



PUBLIC

SAP ERP Sample Code Configuration Guide for Fulfillment Tracking Apps

SAP Business Network Global Track and Trace

November 2022

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Document History

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 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

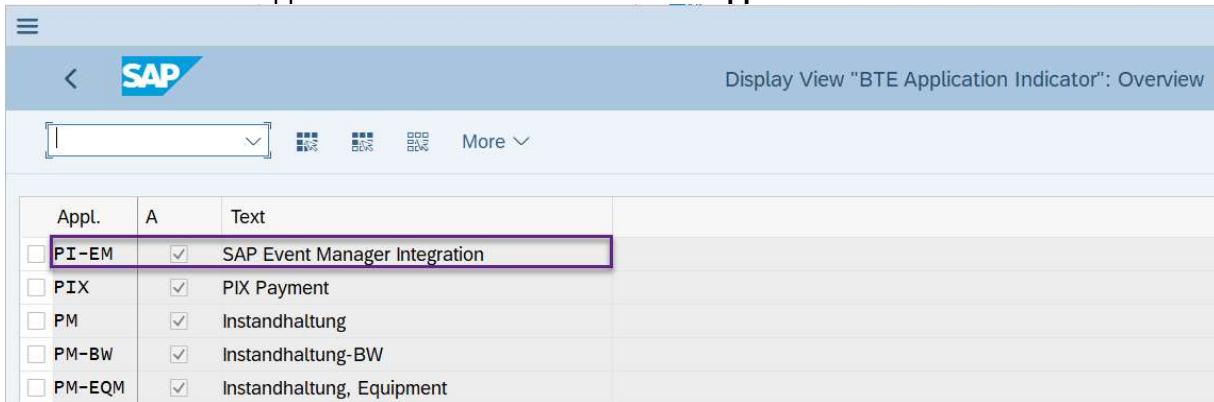
1.1 Check the SAP Product Version

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"/> PI-EM	<input checked="" type="checkbox"/>	SAP Event Manager Integration
<input type="checkbox"/> PIX	<input checked="" type="checkbox"/>	PIX Payment
<input type="checkbox"/> PM	<input checked="" type="checkbox"/>	Instandhaltung
<input type="checkbox"/> PM-BW	<input checked="" type="checkbox"/>	Instandhaltung-BW
<input type="checkbox"/> PM-EQM	<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/guide-install.html>. Make sure you **Install the standalone version** in your dev system. When installation is complete, a new report is created, `ZABAPGIT_STANDALONE`.

The screenshot shows the abapGit documentation page. On the left sidebar, there are sections for Getting Started, Setup, Online Projects, Offline Projects, and Reference. The main content area is titled "Installation". It includes a "Summary" section stating that abapGit exists in two flavors: `standalone` and `developer`. It also includes a "Prerequisites" section listing requirements for SAP BASIS version 702 or higher. A box titled "Install Standalone Version" contains step-by-step instructions for creating a report named `ZABAPGIT_STANDALONE` using transaction SE38 or SE80. It also notes that typically, abapGit is used in development systems and can be installed in a local package like `$ZABAPGIT`.

Getting Started

- Installation
- Upgrading
- Uninstalling
- UI features

Setup

- SSL setup
- Global settings
- Personal settings

Online Projects

- Installing online repo
- Keeping code up to date
- Uninstall repository
- First project
- Moving package into git
- Contributing to a project
- Authentication

Offline Projects

- Installing offline repo
- Import ZIP
- Export ZIP

Reference

- Repo Settings (.abapgit.xml)
- Translations and i18n
- Repo Statistics

Installation

🔗 Improve this page

Summary

abapGit exists in 2 flavours: `standalone` version or `developer` version.

- The standalone version is targeted at users. It consists of one (huge) program which contains all the needed code. You run the standalone version in transaction `SE38`, executing the program you created.
- The developer version is targeted at developers contributing to the abapGit codebase. It consists of all the ABAP programs/classes/interfaces/etc. of the abapGit project. You run the developer version with transaction `ZABAPGIT`.

Prerequisites

abapGit requires SAP BASIS version 702 or higher.

Install Standalone Version

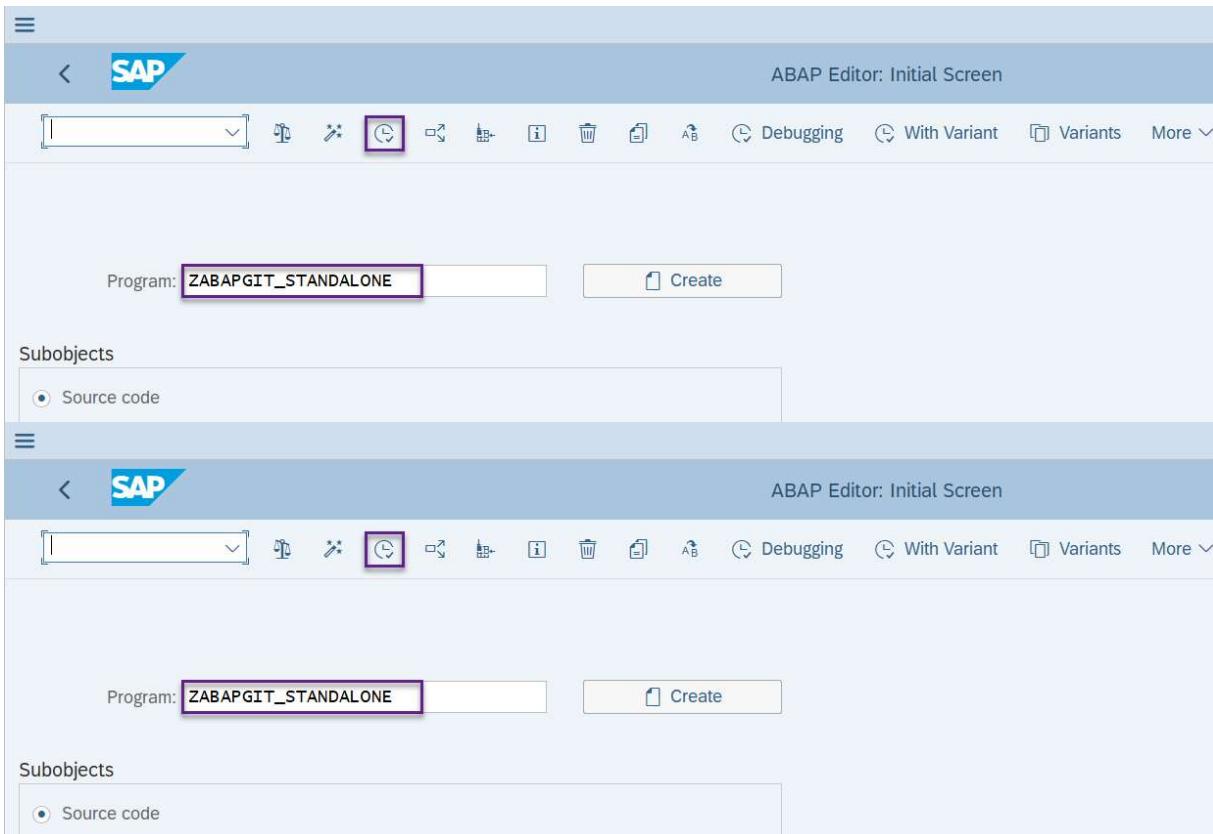
1. Download the [ABAP code](#) (right click -> save-as) to a file.
2. Via `SE38` or `SE80`, create a new report named `ZABAPGIT_STANDALONE` (formerly `ZABAPGIT_FULL`). Note: Do *not* use the name `ZABAPGIT` if you plan to install the developer version.
3. In source code change mode, upload the code from the file using Utilities -> More Utilities -> Upload/Download -> Upload
4. Activate

Typically, abapGit will only be used in the development system, so it can be installed in a local \$ package (e.g. `$ZABAPGIT`).

Now you can use abapGit by executing the report in transaction `SE38`.

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.

Online repositories

- To clone a remote repository (e.g. from github) click **New Online** from the top menu. This will link a remote repository with a package on your system.
- Use the pull button to retrieve and activate the remote objects.
- If the remote repository is updated, you will see the changes and can pull to apply the updates.

Offline repositories

- To add a package as an offline repository, click **New Offline** from the top menu.
- abapGit will start tracking changes for the package without linking it to an online git repository.
- You can link the package later or just export the package content as a ZIP file.

Repository list and favorites

- To favorite a repository, use the **★** icon in the repository list.
- To go to a repository, click on the repository name.
- To go back to your favorites, use the **Repository List**.
- Explore** to find projects using abapGit.

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 Full Full

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 abapGit interface with the repository 'GTT-V2-Standard-Apps' selected. The main area displays a table of ABAP classes (CLAS) with their names and paths. The table includes columns for Type, Name, and Path. The 'Path' column lists the full ABAP class definitions, such as '/bin/gt-standard-app/abap/zsrc/zgtt_mia/zcl_gtt_mia_ae_filler_dlh_gr.clas.abap'. The interface also features a toolbar with buttons for Pull, Stage, Diff, Branch, Tag, Advanced, View, Refresh, and a settings icon.

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's initial screen. The title bar reads 'ABAP Editor: Initial Screen'. The toolbar includes icons for file operations like New, Open, Save, and Print, as well as Debugging, With Variant, Variants, and More. Below the toolbar, the 'Program:' field contains 'ZABAPGIT_STANDALONE'. A 'Create' button is located to the right of the program field. On the left, a 'Subobjects' panel is open, showing a list of options: Source code (selected), Variants, Attributes, Text elements, and Documentation. The 'Source code' option is indicated by a checked radio button.

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. CONFIGURATION OPTION 1 (IMPORT BC SET + MANUAL CONFIGURATION)

Prerequisite:

For this option, you must build up 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.

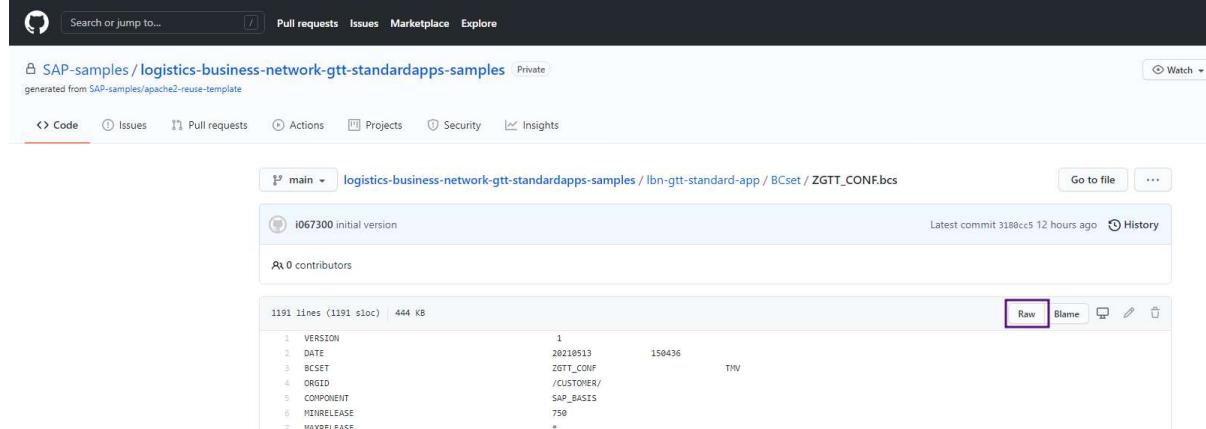


The screenshot shows the SAP Fiori Performance Assistant. At the top, there is a toolbar with various icons. Below it, a message box displays the text: "BC Sets cannot be activated in production systems; see the long text". Underneath the message, it says "Message no. SCPR229". There are sections for "Diagnosis" and "System Response". The "Diagnosis" section 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." The "System Response" section states: "The procedure was cancelled. No data was written into customizing tables." There is also a "Procedure" section with the instruction: "Activate the BC Set in a test system."

3.1 Download BC Set from GitHub

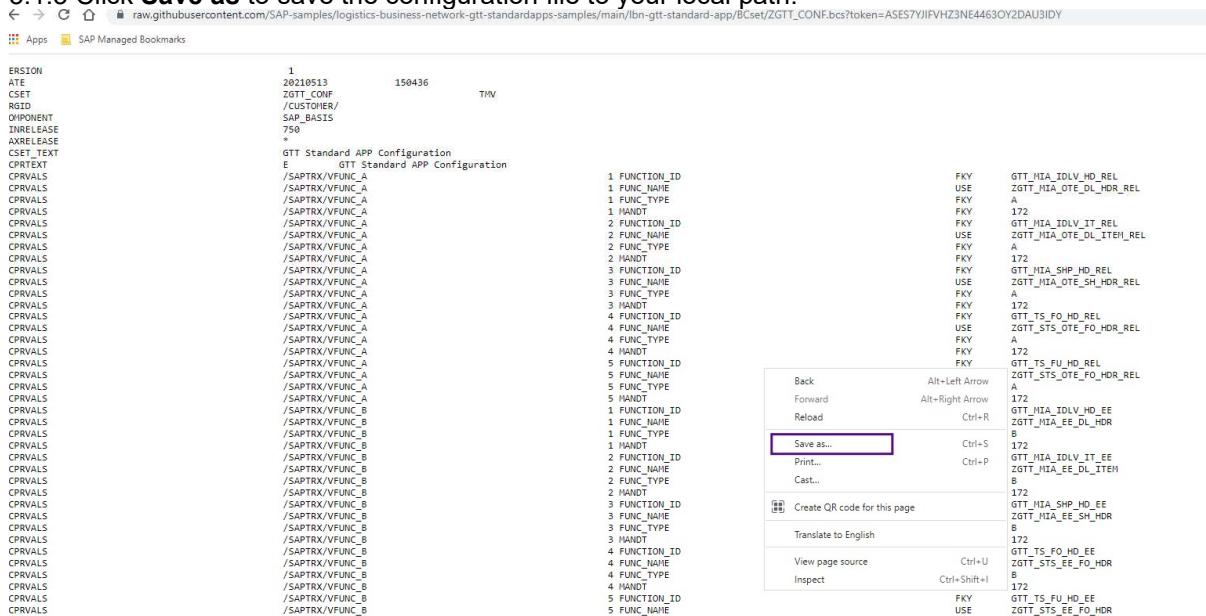
3.1.1 Navigate to BC Set in https://github.com/SAP-samples/logistics-business-network-gtt-standardapps-samples/blob/main/lbn-gtt-standard-app/BCset/ZGTT_CONF.bcs.

