

1. Run transaction **/IWFND/MAINT_SERVICE**.
2. Select the service: **/INVMAT/ MASSETTAG_2_SRV**.
3. Click **Activate** from the drop-down list of **ICF Node** options.

   A message appears notifying the package selection.

Figure 3-27 Activate and Maintain Services



4. Click the **Local Object** button and continue to activate the service.

   The OData service is activated and the status turns **green**.
5. Click **Add System Alias** above **System Aliases** on the right to add the SAP System alias for the selected service.
6. Click **New Entries**.
7. Assign the System Alias (ETT in this case) for the service and save changes.
   Repeat the steps 3 to 7 to activate service: **/INVMAT/ASSET_ADMIN_SRV**.

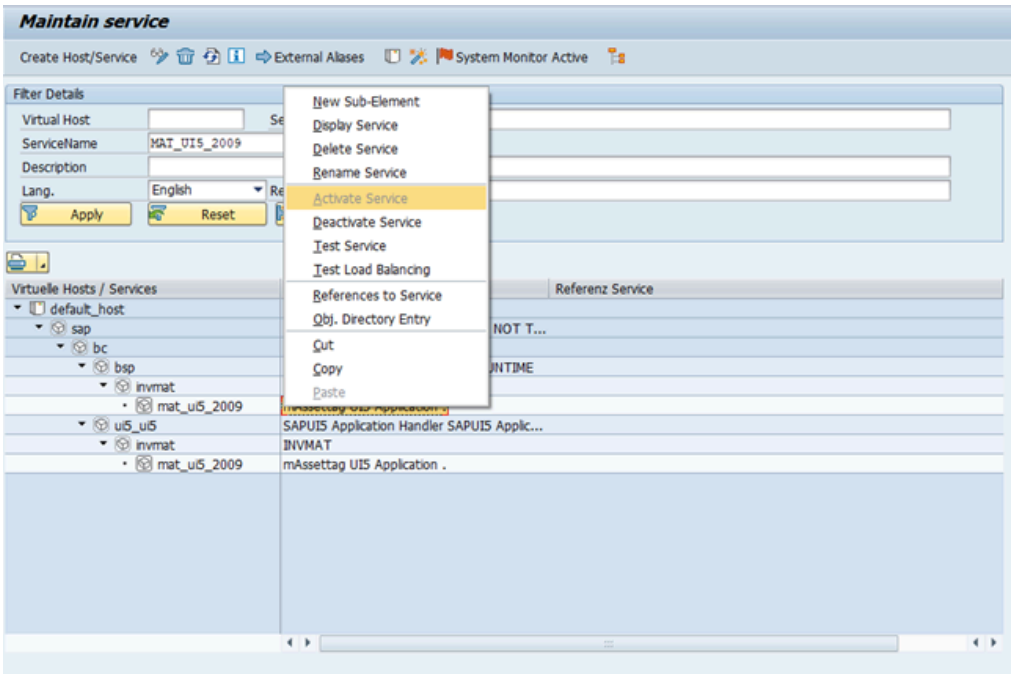
3.6.4. Activate Gateway UI5 Service

Activate gateway UI5 service, once mAssetTag OData service is activated.

To activate Gateway UI5 Service:

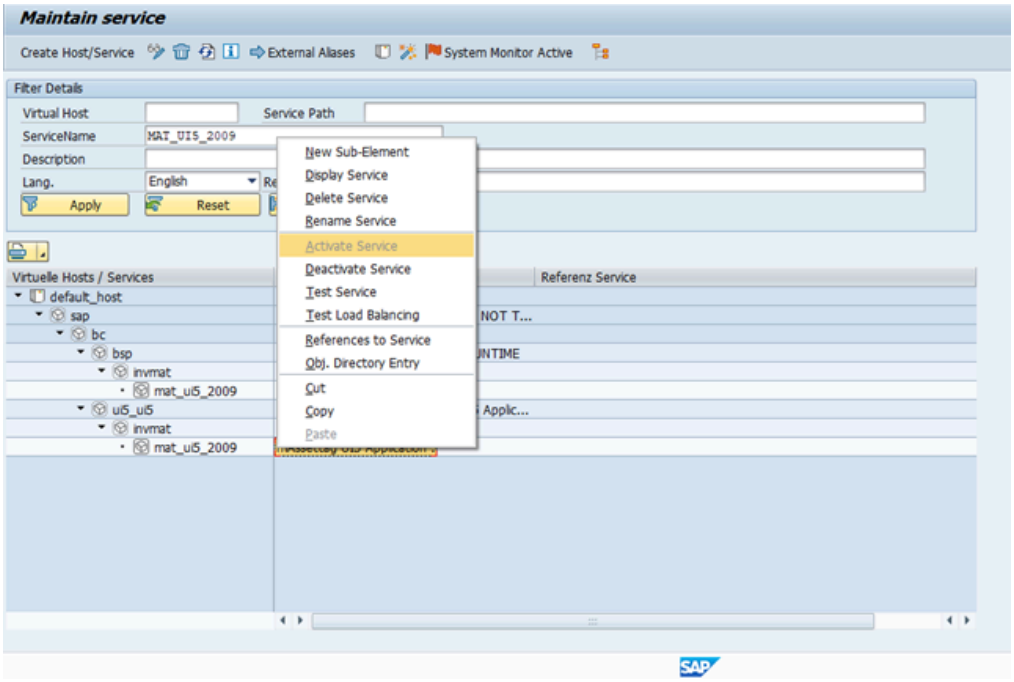
1. Go to transaction code SICF and search for the service **mat_ui5_2009**.
2. Right-click the mAssetTagui5 service under *default_host* > *sap* > *bc* > *ui5_ui5* > *INVMAT* > *mat_ui5_2009* and click **Activate Service**.

Figure 3-28 Activate MAT UI5 Service



3. Right-click the mAssetTagui5 service under *default_host* > *sap* > *bc* > *bsp* > *INVMAT* >*mat_ui5_2009* and click **Activate Service**.
   A message prompts you to activate the service.

Figure 3-29 Activate MAT UI5 Service



4. Click **Yes**.

   Access the SAPUI5 web application by replacing the **host name, port number and client number** in the following template URLs to match your SAP NetWeaver Gateway instance:

   - http://**<hostname>**:**<port_number>**/sap/bc/ui5_ui5/invmat/mat_ui5_2009/index.html?sap-client=**100**.
   - http://**<hostname>**:**<port_number>**/sap/bc/ui5_ui5/invmat/mat_ui5_2009/index.html?sap-client=**100**&sap-ui-language=EN&sap-ui-appcache=false

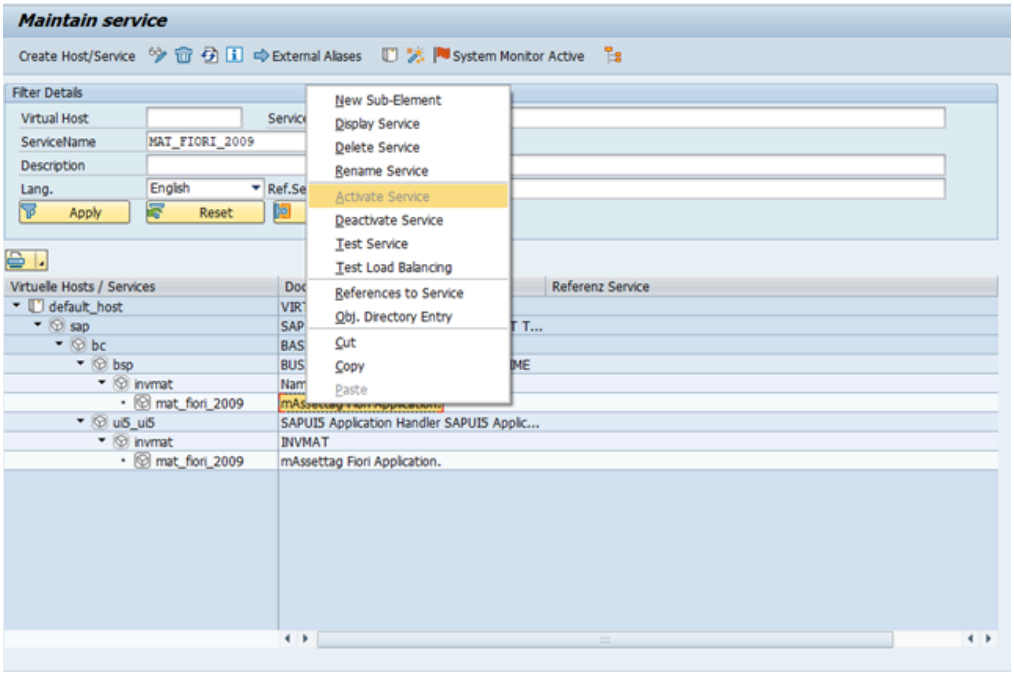
3.6.5. Activate Gateway FIORI Service

Activate gateway FIORI service, once gateway UI5 service is activated

To activate the Gateway FIORI Service:

1. Go to transaction code SICF and search for the service **mat_fiori_2009**.
2. Right-click the mAssetTagui5 service under *default_host* > *sap* >*bc* > *ui5_ui5* > *INVMAT* > *mat_fiori_2009* and click **Activate Service**.

