

Synchronize Actual Events back to SAP TM

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

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

Note

The SAP Cloud Platform brand is retired. For more information, see [A Robust Platform for RISE with SAP !\[\]\(c3d993ca47bfe2a953c700506ce31fa0_img.jpg\)](#). Parts of this content were created before our branding changes related to SAP technology were announced in January 2021.

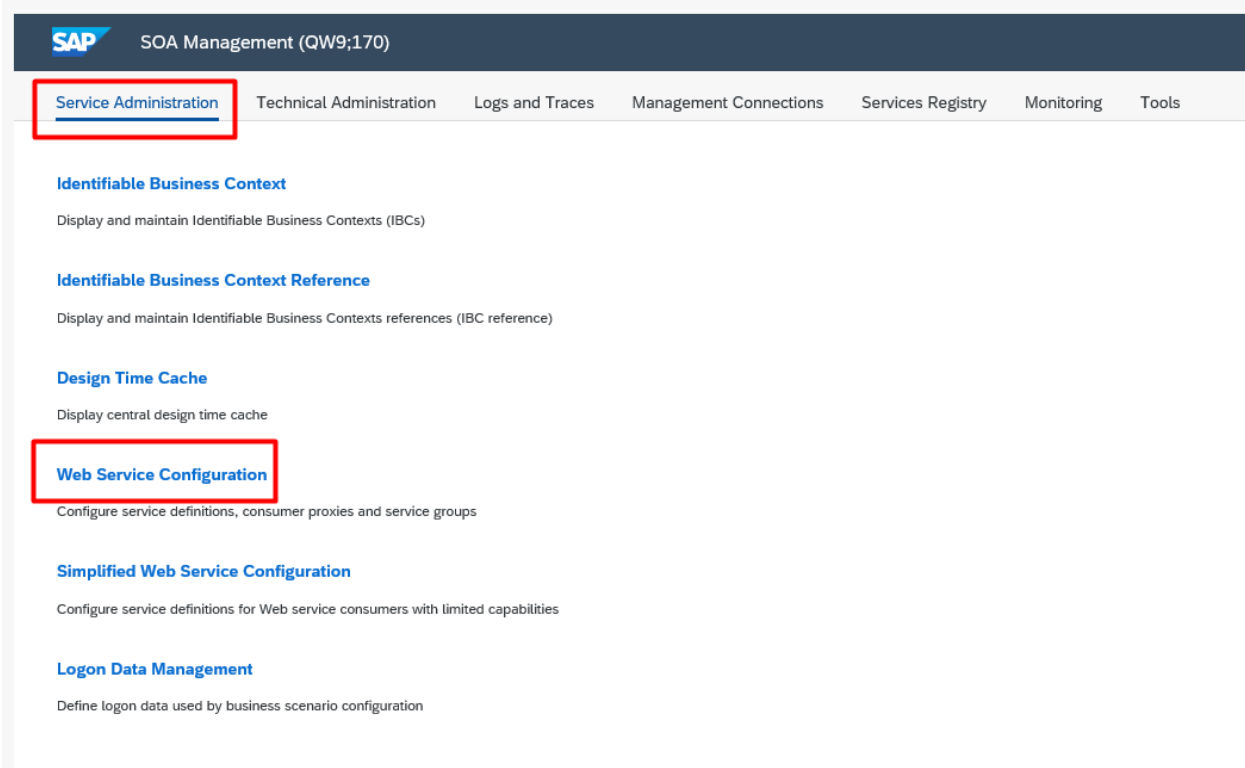
1. Configure Web Service in Your SAP TM System

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

[illegible]

1.3 In the “Configurations” tab, click “Create Service”.

[illegible]

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

2

3

3

Service and Binding NameProvider SecuritySOAP ProtocolOperation Settings

Back

Next

Finish

Cancel

Service Information

Service Name:*ZGTT_Event_In

Service Description Text:

Binding Information

New Binding Name:*ZGTT_Event_In



Configuration of New Binding for Service Definition '/SCMTMS/TPEVTBNTFI'



[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 SPNegot

Message Authentication

- ☐ User ID/Password
☐ X.509 Certificate
☐ Single Sign On using SAML

2. Configure Connection in Your SAP 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, maintain the connection between your SAP TM system and your cloud connector.


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

The screenshot shows the SAP Cloud Connector Administration interface. The left sidebar contains a menu with the following items: Connector, Security Status, Alerting, High Availability, Hardware Metrics Monitor, Configuration, and a dropdown menu for 'lbn-gtt-samples'. The 'Cloud To On-Premise' option is highlighted in the dropdown. The main area is titled 'Cloud To On-Premise' and has tabs for ACCESS CONTROL, COOKIE DOMAINS, APPLICATIONS, and PRINCIPAL PROPAGATION. The 'ACCESS CONTROL' tab is active, showing a table titled 'Mapping Virtual To Internal System'. The table has columns for Status, Virtual Host, Internal Host, Check Result, Protocol, Back-end Type, and Actions. There is one entry with a green status icon, a virtual host, an internal host, a 'Reachable' check result, 'HTTPS' protocol, and 'ABAP System' back-end type. Below this table is a section titled 'Resources Of tmqw9170:54300' with a table showing 'URL Path' and 'Access Policy'. The 'Access Policy' is 'Path And All Sub-Paths'.

