



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

SAP Business Network
March 2021

PUBLIC

Objectives



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

- Learn what prerequisites are necessary for the global track and trace option
- 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 code from Github
- Learn how to customize the logic based on sample code

Agenda

A Prerequisites

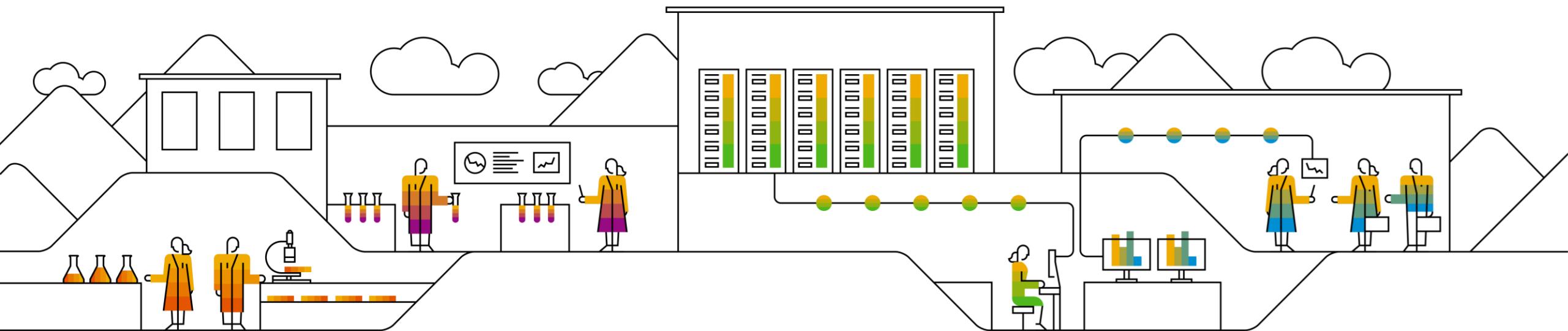
B Configuration and Implementation - Basic

 B1 IDOC Configuration

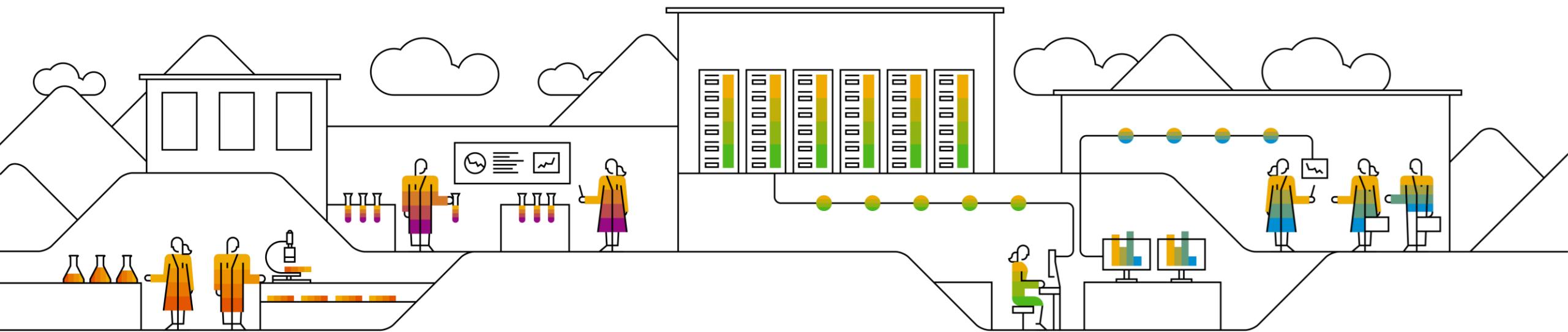
 B2 Extractor Configuration

C Download ABAP Code from GitHub

D Configuration and Coding Guide - Advanced



A) Prerequisites



STEP 1: Check the SAP Version

1-1: The SAP ERP for GTT Version 2 shall be running on NETWEAVER 7.31 or higher

1-2: SAP NOTE 2937175 shall be implemented

1-3: The ABAP codes to support sample apps for GTT Version 2 shall be implemented in S4 HANA 1909 SP03 on premise or higher, which is not validated in lower release

TIPs:

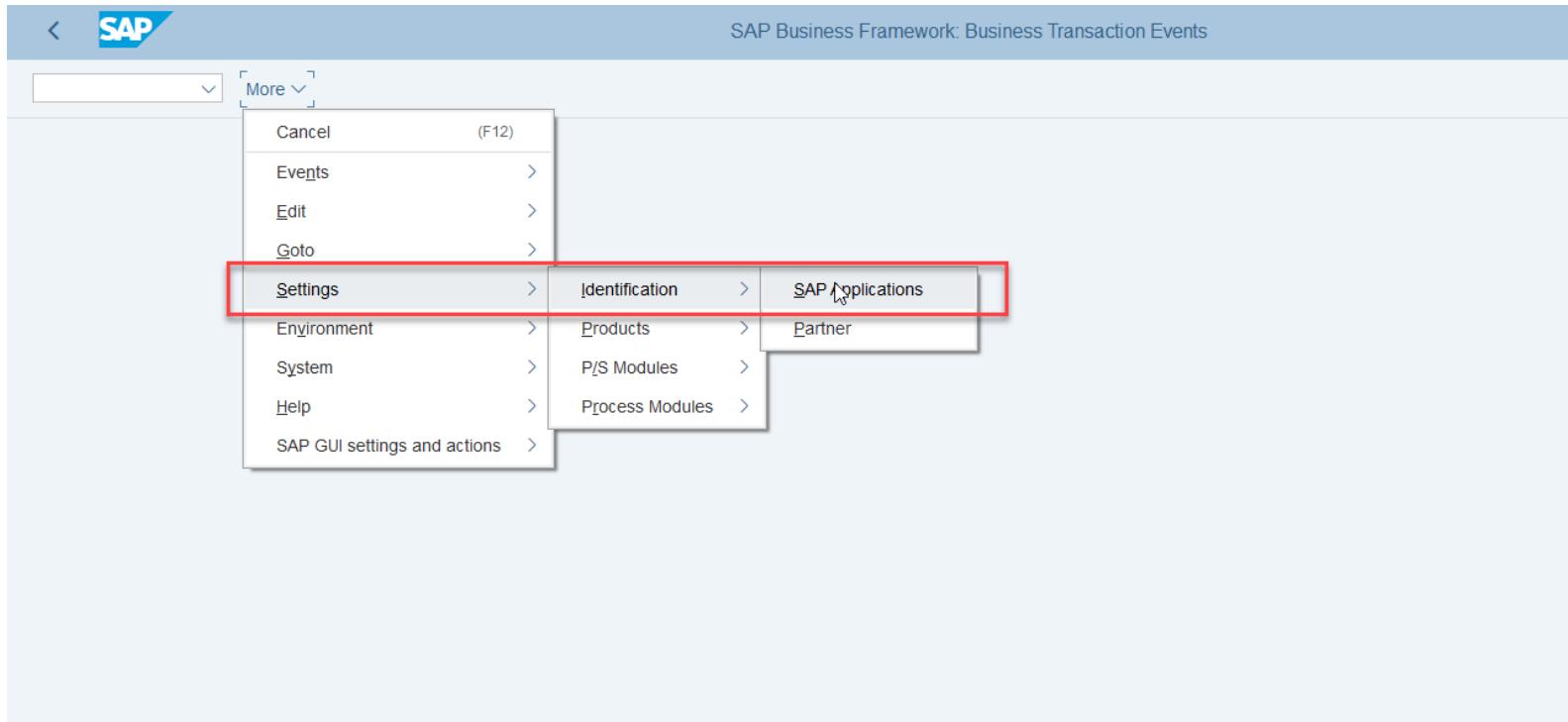
1, SAP version reference: <https://support.sap.com/en/my-support/software-downloads/support-package-stacks/product-versions.html#section>

2, Note-assistant reference: <https://support.sap.com/en/my-support/knowledge-base/note-assistant.html>

SAPNotes						
11 SAP Note(s) found						
SAP Component	Number	Versi...	Score	Title	Changed On	Status
SCM-EM-AS	2959576	1	1	Amendments to EM API for LBNTT2.0	18.08.2020	In Process
SCM-EM-AS	2937175	1	1	Enhancement of IDOCs sent to GTT	16.09.2020	Released for Customer
SCM-EM-AS	2834395	1	1	Solving ATC Issues	27.09.2019	Released for Customer
SCM-EM-AS	2819787	1	1	TM-EM integration - analyzing errors	25.07.2019	In Process
SCM-EM-AS-CNF	2798670	1	1	IMG activity inactive: Define SAP EM Extraction Functions	29.05.2019	Released for Customer
SCM-EM-AS	2609449	4	1	Delete orphaned entries in table /SAPTRX/AOTREF (2)	11.07.2019	Pilot Release
SCM-EM-AS	2502086	2	1	Aligning the BAPI processing mode with the communication mode	11.07.2017	Pilot Release
SCM-EM-AS	2339984	2	1	Orphaned EM inbound queues in application systems	18.04.2019	Released for Customer
SCM-EM-AS	2159436	1	1	Runtime-Error "ABAP Programming" when trying to save delivery. System QSC-800	22.04.2015	In Process
SCM-EM-AS	1507998	4	1	Expert Consulting in the area of SAP Event Management	09.05.2011	Released for Customer
IS-R-PUR-PCC	896191	3	1	FAQ: EM seasonal procurement (Consulting, Tips, Customizing)	13.07.2006	Released for Customer

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**

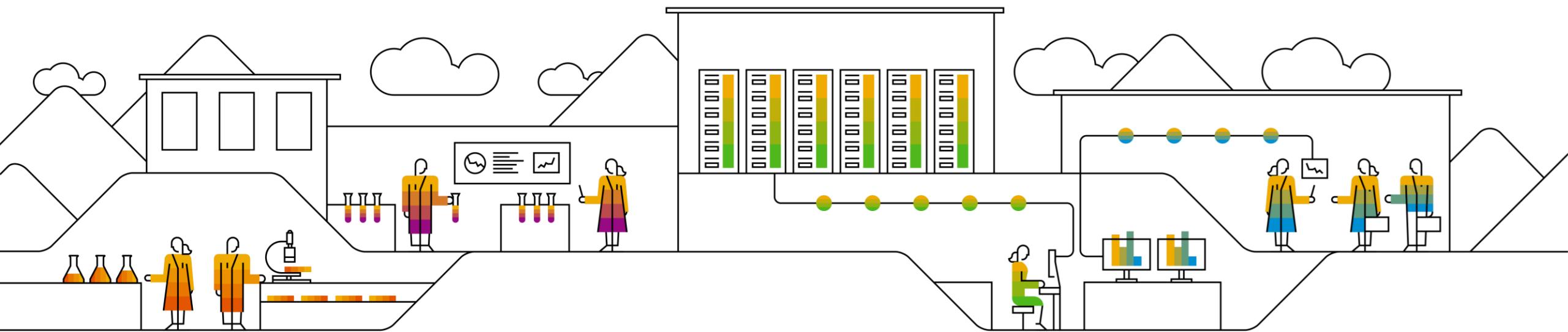
The screenshot shows a SAP application interface titled "Change View 'BTE Application Indicator': Overview". The main area is a grid table with three columns: "Appl.", "A", and "Text". The "Appl." column lists various SAP application codes, and the "A" column contains checkboxes. The row for "PI-EM" has its checkbox checked, indicating it is active. Other applications listed include PM, PM-BW, PM-EQM, PM-PAM, PM-PC, PMAT, PMIPUR, PMPUSH, PP-BD, PP-DD, PP-MRP, PRICAT, PS-REP, PSRV, QBEXT, QBEXTP, QILPO, RDSVFI, and RDSVMD. The "Text" column provides a brief description for each application. 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
PM-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
PSRV	<input checked="" type="checkbox"/>	Produkt - Service
QBEXT	<input checked="" type="checkbox"/>	External Inspection Procurement
QBEXTP	<input checked="" type="checkbox"/>	External Inspection Production
QILPO	<input checked="" type="checkbox"/>	Inspection Lot Order Integr.
RDSVFI	<input type="checkbox"/>	Dgtl.Signature Validation FI
RDSVMD	<input checked="" type="checkbox"/>	Dgtl.Signature BP Check

B) Configuration and Implementation

- Basic

B1. IDOC Configuration



STEP 1: Define RFC Connection for GTT

1-1: Log on to the business client

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

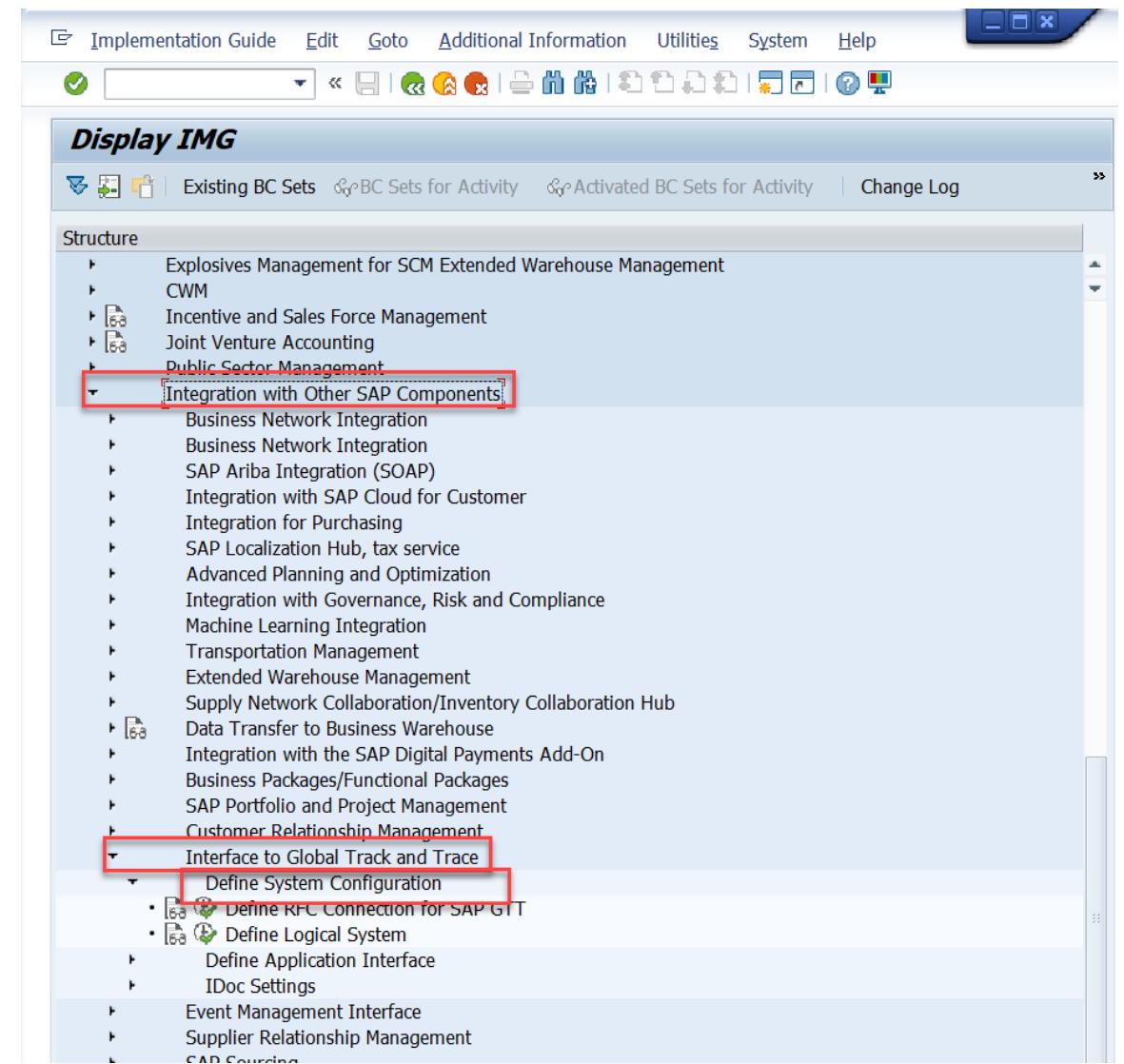
1-3: Click **Integration with Other SAP Components**

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

-> **Define System Configuration**

1-4: Choose activity:

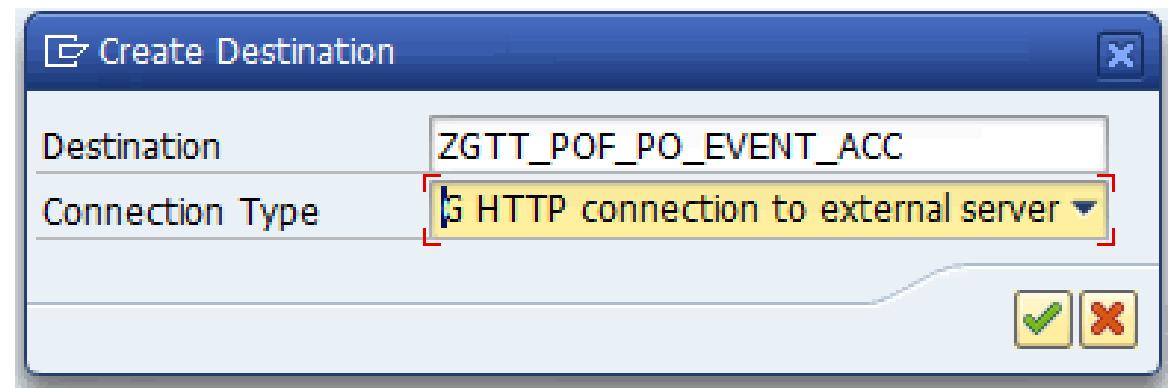
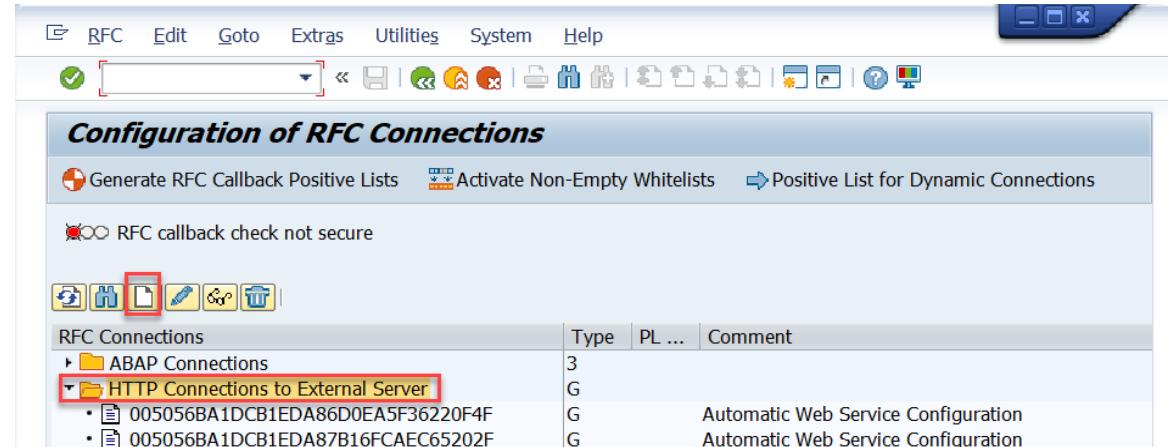
Define RFC Connection for SAP GTT