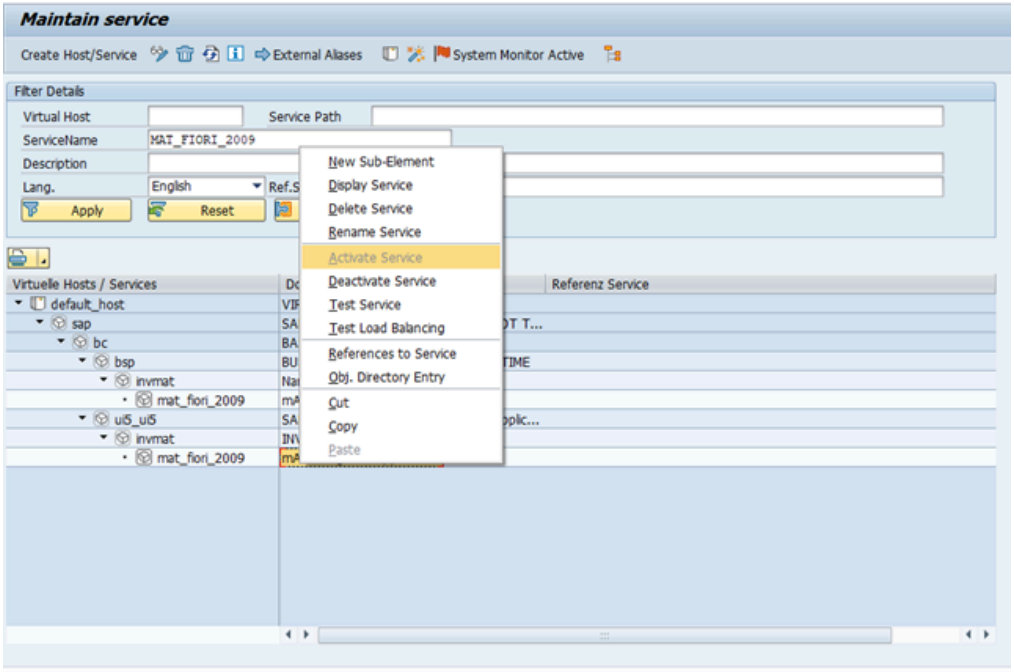
Figure 3-30 Activate MAT FIORI Service



3. Right-click the mAssetTagui5 service under *default_host* > *sap* > *bc* > *bsp* > *INVMAT* > *mat_fiori_2009* and click **Activate Service**

   A message prompts you to activate the service.

Figure 3-31 Activate MAT FIORI Service



4. Click **Yes**.

   Access the SAPUI5 web application by replacing the **host name, port number and client number** in the following template URLs to match your SAP NetWeaver Gateway instance:

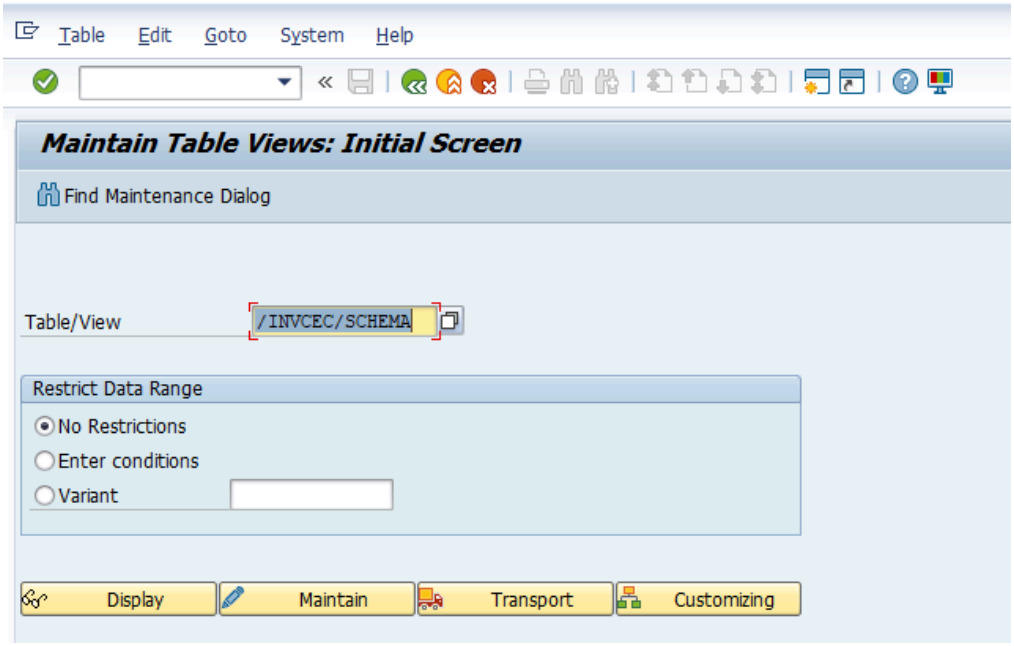
   - http://**<hostname>**:**<port_number>**/sap/bc/ui5_ui5/invmat/mat_fiori_2009/index.html?sap-client=**100**.
   - http://**<hostname>**:**<port_number>**/sap/bc/ui5_ui5/invmat/mat_fiori_2009/index.html?sap-client=**100**&sap-ui-language=EN&sap-ui-appcache=false.

4. Check Schema Change Indicator

After importing support packs into the systems, perform the following steps to check the Schema Change Indicator.

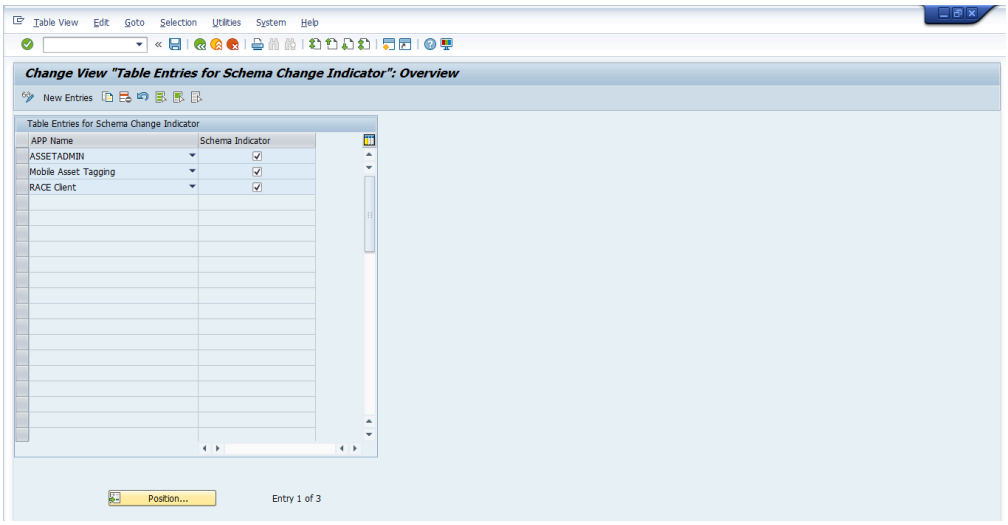
1. Login to SAP Gateway system.
2. Go to **tcode – SM30**.

Figure 4-1 SM30



3. Click **Maintain**.
4. Click **New Entries**.

Figure 4-2 Table Entries for Schema Change Indicator



5. Select RACE™ Client and mAssetTag from **App Name** drop-down and select **Schema Indicator** checkbox.
6. Save the changes in Transport Request to move the changes to Quality and Production environment.

