Synchronize Actual Events back to SAP TM

To send event notifications for freight orders or freight bookings from the GTT system to your TM system, you need to set up a connection between your SAP TM or S/4HANA system and SAP Logistics Business Network, global track and trace option.

1. Configure web service in your TM system
2. Configure connection in your Cloud Connector
3. Define destination service in your SCP cockpit
4. Implement forwardEventToTM function in your GTT model

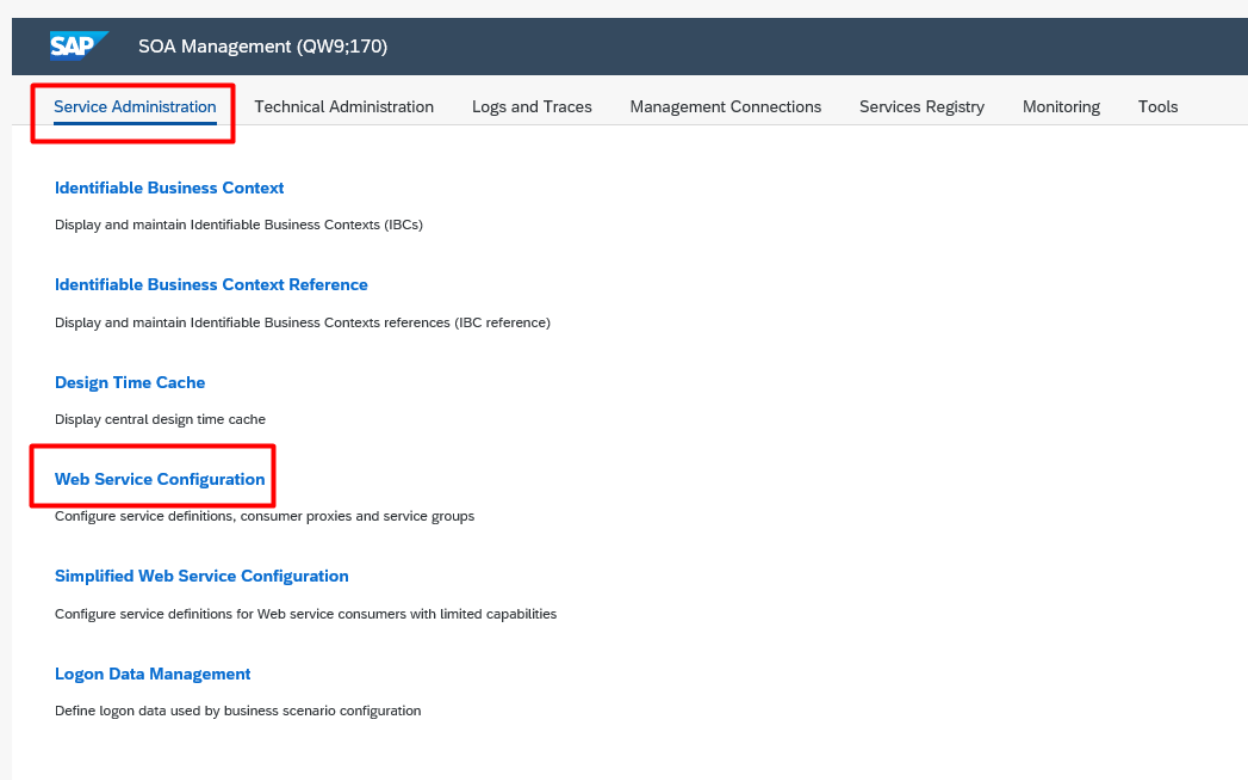
1. Configure Web Service in Your TM System