STEP 1: Define RFC Connection for GTT

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

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



STEP 1: Define RFC Connection for GTT

1-7: Enter a description

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

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

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

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

Port: 443

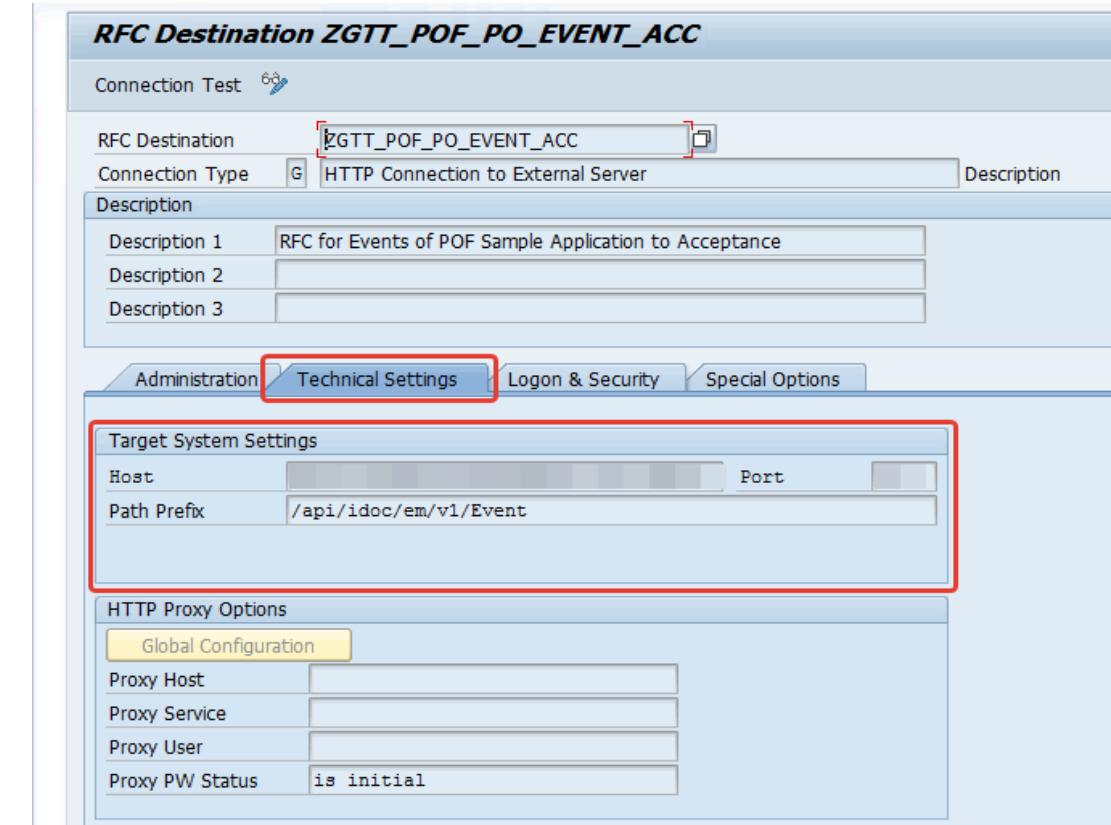
You need to configure two RFC connections separately for event and tracked process. They have different **Path Prefixes**.

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
ZGTT_POF_PO_EVENT_ACC	RFC for Events of POF Sample Application to Acceptance	sat-so-01.gtt-flp-lbnplatform-pre-live.cfapps.eu10.hana.ondemand.com/	/api/idoc/em/v1/Event	443
ZGTT_POF_PO_TP_ACC	RFC for Tracted Process of POF Sample Application to Acceptance	sat-so-01.gtt-flp-lbnplatform-pre-live.cfapps.eu10.hana.ondemand.com/	/api/idoc/em/v1/TrackedProcess	443

STEP 1: Define RFC Connection for GTT

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

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

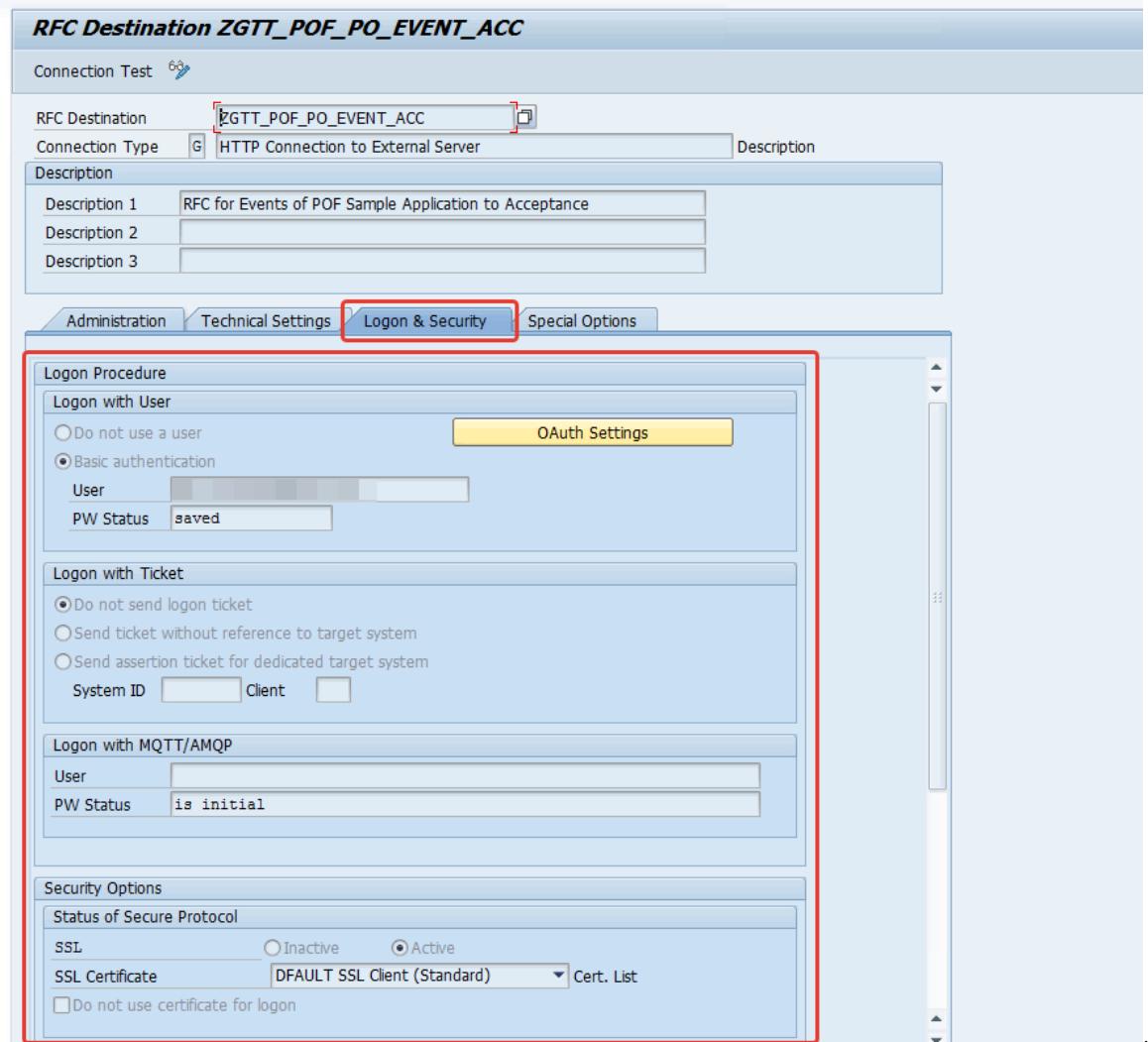
Also, SSL must be *Active*.

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

1-10: Save the configuration

Caution: You need to configure two RFC Connections:

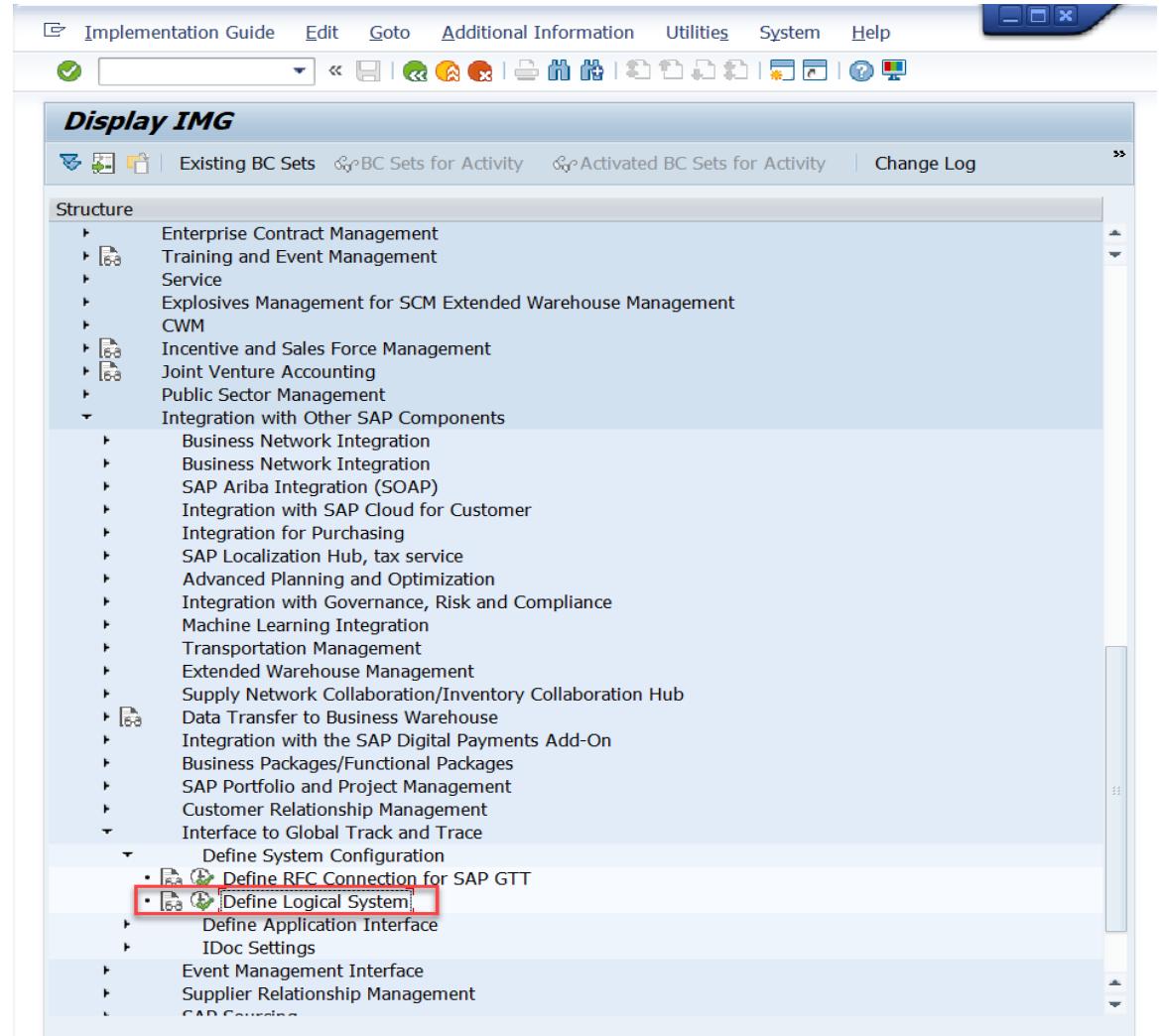
- one for event and
- the other for tracked Process.



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**

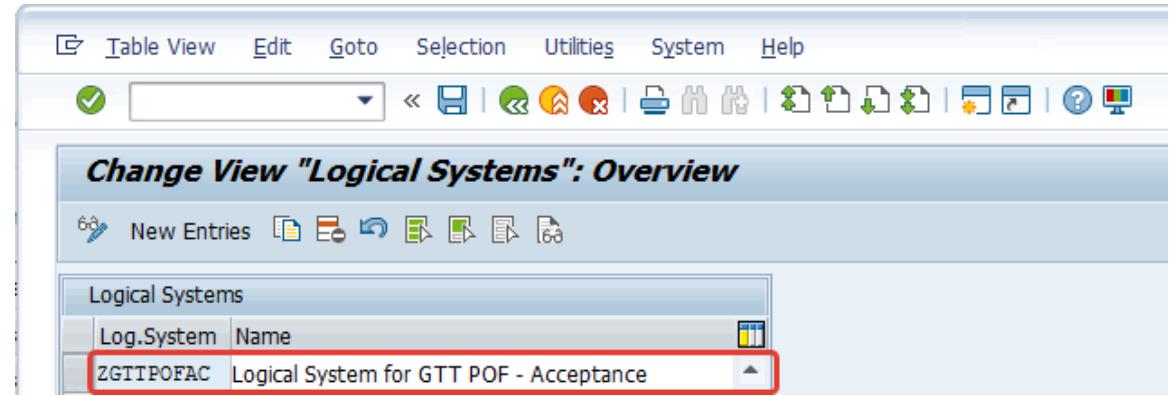


STEP 2: Define Logical System

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



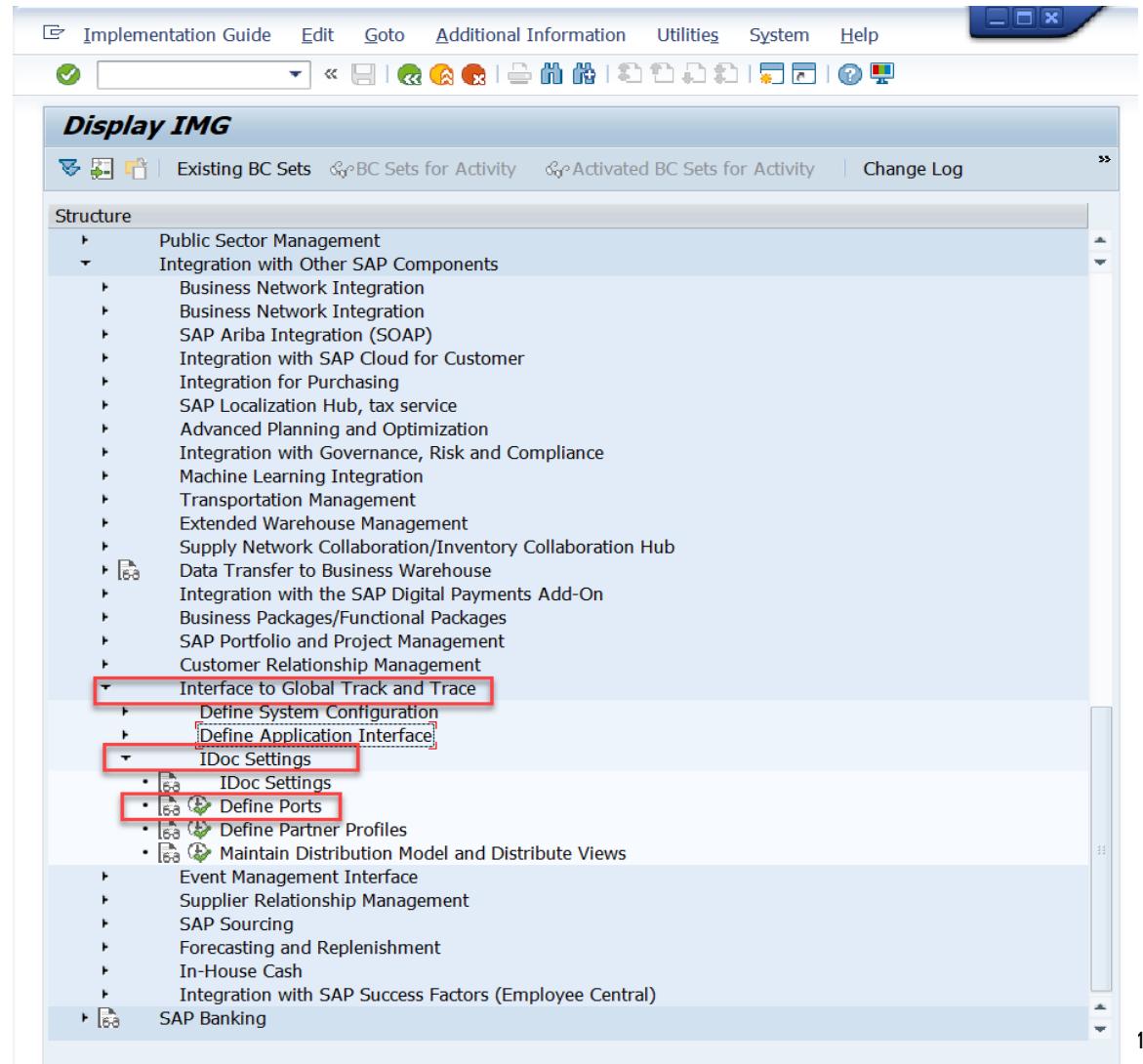
The screenshot shows the SAP Fiori interface for managing logical systems. The title bar reads "Change View 'Logical Systems': Overview". Below the title bar is a toolbar with various icons for navigation and actions. The main area is a table titled "Logical Systems" with two columns: "Log.System" and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

Log.System	Name
ZGTTPOFAC	Logical System for GTT POF - Acceptance

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

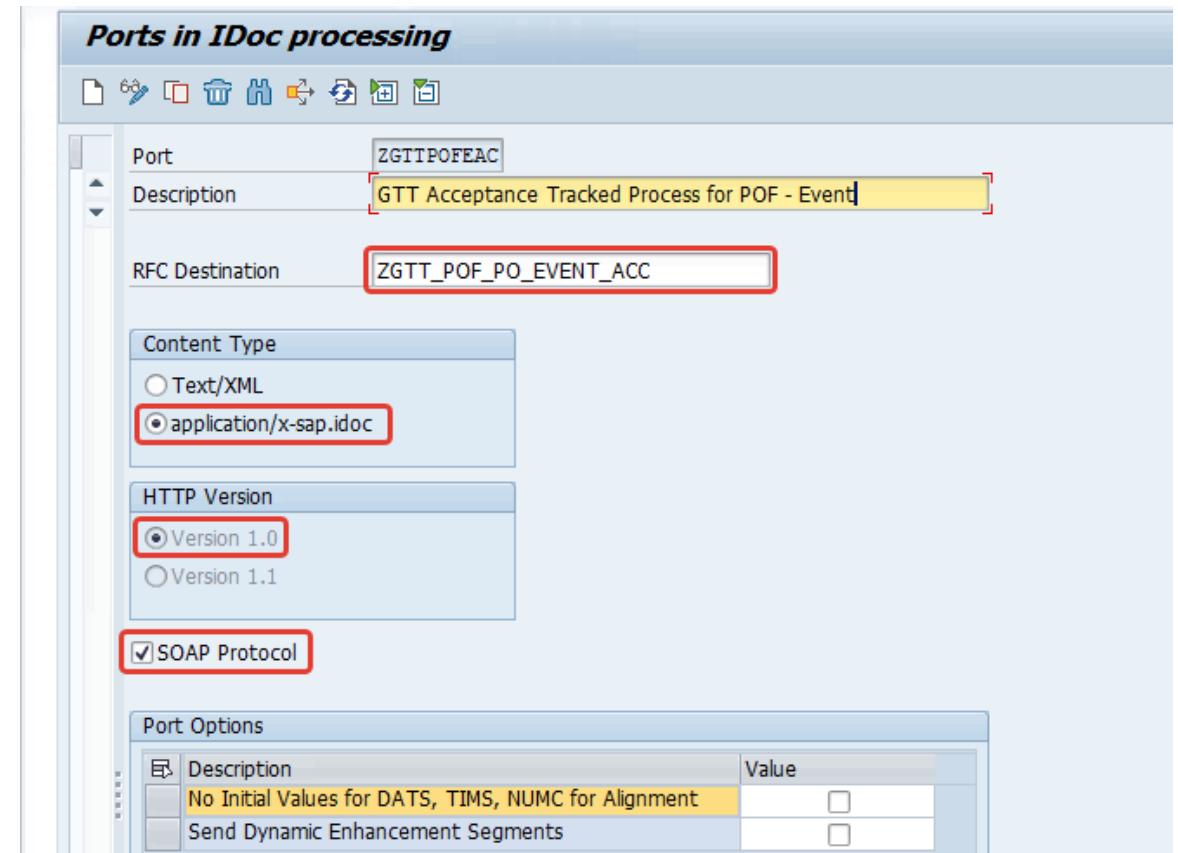
3-5: Choose **Content Type** as *application/x-sap.idoc*

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.