3.1.2 Click on “Raw” button.

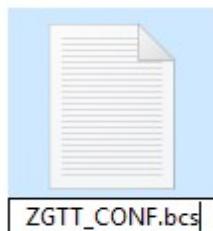


```
1 VERSION          1
2 DATE            20210513      150436
3 BCSET           ZGTT_CONF
4 ORGID           /CUSTOMER/
5 COMPONENT       SAP_BASIS
6 MINRELEASE     750
7 MAXRELEASE    *  
  
1191 lines (1191 sloc) 444 KB
```

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



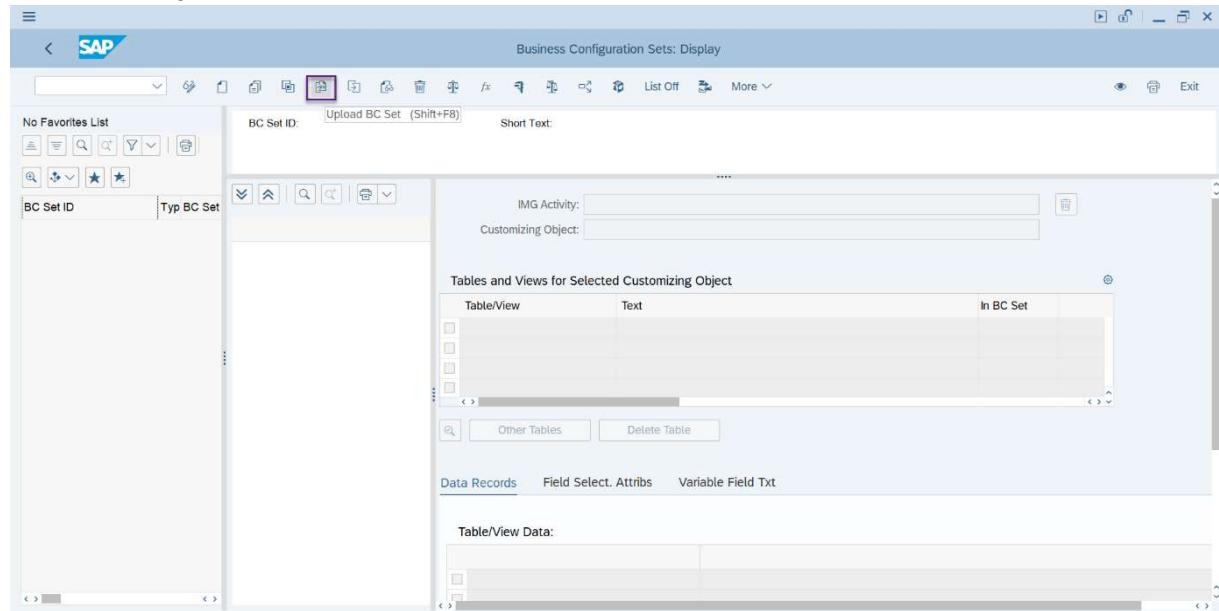
3.1.4 Change file extension to “.bcs”.



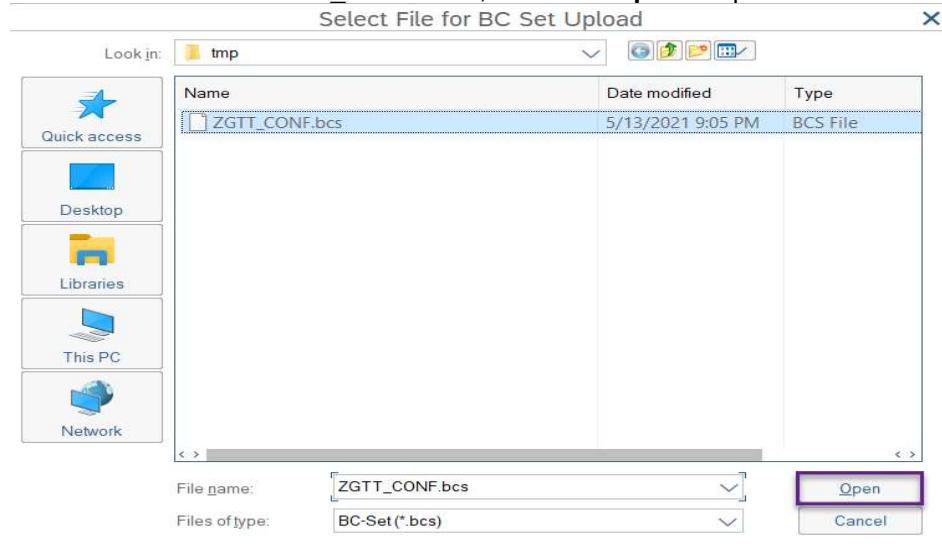
3.2 Import BC Set

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.



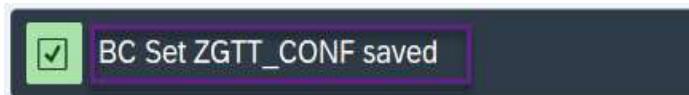
3.2.3 Select the file "ZGTT_CONF.bcs", then click **Open** to upload the BC set to your development system.



All of the configurations are loaded in the system.

The screenshot shows the SAP Business Configuration Sets: Change interface. The top navigation bar displays "Business Configuration Sets: Change". The left sidebar includes a "No Favorites List" and a search bar. The main area shows the BC Set ID: ZGTT_CONF and its short text: "GTT Standard APP Configuration". A tree view on the left lists "GTT Standard APP Configuration (ZGTT_CONF)" with several 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". To the right, there is a section titled "Tables and Views for Selected Customizing Object" showing "Table/View" V_TBDLS with "Text" "Logical Systems". Below this is a table titled "Data Records" with a single entry: "Table/View Data: V_TBDLS" containing "Logical sy..." and "Name" columns, with "GTTAPPLOGS" selected. The bottom of the screen has tabs for "Data Records", "Field Select. Attrbs", and "Variable Field Txt".

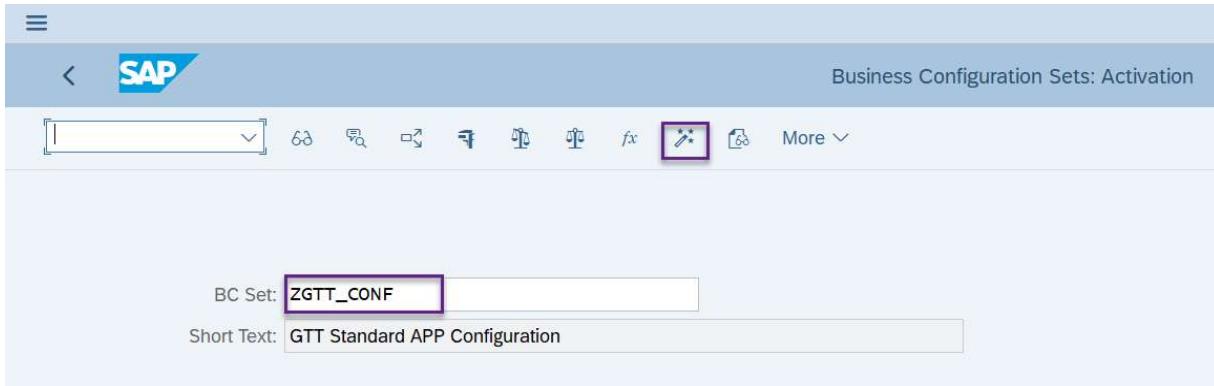
3.2.4 Click **Save** to save the BC Set.



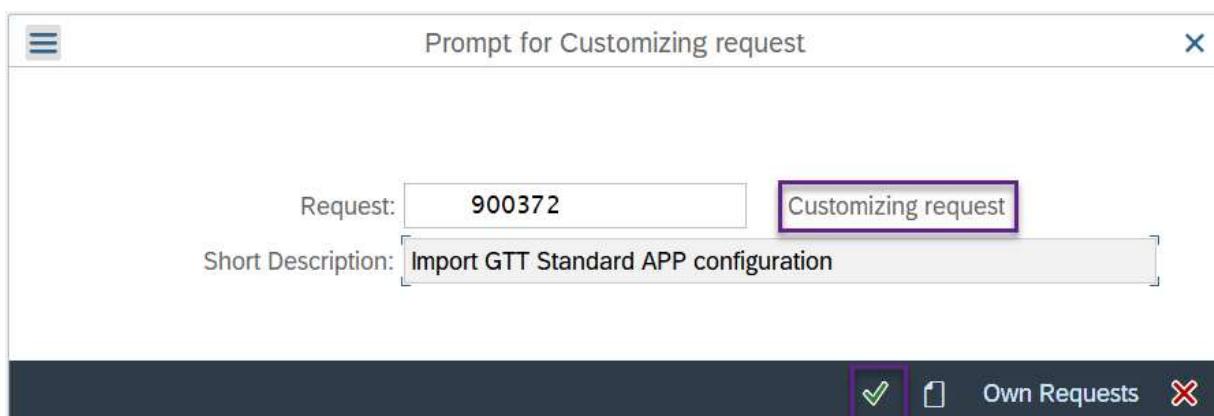
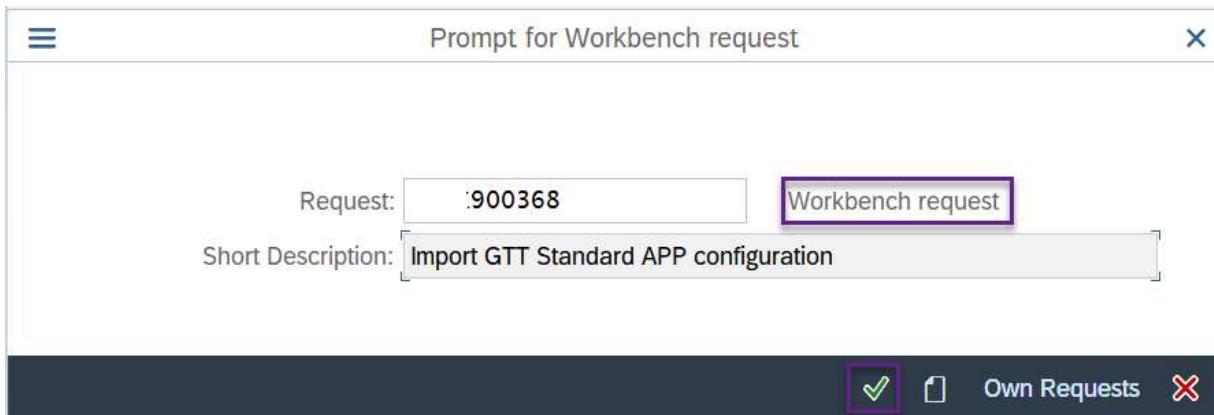
3.3 Activate BC Set

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**.



3.3.3 Provide a Workbench request and a Customizing request.



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."

Activation Options

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

Activation Information

Activated By:	
Date/Time:	13.05.2021 / 15:27:29
System/Client:	/
Workbench Reqst:	900368
Customizing Reqst:	900372
Activation Links:	Do Not Create

Activation Languages:

- Chinese
- Thai
- Korean
- Romanian
- Slovenian

Activation Options

Overwrite Data

Overwrite All Data

Do Not Overwrite Default Values

Select Activation Mode

Default Mode (Reccomend)

Expert Mode

Deletion Functionality

Enable for Classical BC Sets

Messages

With Log

Warnings when editing object

I1 I2 I3	ED Log Text
/	⚠ Text is only transported in the original language

With Log

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



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

Screenshot of the SAP Fiori Business Configuration Sets: Activation screen. It shows the BC Set selected as "ZGTT_CONF" and the Short Text as "GTT Standard APP Configuration".

Screenshot of the SAP Fiori Business Configuration Sets: Activation Logs screen. It shows the activation log for "ZGTT_CONF" on 13.05.2021 at 15:27:29. The log details various activation steps and messages, such as "Main Activation Started" and "User-defined languages are not installed in the system".

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.

The screenshot shows the SAP Reference IMG interface with the title 'Configuration of RFC Connections'. Below the title, there are three buttons: 'Generate RFC Callback Allowlist', 'Activate Non-Empty Allowlists', and 'Allowlist for Dynamic'. A note at the top states 'RFC callback check not secure'. Below these are several icons: refresh, search, create (highlighted with a purple border), edit, list, and delete. A table titled 'RFC Connections' lists categories: ABAP Connections (Type 3), HTTP Connections to External Server (Type G, highlighted with a purple border), HTTP Connections to ABAP System (Type H), Internal Connections (Type I), and Logical Connections (Type L). The 'HTTP Connections to External Server' row is also highlighted with a purple border.

