



PUBLIC

SAP ERP Sample Code Configuration Guide for Fulfillment Tracking Apps

SAP Business Network Global Track and Trace

June 2023

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Document History

2306 Release:

1. Update [2.1.1](#) Install ABAPGit
2. Update [2.1.2](#) Download ABAP Code from GitHub
3. Update [3.7](#) Maintain AOT Type Restriction for Cross-Processes
4. Update [3.8](#) Maintain Event Type Restriction for Cross-Processes
5. Update [4.12.4](#) Cross-processes for Purchase Order
6. Update [4.13.5](#) Cross-processes for Inbound Delivery
7. Update [4.14.3](#) Cross-processes for Sales Order
8. Update [4.15.5](#) Cross-processes for Outbound Delivery

2305 Release:

1. Update [3.4](#) Define RFC Connection for SAP Business Network Global Track and Trace
2. Update [4.1](#) Define RFC Connection for SAP Business Network Global Track and Trace
3. Update [5.7](#) Enhancement Codes for Cross-processes Tracking
4. Add [Q8: How to deactivate or activate the application log?](#)

2304 Release:

1. Update prerequisites for Chapter 3 ERP Integration Configuration option 1 (Import BC set + Manual configuration)
2. Update [5.7](#) Enhancement Codes for Cross-processes Tracking
3. Add the [Chapter 6 Known Issues](#)
4. Update [Q1: After the configuration of GTT and SAP TM systems, we found that the freight unit / freight order / freight booking IDOC cannot be sent to SAP Business Network Global Track and Trace, how can we do the troubleshooting?](#)
5. Add the following FAQs:
 - [Q6: Do sample codes support one-time locations? Where can we maintain the one-time location address?](#)
 - [Q7: How to stop sending unnecessary IDOCs from SAP ERP system to the GTT system?](#)

2303 Release:

1. Update [3.4](#) Define RFC Connection for SAP Business Network Global Track and Trace
2. Update [3.7](#) Maintain AOT Type Restriction for Cross-Processes
3. Update [3.10](#) Maintain Delivery Types that will be sent to SAP Business Network Global Track and Trace
4. Add [3.11](#) Maintain Purchase Order Types that will be sent to SAP Business Network Global Track and Trace
5. Update [4.1](#) Define RFC Connection for SAP Business Network Global Track and Trace
6. Update [4.12.4](#) Cross-processes for Purchase Order
7. Add [4.12.5](#) Maintain Purchase Order Types that will be sent to SAP Business Network Global Track and Trace
8. Add [4.13.6](#) Maintain Delivery Types that will be sent to SAP Business Network Global Track and Trace
9. Update [4.14.3](#) Cross-processes for Sales Order
10. Update [Q2: How to add customized planned event and synchronize this event back to SAP TM?](#)
11. Add [Q4: How is the connection established between SAP ERP and SAP Business Network Global Track and Trace? Do we need to configure PI in SAP ERP?](#)
12. Add [Q5: What scenarios are supported in SAP Business Network Global Track and Trace?](#)

2302 Release:

1. Add [Q4: How to synchronize customized events back to SAP TM?](#)

2212 Release:

1. Add [3.9](#) Maintain Sales Order Types that will be sent to SAP Business Network Global Track and Trace

2. Add [3.10](#) Maintain Delivery Types that will be sent to SAP Business Network Global Track and Trace
3. Add [4.14.4](#) Maintain Sales Order Types that will be sent to SAP Business Network Global Track and Trace
4. Add [4.15.6](#) Maintain Delivery Types that will be sent to SAP Business Network Global Track and Trace
5. Delete 5.1 Coding Tips for Sales Order Relevant Extractor

2211 Release:

1. Update [1.1](#) Check the SAP Product Version

2208 Release:

1. Update Appendix Two
 - Add [Q3: How to update business partner's LBN ID](#)
2. Update [1.1](#) Check the SAP Product Version

2204 Release:

1. Update [Appendix One](#)
2. Update Appendix Two
 - [Add Q2: How to add customized planned event types for SAP Business Network Global Track and Trace?](#)

2203 Release:

1. Update [1.1](#) Check the SAP Version

2202 Release:

1. Update BC set file in the GitHub
2. Chapter [3.7](#) Maintain AOT Type Restriction for Cross-Processes
 - Add "Restr.ID": DL_TO_POIT (Cross process from Inbound Delivery to PO Item)
 - Add "Restr.ID": DL_TO_SOIT (Cross process from Outbound Delivery to SO Item)
 - Add "Restr.ID": SH_TO_ODLH (Cross process from Shipment to Outbound Delivery Header)
 - Add "Restr.ID": FU_TO_ODLH (Cross process from Freight Unit to Outbound Delivery Header)
 - Add "Restr.ID": FU_TO_ODLI (Cross process from Freight Unit to Outbound Delivery Item)
3. Chapter [3.8](#) Maintain Event Type Restriction for Cross-Processes
 - Add "Restr.ID": DL_TO_POIT
4. Chapter [4.6](#) Define GTT Extraction Functions
 - Add "Control Parameter Extractors": GTT_POF_PO_HD_OTE (Control Parameter Extractor for Purchase Order Header)
 - Add "Control Parameter Extractors": GTT_POF_PO_IT_OTE (Control Parameter Extractor for Purchase Order Item)
 - Add "Control Parameter Extractors": GTT_SOF_SO_HD_OTE (Control Parameter Extractor for Sales Order Header)
 - Add "Control Parameter Extractors": GTT_SOF_SO_IT_OTE (Control Parameter Extractor for Sales Order Item)
 - Add "Control Parameter Extractors": GTT_SOF_ODLV_HD_OTE (Control Parameter Extractor for Outbound Delivery Header)
 - Add "Control Parameter Extractors": GTT_SOF_ODLV_IT_OTE (Control Parameter Extractor for Outbound Delivery Item)
 - Add "Event Data Extractors": GTT_POF_PO_IT_CF (Actual Event PO Item Confirmation)
 - Add "Event Data Extractors": GTT_POF_PO_IT_DE (Actual Event PO Item Deletion)
 - Add "Event Data Extractors": GTT_POF_PO_IT_GR (Actual Event PO Item Goods Receipt)
 - Add "Event Data Extractors": GTT_SOF_ODLV_GI (Actual Event Outbound Delivery Goods Issue)

- Add "Event Data Extractors": GTT_SOF_ODLV_IT_PA (Actual Event Outbound Delivery Packing)
 - Add "Event Data Extractors": GTT_SOF_ODLV_IT_PI (Actual Event Outbound Delivery Picking)
 - Add "Event Data Extractors": GTT_SOF_ODLV_IT_POD (Actual Event Outbound Delivery POD)
 - Add "Planned Event Extractors": GTT_POF_PO_HD_EE (Selection of EEs for Purchase Order Header)
 - Add "Planned Event Extractors": GTT_POF_PO_IT_EE (Selection of EEs for Purchase Order Item)
 - Add "Planned Event Extractors": GTT_SOF_SO_HD_EE (Selection of EEs for Sales Order Header)
 - Add "Planned Event Extractors": GTT_SOF_SO_IT_EE (Selection of EEs for Sales Order Item)
 - Add "Planned Event Extractors": GTT_SOF_ODLV_HD_EE (Selection of EEs for Outbound Delivery Header)
 - Add "Planned Event Extractors": GTT_SOF_ODLV_IT_EE (Selection of EEs for Outbound Delivery Item)

 - Add "Tracking ID Extractors": GTT_POF_PO_HD_TID (Tracking ID Extractor for Purchase Order Header)
 - Add "Tracking ID Extractors": GTT_POF_PO_IT_TID (Tracking ID Extractor for Purchase Order Item)
 - Add "Tracking ID Extractors": GTT_SOF_SO_HD_TID (Tracking ID Extractor for Sales Order Header)
 - Add "Tracking ID Extractors": GTT_SOF_SO_IT_TID (Tracking ID Extractor for Sales Order Item)
 - Add "Tracking ID Extractors": GTT_SOF_ODLV_HD_TID (Tracking ID Extractor for Outbound Delivery Header)
 - Add "Tracking ID Extractors": GTT_SOF_ODLV_IT_TID (Tracking ID Extractor for Outbound Delivery Item)
 - Add "GTT relevance function of AOT": GTT_POF_PO_HD_REL (AOT Relevance for Purchase Order Header)
 - Add "GTT relevance function of AOT": GTT_POF_PO_IT_REL (AOT Relevance for Purchase Order Item)
 - Add "GTT relevance function of AOT": GTT_SOF_SO_HD_REL (Appl. Object Type Relevance for Sales Order Header)
 - Add "GTT relevance function of AOT": GTT_SOF_SO_IT_REL (Appl. Object Type Relevance for Sales Order Items)
 - Add "GTT relevance function of AOT": GTT_SOF_ODLV_HD_REL (Appl. Object Type Relevance for Outbound Delivery Header)
 - Add "GTT relevance function of AOT": GTT_SOF_ODLV_IT_REL (Appl. Object Type Relevance for Outbound Delivery Items)
 - Add "GTT relevance function of Event Type": GTT_POF_PO_IT_CF_REL (Relevance function for Actual event PO Item Confirmation)
 - Add "GTT relevance function of Event Type": GTT_POF_PO_IT_DE_REL (Relevance function for Actual event PO Item Deletion)
 - Add "GTT relevance function of Event Type": GTT_POF_PO_IT_GR_REL (Relevance function for Actual event PO Item Goods Receipt)
 - Add "GTT relevance function of Event Type": GTT_SOF_ODLV_GI_REL (Relevance function for Actual event Outbound Delivery Goods Issue)
 - Add "GTT relevance function of Event Type": GTT_SOF_ODLV_PA_REL (Relevance function for Actual event Outbound Delivery Packing)
 - Add "GTT relevance function of Event Type": GTT_SOF_ODLV_PI_REL (Relevance function for Actual event Outbound Delivery Picking)
 - Add "GTT relevance function of Event Type": GTT_SOF_ODLV_POD_REL (Relevance function for Actual event Outbound Delivery POD)
 - Add "AOID Extractor": GTT_POF_PO_IT_AOID (AOID Extractor for PO Item)
 - Add "AOID Extractor": GTT_POF_PO_HD_AOID (AOID Extractor for PO Header)
 - Add "AOID Extractor": GTT_SOF_AOID (AOID Extractor for Sales Order/Outbound Delivery)
5. Chapter [4.7](#) Define Used Business Process Types, Appl. Object Types and Event Types
- Add Scenarios configuration "Purchase Order -> Inbound Delivery -> Shipment"

- Add Scenarios configuration "Purchase Order -> Inbound Delivery -> Freight Unit -> Road Freight Order / Ocean Booking / Air Booking"
 - Add Scenarios configuration "Sales Order -> Outbound Delivery -> Shipment"
 - Add Scenarios configuration "Sales Order -> Outbound Delivery -> Freight Unit -> Road Freight Order / Ocean Booking / Air booking"
6. Chapter [4.12](#) Purchase Order Extractor Configuration
- Add Chapter [4.12.1](#) Define Application Object Types for Purchase Order Header
 - Add Chapter [4.12.2](#) Define Application Object Types for Purchase Order Item
 - Add Chapter [4.12.3](#) Define Event Types for Purchase Order Item
 - Add Chapter [4.12.4](#) Cross-processes for Purchase Order
7. Chapter [4.14](#) Sales Order Extractor Configuration
- Add Chapter [4.14.1](#) Define Application Object Types for Sales Order Header
 - Add Chapter [4.14.2](#) Define Application Object Types for Sales Order Item
 - Add Chapter [4.14.3](#) Cross-processes for Sales Order
8. Chapter [4.15](#) Outbound Delivery Extractor Configuration
- Add Chapter [4.15.1](#) Define Application Object Types for Outbound Delivery Header
 - Add Chapter [4.15.2](#) Define Application Object Types for Outbound Delivery Item
 - Add Chapter [4.15.3](#) Define Event Types for Outbound Delivery Header
 - Add Chapter [4.15.4](#) Define Event Types for Outbound Delivery Item
 - Add Chapter [4.15.5](#) Cross-processes for Outbound Delivery
9. Chapter [5](#) Configuration and Coding Guide – Advanced
- Add Chapter [5.1](#) Coding Tips for Sales Order Relevant Extractor
10. Add [Appendix Two: FAQs](#)

2109 Release:

[Appendix One: Define the Unplanned Events for Freight Booking](#)

2108 Release:

1. Update BC set file in the GitHub
2. Chapter [4.6](#) Define GTT Extraction Functions
 - Add "Tracking ID Extractors": GTT_MIA_IDLV_HD_TID (Tracking ID Extractor for Inbound Delivery Header)
 - Add "AOID Extractor": GTT_MIA_IDLV_HD_AOID (AOID Extractor for Inbound Delivery Header)
 - Add "AOID Extractor": GTT_MIA_IDLV_IT_AOID (AOID Extractor for Inbound Delivery Item)
 - Add "AOID Extractor": GTT_MIA_SHP_HD_AOID (AOID Extractor for Shipment Header)
 - Add "AOID Extractor": GTT_STS_AOID_TOR (AOID Extractor for FU/FO/FB)
3. Chapter [4.13.1](#) Define Application Object Types for Inbound Delivery Header
 - Adjust "AOID Method" from "Determine from Field" to "Determine by Function"
 - Remove the value for fields "Cntl Tab. Type" and "AO ID Field"
 - Add "AOID Function" and set its value to "GTT_MIA_IDLV_HD_AOID"
 - Adjust "TrkID Method" from "Determine from Field" to "Determine by Function"
 - Remove the value for fields "Tr. ID Tab. Type", "Tracking ID Fld", "Tr. ID Code Set"
 - Add "Tr.ID Extractor" and set its value to "GTT_MIA_IDLV_HD_TID"
4. Chapter [4.13.2](#) Define Application Object Types for Inbound Delivery Item
 - Adjust "AOID Method" from "Determine from Field" to "Determine by Function"
 - Remove the value for fields "Cntl Tab. Type" and "AO ID Field"
 - Add "AOID Function" and set its value to "GTT_MIA_IDLV_IT_AOID"
5. Chapter [4.16.1](#) Define Application Object Types for Shipment Header
 - Adjust "AOID Method" from "Determine from Field" to "Determine by Function"

- Remove the value for fields "Cntl Tab. Type" and "AO ID Field"
- Add "AOID Function" and set its value to "GTT_MIA_SHP_HD_AOID"

6.Chapter [4.17.1](#) Define Application Object Types for Freight Unit Header

- Adjust "AOID Method" from "Determine from Field" to "Determine by Function"
- Remove the value for field " Cntl Tab. Type " and "AO ID Field"
- Add " AOID Function" and set its value to "GTT_STS_AOID_TOR"

7.Chapter [4.18.1](#) Define Application Object Types for Road Freight Order/Ocean/Air Booking Header

- Adjust "AOID Method" from "Determine from Field" to "Determine by Function"
- Remove the value for field " Cntl Tab. Type " and "AO ID Field"
- Add " AOID Function" and set its value to "GTT_STS_AOID_TOR"

2105 Release:

Initial version.

1. PREREQUISITES

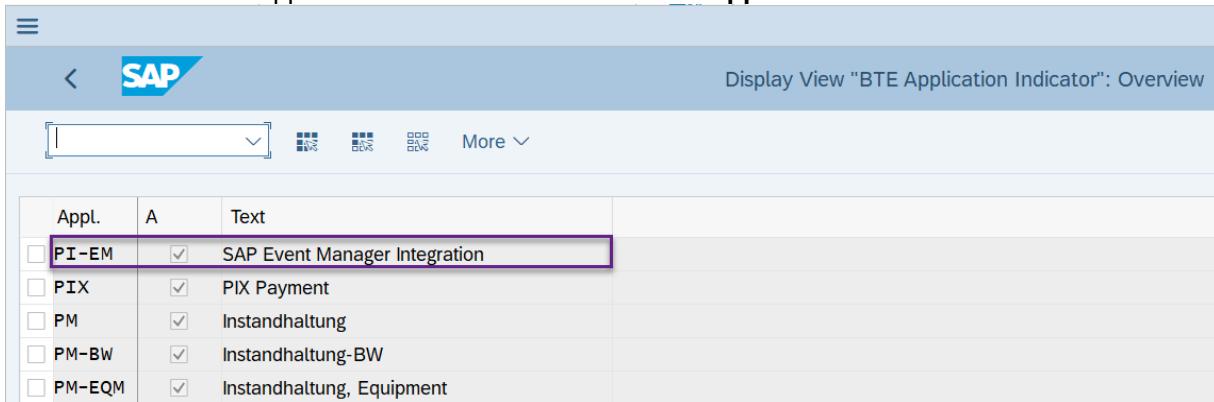
1.1 Check the SAP Product Version

Make sure that you have met the requirements for the product version mentioned in the “[Prerequisites](#)” section of *Appendix one: Connect to SAP ERP in Administration Guide for Version 2*. You can find this guide at <http://help.sap.com/gtt>.

The ABAP codes on Github to support fulfillment tracking apps for SAP Business Network Global Track and Trace shall be implemented in SAP S/4HANA 1909 SP03 on premise or higher. Please note that the codes are not validated in its lower version or other ECC series of products, so you might need to do further adaptation work or build your own extractor.

1.2 Log on the Development Client to Configure BTE

- 1.2.1 Ensure you have development access to the client for cross-client customizing and local development.
- 1.2.2 Log on to the client and enter transaction code (T-code): **FIBF**.
- 1.2.3 Click **More->Settings -> Identification -> SAP Applications**.
- 1.2.4 Position on the Application ID: **PI-EM**. Check the field Application Active.



Appl.	A	Text
<input type="checkbox"/>	<input checked="" type="checkbox"/>	SAP Event Manager Integration
<input type="checkbox"/>	<input checked="" type="checkbox"/>	PIX Payment
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Instandhaltung
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Instandhaltung-BW
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Instandhaltung, Equipment

- 1.2.5 Click **Save**.

2. DOWNLOAD ABAP CODE FROM GITHUB

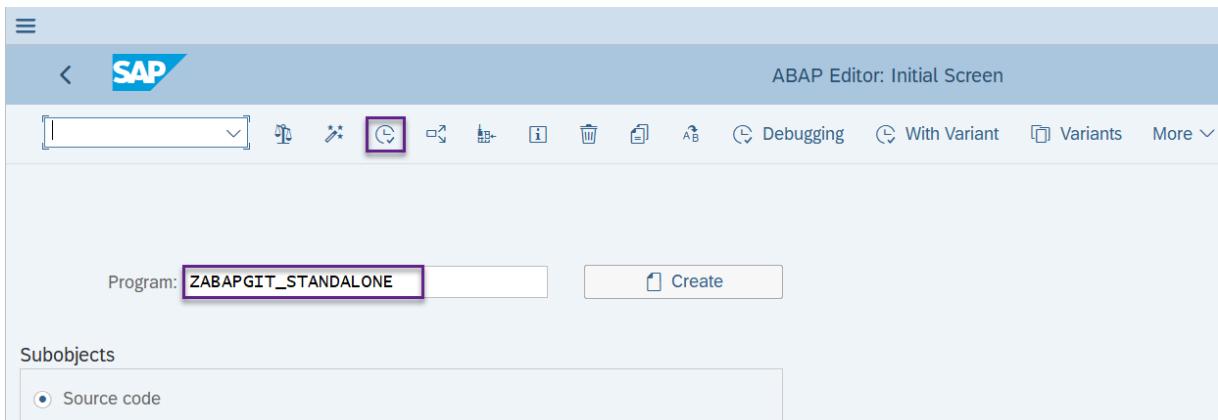
2.1 Initial Download ABAP Code from GitHub

2.1.1 Install ABAPGit

You need to install ABAPGit before downloading the codes from GitHub. To install ABAPGit, follow the instructions on <https://docs.abapgit.org/user-guide/getting-started/install.html>. Make sure you **Install the standalone version** in your dev system. When installation is complete, a new report is created, **ZABAPGIT_STANDALONE**.

2.1.2 Download ABAP Code from GitHub

2.1.2.1 Enter T-code **SE38** and fill in the report name from [2.1.1](#), **ZABAPGIT_STANDALONE**. Click **Execute** to run the report.



2.1.2.2 Click **New Online** to download the code.

A screenshot of the abapGit application's "Tutorial" section. At the top, there's a navigation bar with "abapGit" and "Tutorial" on the left, and "Repository List", "New Online" (which is highlighted with a purple border), "New Offline", "Settings", and "?" on the right. The main content area has sections for "Online repositories", "Offline repositories", and "Repository list and favorites". Each section contains a bulleted list of instructions.

2.1.2.3 Fill in the **Git Repository URL**.

<https://github.com/SAP-samples/logistics-business-network-gtt-standardapps-samples.git>

2.1.2.4 Fill in the **Package** where you want to create the new ABAP code. If the package does not exist yet, click **Create package** to create it. Set **Full** for **Folder Logic**. Click **Clone Online Repo** to download the code.

abapGit

abapGit ► New Online Repository

Git Repository URL *

Package *

Branch

Folder Logic

Prefix

Display Name

Ignore Subpackages

Serialize Main Language Only

2.1.2.5 Assign the change to a change request. If you do not have any available change requests, you need to create a new one.

2.1.2.6 Click **Pull** to pull down the code of the latest version.

The screenshot shows the SAP abapGit interface. At the top, there's a toolbar with 'Selections', 'Edit', 'Goto', 'System', and 'Help'. Below the toolbar, the title bar says 'abapGit' and 'Repository'. The URL is listed as 'GTT-V2-Standard-Apps https://SAP-samples/logistics-business-network-gtt-standardapps-samples.git b19790'. On the right side of the title bar, there are buttons for 'Pull', 'Stage', 'Diff', 'Branch', 'Tag', 'Advanced', 'View', 'Refresh', and a gear icon. A status bar at the bottom shows 'Repository List' and 'master zgtt'.

Type	Name	Path
	non-code and meta files	/abapgit.xml
CLAS	ZCL_GTT_MIA_AE_FILLER_DLH_GR	/lbn-gtt-standard-app/abap/zsrc/zgtt_mia/zcl_gtt_mia_ae_filler_dlh_gr.clas.abap
CLAS	ZCL_GTT_MIA_AE_FILLER_DL_PKA	/lbn-gtt-standard-app/abap/zsrc/zgtt_mia/zcl_gtt_mia_ae_filler_dlh_pk.clas.xml
CLAS	ZCL_GTT_MIA_AE_FILLER_DL_PKN	/lbn-gtt-standard-app/abap/zsrc/zgtt_mia/zcl_gtt_mia_ae_filler_dli_pk.clas.abap
CLAS	ZCL_GTT_MIA_AE_FILLER_DLH_BH	/lbn-gtt-standard-app/abap/zsrc/zgtt_mia/zcl_gtt_mia_ae_filler_dli_pk.clas.xml
CLAS	ZCL_GTT_MIA_AE_FILLER_SHH_BH	/lbn-gtt-standard-app/abap/zsrc/zgtt_mia/zcl_gtt_mia_ae_filler_shh_bh.clas.abap
CLAS	ZCL_GTT_MIA_AE_FILLER_SHH_BS	/lbn-gtt-standard-app/abap/zsrc/zgtt_mia/zcl_gtt_mia_ae_filler_shh_bs.clas.abap
CLAS	ZCL_GTT_MIA_AE_PARAMETERS	/lbn-gtt-standard-app/abap/zsrc/zgtt_mia/zcl_gtt_mia_ae_parameters.clas.abap
CLAS	ZCL_GTT_MIA_AE_PERFORMER	/lbn-gtt-standard-app/abap/zsrc/zgtt_mia/zcl_gtt_mia_ae_performer.clas.abap
CLAS	ZCL_GTT_MIA_AE_PROCESSOR	/lbn-gtt-standard-app/abap/zsrc/zgtt_mia/zcl_gtt_mia_ae_processor.clas.abap
CLAS	ZCL_GTT_MIA_CTP_DAT_TOR_TO_DLH	/lbn-gtt-standard-app/abap/zsrc/zgtt_mia/zcl_gtt_mia_cpt_dat_tor_to_dlh.clas.abap
CLAS	ZCL_GTT_MIA_CTP_DAT_TOR_TO_DL	/lbn-gtt-standard-app/abap/zsrc/zgtt_mia/zcl_gtt_mia_cpt_dat_tor_to_dl.clas.abap
CLAS	ZCL_GTT_MIA_CTP_SHIPMENT_DATA	/lbn-gtt-standard-app/abap/zsrc/zgtt_mia/zcl_gtt_mia_cpt_shipment_data.clas.abap
CLAS	ZCL_GTT_MIA_CTP SND	/lbn-gtt-standard-app/abap/zsrc/zgtt_mia/zcl_gtt_mia_cpt_snd.clas.abap
CLAS	ZCL_GTT_MIA_CTP SND SH_TO_DLH	/lbn-gtt-standard-app/abap/zsrc/zgtt_mia/zcl_gtt_mia_cpt_snd_sh_to_dlh.clas.xml

2.1.2.7 After you download the code, you can check it with T-code **SE80**.

2.2 Update ABAP Code from GitHub

In each release, there are some changes in the public sample codes. To update your local sample codes of Fulfillment Tracking apps after a future release, do the following:

2.2.1 Update ABAP Code from GitHub

2.2.1.1 Enter T-code **SE38** and fill in the report name **ZABAPGIT_STANDALONE**. Click the **Execute** icon to run the report.

The screenshot shows the SAP ABAP Editor: Initial Screen. The title bar says 'ABAP Editor: Initial Screen'. The toolbar includes icons for search, copy, paste, cut, delete, and other functions. Below the toolbar, there's a search field and a 'Create' button. The main area has a 'Program:' field containing 'ZABAPGIT_STANDALONE' and a 'Create' button. Underneath, there's a 'Subobjects' section with a radio button for 'Source code' (which is selected) and other options like 'Variants', 'Attributes', 'Text elements', and 'Documentation'.

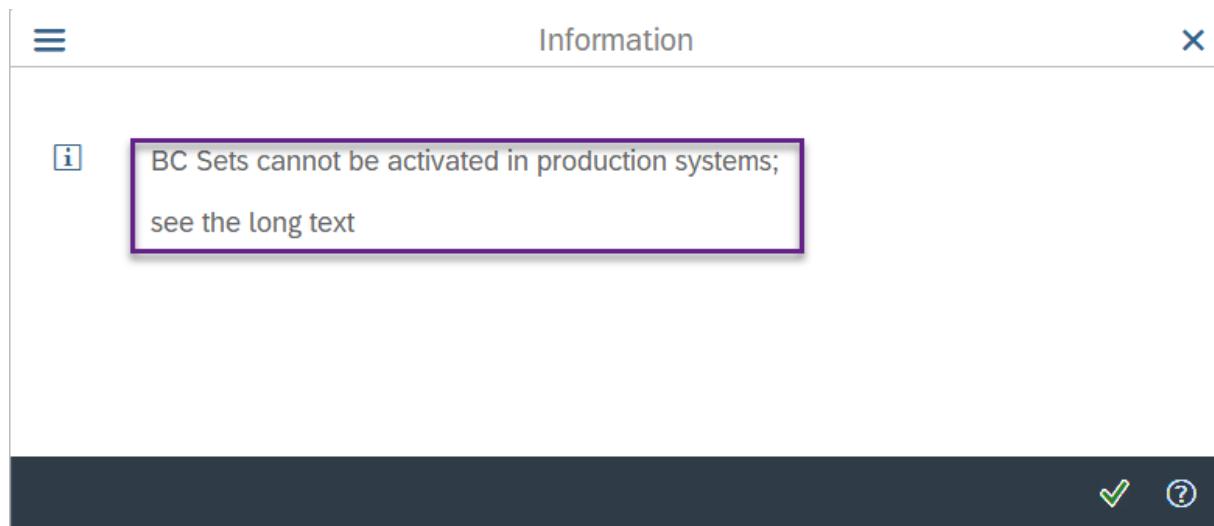
2.2.1.2 To access the Fulfillment Tracking apps' repository, click the button.

2.2.1.3 Click **Pull** to pull down the latest version code.

3. ERP INTEGRATION CONFIGURATION OPTION 1 (IMPORT BC SET + MANUAL CONFIGURATION)

Prerequisites:

- For this option, you must establish the system environment WITHOUT a production client for preparation. If you try to import the BC set into the system with a production client, an error will pop up.



The screenshot shows the SAP Performance Assistant interface. It displays the same error message: 'BC Sets cannot be activated in production systems; see the long text'. Below the message, it says 'Message no. SCPR229'. Under 'Diagnosis', it states: 'You tried to activate BC Sets in a system with at least one production client. This is not allowed. You can only activate Business Configuration Sets in systems with no production client.' Under 'System Response', it says: 'The procedure was cancelled. No data was written into customizing tables.' Under 'Procedure', it says: 'Activate the BC Set in a test system.'

- You must maintain the business process types used for SAP Business Network Global Track and Trace correctly. To do so, follow the steps below:
 - In **Display IMG** page, click **Integration with Other SAP Components -> Interface to Global Track and Trace -> Define Application Interface**.
 - Choose activity **Define Used Business Process Types, Appl. Object Types and Event Types**.
 - Choose **Define Used Business Process Types** and click **New Entries** to maintain business process type as follows:

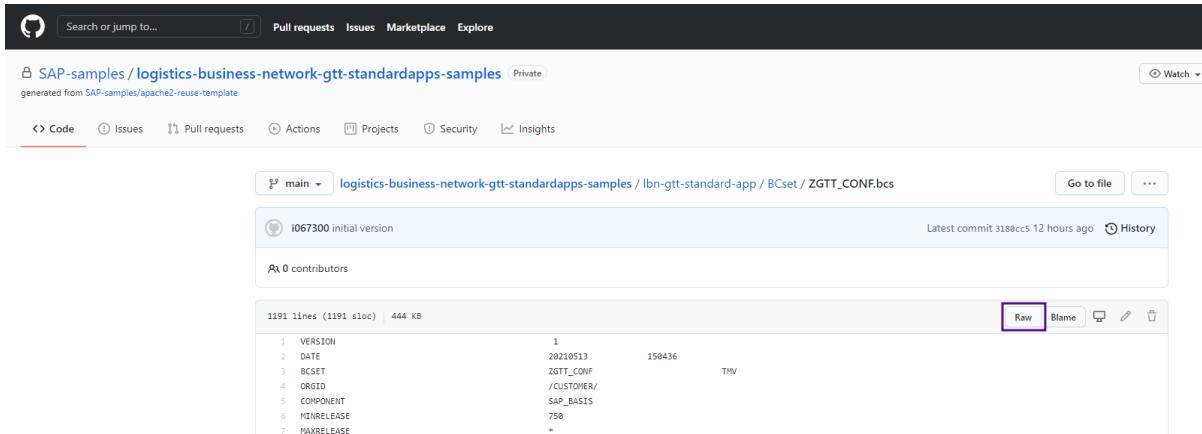
Business Process Type	Update Mode	BPT Processing Mode	Description
ESC_DELIV	Update Task (V1)	Active	Delivery in SAP R/3 Enterprise
ESC_MATDOC	Update Task (V1)	Active	Material Document in SAP R/3 Enterprise
ESC_PURORD	Update Task (V1)	Active	Purchase Order in SAP R/3 Enterprise

ESC_SHIPMT	Update Task (V1)	Active	Shipment (SAP R/3 Enterprise)
ESC_SORDER	Update Task (V1)	Active	Sales Order in SAP R/3 Enterprise
TMS_TOR	Update Task (V1)	Active	Transportation Order (SAP TM)

3.1 Download BC Set from GitHub

3.1.1 Navigate to BC Set in https://github.com/SAP-samples/logistics-business-network-gtt-standardapps-samples/blob/main/lbn-gtt-standard-app/BCset/ZGTT_CONF.bcs.