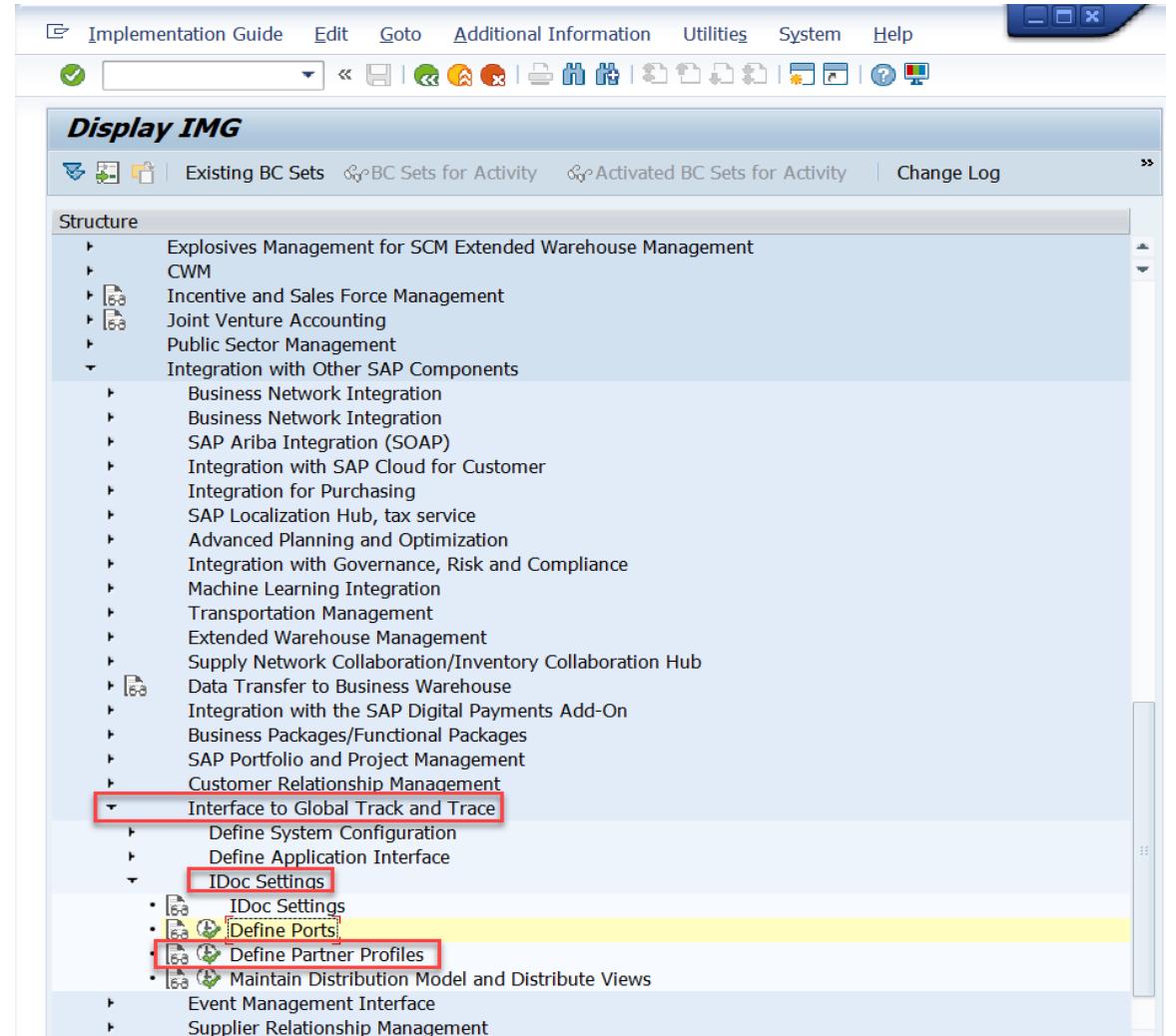


Port	Description	RFC Destination	Content Type	HTTP Version	SOAP Protocol
ZGTTPOFEAC	GTT Acceptance Tracked Process for POF - Event	ZGTT_POF_PO_EVENT_ACC	application/x-sap.idoc	Version 1.0	Checked
ZGTTPOFTAC	GTT Acceptance Tracked Process for POF - TP	ZGTT_POF_PO_TP_ACC	application/x-sap.idoc	Version 1.0	Checked

STEP 4: Define Partner Profiles

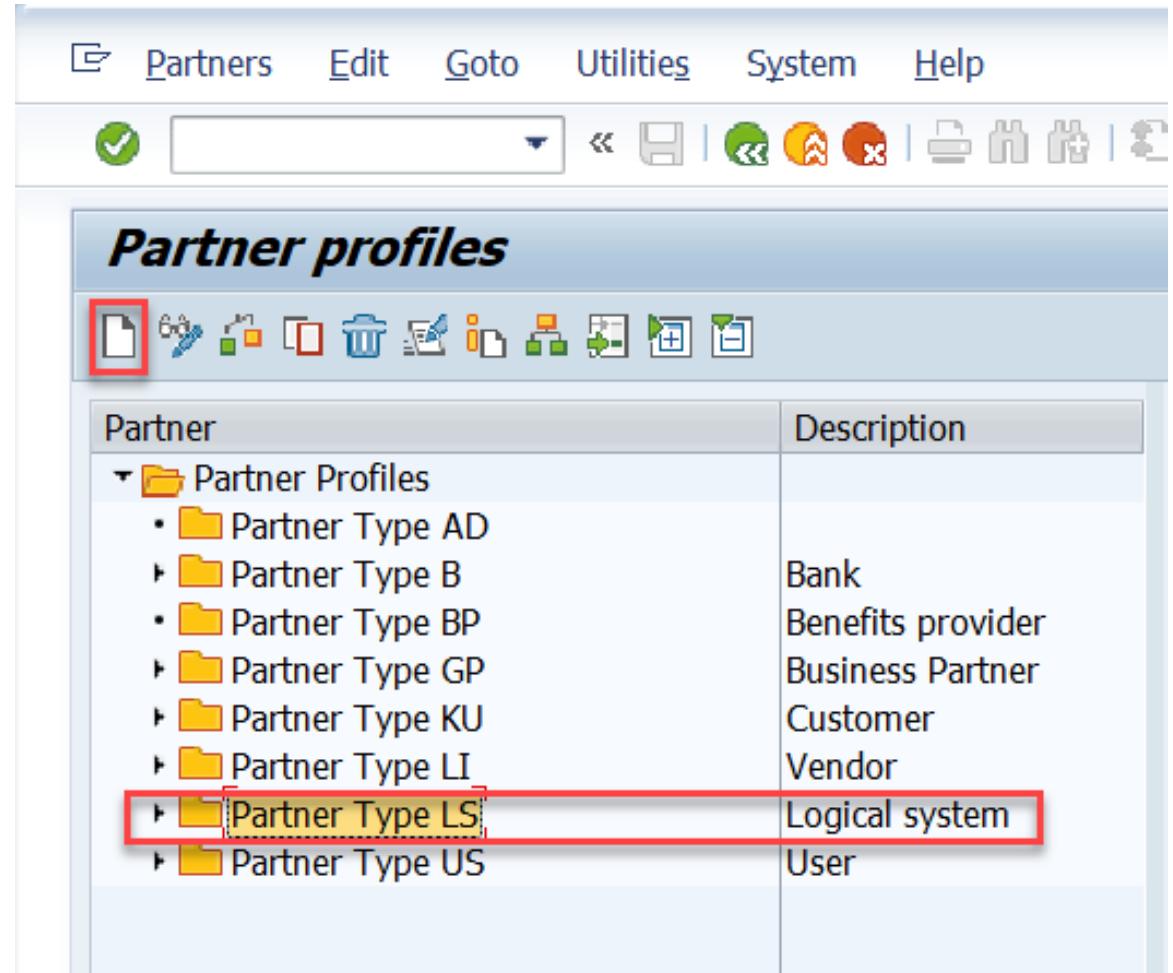
4-1: In **Display IMG** page, unfold **Integration with Other SAP Components** -> **Interface to Global Track and Trace** -> **IDoc Settings**

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



STEP 4: Define Partner Profiles

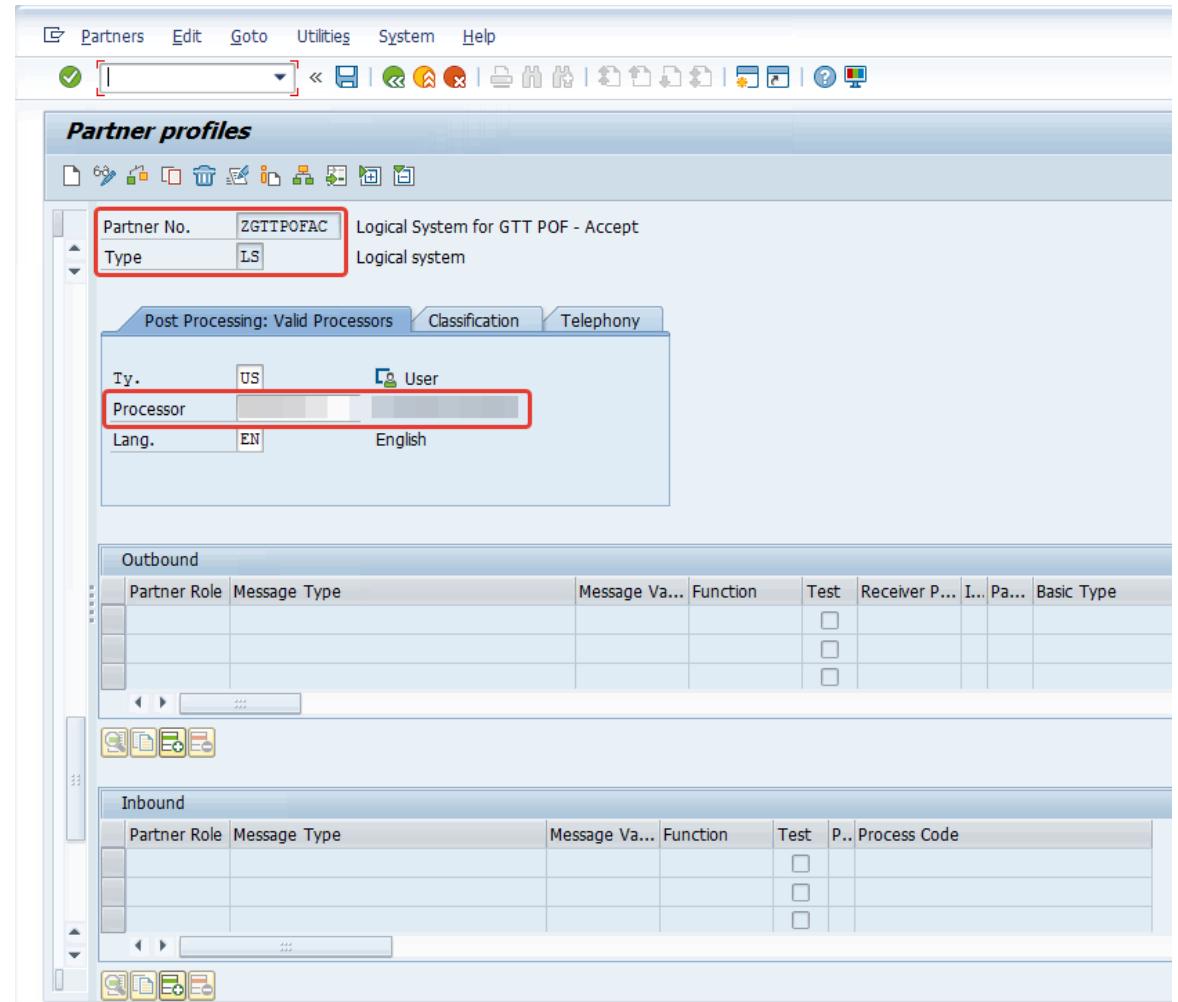
4-3: Choose **Partner Type LS** folder, and click **Create** to create a new partner profile



STEP 4: Define Partner Profiles

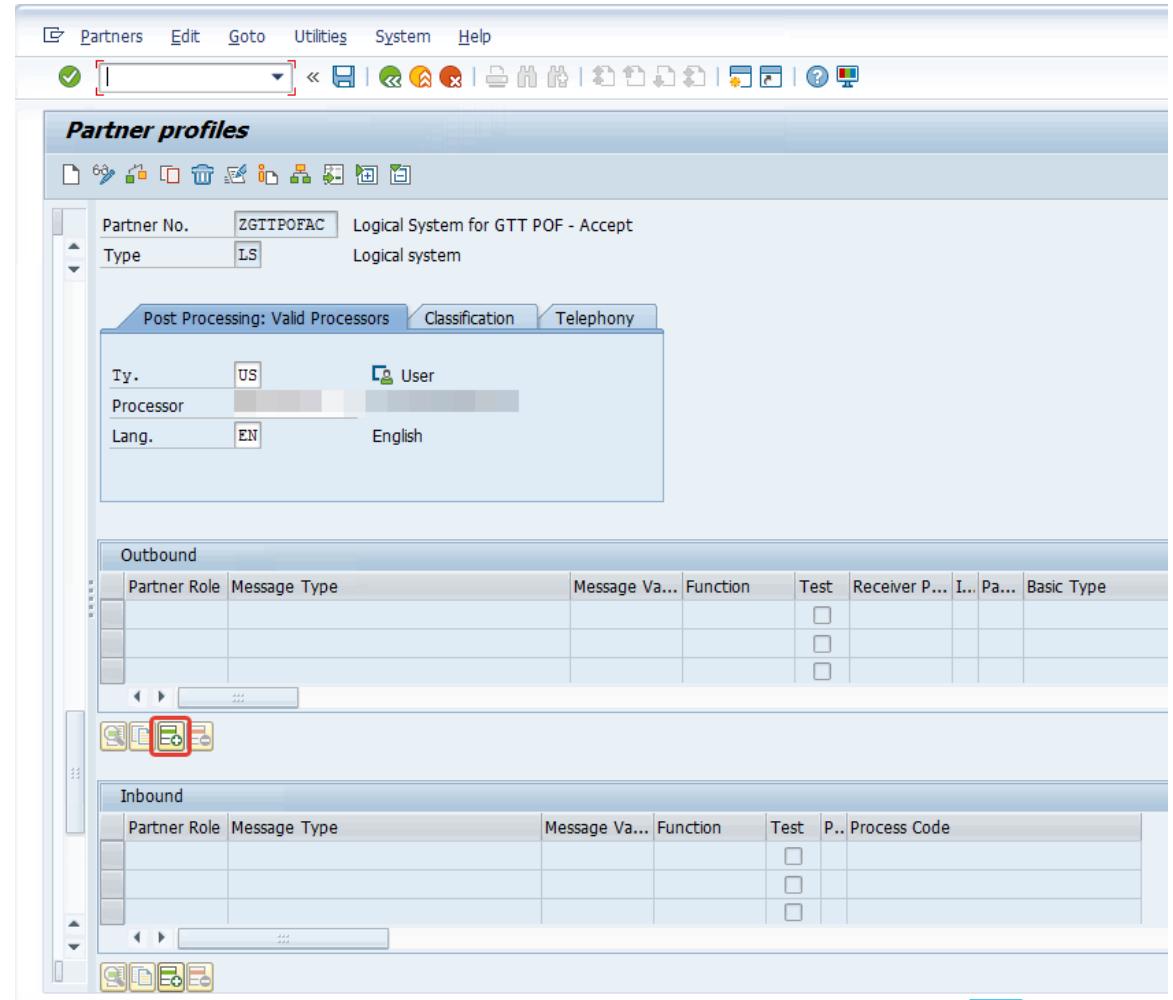
4-4: Fill in the **Partner No.** that you created in STEP 2

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



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.

