Pre-Install or Pre-Upgrade Configurations Guide 2502

Connected Worker Solutions



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The Pre-Install or Pre-Upgrade Configurations Guide for mAssetTag, mWorkOrder, mInventory and all other solutions of *Connected Workforce Platform*TM.

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Preface

Understand audience and conventions followed in this document.

Audience

This guide is for technical configurators who do configurations for mAssetTag, mWorkOrder, mInventory, mServiceOrder, mWorkList and other solutions of *Connected Workforce Platform*TM.

Document Conventions

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 place- holder variables for which you supply values.
monospace	Indicates commands within a paragraph, URLs, code in examples, text that appears on the screen, or text that you enter.

Table 0-1 Conventions followed in the document

Related 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.

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1. Pre-Install or Pre-Upgrade Configurations for Innovapptive Products

This guide contains instructions for pre-install or pre-upgrade configurations for SAP BTP environment. Depending on the platform you are on, choose your configuration path.

Note:

If you are upgrading from previous versions of Innovapptive products, or if you have already installed one of the Innovapptive products, you would have done most of the configurations. Review all the configurations and do only those that are applicable for your environment.

The instructions in the document help you do pre-installation configurations for supported versions of the following Innovapptive products:

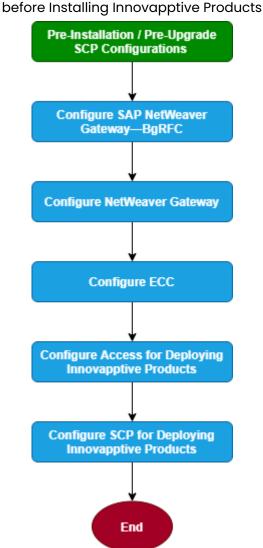
Table 1-1 Innovapptive Products Product mWorkOrder mInventory mServiceOrder mAssetTag

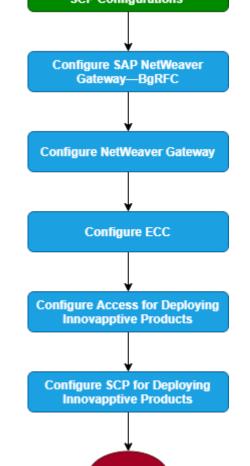
RACE Dynamic Forms

2. SAP BTP Configurations before Installing **Innovapptive Products**

This section guides you with the required SAP BTP Configurations before installing Innovapptive Mobile Products.

Figure 2-1 Workflow for SAP BTP configurations





Task	Reference to section
Configure SAP NetWeaver Gateway—BgRFC	Configure SAP NetWeaver Gateway—BgRFC (on page 10)
Configure NetWeaver Gateway	Configure NetWeaver Gateway <i>(on page 16)</i>
Configure ECC	Configure ECC <i>(on page 33)</i>
Configure Access for Deploying Innovapptive Products	Configure Access for Deploying Innovapptive Products <i>(on page 34)</i>
Configure SAP BTP for Deploying Innovapp- tive Products	Configure SAP BTP for Deploying Innovapp- tive Products <i>(on page 39)</i>

Table 2-1 Tasks for SAP BTP Configurations before Installing Innovapptive Products

3. Configure SAP NetWeaver Gateway-BgRFC

This section helps you configure SAP NetWeaver Gateway-BgRFC

- Before you Configure SAP NetWeaver Gateway BgRFC (on page 10)
- Create BgRFC Destination for Outbound Queues (on page 10)
- Register BgRFC Destination for Outbound Queue (on page 12)
- Create BgRFC Destination for Supervisor (on page 14)

3.1. Before you Configure SAP NetWeaver Gateway -BgRFC

Ensure that the following components are installed and configured:

System & Software

- SAP ECC Business Suite is installed and connected to mobile infrastructure (NetWeaver Gateway, SCPms).
- SAP NetWeaver Gateway 7.4 and above with SAP_GWFND component (SP 13 and above) and SAP_UI component (SP 13 and above).

Access

- SAP Basis System Admin with access to Gateway system.
- SAP Security Admin with access to Gateway system.

3.2. Create BgRFC Destination for Outbound Queues

Create a background remote function call (bgRFC) destination for communications in an outbound queue.

To create BgRFC Destination for the outbound queue:

- 1. In transaction SPRO, open SAP Reference IMG.
- 2. Navigate to SAP NetWeaver, SAP Gateway, OData Channel, Configuration, Connection Settings, SAP NetWeaver Gateway to Consumer, Create RFC Destination for Outbound Queues.
- 3. Click Activity.
- 4. Click Create.

- 5. In the **RFC Destination** field, enter the name for the RFC destination **IWFND_BGRFC_DEST**.
- 6. In the **Connection Type** field, enter **3**.
- 7. In Description 1 field, enter RFC Destination for Outbound Queues.
- 8. On the Special Options tab, select the Transfer Protocol as "Classic with BgRFC"/ "Classic Serializer" with "Convert outbound bgRFC to qRFC".

Figure 3-1 RFC Destination - Special Options tab

RFC Destination	n IWFND_BGRFC_DEST
Remote Logon Conne	ection Test Unicode Test 💖
RFC Destination Connection Type 3 Description	IWFND_BGRFC_DEST ABAP Connection Description
	C Destination for Outbound Queues
Administration	Technical Settings Logon & Security Unicode Special Options
Trace Export Method Default Gateway V Export Trace Do Not Export Tra	/alue
Keep-Alive Timeout	
 Default Gateway Va Timeout Inactive Specify Timeout 	300 Defined Value in Seconds
Select Transfer Protoc	lol
Transfer Protocol	Classic with bgRFC

If you do not find Classic with BgRFC, select the Convert outbound bgRFC to qRFC

Figure 3-2 RFC Destination - Special Options tab

Serializer	Classic serializer	~
Outbound bgRFC Behavior	Convert outbound bgRFC to gRFC	~

- 9. Click Save.
- 10. Click **Yes** on the confirmation message.
- 11. Click Connection Test.