3.1.2 Click on “Raw” button.

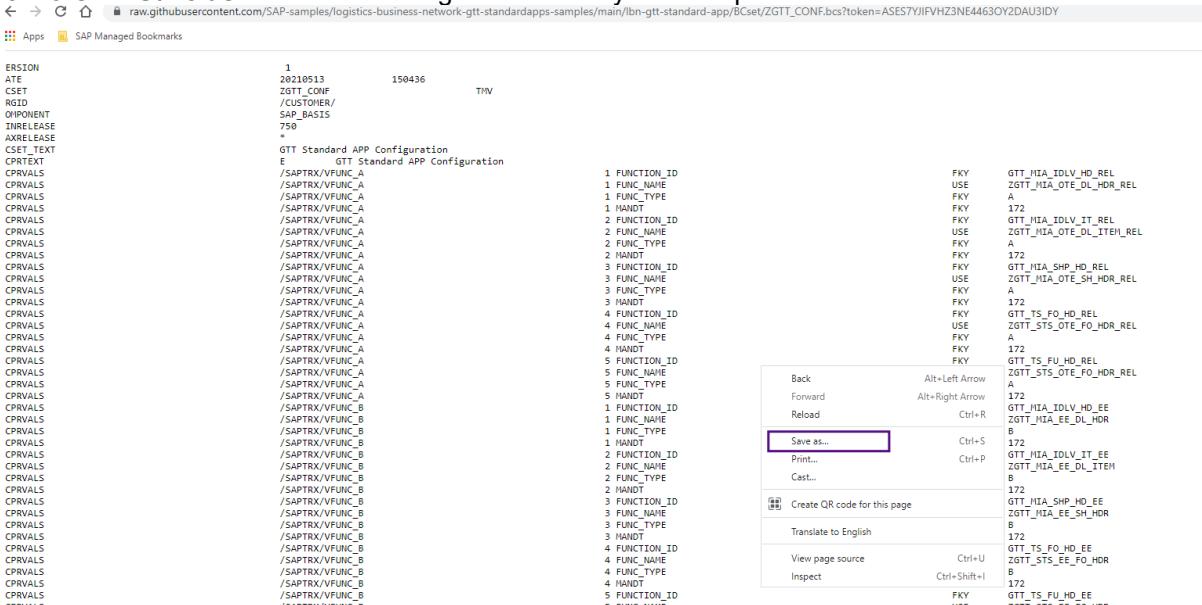


```

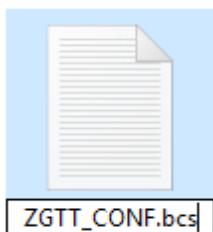
VERSION          1
DATE            20210513      150436
BCSET           ZGTT_CONF
COMPONENT       /CUSTOMER/
ORGID          SAP_BASIS
COMPONENT       SAP_BASIS
MINRELEASE     750
MAXRELEASE     *
+
GTT Standard APP Configuration
E             GTT Standard APP Configuration
/SAPTRX/VFUNC_A           1 FUNCTION_ID
/SAPTRX/VFUNC_A           1 FUNC_NAME
/SAPTRX/VFUNC_A           1 FUNC_TYPE
/SAPTRX/VFUNC_A           1 MANDT
/SAPTRX/VFUNC_A           2 FUNCTION_ID
/SAPTRX/VFUNC_A           2 FUNC_NAME
/SAPTRX/VFUNC_A           2 FUNC_TYPE
/SAPTRX/VFUNC_A           2 MANDT
/SAPTRX/VFUNC_A           3 FUNCTION_ID
/SAPTRX/VFUNC_A           3 FUNC_NAME
/SAPTRX/VFUNC_A           3 FUNC_TYPE
/SAPTRX/VFUNC_A           3 MANDT
/SAPTRX/VFUNC_A           4 FUNCTION_ID
/SAPTRX/VFUNC_A           4 FUNC_NAME
/SAPTRX/VFUNC_A           4 FUNC_TYPE
/SAPTRX/VFUNC_A           4 MANDT
/SAPTRX/VFUNC_A           5 FUNCTION_ID
/SAPTRX/VFUNC_A           5 FUNC_NAME
/SAPTRX/VFUNC_A           5 FUNC_TYPE
/SAPTRX/VFUNC_A           5 MANDT
/SAPTRX/VFUNC_B           1 FUNCTION_ID
/SAPTRX/VFUNC_B           1 FUNC_NAME
/SAPTRX/VFUNC_B           1 FUNC_TYPE
/SAPTRX/VFUNC_B           1 MANDT
/SAPTRX/VFUNC_B           2 FUNCTION_ID
/SAPTRX/VFUNC_B           2 FUNC_NAME
/SAPTRX/VFUNC_B           2 FUNC_TYPE
/SAPTRX/VFUNC_B           2 MANDT
/SAPTRX/VFUNC_B           3 FUNCTION_ID
/SAPTRX/VFUNC_B           3 FUNC_NAME
/SAPTRX/VFUNC_B           3 FUNC_TYPE
/SAPTRX/VFUNC_B           3 MANDT
/SAPTRX/VFUNC_B           4 FUNCTION_ID
/SAPTRX/VFUNC_B           4 FUNC_NAME
/SAPTRX/VFUNC_B           4 FUNC_TYPE
/SAPTRX/VFUNC_B           4 MANDT
/SAPTRX/VFUNC_B           5 FUNCTION_ID
/SAPTRX/VFUNC_B           5 FUNC_NAME

```

3.1.3 Click **Save as...** to save the configuration file to your local path.



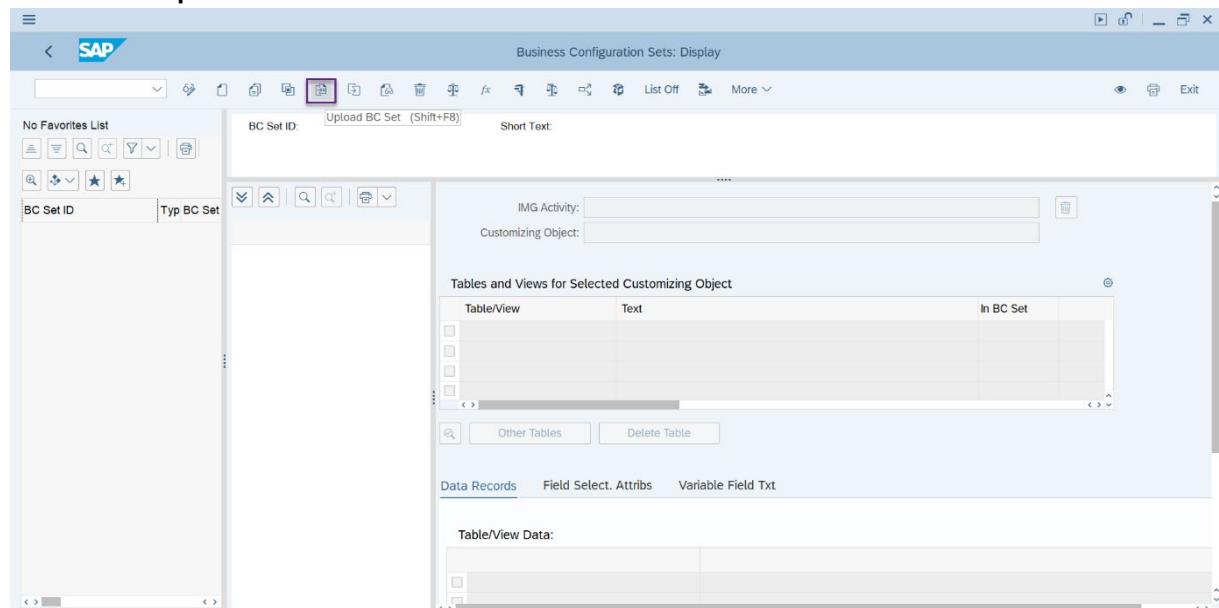
3.1.4 Change file extension to “.bcs”.



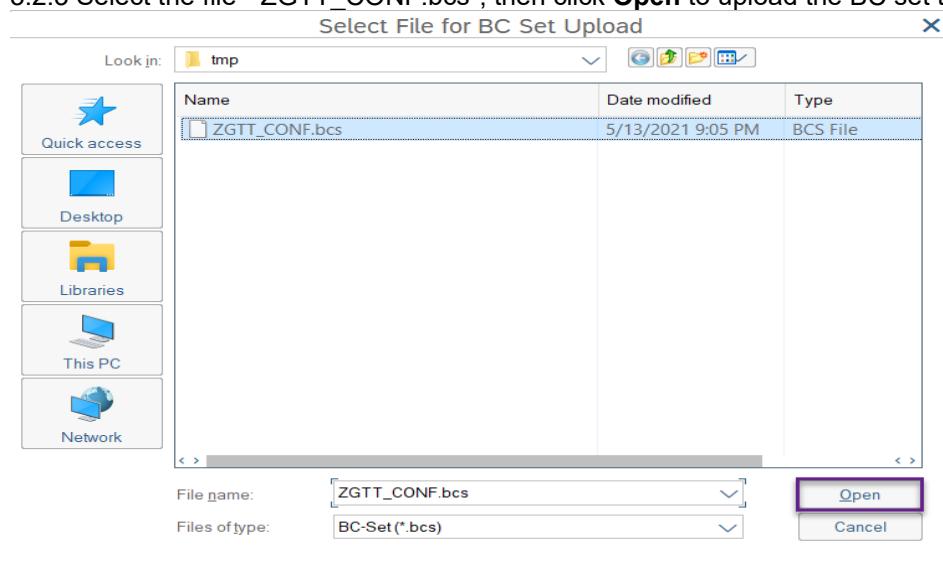
3.2 Import BC Set

3.2.1 From SAP Easy Access Menu, **Tools -> Customizing -> Business Configuration Sets -> Display and Maintain BC Sets** (Transaction Code SCPR3).

3.2.2 Select Upload BC Set.



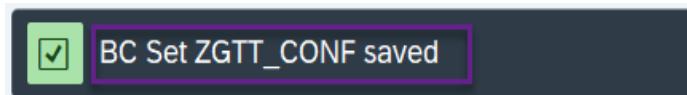
3.2.3 Select the file " ZGTT_CONF.bcs", then click **Open** to upload the BC set to your development system.



All of the configurations are loaded in the system.

The screenshot shows the SAP Business Configuration Sets: Change interface. The top bar displays the title "Business Configuration Sets: Change". The left sidebar has a "No Favorites List" and a search bar. The main area shows "BC Set ID: ZGTT_CONF" and "Short Text: GTT Standard APP Configuration". A tree view under "Tables and Views for Selected Customizing Object" shows "GTT Standard APP Configuration (ZGTT_CONF)" expanded, with sub-items: "Define Logical System", "Define Used Business Process Types, Appl. Object Ty", "Define SAP GTT Extraction Functions", and "Define CI Tenant for SAP GTT". On the right, the "Customizing Object" is set to "Logical Systems". Below this, a table lists "Table/View" and "Text" for "V_TBDLS" as "Logical Systems". At the bottom, there are tabs for "Data Records", "Field Select. Attrbs", and "Variable Field Txt". A message bar at the bottom indicates "Table/View Data: V_TBDLS" with a checked row for "GTTAPPLOGS Logical System for GTT Standard APP".

3.2.4 Click **Save** to save the BC Set.



3.3 Activate BC Set

3.3.1 From SAP Easy Access Menu, **Tools** -> **Customizing** -> **Business Configuration Sets** -> **Activation of BC Sets** (Transaction Code SCPR20).

3.3.2 Enter the name of the BC Set and select **Activate**.

The screenshot shows the SAP Business Configuration Sets: Activation interface. The top bar displays the title "Business Configuration Sets: Activation". The main area shows "BC Set: ZGTT_CONF" and "Short Text: GTT Standard APP Configuration". A toolbar with various icons is visible above the input fields.

3.3.3 Provide a Workbench request and a Customizing request.

Prompt for Workbench request

Request: 900368 Workbench request

Short Description: Import GTT Standard APP configuration

Own Requests

Prompt for Customizing request

Request: 900372 Customizing request

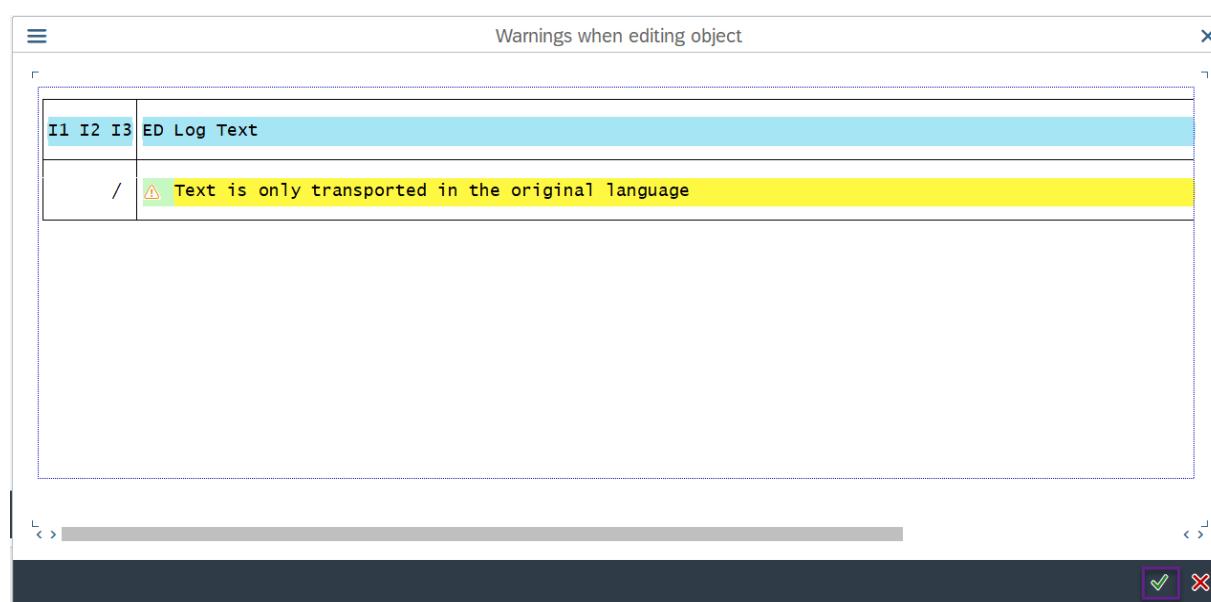
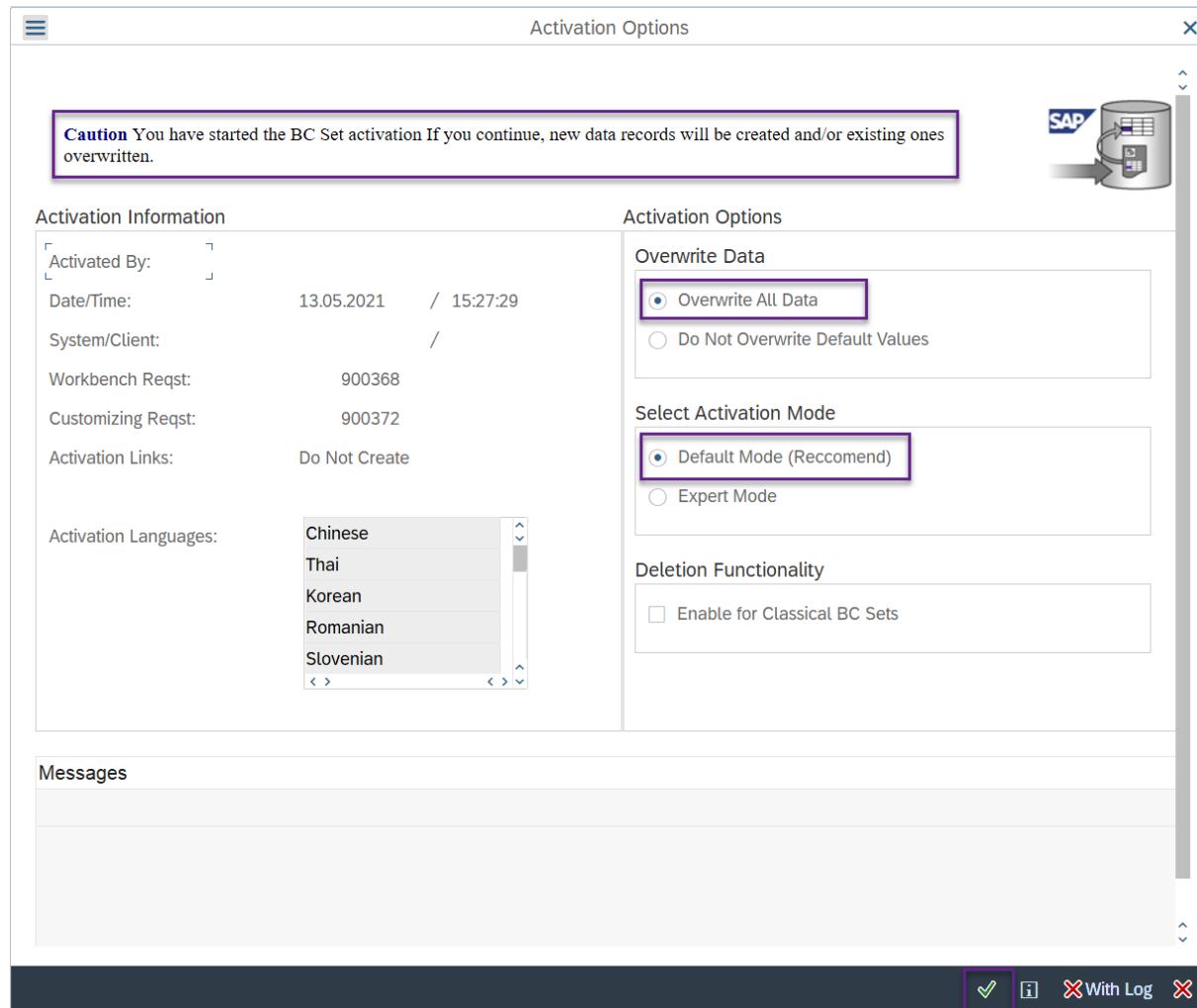
Short Description: Import GTT Standard APP configuration

Own Requests

3.3.4 Various activation options are available. Choose appropriate ones and click **Continue** to proceed with the activation.

The following message is displayed:

Caution You have started the BC Set activation If you continue, new data records will be created and/or existing ones overwritten."



3.3.5 BC Set is activated and BC set data is stored in the customization tables.



Activation ended with warning [View details](#)

3.3.6 Click **Activation Logs** to check the logs.

The screenshot shows two SAP Fiori screens. The top screen is titled "Business Configuration Sets: Activation" and displays a search bar with "BC Set: ZGTT_CONF" highlighted. Below it is a "Short Text" field containing "GTT Standard APP Configuration". The bottom screen is titled "Business Configuration Sets: Activation Logs" and shows a detailed log for the activation of "ZGTT_CONF" on 13.05.2021 at 15:27:29. The log table includes columns for Type, BC Sets, Object, Message Text, Key Field, and Infor... The log entries detail various activation steps and warnings, such as "User-defined languages are not installed in the system" and "Not all data was activated in all languages in object /SAPTRX/VC_ASFUNC_CTT".

3.4 Define RFC Connection for SAP Business Network Global Track and Trace

3.4.1 Log on to the business client, enter T-code **SPRO** and then click **SAP Reference IMG** to open **Display IMG** page.

3.4.2 Click **Integration with Other SAP Components -> Interface to Global Track and Trace -> Define System Configuration**. Choose activity: **Define RFC Connection for SAP GTT**

3.4.3 Choose **HTTP Connections to External Server**, click **Create** to create a new RFC connection.

SAP Configuration of RFC Connections

Generate RFC Callback Allowlist Activate Non-Empty Allowlists Allowlist for Dynamic

● OO RFC callback check not secure

RFC Connections	Type	PL Active	Comment
> ABAP Connections	3		
> HTTP Connections to External Server	G		
> HTTP Connections to ABAP System	H		
> Internal Connections	I		
> Logical Connections	L		

3.4.4 Fill in the **Destination** and choose the **Connection Type**: “G-HTTP connection to external server”.

Create Destination

* Destination: GTT_APP_RFC

* Connection Type: G HTTP connection to external server

3.4.5 Enter a description. In the **Technical Settings** tab, fill in the **Host**, **Port** and **Path Prefix**.

For example, the URL of solution owners is as follows:

<https://xxxxxx.gtt-flp-lbnplatform-pre-live.cfapps.eu10.hana.ondemand.com/>

Host: xxxx.gtt-flp-lbnplatform-pre-live.cfapps.eu10.hana.ondemand.com

Port: 443

Path Prefix: /api/idoc/em/v1/TrackedProcessAndEvent

The screenshot shows the SAP Fiori launchpad interface. At the top, there is a blue header bar with the SAP logo and a back arrow icon. Below the header, the title "RFC Destination GTT_APP_RFC" is displayed. On the left side, there is a search bar with a dropdown arrow and a "Connection Test" button. To the right of the search bar are "More" and "Description" buttons.

The main content area contains the following fields:

- RFC Destination:** GTT_APP_RFC
- Connection Type:** G (selected) - HTTP Connection to External Server
- Description:** A section with three input fields labeled "Description 1", "Description 2", and "Description 3".

At the bottom of the screen, there is a navigation bar with tabs: "Administration", "Technical Settings" (which is highlighted with a purple border), "Logon & Security", and "Special Options".

In the center of the screen, under the heading "Target System Settings", there are two input fields:

- Host:** [redacted]
- Port:** 443

Below these fields, there is another input field:

- Path Prefix:** /api/idoc/em/v1/TrackedProcessAndEvent

3.4.6 In the **Logon & Security** tab, enter the Logon information.

For the basic authentication, the GTT technical user / password is needed. You can get this from your GTT administrator.

For more information about the technical user, please refer to "[Create a Technical User and Assign Role Collection](#)".

Also, SSL must be **Active**. The recommended SSL Certificate is: DEFAULT SSL Client (Standard).

The screenshot shows the SAP Fiori interface for configuring an RFC destination. The top navigation bar includes the SAP logo and the title "RFC Destination GTT_APP_RFC". Below the title, there are buttons for "Connection Test" and "More". The main configuration area starts with "RFC Destination: GTT_APP_RFC" and "Connection Type: G HTTP Connection to External Server". A "Description" section follows, containing three fields: "Description 1: RFC for GTT Standard APP", "Description 2:", and "Description 3:". Below this is a navigation bar with tabs: "Administration", "Technical Settings", "Logon & Security" (which is highlighted with a purple border), and "Special Options". The "Logon & Security" tab is expanded, showing three sections: "Logon Procedure", "Logon with MQTT/AMQP", and "Security Options".

Logon Procedure

Logon with User

- Do not use a user
- Basic authentication

User:

PW Status:

Logon with Ticket

- Do not send logon ticket
- Send ticket without reference to target system
- Send assertion ticket for dedicated target system

System ID Client

Logon with MQTT/AMQP

User:

PW Status:

Security Options

Status of Secure Protocol

SSL: Inactive Active

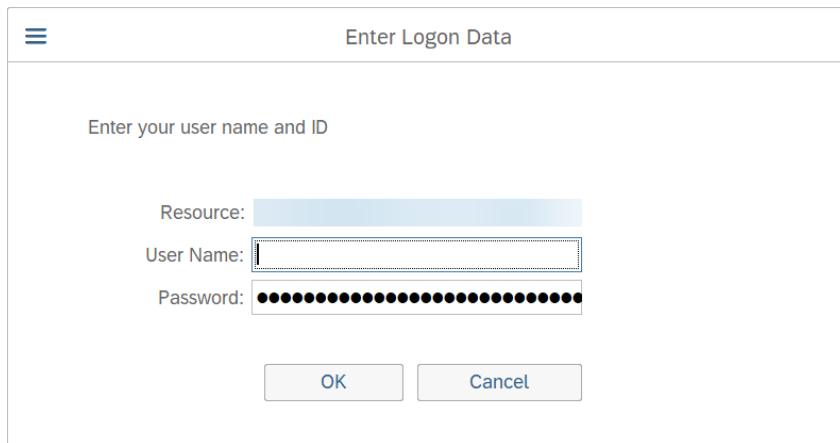
SSL Certificate:

Do not use certificate for logon

3.4.7 Save the configuration.

3.4.8 Click **Connection Test** and check the HTTP status code in the **Test Result** tab:

- Status code “403” indicates the configuration is correct. No action is required.
- If the status code is “401” or a prompt window (as shown in the screenshot below) appears asking your username and password, there are two possibilities:
 - The technical user is locked (informed by an email received in the technical user’s mailbox), you need to follow the steps in the email to unlock the technical user.
 - Your username, password, or URL of **Host** and **Path Prefix** is incorrect. You need to provide the correct ones.



3.5 Define Ports

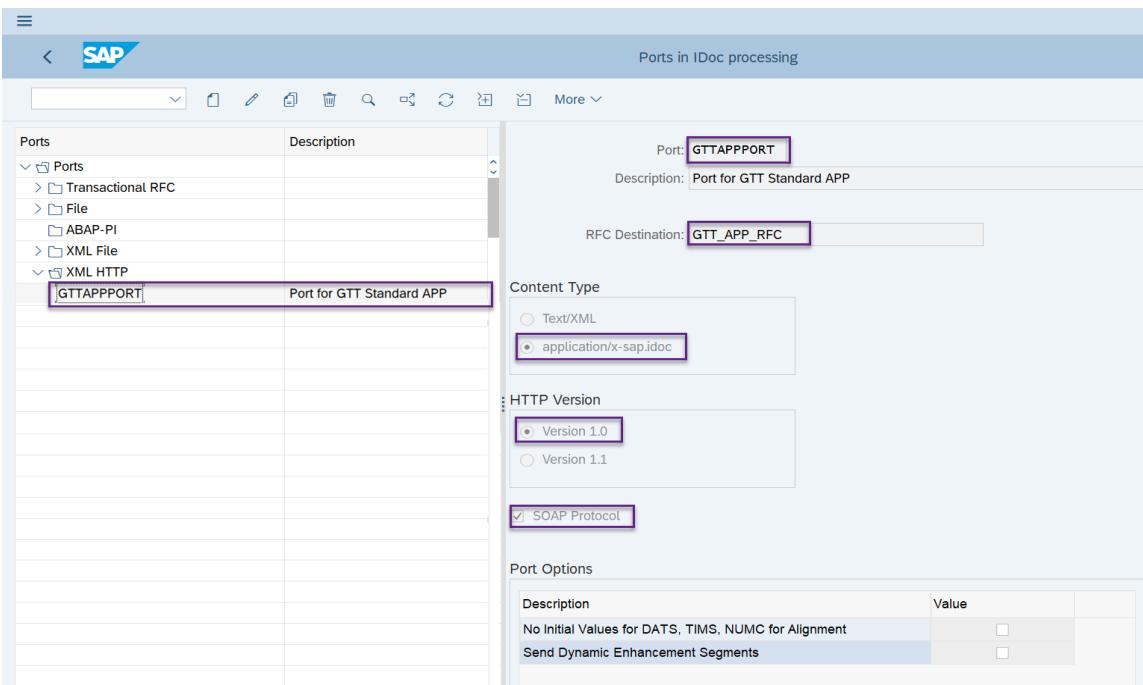
3.5.1 In **Display IMG** page, click **Integration with Other SAP Components -> Interface to Global Track and Trace -> IDoc Settings**. Choose activity **Define Ports**.

3.5.2 Choose **XML HTTP** folder, and click **Create** to create a new port **GTTAPPORT**.

3.5.3 Fill in the **RFC Destination**.

3.5.4 Choose **Content Type** as *application/x-sap.idoc*

3.5.5 Choose **HTTP Version** as Version 1.0. Mark it as **SOAP Protocol**.



3.5.6 Save the configuration.

3.6 Define Partner Profiles

3.6.1 In Display IMG page, unfold Integration with Other SAP Components -> Interface to Global Track and Trace -> IDoc Settings. Choose activity Define Partner Profiles.

3.6.2 Choose Partner Type LS folder, and click Create to create a new partner profile.

Partner profiles

Partner

Partner Profiles

- Partner Type AD
- Partner Type B
- Partner Type BP
- Partner Type GP
- Partner Type KU
- Partner Type LI
- Partner Type LS
- Partner Type US

Description

Partner No.:

Type:

Post Processing: Valid Processors Classification Telephony

Ty.: User

Processor:

Lang.: English

3.6.3 Fill in the Partner No. that you created and fill in the Processor information.

3.6.4 Click Add under Outbound box to create a new outbound parameter.

3.6.5 Fill in the Message Type GTTMSG and Fill in the Receiver Port that you created in [3.5](#).

The screenshot shows the SAP Fiori interface for configuring Partner profiles: Outbound parameters. The partner profile is set up for a Logical System (GTTAPPLOGS) with a Logical system type and no specific partner role. The message type is set to GTTMSG. The receiver port is set to GTTAPPORTR, which is highlighted with a purple border. The pack size is set to 0. Under Output Mode, Pass IDoc Immediately is selected. The IDoc type basic type is set to GTTMSG01, with LBN-TT: Process and Event Posting as the extension. A checkbox for Cancel Processing After Syntax Error is checked. The Seg. release in IDoc type and Application Release fields are empty.

Partner profiles: Outbound parameters

Partner No.: GTTAPPLOGS Logical System for GTT Standard APP

Type: LS Logical system

Partner Role:

Message Type: **GTTMSG**

Message Code:

Message Function: Test

Outbound Options Message Control Post Processing: Valid Processors Telephony EDI Standard

Receiver Port: **GTTAPPORTR** Port for GTT Standard APP

Pack. Size: 0

Queue Processing

Output Mode

Pass IDoc Immediately Output Mode: 2

Collect IDocs

IDoc Type

Basic Type: **GTTMSG01** LBN-TT: Process and Event Posting

Extension:

View:

Cancel Processing After Syntax Error

Seg. release in IDoc type:

Application Release:

3.6.6 Save the configuration.

3.7 Maintain AOT Type Restriction for Cross-Processes

The following entries should be maintained in transaction “ZGTT_AOTYPE_RST - AOT Types Restrictions” for Cross-Processes tracking scenario.

