



SAP Logistics Business Network, Global Track and Trace Option **SAP ERP Integration**

SAP Business Network
September 2020

PUBLIC

THE BEST RUN 

Overview

A Activate SAP Event Manager Integration

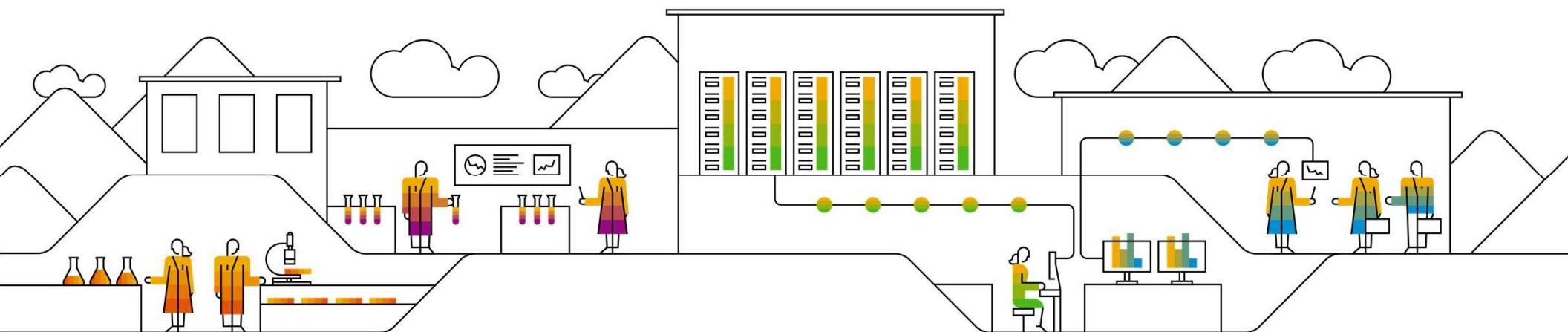
B Configuration and Implementation

 B1 IDOC Configuration

 B2 Extractor Configuration

C Download ABAP Code from GitHub

D Coding Guide



A) Activate SAP Event Manager Integration

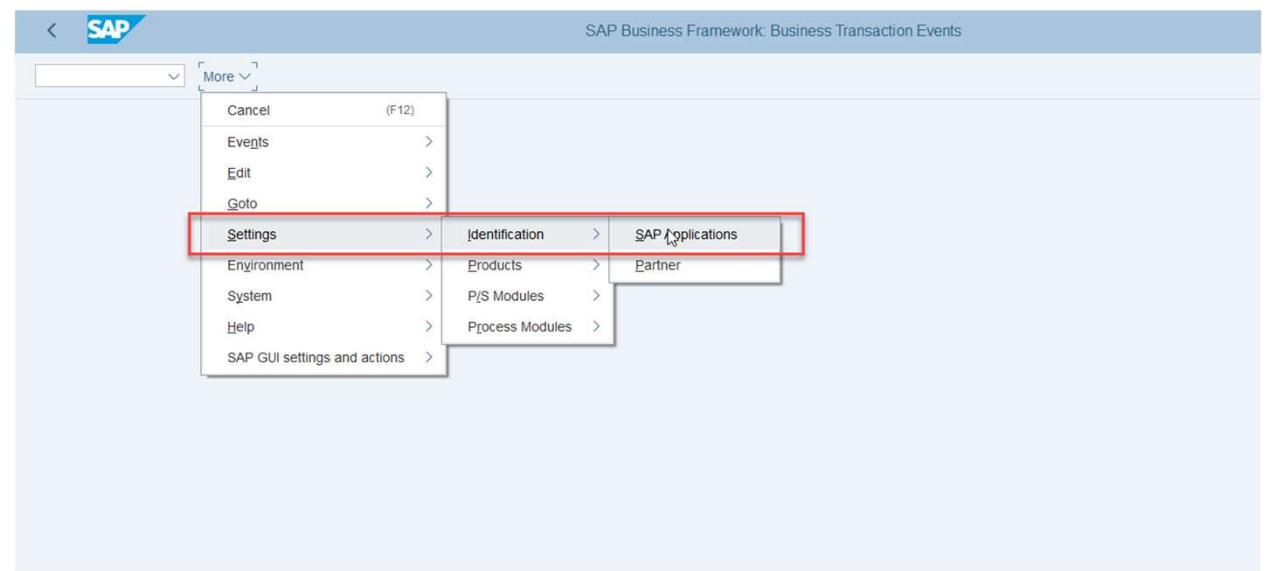


STEP 1: Log on the Development Client to Configure BTE

1-1: Ensure you have development access to the client for cross-client customizing and local development

1-2: Log on to the client and enter transaction code (T-code): **FIBF**

1-3: Click **More -> Settings -> Identification -> SAP Applications**



STEP 2: Activate SAP Event Manager Integration

2-1: Position on the Application ID: PI-EM

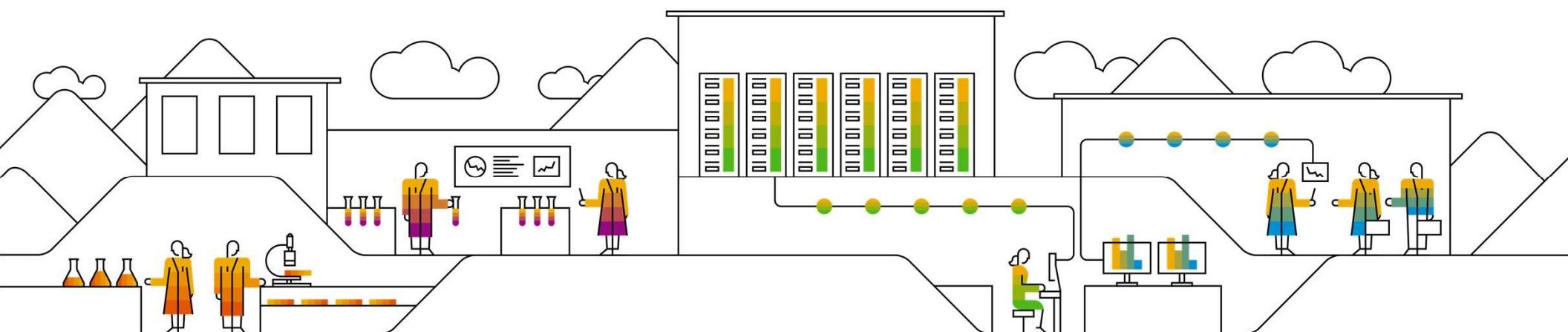
2-2: Check the field Application Active

2-3: Click Save

Change View "BTE Application Indicator": Overview		
Appl.	A	Text
PI-EM	<input checked="" type="checkbox"/>	SAP Event Manager Integration
PM	<input checked="" type="checkbox"/>	Instandhaltung
PM-BW	<input checked="" type="checkbox"/>	Instandhaltung-BW
PM-EQM	<input checked="" type="checkbox"/>	Instandhaltung, Equipment
PM-PAM	<input checked="" type="checkbox"/>	Instandhalt. Pool Asset Mgmt
PMA-PC	<input checked="" type="checkbox"/>	Product Compliance
PMAT	<input checked="" type="checkbox"/>	Produkt - Material
PMIPUR	<input type="checkbox"/>	PMI Anschluss Einkauf
PPM PUSH	<input type="checkbox"/>	MAM Push
PP-BD	<input checked="" type="checkbox"/>	Production Planning MasterData
PP-DD	<input checked="" type="checkbox"/>	Demand Driven Replenishment
PP-MRP	<input checked="" type="checkbox"/>	Material Requirements Planning
PRICAT	<input type="checkbox"/>	Preiskatalog
PS-REP	<input checked="" type="checkbox"/>	Projektsystem
PSRV	<input checked="" type="checkbox"/>	Produkt - Service
QBEXT	<input checked="" type="checkbox"/>	External Inspection Procurement
QBEXTP	<input checked="" type="checkbox"/>	External Inspection Production
QILPO	<input checked="" type="checkbox"/>	Inspection Lot Order Integr.
RDSVFI	<input type="checkbox"/>	Dgtl.Signature Validation FI
RDSVMD	<input checked="" type="checkbox"/>	Dgtl.Signature BP Check

B) Configuration and Implementation

B1. IDOC Configuration



STEP 1: Define RFC Connection for GTT

1-1: Log on to the business client

1-2: Enter T-code **SPRO** and then click **SAP Reference IMG** to open **Display IMG** page

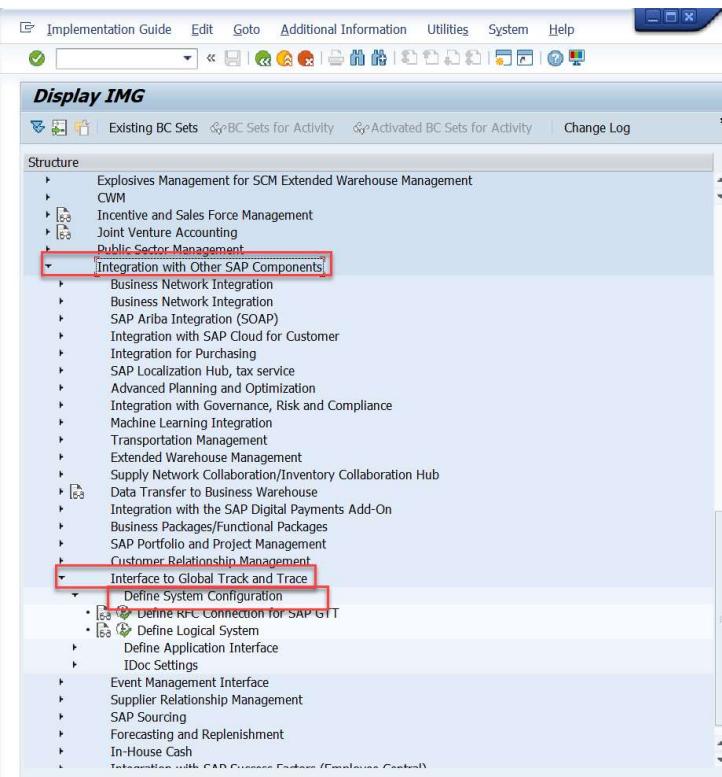
1-3: Click **Integration with Other SAP Components**

-> **Interface to Global Track and Trace**

-> **Define System Configuration**

1-4: Choose activity:

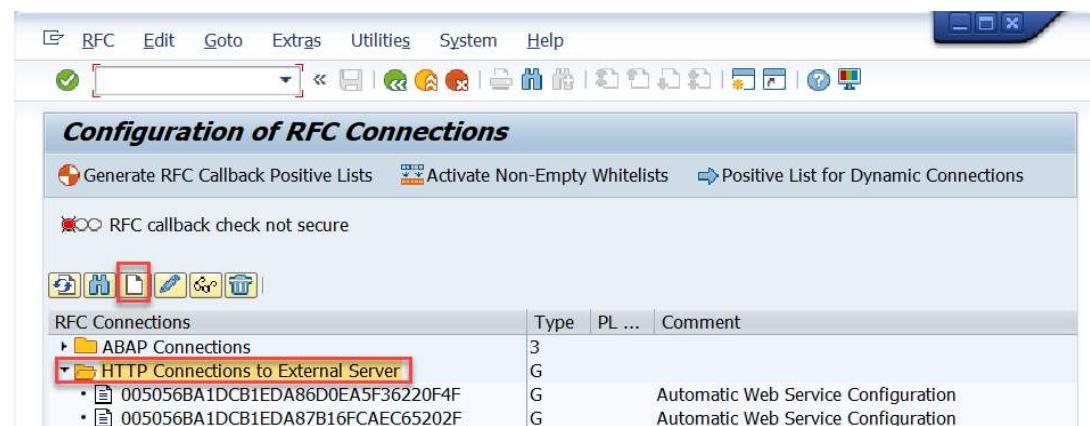
Define RFC Connection for SAP GTT



STEP 1: Define RFC Connection for GTT

1-5: Choose **HTTP Connections to External Server**, click **Create** and create a new RFC connection.

1-6: Fill in the **Destination** and choose the **Connection Type**:
'G-HTTP connection to external server'.