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

The screenshot shows the 'Create Destination' dialog box. It has fields for 'Destination' (containing 'GTT_APP_RFC') and 'Connection Type' (set to 'G HTTP connection to external server'). At the bottom are two buttons: a green checkmark and a red X.

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. Below the header, the title "RFC Destination GTT_APP_RFC" is displayed. On the left, 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.

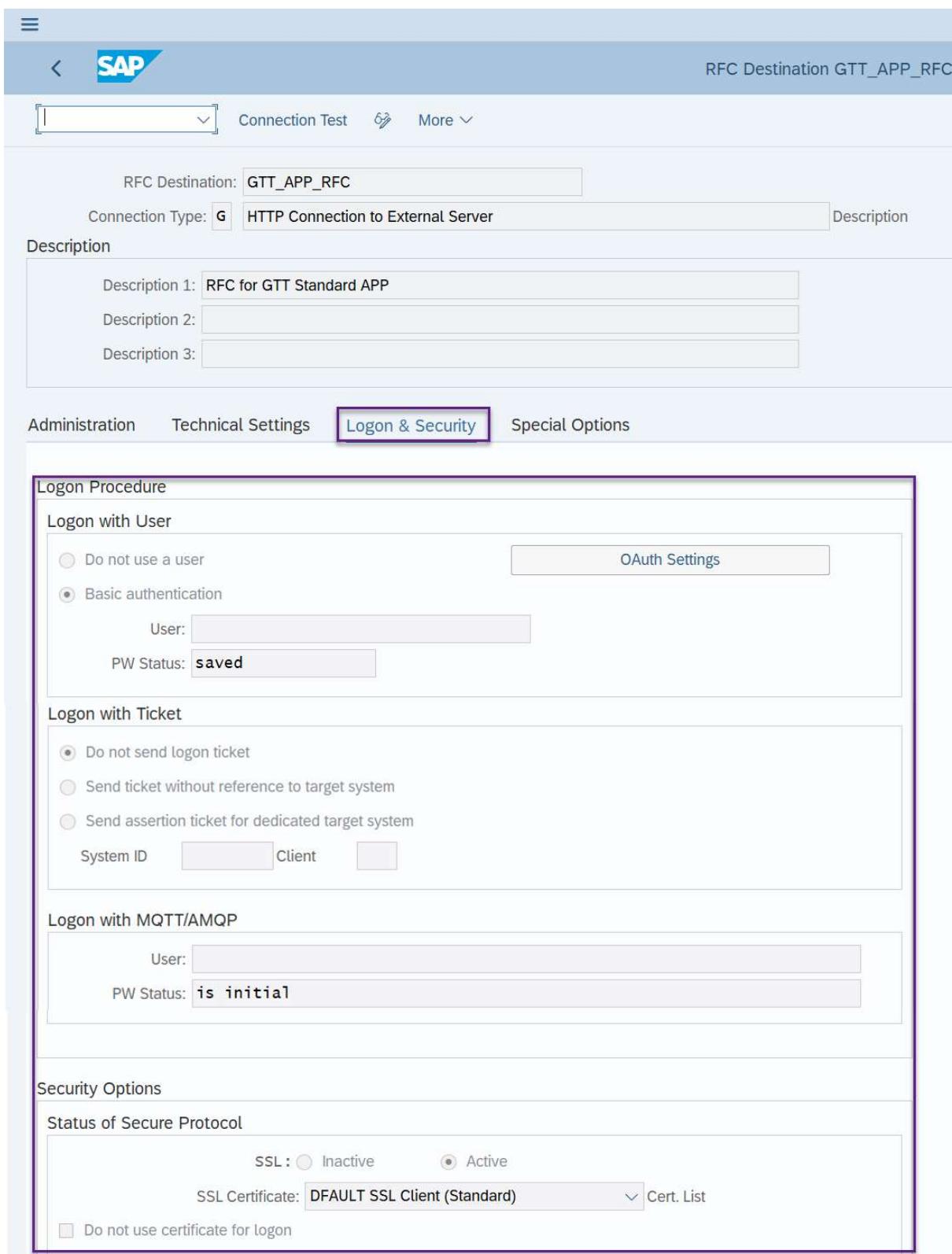
The main area contains a form for configuring an RFC destination. The "RFC Destination" field is set to "GTT_APP_RFC". The "Connection Type" field is set to "G" and "HTTP Connection to External Server". Below these fields is a "Description" section with three input fields: "Description 1: RFC for GTT Standard APP", "Description 2:", and "Description 3:". At the bottom of the form, there are tabs for "Administration", "Technical Settings" (which is highlighted with a purple border), "Logon & Security", and "Special Options".

Below the main form, there is a section titled "Target System Settings" containing fields for "Host" (set to "xxxxxx.gtt-flp-lbnplatform-pre-live.cfapps.eu10.hana.ondemand.com") and "Port" (set to "443"). The "Path Prefix" field is also present, containing the value "/api/idoc/em/v1/TrackedProcessAndEvent", which is also highlighted with a purple border.

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.

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 a back arrow, the SAP logo, and the title "RFC Destination GTT_APP_RFC". Below the title are buttons for "Connection Test" and "More". The main configuration area has fields for "RFC Destination" (set to "GTT_APP_RFC") and "Connection Type" (set to "HTTP Connection to External Server"). A "Description" section contains three input fields: "Description 1" (RFC for GTT Standard APP), "Description 2" (empty), and "Description 3" (empty). Below this are tabs for "Administration", "Technical Settings", **Logon & Security** (which is selected and highlighted with a purple border), and "Special Options". The "Logon & Security" tab contains several sections: "Logon Procedure" (with "Logon with User" and "Logon with Ticket" options), "Logon with MQTT/AMQP" (with a "User" field and "PW Status" field showing "is initial"), and "Security Options" (with "Status of Secure Protocol" settings for SSL, certificate selection, and a checkbox for "Do not use certificate for logon").

3.4.7 Save the configuration.

3.5 Define Ports

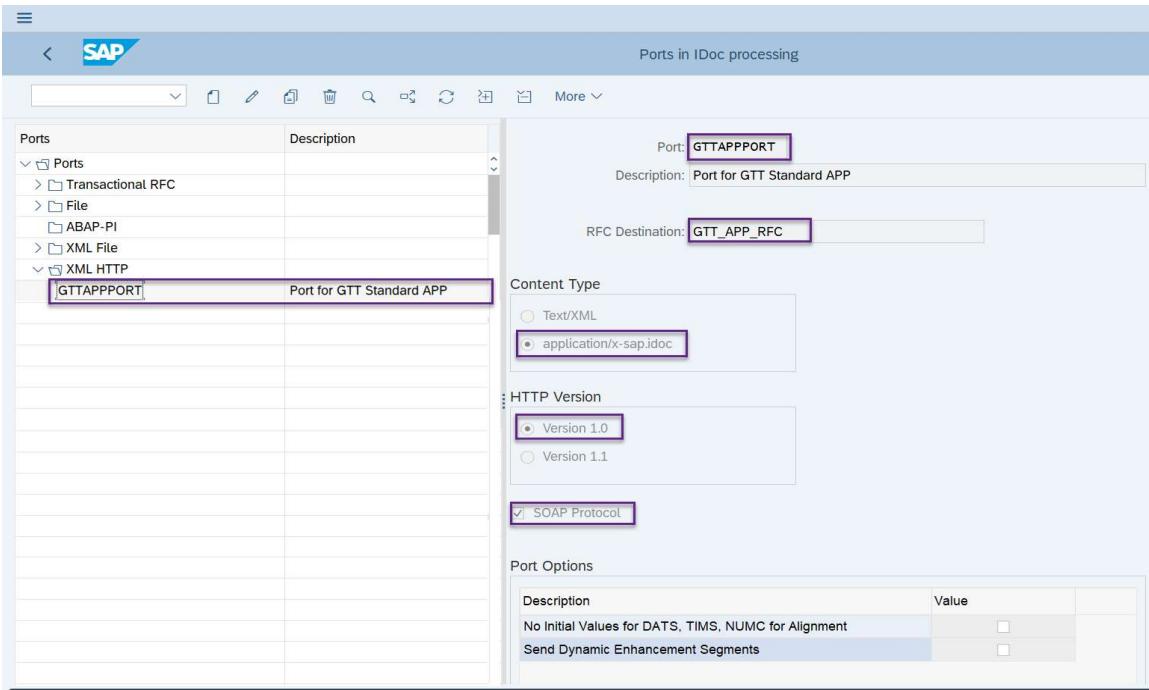
3.5.1 In Display IMG page, click **Integration with Other SAP Components -> Interface to Global Track and Trace -> IDoc Settings**. Choose activity **Define Ports**.

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

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.

The screenshot shows the SAP Fiori interface for defining partner profiles. On the left, there is a tree view under 'Partner Profiles' with various partner types listed. One item, 'Partner Type LS', is selected and highlighted with a purple border. On the right, there are several input fields and tabs for configuring the selected partner type. The 'Post Processing: Valid Processors' tab is active. The configuration includes:

- Partner No.:
- Type:
- Ty.: (Value: US)
- Processor:
- Lang.: (Value: EN)

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

This screenshot shows the detailed configuration for the partner profile 'GTTAPPLOGS'. The top section displays basic information: Partner No. (GTTAPPLOGS), Type (LS), and a description (Logical System for GTT Standard APP). Below this, the 'Post Processing: Valid Processors' tab is selected, showing configuration for Ty. (US), Processor (empty), and Lang. (EN). The 'Classification' and 'Telephony' tabs are also present. At the bottom, the 'Outbound' section is visible, containing a table with columns for Partner Role, Message Type, Message Variant, Function, Test, Receiver Port, I., Pac..., and Basic Type. There are three rows in the table, each with a small icon in the first column.

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

This screenshot shows the same configuration for the partner profile 'GTTAPPLOGS' as the previous one, but with a focus on the 'Outbound' section. The 'Outbound' table at the bottom has three rows. The third row, which was previously empty, now has a plus sign (+) icon in the first column, indicating it is ready for modification or addition of new parameters. The other two rows remain unchanged.

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. The top navigation bar includes the SAP logo and the title "Partner profiles: Outbound parameters". Below the header, there are sections for Partner No., Type, and Partner Role. The "Message Type" field is set to "GTTMSG" and is highlighted with a purple border. The "Receiver Port" field is set to "GTAPPOR" and is also highlighted with a purple border. Other fields like "Message Code" and "Message Function" are present but not highlighted. The interface includes tabs for "Outbound Options", "Message Control", "Post Processing: Valid Processors", "Telephony", and "EDI Standard". The "Output Mode" section shows "Pass IDoc Immediately" selected. The "IDoc Type" section shows "Basic Type: GTTMSG01" and "Extension:" fields, with "LBN-TT: Process and Event Posting" noted as the view. A checkbox for "Cancel Processing After Syntax Error" is checked.

3.6.6 Save the configuration.

3.7 Maintain AOT Type Restriction for Cross-Processes

Prerequisite:

ABAP code and BC set should be activated in the system.

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

3.8 Maintain Event Type Restriction for Cross-Processes

Prerequisite:

ABAP code and BC set should be activated in the system.

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

4. 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.

The screenshot shows the SAP Reference IMG interface with the title 'Configuration of RFC Connections'. Below the title, there are three buttons: 'Generate RFC Callback Allowlist', 'Activate Non-Empty Allowlists', and 'Allowlist for Dynamic'. A note at the top states '●OO RFC callback check not secure'. Below the note are several icons: refresh, search, create (highlighted with a purple border), edit, details, and delete. A table titled 'RFC Connections' lists the following entries:

	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		

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

The screenshot shows the 'Create Destination' dialog box. It has fields for 'Destination' (containing 'GTT_APP_RFC') and 'Connection Type' (set to 'G HTTP connection to external server'). At the bottom right are two buttons: a green checkmark and a red X.