3.3. Register BgRFC Destination for Outbound Queue

Register the BgRFC destination for the outbound queue to handle communications efficiently.

To register the BgRFC destination for the Outbound Queue:

- 1. In the transaction **SPRO**, open the SAP Reference IMG.
- 2. Navigate to SAP NetWeaver, SAP Gateway, OData Channel, Configuration, Connection Settings, SAP Gateway to Consumer, Register RFC Destination for Outbound Queues.
- 3. Click Activity.
- 4. Click Create on the Define Inbound Dest. tab.

bgRFC Configurati	ion
Scheduler: System	Scheduler: App. Server Scheduler: Destination Define Inbound Dest. Define Supervisor Dest.
Scheduler, System	Schedder, App. Server Schedder, Destination Denne Inbound Dest. Denne Supervisor Dest.
2 🗋 🛅	
Destination	IWFND_BGRFC_DEST
IWFND_BGRFC_DEST	 Logon/server group
	Prefixes
	IWCNT_WF
	IWFND_CNP 13
	▲
4 1	New Prefix
Last Changed	
User Name	ZZMARIM
Client ID	100
Time	10:01:39
Current Date	09/05/2015

Figure 3-3 Define Inbound Destination

- 5. Enter IWFND_BGRFC_DEST in the Inb. Dest. Name field and click <Enter>.
- 6. In the **New Prefix** field, create entries, for example **IWFND_CNP** and **IWCNT_WF** and save the settings.

7. Click Create on the Scheduler: Destination tab.

Figure 3-4 Scheduler: Destine	ation tab
-------------------------------	-----------

2 🗋 💼		· · · · · · · · · · · · · · · · · · ·		
Destination Name		Inbound DestinationIW		
IWFND_BGRFC_DEST		Scheduler Count	1-	
		Max. Auto. Retries	30	
		Wait per Unit (s)	900	
		Wait/Destination (s)	900	
		Dest.Proc. Time (s)		
		Open Connections	10	
		Unit Alive Checks	30	
		History Active		
		Check Class		
		Active/Inactive		
		Check Class		
	•			
	() ()			
]		
Last Changed				
User Name				
Client ID				
Time	00:00	0:00		
Current Date				

- 8. In the confirmation message, click Inbound.
- 9. Enter IWFND_BGRFC_DEST in the Destination field and click Save.

3.4. Create BgRFC Destination for Supervisor

Configure a supervisor destination for the BgRFC to receive configuration settings for the BgRFC scheduler. A supervisor starts or stops the schedulers.

To create the BgRFC destination for supervisor:

- 1. In transaction **SPRO**, open SAP Reference IMG.
- 2. Navigate to SAP NetWeaver, SAP Gateway, OData Channel, Configuration, Connection Settings, SAP Gateway to Consumer, Create BgRFC Supervisor Destination.
- 3. Click Activity.
- 4. In the **Define Supervisor Dest** tab, click **Create.**

Figure 3-5 Create RFC Destination for Supervisor

bgRFC Configuration	
匠 Create RFC Destination for Supervisor	ound Dest. Define Supervisor Dest.
Destination	
Destination Name BGRFC_SUPERVISOR	
User	
Create User	
User Name BGRFC_USER	
Generate Password 🗸	
	Save 🔀
Changed On	
Changed At 00:00:00	

- 5. In the **Destination Name** field, enter **BGRFC_SUPERVISOR**.
- 6. In the User Name field, enter a user name. For example, BgRFC_user.
- 7. Select the **Create User** check box.
- 8. Select the Generate Password check box.
- 9. Click **Save**.
- 10. On the BgRFC Destination screen, click Save.

4. Configure NetWeaver Gateway

Configure SAP NetWeaver Gateway to define how some settings must work with your existing SAP ECC Business Suite system.

Prerequisites

Ensure the following components are installed and configured:

- System & Software
 - For HUB architecture SAP ECC Business Suite / S4HANA is installed and connected to the mobile infrastructure (NetWeaver Gateway, SCPms).
 - SAP NetWeaver Gateway 7.4 and above with SAP_GWFND component (SP 13 and above) and SAP_UI component (SP 13 and above).
 - For EMBEDDED architecture SAP ECC Business Suite / S4HANA is installed and connected to the mobile infrastructure (SCPms).
- Access
 - SAP Basis System Admin with access to Gateway and ECC systems.
 - SAP Service marketplace access (S-User ID).
- Dependency
 - ECC backend Business suite system host details to create RFC (in HUB).
 - In EMBEDDED systems, LOCAL_RFC can be created & "Current user" ticked in Logon data of the RFC
 - SCPms host and port details for creating RFC.
- Assumptions

Port number for HTTP = 8000 and HTTPS = 8080.

4.1. Install SAP NetWeaver Gateway

Install SAP NetWeaver Gateway using SAP NetWeaver Application Server ABAP (AS ABAP) addon. Download the installation package from http://service.sap.com/swdc.

SAP NetWeaver 7.4 ABAP with Support Release 2 package includes NetWeaver 7.4 SP08 and Gateway component SAP_GWFND SP13.

Note:

Ensure that the SAP ECC Business Suite setup is completed and ready to be connected with the Gateway.

4.1.1. System Requirements

Hardware

Table 4-1 Hardware Prerequisites for NetWeaver Gateway

Requirement	Specification
Processor	Dual Core (2 logical CPUs) or higher, 2 GHz or
	higher
Random Access Memory (RAM)	8 GB or higher
Hard Disk Capacity	80 GB primary, or higher

Software

Table 4-2 Software Prerequisites for NetWeaver Gateway

Requirement	Specification
SAP NetWeaver Stack	Apply the latest kernel patch for the SAP NetWeaver version.
	Core Component
	 SAP NetWeaver 7.40 SPS08 SAP NetWeaver Gateway Foundation SAP_GWFND SP 13 Note: Comprises functional scope of components IW_FND, GW CORE, IW_BEP, and IW_HDB.
SAP Backend	SAP Business Suite system

For information about the Product Availability Matrix for SAP NetWeaver 7.4, see https://support.sap.com/release-upgrade-maintenance/pam.html.