STEP 1: Define RFC Connection for GTT

1-7: Enter a description

1-8: In the **Technical Settings** tab, fill in the **Host, Port and Path Prefix**

For example, the url of solution owners is as below:

<https://sat-so-01.gtt-flp-lbnplatform-pre-live.cfapps.eu10.hana.ondemand.com/>

Host: sat-so-01.gtt-flp-lbnplatform-pre-live.cfapps.eu10.hana.ondemand.com

Port: 443

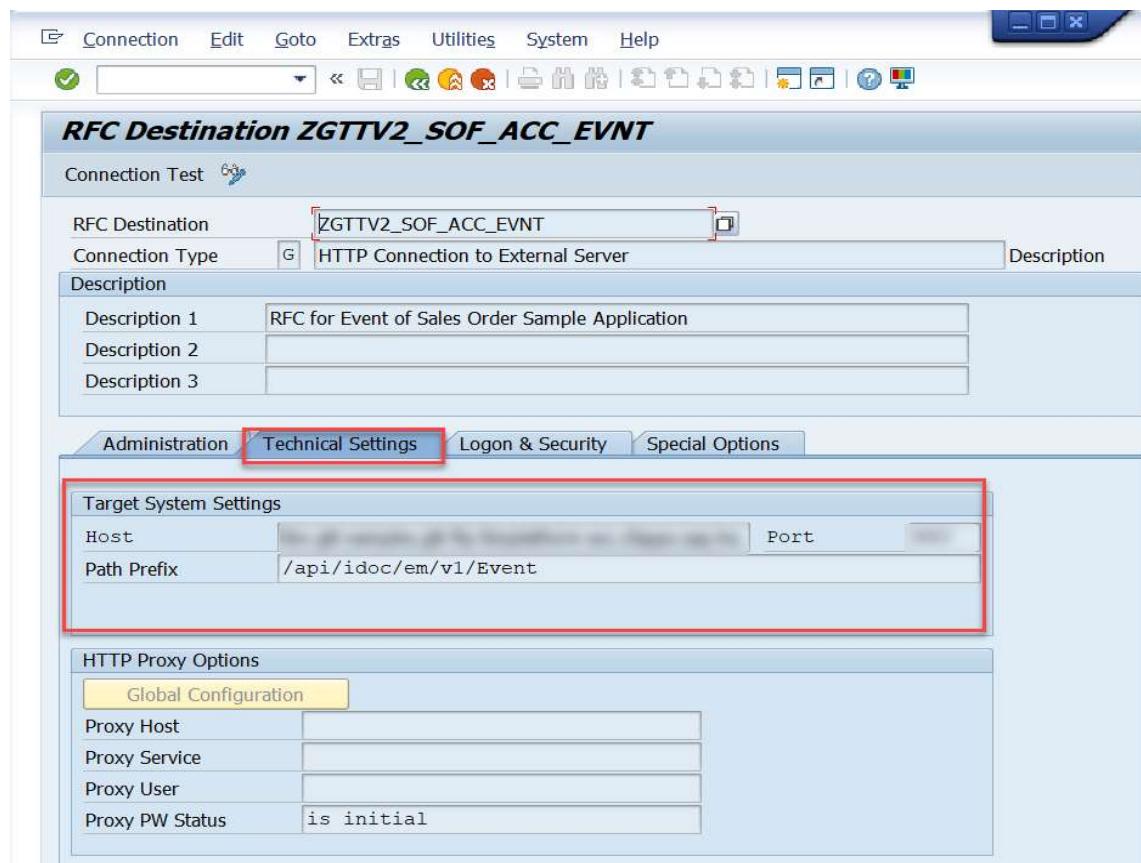
You may need to configure two RFC connections separately for event and tracked process. They have different **Path Prefixes**.

For the event:

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

For the tracked Process:

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



STEP 1: Define RFC Connection for GTT

1-9: In the **Logon & Security** tab, enter the Logon information.

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

Also, SSL must be *Active*.

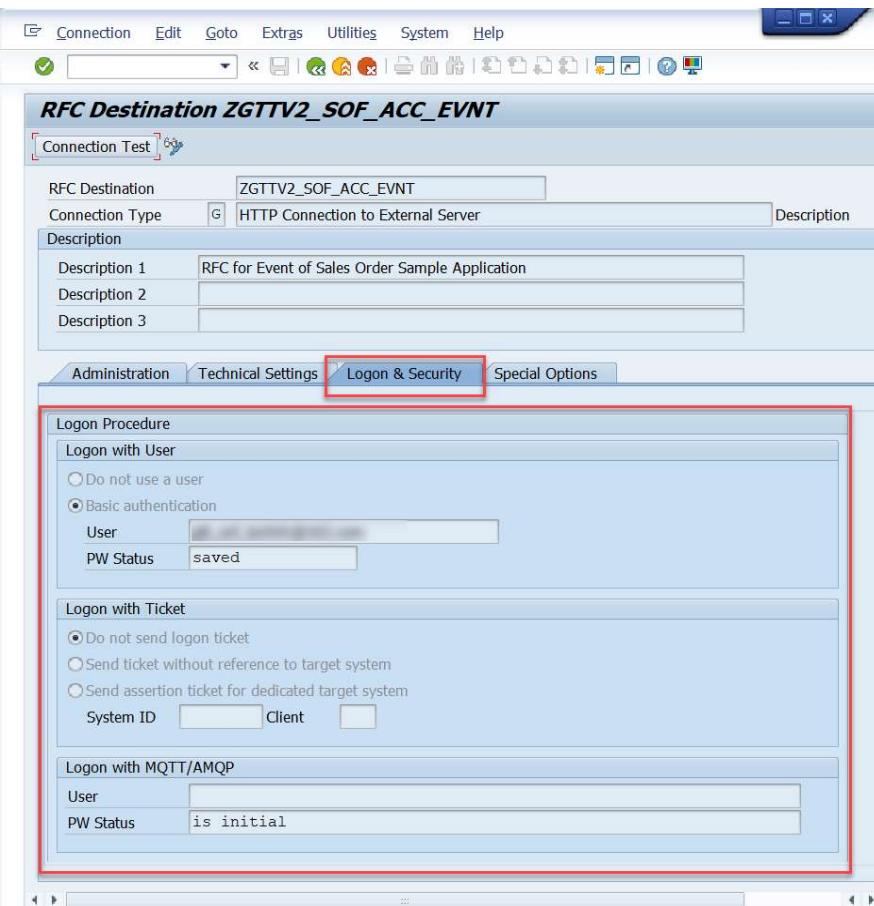
The recommended SSL Certificate is: *DEFAULT SSL Client (Standard)*.

1-10: Save the configuration

1-11: Click **Connection Test**. A successful connection returns a status HTTP response of 200.

Caution: You may need to configure two RFC Connections:

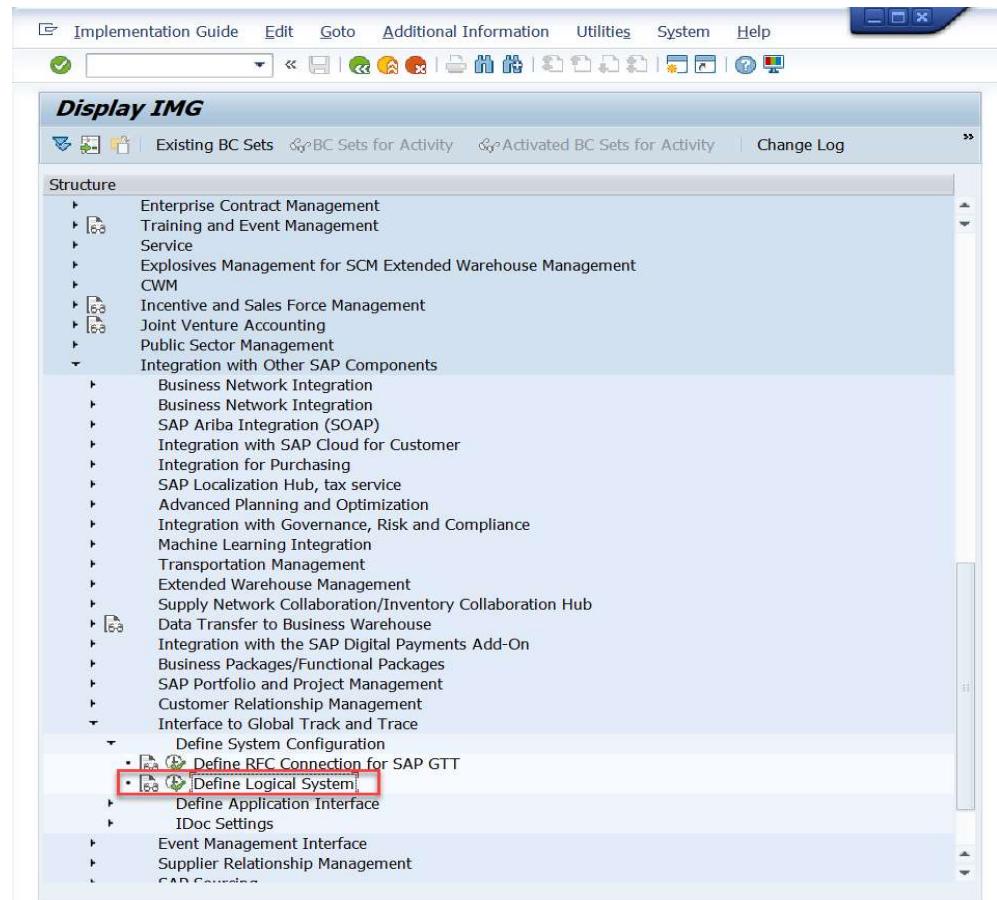
- one for event and
- the other for tracked process.



STEP 2: Define Logical System

2-1: In Display IMG page, click
Integration with Other SAP Components ->
Interface to Global Track and Trace ->
Define System Configuration.

2-2: Choose activity **Define Logical System**.

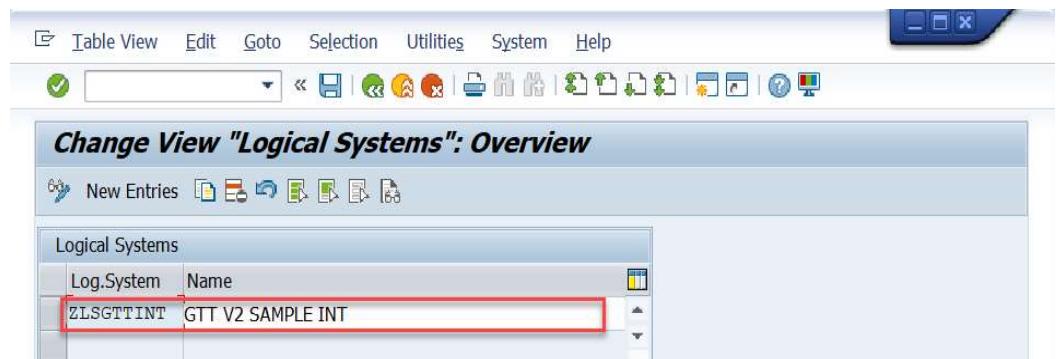


STEP 2: Define Logical System

2-3: Create **New Entries** to create a new Logical System, fill in the:

- Logical system code and
- Name of the new logical system

2-4: Save the configuration



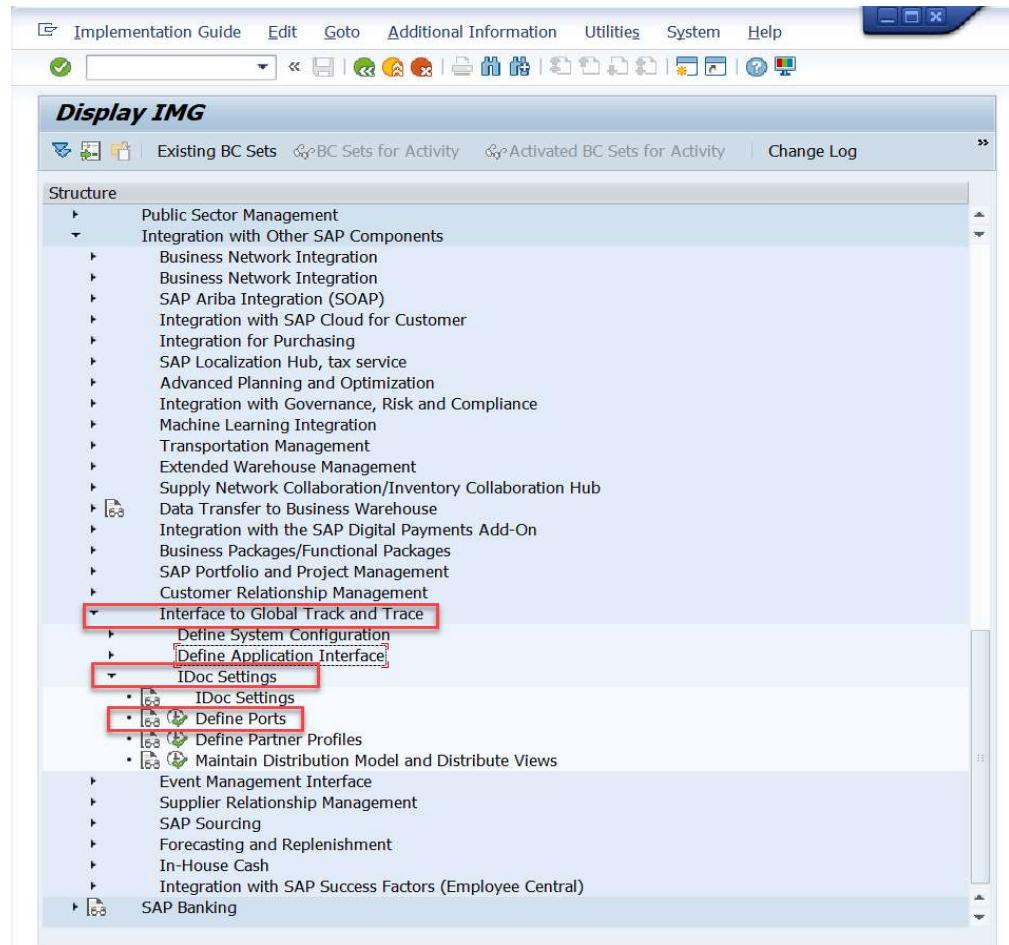
The screenshot shows the SAP Fiori interface for managing logical systems. The title bar reads "Change View 'Logical Systems': Overview". Below the title bar is a toolbar with various icons. The main area contains a table titled "Logical Systems" with two columns: "Log.System" and "Name". A single row is visible, showing "ZLSGTTINT" in the Log.System column and "GTT V2 SAMPLE INT" in the Name column. This row is highlighted with a red border.