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

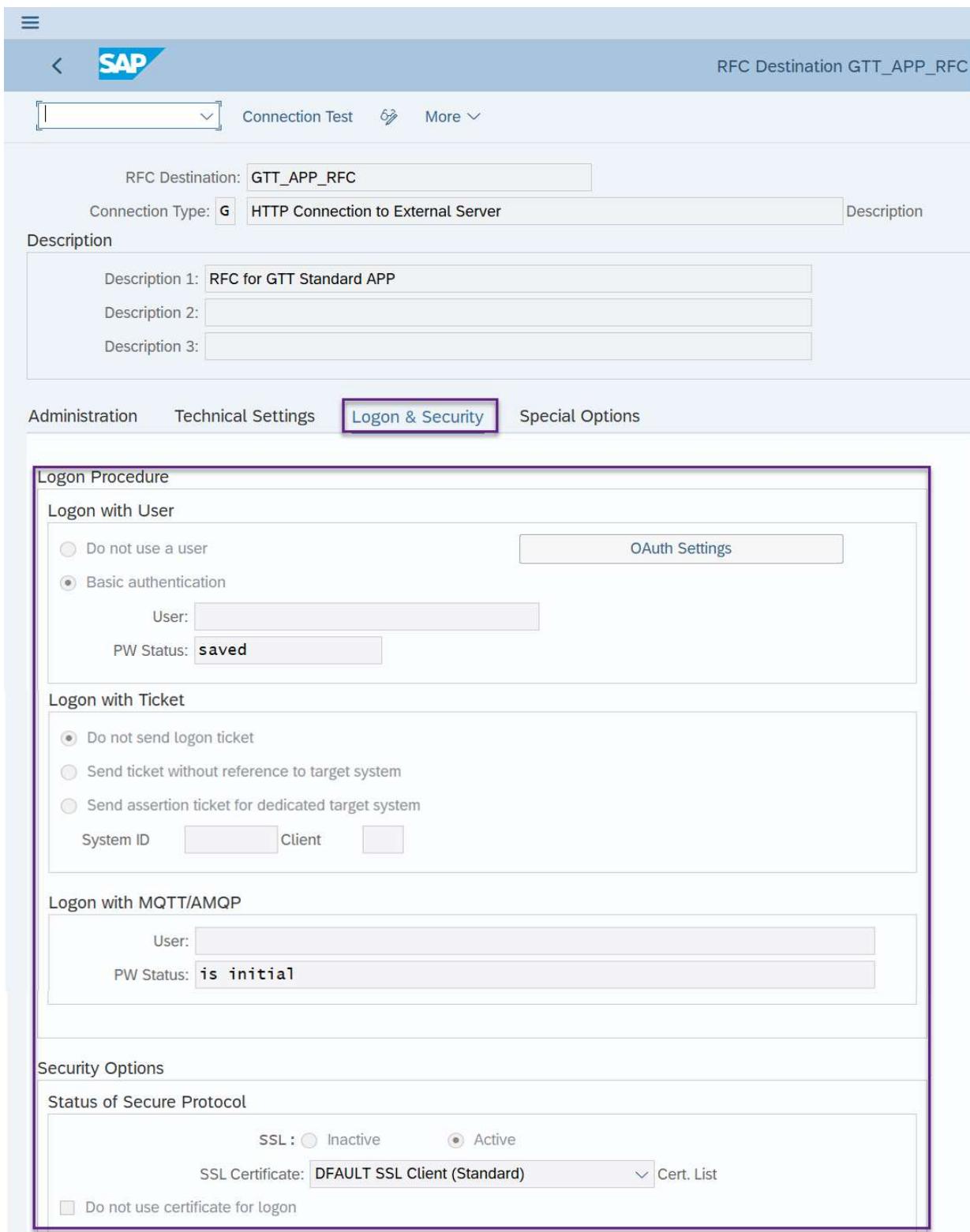
Path Prefix: /api/idoc/em/v1/TrackedProcessAndEvent

The screenshot shows the SAP Fiori launchpad interface. At the top, there is a header bar with the SAP logo and a back arrow. To the right of the header, it says "RFC Destination GTT_APP_RFC". Below the header, there is a search bar and some navigation links. The main content area is titled "RFC Destination: GTT_APP_RFC". Underneath, it says "Connection Type: G HTTP Connection to External Server". There is a "Description" section with three input fields labeled "Description 1: RFC for GTT Standard APP", "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". Below the navigation bar, there is a section titled "Target System Settings" with fields for "Host:" (containing "xxxxxx.gtt-flp-lbnplatform.cfapps.eu10.hana.ondemand.com") and "Port:" (containing "443"). The "Path Prefix:" field (containing "/api/idoc/em/v1/TrackedProcessAndEvent") is also highlighted with a purple border.

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.

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 a back arrow, the SAP logo, and the title "RFC Destination GTT_APP_RFC". Below the title 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 to show the "Logon Procedure" section. This section contains three sub-sections: "Logon with User", "Logon with Ticket", and "Logon with MQTT/AMQP". Under "Logon with User", the "Basic authentication" option is selected, and fields for "User" and "PW Status" (showing "saved") are present. Under "Logon with Ticket", the "Do not send logon ticket" option is selected, and fields for "System ID" and "Client" are shown. Under "Logon with MQTT/AMQP", fields for "User" and "PW Status" (showing "is initial") are present. The "Security Options" section at the bottom includes a "Status of Secure Protocol" group where "SSL" is set to "Active" and the "SSL Certificate" is set to "DEFAULT SSL Client (Standard)". A checkbox for "Do not use certificate for logon" is also present.

4.1.7 Save the configuration.

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.

The screenshot shows a SAP Fiori-style interface titled "Display View 'Logical Systems': Overview". At the top, there is a search bar and several filter icons. Below the header, the table has a single row with the following data:

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 **GTTAPPORT**.

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.

The screenshot shows the SAP Display IMG interface with the title bar "Ports in IDoc processing". On the left, a tree view under "Ports" shows categories like Transactional RFC, File, ABAP-PI, XML File, and XML HTTP. Under XML HTTP, the port "GTTAPPORT" is selected and highlighted with a purple border. The main panel displays configuration details for this port:

- Port:** GTTAPPORT
- Description:** Port for GTT Standard APP
- RFC Destination:** GTT_APP_RFC
- Content Type:** application/x-sap.idoc (radio button selected)
- HTTP Version:** Version 1.0 (radio button selected)
- SOAP Protocol:** (checkbox checked)
- Port Options:** A table with two rows:

Description	Value
No Initial Values for DATS, TIMS, NUMC for Alignment	<input type="checkbox"/>
Send Dynamic Enhancement Segments	<input type="checkbox"/>

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.

The screenshot shows the SAP Fiori interface for defining partner profiles. On the left, there's a sidebar with a tree view of partner types. The 'Partner Type LS' node is selected and highlighted with a purple border. The main area has fields for 'Partner No.' and 'Type', both of which are currently empty. There are tabs for 'Post Processing: Valid Processors' and 'Classification'. Below these tabs, there are fields for 'Ty.:' (set to 'US'), 'Processor:' (empty), and 'Lang:' (set to 'EN').

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

The screenshot shows the SAP Fiori interface for defining partner profiles. The 'Partner No.' field now contains 'GTTAPPLOGS' and the 'Type' field contains 'LS'. The 'Ty.:' field is set to 'US', 'Processor:' is empty, and 'Lang:' is set to 'EN'. The 'Outbound' section shows a table with three rows, each with a radio button and a 'Delete' icon. The table has columns for 'Partner Role', 'Message Type', 'Message Variant', 'Function', 'Test', 'Receiver Port', 'I...', 'Pac...', and 'Basic Type'.

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

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

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

Output Mode	Output Mode:
<input checked="" type="radio"/> Pass IDoc Immediately	2
<input type="radio"/> Collect IDocs	

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 top screenshot shows the "Change View 'SAP Global Track & Trace Definitions': Overview" screen. It has a search bar, a "New Entries" button highlighted with a purple box, and a toolbar with various icons. Below is a table with columns: CI for Global Track & Trace, CI Log. System, SAP Track & Trace Version, and Description. A single row is shown: CI for Global Track & Trace is "CI for Global Track & Trace", CI Log. System is "GTTAPPLOGS", SAP Track & Trace Version is "GTT2.0 Logistics Business Network - Track and Trace", and Description is "CI Tenant for GTT Standard APP".

The bottom screenshot shows the "Display View 'SAP Global Track & Trace Definitions': Overview" screen. It has a search bar, a toolbar with icons, and a table with the same four columns. The same single row is displayed.

4.6 Define GTT Extraction Functions

Prerequisite:

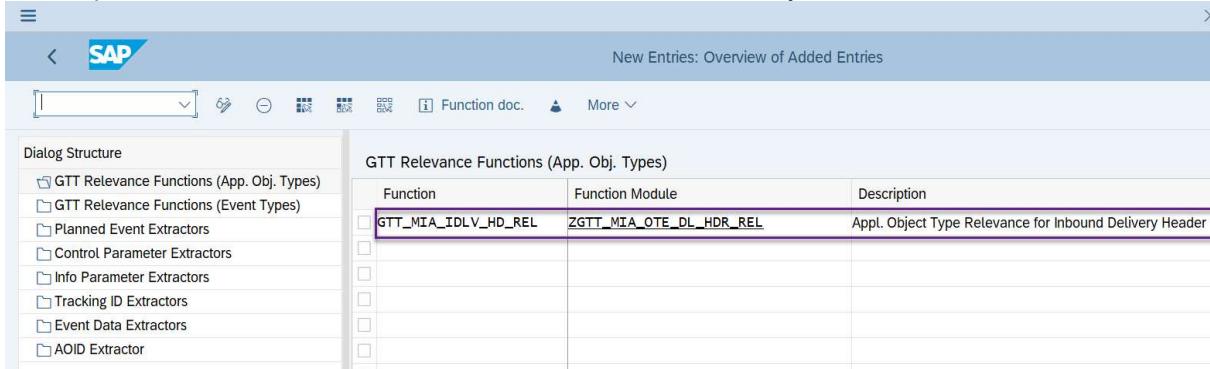
You have already installed ABAPGit and downloaded the code of Fulfillment Tracking apps in your development system.

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**.

This screenshot shows the "Change View 'GTT Relevance Functions (App. Obj. Types)': Overview" screen. It features a "Dialog Structure" sidebar with a tree view containing nodes like "GTT Relevance Functions (App. Obj. Types)" and "Planned Event Extractors". The main area displays a table titled "GTT Relevance Functions (App. Obj. Types)". The table has columns: Function, Function Module, and Description. There are several rows in the table, each with a small icon and some text.

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



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
	GTT_SOF_ODLV_IT_OTE	ZGTT_SSOF_OTE_DE_ITEM	Control Parameter Extractor for Outbound Delivery Item
Event Data Extractors	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_SOF_ODLV_IT_TID	ZGTT_SSOF_TRACKID_OTE_DEITEM	Tracking ID Extractor for Outbound Delivery Item
GTT relevance function of AOT	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.

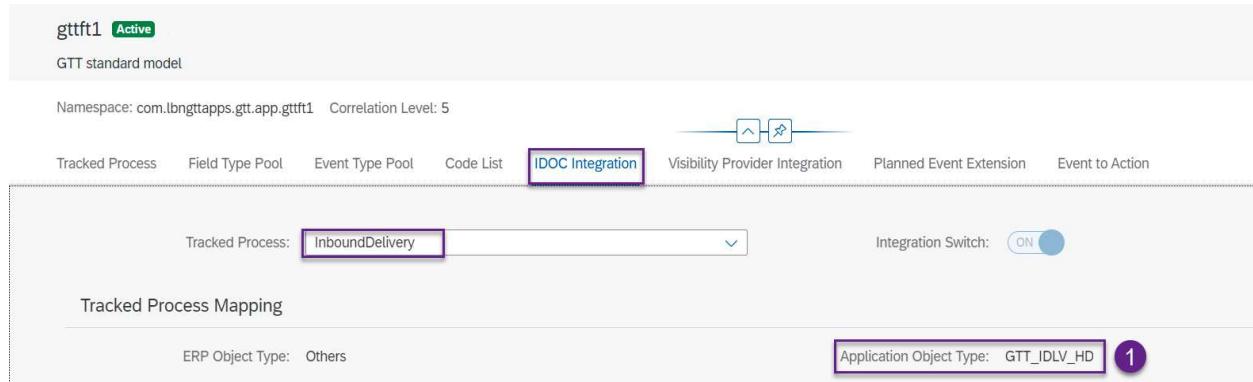
4.8.3 Fill in the **Application Object Type** and **Text** fields.

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**.

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

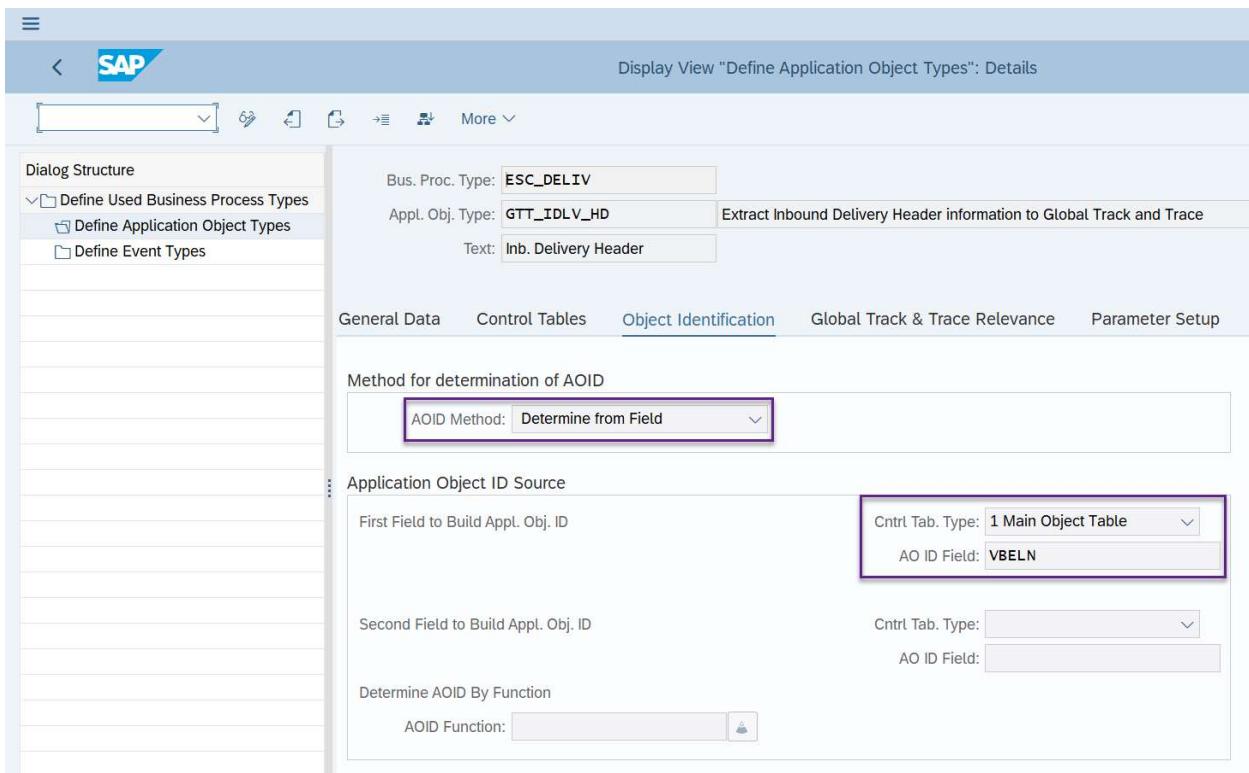
- Dialog Structure:
 - Define Used Business Process Types
 - Define Application Object Types (selected)
 - Define Event Types
- Business Proc. Type: ESC_DELIV
- Appl. Obj. Type: GTT_IDLV_HD (Extract Inbound Delivery Header information to Global Track and Trace)
- Text: Inb. Delivery Header
- Control Tables Tab (selected):
 - Main Obj. Table: DELIVERY_HEADER_NEW (highlighted with a purple box)
 - Master Table: (empty)
- General Data Tab
- Object Identification Tab
- Global Track & Trace Relevance Tab
- Parameter Setup Tab