Restr.ID	Restr.Pos	Option	Sign	Application Obj.Type
FU_TO_IDLH	001	Equal To	Include	GTT_IDLV_HD
FU_TO_IDLI	001	Equal To	Include	GTT_IDLV_IT
SH_TO_IDLH	001	Equal To	Include	GTT_IDLV_HD
SH_TO_IDLI	001	Equal To	Include	GTT_IDLV_IT
DL_TO_POIT	001	Equal To	Include	GTT_PO_IT
DL_TO_SOIT	001	Equal To	Include	GTT_SO_IT
SH_TO_ODLH	001	Equal To	Include	GTT_ODLV_HD
FU_TO_ODLH	001	Equal To	Include	GTT_ODLV_HD
FU_TO_ODLI	001	Equal To	Include	GTT_ODLV_IT
DL_TO_POHD	001	Equal To	Include	GTT_PO_HD
DL_TO_SOHD	001	Equal To	Include	GTT_SO_HD

3.8 Maintain Event Type Restriction for Cross-Processes

The following entry should be maintained in transaction “ZGTT_EVTYPE_RST – Event Types Restrictions” for Cross-Processes tracking scenario.

Restr.ID	Restr.Pos	Option	Sign	Event Type
DL_TO_POIT	001	Equal To	Include	GTT_EVT_PO_IT_CF

3.9 Maintain Sales Order Types that will be sent to SAP Business Network Global Track and Trace

Maintain the sales order type that you want to send to SAP Business Network Global Track and Trace via transaction “ZGTT_SOTYPE_RST - GTT Sales Doc Type Configuration”, then mark it as active.

For example:

Sales Document Type	Active
ZGTT	X

3.10 Maintain Delivery Types that will be sent to SAP Business Network Global Track and Trace

Maintain the outbound and inbound delivery type that you want to send to SAP Business Network Global Track and Trace via transaction “ZGTT_DLVTYPE_RST - GTT Delivery Type Configuration”, then mark it as active.

For example:

Delivery Type	Active
LBNP	X
EL	X

3.11 Maintain Purchase Order Types that will be sent to SAP Business Network Global Track and Trace

Maintain the purchase order type that you want to send to SAP Business Network Global Track and Trace via transaction “ZGTT_POTYPE_RST - GTT Purchase Doc Type Configuration”, then mark it as active.

For example:

Purchasing Document Type	Active
NB	X

4. ERP INTEGRATION CONFIGURATION OPTION 2 (MANUAL CONFIGURATION)

4.1 Define RFC Connection for SAP Business Network Global Track and Trace

4.1.1 Log on to the business client, enter T-code **SPRO** and then click **SAP Reference IMG** to open **Display IMG** page.

4.1.2 Click **Integration with Other SAP Components -> Interface to Global Track and Trace -> Define System Configuration**. Choose activity: **Define RFC Connection for SAP GTT**

4.1.3 Choose **HTTP Connections to External Server**. Click **Create** to create a new RFC connection.

Configuration of RFC Connections

●OO RFC callback check not secure

	RFC Connections	Type	PL Active	Comment
<input type="checkbox"/>	> ABAP Connections	3		
<input type="checkbox"/>	> HTTP Connections to External Server	G		
<input type="checkbox"/>	> HTTP Connections to ABAP System	H		
<input type="checkbox"/>	> Internal Connections	I		
<input type="checkbox"/>	> Logical Connections	L		

4.1.4 Fill in the **Destination** and choose the **Connection Type**: 'G-HTTP connection to external server'.

Create Destination

* Destination: GTT_APP_RFC

* Connection Type: G HTTP connection to external server

✓ ✗

4.1.5 Enter a description. In the **Technical Settings** tab, fill in the **Host**, **Port** and **Path Prefix**.

For example, the URL of solution owners is as follows:

<https://xxxxxx.gtt-flp-lbnplatform.cfapps.eu10.hana.ondemand.com>

Host: xxxx.gtt-flp-lbnplatform.cfapps.eu10.hana.ondemand.com

Port: 443

Path Prefix: /api/idoc/em/v1/TrackedProcessAndEvent

The screenshot shows the SAP Fiori launchpad interface. At the top, there is a blue header bar with the SAP logo and the text "RFC Destination GTT_APP_RFC". Below the header, there is a search bar and some navigation links. The main content area displays the configuration of an RFC destination.

RFC Destination: GTT_APP_RFC

Connection Type: G HTTP Connection to External Server

Description:

- Description 1: RFC for GTT Standard APP
- Description 2:
- Description 3:

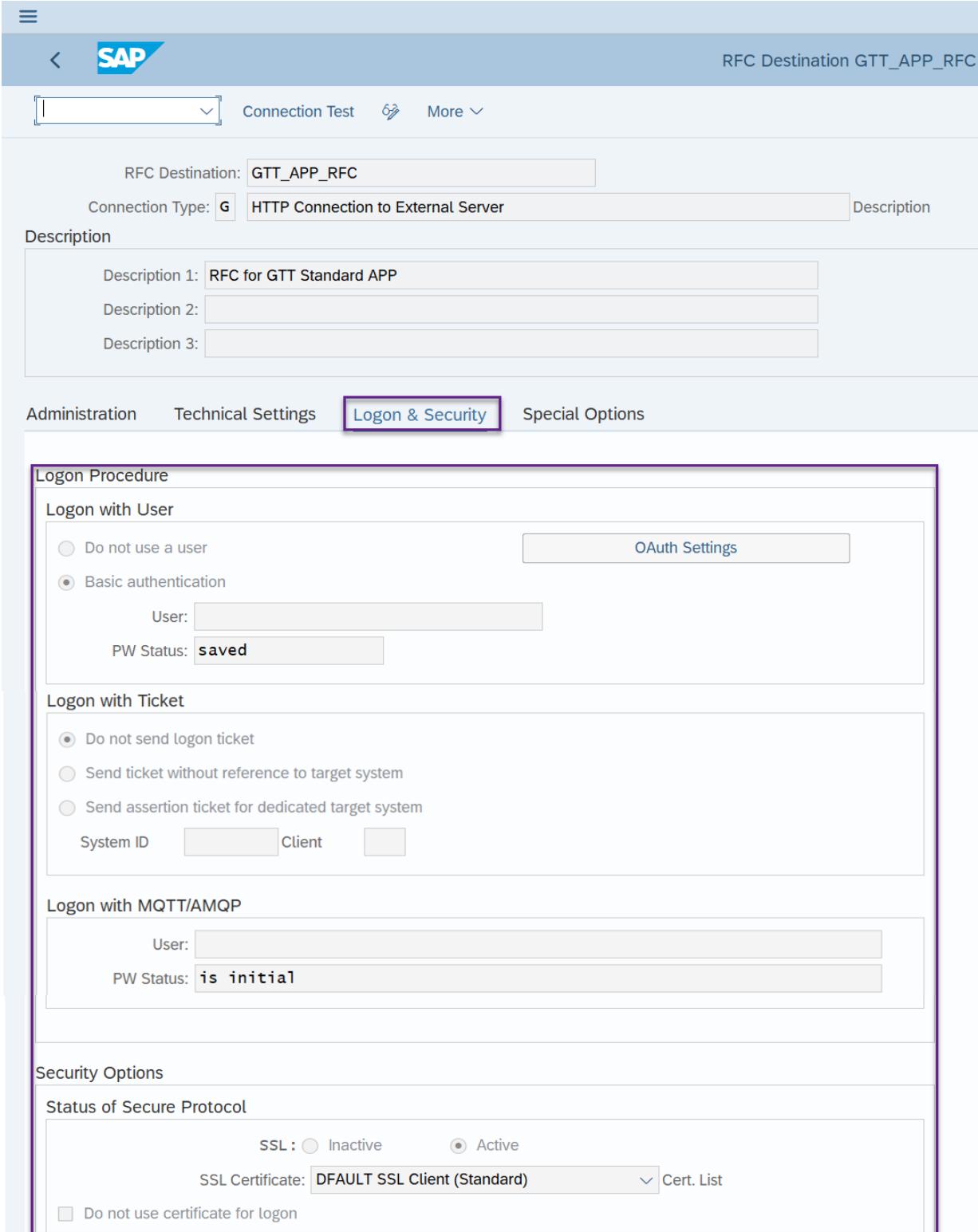
At the bottom, there are tabs for Administration, Technical Settings (which is highlighted with a purple border), Logon & Security, and Special Options. In the "Target System Settings" section, the Host is set to xxxx.gtt-flp-lbnplatform.cfapps.eu10.hana.ondemand.com and the Port is set to 443. The Path Prefix is set to /api/idoc/em/v1/TrackedProcessAndEvent.

4.1.6 In the **Logon & Security** tab, enter the Logon information.

For the basic authentication, the GTT technical user / password is needed. You can get this from your GTT administrator.

For more information about the technical user, please refer to "[Create a Technical User and Assign Role Collection](#)".

Also, SSL must be **Active**. The recommended SSL Certificate is: DEFAULT SSL Client (Standard).



The screenshot shows the SAP Fiori interface for configuring an RFC destination. The top navigation bar includes the SAP logo and the title "RFC Destination GTT_APP_RFC". Below the title, there are tabs for "Connection Test" and "More". The main configuration area has the following fields:

- RFC Destination:** GTT_APP_RFC
- Connection Type:** G HTTP Connection to External Server
- Description:** (This section contains three empty text input fields labeled "Description 1", "Description 2", and "Description 3".)

Below the configuration area, there is a navigation bar with tabs: Administration, Technical Settings, **Logon & Security**, and Special Options. The "Logon & Security" tab is highlighted with a purple border.

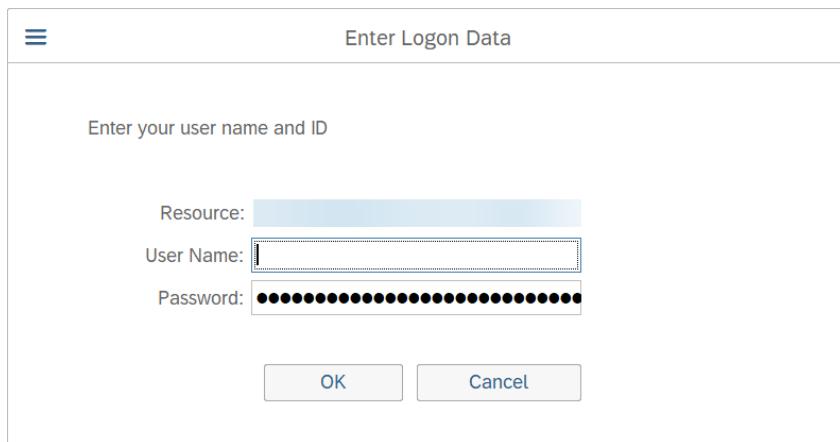
The "Logon & Security" tab contains several sections:

- Logon Procedure**:
 - Logon with User**:
 - Do not use a user
 - Basic authentication
 - User: [empty input field]
 - PW Status: saved
 - Logon with Ticket**:
 - Do not send logon ticket
 - Send ticket without reference to target system
 - Send assertion ticket for dedicated target system
 - Logon with MQTT/AMQP**:
 - User: [empty input field]
 - PW Status: is initial
- Security Options**:
 - Status of Secure Protocol**:
 - SSL: Active
 - Inactive
 - SSL Certificate: DEFAULT SSL Client (Standard)
 - Do not use certificate for logon

4.1.7 Save the configuration.

4.1.8 Click **Connection Test** and check the HTTP status code in the **Test Result** tab:

- Status code “403” indicates the configuration is correct. No action is required.
- If the status code is “401” or a prompt window (as shown in the screenshot below) appears asking your username and password, there are two possibilities:
 - The technical user is locked (informed by an email received in the technical user’s mailbox), you need to follow the steps in the email to unlock the technical user.
 - Your username, password, or URL of **Host** and **Path Prefix** is incorrect. You need to provide the correct ones.



4.2 Define Logical System

4.2.1 In Display IMG page, click **Integration with Other SAP Components -> Interface to Global Track and Trace -> Define System Configuration**. Choose activity **Define Logical System**.

4.2.2 Create **New Entries** to create a new Logical System, fill in the Logical System code and Name of the new logical system.

Logical Systems	
Log.System	Name
GTTAPPLOGS	Logical System for GTT Standard APP

4.2.3 Save the configuration.

4.3 Define Ports

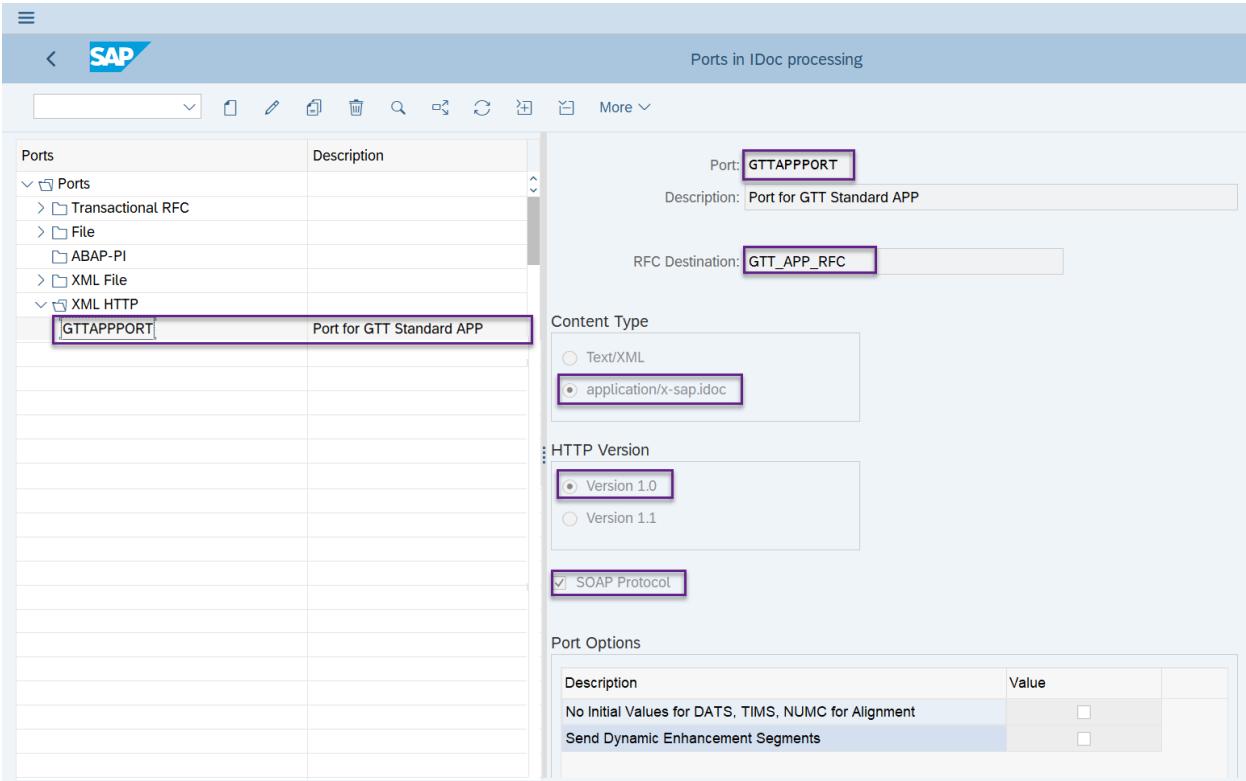
4.3.1 In Display IMG page, click **Integration with Other SAP Components -> Interface to Global Track and Trace -> IDoc Settings**. Choose activity **Define Ports**.

4.3.2 Choose **XML HTTP** folder, and click **Create** to create a new port **GTTAPPPORT**.

4.3.3 Fill in the **RFC Destination**.

4.3.4 Choose **Content Type** as *application/x-sap.idoc*

4.3.5 Choose **HTTP Version** as Version 1.0. Mark it as **SOAP Protocol**.



4.3.6 Save the configuration.

4.4 Define Partner Profiles

4.4.1 In Display IMG page, unfold **Integration with Other SAP Components** -> **Interface to Global Track and Trace** -> **IDoc Settings**. Choose activity **Define Partner Profiles**.

4.4.2 Choose **Partner Type LS** folder, and click **Create** to create a new partner profile.

Partner profiles

Partner	Description
Partner Profiles	
Partner Type AD	
Partner Type B	Bank
Partner Type BP	Benefits provider
Partner Type GP	Business Partner
Partner Type KU	Customer
Partner Type LI	Vendor
Partner Type LS	Logical system
Partner Type US	User

Post Processing: Valid Processors Classification

Partner No.:
Type:

Ty.: US
Processor:
Lang.: EN

4.4.3 Fill in the **Partner No.** that you created and fill in the **Processor** information.

Post Processing: Valid Processors Classification Telephony

Partner No.: GTTAPPLOGS Logical System for GTT Standard APP
Type: LS Logical system

Ty.: US
Processor:
Lang.: EN

Outbound

Partner Role	Message Type	Message Variant	Function	Test	Receiver Port	I...	Pac...	Basic Type
<input type="radio"/>				<input type="checkbox"/>				
<input type="radio"/>				<input type="checkbox"/>				
<input type="radio"/>				<input type="checkbox"/>				

4.4.4 Click **Add** under the **Outbound** box to create a new outbound parameter.

Partner No.: **GTTAPPLOGS** Logical System for GTT Standard APP
Type: **LS** Logical system

Post Processing: Valid Processors Classification Telephony

Ty.: **US** User
Processor:
Lang.: **EN** English

Outbound

Partner Role	Message Type	Message Variant	Function	Test	Receiver Port	I...	Pac...	Basic Type
				<input type="checkbox"/>				
				<input type="checkbox"/>				
				<input type="checkbox"/>				

+ Add

4.4.5 Fill in the Message Type GTTMSG and Fill in the Receiver Port that you created in [4.3](#).

Partner profiles: Outbound parameters

Partner No.: **GTTAPPLOGS** Logical System for GTT Standard APP
Type: **LS** Logical system
Partner Role:

Message Type: **GTTMSG**
Message Code:
Message Function: Test

Outbound Options Message Control Post Processing: Valid Processors Telephony EDI Standard

Receiver Port: **GTTAPPPORT** Port for GTT Standard APP
Pack. Size: **0**
 Queue Processing

Output Mode
 Pass IDoc Immediately Output Mode: **2**
 Collect IDocs

IDoc Type
Basic Type: **GTTMSG01** LBN-TT: Process and Event Posting
Extension:
View:
 Cancel Processing After Syntax Error
Seg. release in IDoc type: Application Release:

4.4.6 Save the configuration.

4.5 Define CI tenant for SAP Business Network Global Track and Trace

4.5.1 In Display IMG page, click **Integration with Other SAP Components -> Interface to Global Track and Trace -> Define Application Interface**.

Choose activity **Define CI Tenant for SAP GTT**.

4.5.2 Click **New Entries** to create a new CI tenant for SAP Business Network Global Track and Trace, fill in the information for the new CI tenant. The **CI Log. System** is the logical system you created in [4.2](#).

The first screenshot shows the 'Change View "SAP Global Track & Trace Definitions": Overview' screen. A purple box highlights the 'New Entries' button in the top navigation bar. The second screenshot shows the 'Display View "SAP Global Track & Trace Definitions": Overview' screen, where a new entry 'GTTAPPLOGS' has been created. This entry is highlighted with a purple box and includes the logical system 'GTTAPPLOGS', track and trace version 'GTT2.0 Logistics Business Network - Track and Trace', and a description 'CI Tenant for GTT Standard APP'.

4.6 Define GTT Extraction Functions

Prerequisite:

You have already installed ABAPGit and downloaded the code of Fulfillment Tracking apps in your development system.

4.6.1 In Display IMG page, click **Integration with Other SAP Components -> Interface to Global Track and Trace -> Define Application Interface**. Choose activity **Define SAP GTT Extraction Functions**.

4.6.2 Choose the type of extraction function you want to create from the **Dialog Structure**, and click **New entries**.

The screenshot shows the 'Change View "GTT Relevance Functions (App. Obj. Types)": Overview' screen. A purple box highlights the 'New entries' button in the top navigation bar. On the left, the 'Dialog Structure' sidebar lists several categories under 'GTT Relevance Functions (App. Obj. Types)'. The 'Function' table on the right is currently empty, showing columns for 'Function', 'Function Module', and 'Description'.

4.6.3 Input the **Function name** and **Function Module** for the newly created extraction function.

GTT Relevance Functions (App. Obj. Types)		
Function	Function Module	Description
GTT_MIA_IDLV_HD_REL	ZGTT_MIA_OTE_DL_HDR_REL	Appl. Object Type Relevance for Inbound Delivery Header

4.6.4 Click **Save**.

Hint:

After completing the configuration of 'Define GTT Extraction Functions', the configuration should be as follows:

Category	Extractor	Function Module Name	Description
Control Parameter Extractors	GTT_MIA_IDLV_HD_OTE	ZGTT_MIA_OTE_DL_HDR	Control Parameter Extractor for Inbound Delivery Header
	GTT_MIA_IDLV_IT_OTE	ZGTT_MIA_OTE_DL_ITEM	Control Parameter Extractor for Inbound Delivery Item
	GTT_MIA_SHP_HD_OTE	ZGTT_MIA_OTE_SH_HDR	Control Parameter Extractor for Shipment Header
	GTT_TS_FO_HD_OTE	ZGTT_STS_OTE_FO_HDR	Control Parameter Extractor for Freight Order and Freight Booking
	GTT_TS_FU_HD_OTE	ZGTT_STS_OTE_FO_HDR	Control Parameter Extractor for Freight Unit
	GTT_POF_PO_HD_OTE	ZGTT_SPOF_OTE_PO_HDR	Control Parameter Extractor for Purchase Order Header
	GTT_POF_PO_IT_OTE	ZGTT_SPOF_OTE_PO_ITM	Control Parameter Extractor for Purchase Order Item
	GTT_SOF_SO_HD_OTE	ZGTT_SSOF_OTE_SO_HD	Control Parameter Extractor for Sales Order Header
	GTT_SOF_SO_IT_OTE	ZGTT_SSOF_OTE_SO_ITEM	Control Parameter Extractor for Sales Order Item
	GTT_SOF_ODLV_HD_OTE	ZGTT_SSOF_OTE_DE HD	Control Parameter Extractor for Outbound Delivery Header
Event Data Extractors	GTT_SOF_ODLV_IT_OTE	ZGTT_SSOF_OTE_DE_ITEM	Control Parameter Extractor for Outbound Delivery Item
	GTT_MIA_IDLV_HD_GR	ZGTT_MIA_EE_DL_HDR_GR	Actual event Inbound Delivery Header Goods Receipt

	GTT_MIA_IDLV_IT_PA	ZGTT_MIA_EE_DL_ITEM_PA	Actual event Inbound Delivery Item Put Away
	GTT_MIA_IDLV_IT_PKNG	ZGTT_MIA_EE_DL_ITEM_PKNG	Actual event Inbound Delivery Item Packing
	GTT_MIA_SHP_HD_ARR	ZGTT_MIA_EE_SH_HDR_ARR	Actual event Shipment Header Arrival
	GTT_MIA_SHP_HD_CI	ZGTT_MIA_EE_SH_HDR_CI	Actual event Shipment Header Check In
	GTT_MIA_SHP_HD_DEP	ZGTT_MIA_EE_SH_HDR_DEP	Actual event Shipment Header Departure
	GTT_MIA_SHP_HD_LE	ZGTT_MIA_EE_SH_HDR_LE	Actual event Shipment Header Load End
	GTT_MIA_SHP_HD_LS	ZGTT_MIA_EE_SH_HDR_LS	Actual event Shipment Header Load Start
	GTT_TS_TOR_ARRIVAL	ZGTT_STS_EE_FO_ARRIVAL	Actual Event FO/FB/FU Proof of Arrival
	GTT_TS_TOR_COUPLING	ZGTT_STS_EE_FO_COUPLING	Actual Event FO/FB/FU Coupling
	GTT_TS_TOR_DECOUPL	ZGTT_STS_EE_FO_DECOUPLING	Actual Event FO/FB/FU Decoupling
	GTT_TS_TOR_DELAY	ZGTT_STS_EE_FO_DELAY	Actual Event FO/FB/FU Delay
	GTT_TS_TOR_DEPART	ZGTT_STS_EE_FO_DEPARTURE	Actual Event FO/FB/FU Proof of Departure
	GTT_TS_TOR_FU_DELAY	ZGTT_STS_EE_FU_DELAY	Actual Event FO/FB/FU Delay
	GTT_TS_TOR_LOAD_END	ZGTT_STS_EE_FO_LOAD_END	Actual Event FO/FB/FU Loading End
	GTT_TS_TOR_LOAD_STR	ZGTT_STS_EE_FO_LOAD_START	Actual Event FO/FB/FU Loading Start
	GTT_TS_TOR_POD	ZGTT_STS_EE_FO_POD	Actual Event FO/FB/FU Proof of Delivery
	GTT_TS_TOR_POPU	ZGTT_STS_EE_FO_POPU	Actual Event FO/FB/FU Proof of Pick-Up
	GTT_TS_TOR_UNLD_END	ZGTT_STS_EE_FO_UNLOAD_END	Actual Event FO/FB/FU Unloading End
	GTT_TS_TOR_UNLD_STR	ZGTT_STS_EE_FO_UNLOAD_START	Actual Event FO/FB/FU Unloading Start
	GTT_POF_PO_IT_CF	ZGTT_SPOF_EE_PO_ITM_CONF	Actual Event PO Item Confirmation
	GTT_POF_PO_IT_DE	ZGTT_SPOF_EE_PO_ITM_DEL	Actual Event PO Item Deletion
	GTT_POF_PO_IT_GR	ZGTT_SPOF_EE_PO_ITM_GR	Actual Event PO Item Goods Receipt
	GTT_SOF_ODLV_GI	ZGTT_SSOF_EE_DE_GI	Actual Event of Outbound Delivery Goods Issue
	GTT_SOF_ODLV_IT_PA	ZGTT_SSOF_EE_DE_PACKING	Actual Event Outbound Delivery Packing
	GTT_SOF_ODLV_IT_PI	ZGTT_SSOF_EE_DE_PICKING	Actual Event Outbound Delivery Picking
	GTT_SOF_ODLV_IT_POD	ZGTT_SSOF_EE_DE_POD	Actual Event Outbound Delivery POD
Planned Event Extractors	GTT_MIA_IDLV_HD_EE	ZGTT_MIA_EE_DL_HDR	Selection of EEs for Inbound Delivery Header
	GTT_MIA_IDLV_IT_EE	ZGTT_MIA_EE_DL_ITEM	Selection of EEs for Inbound Delivery Item

	GTT_MIA_SHP_HD_EE	ZGTT_MIA_EE_SH_HDR	Selection of EEs for Shipment Header
	GTT_TS_FO_HD_EE	ZGTT_STS_EE_FO_HDR	Selection of EEs for FO/FB Header
	GTT_TS_FU_HD_EE	ZGTT_STS_EE_FO_HDR	Selection of EEs for FU Header
	GTT_POF_PO_HD_EE	ZGTT_SPOF_EE_PO_HDR	Selection of EEs for Purchase Order Header
	GTT_POF_PO_IT_EE	ZGTT_SPOF_EE_PO_ITM	Selection of EEs for Purchase Order Item
	GTT_SOF_SO_HD_EE	ZGTT_SSOF_EE_SO_HD	Selection of EEs for Sales Order Header
	GTT_SOF_SO_IT_EE	ZGTT_SSOF_EE_SO_ITM	Selection of EEs for Sales Order Item
	GTT_SOF_ODLV_HD_EE	ZGTT_SSOF_EE_DE_HD	Selection of EEs for Outbound Delivery Header
	GTT_SOF_ODLV_IT_EE	ZGTT_SSOF_EE_DE_ITM	Selection of EEs for Outbound Delivery Item
Tracking ID Extractors	GTT_MIA_IDLV_HD_TID	ZGTT_MIA_OTE_DL_HDR_TID	Tracking ID Extractor for Inbound Delivery Header
	GTT_MIA_IDLV_IT_TID	ZGTT_MIA_OTE_DL_ITEM_TID	Tracking ID Extractor for Inbound Delivery Item
	GTT_MIA_SHP_HD_TID	ZGTT_MIA_OTE_SH_HDR_TID	Tracking ID Extractor for Shipment Header
	GTT_TS_FO_HD_TID	ZGTT_STS_OTE_FO_HEADER_TID	Tracking ID Extractor for Freight Order and Freight Booking
	GTT_TS_FU_HD_TID	ZGTT_STS_OTE_FO_HEADER_TID	Tracking ID Extractor for Freight Unit
	GTT_POF_PO_HD_TID	ZGTT_SPOF_OTE_PO_HDR_TID	Tracking ID Extractor for Purchase Order Header
	GTT_POF_PO_IT_TID	ZGTT_SPOF_OTE_PO_ITM_TID	Tracking ID Extractor for Purchase Order Item
	GTT_SOF_SO_HD_TID	ZGTT_SSOF_TRACKID_OTE_SOHDR	Tracking ID Extractor for Sales Order Header
	GTT_SOF_SO_IT_TID	ZGTT_SSOF_TRACKID_OTE_SOITEM	Tracking ID Extractor for Sales Order Item
	GTT_SOF_ODLV_HD_TID	ZGTT_SSOF_TRACKID_OTE_DEHDR	Tracking ID Extractor for Outbound Delivery Header
GTT relevance function of AOT	GTT_SOF_ODLV_IT_TID	ZGTT_SSOF_TRACKID_OTE_DEITEM	Tracking ID Extractor for Outbound Delivery Item
	GTT_MIA_IDLV_HD_REL	ZGTT_MIA_OTE_DL_HDR_REL	Appl. Object Type Relevance for Inbound Delivery Header
	GTT_MIA_IDLV_IT_REL	ZGTT_MIA_OTE_DL_ITEM_REL	Appl. Object Type Relevance for Inbound Delivery Item
	GTT_MIA_SHP_HD_REL	ZGTT_MIA_OTE_SH_HDR_REL	Appl. Object Type Relevance for Shipment Header