1.0 Check whether interface “TransportationEventBulkNotification_In” is available in your TM system.

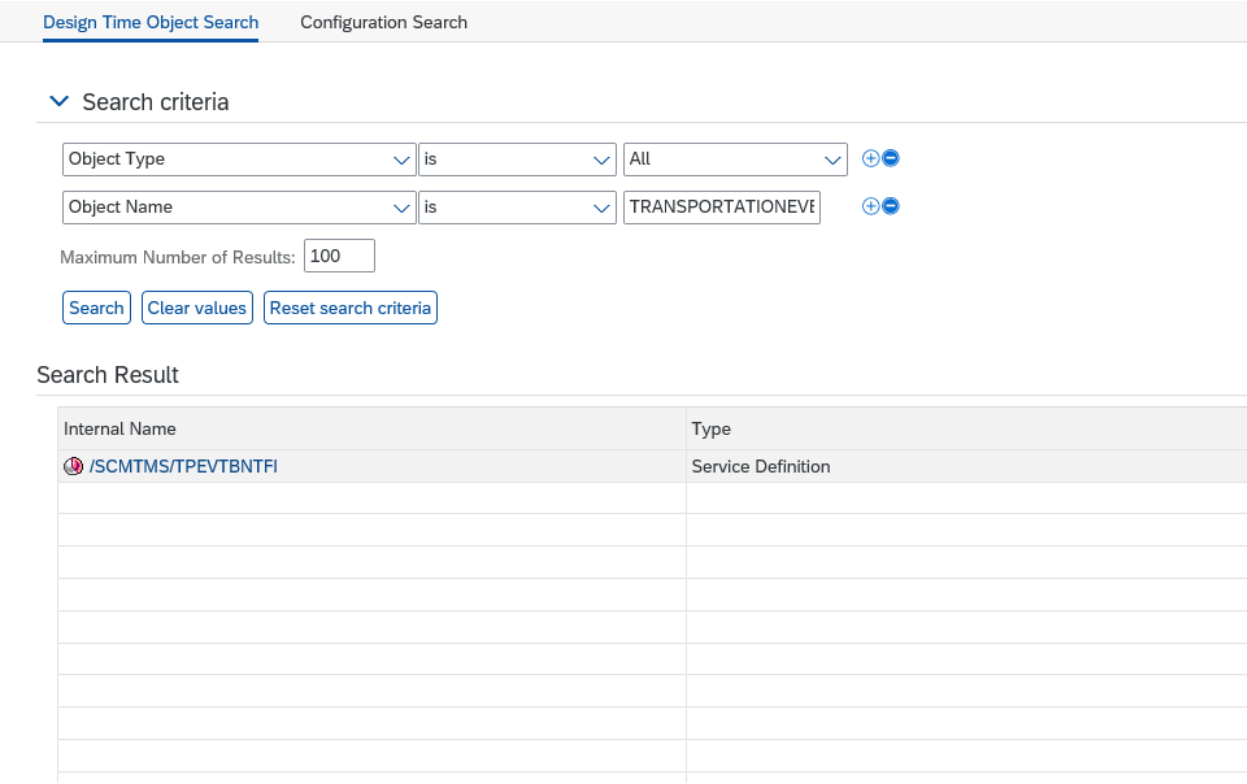
To receive event notifications, you must use the B2B message interfaces: “TransportationEventBulkNotification_In” in your TM system.

For more information about the required message enhancement, see SAP Notes 2721729 and 2743015 .

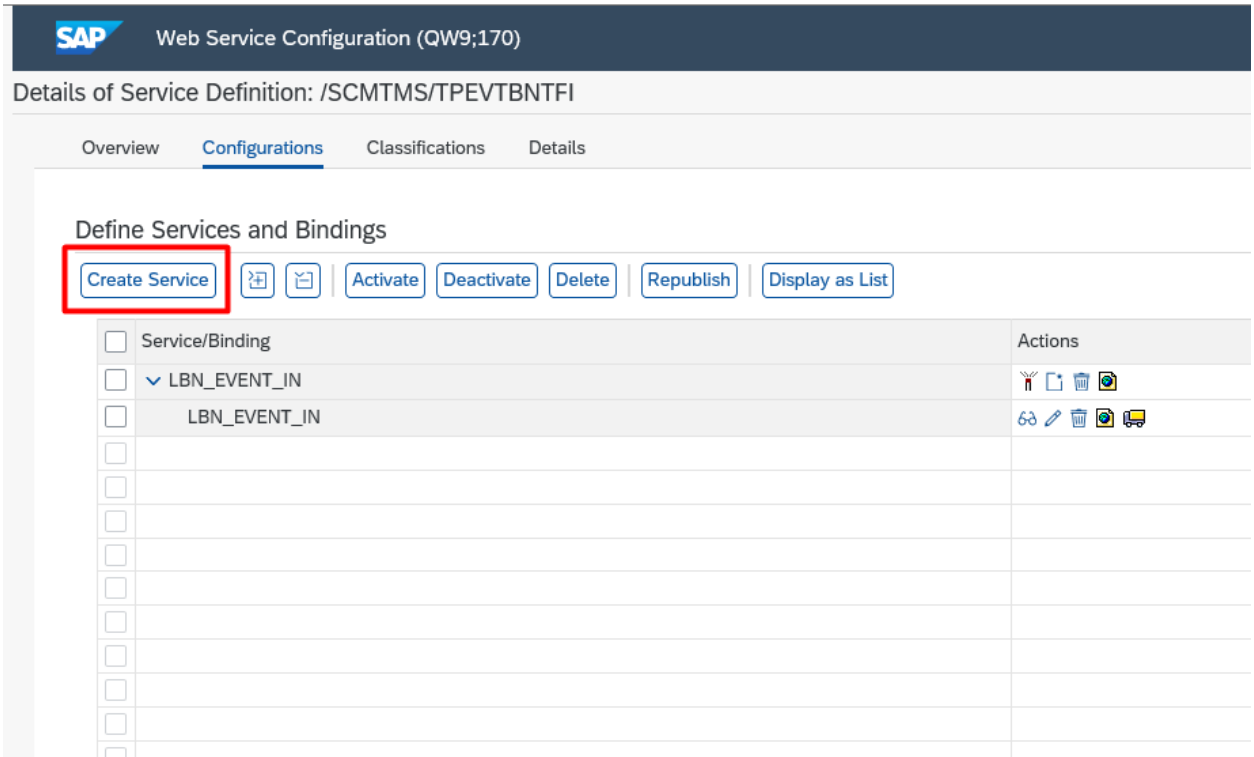
1.1 Execute T-CODE “SOAMANAGER” in your TM system.
Under “Service Administration”, select “Web Service Configuration”.