Note:

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

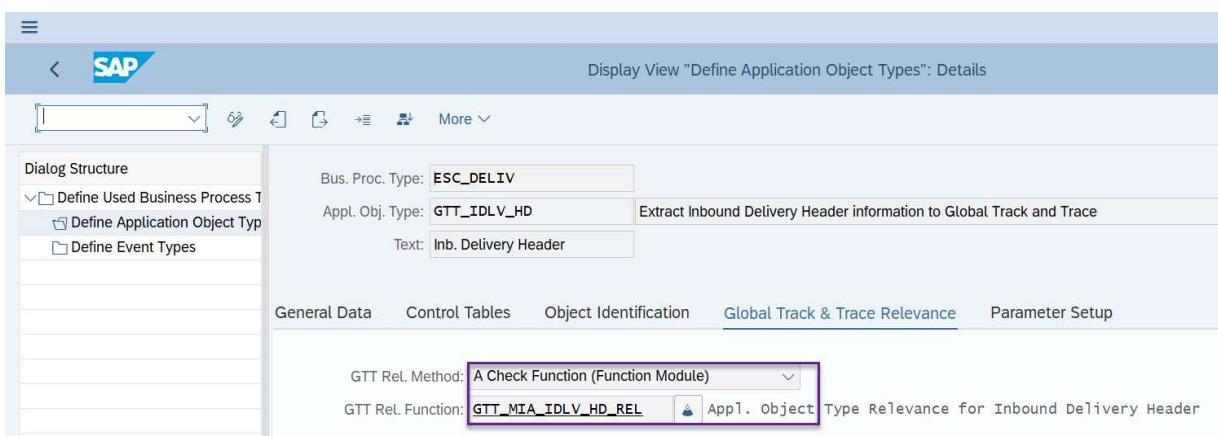
If the event type or application object type is on the item level, then you need to assign the **Main Object Table** and **Master Table**, and assign the reference between the **Main Object Table** and **Master Table**.

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.



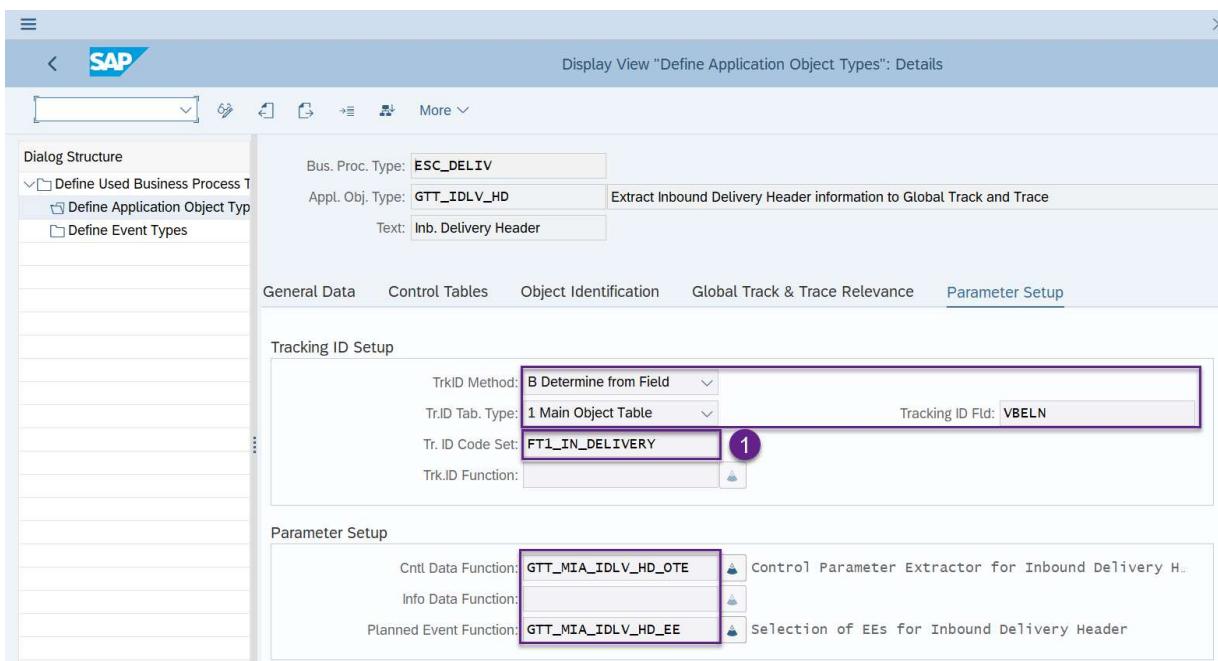
4.8.8 In the **Parameter Setup** tab, choose the **TrkID Method** as you need.

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

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 "Define Application Object Types" node is highlighted. On the right, a table titled "Define Used Business Process Types" lists two entries:

Bus. Proc. Type	Update Mode	BPT Process Mode	Description
<input checked="" type="checkbox"/> ESC_DELIV	Update Task (V1)	Active	Delivery in SAP R/3 Enterprise
<input type="checkbox"/> ESC_FI_CLEARING	Update Task (V1)	Active	FI Clearing in SAP R/3 Enterprise

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". On the left, there is a "Dialog Structure" tree with nodes like "Define Used Business Process T" and "Define Application Object Typ". The "Define Application Object Typ" node is selected. On the right, the "General Data" tab is active, showing the following fields:

Bus. Proc. Type:	ESC_DELIV	
Appl. Obj. Type:	GTT_IDLV_IT	Extract Inbound Delivery Item information to Global Track and Trace
Text:	Inb. Delivery Item	

Below the General Data tab, there are other tabs: Control Tables, Object Identification, Global Track & Trace Relevance, and Parameter Setup. The "Behavior" section contains a checkbox labeled "GTT Relevant" which is checked. Other options like "Stop AO Determ." and "Appl. Log Deact" are also present but unchecked.

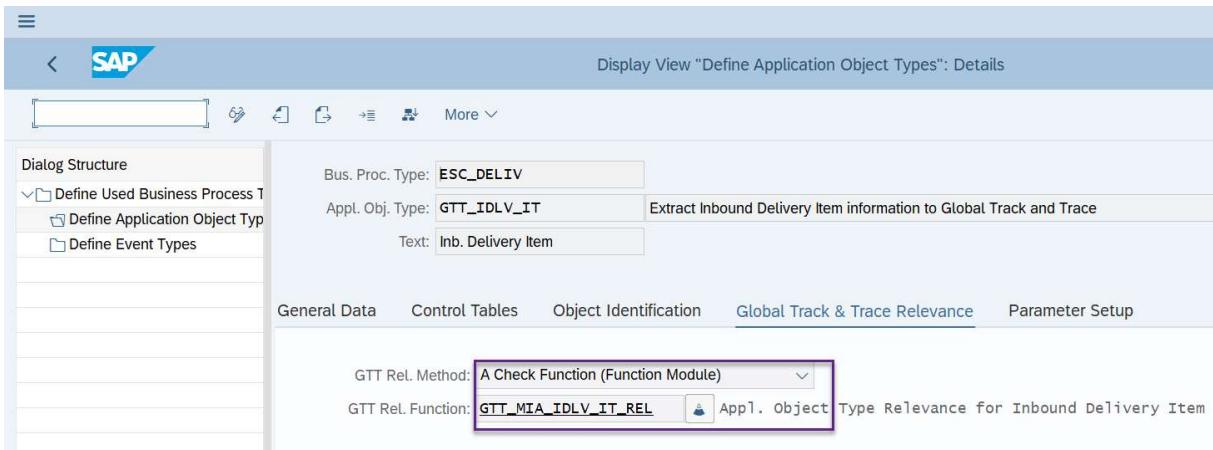
4.9.5 Fill in the Main Object table and Master Table in the Control Tables tab.

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 "Define Application Object Types" selected. The main area has tabs: General Data, Control Tables (selected), Object Identification, Global Track & Trace Relevance, and Parameter Setup. Under Control Tables, there are sections for "Data Source for Created and Updated Objects" (Main Obj. Table: DELIVERY_ITEM_NEW, Master Table: DELIVERY_HEADER_NEW) and "Data Source for Deleted Objects" (Del.Obj. Table: DELIVERY_ITEM_OLD). Below these are sections for "Reference Between Main and Master Table" and "Second Field Reference from Main to Master Table", each with uplink field and mode settings.

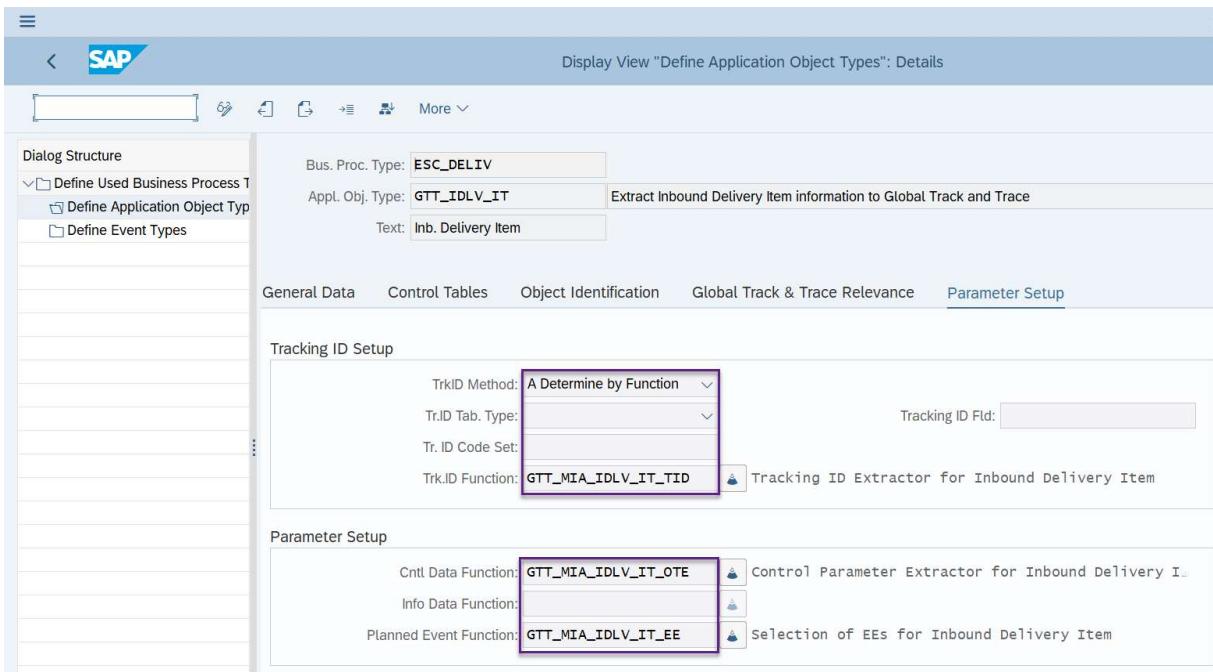
4.9.6 Fill in the AOID method in the Object Identification tab.

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 "Define Application Object Types" selected. The main area has tabs: General Data, Control Tables, Object Identification (selected), Global Track & Trace Relevance, and Parameter Setup. Under Object Identification, there is a section for "Method for determination of AOID" (AOID Method: Determine from Field) and "Application Object ID Source". The "Application Object ID Source" section contains fields for "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). There is also a "Determine AOID By Function" section with an AOID Function input field.

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:	GTTAPPLOGS	CI Tenant for GTT Standard APP

Data Setup

Event Function:	GTT_MIA_IDLV_HD_GR	Actual event Inbound Delivery Head
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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 says "Display View 'Define Event Types': Details". The left sidebar shows "Dialog Structure" with "Define Used Business Process Types" expanded, containing "Define Application Object Types" and "Define Event Types". The main area has tabs: "General Data" (selected), "Control Tables", and "Global Track & Trace Relevance". Under "Control Tables", there is a section for "Data Source for Events" where "Main Obj. Table: MATERIAL_HEADER" is selected. Below it are fields for "Old Main Obj. Table:" and "Old Master Table:". There is also a section for "Reference Between Main and Master Table" 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 says "Display View 'Define Event Types': Details". The left sidebar shows "Dialog Structure" with "Define Used Business Process 1" expanded, containing "Define Application Object Typ" and "Define Event Types". The main area has tabs: "General Data" (selected), "Control Tables", and "Global Track & Trace Relevance". Under "Global Track & Trace Relevance", there is a dropdown for "GTT Rel. Method: A Check Function (Function...)" and a field for "GTT Rel. Function: GTT_MIA_IDLV_HD_GR". To the right of the function field is a button labeled "Relevance Function for Actu".