GTT relevance function of Event Type	GTT_TS_FO_HD_REL	ZGTT_STS_OTE_FO_HDR_REL	Appl. Object Type Relevance for FO/FB Header
	GTT_TS_FU_HD_REL	ZGTT_STS_OTE_FO_HDR_REL	Appl. Object Type Relevance for FU Header
	GTT_POF_PO_HD_REL	ZGTT_SPOF_OTE_PO_HDR_REL	Appl. Object Type Relevance for Purchasing Order Header
	GTT_POF_PO_IT_REL	ZGTT_SPOF_OTE_PO_ITM_REL	Appl. Object Type Relevance for Purchasing Order Item
	GTT_SOF_SO_HD_REL	ZGTT_SSOF_OTE_SO_HDR_REL	Appl. Object Type Relevance for Sales Order Header
	GTT_SOF_SO_IT_REL	ZGTT_SSOF_OTE_SO_ITM_REL	Appl. Object Type Relevance for Sales Order Items
	GTT_SOF_ODLV_HD_REL	ZGTT_SSOF_OTE_DE_HDR_REL	Appl. Object Type Relevance for Outbound Delivery Header
	GTT_SOF_ODLV_IT_REL	ZGTT_SSOF_OTE_DE_ITM_REL	Appl. Object Type Relevance for Outbound Delivery Items
	GTT_MIA_IDLV_HD_GR	ZGTT_MIA_EE_DL_HDR_GR_REL	Relevance function for Actual event Delivery Header Goods Receipt
	GTT_MIA_IDLV_IT_PA	ZGTT_MIA_EE_DL_ITEM_PA_REL	Relevance function for Actual event Delivery Item Put Away
	GTT_MIA_IDLV_IT_PKNG	ZGTT_MIA_EE_DL_ITEM_PKNG_REL	Relevance function for Actual event Delivery Item Packing
	GTT_MIA_SHP_HD_ARR	ZGTT_MIA_EE_SH_HDR_ARR_REL	Relevance function for Actual event Shipment Header Arrival
	GTT_MIA_SHP_HD_CI	ZGTT_MIA_EE_SH_HDR_CI_REL	Relevance function for Actual event Shipment Header Check In
	GTT_MIA_SHP_HD_DEP	ZGTT_MIA_EE_SH_HDR_DEP_REL	Relevance function for Actual event Shipment Header Departure
	GTT_MIA_SHP_HD_LE	ZGTT_MIA_EE_SH_HDR_LE_REL	Relevance function for Actual event Shipment Header Load End
	GTT_MIA_SHP_HD_LS	ZGTT_MIA_EE_SH_HDR_LS_REL	Relevance function for Actual event Shipment Header Load Start
	GTT_TS_TOR_ARRIVE	ZGTT_STS_EE_FO_ARRIVAL_REL	Relevance function for Actual event FO/FB/FU Arrival
	GTT_TS_TOR_COUP	ZGTT_STS_EE_FO_COUPLING_REL	Relevance function for Actual event FO/FB/FU Coupling
	GTT_TS_TOR_DECP	ZGTT_STS_EE_FO_DECOUPLING_REL	Relevance function for Actual event FO/FB/FU Decoupling

	GTT_TS_TOR_DELAY	ZGTT_STS_EE_FO_DELAY_REL	Relevance function for Actual event FO/FB/FU Delay
	GTT_TS_TOR_DEPART	ZGTT_STS_EE_FO_DEPARTURE_REL	Relevance function for Actual event FO/FB/FU Departure
	GTT_TS_TOR_FU_DELAY	ZGTT_STS_EE_FU_DELAY_REL	Relevance function for Actual event FO/FB/FU Freight Unit Delay
	GTT_TS_TOR_LEND	ZGTT_STS_EE_FO_LOAD_END_REL	Relevance function for Actual event FO/FB/FU Loading End
	GTT_TS_TOR_LSTR	ZGTT_STS_EE_FO_LOAD_START_REL	Relevance function for Actual event FO/FB/FU Loading Start
	GTT_TS_TOR_POD	ZGTT_STS_EE_FO_POD_REL	Relevance function for Actual event FO/FB/FU Proof of Delivery
	GTT_TS_TOR_POPU	ZGTT_STS_EE_FO_POPU_REL	Relevance function for Actual event FO/FB/FU Proof of Pick Up
	GTT_TS_TOR_UEND	ZGTT_STS_EE_FO_UNLOAD_END_REL	Relevance function for Actual event FO/FB/FU Unloading End
	GTT_TS_TOR_USTR	ZGTT_STS_EE_FO_UNLOAD_STRT_REL	Relevance function for Actual event FO/FB/FU Unloading Start
	GTT_POF_PO_IT_CF_REL	ZGTT_SPOF_EE_PO_ITM_CONF_REL	Relevance function for Actual event PO Item Confirmation
	GTT_POF_PO_IT_DE_REL	ZGTT_SPOF_EE_PO_ITM_DEL_REL	Relevance function for Actual event PO Item Deletion
	GTT_POF_PO_IT_GR_REL	ZGTT_SPOF_EE_PO_ITM_GR_REL	Relevance function for Actual event PO Item Goods Receipt
	GTT_SOF_ODLV_GI_REL	ZGTT_SSOF_EE_DE_GI_REL	Relevance function for Actual event Outbound Delivery Goods Issue
	GTT_SOF_ODLV_PA_REL	ZGTT_SSOF_EE_DE_PACKING_REL	Relevance function for Actual event Outbound Delivery Packing
	GTT_SOF_ODLV_PI_REL	ZGTT_SSOF_EE_DE_PICKING_REL	Relevance function for Actual event Outbound Delivery Picking
	GTT_SOF_ODLV POD_REL	ZGTT_SSOF_EE_DE_POD_REL	Relevance function for Actual event Outbound Delivery POD
AOID Extractor	GTT_MIA_IDLV_HD_AOID	ZGTT_MIA_AOID_DL_HDR	AOID Extractor for Inbound Delivery Header
	GTT_MIA_IDLV_IT_AOID	ZGTT_MIA_AOID_DL_ITEM	AOID Extractor for Inbound Delivery Item
	GTT_MIA_SHP_HD_AOID	ZGTT_MIA_AOID_SH_HDR	AOID Extractor for Shipment Header
	GTT_STS_AOID_TOR	ZGTT_STS_AOID_TOR	AOID Extractor for FU/FO/FB
	GTT_POF_PO_IT_AOID	ZGTT_SPOF_AOID_PO_ITM	AOID Extractor for Purchase Order Item

GTT_POF_PO_HD_AOID	ZGTT_SPOF_AOID_PO_HDR	AOID Extractor for Purchase Order Header
GTT_SOF_AOID	ZGTT_SSOF_AOID	AOID Extractor for Sales Order / Outbound Delivery

4.7 Define Used Business Process Types, Appl. Object Types and Event Types

4.7.1 In Display IMG page, click **Integration with Other SAP Components -> Interface to Global Track and Trace -> Define Application Interface.**

Choose activity **Define Used Business Process Types, Appl. Object Types and Event Types.**

4.7.2 You can create event types and application object types for each business process type.

The following sections from 4.8 to 4.11 only demonstrate how to configure relevant objects. For actual configuration, refer to the scenarios configuration listed below.

Scenarios configuration:

1) Purchase Order -> Inbound Delivery -> Shipment.

For this scenario, see the following configurations:

[4.12](#) Purchase Order Extractor Configuration

[4.13](#) Inbound Delivery Extractor Configuration

[4.16](#) Shipment Extractor Configuration

2) Purchase Order -> Inbound Delivery -> Freight Unit -> Road Freight Order / Ocean booking / Air Booking.

For this scenario, see the following configurations:

[4.12](#) Purchase Order Extractor Configuration

[4.13](#) Inbound Delivery Extractor Configuration

[4.17](#) Freight Unit Extractor Configuration

[4.18](#) Road Freight Order/Ocean Booking/Air booking Extractor Configuration

3) Sales Order -> Outbound Delivery -> Shipment.

For this scenario, see the following configurations:

[4.14](#) Sales Order Extractor Configuration

[4.15](#) Outbound Delivery Extractor Configuration

[4.16](#) Shipment Extractor Configuration

4) Sales Order -> Outbound Delivery -> Freight Unit -> Road Freight Order / Ocean Booking / Air Booking.

For this scenario, see the following configurations:

[4.14](#) Sales Order Extractor Configuration

[4.15](#) Outbound Delivery Extractor Configuration

[4.17](#) Freight Unit Extractor Configuration

[4.18](#) Road Freight Order/Ocean Booking/Air Booking Extractor Configuration

4.8 Define Application Object Types for Header Level Extractor

4.8.1 As an example of AOT type's header level tracking introduction, choose the business process type ESC_DELIV from the **Define Used Business Process Types** on the right side.

Double click **Define Application Object Types**.

Bus. Proc. Type	Update Mode	BPT Process Mode	Description
ESC_DELIV	Update Task (V1)	Active	Delivery in SAP R/3 Enterprise
ESC_FI_CLEARING	Update Task (V1)	Active	FI Clearing in SAP R/3 Enterprise

4.8.2 Click **New Entries** to create a new Application Object Type.

4.8.3 Fill in the **Application Object Type** and **Text** fields.

4.8.4 Fill in the information required in the **General Data** tab. **CI for GTT** is the CI Tenant you created in [4.5](#). Check **GTT Relevant**.

Bus. Proc. Type: ESC_DELIV
Appl. Obj. Type: **GTT_IDLV_HD** ① Extract Inbound Delivery Header information to Global Track and Trace
Text: Inb. Delivery Header

General Data Control Tables Object Identification Global Track & Trace Relevance Parameter Setup

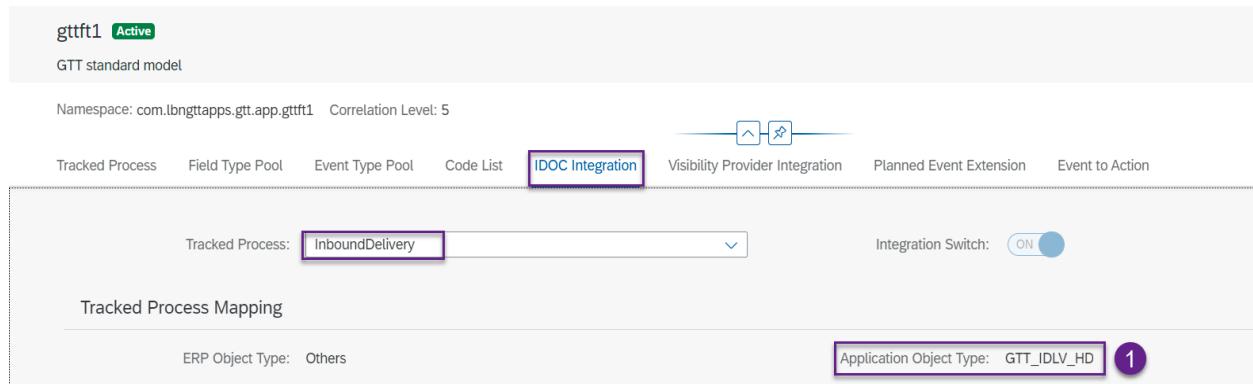
Sequencing / Destination
Seq. No.: 10
CI for GTT: **GTTAPPLOGS** CI Tenant for GTT Standard APP

Business Object Reference
Object Type: **BUS2015** InboundDelivery
BO Setup Fnct.:

Behavior
 GTT Relevant
 Stop AO Determ.
 Appl. Log Deact

Hint:

When you are creating Application Object Type for one Business Process Type, make sure the AOT name must be the same name defined in the corresponding model in the *Manage Models* app in GTT Version 2.



4.8.5 Fill in the Main Object table and Master Table in the Control Tables tab.

The screenshot shows the SAP dialog 'Display View "Define Application Object Types": Details' with the following configuration:

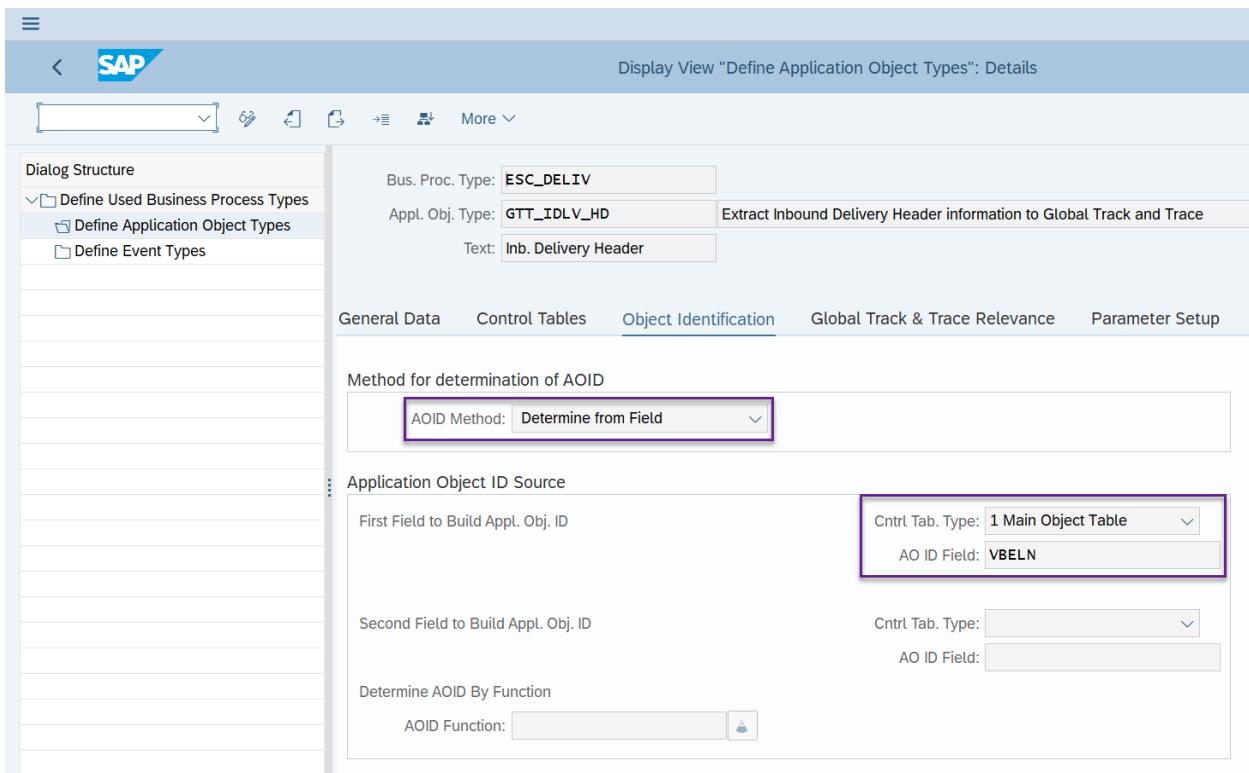
- Dialog Structure: Define Used Business Process Types (selected), Define Application Object Types (selected), Define Event Types
- Business Proc. Type: ESC_DELIV
- Appl. Obj. Type: GTT_IDLV_HD (Extract Inbound Delivery Header information to Global Track and Trace)
- Text: Inb. Delivery Header
- Control Tables Tab (selected):
 - Main Obj. Table: DELIVERY_HEADER_NEW (highlighted with a purple box)
 - Master Table: (empty)
- Data Source for Deleted Objects:
 - Del.Obj. Table: DELIVERY_HEADER_OLD (highlighted with a purple box)
- Reference Between Main and Master Table:
 - First Field Reference from Main to Master Table
 - Second Field Reference from Main to Master Table

Note:

If the event type or application object type is on the header level, then you only need to assign the **Main Object Table**.

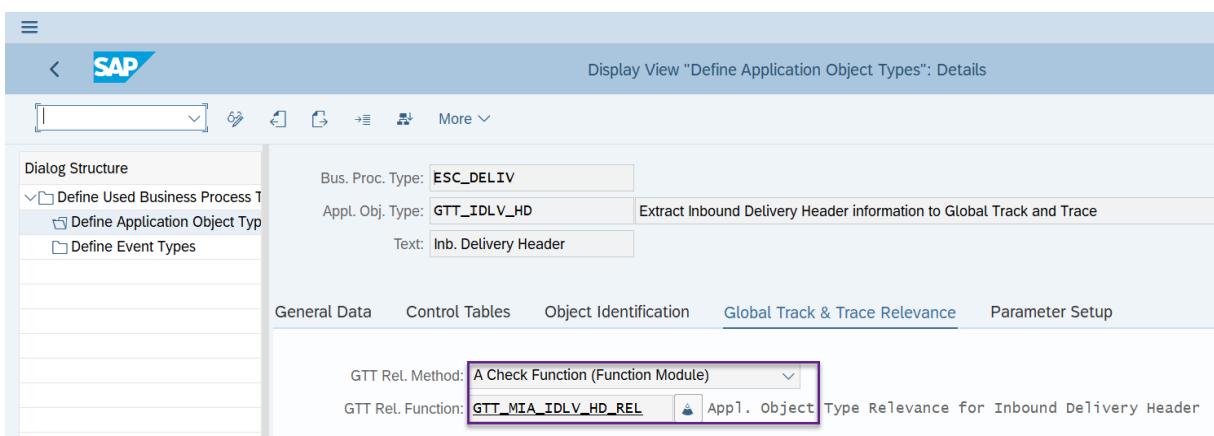
If the event type or application object type is on the item level, then you need to assign the **Main Object Table** and **Master Table**, and assign the reference between the **Main Object Table** and **Master Table**.

4.8.6 If there is no customized logic to determine the AOT ID, choose **Determine from Field**, and use the key field to fill the AO ID fields. When choosing **Determine by Function**, you must enter the customized information in the AOID function field.



4.8.7 In the **Global Track & Trace Relevance** tab, choose the **GTT Relevance Method** you need.

If you choose the **GTT Relevance Method** as *Check Function*, then you need to define a relevance function according to [4.6](#), and fill in the relevance function name here.



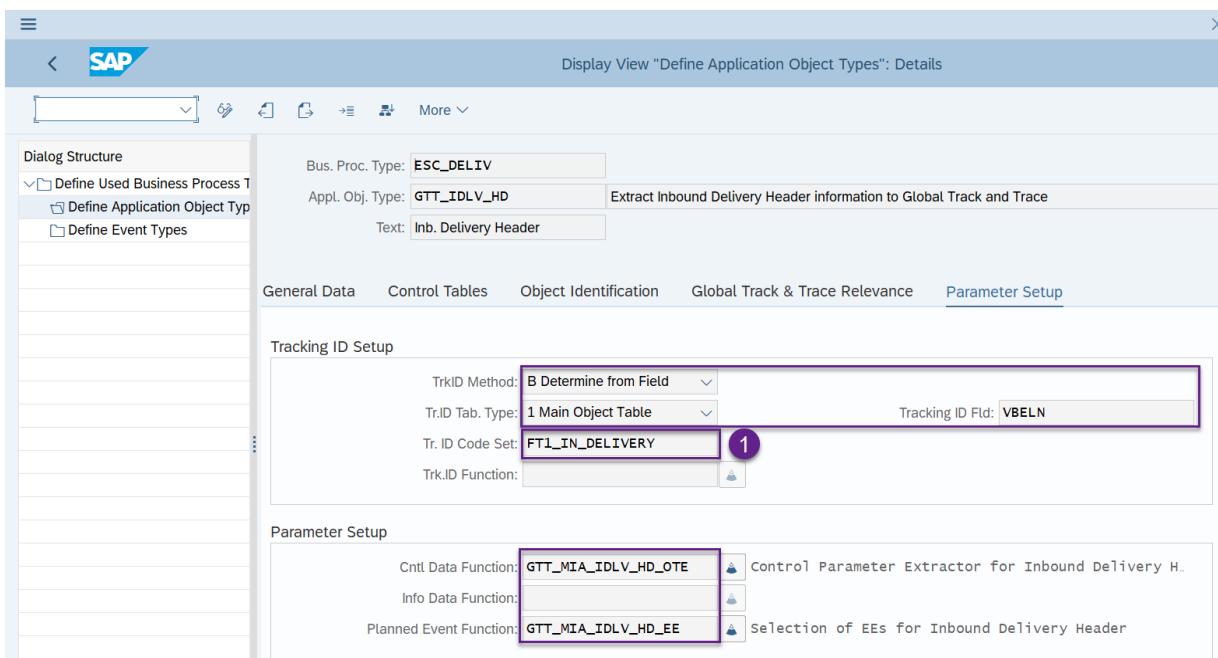
4.8.8 In the **Parameter Setup** tab, choose the **TrkID Method** as you need.

If you choose the **TrkID Method** as *Determine by Function*, then you need to define a tracking ID function according to [4.6](#), and fill in the relevance function name here.

If no customized logic exists, for **TrkID Method** choose *Determine from Field*, then you need to fill the key field and name the Code Set for the AOT.

Fill in the extractor functions for **Control Data, Info Data(optional), Planned Event**.

Click **Save**.



Hint:

In the AOT you maintained, make sure the name of Tracking ID Type is the same name defined in the corresponding process type of the model in the *Manage Models* app in GTT Version 2.

If the Tracking ID Type is determined by Field, input the value source field in the Tracking ID field, and the Code Set that refers to the Tracking ID Type for the AOT as below.

User Model Fields (0)						
<input type="checkbox"/>	Name	Type	DPP	Grant	Readable	Writable
No data						

Standard Model Fields (30)					
Name	Type	DPP	Grant	Readable	Writable
No data					

4.9 Define Application Object Types for Item Level Extractor

4.9.1 As an example of AOT type's item level tracking introduction, choose the business process type ESC_DELIV from the **Define Used Business Process Types** on the right side. Double click **Define Application Object Types**.

The screenshot shows the SAP AOT interface with the title 'Display View "Define Used Business Process Types": Overview'. On the left, there is a 'Dialog Structure' tree with nodes like 'Define Used Business Process Types' and 'Define Application Object Types'. The main area displays a table titled 'Define Used Business Process Types' with columns: Bus. Proc. Type, Update Mode, BPT Process Mode, and Description. Two entries are listed: 'ESC_DELIV' (selected) with 'Update Task (V1)' mode, 'Active' status, and 'Delivery in SAP R/3 Enterprise' description; and 'ESC_FI_CLEARING' with 'Update Task (V1)' mode, 'Active' status, and 'FI Clearing in SAP R/3 Enterprise' description.

4.9.2 Click **New Entries** to create a new Application Object Type.

4.9.3 Fill in the **Application Object Type** and **Text** fields.

4.9.4 Fill in the information required in the **General Data** tab. **CI for GTT** is the CI Tenant you created in [4.5](#). Check **GTT Relevant**.

The screenshot shows the SAP AOT interface with the title 'Display View "Define Application Object Types": Details'. The 'Dialog Structure' tree on the left shows 'Define Used Business Process Types' and 'Define Application Object Types'. The main area has tabs for 'General Data', 'Control Tables', 'Object Identification', 'Global Track & Trace Relevance', and 'Parameter Setup'. The 'General Data' tab is selected, showing fields for 'Bus. Proc. Type' (ESC_DELIV), 'Appl. Obj. Type' (GTT_IDLV_IT), and 'Text' (Inb. Delivery Item). Below these, under 'Sequencing / Destination', is a section for 'CI for GTT' with 'Seq. No.' set to 10 and 'GTTAPPLOGS' selected. Under 'Business Object Reference', the 'Object Type' is set to BUS2015 and 'InboundDelivery' is selected. Under 'Behavior', the checkbox 'GTT Relevant' is checked, while 'Stop AO Determ.' and 'Appl. Log Deact' are unchecked.

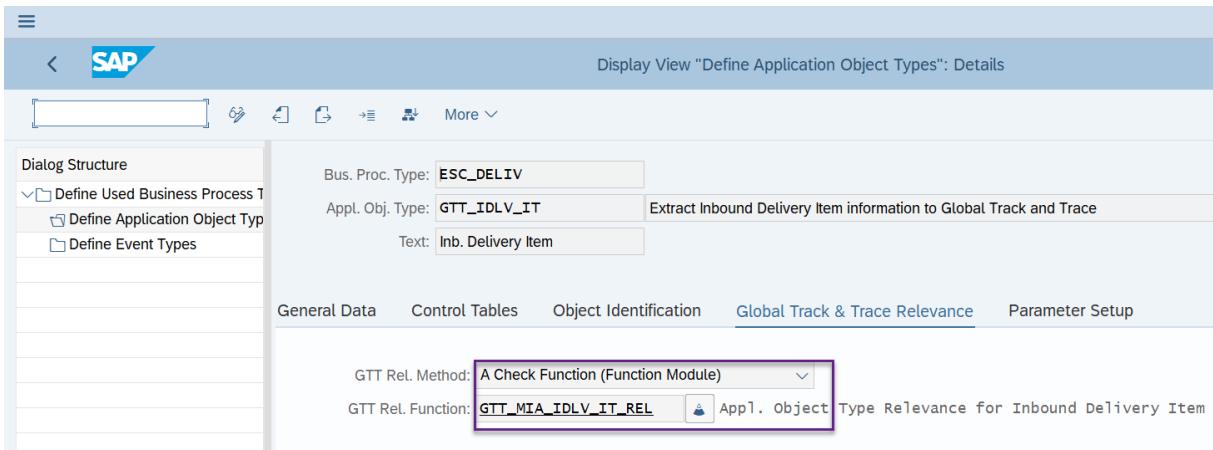
4.9.5 Fill in the Main Object table and Master Table in the Control Tables tab.

The screenshot shows the SAP Fiori interface for defining application object types. The title bar reads "Display View 'Define Application Object Types': Details". The left sidebar shows "Dialog Structure" with sections for "Define Used Business Process Types", "Define Application Object Types" (which is expanded), and "Define Event Types". The main content area has tabs: General Data, Control Tables (selected), Object Identification, Global Track & Trace Relevance, and Parameter Setup. The "Control Tables" tab contains fields for "Main Obj. Table" (DELIVERY_ITEM_NEW) and "Master Table" (DELIVERY_HEADER_NEW). Below this, there are sections for "Data Source for Deleted Objects" (Del.Obj. Table: DELIVERY_ITEM_OLD) and "Reference Between Main and Master Table" (First Field Reference from Main to Master Table: Uplink Field: VBELN, Uplink Mode: R, Uplink Target Fld: VBELN). The entire "Control Tables" section is highlighted with a purple border.

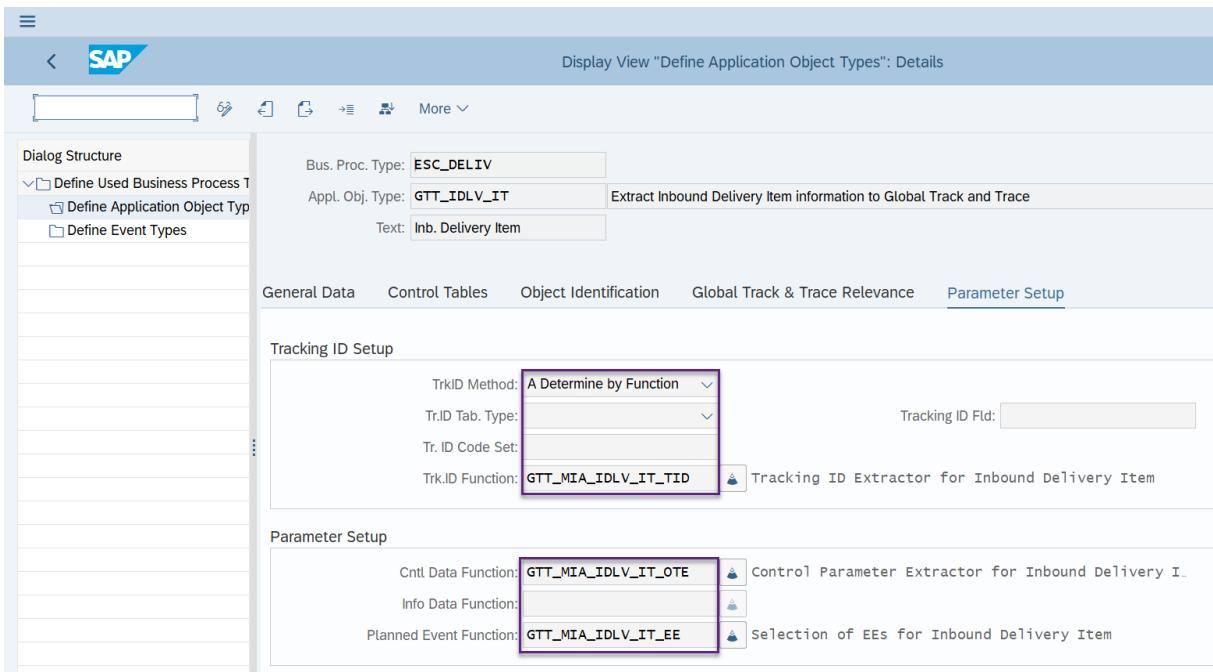
4.9.6 Fill in the AOID method in the Object Identification tab.

The screenshot shows the SAP Fiori interface for defining application object types, focusing on the "Object Identification" tab. The title bar reads "Display View 'Define Application Object Types': Details". The left sidebar shows "Dialog Structure" with sections for "Define Used Business Process Types", "Define Application Object Types" (expanded), and "Define Event Types". The main content area has tabs: General Data, Control Tables, Object Identification (selected), Global Track & Trace Relevance, and Parameter Setup. The "Object Identification" tab contains a section for "Method for determination of AOID" with a dropdown menu set to "Determine from Field". Below this, there is a section for "Application Object ID Source" which includes "First Field to Build Appl. Obj. ID" (Cntrl Tab. Type: 1 Main Object Table, AO ID Field: VBELN) and "Second Field to Build Appl. Obj. ID" (Cntrl Tab. Type: 1 Main Object Table, AO ID Field: POSNR). The entire "Object Identification" section is highlighted with a purple border.

4.9.7 In the Global Track & Trace Relevance tab, choose the GTT Relevance Method you need.



4.9.8 In the **Parameter Setup** tab, choose the **TrkID Method** as you need.



4.10 Define Event Types for Header Level Extractor

4.10.1 As an example of event's header level tracking introduction, choose the business process type ESC_MATDOC from the **Define Used Business Process Types** on the right side. Double click **Define Event Types**.

Bus. Proc. Type	Update Mode	BPT Process Mode	Description
ESC_MATDOC	Update Task (V1)	Active	Material Document in SAP R/3 Enterprise
ESC_MM_INVOICE	Update Task (V1)	Active	MM Invoice in SAP R/3 Enterprise

4.10.2 Click **New Entries** to create a new event type.

4.10.3 Fill in the **Event Type** and **Text** fields.

4.10.4 Fill in the information required in the **General Data** tab. **HCI for GTT** is the CI Tenant you created in [4.5. Event Function](#) is the extractor function you created in [4.6](#). Check **GTT Relevant**.