Table 4-1 Schema Details

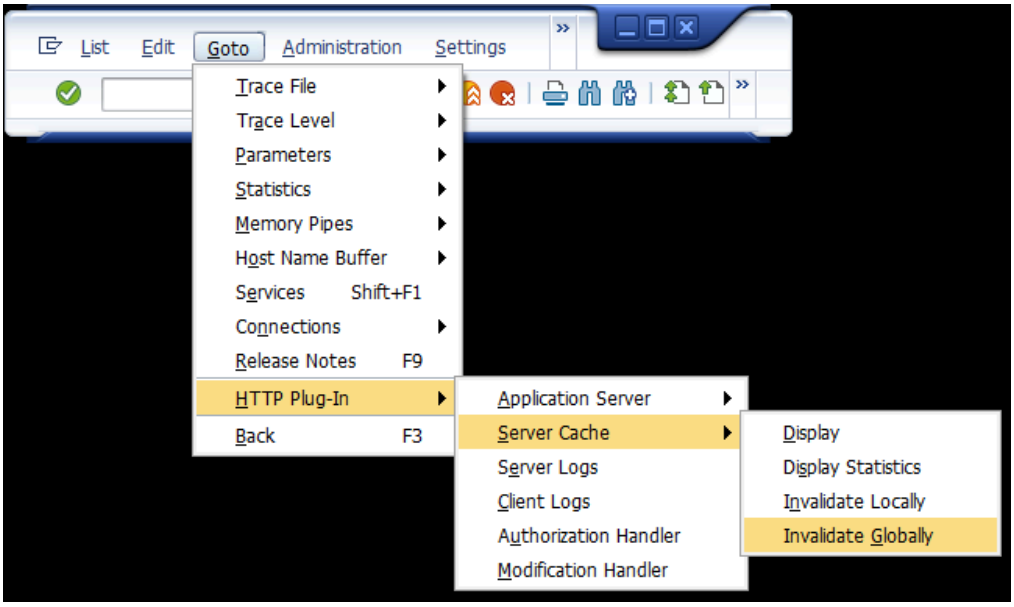
Base URL	Old Schema	New Schema
/INVCEC/RACE_SRV	/INVCEC/RACE_SRV	RACECLIENT
/INVMAT/ASSET_ADMIN_-SRV/	INVMAT/ASSET_ADMIN_-SRV/	ASSET ADMIN
/INVMAT/MASSETTAG_2_-SRV/	/INVMAT/MASSETTAG_2_-SRV/	MASSETTAG

5. Clean SAP Gateway

Clean up the SAP Gateway Cache after importing support packs into the systems.

1. Login to SAP Gateway system.
2. Go to transaction /n/iwfnd/cache_cleanup in the gateway system.
3. Select the **Cleanup Cache for all Models** checkbox and click **Execute**.
4. Go to transaction */n/iwbep/cache_cleanup* in the gateway system.
5. Select the **Cleanup Cache for all Models** checkbox and click **Execute**.
6. Go to transaction *smicm* in the gateway system.
7. Navigate to **Goto**, **HTTP Plugin**, **Server Cache** and **Invalidate Globally** option.

Figure 5-1 smicm transaction



8. Click **Yes**.

6. Configure SAP Gateway for mAssetTag

SAP FI-Asset Accounting (FI-AA) users can use mAssetTag to do the following:

- Connect and access FI-AA master data using iOS mobile.
- Scan and tag geo-location of assets and track assets.
- Generate barcode / QR code for assets.
- Audit assets (Verify / Approve/ Reject).

6.1. Prerequisites for SAP Gateway Configuration

Ensure these components are installed and configured:

- Dependency
    - Innovapptive Add-Ons and Support Packs are installed successfully.
- Assumptions
    - The backend processes required for the app, which shall be enabled, are already configured and related data is set up.
    - mAssetTag Add-on for SAP ECC and SAP NetWeaver Gateway are installed and validated.
    - Mobile platform (SAP Mobile Platform or SAP Cloud Platform mobile services) is configured with the mobile application.

mAssetTag application primarily consists of four modules:

- Scan Assets, Tag Geo-location, and Tracking
- Add Assets—Generate Bar Code/QR Code
- Review Asset list—Audit list.
- Goods Receiving
    - Purchase Order
    - Stock Transport Order
    - Inbound Delivery
    - Outbound Delivery
    - Orders
    - Material Document
    - Others

6.2. Configure application global settings

To configure the application settings for mAssetTag.

1. Run T-Code **/INVCEC/APP_CONF**.
2. Add the following entries in the table:

Table 6-1 Application configuration attributes

Field	Description
SNo	Entering the serial number for the Primary key.
App Name	Unique ID for the app.
App ID	Description of the app.
Security Profile	Identifies the security authentication mechanism selected for the application. Not applicable for mAssetTag application.
Language	Not applicable for mAssetTag application.
SMP Host	This field defines the SMP Host name to be utilized by the application. Not applicable for mAssetTag application.
SMP Port	Defines the SMP Port number to be utilized by the application. Not applicable for mAssetTag application.
Bandwidth Value	Enter the bandwidth used to switch the service call from online to offline mode depending on the network bandwidth capacity.
Enable HTTPs	To enable HTTPS switch for the application. Not applicable for mAssetTag application.
Extension	Not applicable for mAssetTag application.

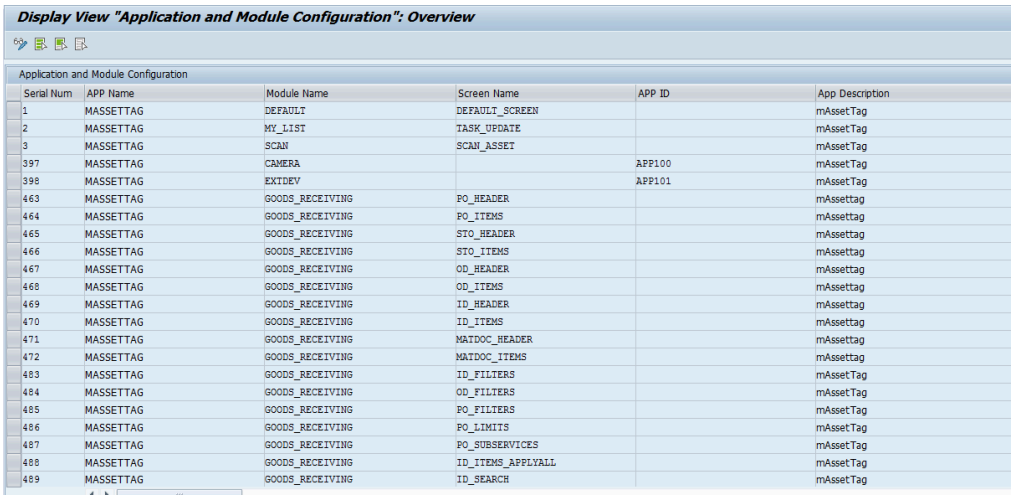
Field	Description
Refresh Rate	Defines the duration of time taken to refresh the offline store.
Refresh Offline	Enables offline refreshing. Using this field, a push notification can be generated that refreshes the application in offline mode.
Theme	Not applicable for mAssetTag application.
Template	Not applicable for mAssetTag application.
APPNAME SPACE	Not applicable for mAssetTag application.
APPTITLE	Not applicable for mAssetTag application.
APP Description	Not applicable for mAssetTag application.
APP Icon	Not applicable for mAssetTag application.
Status	Not applicable for mAssetTag application.
Created Date	Not applicable for mAssetTag application.
Updated Date	Not applicable for mAssetTag application.

6.3. Configure application modules and screens

To configure the modules and screens for mAssetTag application.

1. Run T-Code **/INVCEC/APPCONFI**.
2. Add the following entries in the table for modules and corresponding screens.
   See RACE™ Preset Configuration spreadsheet for Modules and Screens entries on the product release documentation page.
3. Copy and paste values from the spreadsheet to the table.

Figure 6-1 Modules and Screens



Display View "Application and Module Configuration": Overview

Application and Module Configuration

Serial Num	APP Name	Module Name	Screen Name	APP ID	App Description
1	MASSETTAG	DEFAULT	DEFAULT_SCREEN		mAssetTag
2	MASSETTAG	MY_LIST	TASK_UPDATE		mAssetTag
3	MASSETTAG	SCAN	SCAN_ASSET		mAssetTag
397	MASSETTAG	CAMERA		APP100	mAssetTag
398	MASSETTAG	EXTDEV		APP101	mAssetTag
463	MASSETTAG	GOODS_RECEIVING	PO_HEADER		mAssettag
464	MASSETTAG	GOODS_RECEIVING	PO_ITEMS		mAssettag
465	MASSETTAG	GOODS_RECEIVING	STO_HEADER		mAssettag
466	MASSETTAG	GOODS_RECEIVING	STO_ITEMS		mAssettag
467	MASSETTAG	GOODS_RECEIVING	OD_HEADER		mAssettag
468	MASSETTAG	GOODS_RECEIVING	OD_ITEMS		mAssettag
469	MASSETTAG	GOODS_RECEIVING	ID_HEADER		mAssettag
470	MASSETTAG	GOODS_RECEIVING	ID_ITEMS		mAssettag
471	MASSETTAG	GOODS_RECEIVING	MATDOC_HEADER		mAssettag
472	MASSETTAG	GOODS_RECEIVING	MATDOC_ITEMS		mAssettag
483	MASSETTAG	GOODS_RECEIVING	ID_FILTERS		mAssetTag
484	MASSETTAG	GOODS_RECEIVING	OD_FILTERS		mAssetTag
485	MASSETTAG	GOODS_RECEIVING	PO_FILTERS		mAssetTag
486	MASSETTAG	GOODS_RECEIVING	PO_LIMITS		mAssetTag
487	MASSETTAG	GOODS_RECEIVING	PO_SUBSERVICES		mAssetTag
488	MASSETTAG	GOODS_RECEIVING	ID_ITEMS_APPLYALL		mAssetTag
489	MASSETTAG	GOODS_RECEIVING	ID_SEARCH		mAssetTag

Table 6-2 Modules and Screens Attributes

Field	Description
App Name	Unique ID for the app.
Module Name	Indicates the module available for the app.
Screen Name	Indicates the configurable screens within each Module of the app.
App ID	Unique application identity of the App.
App Description	Description of the app.
Module Description	Description of the module.
Screen Description	Description of the screen.

