



SAP Business Network Global Track and Trace

Track Sales Orders - Deep Dive with SAP

S/4HANA Integration

SAP Business Network for Logistics
March 2021

PUBLIC

Objectives

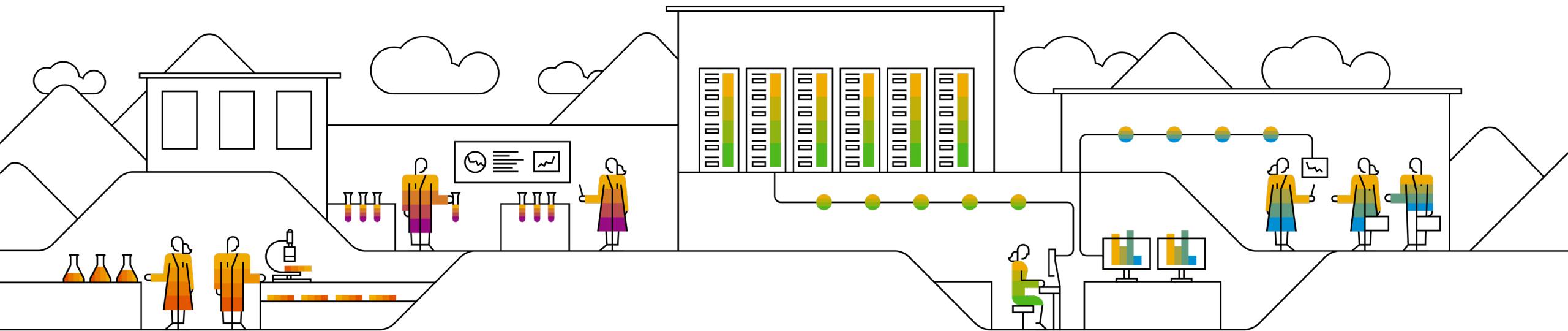


After completing this learning module, you will be able to:

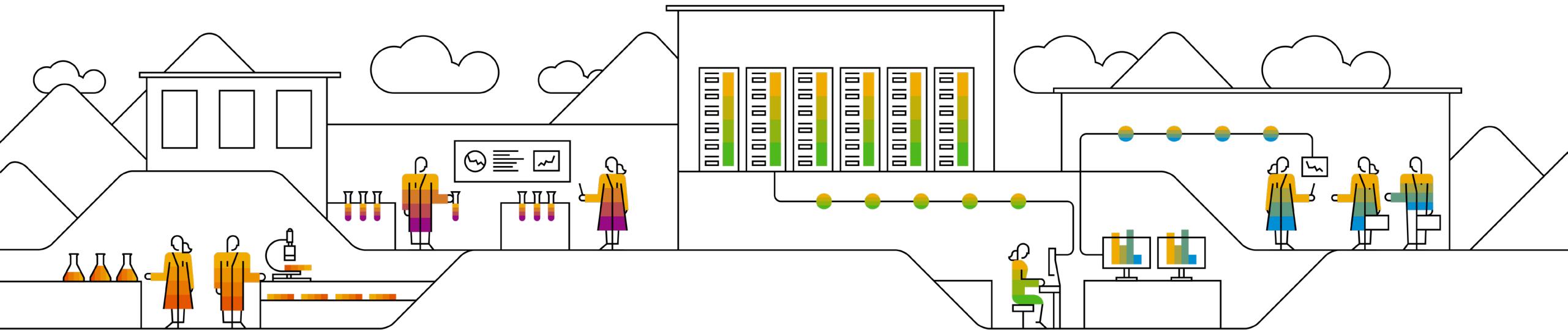
- Learn what prerequisite is necessary for SAP Business Network Global Track and Trace
- Learn how to maintain IDOC configurations in ERP for integration
- Learn how to maintain extractors in ERP for integration
- Learn how to download and implement sample ABAP codes from Github
- Learn how to customize own logic based on sample codes

Agenda

- A Prerequisites
- B Configuration and Implementation - Basic
 - B1 IDOC Configuration
 - B2 Extractor Configuration
- C Download ABAP Code from GitHub
- D Configuration and Coding Guide - Advanced



A) Prerequisites



STEP 1: Check the SAP Product Version

1-1: Make sure that you have met the requirements for the product version mentioned in the [Prerequisites](#) chapter of *How to Send Documents from SAP S/\$HANA to SAP Business Network Global Track and Trace*. You can find this guide at <http://help.sap.com/gtt>.

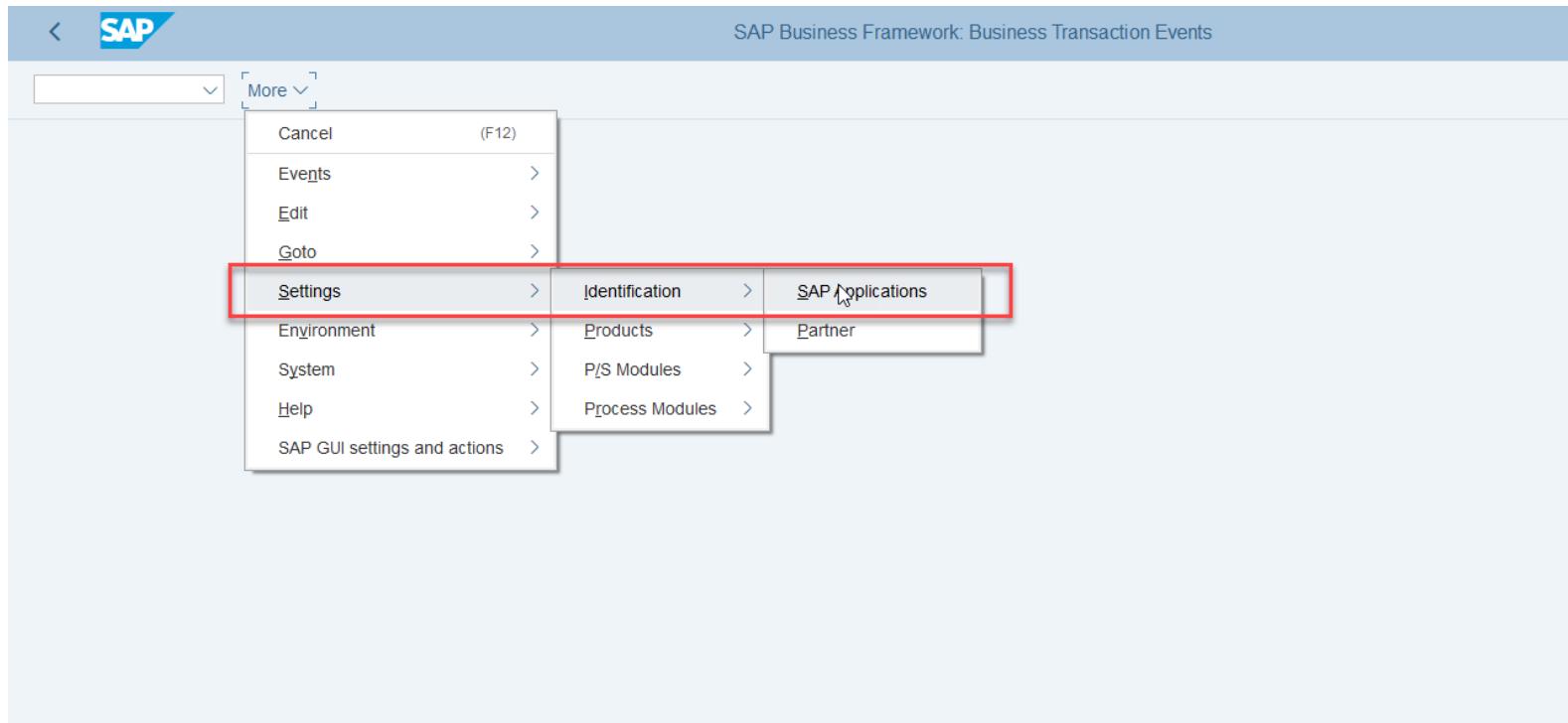
1-2 : The ABAP codes on Github to support sample apps for SAP Business Network Global Track and Trace shall be implemented in SAP S/4HANA 1909 SP03 on premise or higher. Please note that the codes are not validated in its lower version or other ECC series of products, so you might need to do further adaptation work or build your own extractor.

STEP 2: Log on the Development Client to Configure BTE

2-1: Ensure you have development access to the client for cross-client customizing and local development

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

2-3: Click **More -> Settings -> Identification -> SAP Applications**



STEP 2: Activate SAP Event Manager Integration

2-4: Position on the Application ID: **PI-EM**

2-5: Check the field **Application Active**

2-6: Click **Save**

The screenshot shows a SAP application interface titled "Change View 'BTE Application Indicator'. Overview". The main area is a grid table with three columns: "Appl.", "A", and "Text". The "Appl." column lists various application codes, and the "Text" column provides a brief description of each. A red box highlights the row for "PI-EM". In the "A" column for "PI-EM", there is a checkbox which is checked, indicating it is active. Other rows in the table include PM (Instandhaltung), PM-BW (Instandhaltung-BW), PM-EQM (Instandhaltung, Equipment), PM-PAM (Instandhalt. Pool Asset Mgmt), PMA-PC (Product Compliance), PMAT (Produkt - Material), PMIPUR (PMI Anschluss Einkauf), PMPUSH (MAM Push), PP-BD (Production Planning MasterData), PP-DD (Demand Driven Replenishment), PP-MRP (Material Requirements Planning), PRICAT (Preiskatalog), PS-REP (Projektsystem), PSRVA (Produkt - Service), QBEXT (External Inspection Procurement), QBEXTP (External Inspection Production), QILPO (Inspection Lot Order Integr.), RDSVFI (Dgtl. Signature Validation FI), and RDSVM (Dgtl. Signature BP Check). At the bottom of the screen, there are buttons for "+ Position...", "Entry 133 of 174", "Save", and "Cancel".

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
PMPUSH	<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
PSRVA	<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
RDSVM	<input checked="" type="checkbox"/>	Dgtl. Signature BP Check

B) Configuration and Implementation

- Basic

B1. IDOC Configuration



STEP 1: Define RFC Connection for SAP Business Network Global Track and Trace

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

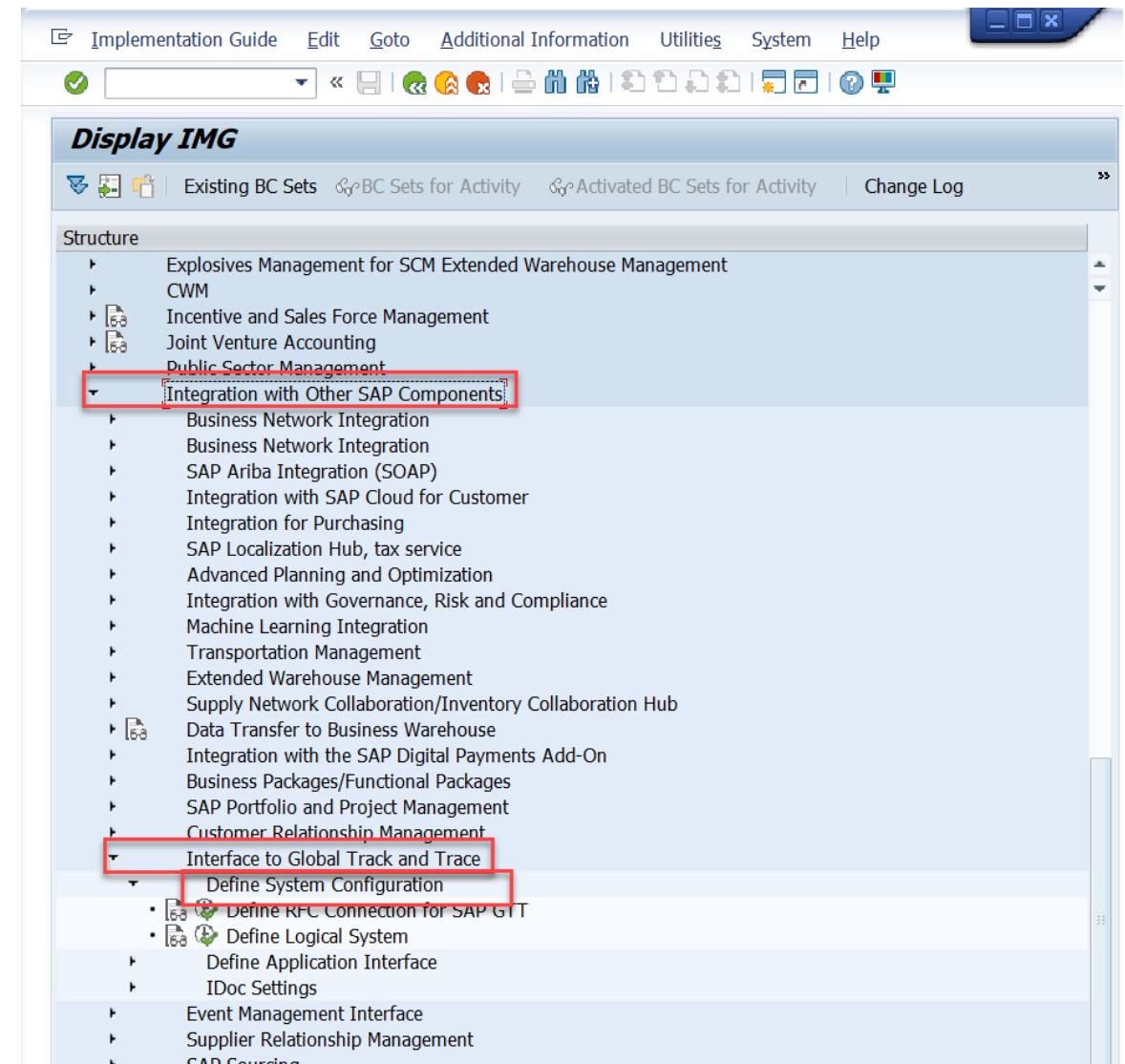
1-3: Click **Integration with Other SAP Components**

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

-> **Define System Configuration**

1-4: Choose activity:

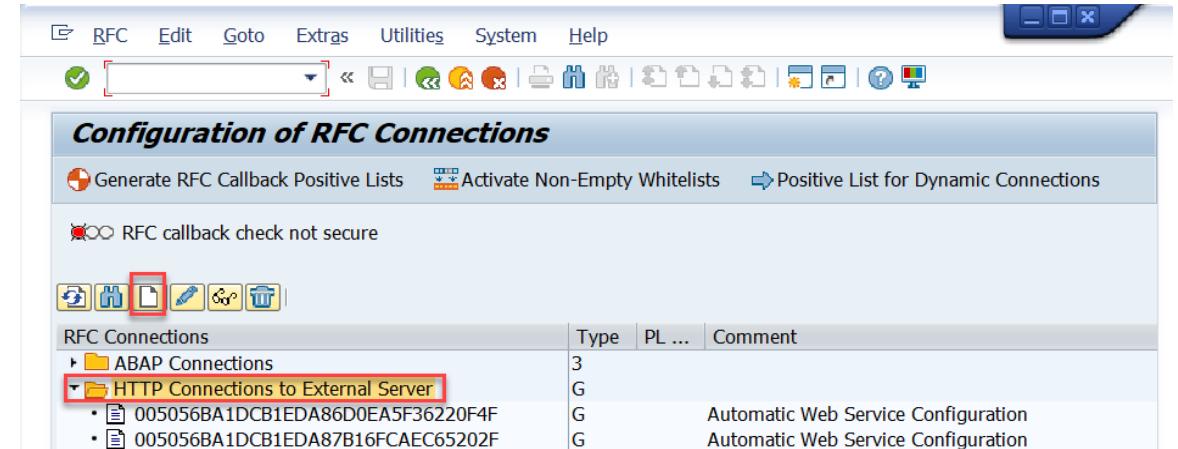
Define RFC Connection for SAP GTT



STEP 1: Define RFC Connection for SAP Business Network Global Track and Trace

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 SAP Business Network Global Track and Trace

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 follows :

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

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

Port: 443

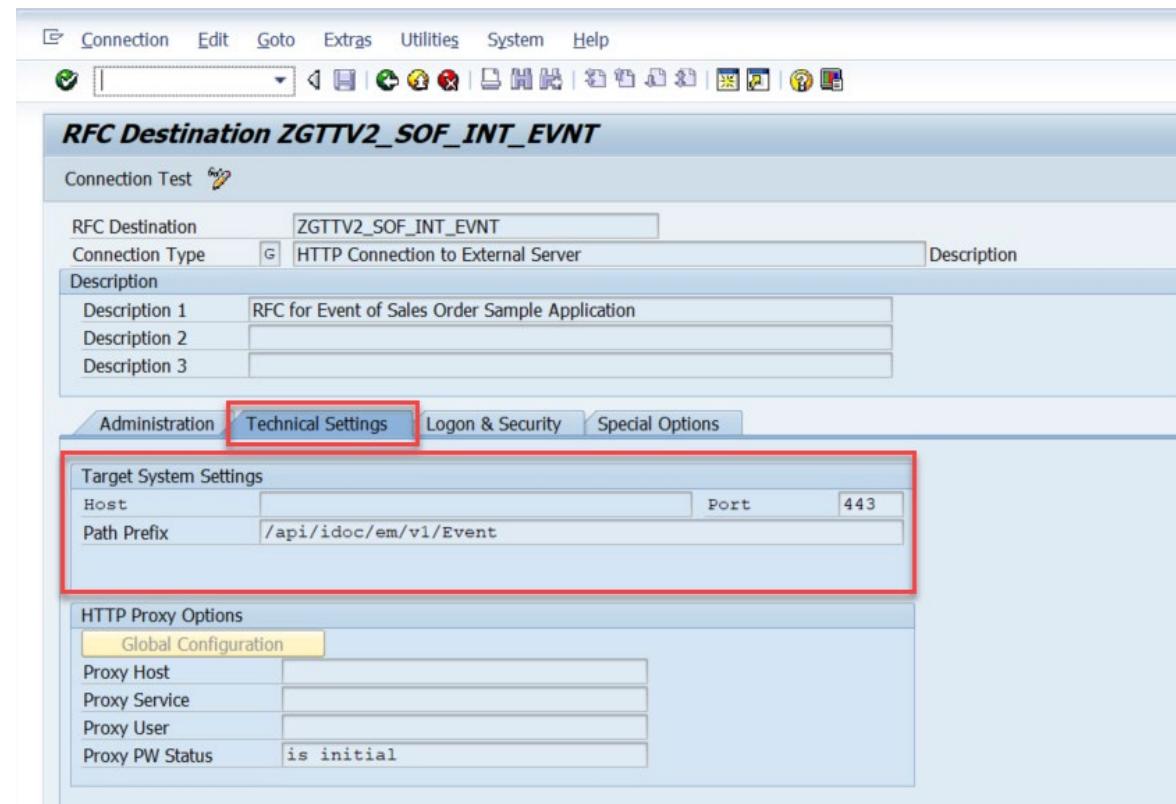
You need to configure two RFC connections separately for event and tracked process. They have different **Path Prefixes**.

For the event:

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

For the tracked Process:

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



RFC Destination	RFC Destination Description	Host	Path Prefix	Port
ZGTTV2_SOF_INT_EVNT	RFC for Event of Sales Order Sample Application	xxxxxx.gtt-flp-lbnplatform.cfapps.eu10.hana.ondemand.com	/api/idoc/em/v1/Event	443
ZGTTV2_SOF_INT_TP	RFC for Tracked Process of Sales Order Sample Application	xxxxxx.gtt-flp-lbnplatform.cfapps.eu10.hana.ondemand.com	/api/idoc/em/v1/TrackedProcess	443

STEP 1: Define RFC Connection for SAP Business Network Global Track and Trace

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.

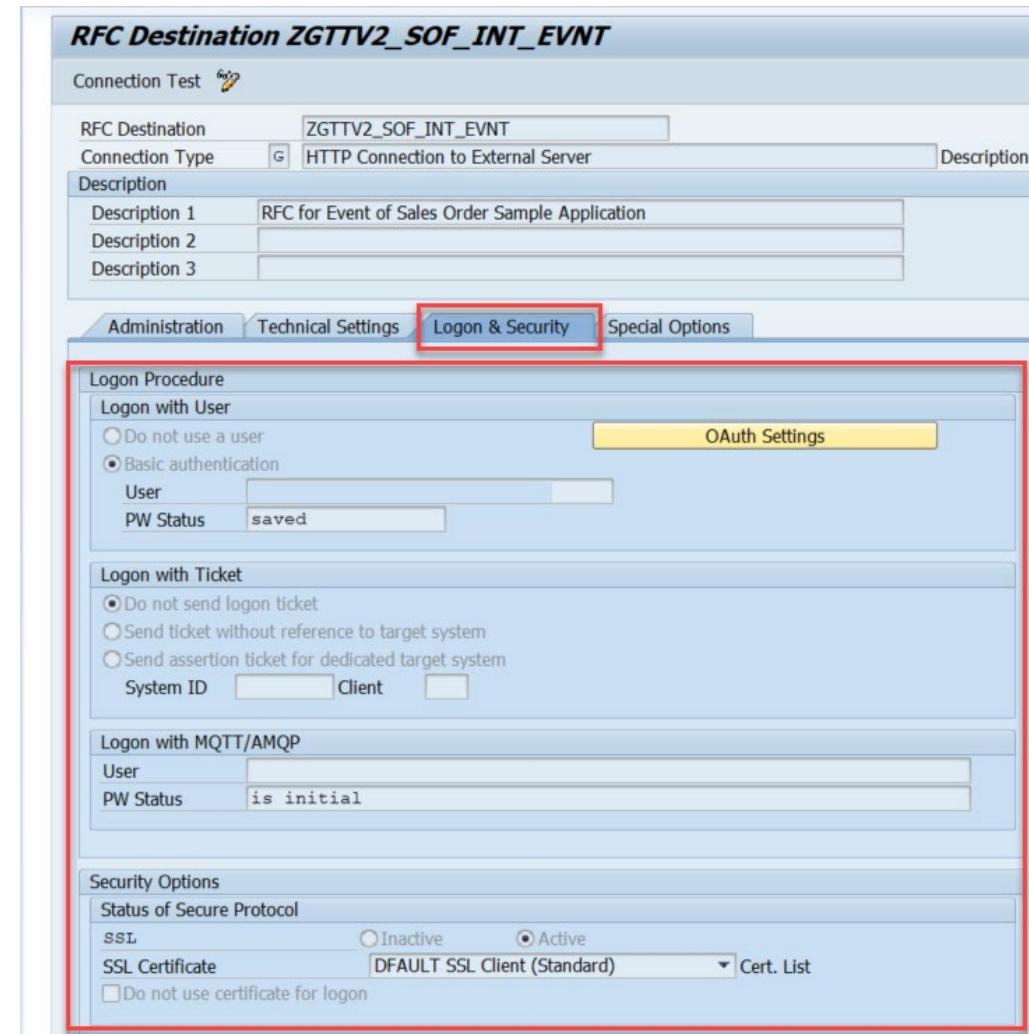
Also, SSL must be *Active*.

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

1-10: Save the configuration

Caution: You need to configure two RFC Connections:

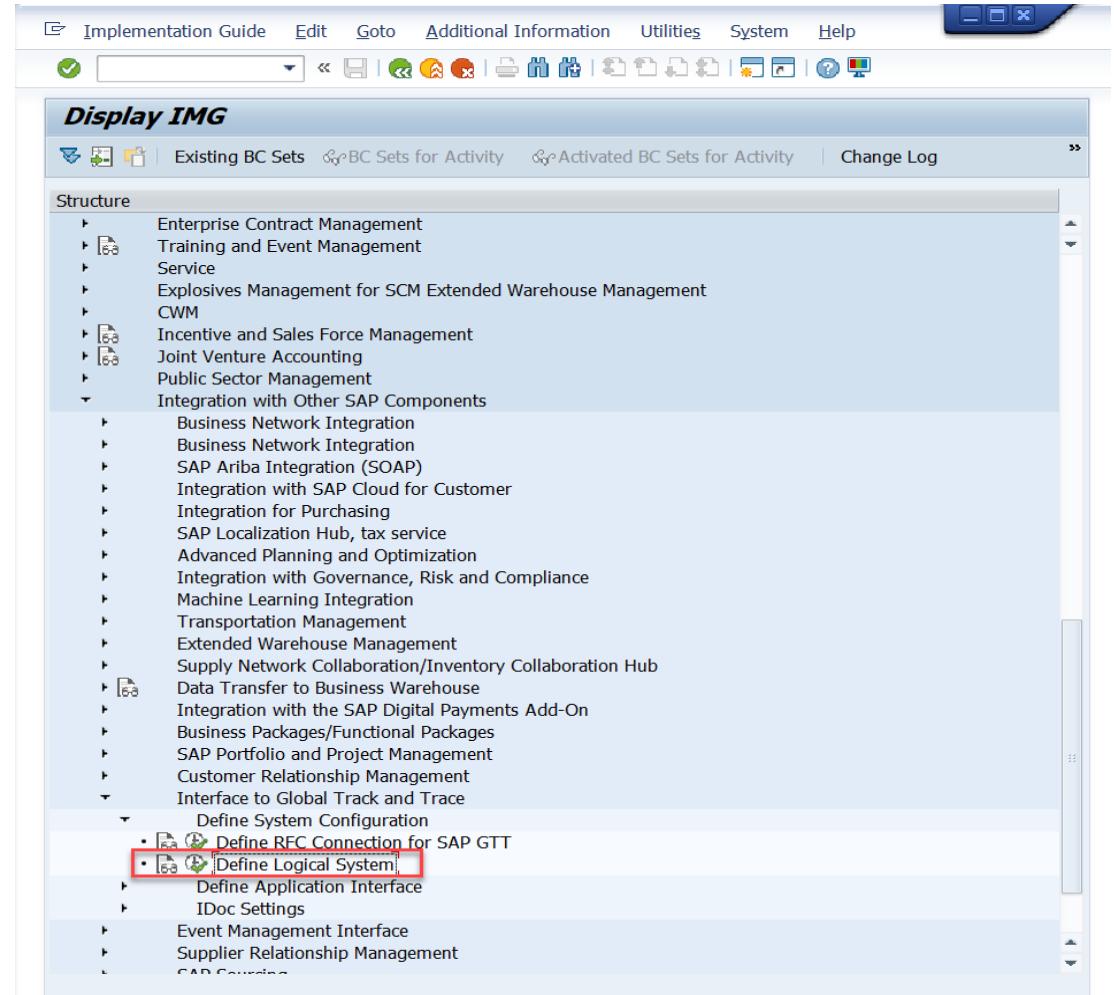
- one for event and
- the other for tracked process.



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

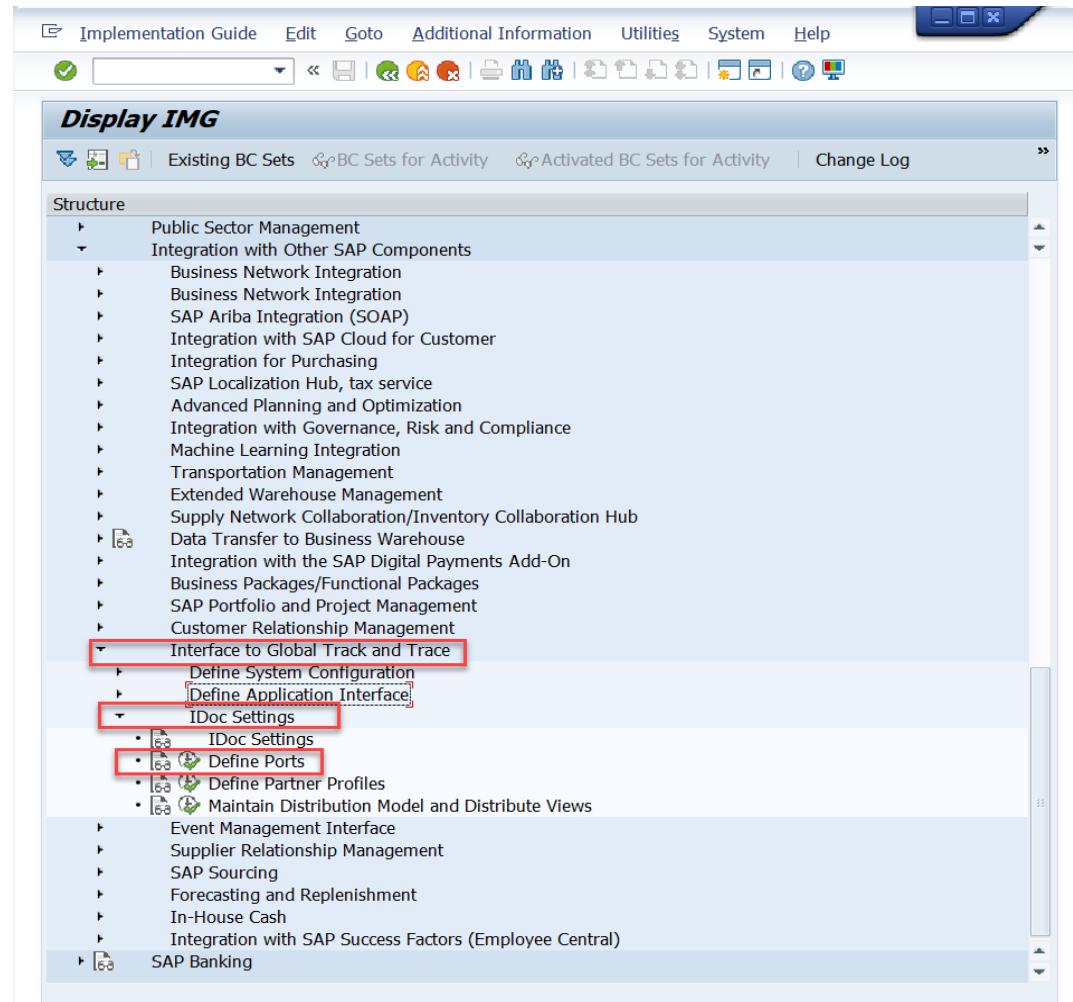
2-4: Save the configuration

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

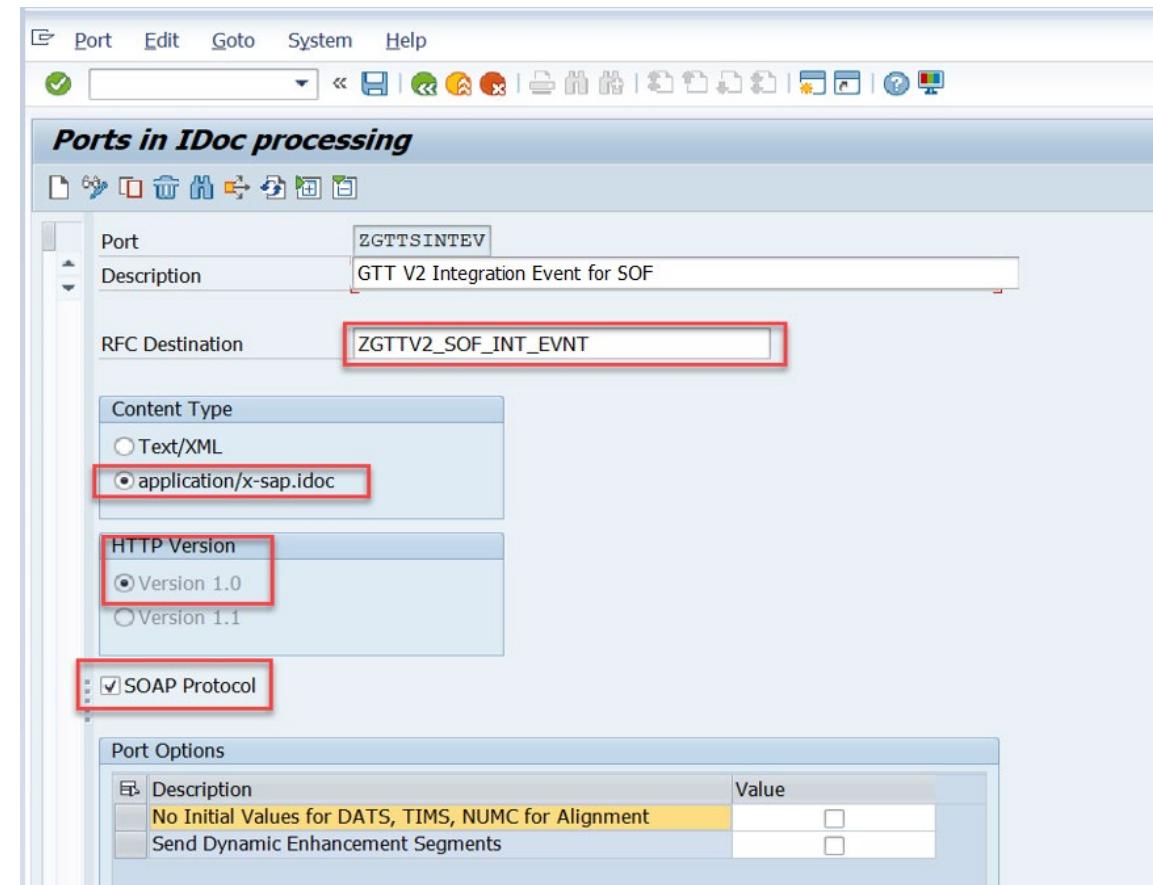
3-5: Choose **Content Type** as *application/x-sap.idoc*

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.