For installation procedure, see the SAP document: https://websmp208.sap-ag.de/ ~sapidb/011000358700000828172012E#q1.

4.2. Establish trust between Gateway and ECC

Learn how to establish trust between Gateway and ECC. This is applicable in HUB Architecture.

To define the trust between the Gateway and ECC:

- 1. On the SAP NetWeaver Gateway, open the SM59 transaction and click Create.
- 2. In the **RFC Destination** field, enter the RFC destination name in the **<system id > CLNT <Client>** format.

Figure 4-1 RFC Destination

RFC Destination ERDCLNT800	
Remote Logon Connection Test Unicode Test 😚	
RFC Destination ERDCLNT800 Connection Type 3 ABAP Connection Description	
Description 1 Connection to ERD Backend system Description 2	
Administration Technical Settings Logon & Security Unicode Special Options	
Client 800 User Current User PW Status is initial	×
Trust Relationship ONo OYes Logon Screen	
Status of Secure Protocol Image: Status of Secure Protocol Authorization for Destination	33
Callback Positive List	
Positive List Actv	*

- 3. Enter 3 in the Connection Type field.
- 4. Enter description in the **Description 1** field. For example, **Connection to Backend System**.
- 5. Save your settings.
- 6. On the **Technical Settings** tab, select the option as per your system settings.
- 7. Enter the name of the SAP NetWeaver Gateway system in the Target Host field.
- 8. Enter the SAP NetWeaver Gateway system number in the System Number field.
- 9. Save your settings.

| 4 - Configure NetWeaver Gateway

10. Click Create in transaction SMT1.

A window for creating trusting relationships appears.

11. Enter the RFC destination that you created in the window.

An RFC logon to the SAP NetWeaver Gateway host occurs and the required information exchange happens.

12. Log on to the SAP NetWeaver Gateway host.

The trusted entry for the SAP NetWeaver Gateway host appears.

- 13. Save your settings.
- 14. Navigate to the **RFC** that you created in the previous step.
- 15. Select the current user on the Logon & Security tab.
- 16. Click Yes.
- 17. Save your settings.

18. Click Connection Test.

Figure 4-2 Connection Test

RFC - Connection	ı Test				
Connection Test ERDCLNT800 Connection Type SAP Connection					
Action	Result				
Logon	10 msec				
Transfer of 0 KB	1 msec				
Transfer of 10 KB	1 msec				
Transfer of 20 KB	3 msec				
Transfer of 30 KB	2 msec				

Calls from the systems that are trusted is displayed on **Trusted - Trusting Connections** screen.

Figure 4-3 Trusted Calling Systems

Trusted-Trusting Connections						
i						
Systems whose ca	lls are trusted	Systems that trust current system				
► <						
Calling Systems	Inst.					
ABAP Systems						
• 🖹 CRD	0090055493					
• 🖹 EH7	0020732636					
• 🖹 ERD	0020732636					
• 🖹 ERQ	0020732636					

4.3. Define Connection Settings to SAP NetWeaver Gateway

Identify the SAP Gateway for which you want to define connection settings. Once you identify, do the following:

Before defining the connection settings, do the following:

- Define an RFC destination for SAP Gateway to broadcast events.
- Note down the system name, client ID and a system alias of the host of the SAP Gateway.

To define the connection settings:

- In transaction SPRO, open SAP Reference IMG and navigate to SAP NetWeaver, SAP Gateway Service Enablement, Backend OData Channel, Connection Settings to SAP Gateway, SAP Gateway Settings.
- 2. Click Activity.
- 3. Click **New Entries** and enter the following:
 - Destination System: SID of the Gateway system. For EMBEDDED, it is System SID
 - **Client:** Client ID of the host of SAP NetWeaver Gateway. The client ID, you specify, must exist in the system.
 - System Alias: LOCAL.
 - **RFC Destination:** IWFND_BGRFC_DEST.

Figure 4-4 Connection Settings: New Entries

lew Entries: Overvi	ew of Adde	ed Entries		
· 🖬 🖪 🖪 🖪				
ateway settings				
Destination system	Client	System Alias	RFC Destination	11
MGX	100	LOCAL	IWFND_BGRFC_DEST	-
				-

4. Save your settings.

4.4. Create the SAP System Alias for Applications

To create the SAP system Alias for applications:

- In the transaction SPRO, open SAP Reference IMG and navigate to SAP NetWeaver, SAP Gateway, OData Channel, Configuration, Connection Settings, SAP Gateway to SAP System, Manage SAP System Aliases.
- 2. Click Activity.
- 3. Click New Entries.
- 4. Enter the following details:
 - SAP System Alias: Name of the system Alias. Preferably create a new one as "INNOVAPPTIVE"
 - **Description**: Descriptive text for the system alias. For example, Innovapptive Mobile Applications
 - Local GW: Select the check box.
 - For Local App: Select the check box.
 - **RFC Destination**: Specify the RFC destination that you defined for backend SAP system.

Note:

For HUB systems, it is backend ECC RFC. For example ECDCLNT100 and For EMBEDDED systems, it is backend local RFC. For example LOCAL RFC

- Software Version: DEFAULT.
- \circ System ID: Name of the SAP target system.
- Client: Target client.

Figure 4-5 Manage SAP System Aliases

Change View "Manage SAP System Aliases": Overview							
ッ New Entries □ 日 ロ 思 思 □							
Manage SAP System	Aliases						
SAP System Alias	Description	Local SAP For Local App	RFC Destination	Software Version	System ID	Client	WS Provider System
ERD	ECC Backend for Fiori	V	ERDCLNT800	DEFAULT	ERD	800	

5. Save your settings.

4.5. Activate SAP NetWeaver Gateway

To activate the SAP NetWeaver Gateway:

- In transaction SPRO, open SAP Reference IMG and navigate to SAP NetWeaver, SAP Gateway, OData Channel, Configuration, Activate or Deactivate SAP NetWeaver Gateway.
- 2. Click Activity.
- 3. Click Activate.