Partner profiles: Outbound parameters

Partner No.	ZGTTPOFAC	Logical System for GTT POF - Accept
Type	LS	Logical system
Partner Role		
Message Type	EVMSTA	
Message Code		
Message Function		<input type="checkbox"/> Test
Outbound Options		
Receiver Port	ZGTTPOFEAC	GTT Acceptance Tracked Proc...
Pack. Size		
<input type="checkbox"/> Queue Processing		
Output Mode		
<input checked="" type="radio"/> Pass IDoc Immediately		Output Mode 2
<input type="radio"/> Collect IDocs		
IDoc Type		
Basic Type	EVMSTA02	SCEM: Event Message Input
Extension		
View		
<input checked="" type="checkbox"/> Cancel Processing After Syntax Error		
Seg. release in IDoc type		<input type="checkbox"/> Application Release

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
ZGTTPOFAC	LS	Yes	AOPOST	ZGTTPOFTAC	EHPOST01
ZGTTPOFAC	LS	Yes	EVMSTA	ZGTTPOFEAC	EVMSTA02

Partner profiles: Outbound parameters

Partner No.	ZGTTPOFAC	Logical System for GTT POF - Accept
Type	LS	Logical system
Partner Role		
Message Type	AOPOST	
Message Code		
Message Function		
<input type="checkbox"/> Test		
Outbound Options Message Control Post Processing: Valid Processors Tele...		
Receiver Port	ZGTTPOFTAC	GTT Acceptance Tracked Proc...
Pack. Size		
<input type="checkbox"/> Queue Processing		
Output Mode		
<input checked="" type="radio"/> Pass IDoc Immediately	Output Mode	2
<input type="radio"/> Collect IDocs		
IDoc Type		
Basic Type	EHPOST01	SCEM: Event Handler Posting
Extension		
View		
<input checked="" type="checkbox"/> Cancel Processing After Syntax Error		
Seg. release in IDoc type		Application Release

B) Configuration and Implementation

- Basic

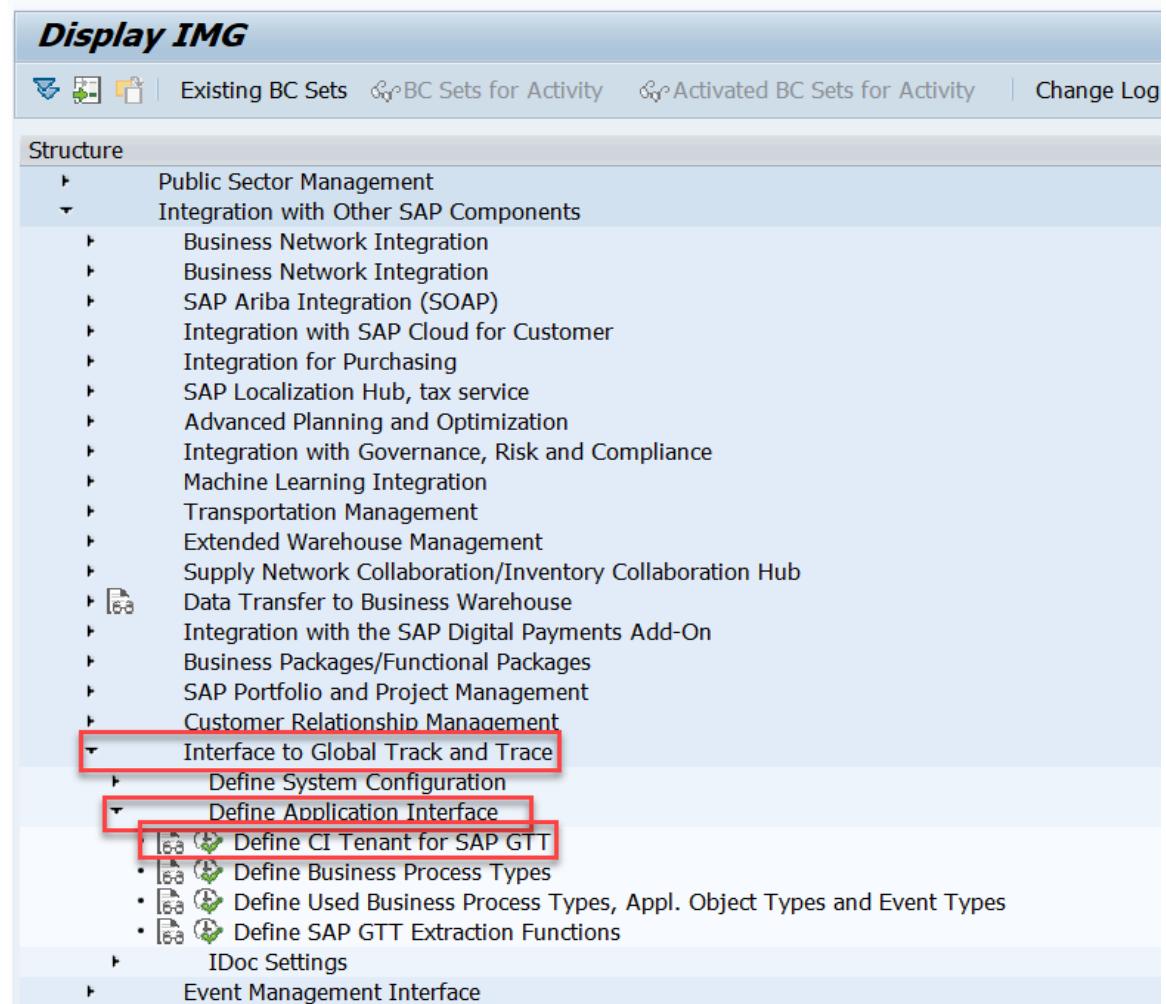
B2. Extractor Configuration



STEP 5: Define CI Tenant for GTT

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

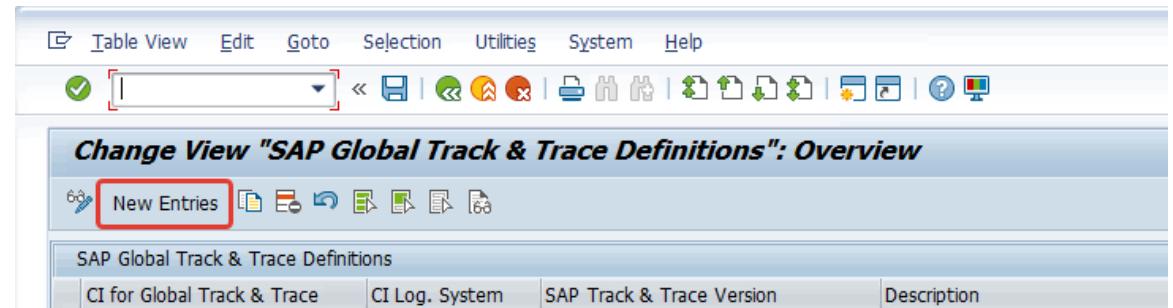
5-2: Choose activity
Define CI Tenant for SAP GTT



STEP 5: Define CI Tenant for GTT

5-3: Click **New Entries** to create a new CI tenant for GTT

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 GUI interface for managing Global Track & Trace Definitions. The title bar reads 'Change View "SAP Global Track & Trace Definitions": Overview'. The toolbar includes standard SAP icons for Table View, Edit, Goto, Selection, Utilities, System, and Help. A red box highlights the 'New Entries' button in the toolbar. Below the toolbar is a menu bar with SAP icons. The main area displays a table with columns: CI for Global Track & Trace, CI Log. System, SAP Track & Trace Version, and Description. The 'Description' column for the first row contains the text 'CI For GTT Purchasing Order Sample APP - Acceptance'.

CI for Global Track & Trace	CI Log. System	SAP Track & Trace Version	Description
ZGTTPOFAC	ZGTTPOFAC	GTT1.0 Global Track & Trace	CI For GTT Purchasing Order Sample APP - Acceptance

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

Display IMG

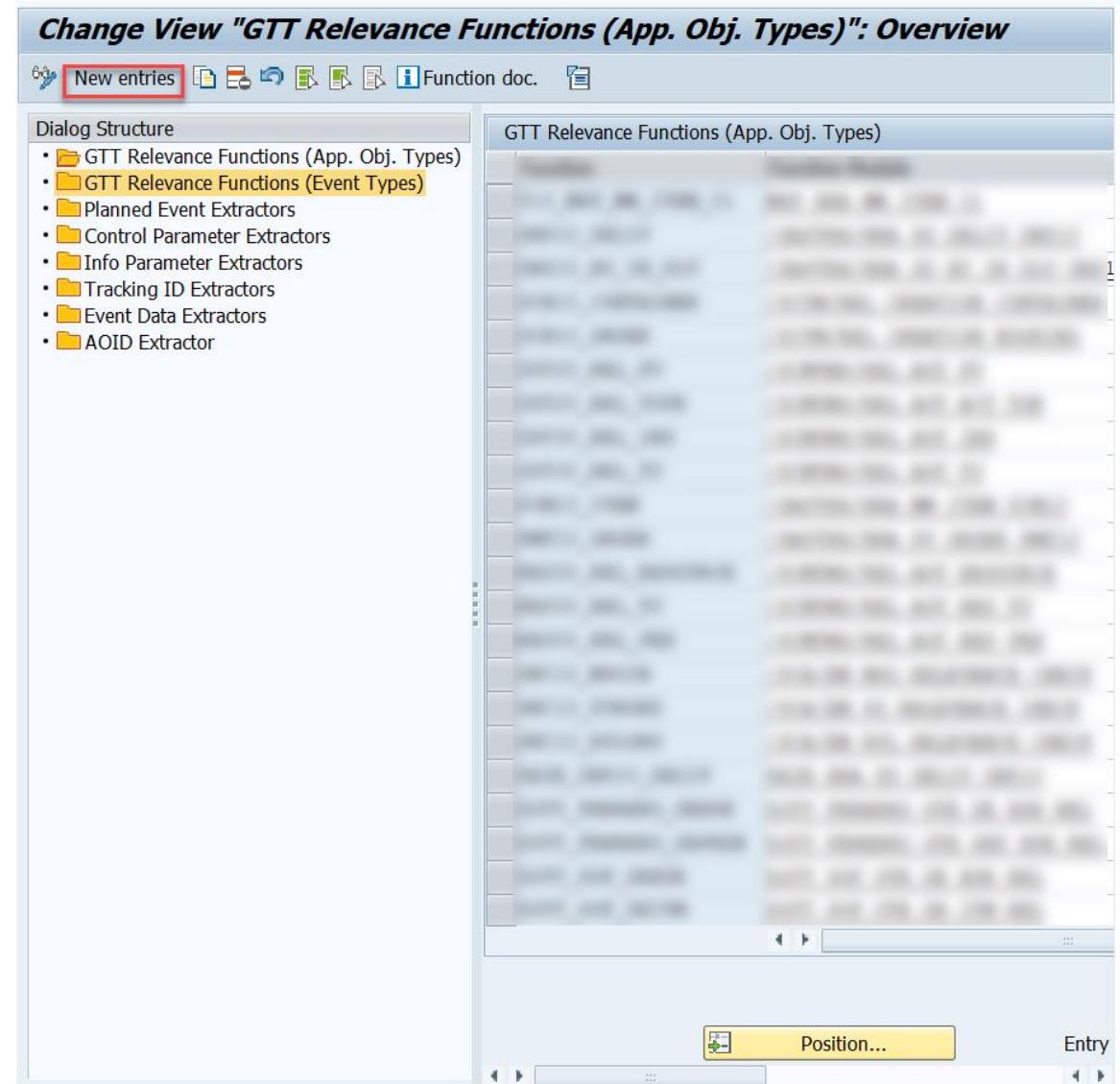
Existing BC Sets BC Sets for Activity Activated BC Sets for Activity Change Log

Structure

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

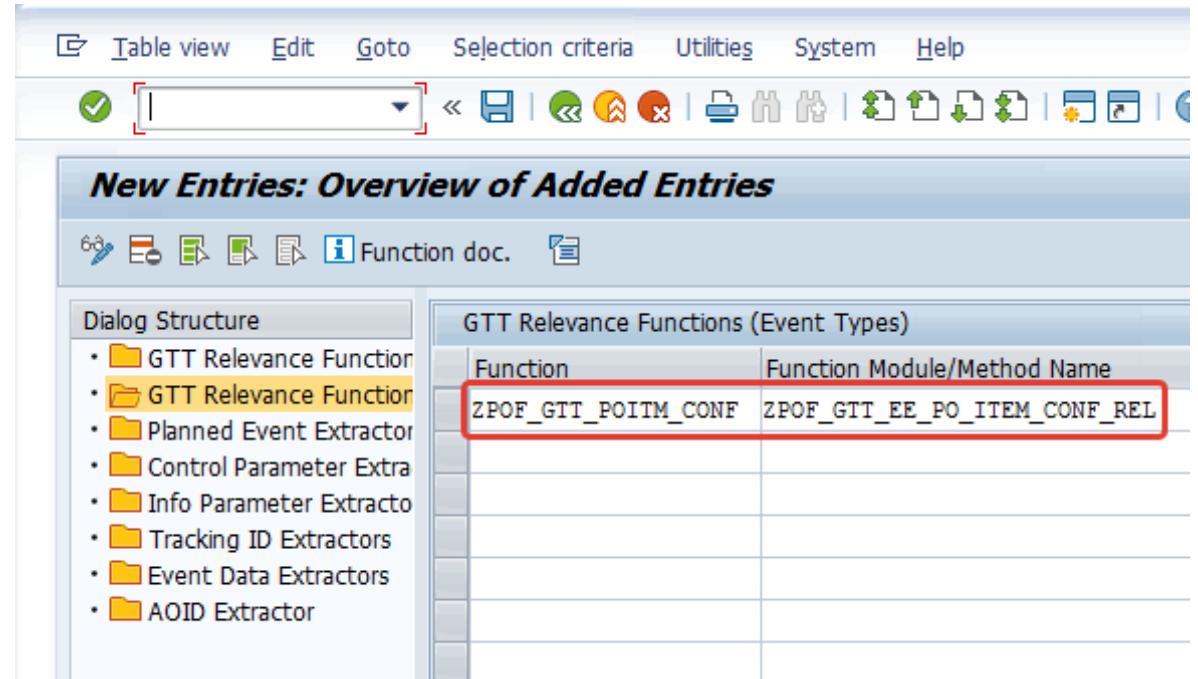
STEP 6: Define GTT Extraction Functions

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

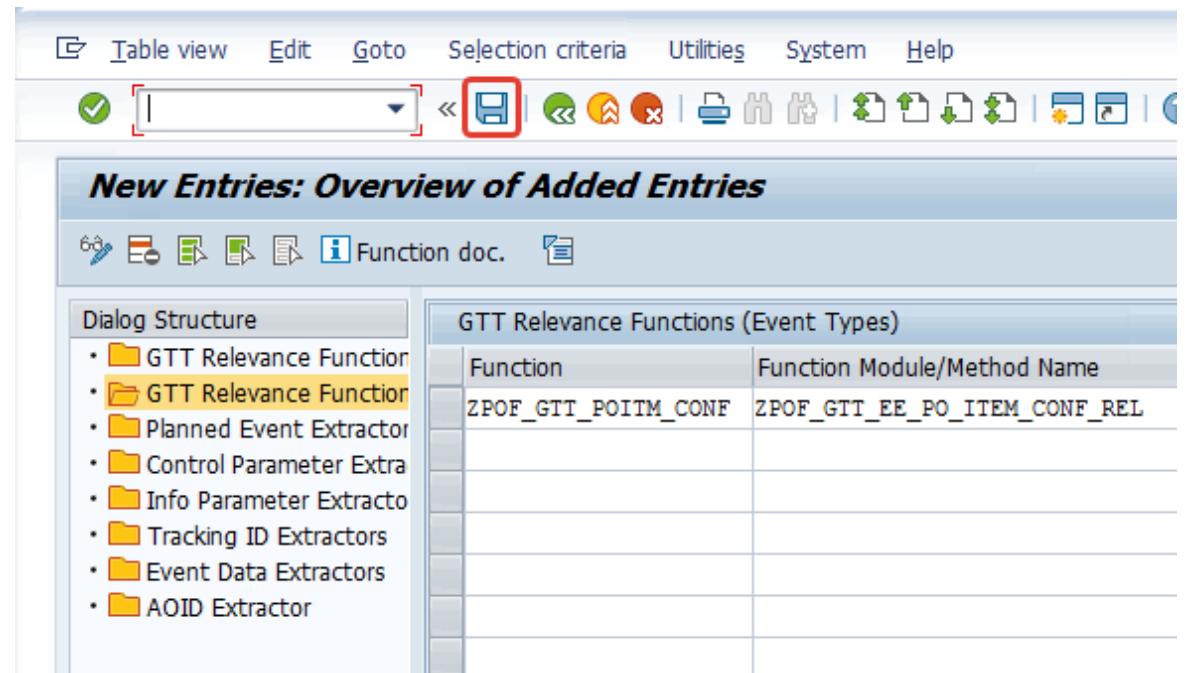
6-4: Input the **Function name** and **Function Module** for the newly created extraction function



GTT Relevance Functions (Event Types)	
Function	Function Module/Method Name
ZPOF_GTT_POITM_CONF	ZPOF_GTT_EE_PO_ITEM_CONF_REL

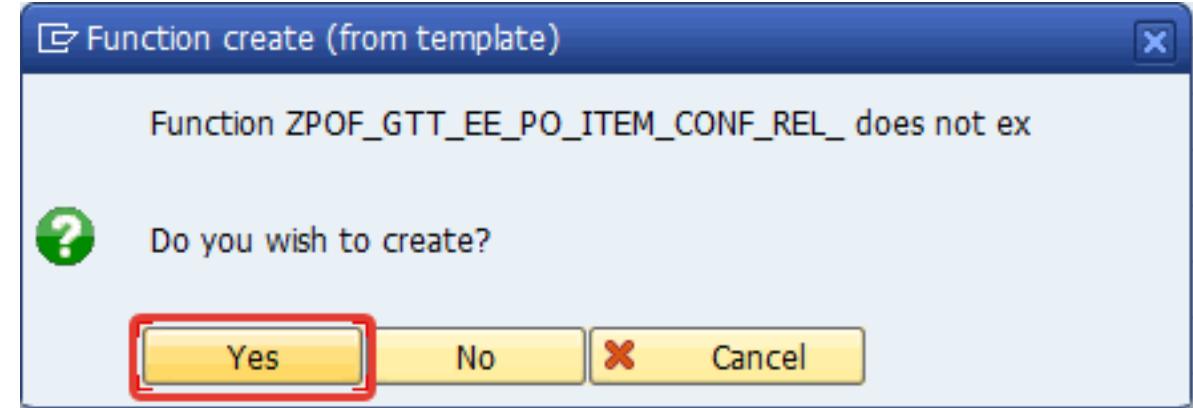
STEP 6: Define GTT Extraction Functions

6-5: Click Save



STEP 6: Define GTT Extraction Functions

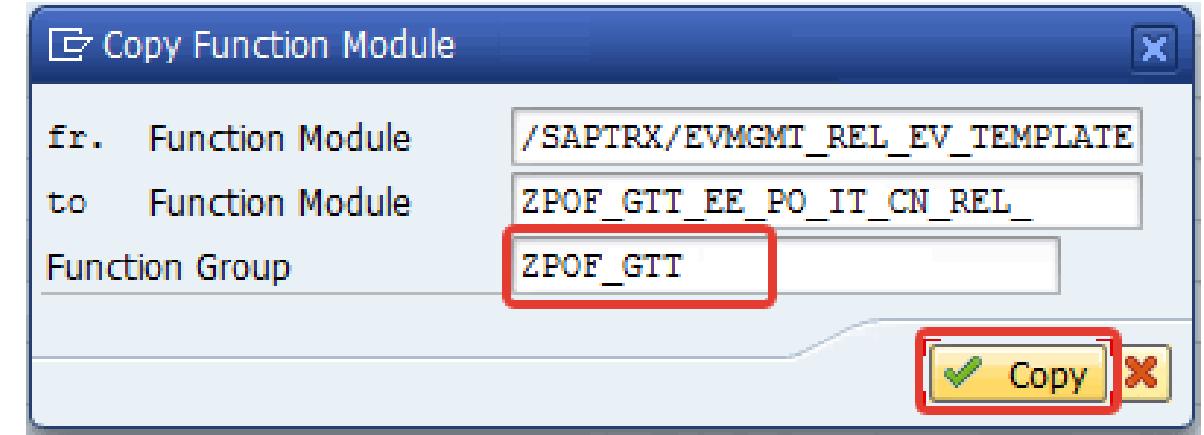
6-6: If the function module you use to create the extraction function has not been created yet, then a dialog reminds you to create the function module. Click **Yes** in the dialog box.



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.