Bus. Proc. Type:	ESC_MATDOC	
Event Type:	GTT_EVT_IDLV_GR	Delivery Header Goods Receipt Event
Text:	Delivery GR	

General Data Control Tables Global Track & Trace Relevance

Sequencing / Destination

Seq. No.:	10	
HCI for GTT:	GTTPLOGS	CI Tenant for GTT Standard APP

Data Setup

Event Function:	GTTPLOGS	Actual event Inbound Delivery Head
-----------------	----------	------------------------------------

Behavior

<input checked="" type="checkbox"/> GTT Relevant
<input type="checkbox"/> Stop ET Det.
<input type="checkbox"/> Appl. Log Deact

4.10.5 Fill in the Main Object Table and Master Table in the Control Tables tab.

The screenshot shows the SAP Fiori interface for defining event types. The title bar reads "Display View 'Define Event Types': Details". The left sidebar shows "Dialog Structure" with "Define Used Business Process Types" expanded, showing "Define Application Object Types" and "Define Event Types". The main area has tabs for "General Data", "Control Tables" (which is selected), and "Global Track & Trace Relevance". In the "Control Tables" section, there is a "Data Source for Events" group containing fields for "Main Obj. Table" (set to "MATERIAL_HEADER") and "Master Table". Below this is a "Reference Between Main and Master Table" group with fields for "First Field Reference from Main to Master Table" and "Second Field Reference from Main to Master Table".

Caution:

If the event type or application object type is on the header level, then you only need to assign the **Main Object Table**.

If the event type or application object type is on the item level, then you need to assign the **Main Object Table** and **Master Table**, and assign the reference between the **Main Object Table** and **Master Table**.

4.10.6 In the Global Track & Trace Relevance tab, choose the GTT Relevance Method you need.

If you choose the **GTT Relevance Method** as *Check Function*, then you need to define a relevance function according to [4.6](#), and fill in the relevance function name here. Click **Save**.

The screenshot shows the SAP Fiori interface for defining event types. The title bar reads "Display View 'Define Event Types': Details". The left sidebar shows "Dialog Structure" with "Define Used Business Process Types" expanded, showing "Define Application Object Types" and "Define Event Types". The main area has tabs for "General Data", "Control Tables" (selected), and "Global Track & Trace Relevance". In the "Global Track & Trace Relevance" section, there is a dropdown for "GTT Rel. Method" set to "A Check Function (Function...)" and a field for "GTT Rel. Function" containing "GTT_MIA_IDLV_HD_GR". A tooltip "Relevance function for Actu" is shown next to the function name.

4.11 Define Event Types for Item Level Extractor

4.11.1 As an example of the event's item level tracking introduction, choose the business process type ESC_DELIV from the **Define Used Business Process Types** on the right side. Double click **Define Event Types**.

The screenshot shows the SAP Fiori interface with the title "Display View 'Define Used Business Process Types': Overview". On the left, there is a "Dialog Structure" sidebar with sections: "Define Used Business Process Types" (selected), "Define Application Object Types", and "Define Event Types". The main area displays a table titled "Define Used Business Process Types" with columns: Bus. Proc. Type, Update Mode, BPT Process Mode, and Description. Two rows are present: "ESC_DELIV" (selected) with "Update Task (V1)" and "Active" status, and "ESC_FI_CLEARING" with "Update Task (V1)" and "Active" status. A tooltip for "ESC_DELIV" indicates "Delivery in SAP R/3 Enterprise".

4.11.2 Click **New Entries** to create a new event type.

4.11.3 Fill in the **Event Type** and **Text** fields.

4.11.4 Fill in the information required in the **General Data** tab. **HCI for GTT** is the CI Tenant you created in [4.5. Event Function](#) is the extractor function you created in [4.6](#). Check **GTT Relevant**.

The screenshot shows the SAP Fiori interface with the title "Display View 'Define Event Types': Details". On the left, there is a "Dialog Structure" sidebar with sections: "Define Used Business Process Types" (selected), "Define Application Object Types", and "Define Event Types". The main area displays the "General Data" tab of the event type configuration. It shows the following fields:

- Bus. Proc. Type: ESC_DELIV
- Event Type: GTT_EVT_IDLV_PA (highlighted)
- Text: Put Away Event

Below the General Data tab, there are other tabs: Control Tables and Global Track & Trace Relevance. Further down, there are sections for Sequencing / Destination (Seq. No.: 10, HCI for GTT: GTTAPPLOGS), Data Setup (Event Function: GTT_MIA_IDLV_IT_PA), and Behavior (checkboxes: GTT Relevant, Stop ET Det., Appl. Log Deact). A tooltip for "GTT_EVT_IDLV_PA" indicates "Delivery Item Put Away Event".

4.11.5 Fill in the Main Object Table and Master Table in the Control Tables tab.

Bus. Proc. Type: ESC_DELIV
Event Type: **GTT_EVT_IDLV_PA** Delivery Item Put Away Event
Text: Put Away Event

Main Obj. Table: **DELIVERY_ITEM_NEW**
Master Table: **DELIVERY_HEADER_NEW**

Old Main Obj. Table: **DELIVERY_ITEM_OLD**
Old Master Table: **DELIVERY_HEADER_OLD**

Uplink Field: **VBELN** Uplink Mode: **R**
Uplink Target Fld: **VBELN** Uplink Const:

Caution:

If the event type or application object type is on the header level, then you only need to assign the **Main Object Table**.

If the event type or application object type is on the item level, then you need to assign the **Main Object Table** and **Master Table**, and assign the reference between the **Main Object Table** and **Master Table**.

4.11.6 In the Global Track & Trace Relevance tab, choose the GTT Relevance Method you need.

If you choose the **GTT Relevance Method** as *Check Function*, then you need to define a relevance function according to [4.6](#), and fill in the relevance function name here. Click **Save**.

Bus. Proc. Type: ESC_DELIV
Event Type: **GTT_EVT_IDLV_PA** Delivery Item Put Away Event
Text: Put Away Event

GTT Rel. Method: **A Check Function (Function)**
GTT Rel. Function: **GTT_MIA_IDLV_IT_PA**

Relevance function for Actu

4.12 Purchase Order Extractor Configuration

4.12.1 Define Application Object Types for Purchase Order Header

Segment	Field	Value
Header	Bus. Proc. Type	ESC_PURORD
	Appl. Obj. Type	GTT_PO_HD
	Description	Extract purchase order header information to SAP Business Network Global Track and Trace
	Text	Purchase Order Header
General Data	Seq. No.	10
	CI for GTT	GTTAPPLOGS
	Object Type	BUS2012
	GTT Relevant	X
Control Tables	Main Obj. Table	PURCHASE_ORDER_HEADER_NEW
Object Identification	AOID Method	Determine by Function
Object Identification – Application Object ID Source – Determine AOID by Function	AOID Extractor	GTT_POF_PO_HD_AOID
Global Track & Trace Relevance	GTT Rel. Method	Check Function (Function Module)
	GTT Rel. Function	GTT_POF_PO_HD_REL
Parameter Setup	TrkID Method	Determine by Function
	Tr.ID Extractor	GTT_POF_PO_HD_TID
	Ctrl Data Function	GTT_POF_PO_HD_OTE
	Planned Event Function	GTT_POF_PO_HD_EE

4.12.2 Define Application Object Types for Purchase Order Item

Segment	Field	Value
Header	Bus. Proc. Type	ESC_PURORD
	Appl. Obj. Type	GTT_PO_IT
	Description	Extract purchase order item information to SAP Business Network Global Track and Trace
	Text	Purchase Order Item
General Data	Seq. No.	10
	CI for GTT	GTTAPPLOGS
	Object Type	BUS2012
	GTT Relevant	X
Control Tables	Main Obj. Table	PURCHASE_ITEM_NEW
	Master Table	PURCHASE_ORDER_HEADER_NEW
	Del. Obj. Table	PURCHASE_ITEM_OLD
Control Tables – Reference Between Main and Master	Uplink Field	EBELN
	Uplink Mode	R

Table – First Field Reference from Main to Master Table	Uplink Target Fld	EBELN
Object Identification	AOID Method	Determine by Function
Object Identification – Application Object ID Source – Determine AOID by Function	AOID Extractor	GTT_POF_PO_IT_AOID
Global Track & Trace Relevance	GTT Rel. Method	Check Function (Function Module)
	GTT Rel. Function	GTT_POF_PO_IT_REL
Parameter Setup	TrkID Method	Determine by Function
	Trk. ID Function	GTT_POF_PO_IT_TID
	Ctrl Data Function	GTT_POF_PO_IT_OTE
	Planned Event Function	GTT_POF_PO_IT_EE

4.12.3 Define Event Types for Purchase Order Item

Segment	Field	Value
Header	Bus. Proc. Type	ESC_PURORD
	Event Type	GTT_EVT_PO_IT_CF
	Description	PO Item Confirmation Event
	Text	Confirmation Event
General Data	Seq. No.	10
	HCI for GTT	GTTAPPLOGS
	Event Function	GTT_POF_PO_IT_CF
	GTT Relevant	X
Control Tables	Main Obj. Table	PURCHASE_ITEM_NEW
	Master Table	PURCHASE_ORDER_HEADER_NEW
	Old Main Obj. Table	PURCHASE_ITEM_OLD
	Old Master Table	PURCHASE_ORDER_HEADER_OLD
Control Tables – Reference Between Main and Master Table – First Field Reference from Main to Master Table	Uplink Field	EBELN
	Uplink Mode	R
	Uplink Target Fld	EBELN
Global Track & Trace Relevance	GTT Rel. Method	Check Function (Function Module)
	GTT Rel. Function	GTT_POF_PO_IT_CF_REL

Segment	Field	Value
Header	Bus. Proc. Type	ESC_PURORD
	Event Type	GTT_EVT_PO_IT_DE
	Description	PO Item Deletion Event

	Text	Deletion Event
General Data	Seq. No.	10
	HCI for GTT	GTTAPPLOGS
	Event Function	GTT_POF_PO_IT_DE
	GTT Relevant	X
Control Tables	Main Obj. Table	PURCHASE_ITEM_NEW
	Master Table	PURCHASE_ORDER_HEADER_NEW
	Old Main Obj. Table	PURCHASE_ITEM_OLD
	Old Master Table	PURCHASE_ORDER_HEADER_OLD
Control Tables – Reference Between Main and Master Table – First Field Reference from Main to Master Table	Uplink Field	EBELN
Global Track & Trace Relevance	Uplink Mode	R
	Uplink Target Fld	EBELN
Global Track & Trace Relevance	GTT Rel. Method	Check Function (Function Module)
	GTT Rel. Function	GTT_POF_PO_IT_DE_REL

Segment	Field	Value
Header	Bus. Proc. Type	ESC_MATDOC
	Event Type	GTT_EVT_PO_IT_GR
	Description	PO Item Goods Receipt Event
	Text	Goods Receipt Event
General Data	Seq. No.	10
	HCI for GTT	GTTAPPLOGS
	Event Function	GTT_POF_PO_IT_GR
	GTT Relevant	X
Control Tables	Main Obj. Table	MATERIAL_SEGMENT
	Master Table	MATERIAL_HEADER
Control Tables – Reference Between Main and Master Table – First Field Reference from Main to Master Table	Uplink Field	MBLNR
	Uplink Mode	R
	Uplink Target Fld	MBLNR
Global Track & Trace Relevance	GTT Rel. Method	Check Function (Function Module)
	GTT Rel. Function	GTT_POF_PO_IT_GR_REL

4.12.4 Cross-processes for Purchase Order

The following entries should be maintained in transaction “ZGTT_AOTYPE_RST - AOT Types Restrictions” for the cross-processes tracking scenario.

Restr.ID	Restr.Pos	Option	Sign	Application Obj.Type
DL_TO_POIT	001	Equal To	Include	GTT_PO_IT
DL_TO_POHD	001	Equal To	Include	GTT_PO_HD

The following entries should be maintained in transaction “ZGTT_EVTYPE_RST - Event Types Restrictions” for the cross-processes tracking scenario.

Restr.ID	Restr.Pos	Option	Sign	Event Type
DL_TO_POIT	001	Equal To	Include	GTT_EVT_PO_IT_CF

4.12.5 Maintain Purchase Order Types that will be sent to SAP Business Network Global Track and Trace

Maintain the purchase order type that you want to send to SAP Business Network Global Track and Trace via transaction “ZGTT_POTYPE_RST - GTT Purchase Doc Type Configuration”, then mark it as active. For example:

Purchasing Document Type	Active
NB	X

4.13 Inbound Delivery Extractor Configuration

4.13.1 Define Application Object Types for Inbound Delivery Header

Segment	Field	Value
Header	Bus. Proc. Type	ESC_DELIV
	Appl. Obj. Type	GTT_IDLV_HD
	Description	Extract Inbound Delivery Header information to SAP Business Network Global Track and Trace
	Text	Inb. Delivery Header
General Data	Seq. No.	10
	CI for GTT	GTTAPPLOGS
	Object Type	BUS2015
	GTT Relevant	X
Control Tables	Main Obj. Table	DELIVERY_HEADER_NEW
	Del. Obj. Table	DELIVERY_HEADER_OLD
Object Identification	AOID Method	Determine by Function
Object Identification – Application Object ID Source – Determine AOID by Function	AOID Extractor	GTT_MIA_IDLV_HD_AOID
Global Track & Trace Relevance	GTT Rel. Method	Check Function (Function Module)
	GTT Rel. Function	GTT_MIA_IDLV_HD_REL
Parameter Setup	TrkID Method	Determine by Function
	Tr.ID Extractor	GTT_MIA_IDLV_HD_TID
	Ctrl Data Function	GTT_MIA_IDLV_HD_OTE
	Planned Event Function	GTT_MIA_IDLV_HD_EE

4.13.2 Define Application Object Types for Inbound Delivery Item

Segment	Field	Value
Header	Bus. Proc. Type	ESC_DELIV
	Appl. Obj. Type	GTT_IDLV_IT
	Description	Extract Inbound Delivery Item information to SAP Business Network Global Track and Trace
	Text	Inb. Delivery Item
General Data	Seq. No.	10
	CI for GTT	GTTAPPLOGS
	Object Type	BUS2015
	GTT Relevant	X
Control Tables	Main Obj. Table	DELIVERY_ITEM_NEW
	Master Table	DELIVERY_HEADER_NEW
	Del. Obj. Table	DELIVERY_ITEM_OLD
Control Tables – Reference Between Main and Master Table – First Field Reference from Main to Master Table	Uplink Field	VBELN
	Uplink Mode	R
	Uplink Target Fld	VBELN
Object Identification	AOID Method	Determine by Function
Object Identification – Application Object ID Source – Determine AOID by Function	AOID Extractor	GTT_MIA_IDLV_IT_AOID
Global Track & Trace Relevance	GTT Rel. Method	Check Function (Function Module)
	GTT Rel. Function	GTT_MIA_IDLV_IT_REL
Parameter Setup	TrkID Method	Determine by Function
	Trk. ID Function	GTT_MIA_IDLV_IT_TID
	Ctrl Data Function	GTT_MIA_IDLV_IT_OTE
	Planned Event Function	GTT_MIA_IDLV_IT_EE

4.13.3 Define Event Types for Inbound Delivery Header

Segment	Field	Value
Header	Bus. Proc. Type	ESC_MATDOC
	Event Type	GTT_EVT_IDLV_GR
	Description	Delivery Header Goods Receipt Event
	Text	Delivery GR
General Data	Seq. No.	10
	HCI for GTT	GTTAPPLOGS
	Event Function	GTT_MIA_IDLV_HD_GR
	GTT Relevant	X
Control Tables	Main Obj. Table	MATERIAL_HEADER
Global Track & Trace Relevance	GTT Rel. Method	Check Function (Function Module)
	GTT Rel. Function	GTT_MIA_IDLV_HD_GR

4.13.4 Define Event Types for Inbound Delivery Item

Segment	Field	Value
Header	Bus. Proc. Type	ESC_DELIV
	Event Type	GTT_EVT_IDLV_PA
	Description	Delivery Item Put Away Event
	Text	Put Away Event
General Data	Seq. No.	10
	HCI for GTT	GTTAPPLOGS
	Event Function	GTT_MIA_IDLV_IT_PA
	GTT Relevant	X
Control Tables	Main Obj. Table	DELIVERY_ITEM_NEW
	Master Table	DELIVERY_HEADER_NEW
	Old Main Obj. Table	DELIVERY_ITEM_OLD
	Old Master Table	DELIVERY_HEADER_OLD
Control Tables – Reference Between Main and Master Table – First Field Reference from Main to Master Table	Uplink Field	VBELN
	Uplink Mode	R
	Uplink Target Fld	VBELN
Global Track & Trace Relevance	GTT Rel. Method	Check Function (Function Module)
	GTT Rel. Function	GTT_MIA_IDLV_IT_PA

Segment	Field	Value
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Header	Bus. Proc. Type	ESC_DELIV
	Event Type	GTT_EVT_IDLV_PACK
	Description	Delivery Item Packing Event
	Text	Delivery Packing
General Data	Seq. No.	10
	HCI for GTT	GTTAPPLOGS
	Event Function	GTT_MIA_IDLV_IT_PKNG
	GTT Relevant	X
Control Tables	Main Obj. Table	DELIVERY_ITEM_NEW
	Master Table	DELIVERY_HEADER_NEW
	Old Main Obj. Table	DELIVERY_ITEM_OLD
	Old Master Table	DELIVERY_HEADER_OLD
Control Tables – Reference Between Main and Master Table – First Field Reference from Main to Master Table	Uplink Field	VBELN
	Uplink Mode	R
	Uplink Target Fld	VBELN
Global Track & Trace Relevance	GTT Rel. Method	Check Function (Function Module)
	GTT Rel. Function	GTT_MIA_IDLV_IT_PKNG

4.13.5 Cross-processes for Inbound Delivery

The following entries should be maintained in transaction “ZGTT_AOTYPE_RST - AOT Types Restrictions” for the cross-processes tracking scenario.

Restr.ID	Restr.Pos	Option	Sign	Application Obj.Type
FU_TO_IDLH	001	Equal To	Include	GTT_IDLV_HD
FU_TO_IDLI	001	Equal To	Include	GTT_IDLV_IT
SH_TO_IDLH	001	Equal To	Include	GTT_IDLV_HD
SH_TO_IDLI	001	Equal To	Include	GTT_IDLV_IT

4.13.6 Maintain Delivery Types that will be sent to SAP Business Network Global Track and Trace

Maintain the inbound delivery type that you want to send to SAP Business Network Global Track and Trace via transaction “ZGTT_DLVTYPERST - GTT Delivery Type Configuration”, then mark it as active.

For example:

Delivery Type	Active
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EL	X
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4.14 Sales Order Extractor Configuration

4.14.1 Define Application Object Types for Sales Order Header

Segment	Field	Value
Header	Bus. Proc. Type	ESC_SORDER
	Appl. Obj. Type	GTT_SO_HD
	Description	Extract sales order header information to SAP Business Network Global Track and Trace
	Text	Sales Order Header
General Data	Seq. No.	10
	CI for GTT	GTTAPPLOGS
	GTT Relevant	X
Control Tables	Main Obj. Table	SALES_ORDER_HEADER_NEW
	Del. Obj. Table	SALES_ORDER_HEADER_OLD
Object Identification	AOID Method	Determine by Function
Object Identification – Application Object ID Source – Determine AOID by Function	AOID Extractor	GTT_SOF_AOID
Global Track & Trace Relevance	GTT Rel. Method	Check Function (Function Module)
	GTT Rel. Function	GTT_SOF_SO_HD_REL
Parameter Setup	TrkID Method	Determine by Function
	Tr.ID Extractor	GTT_SOF_SO_HD_TID
	Ctrl Data Function	GTT_SOF_SO_HD_OTE
	Planned Event Function	GTT_SOF_SO_HD_EE

4.14.2 Define Application Object Types for Sales Order Item

Segment	Field	Value
Header	Bus. Proc. Type	ESC_SORDER
	Appl. Obj. Type	GTT_SO_IT
	Description	Extract sales order item information to SAP Business Network Global Track and Trace
	Text	Sales Order Item
General Data	Seq. No.	20
	CI for GTT	GTTAPPLOGS
	GTT Relevant	X
Control Tables	Main Obj. Table	SALES_ORDER_ITEMS_NEW

	Master Table	SALES_ORDER_HEADER_NEW
	Del. Obj. Table	SALES_ORDER_ITEMS_OLD
Control Tables – Reference Between Main and Master Table – First Field Reference from Main to Master Table	Uplink Field	VBELN
	Uplink Mode	R
	Uplink Target Fld	VBELN
Object Identification	AOID Method	Determine by Function
Object Identification – Application Object ID Source – Determine AOID by Function	AOID Extractor	GTT_SOF_AOID
Global Track & Trace Relevance	GTT Rel. Method	Check Function (Function Module)
	GTT Rel. Function	GTT_SOF_SO_IT_REL
Parameter Setup	TrkID Method	Determine by Function
	Trk. ID Function	GTT_SOF_SO_IT_TID
	Ctrl Data Function	GTT_SOF_SO_IT_OTE
	Planned Event Function	GTT_SOF_SO_IT_EE

4.14.3 Cross-processes for Sales Order

The following entries should be maintained in transaction “ZGTT_AOTYPE_RST - AOT Types Restrictions” for the cross-processes tracking scenario.

Restr.ID	Restr.Pos	Option	Sign	Application Obj.Type
DL_TO_SOIT	001	Equal To	Include	GTT_SO_IT
DL_TO_SOHD	001	Equal To	Include	GTT_SO_HD

4.14.4 Maintain Sales Order Types that will be sent to SAP Business Network Global Track and Trace

Maintain the sales order type that you want to send to SAP Business Network Global Track and Trace via transaction “ZGTT_SOTYPE_RST - GTT Sales Doc Type Configuration”, then mark it as active.

For example:

Sales Document Type	Active
ZGTT	X

4.15 Outbound Delivery Extractor Configuration

4.15.1 Define Application Object Types for Outbound Delivery Header

Segment	Field	Value
Header	Bus. Proc. Type	ESC_DELIV

	Appl. Obj. Type	GTT_ODLV_HD
	Description	Extract delivery header information to SAP Business Network Global Track and Trace
	Text	Delivery Header
General Data	Seq. No.	10
	CI for GTT	GTTAPPLOGS
	GTT Relevant	X
Control Tables	Main Obj. Table	DELIVERY_HEADER_NEW
	Del. Obj. Table	DELIVERY_HEADER_OLD
Object Identification	AOID Method	Determine by Function
Object Identification – Application Object ID Source – Determine AOID by Function	AOID Extractor	GTT_SOF_AOID
Global Track & Trace Relevance	GTT Rel. Method	Check Function (Function Module)
	GTT Rel. Function	GTT_SOF_ODLV_HD_REL
Parameter Setup	TrkID Method	Determine by Function
	Tr.ID Extractor	GTT_SOF_ODLV_HD_TID
	Ctrl Data Function	GTT_SOF_ODLV_HD_OTE
	Planned Event Function	GTT_SOF_ODLV_HD_EE

4.15.2 Define Application Object Types for Outbound Delivery Item

Segment	Field	Value
Header	Bus. Proc. Type	ESC_DELIV
	Appl. Obj. Type	GTT_ODLV_IT
	Description	Extract delivery item information to SAP Business Network Global Track and Trace
	Text	Delivery Item
General Data	Seq. No.	20
	CI for GTT	GTTAPPLOGS
	GTT Relevant	X
Control Tables	Main Obj. Table	DELIVERY_ITEM_NEW
	Master Table	DELIVERY_HEADER_NEW
	Del. Obj. Table	DELIVERY_ITEM_OLD
Control Tables – Reference Between Main and Master Table – First Field Reference from Main to Master Table	Uplink Field	VBELN
	Uplink Mode	R
	Uplink Target Fld	VBELN
Object Identification	AOID Method	Determine by Function
Object Identification – Application Object ID Source – Determine AOID by Function	AOID Extractor	GTT_SOF_AOID
Global Track & Trace Relevance	GTT Rel. Method	Check Function (Function Module)

	GTT Rel. Function	GTT_SOF_ODLV_IT_REL
Parameter Setup	TrkID Method	Determine by Function
	Trk. ID Function	GTT_SOF_ODLV_IT_TID
	Ctrl Data Function	GTT_SOF_ODLV_IT_OTE
	Planned Event Function	GTT_SOF_ODLV_IT_EE

4.15.3 Define Event Types for Outbound Delivery Header

Segment	Field	Value
Header	Bus. Proc. Type	ESC_DELIV
	Event Type	GTT_EVT_ODLV_GI
	Description	Delivery Goods Issue event
	Text	Goods Issue Event
General Data	Seq. No.	10
	HCI for GTT	GTTAPPLOGS
	Event Function	GTT_SOF_ODLV_GI
	GTT Relevant	X
Control Tables	Main Obj. Table	DELIVERY_HEADER_NEW
	Old Main Obj. Table	DELIVERY_HEADER_OLD
Global Track & Trace Relevance	GTT Rel. Method	Check Function (Function Module)
	GTT Rel. Function	GTT_SOF_ODLV_GI_REL

4.15.4 Define Event Types for Outbound Delivery Item

Segment	Field	Value
Header	Bus. Proc. Type	ESC_DELIV
	Event Type	GTT_EVT_ODLV_PA
	Description	Delivery Item Packing event
	Text	Packing Event
General Data	Seq. No.	10
	HCI for GTT	GTTAPPLOGS
	Event Function	GTT_SOF_ODLV_IT_PA
	GTT Relevant	X
Control Tables	Main Obj. Table	DELIVERY_ITEM_NEW
	Master Table	DELIVERY_HEADER_NEW
	Old Main Obj. Table	DELIVERY_ITEM_OLD

	Old Master Table	DELIVERY_HEADER_OLD
Control Tables – Reference Between Main and Master Table – First Field Reference from Main to Master Table	Uplink Field	VBELN
	Uplink Mode	R
	Uplink Target Fld	VBELN
Global Track & Trace Relevance	GTT Rel. Method	Check Function (Function Module)
	GTT Rel. Function	GTT_SOF_ODLV_PA_REL

Segment	Field	Value
Header	Bus. Proc. Type	ESC_DELIV
	Event Type	GTT_EVT_ODLV_PI
	Description	Delivery Item Picking event
	Text	Picking Event
General Data	Seq. No.	10
	HCI for GTT	GTTAPPLOGS
	Event Function	GTT_SOF_ODLV_IT_PI
	GTT Relevant	X
Control Tables	Main Obj. Table	DELIVERY_ITEM_NEW
	Master Table	DELIVERY_HEADER_NEW
	Old Main Obj. Table	DELIVERY_ITEM_OLD
	Old Master Table	DELIVERY_HEADER_OLD
Control Tables – Reference Between Main and Master Table – First Field Reference from Main to Master Table	Uplink Field	VBELN
	Uplink Mode	R
	Uplink Target Fld	VBELN
Global Track & Trace Relevance	GTT Rel. Method	Check Function (Function Module)
	GTT Rel. Function	GTT_SOF_ODLV_PI_REL

Segment	Field	Value
Header	Bus. Proc. Type	ESC_DELIV
	Event Type	GTT_EVT_ODLV_POD
	Description	Delivery Item POD event
	Text	POD Event
General Data	Seq. No.	10
	HCI for GTT	GTTAPPLOGS
	Event Function	GTT_SOF_ODLV_IT_POD
	GTT Relevant	X

Control Tables	Main Obj. Table	DELIVERY_ITEM_NEW
	Master Table	DELIVERY_HEADER_NEW
	Old Main Obj. Table	DELIVERY_ITEM_OLD
	Old Master Table	DELIVERY_HEADER_OLD
Control Tables – Reference Between Main and Master Table – First Field Reference from Main to Master Table	Uplink Field	VBELN
	Uplink Mode	R
	Uplink Target Fld	VBELN
Global Track & Trace Relevance	GTT Rel. Method	Check Function (Function Module)
	GTT Rel. Function	GTT_SOF_ODLV POD_REL

4.15.5 Cross-processes for Outbound Delivery

The following entries should be maintained in transaction “ZGTT_AOTYPE_RST - AOT Types Restrictions” for Cross-Processes tracking scenario.

Restr.ID	Restr.Pos	Option	Sign	Application Obj.Type
SH_TO_ODLH	001	Equal To	Include	GTT_ODLV_HD
FU_TO_ODLH	001	Equal To	Include	GTT_ODLV_HD
FU_TO_ODLI	001	Equal To	Include	GTT_ODLV_IT

4.15.6 Maintain Delivery Types that will be sent to SAP Business Network Global Track and Trace

Maintain the outbound delivery type that you want to send to SAP Business Network Global Track and Trace via transaction “ZGTT_DLVTYPERST - GTT Delivery Type Configuration”, then mark it as active.