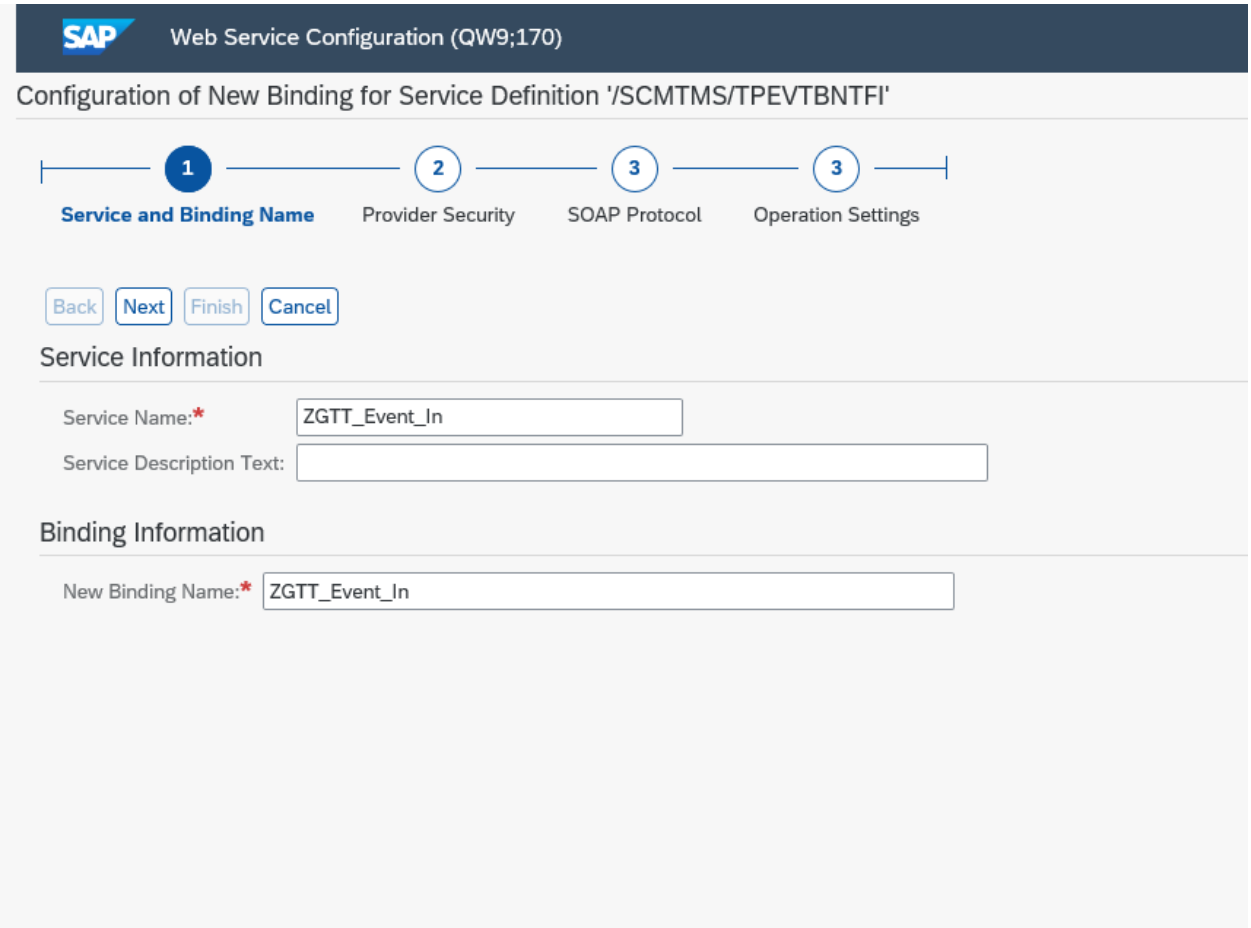
1.2 Search for “TransportationEventBulkNotification_In” and select the service “/SCMTMS/TPEVTBNTFI” to enter the detail page