6.4. Configure RACE™ in SAP Gateway

Define the scope of the RACE™ configuration for the mAssetTag application.

To configure:

1. Run T-Code **/INVCEC/APPCNTRL**.
2. Add the following entries and configure settings for components of mAssetTag.

Figure 6-2 App Control - RACE™

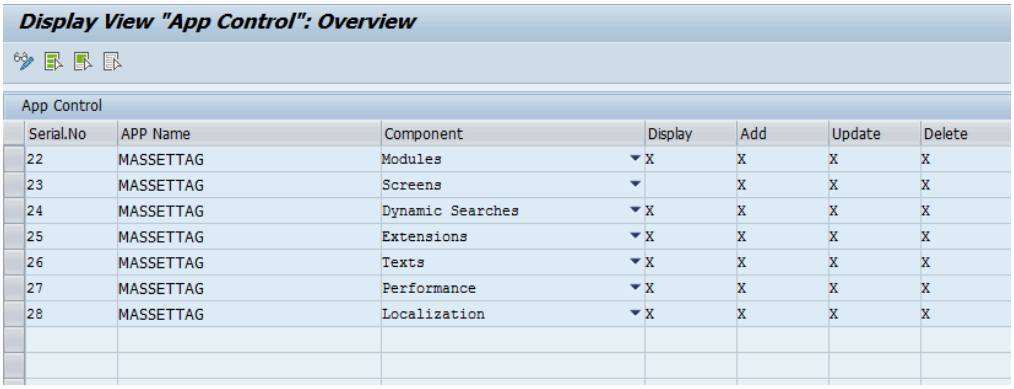


Table 6-3 Application control configuration attributes

Field	Description
Serial No.	Serial Number of the configuration entry.
App Name	Unique application identity of the App.
Component	Indicates the unique configuration category for the application. The acceptable entries are: Modules, Screens (not relevant for mAssetTag), Dynamic Searches (not relevant for mAssetTag), Extensions, Texts, Performance (not relevant for mAssetTag), Localization.
Display	If enabled, the component is displayed in RACE™.

Field	Description
	Note: Indicator (x) means component is enabled.
Add	If enabled, user can add new entries for configuration in RACE™.
Update	If enabled, ser can update the configuration entries in RACE™.
Delete	If enabled, user can delete the configuration entries in RACE™.

6.5. Configure mAssetTag modules in Gateway

Following steps guide you to enable or disable modules in scope for mAssetTag.

1. Run T-Code **/INVCEC/SCOPING**.
2. Add entries in the table for various modules as listed in the following table.
   See RACE™ Preset Configuration spreadsheet for Scoping entries on the product release documentation page.

Table 6-4 App Scoping configuration attributes

Field	Description
App Name	Unique ID for the app.
App ID	Application identity of the App.
Title	Not applicable for mAssetTag application.
App Description	Description of the app name.
Onclick Screen	Not applicable for mAssetTag application.
Access Category	Based on the user access, you can enable/disable modules and the screens.

Field	Description
	• T-Transaction Code • U-User Group • R-Role • A-Authorization Object
Access Value / TCode	This field is used for data related to security. Based on the access category, data in this field needs to be maintained. For example, if in the **Access Category** you maintain a t-code then in the access values you must enter that t-code name. If user has access to that t-code, only then module is displayed in the mobile app.
Status	To enable/disable the modules on the mobile screen, you need to select the status as active/inactive respectively
Multiple Approval	Define whether the user can do multiple document approval at the list level.
Value	Not applicable for mAssetTag application.

Field	Description
Push Interval	Not applicable for mAssetTag application.
Date Format	Not applicable for mAssetTag application.

3. Copy and paste values from the spreadsheet to the table.

Figure 6-3 Global App Scoping

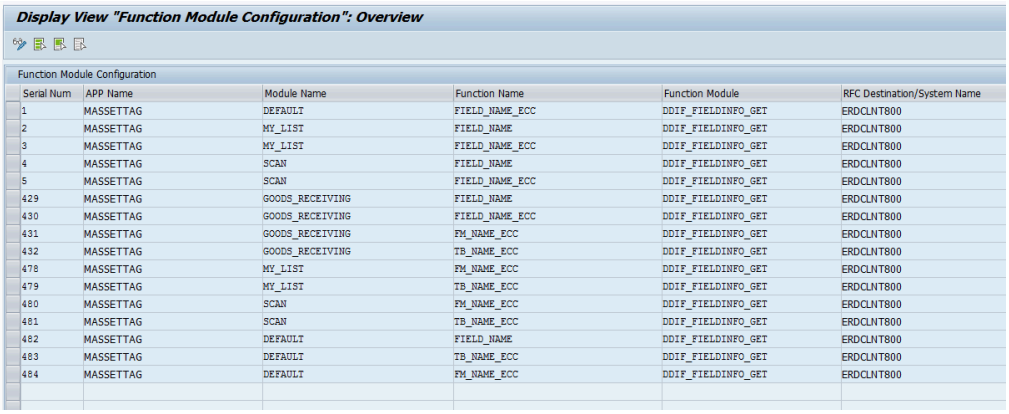
Serial Number	APP Na...	Module Name	AP...	BOR ID	T	App Description	Access...	A	Status	Multiple Approval	Value	Push
1	MASSETT_	SCAN	APP...	SCAN_ASSET		Scan and Tag Assets			True		0	0
2	MASSETT_	ADD_ASSET	APP...	ADD_ASSET		Add Assets			True		0	0
3	MASSETT_	MY_LIST	APP...	MYLIST		Asset Inventory			True		0	0
319	MASSETT_	ATTACHMENTS	APP...	ATTACHMENTS		Attachments			True		0	0
323	MASSETT_	CAMERA	APP...	CAMERA		Scan with Camera			True		0	0
324	MASSETT_	EXTDEV	APP...	EXTDEV		Scan with External Peripheral			True		0	0
325	MASSETT_	GOODS_RECEIVING	APP...	GR_PO		GR - Purchase Order			True		0	0
326	MASSETT_	GOODS_RECEIVING	APP...	GR_STO		GR - Stock Transport Order			True		0	0
327	MASSETT_	GOODS_RECEIVING	APP...	GR_ID		GR - Inbound Delivery			True		0	0
328	MASSETT_	GOODS_RECEIVING	APP...	GR_OD		GR - Outbound Delivery			True		0	0
329	MASSETT_	GOODS_RECEIVING	APP...	GR_OTH		GR - Others			True		0	0
330	MASSETT_	GOODS_RECEIVING	APP...	GR_MAT		GR - Material Document			True		0	0
334	MASSETT_	GOODS_RECEIVING	APP...	BTN_CAN		GR - Mat.Doc Cancellation			True		0	0
335	MASSETT_	GOODS_RECEIVING	APP...	GR_MAT_MATDOC		GR - Mat doc - Mat.Doc O/p			True		0	0
336	MASSETT_	GOODS_RECEIVING	APP...	BTN_POCONF		GR - PO Confirm			True		0	0
337	MASSETT_	GOODS_RECEIVING	APP...	GR_PO_MATDOC		GR - PO Mat.Doc O/p			True		0	0
338	MASSETT_	GOODS_RECEIVING	APP...	GR_STO_MATDOC		GR - STO - Mat.Doc O/p			True		0	0
339	MASSETT_	GOODS_RECEIVING	APP...	GR_OD_MATDOC		GR - OD - Mat.Doc O/p			True		0	0
340	MASSETT_	GOODS_RECEIVING	APP...	GR_ID_MATDOC		GR - ID - Mat.Doc O/p			True		0	0
341	MASSETT_	GOODS_RECEIVING	APP...	GR_OTH_MATDOC		GR - Others - Mat.Doc O/p			True		0	0

6.6. Configure Search Function Module

To enable search help within the drop-down fields across the mAssetTag application.