A message appears notifying the status.

4.6. Define Settings for Idempotent Services

You can configure idempotent services by scheduling a background job that ensures that the request messages in SAP NetWeaver Gateway occur only once.

To define settings for Idempotent Services:

- In transaction SPRO, open SAP Reference IMG and navigate to SAP NetWeaver, SAP Gateway Service Enablement, Backend OData Channel, Connection Settings to SAP Gateway, Define Settings for Idempotent Services.
- 2. Click Activity.
- 3. In Document section, enter 6 in the Period in Hours field.
- 4. In Document ID section, enter 12 in the Period in Hours field.
- 5. Click Schedule.

Figure 4-6 Idempotent Services Settings

Program SRT_WS_IDP_CUSTOMIZE	
🚱 🚥 Jobs	
Schedule Switch for IDP WS	
Document	
Switch Document Tables	
Job Name SAP_BC_IDP_WS_SWITCH_BD	
Period in Days	
Period in Hours 6	
Change Time of Next Switch	03.09.2016 09:39:06
Change Time of Next Switch Document ID	03.09.2016 09:39:06
	03.09.2016 09:39:06
Document ID	03.09.2016 09:39:06
Document ID Switch Document ID Tables	03.09.2016 09:39:06
Document ID Switch Document ID Tables Job Name SAP_BC_IDP_WS_SWITCH_BDID	03.09.2016 09:39:06

6. Click Continue.

4.7. Set Profile Parameters in SAP NetWeaver Gateway

Set the following profile parameters in the SAP NetWeaver Gateway system.

To set the profile parameters:

1. Go to transaction code **RZ11** and check if the parameters are set to the belowmentioned values. If not set, create the parameters in **RZ10** transaction under default profile.

Table 4-3 Profile Parameters

login/accept_sso2_ticket	1
login/create_sso2_ticket	2
icm/HTTPS/verify_client	1
icm/HTTPS/trust_client_with_issuer	*

icm/HTTPS/trust_client_with_subject

*

2. Activate SICF Services: /sap/opu and /sap/bc/ping.

Figure 4-7 SICF: /sap/opu

Create Host/Service 🛯 🎾 🚺 🔕 🛛	🗄 🔶 External Aliases 🛛 🔃 🎾 🖗 System	n Monitor Inactive 📲	
ter Details			
/irtual Host	Service Path		
ServiceName			
Description			
_ang, English	Ref.Service:		
Apply 😽 Reset			
tuelle Hosts / Services	Documentation	Referenz Service	
• O co_mes_int	co_mes_int		
• 🕂 crm_logon	Default alias to the CRM application	/default_host/sap/bc/bsp/sap/crm_ui_start	
• 🞯 epic_dummy_icbc	EPIC Dummy ICBC		
• 😡 es	Enterprise Search		
• 🚱 gw	gateway subnode		
• 🞯 iwbep	Business Suite Enablement node for Gate	e	
• 🔞 meData	meData synchronization Service		
	DD		
MY_NEW_TEST	00		
▼ 🖗 <mark>opu</mark>	OData for SAP Products		
	00		
▼ 🖗 <mark>opu</mark>	OData for SAP Products		
✓ ⁽) opu ▶ ⁽) odata	OData for SAP Products Standard Mode		
 ♥ opu ♥ odata ♥ sdata 	OData for SAP Products Standard Mode Compatibility Mode for SP 02		
 ♥ opu ♥ odata ♥ sdata ♥ utils 	OData for SAP Products Standard Mode Compatibility Mode for SP 02 Utility services		
Image: Weight of the second	OData for SAP Products Standard Mode Compatibility Mode for SP 02 Utility services POWL WIDGET	/default_host/sap/bc/bsp/sap/crm_ui_start	
	OData for SAP Products Standard Mode Compatibility Mode for SP 02 Utility services POWL WIDGET SICF Services for ERP eProcurement	/default_host/sap/bc/bsp/sap/crm_ui_start	

Figure 4-8 SICF: /sap/bc/ping

Maintain servi	ice						
Create Host/Service	%	i 🔁 🚹 🖨	External Aliases	0 🎇 🍋	System Monitor Active		
Filter Details							
Virtual Host			Service Path				
ServiceName	PING						
Description							
Lang.	English	•	Ref.Service:				
P Apply	4	Reset	📔 Fine-Tune				
Virtuelle Hosts / Service	es	Documentat	tion		Referenz Service		
I default_host		VIRTUAL DE	FAULT HOST				
🔻 🕅 sap		SAP NAMESP	ACE; SAP IS OBL	IGED NOT T			
🕨 💿 public		PUBLIC SERV	/ICES				
	 BASIS TREE (BASIS FUNCTIONS) 		1S)				
🕨 🕥 apc		ABAP Push C	Channel Framewor	k			
 <u> </u>		ABAP Push C	Channel test applic	cations			
• 🕥 ping		Connection 7	Test				

4.8. Maintain HTTPS and HTTP Connections

To maintain HTTPS and HTTP connections:

- 1. Run Tcode **RZ10** and set these parameters:
 - icm/server_port_0 = PROT=HTTP, PORT=8000, TIMEOUT=600, PROCTIMEOUT=600
 - icm/server_port_2 = PROT=HTTPS, PORT=8080, TIMEOUT=600, PROCTIMEOUT=600

Figure 4-9 ICM Parameters

ICM Monitor of Server SRVWIN0880_NGS_01					
la 45 📅 🗋					
ICM Parameter					
Services					
icm/server_port[0]	= PROT=HTTP, PORT=0, TIMEOUT=60, PROCTIMEOUT=60				
<pre>icm/server_port[1]</pre>	= PROT=SMTP, PORT=0, TIMEOUT=120, PROCTIMEOUT=120				
<pre>icm/server_port[2]</pre>	=				
<pre>icm/server_port[3]</pre>	=				
<pre>icm/server_port[4]</pre>	=				
Hard limits					
-	= 30				
icm/listen_queue_len					
	= 1000				
-	= 500				
icm/max_sockets	= 2048				
Thread handling					
	- 10				
icm/min_threads	= 10				
icm/max_threads	= 250				
icm/min spare threads	= 3				

- 2. Restart the system.
- 3. Go to **SMICM** transaction.
- 4. Click the **Services** tab and validate the HTTP and HTTPS connections.