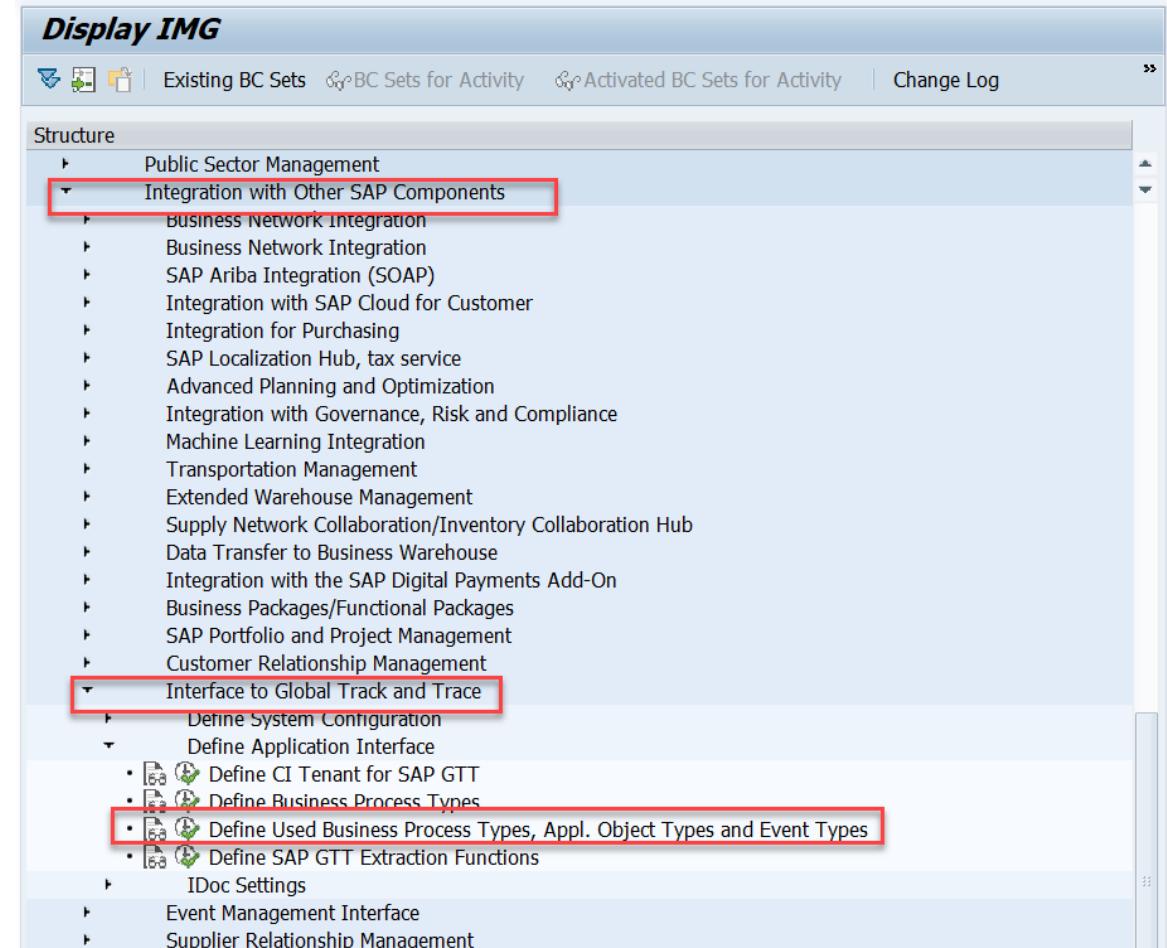
The screenshot shows the SAP SE80 Function Builder interface. The title bar reads "Function Builder: Display ZPOF_GTT_EE_PO_IT_CN_REL_". The left pane is a "Repository Browser" with a "Function Group" dropdown set to "ZPOF_GTT" (highlighted with a red box). The right pane displays the source code for the function module "ZPOF_GTT_EE_PO_IT_CN_REL_". The code is as follows:

```
1 FUNCTION ZPOF_GTT_EE_PO_IT_CN_REL_.
2   *--> Local Interface:
3   *--> IMPORTING
4   *-->   REFERENCE(I_APPSYS) TYPE /SAPTRX/APPLSYSTEM
5   *-->   REFERENCE(I_EVENT_TYPES) TYPE /SAPTRX/EVTYPES
6   *-->   REFERENCE(I_ALL_APPL_TABLES) TYPE TRXAS_TABCONTAINER
7   *-->   REFERENCE(I_EVENTTYPE_TAB) TYPE TRXAS_EVENTTYPE_TABS_WA
8   *-->   REFERENCE(I_EVENT) TYPE TRXAS_EVT_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  ENDFUNCTION.
```

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**

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 2.0
ESC_SHIPMT	Update Task ...	Active	Shipment (SAP R/3 Enterprise)
ESC_SORDER	Update Task ...	Active	Sales Order in SAP R/3 Enterprise
ESC_WRKORD	Update Task ...	Active	Workorder (Production, Service, Maintenance) in SAP R/3 Enterprise
OCB10_ORDER	Dialog Update	Active	Booking Order in Ocean Carrier Booking Process
SNC_MSGIN	Dialog Update	Active	SNC Inbound messages
SNC_PURORD	Dialog Update	Active	SNC Purchase Order
SNC_RPLORD	Dialog Update	Active	SNC Replenishment Order
TMS_INS	Update Task ...	Active	Instructions (SAP TM)
TMS_RES	Update Task ...	Active	Resources (SAP TM)
TMS_TOR	Update Task ...	Active	Transportation Order (SAP TM)

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

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

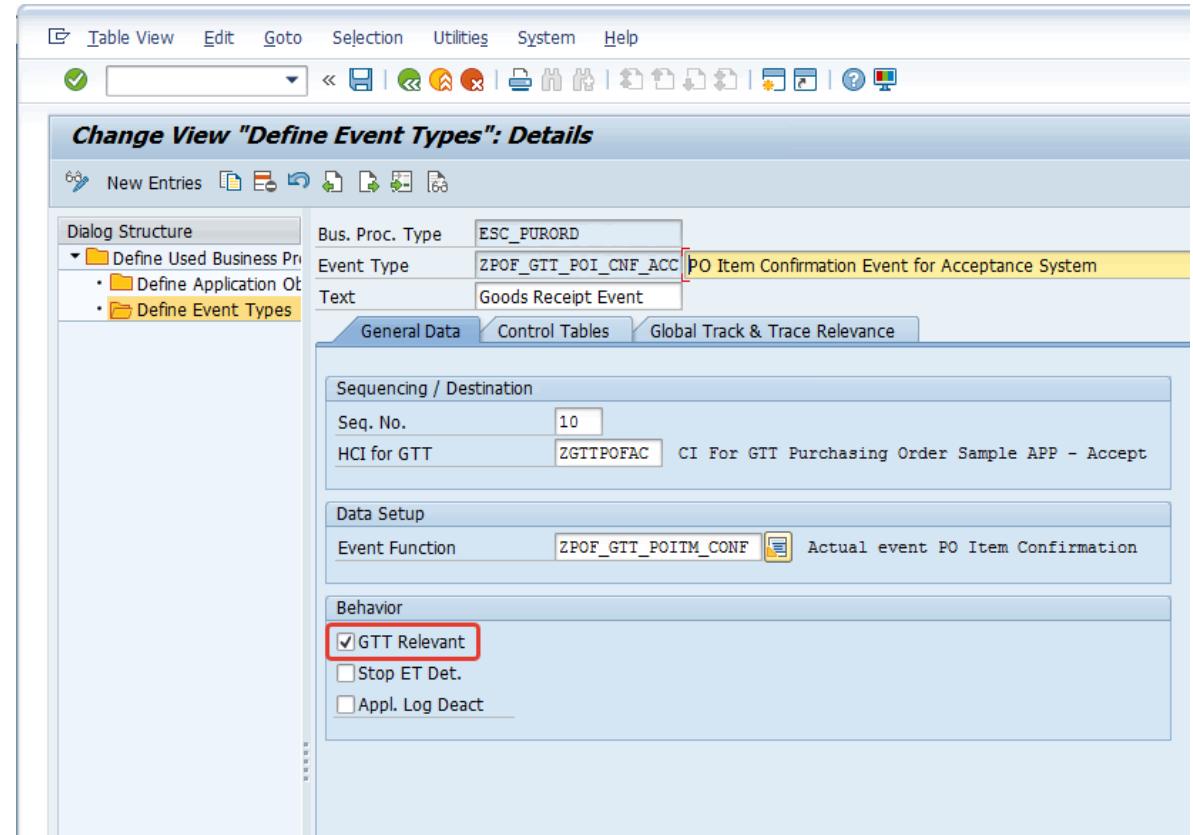
Business Process Type	Event Type	Description
ESC_PURORD	ZPOF_GTT_POI_DEL_ACC	PO Item Confirmation Event for Acceptance System
ESC_PURORD	ZPOF_GTT_POI_DEL_ACZ	PO Item Confirmation Event for Azure System
ESC_PURORD	ZPOF_GTT_POI_DEL_INT	PO Item Confirmation Event for Integration System

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**



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

Bus. Proc. Type	ESC_SHIPMT	
Event Type	ZPOF_GTT_SHH_ARR_ACC	Shipment Header Arrival Event for Acceptance System
Text	Arrival Event	
General Data Control Tables Global Track & Trace Relevance		
Data Source for Events		
Main Obj. Table	SHIPMENT_HEADER_NEW	Event on Header Level
Master Table		
Old Main Obj. Table	SHIPMENT_HEADER_OLD	
Old Master Table		

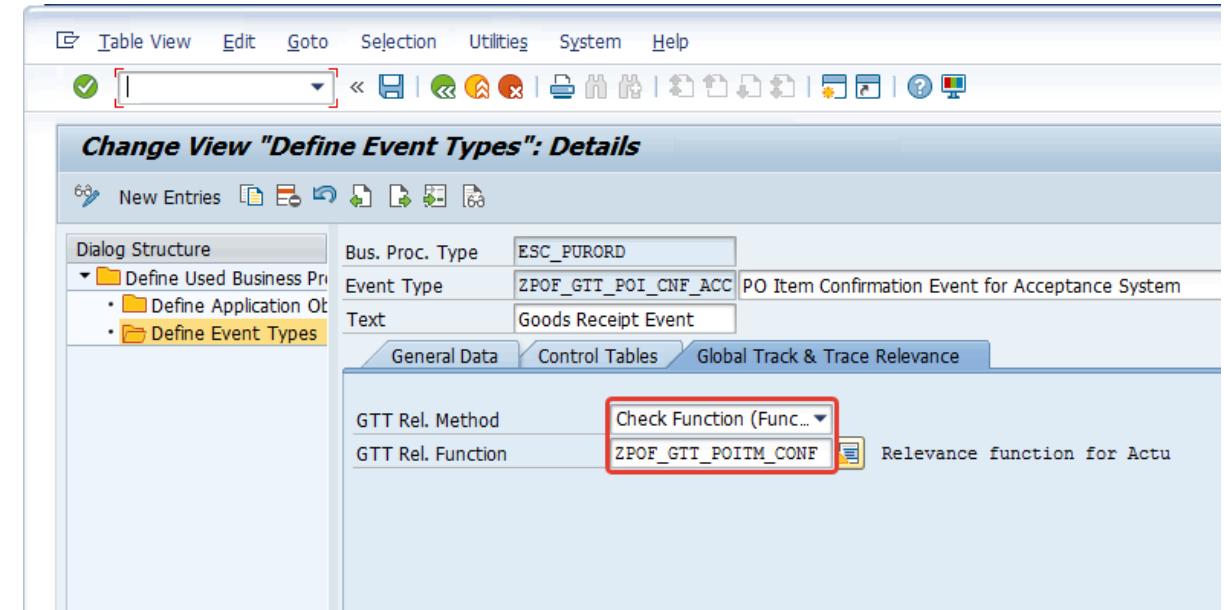
Bus. Proc. Type	ESC_PURORD	
Event Type	ZPOF_GTT_POI_CNF_ACC	PO Item Confirmation Event for Acceptance System
Text	Goods Receipt Event	
General Data Control Tables Global Track & Trace Relevance		
Data Source for Events		
Main Obj. Table	PURCHASE_ITEM_NEW	Event on Item Level
Master Table	PURCHASE_ORDER_HEADER_NEW	
Old Main Obj. Table	PURCHASE_ITEM_OLD	
Old Master Table	PURCHASE_ORDER_HEADER_OLD	
Reference Between Main and Master Table		
First Field Reference from Main to Master Table		
Uplink Field	EBELN	Uplink Mode <input checked="" type="checkbox"/> R
Uplink Target Fld	EBCIN	Uplink Const

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**.



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

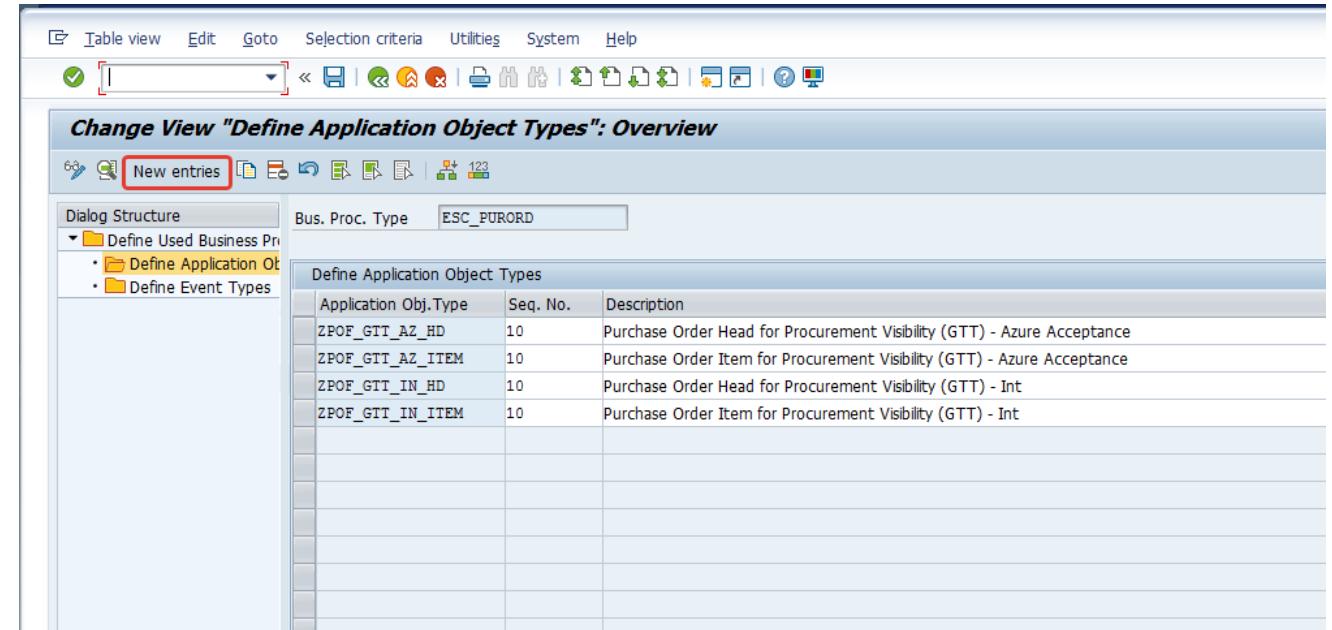
7-11: Choose the business process type from the **Define Used Business Process Types** on the right side

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

Bus. Proc. Type	Update Mode	BPT Process Mode	Description
EPI_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 2.0
ESC_SHIPMT	Update Task...	Active	Shipment (SAP R/3 Enterprise)
ESC_SORDER	Update Task...	Active	Sales Order in SAP R/3 Enterprise
ESC_WRKORD	Update Task...	Active	Workorder (Production, Service, Maintenance) in SAP R/3 Enterprise
OCB10_ORDER	D Dialog Upd...	Active	Booking Order in Ocean Carrier Booking Process
SNC_MSGIN	D Dialog Upd...	Active	SNC Inbound messages
SNC_PURORD	D Dialog Upd...	Active	SNC Purchase Order
SNC_RPLORD	D Dialog Upd...	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

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

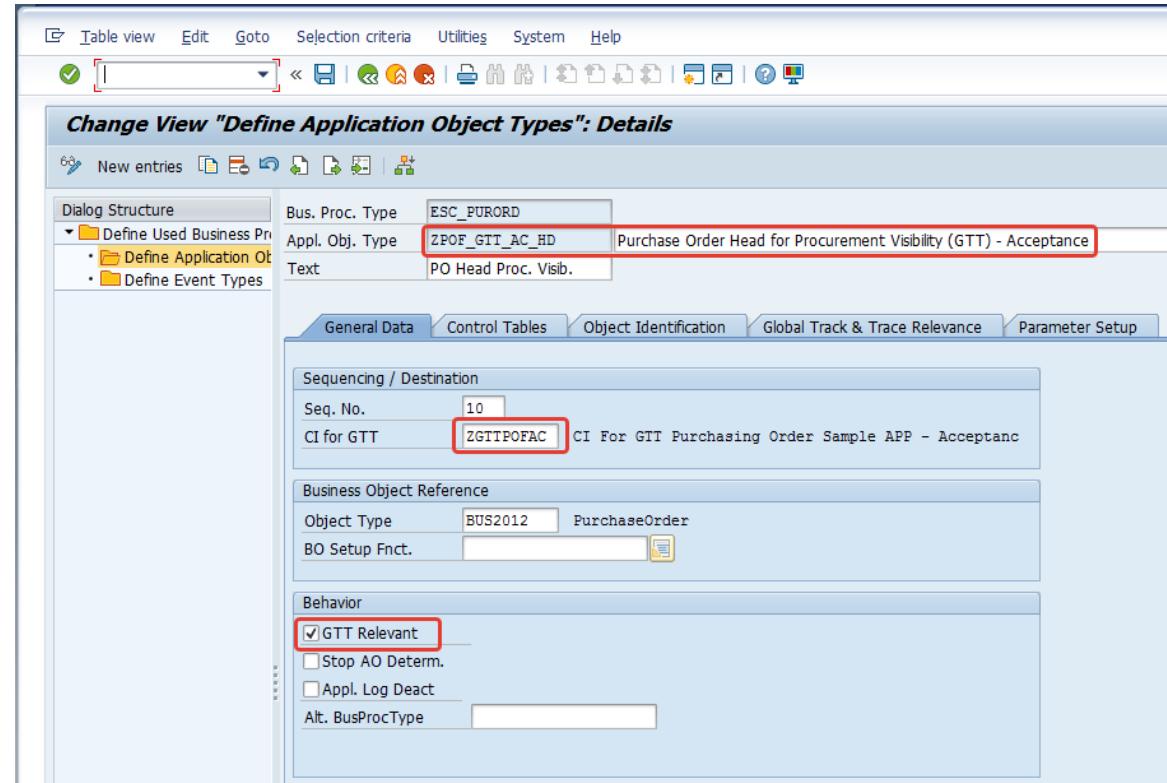


STEP 7: Define Used Business Process Types, Appl. Object Types and Event Types

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**

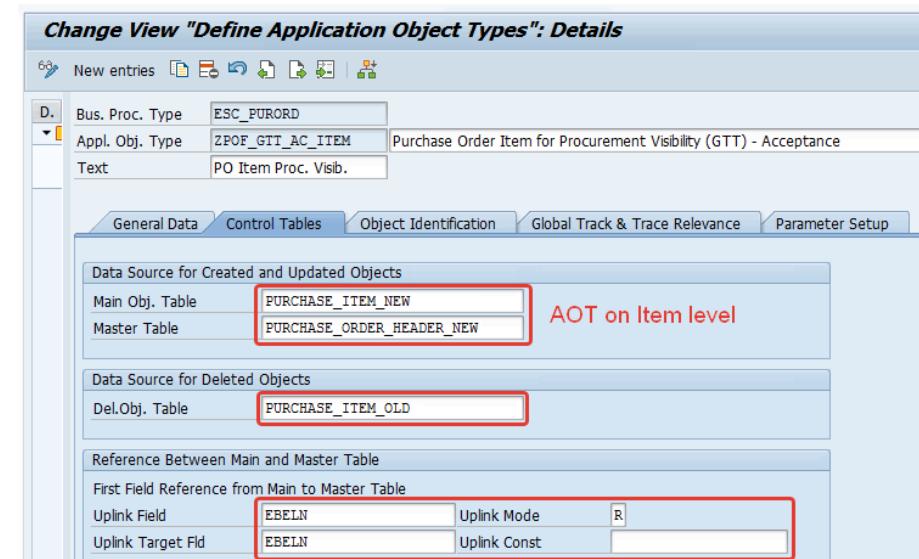
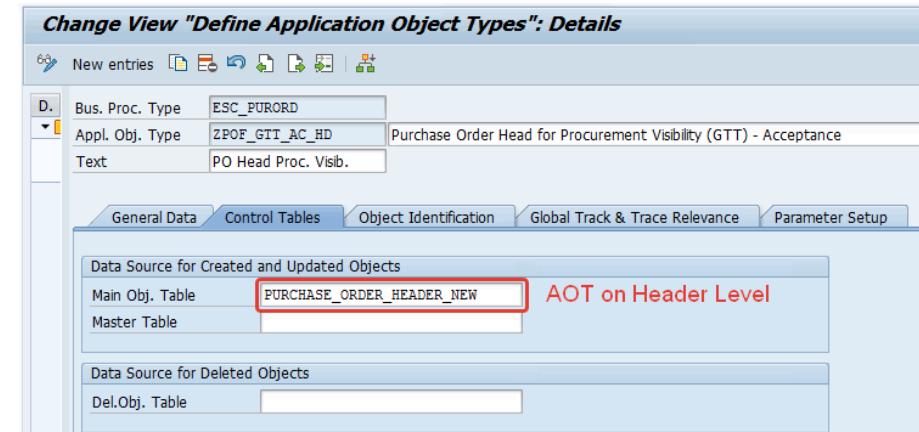