1. 1. Run T-Code **/INVCEC/FMCONFIG**.
2. Add the following entries.
   See RACE™ Preset Configuration spreadsheet for Search Function Module entries on the product release documentation page.

Figure 6-4 Function Module Configuration



The following table lists the Search function module configuration relevant attributes.

Table 6-5 Search function module configuration attributes

Field	Description
App Name	Unique ID for the app.
Module Name	Module name for which the search function is configured.
Function Name	Indicates the Function name.
Function Module Name	Indicates the Function Module for the search function.
RFC Destination	Indicates the RFC destination for which the search is executed.

6.7. Configure extensions for mAssetTag

Do the following configurations to add/update fields on the transaction screens (list, header, item details) across the application.

The following table lists the extensions configuration relevant attributes.

Table 6-6 Extension configuration attributes

Field	Description
Module Name	Select the module where the field is configured.
Screen Name	Select the screen within the module where the field is displayed.
Category	Select between Standard and Extension options to choose the configuration type. **Note:** Select **Standard** to customize the type of input required to be displayed on the header.
Section Name	Helps you group the Extension fields into sections for retrievals or Posting Forms.
Section Position	Define the position of section within the screen relevant to other sections.
Source Type	Select the source like BAPI or SAP Table from where the data is retrieved.
Entity Set	Collection to which the Standard field belongs. **Note:** Auto-populated based on Module and Screen selected if the **Category** field is set to Standard. For example, this field is populated with GRPOHeaderCollection if Goods Receiving module and PO Header screen are selected.
Entity Type	Auto-populated based on Module and Screen selected if the **Category** field is set to Standard.
Table / BAPI Name	Select the table/BAPI to fetch the data from.

Table 6-6 Extension configuration attributes (continued)

Field	Description
	Note: This field is applicable only if you selected Extension in the **Category** field.
Table / BAPI Description	Auto-populated based on **Table / BAPI Name**. **Note:** This field is applicable only if you selected Extension in the **Category** field.
Field Name	Select the table/BAPI field to retrieve the field data.
Field Description	Populated based on the **Field Name**.
UI Label	Enter the text to be shown on the application UI.
Field Type	Define the type of the field. Following are a few of the UI field types available for mAssetTag: **Table 6-7 UI Field Types** Field Type ID: DD — Field Type: Drop Down Field Type ID: DF — Field Type: Date Field Field Type ID: TF — Field Type: Text Field Field Type ID: SF — Field Type: Scan Field Field Type ID: ID — Field Type: Input Drop Down Field Type ID: DFR — Field Type: Date Field Range Field Type ID: SID — Field Type: Scan Input Drop Down
UI Position	Position of the extension compared to other fields on the transaction screen.

Table 6-6 Extension configuration attributes (continued)

Field	Description
Default Value	Value to be populated in the extension field.
Case Sensitive	To show the extension field value in Uppercase or Lowercase.
Active	To show/hide the extension on the transaction screen.
Overview	Enable/disable the extension field in Overview section of the transaction screen. For example, header fields and line item fields in the Item Overview list screen are displayed in Overview section.
Detail	Enable/disable to show the extension in Detail section of the transaction screen.
Mandatory	To show the extension as Mandatory field on the transaction screen.
Validation Required	To configure validation rules for the extension field.
UI Validation	Specify the validations for user entered values. **Note:** This field is displayed only if the **Validation Required** is enabled.
UI Validation Message	Enter the alert message to be displayed if the UI validation is applicable. **Note:** This field is displayed only if the **Validation Required** is enabled.

Table 6-6 Extension configuration attributes (continued)

Field	Description
Authorization Relevant	Enable/disable security authorization relevancy. This is relevant for fields of type 'drop down', and when activated, will filter values based on security org values set up in SAP security roles.
Access Category	Enable/disable extension field based on user access: • T-Transaction Code • U-User Group • R-Role • A-Authorization Object.
Access Value	This field is used for data related to security. Based on the access category, value in this field must be maintained. For example, if you configure a transaction code in the **Access Category** field then the t-code name must be specified in this field. Extension configured is displayed in the mobile application only if the transaction code is assigned to the user.
Dropdown Table	Select the Source table from where the values of a dropdown field are retrieved. **Note:** This field is displayed only if the **UI Field type** is set to **DD - Drop Down** or **ID - Input Dropdown**.
Dropdown Field	Select the Field in the source table from where the values of a dropdown field are retrieved.

Table 6-6 Extension configuration attributes (continued)

Field	Description
	Note: This field is displayed only if the **UI Field type** is set to **DD - Drop Down** or **ID - Input Dropdown**.
DD Dependency Field	Select the Dependent field on the transaction screen that facilitates filtering of the field values. For example, **Storage Location** search field is dependent on **Plant** field. **Note:** Displayed only if the **UI Field type** is set to **DD - Drop Down** or **ID - Input Dropdown**.
Parent Table	Select the Table from where the field is retrieved.
Parent Key	Select the field to define the relationship between the dropdown field and table.
Condition	Enter the logic to show the configured field. For example, you can show an extension 'Supplying Plant' only if the Purchase Order type is UB (Internal Purchase Order).
Text Required	Define how the dropdown values are displayed. Possible values: • 0 – Not Required (not relevant) • 1 – Only Description (only the description of the value is displayed) • 2 – Key and Description (both the key and description of the value are displayed)
Text Table	Select the Table from where the text is retrieved.

Table 6-6 Extension configuration attributes (continued)

Field	Description
	Note: This field is displayed only if the **Text Required** is set to **Only Description** or **Key and Description**.
Text Field Name	Select the table field name from where the text is retrieved. When the value in **Text Required** field is set to 1 or 2, the corresponding Description is fetched from the text table in SAP. **Note:** This field is displayed only if the **Text Required** is set to **Only Description** or **Key and Description**.
Text Key Field Name	Select the field to define the relationship between the dropdown field and table.

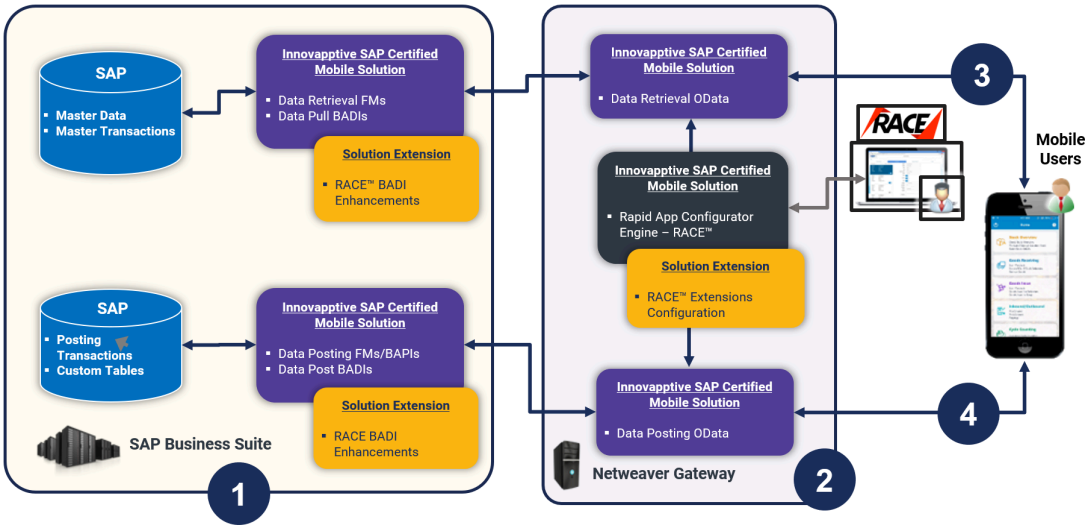
7. Configure RACE™ for mAssetTag

Innovapptive's Connected Workforce Platform™ uses built-in integrations to connect your SAP®, IBM Maximo, and other back-office systems with mobile applications. This helps organizations bridge communication and information gaps between executive teams, field technicians, plant operators, warehouse operators, maintenance engineers, and back-office staff. Connect data points across cloud and on-premise networks to quickly and easily.

- Draw powerful insights
- Identify cost-savings opportunities
- Make calculated business decisions
- Respond quickly to trends or problems

To align our solutions with your operations, we built a Rapid App Configuration Engine (RACE™) directly into our mobile Connected Workforce Platform. This sophisticated configuration toolkit gives developers and non-developers complete freedom to customize mobile environments without any coding experience.