Figure 4-10 ICM Monitor

ΙΟ	M M	lonitor - Sei	rvice Display				
9	3	R 4 7	' 🔀 🗷 🚚 🛷 🚯 🔞	🏘 🎛 🖽 📆 🗓	I	M	
Act	ive '	Services					
	1.00						
		Protocol	Service Name/Port	Host Name	Keep Alive	Proc.Timeo	Actv
	No.		Service Name/Port 8000	Host Name INNONGWDEV.internal.	Keep Alive	Proc.Timeo	
	No.	Protocol			600		~

4.9. Configure SAP Gateway virus scan profile

Application programs use virus scan profiles to check data for viruses. A virus scan profile comprises of the scanner groups that verify the document, and the process to scan.

Note:
The Virus Scan must be enabled in Gateway only if the virus profile is defined.

For more information, see SAP Notes: 786179 - Data security products: Application in the antivirus area.

To disable SAP Gateway virus scan:

- 1. Go to /n/IWFND/VIRUS_SCAN transaction.
- 2. Select the Virus Scan Switched Off check box and execute.

Figure 4-11 Gateway Virus Scan Profile

🔄 <u>P</u> rogram	<u>E</u> dit	<u>G</u> oto	S <u>y</u> stem	Help	
Ø		•		n 👷 🖓 i 🚍 iii iii iii iii iii iii iii iii ii	
SAP Gat	tewa	y Virus	s Scan I	Profile Configuration	
₽					
Virus Scan Pro	file			[]a	
✓ Virus Scan S	Switche	d Off			
Virus scann	ning is n	ot active.		SAP 👂 NGT (1) 100 👻 INNONGWTST 🗄	INS 🛛 🖛 🔒 🎾

4.10. Create Periodical Tasks for Gateway

Periodical tasks like of disk and memory space cleanup ensure optimal performance of the Gateway system.

To create periodical tasks:

- In the transaction SPRO, open SAP Reference IMG and navigate to SAP NetWeaver, SAP Gateway, OData Channel, Administration, Cache Settings, Create Default Cleanup Jobs.
- 2. Click Activity.
- 3. Following tasks are created:
 - **SAP_IWFND_SUP_UTIL_CLN**: Deletes logs of support utilities, such as error logs, traces, and performance logs.
 - **SAP_IWFND_APPS_LOG_CLN**: Deletes SAP Gateway entries from the application log.
 - **SAP_IWFND_NOTIF_CLN**: Deletes the SAP Gateway notifications.

Figure 4-12 Gateway Cleanup tasks

Program /IWFND/R_SM_CLEANUP_JOB_CREATE
F Program /IWFND/R_SM_CLEANUP_JOB_CREATE
Created Cleanup Jobs: SAP_IWFND_APPS_LOG_CLN SAP_IWFND_SUP_UTIL_CLN SAP_IWFND_NOTIF_CLN

4.11. Clear Application Log Entries

To delete application log entries:

- 1. Go to Transaction SE38.
- 2. Enter the **Program** name as **SBAL_DELETE** and click **Execute**.
- 3. Set the criteria to delete the log entries.

Figure 4-13 Clear Log Er	ntries Criteria
--------------------------	-----------------

Application Log: De	lete Expired Log	5			
🍄 🔥 🗓					
Delete logs					
All logs are deleted which satis selection conditions, and for w - the expiry date is reached o - the expiry date is not define	hich: r passed		-		
Expiry date					
 Only logs which have reach and logs which can be delet Cnnot delete log now since 	ed before the expiry dat				
Selection conditions					
Object		to			
Subobject		to			
External ID		to		8 8 8	
Transaction code		to		<u> </u>	
User		to		<u> </u>	
Log number		to			
Problem class		to		<u> </u>	
from (date/time)		00:00:00			
to (date/time)		00:00:00			
Options					
Only calculate how many					
⊖Generate list					
 Delete immediately 					
Delete by Number of Logs					
COMMIT Counter	1	00			

- 4. Go to **Program** in the menu bar and click **Execute in Background**.
- 5. Click Continue.
- 6. Click **Date/Time** button and enter the date and time when the program must be executed.
- 7. Click on **Period Values** button and set the frequency. (Preferably during non-peak hours)
- 8. Click Save.

4.12. Clear Query Result Log Entries

To delete the query result logs:

- 1. Go to Transaction SE38.
- 2. Enter the **Program** name as **/IWBEP/R_CLEAN_UP_QRL** and click **Execute**.
- 3. Set the criteria to delete the log entries in the Selection Parameters section.

Figure 4-14 Clear Log Entries Criteria

Cleanup of Query Result Log
Selection Parameters
Records Older Than (in Hours) 168
✓Delete Log Headers
Control Parameters
Execute in Test Mode

- 4. Go to Program in the menu bar and click Execute in Background.
- 5. Click Continue.
- 6. Click **Date/Time** button and enter the date and time when the program must be executed.
- 7. Click on **Period Values** button and set the frequency.
- 8. Click Save.

4.13. Install certificates for Geo location

Geo Location certification is only applicable for Workorders, Notifications, Equipment, Functional Locations modules of mWorkorder and mServiceOrder applications. Do this only if this in scope.