Status	Virtual Host	Internal Host	Check Result	Protocol	Back-end Type	Actions
			Reachable	HTTPS	ABAP System	

Status	URL Path	Access Policy	Actions
		Path And All Sub-Paths	

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

 Virtual host and port cannot be edited

Back-end Type:	<input type="text" value="ABAP System"/>
Protocol:	<input type="text" value="HTTPS"/>
Virtual Host:	<input type="text"/>
Virtual Port:	<input type="text"/>
*Internal Host:	<input type="text"/>
*Internal Port:	<input type="text"/>
SAProuter:	<input type="text"/>
Principal Type:	<input type="text" value="None"/>
SNC Partner Name:	<input type="text"/>
Host In Request Header:	<input type="text" value="Use Virtual Host"/>
Description:	<input type="text"/>
Check Internal Host:	<input type="checkbox"/>

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”](#).

Subaccount: lbn-gtt-samples

Cloud To On-Premise

ACCESS CONTROL COOKIE DOMAINS APPLICATIONS PRINCIPAL PROPAGATION

Mapping Virtual To Internal System

Status	Virtual
<input checked="" type="checkbox"/>	tmqw9

Resources C

Status	URI
<input checked="" type="checkbox"/>	/sap

Edit Resource

*URL Path:

Active: ☒

WebSocket: ☐

Access Policy: ☐ Path Only (Sub-Paths Are Excluded)
☒ Path And All Sub-Paths

Description:

Save Cancel

Back-end Type	Actions
ABAP System	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>

Actions
<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>

3. Define Destination Service in Your SAP Cloud Platform Cockpit

3.1 Go to your subaccount that subscribed the global track and trace option in SAP Cloud Platform cockpit and create a destination service. Apply the user and password from your SAP TM system.

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.

Destination Configuration

Name: *

TO_QW9_170_STANDARD

Type:

HTTP

Description:

ABAP QW9

URL: *

Proxy Type:

OnPremise

Authentication:

BasicAuthentication

Location ID:

cpi

User: *

Password:

Additional Properties

Edit

Clone

Export

Delete

Check Connection

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:

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
368 /*-----Forward to TM system begin-----*/
369 var destinationTMName = "TO_QW9_170_STANDARD"
370 var msgObj = toObject("{}");
371 var eventObj = toObject("{}");
372
373 var estimatedArrivalTime = null;
374 var refPlannedEventMatchKey = null;
375 var estimatedArrival = null;
376
377 eventObj.eventReasonCode = "";
378
379 if (trackedProcess != null &&
380     "QW9CLNT170" == trackedProcess.logicalSystem &&
381     "SHIPMENT_ORDER" == actualEvent.trackingIdType &&
382     ("com.lbngttsamples.gtt.app.sof.Shipment.Departure" == actualEvent.eventType ||
383      "com.lbngttsamples.gtt.app.sof.Shipment.Arrival" == actualEvent.eventType ||
384      "com.lbngttsamples.gtt.app.sof.Shipment.Delay" == actualEvent.eventType ||
385      "com.lbngttsamples.gtt.app.sof.Shipment.LoadingStart" == actualEvent.eventType ||
386      "com.lbngttsamples.gtt.app.sof.Shipment.LoadingEnd" == actualEvent.eventType ||
387      "com.lbngttsamples.gtt.app.sof.Shipment.POD" == actualEvent.eventType ||
388      "com.lbngttsamples.gtt.app.sof.Shipment.POPU" == actualEvent.eventType ||
389      "com.lbngttsamples.gtt.app.sof.Shipment.Coupling" == actualEvent.eventType ||
390      "com.lbngttsamples.gtt.app.sof.Shipment.Decoupling" == actualEvent.eventType ||
391      "com.lbngttsamples.gtt.app.sof.Shipment.UnloadingStart" == actualEvent.eventType ||
392      "com.lbngttsamples.gtt.app.sof.Shipment.UnloadingEnd" == actualEvent.eventType)) {
393     if (actualEvent.containsProperty("estimatedArrival") && actualEvent.containsProperty("refPlannedEventMatchKey")) {
394         refPlannedEventMatchKey = actualEvent.refPlannedEventMatchKey;
395         estimatedArrival = actualEvent.estimatedArrival;
396         var i = 0;
397         // Get the latest matched estimatedArrivalTime
398         while (i < estimatedArrival.size()) {
399             if (refPlannedEventMatchKey == estimatedArrival[i].stopId) {
400                 estimatedArrivalTime = estimatedArrival[i].estimatedArrivalTime;
401             }
402             i = i + 1;
403         }
404     }
405 }
```