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 "Define Used Business Process Types" expanded, showing "Define Application Object Types" and "Define Event Types". The main area displays a table titled "Define Used Business Process Types" with two rows:

Bus. Proc. Type	Update Mode	BPT Process Mode	Description
<input checked="" type="checkbox"/> ESC_DELIV	Update Task (V1)	Active	✓ Delivery in SAP R/3 Enterprise
<input type="checkbox"/> ESC_FI_CLEARING	Update Task (V1)	Active	✓ FI Clearing 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 "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", and "Global Track & Trace Relevance". The "General Data" tab is active, showing the following fields:

Bus. Proc. Type:	ESC_DELIV	
Event Type:	<input type="text"/> GTT_EVT_IDLV_PA	Delivery Item Put Away Event
Text:	Put Away Event	

Below the General Data tab, there are sections for "Sequencing / Destination" and "Data Setup". In the "Sequencing / Destination" section, the "Seq. No." is set to 10 and the "HCI for GTT" is set to GTTAPPLOGS. In the "Data Setup" section, the "Event Function" is set to GTT_MIA_IDLV_IT_PA. The "Behavior" section contains checkboxes for "GTT Relevant" (which is checked), "Stop ET Det.", and "Appl. Log Deact".

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**

First Field Reference from Main to Master Table
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
	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

Prerequisite:

ABAP code and BC set should be activated in the system.

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

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

4.13 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

Prerequisite:

ABAP code and BC set should be activated in the system.

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

4.14 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	Uplink Field	VBELN
	Uplink Mode	R

Table – First Field Reference from Main to Master Table	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

Prerequisite:

ABAP code and BC set should be activated in the system.

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

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

Prerequisite:

ABAP code and BC set should be activated in the system.

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

4.16 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	Departure 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_DECUPLE
	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

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	GTTAPPLOGS
	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	GTTAPPLOGS
	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_LOADSTR
	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

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 Coding Tips for Sales Order Relevant Extractor

To send the data of sales orders and outbound deliveries to SAP Business Network Global Track and Trace, you have two options:

- Create a new sales document type “ZGTT” via TCode “VOV8” and delivery type “LBNP” via TCode “OVLK” or “0VLK”
- Replace the sales document type and delivery type in interface “ZIF_GTT_SOF_CONSTANTS”.

5.2 Available Contexts for the Extractors’ Modules

5.2.1 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**

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

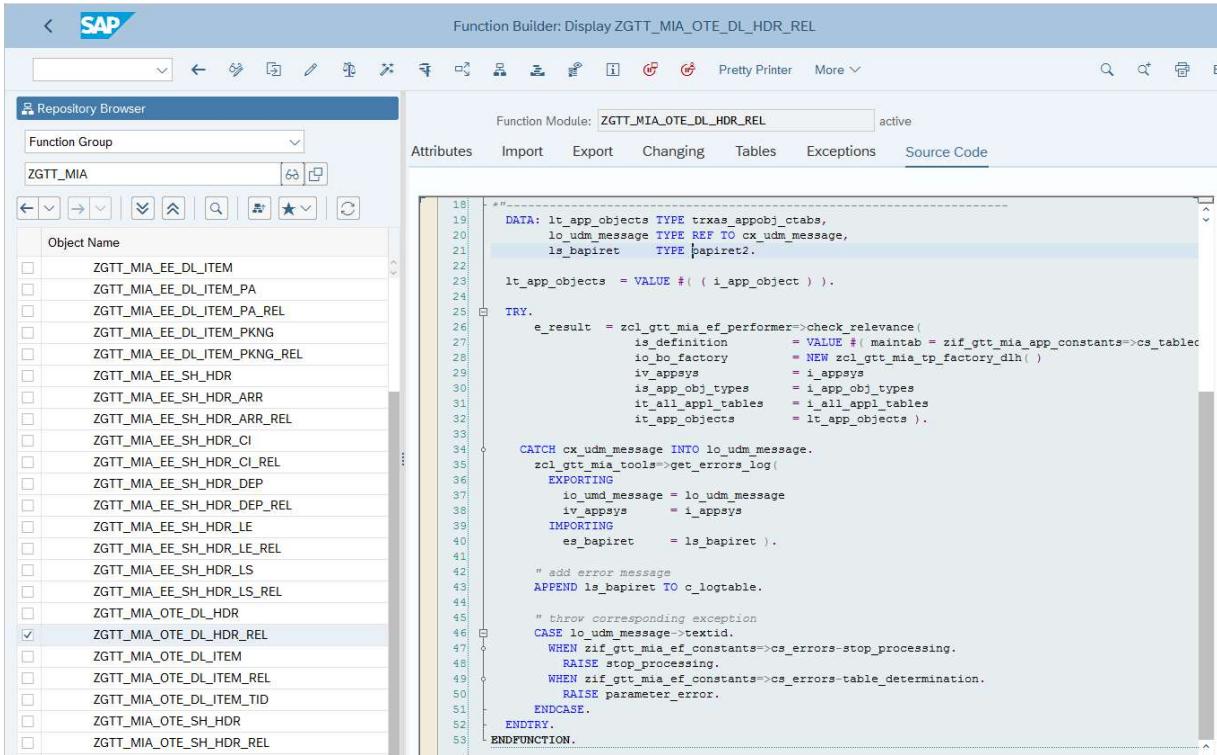
Define Business Process Types		
Business Process Type	Update Mde	Description
EPL_EQUIPMNT	Update Task (V1)	Equipment in SAP R/3 Enterprise
EPL_INSPLOT	Update Task (V1)	Inspection Lot in SAP R/3 Enterprise
EPL_NOTIF	Update Task (V1)	Notification in SAP R/3 Enterprise
ESC_DELIV	Update Task (V1)	Delivery 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_WRKORC	Update Task (V1)	Workorder Confirmation (Production, Service, Maintenance) in SAP R/3 Enterprise
ESC_WRKORD	Update Task (V1)	Workorder (Production, Service, Maintenance) in SAP R/3 Enterprise
OCB10_ORDER	Update Task (V1)	Booking Order in Ocean Carrier Booking Process
SNC_MSGIN	D Dialog Update	SNC Inbound messages

5.3 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.

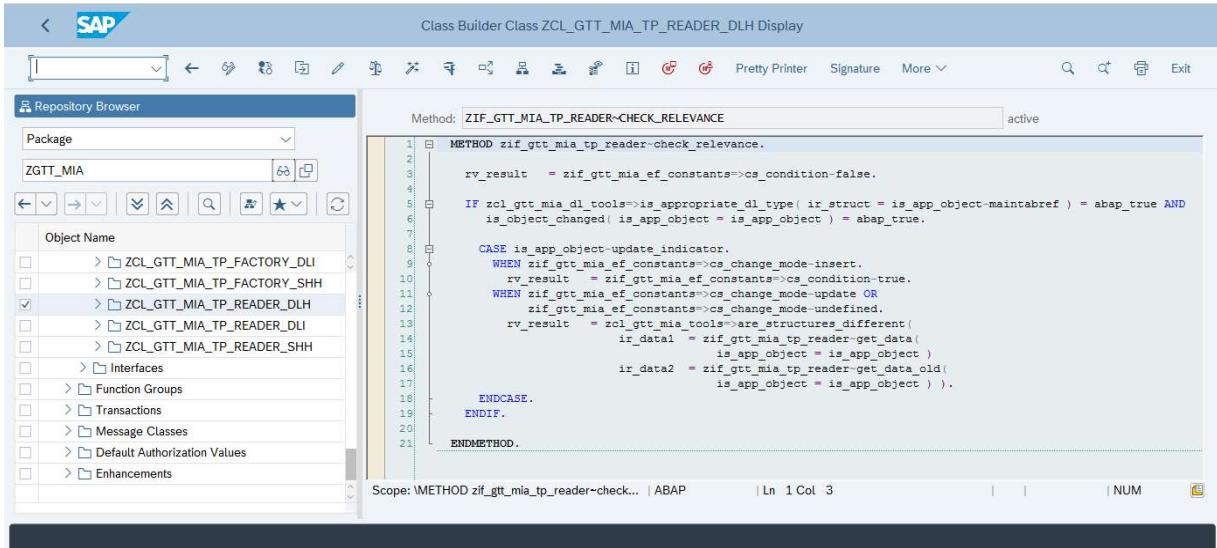
See the sample code of function: ZGTT_MIA_OTE_DL_HDR_REL.



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 ABAP code for the function module. The code handles relevance checks for various objects and handles errors by logging them to the message catalog.

```
18  DATA: lt_app_objects TYPE txnas_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_tablec
27      io_bo_factory = NEW zcl_gtt_mia_tp_factory_dlh( )
28      iv_apps = i_apps
29      is_app_obj_types = i_app_obj_types
30      it_all_appl_tables = i_all_appl_tables
31      it_app_objects = it_app_objects ).
32
33  CATCH cx_udm_message INTO lo_udm_message.
34    zcl_gtt_mia_tools->get_errors_log(
35      EXPORTING
36        io_udm_message = lo_udm_message
37        iv_apps = i_apps
38      IMPORTING
39        es_bapiret = ls_bapiret .
40
41    " add error message
42    APPEND ls_bapiret TO c_logtable.
43
44    " throw corresponding exception
45    CASE lo_udm_message->textid.
46      WHEN zif_gtt_mia_ef_constants->cs_errors-stop_processing.
47        RAISE stop_processing.
48      WHEN zif_gtt_mia_ef_constants->cs_errors-table_determination.
49        RAISE parameter_error.
50      ENDCASE.
51    ENDTRY.
52  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 ABAP code for the method. It performs relevance checks based on the type of object being processed and compares structures to determine if they are different.

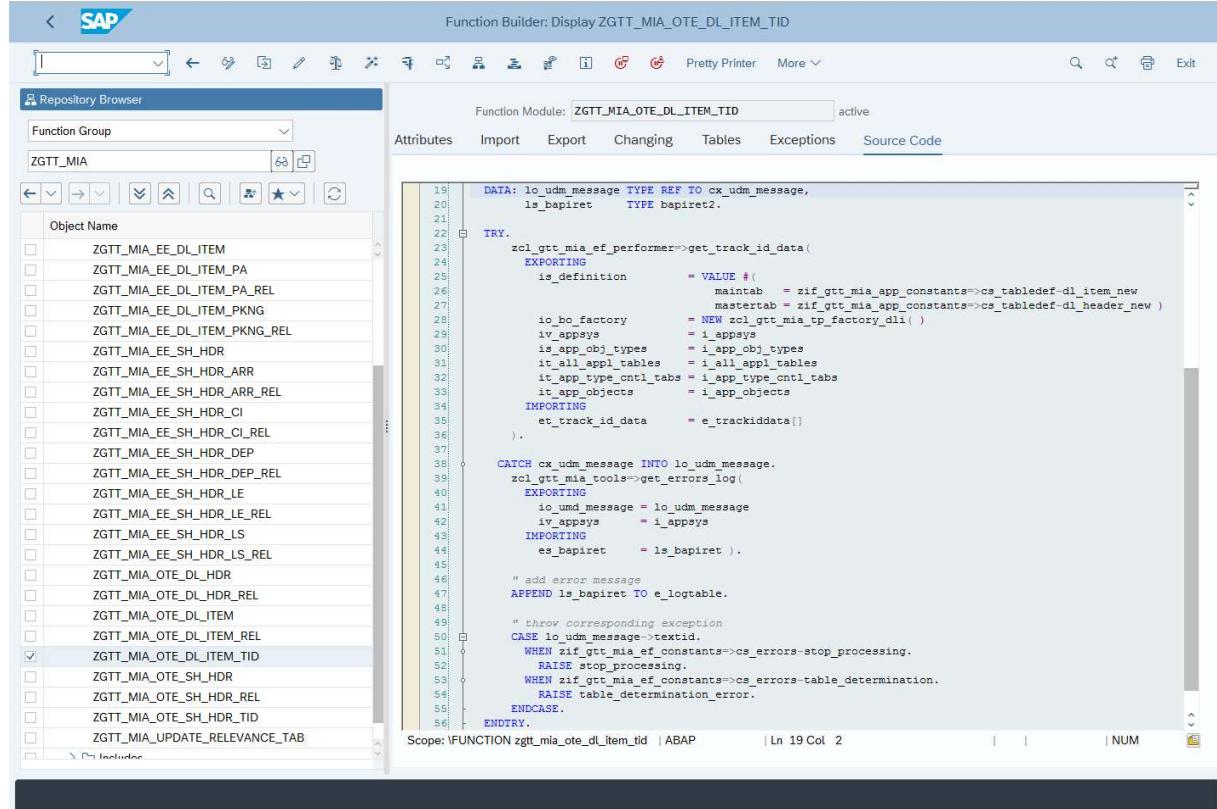
```
1 METHOD zif_gtt_mia_tp_reader-check_relevance.
2   rv_result = zif_gtt_mia_ef_constants->cs_condition-false.
3
4   IF zcl_gtt_mia_dl_tools->is_appropriate_dt_type( ir_struct = is_app_object-maintabref ) = abap_true AND
5     is_object_changed( is_app_object = is_app_object ) = abap_true.
6
7   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

5.4 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 a list of objects under "ZGTT_MIA", with "ZGTT_MIA_OTE_DL_ITEM_TID" selected. The right pane displays the ABAP source code for the function module:

```
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         masterstab        = 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 the package "ZGTT_MIA" and the class "ZCL_GTT_MIA_TP_READER_DLI". The right pane displays the source code for the method "METHOD zif_gtt_mia_tp_reader~GET_TRACK_ID_DATA". The code is written in ABAP and handles the extraction of tracking IDs from ERF objects.