Log.System	Name
ZLSGTTINT	GTT V2 SAMPLE INT

STEP 3: Define Ports

3-1: In Display IMG page, click
Integration with Other SAP Components ->
Interface to Global Track and Trace ->
IDoc Settings

3-2: Choose activity **Define Ports**



STEP 3: Define Ports

3-3: Choose **XML HTTP** folder, and click **Create** to create a new port

3-4: Fill in the **RFC Destination**, it is the RFC connection you created in STEP 1

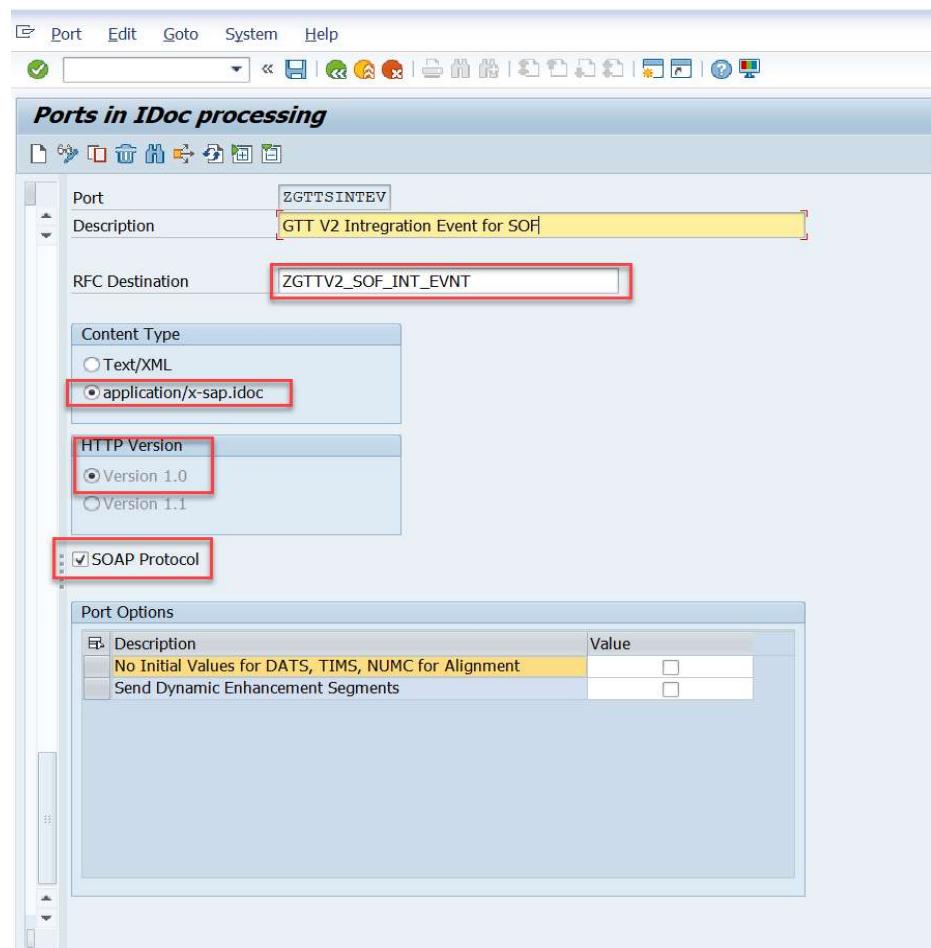
3-5: Choose **Content Type** as *application/x-sap.idoc*

3-6: Choose **HTTP Version** as *Version 1.0*

3-7: Mark it as SOAP Protocol

3-8: Save the configuration

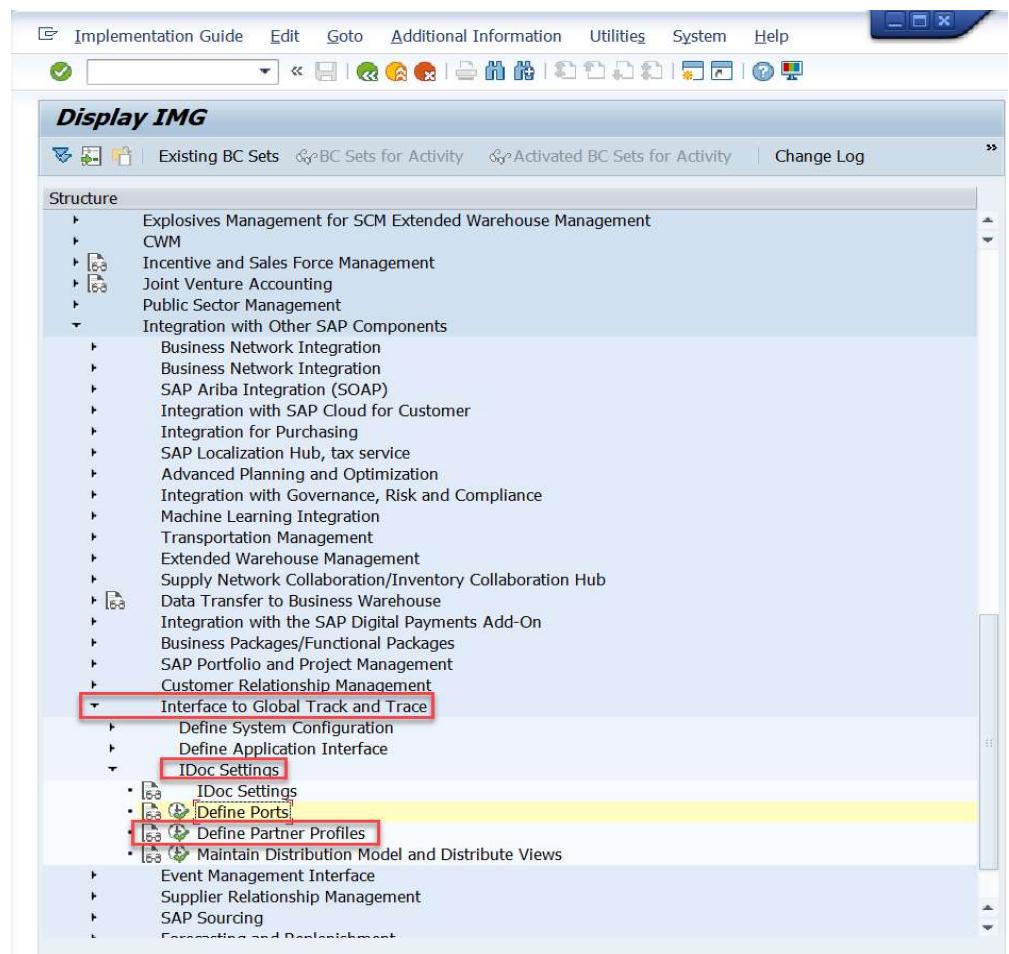
Caution: You need to define two ports, one for event and the other for tracked process.



STEP 4: Define Partner Profiles

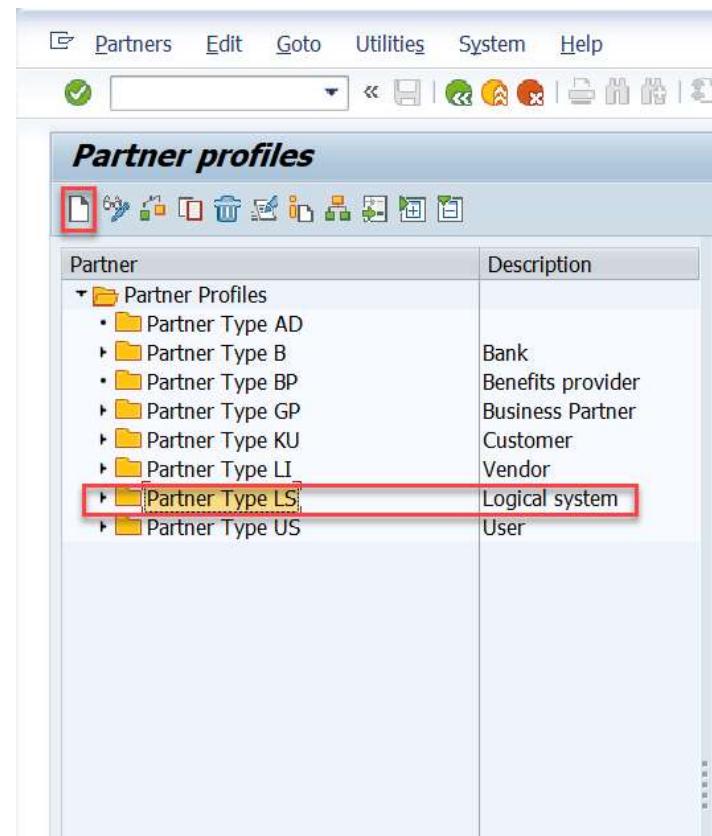
4-1: In Display IMG page, unfold
Integration with Other SAP Components ->
Interface to Global Track and Trace ->
IDoc Settings

4-2: Choose activity **Define Partner Profiles**



STEP 4: Define Partner Profiles

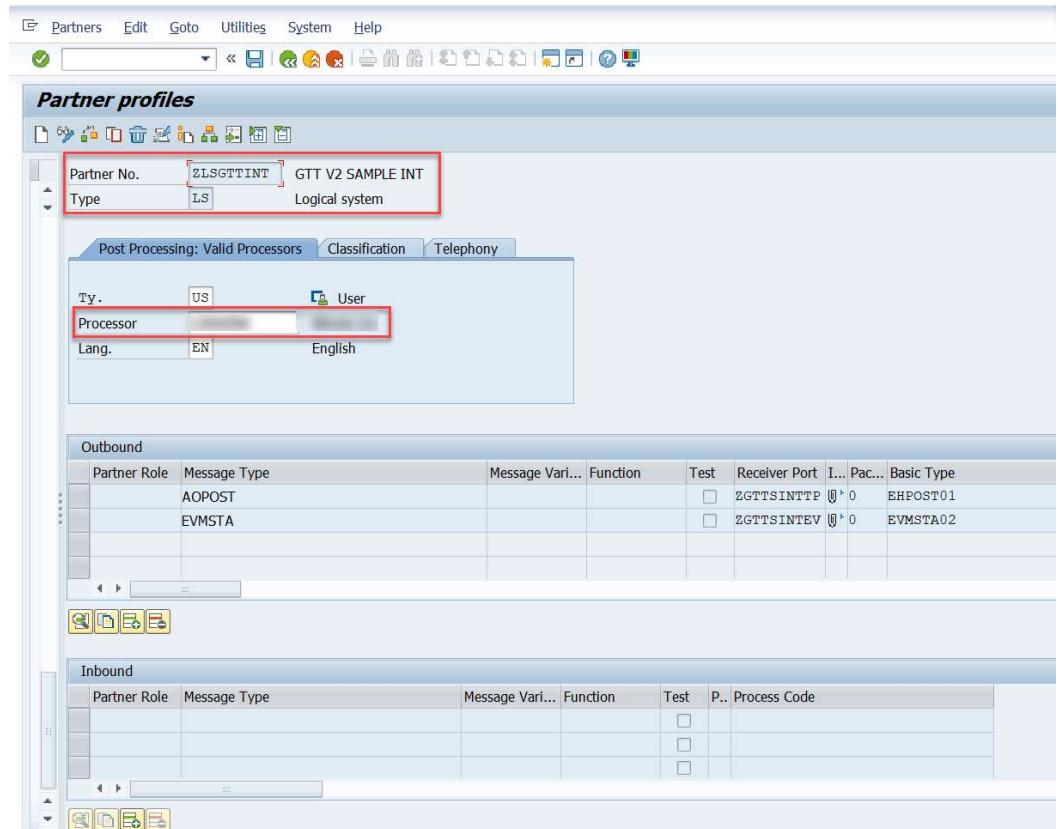
4-3: Choose **Partner Type LS** folder, and click **Create** to create a new partner profile



STEP 4: Define Partner Profiles

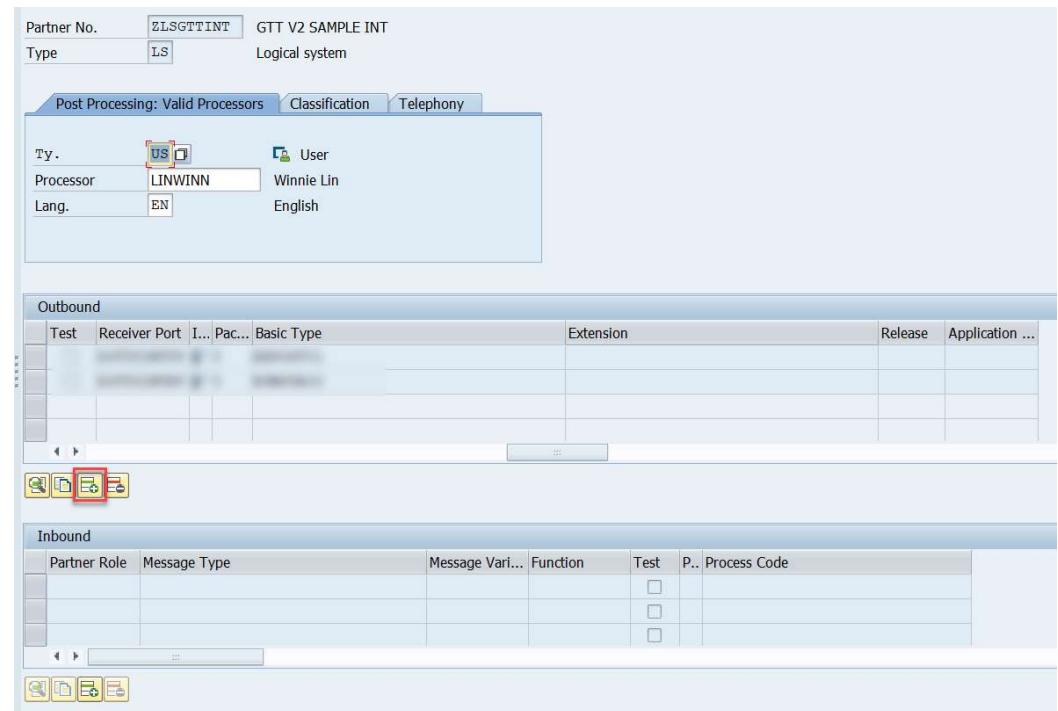
4-4: Fill in the **Partner No.** that you created in STEP 2

4-5: Fill in the **Processor** information



STEP 4: Define Partner Profiles

4-6: Click **Add** under **Outbound** box to create a new outbound parameter



STEP 4: Define Partner Profiles

4-7: Fill in the Message Type.