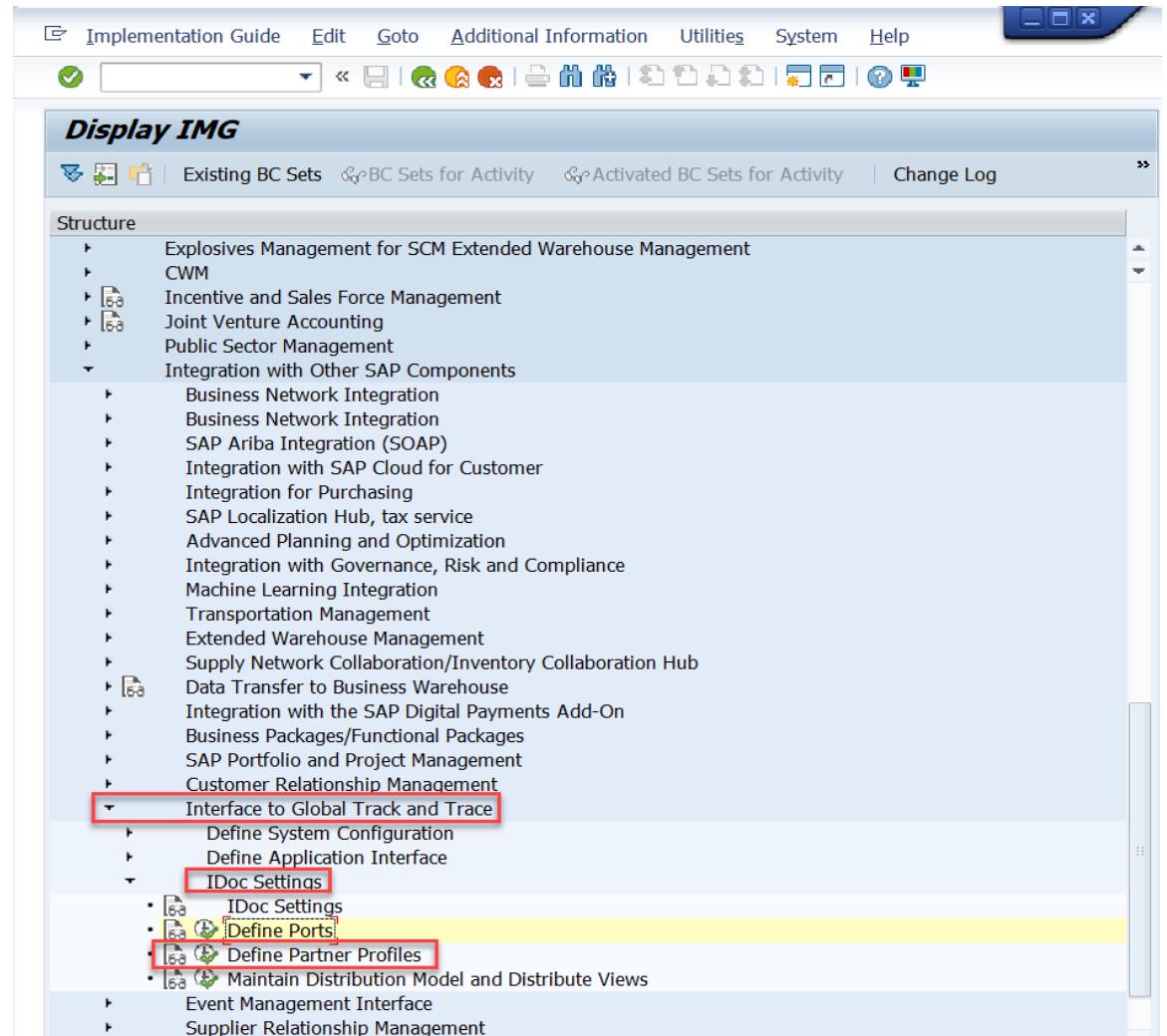


Port	Description	RFC Destination	Content Type	HTTP Version	SOAP Protocol
ZGTTSINTEV	GTT V2 Integration Event for SOF	ZGTTV2_SOF_INT_EVNT	application/x-sap.idoc	Version 1.0	Checked
ZGTTSINTTP	GTT V2 Integration Tracked Process for SOF	ZGTTV2_SOF_INT_TP	application/x-sap.idoc	Version 1.0	Checked

STEP 4: Define Partner Profiles

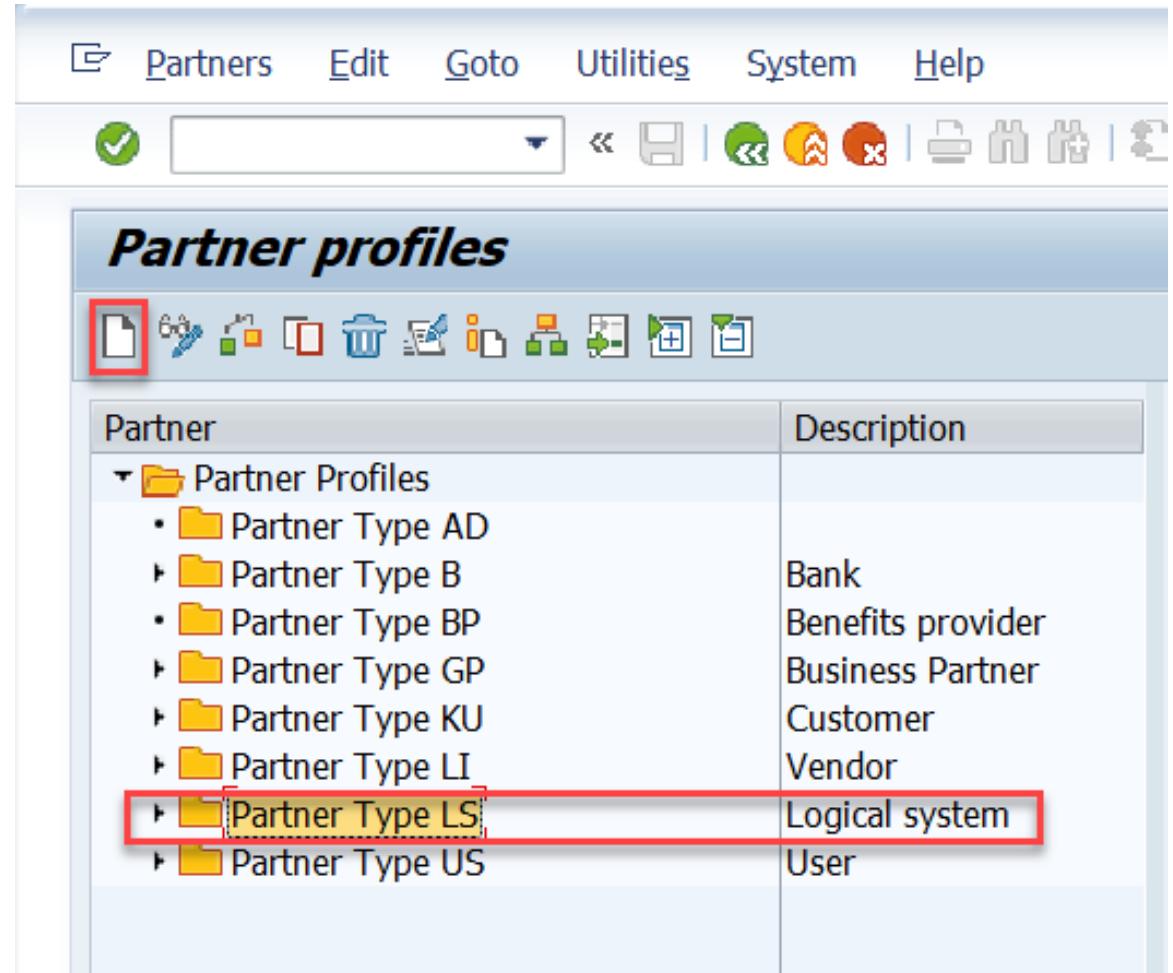
4-1: In **Display IMG** page, unfold **Integration with Other SAP Components** -> **Interface to Global Track and Trace** -> **IDoc Settings**

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



STEP 4: Define Partner Profiles

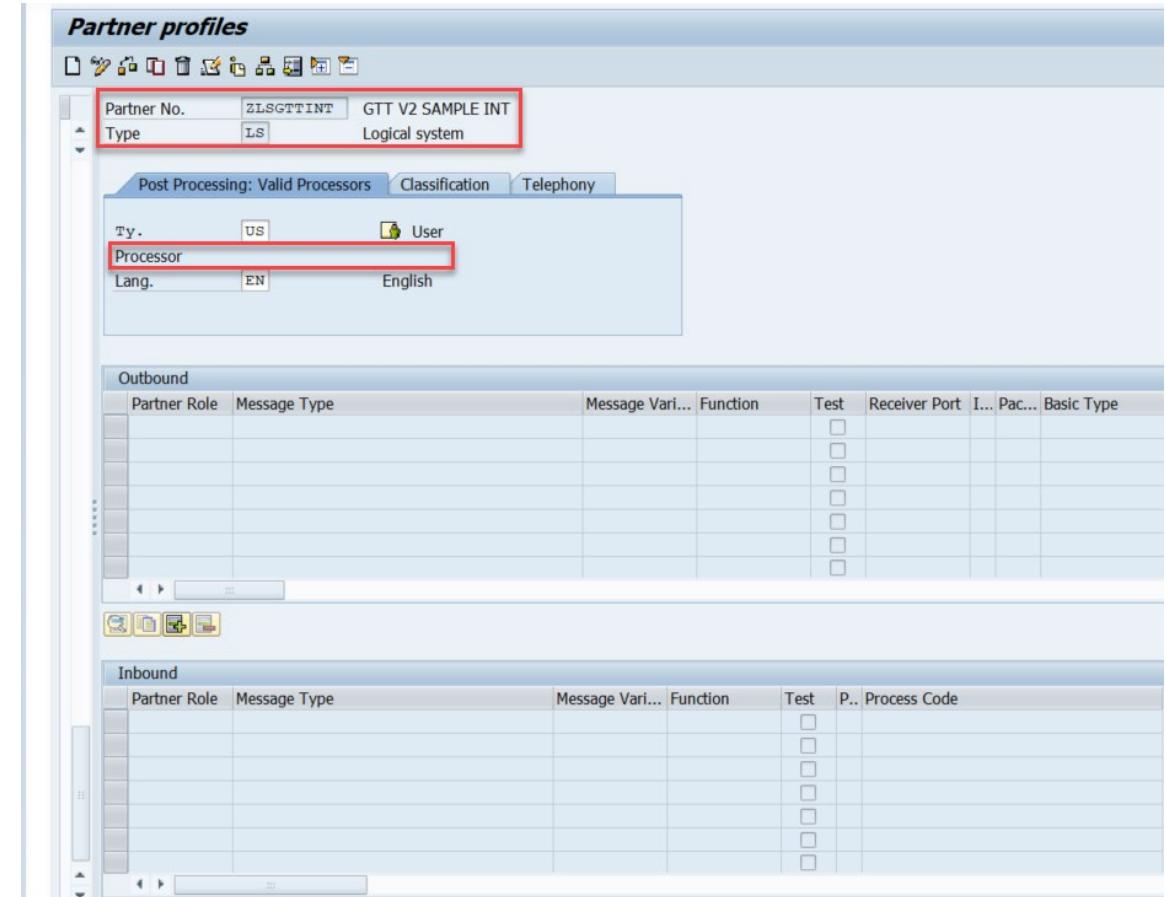
4-3: Choose **Partner Type LS** folder, and click **Create** to create a new partner profile



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

The screenshot shows the SAP Fiori interface for defining partner profiles. At the top, there's a toolbar with various icons. Below it, the main area is titled "Partner profiles". A header bar displays "Partner No. ZLSGTTINT", "Type LS", and "GTT V2 SAMPLE INT Logical system". There are three tabs: "Post Processing: Valid Processors" (selected), "Classification", and "Telephony". Under the "Post Processing" tab, there's a section for "Ty." (set to "US") and "User", with "Processor" and "Lang." (set to "EN" and "English" respectively) below it. The main content area is divided into two sections: "Outbound" and "Inbound". The "Outbound" section has a table with columns: Partner Role, Message Type, Message Vari..., Function, Test, Receiver Port, I... Pac..., and Basic Type. The "Inbound" section has a similar table. In the bottom right corner of the "Outbound" table, there's a red box highlighting a small "Add" icon (represented by a plus sign inside a square).

STEP 4: Define Partner Profiles

4-7: Fill in the Message Type.

For the event:

Message Type: EVMSTA

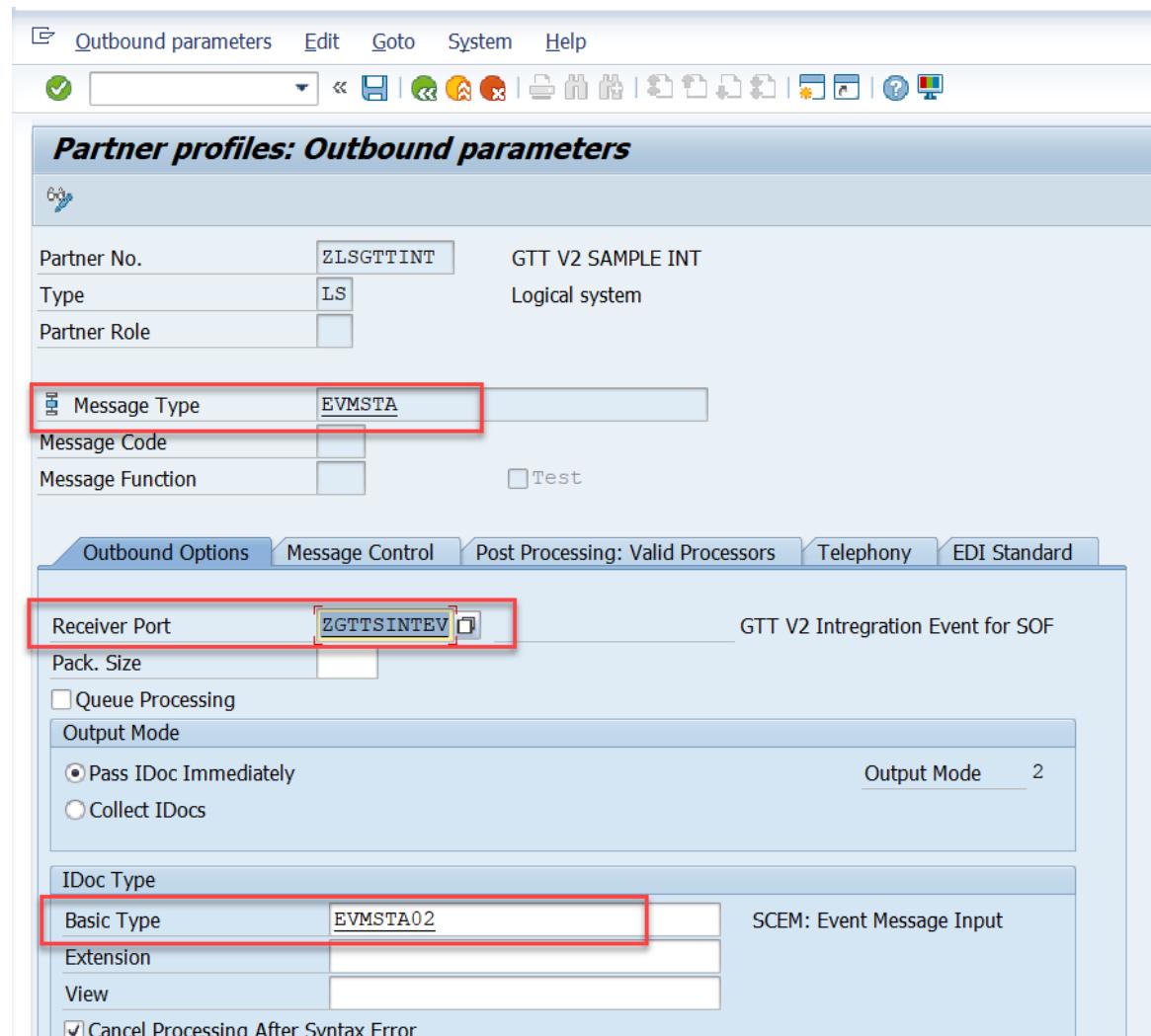
For the tracked Process:

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 to 4-9 to add two outbound parameters, one for event and the other for tracked process.



STEP 4: Define Partner Profiles

4-10: Fill in the Message Type.

For the tracked Process:

Message Type: AOPOST

4-11: Fill in the Receiver Port, that you created in STEP 3

4-12: Save the configuration

Partner No.	Type	Outbound	Message Type	Receiver Port	IDoc Type
ZLSGTTINT	LS	Yes	AOPOST	ZGTTTSINTTP	EHPOST01
ZLSGTTINT	LS	Yes	EVMSTA	ZGTTTSINTEV	EVMSTA02

Partner profiles: Outbound parameters

Partner No. ZLSGTTINT GTT V2 SAMPLE INT
Type LS Logical system
Partner Role

Message Type AOPOST AOPOST

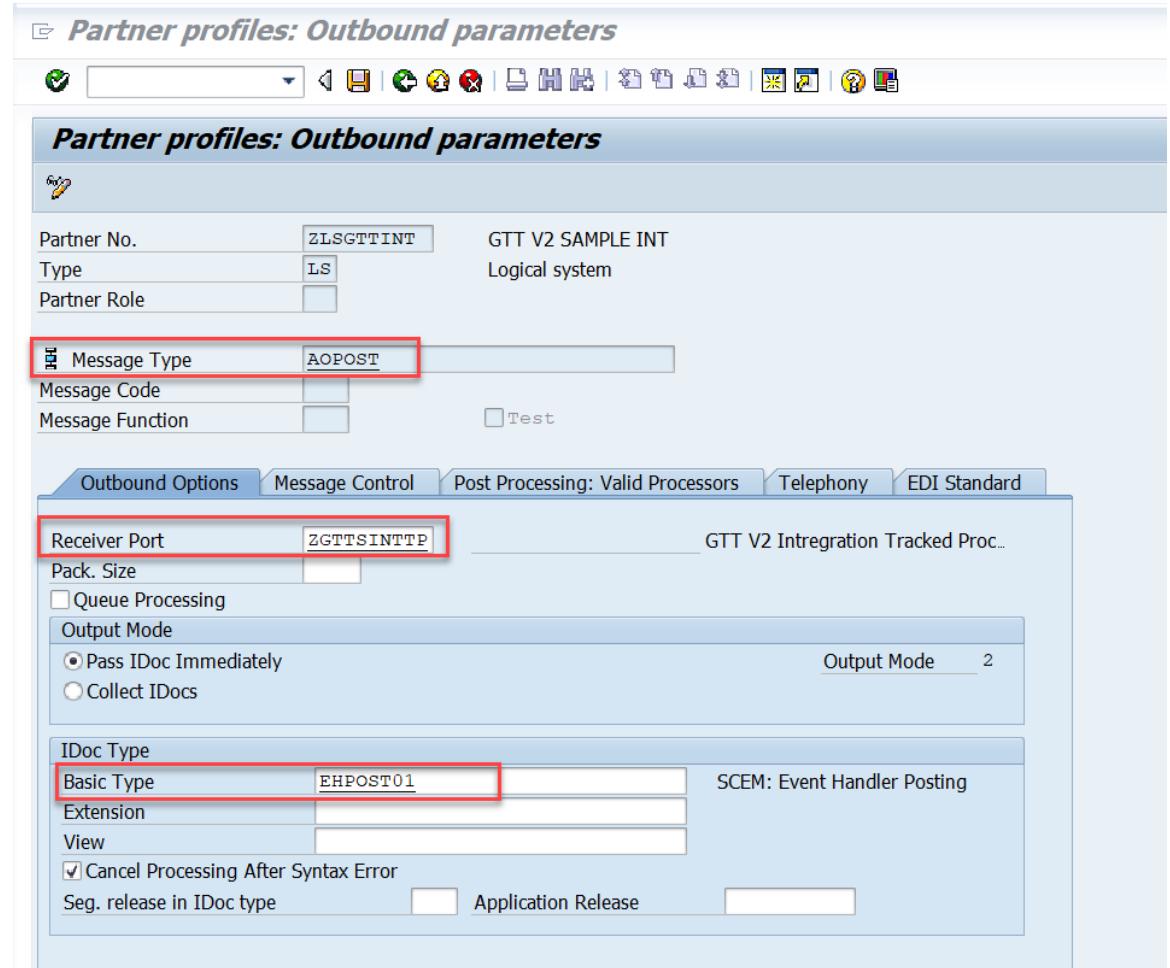
Message Code
Message Function Test

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

Receiver Port ZGTTTSINTTP ZGTTTSINTTP
Pack. Size
 Queue Processing
Output Mode
 Pass IDoc Immediately Output Mode 2
 Collect IDocs

IDoc Type
Basic Type EHPOST01 EHPOST01
Extension
View
 Cancel Processing After Syntax Error
Seg. release in IDoc type Application Release

GTT V2 Intregation Tracked Proc... SCEM: Event Handler Posting



B) Configuration and Implementation

- Basic

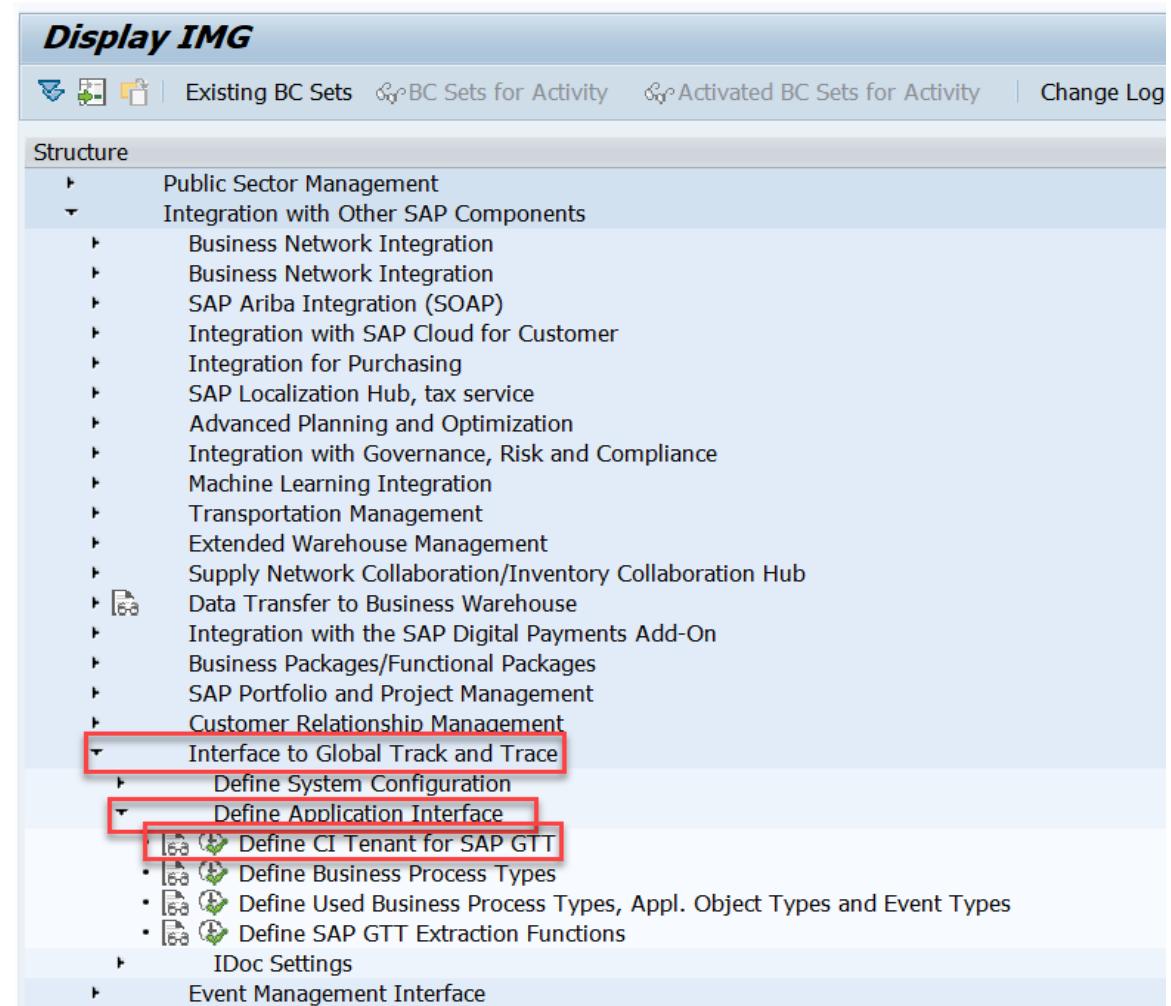
B2. Extractor Configuration



STEP 5: Define CI Tenant for SAP Business Network Global Track and Trace

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

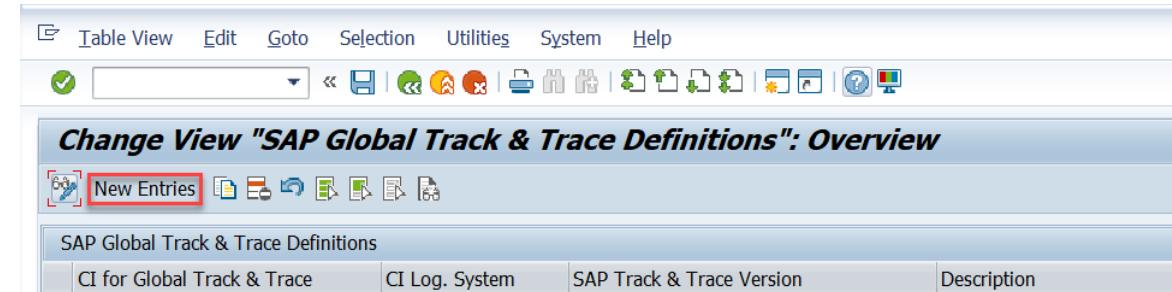
5-2: Choose activity
Define CI Tenant for SAP GTT



STEP 5: Define CI Tenant for SAP Business Network Global Track and Trace

5-3: Click **New Entries** to create a new CI tenant for SAP Business Network Global Track and Trace

5-4: Fill in the information for the new CI tenant. The **CI Log. System** is the logical system you created in STEP 2.



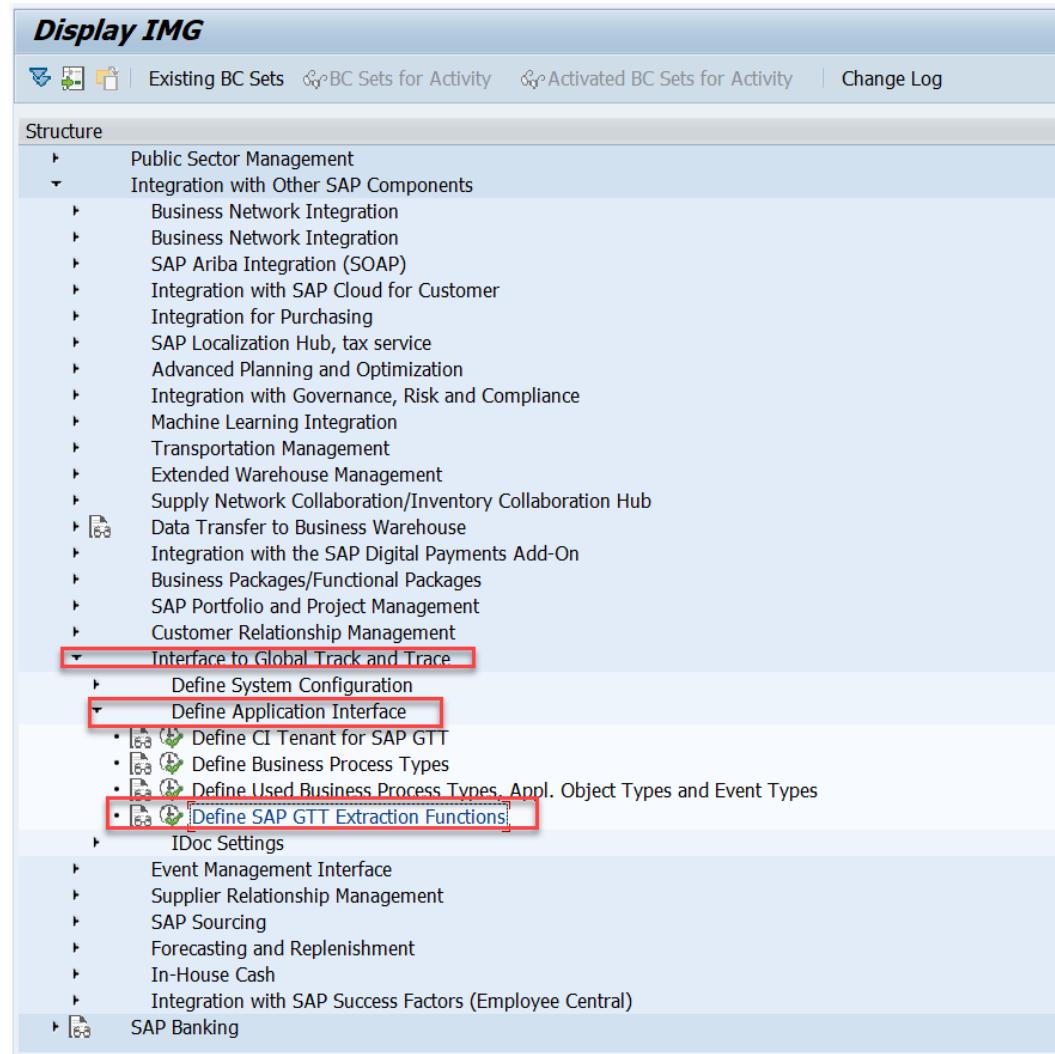
The screenshot shows the SAP Fiori interface with the title "Display View 'SAP Global Track & Trace Definitions': Overview". Below the title is a toolbar with various icons. The main area displays a table titled "SAP Global Track & Trace Definitions" with four columns: CI for Global Track & Trace, CI Log. System, SAP Track & Trace Version, and Description. A specific row is selected and highlighted with a yellow background. The selected row has the following values:

CI for Global Track & Trace	CI Log. System	SAP Track & Trace Version	Description
ZGTTSOFINST	ZLSGTTINT	GTT1.0 Global Track & Trace	CI For GTT V2 Integration system Sales Order Sample APP

STEP 6: Define GTT Extraction Functions

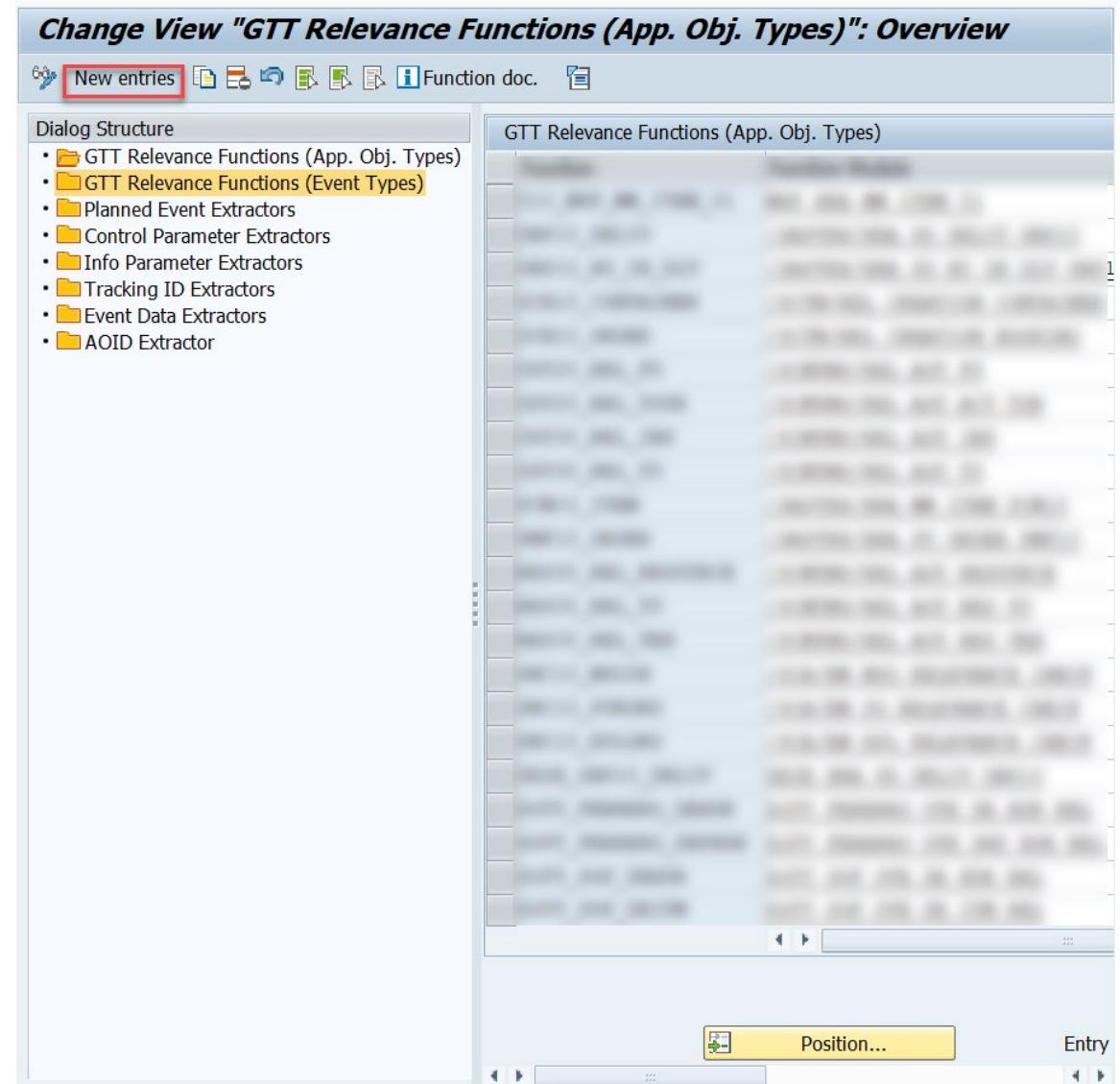
6-1: In **Display IMG** page, click
Integration with Other SAP Components ->
Interface to Global Track and Trace ->
Define Application Interface

6-2: Choose activity
Define SAP GTT Extraction Functions



STEP 6: Define GTT Extraction Functions

6-3: Choose the type of Extraction Function you want to create from the **Dialog Structure**, and click **New entries**



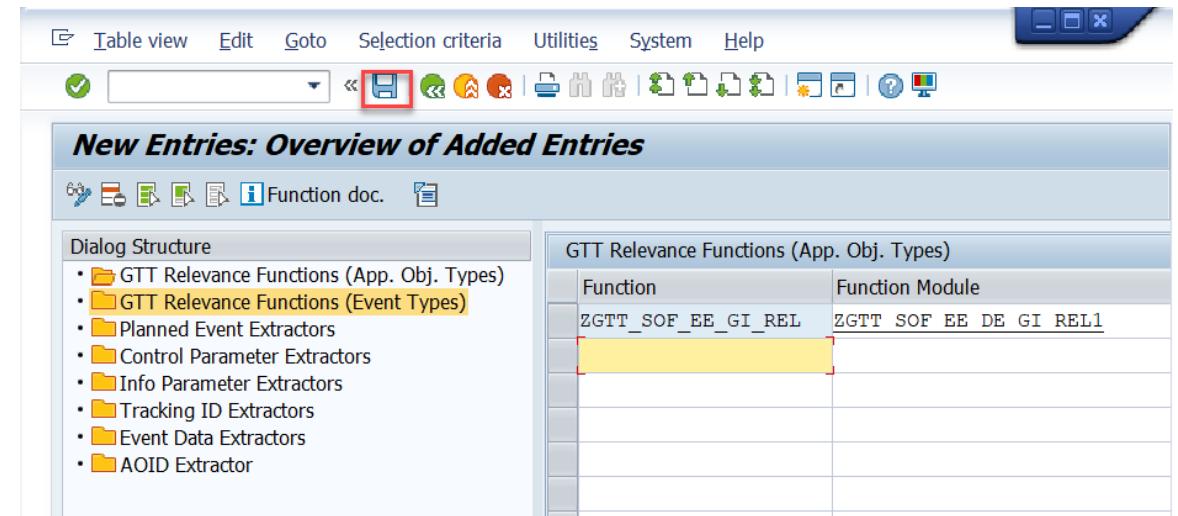
STEP 6: Define GTT Extraction Functions

6-4: Input the **Function name** and **Function Module** for the newly created extraction function

GTT Relevance Functions (App. Obj. Types)	
Function	Function Module
ZGTT_SOF_EE_GI_REL	ZGTT_SOF_EE_DE_GI_REL1

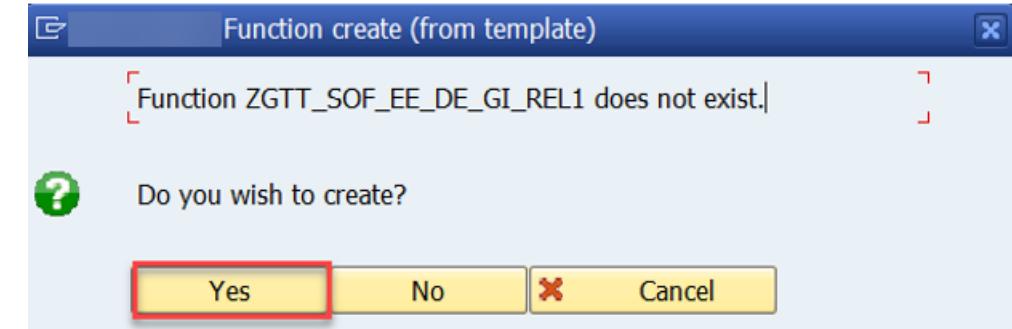
STEP 6: Define GTT Extraction Functions

6-5: Click Save



STEP 6: Define GTT Extraction Functions

6-6: 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 6: Define GTT Extraction Functions

6-7: Input the **Function Group** where the function module is to be created

6-8: Click **Copy**



STEP 6: Define GTT Extraction Functions

6-9: 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. The title bar reads "Function Builder: Display ZGTT_SOEE_DE_GI_REL1". The left pane is a "Repository Browser" showing a tree structure under "Function Group" (selected) and "ZGTT_SOEE". The node "ZGTT_SOEE_DE_GI_REL1" is highlighted with a red box. The right pane displays the ABAP source code for the function module:

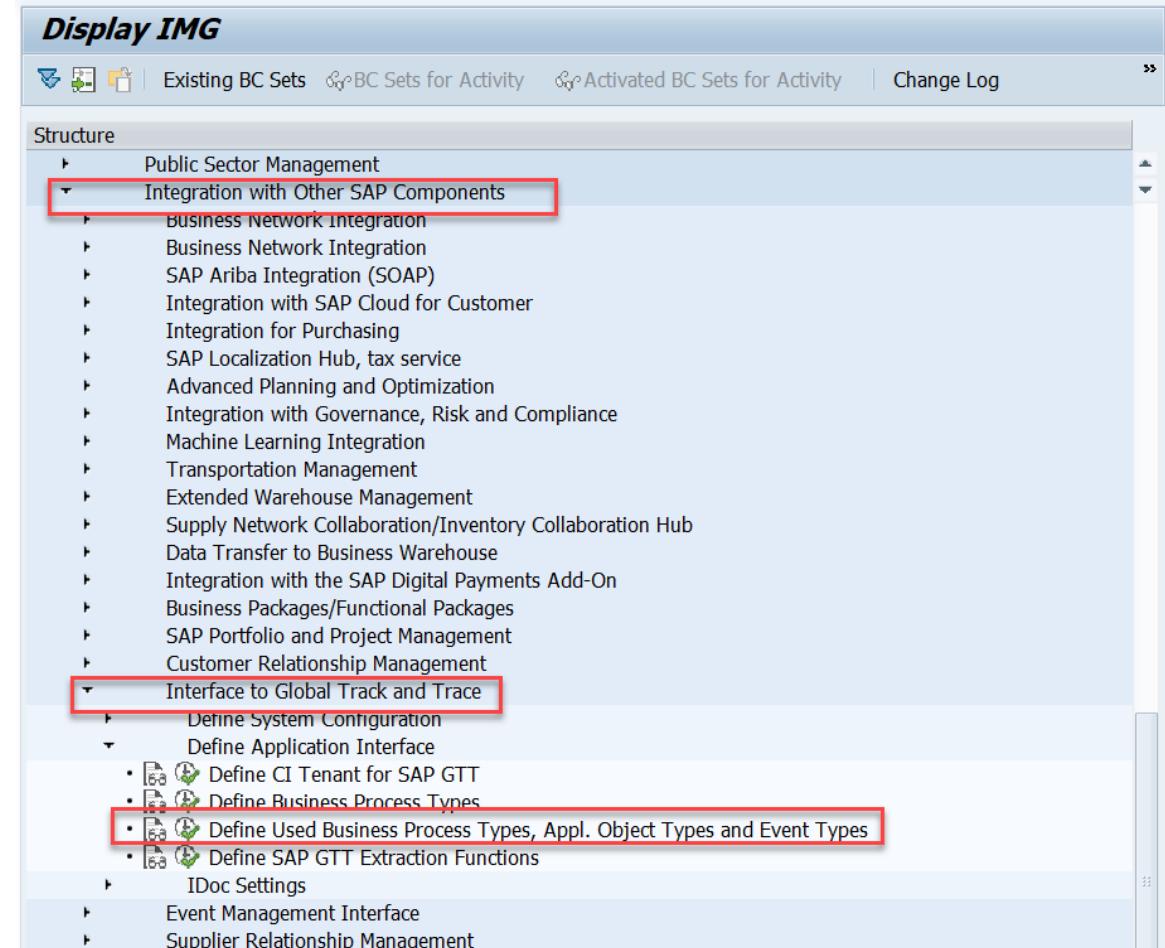
```
1 FUNCTION ZGTT_SOEE_DE_GI_REL1.
2 *" Local Interface:
3 *" IMPORTING
4 *"   REFERENCE(I_APPSYS) TYPE /SAPTRX/APPLSYSTEM
5 *"   REFERENCE(I_APP_OBJ_TYPES) TYPE /SAPTRX/AOTYPES
6 *"   REFERENCE(I_ALL_APPL_TABLES) TYPE TRXAS_TABCONTAINER
7 *"   REFERENCE(I_APPTYPE_TAB) TYPE TRXAS_APPTYPE_TABS_WA
8 *"   REFERENCE(I_APP_OBJECT) TYPE TRXAS_APPOBJ_CTAB_WA
9 *" EXPORTING
10 *"   VALUE(E_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-POOLS:trxas.
21 -
22 -
23 -
24 -
25 -
26 ENDFUNCTION.
```

Below the code, the status bar indicates "Scope: FUNCTION ZGTT_SOEE_DE_GI_REL1", "ABAP", and "Ln 13 Col 48".