```

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

```

5.5 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      = NEW zcl_gtt_mia_tp_factory_dli( )
30|     iv_appsyst         = i_appsyst
31|     is_app_obj_types   = i_app_obj_types
32|     it_all_appl_tables = i_all_appl_tables
33|     it_app_type_cntl_tabs = i_app_type_cntl_tabs
34|     it_app_objects     = i_app_objects
35|   CHANGING
36|     ct_control_data    = e_control_data[] ).
37|
38| CATCH cx_udm_message INTO lo_udm_message.
39|   zcl_gtt_mia_tools->get_errors_log(
40|     EXPORTING
41|       io_udm_message = lo_udm_message
42|       iv_appsyst     = i_appsyst
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|
56| ENDCASE.
57| ENDTRY.
58| 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      = no_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 "ERP Object Type" is "Others" and the "Application Object Type" is "GTT_IDLV_HD".

Tracked Process / Events (2)

Name	IDOC	Event Code
Tracked Process		
InboundDeliveryEvent	E1EHPAO	
Event Types		
GoodsReceipt	E1EVMHDR02	GOODS_RECEIPT

Standard Model 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

5.6 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:

The screenshot shows the SAP Function Builder interface with the title "Function Builder: Display ZGTT_MIA_EE_DL_ITEM". The left pane is the "Repository Browser" showing a list of function modules under "ZGTT_MIA". The right pane displays the source code for the selected function module:

```
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 #(
30                 maintab          = zif_gtt_mia_app_constants->cs_tabledef-dl_item_new
31                 masterstab       = zif_gtt_mia_app_constants->cs_tabledef-dl_header_new
32             )
33         i_factory
34         iv_appsrys
35         is_app_obj_types
36         it_all_appl_tables
37         it_app_type_cntl_tabs
38         it_app_objects
39     )
40     CHANGING
41         ct_expeventdata   = e_expeventdata[]
42         ct_measrmtdata   = e_measrmtdata[]
43         ct_infodata       = e_infodata[] .
44
45 CATCH cx_udm_message INTO lo_udm_message.
46     zcl_gtt_mia_tools->get_errors_log(
47         EXPORTING
48             io_udm_message = lo_udm_message
49             iv_appsrys   = i_appsrys
50             IMPORTING
51                 es_bapiret   = ls_bapiret .
52
53             " add error message
54             APPEND ls_bapiret TO e_logtable.
55
56             " throw corresponding exception
57             CASE lo_udm_message->textid.
58                 WHEN zif_gtt_mia_ef_consts->cs_errors-stop_processing.
59                     RAISE stop_processing.
60                 WHEN zif_gtt_mia_ef_consts->cs_errors-table_determination.
61                     RAISE table_determination_error.
62             ENDCASE.
63         ENDTRY.
64     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. DATA: lr_lips_data TYPE REF TO data.
3. DATA(lo_relevance) = NEW zcl_gtt_mia_event_rel_dl_hd(
4.   io_ef_parameters = mo_ef_parameters
5.   is_app_objects = is_app_objects).
6.
7.   " initiate relevance flags
8.   lo_relevance->initiate().
9.
10.  " store calculated relevance flags
11.  lo_relevance->update( ).
12.
13.  lr_lips_data = mo_ef_parameters->get_appl_table(
14.    iv_tabledef = zif_gtt_mia_app_constants->cs_tabledef-dl_item_new).
15.
16.  add_gr_event_with_matchkey(
17.    EXPORTING
18.      is_app_objects = is_app_objects
19.      ir_lips_data = lr_lips_data
20.    CHANGING
21.      ct_expeventdata = ct_expeventdata
22.  ).
23.
24.  add_planned_delivery_event(
25.    EXPORTING
26.      is_app_objects = is_app_objects
27.      io_relevance = lo_relevance
28.      iv_milestonenum = zcl_gtt_tools->get_next_sequence_id(
29.        it_expeventdata = ct_expeventdata
30.      )
31.    CHANGING
32.      ct_expeventdata = ct_expeventdata
33.  ).
```

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

The screenshot shows the SAP Manage Models app with the model "gttft1" selected. The "Model Details" tab is active. The "IDOC Integration" tab is highlighted with a purple box. The "Tracked Process Mapping" section shows a tracked process "InboundDelivery" and an integration switch set to "ON". Below this, the "Tracked Process / Events" table lists two entries: "InboundDeliveryEvent" with IDOC "E1EHPAO" and "Event Types" "GoodsReceipt" with IDOC "E1EVMDR02". The "Standard Model Fields" table maps fields from the tracked process to standard model fields, with the row for "reversal" highlighted by a purple box.

Name	IDOC	Event Code
Tracked Process		
InboundDeliveryEvent	E1EHPAO	
Event Types		
GoodsReceipt	E1EVMDR02	GOODS_RECEIPT

Field	IDOC Segment	IDOC Field
reversal	E1EVMPAR	REVERSAL_INDICATOR

5.7 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.

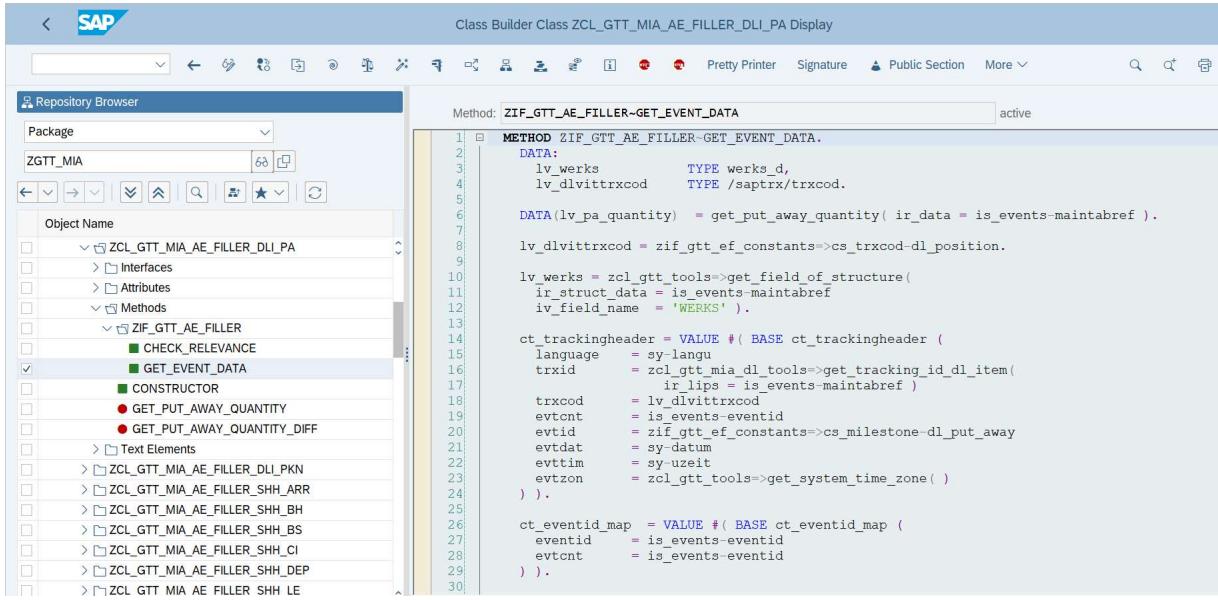
See sample code of function: ZGTT_MIA_EE_DL_ITEM_PA.

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 defines a function module with several parameters and a main processing block (TRY...ENDTRY) containing various assignments and error handling logic.

```
Function Module: ZGTT_MIA_EE_DL_ITEM_PA active
Attributes Import Export Changing Tables Exceptions Source Code

61 DATA: lo_udm_message TYPE REF TO cx_udm_message,
62 ls_bapiret TYPE bapiret2.
63
64 TRY.
65   zcl_gtt_mia_se_performer->get_event_data(
66     EXPORTING
67       is_definition      = VALUE #(
68         maintab      = zif_gtt_mia_app_constants->cs_tabledef_dl_item_new
69         mastertab    = zif_gtt_mia_app_constants->cs_tabledef_dl_header_new )
70     io_ae_factory
71     iv_appsyst
72     is_event_type
73     it_all_appl_tables
74     it_event_type_ctrl_tabs
75     it_events
76     CHANGING
77       ct_eventid_map
78       ct_trackingheader
79       ct_tracklocation
80       ct_trackpreferences
81       ct_trackparameters
82     ).
83
84   CATCH cx_udm_message INTO lo_udm_message.
85     zcl_gtt_mia_tools->get_errors_log(
86       EXPORTING
87         io_udm_message = lo_udm_message
88         iv_appsyst
89       IMPORTING
90         es_bapiret = ls_bapiret .
91
92     " add error message
93     APPEND ls_bapiret TO ct_logtable.
94
95     " throw corresponding exception
96     CASE lo_udm_message->textid.
97       WHEN zif_gtt_mia_ef_constants->cs_errors_stop_processing.
98         RAISE stop_processing.
99       WHEN zif_gtt_mia_ef_constants->cs_errors_table_determination.
100        RAISE event_data_error.
101      ENDCASE.
102
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 "ZIF_GTT_AE_FILLER~GET_EVENT_DATA".

```
Method: ZIF_GTT_AE_FILLER~GET_EVENT_DATA active
METHOD ZIF_GTT_AE_FILLER~GET_EVENT_DATA.
DATA:
  lv_werks      TYPE werks_d,
  lv_dlvittrxcod  TYPE /saptrx/trxcod.

DATA(lv_pa_quantity) = get_put_away_quantity( ir_data = is_events-maintabref ).

lv_dlvittrxcod = zif_gtt_ef_constants->cs_trxcod-dl_position.

lv_werks = zcl_gtt_tools->get_field_of_structure(
  ir_struct_data = is_events-maintabref
  iv_field_name = 'WERKS' ).

ct_trackingheader = VALUE #( BASE ct_trackingheader (
  language = sy-langu
  trxid = zcl_gtt_mia_dli_tools->get_tracking_id_dli_item(
    ir_lips = is_events-maintabref )
  trxcod = lv_dlvittrxcod
  evtcnt = is_events-eventid
  evtid = zif_gtt_ef_constants->cs_milestone-dl_put_away
  evtdat = sy-datum
  evttim = sy-uzzeit
  evtzon = zcl_gtt_tools->get_system_time_zone( )
) ).

ct_eventid_map = VALUE #( BASE ct_eventid_map (
  eventid = is_events-eventid
  evtcnt = is_events-eventid
) ).
```

5.8 Enhancement Codes for Cross-processes Tracking

The Fulfillment Tracking apps ask for 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 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 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 and item process, 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 and item process need to be updated and sent to SAP Business Network Global Track and Trace.

The cross-process tracking scenarios cover the following:

Shipment -> Inbound/Outbound Delivery and Inbound/Outbound Delivery Item:

1. Tracking ID (Delta Transport)
 - Case: Shipment Create / Delete with Delivery
 - Case: Shipment Assign / Unassign Delivery
2. Shipment Composition (Full Transport)
 - Case: Shipment Create / Delete with Delivery
 - Case: Shipment Assign / Unassign Delivery
3. Planned Event in Delivery (Full Transport)
 - Case: Shipment Create / Delete with Delivery / with stage
 - Case: Shipment Assign / Unassign Delivery / with stage
 - Case: Stage Assign / Unassign Delivery
 - Case: Stage Insert / Delete
 - Case: Stage Location Update
 - Case: Stage Planned Datetime Update

Freight Unit -> Inbound/Outbound Delivery and Inbound/Outbound Delivery Item:

1. Freight Unit Relevant
 - Case: Freight Unit Create / Delete with Delivery
2. Freight Unit Composition
 - Case: Freight Unit Create / Delete with Delivery
3. Planned Event
 - Case: Freight Unit Create / Delete with Delivery

5.9 Known Issue

5.9.1 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.

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	

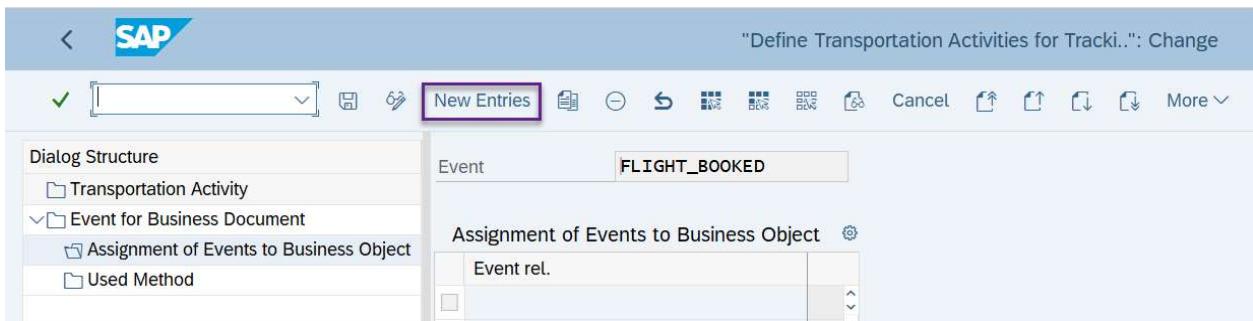
3. Input the **Event name, Description, Transp Act and Click Save**.