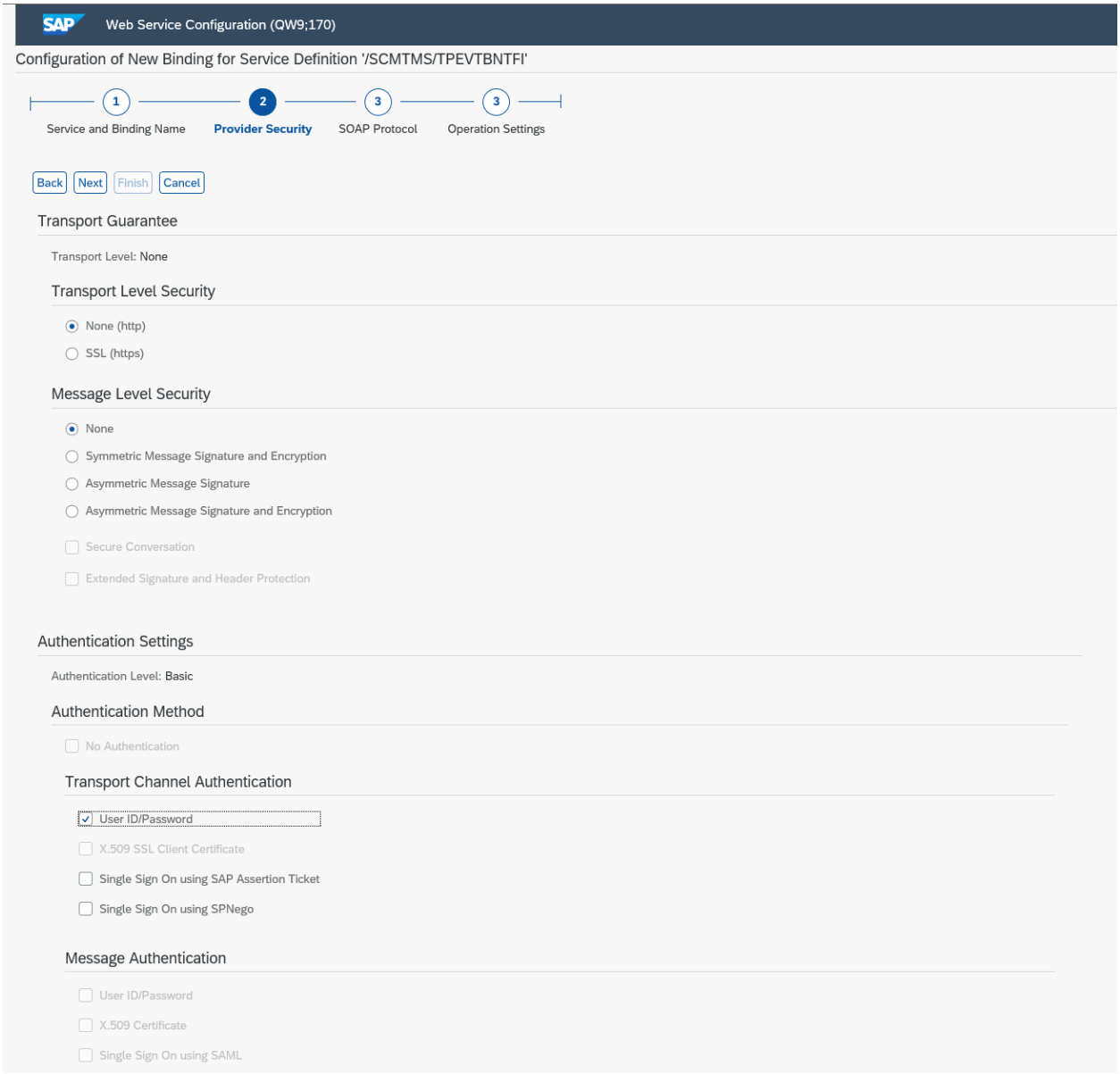


1.3 In the “Configurations” Tab, click “Create Service”

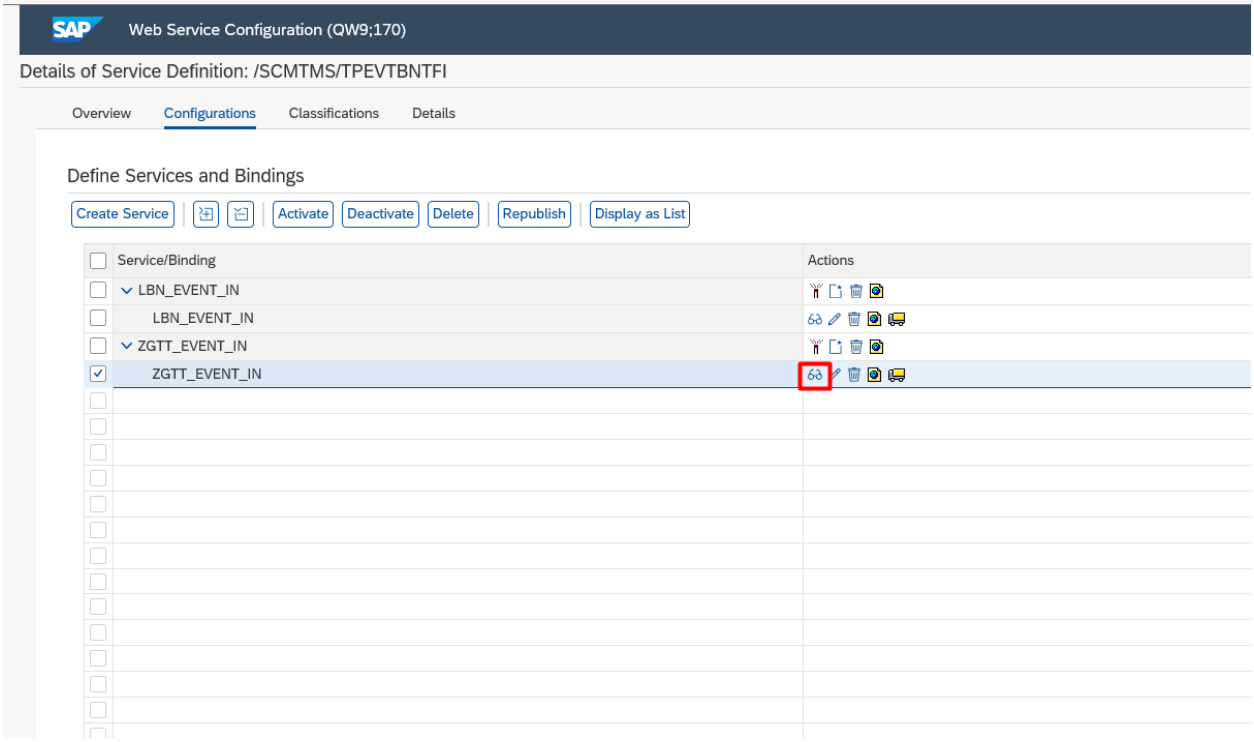


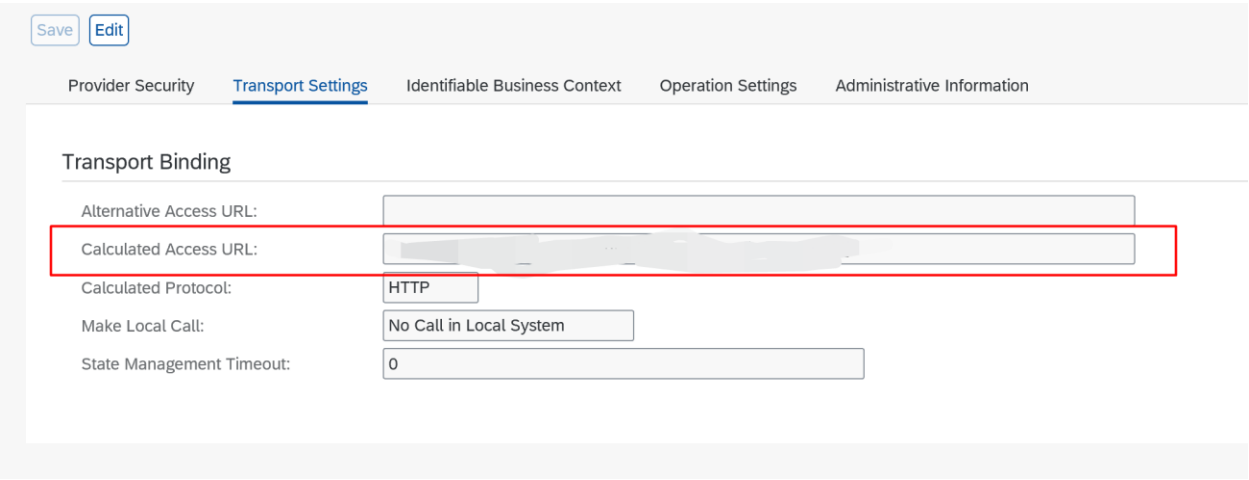
1.4 In the popup window, fill in your own service name and security settings and save the service you created




Web Service Configuration (QW9;170)
Configuration of New Binding for Service Definition '/SCMTMS/TPEVTBNTFI'
1
Service and Binding Name
2
Provider Security
3
SOAP Protocol
3
Operation Settings
Back
Next
Finish
Cancel
Transport Guarantee
Transport Level: None
Transport Level Security
None (http)
SSL (https)
Message Level Security
None
Symmetric Message Signature and Encryption
Asymmetric Message Signature
Asymmetric Message Signature and Encryption
Secure Conversation
Extended Signature and Header Protection
Authentication Settings
Authentication Level: Basic
Authentication Method
No Authentication
Transport Channel Authentication
User ID/Password
X.509 SSL Client Certificate
Single Sign On using SAP Assertion Ticket
Single Sign On using SPNego
Message Authentication
User ID/Password
X.509 Certificate
Single Sign On using SAML

1.5 Check your service's Calculated Access URL





2. Configure Connection in Your Cloud Connector

2.0 Ensure that you have installed SAP Cloud Connector.
For details about how to install it, see SAP Cloud Connector Installation Guide on the SAP Help Portal.