For the event:

Message Type: EVMSTA

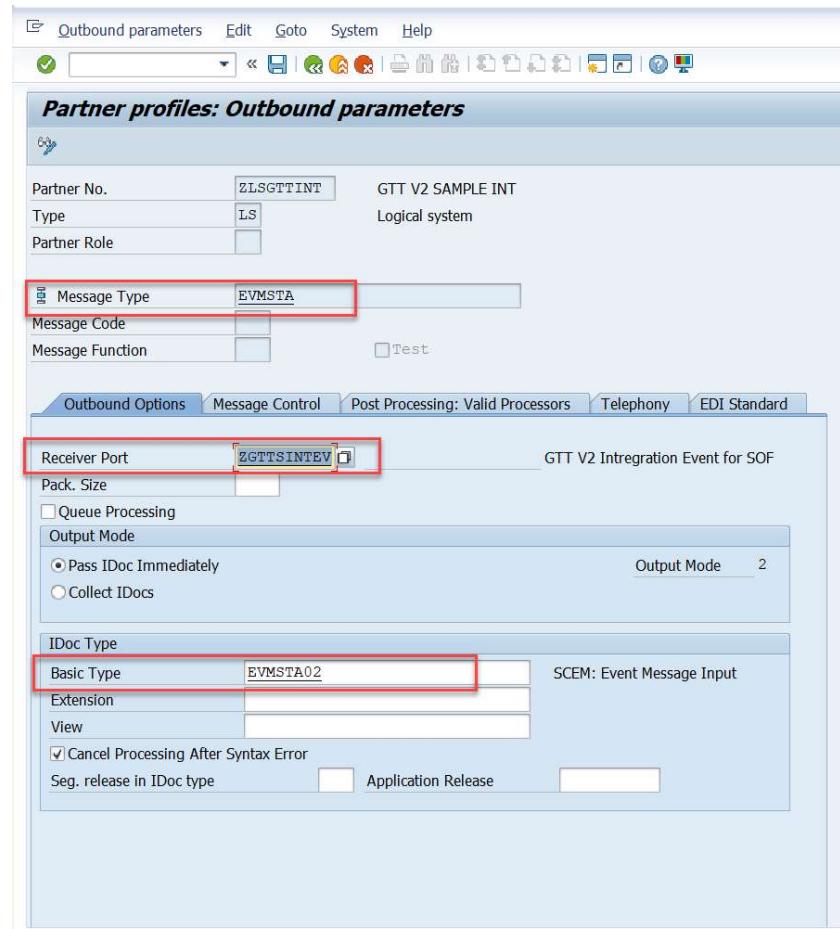
For the tracked Process:

Message Type: AOPOST

4-8: Fill in the Receiver Port, that you created in STEP 3

4-9: Save the configuration

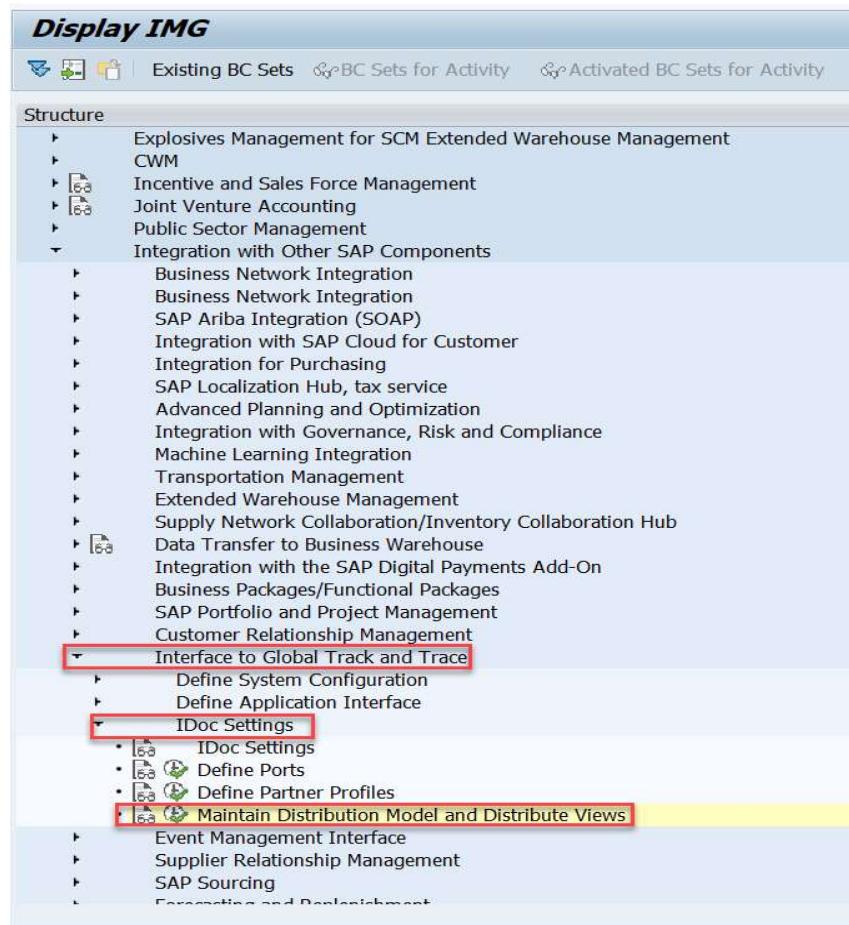
Caution: In this step, you need to repeat steps 4-6 ~ 4-9 to add two outbound parameters, one for event and the other for tracked process.



STEP 5: Maintain Distribution Model and Distribute Views

5-1: In Display IMG page, click
Integration with Other SAP Components ->
Interface to Global Track and Trace ->
IDoc Settings

5-2: Choose activity **Maintain Distribution Model and Distribute Views**



STEP 5: Maintain Distribution Model and Distribute Views

5-3: Click **Edit**, then click **Create Model View** to create a new model view

5-4: Fill in the Short Text and Technical Name of the model view

5-5: Select the new model view and click **Add Message Type** to create a new message

5-6: Fill in the logical systems of Sender and Receiver, and the message type to continue.

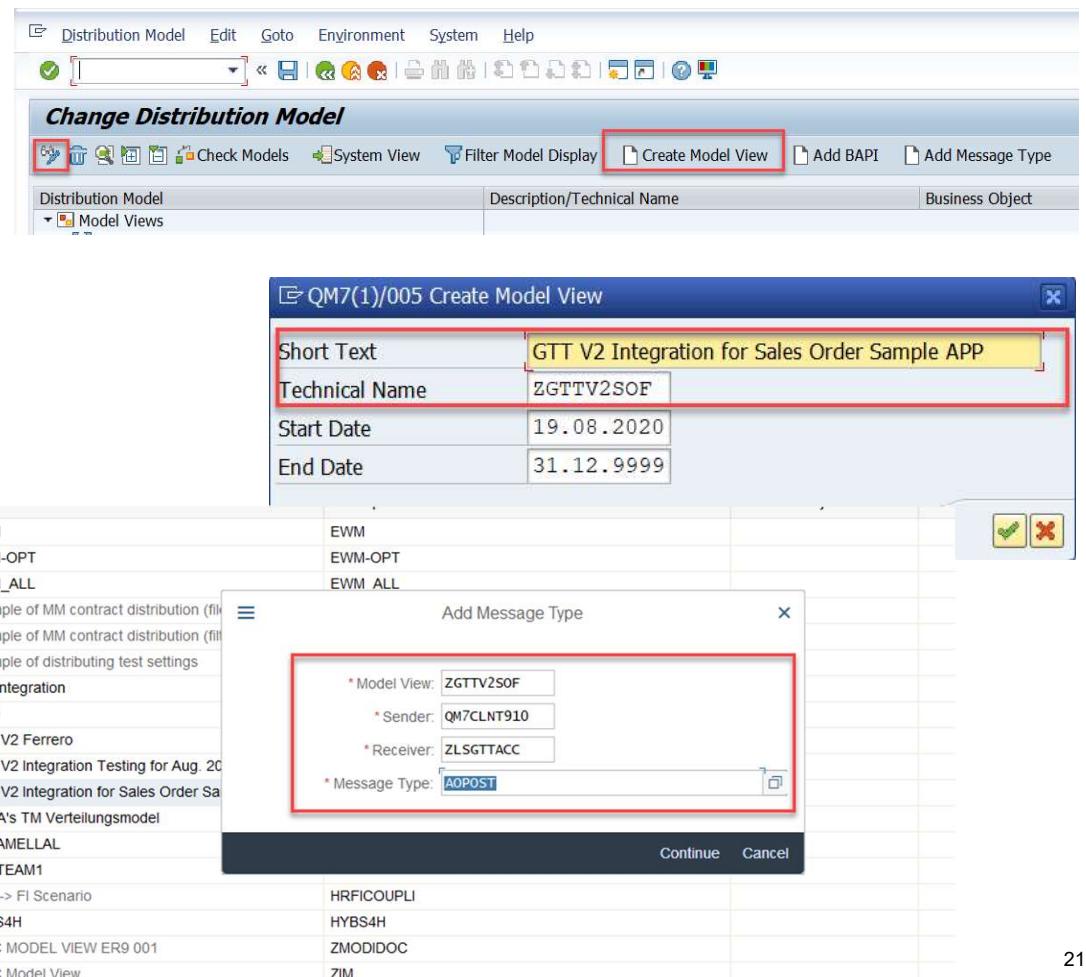
For the event:

Message Type: EVMSTA

For the tracked Process:

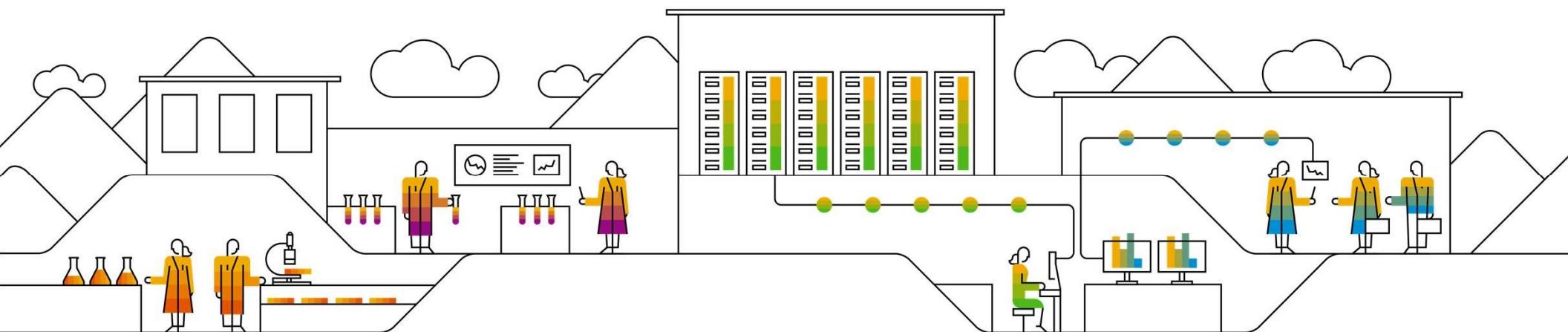
Message Type: AOPOST

5-7: Save the configuration



B) Configuration and Implementation

B2. Extractor Configuration



STEP 6: Define CI Tenant for GTT

6-1: In Display IMG page, click
Integration with Other SAP Components ->
Interface to Global Track and Trace ->
Define Application Interface

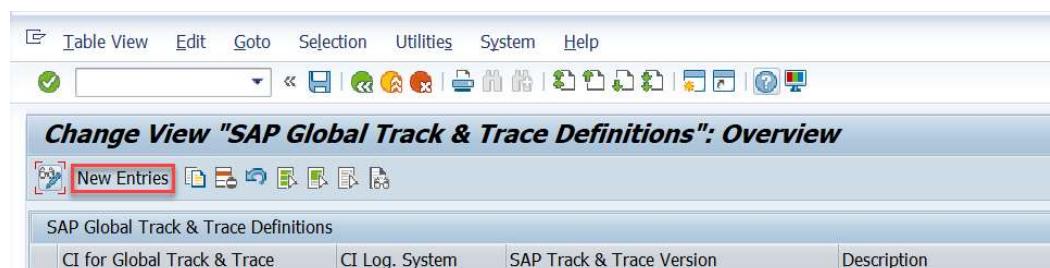
6-2: Choose activity
Define CI Tenant for SAP GTT



STEP 6: Define CI Tenant for GTT

6-3: Click **New Entries** to create a new CI tenant for GTT

6-4: Fill in the information for the new CI tenant. The **CI Log. System** is the logical system you created in STEP 2.