Event	Description	Transp Act	Stop Cat	Internal
FLIGHT_BOOKED	Flight Booked	99		

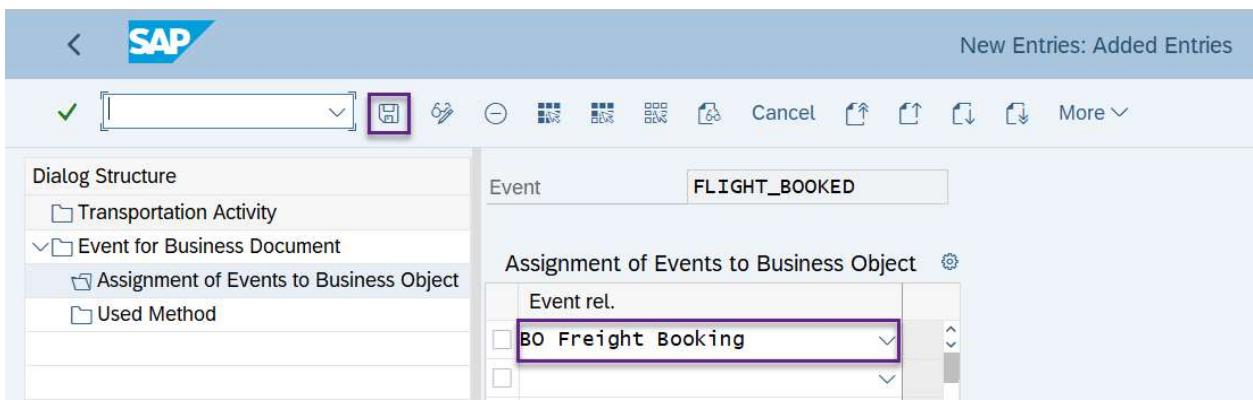
4. Select the event "FLIGHT_BOOKED", then double click **Assignment of Events to Business Object**.

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.

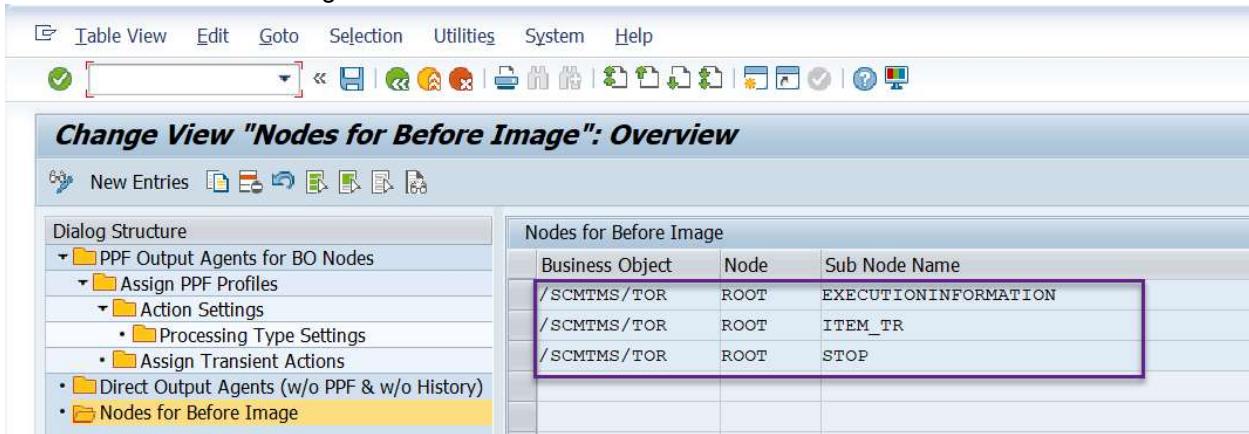
The screenshot shows the SAP Reference IMG interface with the title "Change View \"Direct Output Agents (w/o PPF & w/o History)": Overview". The left sidebar displays the "Dialog Structure" tree, which includes nodes for PPF Output Agents for BO Nodes, Assign PPF Profiles, Action Settings, Processing Type Settings, Assign Transient Actions, Direct Output Agents (w/o PPF & w/o History), and Nodes for Before Image. The "Direct Output Agents (w/o PPF & w/o History)" node is selected. The main area shows a table titled "Direct Output Agents (w/o PPF & w/o History)" with one row:

Business Object	Node	Agent Name	Description	Enable	Child Chg Sync/Async
/SCMTMS/TOR	ROOT	SEND_EM_DATA_FROM_TOR	Call SAP EM (recommended, check note 1842397 for details)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> B Has Uncritical o/p: Process after Commit (background)

Below this, the "Display View \"Direct Output Agents (w/o PPF & w/o History)": Details" screen is shown. It contains two panes. The left pane shows the "Dialog Structure" tree with the "Direct Output Agents (w/o PPF & w/o History)" node selected. The right pane displays the configuration details for the selected agent:

- Business Object: /SCMTMS/TOR
- Node: ROOT
- Agent Name: SEND_EM_DATA_FROM_TOR
- Direct Output Agents (w/o PPF & w/o History):
 - Description: Call SAP EM (recommended, check note 1842397 for details)
 - Enable:
 - Incl. Child Chgs:
 - Synch/Asynch: B Has Uncritical o/p: Process after Commit (background)
 - Processor Class: /SCMTMS/CL_OUTMGMT_EXEC_TOR
 - User-Def. Func. 1: (empty)
 - User-Def. Func. 2: (empty)
 - User-Def. Func. 3: (empty)

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

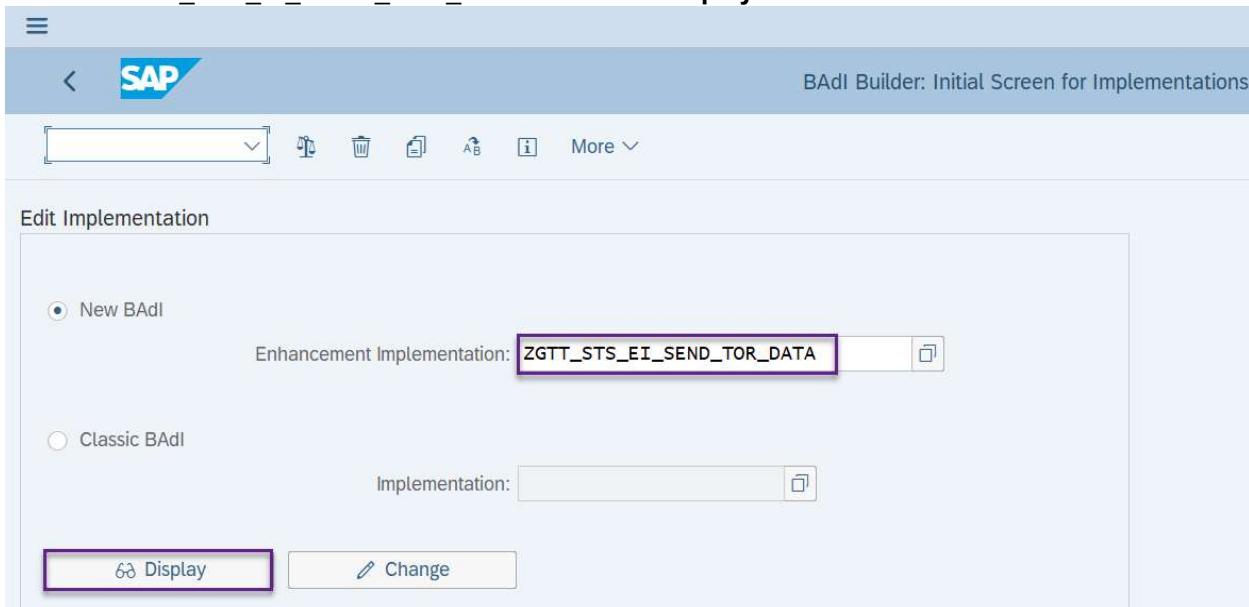


The screenshot shows the SAP dialog structure for 'Nodes for Before Image'. On the left, under 'Dialog Structure', the path is expanded to show 'PPF Output Agents for BO Nodes' and 'Assign PPF Profiles'. Within 'Assign PPF Profiles', 'Action Settings' is expanded to show 'Processing Type Settings' and 'Assign Transient Actions'. Below these, 'Nodes for Before Image' is selected. On the right, the 'Nodes for Before Image' table displays 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**.



The screenshot shows the SAP SE19 implementation creation screen. The title bar says 'BAdI Builder: Initial Screen for Implementations'. The main area is titled 'Edit Implementation'. There are two radio button options: 'New BAdI' (selected) and 'Classic BAdI'. Under 'New BAdI', the 'Enhancement Implementation:' field contains the value 'ZGTT_STS_EI_SEND_TOR_DATA'. At the bottom, there are two buttons: 'Display' (highlighted with a purple border) and '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.

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:

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"/>
Delivery Profile:	<input type="text"/>
EWM Integration Profile:	<input type="text"/>
Application Object Type:	<input style="border: 2px solid #800080; background-color: #f0f0ff; width: 150px; height: 20px; padding: 2px; margin-left: 10px;" 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. It includes fields for Execution Tracking Relevance (set to "3 Execution Tracking with External Event M..."), Check Condition "Ready for Exec", Display Mode for Execution Tab (set to "Actual Events from TM and EM, Expected ..."), Expected Event for Goods Issue, Expected Event for Goods Receipt, Last Exp. Event (set to "ARRIV_DEST"), Immediate Processing (unchecked), Execution Propagation Mode (set to "Standard Propagation"), and Discrepancy Profile.

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. It includes fields for Dangerous Goods Profile (set to "DG1"), Customs Profile, Document Creation Relevance, Delivery Profile, EWM Integr. Profile, and Application Object Type (set to "GTT_SHP_HD"). A checkbox for BW Relevance is also present.

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 managing freight orders. The top navigation bar includes 'Edit', 'Refresh', 'Copy', 'Other Copy Options', 'Check', 'Follow Up', 'Scheduling', 'Subcontracting', 'Create Service Order', 'Schedule', 'Set Status', and 'Display Settings'. The main area has tabs for 'General Data', 'Business Partner', 'Items', 'Overview', 'Stages', 'Utilization', and 'Subcontracting'. On the right, there's a 'Transportation' section with fields for 'Carrier' (set to 'LBN_CAR100'), 'Executing Carrier', 'Communication Party', and 'Service Level – Carrier'. A context menu is open over the 'Carrier' field, showing options like 'Load Plan Status (Stop)', 'Execution Status' (which is selected), 'Fixing', 'Customs', 'Charges/Settlement', 'Cancel Document', 'Load Plan Status (Packaging)', and 'Load Plan Status (Load Planning)'. The 'Set to In Execution' option is highlighted with a purple box and a circled number 2. Another circled number 1 is shown next to the 'Carrier' field.

- 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".

SAP Edit GTT Standard Air Booking AccAWS 6500009008

Booking Type: STA1 GTT Standard Air Booking AccAWS

Issuing Carrier Airline Code/Local Car...: MG 1005683 HEST /69190 Walldorf

MAWB No.: 421826854 Allow ... :

First Carrier Airline Code/Flight No./G...:

First Space Allocation Act. Code/Adv...:

Airport of Departure:

Expected Departure Date/Time/Day:

Airport of Destination:

Expected Arrival Date/Time/Day:

Schedule:

Organizational Data

Origin Organization

Destination Organization

Issuing Carrier's Agent

IATA Agent Code/Agent's CASS Acco...

Account Number with Carrier

Regulated Agent

Capacity Requirements

Total Booked Capacity (Volume)

Total Booked Capacity (Mass)

Total Booked Capacity (Piece)

- 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".

SAP Edit GTT Standard Ocean Booking AccAWS 6500009007

Booking Type: STO1 GTT Standard Ocean Booking AccAWS

Carrier: LBN_DACHS1 1 User ... SCAC: Container Count

Executing Carrier: SCAC: Confirmed Container Count

Communication Party: Cargo Capacity

Steamship Line Booking Number: Confirmed Cargo Capacity

Carrier's Master Bill of Lading Number: Purchasing Organization

Booking Confirmation Status: 1 Not Sent to Carrier

Capacity Requirements

Container Count

Confirmed Container Count

Cargo Capacity

Confirmed Cargo Capacity

Organizational Data

Purchasing Organization

Q2: How to add customized planned event types for global track and trace?

Suppose you want to add the planned event type "picking complete" for the outbound delivery 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](#).
 - Assign the newly created event type to the Outbound Delivery 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 "OutboundDelivery" from the dropdown list.
 - Under **Tracked Process / Events**, fill in **IDOC** and **Event Code** for the newly created event type.
- Note: the event code must start with "ZZ".

- e. 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

- a. Navigate to the function module “ZGTT_SSOF_EE_DE_HD (Selection of EEs for Outbound Delivery Header)” in the system.
- b. Add the planned event type that you created in the Manage Models app as milestone event. For coding tips, see chapter [5.6](#) 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.

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 who's become 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

- a. Go to the **Manage Business Partner** transaction (transaction BP).
- b. 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.
- c. Go to the **Identification** tab. In the **Identification Numbers** section, enter “LBN001” in the **IDType** column.
- d. In the **Identification Number** field, enter the LBN ID and save your changes.

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