To install the certificate:

- 1. Navigate to transaction code: **STRUST**.
- 2. Click SSL client SSL Client (Standard).
- 3. Click the **Import** icon to import the certificate.

Figure 4-15 Trust Manager

PSE Edit Goto Certificate	e En <u>v</u> ironment System	Нер	
× •	🖯 I 🗟 🚷 😒 I 🗁 🕅	🖞 \$ \$ \$ \$ \$ \$ \$ 🗧 🗖 🖉 🖳	
Trust Manager: Display	,		
9 🕅			
System PSE SinC SAPCyptolb In SSL server Standard SSL clent SSL Clent (Anony SSL clent SSL Clent (Standar) SSL clent SSL Clent (Standar) SSL clent WSSE Web Servor WS Security Standard WS Security Standard WS Security WS Security Kee SMIME Standard	Certificate List	Sur-mov Jak, uenik, Jak, uenik, Jak, uenik, Jakenow J, uo-bov V, zucose, Jul-zor- V (self-Signed) Subject OH=GlobalSion, OH=GlobalSion Root CA - R2	
 X SSF Collaboration Integration C SSF Logon Ticket 	Veri. PSE	Password	
	Subject	CN=GlobalSign, O=GlobalSign, OU=GlobalSign Root CA - R2	
	Subject (Alt.)	CN=diobalsign, O=diobalsign, O0=diobalsign Root CA - R2	
	Issuer	CN=GlobalSign, O=GlobalSign, OU=GlobalSign Root CA - R2	
	Serial Number (Hex.)	04:00:00:00:00:01:0F:86:26:E6:0D	
	Serial Number (Dec.)	4835703278459682885658125	
	Valid From	15.12.2006 08:00:00 to 15.12.2021 08:00:00	
	Algorithm	RSA with SHA-1 Key Length 2048	
	Check Sum (MD5)	94:14:77:7E:3E:5E:FD:8F:30:BD:41:B0:CF:E7:D0:30	
	Checksum (SHA1)	75:E0:AB:B6:13:85:12:27:1C:04:F8:5F:DD:DE:38:E4:B7:24:2E:FE	
<pre>4 ></pre>		Add to Certificate List	*
		SAP	NGO (1) 100 T INNONGWOAS INS

- 4. Click on Add to Certificate List option.
- 5. Click Save.

5. Configure ECC

If you have HUB architecture, you must configure ECC.

To configure ECC:

- 1. On the SAP ECC system, open the transaction SM59 and click Create.
- 2. In the **RFC Destination** field, enter the RFC destination name in the **<system id > CLNT <Client>** format.
- 3. Enter 3 in the Connection Type field.
- 4. Specify text in the **Description 1** field.
- 5. Save your settings.
- 6. On the **Technical Settings and Load Balancing** tab, select the option according to your system settings.
- 7. Enter the name of the SAP NetWeaver Gateway system in the Target Host field.
- 8. Enter the SAP NetWeaver Gateway system number in the System Number field.
- 9. Save your settings.
- 10. Click Create in transaction SMT1.
- 11. In the window for creating trusting relationships, enter the RFC destination that you created.

An RFC logon to the SAP NetWeaver Gateway host takes place and the necessary information is exchanged between the systems.

12. Log on to the SAP NetWeaver Gateway host.

The trusted entry for the SAP NetWeaver Gateway host appears.

- 13. Save your settings.
- 14. Navigate to the **RFC** that you created in the previous step.
- 15. Select the current user on the Logon & Security tab.
- 16. Click Yes.
- 17. Save your settings.
- 18. Click Connection Test.

6. Configure Access for Deploying Innovapptive Products

Understand the roles and access requirements for deploying Innovapptive mobile products.

The following table lists the roles that are packaged with Innovapptive mobile products and access to the transactions required for Basis Administrator, ABAP Developers, Configurators and Security Administrator on ECC and NetWeaver Gateway systems. Generate the role and use it or copy the role to appropriate enterprise naming convention, generate, and use.

Note:

On the Quality, Pre-Production, and Production systems, these users have access to the same set of transactions in read only mode.

Role Name	Role Description	User	Transactions
ZINV_ECC_PRJ_BASIS	Innovapptive - Project Role - ECC Basis Authorizations	SAP Basis Adminis- trator	SU01D, SBWP, SM59, SMT1, ST22, SU53, ST- MS_IMPORT, SE37, SE16, SM30, SM31, ST22
ZINV_ECC_PRJ_DE- VELOPER	Innovapptive - Project Role - ECC Developer Authoriza- tions	SAP Developer	Developer access key, Developer De- bug access SE11, SE12, SE16, SE14, SE38, SE18, SE19, SE93, SM30, SM31, SE41, SE51, SE91, SE37, SE80, SE24, SWDD, SU01D, SU53, SBWP, SWUS, SWELS, SWEL, SW11, SW111, SW114, SW13, SW16, SW1E, SWUE, SW1A , SMARFORMS, SEGW,SE80,SE01, SW15, SE63, SLXT

Table 6-1 Roles on ECC System and transactions

Role Name	Role Description	User	Transactions
ZINV_ECC_PRJ_SE- CURITY	Innovapptive - Project Role - ECC Security Authoriza- tions	SAP Security Admin- istrator	SU01, RSPFPAR, SPRO, PFCG, SUIM, SM30, SE16, ST01, SU53, SU56, SU21, SU03
ZINV_ECC_PRJ CONFIGURATOR	Innovapptive - Project Role - ECC Configurator Autho- rizations	SAP Configurator	SPRO, SE11, SE38, SE24, SM36, SM37, SM30, SE37, SBWP, SU53, SU3, SE16, SU01D

Table 6-1 Roles on ECC System and transactions (continued)