STEP 7: Define Used Business Process Types, Appl. Object Types and Event Types

7-17: Fill in the **Main Object table** and **Master Table**

Caution:

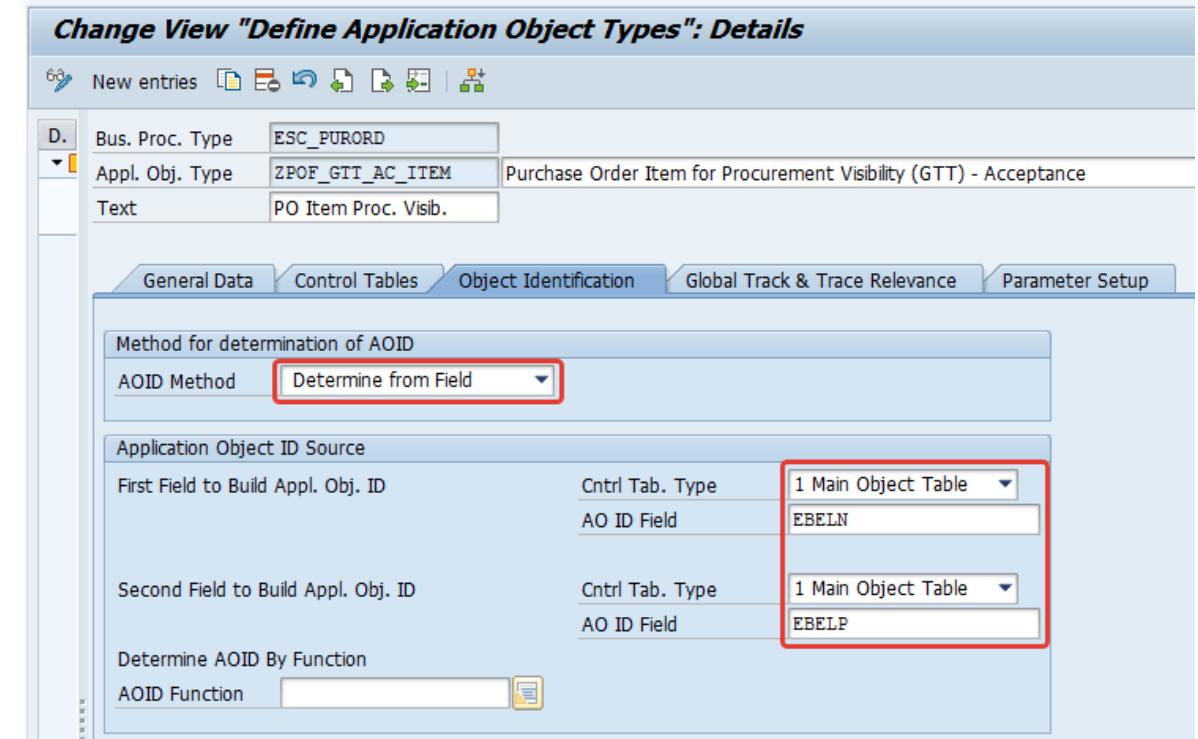
If the event type or application object type is on the header level, then you only need to assign the **Main Object Table**. Otherwise, if the event type or application object type is on the item level, then you need to assign the **Main Object Table** and **Master Table**, and assign the reference between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



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* and use the key field to fill in the AO ID fields.

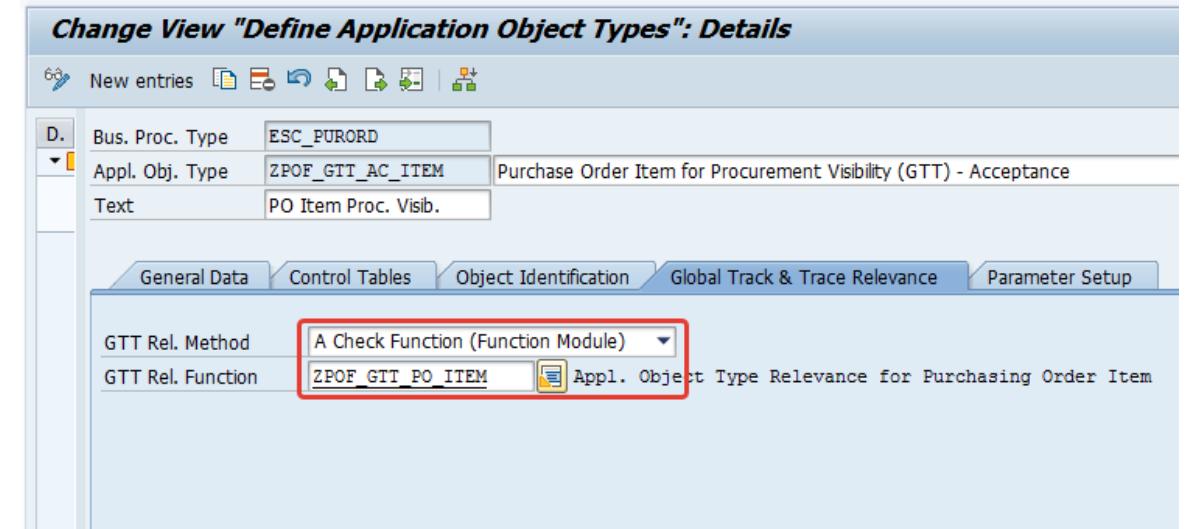
7-19: When choosing *Determine by Function*, you must enter the customized information in the AOID Function field.



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**, you need to define a relevance function according to STEP 6, and fill in the relevance function name here.



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

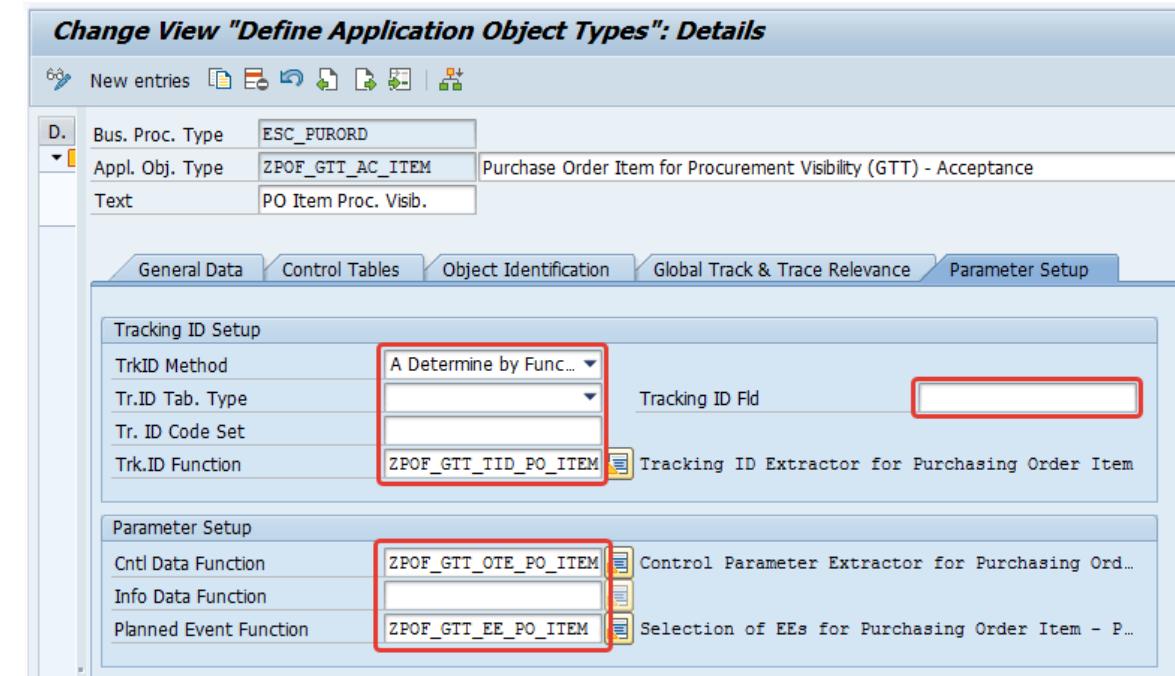
7-21: In the **Parameter Setup** tab, choose the **TrkID Method** as you need.

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 fill in the key field and name the Code Set for the AOT.

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

Click **Save**.



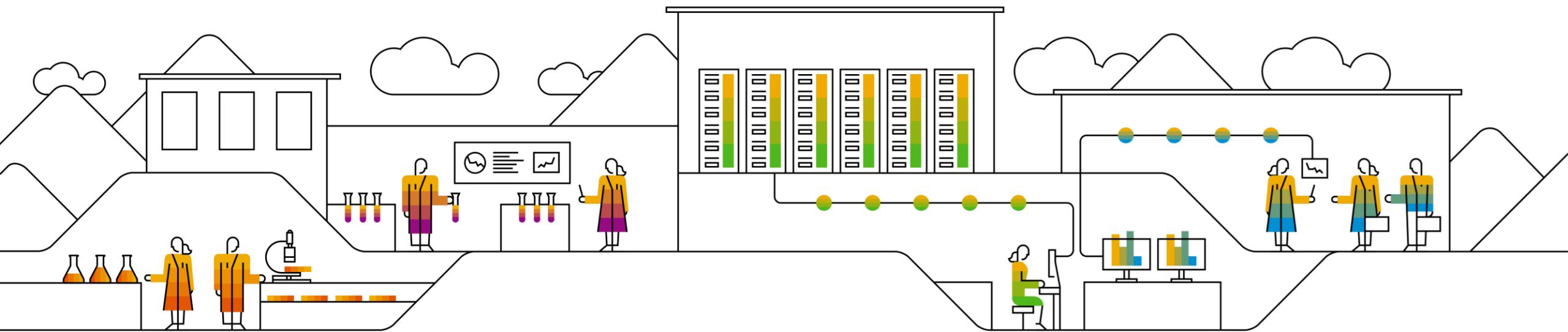
C) Download ABAP Code from GitHub

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

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

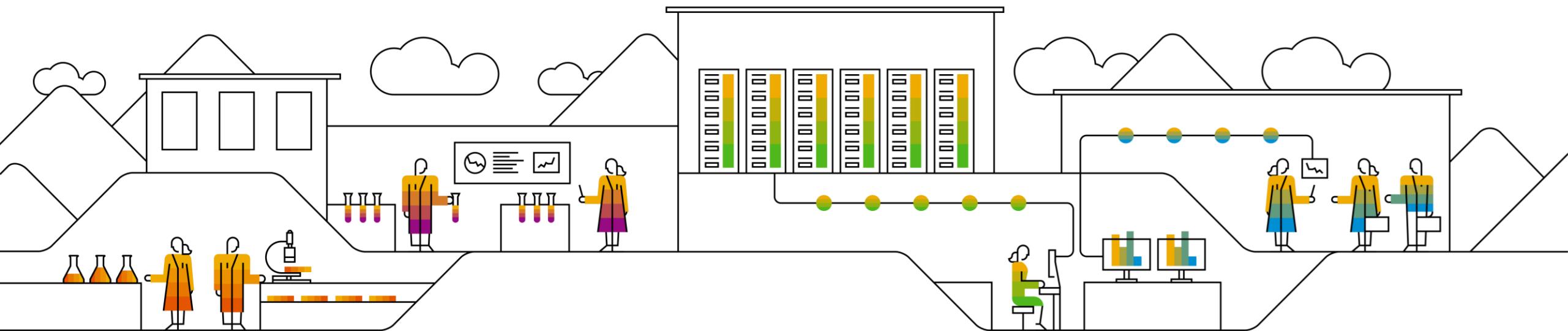
C3. Download Another ABAP Code from GitHub (TSOF)

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 TPOF)



STEP 1: Install ABAPGit

You need to install ABAPGit before downloading codes from GitHub.

To install ABAPGit, follow the instructions at <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*.

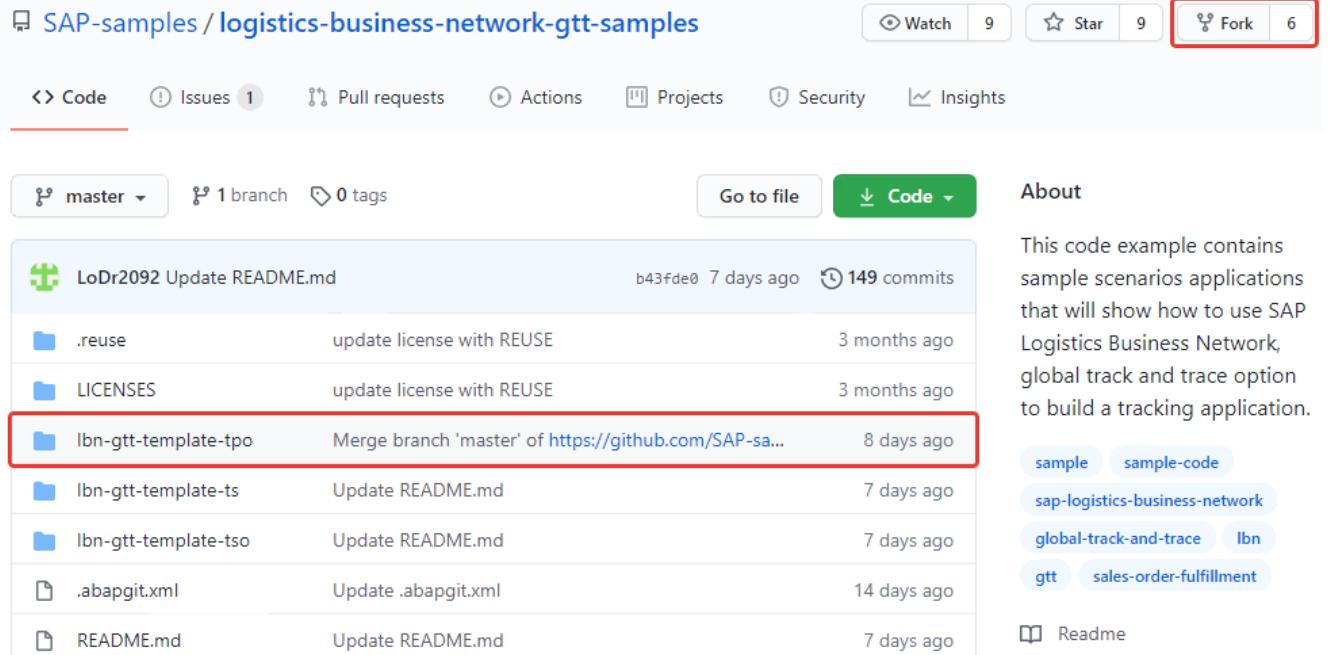
Note: ABAPGit version 1.105.0 is used to create this guide. In case you use different version of ABAPGit, you may face distinctions in interface of the app.

The screenshot shows the abapGit documentation page. The header reads "abapGit › documentation". The left sidebar has sections for "Getting Started" (Installation, Upgrading, Uninstalling, UI features), "Setup" (SSL setup, Proxy configuration, Development version), "Online Projects" (Installing online repo, Keeping code up to date, Uninstall repository, First project, Moving package into git, Contributing to a project), "Offline Projects" (Import zip, Export zip), and "Reference" (Repo Settings (abapgit.xml), Supported object types, Icon Legend, User Exits, Authorizations, Namespaces). The main content area starts with a "Summary" section stating that abapGit exists in two flavours: standalone or developer version. It then describes the standalone version as targeted for users and the developer version as targeted for developers. Below this is a "Prerequisites" section mentioning 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 via Utilities > More Utilities > Upload/Download > Upload, 4. Activate. A note below says abapGit is typically used in development systems and can be installed in a local \$ package. A final note says abapGit can be used 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 code into the user’s account and meanwhile it will navigate to user’s own repository.



The screenshot shows a GitHub repository page for 'SAP-samples / logistics-business-network-gtt-samples'. The top navigation bar includes 'Watch' (9), 'Star' (9), and a redboxed 'Fork' button (6). Below the bar, there are tabs for 'Code' (selected), 'Issues' (1), 'Pull requests', 'Actions', 'Projects', 'Security', and 'Insights'. A dropdown shows 'master' (selected), '1 branch', '0 tags', 'Go to file', and a green 'Code' button. The main area displays a list of commits:

Commit	Message	Date
	LoDr2092 Update README.md	b43fde0 7 days ago
	.reuse update license with REUSE	3 months ago
	LICENSES update license with REUSE	3 months ago
	Ibn-gtt-template-tpo Merge branch 'master' of https://github.com/SAP-sa... 8 days ago	8 days ago
	Ibn-gtt-template-ts Update README.md	7 days ago
	Ibn-gtt-template-tso Update README.md	7 days ago
	.abapgit.xml Update .abapgit.xml	14 days ago
	README.md Update README.md	7 days ago

To the right, there's an 'About' section with a description of the code example, a 'Tags' sidebar with 'sample', 'sap-logistics-business-network', 'global-track-and-trace', 'gtt', 'sample-code', 'Ibn', and 'sales-order-fulfillment', and a 'Readme' link.