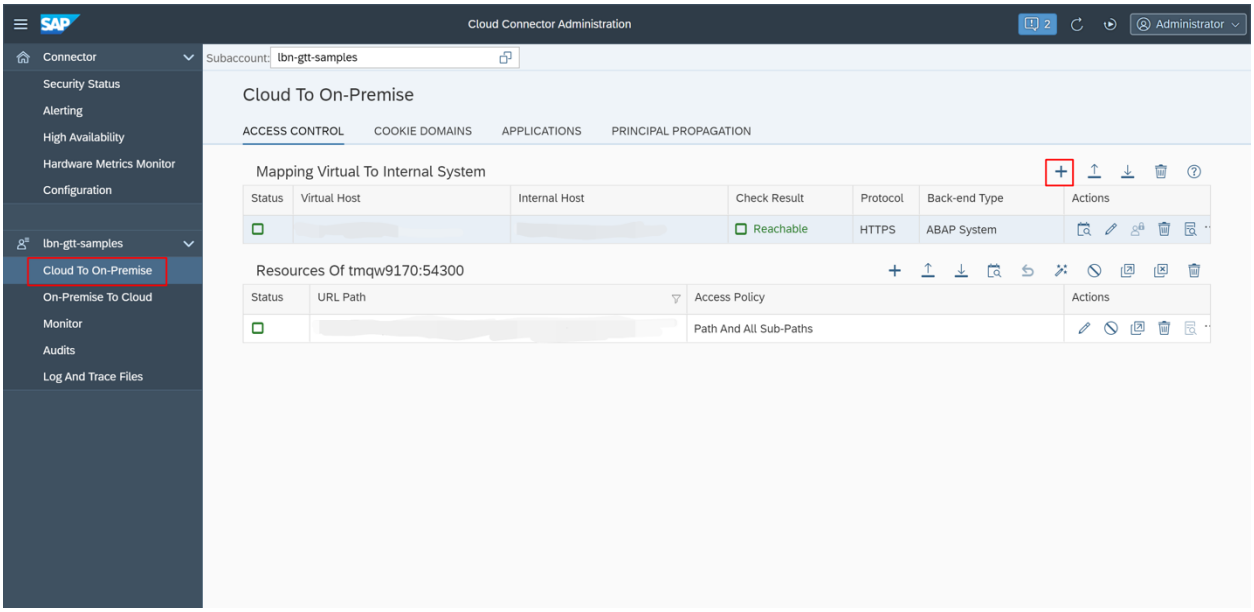
https://help.sap.com/viewer/cca91383641e40ffbe03bdc78f00f681/Cloud/en-US/57ae3d62f63440f7952e57bfcef948d3.html

2.1 After installing Cloud Connector and starting the Cloud Connector, log on to the cloud connector and perform required configurations to make your Cloud Connector operational.

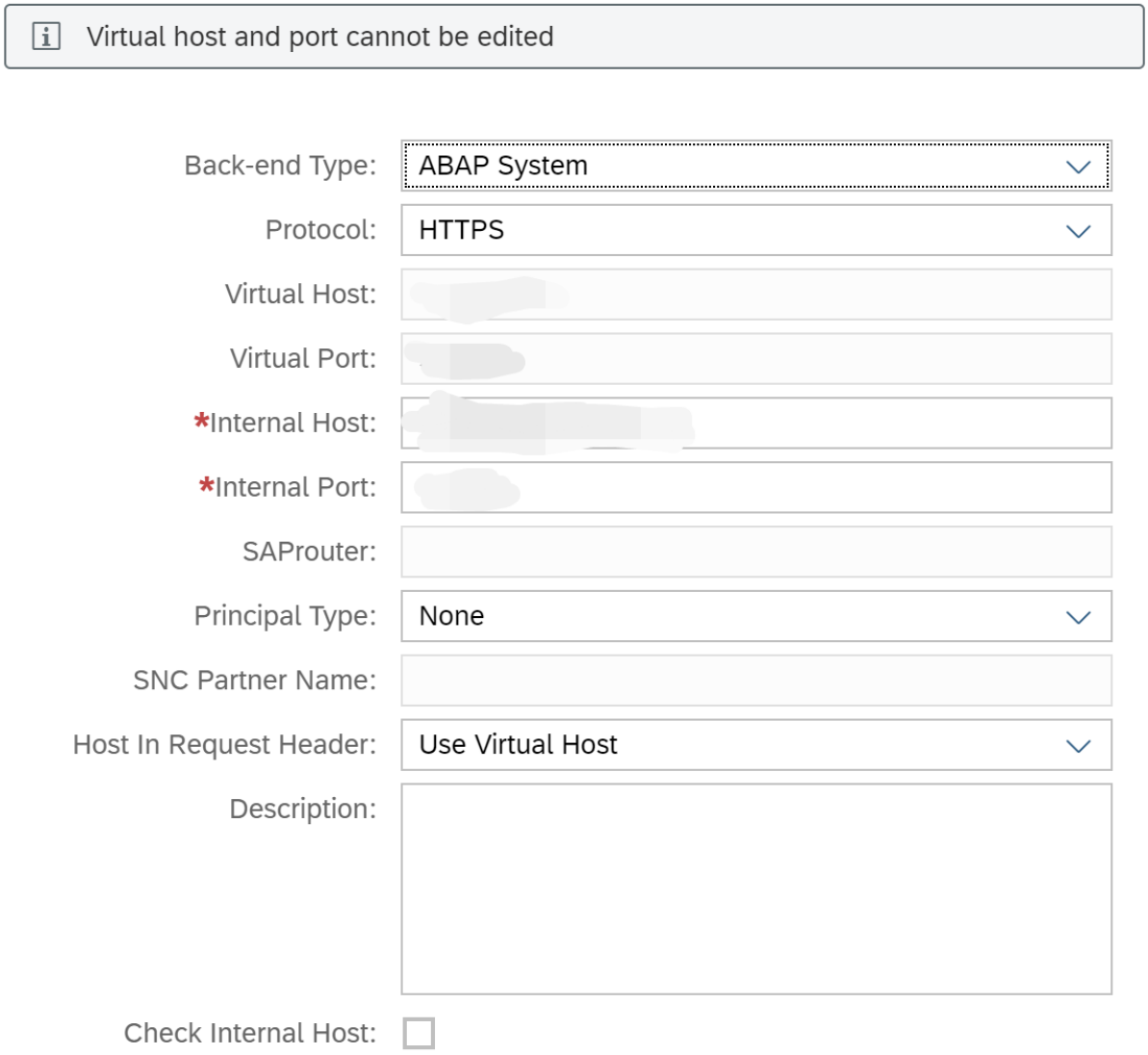
For details, see https://help.sap.com/viewer/cca91383641e40ffbe03bdc78f00f681/Cloud/en-US/db9170a7d97610148537d5a84bf79ba2.html