Table 6-2 Roles on NetWeaver Gateway System and transactions
--

Role Name	Role Description	User	Transactions
ZINV_NWG_PRJ BASIS	Innovapptive - Project Role - Gate- way Basis Authoriza- tions	SAP Basis Administra- tor	RZ11, SM59, SMT1, SE01, ST22, SU53, SU01D, SPRO, STMS*, SM30, SMICM, SICF, STRUST, / IWBEP/*, /IWFND/*, SBGRFCCONF
ZINV_NWG_PRJ_DE- VELOPER	Innovapptive - Project Role - Gate- way Developer Au- thorizations	SAP Developer	Developer ac- cess key, Develop- er Debug access SEGW, SE24, SE37, SE38, SSO2, SICF, / NSBRGFCCONF, /IW- BEP/TRACES, /IWFND/ TRACES, /IWFND/ MAINT_SERVICE, /IW- BEP/ERROR_LOG, / IWFND/ERROR LOG, /IWFND/NOTIF CLEANUP/IWFND/ CACHE_CLEANUP, / IWBEP/TRACES, / IWFND/APPS_LOG, /

Role Name	Role Description	User	Transactions
			IWBEP/CACHE
			CLEANUP, SBGRFC-
			MON, SBGRFCCONF,
			SBGRFCHIST, SBGR-
			FCPERFMON, SBGR-
			FCSCHEDMON.
ZINV_NWG_PRJ_SE-	Innovapptive -	SAP Security Adminis-	SU01, RSPFPAR, SPRO,
CURITY	Project Role - Gate-	trator	PFCG, SUIM, SM30,
	way Security		SE16, ST01, SU53, SU56,
			SU21, SU03
ZINV_NWG_PRJ	AuthorizationsInno-	SAP Configurator	/IWBEP/*, /IWFND/
CONFIGURATOR	vapptive - Project		*, SEGW, SE24, SE37,
	Role - Gateway Con-		SE38, SSO2, SICF, SE16,
	figurator Authoriza-		SE11, SU01D, SU53, SB-
	tions		GRFCMON, SBGRFC-
			CONF, SBGRFCHIST,
			SBGRFCPERFMON, SB-
			GRFCSCHEDMON

Table 6-2 Roles on NetWeaver Gateway System and transaction	s (continued)
---	---------------

6.1. Access Required for Configuring SAP BTP

Person who is configuring SAP BTP requires an Administrator access for entire SAP BTP and all mobile services (**HanaMobileAdmin**). The user also requires an Administrator access to SAP Cloud Connector. Cloud Connector allows creation of new users. Share the SAP Cloud Connector credentials, you can create new users. An Administrator user created during the installation must be shared with the SAP BTP Administrator.

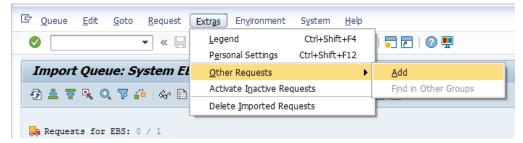
6.2. Import Roles Using Transports

Learn how to import roles into ECC and GW development/sandbox system.

To import roles using Transports:

- 1. Extract the zip or .rar files that you received from Innovapptive 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 that start with 'K90*' from software deployment package to the **USR/SAP/TRANS/COFILES** path on the SAP ECC & GW system.
 - b. Extract the zip files and copy all data files that start with R90* from the software deployment package to the **USR/SAP/TRANS/DATA** path on the SAP ECC &GW system.
- 3. Log in to the SAP GW & ECC System where you want to import transports.
- 4. Navigate to the transaction code STMS_Import.
- 5. Navigate to Extras, Other Requests, Add.

Figure 6-1 Import Queue



6. Enter the following transport number in the **Transp. Request** field and confirm by pressing the **ENTER** key to attach transports to the import queue.

Transport	Description	Dependency
ERDK904636	INNOV:ECC Project Team	None
	Roles	

Table 6-4 SAP NWG Transports for Roles

Transport	Description	Dependency
NGTK904332	INNOV:NWG Project Team Roles	None

Figure 6-2 Add Transport Request to Import Queue

Import Queue:	System EH7
1 dia 1 amin'ny 1	। 🕼 🖹 📰 🔜 🔒 । 🖴 🛼 🔤 🛯 🖾 📰 🛽
Requests for EH7	: 0 / 82
🔄 Add Transport Requ	est to Import Queue
Transp. Request	ERDK901948
Import Queue	EH7 System EH7
Import Again	

- 7. Click **Yes** to proceed to the next step.
- 8. Select the transport request that needs to be imported.
- 9. Click the Transport icon.

Figure 6-3 Truck icon

-					
Impor	t Queue: S	yste	m EH7		
Ð 🛎 🖥	r k Q 77 (<mark>1</mark> 0 6	8 🖹 🗐 🎭 🕅		
📮 Reque	sts for EH7: (0/1		01.08.2016 14:3	27:35
W Request ERDK901948					
Number	Request	RC	Owner	Short Text	St
83	ERDK901948	٠	E5000103		1

- 10. Enter the target client number in Target Client field.
- 11. Select Leave Transport Request in Queue for Later Import and Ignore Invalid Component Version check boxes.
- 12. Click **Yes** in the confirmation screen.

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.

7. Configure SAP BTP for Deploying Innovapptive Products

SAP BTP configuration process consists of tasks like installing and configuring cloud connector, validating access, enabling mobile services, and so on.