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 'C5310110 / logistics-business-network-gtt-samples-1'. The repository is forked from 'SAP-samples/logistics-business-network-gtt-samples'. The 'Code' tab is selected. The 'master' branch is current, with 1 branch and 0 tags. A message indicates the branch is even with SAP-samples:master. The commit history lists several changes, including an update to '.abapgit.xml' 14 days ago, which is highlighted with a red box. Other commits include updates to README.md, LICENSES, and various template branches. The right sidebar provides an 'About' summary, links to 'Readme', 'Releases', and 'Packages'.

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

No releases published
Create a new release

Packages

No packages published
Publish your first package

File	Commit Message	Date
.abapgit.xml	Update .abapgit.xml	14 days ago
README.md	Update README.md	7 days ago
.reuse	update license with REUSE	3 months ago
LICENSES	update license with REUSE	3 months ago
Ibn-gtt-template-tpo	Merge branch 'master' of https://github.com/SAP-samples/logistics-bus...	8 days ago
Ibn-gtt-template-ts	Update README.md	7 days ago
Ibn-gtt-template-tso	Update README.md	7 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 'C5310110 / logistics-business-network-gtt-samples-1'. The repository has 0 stars and 6 forks. The 'Code' tab is selected, showing the master branch with 1 branch and 0 tags. A message indicates the branch is even with SAP-samples:master. The commit history lists several changes, including an update to README.md and the current commit to update .abapgit.xml. The commit details show it was updated 14 days ago by LoDr2092. The .abapgit.xml file content is displayed in a code editor, with the 'Edit' button highlighted with a red box.

This branch is even with SAP-samples:master.

Go to file Add file ▾ Code ▾

About

I305298 Update .abapgit.xml

Latest commit b91bcac 5 hours ago History

2 contributors

20 lines (20 sloc) | 553 Bytes

```
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 <FOLDER_LOGIC>FULL</FOLDER_LOGIC>
7 <IGNORE>
8 <item>/.gitignore</item>
9 <item>/LICENSE</item>
10 <item>/README.md</item>
11 <item>/package.json</item>
12 <item>/.travis.yml</item>
13 <item>/.gitlab-ci.yml</item>
14 <item>/abaplint.json</item>
15 <item>/azure-pipelines.yml</item>
16 <item>/.devcontainer.json</item>
17 </IGNORE>
18 </DATA>
19 </asx:values>
20 </asx:abap>
```

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

3-3: Add the sentence of ‘<STARTING_FOLDER>/lbn-gtt-template-tpo/abap/zsrc/</STARTING_FOLDER>’ as below.

3-4: Commit changes.

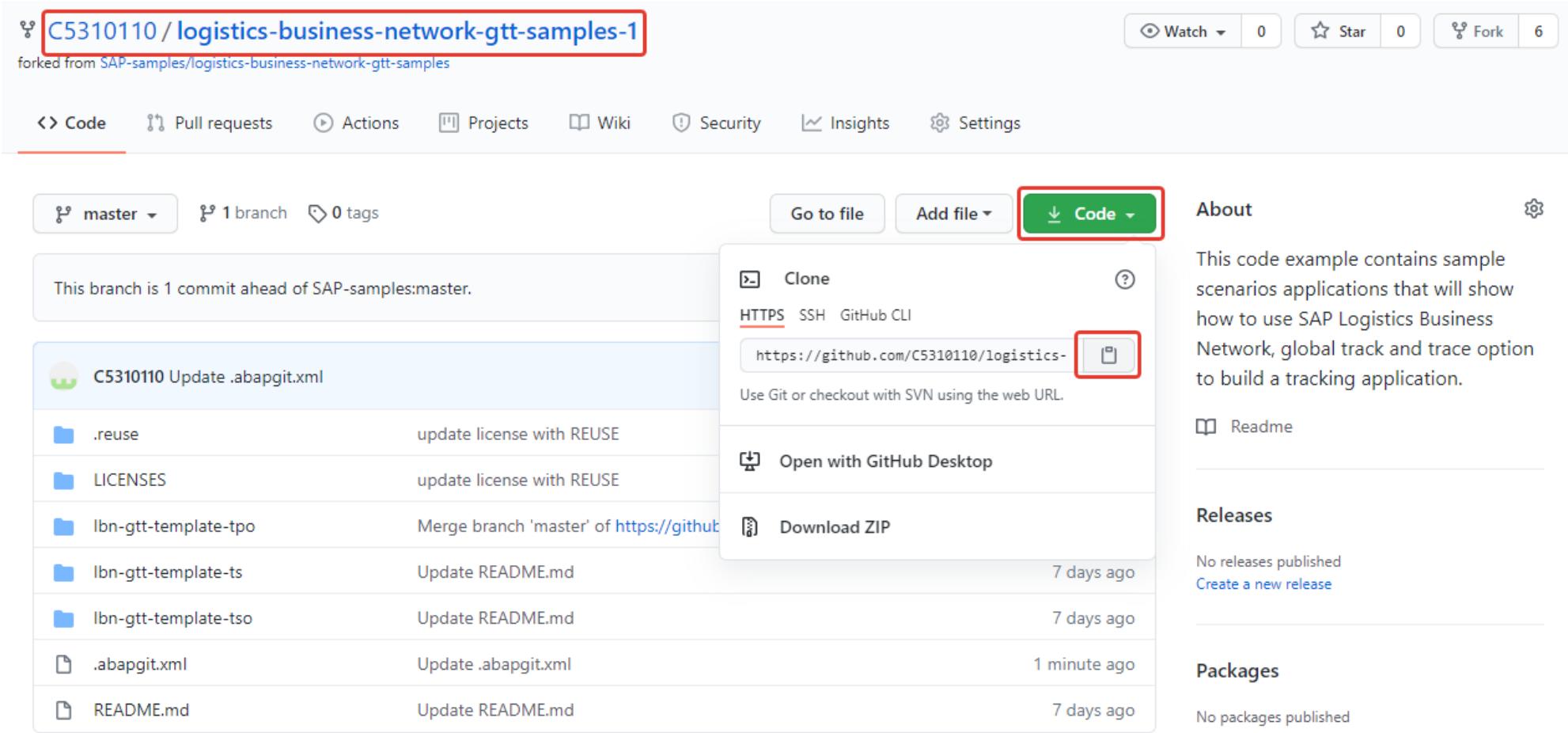
The screenshot shows a GitHub repository page for 'C5310110 / logistics-business-network-gtt-samples-1'. The repository is forked from 'SAP-samples/logistics-business-network-gtt-samples'. The 'Code' tab is selected. A file named '.abapgit.xml' is open in the editor. The code content is as follows:

```
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>/.gitignore</item>
10    <item>/LICENSE</item>
11    <item>/README.md</item>
12    <item>/package.json</item>
13    <item>/travis.yml</item>
14    <item>/gitlab-ci.yml</item>
15    <item>/abaplint.json</item>
16    <item>/azure-pipelines.yml</item>
17    <item>/devcontainer.json</item>
18  </IGNORE>
19 </DATA>
20 </asx:values>
21 </asx:abap>
```

The line containing the new folder path is highlighted with a red box. To the right, a 'Commit changes' dialog is open. It contains a text input field with 'Update .abapgit.xml' and a larger text area for an optional extended description. Below these are two radio buttons: one selected for committing directly to the master branch, and another for creating a new branch. A large green 'Commit changes' button is at the bottom, which is also highlighted with a red box.

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 'C5310110 / logistics-business-network-gtt-samples-1'. The URL 'https://github.com/C5310110/logistics...' is highlighted with a red box. A context menu is open over this URL, with the 'Code' button also highlighted with a red box. The menu options include 'Clone' (with HTTPS, SSH, and GitHub CLI links), 'Open with GitHub Desktop', and 'Download ZIP'. The repository has 1 branch and 0 tags. The master branch is 1 commit ahead of SAP-samples:master. The commit history shows several updates to '.abapgit.xml' and README files. The right sidebar contains sections for About, Readme, Releases, and Packages.

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

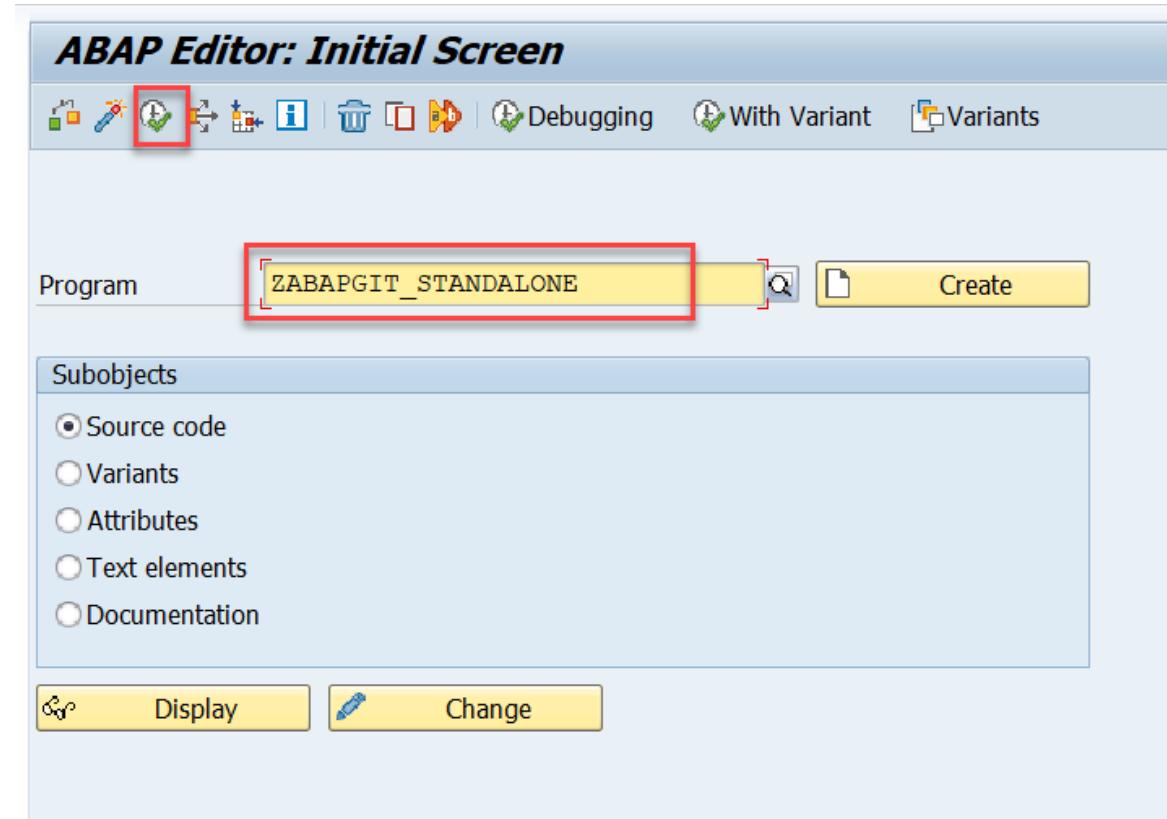
Releases

Packages

STEP 4: Download ABAP Code from GitHub

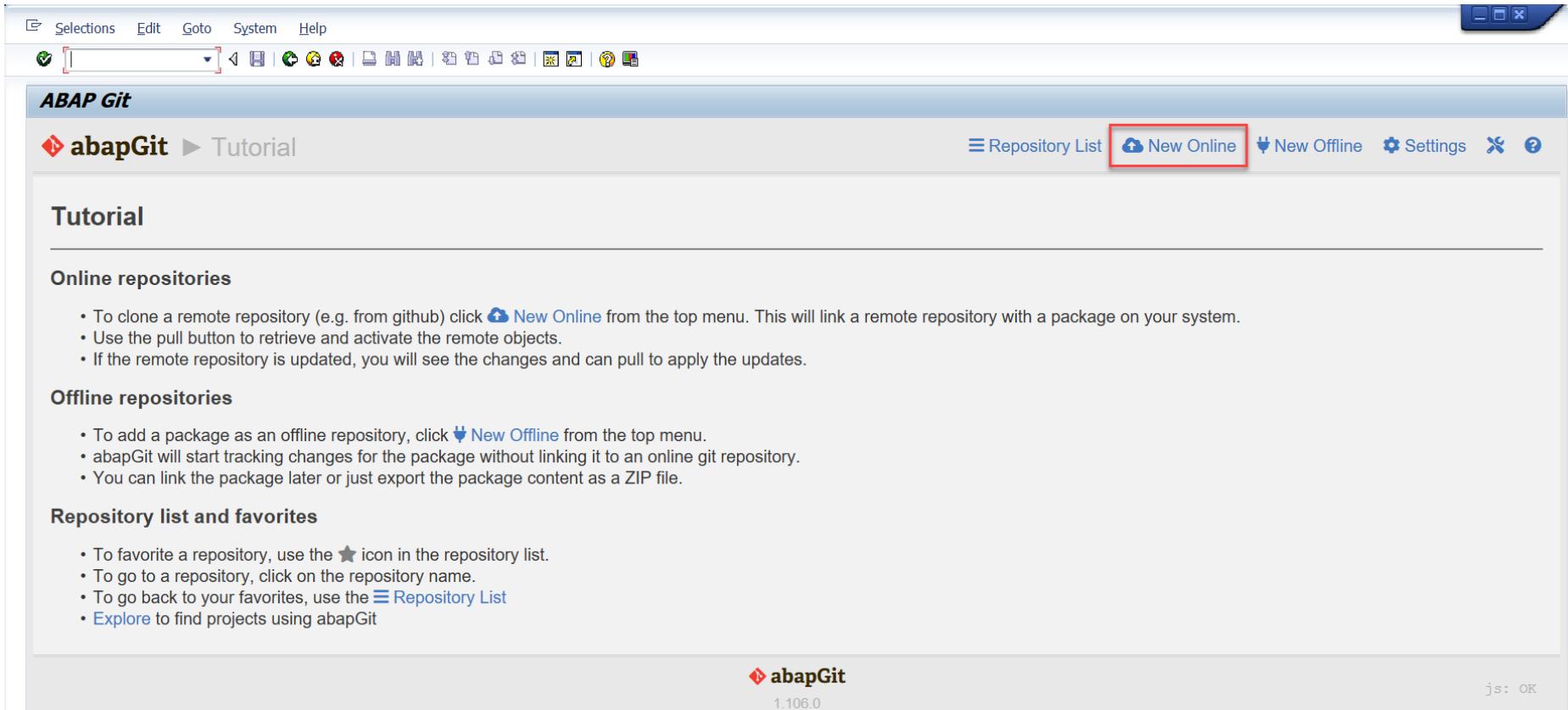
4-1: Enter T-code *SE38* and fill the report name from STEP 1, *ZABAPGIT_STANDALONE*

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**:

<https://github.com/C5310110/logistics-business-network-gtt-samples-1.git>

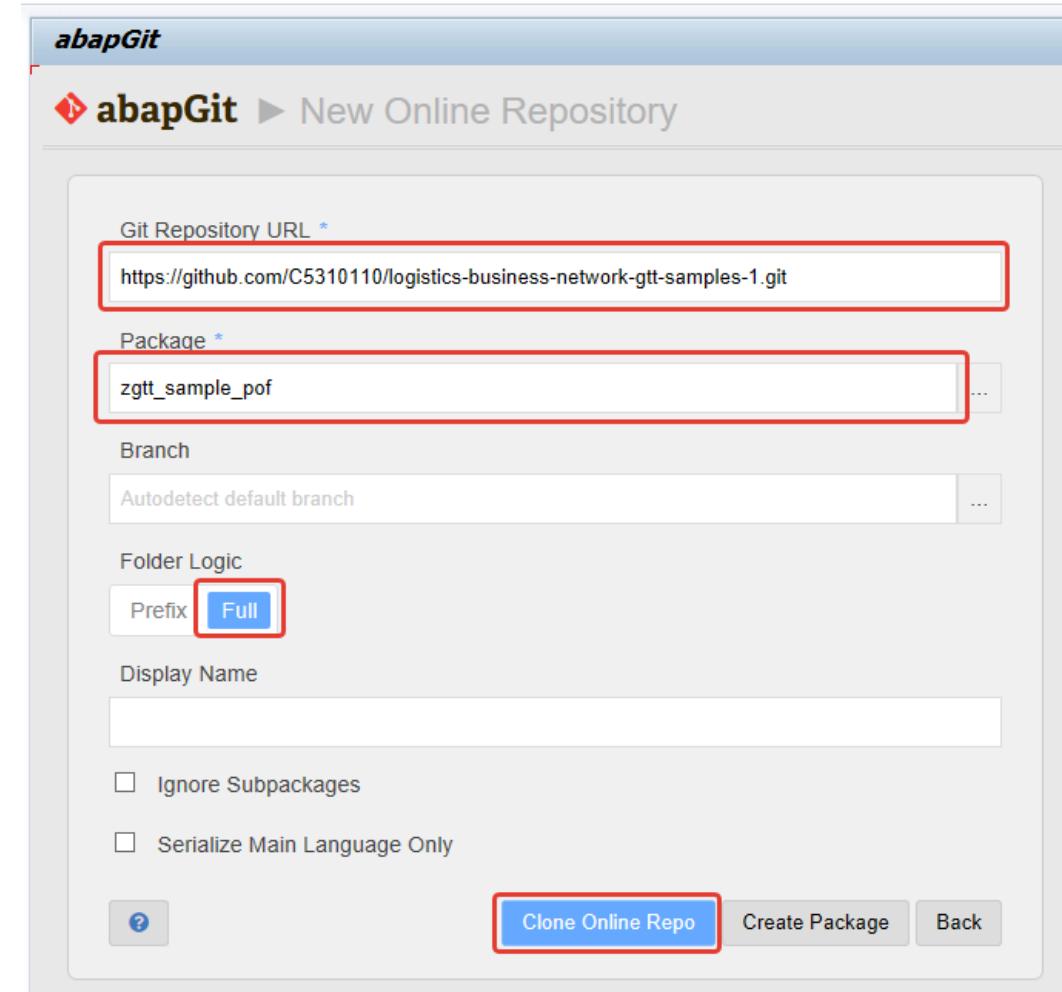
Caution:

This URL is the user's account 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.

