

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.

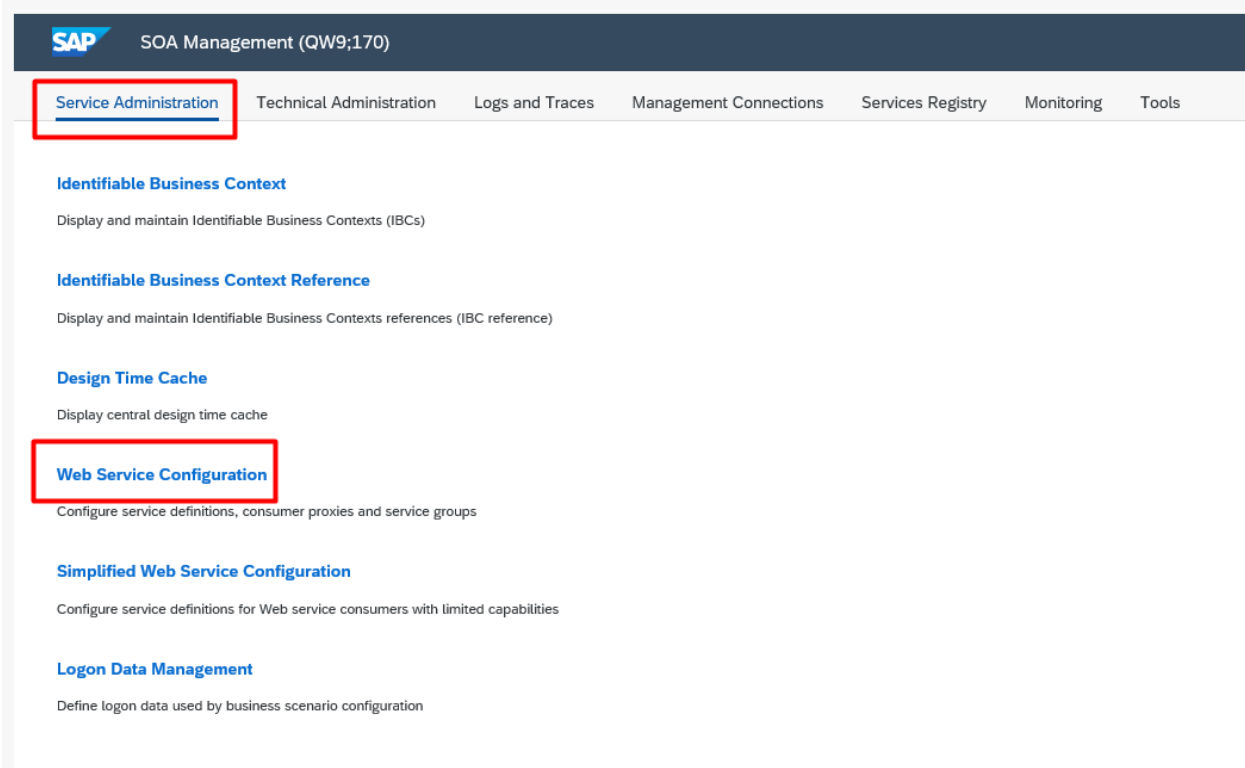
1. Configure Web Service in Your SAP TM System

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 SPNegotiation

Message Authentication

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

SAP

Web Service Configuration (QW9;170)

Details of Service Definition: /SCMTMS/TPEVTBNTFI

OverviewConfigurationsClassificationsDetails

Define Services and Bindings

Create ServiceActivateDeactivateDeleteRepublishDisplay as List

Service/Binding	Actions
<input type="checkbox"/> LBN_EVENT_IN	
<input type="checkbox"/> LBN_EVENT_OUT	
<input checked="" type="checkbox"/> ZGTT_EVENT_IN	
<input type="checkbox"/> ZGTT_EVENT_OUT	
<input type="checkbox"/>	
<input type="checkbox"/>	
<input type="checkbox"/>	
<input type="checkbox"/>	
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<input type="checkbox"/>	
<input type="checkbox"/>	
<input type="checkbox"/>	
<input type="checkbox"/>	
<input type="checkbox"/>	