Figure 7-1 RACE™ Architecture



Deployment ecosystem consists of the following:

1. **SAP ECC Integration Component (SAP Certified Add-On in Innovapptive Namespace)**: This SAP-certified add-on is developed on ABAP. You can deploy this add-on on SAP ECC through an Add-On Package. You can make enhancements to this through BADI by developing those enhancements in ABAP. This add-on helps you manage Data retrieval and do posting to BAPI's or Function Modules.
2. **SAP NetWeaver Integration Component with OData Web Services**: Developed on ABAP and OData and offered as an SAP Certified Add-On. This add-on is deployed through an Add-On Package on SAP NetWeaver. You can make enhancements through RACE Configurations. This add-on helps manage the OData integration components (i.e. OData Web Services) to interface with the mobile app. The RACE™ Add-On has both the front-end components and the back-end data tables for the RACE™ Lite Configuration tool.
3. **Native App Client + Desktop Web App**: Application front-end solutions are offered on all three major mobile OS as a native application that can run on tablets and smartphones.
    - iOS - Developed using native iOS (Swift SDK)
    - Android - Developed using Android SDK on JAVA
    - Windows OS - Developed using Windows development kits.
    - Browser based App for desktop - Developed using SAPUI5 technology.

    Changes on the application user interface is managed through the RACE™ Lite Admin tool.
4. **Interface between Mobile App and NetWeaver Gateway**: OData Web Services
5. **Interface between NetWeaver Gateway and SAP ECC**: RFC Connection

7.1. Features of RACE™

You can do the following with RACE™ in your mobile application:

- **Enable and Disable features**: Enable or disable modules on the fly; no additional development or deployments efforts.
- **Define Defaults**: Define default device and application values that you use every day at work like Default Plant or the type of peripherals that you use. When you do this, the fields for specifying those values are automatically populated.
- **Manage Filters**: Create, edit, or delete filters to define the transaction records that you want to view across the modules. For example, you can add a date filter for Purchase Orders to restrict a list of Purchase Orders displayed in a list screen.
- **Add/Modify fields**: Add new fields and modify existing field parameters, such as Field Types, UI Label, UI Positions and visibility. Define mandatory, optional or display/hidden fields.
- **Add and customize search criteria**: Add/modify search fields to filter records based on your work requirements.
- **Create modules and screens**: Create new modules and screens to address your specific business requirements.
- **Optimize Performance**: Enable or disable a collection for Offline storage and configure the page size on the list screen using Skip Token.
- **Localization**: Configure the UI labels in the language of your choice to cater to regional language requirements.
- Apply security access capabilities to modules and features.
- Configure security for newly added fields.
- Map newly added fields with SAP fields.

7.2. How to Configure RACE™ for mAssetTag

RACE™ configurations are provided in spreadsheets. Upload these spreadsheets to your RACE application instance to enable the latest RACE™ features that are developed for mAssetTag. Contact your Innovapptive representative for the RACE configuration spreadsheets for your release.

When you use the RACE™ preset configuration spreadsheets, you enable all the recommended features / configurations automatically.

Some non-standard features are developed for a few customers. These features are not enabled by default when you import the spreadsheets with configurations. You can enable these features if required by your business.

For detailed information on RACE configurations, see the *Upload Application Configurations Using RACE*™ section in the *Configure mAssetTag using RACE*™ document.

8. SAP transactions and tables for mAssetTag

The following table provides the list of key SAP transactions and tables for the mAssetTag application.

Table 8-1 SAP Transactions and Tables

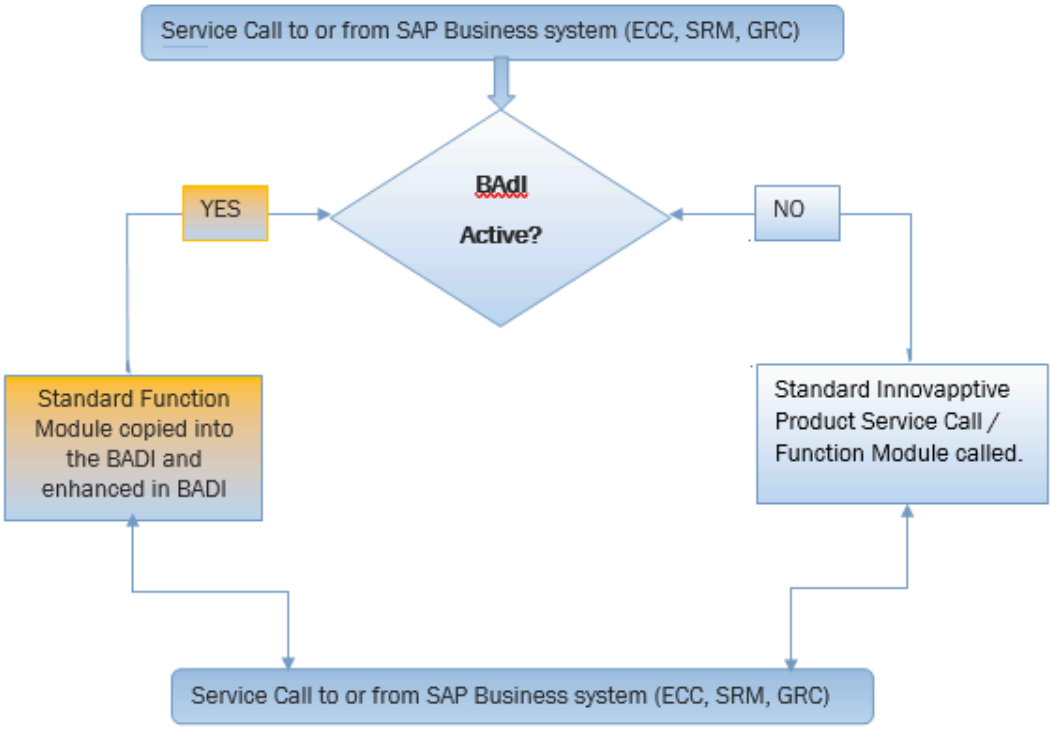
Module Name	Applicable Table	Transaction Code
SCAN	ANLA, ANLZ	AS02, AS03
MY_LIST	ANLA, ANLZ, /IN-VMAT/ASSETSCH, /IN-VMAT/POSTSTAG, /IN-VMAT/ATTAPOST	AS02, AS03, /INVMAT, /INVS-TAT
ADD_ASSET	/INVMAT/ASSET_TG	/INVMAT/COCKPIT
GOODS_RECIEVING	LIKP	MIGO
GOODS_RECIEVING	EKKO	MIGO
GOODS_RECIEVING	EKKO	MIGO
GOODS_RECIEVING	MSEG	MB1C

9. Implement BADIs

mAssetTag uses SAP oDATA based on RESTful design. mAssetTag performs service calls to read and post data from the SAP Business backend system. These service calls invoke remote enabled function modules in the backend systems to either get or post data depending on the direction of the call. Like Standard SAP code, Innovapptive Add-On code objects cannot be modified in customer systems.

Innovapptive's solution provides the ability for customers to avail additional functionality through BADIs. The enhanced / modified service calls/function modules that are designed to meet special / additional requirements of customers are replaced in the customer environment BADI.

Figure 9-1 BADI Implementation



9.1. List of BADIs for mAssetTag

List of BADIs (Business Add-Ins) available as part of the mAssetTag SAP ECC Add-on component to enhance the standard functionality with ABAP development.