Table 7-1 Configuring SAP BTP for Deploying Innovapptive Products

Tasks
check and Implement Prerequisites for Installing SAP Cloud Connector (SCC)
check and Implement Sizing Recommendation for SCC
nstall SAP BTP on you platform
Installation on Microsoft Windows OS
Installation on Linux OS
Installation on Mac OS X
alidate access to SAP BTP <i>(on page 40)</i>
nable Mobile Services <i>(on page 40)</i>
ccess your SAP BTP account based on the region where you are located. Check Regions nd Hosts Available for the Neo Environment
Note: From the list of BTP Neo Data Centers, Mobile Services is not available for the China (Shanghai) data center. that provide mobile services.
Note: From the list of BTP Neo Data Centers, Mobile Services is not available for the China
Note: From the list of BTP Neo Data Centers, Mobile Services is not available for the China (Shanghai) data center. that provide mobile services.
Note: From the list of BTP Neo Data Centers, Mobile Services is not available for the China (Shanghai) data center. that provide mobile services.
Note: From the list of BTP Neo Data Centers, Mobile Services is not available for the China (Shanghai) data center. that provide mobile services. complete Initial Setup configure Trust entities in the cloud connector
Note: From the list of BTP Neo Data Centers, Mobile Services is not available for the China (Shanghai) data center. that provide mobile services. complete Initial Setup configure Trust entities in the cloud connector nstall a System Certificate for Mutual Authentication

7.1. Validate access to SAP BTP

Validate the SAP BTP Access and add members to the team for Administration and Development activities.

To validate access to SAP BTP:

- 1. Login to SAP BTP.
- 2. Under **Overview**, click **Account Name**.

Click New Account to create tenants such as Dev, QA, and PRD with SAP BTP account.

3. Click on **Tenant** (sub account) to view the **Services** and validate the settings. Navigate to **Members** tab as shown below.

Figure 7-1 SAP BTP Account Members

≡			SAP HANA Cloud P	latform Cockpit				© [1 4	1 @	<u>ه</u> ک
ē	Overview	🎟 US East ~ / 器 Innovapp	otive Inc. 🕗 \mid 🖻 I	nnovapptive Inc. \vee							
٥	Applications >	ౖౖ Innovapptive Inc	Members								?
Ŵ	Services	All: 18									
•	Solutions (BETA)	Add Members History			All Roles	~	Search				Q,
۲	Persistence >										
8	Connectivity >	Name	ID	Roles		Comment			Actio	ns	
	, sound and	Anilkumar Guntuka	SOC	Administrator, Developer, Support User, A	Application User A	Anil		6-3	Ø	Ŵ	\bowtie
8	Security >	fsn avatar	P1	Administrator, Developer					Ø	Ŵ	
5	Repositories >	Hari Kamineni	SC	Support User		Hari		6-3	Ø	Ŵ	
0	Resource Consumption	Nagesh Caparthy	SC	Administrator, Developer, Support User, A	Application User A	Nagesh		63	Ø	Ŵ	
కె	Members	Narasimha Rao Yannabathina	sc	Administrator, Developer, Application Use	er Admin, Cloud C	Narasimha		69	Ø	Ŵ	\bowtie
		Prabhukumar Srikarthik	S0^	Support User		Sri		6-3	Ø	Ŵ	\bowtie

4. This tab helps you to add new members to the SAP BTP Tenant. Use any of the predefined roles for the new members that you add.

a. Check Predefined Platform Roles

b. Add Member to your Neo Sub-Account

7.2. Enable Mobile Services

Enable mobile services, if you are logging into SAP BTP for the first time.

To enable Mobile Services:

- |7 Configure SAP BTP for Deploying Innovapptive Products
 - 1. Under Services, click the Mobile Services option.

For example, **Mobile Services**, std in the image

Figure 7-2 Services, Mobile Services



2. Click Enable.

Figure 7-3 Mobile Services

Service: Mobile Services, std - Overview
 Not enabled
 Enable
 Service Description
 Use Mobile Services to provide mobile access to enterprise information. Key features include app content lifecycle management, push notifications and support for offline apps, app security, app monitoring and usage reporting. This includes native build apps, MDK and SAP Mobile Cards. You need this to run apps based on the SAP Cloud Platform SDK for iOS. For B2E and B2B use cases only.

3. Click Go to Service to access the Mobile Services portal.

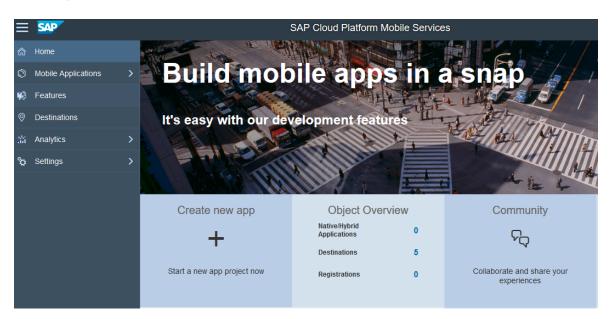


Figure 7-4 Mobile Services portal

7.3. Import Cloud Connector Root and Intermediate Certificates to Gateway Trust Store

To import Cloud Connector Certificates to SSL Server Standard:

- 1. Transaction code: STRUST.
- 2. Open SSL Server Standard group and double-click the certificate node.
- 3. Double-click the Owner entry under **Own certificate** section and click **Import Certificate**.
- 4. Browse for CA Certificate and System Certificate files and Import them.
- 5. Click Add to certificate list to add the certificate to System PSE certificates list.

Note:

Repeat the same process to import Intermediate certificate.

7.4. Configure Access Control

To configure access control:

Click Access Control and click Add to add a new system mapping in HCC.
 Edit the existing mapping to support Principal propagation.

i Virtual host can	not be edited	
Virtual Host:	ngslest	
Virtual Port:	443	
Internal Host: *	innongwdev.internal.innovapptive.com	
Internal Port: *	443	
Protocol:	HTTPS v	
Principal Type:	X.509 Certificate 🖌	
Back-end Type: *	SAP Gateway 🖌	
SNC Partner Name:		
Description:	Test	
		_
Check availabili	ty of internal host (this may take some time)	

Figure 7-5 System Mapping

2. Add resource to access the ODATA Service.

Figure 7-6 Add Resource

Edit Resou	rce
Path must	not be empty
	C Enabled
URL Path: *	/sap/opu/odata/
Access Policy:	Path only (sub-paths are excluded)
	Path and all sub-paths
	Save Cancel

3. Restart the Cloud Connector.