SAP Global Track & Trace Definitions			
CI for Global Track & Trace	CI Log. System	SAP Track & Trace Version	Description
ZGTTSOFINT	ZLSGTTINT	Global Track & Trace	CI For GTT V2 Integration system Sales Order Sample APP

STEP 7: Define GTT Extraction Functions

7-1: In Display IMG page, click
Integration with Other SAP Components ->
Interface to Global Track and Trace ->
Define Application Interface

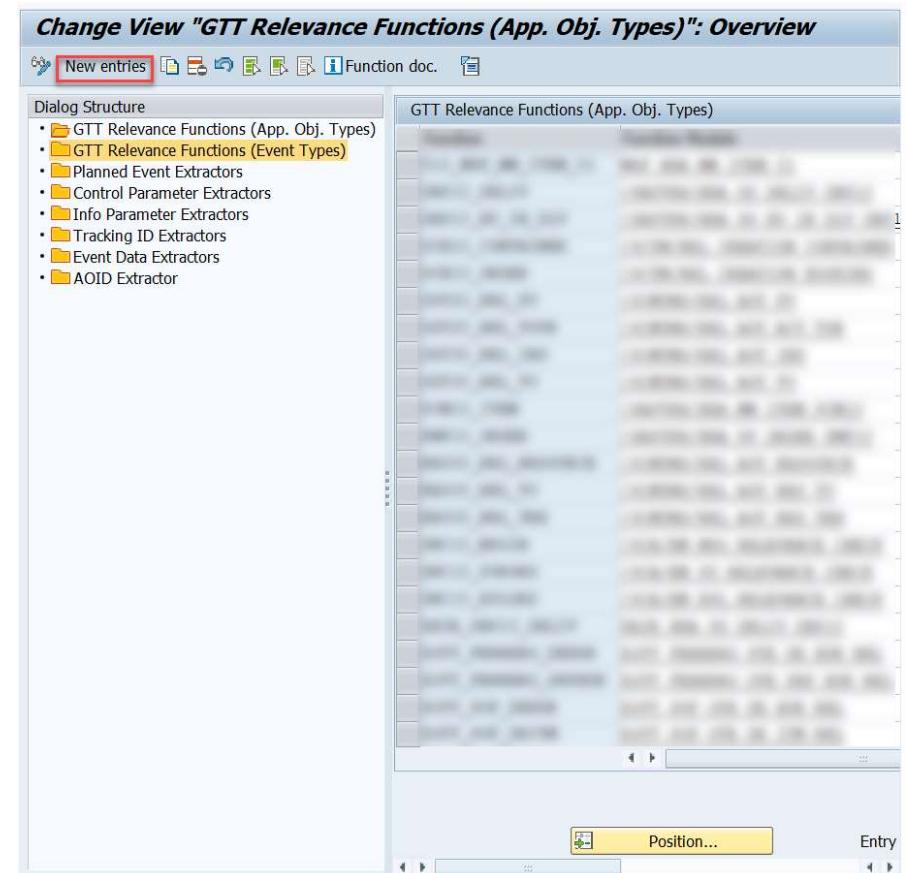
7-2: Choose activity
Define SAP GTT Extraction Functions

The screenshot shows the SAP Display IMG interface. The top navigation bar includes links for Existing BC Sets, BC Sets for Activity, Activated BC Sets for Activity, and Change Log. The main structure tree on the left lists various SAP components. A red box highlights the path: Integration with Other SAP Components > Interface to Global Track and Trace > Define Application Interface > Define SAP GTT Extraction Functions. This final node is also highlighted with a red box.

- Structure
- ↳ Public Sector Management
- ↳ Integration with Other SAP Components
 - ↳ Business Network Integration
 - ↳ Business Network Integration
 - ↳ SAP Ariba Integration (SOAP)
 - ↳ Integration with SAP Cloud for Customer
 - ↳ Integration for Purchasing
 - ↳ SAP Localization Hub, tax service
 - ↳ Advanced Planning and Optimization
 - ↳ Integration with Governance, Risk and Compliance
 - ↳ Machine Learning Integration
 - ↳ Transportation Management
 - ↳ Extended Warehouse Management
 - ↳ Supply Network Collaboration/Inventory Collaboration Hub
 - ↳ Data Transfer to Business Warehouse
 - ↳ Integration with the SAP Digital Payments Add-On
 - ↳ Business Packages/Functional Packages
 - ↳ SAP Portfolio and Project Management
 - ↳ Customer Relationship Management
 - ↳ **Interface to Global Track and Trace**
 - ↳ Define System Configuration
 - ↳ **Define Application Interface**
 - Define CI Tenant for SAP GTT
 - Define Business Process Types
 - Define Used Business Process Types, Appl. Object Types and Event Types
 - **Define SAP GTT Extraction Functions**
 - ↳ IDoc Settings
 - ↳ Event Management Interface
 - ↳ Supplier Relationship Management
 - ↳ SAP Sourcing
 - ↳ Forecasting and Replenishment
 - ↳ In-House Cash
 - ↳ Integration with SAP Success Factors (Employee Central)
 - ↳ SAP Banking

STEP 7: Define GTT Extraction Functions

7-3: Choose the type of Extraction Function you want to create from the **Dialog Structure**, and click **New entries**



STEP 7: Define GTT Extraction Functions

7-4: Input the **Function name** and **Function Module** for the newly created extraction function

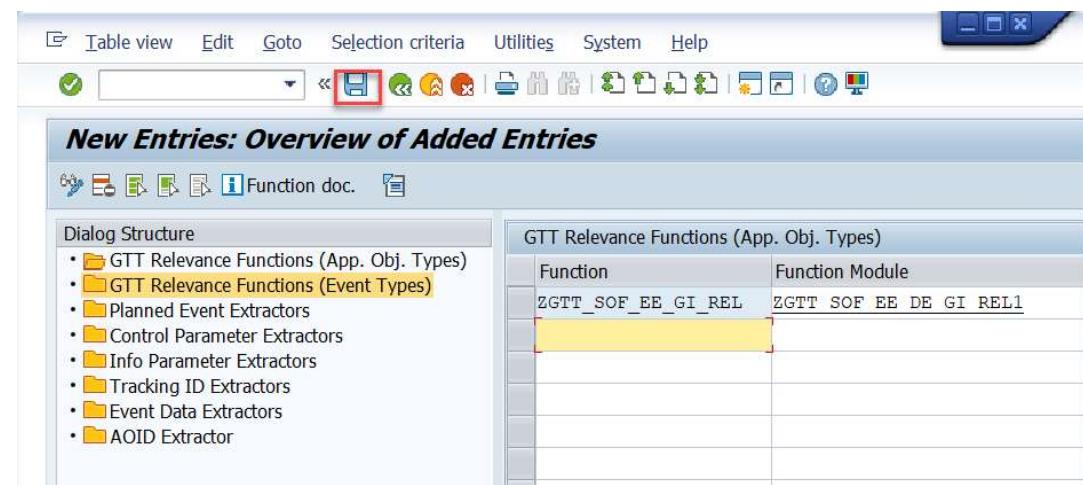
The screenshot shows the SAP GUI interface for defining new entries. The title bar reads "New Entries: Overview of Added Entries". Below the title bar are several icons: a blue gear, a red document, a green document, a yellow document, a white document, a blue info icon, and a magnifying glass. To the right of these icons is the text "Function doc." and a small edit button.

The main area is divided into two sections:

- Dialog Structure:** A list of categories:
 - **GTT Relevance Functions (App. Obj. Types)**
 - **GTT Relevance Functions (Event Types)** (highlighted in orange)
 - Planned Event Extractors
 - Control Parameter Extractors
 - Info Parameter Extractors
 - Tracking ID Extractors
 - Event Data Extractors
 - AOID Extractor
- GTT Relevance Functions (App. Obj. Types) Table:** A grid with columns "Function" and "Function Module". One row is highlighted with a red border, showing "ZGTT_SOF_EE_GI_REL" in the Function column and "ZGTT SOF EE DE GI REL1" in the Function Module column.

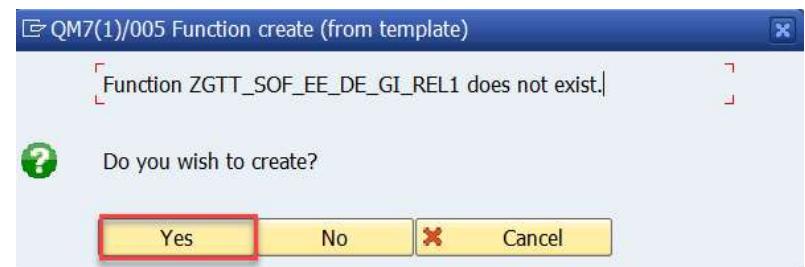
STEP 7: Define GTT Extraction Functions

7-5: Click Save



STEP 7: Define GTT Extraction Functions

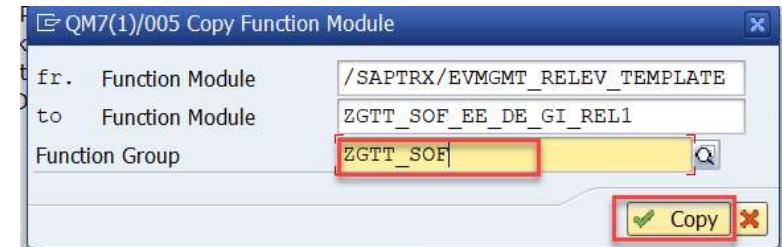
7-6: If the function module you use to create the extraction function has not been created yet, then a dialog reminds you to create the function module. Click **Yes** in the dialog box.



STEP 7: Define GTT Extraction Functions

7-7: Input the **Function Group** where the function module is to be created

7-8: Click **Copy**



STEP 7: Define GTT Extraction Functions

7-9: Use T-Code SE80 to check the function module you just created

Caution: More information on how to implement extraction functions and the relevant sample code is introduced later.

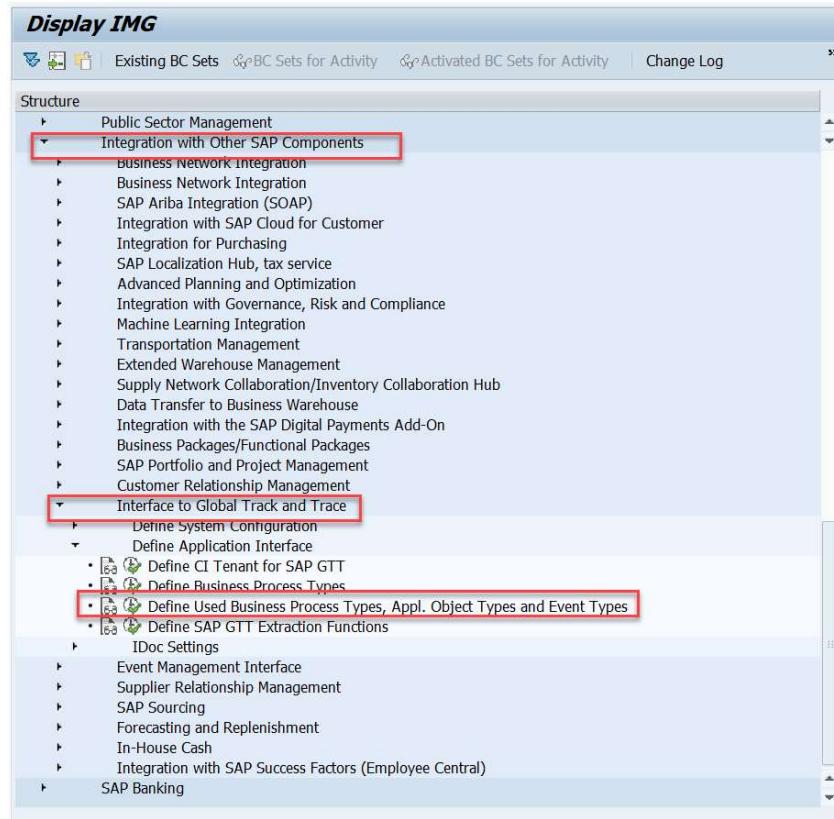
The screenshot shows the SAP Function Builder interface with the title "Function Builder: Display ZGTT_SOF_EE_DE_GI_REL1". The function module "ZGTT_SOF_EE_DE_GI_REL1" is selected in the "Function Module" tab. The code editor displays the ABAP source code for the function module:

```
1 FUNCTION ZGTT_SOF_EE_DE_GI_REL1.
2   * Local Interface:
3   *  IMPORTING
4   *    REFERENCE(I_APPSYS) TYPE /SAPTRX/APPLSYSTEM
5   *    REFERENCE(I_APP_OBJ_TYPES) TYPE /SAPTRX/AOTYPES
6   *    REFERENCE(I_ALL_APFL_TABLES) TYPE TRXAS_TABCONTAINER
7   *    REFERENCE(I_APPTYPE_TAB) TYPE TRXAS_APPTYPE_TABS_WA
8   *    REFERENCE(I_APP_OBJECT) TYPE TRXAS_APPOBJ_CTAB_WA
9   *  EXPORTING
10  *    VALUE(B_RESULT) LIKE SY-BINPT
11  *  TABLES
12  *    C_LOGTABLE STRUCTURE BAPIRET2 OPTIONAL
13  *  EXCEPTIONS
14  *    PARAMETER_ERROR
15  *    RELEVANCE_DETERM_ERROR
16  *    STOP_PROCESSING
17  *
18  *
19  * Top Include
20  * TYPE-POOLG:trxas.
21  *
22  *
23  *
24  *
25  *
26  ENDFUNCTION.
```

The code editor also shows the scope as "FUNCTION ZGTT_SOF_EE_DE_GI_REL1" and the line count as "Ln 13 Col 48".