SaveEdit

Provider SecurityTransport SettingsIdentifiable Business ContextOperation SettingsAdministrative Information

Transport Binding

Alternative Access URL:

Calculated Access URL:

Calculated Protocol:

HTTP

Make Local Call:

No Call in Local System

State Management Timeout:

0

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 displays the SAP Cloud Connector Administration web interface. The left sidebar contains a navigation menu with options like Connector, Security Status, Alerting, High Availability, Hardware Metrics Monitor, Configuration, and a subaccount dropdown for 'lbn-gtt-samples'. The 'Cloud To On-Premise' option is highlighted. The main content area is titled 'Cloud To On-Premise' and includes tabs for ACCESS CONTROL, COOKIE DOMAINS, APPLICATIONS, and PRINCIPAL PROPAGATION. Under the 'ACCESS CONTROL' tab, there is a section for 'Mapping Virtual To Internal System' with a table showing a single entry with status 'Reachable', protocol 'HTTPS', and back-end type 'ABAP System'. A red box highlights a '+' icon in the top right of this section, indicating where to click to create a new mapping. Below this is a section for 'Resources Of tmqw9170:54300' with a table showing a single entry with status 'Reachable' and access policy 'Path And All Sub-Paths'.

Status	Virtual Host	Internal Host	Check Result	Protocol	Back-end Type	Actions
<input checked="" type="checkbox"/>			Reachable	HTTPS	ABAP System	

Status	URL Path	Access Policy	Actions
<input checked="" type="checkbox"/>		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:	ABAP System
Protocol:	HTTPS
Virtual Host:	
Virtual Port:	
*Internal Host:	
*Internal Port:	
SAProuter:	
Principal Type:	None
SNC Partner Name:	
Host In Request Header:	Use Virtual Host
Description:	

Check Internal Host: ☐

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	<div><div></div><div></div><div></div><div></div><div></div></div>

Back-end Type	Actions
	<div><div></div><div></div><div></div><div></div><div></div></div>

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 //For Track Shipments Application Only
370 var destinationTMName = "TO_QW9_170_STANDARD";
371 var msgObj = toObject("{}");
372 var eventObj = toObject("{}");
373
374 var reportedBy = null;
375 var estimatedArrivalTime = null;
376 var refPlannedEventMatchKey = null;
377 var estimatedArrival = null;
378
379 eventObj.eventReasonCode = "";
380 eventObj.stopId = "";
381
382 if (trackedProcess != null &&
383     "QW9CLNT170" == trackedProcess.logicalSystem &&
384     "SHIPMENT_ORDER" == actualEvent.trackingIdType &&
385     ("com.lbngttsamples.gtt.app.sof.Shipment.Departure" == actualEvent.eventType ||
386      "com.lbngttsamples.gtt.app.sof.Shipment.Arrival" == actualEvent.eventType ||
387      "com.lbngttsamples.gtt.app.sof.Shipment.Delay" == actualEvent.eventType ||
388      "com.lbngttsamples.gtt.app.sof.Shipment.LoadingStart" == actualEvent.eventType ||
389      "com.lbngttsamples.gtt.app.sof.Shipment.LoadingEnd" == actualEvent.eventType ||
390      "com.lbngttsamples.gtt.app.sof.Shipment.POD" == actualEvent.eventType ||
391      "com.lbngttsamples.gtt.app.sof.Shipment.POPU" == actualEvent.eventType ||
392      "com.lbngttsamples.gtt.app.sof.Shipment.Coupling" == actualEvent.eventType ||
393      "com.lbngttsamples.gtt.app.sof.Shipment.Decoupling" == actualEvent.eventType ||
394      "com.lbngttsamples.gtt.app.sof.Shipment.UnloadingStart" == actualEvent.eventType ||
395      "com.lbngttsamples.gtt.app.sof.Shipment.UnloadingEnd" == actualEvent.eventType)) {
396     if (actualEvent.containsProperty("estimatedArrival") && actualEvent.containsProperty("refPlannedEventMatchKey")) {
397         refPlannedEventMatchKey = actualEvent.refPlannedEventMatchKey;
398         estimatedArrival = actualEvent.estimatedArrival;
399         var i = 0;
400         // Get the latest matched estimatedArrivalTime
```