2.2 After setting up the connection between your cloud platform and your cloud connector, then you need to maintain the connection between your TM system and your cloud connector.

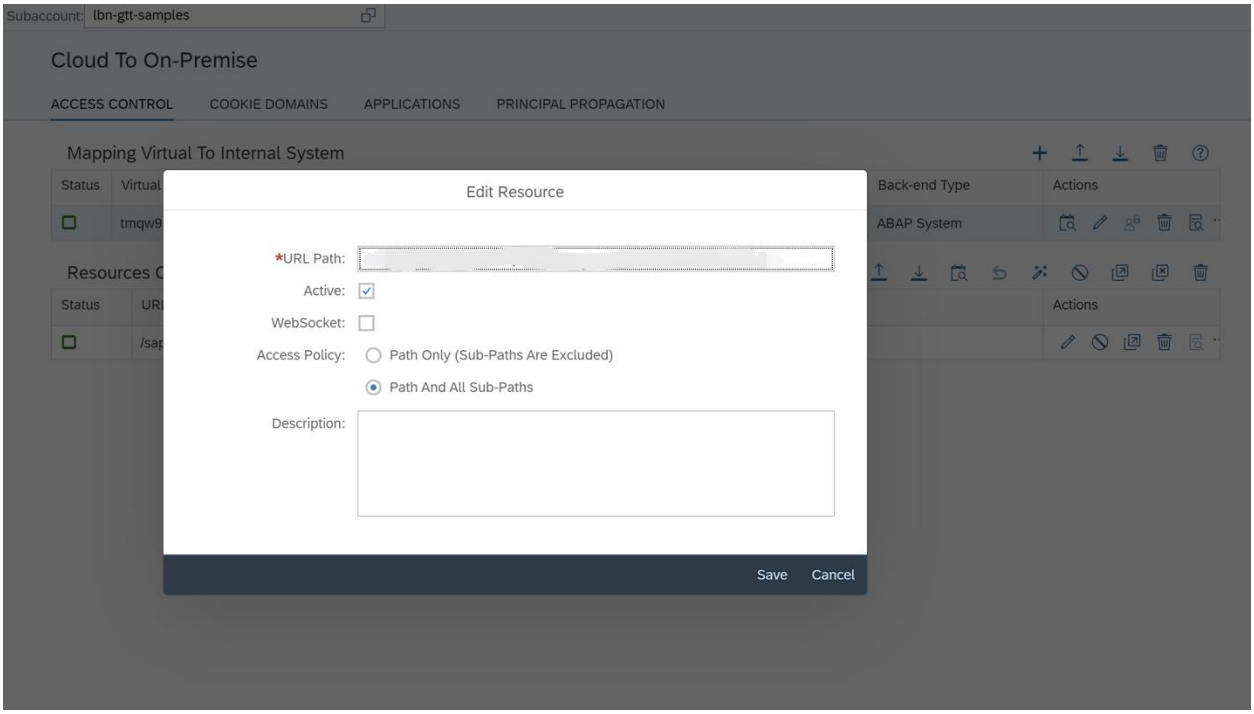
Click “Cloud To On-Premise” and Create “Mapping Virtual to Internal System”



2.3 Fill in the virtual URL and internal URL of your TM system



2.4 Add resource for your mapping internal URL. Fill in the URL path below with Calculated Access URL in the Step “Check Your Service’s Calculated Access URL”.