STEP 8: Define Used Business Process Types, Appl. Object Types and Event Types

- 8-1: In Display IMG page, click
Integration with Other SAP Components ->
Interface to Global Track and Trace ->
Define Application Interface
- 8-2: Choose activity **Define Used Business Process Types, Appl. Object Types and Event Types**



STEP 8: Define Used Business Process Types, Appl. Object Types and Event Types

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

In the following:

- Steps 8-3 to 8-10 demonstrate how to create an *Event Type* for a given business process type
- Steps 8-11 to 8-21 demonstrate how to create an *Application Object Type* for a given business process type

Change View "Define Used Business Process Types": Overview		
Dialog Structure		
Define Used Business Process Types		
Bus. Proc. Type	Update Mode	BPT Process Mod
EPL_NOTIF	Update Task ...	Active
ESC_DELIV	Update Task ...	Active
ESC_FI_CLEARING	Update Task ...	Active
ESC_MATDOC	Update Task ...	Active
ESC_MM_INVOICE	Update Task ...	Active
ESC_PURORD	Update Task ...	Active
ESC_PURORD_FASHION	Update Task ...	Active
ESC_SHIPMT	Update Task ...	Active
ESC_SORDER	Update Task ...	Active
ESC_WRKORD	Update Task ...	Active
OCB10_ORDER	Dialog Update	Active
SNC_MSGIN	Dialog Update	Active
SNC_PURORD	Dialog Update	Active
SNC_RPLORD	Dialog Update	Active
TMS_INS	Update Task ...	Active
TMS_RES	Update Task ...	Active
TMS_TOR	Update Task ...	Active

STEP 8: Define Used Business Process Types, Appl. Object Types and Event Types

8-3: Choose the business process type from the **Define Used Business Process Types** on the right side

8-4: Double click **Define Event Types**

Change View "Define Used Business Process Types": Overview			
Bus. Proc. Type	Update Mode	BPT Process Mode	Description
EPL_NOTIF	Update Task .. ▾ Active	▼ Notification in SAP R/3 Enterprise	
ESC_DELIV	Update Task .. ▾ Active	▼ Delivery in SAP R/3 Enterprise	
ESC_FI_CLEARING	Update Task .. ▾ Active	▼ FI Clearing in SAP R/3 Enterprise	
ESC_MATDOC	Update Task .. ▾ Active	▼ Material Document in SAP R/3 Enterprise	
ESC_MM_INVOICE	Update Task .. ▾ Active	▼ MM Invoice in SAP R/3 Enterprise	
ESC_PURORD	Update Task .. ▾ Active	▼ Purchase Order in SAP R/3 Enterprise	
ESC_PURORD_FASHION	Update Task .. ▾ Active	▼ Purchase Order (Seasonal Procurement) in SAP R/3 Enterprise	
ESC_SHIPMT	Update Task .. ▾ Active	▼ Shipment (SAP R/3 Enterprise)	
ESC_SORDER	Update Task .. ▾ Active	▼ Sales Order in SAP R/3 Enterprise	
ESC_WRKORD	Update Task .. ▾ Active	▼ Workorder (Production, Service, Maintenance) in SAP R/3 Enterprise	
OCB10_ORDER	Dialog Update ▾ Active	▼ Booking Order in Ocean Carrier Booking Process	
SNC_MSGIN	Dialog Update ▾ Active	▼ SNC Inbound messages	
SNC_PURORD	Dialog Update ▾ Active	▼ SNC Purchase Order	
SNC_RPLORD	Dialog Update ▾ Active	▼ SNC Replenishment Order	
TMS_INS	Update Task .. ▾ Active	▼ Instructions (SAP TM)	
TMS_RES	Update Task .. ▾ Active	▼ Resources (SAP TM)	
TMS_TOR	Update Task .. ▾ Active	▼ Transportation Order (SAP TM)	

STEP 8: Define Used Business Process Types, Appl. Object Types and Event Types

8-5: Click **New Entries** to create a new event type

Change View "Define Event Types": Overview		
New Entries		
Dialog Structure		
<ul style="list-style-type: none">-> Define Used Business Process Types<ul style="list-style-type: none">• Define Application Object Types• Define Event Types		
Business Process Type	Event Type	Description
ESC_SHIPMT	GTT_ARRIVAL_ACC_SO	Arrival Event for GTT Sample SO Acceptance System
ESC_SHIPMT	GTT_ARRIVAL_INT_SO	Arrival Event for GTT Sample so Integration System
ESC_SHIPMT	GTT_CHIN_ACC_SO	Check In Event for GTT Sample So Acceptance System
ESC_SHIPMT	GTT_CHIN_INT_SO	Check In Event for GTT Sample SO Integration System
ESC_SHIPMT	GTT_DEPART_ACC_SO	Departure Event for GTT Sample So Acceptance System
ESC_SHIPMT	GTT_DEPART_INT_SO	Departure Event for GTT Sample So Integration System
ESC_SHIPMT	GTT_LDED_ACC_SO	Loading End Event for GTT Sample SO Acceptance System
ESC_SHIPMT	GTT_LDED_INT_SO	Loading End Event for GTT Sample SO Integration System
ESC_SHIPMT	GTT_LDST_ACC_SO	Loading Start Event for GTT Sample SO Acceptance System
ESC_SHIPMT	GTT_LDST_INT_SO	Loading Start Event for GTT Sample SO Integration System
ESC_SHIPMT	TRA10_ROAD	Road Shipment for Transportation Visibility
ESC_SHIPMT	YSHIPMENT_ACC	Road Shipment for Transportation Visibility
ESC_SHIPMT	YSHIPMENT_INT	Road Shipment for Transportation Visibility
ESC_SHIPMT	ZGTT_SOF_ARRIVAL_ACC	Arrival Event for GTT SOF Acceptance System
ESC_SHIPMT	ZGTT_SOF_ARRIVAL_INT	Arrival Event for GTT SOF Integration System
ESC_SHIPMT	ZGTT_SOF_CHIN_ACC	Check In Event for GTT SOF Acceptance System
ESC_SHIPMT	ZGTT_SOF_CHIN_INT	Check In Event for GTT SOF Integration System
ESC_SHIPMT	ZGTT_SOF_DEPART_ACC	Departure Event for GTT SOF Acceptance System
ESC_SHIPMT	ZGTT_SOF_DEPART_INT	Departure Event for GTT SOF Integration System
ESC_SHIPMT	ZGTT_SOF_LDED_ACC	Loading End Event for GTT SOF Acceptance System
ESC_SHIPMT	ZGTT_SOF_LDED_INT	Loading End Event for GTT SOF Integration System
ESC_SHIPMT	ZGTT_SOF_LDST_ACC	Loading Start Event for GTT SOF Acceptance System

STEP 8: Define Used Business Process Types, Appl. Object Types and Event Types

8-6: Fill in the **Event Type** and **Text** fields

8-7: Fill in the information required in the **General Data** tab. **HCI for GTT** is the CI Tenant you created in STEP 6. **Event Function** is the extractor function you created in STEP 7.

8-8: Check **GTT Relevant**

Bus. Proc. Type	ESC_SHIPMT
Event Type	ZGTT_SOF_CHIN_INT
Text	Check In Event

General Data Control Tables Global Track & Trace Relevance

Sequencing / Destination

Seq. No.	10
HCI for GTT	ZGTTSOFIN

Data Setup

Event Function	ZGTT_SOF_EVNT_CHIN
----------------	--------------------

Behavior

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

STEP 8: Define Used Business Process Types, Appl. Object Types and Event Types

8-9: Fill in the Main Object Table and Master Table.

Caution:

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

Bus. Proc. Type	ESC_SHIPMT	Event Type	ZGTT_SOF_CHIN_INT	Check In Event for GTT SOF Integration System
Text	Check In Event			
<input checked="" type="radio"/> General Data <input type="radio"/> Control Tables <input type="radio"/> Global Track & Trace Relevance				
Data Source for Events				
Main Obj. Table	SHIPMENT_HEADER_NEW			
Master Table				
Old Main Obj. Table	SHIPMENT_HEADER_OLD			
Old Master Table				
Reference Between Main and Master Table				
First Field Reference from Main to Master Table				
Second Field Reference from Main to Master Table				

Event on Header Level

Bus. Proc. Type	ESC_DELIV	Event Type	ZGTT_SOF_PICKING_ACC	Picking for GTT SOF Acceptance System
Text	Picking Event			
<input checked="" type="radio"/> General Data <input type="radio"/> Control Tables <input type="radio"/> Global Track & Trace Relevance				
Data Source for Events				
Main Obj. Table	DELIVERY_ITEM_NEW			
Master Table	DELIVERY_HEADER_NEW			
Old Main Obj. Table	DELIVERY_ITEM_OLD			
Old Master Table	DELIVERY_HEADER_OLD			
Reference Between Main and Master Table				
First Field Reference from Main to Master Table				
Uplink Field	VBELN	Uplink Mode	R	
Uplink Target Fld	VBELN	Uplink Const		
Second Field Reference from Main to Master Table				
Uplink Field		Uplink Mode		
Uplink Target Fld		Uplink Const		

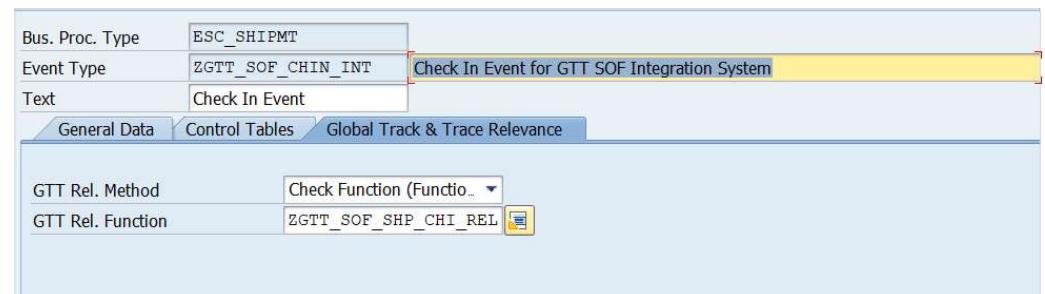
Event on Item Level

STEP 8: Define Used Business Process Types, Appl. Object Types and Event Types

8-10: In the **Global Track & Trace Relevance** tab, choose the **GTT Relevance Method** you need.

If you choose the **GTT Relevance Method Check Function**, then you need to define a relevance function according to STEP 7, and fill in the relevance function name here.

Click **Save**.