Table 9-1 BADIs in mAssetTag Application

BADI Name	BADI Description
/INVMAT/BADI_ACTIVE_OBJ_LIST	BADI definition for List of Screens in mobile device
/INVMAT/BADI_ASSET_CLASS_GET	BADI definition for Get Asset Class Collection
/INVMAT/BADI_ASSET_SCHEDULER	BADI definition for mAssetTag – Asset Scheduler
/INVMAT/BADI_ASSET_TAG_GET	BADI definition for Get Inventory Asset information
/INVMAT/BADI_ASSET_TAG_UPDATE	BADI definition for Update Asset Tag Information
/INVMAT/BADI_ASSET_USER_VAL	BADI definition for Asset Scheduler User Validation
/INVMAT/BADI_AUTH_CHECKS	Authorization Checks
/INVMAT/BADI_BATCH_VAL	BADI definition for Batch Validation
/INVMAT/BADI_CAPTURE_ASSETDATA	BADI definition for Capturing Asset Data from mobile device
/INVMAT/BADI_COMPANYCODE_LIST	BADI definition for Get List of Company Codes
/INVMAT/BADI_CUSTOM_DROPDOWN	BADI definition for Custom Dropdown
/INVMAT/BADI_DD_BATCH	BADI definition for Batch Dropdown
/INVMAT/BADI_DD_MATERIALS	BADI definition for List of Materials for Dropdown
/INVMAT/BADI_DD_MOVEMENT_TYPES	BADI definition for Movement Types Dropdown
/INVMAT/BADI_DD_PLANTS	BADI definition for List of Plants drop down
/INVMAT/BADI_GET_ASSET_TASKS	BADI definition for List of Tasks assigned to the user

Table 9-1 BADIs in mAssetTag Application (continued)

BADI Name	BADI Description
/INVMAT/BADI_GRID_ITEMS	BADI definition for Goods Receipt Inbound Delivery Items
/INVMAT/BADI_GRID_ITEMS_VAL	GR Inbound Delivery Item Validation/Update
/INVMAT/BADI_GRID_LIST	BADI definition for Goods Receipt Inbound Delivery List
/INVMAT/BADI_GRID_LIST_VAL	BADI definition for Goods Receipt Inbound Delivery List
/INVMAT/BADI_GRID_POST	BADI definition for Goods Receipt Inbound Delivery Posting
/INVMAT/BADI_GROD_ITEMS	BADI definition for Goods Receipt Outbound Delivery Items
/INVMAT/BADI_GROD_ITEMS_VAL	GR Outbound Delivery Item Validation/Update
/INVMAT/BADI_GROD_LIST	Get list of Outbound Deliveries waiting for Goods Receipt
/INVMAT/BADI_GROD_LIST_VAL	GR Outbound Delivery Header Validation/Update
/INVMAT/BADI_GROD_POST	BADI definition for Goods Receipt Outbound Delivery Posting
INVMAT/BADI_GRPO_POST	BADI definition for Goods Receipt Posting
/INVMAT/BADI_GRSTO_POST	BADI definition for Goods Receipt Posting
/INVMAT/BADI_GR_DLV_ID_HUDATA	Handling Unit Data for Inbound Delivery
/INVMAT/BADI_GR_DLV_OD_HUDATA	Handling Unit Data for Outbound Delivery
/INVMAT/BADI_GR_POITEMS	BADI definition for Goods Receipt PO Items
/INVMAT/BADI_GR_POITEMS_VAL	GR Purchasing Document Item Validation/Update
/INVMAT/BADI_GR_POLIST	BADI definition for Goods Receipt PO List

Table 9-1 BADIs in mAssetTag Application (continued)

BADI Name	BADI Description
/INVMAT/BADI_GR_POLIST_VAL	GR Purchasing Document Header Validation/Update
/INVMAT/BADI_GR_STOITEMS	BADI definition for Goods Receipt PO Items
/INVMAT/BADI_GR_STOITEMS_VAL	GR Purchasing Document Item Validation/Update
/INVMAT/BADI_GR_STOLIST	BADI definition for Goods Receipt STO List
/INVMAT/BADI_GR_STOLIST_VAL	GR STO Document Header Validation/Update
/INVMAT/BADI_MATERIAL_GROUP	BADI definition for Material Group
/INVMAT/BADI_MATERIAL_GRP_VAL	BADI definition for Material Group Validation
/INVMAT/BADI_MATERIAL_VAL	BADI definition for Material Validation
/INVMAT/BADI_MAT_DOC_ITEMS	Get Material Document Items
/INVMAT/BADI_MAT_DOC_OUTPUT	BADI definition for Material Document Output
/INVMAT/BADI_MOVEMENT_TYPE_VAL	BADI definition for Movement Type Validation
/INVMAT/BADI_PLANT_VAL	BADI definition for Plant Validation
/INVMAT/BADI_PO_LIMITS	BADI definition for PO Limits
/INVMAT/BADI_SERVICE_LINES	BADI definition for Service Lines
/INVMAT/BADI_SERVICE_LINES_VAL	BADI definition for Service Lines Validation/Update
/INVMAT/BADI_STATUS_LIST	BADI definition for List of Status Codes
/INVMAT/BADI_STORAGE_LOC	BADI definition for List Storage Locations Dropdown
/INVMAT/BADI_STOR_LOC_VAL	BADI definition for Storage Location Validation

Table 9-1 BADIs in mAssetTag Application (continued)

BADI Name	BADI Description
/INVMAT/BADI_UPDATE_TASKSTATUS	BADI definition for Update Status of Assigned Tasks
/INVMAT/BADI_MATDOC_HEADER	BADI definition for Material Document Header
/INVMAT/BADI_MATDOC_ITEMS	BADI definition for Material Document Items
/INVMAT/BADI_MATDOC_REVERSAL	BADI definition for Material Document Reversal
/INVMAT/BADI_GRPO_ATTACH_DISPL	BADI definition for Goods Receiving attachment display
/INVMAT/BADI_GRPO_ATTACH_DOWNL	BADI definition for Goods Receiving attachment download
/INVMAT/BADI_BATCHNUMBERS_LIST	BADI definition for Batch Number List
/INVMAT/BADI_ACNT_ASMNT_POLINE	BADI for Asset Account Assignment lines for PO
/INVMAT/BADI_ASSET_COCKPIT_ATT	BADI for asset cockpit attachment
/INVMAT/BADI_ASSET_RECNCL_ATTA	BADI Definition to get the Recancellation Attachments
/INVMAT/BADI_ATTACH_DOWNLOAD	Download Attachments
/INVMAT/BADI_ATT_MAT_DOC_CRE	Attachment creation for matdoc
/INVMAT/BADI_AT_ATTACH_DELETE	BADI for Delete Assettag Attachments
/INVMAT/BADI_AT_ATTACH_DISPLAY	BADI for display attachments
/INVMAT/BADI_AT_ATTACH_UPLOAD	BADI for Upload Assettag Attachments
/INVMAT/BADI_GET_ROOMS_LIST	BADI Definition for List of rooms
/INVMAT/BADI_GRMAT_DOC_ITEMS	GR Matdoc items Label printing
/INVMAT/BADI_ASSET_TAG_UPD_MUL	BADI for Update Multiple Asset tag Information

Table 9-1 BADIs in mAssetTag Application (continued)

BADI Name	BADI Description
/INVMAT/BADI_CREATE_ASSET_MUL	BADI for Multiple Create Asset
/INVMAT/BADI_ASSETS_TO_BATCH	Assign assets to Batch number
/INVMAT/BADI_ASSET_ANALYTICS	BADI for Asset Analytics
/INVMAT/BADI_ASSET_BATCHES	BADI Definition for List of asset batches
/INVMAT/BADI_ASSET_INV_UPDATE	Asset Inventory Status Update
/INVMAT/BADI_ASSET_KPI	Asset KPI
/INVMAT/BADI_ASSET_RECON	Asset Reconciliation
/INVMAT/BADI_ASSET_RETIREMENT	BADI for Asset retirement
/INVMAT/BADI_ASSET_SCHEDULE	Schedule Assets
/INVMAT/BADI_ASSET_STATUS	Get Asset Status
/INVMAT/BADI_ASSIGN_ASS_TO_USR	Assign asset to user
/INVMAT/BADI_BATCHNUMBER_LIST	BADI for Batchnumber list
/INVMAT/BADI_CHECKOUT_STATUS	BADI for Asset Checkout Status
/INVMAT/BADI_CREATE_ASSET	Create Asset
/INVMAT/BADI_DDPLANT_LIST	Plant List
/INVMAT/BADI_DOC_TYPES	BADI for document types
/INVMAT/BADI_GET_MOBILE_ASSETS	Get the mobile assets details
/INVMAT/BADI_INVENTORY_STATUS	Get Asset Inventory Status
/INVMAT/BADI_KOSTL_LIST	BADI for Costcenter list
/INVMAT/BADI_LOCATION_DETAILS	Get Location Details
/INVMAT/BADI_TRADING_PARTNERS	BADI for trading partners
/INVMAT/BADI_TRANS_TYPES	Asset transaction types
/INVMAT/BADI_UPDAT_TASKSSTATUS	BADI Definition for Update Status of As-signed Tasks
/INVMAT/BADI_USER_DETAILS	Get User Details

Table 9-1 BADIs in mAssetTag Application (continued)

BADI Name	BADI Description
/INVMAT/BADI_ASSET_USER_VAL	BADI Definition for Asset Scheduler User Validation
/INVMAT/BADI_CAPTURE_ASSETDATA	BADI Definition for Capturing asset data from mobile device
/INVMAT/BADI_USER_ADOPTION	BADI Definition for User Adoption
/INVMAT/BADI_USER_DETAIL_LIST	BADI Definition for User Details List
/INVMAT/BADI_GRPO_ATTACH_DISPL	BADI Definition for GRPO Attachment Display
/INVMAT/BADI_GRPO_ATTACH_DOWNL	BADI Definition for GRPO Attachment Download
/INVMAT/BADI_ASSET_INV_DELETE	BADI Definition for Asset Inventory Status Delete
/INVMAT/BADI_ASSET_INV_UPDMUL	BADI Definition for Inventory Status Update Multiple
/INVMAT/BADI_LANGUAGE	BADI Definition for Language
/INVMAT/BADI_FUNCTIONLOCATION	Badi for Location List

10. Update Resource File

This section describes the steps to view and modify the content, format, and structure of the Resources file.