STEP 7: Define Used Business Process Types, Appl. Object Types and Event Types

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 Used Business Process Types, Appl. Object Types and Event Types**



STEP 7: 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 7-3 to 7-10 demonstrate how to create an *Event Type* for a given business process type
- Steps 7-11 to 7-21 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
	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 7: Define Used Business Process Types, Appl. Object Types and Event Types

7-3: Choose the business process type from the **Define Used Business Process Types** on the right side

7-4: Double click **Define Event Types**

Change View "Define Used Business Process Types": Overview			
Define Used Business Process Types			
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	<input checked="" type="checkbox"/> 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 7: Define Used Business Process Types, Appl. Object Types and Event Types

7-5: Click **New Entries** to create a new event type

Change View "Define Event Types": Overview		
New Entries		
Dialog Structure		
Define Used Business Process 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 7: Define Used Business Process Types, Appl. Object Types and Event Types

7-6: Fill in the **Event Type** and **Text** fields

7-7: Fill in the information required in the **General Data** tab. **HCI for GTT** is the CI Tenant you created in STEP 5. **Event Function** is the extractor function you created in STEP 6.

7-8: 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	ZGTTSOFINTE CI For GTT V2 Integration system Sales Order Sa

Data Setup	
Event Function	ZGTT_SOF_EVNT_CHIN

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

STEP 7: Define Used Business Process Types, Appl. Object Types and Event Types

7-9: 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**.

The image displays two screenshots of SAP configuration interfaces for defining business processes.

Top Screenshot (Business Process Type: ESC_SHIPMT):

- General Data:**
 - Bus. Proc. Type: ESC_SHIPMT
 - Event Type: ZGTT_SOF_CHIN_INT
 - Text: Check In Event for GTT SOF Integration System
- Data Source for Events:**
 - Main Obj. Table: SHIPMENT_HEADER_NEW (highlighted with a red box)
 - Master Table: (empty)
 - Old Main Obj. Table: SHIPMENT_HEADER_OLD (highlighted with a red box)
 - Old Master Table: (empty)
- Reference Between Main and Master Table:**
 - First Field Reference from Main to Master Table: (empty)
 - Second Field Reference from Main to Master Table: (empty)

A red box highlights the "Event on Header level" note next to the Main Obj. Table entry.

Bottom Screenshot (Business Process Type: ESC_DELIV):

- General Data:**
 - Bus. Proc. Type: ESC_DELIV
 - Event Type: ZGTT_SOF_PICKING_INT
 - Text: Picking Event
- Data Source for Events:**
 - Main Obj. Table: DELIVERY_ITEM_NEW (highlighted with a red box)
 - Master Table: DELIVERY_HEADER_NEW (highlighted with a red box)
 - Old Main Obj. Table: DELIVERY_ITEM_OLD (highlighted with a red box)
 - Old Master Table: DELIVERY_HEADER_OLD (highlighted with a red box)
- 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: (empty)
 - Second Field Reference from Main to Master Table:
 - Uplink Field: (empty)
 - Uplink Mode: (empty)
 - Uplink Target Fld: (empty)
 - Uplink Const: (empty)

A red box highlights the "Event on Item level" note next to the Main Obj. Table entry.

STEP 7: Define Used Business Process Types, Appl. Object Types and Event Types

7-10: 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 6, and fill in the relevance function name here.

Click **Save**.

Bus. Proc. Type	ESC_SHIPMT
Event Type	ZGTT_SOF_CHIN_INT
Text	Check In Event
General Data	
Control Tables	
Global Track & Trace Relevance	
GTT Rel. Method	Check Function (Function...)
GTT Rel. Function	ZGTT_SOF_SHP_CHI_REL

STEP 7: Define Used Business Process Types, Appl. Object Types and Event Types

7-11: Choose the business process type from the **Define Used Business Process Types** on the right side

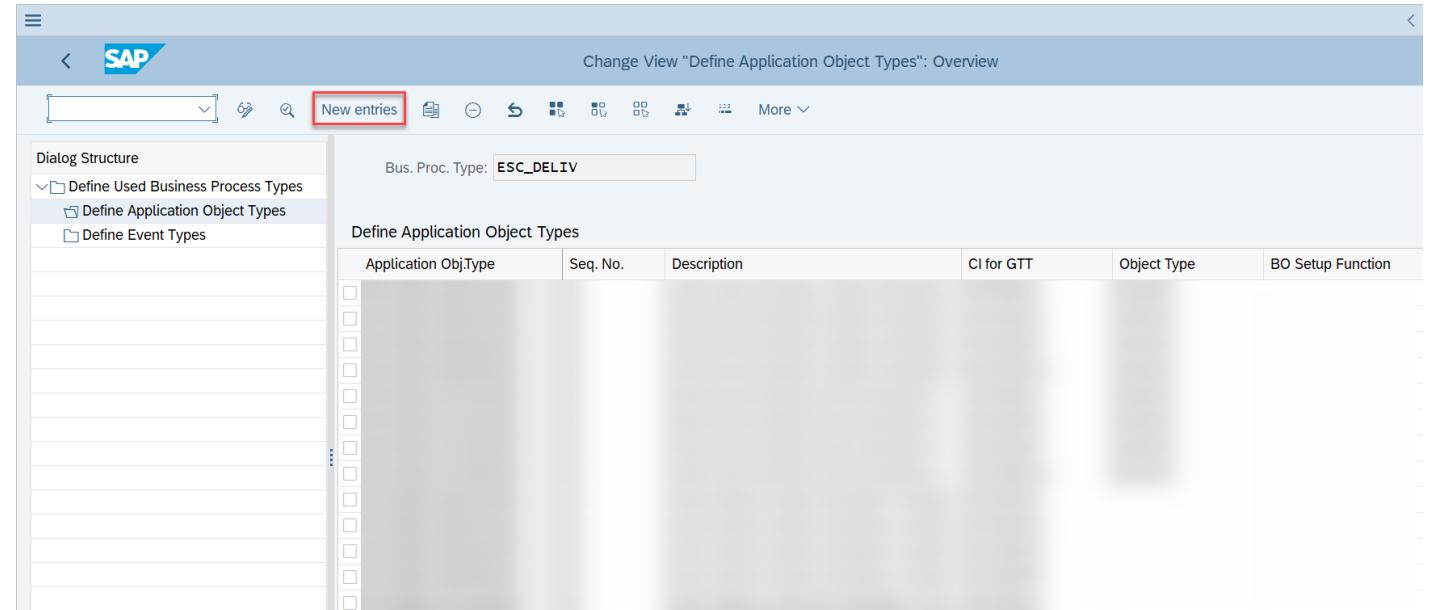
7-12: Double click **Define Application Object Types**

The screenshot shows the SAP Change View "Define Used Business Process Types". The title bar reads "Change View 'Define Used Business Process Types': Overview". The toolbar includes buttons for New Entries, Copy As..., Delete, Undo Change, Select All, Select Block, Deselect All, Configuration Help, and More. The left sidebar, titled "Dialog Structure", lists "Define Used Business Process Type", "Define Application Object Type" (which is selected and highlighted with a red box), and "Define Event Types". The main area, titled "Define Used Business Process Types", contains a table with columns: Bus. Proc. Type, Update Mode, BPT Process Mode, and Description. The table lists various business process types, each with a checkbox and a dropdown menu icon. Some rows have a red box around them, specifically the first row (EPL_NOTIF) and the row for ESC_SHIPMT.

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_SOURDER	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	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 (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 7: Define Used Business Process Types, Appl. Object Types and Event Types

7-13: Click **New Entries** to create a new Application Object Type



STEP 7: Define Used Business Process Types, Appl. Object Types and Event Types

7-14: Fill in the **Application Object Type** and **Text** fields

7-15: Fill in the information required in the **General Data** tab. **CI for GTT** is the CI Tenant you created in STEP 5.

7-16: Check **GTT Relevant**

The screenshot shows the SAP Fiori application configuration interface. The top section displays the following fields:

- Bus. Proc. Type: ESC_SHIPMT
- Appl. Obj. Type: ZGTT_SHP_INT_HD (highlighted with a red box)
- Text: Extract shipment header information to Global Track and Trace Integration

Below this, the General Data tab is selected, showing the following configuration:

- Sequencing / Destination:
 - Seq. No.: 20
 - CI for GTT: ZGTTSOFINST (highlighted with a red box)
 - CI For GTT V2 Integration system Sales Order Sampl
- Business Object Reference:
 - Object Type: [empty]
 - BO Setup Fnct.: [empty]
- Behavior:
 - GTT Relevant (highlighted with a red box)
 - Stop AO Determ.
 - Appl. Log Deact

STEP 7: Define Used Business Process Types, Appl. Object Types and Event Types

7-17: 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 screenshot shows the SAP Fiori interface for defining business process types, application object types, and event types. It is divided into two main sections: one for the business process type **ESC_SHIPMT** and another for **ESC_DELIV**.

ESC_SHIPMT Configuration:

- General Data:** Bus. Proc. Type: **ESC_SHIPMT**, Appl. Obj. Type: **ZGTT_SHP_INT_HD**, Text: **Extract shipment header information to Global Track and Trace Integration**.
- Control Tables:** Data Source for Created and Updated Objects: Main Obj. Table: **SHIPMENT_HEADER_NEW** (highlighted with a red box), Master Table: **SHIPMENT_HEADER_OLD**. AOT on Header Level (highlighted with a red box).
- Reference Between Main and Master Table:** First Field Reference from Main to Master Table.

ESC_DELIV Configuration:

- General Data:** Bus. Proc. Type: **ESC_DELIV**, Appl. Obj. Type: **ZGTT_DE_INT_ITEM**, Text: **Extract delivery order item information to Global Track and Trace Integration**.
- Control Tables:** Data Source for Created and Updated Objects: Main Obj. Table: **DELIVERY_ITEM_NEW** (highlighted with a red box), Master Table: **DELIVERY_HEADER_NEW**. AOT on Item Level (highlighted with a red box).
- 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: .
- Data Source for Deleted Objects:** Del.Obj. Table: **DELIVERY_ITEM_OLD** (highlighted with a red box).

STEP 7: Define Used Business Process Types, Appl. Object Types and Event Types

7-18: 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

7-19: When choosing **Determine by Function**, you must enter the customized information in the AOID function field.

The screenshot shows the 'Object Identification' tab of a configuration screen. At the top, there are three input fields: 'Bus. Proc. Type' (ESC_DELIV), 'Appl. Obj. Type' (ZGTT_DE_INT_ITEM), and 'Text' (Delivery Item). To the right of the type field is a tooltip: 'Extract delivery order item information to Global Track and Trace Integration'. Below these, a section titled 'Method for determination of AOID' has a dropdown menu set to 'Determine from Field'. The 'Application Object ID Source' section contains two fields: 'First Field to Build Appl. Obj. ID' (with a red box around it) and 'Second Field to Build Appl. Obj. ID' (with a red box around it). Each of these fields has a 'Cntrl Tab. Type' dropdown set to '1 Main Object Table' and an 'AO ID Field' input field: 'VBELN' for the first and 'POSNR' for the second. At the bottom, a section titled 'Determine AOID By Function' has a dropdown menu for 'AOID Function'.

STEP 7: Define Used Business Process Types, Appl. Object Types and Event Types

7-20: 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 6, and fill in the relevance function name here.

The screenshot shows a configuration interface for a business process. At the top, there are three input fields: 'Bus. Proc. Type' (ESC_DELIV), 'Appl. Obj. Type' (ZGTT_DE_INT_ITEM), and 'Text' (Delivery Item). Below these, a tooltip provides the description: 'Extract delivery order item information to Global Track and Trace Integration'. A horizontal navigation bar at the bottom includes tabs for 'General Data', 'Control Tables', 'Object Identification', 'Global Track & Trace Relevance' (which is highlighted in blue), and 'Parameter Setup'. Under the 'Global Track & Trace Relevance' tab, there are two configuration fields: 'GTT Rel. Method' (set to 'A Check Function (Function Module)') and 'GTT Rel. Function' (containing the value 'ZGTT_SOF_DEITM'). The 'GTT Rel. Function' field is enclosed in a red rectangular box.

STEP 7: Define Used Business Process Types, Appl. Object Types and Event Types

7-21: 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 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**.

The screenshot shows the SAP Fiori interface for parameter setup. At the top, there are fields for 'Bus. Proc. Type' (ESC_DELIV), 'Appl. Obj. Type' (ZGTT_DE_INT_ITEM) with a tooltip 'Extract delivery order item information to Global Track and Trace Integration', and 'Text' (Delivery Item). Below these are tabs for General Data, Control Tables, Object Identification, Global Track & Trace Relevance, and Parameter Setup. The Parameter Setup tab is active. Under 'Tracking ID Setup', the 'TrkID Method' dropdown is set to 'A Determine by Function' (highlighted with a red box). Other fields include 'Tr.ID Tab. Type', 'Tr. ID Code Set', and 'Trk.ID Function' (ZGTT_TID_DE_ITEM). To the right is a 'Tracking ID Fld' input field. Under 'Parameter Setup', three fields are shown: 'Ctrl Data Function' (ZGTT_OTE_DE_ITEM), 'Info Data Function' (empty), and 'Planned Event Function' (ZGTT_EE_DE_ITM), all highlighted with red boxes.

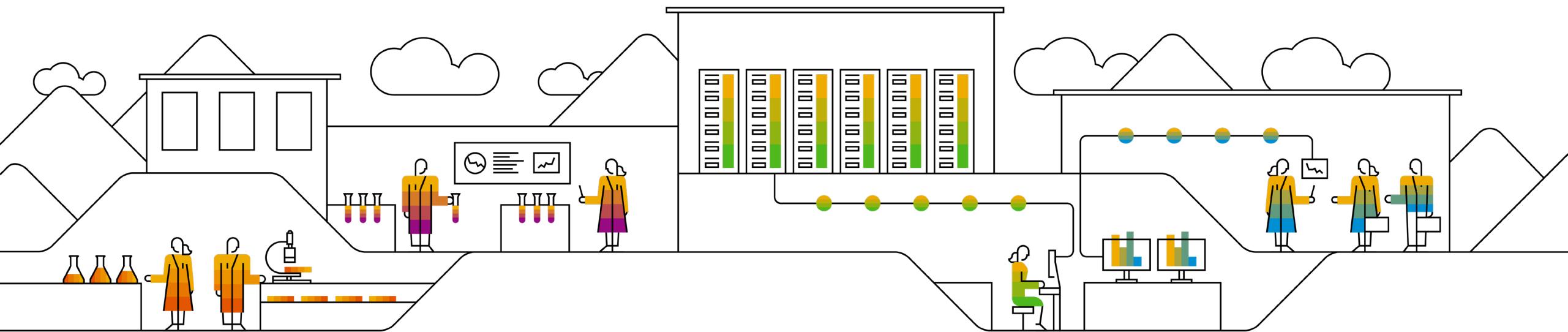
C) Download ABAP Code from GitHub

C1. Initial Download ABAP Code from GitHub (Only for TSOF)

C2. Update ABAP Code from GitHub (Only for TSOF)

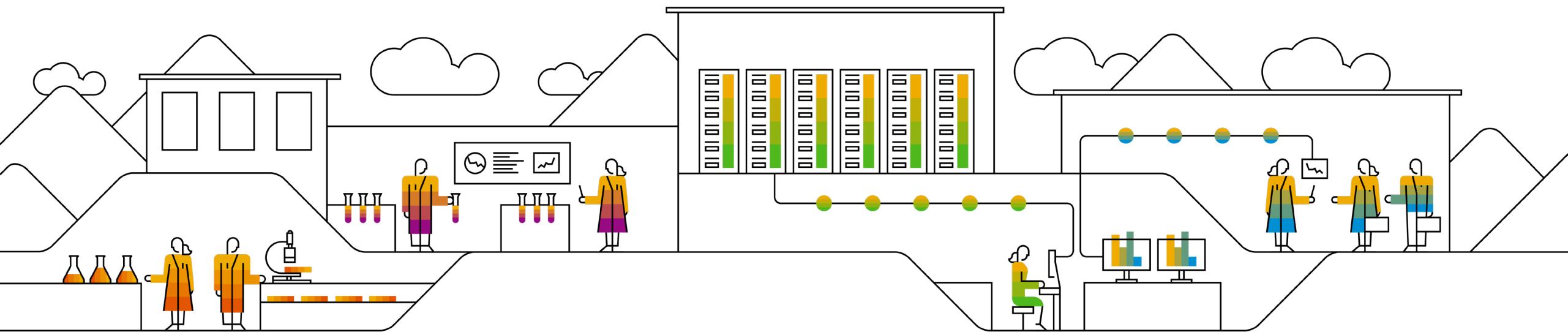
C3. Download Another ABAP Code from GitHub (Only for TPOF)

C4. Initial Download ABAP Code from GitHub (Include TSOF/TPOF/TS)



C) Download ABAP Code from GitHub

C1. Initial Download ABAP Code from GitHub (Only for TSOF)



STEP 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. The header reads "abapGit › documentation". The left sidebar contains links for "Getting Started", "Setup", "Online Projects", "Offline Projects", and "Reference". The main content area starts with a "Summary" section stating that abapGit exists in two flavors: "standalone" and "developer". It then describes the "standalone" version as targeted for users and the "developer" version as targeted for developers contributing to the codebase. A "Prerequisites" section requires SAP BASIS version 702 or higher. The "Install standalone version" section is highlighted with a red border and contains four numbered steps: 1. Download ABAP code, 2. Create a report named ZABAPGIT_STANDALONE, 3. Upload code to the report, and 4. Activate the report. Below this, a note says abapGit is typically used in development systems, and a final note says it can be used by executing the report in transaction SE38.

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

- The *standalone* version is targeted at users. It consist 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`). NB: Don't 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

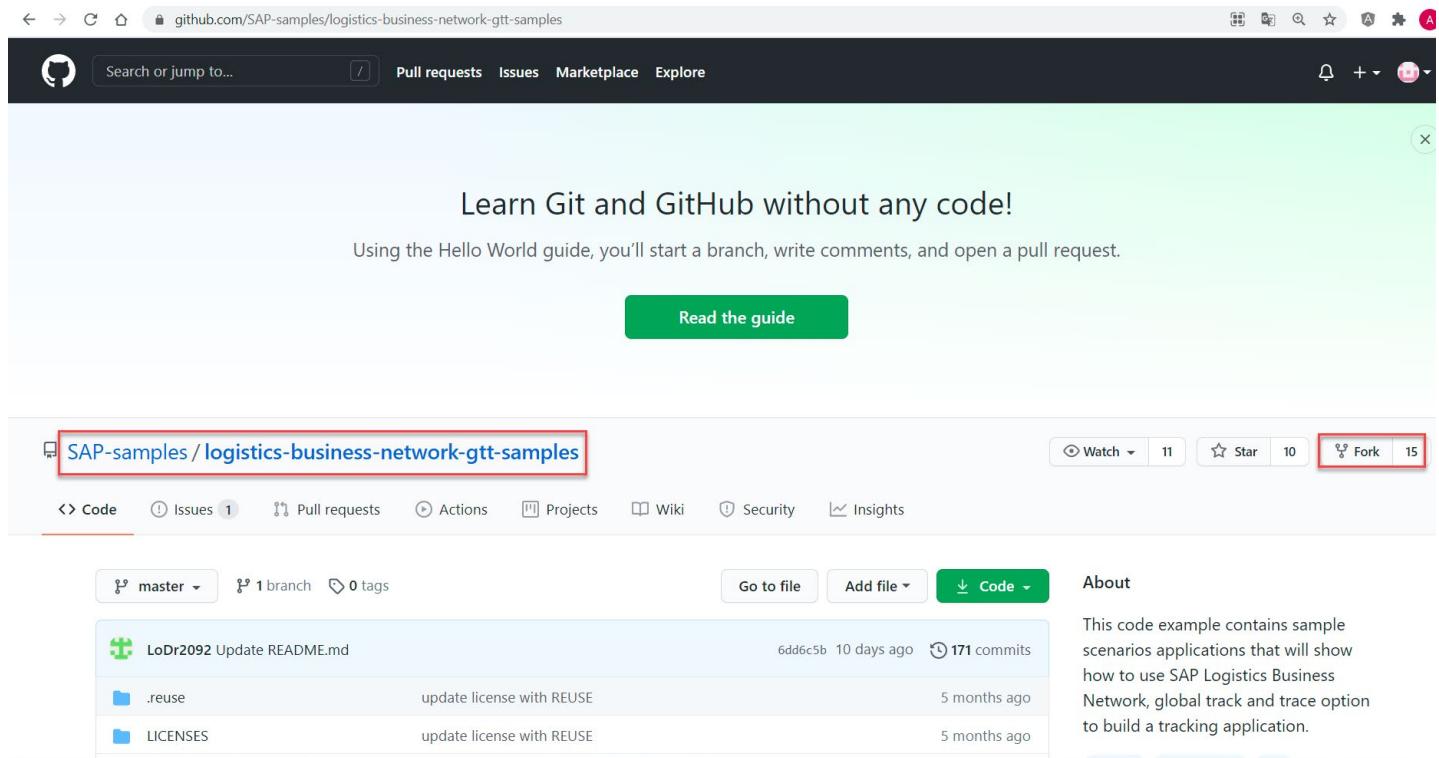
Typically, abapGit will only be used in the development system, so it can be installed in a local \$ package (e.g. `$ZABAPGIT`).

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

STEP 2: Fork Sample Code Repository

2-1. Navigate to sample code in
<https://github.com/SAP-samples/logistics-business-network-gtt-samples>

2-2. Click the “Fork” button, it will copy the newest version of sample codes into the user’s account and meanwhile it will navigate to the user’s own repository.



STEP 3: Change Configuration File ‘.abapgit.xml’

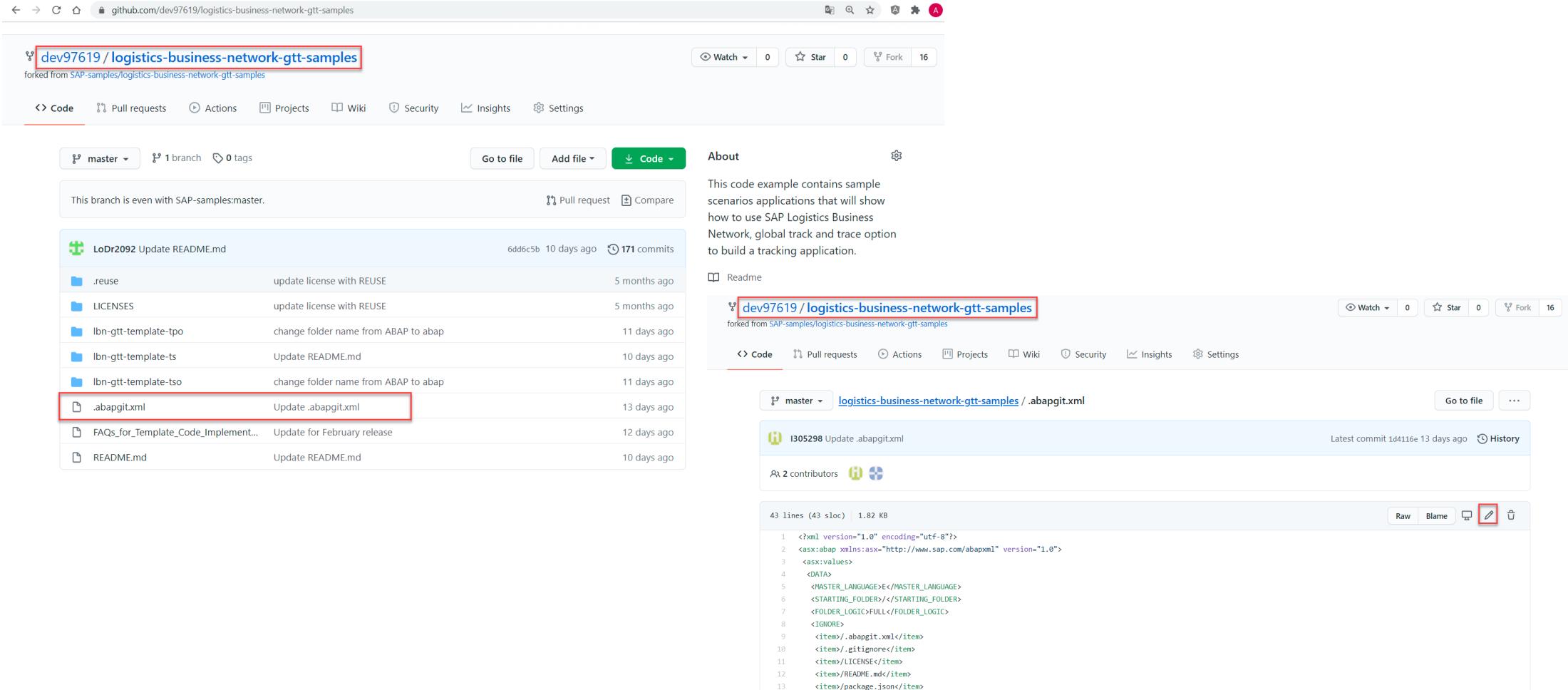
3-1: In the user’s account repository, click the file ‘.abapgit.xml’.

The screenshot shows a GitHub repository page for 'dev97619 / logistics-business-network-gtt-samples'. The repository is a fork from 'SAP-samples/logistics-business-network-gtt-samples'. The 'Code' tab is selected. The 'master' branch is active, with 1 branch and 0 tags. A message indicates the branch is even with SAP-samples:master. The commit history lists several changes, including one for '.abapgit.xml' which is highlighted with a red box. The commit details show it was updated 13 days ago. To the right of the code area, there is an 'About' section describing the repository as containing sample scenarios for SAP Logistics Business Network, global track and trace options, and a 'Readme' link. Below that is a 'Releases' section stating 'No releases published' and a 'Create a new release' link. Finally, a 'Packages' section states 'No packages published' and a 'Publish your first package' link.

File	Description	Time Ago
.reuse	update license with REUSE	5 months ago
LICENSES	update license with REUSE	5 months ago
Ibn-gtt-template-tpo	change folder name from ABAP to abap	11 days ago
Ibn-gtt-template-ts	Update README.md	10 days ago
Ibn-gtt-template-tso	change folder name from ABAP to abap	11 days ago
.abapgit.xml	Update .abapgit.xml	13 days ago
FAQs_for_Template_Code_Implement...	Update for February release	12 days ago
README.md	Update README.md	10 days ago

STEP 3: Change Configuration File ‘.abapgit.xml’

3-2: Click  button to edit the file.



The screenshot shows a GitHub repository page for `dev97619/logistics-business-network-gtt-samples`. The repository has 16 forks. The main repository page shows a list of commits, with one commit highlighted: `LoDr2092 Update README.md`. Below the commit list is a summary: "This branch is even with SAP-samples:master." The repository has 1 branch and 0 tags. The "Code" tab is selected. On the right, there is an "About" section describing the code example and a "Readme" section. A modal window is open over the repository page, showing the file `logistics-business-network-gtt-samples/.abapgit.xml`. The modal title is "I305298 Update .abapgit.xml". It shows the latest commit `1d4116e` from 13 days ago. The file has 2 contributors. The code editor shows the XML configuration file:

```
43 lines (43 sloc) 1.82 KB
1 <?xml version="1.0" encoding="utf-8"?>
2 <asx:abap xmlns:asx="http://www.sap.com/abapxml" version="1.0">
3   <asx:values>
4     <DATA>
5       <MASTER_LANGUAGE>E</MASTER_LANGUAGE>
6       <STARTING_FOLDER>./</STARTING_FOLDER>
7       <FOLDER_LOGIC>FULL</FOLDER_LOGIC>
8       <IGNORE>
9         <item>./.abapgit.xml</item>
10        <item>./.gitignore</item>
11        <item>./LICENSE</item>
12        <item>./README.md</item>
13        <item>./package.json</item>
```

STEP 3: Change Configuration File ‘.abapgit.xml’

3-3: Replace the line "<STARTING_FOLDER>/</STARTING_FOLDER>" with
"<STARTING_FOLDER>/lbn-gtt-template-tso/abap/zsrc/</STARTING_FOLDER>" as follows.

3-4: Commit change.

The screenshot shows a GitHub repository page for "dev97619 / logistics-business-network-gtt-samples". The ".abapgit.xml" file is open in the editor, showing the XML configuration. A specific line of code is highlighted with a red box: "<STARTING_FOLDER>/</STARTING_FOLDER>". This line is being replaced by the correct path: "<STARTING_FOLDER>/lbn-gtt-template-tso/abap/zsrc/</STARTING_FOLDER>". To the right, a "Commit changes" dialog is displayed, prompting the user to update the file and providing options to commit directly or create a pull request. The "Commit changes" button is highlighted with a red box.

Code

Pull requests

Actions

Projects

Wiki

Security

Insights

Settings

Watch 0

Star 0

Fork 16

logistics-business-network-gtt-samples / .abapgit.xml in master

1 <xml version="1.0" encoding="utf-8"?>

2 <asx:abap xmlns:asx="http://www.sap.com/abapxml" version="1.0">

3 <asx:values>

4 <DATA>

5 <MASTER_LANGUAGE>E</MASTER_LANGUAGE>

6 <STARTING_FOLDER>/lbn-gtt-template-tso/abap/zsrc/</STARTING_FOLDER>

7 <FOLDER_LOGIC>FULL</FOLDER_LOGIC>

8 <IGNORE>

9 <item>./.abapgit.xml</item>

10 <item>./.gitignore</item>

Commit changes

Update .abapgit.xml

Add an optional extended description...

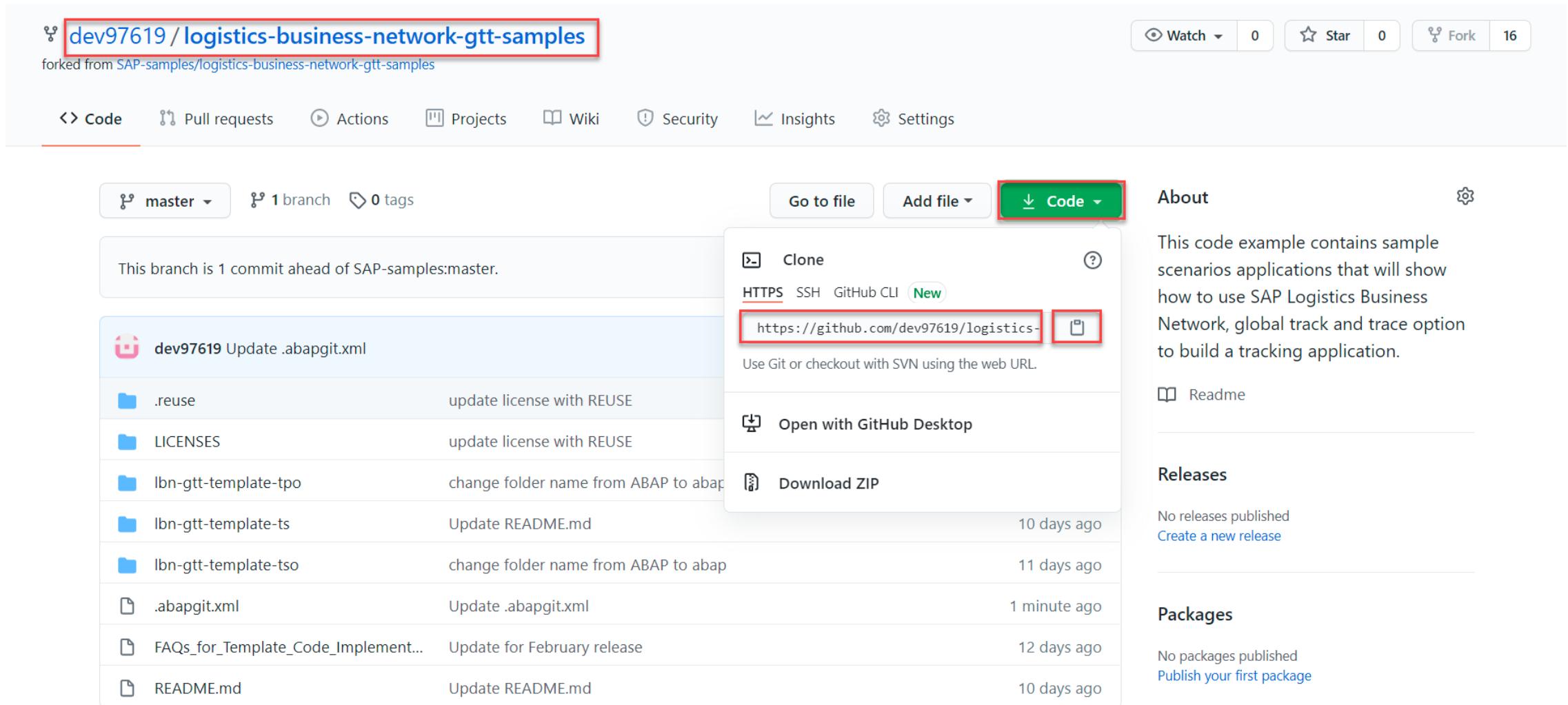
Commit directly to the master branch.