STEP 8: Define Used Business Process Types, Appl. Object Types and Event Types

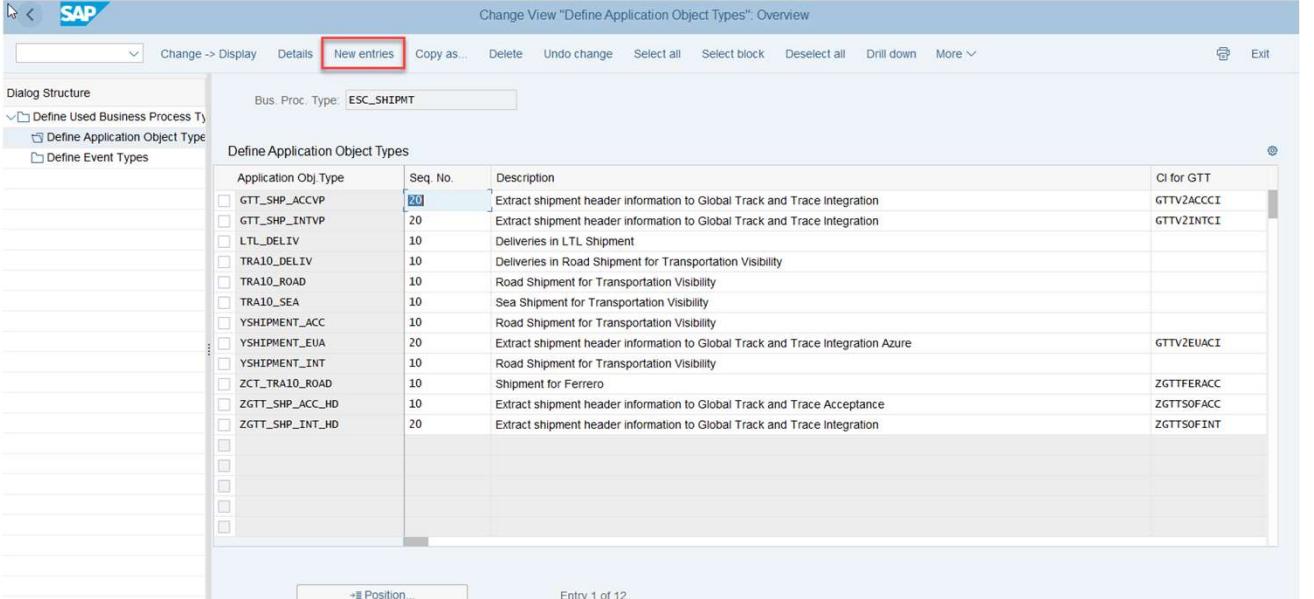
8-11: Choose the business process type from the **Define Used Business Process Types** on the right side

8-12: Double click **Define Application Object Types**

Bus. Proc. Type	Update Mode	BPT Process Mode	Description
EPL_NOTIF	Update Task (V_)	Active	Notification in SAP R/3 Enterprise
ESC_DELIV	Update Task (V_)	Active	Delivery in SAP R/3 Enterprise
ESC_FI_CLEARING	Update Task (V_)	Active	FI Clearing in SAP R/3 Enterprise
ESC_MATDOC	Update Task (V_)	Active	Material Document in SAP R/3 Enterprise
ESC_MM_INVOICE	Update Task (V_)	Active	MM Invoice in SAP R/3 Enterprise
ESC_PURORD	Update Task (V_)	Active	Purchase Order in SAP R/3 Enterprise
ESC_PURORD_FASHION	Update Task (V_)	Active	Purchase Order (Seasonal Procurement) in SAP R/3 Enterprise 2.0
ESC_SHIPMT	Update Task (V_)	Active	Shipment (SAP R/3 Enterprise)
ESC_SURDER	Update Task (V_)	Active	Sales Order in SAP R/3 Enterprise
ESC_WRKORD	Update Task (V_)	Active	Workorder (Production, Service, Maintenance) in SAP R/3 Enterprise
OCB10_ORDER	D Dialog Update	Active	Booking Order in Ocean Carrier Booking Process
SNC_MSGIN	D Dialog Update	Active	SNC Inbound messages
SNC_PURORD	D Dialog Update	Active	SNC Purchase Order
SNC_RPLORD	D Dialog Update	Active	SNC Replenishment Order
TMS_INS	Update Task (V_)	Active	Instructions (SAP TM)
TMS_RES	Update Task (V_)	Active	Resources (SAP TM)
TMS_TOR	Update Task (V_)	Active	Transportation Order (SAP TM)

STEP 8: Define Used Business Process Types, Appl. Object Types and Event Types

8-13: Click **New Entries** to create a new Application Object Type



The screenshot shows the SAP Fiori interface for defining application object types. The title bar reads "Change View 'Define Application Object Types'. Overview". The toolbar includes buttons for Change > Display, Details, New entries (which is highlighted with a red box), Copy as..., Delete, Undo change, Select all, Select block, Deselect all, Drill down, More, and Exit.

The left sidebar shows the "Dialog Structure" with sections: Define Used Business Process T, Define Application Object Type (which is expanded), and Define Event Types. The "Bus. Proc. Type:" field is set to "ESC_SHIPMT".

The main area is titled "Define Application Object Types" and contains a table with the following data:

Application Obj Type	Seq. No.	Description	CI for GTT
GTT_SHP_ACCVP	20	Extract shipment header information to Global Track and Trace Integration	GTTV2ACCCI
GTT_SHP_INTPV	20	Extract shipment header information to Global Track and Trace Integration	GTTV2INTCI
LTL_DELIV	10	Deliveries in LTL Shipment	
TRA10_DELIV	10	Deliveries in Road Shipment for Transportation Visibility	
TRA10_ROAD	10	Road Shipment for Transportation Visibility	
TRA10_SEA	10	Sea Shipment for Transportation Visibility	
YSHIPMENT_ACC	10	Road Shipment for Transportation Visibility	
YSHIPMENT_EUA	20	Extract shipment header information to Global Track and Trace Integration Azure	GTTV2EUACI
YSHIPMENT_INT	10	Road Shipment for Transportation Visibility	
ZCT_TRA10_ROAD	10	Shipment for Ferrero	ZGTTFERACC
ZGTT_SHP_ACC_HD	10	Extract shipment header information to Global Track and Trace Acceptance	ZGTTSOFACC
ZGTT_SHP_INT_HD	20	Extract shipment header information to Global Track and Trace Integration	ZGTTSOFINTE

At the bottom, there are buttons for "Position..." and "Entry 1 of 12".

STEP 8: Define Used Business Process Types, Appl. Object Types and Event Types

8-14: Fill in the **Application Object Type** and **Text** fields

8-15: Fill in the information required in the **General Data** tab. **CI for GTT** is the CI Tenant you created in STEP 6.

8-16: Check **GTT Relevant**

Change View "Define Application Object Types": Details

Bus. Proc. Type: ESC_SHIPMT
Appl. Obj. Type: ZGTT_SHP_ACC_HD Extract shipment header information to Global Track and Trace Acceptance
Text:

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

Sequencing / Destination
Seq. No.: 10
CI for GTT: ZGTTSOFACC CI For GTT V2 Acceptance system Sales Order Sample

Business Object Reference
Object Type:
BO Setup Fnct.:

Behavior
 GTT Relevant
 Stop AO Determ.
 Appl. Log Deact
Alt. BusProcType:

STEP 8: Define Used Business Process Types, Appl. Object Types and Event Types

8-17: Fill in the Main Object table and Master Table

Caution:

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

The screenshots illustrate the configuration of application object types in SAP. In both cases, the 'Main Obj. Table' field is highlighted with a red box. In the top screenshot (header level), the table is SHIPMENT_HEADER_NEW, and the text 'AOT on Header Level' is written in red next to it. In the bottom screenshot (item level), the table is DELIVERY_ITEM_NEW, and the text 'AOT on Item Level' is written in red next to it. The bottom screenshot also shows the 'Uplink' section, which includes fields for 'Uplink Field' (VBELN), 'Uplink Target Fld' (VBELN), 'Uplink Mode' (R), and 'Uplink Const'.

STEP 8: Define Used Business Process Types, Appl. Object Types and Event Types

8-18: If there is no customized logic to determine the AOT ID, choose **Determine from Field**, use the key field to fill the AO ID fields

8-19: When choosing **Determine by Function**, you must enter the customized information in the AOID function field.

Change View "Define Application Object Types": Details

Display New entries Copy as... Delete Undo change Previous entry Next entry Other entry... Drill down More ▾

Bus. Proc. Type: `ESC_DELIV`
Appl. Obj. Type: `ZGTT_DE_ACC_ITEM` Extract sales order item information to Global Track and Trace Acceptance
Text: Delivery Item

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

Method for determination of AOID

AOID Method: `Determine from Field` (highlighted)

Application Object ID Source

First Field to Build Appl. Obj. ID

Cntrl Tab. Type: `1 Main Object Table` (highlighted)
AO ID Field: `VBELN`

Second Field to Build Appl. Obj. ID

Cntrl Tab. Type: `1 Main Object Table` (highlighted)
AO ID Field: `POSNR`

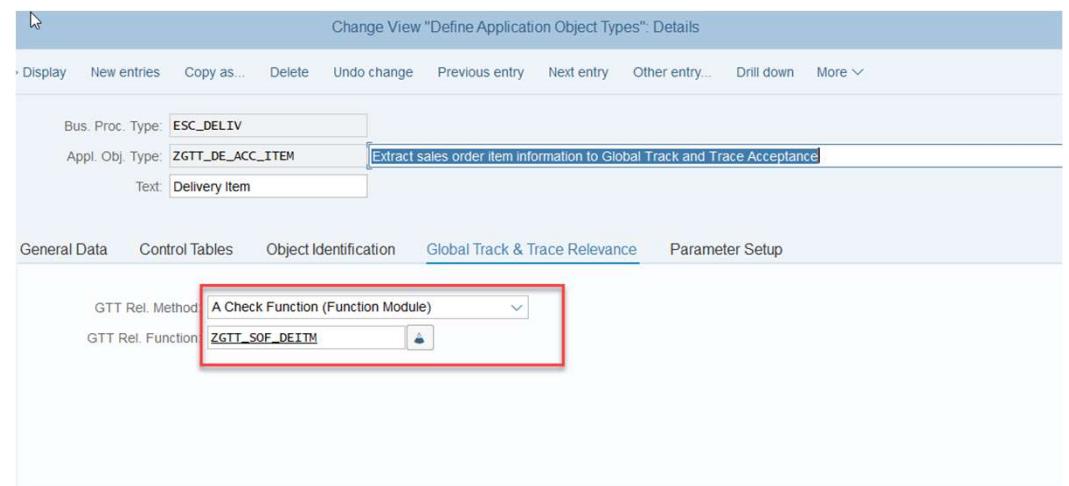
Determine AOID By Function

AOID Function: (highlighted)

STEP 8: Define Used Business Process Types, Appl. Object Types and Event Types

8-20: In the **Global Track & Trace Relevance** tab, choose the **GTT Relevance Method** you need.

If you choose the **GTT Relevance Method Check Function**, then you need to define a relevance function according to STEP 7, and fill in the relevance function name here.



STEP 8: Define Used Business Process Types, Appl. Object Types and Event Types

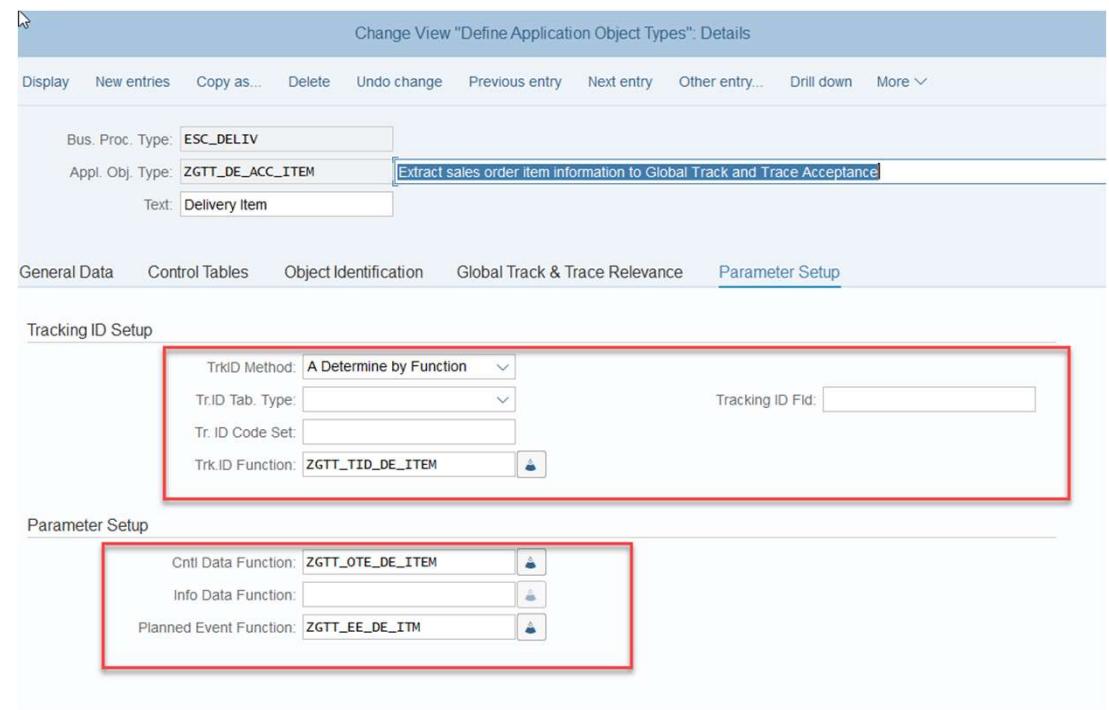
8-21: In the **Parameter Setup** tab, choose the **TrkID Method** as you need.

If you choose the **TrkID Method** as *Determine by Function*, then you need to define a tracking ID function according to STEP 7, and fill in the relevance function name here.