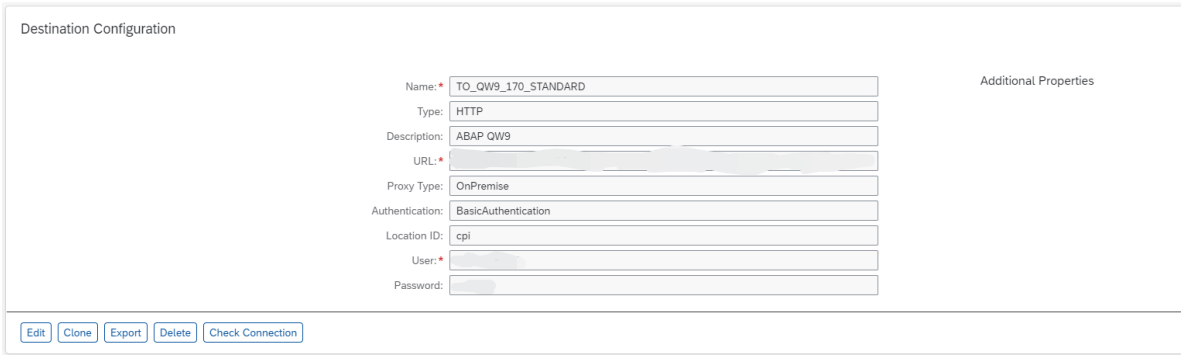
3. Define Destination Service in Your SCP Cockpit

3.1 Go to your subaccount that subscribed GTT in SCP Cockpit and create destination service. The user and password here are your TM system user and password.

Fill in the URL as:

http://{virtual host in cloud connector}:{virtual port in cloud connector}{Calculated Access URL}

Note down your destination service name.



4. Implement forwardEventToTM Function in Your GTT Model

4.1 In the corresponding model's Event-to-Action script in the Manage Models app, you can refer to the script in the template model below to implement forwardEventToTM function.

Note:

If you only deploy the Track Shipments application, the part starting from "===> sync back event to TM system" in the Event to Action script is enough. The rest of the script is used for Track Sales Orders application. Replace "TO_QW9_170_STANDARD" with the destination name that you maintained in Step 3 and replace "QW9CLNT170" with the logical system of shipment tracked process.

For details, see help.sap.com/gtt and search for *Guide for Model Administrators*.

Help

```
341     ?"===> forwardCurrentTP to gtt_sof_forwarding-acc";
342     forwardCurrentTP("gtt_sof_forwarding-acc", false, false, true);
343 }
344
345 ?"===> sync back event to TM system";
346 ?"===> begin forwardEventToTM";
347
348 var eventTypeOfActualEvent = actualEvent.eventType;
349
350 if ("com.lbngttsamples.gtt.app.sof.Shipment.Departure" == eventTypeOfActualEvent ||
351         "com.lbngttsamples.gtt.app.sof.Shipment.Arrival" == eventTypeOfActualEvent ||
352         "com.lbngttsamples.gtt.app.sof.Shipment.Delay" == eventTypeOfActualEvent ||
353         "com.lbngttsamples.gtt.app.sof.Shipment.LoadingStart" == eventTypeOfActualEvent ||
354         "com.lbngttsamples.gtt.app.sof.Shipment.LoadingEnd" == eventTypeOfActualEvent ||
355         "com.lbngttsamples.gtt.app.sof.Shipment.POD" == eventTypeOfActualEvent ||
356         "com.lbngttsamples.gtt.app.sof.Shipment.POPU" == eventTypeOfActualEvent ||
357         "com.lbngttsamples.gtt.app.sof.Shipment.Coupling" == eventTypeOfActualEvent ||
358         "com.lbngttsamples.gtt.app.sof.Shipment.Decoupling" == eventTypeOfActualEvent ||
359         "com.lbngttsamples.gtt.app.sof.Shipment.UnloadingStart" == eventTypeOfActualEvent ||
360         "com.lbngttsamples.gtt.app.sof.Shipment.UnloadingEnd" == eventTypeOfActualEvent) {
361
362     var destinationName = "TO_QW9_170_STANDARD";
363     var reportedBy = null;
364     var senderPartyId = actualEvent.senderPartyId;
365     var trackingIdType = actualEvent.trackingIdType;
366     var partyId = trackedProcess.partyId;
367     var logicalSystemOfTp = trackedProcess.logicalSystem;
368
369     if ("QW9CLNT170" == logicalSystemOfTp && "SHIPMENT_ORDER" == trackingIdType) {
370         if (actualEvent.containsProperty("reportedBy")) {
371             reportedBy = actualEvent.reportedBy;
372         }
373         if (senderPartyId != partyId || reportedBy != null) {
374             forwardEventToTM(toObject("{}"), destinationName);
375         }
376     }
```