Create a new branch for this commit and start a pull request. [Learn more about pull requests](#).

Commit changes Cancel

STEP 3: Change Configuration File ‘.abapgit.xml’

3-5: Go to the root and copy the repository URL by clicking  button.



The screenshot shows a GitHub repository page for 'dev97619 / logistics-business-network-gtt-samples'. The repository has been forked from SAP-samples/logistics-business-network-gtt-samples. The 'Code' tab is selected. On the right, there's a 'Code' dropdown menu with a 'Clone' option. The 'Clone' section displays the repository URL: <https://github.com/dev97619/logistics-business-network-gtt-samples>. A red box highlights both the URL and the copy icon. The repository has 0 stars, 16 forks, and 0 issues. The 'About' section describes the code example as containing sample scenarios applications for SAP Logistics Business Network, global track and trace options. The 'Readme' and 'Releases' sections are also visible.

Code

Watch 0 Star 0 Fork 16

Code

Clone

HTTPS SSH GitHub CLI New

<https://github.com/dev97619/logistics-business-network-gtt-samples>

Use Git or checkout with SVN using the web URL.

Open with GitHub Desktop

Download ZIP

10 days ago

11 days ago

1 minute ago

12 days ago

10 days ago

About

This code example contains sample scenarios applications that will show how to use SAP Logistics Business Network, global track and trace option to build a tracking application.

Readme

Releases

No releases published

Create a new release

Packages

No packages published

Publish your first package

master 1 branch 0 tags

This branch is 1 commit ahead of SAP-samples:master.

dev97619 Update .abapgit.xml

.reuse update license with REUSE

LICENSES update license with REUSE

Ibn-gtt-template-tpo change folder name from ABAP to abap

Ibn-gtt-template-ts Update README.md

Ibn-gtt-template-tso change folder name from ABAP to abap

.abapgit.xml Update .abapgit.xml

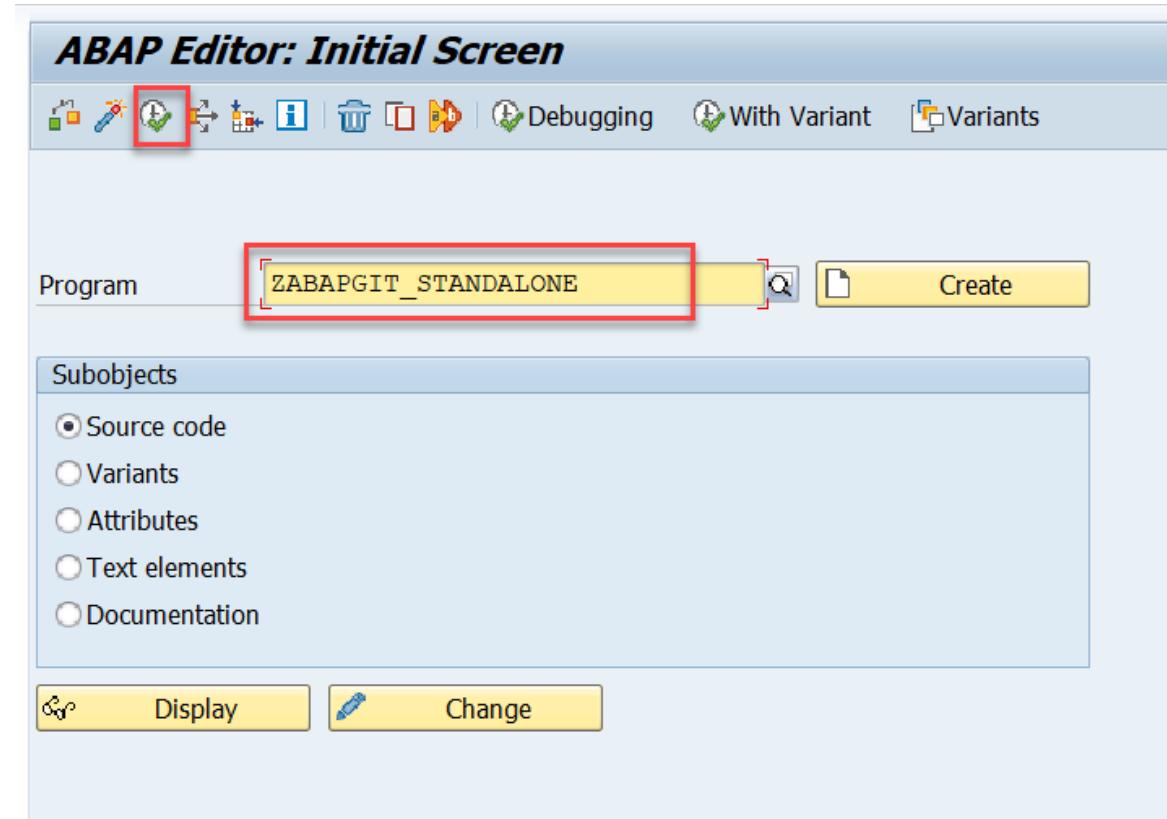
FAQs_for_Template_Code_Implement... Update for February release

README.md Update README.md

STEP 4: Download ABAP Code from GitHub

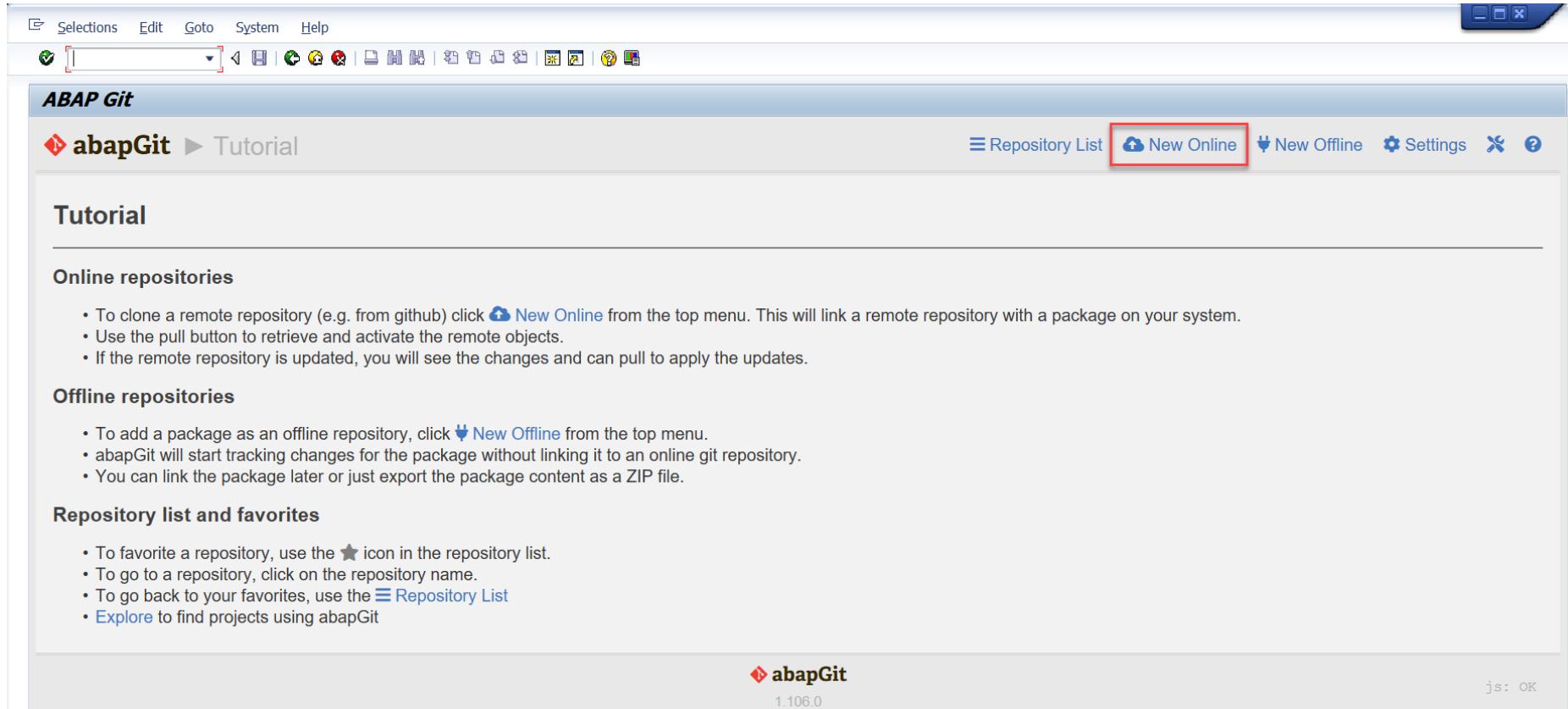
4-1: Enter T-code **SE38** and fill in the report name from STEP 1,
ZABAPGIT_STANDALONE.

4-2: Click **Execute** to run the report.



STEP 4: Download ABAP Code from GitHub

4-3: Click **New Online** to download the code.



STEP 4: Download ABAP Code from GitHub

4-4: Fill in the **Git Repository URL** in step 3-5:

<https://github.com/dev97619/logistics-business-network-gtt-samples.git>

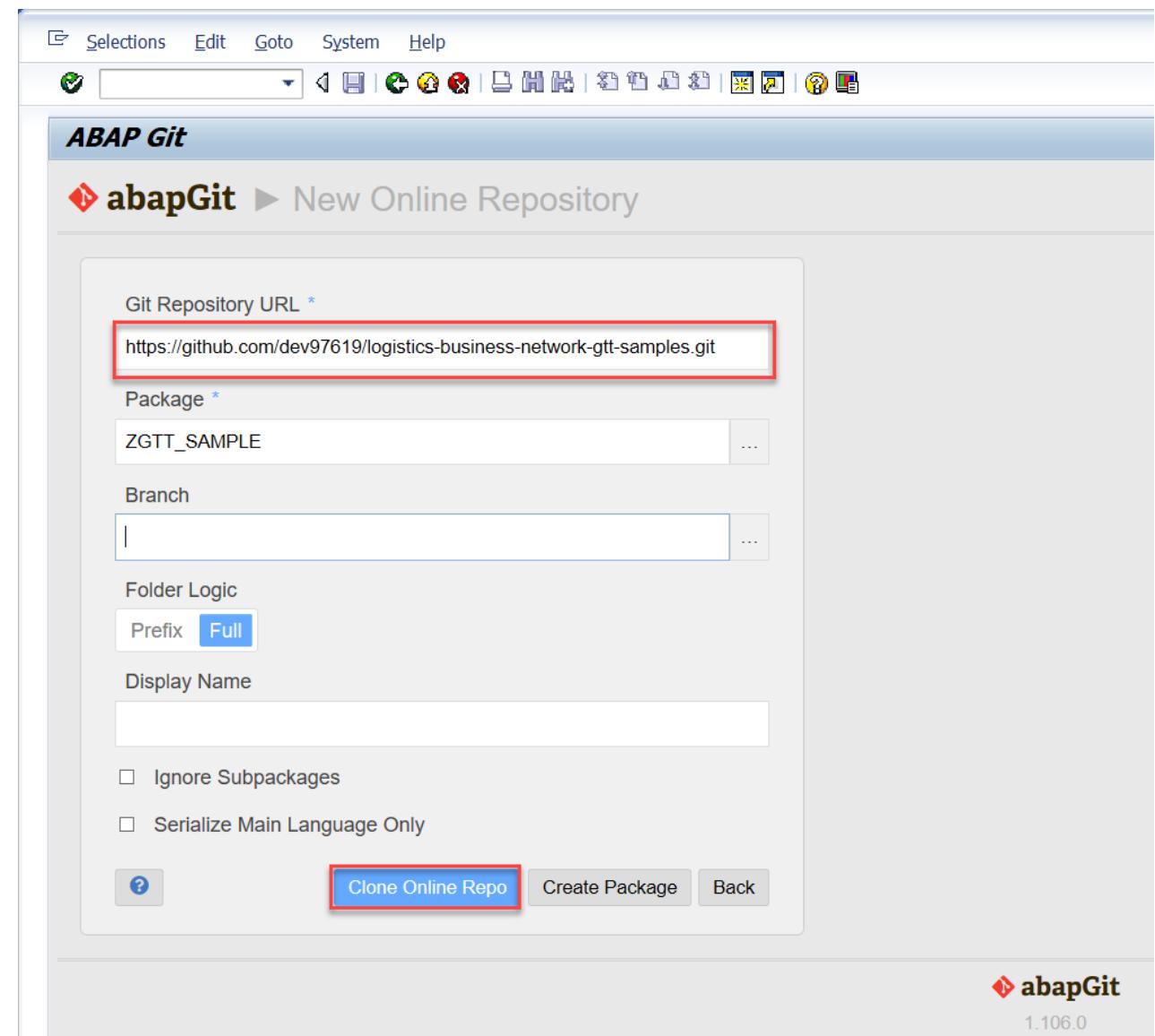
Caution:

This URL is the user account's repository URL, not the public sample code's repository URL.

4-5: 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.

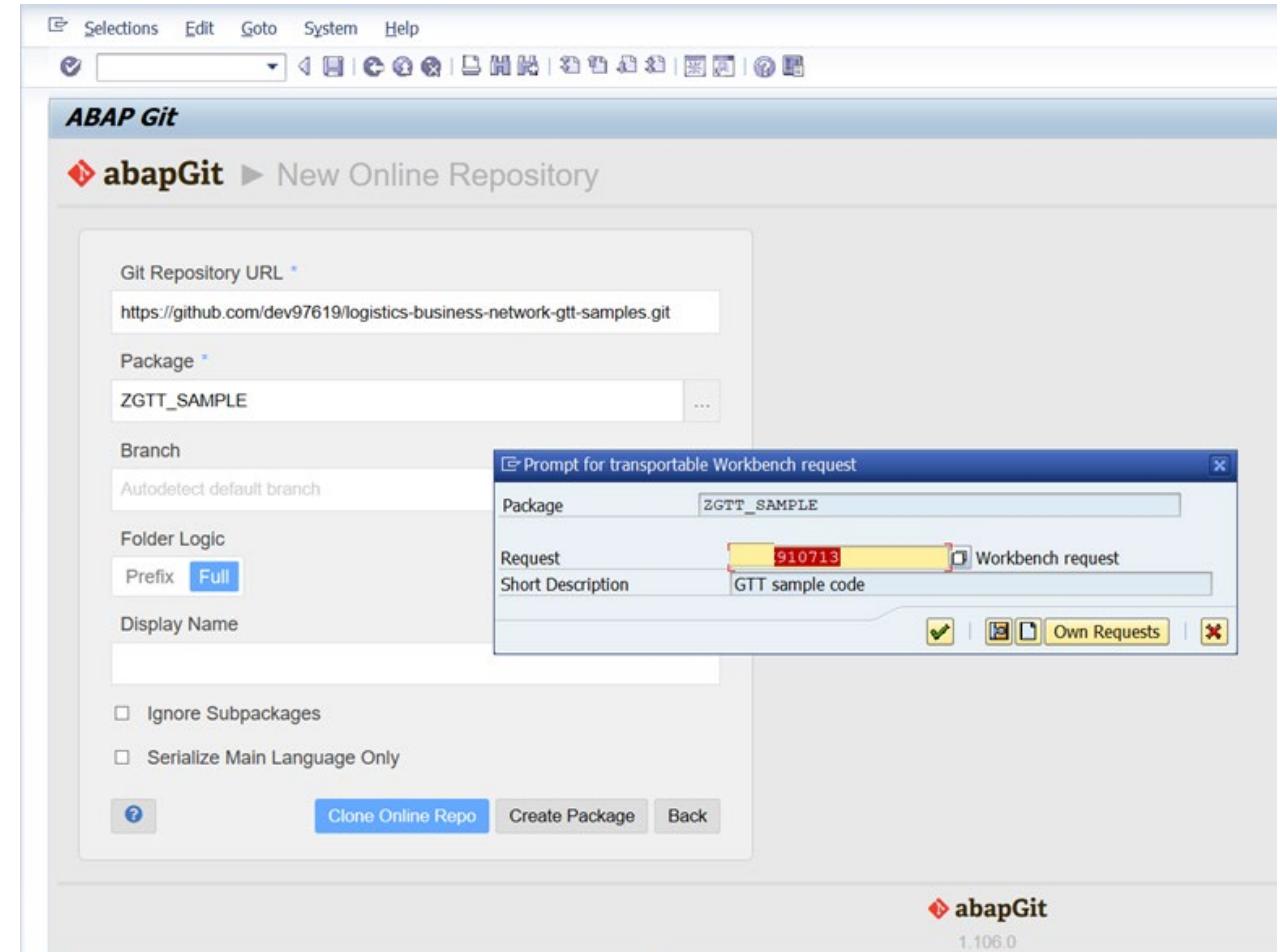
4-6: Set *Full* for **Folder Logic**

4-7: Click **Clone Online Repo** to download the code.



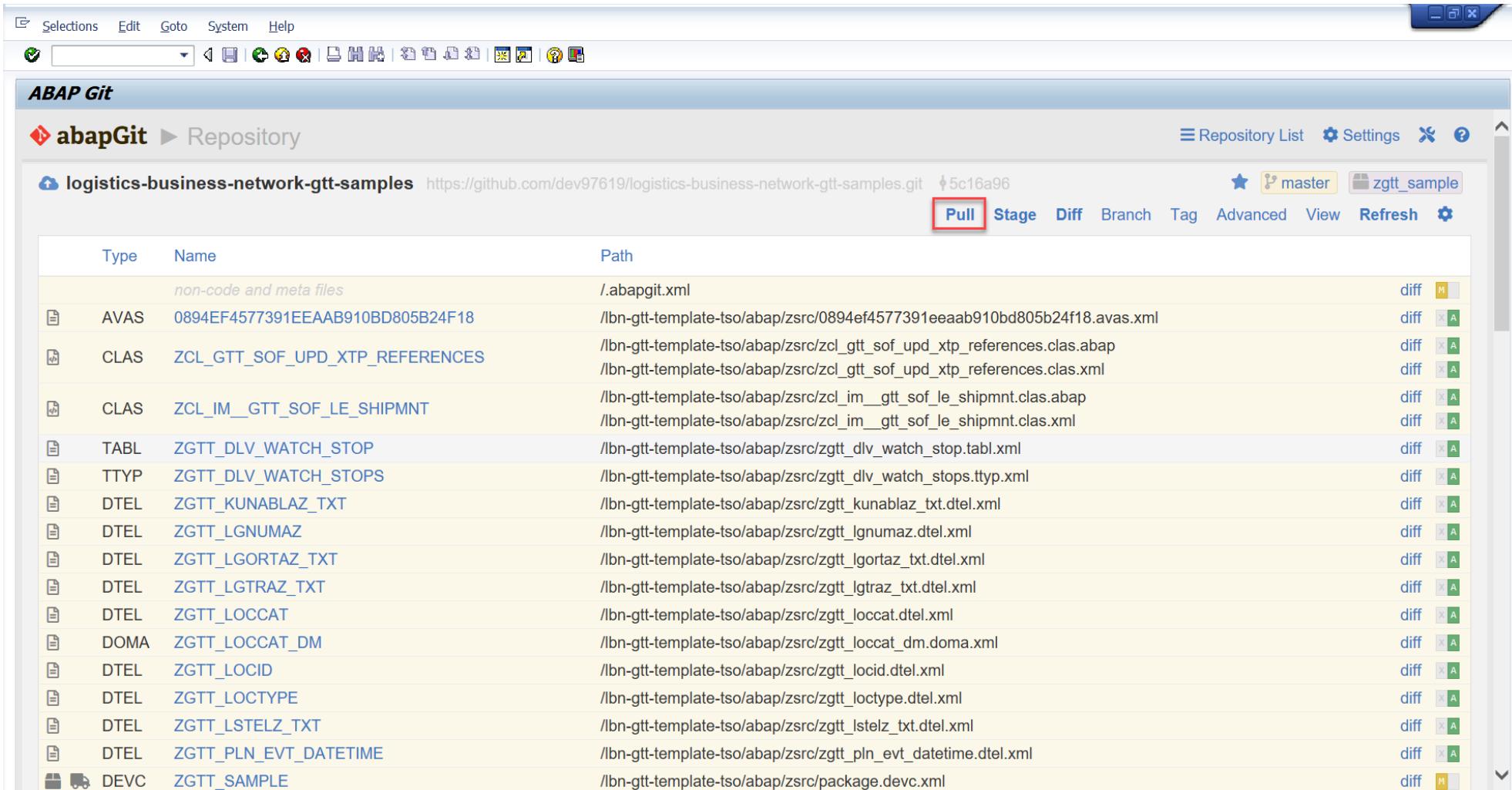
STEP 4: Download ABAP Code from GitHub

4-8: Assign the change to a change request. If you do not have any available change request, you need to create a new one.



STEP 4: Download ABAP Code from GitHub

4-9: Click **Pull** to pull down the latest version code.

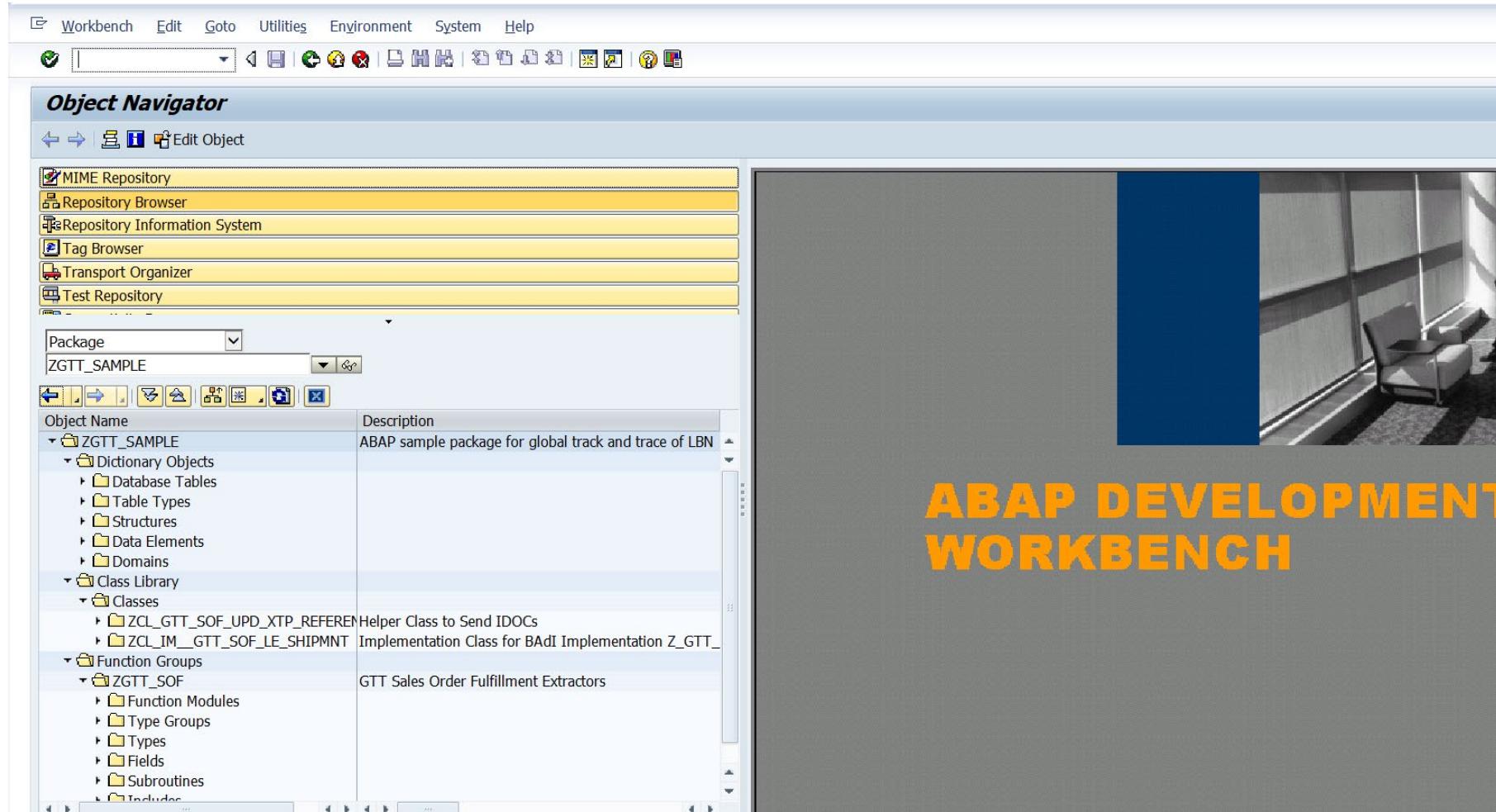


The screenshot shows the ABAP Git interface within SAP. The title bar includes 'Selections', 'Edit', 'Goto', 'System', and 'Help'. Below the title bar is a toolbar with various icons. The main area is titled 'ABAP Git' and shows the 'abapGit' repository. A breadcrumb navigation shows 'Repository'. The repository name is 'logistics-business-network-gtt-samples' with the URL 'https://github.com/dev97619/logistics-business-network-gtt-samples.git'. The commit hash '5c16a96' is displayed. The master branch is selected. A 'zgtt_sample' folder icon is shown. The top navigation bar includes 'Repository List', 'Settings', and other options. A toolbar below the navigation bar includes 'Pull' (highlighted with a red box), 'Stage', 'Diff', 'Branch', 'Tag', 'Advanced', 'View', 'Refresh', and a settings gear icon. The main content area displays a table of files with columns for Type, Name, and Path. The 'Type' column includes icons for AVAS, CLAS, TABL, TTYP, DTEL, DOMA, and DEV. The 'Name' column lists file names like '0894EF4577391EEAAB910BD805B24F18', 'ZCL_GTT_SOUPD_XTP_REFERENCES', etc. The 'Path' column shows the full path for each file. Each row has a 'diff' link and a status indicator icon (green with 'A').

Type	Name	Path	diff
	non-code and meta files	/.abapgit.xml	[diff]
AVAS	0894EF4577391EEAAB910BD805B24F18	/lbn-gtt-template-tso/abap/zsrc/0894ef4577391eeaab910bd805b24f18.avas.xml	[diff]
CLAS	ZCL_GTT_SOUPD_XTP_REFERENCES	/lbn-gtt-template-tso/abap/zsrc/zcl_gtt_sof_upd_xtp_references.clas.abap	[diff]
		/lbn-gtt-template-tso/abap/zsrc/zcl_gtt_sof_upd_xtp_references.clas.xml	[diff]
CLAS	ZCL_IM_GTT_SOUPD_XTP_REFERENCES	/lbn-gtt-template-tso/abap/zsrc/zcl_im_gtt_sof_le_shipmnt.clas.abap	[diff]
		/lbn-gtt-template-tso/abap/zsrc/zcl_im_gtt_sof_le_shipmnt.clas.xml	[diff]
TABL	ZGTT_DLV_WATCH_STOP	/lbn-gtt-template-tso/abap/zsrc/zggt_dlv_watch_stop.tabl.xml	[diff]
TTYP	ZGTT_DLV_WATCH_STOPS	/lbn-gtt-template-tso/abap/zsrc/zggt_dlv_watch_stops.ttyp.xml	[diff]
DTEL	ZGTT_KUNABL陛TXT	/lbn-gtt-template-tso/abap/zsrc/zggt_kunabl陛txt.dtel.xml	[diff]
DTEL	ZGTT_LGNUMAZ	/lbn-gtt-template-tso/abap/zsrc/zggt_lgnumaz.dtel.xml	[diff]
DTEL	ZGTT_LGORAZ_TXT	/lbn-gtt-template-tso/abap/zsrc/zggt_lgoraz_txt.dtel.xml	[diff]
DTEL	ZGTT_LGTRAZ_TXT	/lbn-gtt-template-tso/abap/zsrc/zggt_lgtraz_txt.dtel.xml	[diff]
DTEL	ZGTT_LOCCAT	/lbn-gtt-template-tso/abap/zsrc/zggt_loccat.dtel.xml	[diff]
DOMA	ZGTT_LOCCAT_DM	/lbn-gtt-template-tso/abap/zsrc/zggt_loccat_dm.doma.xml	[diff]
DTEL	ZGTT_LOCID	/lbn-gtt-template-tso/abap/zsrc/zggt_locid.dtel.xml	[diff]
DTEL	ZGTT_LOCTYPE	/lbn-gtt-template-tso/abap/zsrc/zggt_loctype.dtel.xml	[diff]
DTEL	ZGTT_LSTELZ_TXT	/lbn-gtt-template-tso/abap/zsrc/zggt_lstelz_txt.dtel.xml	[diff]
DTEL	ZGTT_PLN_EVT_DATETIME	/lbn-gtt-template-tso/abap/zsrc/zggt_pln_evt_datetime.dtel.xml	[diff]
DEV	ZGTT_SAMPLE	/lbn-gtt-template-tso/abap/zsrc/package.devco.xml	[diff]

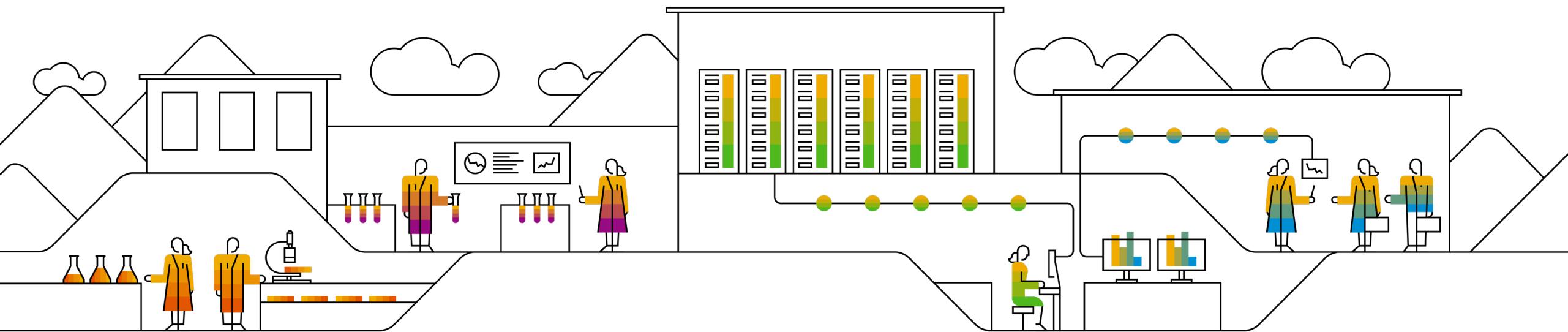
STEP 4: Download ABAP Code from GitHub

4-10: After you download the code, you can check them with T-code SE80.



C) Download ABAP Code from GitHub

C2. Update ABAP Code from GitHub (Only for TSOF)

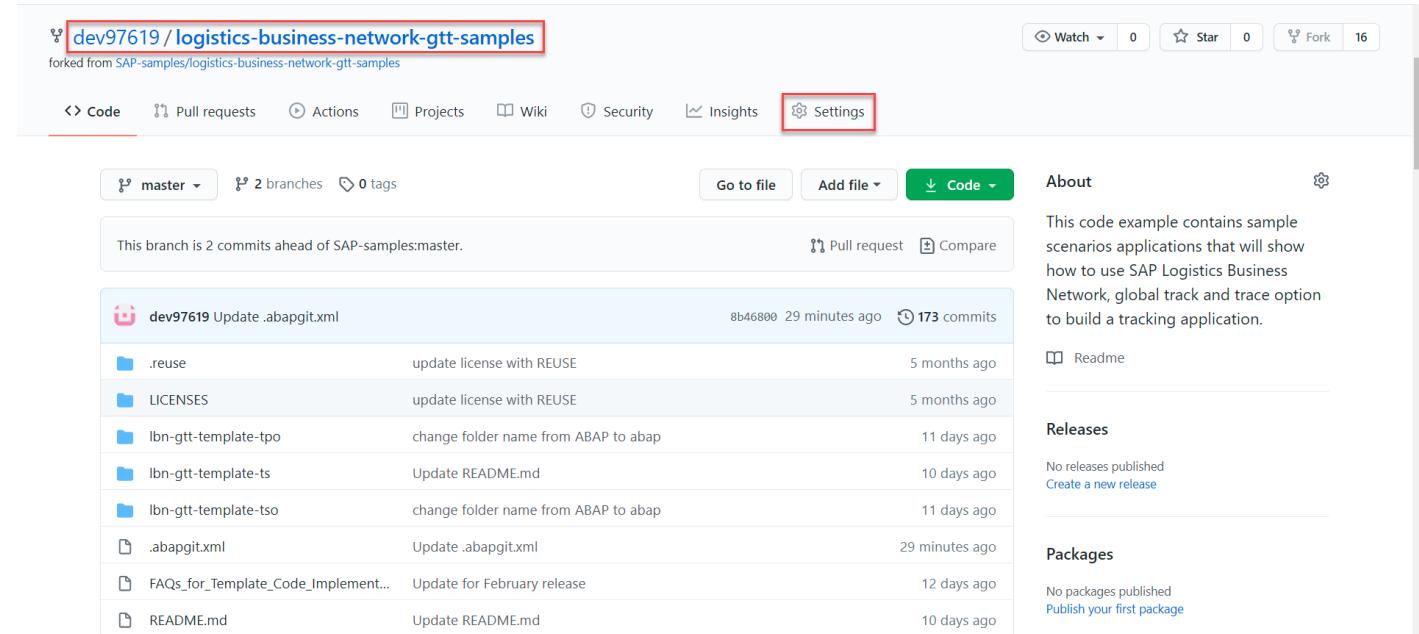


STEP 1: Delete the User's Account Repository

1-1: Assume you've already installed the sample code of TSOF to your local SAP system with the version of the previous release.

In the latest release, there is some code changes in the public sample code, you need to update the local code according to the latest public sample code.

1-2: Navigate to the user's account repository, and click "Settings".



STEP 1: Delete the User's Account Repository

1-3: Scroll down and find the button “Delete this repository” and click it.