For example:

Delivery Type	Active
LBNP	X

4.16 Shipment Extractor Configuration

4.16.1 Define Application Object Types for Shipment Header

Segment	Field	Value
Header	Bus. Proc. Type	ESC_SHIPMT
	Appl. Obj. Type	GTT_SHP_HD
	Description	Extract Shipment Header information to SAP Business Network Global Track and Trace

	Text	Shipment Header
General Data	Seq. No.	10
	CI for GTT	GTTAPPLOGS
	GTT Relevant	X
Control Tables	Main Obj. Table	SHIPMENT_HEADER_NEW
	Del. Obj. Table	SHIPMENT_HEADER_OLD
Object Identification	AOID Method	Determine by Function
Object Identification – Application Object ID Source – Determine AOID by Function	AOID Extractor	GTT_MIA_SHP_HD_AOID
Global Track & Trace Relevance	GTT Rel. Method	Check Function (Function Module)
	GTT Rel. Function	GTT_MIA_SHP_HD_REL
Parameter Setup	TrkID Method	Determine by Function
	Trk. ID Function	GTT_MIA_SHP_HD_TID
	Ctrl Data Function	GTT_MIA_SHP_HD_OTE
	Planned Event Function	GTT_MIA_SHP_HD_EE

4.16.2 Define Event Types for Shipment Header

Segment	Field	Value
Header	Bus. Proc. Type	ESC_SHIPMT
	Event Type	GTT_EVT_SHP_ARRIVE
	Description	Shipment Header Arrival Event
	Text	Arrival Event
General Data	Seq. No.	10
	HCI for GTT	GTTAPPLOGS
	Event Function	GTT_MIA_SHP_HD_ARR
	GTT Relevant	X
Control Tables	Main Obj. Table	SHIPMENT_HEADER_NEW
	Old Main Obj. Table	SHIPMENT_HEADER_OLD
Global Track & Trace Relevance	GTT Rel. Method	Check Function (Function Module)
	GTT Rel. Function	GTT_MIA_SHP_HD_ARR

Segment	Field	Value
Header	Bus. Proc. Type	ESC_SHIPMT
	Event Type	GTT_EVT_SHP_CHECKIN
	Description	Shipment Header Check In Event
	Text	Check In Event
General Data	Seq. No.	10
	HCI for GTT	GTTAPPLOGS
	Event Function	GTT_MIA_SHP_HD_CI
	GTT Relevant	X

Control Tables	Main Obj. Table	SHIPMENT_HEADER_NEW
	Old Main Obj. Table	SHIPMENT_HEADER_OLD
Global Track & Trace Relevance	GTT Rel. Method	Check Function (Function Module)
	GTT Rel. Function	GTT_MIA_SHP_HD_CI

Segment	Field	Value
Header	Bus. Proc. Type	ESC_SHIPMT
	Event Type	GTT_EVT_SHP_DEPART
	Description	Shipment Header Departure Event
	Text	Departure Event
General Data	Seq. No.	10
	HCI for GTT	GTTAPPLOGS
	Event Function	GTT_MIA_SHP_HD_DEP
	GTT Relevant	X
Control Tables	Main Obj. Table	SHIPMENT_HEADER_NEW
	Old Main Obj. Table	SHIPMENT_HEADER_OLD
Global Track & Trace Relevance	GTT Rel. Method	Check Function (Function Module)
	GTT Rel. Function	GTT_MIA_SHP_HD_DEP

Segment	Field	Value
Header	Bus. Proc. Type	ESC_SHIPMT
	Event Type	GTT_EVT_SHP_LOADEND
	Description	Shipment Header Load End Event
	Text	Load End Event
General Data	Seq. No.	10
	HCI for GTT	GTTAPPLOGS
	Event Function	GTT_MIA_SHP_HD_LE
	GTT Relevant	X
Control Tables	Main Obj. Table	SHIPMENT_HEADER_NEW
	Old Main Obj. Table	SHIPMENT_HEADER_OLD
Global Track & Trace Relevance	GTT Rel. Method	Check Function (Function Module)
	GTT Rel. Function	GTT_MIA_SHP_HD_LE

Segment	Field	Value
Header	Bus. Proc. Type	ESC_SHIPMT
	Event Type	GTT_EVT_SHP_LOADSTAR
	Description	Shipment Header Load Start Event

	Text	Load Start Event
General Data	Seq. No.	10
	HCI for GTT	GTTAPPLOGS
	Event Function	GTT_MIA_SHP_HD_LS
	GTT Relevant	X
Control Tables	Main Obj. Table	SHIPMENT_HEADER_NEW
	Old Main Obj. Table	SHIPMENT_HEADER_OLD
Global Track & Trace Relevance	GTT Rel. Method	Check Function (Function Module)
	GTT Rel. Function	GTT_MIA_SHP_HD_LS

4.17 Freight Unit Extractor Configuration

4.17.1 Define Application Object Types for Freight Unit Header

Segment	Field	Value
Header	Bus. Proc. Type	TMS_TOR
	Appl. Obj. Type	GTT_FU
	Description	Extract FU Information to SAP Business Network Global Track and Trace
	Text	FU Header
General Data	Seq. No.	10
	CI for GTT	GTTAPPLOGS
	GTT Relevant	X
Control Tables	Main Obj. Table	TOR_ROOT
	Del. Obj. Table	TOR_ROOT
Object Identification	AOID Method	Determine by Function
Object Identification – Application Object ID Source – Determine AOID By Function	AOID Function	GTT_STS_AOID_TOR
Global Track & Trace Relevance	GTT Rel. Method	Check Function (Function Module)
	GTT Rel. Function	GTT_TS_FU_HD_REL
Parameter Setup	Trk.ID Method	Determine by Function
	Tr. Function	GTT_TS_FU_HD_TID
	Ctrl Data Function	GTT_TS_FU_HD_OTE
	Planned Event Function	GTT_TS_FU_HD_EE

4.17.2 Define Event Types for Freight Unit Header

Segment	Field	Value
Header	Bus. Proc. Type	TMS_TOR

	Event Type	GTT_EVT_TOR_ARRIVE
	Description	FO/FB/FU Arrival Event
	Text	Arrival Event
General Data	Seq. No.	0
	HCI for GTT	GTTAPPLOGS
	Event Function	GTT_TS_TOR_ARRIVAL
	GTT Relevant	X
Control Tables	Main Obj. Table	TOR_ROOT
Global Track & Trace Relevance	GTT Rel. Method	Check Function (Function Module)
	GTT Rel. Function	GTT_TS_TOR_ARRIVE

Segment	Field	Value
Header	Bus. Proc. Type	TMS_TOR
	Event Type	GTT_EVT_TOR_COUPLE
	Description	FO/FB/FU Coupling Event
	Text	Coupling Event
General Data	Seq. No.	0
	HCI for GTT	GTTAPPLOGS
	Event Function	GTT_TS_TOR_COUPLING
	GTT Relevant	X
Control Tables	Main Obj. Table	TOR_ROOT
Global Track & Trace Relevance	GTT Rel. Method	Check Function (Function Module)
	GTT Rel. Function	GTT_TS_TOR_COUP

Segment	Field	Value
Header	Bus. Proc. Type	TMS_TOR
	Event Type	GTT_EVT_TOR_DECOPPLE
	Description	FO/FB/FU Decoupling Event
	Text	Decoupling Event
General Data	Seq. No.	0
	HCI for GTT	GTTAPPLOGS
	Event Function	GTT_TS_TOR_DECOUPL
	GTT Relevant	X
Control Tables	Main Obj. Table	TOR_ROOT
Global Track & Trace Relevance	GTT Rel. Method	Check Function (Function Module)
	GTT Rel. Function	GTT_TS_TOR_DECP

Segment	Field	Value
Header	Bus. Proc. Type	TMS_TOR
	Event Type	GTT_EVT_TOR_UNLSTART
	Description	FO/FB/FU Unloading Start Event
	Text	Unloading Start
General Data	Seq. No.	0
	HCI for GTT	GTTAPPLOGS
	Event Function	GTT_TS_TOR_UNLD_STR
	GTT Relevant	X
Control Tables	Main Obj. Table	TOR_ROOT
Global Track & Trace Relevance	GTT Rel. Method	Check Function (Function Module)
	GTT Rel. Function	GTT_TS_TOR_USTR

Segment	Field	Value
Header	Bus. Proc. Type	TMS_TOR
	Event Type	GTT_EVT_TOR_DELAY
	Description	FO/FB/FU Delay Event
	Text	Delay Event
General Data	Seq. No.	0
	HCI for GTT	GTTAPPLOGS
	Event Function	GTT_TS_TOR_DELAY
	GTT Relevant	X
Control Tables	Main Obj. Table	TOR_ROOT
Global Track & Trace Relevance	GTT Rel. Method	Check Function (Function Module)
	GTT Rel. Function	GTT_TS_TOR_DELAY

Segment	Field	Value
Header	Bus. Proc. Type	TMS_TOR
	Event Type	GTT_EVT_TOR_DEPART
	Description	FO/FB/FU Departure Event
	Text	Departure Event
General Data	Seq. No.	0
	HCI for GTT	GTTAPPLOGS
	Event Function	GTT_TS_TOR_DEPART
	GTT Relevant	X
Control Tables	Main Obj. Table	TOR_ROOT
Global Track & Trace Relevance	GTT Rel. Method	Check Function (Function Module)

	GTT Rel. Function	GTT_TS_TOR_DEPART
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Segment	Field	Value
Header	Bus. Proc. Type	TMS_TOR
	Event Type	GTT_EVT_TOR_FU_DELAY
	Description	FU Delay Event
	Text	FU Delay Event
General Data	Seq. No.	0
	HCI for GTT	GTAPPLOGS
	Event Function	GTT_TS_TOR_FU_DELAY
	GTT Relevant	X
Control Tables	Main Obj. Table	TOR_ROOT
Global Track & Trace Relevance	GTT Rel. Method	Check Function (Function Module)
	GTT Rel. Function	GTT_TS_TOR_FU_DELAY

Segment	Field	Value
Header	Bus. Proc. Type	TMS_TOR
	Event Type	GTT_EVT_TOR_LOADEND
	Description	FO/FB/FU Loading End Event
	Text	Loading End Event
General Data	Seq. No.	0
	HCI for GTT	GTAPPLOGS
	Event Function	GTT_TS_TOR_LOAD_END
	GTT Relevant	X
Control Tables	Main Obj. Table	TOR_ROOT
Global Track & Trace Relevance	GTT Rel. Method	Check Function (Function Module)
	GTT Rel. Function	GTT_TS_TOR_LEND

Segment	Field	Value
Header	Bus. Proc. Type	TMS_TOR
	Event Type	GTT_EVT_TOR_LOADSTRT
	Description	FO/FB/FU Loading Start Event
	Text	Loading Start Event
General Data	Seq. No.	0
	HCI for GTT	GTAPPLOGS
	Event Function	GTT_TS_TOR_LOAD_STR
	GTT Relevant	X

Control Tables	Main Obj. Table	TOR_ROOT
Global Track & Trace Relevance	GTT Rel. Method	Check Function (Function Module)
	GTT Rel. Function	GTT_TS_TOR_LSTR

Segment	Field	Value
Header	Bus. Proc. Type	TMS_TOR
	Event Type	GTT_EVT_TOR_POD
	Description	FO/FB/FU Proof of Delivery Event
	Text	POD Event
General Data	Seq. No.	0
	HCI for GTT	GTTAPPLOGS
	Event Function	GTT_TS_TOR_POD
	GTT Relevant	X
Control Tables	Main Obj. Table	TOR_ROOT
Global Track & Trace Relevance	GTT Rel. Method	Check Function (Function Module)
	GTT Rel. Function	GTT_TS_TOR_POD

Segment	Field	Value
Header	Bus. Proc. Type	TMS_TOR
	Event Type	GTT_EVT_TOR_POPU
	Description	FO/FB/FU Proof of Pickup Event
	Text	POPU Event
General Data	Seq. No.	0
	HCI for GTT	GTTAPPLOGS
	Event Function	GTT_TS_TOR_POPU
	GTT Relevant	X
Control Tables	Main Obj. Table	TOR_ROOT
Global Track & Trace Relevance	GTT Rel. Method	Check Function (Function Module)
	GTT Rel. Function	GTT_TS_TOR_POPU

Segment	Field	Value
Header	Bus. Proc. Type	TMS_TOR
	Event Type	GTT_EVT_TOR_UNLEND
	Description	FO/FB/FU Unloading End Event
	Text	Unloading End Event
General Data	Seq. No.	0
	HCI for GTT	GTTAPPLOGS
	Event Function	GTT_TS_TOR_UNLD_END
	GTT Relevant	X
Control Tables	Main Obj. Table	TOR_ROOT
Global Track & Trace Relevance	GTT Rel. Method	Check Function (Function Module)
	GTT Rel. Function	GTT_TS_TOR_UEND

4.18 Road Freight Order/Ocean Booking/Air Booking Extractor Configuration

4.18.1 Define Application Object Types for Road Freight Order/Ocean booking/Air Booking Header

Segment	Field	Value
Header	Bus. Proc. Type	TMS_TOR
	Appl. Obj. Type	GTT_SHP_HD
	Description	Extract FO/FB information to SAP Business Network Global Track and Trace
	Text	FO/FB Header
General Data	Seq. No.	10
	CI for GTT	GTTAPPLOGS
	GTT Relevant	X
Control Tables	Main Obj. Table	TOR_ROOT
	Del. Obj. Table	TOR_ROOT
Object Identification	AOID Method	Determine by Function
Object Identification – Application Object ID Source – Determine AOID By Function	AOID Function	GTT_STS_AOID_TOR
Global Track & Trace Relevance	GTT Rel. Method	Check Function (Function Module)
	GTT Rel. Function	GTT_TS_FO_HD_REL
Parameter Setup	Trk.ID Method	Determine by Function
	Tr. Function	GTT_TS_FO_HD_TID
	Ctrl Data Function	GTT_TS_FO_HD_OTE
	Planned Event Function	GTT_TS_FO_HD_EE

4.18.2 Define Event Types for Road Freight Order/Ocean Booking/Air Booking Header

Segment	Field	Value
Header	Bus. Proc. Type	TMS_TOR
	Event Type	GTT_EVT_TOR_ARRIVE
	Description	FO/FB/FU Arrival Event
	Text	Arrival Event
General Data	Seq. No.	0
	HCI for GTT	GTTAPPLOGS
	Event Function	GTT_TS_TOR_ARRIVAL
	GTT Relevant	X
Control Tables	Main Obj. Table	TOR_ROOT

Global Track & Trace Relevance	GTT Rel. Method	Check Function (Function Module)
	GTT Rel. Function	GTT_TS_TOR_ARRIVE

Segment	Field	Value
Header	Bus. Proc. Type	TMS_TOR
	Event Type	GTT_EVT_TOR_COUPLE
	Description	FO/FB/FU Coupling Event
	Text	Coupling Event
General Data	Seq. No.	0
	HCI for GTT	GTTAPPLOGS
	Event Function	GTT_TS_TOR_COUPLING
	GTT Relevant	X
Control Tables	Main Obj. Table	TOR_ROOT
Global Track & Trace Relevance	GTT Rel. Method	Check Function (Function Module)
	GTT Rel. Function	GTT_TS_TOR_COUP

Segment	Field	Value
Header	Bus. Proc. Type	TMS_TOR
	Event Type	GTT_EVT_TOR_DECOUPLE
	Description	FO/FB/FU Decoupling Event
	Text	Decoupling Event
General Data	Seq. No.	0
	HCI for GTT	GTTAPPLOGS
	Event Function	GTT_TS_TOR_DECOUPL
	GTT Relevant	X
Control Tables	Main Obj. Table	TOR_ROOT
Global Track & Trace Relevance	GTT Rel. Method	Check Function (Function Module)
	GTT Rel. Function	GTT_TS_TOR_DECP

Segment	Field	Value
Header	Bus. Proc. Type	TMS_TOR
	Event Type	GTT_EVT_TOR_UNLSTART
	Description	FO/FB/FU Unloading Start Event
	Text	Unloading Start
General Data	Seq. No.	0
	HCI for GTT	GTTAPPLOGS
	Event Function	GTT_TS_TOR_UNLD_STR
	GTT Relevant	X

Control Tables	Main Obj. Table	TOR_ROOT
Global Track & Trace Relevance	GTT Rel. Method	Check Function (Function Module)
	GTT Rel. Function	GTT_TS_TOR_USTR

Segment	Field	Value
Header	Bus. Proc. Type	TMS_TOR
	Event Type	GTT_EVT_TOR_DELAY
	Description	FO/FB/FU Delay Event
	Text	Delay Event
General Data	Seq. No.	0
	HCI for GTT	GTAPPLOGS
	Event Function	GTT_TS_TOR_DELAY
	GTT Relevant	X
Control Tables	Main Obj. Table	TOR_ROOT
Global Track & Trace Relevance	GTT Rel. Method	Check Function (Function Module)
	GTT Rel. Function	GTT_TS_TOR_DELAY

Segment	Field	Value
Header	Bus. Proc. Type	TMS_TOR
	Event Type	GTT_EVT_TOR_DEPART
	Description	FO/FB/FU Departure Event
	Text	Departure Event
General Data	Seq. No.	0
	HCI for GTT	GTAPPLOGS
	Event Function	GTT_TS_TOR_DEPART
	GTT Relevant	X
Control Tables	Main Obj. Table	TOR_ROOT
Global Track & Trace Relevance	GTT Rel. Method	Check Function (Function Module)
	GTT Rel. Function	GTT_TS_TOR_DEPART

Segment	Field	Value
Header	Bus. Proc. Type	TMS_TOR
	Event Type	GTT_EVT_TOR_LOADEND
	Description	FO/FB/FU Loading End Event
	Text	Loading End Event
General Data	Seq. No.	0
	HCI for GTT	GTAPPLOGS

	Event Function	GTT_TS_TOR_LOAD_END
	GTT Relevant	X
Control Tables	Main Obj. Table	TOR_ROOT
Global Track & Trace Relevance	GTT Rel. Method	Check Function (Function Module)
	GTT Rel. Function	GTT_TS_TOR_LEND

Segment	Field	Value
Header	Bus. Proc. Type	TMS_TOR
	Event Type	GTT_EVT_TOR_LOADSTRT
	Description	FO/FB/FU Loading Start Event
	Text	Loading Start Event
General Data	Seq. No.	0
	HCI for GTT	GTTAPPLOGS
	Event Function	GTT_TS_TOR_LOAD_STR
	GTT Relevant	X
Control Tables	Main Obj. Table	TOR_ROOT
Global Track & Trace Relevance	GTT Rel. Method	Check Function (Function Module)
	GTT Rel. Function	GTT_TS_TOR_LSTR

Segment	Field	Value
Header	Bus. Proc. Type	TMS_TOR
	Event Type	GTT_EVT_TOR_POD
	Description	FO/FB/FU Proof of Delivery Event
	Text	POD Event
General Data	Seq. No.	0
	HCI for GTT	GTTAPPLOGS
	Event Function	GTT_TS_TOR_POD
	GTT Relevant	X
Control Tables	Main Obj. Table	TOR_ROOT
Global Track & Trace Relevance	GTT Rel. Method	Check Function (Function Module)
	GTT Rel. Function	GTT_TS_TOR_POD

Segment	Field	Value
Header	Bus. Proc. Type	TMS_TOR
	Event Type	GTT_EVT_TOR_POPU
	Description	FO/FB/FU Proof of Pickup Event
	Text	POPU Event

General Data	Seq. No.	0
	HCI for GTT	GTTAPPLOGS
	Event Function	GTT_TS_TOR_POPU
	GTT Relevant	X
Control Tables	Main Obj. Table	TOR_ROOT
Global Track & Trace Relevance	GTT Rel. Method	Check Function (Function Module)
	GTT Rel. Function	GTT_TS_TOR_POPU

Segment	Field	Value
Header	Bus. Proc. Type	TMS_TOR
	Event Type	GTT_EVT_TOR_UNLEND
	Description	FO/FB/FU Unloading End Event
	Text	Unloading End Event
General Data	Seq. No.	0
	HCI for GTT	GTTAPPLOGS
	Event Function	GTT_TS_TOR_UNLD_END
	GTT Relevant	X
Control Tables	Main Obj. Table	TOR_ROOT
Global Track & Trace Relevance	GTT Rel. Method	Check Function (Function Module)
	GTT Rel. Function	GTT_TS_TOR_UEND

5. CONFIGURATION AND CODING GUIDE – ADVANCED

5.1 Available Contexts for the Extractors' Modules

5.1.1 In Display IMG page, click Integration with Other SAP Components ->

Interface to Global Track and Trace -> Define Application Interface.

Choose activity Define Business Process Types

5.1.2 Select the Business Process Types to find all the context tables and their structure info.

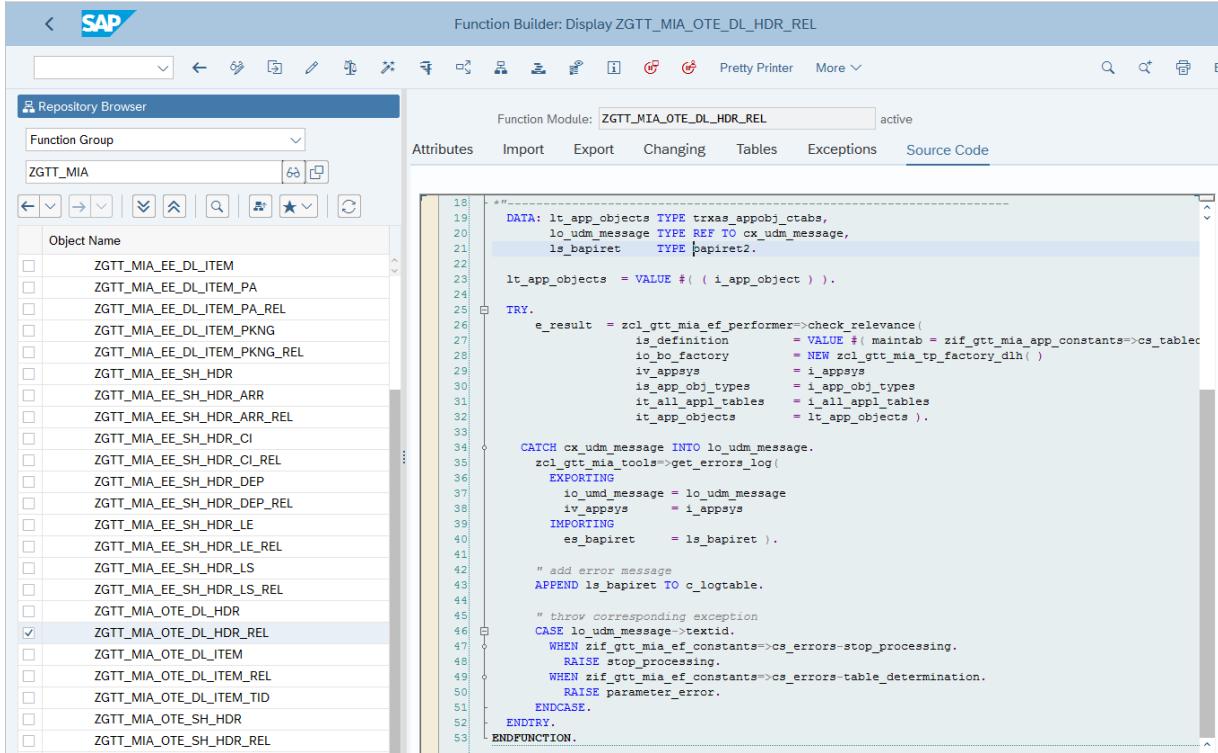
Define Business Process Types		
Business Process Type	Update Mde	Description
EPL_EQUIPMT	Update Task (V1)	Equipment in SAP R/3 Enterprise
EPL_INSPLOT	Update Task (V1)	Inspection Lot in SAP R/3 Enterprise
EPL_NOTIF	Update Task (V1)	Notification in SAP R/3 Enterprise
ESC_DELIV	Update Task (V1)	Delivery in SAP R/3 Enterprise
ESC_FI_CLEARING	Update Task (V1)	FI Clearing in SAP R/3 Enterprise
ESC_MATDOC	Update Task (V1)	Material Document in SAP R/3 Enterprise
ESC_MM_INVOICE	Update Task (V1)	MM Invoice in SAP R/3 Enterprise
ESC_PURORD	Update Task (V1)	Purchase Order in SAP R/3 Enterprise
ESC_PURORD_FASHION	Update Task (V1)	Purchase Order (Seasonal Procurement) in SAP R/3 Enterprise 2.0
ESC_PURREQ	Update Task (V1)	Purchase Requisition in SAP R/3 Enterprise
ESC_SD_INVOICE	Update Task (V1)	SD Invoice in SAP R/3 Enterprise
ESC_SHIPMT	Update Task (V1)	Shipment (SAP R/3 Enterprise)
ESC_SORDER	Update Task (V1)	Sales Order in SAP R/3 Enterprise
ESC_WOGMVT	Update Task (V1)	Workorder Goods Movements (Production,Service,Maintenance) in SAP R/3 Enterprise
ESC_WRKORD	Update Task (V1)	Workorder Confirmation (Production, Service, Maintenance) in SAP R/3 Enterprise
OCB10_ORDER	Update Task (V1)	Workorder (Production, Service, Maintenance) in SAP R/3 Enterprise
SNC_MSGIN	Dialog Update	Booking Order in Ocean Carrier Booking Process
		SNC Inbound messages

5.2 Coding Tips in the GTT Relevance Function Modules

To customize the GTT relevance function modules, key points are as follows:

1. Make sure that the Main / Master tables follow the configuration of corresponding AOT or Event Type.
2. Add customization logics to determine the output parameters E_RESULT.

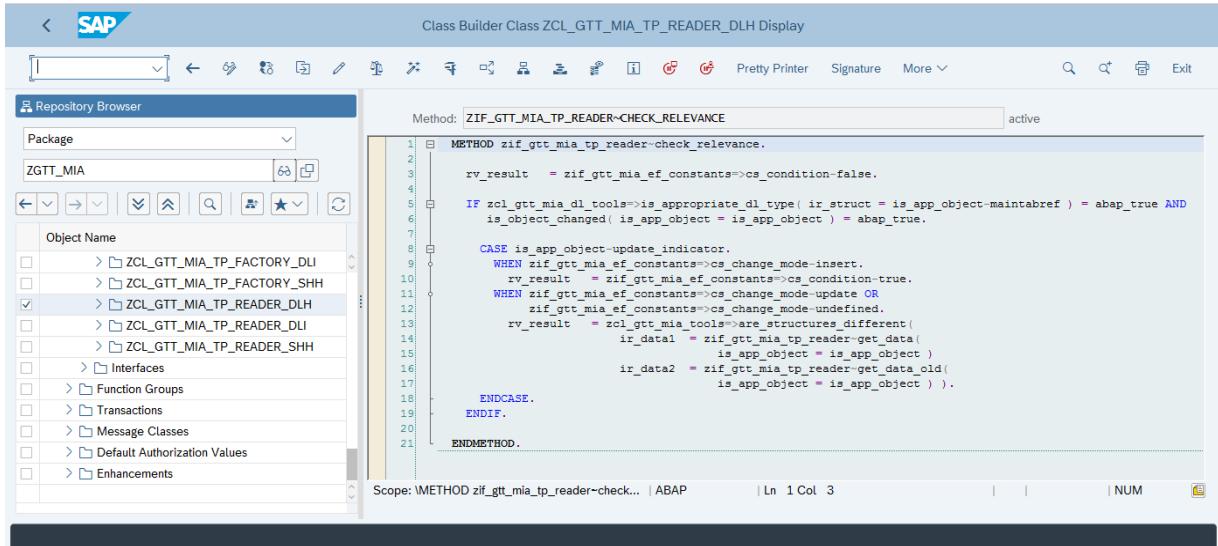
See the sample code of function “ZGTT_MIA_OTE_DL_HDR_REL”.



The screenshot shows the SAP Function Builder interface with the function module ZGTT_MIA_OTE_DL_HDR_REL selected. The source code tab is active, displaying the following ABAP code:

```
18  DATA: lt_app_objects TYPE txmas_apppobj_ctabs,
19    lo_udm_message TYPE REF TO cx_udm_message,
20    ls_bapiret TYPE pappiret.
21
22  lt_app_objects = VALUE #( ( i_app_object ) ).
23
24  TRY.
25    e_result = zcl_gtt_mia_ef_performer->check_relevance(
26      is_definition = VALUE #( maintab = zif_gtt_mia_app_constants->cs_tabledef ),
27      io_bo_factory = NEW zcl_gtt_mia_tp_factory_dlh( )
28      iv_apps = i_apps
29      iv_apps = i_apps
30      is_app_obj_types = i_app_obj_types
31      it_all_appl_tables = i_all_appl_tables
32      it_app_objects = it_app_objects ).
33
34  CATCH cx_udm_message INTO lo_udm_message.
35    zcl_gtt_mia_tools->get_errors_log(
36      EXPORTING
37        io_udm_message = lo_udm_message
38        iv_apps = i_apps
39      IMPORTING
40        es_bapiret = ls_bapiret ).
41
42  " add error message
43  APPEND ls_bapiret TO c_logtable.
44
45  " throw corresponding exception
46  CASE lo_udm_message->textid.
47    WHEN zif_gtt_mia_ef_constants->cs_errors-stop_processing.
48      RAISE stop_processing.
49    WHEN zif_gtt_mia_ef_constants->cs_errors-table_determination.
50      RAISE parameter_error.
51  ENDCASE.
52  ENDTRY.
53  ENDFUNCTION.
```

The function module uses class ZCL_GTT_MIA_TP_READER_DLH to do the check.



The screenshot shows the SAP Class Builder interface with the method ZIF_GTT_MIA_TP_READER-CHECK_RELEVANCE selected. The source code tab is active, displaying the following ABAP code:

```
1  MBETHOD zif_gtt_mia_tp_reader-check_relevance.
2
3  rv_result = zif_gtt_mia_ef_constants->cs_condition-false.
4
5  IF zcl_gtt_mia_dl_tools->is_appropriate_dt_type( ir_struct = is_app_object-maintabref ) = abap_true AND
6    is_object_changed( is_app_object = is_app_object ) = abap_true.
7
8  CASE is_app_object-update_indicator.
9    WHEN zif_gtt_mia_ef_constants->cs_change_mode-insert.
10      rv_result = zif_gtt_mia_ef_constants->cs_condition=true.
11    WHEN zif_gtt_mia_ef_constants->cs_change_mode-update OR
12      zif_gtt_mia_ef_constants->cs_change_mode-undefined.
13      rv_result = zcl_gtt_mia_tools->are_structures_different(
14        ir_data1 = zif_gtt_mia_tp_reader-get_data(
15          is_app_object = is_app_object )
16        ir_data2 = zif_gtt_mia_tp_reader-get_data_old(
17          is_app_object = is_app_object ) ).
18
19  ENDCASE.
20  ENDIF.
21
22 ENDMETHOD.
```

5.3 Coding Tips in the Tracking ID Function Modules

To customize the Tracking ID function modules, key points are as follows:

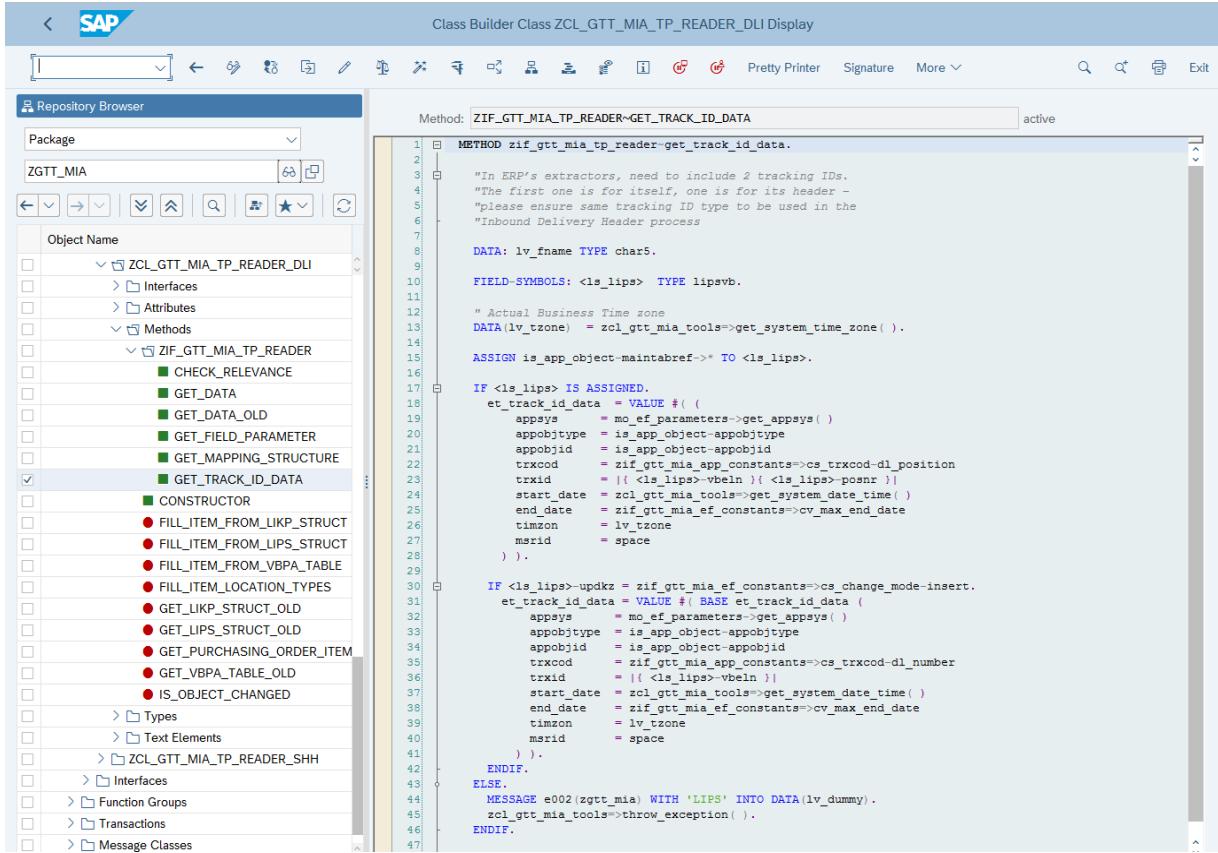
1. Make sure that the Main / Master tables follow the configuration of corresponding AOT.
2. Add customization logics to fill in the output table E_TRACKIDDATA.
3. The Tracking ID Type needs to be the same as the definition in the process type of model in the *Manage Models* app.
4. GTT V2 accepts delta transport for tracking IDs, which means only the newly created / changed / deleted tracking IDs shall be filled in, while the ones without changes need to be ignored in the logic.
5. The tracking ID for its own process type needs to be filled in for each process update.
6. In case of tracking ID deletion, the field ACTION shall be filled in with 'D'.