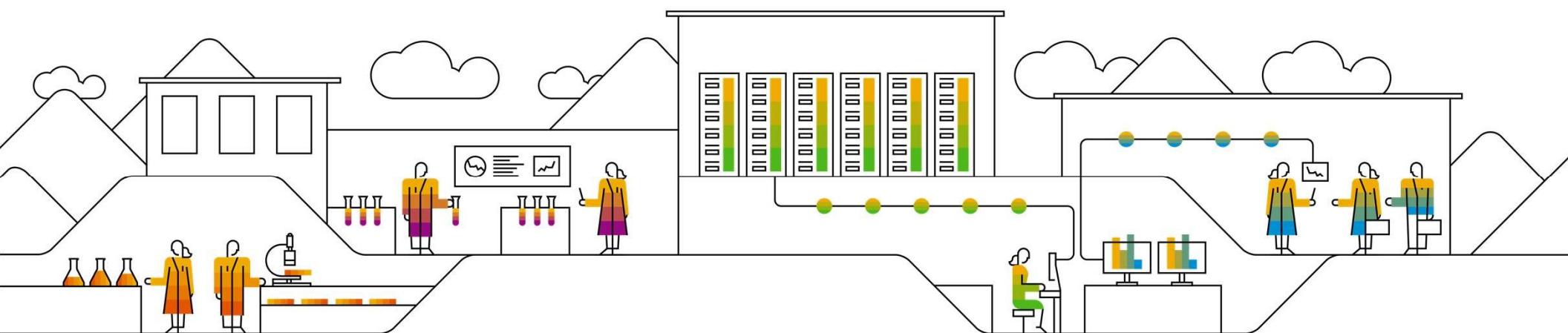
If no customized logic exists, for **TrkID Method** choose *Determine from Field*, then you need to fill the key field and name the Code Set for the AOT.

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

Click **Save**.



C) Download ABAP Code from GitHub



STEP 1: Install abapGit

You need to install abapGit before downloading 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. The main navigation bar at the top includes links for 'Documentation', 'API Reference', 'Code Examples', 'Community', and 'About'. Below the navigation, there's a search bar and a 'Documentation' link. The main content area has a sidebar on the left with sections like 'Getting Started' (Installation, Upgrading, Uninstalling, UI features), 'Setup' (SSL setup, Proxy configuration, Development version), 'Online Projects' (Installing online repo, Keeping code up to date, Uninstall repository, First project, Moving package into git, Contributing to a project), 'Offline Projects' (Import zip, Export zip), and 'Reference' (Repo Settings (.abapgit.xml), Supported object types, Icon Legend, User Exits, Authorizations, Namespaces). The right side of the page is dedicated to the 'Installation' section, which includes a 'Summary' section stating that abapGit exists in 2 flavours: standalone or developer version. It then details the differences between the two versions. A red box highlights the 'Install standalone version' section, which contains a numbered list of steps: 1. Download ABAP code, 2. Create a report named ZABAPGIT_STANDALONE, 3. Upload the code to the report, and 4. Activate the report. Below this, a note says typically it's used in development systems, and a final note says it can be used via transaction SE38.

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 #

- Download the ABAP code(right click -> save-as) to a file.
- Via `SE38` or `SE80`, create a new report named `ZABAPGIT_STANDALONE` (formerly `ZABAPGIT_FULL`). NB: Don't use the name `ZABAPGIT` if you plan to install the developer version.
- In source code change mode, upload the code from the file using Utilities -> More Utilities -> Upload/Download -> Upload
- Activate

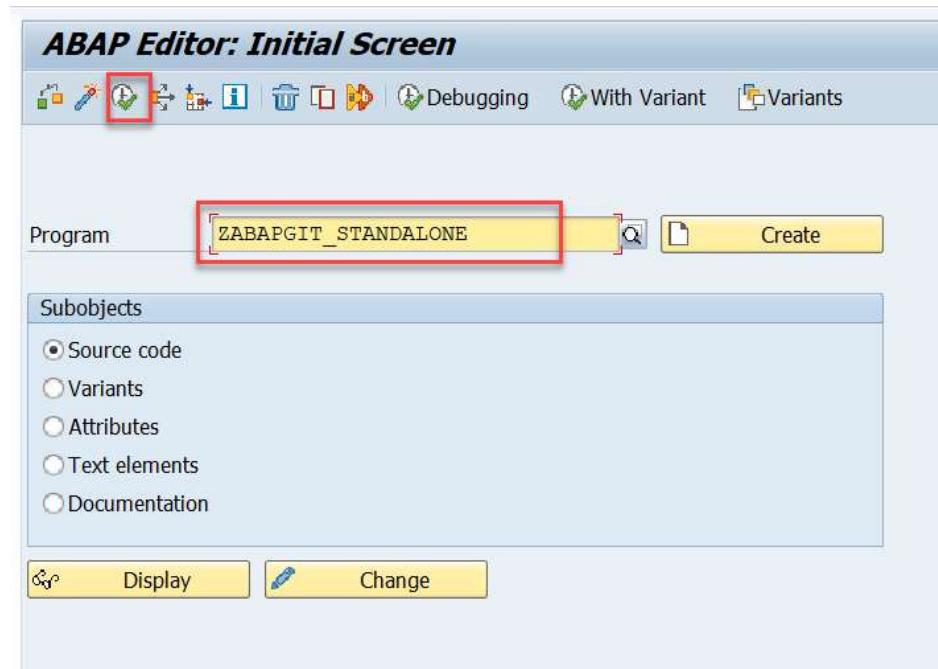
Typically, abapGit will only be used in the development system, so it can be installed in a local \$ package (e.g. `$ZABAPGIT`).

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

STEP 2: Download ABAP Code

2-1: Enter T-code **SE38** and fill in the report name from STEP 1,
ZABAPGIT_STANDALONE

2-2: Click **Execute** to run the report



STEP 2: Download ABAP Code

2-3: Click **New Online** to download the code

The screenshot shows the 'ABAP GIT for GTT' application interface. At the top, there's a header bar with the title 'ABAP GIT for GTT' and a logo. Below it, the main title is 'abapGit ► Repository List'. On the right side of the header, there are several buttons: 'New Online' (highlighted with a red box), 'New Offline', 'X', and '?'. Below the header, there's a search bar labeled 'Filter:' and two checkboxes: 'Only Favorites' and 'Detail'. The main area is a table with columns: 'Name' (with a dropdown arrow), 'Url', 'Package', 'Branch', and 'Action'. There are two rows of data in the table, both of which are blurred. At the bottom of the screen, there's a footer with the 'abapGit' logo, the version '1.98.0', and the text 'js: OK'.

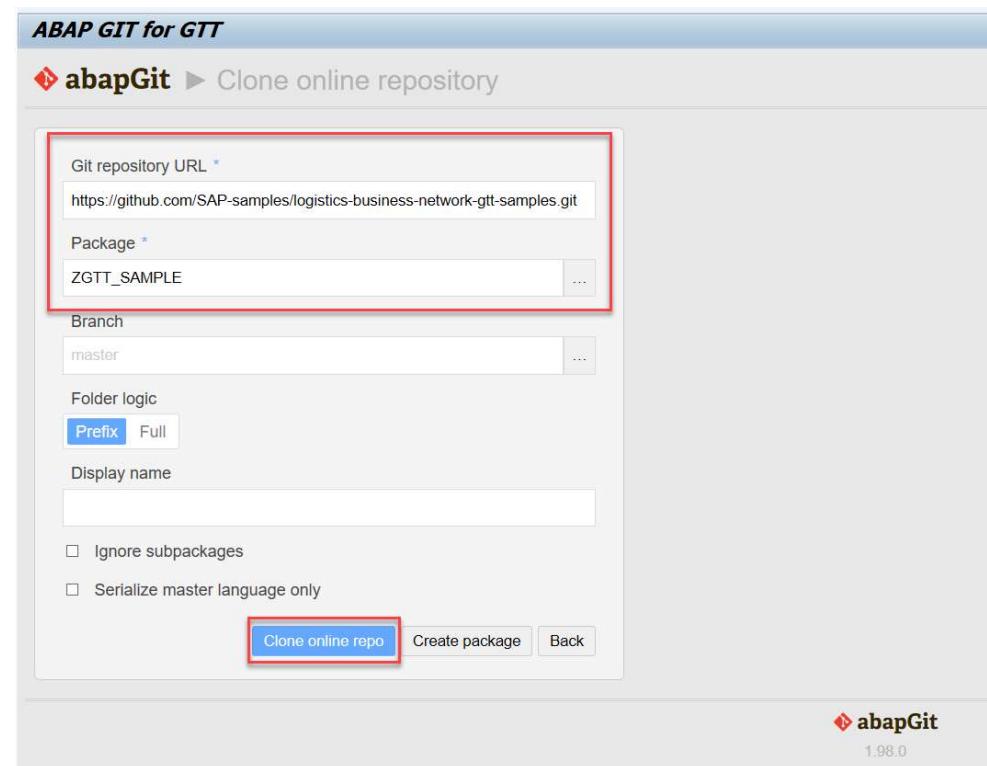
STEP 2: Download ABAP Code

2-4: Fill in the **Git repository URL**:

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

2-5: 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.

2-6: Click **Clone online repo** to download the code



STEP 2: Download ABAP Code

2-7: Click **Pull** to pull down the latest version code

The screenshot shows the ABAP GIT for GTT interface. At the top, it displays the repository name "logistics-business-network-gtt-samples" and its URL "https://github.com/SAP-samples/logistics-business-network-gtt-samples.git". The commit hash "c86ad2d" is also shown. On the right side, there is a toolbar with buttons for "Pull", "Stage", "Diff", "Branch", "Tag", "Advanced", "Refresh", and a gear icon. The "Pull" button is highlighted with a red box. Below the toolbar, there is a table listing files and their paths. The table has two columns: "non-code and meta files" and "Path". The "non-code and meta files" column contains entries like ".abapgit.xml", "/NOTICE", and "/src/0894ef4577391eeaab910bd805b24f18.avas.xml". The "Path" column contains the full file paths corresponding to the entries in the first column. At the bottom of the interface, there is a footer with the "abapGit" logo and the text "js: OK".

non-code and meta files	Path	diff
AVAS	/src/0894ef4577391eeaab910bd805b24f18.avas.xml	diff [x A]
CLAS	/src/zcl_gtt_sof_im_le_shipping.clas.abap	diff [x A]
	/src/zcl_gtt_sof_im_le_shipping.clas.xml	diff [x A]
DEVC	/src/package.devc.xml	diff [M R]
TABL	/src/zgtt_sof_ee_rel.tabl.xml	diff [x A]

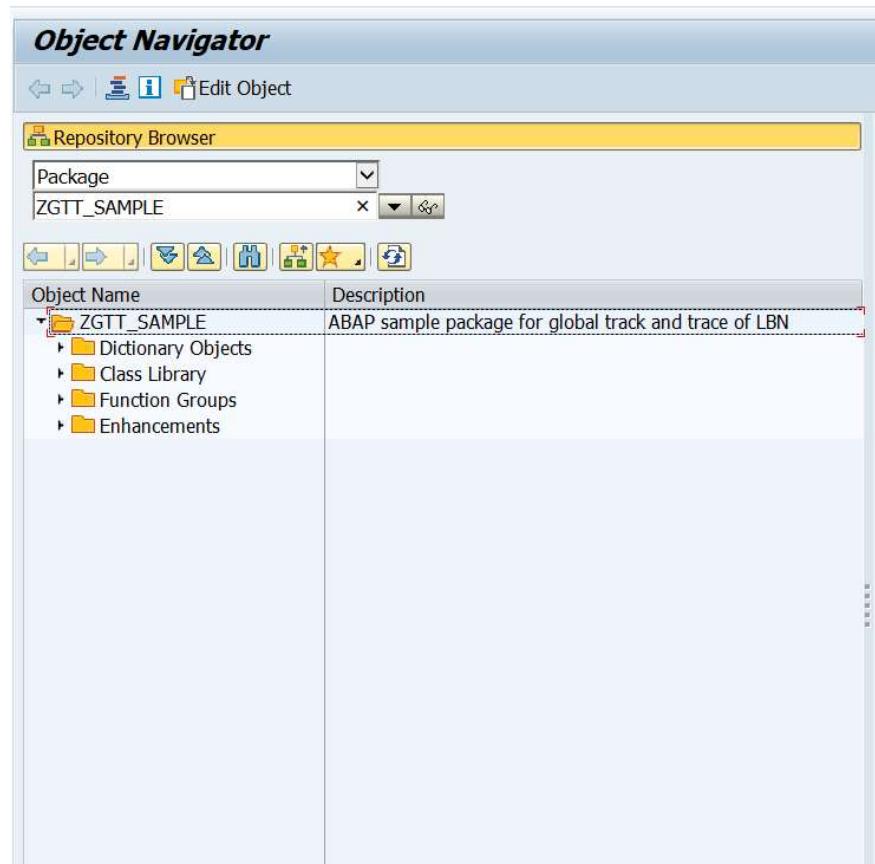
STEP 2: Download ABAP Code

2-8: Assign the change to a change request. If you do not have any available change request, you need to create a new one.



STEP 2: Download ABAP Code

2-9: After you download the code, you can check them with T-code **SE80**.



Thank you.

Contact information:

SAP Business Network

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