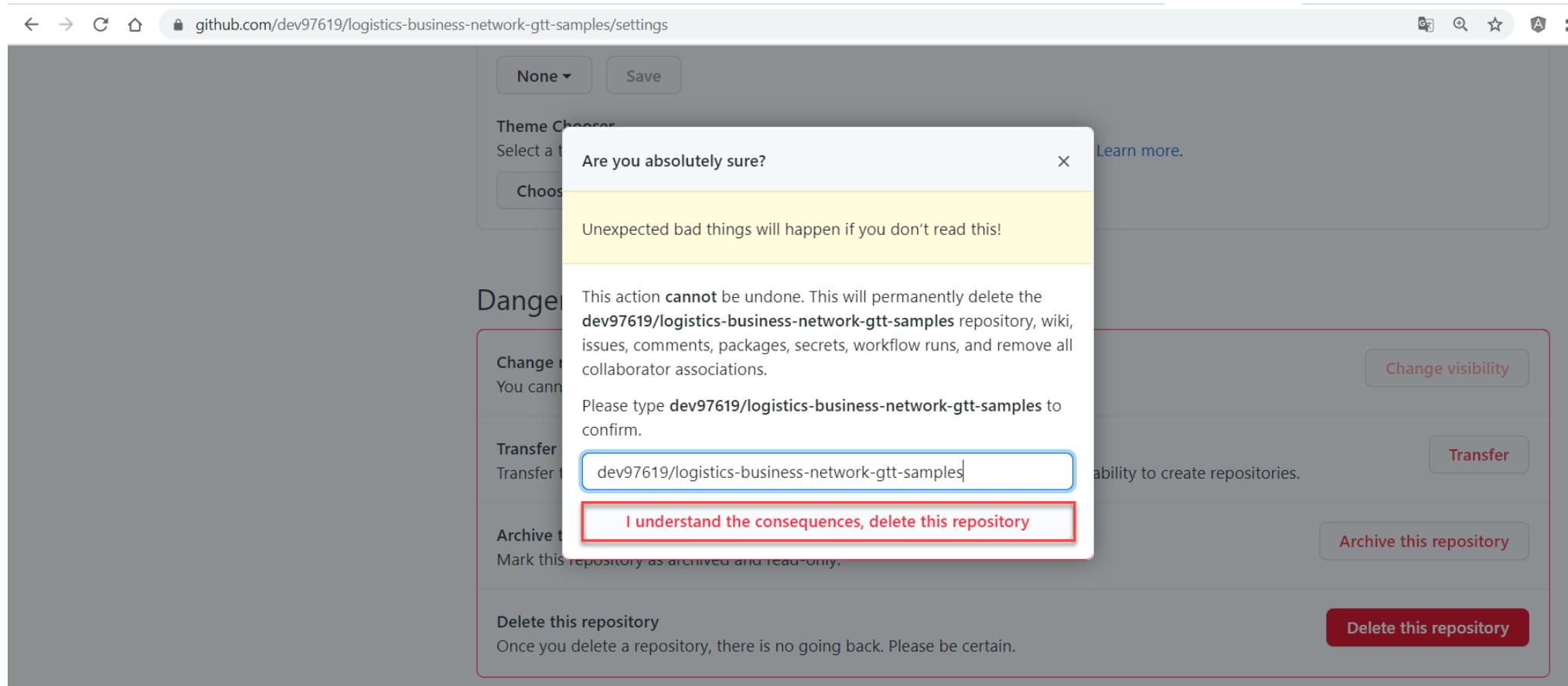
The screenshot shows a GitHub repository settings page for 'github.com/dev97619/logistics-business-network-gtt-samples'. At the top, there is a 'Theme Chooser' section with a 'None' dropdown and a 'Save' button. Below it is a 'Danger Zone' section with four options:

- Change repository visibility**: You cannot change the visibility of a fork. Please [duplicate the repository](#). [Change visibility](#)
- Transfer ownership**: Transfer this repository to another user or to an organization where you have the ability to create repositories. [Transfer](#)
- Archive this repository**: Mark this repository as archived and read-only. [Archive this repository](#)
- Delete this repository**: Once you delete a repository, there is no going back. Please be certain. [Delete this repository](#)

The 'Delete this repository' button is highlighted with a red border.

STEP 1: Delete the User's Account Repository

1-4: The popup shows some warning messages. Follow the instructions then click the button "I understand the consequences, delete this repository".



STEP 1: Delete the User's Account Repository

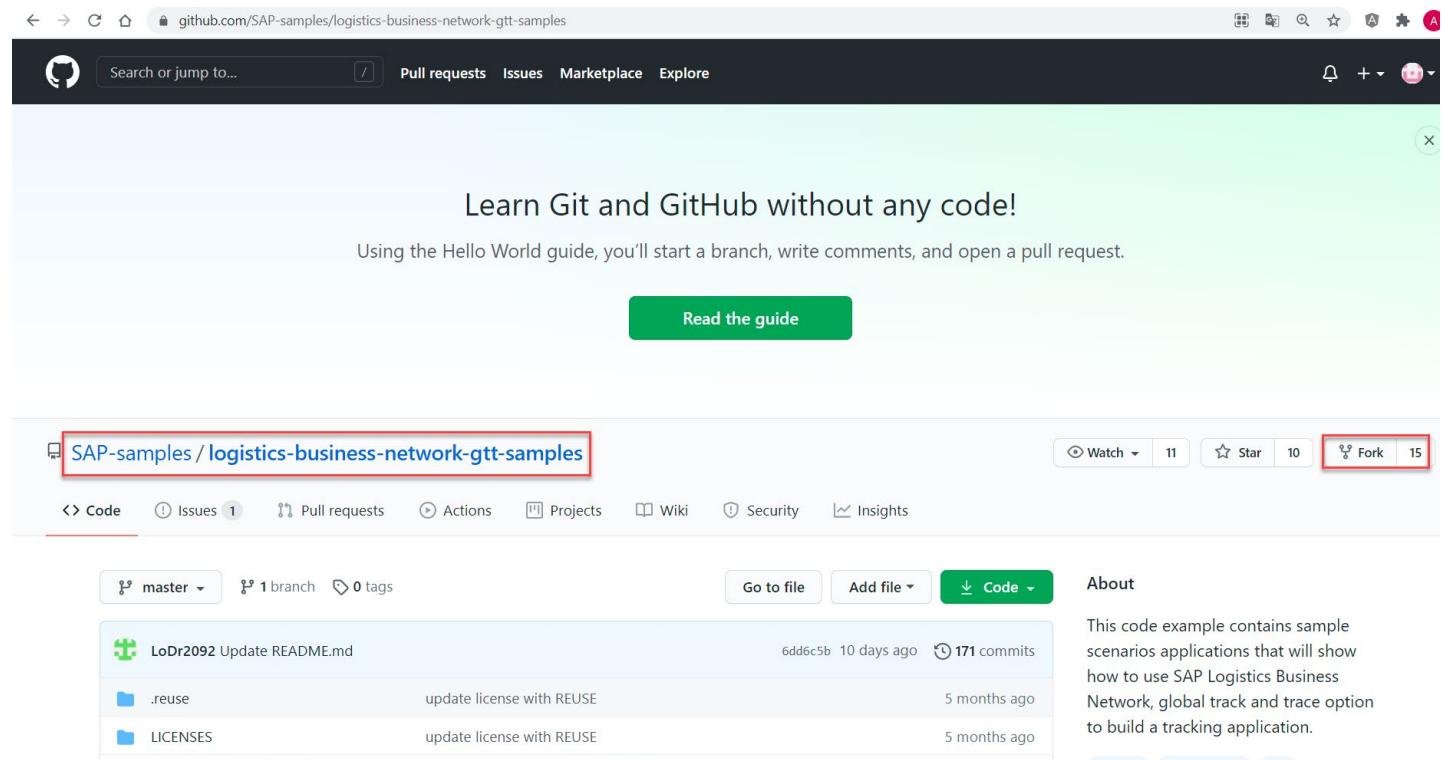
1-5: The user's account repository is deleted.

The screenshot shows a dark-themed GitHub interface. At the top, there is a navigation bar with a search bar, a pull requests button, an issues button, a marketplace button, and an explore button. On the right side of the top bar are icons for notifications, a plus sign, and a profile picture. Below the navigation bar, a message box contains the text "Your repository \"dev97619/logistics-business-network-gtt-samples\" was successfully deleted." This message is highlighted with a red rectangular border. To the left of the message box, there is a "Create your first project" section with a "Create repository" button (which is green) and an "Import repository" button. Below this section is another titled "Working with a team?" which includes a "Create an organization" button. On the right side of the interface, there is a large, semi-transparent callout box with a light green background. The title of the callout is "Learn Git and GitHub without any code!". The text inside the callout reads: "Using the Hello World guide, you'll create a repository, start a branch, write comments, and open a pull request." At the bottom of the callout are two buttons: a green "Read the guide" button and a white "Start a project" button.

STEP 2: Fork Sample Code Repository

2-1. Navigate to sample code in
<https://github.com/SAP-samples/logistics-business-network-gtt-samples>

2-2. Click the “Fork” button, it will copy the newest version of sample codes into the user’s account and meanwhile it will navigate to the user’s own repository.



STEP 2: Fork Sample Code Repository

2-3: The newest version of the sample codes is copied to the user's account.

github.com/dev97619/logistics-business-network-gtt-samples

Watch 0 Star 0 Fork 16

Code Pull requests Actions Projects Wiki Security Insights Settings

master 1 branch 0 tags

This branch is even with SAP-samples:master.

Go to file Add file Code

Pull request Compare

File	Description	Time
LoDr2092 Update README.md	6dd6c5b 10 days ago 171 commits	
.reuse	update license with REUSE	5 months ago
LICENSES	update license with REUSE	5 months ago
Ibn-gtt-template-tpo	change folder name from ABAP to abap	11 days ago
Ibn-gtt-template-ts	Update README.md	10 days ago
Ibn-gtt-template-tso	change folder name from ABAP to abap	11 days ago
.abapgit.xml	Update .abapgit.xml	13 days ago
FAQs_for_Template_Code_Implement...	Update for February release	12 days ago
README.md	Update README.md	10 days ago

About

This code example contains sample scenarios applications that will show how to use SAP Logistics Business Network, global track and trace option to build a tracking application.

Readme

Releases

No releases published [Create a new release](#)

Packages

No packages published [Publish your first package](#)

STEP 3: Change Configuration File ‘.abapgit.xml’

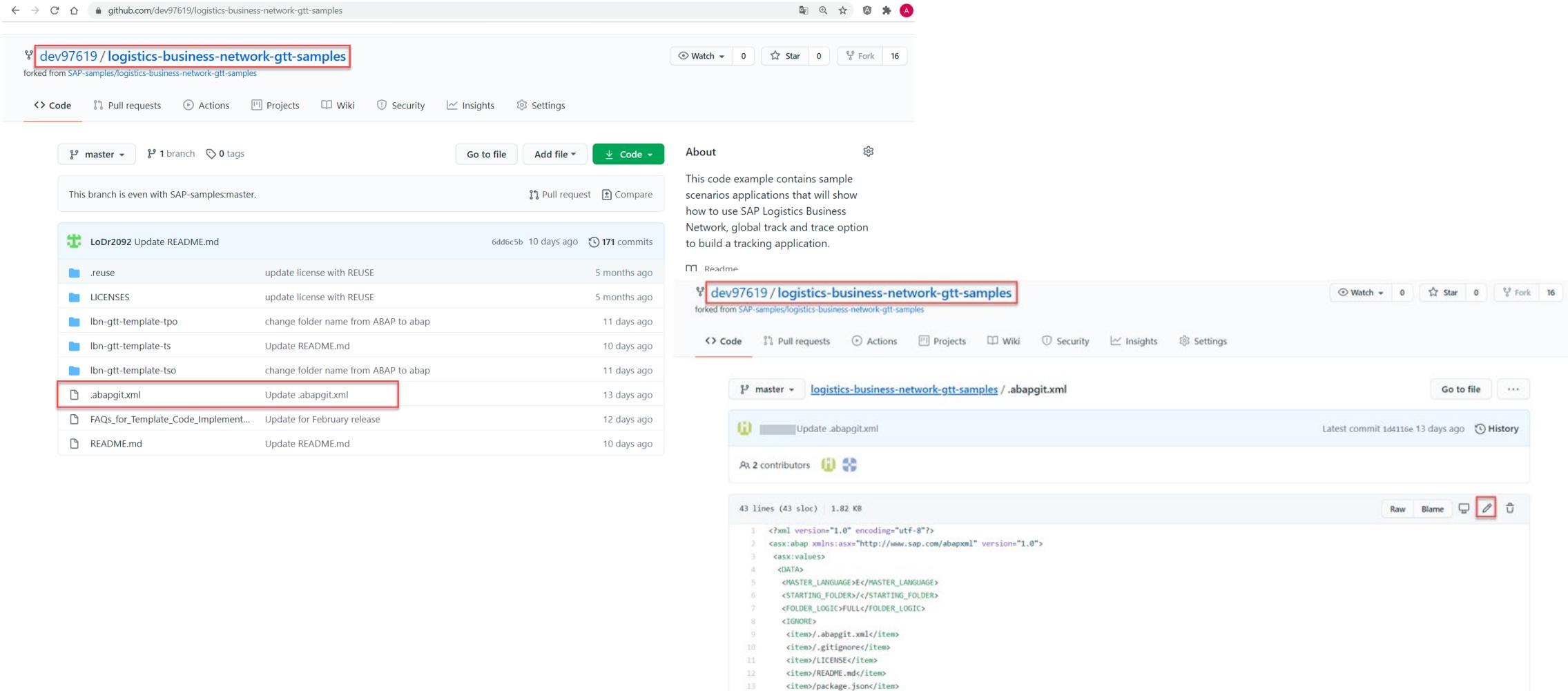
3-1: In the user’s account repository, click the file ‘.abapgit.xml’.

The screenshot shows a GitHub repository page for 'dev97619 / logistics-business-network-gtt-samples'. The repository is a fork from 'SAP-samples/logistics-business-network-gtt-samples'. The 'Code' tab is selected. The 'master' branch is active, with 1 branch and 0 tags. A message indicates the branch is even with SAP-samples:master. The commit history lists several changes, including one for '.abapgit.xml' which is highlighted with a red box. The commit details show it was updated 13 days ago. To the right of the code area, there is an 'About' section describing the repository as containing sample scenarios for SAP Logistics Business Network, global track and trace options, and a 'Readme' link. Below that is a 'Releases' section stating 'No releases published' and a 'Create a new release' link. Finally, a 'Packages' section states 'No packages published' and a 'Publish your first package' link.

File	Description	Time Ago
.reuse	update license with REUSE	5 months ago
LICENSES	update license with REUSE	5 months ago
Ibn-gtt-template-tpo	change folder name from ABAP to abap	11 days ago
Ibn-gtt-template-ts	Update README.md	10 days ago
Ibn-gtt-template-tso	change folder name from ABAP to abap	11 days ago
.abapgit.xml	Update .abapgit.xml	13 days ago
FAQs_for_Template_Code_Implement...	Update for February release	12 days ago
README.md	Update README.md	10 days ago

STEP 3: Change Configuration File ‘.abapgit.xml’

3-2: Click  button to edit the file.



The screenshot shows two views of a GitHub repository. The top view is the repository page for `dev97619 / logistics-business-network-gtt-samples`. The bottom view is the code editor for the `.abapgit.xml` file in the `logistics-business-network-gtt-samples` repository.

Repository Page:

- Branch: master
- Commits: 171 commits
- Latest commit: 6dd6c5b 10 days ago
- Contributors: 2 contributors

.abapgit.xml File Content:

```
<?xml version="1.0" encoding="utf-8"?>
<asx:abap xmlns:asx="http://www.sap.com/abapxml" version="1.0">
<asx:values>
<DATA>
<MASTER_LANGUAGE>E</MASTER_LANGUAGE>
<STARTING_FOLDER>/<STARTING_FOLDER>
<FOLDER_LOGIC>FULL</FOLDER_LOGIC>
<IGNORE>
<item>/.abapgit.xml</item>
<item>/.gitignore</item>
<item>/LICENSE</item>
<item>/README.md</item>
<item>/package.json</item>
```

STEP 3: Change Configuration File ‘.abapgit.xml’

3-3: Replace the line "<STARTING_FOLDER>/</STARTING_FOLDER>" with
"<STARTING_FOLDER>/lbn-gtt-template-tso/abap/zsrc/</STARTING_FOLDER>" as follows.

3-4: Commit change.

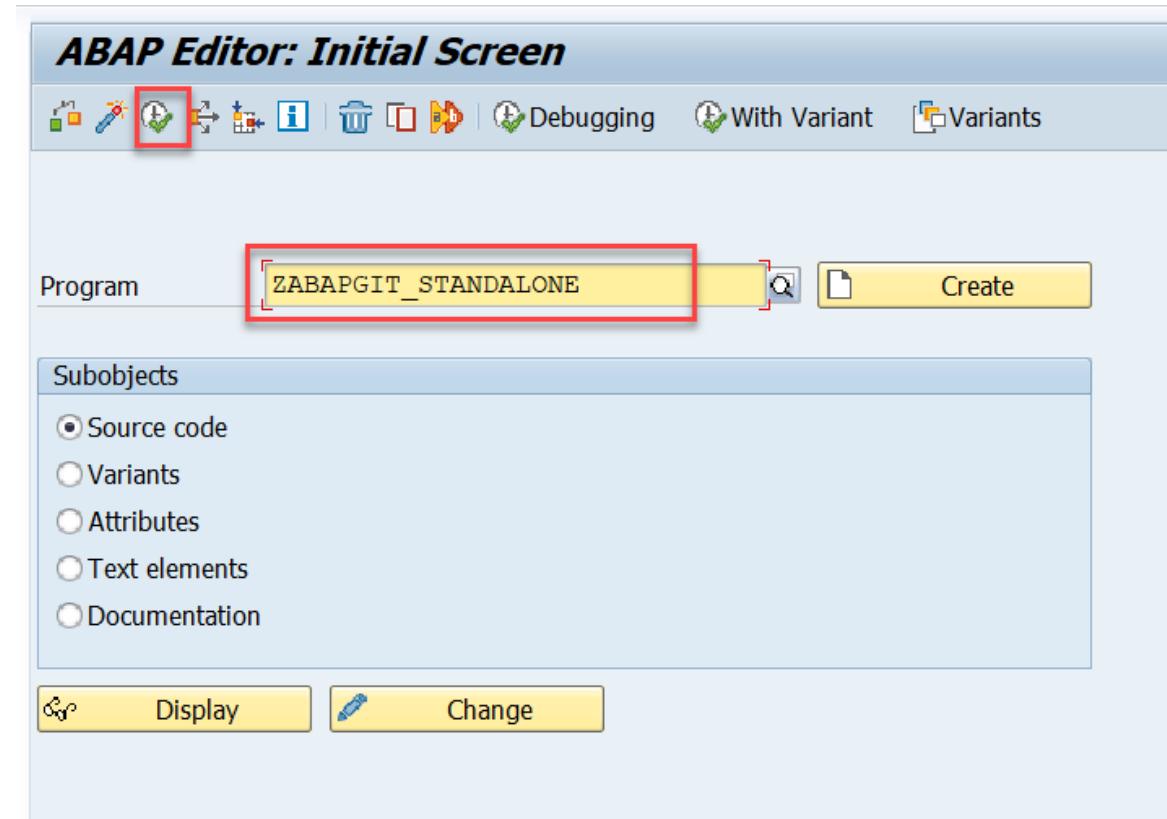
The screenshot shows a GitHub repository page for 'dev97619 / logistics-business-network-gtt-samples'. The repository is a fork from 'SAP-samples/logistics-business-network-gtt-samples'. The 'Code' tab is selected. In the code editor, the '.abapgit.xml' file is open, showing XML configuration. Line 6 contains the path '<STARTING_FOLDER>/lbn-gtt-template-tso/abap/zsrc/</STARTING_FOLDER>'. A red box highlights this line. To the right, a 'Commit changes' dialog is displayed. It has a 'Commit changes' button at the bottom left, which is also highlighted with a red box. The dialog includes fields for a commit message ('Update .abapgit.xml') and a description, and two radio button options for committing: 'Commit directly to the master branch.' (selected) and 'Create a new branch for this commit and start a pull request.'

```
<?xml version="1.0" encoding="utf-8"?>
<asx:abap xmlns:asx="http://www.sap.com/abapxml" version="1.0">
  <asx:values>
    <DATA>
      <MASTER_LANGUAGE>E</MASTER_LANGUAGE>
      <STARTING_FOLDER>/lbn-gtt-template-tso/abap/zsrc/</STARTING_FOLDER>
      <FOLDER_LOGIC>FULL</FOLDER_LOGIC>
    <IGNORE>
      <item>/.abapgit.xml</item>
      <item>/.gitignore</item>
    </IGNORE>
  </asx:values>
</asx:abap>
```

STEP 4: Update ABAP Code from GitHub

4-1: Enter T-code *SE38* and fill in the report name *ZABAPGIT_STANDALONE*.

4-2: Click **Execute** to run the report.



STEP 4: Update ABAP Code from GitHub

4-3: Check if the URL is changed or not after your recreation of repository copy. Access the TSOF Repository by clicking  button.

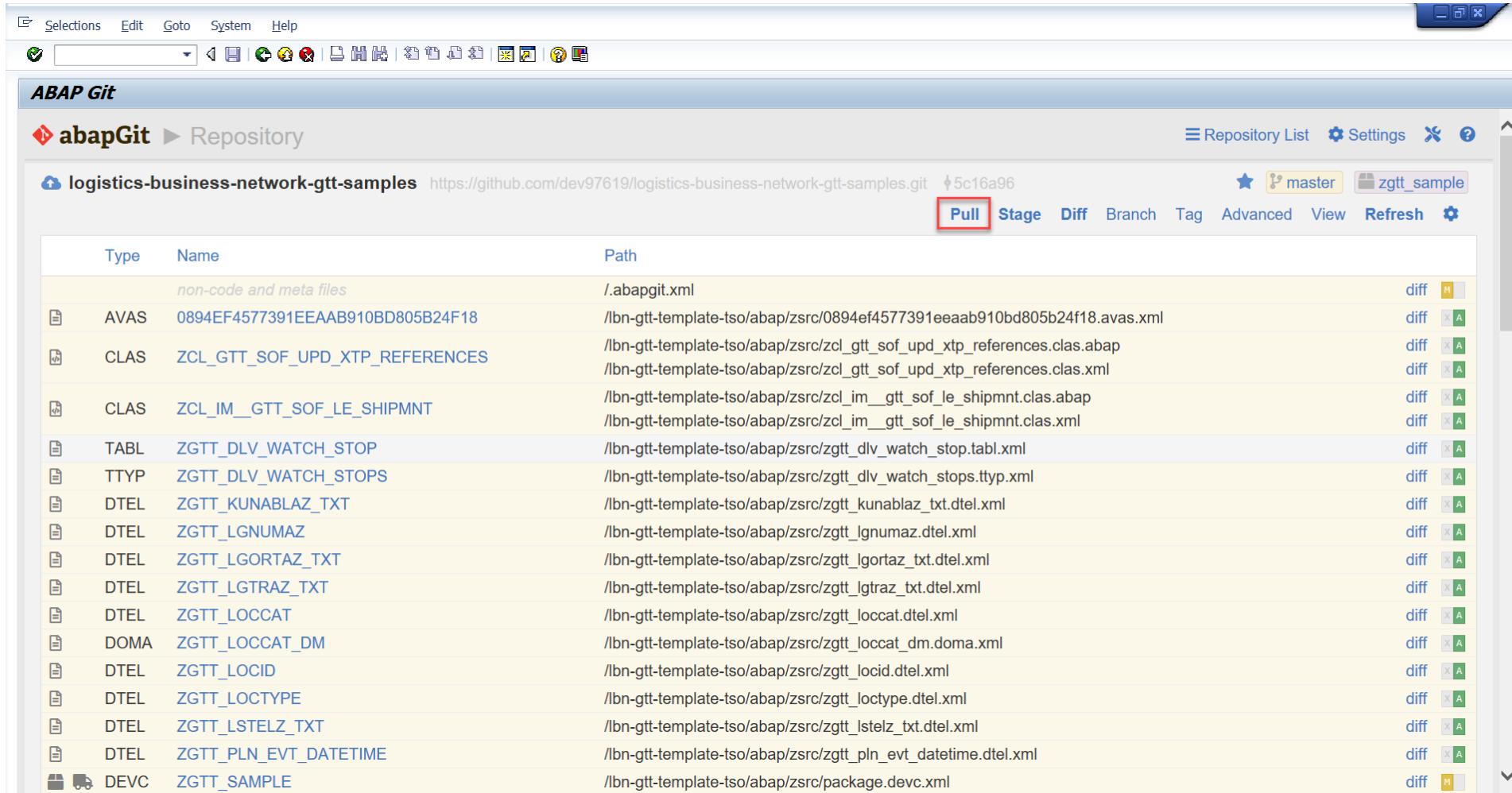


The screenshot shows the SAP ABAP Git interface. At the top, there's a toolbar with various icons for file operations like Selections, Edit, Goto, System, and Help. Below the toolbar is a menu bar with 'ABAP Git' selected. The main area is titled 'abapGit' and 'Repository List'. It features a search bar with a placeholder 'Filter:' and checkboxes for 'Only Favorites' and 'Detail'. A table lists repositories with columns: Name, Url, Package, Branch, and Action. One repository is listed: 'logistics-business-network-gtt-samples' with Url 'github.com/dev97619/logistics-business-network-gtt-samples.git', Package 'zgtt_sample', Branch 'master', and Action buttons for 'Check', 'Stage', 'Patch', and 'Settings'. The 'Action' column for the last row has a red box around the rightmost button. At the bottom, there's a footer with the 'abapGit' logo and version '1.106.0', and a status message 'js: OK'.

Name	Url	Package	Branch	Action
logistics-business-network-gtt-samples	github.com/dev97619/logistics-business-network-gtt-samples.git	zgtt_sample	master	Check Stage Patch Settings 

STEP 4: Update ABAP Code from GitHub

4-4: Click **Pull** to pull down the latest version code.

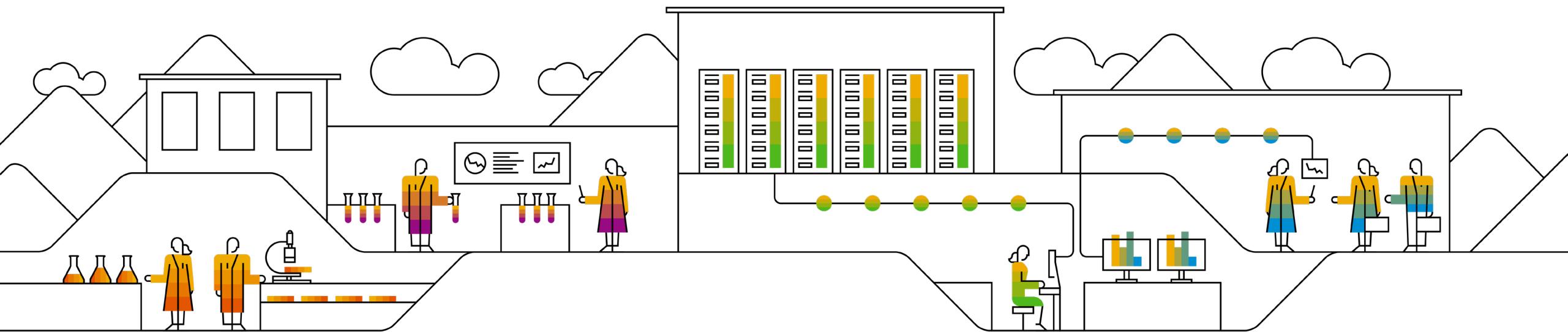


The screenshot shows the SAP ABAP Git interface. At the top, there's a toolbar with various icons. Below it is a header bar with the title "ABAP Git" and a breadcrumb trail "abapGit > Repository". The main area displays a table of files from the repository "logistics-business-network-gtt-samples". The table has columns for Type, Name, Path, and Diff. A red box highlights the "Pull" button in the toolbar above the table. The table lists numerous files, mostly XML and ABAP classes, related to GTT (Global Transportation Table) templates.

Type	Name	Path	Diff
	non-code and meta files	/abapgit.xml	M
AVAS	0894EF4577391EEAAB910BD805B24F18	//lbn-gtt-template-tso/abap/zsrc/0894ef4577391eeaab910bd805b24f18.avas.xml	A
CLAS	ZCL_GTT_SOF_UPD_XTP_REFERENCES	//lbn-gtt-template-tso/abap/zsrc/zcl_gtt_sof_upd_xtp_references.clas.abap //lbn-gtt-template-tso/abap/zsrc/zcl_gtt_sof_upd_xtp_references.clas.xml	A
CLAS	ZCL_IM_GTT_SOF_LE_SHIPMNT	//lbn-gtt-template-tso/abap/zsrc/zcl_im_gtt_sof_le_shipmnt.clas.abap //lbn-gtt-template-tso/abap/zsrc/zcl_im_gtt_sof_le_shipmnt.clas.xml	A
TABL	ZGTT_DLV_WATCH_STOP	//lbn-gtt-template-tso/abap/zsrc/zgtt_dlv_watch_stop.tabl.xml	A
TTYP	ZGTT_DLV_WATCH_STOPS	//lbn-gtt-template-tso/abap/zsrc/zgtt_dlv_watch_stops.ttyp.xml	A
DTEL	ZGTT_KUNABLAZ_TXT	//lbn-gtt-template-tso/abap/zsrc/zgtt_kunabla_z_txt.dtel.xml	A
DTEL	ZGTT_LGNUMAZ	//lbn-gtt-template-tso/abap/zsrc/zgtt_lgnumaz.dtel.xml	A
DTEL	ZGTT_LGORTAZ_TXT	//lbn-gtt-template-tso/abap/zsrc/zgtt_lgortaz_txt.dtel.xml	A
DTEL	ZGTT_LGTRAZ_TXT	//lbn-gtt-template-tso/abap/zsrc/zgtt_lgtraz_txt.dtel.xml	A
DTEL	ZGTT_LOCCAT	//lbn-gtt-template-tso/abap/zsrc/zgtt_locat.dtel.xml	A
DOMA	ZGTT_LOCCAT_DM	//lbn-gtt-template-tso/abap/zsrc/zgtt_locat_dm.doma.xml	A
DTEL	ZGTT_LOCID	//lbn-gtt-template-tso/abap/zsrc/zgtt_locid.dtel.xml	A
DTEL	ZGTT_LOCTYPE	//lbn-gtt-template-tso/abap/zsrc/zgtt_loctype.dtel.xml	A
DTEL	ZGTT_LSTELZ_TXT	//lbn-gtt-template-tso/abap/zsrc/zgtt_lstelz_txt.dtel.xml	A
DTEL	ZGTT_PLN_EVT_DATETIME	//lbn-gtt-template-tso/abap/zsrc/zgtt_pln_evt_datetime.datetime.dtel.xml	A
DEV	ZGTT_SAMPLE	//lbn-gtt-template-tso/abap/zsrc/package.devcl.xml	M

C) Download ABAP Code from GitHub

C3. Download Another ABAP Code from GitHub (Only for TPOF)



STEP 1: Fork Sample Code Repository

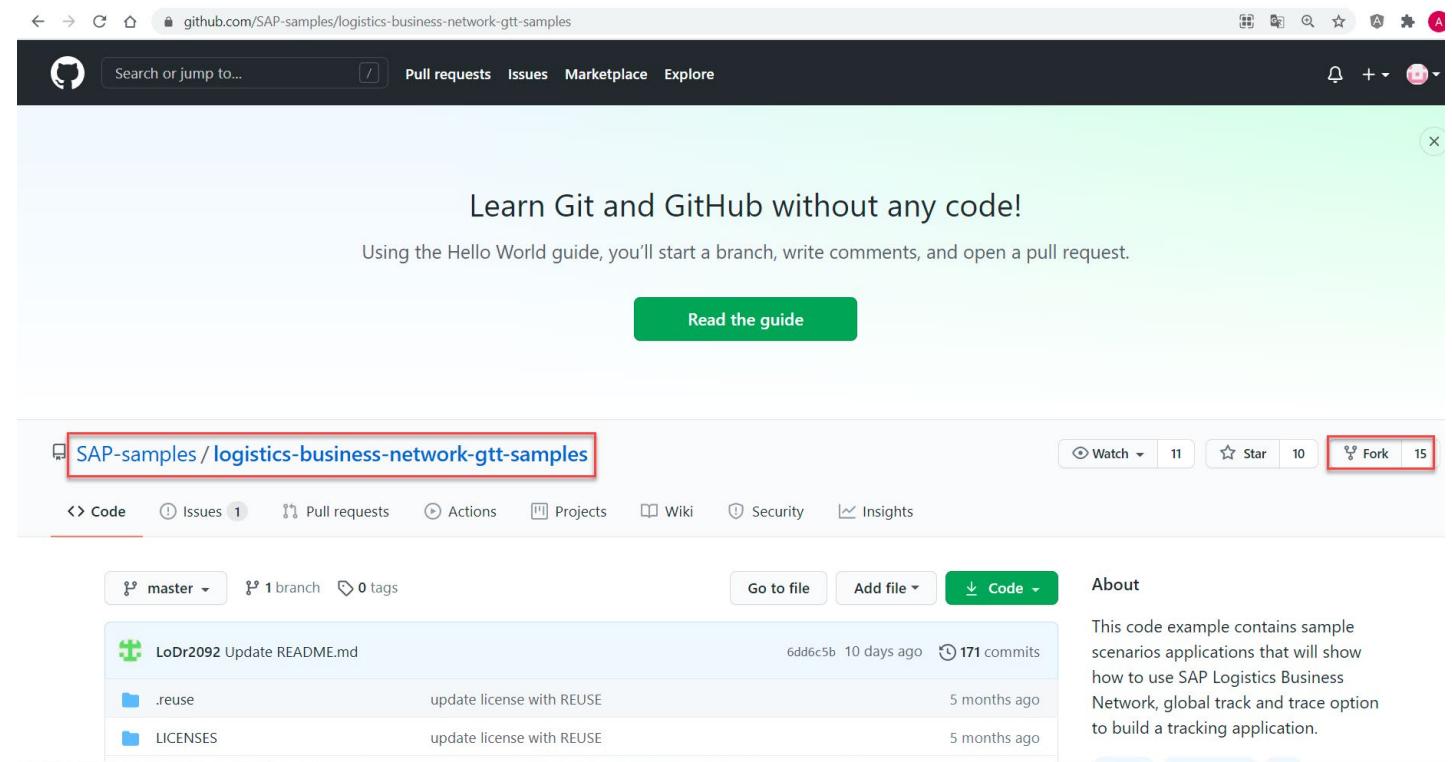
Prerequisite:

You must have already completed procedure C1 and have installed ABAPGit and the sample code of TSOF to your local SAP system.

To install the TPOF do the following:

1-1. Navigate to sample code in
<https://github.com/SAP-samples/logistics-business-network-gtt-samples>

1-2. Click the “Fork” button, it will copy the newest version of sample codes into the user’s account and meanwhile it will navigate to the user’s own repository.



STEP 2: Change Configuration File ‘.abapgit.xml’

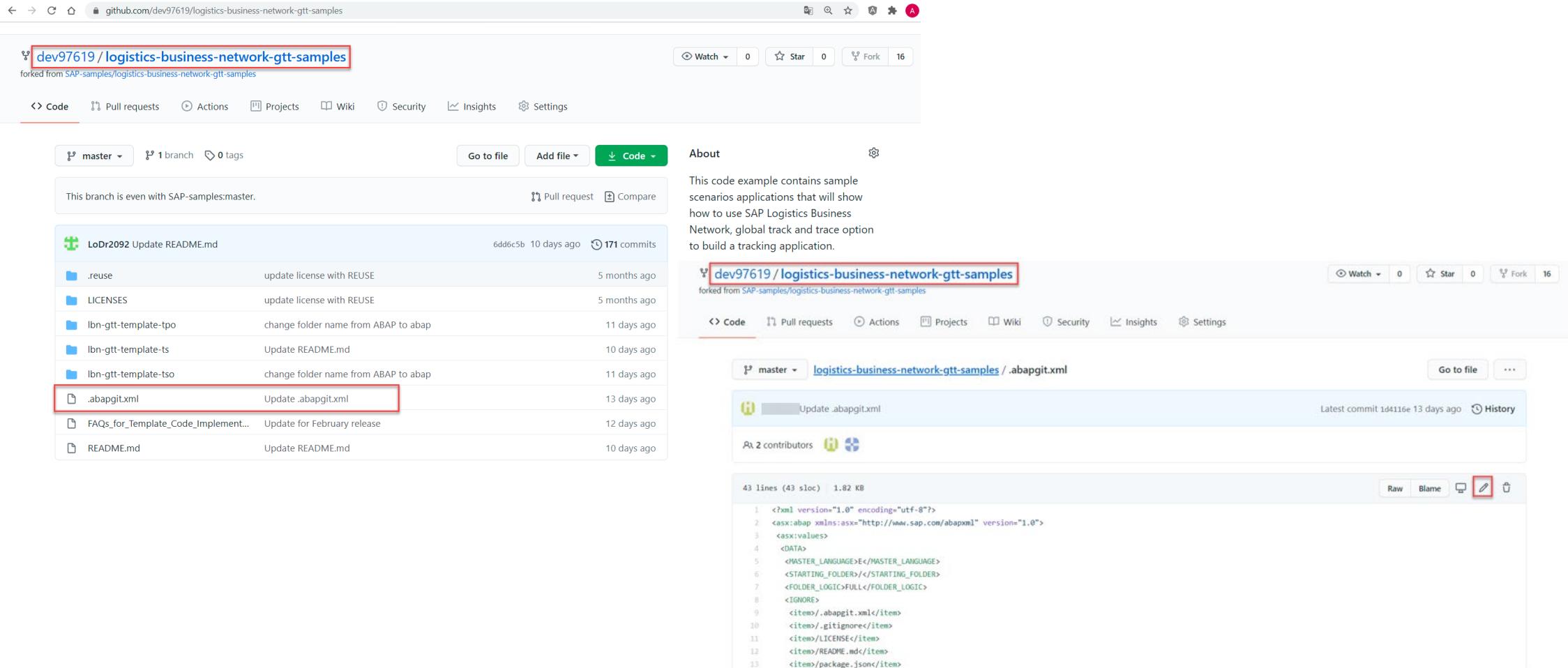
2-1: In the user’s account repository, click the file ‘.abapgit.xml’.