See sample code of function: ZGTT_MIA_OTE_DL_ITEM_TID.

The screenshot shows the SAP Function Builder interface with the title "Function Builder: Display ZGTT_MIA_OTE_DL_ITEM_TID". The left pane is the "Repository Browser" showing various function groups and objects under "ZGTT_MIA". The right pane displays the ABAP code for the selected function module. The code handles tracking ID data retrieval and error handling.

```
19 DATA: lo_udm_message TYPE REF TO cx_udm_message,
20      ls_bapiret TYPE bapiret2.
21
22 TRY.
23   zcl_gtt_mia_ef_performer->get_track_id_data(
24     EXPORTING
25       is_definition = VALUE #(
26         maintab = zif_gtt_mia_app_constants->cs_tabledef_dl_item_new
27         mastertab = zif_gtt_mia_app_constants->cs_tabledef_dl_header_new )
28     io_bo_factory = NEW zcl_gtt_mia_tp_factory_dli( )
29     iv_appsys = i_appsys
30     is_app_obj_types = i_app_obj_types
31     it_all_appl_tables = i_all_appl_tables
32     it_app_type_cntl_tabs = i_app_type_cntl_tabs
33     it_app_objects = i_app_objects
34   IMPORTING
35     et_track_id_data = e_trackiddata[]
36   ).
37
38 CATCH cx_udm_message INTO lo_udm_message.
39   zcl_grt_mia_tools->get_errors_log(
40     EXPORTING
41       io_udm_message = lo_udm_message
42       iv_appsys = i_appsys
43     IMPORTING
44       es_bapiret = ls_bapiret .
45
46   " add error message
47   APPEND ls_bapiret TO e_logtable.
48
49   " throw corresponding exception
50   CASE lo_udm_message->textid.
51     WHEN zif_gtt_mia_ef_constants->cs_errors-stop_processing.
52       RAISE stop_processing.
53     WHEN zif_gtt_mia_ef_constants->cs_errors-table_determination.
54       RAISE table_determination_error.
55   ENDCASE.
56 ENDTRY.
```

The corresponding Track ID data is filled by ZCL_GTT_MIA_TP_READER_DLI class:



The screenshot shows the SAP Class Builder interface with the title "Class Builder Class ZCL_GTT_MIA_TP_READER_DLI Display". The left pane is the "Repository Browser" showing a package structure under "ZGTT_MIA". The right pane displays the source code for the "GET_TRACK_ID_DATA" method of the "ZCL_GTT_MIA_TP_READER_DLI" class.

```

1 METHOD zif_gtt_mia_tp_reader->get_track_id_data.
2
3   "In ERF's extractors, need to include 2 tracking IDs.
4   "The first one is for itself, one is for its header -
5   "please ensure same tracking ID type to be used in the
6   "Inbound Delivery Header process
7
8   DATA: lv_fname TYPE char5.
9
10  FIELD-SYMBOLS: <ls_lips> TYPE lipsvb.
11
12  " Actual Business Time zone
13  DATA(lv_tzone) = zcl_gtt_mia_tools->get_system_time_zone( ).
14
15  ASSIGN is_app_object-maintabref->* TO <ls_lips>.
16
17  IF <ls_lips> IS ASSIGNED.
18    et_track_id_data = VALUE #((
19      appsys      = mo_ef_parameters->get_appsyst( )
20      appobjtype = is_app_object-appobjtype
21      appobjid   = is_app_object-appobjid
22      trxcod     = zif_gtt_mia_app_constants->cs_trxcod-dl_position
23      trxid      = |( <ls_lips>-vbeln )( <ls_lips>-posnr )|
24      start_date = zcl_gtt_mia_tools->get_system_date_time( )
25      end_date   = zif_gtt_mia_ef_constants->cv_max_end_date
26      timzon    = lv_tzone
27      merid     = space
28    )).
29
30  IF <ls_lips>-updkz = zif_gtt_mia_ef_constants->cs_change_mode-insert.
31    et_track_id_data = VALUE #! BASE et_track_id_data (
32      appsys      = mo_ef_parameters->get_appsyst( )
33      appobjtype = is_app_object-appobjtype
34      appobjid   = is_app_object-appobjid
35      trxcod     = zif_gtt_mia_app_constants->cs_trxcod-dl_number
36      trxid      = |( <ls_lips>-vbeln )|
37      start_date = zcl_gtt_mia_tools->get_system_date_time( )
38      end_date   = zif_gtt_mia_ef_constants->cv_max_end_date
39      timzon    = lv_tzone
40      merid     = space
41    )).
42  ENDIF.
43 ELSE.
44   MESSAGE e002(zgtt_mia) WITH 'LIPS' INTO DATA(lv_dummy).
45   zcl_gtt_mia_tools->throw_exception( ).
46 ENDIF.
47

```

5.4 Coding Tips in the Control Parameter Function Modules

To customize the Control Parameter function modules, key points are as follows:

1. Make sure that the Main / Master tables follow the configuration of corresponding AOT.
2. Add customization logics to fill in the output table E_CONTROL_DATA.
3. GTT V2 asks for full transport for all the control parameters, which means all the fields needs to be extracted in all cases, no matter whether their values have been changed or not.
4. To fill in the composition (table) fields defined in the *Manage Models* app, use the parameter field PARAMINDEX to specify the line number. If the field is empty, GTT regards it as a simple flat field.
5. To clear a composition, fill in the key field using invalid values, for which the key attribute has been checked in the *Manage Models* app. It's not recommended to fill in a code list type field to clear a composition even if it's a key field.
6. The fields with fixed names 'ACTUAL_BUSINESS_DATETIME' and 'ACTUAL_BUSINESS_TIMEZONE' are mandatory fields to be transported for event handling sequencing in GTT Version 2.
7. The fields with fixed names 'ACTUAL_TECHNICAL_TIMEZONE' and 'ACTUAL_TECHNICAL_DATETIME' are optional and recommended for fixing IDOC sequencing issue (after object creation in S/4 actual event might be processed before object creation in GTT via TP request, which leads to an error)
8. In the *Manage Models* app, click the *IDOC Integration* tab to map the parameter names and model field names.
9. For DATE or DATETIME fields, when the source value is initial like '00000000' '0000000000000000', then only enable PARAMNAME and PARAMINDEX in the extractor code, and do not enable VALUE for IDOC sending.
10. For amount field which has reference currency, ensure to call BAPI 'BAPI_CURRENCY_CONV_TO_EXTERNAL' using the reference currency to make the amount tracked correctly by GTT Version 2. The BAPI will output the conversion result in 4 decimals as fixed, which needs additional rounding in the extractor if the corresponding field defined in the tracking model is less than 4 decimals.
11. In the shipment extractor, add the prefix LBN# into the fields SERVICE AGENT LBN ID for integration with Visibility Providers.

See sample code of function: ZGTT_MIA_OTE_DL_ITEM

The screenshot shows the SAP Function Builder interface with the title "Function Builder: Display ZGTT_MIA_OTE_DL_ITEM". The "Source Code" tab is selected. The code is as follows:

```

19 DATA: lo_udm_message TYPE REF TO cx_udm_message,
20      ls_bapiret      TYPE bapiret2.
21
22 TRY.
23   zcl_gtt_mia_ef_performer->get_control_data(
24     EXPORTING
25       is_definition      = VALUE #( 
26         maintab          = zif_gtt_mia_app_constants->cs_tabledef-dl_item_new
27         masterstab        = zif_gtt_mia_app_constants->cs_tabledef-dl_header_new )
28
29   io_bo_factory
30   iv_appsays
31   is_app_obj_types
32   it_all_appl_tables
33   it_app_type_cntl_tabs
34   it_app_objects
35
36 CHANGING
37   ct_control_data      = e_control_data[] .
38
39 CATCH cx_udm_message INTO lo_udm_message.
40   zcl_gtt_mia_tools->get_errors_log(
41     EXPORTING
42       io_udm_message = lo_udm_message
43       iv_appsays    = i_appsays
44     IMPORTING
45       es_bapiret    = ls_bapiret .
46
47   " add error message
48   APPEND ls_bapiret TO e_logtable.
49
50   " throw corresponding exception
51 CASE lo_udm_message->textid.
52   WHEN zif_gtt_mia_ef_constants->cs_errors-stop_processing.
53     RAISE stop_processing.
54   WHEN zif_gtt_mia_ef_constants->cs_errors-table_determination.
55     RAISE table_determination_error.
56 ENDCASE.
57 ENDTRY.
58
59 ENDFUNCTION.

```

Control data is prepared by ZCL_GTT_MIA_TP_READER_DLI class:

The screenshot shows the SAP Class Builder interface with the title "Class Builder Class ZCL_GTT_MIA_TP_READER_DLI Display". The "Method: ZIF_GTT_TP_READER-GET_DATA" tab is selected. The code is as follows:

```

1 METHOD zif_gtt_tp_reader-get_data.
2
3   DATA: ls_item          TYPE ts_dl_item,
4        ls_item_with_fu  TYPE ts_dl_item_with_fu.
5   DATA: lv_count          TYPE i VALUE 0.
6   FIELD-SYMBOLS: <ls_lips>  TYPE lipsvbl.
7
8   ASSIGN is_app_object-maintabref->* TO <ls_lips>.
9   IF <ls_lips> IS ASSIGNED.
10    change_mode = <ls_lips>-updckz. " Save change mode to determinate cs_mapping!
11    ENDIF.
12
13   fill_item_from_likp_struct(
14     EXPORTING
15       ir_likp      = is_app_object-mastertabref
16     CHANGING
17       cs_dl_item  = ls_item ).
18
19   fill_item_from_lips_struct(
20     EXPORTING
21       ir_lips      = is_app_object-maintabref
22     CHANGING
23       cs_dl_item  = ls_item ).
24
25   fill_item_from_vbpa_table(
26     EXPORTING
27       ir_vbpa      = mo_ef_parameters->get_appl_table(
28         iv_tabledef = zif_gtt_mia_app_constants->cs_tabledef-dl_partners_new )
29       iv_vbeln    = |{ ls_item_vbeln ALPHA = IN }
30       iv_posnr    = cv_posnr_empty
31     CHANGING
32       cs_dl_item  = ls_item ).

```

Fields mapping is set up in the *Manage Models* app in the *IDOC Integration* section:

The screenshot shows the SAP Model Details interface for a model named 'gttft1' (Active). The 'IDOC Integration' tab is selected. The 'Tracked Process' dropdown is set to 'InboundDelivery'. The 'Integration Switch' is turned 'ON'. The 'Tracked Process Mapping' section shows 'ERP Object Type: Others' and 'Application Object Type: GTT_IDLV_HD'. Below this, the 'Tracked Process / Events (2)' table lists two entries: 'Tracked Process' (InboundDeliveryEvent) and 'Event Types' (GoodsReceipt). The 'Standard Model Fields' table maps fields from the tracked process to IDOC segments and fields.

Field	IDOC Segment	IDOC Field
inboundDeliveryNo	E1EHPCP	YN_DL_DELETEVERY
supplierId	E1EHPCP	YN_DL_VENDOR_ID
supplierLocationType	E1EHPCP	YN_DL_VENDOR_LOC_TYPE
plannedDeliveryDate	E1EHPCP	YN_DL_PLANNED_DLV_DATE
documentDate	E1EHPCP	YN_DL_DOCUMENT_DATE
totalWeight	E1EHPCP	YN_DL_TOTAL_WEIGHT
netWeight	E1EHPCP	YN_DL_NET_WEIGHT
weightUoM	E1EHPCP	YN_DL_WEIGHT_UNITS
volume	E1EHPCP	YN_DL_VOLUME
volumeUoM	E1EHPCP	YN_DL_VOLUME_UNITS

5.5 Coding Tips in the Planned Event Function Modules

To customize the Planned Event function modules, key points are as follows:

1. Make sure that the Main / Master tables follow the configuration of corresponding AOT.
2. Add customization logics to fill in the output table E_EXPEVENTDATA.
3. By default, except that no changes are made on the model configuration, GTT Version 2 will ask for full transport for all the planned events, which means that all the events needs to be extracted in all cases, no matter whether their values have been changed. If nothing is transported, the planned events will be removed in GTT Version 2.
4. The field MILESTONE is mandatory to be transported.
5. The field EVT_EXP_DATETIME is optional, but needs to be filled in with relevant time zone EVT_EXP_TZONE together if it needs to be transported.
6. The field LOC_ID1 is optional, but needs to be filled in with relevant location type LOCTYPE together if it needs to be transported. The values for field LOCTYPE are limited by the Manage Locations app in GTT Version 2.
7. The field LOCID2 is mandatory to specify event match key of each stop (combination of the Shipment Number and Stop ID) for shipment tracking
8. The field MILESTONENUM is recommended to specify in order to implement custom sorting logic instead of sorting by planned business datetime.

See sample code of function: ZGTT_MIA_EE_DL_ITEM:

SAP

Function Builder: Display ZGTT_MIA_EE_DL_ITEM

Repository Browser

Function Group: ZGTT_MIA

Object Name: ZGTT_MIA_EE_DL_ITEM

Function Module: ZGTT_MIA_EE_DL_ITEM active

Attributes Import Export Changing Tables Exceptions Source Code

```

21 DATA: lo_udm_message TYPE REF TO cx_udm_message,
22     ls_bapiret TYPE bapiret2.
23
24 CLEAR e_logtable[].
25
26 TRY.
27     zcl_gtt_mia_ef_performer->get_planned_events(
28         EXPORTING
29             is_definition      = VALUE #(          maintab = zif_gtt_mia_app_constants->cs_tabledef-dl_item_new
30                                         masterstab = zif_gtt_mia_app_constants->cs_tabledef-dl_header_new )
31             io_factory        = NEW zcl_gtt_mia_tp_factory_dli( )
32             iv_applsys       = i_applsys
33             is_app_obj_types = i_app_obj_types
34             it_all_appl_tables = i_all_appl_tables
35             it_app_type_ctrl_tabs = i_app_type_ctrl_tabs
36             it_app_objects    = i_app_objects
37
38         CHANGING
39             ct_expeventdata   = e_expeventdata[]
40             ct_measrmntdata  = e_measrmntdata[]
41             ct_infodata       = e_infodata[] ).
42
43     CATCH cx_udm_message INTO lo_udm_message.
44     zcl_gtt_mia_tools->get_errors_log(
45         EXPORTING
46             io_udm_message = lo_udm_message
47             iv_applsys     = i_applsys
48         IMPORTING
49             es_bapiret    = ls_bapiret .
50
51     " add error message
52     APPEND ls_bapiret TO e_logtable.
53
54     " throw corresponding exception
55     CASE lo_udm_message->textid.
56         WHEN zif_gtt_mia_ef_constants->cs_errors-stop_processing.
57             RAISE stop_processing.
58         WHEN zif_gtt_mia_ef_constants->cs_errors-table_determination.
59             RAISE table_determination_error.
60         ENDCASE.
61     ENDTRY.
62 ENDFUNCTION.

```

Main logic of Inbound Delivery Item is implemented in class ZCL_GTT_MIA_PE_FILLER_DLH:

The screenshot shows the SAP Class Builder interface with the title "Class Builder Class ZCL_GTT_MIA_PE_FILLER_DLH Display". The left pane is a "Repository Browser" showing a package structure under "ZGTT_MIA". The right pane displays the source code for the method "ZIF_GTT_PE_FILLER~GET_PLANNED_EVENTS". The code is as follows:

```
1 METHOD zif_gtt_pe_filler-get_planned_events.
2
3 DATA: lr_lips_data TYPE REF TO data.
4
5 DATA(lo_relevance) = NEW zcl_gtt_mia_event_rel_dl_hd(
6   io_ef_parameters = mo_ef_parameters
7   is_app_objects = is_app_objects .
8
9   " initiate relevance flags
10  lo_relevance->initiate( ).
11
12  " store calculated relevance flags
13  lo_relevance->update( ).
14
15  lr_lips_data = mo_ef_parameters->get_appl_table(
16    iv_tabledef = zif_gtt_mia_app_constants->cs_tabledef-dl_item_new .
17
18  add_gr_event_with_matchkey(
19    EXPORTING
20      is_app_objects = is_app_objects
21      ir_lips_data = lr_lips_data
22    CHANGING
23      ct_expeventdata = ct_expeventdata
24  .
25
26  add_planned_delivery_event(
27    EXPORTING
28      is_app_objects = is_app_objects
29      io_relevance = lo_relevance
30      iv_milestonenum = zcl_gtt_tools->get_next_sequence_id(
31        it_expeventdata = ct_expeventdata
32    CHANGING
33      ct_expeventdata = ct_expeventdata .
34
```

Event parameters mapping is set up in the *IDOC Integration* tab of the *Manage Models* app:

The screenshot shows the "Model Details" screen in the SAP Manage Models app. The model is named "gttft1" (Active). The "IDOC Integration" tab is selected and highlighted with a red box. The "Tracked Process" dropdown is set to "InboundDelivery". The "Integration Switch" is turned "ON".

Tracked Process Mapping

ERP Object Type:	Others	Application Object Type:	GTT_IDLV_HD		
Tracked Process / Events (2)		Standard Model Fields			
Name	IDOC	Event Code	Field	IDOC Segment	IDOC Field
Tracked Process			reversal	E1EVMPAR	REVERSAL_INDICATOR
InboundDeliveryEvent	E1EHPAO				
Event Types					
GoodsReceipt	E1EVMHDR02	GOODS_RECEIPT			

5.6 Coding Tips in the Event Data Function Modules

To customize the Event Data function modules, key points are as follows:

1. Make sure that the Main / Master tables follow the configuration of corresponding Event Type.
2. Add customization logic to fill in the output table CT_TRACKINGHEADER, CT_TRACKLOCATION, C_EVENTID_MAP.
3. If the event has user-defined fields in the *Manage Models* app, fill in the table CT_TRACKPARAMETERS.
4. Add two technical parameters with fixed names 'ACTUAL_TECHNICAL_TIMEZONE' and 'ACTUAL_TECHNICAL_DATETIME' which are recommended for fixing IDOC sequencing issue (after object creation in S/4 actual event might be processed before object creation in GTT via TP request, which leads to an error)
5. If the event has reference table information, fill in the table CT_TRACKREFERENCES.
6. The field CT_TRACKINGHEADER-SRCCOD, SRCID, SRCTX is used for event reason transport.
7. In the *Manage Models* app, click the *IDOC Integration* tab to map the user-defined parameter names and model field names.

See sample code of function: ZGTT_MIA_EE_DL_ITEM_PA.

The screenshot shows the SAP Function Builder interface with the title "Function Builder: Display ZGTT_MIA_EE_DL_ITEM_PA". The left pane is the "Repository Browser" showing various function modules under "ZGTT_MIA". The right pane displays the source code for the selected function module. The code is written in ABAP and includes sections for DATA, TRY, CHANGING, CATCH, and ENDTRY. It involves objects like io_udm_message, ls_bapiret, zcl_gtt_mia_se_performer, and various tables and constants related to tracking and events.

```
DATA: lo_udm_message TYPE REF TO cx_udm_message,
      ls_bapiret      TYPE bapiret2.

TRY.
  zcl_gtt_mia_se_performer->get_event_data(
    EXPORTING
      is_definition      = VALUE #( 
        maintab   = zif_gtt_mia_app_constants->cs_tabledef_dl_item_new
        mastertab = zif_gtt_mia_app_constants->cs_tabledef_dl_header_new )
    IMPORTING
      io_ae_factory     = zcl_gtt_mia_ae_factory_dli_pa( )
      iv_appsyst       = i_appsyst
      is_event_type     = i_event_type
      it_all_appl_tables = i_all_appl_tables
      it_event_type_ctrl_tabs = i_event_type_ctrl_tabs
      it_events         = i_events
    CHANGING
      ct_eventid_map    = c_eventid_map[]
      ct_trackingheader = ct_trackingheader[]
      ct_tracklocation  = ct_tracklocation[]
      ct_trackpreferences = ct_trackpreferences[]
      ct_trackparameters = ct_trackparameters[])
  .
  CATCH cx_udm_message INTO lo_udm_message.
  zcl_gtt_mia_tools->get_errors_log(
    EXPORTING
      io_udm_message = lo_udm_message
      iv_appsyst     = i_appsyst
    IMPORTING
      es_bapiret     = ls_bapiret).
  " add error message
  APPEND ls_bapiret TO ct_logtable.

  " throw corresponding exception
  CASE lo_udm_message->textid.
    WHEN zif_gtt_mia_ef_constants->cs_errors_stop_processing.
      RAISE stop_processing.
    WHEN zif_gtt_mia_ef_constants->cs_errors_table_determination.
      RAISE event_data_error.
  ENDCASE.
ENDTRY.
```

Main logic of Inbound Delivery Item is implemented in class ZCL_GTT_MIA_AE_FILLER_DLI_PA:

The screenshot shows the SAP Class Builder interface with the title "Class Builder Class ZCL_GTT_MIA_AE_FILLER_DLI_PA Display". The left pane is a "Repository Browser" showing a package structure under "ZGTT_MIA". The right pane displays the source code for the method "METHOD ZIF_GTT_AE_FILLER~GET_EVENT_DATA". The code is as follows:

```

1 METHOD ZIF_GTT_AE_FILLER~GET_EVENT_DATA.
2   DATA:
3     lv_werks          TYPE werks_d,
4     lv_dlvittrcod    TYPE /saptrx/trxcod.
5
6     DATA(lv_pa_quantity) = get_put_away_quantity( ir_data = is_events-maintabref ).
7
8     lv_dlvittrcod = zif_gtt_ef_constants->cs_trxcod-dl_position.
9
10    lv_werks = zcl_gtt_tools->get_field_of_structure(
11      ir_struct_data = is_events-maintabref
12      iv_field_name = 'WERKS' ).
13
14    ct_trackingheader = VALUE #( BASE ct_trackingheader (
15      language = sy-langu
16      trxid = zcl_gtt_mia_dl_tools->get_tracking_id_dl_item(
17        ir_lips = is_events-maintabref )
18      trxcod = lv_dlvittrcod
19      evtcnt = is_events-eventid
20      evtid = zif_gtt_ef_constants->cs_milestone-dl_put_away
21      evtdat = sy-datum
22      evttim = sy-uzeit
23      evtzon = zcl_gtt_tools->get_system_time_zone( )
24    )).
25
26    ct_eventid_map = VALUE #( BASE ct_eventid_map (
27      eventid = is_events-eventid
28      evtent = is_events-eventid
29    )).
30

```

5.7 Enhancement Codes for Cross-processes Tracking

The fulfillment tracking apps support cross-processes tracking, which is used in the following cases:

1. When the inbound delivery process is updated and sent to SAP Business Network Global Track and Trace, the preceding purchase order header, its item process, and its planned events need to be updated and sent to SAP Business Network Global Track and Trace.
2. When the outbound delivery process is updated and sent to SAP Business Network Global Track and Trace, the preceding sales order header and its item process, and its planned events need to be updated and sent to SAP Business Network Global Track and Trace.
3. When the shipment process is updated and sent to SAP Business Network Global Track and Trace, the preceding inbound/outbound delivery header, and its planned events need to be updated and sent to SAP Business Network Global Track and Trace.
4. When the freight unit is updated and sent to SAP Business Network Global Track and Trace, the preceding inbound/outbound delivery header and its item process need to be updated and sent to SAP Business Network Global Track and Trace.

6 KNOWN ISSUES

6.1 Planned Event Extension Not Enabled

Currently, on the ERP side, the EXTENSION segment of process IDOC is not enabled for the planned event part, which means that you cannot make the user-defined fields for planned events in the *Manage Models* app.

The workaround is to make use of Control Parameter's segment in IDOC and make the field mapping on the tracked process level in the *Manage Models* app.

6.2 One-time locations Relevant

- When the supplier address is changed in the purchase order header, the purchase order item IDOC cannot be triggered. So, the change cannot be updated to its purchase order items in the GTT system.
- After the sales order and the outbound delivery are created, then if you change the address in the sales order, the change cannot be updated to outbound delivery in the GTT system, because no new outbound delivery IDOC is generated and sent to the GTT system. The same goes for the purchase order and the inbound delivery.
- After the outbound delivery and the LE-TRA shipment are created, then if you change the address in the outbound delivery, the change cannot be updated to the LE-TRA shipment in the GTT system, because no new LE-TRA shipment IDOC is generated and sent to the GTT system. The same goes for the inbound delivery and the LE-TRA shipment.
- If you change the address in the LE-TRA shipment, the change can be updated to the outbound/inbound delivery header through cross-process updates. But it cannot be updated to the item level.

APPENDIX ONE: DEFINE THE UNPLANNED EVENTS FOR AIR BOOKING

You need to define the following unplanned events for air booking before they can be synchronized back from GTT to TM:

- Flight Booked
- Manifest Ready
- Received from Shipper
- Consignee Notified.

To define these unplanned events, do the following:

Note: here the unplanned event "Flight Booked" is used as an example.

1. On the **Display IMG** page, click **Transportation Management-> Integration-> Tracking and Tracing of Processes and Documents-> Define Transportation Activities for Tracking and Tracing**.
2. Select **Event for Business Document** and click **New Entries**.

Event	Description	Transp Act	Stop Cat
ARRIVAL_DOOR	Arrival at Door	11	
ARRIV_DEST	Arrival at Destination	04	I S
BLOCK_FOR_EXEC	Block for Execution	99	

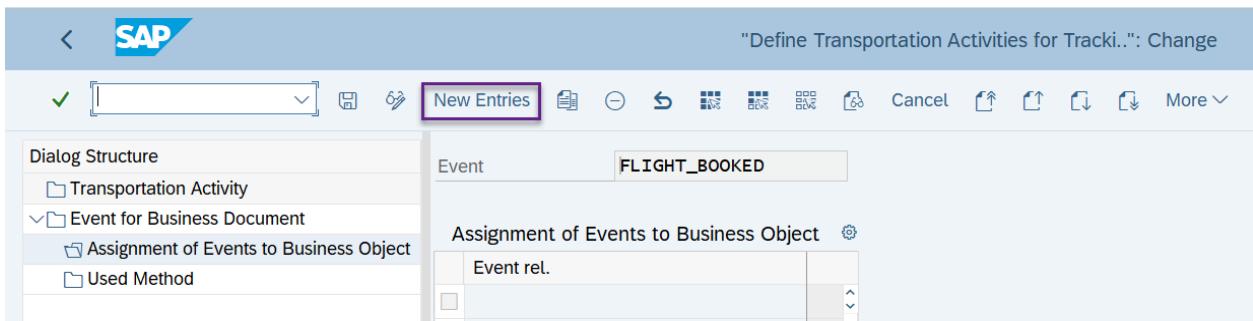
3. Input the **Event name, Description, Transp Act** and Click **Save**.

Event	Description	Transp Act	Stop Cat	Internal
FLIGHT_BOOKED	Flight Booked	99		<input checked="" type="checkbox"/>

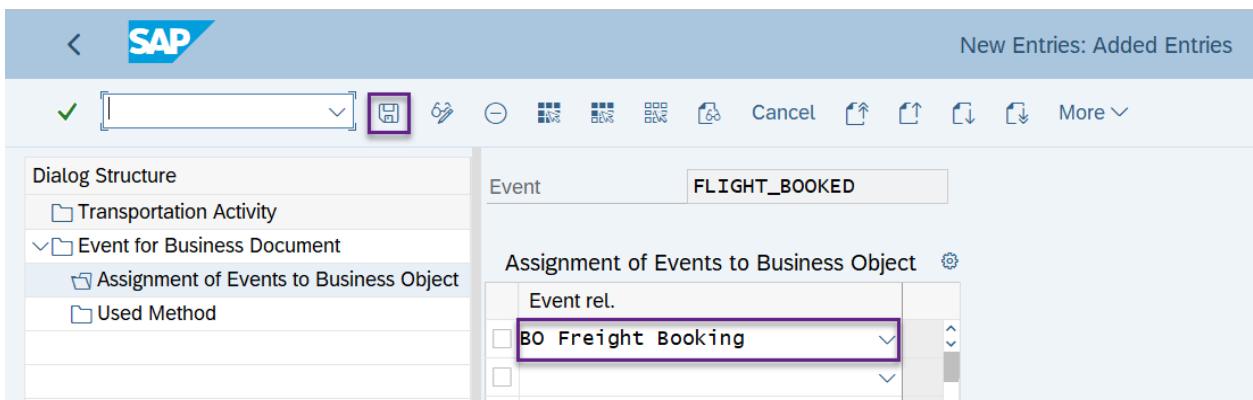
4. Select the event "FLIGHT_BOOKED", then double click **Assignment of Events to Business Object**.

Event	Description	Transp Act	Stop Cat
FLIGHT_BOOKED	Flight Booked	99	
GEN_DISCRP	General Discrepancy	99	

5. Click **New Entries**.



6. Select "BO Freight Booking" and Click **Save**.



Results:

The configuration results for these event types should be as follows:

Event	Description	Transportation Activity	Stop Category	Event relevance for category
FLIGHT_BOOKED	Flight Booked	99	blank	BO (Freight Booking)
MANIFEST_READY	Manifest Ready	99	blank	BO (Freight Booking)
RCVD_FROM_SHIPPER	Received from Shipper	99	blank	BO (Freight Booking)
CONSIGNEE_NOTIFIED	Consignee Notified	99	blank	BO (Freight Booking)

Now you can go on to configure for synchronizing these unplanned events back to TM. For configuration details, see [Synchronize Actual Events Back to TM System](#). If the events still cannot be synchronized back to TM, please check the SAP Note [3010748 - Allow unexpected events without location reference in TransportationEventBulkNotification](#).