As part of the initial product deployment, Innovapptive will provide a default zip file that needs to be updated to reflect your settings and branding needs.

mWorkOrder application resource file **resources_mworkorder.zip** on Windows platform is used as an example to demonstrate the steps andactions that are needed to be performed. The same steps can be followed for other products and platforms as well using the appropriate file and product names for other products.

To prepare and update the resource file:

1. Download the resources_mworkorder_zip file to the local drive.
2. Extract the resource_mmworkorder.zip file.

   The folder structure: **resource_mworkorder, Dev, ios** is displayed after successful extraction:
3. Navigate to the iOS folder. (Same file and settings are applicable for iOS, Android, and Windows).
   Standard images, logo, and the settings file are displayed in the folder.
4. Open the file **settings.json** in Notepad/Notepad++ (any standard text file editor).
5. Modify the default setting from **settings.json** file as required.

Table 10-1 json file attributes

Attribute	Description
AppName	This field is used to identify the Inno-vapptive product name. **Conditions:** Use uppercase alphabets. **Possible Values:** Based on the product, refer to the table Table 10-3 : AppName and App id *(on page 105)*. **Example:** MWORKORDER
Environment	Identifies the landscape to which the mobile application is connected. This value is displayed on the Login page of the mobile app.

Attribute	Description
	Conditions: None **Possible Values:** Development/Quality/Production
ShowDemoButton	Set to True to display the Sample Data button on the application Login page. Upon clicking the sample data, the user can view the demo data. **Conditions:** Use lowercase alphabets. **Possible Values:** true/false
hcolor	Custom header color for application. Use this parameter to customize the app screen elements, such as the header bar, to meet your corporate branding needs. Work with your appropriate branding team to identify the color that meets your enterprise palette. **Tip:** Using the Google Hex color picker, you can identify the Hex color code value that needs to be set up. To find the hex color code, go to www.google.com and search for “hex color picker.” Select the desired color and you will see the color code. **Condition:** Use the Hex color code value based on the color you would like to see on the mobile app screen elements. **Possible Values:** As per the requirement. **Example:**#42c2f4
TouchId	Set the value as **True** to enable the **Touch ID** feature in application.

Attribute	Description
AppPassCode	Set the value as **True** to enable the **App Passcode** feature in application**.**
ForgotPwd	Set the value as **True** to enable the **Forgot Password** feature in application.
ForgotPwdLink	Set the value as **True** to display the website link to reset password.
ForgotPwdMsg	Set the value as **True** to display the message to reset password.
Languages	Languages that are configured in the **settings.json** file are displayed to the user as a drop-down menu for selection. Additional languages can be added provided the language is available in SAP and the necessary translations are maintained. **Syntax:** `{"id":<SequenceNumber>,"key":"<SAPLanguageCode>", "value": "<LanguageName>"}` **Possible Values:** Languages supported by SAP **Example:** {"id":1,"key":"E","value":"English"} **Note:** For RACE™ Dynamic Forms, only English language is supported.
Timeout	Application idle Timeout (in minutes). This setting allows the administrator to specify the automatic time out when apps are left idle. **Possible Values:** As per the requirement.

Attribute	Description
	Example:D30

6. Review and update the content block for each environment (Development, Quality, and Production).

> **Note:**
> Values described in the following table are case sensitive and are recommended to be used in the same format as mentioned in the Description section. All the values are mandatory.

Table 10-2 json parameters

Parameter	Description
Server	The DNS/HostName of the SMP/SCPms servers, which will be used for mobile application connection. **Example:** smp.innovapptive.com
Port	The application establishes the communication to the server based on the specified port number. **Possible Values:** 8080, 8081, 443 **Example:** HTTP/HTTPs (SMP default HTTP port 8080, HTTPs 8081, SCPms HTTPs 443 and custom ports for proxy)
ApplicationID	ApplicationID is the ID configured in SMP/SCPms and the mobile application will use it to connect to server for the registration. **Condition:** Use the same application ID as defined in SMP/SCPms. **Possible Values:** Based on the product, refer to the table below. **Example:.**com.innovapptive.mworkorder

Parameter	Description
SecurityType	This field is used to identify the security type configured in SMP/SCPms server for the application. Security types are used based on authentication mechanism/login mechanism selected for the application. **Condition:** Use the same security profile name as defined in SMP/SCPms. **Example:** Basic Authentication (SSO2), SAML Authentication (SAML) and x509 authentication(x509) mechanisms.
https	This field is used to identify the protocol type. The default value should be set to **false**. **Conditions:** Use lowercase alphabets. **Possible Values:** true/false
Whitelist [ApplicationID]	All Innovapptive applications require connection settings for RACE™ services and may require other connection settings also. mWorkOrder application requires connection setting for RACE™, EQUIPMENT, FUNCTIONALLOCATION, and ATTACHMENT. **Example**. com.innovapptive.race, mwo.equipment, mwo.funloc and mwo.attach.
Whitelist [StoreName]	This field describes the nameOffline stores for whitelist ApplicationIDs. RACE™ store is common for all Innovapptive applications.

Parameter	Description
	mWorkOrder application requires to configure for following StoreName – RACE™, EQUIPMENT, FUNCTIONALLOCATION, and ATTACHMENT.

Figure 10-1 Sample JSON Settings file


```
{
  "Server": "smphost",
  "Port": "8080",
  "ApplicationID": "com.innovapptive.mworkorder",
  "SecurityType": "SSO2",
  "https": false,
  "AppName":"MWORKORDER",
 "Environment": "Development",
  "ShowDemoButton":true,
  "hcolor":"#445E75",
 "TouchId":true, "AppPassCode":true, "ForgotPwd":true, "ForgotPwdLink":false, "ForgotPwdMsg":"http://www.innovapptive.com/", "StoreName":"",
 "Languages":[{"id":1,"key":"E","value":"English"},{"id":2,"key":"D","value":"German"},{"id":3,"key":"F","value":"French"},
{"id":4,"key":"S","value":"Spanish"},{"id":5,"key":"P","value":"Portuguese"},{"id":6,"key":"1","value":"Chinese"},{"id":7,"key":"M","value":"Thai"}],
 "Timeout":"D30", "Whitelist":[{"ApplicationID": "com.innovapptive.mworace","StoreName":"RACE"},{"ApplicationID": "mwo.equipment","StoreName":"EQUIPMENT"},
{"ApplicationID": "mwo.funloc","StoreName":"FUNCTIONALLOCATION"},{"ApplicationID": "mwo.attach","StoreName":"ATTACHMENT"}]
}
```


ApplicationID and **AppName** depend on the app that you configure. The following table will help to configure the details.

Table 10-3 AppName and App id

Name	APP ID	AppName
Mobile Asset Tag	com.innovapptive.massettag	MASSETTAG
Mobile Inventory	com.innovapptive.minventory	MINVENTORY
Mobile Service Order	com.innovapptive.mserviceorder	MSERVICEORDER
Mobile Shopping Cart	com.innovapptive.mshop	MSHOP
Mobile Worklist	com.innovapptive.mworklist	MWORKLIST
Mobile Work Order	com.innovapptive.mworkorder	MWORKORDER
RACE™ Dynamic Forms	com.innovapptive.racedynamicforms	RACEDYNAMICFORMS

7. Save the **settings.json** file with the same name. (As a best practice, maintain a backup of the file with a different name)

8. Update the Image files.
   The .png image files that are provided can be replaced with images to meet your branding needs. Ensure that the file format, image size, quality, resolution, and so on are aligned with the image that is being replaced.
9. Compress the following files with the updated files from Part 1 & 2 into a zip file with the name **resources_ios.zip**. Ensure that the content and filenames are exactly matching.
   - App_BG_iPad_Landscape.png
   - App_BG_iPad_Protrait.png
   - App_BG_iPhone.png
   - App_Logo.png
   - settings.json

11. Download App and Install

Download the latest version of mInventory app from Apple App Store, Google Play or the Microsoft Store and install it on your devices.