The screenshot shows a GitHub repository page for 'dev97619 / logistics-business-network-gtt-samples'. The repository is a fork from 'SAP-samples/logistics-business-network-gtt-samples'. The 'Code' tab is selected. A red box highlights the repository name 'dev97619 / logistics-business-network-gtt-samples' in the header and the '.abapgit.xml' file entry in the commit list. The commit list shows several recent changes, with the last one, 'Update .abapgit.xml', highlighted by a red box. The commit details show it was updated 13 days ago.

File	Commit Message	Time Ago
.reuse	update license with REUSE	5 months ago
LICENSES	update license with REUSE	5 months ago
Ibn-gtt-template-tpo	change folder name from ABAP to abap	11 days ago
Ibn-gtt-template-ts	Update README.md	10 days ago
Ibn-gtt-template-tso	change folder name from ABAP to abap	11 days ago
.abapgit.xml	Update .abapgit.xml	13 days ago
FAQs_for_Template_Code_Implement...	Update for February release	12 days ago
README.md	Update README.md	10 days ago

STEP 2: Change Configuration File ‘.abapgit.xml’

2-2: Click  button to edit the file.



The screenshot shows two GitHub repository pages. The top page is for the repository `dev97619 / logistics-business-network-gtt-samples`, which is a fork of `SAP-samples/logistics-business-network-gtt-samples`. It displays a list of commits, including one from LoDr092 that updated the README.md file. A commit to update the `.abapgit.xml` file is highlighted with a red box. The bottom page shows the contents of the `.abapgit.xml` file, which is an XML configuration file for ABAP Git. The file includes definitions for master languages, starting folders, folder logic, and ignore patterns.

```
<?xml version="1.0" encoding="utf-8"?>
<asx:abap xmlns:asx="http://www.sap.com/abapxml" version="1.0">
  <asx:values>
    <DATA>
      <MASTER_LANGUAGE>E</MASTER_LANGUAGE>
      <STARTING_FOLDER>/</STARTING_FOLDER>
      <FOLDER_LOGIC>FULL</FOLDER_LOGIC>
      <IGNORE>
        <item>.abapgit.xml</item>
        <item>.gitignore</item>
        <item>LICENSE.mdc</item>
        <item>README.md</item>
        <item>package.json</item>
      </IGNORE>
    </DATA>
  </asx:values>
</asx:abap>
```

STEP 2: Change Configuration File ‘.abapgit.xml’

2-3: Replace the line "<STARTING_FOLDER>/</STARTING_FOLDER>" with
"<STARTING_FOLDER>/lbn-gtt-template-tpo/abap/zsrc/</STARTING_FOLDER>" as follows.

2-4: Commit change.

The screenshot shows a GitHub commit dialog for the file '.abapgit.xml' in the repository 'logistics-business-network-gtt-samples'. The file content is as follows:

```
1 <?xml version="1.0" encoding="utf-8"?>
2 <asx:abap xmlns:asx="http://www.sap.com/abapxml" version="1.0">
3   <asx:values>
4     <DATA>
5       <MASTER_LANGUAGE>E</MASTER_LANGUAGE>
6       <STARTING_FOLDER>/lbn-gtt-template-tpo/abap/zsrc/</STARTING_FOLDER>
7     <FOLDER_LOGIC>FULL</FOLDER_LOGIC>
8   <IGNORE>
9     <item>/.abapgit.xml</item>
10    <item>/.gitignore</item>
```

A red box highlights the line '<STARTING_FOLDER>/lbn-gtt-template-tpo/abap/zsrc/</STARTING_FOLDER>'. The commit message field contains 'Update .abapgit.xml'.

Commit changes

Update .abapgit.xml

Add an optional extended description...

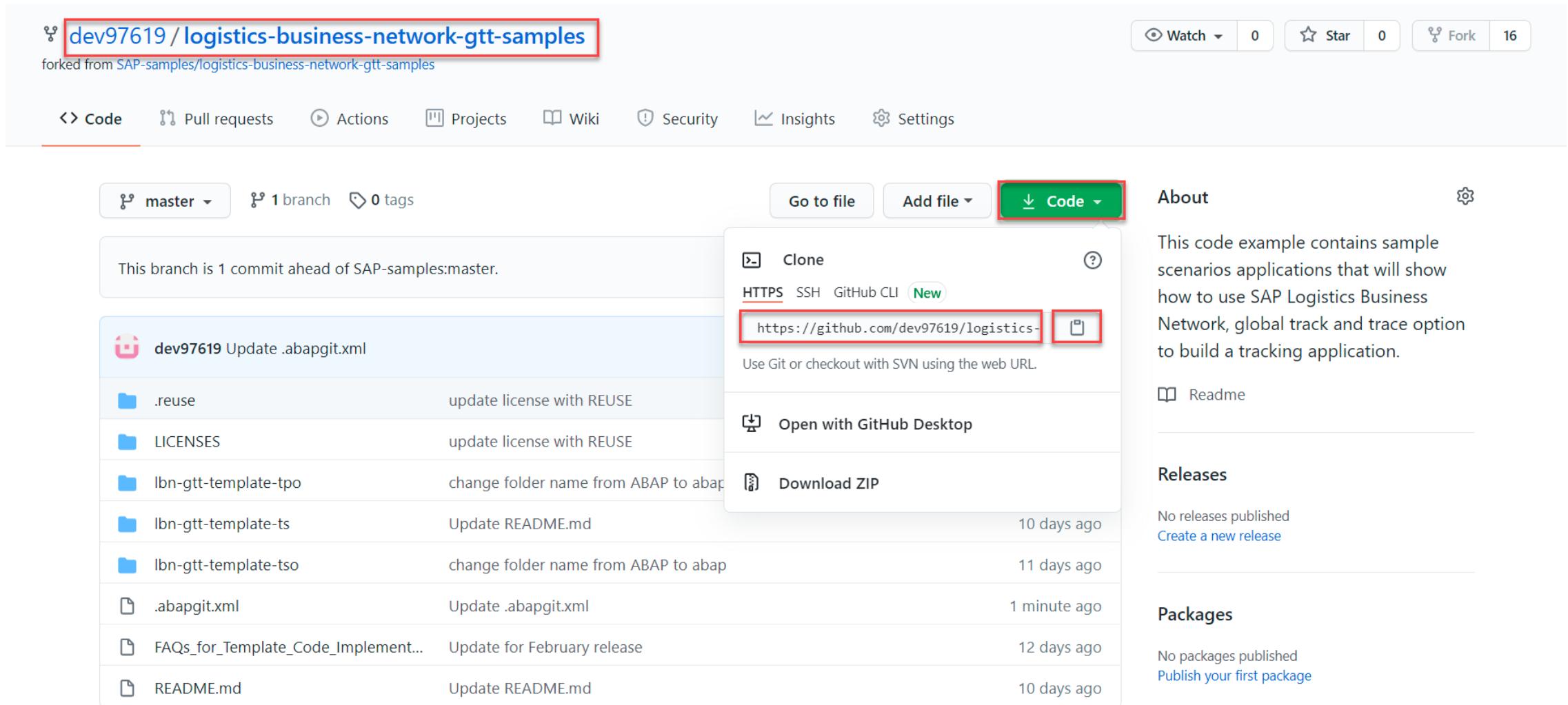
-o- Commit directly to the master branch.

⚡ Create a new branch for this commit and start a pull request. [Learn more about pull requests](#).

Commit changes **Cancel**

STEP 2: Change Configuration File ‘.abapgit.xml’

2-5: Go to the root and copy the repository URL by clicking  button.



The screenshot shows a GitHub repository page for 'dev97619 / logistics-business-network-gtt-samples'. The repository has been forked from SAP-samples/logistics-business-network-gtt-samples. The 'Code' tab is selected. The repository has 1 branch and 0 tags. The 'master' branch is ahead of SAP-samples:master by 1 commit. A dropdown menu is open over the 'Code' button, showing options: 'Clone', 'HTTPS' (selected), 'SSH', 'GitHub CLI', and a 'New' button. The 'Clone' URL is highlighted with a red box: <https://github.com/dev97619/logistics-business-network-gtt-samples>. Below the URL, there is a note: 'Use Git or checkout with SVN using the web URL.' To the right of the URL is a copy icon, also highlighted with a red box. The repository's 'About' section describes it as containing sample scenarios applications for SAP Logistics Business Network, global track and trace option to build a tracking application. It includes links for 'Readme', 'Releases' (no releases published), and 'Packages' (no packages published). The footer indicates the repository was created on February 2, 2022, and the configuration file was last updated 1 minute ago.

dev97619 / logistics-business-network-gtt-samples

forked from SAP-samples/logistics-business-network-gtt-samples

Watch 0 Star 0 Fork 16

Code Pull requests Actions Projects Wiki Security Insights Settings

master 1 branch 0 tags

This branch is 1 commit ahead of SAP-samples:master.

dev97619 Update .abapgit.xml

.reuse update license with REUSE

LICENSES update license with REUSE

Ibn-gtt-template-tpo change folder name from ABAP to abap

Ibn-gtt-template-ts Update README.md

Ibn-gtt-template-tso change folder name from ABAP to abap

.abapgit.xml Update .abapgit.xml

FAQs_for_Template_Code_Implement... Update for February release

README.md Update README.md

Go to file Add file Code

Clone HTTPS SSH GitHub CLI New

https://github.com/dev97619/logistics-business-network-gtt-samples

Use Git or checkout with SVN using the web URL.

Open with GitHub Desktop

Download ZIP

10 days ago

11 days ago

1 minute ago

12 days ago

10 days ago

About

This code example contains sample scenarios applications that will show how to use SAP Logistics Business Network, global track and trace option to build a tracking application.

Readme

Releases

No releases published

Create a new release

Packages

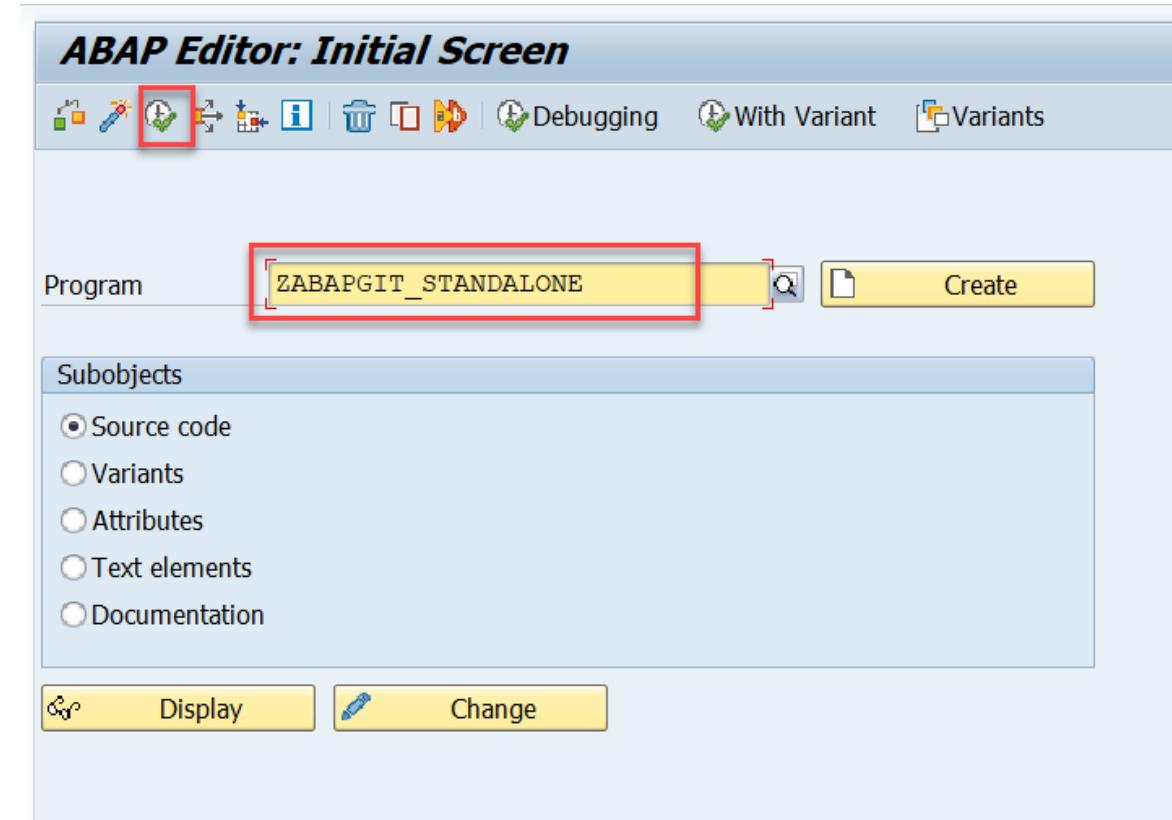
No packages published

Publish your first package

STEP 3: Remove TSOF Repository in ABAPGit

3-1: Enter T-code **SE38** and fill in the report name **ZABAPGIT_STANDALONE**.

3-2: Click **Execute** to run the report.



STEP 3: Remove TSOF Repository in ABAPGit

3-3: Access the TSOF Repository by clicking  button.



The screenshot shows the ABAP Git interface with the following details:

- Toolbar:** Selections, Edit, Goto, System, Help.
- Buttons:** Filter, Favorites, Recent, etc.
- Title Bar:** ABAP Git
- Header:** abapGit ► Repository List, New Online, New Offline, Settings, Help.
- Filter:** Filter: [] Only Favorites | Detail
- Table:** Repository List with columns: Name, Url, Package, Branch, Action.

Name	Url	Package	Branch	Action
logistics-business-network-gtt-samples	github.com/dev97619/logistics-business-network-gtt-samples.git	zgtt_sample	master	Check Stage Patch Settings 
- Footer:** abapGit 1.106.0, js: OK

STEP 3: Remove TSOF Repository in ABAPGit

3-4: Under the “Advanced” menu, choose and click “Remove”.

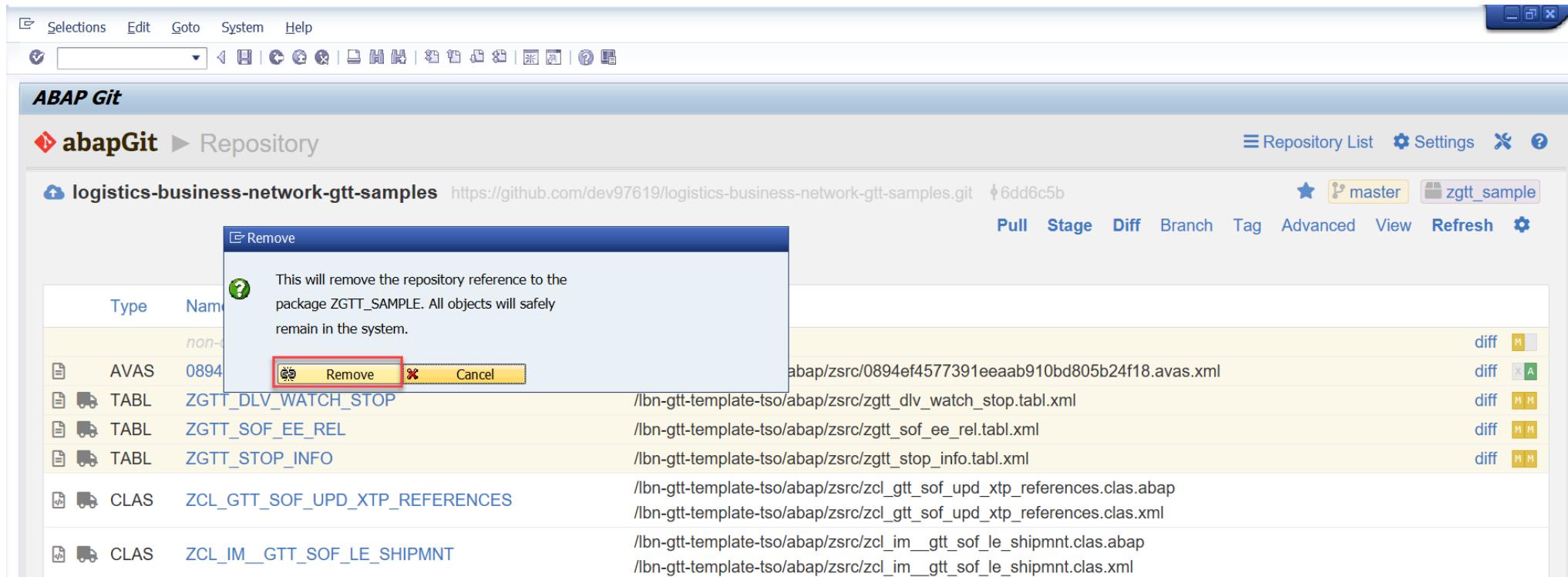
The screenshot shows the ABAPGit interface with the following details:

- Toolbar:** Selections, Edit, Goto, System, Help.
- Header:** ABAP Git, abapGit, Repository, Repository List, Settings, Refresh, Help.
- Repository Information:** logistics-business-network-gtt-samples, https://github.com/dev97619/logistics-business-network-gtt-samples.git, commit 6dd6c5b.
- Branch:** master (highlighted).
- Advanced Menu:** A dropdown menu with the following options:
 - Reset Local (Force Pull)
 - Checkout commit
 - Background Mode
 - Change Remote
 - Make Off-line
 - Force Stage
 - Transport to Branch
 - Add all objects to transport request
 - Syntax Check
 - Run Code Inspector
 - Update Local Checksums
 - Beta - Data
 - Remove** (highlighted with a red box)
 - Uninstall
- Table:** A list of repository contents with columns: Type, Name, Path.

Type	Name	Path
non-code and meta files		
AVAS	0894EF4577391EEAB910BD805B24F18	./abapgit.xml
TABL	ZGTT_DLV_WATCH_STOP	/lbn-gtt-template-tso/abap/zsrc/0894ef4577391eeab910bd/lbn-gtt-template-tso/abap/zsrc/zggt_dlv_watch_stop.tabl.xml
TABL	ZGTT_SOF_EE_REL	/lbn-gtt-template-tso/abap/zsrc/zggt_sof_ee_rel.tabl.xml
TABL	ZGTT_STOP_INFO	/lbn-gtt-template-tso/abap/zsrc/zggt_stop_info.tabl.xml
CLAS	ZCL_GTT_SOF_UPD_XTP_REFERENCES	/lbn-gtt-template-tso/abap/zsrc/zcl_gtt_sof_upd_xtp_referen/lbn-gtt-template-tso/abap/zsrc/zcl_gtt_sof_upd_xtp_referen
CLAS	ZCL_IM_GTT_SOF_LE_SHIPMNT	/lbn-gtt-template-tso/abap/zsrc/zcl_im_gtt_sof_le_shipmnt/lbn-gtt-template-tso/abap/zsrc/zcl_im_gtt_sof_le_shipmnt
TTYP	ZGTT_DLV_WATCH_STOPS	/lbn-gtt-template-tso/abap/zsrc/zggt_dlv_watch_stops.ttyp.xr
DTEL	ZGTT_KUNABLAZ_TXT	/lbn-gtt-template-tso/abap/zsrc/zggt_kunablaz_txt.dtel.xml
DTEL	ZGTT_LGNUMAZ	/lbn-gtt-template-tso/abap/zsrc/zggt_lgnumaz.dtel.xml
DTEL	ZGTT_LGORTAZ_TXT	/lbn-gtt-template-tso/abap/zsrc/zggt_lgortaz_txt.dtel.xml

STEP 3: Remove TSOF Repository in ABAPGit

3-5: Click “Remove” button in the popup window. The reference to TSOF repository will be removed.

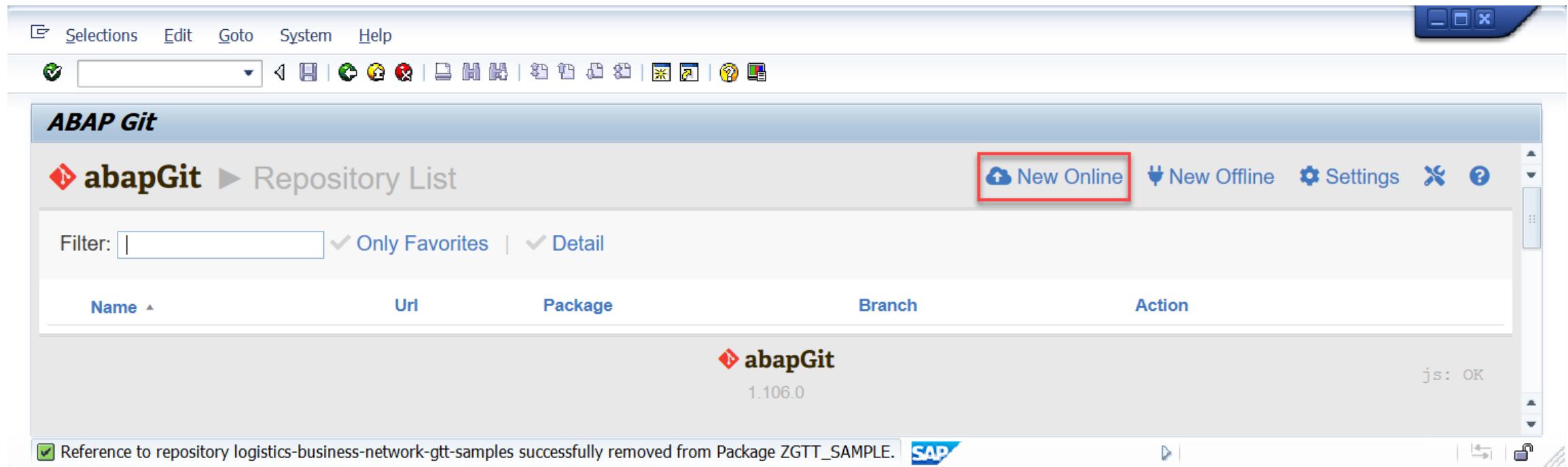


3-6: After repository removal you will see the following message:



STEP 4: Download TPOF Code from GitHub

4-1: Click **New Online** to download the code.



STEP 4: Download TPOF Code from GitHub

4-2: Fill in the **Git Repository URL** in step 2-5:

<https://github.com/dev97619/logistics-business-network-gtt-samples.git>

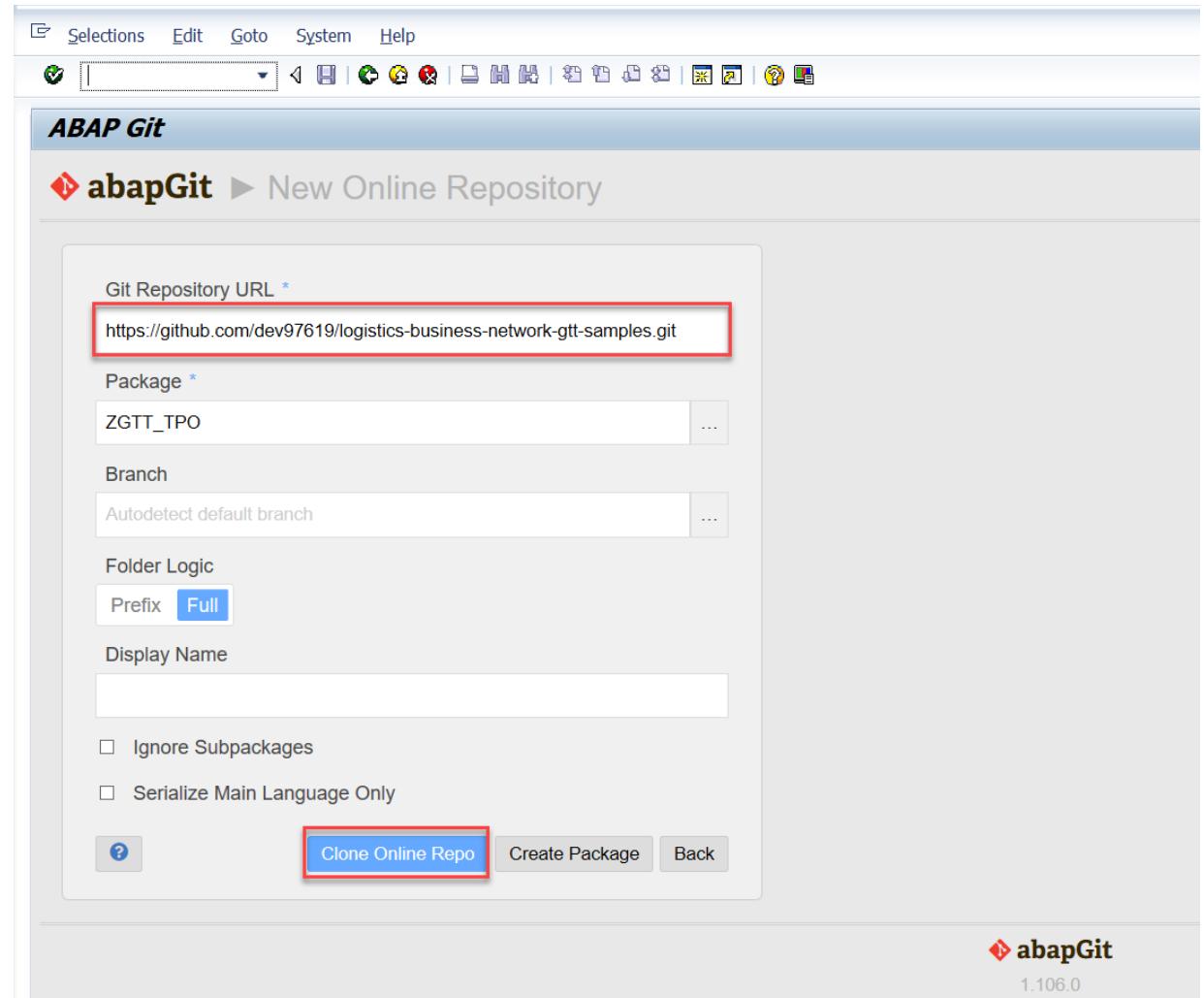
Caution:

This URL is the user's account repository URL, not the public sample code's repository URL.

4-3: 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.

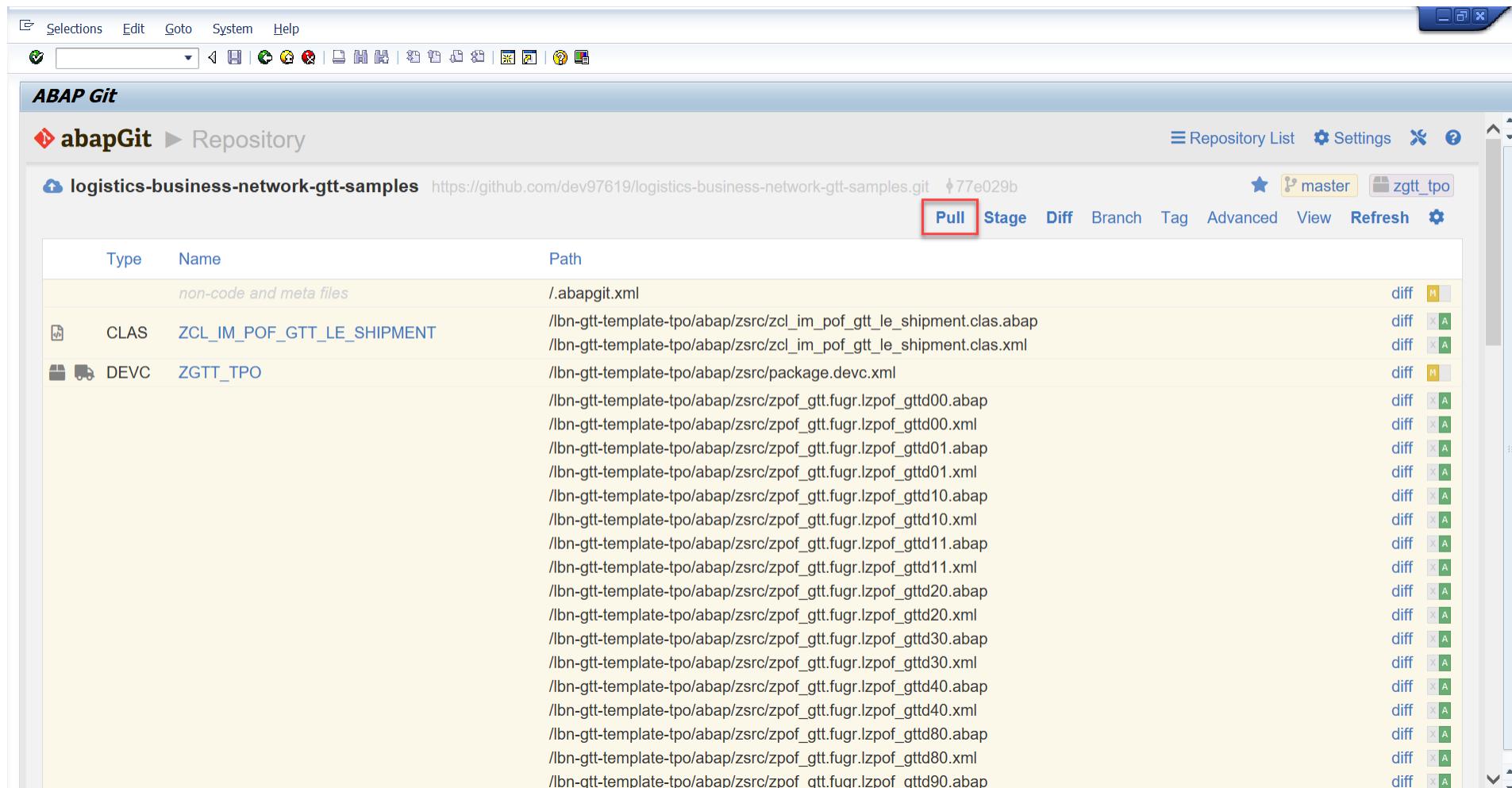
4-4: Set **Full** for **Folder Logic**

4-5: Click **Clone Online Repo** to download the code.



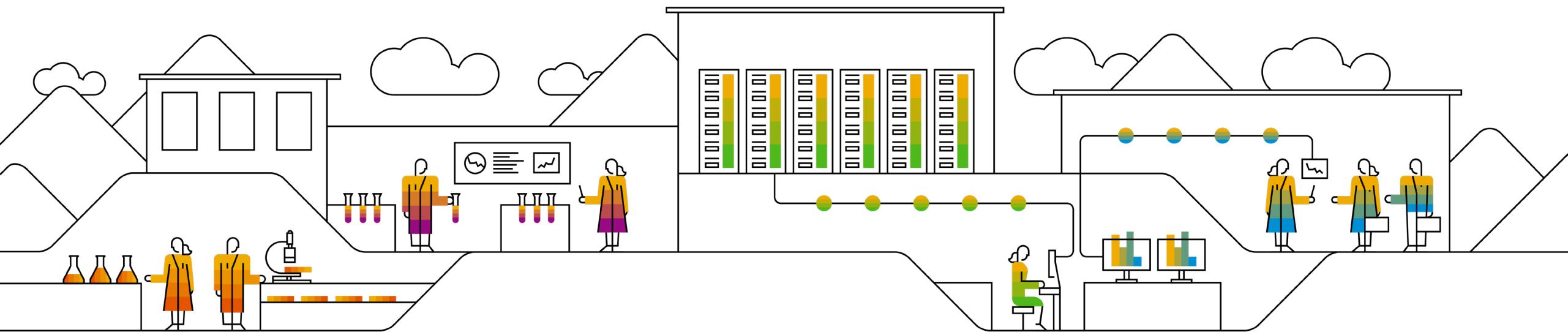
STEP 4: Download ABAP Code from GitHub

4-6: Click **Pull** to pull down the latest version code.



C) Download ABAP Code from GitHub

C4. Initial Download ABAP Code from GitHub (include TSOF/TPOF/TS)



STEP 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. The header reads "abapGit › documentation". The left sidebar contains links for "Getting Started", "Setup", "Online Projects", "Offline Projects", and "Reference". The main content area starts with a "Summary" section, followed by a note about the two flavours of abapGit: "standalone version or developer version". The "Installation" section is highlighted with a red border. It contains a link to "Improve this page" and a "Prerequisites" section stating "abapGit requires SAP BASIS version 702 or higher". The "Install standalone version" section provides step-by-step instructions:

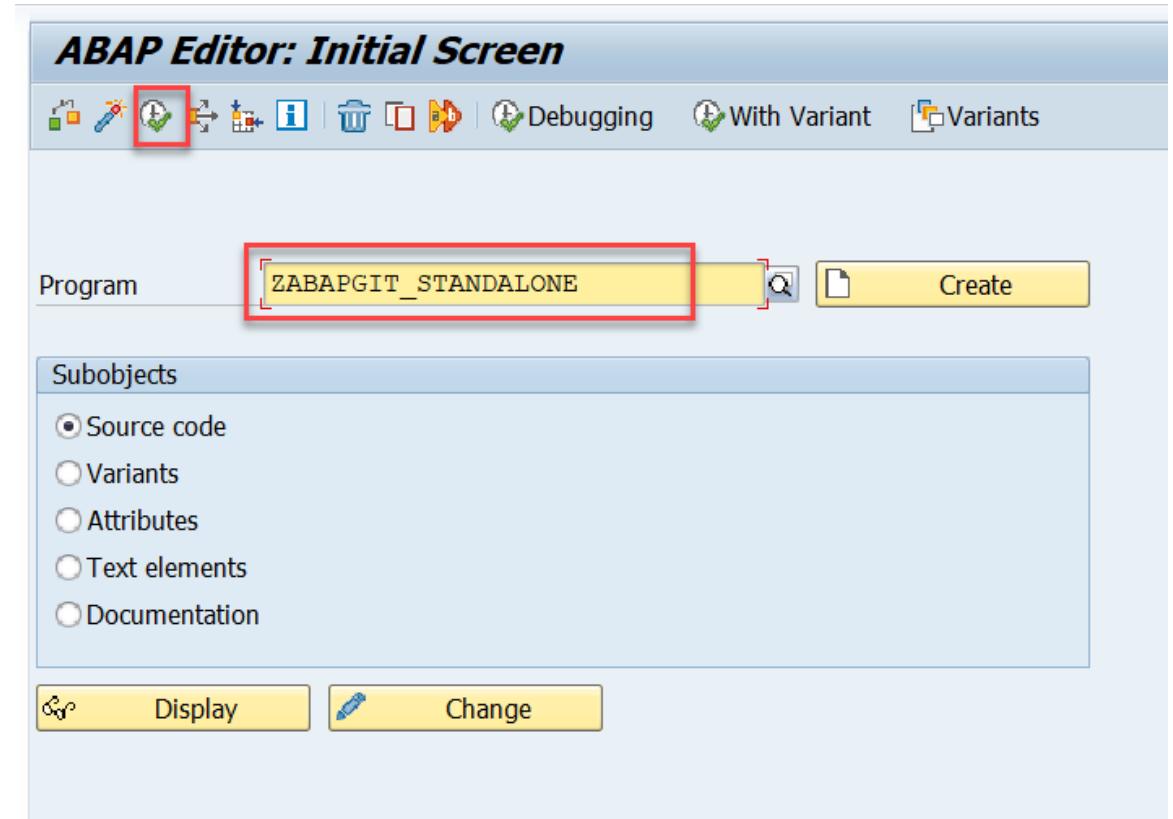
1. Download the ABAP code(right click -> save-as) to a file.
2. Via SE38 or SE80 , create a new report named ZABAPGIT_STANDALONE (formerly ZABAPGIT_FULL). NB: Don't use the name ZABAPGIT if you plan to install the developer version.
3. In source code change mode, upload the code from the file using Utilities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

Below these steps, it notes: "Typically, abapGit will only be used in the development system, so it can be installed in a local \$ package (e.g. \$ZABAPGIT)." A final note states: "Now you can use abapGit by executing the report in transaction SE38 ."