APPENDIX TWO: FAQS

This chapter provides you with answers to questions commonly asked about the configuration.

Q1: After the configuration of GTT and SAP TM systems, we found that the freight unit / freight order / freight booking IDOC cannot be sent to SAP Business Network Global Track and Trace, how can we do the troubleshooting?

Step 1: Check the integration of SAP TM and SAP EM

The Post Processing Framework (PPF) is used to trigger the communication from SAP Transportation Management (SAP TM) to SAP Event Management (SAP EM). You need to maintain the output management adapter for this communication to work.

- a. Log onto SAP Business Client, enter T-code SPRO and then click **SAP Reference IMG** to open the **Display IMG** page. Go to node **Cross-Application Components -> Processes and Tools for Enterprise Applications -> Reusable Objects and Functions for BOPF Environment -> PPF Adapter for Output Management -> Maintain Output Management Adapter Settings**.
- b. In the **Dialog Structure** section, choose **Direct Output Agents (w/o PPF & w/o History)**.
- c. Choose the entry shown in the screenshot and enable it.

The screenshot shows the SAP Reference IMG interface with the title "Display View 'Direct Output Agents (w/o PPF & w/o History)": Overview". The left sidebar shows the "Dialog Structure" tree with nodes like "PPF Output Agents for BO Nodes", "Assign PPF Profiles", "Action Settings", and "Direct Output Agents (w/o PPF & w/o History)". The main area displays a table titled "Direct Output Agents (w/o PPF & w/o History)" with columns: Business Object, Node, Agent Name, Description, Enable, and Ch. One row is selected: "/SCMTMS/TOR" with Node "ROOT" and Agent Name "SEND_EM_DATA_FROM_TOR". The "Enable" checkbox is checked. Other rows include "/SCMTMS/TOR" (Node ROOT, Agent TOR_BW_EXTRACTION), "/SCMTMS/trigger_collector" (Node ROOT, Agent TRIGGER_COLLECTOR), "/SCMTMS/TRQ" (Node ROOT, Agent DPP_SORT_DETERMINATION), "/SCMTMS/TRQ" (Node ROOT, Agent SEND_EM_DATA_FROM_TRQ), "/SCMTMS/TRQ" (Node ROOT, Agent TRQ_BW_EXTRACTION), and "/SCMTMS/WAYBILLNO" (Node ROOT, Agent DPP_SORT_DETERMINATION).

The screenshot shows the SAP Reference IMG interface with the title "Display View 'Direct Output Agents (w/o PPF & w/o History)": Details". The left sidebar shows the "Dialog Structure" tree with the same nodes as the previous screenshot. The main area displays the details for the selected entry: "/SCMTMS/TOR" (Business Object), "ROOT" (Node), and "SEND_EM_DATA_FROM_TOR" (Agent Name). Below this, there is a table titled "Direct Output Agents (w/o PPF & w/o History)" with a single row. The "Description" field contains "Call SAP EM (recommended, check note 1842397 for details)". The "Enable" checkbox is checked. Other fields include "Incl. Child Chgs" (checked), "Synch/Asynch" (set to "B Has Uncritical o/p: Process after Commit (background)"), "Processor Class" (set to "/SCMTMS/CL_OUTMGMT_EXEC_TOR"), and three "User-Def. Func." fields (empty).

- d. In the **Dialog Structure** section, choose **Nodes for Before Image**.
e. Create the following three entries:

Business Object	Node	Sub Node Name
/SCMTMS/TOR	ROOT	EXECUTIONINFORMATION
/SCMTMS/TOR	ROOT	ITEM_TR
/SCMTMS/TOR	ROOT	STOP

Step 2: Check the trigger point of the generation of freight unit / freight order / freight booking IDOC

- a. Go to T-code SE19, fill in the **Enhancement Implementation** with "ZGTT_STS_EI_SEND_TOR_DATA" and click **Display**.

Enhancement Implementation: `ZGTT_STS_EI_SEND_TOR_DATA`

New BAdI

Classic BAdI

Implementation:

Display **Change**

- b. Ensure that the **Enhancement Implementation** “ZGTT_STS_EI_SEND_TOR_DATA” is active. In the **Enh. Implementation Elements** tab, ensure that **BAdl Implementation** “ZGTT_STS_BI_SEND_TOR_DATA” is active.

Enhancement Implementation ZGTT_STS_EI_SEND_TOR_DATA Display

Enhancement Implementation: ZGTT_STS_EI_SEND_TOR_DATA Active

Properties History Technical Details Enh. Implementation Elements

BAdl Implementations Descr... ZGTT_STS_BI_SEND_TOR_DATA Send TOR Data

BAdl Implementation: ZGTT_STS_BI_SEND_TOR_DATA Description: Send TOR Data

Default Implementation
 Example Implementation
 "Active" not switchable in customizing (IMG)

Runtime Behavior Implementation is active Runtime Behavior: The implementation will be called

Properties of BAdl Definition

BAdl Definition Name: /SCMTMS/SEND_TOR_DATA Description: Send TOR Data to Event Management Interface: /SCMTMS/IF_SEND_TOR_DATA Instance Creation Mode: No Reuse of BAdl Instance

Further Implementations in Other Systems (perhaps already deleted)

Step 3: Check the freight unit type settings

- On the IMG, go to **SAP Transportation Management -> Transportation Management -> Planning -> Freight Unit -> Define Freight Unit Types**.
- In the table, open the applicable freight unit type to be tracked with SAP Event Management.
 - In the **Integration Settings**, fill in the **Application Obj.Type** field as follows:

Integration Settings

Dangerous Goods Profile:

Customs Profile:

Application Obj.Type: GTT_FU

BW Relevance

Note: make sure the value you filled in is the same as the ones in the other two fields:

- Appl.Obj.Type field
(Navigation Path: **IMG->Integration with Other SAP Components-> Interface to Global Track and Trace -> Define Application Interface**, choose **Define Used Business Process Types, Appl. Object Types and Event Types**. In the table, choose **Business Process Type TMS_TOR** and click **Define Application Object Types**.)

SAP

Display View "Define Application Object Types": Details

Dialog Structure

- Define Used Business Process Types
 - Define Application Object Types
 - Define Event Types

Bus. Proc. Type: TMS_TOR
Appl. Obj. Type: GTT_FU Extract FU Information to Global Track and Trace
Text: FU Header

General Data Control Tables Object Identification Global Track & Trace Relevance Parameter Setup

Sequencing / Destination

Seq. No.: 10
CI for GTT: GTTAPPLOGS CI Tenant for GTT Standard APP

Business Object Reference

Object Type:
BO Setup Fnct:

○ Application Object Type field in the “gttft1” model in the Manage Models app.

SAP Model Details Internal - Test

gttft1 Active

GTT standard model

Namespace: com.lbngttapps.gtt.app.gttft1 Correlation Level: 5 Model Category: Standard

Tracked Process Field Type Pool Event Type Pool Code List IDOC Integration Visibility Provider Integration Planned Event Extension Event to Action

Tracked Process: FreightUnit Integration Switch:

Tracked Process Mapping

ERP Object Type: Others Application Object Type: GTT_FU

- In the **Execution Settings**, the **Execution Tracking Relevance** field is set to “Execution Tracking with External Event Management”.

Execution Settings

Execution Tracking Relevance: 3 Execution Tracking with External Ev...

Display Mode for Execution Tab: Actual Events from TM and EM, Expe...

Propagation Mode: Standard Propagation

Last Exp. Event: UNLOAD_END

Immediate Processing

Step 4: Check the freight order type settings

- a. On the IMG, go to **SAP Transportation Management > Transportation Management > Freight Order Management > Freight Order > Define Freight Order Types**.
- b. In the table, open the applicable freight order type to be tracked with SAP Event Management.
 - In the **Integration Settings**, fill in the **Application Object Type** field as follows:

Integration Settings

Dangerous Goods Profile:	<input type="text" value="DG1"/>
Customs Profile:	<input type="text"/>
Document Creation Relevance:	<input type="text" value="N No External Document Creation"/> <input type="button" value="▼"/>
Delivery Profile:	<input type="text"/>
EWM Integration Profile:	<input type="text"/>
Application Object Type:	<input style="border: 2px solid #800080; background-color: #f0f0ff;" type="text" value="GTT_SHP_HD"/>
<input checked="" type="checkbox"/> BW Relevance	

Note: make sure the value you filled in is the same as the ones in the other two fields:

- **Appl. Obj. Type** field
(Navigation Path: **IMG-> Integration with Other SAP Components-> Interface to Global Track and Trace -> Define Application Interface**, choose **Define Used Business Process Types, Appl. Object Types and Event Types**, choose **Business Process Type TMS_TOR->Define Application Object Types.**)
- **Application Object Type** field in the “gttft1” model in the Manage Models app.

- In the **Execution Settings**, the **Execution Tracking Relevance** field is set to “Execution Tracking with External Event Management”.

Execution Settings

The screenshot shows the SAP Execution Settings dialog. The 'Execution Tracking Relevance' dropdown is highlighted with a purple border and contains the value '3 Execution Tracking with External Event M...'. Other fields include 'Check Condition "Ready for Exec":' (empty), 'Display Mode for Execution Tab:' (set to 'Actual Events from TM and EM, Expected ...'), 'Expected Event for Goods Issue:' (empty), 'Expected Event for Goods Receipt:' (empty), and 'Last Exp. Event:' (set to 'ARRIV_DEST'). A checkbox for 'Immediate Processing' is unchecked. Below it, 'Execution Propagation Mode:' is set to 'Standard Propagation' and 'Discrepancy Profile:' is empty.

Step 5: Check the freight booking type settings

- a. On the IMG, go to **SAP Transportation Management > Transportation Management > Freight Order Management > Freight Booking > Define Freight Booking Types**.
- b. In the table, open the applicable freight booking type to be tracked with SAP Event Management.
 - In the **Integration Settings**, fill in the **Application Object Type** field as follows:

The screenshot shows the SAP Integration Settings dialog. The 'Application Object Type' dropdown is highlighted with a purple border and contains the value 'GTT_SHP_HD'. Other fields include 'Dangerous Goods Profile:' (set to 'DG1'), 'Customs Profile:' (empty), 'Document Creation Relevance:' (empty), 'Delivery Profile:' (empty), and 'EWM Integr. Profile:' (empty). A checkbox for 'BW Relevance' is unchecked.

Note: make sure the value you filled in is the same as the ones in the other two fields:

- **Appl. Obj. Type** field
(Navigation Path: **IMG->Integration with Other SAP Components-> Interface to Global Track and Trace -> Define Application Interface**, choose **Define Used Business Process Types, Appl. Object Types and Event Types**, choose **Business Process Type TMS_TOR->Define Application Object Types**.)
- **Application Object Type** field in the “gttft1” model in the Manage Models app.

- In the **Execution Settings**, the **Execution Tracking Relevance** field is set to “Execution Tracking with External Event Management”.

Execution Settings

Execution Tracking Relevance:	3 Execution Tracking with External Event Management
Display Mode for Execution Tab:	Actual Events from TM and EM, Expected Events from EM
Immediate Processing:	Life Cycle Is Not to Be Set to "In Process" Immediately
Expected Event for Goods Issue:	
Expected Event for Goods Receipt:	
Last Exp. Event:	UNLOAD_END
Execution Propagation Mode:	Standard Propagation
Check Condition "Ready for Exec":	
Discrepancy Profile:	

Step 6: Check the freight order / freight booking master data

To send freight orders or freight bookings to SAP Business Network Global Track and Trace, do the following:

- Assign the carrier.
- Change the execution status.
 - For freight orders: in the **Execution Status** tab on the top, change the **Execution Status** to “Set to Ready for Transportation Execution” or “Set to In Execution”.

The screenshot shows the SAP Fiori interface for editing a freight order. The top navigation bar includes 'Edit GTT Standard Freight Order Type AccAWS 6100063618'. The main area has tabs for General Data, Business Partner, Items, Overview, Stages, Utilization, Subcontracting, Schedule, Set Status, and Display Settings. The General Data tab is active, showing sections for Truck (Means of Transport, Vehicle, Registration Country/Region No., Total/Capacity), Cargo Information (Cargo Weight, Volume, Quantity, Total Weight), and General Information (Document Type, Description, Origin of Freight Order). A context menu is open at the top right, listing options like 'Set to Ready for Transportation Execution', 'Set to In Execution', and 'Set to Not Ready for Transportation Execution'. Callout 1 points to the 'Carrier' field, which is set to 'LBN_CAR100'. Callout 2 points to the 'Set to In Execution' option in the context menu.

- For freight bookings:
 - Air booking: in the **Execution Status** tab on the top, change the **Execution Status** to "Set to MAWB Finalized" or "Set to In Execution".

The screenshot shows the SAP interface for editing a GTT Standard Air Booking. The main window displays booking details like Issuing Carrier Airline Code, MAWB No., and flight information. A context menu is open at the top right, specifically under the 'Execution' tab. The menu items include 'Set to MAWB Finalized', 'Set to MAWB Not Finalized', 'Set to In Execution', and other options like 'Set to MAWB Open' and 'Set to Uplift Confirmed'. The 'Set to In Execution' option is highlighted.

- Ocean booking: in the **Execution Status** tab on the top, change the **Execution Status** to "Set to Ready for Transportation Execution" or "Set to In Execution".

The screenshot shows the SAP interface for editing a GTT Standard Ocean Booking. Similar to the air booking, it has fields for carrier, executing carrier, and communication parties. A context menu is open at the top right, under the 'Execution' tab. It includes options like 'Set to Ready for Transportation Execution', 'Set to In Execution', and others. The 'Set to In Execution' option is highlighted.

Debugging

If the issue still exists, you can perform the following steps to debug in the extractor code:

- On the IMG, go to node **Cross-Application Components -> Processes and Tools for Enterprise Applications ->Reusable Objects and Functions for BOPF Environment -> PPF Adapter for Output Management -> Maintain Output Management Adapter Settings**.
- In the **Dialog Structure** section, choose **Direct Output Agents (w/o PPF & w/o History)**. Ensure that the following entry is enabled:

The screenshot shows the SAP dialog structure for maintaining output management adapter settings. On the left, there's a tree view with nodes like 'PPF Output Agents for BO Nodes', 'Assign PPF Profiles', 'Action Settings', 'Processing Type Settings', 'Assign Transaction Actions', 'Direct Output Agents (w/o PPF & w/o History)', and 'Nodes for Before Image'. On the right, a table lists 'Direct Output Agents (w/o PPF & w/o History)'. One row is selected: '/SCMTMS/TOR' with Node 'ROOT' and Agent Name 'SEND_EM_DATA_FROM_TOR'. The 'Description' column contains the text 'Call SAP EM (recommended, check note 1842397 for details)'. The 'Enable' and 'Ch' columns have checkboxes.

Note: in this entry, the value of **Synch/Asynch** column is "Has Critical o/p: Process during Save - before Commit".

- Set a break point in method /SCMTMS/IF_SEND_TOR_DATA~CALL_EVENT_MGR of the BAdI implementing class ZCL_GTT_STS_SEND_TOR_DATA.
- For the scenario when the freight unit watches the freight order, set additional break point in below places:
 - In method ZIF_GTT_STS_BO_READER~CHECK_RELEVANCE of class ZCL_GTT_STS_BO_FU_READER, check the value of "rv_result". If it is "T", it means

- the freight unit IDOC can be generated. Otherwise, the freight unit IDOC cannot be generated.
- In method ZIF_GTT_STS_BO_READER~CHECK_RELEVANCE of class ZCL_GTT_STS_BO_FO_READER, check the value of "rv_result". If it is "T", it means the freight order IDOC can be generated. Otherwise, the freight order IDOC cannot be generated.

Q2: How to add customized planned event and synchronize this event back to SAP TM?

Suppose you want to add the planned event type "quality inspection" for the freight order tracked process, do the following:

Step 1: Create a planned event type in the GTT standard model "gttft1" in the Manage Models app

- Launch the Manage Models app and go to the GTT standard model "gttft1".
- In the **Event Type Pool** tab, click **Create** and fill in the event information in the dialogue. For details, see "4.7.1 Create Event Type" section in [Guide for Model Administrators](#).
Note: the event type must start with "ZZ". For example ZZINSPECTION.
- Assign the newly created event type to the shipment tracked process.
 - In the **Tracked Process** tab, choose **Admissible Planned Events** from the dropdown list on the right and click **Add**.
 - In the **Details** tab of the dialogue, choose the **Event Type** that you created from the dropdown list and fill in the rest of information.
- Configure the IDOC mapping
 - Click **Edit** on the top. In the **IDOC Integration** tab, for **Tracked Process** field, choose "Shipment" from the dropdown list.
 - Under **Tracked Process / Events**, fill in **IDOC** and **Event Code** for the newly created event type.

The screenshot shows the SAP Manage Models app interface. The top navigation bar includes tabs for Tracked Process, Field Type Pool, Event Type Pool, Code List, **IDOC Integration** (which is currently selected), and Visibility Provider Integration. Below the navigation bar, there is a dropdown labeled "Tracked Process:" set to "Shipment". The main content area is titled "Tracked Process Mapping" and shows the "Tracked Process / Events (54)" table. The table has columns for Name, IDOC, and Event Code. A new row has been added for the event type "ZZINSPECTION", which is highlighted with a purple border. The "Event Code" column for this row contains "ZZ_INSPECTION". To the right of the table, there are two vertical panes: "User M" and "Field".

Tracked Process / Events (54)		
Name	IDOC	Event Code
GateInEmpty	E1EVMHDR02	GATEIN_EMPTY
GateInFull	E1EVMHDR02	GATEIN_FULL
GateOutEmpty	E1EVMHDR02	GATEOUT_EMPTY
GateOutFull	E1EVMHDR02	GATEOUT_FULL
ZZINSPECTION	E1EVMHDR02	ZZ_INSPECTION

- In the **User Script Before Standard Script** section, add your script for synchronizing back the customized event to SAP TM.

Example:

```
var inspection_event = modelNamespace + ".Shipment.ZZINSPECTION";
if (inspection_event == actualEvent.eventType) {
```

```

        eventForwardToTM = true;

    }

```

- f. Save your changes and click **Deploy** on the top right to deploy the model. Once the model is successfully deployed, you can see **Active** on the model card with its last operation status "Deployment Success".

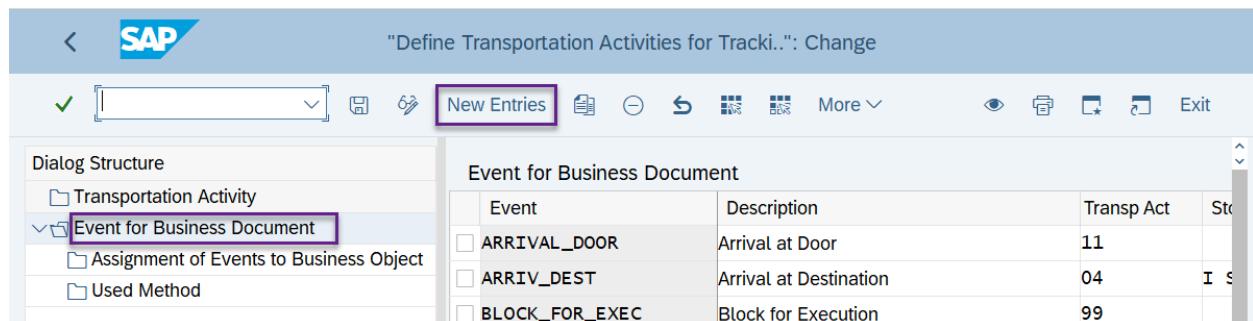
Step 2: Add the ABAP Implementation Code

- Navigate to the method ZIF_GTT_STS_PE_FILLER~GET_PLANNED_EVENTS of class ZCL_GTT_STS_PE_FO_FILLER in the system.
- Add the planned event type that you created in the Manage Models app as milestone event. For coding tips, see chapter [5.5](#) in this guide.

Note: when you add the planned event type, remember that the event name here must be the same as the event code that you previously maintained in the IDOC mapping.

Step 3: Add the above customized event In SAP TM.

- On the **Display IMG** page, click **Transportation Management-> Integration-> Tracking and Tracing of Processes and Documents-> Define Transportation Activities for Tracking and Tracing**.
- Select **Event for Business Document** and click **New Entries**.



c. Input the **Event name**, **Description**, **Transp Act** and Click **Save**.

Event	Description	Transp Act	Stop Cat	Internal
ZZ_INSPECTION	Quality inspection	99		

d. Select the event "ZZ_INSPECTION", then double click **Assignment of Events to Business Object**.

e. Click **New Entries**.

f. Select "TO Freight Order" and Click **Save**.

Now you can go on to configure for synchronizing these unplanned events back to TM. For configuration details, see [Synchronize Actual Events Back to TM System](#). If the events still cannot be synchronized back to TM, please check the SAP Note [3010748 - Allow unexpected events without location reference in TransportationEventBulkNotification](#).

Q3: How to update business partner's LBN ID?

To update the LBN ID in SAP Transportation Management (SAP TM) for a logistics service provider (your business partner), proceed as follows in SAP TM:

Step 1: Define Identification Categories for LBN Identification Number

Go to SAP Customizing Implementation Guide under **Cross-Application Components->SAP Business Partner->Business Partner->Basic Settings->Identification Numbers->Define Identification Categories** and maintain the following entry:

ID Cat.	Description	ID Unique	Disp. Only	One ID->BP	Identification Schema
LBN001	LBN Identification			X	

Step 2: Define Identification Types for LBN Identification Number

Go to SAP Customizing Implementation Guide under **Cross-Application Components->SAP Business Partner->Business Partner->Basic Settings->Identification Numbers->Define Identification Types**. Create a new ID Type as follows:

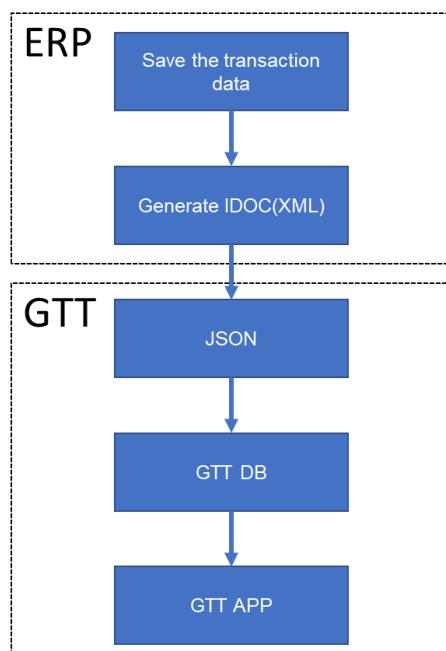
ID Type	Description	ID Categ.	Persons	Organizations
LBN001	LBN Identification	LBN001	X	X

Step 3: Update Business Partner's LBN ID

- Go to the **Manage Business Partner** transaction (transaction BP).
- Set the filtering criteria to find the business partner for which you want to update the LBN ID. Double-click the business partner to open its **Display Organization** page.
- Go to the **Identification** tab. In the **Identification Numbers** section, enter “LBN001” in the **IDType** column.
- In the **Identification Number** field, enter the LBN ID and save your changes.

Q4: How is the connection established between SAP ERP and SAP Business Network Global Track and Trace? Do we need to configure PI in SAP ERP?

When saving the transaction data, the asynchronized IDOC was sent to establish the connection between SAP ERP and SAP Business Network Global Track and Trace. You don't need to set up PI in SAP ERP. The data process flow is as below:



Q5: What scenarios are supported in SAP Business Network Global Track and Trace?

1) Purchase Order -> Inbound Delivery -> Shipment.



2) Purchase Order -> Inbound Delivery -> Freight Unit -> Road Freight Order / Ocean Booking / Air Booking.



3) Sales Order -> Outbound Delivery -> Shipment.



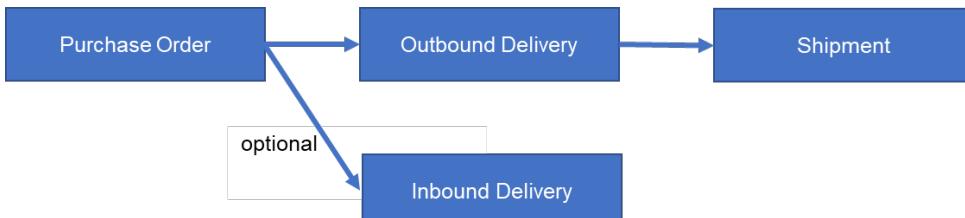
4) Sales Order -> Outbound Delivery -> Freight Unit -> Road Freight Order / Ocean Booking / Air Booking.



5) Stock Transport Order

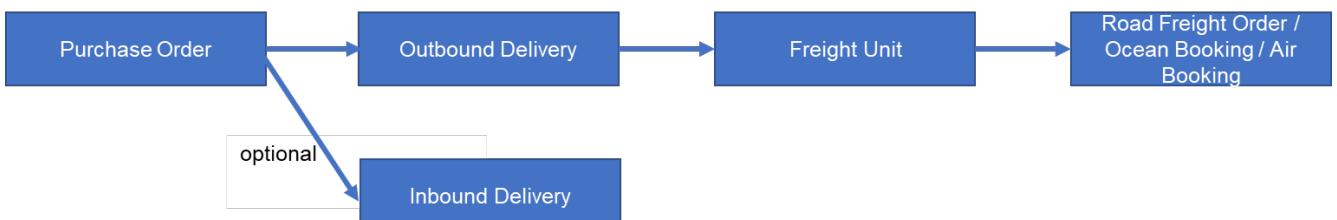
Scenario A:

Purchase Order -> Outbound Delivery -> Shipment.



Scenario B:

Purchase Order -> Outbound Delivery -> Freight Unit -> Road Freight Order / Ocean Booking / Air Booking.



Q6: Do sample codes support one-time locations? Where can we maintain the one-time location address?

Yes. You can maintain one-time locations in the following fields:

Tracked Processes	Fields
Purchase Order	Address in Purchase Order header
Purchase Order Item	Delivery Address in Purchase Order Item
Inbound Delivery	Goto->Header->Partners->Partner Function "Supplier"
Shipment	Fields under Stages->Departure point / Destination or you can directly add the one-time location address in the stage
Sales Order	Fields under Goto->Header->Partner->Partner Function "Sold-To Party" or "Ship-To Party"
Outbound Delivery	Fields under Goto->Header->Partners->Partner Function "Ship-To Party"

Q7: How to stop sending unnecessary IDOCs from SAP ERP system to the GTT system?

To do so, you should not mark application object types/event types as “GTT Relevant”.

Take the purchase order as an example, you can perform the following steps:

- In Display IMG page, click **Integration with Other SAP Components -> Interface to Global Track and Trace -> Define Application Interface**.
- Choose activity **Define Used Business Process Types, Appl. Object Types and Event Types**.
- Choose the business process type “ESC_PURORD” and double click **Define Application Object Types** on the left.
- Uncheck the “GTT Relevant” box for application object types “GTT_PO_HD” and “GTT_PO_IT”, and it will stop sending control parameter / planned events / tracking ID of the purchase order and its items.

Application ObjType	Seq. No.	Description	CI for GTT	Object Type	GTT Relev.
GTT_PO_HD	10	Purchase Order Head for Procurement Visibility (GTT)	GTTAPPLOGS	BUS2012	<input type="checkbox"/>
GTT_PO_IT	10	Purchase Order Item for Procurement Visibility (GTT)	GTTAPPLOGS	BUS2012	<input type="checkbox"/>
PCM10_ITEM		Purchase Order Item for Procurement Visibility		BUS2012	<input type="checkbox"/>

- Uncheck the “GTT Relevant” box for event types “GTT_EVT_PO_IT_CF” and “GTT_EVT_PO_IT_DE”, and it will stop sending actual events of the purchase order and its items.

Business Process Type	Event Type	Description	Text	GTTR
ESC_PURORD	GTT_EVT_PO_IT_CF	PO Item Confirmation Event	Confirmation Event	<input type="checkbox"/>
ESC_PURORD	GTT_EVT_PO_IT_DE	PO Item Deletion Event	Deletion Event	<input type="checkbox"/>
ESC_PURORD	PCM10_ACKNOWL	Acknowledgement for Procurement Visibility	Acknowl. Proc. Visib.	<input type="checkbox"/>
ESC_PURORD	PCM10_PO_CHANGE	Purchase Order Changes for Procurement Visibility	PO Chg. Proc. Visib.	<input type="checkbox"/>

Q8: How to deactivate or activate the application log?

Take the purchase order as an example, to deactivate the application log for application object types and event types, do the following:

- In Display IMG page, click **Integration with Other SAP Components -> Interface to Global Track and Trace -> Define Application Interface**.
- Choose activity **Define Used Business Process Types, Appl. Object Types and Event Types**.
- Choose the business process type “ESC_PURORD”
- To deactivate the application log for application object types, double click **Define Application Object Types** on the left, then check the “Application Log Deactivation” box for application object types “GTT_PO_HD” and “GTT_PO_IT”. It will stop recording the application log for control parameter / planned events / tracking ID of the purchase order and its items.

Application ObjType	Seq. No.	Description	CI for GTT	Object Type	GTT Relev.	Log. Deac.	BO Setup Functor
GTT_PO_HD	10	Purchase Order Head for Procurement Visibility (GTT)	GTTAPPLOGS	BUS2012	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	PCM10_ITEM
GTT_PO_IT	10	Purchase Order Item for Procurement Visibility (GTT)	GTTAPPLOGS	BUS2012	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
PCM10_ITEM	0	Purchase Order Item for Procurement Visibility		BUS2012	<input type="checkbox"/>	<input type="checkbox"/>	

- e. To deactivate the application log for event types, double click **Define Event Types** on the left, then check the “Application Log Deactivation” box for event types “GTT_EVT_PO_IT_CF” and “GTT_EVT_PO_IT_DE”. It will stop recording the application log for actual events of the purchase order and its items.

Business Process Type	Event Type	Description	Text	GTTR	Log. Deac.	Seq. No.
ESC_PURORD	GTT_EVT_PO_IT_CF	PO Item Confirmation Event	Confirmation Event	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	10
ESC_PURORD	GTT_EVT_PO_IT_DE	PO Item Deletion Event	Deletion Event	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	10
ESC_PURORD	PCM10_ACKNOWL	Acknowledgement for Procurement Visibility	Acknwl. Proc. Visib.	<input type="checkbox"/>	<input type="checkbox"/>	0
ESC_PURORD	PCM10_PO_CHANGE	Purchase Order Changes for Procurement Visibility	PO Chg. Proc. Visib.	<input type="checkbox"/>	<input type="checkbox"/>	0

To activate the application log for application object types and event types, you can uncheck the “Application Log Deactivation” box.

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