STEP 2: Download ABAP Code

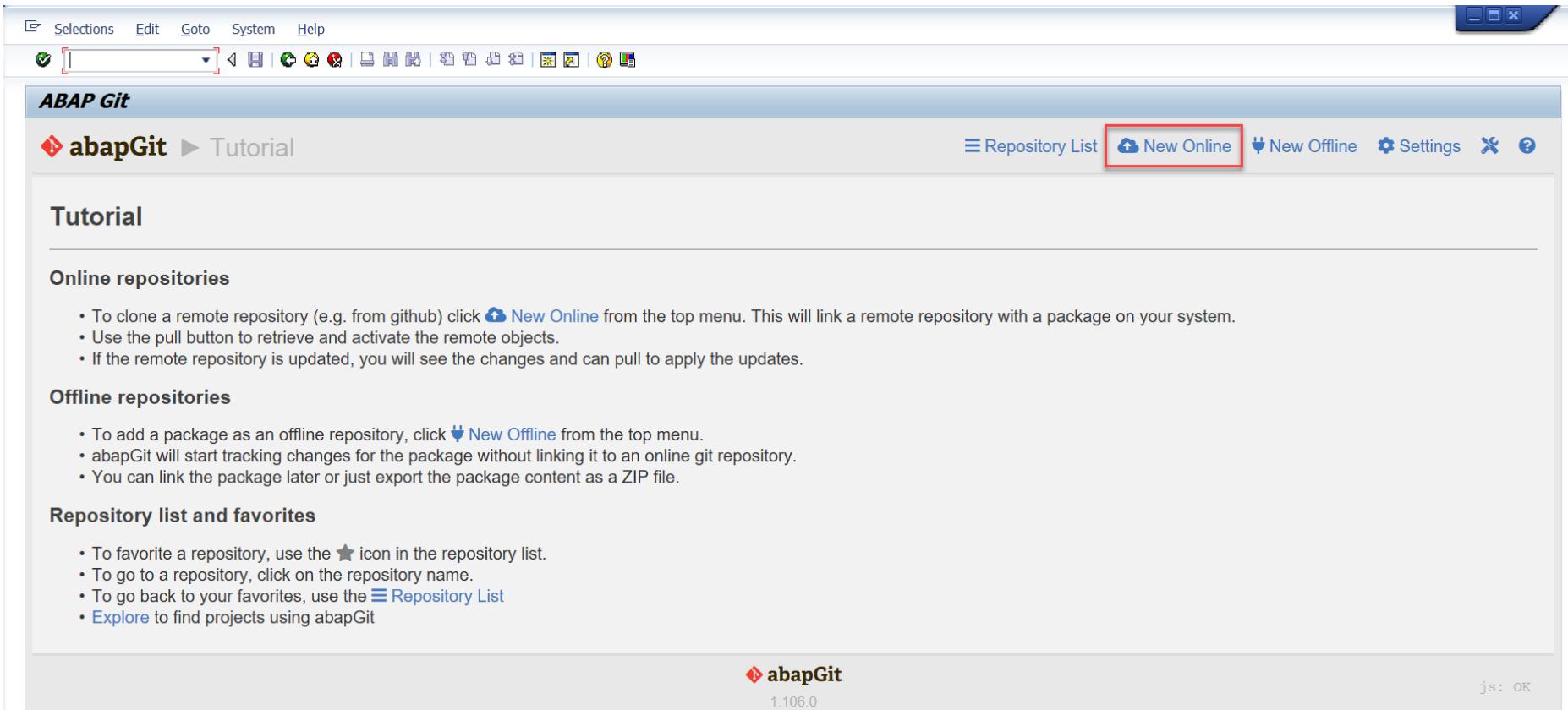
2-1: Enter T-code **SE38** and fill in the report name from STEP 1,
ZABAPGIT_STANDALONE.

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 SAP ABAP Git interface. At the top, there's a menu bar with 'Selections', 'Edit', 'Goto', 'System', and 'Help'. Below the menu is a toolbar with various icons. The main title is 'ABAP Git' with a sub-section 'abapGit > Tutorial'. On the right side of the toolbar, there are several buttons: 'Repository List', 'New Online' (which is highlighted with a red box), 'New Offline', 'Settings', and others. The main content area is titled 'Tutorial' and contains sections for 'Online repositories' and 'Offline repositories', each with a bulleted list of instructions. At the bottom, there's a footer with the 'abapGit' logo and version '1.106.0', and the text 'js: OK'.

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

STEP 2: Download ABAP Code

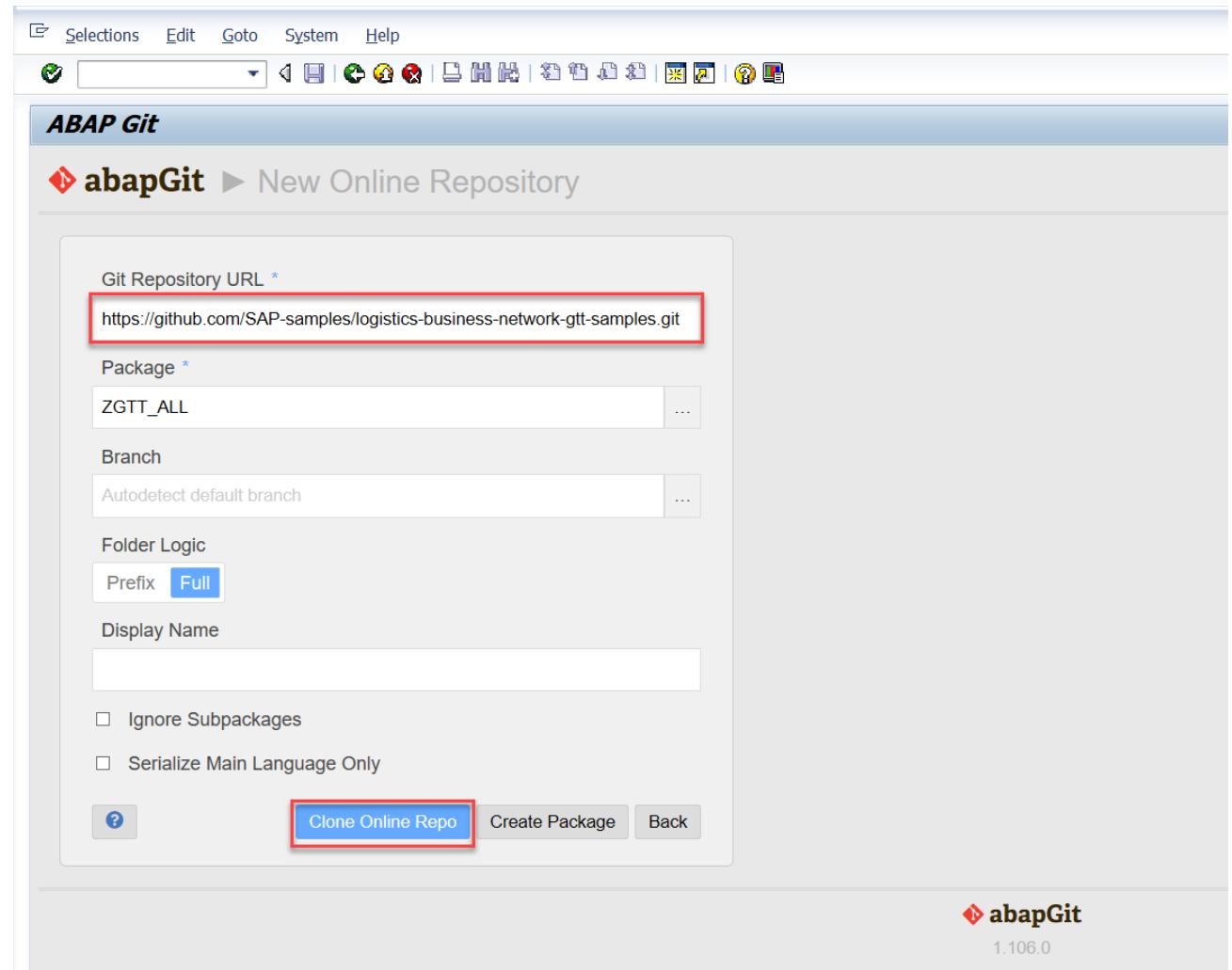
2-4: Fill in the **Git Repository URL**:

<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.

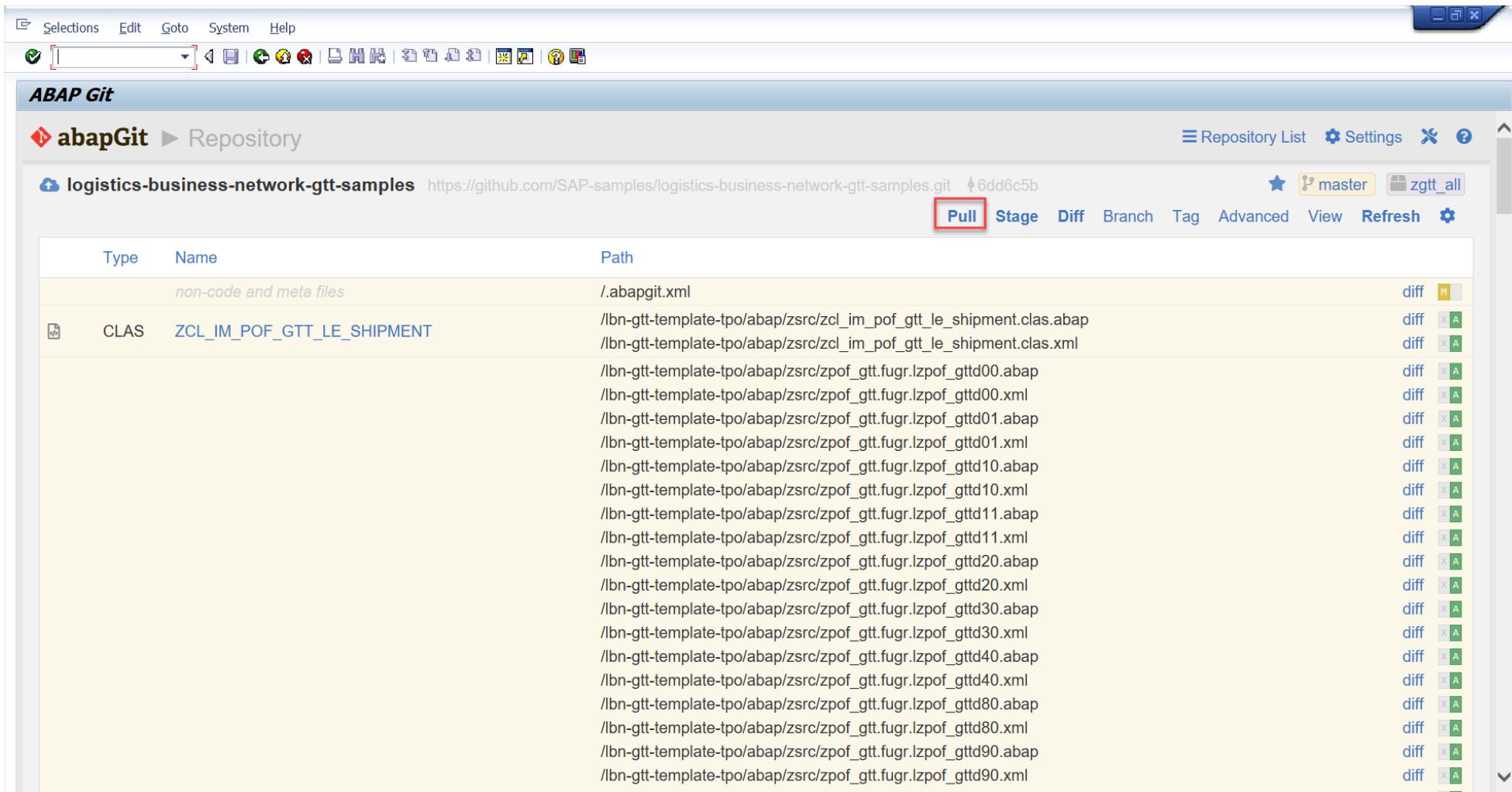
2-6: Set *Full* for **Folder Logic**

2-7: Click **Clone Online Repo** to download the code.



STEP 2: Download ABAP Code

2-8: Click **Pull** to pull down the latest version code.

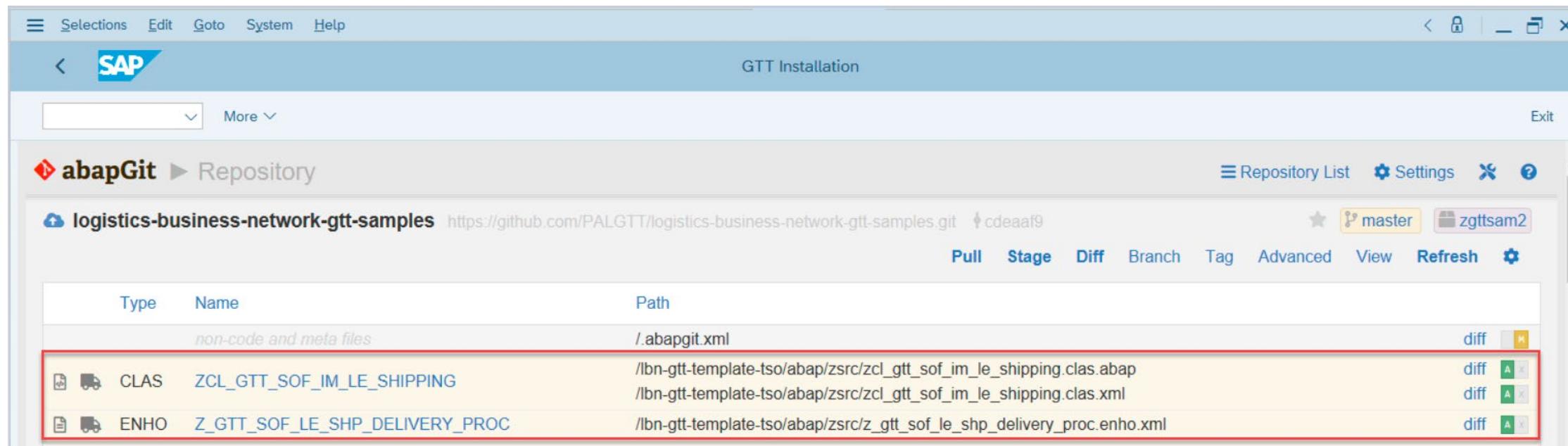


The screenshot shows the ABAP Git interface within SAP. The title bar includes 'Selections', 'Edit', 'Goto', 'System', and 'Help'. Below the title bar is a toolbar with various icons. The main area is titled 'ABAP Git' and shows the path 'abapGit > Repository'. A repository card for 'logistics-business-network-gtt-samples' is displayed, including its URL and a commit hash. The 'Pull' button is highlighted with a red box. Below the card is a table with columns 'Type', 'Name', and 'Path'. The table lists several files and classes, with some being 'non-code and meta files'. The 'Path' column shows full ABAP file paths, and the 'diff' column indicates changes with icons for M (Modified), A (Added), and D (Deleted).

Type	Name	Path	diff
non-code and meta files			
		./abapgit.xml	M
CLAS	ZCL_IM_POF_GTT_LE_SHIPMENT	/lbn-gtt-template-tpo/abap/zsrc/zcl_im_pof_gtt_le_shipment.clas.abap	A
		/lbn-gtt-template-tpo/abap/zsrc/zcl_im_pof_gtt_le_shipment.clas.xml	A
		/lbn-gtt-template-tpo/abap/zsrc/zpof_gtt.fugr.lzpos_gtt00.abap	A
		/lbn-gtt-template-tpo/abap/zsrc/zpof_gtt.fugr.lzpos_gtt00.xml	A
		/lbn-gtt-template-tpo/abap/zsrc/zpof_gtt.fugr.lzpos_gtt01.abap	A
		/lbn-gtt-template-tpo/abap/zsrc/zpof_gtt.fugr.lzpos_gtt01.xml	A
		/lbn-gtt-template-tpo/abap/zsrc/zpof_gtt.fugr.lzpos_gtt10.abap	A
		/lbn-gtt-template-tpo/abap/zsrc/zpof_gtt.fugr.lzpos_gtt10.xml	A
		/lbn-gtt-template-tpo/abap/zsrc/zpof_gtt.fugr.lzpos_gtt11.abap	A
		/lbn-gtt-template-tpo/abap/zsrc/zpof_gtt.fugr.lzpos_gtt11.xml	A
		/lbn-gtt-template-tpo/abap/zsrc/zpof_gtt.fugr.lzpos_gtt20.abap	A
		/lbn-gtt-template-tpo/abap/zsrc/zpof_gtt.fugr.lzpos_gtt20.xml	A
		/lbn-gtt-template-tpo/abap/zsrc/zpof_gtt.fugr.lzpos_gtt30.abap	A
		/lbn-gtt-template-tpo/abap/zsrc/zpof_gtt.fugr.lzpos_gtt30.xml	A
		/lbn-gtt-template-tpo/abap/zsrc/zpof_gtt.fugr.lzpos_gtt40.abap	A
		/lbn-gtt-template-tpo/abap/zsrc/zpof_gtt.fugr.lzpos_gtt40.xml	A
		/lbn-gtt-template-tpo/abap/zsrc/zpof_gtt.fugr.lzpos_gtt80.abap	A
		/lbn-gtt-template-tpo/abap/zsrc/zpof_gtt.fugr.lzpos_gtt80.xml	A
		/lbn-gtt-template-tpo/abap/zsrc/zpof_gtt.fugr.lzpos_gtt90.abap	A
		/lbn-gtt-template-tpo/abap/zsrc/zpof_gtt.fugr.lzpos_gtt90.xml	A

Known Issue: Remotely Deleted Object Cannot be Synchronized to the Local Object

Symptom: If the user updates the ABAP code by report **ZABAPGIT_STANDALONE**, there will be a code difference as below:



The screenshot shows the SAP GTT Installation interface. At the top, it displays "GTT Installation". Below that, the SAP logo and a navigation bar with "Selections", "Edit", "Goto", "System", and "Help". The main area is titled "abapGit" and "Repository". It shows a GitHub repository "logistics-business-network-gtt-samples" with the URL <https://github.com/PALGTT/logistics-business-network-gtt-samples.git>. The commit hash is "cdeaaaf". The repository has a "master" branch and a tag "zgttsam2". Below the repository details, there are buttons for "Pull", "Stage", "Diff", "Branch", "Tag", "Advanced", "View", "Refresh", and settings. A table lists files with their types (CLAS, ENHO), names, and paths. The last two rows, which are enhancement implementations, have a red border around them. The "diff" button for these rows shows a green "A" icon, indicating they have been added.

Type	Name	Path	diff
non-code and meta files			
		/abapgit.xml	[diff]
CLAS	ZCL_GTT_SOFTWARE_SHIPPING	/Ibn-gtt-template-tso/abap/zsrc/zcl_gtt_sof_im_le_shipping.clas.abap /Ibn-gtt-template-tso/abap/zsrc/zcl_gtt_sof_im_le_shipping.clas.xml	[diff] [A]
ENHO	Z_GTT_SOFTWARE_SHIPPING_DELIVERY_PROC	/Ibn-gtt-template-tso/abap/zsrc/z_gtt_sof_im_le_shp_delivery_proc.enho.xml	[diff] [A]

This is because the enhancement implementation **Z_GTT_SOFTWARE_SHIPPING_DELIVERY_PROC** is already obsolete and removed from the GitHub, the report **ZABAPGIT_STANDALONE** cannot remove the object which was already deleted in GitHub.

Known Issue: Remotely Deleted Object Cannot be Synchronized to the Local Object

Solution:

Option 1:

1-1) Deactivate the BADI implementation.

Option 2:

2-1) Delete the enhancement implementation Z_GTT_SOF_LE_SHIP_DELIVERY_PROC

2-2) Delete the BADI implementation class ZCL_GTT_SOF_IM_LE_SHIPPING

Notes:

Option 1: Objects deactivated and can be used after activation in the future.

Option 2: Objects deleted completely and would not be shown in the ABAPGit during code download.

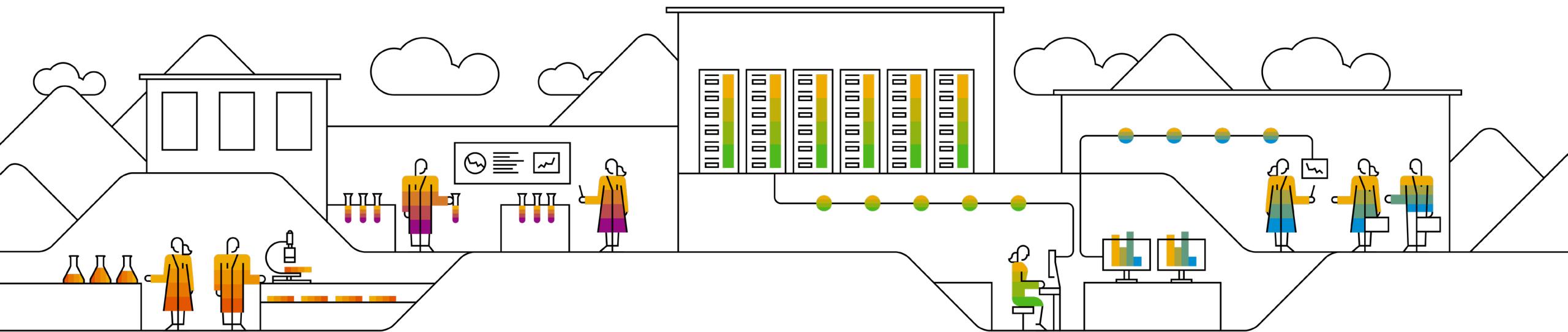
Known Issue: Remotely Deleted Object Cannot be Synchronized to the Local Object

For option 1: Use transaction code SE19 and deactivate the BADI implementation.

The screenshot shows two SAP application windows. The top window is titled "BAdI Builder: Initial Screen for Implementations". It has tabs for "Check", "Delete implementation", "Copy implementation", "Rename implementation", "Application help", and "More". A search bar is at the top left. Below it, there's a section for "Edit Implementation" with a radio button for "New BAdI" selected. An input field for "Enhancement implementation" contains the value "Z_GTT_SOF_LE_SHP_DELIVERY_PROC", which is highlighted with a red box. The bottom window is titled "Enhancement Implementation Z_GTT_SOF_LE_SHP_DELIVERY_PROC Display". It also has tabs for "Properties", "History", "Technical Details", and "Implementation Elements". The "Implementation Elements" tab is active. It shows a table with one row under "BAdI Implementations" for "Z_GTT_SOF_IM_LE_SHIPPING". The "Implementation" column shows "Implementation" and "Implementing Class". On the right side of the screen, there are several configuration fields. One field for "BAdI Implementation" is set to "Z_GTT_SOF_IM_LE_SHIPPING". A note below it says "Description: Implementation: GTT - Enhancement to update the imputed sales orders' delivery list". There are checkboxes for "Default Implementation", "Example Implementation", and a checked checkbox for "Active" with the note "Implementation is active". Another checkbox for "Implementation is active" is also checked. A note at the bottom states "Runtime Behavior: The implementation will not be called".

D) Configuration and Coding Guide

- Advanced



1: Maintain AOT Type

When you are creating Application Object Type for one Business Process Type, make sure the AOT name must be the same as the name which is defined in the corresponding model in Manage Models application in SAP Business Network Global Track and Trace Version 2.

The screenshot displays two SAP application interfaces side-by-side.

Left Side (Define Application Object Types):

- Header:** Display View "Define Application Object Types": Details
- Bus. Proc. Type:** ESC_SORDER
- Appl. Obj. Type:** ZGTT_SO_INT_HD (highlighted with a red box)
- Text:** Extract sales order header information to Global Track and Trace Integration
Sales Order Header
- Object Identification Tab:** Selected tab. Other tabs include General Data, Control Tables, Global Track & Trace Relevance, and Parameter Setup.
- Method for determination of AOID:** AOID Method: Determine from Field
- Application Object ID Source:**
 - First Field to Build Appl. Obj. ID: Cntrl Tab. Type: 1 Main Object Table, AO ID Field: VBELN
 - Second Field to Build Appl. Obj. ID: Cntrl Tab. Type: (empty), AO ID Field: (empty)
- Determine AOID By Function:** (empty)

Right Side (IDOC Integration Configuration):

- Header:** sof Active (Sales Order Fulfilment)
- Tracked Process:** SalesOrder
- IDOC Integration:** (highlighted with a red box)
- Integration Switch:** ON
- Tracked Process Mapping:** ERP Object Type: Others, Application Object Type: ZGTT_SO_INT_HD (highlighted with a red box)
- Tracked Process / Events (2):**

Name	IDOC	Event Code
Tracked Process		
SalesOrderEvent	E1EHPAO	
Event Types		
Completion	E1EVMDR02	
- User Model Fields:**

Field	IDOC Segment	IDOC Field
salesOrderNo	E1EHPCP	YN_SO_NO
shipToPartyId	E1EHPCP	YN_SO_SHIPTO
netValue	E1EHPCP	YN_NET_VALUE
currency	E1EHPCP	YN_NET_VALUE_CURRENCY

2: Maintain Tracking ID Type

In the AOT you maintained, make sure the name of Tracking ID Type is as same as the name defined in the corresponding process type of the model in Manage Models app in SAP Business Network Global Track and Trace 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 which is referring to the Tracking ID Type for the AOT as below.

The image shows two screenshots illustrating the configuration of Tracking ID Types. On the left, the SAP AOT interface displays a process named 'ESC_SORDER' with a tracking ID setup. The 'Tr.ID Code Set' field is highlighted with a red box and contains the value 'SALES_ORDER'. On the right, the SAP Business Network Global Track and Trace interface shows a tracked process named 'Sales Order Fulfillment'. It lists several items, including 'SalesOrder' and 'SalesOrderItem', both of which have their 'Tracking Id Type' fields highlighted with red boxes and set to 'SALES_ORDER'. A modal dialog box is also shown, titled 'Edit Tracked Process', with the 'Name' field set to 'SalesOrder' and the 'Tracking Id Type' field set to 'SALES_ORDER', also highlighted with a red box.

3: Make the customization logic in the function modules and assign them to the extractor function.

You can assign customization function models to the following extractor function:

1. GTT relevance function of AOT for tracked process tracking
2. GTT relevance function of Event Type for event tracking
3. Planned Event Extractors
4. Control Parameter Extractors
5. Info Parameter Extractors(optional)
6. Tracking ID Extractors
7. Event Data Extractors
8. AOT ID Extractors

Function	Function Module	Description
ZGTT_SOF_DEHDR	ZGTT_SOF_OTE_DE_HDR_REL	Extractor for relevance determination for Delivery Order Header
ZGTT_SOF_DEITM	ZGTT_SOF_OTE_DE_ITM_REL	Extractor for relevance determination for Delivery Order Items
ZGTT_SOF_SHPHDR	ZGTT_SOF_OTE_SHP_HDR_REL	Extractor for relevance determination for Shipment
ZGTT_SOF_SOHDR	ZGTT_SOF_OTE_SO_HDR_REL	Extractor for relevance determination for Sales Order Header
ZGTT_SOF_SOITM	ZGTT_SOF_OTE_SO_ITM_REL	Extractor for relevance determination for Sales Order Items

Please select one category above, create the extractor function and assign the corresponding modules.

For customization of GTT relevance and AOT ID, you need to enable *Determine by Function* option.

For customization of Tracking ID Type, you need to enable *Check Function(Function Module)* option.

4: Sample Codes for Sales Order Fulfillment Application

To support the Sales Order Fulfillment Application, the sample codes in Github covers the following cases by function group ZGTT_SOF:

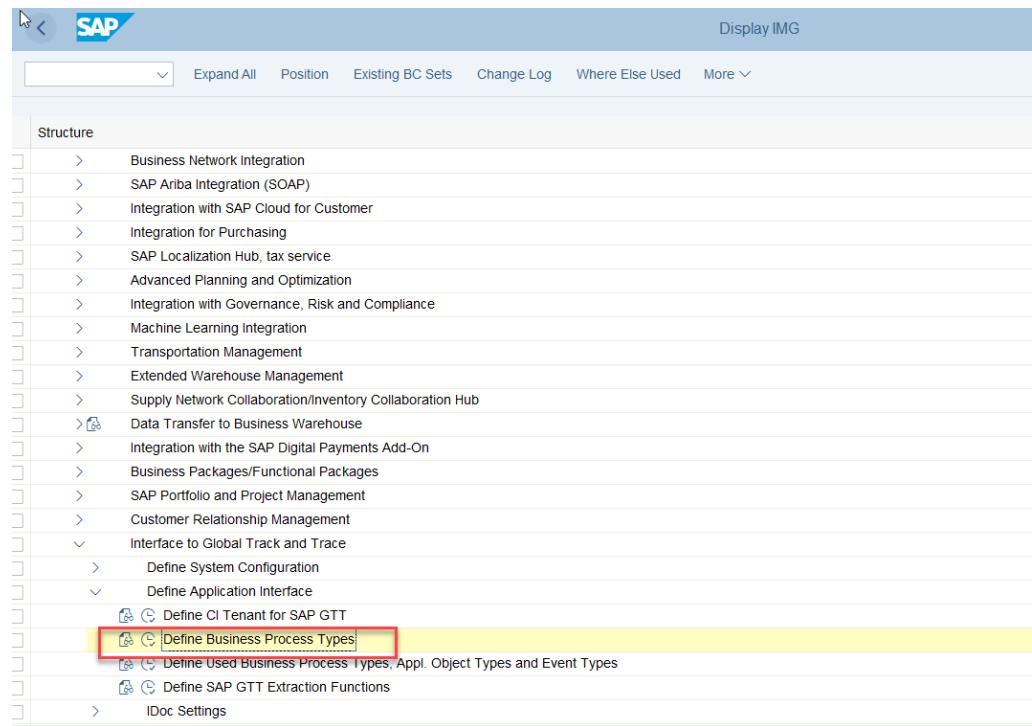
Category	Business Process Type	Function Module Name	Description
Control Parameter Extractors	ESC_DELIV	ZGTT_SOF_OTE_DE_HD	Function for setup of control parameters of delivery header
Control Parameter Extractors	ESC_DELIV	ZGTT_SOF_OTE_DE_ITM	Function for setup of control parameters of delivery item
Control Parameter Extractors	ESC_SHIPMT	ZGTT_SOF_OTE_SHP_HD	Function for setup of control parameters of shipment
Control Parameter Extractors	ESC_SORDER	ZGTT_SOF_OTE_SO_HD	Function for setup of control parameters of sales order header
Control Parameter Extractors	ESC_SORDER	ZGTT_SOF_OTE_SO_ITM	Function for setup of control parameters of sales order item
Event Data Extractors	ESC_DELIV	ZGTT_SOF_EE_DE_GI	SOF Extractor: Actual Event of Goods Issue
Event Data Extractors	ESC_DELIV	ZGTT_SOF_EE_DE_PACKING	SOF Extractor: Actual Event of Packing
Event Data Extractors	ESC_DELIV	ZGTT_SOF_EE_DE_PICKING	SOF Extractor: Actual Event of Picking
Event Data Extractors	ESC_DELIV	ZGTT_SOF_EE_DE POD	SOF Extractor: Actual Event of POD
Event Data Extractors	ESC_SHIPMT	ZGTT_SOF_EE_SHP_ARRIVAL	SOF Extractor: Actual Event of Arrival
Event Data Extractors	ESC_SHIPMT	ZGTT_SOF_EE_SHP_CHECKIN	SOF Extractor: Actual Event of Check In
Event Data Extractors	ESC_SHIPMT	ZGTT_SOF_EE_SHP_DEPARTURE	SOF Extractor: Actual Event of Departure
Event Data Extractors	ESC_SHIPMT	ZGTT_SOF_EE_SHP_LOAD_END	SOF Extractor: Actual Event of Loading End
Event Data Extractors	ESC_SHIPMT	ZGTT_SOF_EE_SHP_LOAD_START	SOF Extractor: Actual Event of Loading Start
GTT relevance function of AOT	ESC_DELIV	ZGTT_SOF_OTE_DE_HDR_REL	Extractor for relevance determination for Delivery Order Header
GTT relevance function of AOT	ESC_DELIV	ZGTT_SOF_OTE_DE_ITM_REL	Extractor for relevance determination for Delivery Order Items
GTT relevance function of AOT	ESC_SHIPMT	ZGTT_SOF_OTE_SHP_HDR_REL	Extractor for relevance determination for Shipment
GTT relevance function of AOT	ESC_SORDER	ZGTT_SOF_OTE_SO_HDR_REL	Extractor for relevance determination for Sales Order Header
GTT relevance function of AOT	ESC_SORDER	ZGTT_SOF_OTE_SO_ITM_REL	Extractor for relevance determination for Sales Order Items
GTT relevance function of Event Type	ESC_DELIV	ZGTT_SOF_EE_DE_GI_REL	Extractor for relevance determination for Goods Issue Event
GTT relevance function of Event Type	ESC_DELIV	ZGTT_SOF_EE_DE_PACKING_REL	Extractor for relevance determination for Packing Event
GTT relevance function of Event Type	ESC_DELIV	ZGTT_SOF_EE_DE_PICKING_REL	Extractor for relevance determination for Picking Event
GTT relevance function of Event Type	ESC_DELIV	ZGTT_SOF_EE_DE POD_REL	Extractor for relevance determination for POD Event
GTT relevance function of Event Type	ESC_SHIPMT	ZGTT_SOF_EE_SHP_ARRIVAL_REL	Extractor for relevance determination for Arrival Event
GTT relevance function of Event Type	ESC_SHIPMT	ZGTT_SOF_EE_SHP_CHECKIN_REL	Extractor for relevance determination for Check In Event
GTT relevance function of Event Type	ESC_SHIPMT	ZGTT_SOF_EE_SHP_DEPARTURE_REL	Extractor for relevance determination for Departure Event
GTT relevance function of Event Type	ESC_SHIPMT	ZGTT_SOF_EE_SHP_LOAD_END_REL	Extractor for relevance determination for Loading End Event
GTT relevance function of Event Type	ESC_SHIPMT	ZGTT_SOF_EE_SHP_LOAD_START_REL	Extractor for relevance determination for Loading Start
Planned Event Extractors	ESC_DELIV	ZGTT_SOF_EE_DE HD	SOF Extractor: Planned Event for Delivery Header of Outbound Delivery
Planned Event Extractors	ESC_DELIV	ZGTT_SOF_EE_DE_ITM	SOF Extractor: Planned Event for Delivery Item of Outbound Delivery
Planned Event Extractors	ESC_SHIPMT	ZGTT_SOF_EE_SHP_HD	SOF Extractor: Planned Event for Shipment
Tracking ID Extractors	ESC_DELIV	ZGTT_ADD_TRACKID_OTE_DEITEM	Function for setup of tracking IDs of delivery item
Tracking ID Extractors	ESC_SHIPMT	ZGTT_ADD_TRACKID_OTE_SHPHDR	Function for setup of tracking IDs of shipment
Tracking ID Extractors	ESC_SORDER	ZGTT_ADD_TRACKID_OTE_SOITEM	Function for setup of tracking IDs of sales order item

5: Available Contexts for the extractors' modules

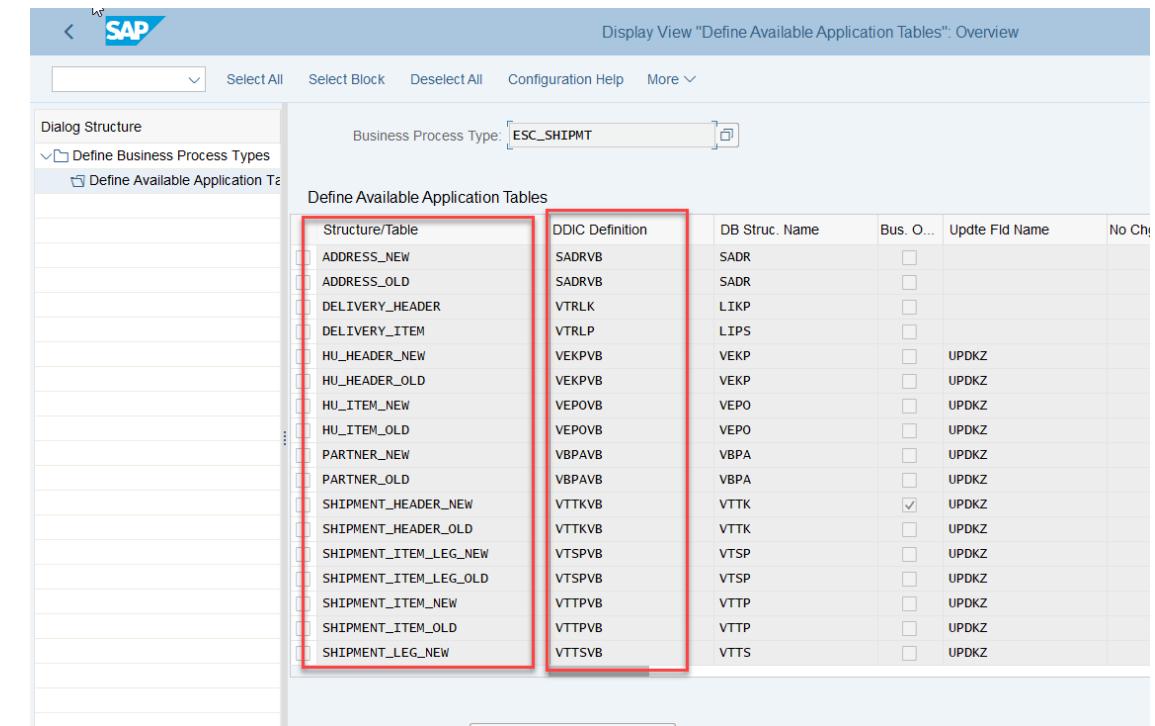
5-1: In Display IMG page, click
Integration with Other SAP Components -> Interface to Global Track and Trace -> Define Application Interface

5-2: Choose activity **Define Business Process Types**

5-3: Please select the Business Process Types to find all the context tables and their structure info.



The screenshot shows the SAP Display IMG interface. The left sidebar lists various integration components. Under 'Interface to Global Track and Trace', the 'Define Application Interface' option is expanded, and its sub-option 'Define Business Process Types' is highlighted with a red box. The main area displays a tree structure of integration components.



The screenshot shows the 'Define Available Application Tables' dialog. The 'Business Process Type' field is set to 'ESC_SHIPMT'. The dialog is divided into two main sections: 'Structure/Table' on the left and 'DDIC Definition' on the right. Both sections contain a list of tables, each with a checkbox column. The entire list is highlighted with a red box.

Structure/Table	DDIC Definition	DB Struc. Name	Bus. O...	Updt Fld Name	No Ch...
ADDRESS_NEW	SADRVB	SADR			
ADDRESS_OLD	SADRVB	SADR			
DELIVERY_HEADER	VTRLK	LTKP			
DELIVERY_ITEM	VTRLP	LIPS			
HU_HEADER_NEW	VEKPV	VEKP			UPDKZ
HU_HEADER_OLD	VEKPV	VEKP			UPDKZ
HU_ITEM_NEW	VEPOVB	VEPO			UPDKZ
HU_ITEM_OLD	VEPOVB	VEPO			UPDKZ
PARTNER_NEW	VBPAVB	VBPA			UPDKZ
PARTNER_OLD	VBPAVB	VBPA			UPDKZ
SHIPMENT_HEADER_NEW	VTTKVB	VTTK			UPDKZ
SHIPMENT_HEADER_OLD	VTTKVB	VTTK			UPDKZ
SHIPMENT_ITEM_LEG_NEW	VTSPVB	VTSP			UPDKZ
SHIPMENT_ITEM_LEG_OLD	VTSPVB	VTSP			UPDKZ
SHIPMENT_ITEM_NEW	VTPPB	VTPP			UPDKZ
SHIPMENT_ITEM_OLD	VTPPB	VTPP			UPDKZ
SHIPMENT_LEG_NEW	VTTSVB	VTTS			UPDKZ

6: Coding Tips in the GTT relevance function modules

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

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

See sample code of function: ZGTT_SOF_OTE_SHP_HDR_REL

Function Builder: Display ZGTT_SOF_OTE_SHP_HDR_REL

Function Module: ZGTT_SOF_OTE_SHP_HDR_REL active

Attributes Import Export Changing Tables Exceptions Source Code

```
28:     <ls_xvttk>      TYPE vttkvb.  
29:  
30:     * <1> Check if Main table is Shipment or not.  
31:     IF i_app_object-maintabdef <> gc_bpt_shipment_header_new.  
32:         PERFORM create_logitable_ao_rel  
33:             TABLES c_logitable  
34:                 USING i_app_object-maintabdef  
35:                     space  
36:                     i_app_obj_types-trrelfunc  
37:                     i_app_object-appobjtype  
38:                     i_appsys.  
39:             RAISE parameter_error.  
40:     ELSE.  
41:         Read Main Object Table (Shipment - VTTK)  
42:         ASSIGN i_app_object-maintabref->* TO <ls_xvttk>.  
43:     ENDIF.  
44:  
45:  
46:     * <3> Check Relevance of AOT: YN_OTE  
47:     PERFORM check_act_relevance_shp  
48:         USING <ls_xvttk>  
49:             CHANGING lv_act_relevance.  
50:     CHECK lv_act_relevance IS NOT INITIAL.  
51:  
52:     When shipment is newly created, check relevance of GTT: only when delivery has been assigned.  
53:     IF <ls_xvttk>-updtk EQ gc_insert.  
54:         PERFORM check_delivery_assignment  
55:             USING i_all_appl_cables  
56:  
Scope: FUNCTION zgtt_sof_ote_shp_hdr_rel | ABAP | Ln 18 Col 50 | | | |
```

7: 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 are following the configuration of corresponding AOT.
2. Add customization logics to fill the output table *E_TRACKIDDATA*.
3. The Tracking ID Type need to be the same as the definition in the process type of model in Manage Models app.
4. SAP Business Network Global Track and Trace v2 accepts delta transport for tracking IDs, which means that only the newly-created / changed / deleted tracking IDs shall be filled, while the ones without change need to be ignored in the logic.
5. The tracking ID for its own process type needs to be filled for each process update.
6. In case of tracking ID deletion, the field *ACTION* shall be filled with 'D'.

See sample code of function:

ZGTT_ADD_TRACKID_OTE_SHPHDR

The screenshot shows the SAP Function Builder interface with the title bar "Function Builder: Display ZGTT_ADD_TRACKID_OTE_SHPHDR". Below the title bar, there are tabs: Attributes, Import, Export, Changing, Tables, Exceptions, and Source Code. The "Source Code" tab is selected. The code editor displays the following ABAP code:

```
76 e_trackiddata-trxcod = 'SHIPMENT_ORDER'.
77 e_trackiddata-trxid = <ls_xvttk>-tknum.
78 CONCATENATE '01' sy-datum sy-uzeit INTO e_trackiddata-start_date.
79 e_trackiddata-end_date = '09991231000000'.
80 e_trackiddata-timzon = lv_tzone.
81 e_trackiddata-msrid = space.
82 APPEND e_trackiddata.
83
84 e_trackiddata-trxcod = 'RESOURCE'.
85 CLEAR e_trackiddata-start_date.
86 CLEAR e_trackiddata-end_date.
87 CLEAR e_trackiddata-timzon.
88
89 IF <ls_xvttk>-updckz = 'I'.
90   IF <ls_xvttk>-vsart = '01' AND <ls_xvttk>-extil IS NOT INITIAL.
91     CONCATENATE <ls_xvttk>-tknum <ls_xvttk>-extil INTO e_trackiddata-trxid.
92     e_trackiddata-msrid = space.
93     APPEND e_trackiddata.
94   ELSEIF <ls_xvttk>-vsart = '04' AND <ls_xvttk>-signi IS NOT INITIAL.
95     CONCATENATE <ls_xvttk>-tknum <ls_xvttk>-signi INTO e_trackiddata-trxid.
96     e_trackiddata-msrid = space.
97     APPEND e_trackiddata.
98   ENDIF.
99
100 ELSEIF <ls_xvttk>-updckz = 'U'.
101   READ TABLE lt_yvttk INTO ls_yvttk INDEX 1.
102   CHECK ls_yvttk IS NOT INITIAL.
103
104   IF <ls_xvttk>-vsart <> ls_yvttk-vsart.
105     IF <ls_xvttk>-vsart = '01' AND <ls_xvttk>-extil IS NOT INITIAL.
```

The code is annotated with two red boxes highlighting sections of the logic. The first box covers lines 76 through 83, which handle the creation of a new tracking ID for a shipment order. The second box covers lines 84 through 105, which handle the update logic for resource tracking IDs, including reading from a table and updating based on version numbers.

8: Coding Tips in the Control Parameter function modules

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

1. Make sure that the Main / Master tables are following the configuration of corresponding AOT.
2. Add customization logics to fill the output table *E_CONTROL_DATA*.
3. SAP Business Network Global Track and Trace v2 asks for full transport for all the control parameters, which means that all the fields needs to be extracted in all cases, no matter whether their values have been changed.
4. To fill in the composition (table) fields defined in Manage Model app, use the parameter field *PARAMINDEX* to specify the line number. If the field is empty, SAP Business Network Global Track and Trace regards it as a simple flat field.
5. **To clear a composition, fill the key field using invalid values, for which key attribute has been checked in Manage Model app. It's not recommended to fill a code list type field to clear a composition even if it's a key field.**
6. The field with fixed name 'ACTUAL_BUSINESS_DATETIME' and 'ACTUAL_BUSINESS_TIMEZONE' are mandatory fields to be transported for event handling sequencing in SAP Business Network Global Track and Trace 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 SAP Business Network Global Track and Trace via TP request, which leads to an error)
8. In Manage Models app, click tab *IDOC Integration* 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 please ensure to only enable *PARAMNAME* and *PARAMINDEX* in the extractor code, 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 SAP Business Network Global Track and Trace 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_SOF_OTE_SHP_HD*

8: Coding Tips in the Control Parameter Function Modules

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

The screenshot shows the SAP Manage Models app interface. The top navigation bar includes the SAP logo, Model Details (with a dropdown menu), Internal - Test, Help, and User icons. The current model is 'sof' (Active). The page title is 'Sales Order Fulfillment'. The main navigation tabs are Tracked Process, Field Type Pool, Event Type Pool, Code List, **IDOC Integration** (which is selected), Visibility Provider Integration, Planned Event Extension, and Event to Action.

Under the IDOC Integration tab, the 'Tracked Process' dropdown is set to 'Shipment'. The 'Integration Switch' is turned **ON**.

The 'Tracked Process Mapping' section shows the ERP Object Type as 'Others' and the Application Object Type as 'ZGTT_SHP_INT_HD'.

The 'Tracked Process / Events (26)' table lists various tracked processes and their corresponding IDOC segments and event codes. Some rows are collapsed under sections like 'Event Types'.

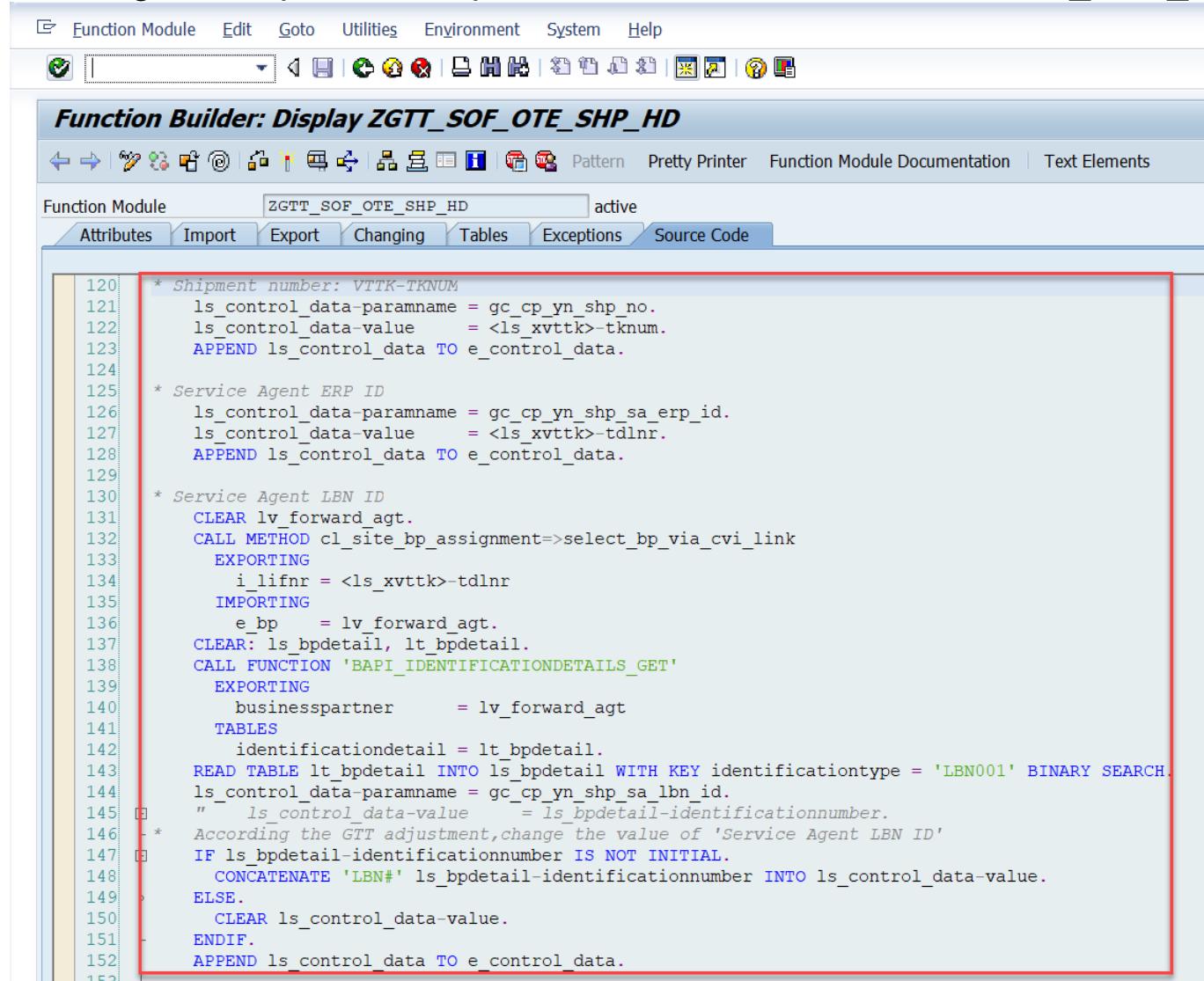
Name	IDOC	Event Code
Tracked Process		
ShipmentEvent	E1EHPAO	
Event Types		
LoadingStart	E1EVMHDR02	LOAD_BEGIN
POD	E1EVMHDR02	POD
Departure	E1EVMHDR02	DEPARTURE
Arrival	E1EVMHDR02	ARRIV_DEST
LoadingEnd	E1EVMHDR02	LOAD_END

A red box highlights the 'User Model Fields' table, which maps application object fields to IDOC segments and fields.

Field	IDOC Segment	IDOC Field
shipmentNo	E1EHPCP	YN_SHP_NO
serviceAgentLbNId	E1EHPCP	YN_SHP_SA_LBN_ID
transportationMode	E1EHPCP	YN_SHP_TRANSPORTATION_MODE
dangerousGoods	E1EHPCP	YN_SHP_CONTAIN_DGOODS
forwardingAgentTrackingId	E1EHPCP	YN_SHP_FA_TRACKING_ID
> stops		
shippingType	E1EHPCP	YN_SHP_SHIPPING_TYPE
> resourceTPs		

8: Coding Tips in the Control Parameter Function Modules

Main logic of shipment is implemented in function module ZGTT_SOF_OTE_SHP_HD



The screenshot shows the SAP Function Builder interface with the title "Function Builder: Display ZGTT_SOF_OTE_SHP_HD". The function module "ZGTT_SOF_OTE_SHP_HD" is active. The "Source Code" tab is selected. The code is highlighted with a red box around the main logic starting from line 120.

```
120 * Shipment number: VTTK-TKNUM
121   ls_control_data-paramname = gc_cp_yn_shp_no.
122   ls_control_data-value     = <ls_xvttk>-tknum.
123   APPEND ls_control_data TO e_control_data.
124
125 * Service Agent ERP ID
126   ls_control_data-paramname = gc_cp_yn_shp_sa_erp_id.
127   ls_control_data-value     = <ls_xvttk>-tdlnr.
128   APPEND ls_control_data TO e_control_data.
129
130 * Service Agent LBN ID
131   CLEAR lv_forward_agt.
132   CALL METHOD cl_site_bp_assignment=>select_bp_via_cvi_link
133     EXPORTING
134       i_lifnr = <ls_xvttk>-tdlnr
135     IMPORTING
136       e_bp    = lv_forward_agt.
137   CLEAR: ls_bpdetail, lt_bpdetail.
138   CALL FUNCTION 'BAPI_IDENTIFICATIONDETAILS_GET'
139     EXPORTING
140       businesspartner      = lv_forward_agt
141     TABLES
142       identificationdetail = lt_bpdetail.
143     READ TABLE lt_bpdetail INTO ls_bpdetail WITH KEY identificationtype = 'LBN001' BINARY SEARCH.
144     ls_control_data-paramname = gc_cp_yn_shp_sa_lbn_id.
145     "   ls_control_data-value     = ls_bpdetail-identificationnumber.
146   * According the GTT adjustment, change the value of 'Service Agent LBN ID'
147   IF ls_bpdetail-identificationnumber IS NOT INITIAL.
148     CONCATENATE 'LBN#' ls_bpdetail-identificationnumber INTO ls_control_data-value.
149   ELSE.
150     CLEAR ls_control_data-value.
151   ENDIF.
152   APPEND ls_control_data TO e_control_data.
```

9: Coding Tips in the Planned Event function modules

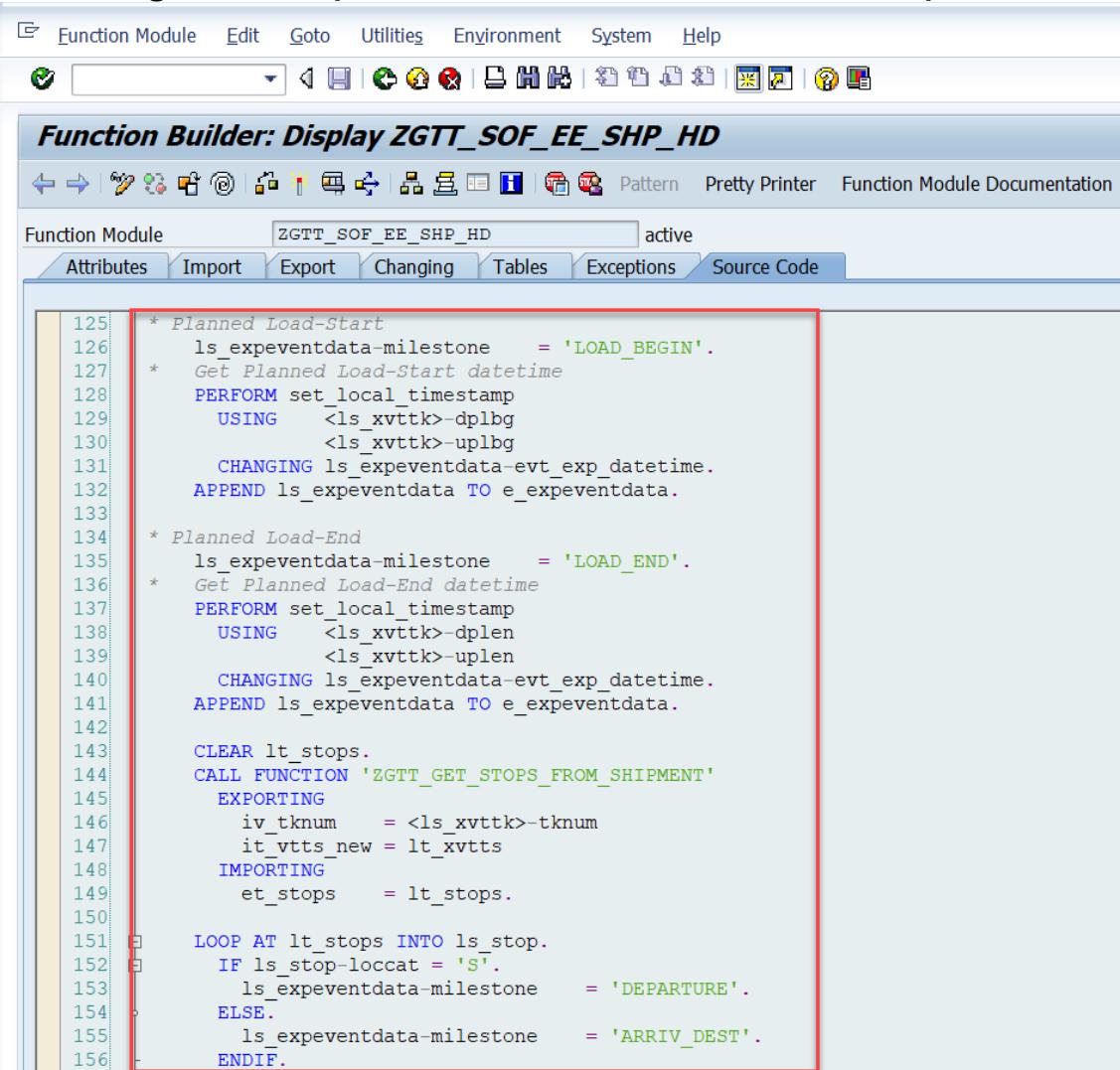
To customize the Planned Event function modules, key points are as follows:

1. Make sure that the Main / Master tables are following the configuration of corresponding AOT.
2. Add customization logics to fill the output table *E_EXPEVENTDATA*.
3. As default except no change made on the model configuration, SAP Business Network Global Track and Trace version 2 asks 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 SAP Business Network Global Track and Trace Version 2.
4. The field *MILESTONE* is mandatory to be transported.
5. The field *EVT_EXP_DATETIME* is optional, but need to be filled with relevant time zone *EVT_EXP_TZONE* together if it needs to be transported.
6. The field *LOC_ID1* is optional, but need to be filled with relevant location type *LOCTYPE* together if it needs to be transported. The values for field *LOCTYPE* are limited by *Manage Locations* app in SAP Business Network Global Track and Trace Version 2.
7. The field *LOCID2* is mandatory to specify the stop ID (match key) in case of shipment tracking.

Name	IDOC	Event Code
Tracked Process		
ShipmentEvent	E1EHPAO	
Event Types		
LoadingStart	E1EVMHDR02	LOAD_BEGIN
POD	E1EVMHDR02	POD
Departure	E1EVMHDR02	DEPARTURE
Arrival	E1EVMHDR02	ARRIV_DEST
LoadingEnd	E1EVMHDR02	LOAD_END
CheckIn	E1EVMHDR02	CHECK_IN

9: Coding Tips in the Planned Event Function Modules

Main logic of shipment Planned Events is implemented in function module ZGTT_SOF_EE_SHP_HD



The screenshot shows the SAP Function Builder interface with the title "Function Builder: Display ZGTT_SOF_EE_SHP_HD". The function module "ZGTT_SOF_EE_SHP_HD" is active. The "Source Code" tab is selected. The code is written in ABAP and handles the logic for planned events at stops. A red box highlights the section from line 125 to 156, which sets milestones for departure and arrival/destination based on stop location.

```
125 * Planned Load-Start
126   ls_expeventdata-milestone  = 'LOAD_BEGIN'.
127 * Get Planned Load-Start datetime
128   PERFORM set_local_timestamp
129     USING      <ls_xvttk>-dplbg
130       <ls_xvttk>-uplbg
131     CHANGING ls_expeventdata-evt_exp_datetime.
132 APPEND ls_expeventdata TO e_expeventdata.
133
134 * Planned Load-End
135   ls_expeventdata-milestone  = 'LOAD_END'.
136 * Get Planned Load-End datetime
137   PERFORM set_local_timestamp
138     USING      <ls_xvttk>-dplen
139       <ls_xvttk>-uplen
140     CHANGING ls_expeventdata-evt_exp_datetime.
141 APPEND ls_expeventdata TO e_expeventdata.
142
143 CLEAR lt_stops.
144 CALL FUNCTION 'ZGTT_GET_STOPS_FROM_SHIPMENT'
145   EXPORTING
146     iv_tknum    = <ls_xvttk>-tknum
147     it_vtts_new = lt_xvtt
148   IMPORTING
149     et_stops    = lt_stops.
150
151 LOOP AT lt_stops INTO ls_stop.
152   IF ls_stop-locat = 'S'.
153     ls_expeventdata-milestone  = 'DEPARTURE'.
154   ELSE.
155     ls_expeventdata-milestone  = 'ARRIV_DEST'.
156   ENDIF.
```

10: 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 are following the configuration of corresponding Event Type.
2. Add customization logics to fill the output table `CT_TRACKINGHEADER`, `CT_TRACKLOCATION`, `C_EVENTID_MAP`.
3. If the event has user-defined fields in Manage Models application, fill 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 SAP Business Network Global Track and Trace 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 *Manage Models* app, click tab *IDOC Integration* to map the user-defined parameter names and model field names.

See sample code of function: `ZGTT_SOF_EE_DE_PICKING`

10: Coding Tips in the Event Data Function Modules

To set up mapping of event type user-defined parameters, go to the *IDOC Integration* section of *Manage Models* app, select corresponding event type and set values of IDOC Field:

The screenshot shows the SAP Model Details interface for the 'sof' model, which is active. The 'IDOC Integration' tab is selected. The interface includes sections for Tracked Process Mapping, Tracked Process / Events (4), and User Model Fields.

Tracked Process Mapping:

- Tracked Process: DeliveryItem
- Integration Switch: ON

Tracked Process / Events (4):

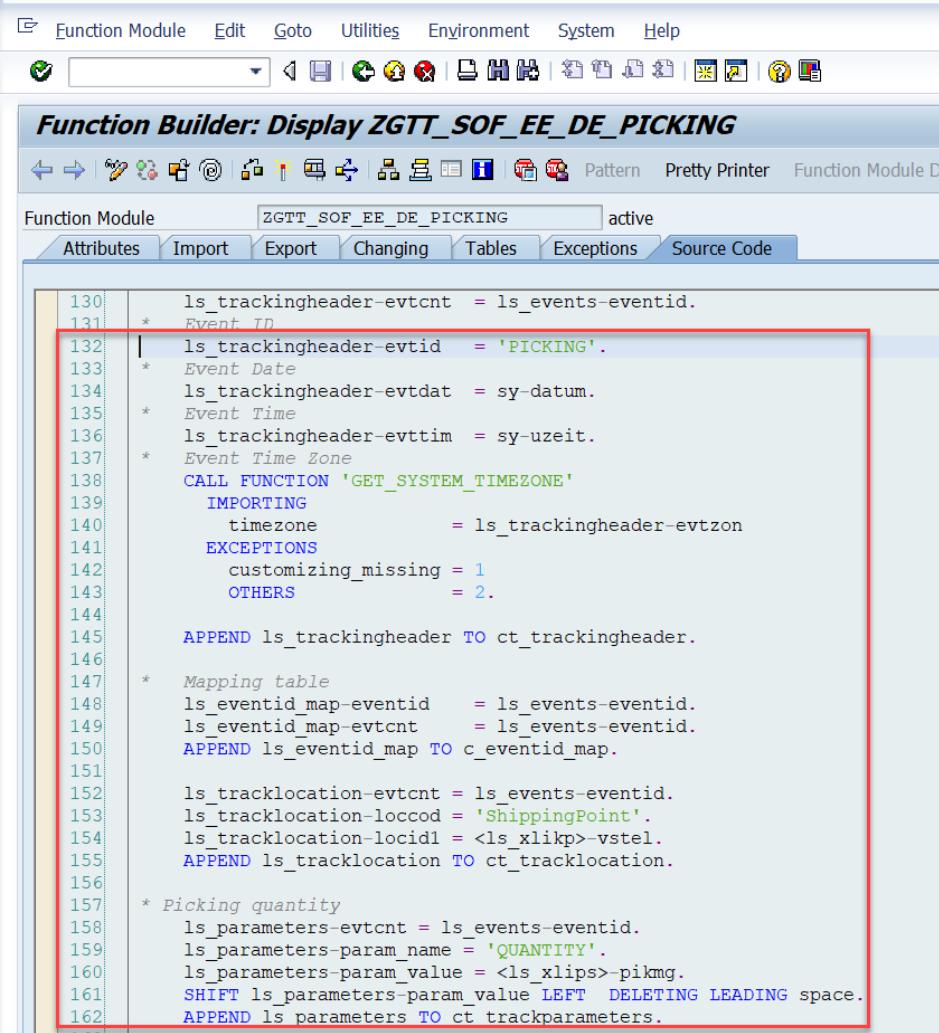
Name	IDOC	Event Code
Tracked Process		
DeliveryItemEvent	E1EHPAO	
Event Types		
Picking	E1EVMPAR	PICKING
Packing	E1EVMPAR	PACKING
DeliveryItemPOD	E1EVMPAR	DLV POD

User Model Fields:

Field	IDOC Segment	IDOC Field
quantity	E1EVMPAR	QUANTITY

10: Coding Tips in the Event Data Function Modules

Main logic of delivery item picking event is implemented in function module **ZGTT_SOF_EE_DE_PICKING**



The screenshot shows the SAP Function Builder interface with the title "Function Builder: Display ZGTT_SOF_EE_DE_PICKING". The function module name "ZGTT_SOF_EE_DE_PICKING" is active. The code editor displays the following ABAP code:

```
130 ls_trackingheader-evtcnt = ls_events-eventid.
131 * Event ID
132 | ls_trackingheader-evtid = 'PICKING'.
133 * Event Date
134 ls_trackingheader-evtdat = sy-datum.
135 * Event Time
136 ls_trackingheader-evttim = sy-uzeit.
137 * Event Time Zone
138 CALL FUNCTION 'GET_SYSTEM_TIMEZONE'
139   IMPORTING
140     timezone      = ls_trackingheader-evtzon
141   EXCEPTIONS
142     customizing_missing = 1
143     OTHERS          = 2.
144
145 APPEND ls_trackingheader TO ct_trackingheader.
146
147 * Mapping table
148 ls_eventid_map-eventid = ls_events-eventid.
149 ls_eventid_map-evtcnt = ls_events-eventid.
150 APPEND ls_eventid_map TO c_eventid_map.
151
152 ls_tracklocation-evtcnt = ls_events-eventid.
153 ls_tracklocation-loccod = 'ShippingPoint'.
154 ls_tracklocation-locidl = <ls_xlikp>-vstel.
155 APPEND ls_tracklocation TO ct_tracklocation.
156
157 * Picking quantity
158 ls_parameters-evtcnt = ls_events-eventid.
159 ls_parameters-param_name = 'QUANTITY'.
160 ls_parameters-param_value = <ls_xlips>-pikmg.
161 SHIFT ls_parameters-param_value LEFT DELETING LEADING space.
162 APPEND ls_parameters TO ct_trackparameters.
```

11: Enhancement codes for cross-processes tracking

The Sales Order Fulfillment application asks for cross-processes tracking, which is used in below cases:

- When the shipment process is updated and transported to SAP Business Network Global Track and Trace, the preceding delivery and item process, and their planned events needs to be updated and transported to SAP Business Network Global Track and Trace.

IMPORTANT: To enable cross-processes tracking, please update the below sample codes after downloading:

- Replace your Delivery AOT type name in Method *BEFORE_UPDATE* of BADI implementation *Z_GTT_SOF_LE_SHIPMNT*

The screenshot shows the SAP Business Add-In Builder interface for the 'Display Implementation Z_GTT_SOF_LE_SHIPMNT' screen. The top navigation bar includes links for 'Next Object', 'Display <-> Change', 'Other Object', 'Check', 'Display object list', 'Display navigation window', 'Application help', and 'Definition Document'. The main area displays the following fields:

- Implementation Name: `Z_GTT_SOF_LE_SHIPMNT` (Active)
- Implementation Short Text: GTT - Enhancement to update the impacted delivery orders
- Definition Name: `BADI_LE_SHIPMENT`
- Runtime Behavior: Implementation will be called

The 'Interface' tab is selected, showing:

- Interface Name: `IF_EX_BADI_LE_SHIPMENT`
- Name of Implementing Class: `ZCL_IM_GTT_SOF_LE_SHIPMNT`

A table lists the methods and their implementations:

Method	Implementation Type	Description
<code>AT_SAVE</code>	ABAP ABAP code	Process Shipments During "At Save" Context
<code>BEFORE_UPDATE</code>	ABAP ABAP code	Process Shipments During "Before Update" Context
<code>IN_UPDATE</code>	ABAP ABAP code	Process Shipments During "In Update" Context

Below the table, there is a field for 'Default Implementation Class:' with a placeholder value.

11: Enhancement codes for cross-processes tracking

The cross processes tracking scenarios cover below:

Shipment -> Delivery and 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

4\ Planned Event in Delivery Item (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

12: Known Issues

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.

2. IDOC sequencing issue

Currently, on the ERP side, when you report actual events while creating the process, the IDOCs might be sent in an incorrect order. For example, entering a PICK quantity and saving the new delivery in ERP will generate a PICK event IDOC and a delivery order IDOC. If the event IDOC approaches SAP Business Network Global Track and Trace prior to the order IDOC, it will lead to processing failure.

This issue is covered now, see the solution provided in these topics:

- 8: Coding Tips in the Control Parameter Function Modules
- 10: Coding Tips in the Event Data Function Modules
- 13: Solution of IDOC sequencing issue

13: Solution of IDOC Sequencing Issue

1. Implement corrections provided in the note <https://launchpad.support.sap.com/#/notes/2959576>

2. Create CI tenant.

Select “**GTT2.0 Logistics Business Network - Track and Trace**” for SAP Track & Trace Version

3. Create RFC destination

You need to configure only one RFC connection for both event and tracked process.

They have the same **Path Prefix**:
`/api/idoc/em/v1/TrackedProcessAndEvent`

The image contains two screenshots of SAP GUI screens. The top screenshot shows the 'SAP Global Track & Trace Definitions' table with one entry: CI for Global Track & Trace (ZGTTSOFIN2), CI Log. System (ZLSGTTINT), SAP Track & Trace Version (GTT2.0 Logistics Business N...), and Description (CI For GTT V2 Integration system Sales Order Sample APP). The bottom screenshot shows the 'RFC Destination ZGTTV2_SOF_INT2' configuration screen. It includes fields for RFC Destination (ZGTTV2_SOF_INT2), Connection Type (HTTP Connection to External Server), and three Description fields (Description 1: RFC for Tracked Process of Sales Order Sample Application, Description 2: blank, Description 3: blank). At the bottom, there are tabs for Administration, Technical Settings, Logon & Security, and Special Options. The 'Target System Settings' section shows Host and Port (443) fields, and the Path Prefix field is highlighted with a red box and contains the value `/api/idoc/em/v1/TrackedProcessAndEvent`.

Thank you.

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