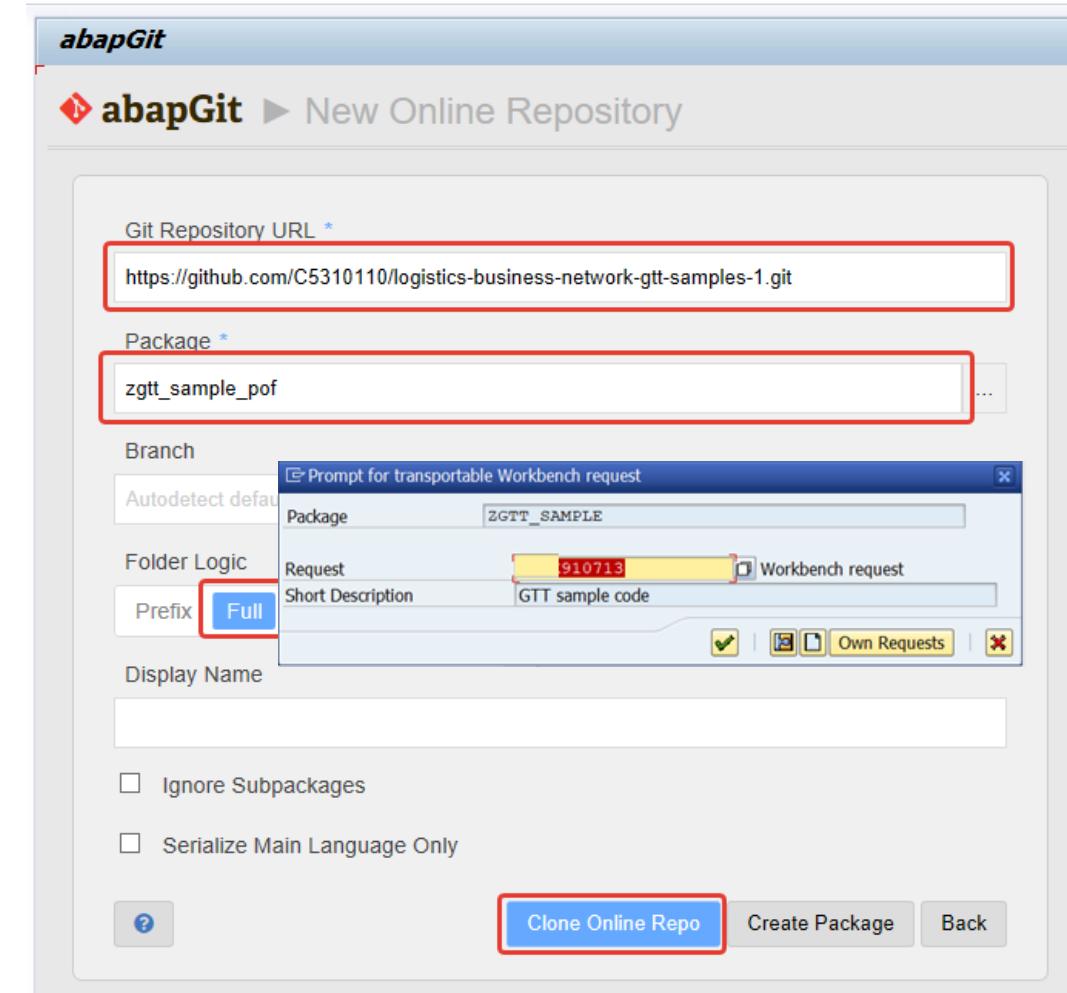
4-6: Set *Full* for **Folder Logic**

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

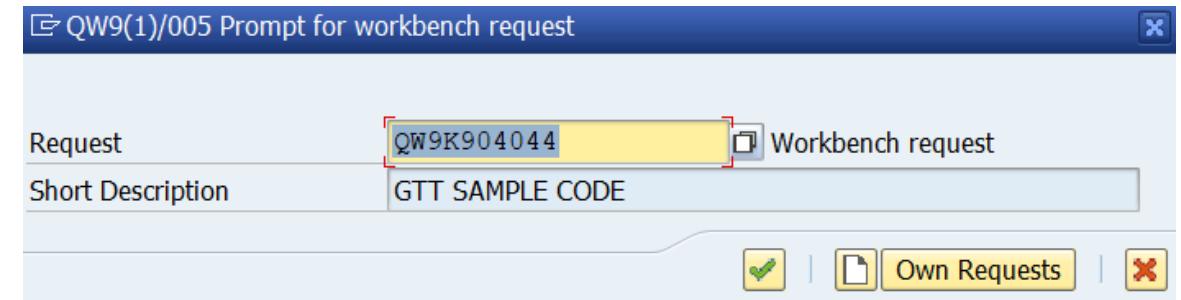
4-9: Click **Pull** to pull down the latest version of sample code.

The screenshot shows the abapGit interface. At the top, there's a header bar with the title "abapGit". Below it, a navigation bar includes "abapGit" (with a red diamond icon), "Repository", and links for "Repository List", "Settings", and help. A repository card for "logistics-business-network-gtt-samples-1" is displayed, showing its URL (<https://github.com/C5310110/logistics-business-network-gtt-samples-1.git>), a commit hash ("baaf604"), and branches ("master" and "zgtt_sample_pof"). Below the card is a toolbar with buttons for "Pull" (highlighted with a red box), "Stage", "Diff", "Branch", "Tag", "Advanced", "View", "Refresh", and settings. The main area is a table with columns "Type", "Name", and "Path". The table lists files and directories under two categories: "non-code and meta files" and "ZCL_IM_POF_GTT_LE_SHIPMENT" (a CLAS type). The "Path" column shows the full file paths, and the "diff" column contains small colored icons indicating changes (e.g., yellow for M/M, green for A, red for D).

Type	Name	Path	diff
	<i>non-code and meta files</i>		
		./abapgit.xml	M/M
FI	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
FI	DEVC	ZGTT_SAMPLE_POF	
		/lbn-gtt-template-tpo/abap/zsrc/package.devcl.xml	D
		/lbn-gtt-template-tpo/abap/zsrc/zpof_gtt.fugr.lzpof_gttd00.abap	A
		/lbn-gtt-template-tpo/abap/zsrc/zpof_gtt.fugr.lzpof_gttd00.xml	A
		/lbn-gtt-template-tpo/abap/zsrc/zpof_gtt.fugr.lzpof_gttd01.abap	A
		/lbn-gtt-template-tpo/abap/zsrc/zpof_gtt.fugr.lzpof_gttd01.xml	A
		/lbn-gtt-template-tpo/abap/zsrc/zpof_gtt.fugr.lzpof_gttd10.abap	A
		/lbn-gtt-template-tpo/abap/zsrc/zpof_gtt.fugr.lzpof_gttd10.xml	A
		/lbn-gtt-template-tpo/abap/zsrc/zpof_gtt.fugr.lzpof_gttd11.abap	A
		/lbn-gtt-template-tpo/abap/zsrc/zpof_gtt.fugr.lzpof_gttd11.xml	A
		/lbn-gtt-template-tpo/abap/zsrc/zpof_gtt.fugr.lzpof_gttd20.abap	A
		/lbn-gtt-template-tpo/abap/zsrc/zpof_gtt.fugr.lzpof_gttd20.xml	A
		/lbn-gtt-template-tpo/abap/zsrc/zpof_gtt.fugr.lzpof_gttd30.abap	A
		/lbn-gtt-template-tpo/abap/zsrc/zpof_gtt.fugr.lzpof_gttd30.xml	A

STEP 4: Download ABAP Code from GitHub

4-10: Assign the change to a change request. If you do not have any available change requests, you need to create a new one.



STEP 4: Download ABAP Code from GitHub

4-11: After you download the code, you can check them with T-code SE80.

Object Navigator

Repository Browser

Package: ZGTT_SAMPLE_POF

Object Name	Description
ZGTT_SAMPLE_POF	ABAP sample package for global track and trace of LBN
Dictionary Objects	
Database Tables	ZPOF_GTT_EE_REL GTT SOF - Delivery Order's Planned Event Relevance Indicator
Data Elements	ZPOF_KOSTA ZPOF_PDSTK ZPOF_PKSTA ZPOF_WBSTA GTT POF - Planned Event Relevance for Put Away of Delivery GTT SOF - Planned Event Relevance for POD of delivery GTT POF - Planned Event Relevance for Packing of Delivery GTT POF - Planned Event Relevance for Goods Mvt of Delivery
Class Library	
Classes	ZCL_IM_POF_GTT_LE_SHIPMENT Implementation Class for BAdI Implementation ZPOF_GTT_L...
Function Groups	ZPOF_GTT POF GTT
Message Classes	ZPOF_GTT Purchasing Order Fulfillment Messages
Enhancements	
Classic BAdIs (Impl.)	ZPOF_GTT_LE_SHIPMENT Shipment Cross TP Update

C) Download ABAP Code from GitHub

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



STEP 1: Delete the User's Account Repository

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

In the latest release, there is some code changes in 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, click 'Settings'.

The screenshot shows a GitHub repository page for 'C5310110 / logistics-business-network-gtt-samples-1'. The repository is a fork from 'SAP-samples/logistics-business-network-gtt-samples'. The 'Settings' tab is highlighted with a red box. The master branch is 4 commits ahead of SAP-samples:master. A list of recent commits shows updates for various files like zpof_gtt.fugr.lzpof_gtt80.abap, Documents, GTT-V2-Sample-App-FLP, GTT-V2-Sample-TrackPurchaseOrders-Service, GTT-V2-Sample-TrackPurchaseOrders-UI, Model, abap/zsrc, and README.md, all dated between 16 and 19 days ago.

Commit	Message	Date
C5310110 Update zpof_gtt.fugr.lzpof_gtt80.abap	baaf604 16 days ago	History
Documents	Update for February release	19 days ago
GTT-V2-Sample-App-FLP	Update for February release	19 days ago
GTT-V2-Sample-TrackPurchaseOrders-Service	Update for February release	19 days ago
GTT-V2-Sample-TrackPurchaseOrders-UI	Update for February release	19 days ago
Model	Update for February release	19 days ago
abap/zsrc	Update zpof_gtt.fugr.lzpof_gtt80.abap	16 days ago
README.md	Update for February release	19 days ago

STEP 1: Delete the User's Account Repository

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

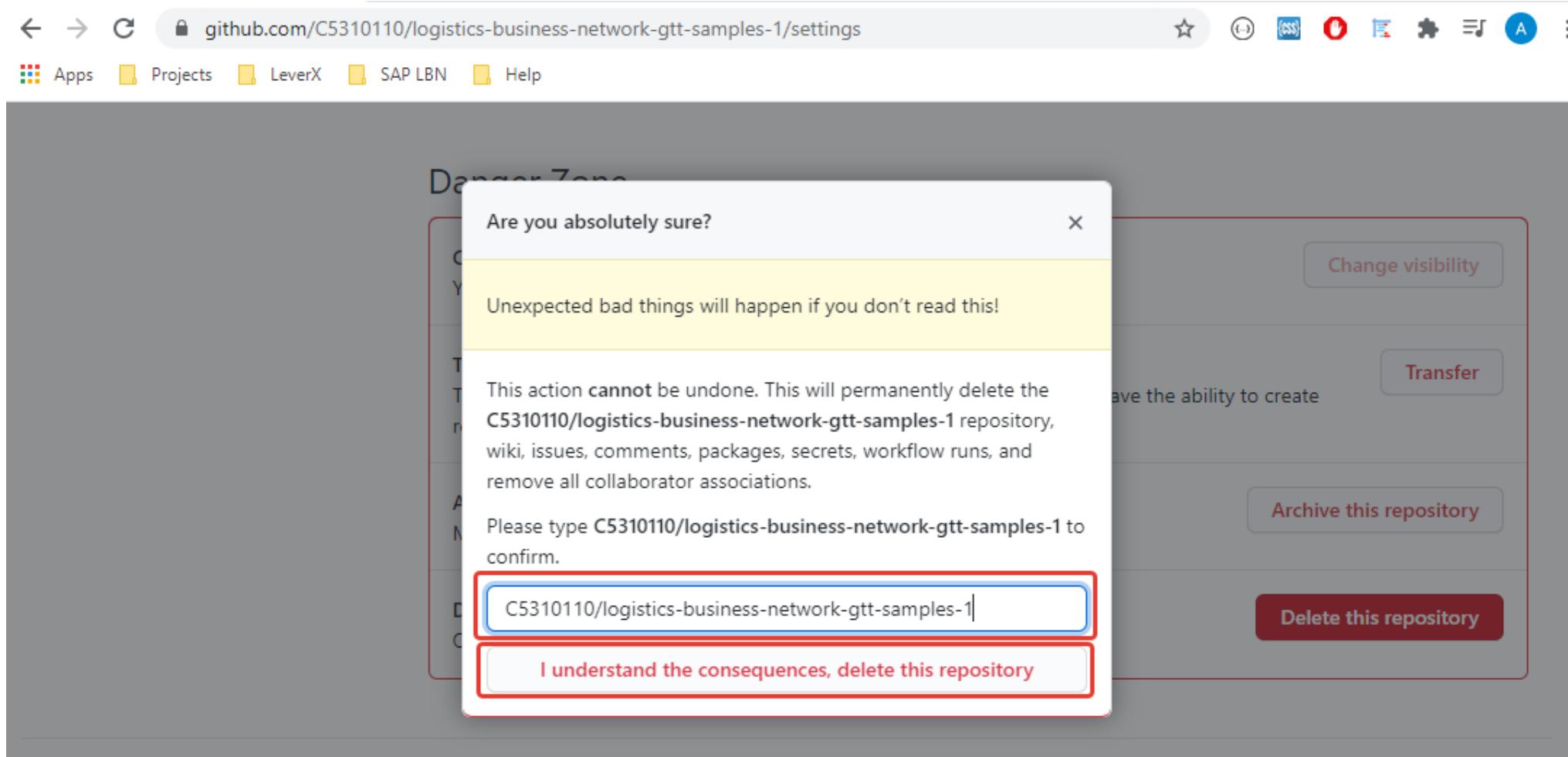
The screenshot shows a browser window with the URL `github.com/C5310110/logistics-business-network-gtt-samples-1/settings`. The page title is "Danger Zone". There are four options listed:

- 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

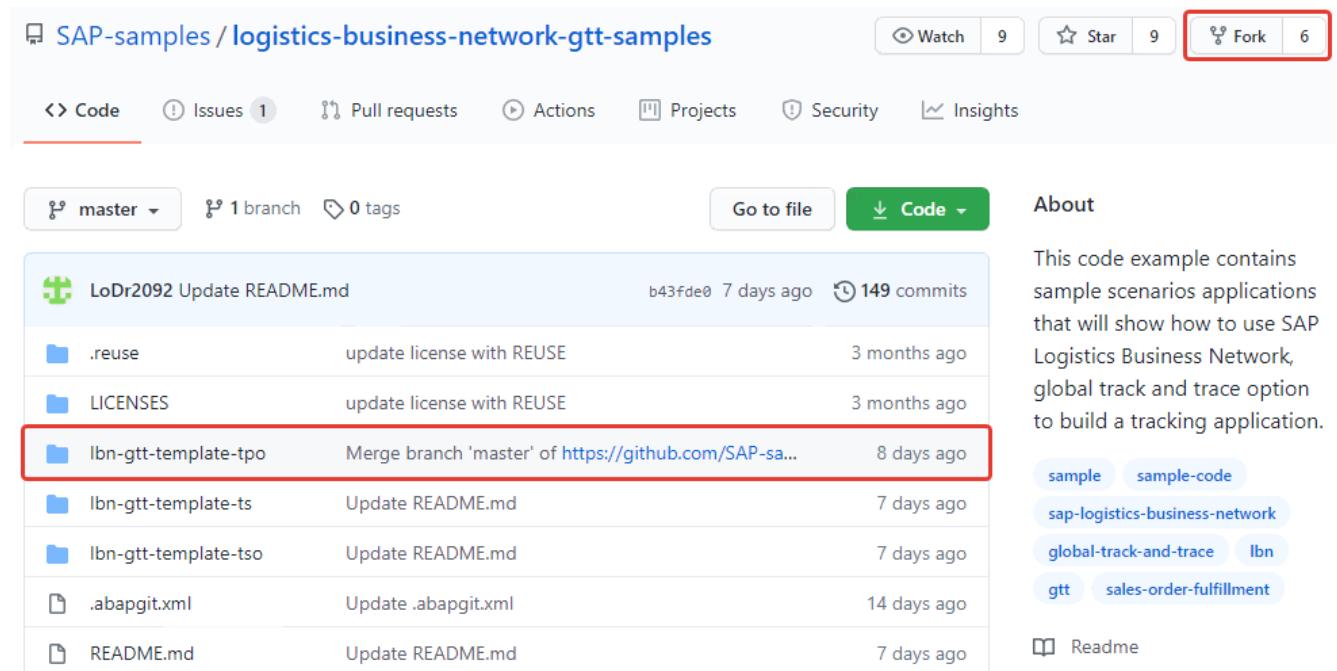
1-5: The user's account repository is deleted.

The screenshot shows the GitHub homepage. At the top, there is a navigation bar with links for Apps, Projects, LeverX, SAP LBN, and Help. Below the navigation bar is the main search bar and navigation menu with links for Pull requests, Issues, Marketplace, and Explore. A notification bell icon is visible on the right. A prominent red-bordered message box in the center states: "Your repository 'C5310110/logistics-business-network-gtt-samples-1' was successfully deleted." To the left, there is a sidebar with sections for "Create your first project" (with a "Create repository" button), "Import repository", and "Working with a team?". On the right, a modal window titled "Introduce yourself" provides instructions on creating a README file. It includes a sample README.md content with items 1 through 6, each preceded by a GitHub emoji. Buttons for "Dismiss this" and "Continue" are at the bottom of the modal.

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 code into the user's account and meanwhile it will navigate to user's own repository.



The screenshot shows a GitHub repository page for 'SAP-samples / logistics-business-network-gtt-samples'. The top navigation bar includes 'Watch' (9), 'Star' (9), 'Fork' (6), and other standard GitHub icons. Below the header, there are tabs for 'Code', 'Issues' (1), 'Pull requests', 'Actions', 'Projects', 'Security', and 'Insights'. A dropdown menu shows 'master' selected, along with '1 branch' and '0 tags'. To the right, there are 'Go to file' and 'Code' dropdowns. The main content area displays a list of commits. One commit, 'Ibn-gtt-template-tpo' (Merge branch 'master' of https://github.com/SAP-sa...), is highlighted with a red border. On the right side, there is an 'About' section with a detailed description of the code example, followed by a series of blue circular tags with white text: 'sample', 'sample-code', 'sap-logistics-business-network', 'global-track-and-trace', 'Ibn', 'gtt', and 'sales-order-fulfillment'. At the bottom, there is a 'Readme' link.

Commit	Message	Date
LoDr2092 Update README.md	b43fde0 7 days ago	149 commits
.reuse	update license with REUSE	3 months ago
LICENSES	update license with REUSE	3 months ago
Ibn-gtt-template-tpo	Merge branch 'master' of https://github.com/SAP-sa...	8 days ago
Ibn-gtt-template-ts	Update README.md	7 days ago
Ibn-gtt-template-tso	Update README.md	7 days ago
.abapgit.xml	Update .abapgit.xml	14 days ago
README.md	Update README.md	7 days ago

STEP 2: Fork Sample Code Repository

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

The screenshot shows a GitHub repository page for the repository `C5310110 / logistics-business-network-gtt-samples-1`. The repository is a fork from `SAP-samples/logistics-business-network-gtt-samples`. The page includes a navigation bar with links for Code, Pull requests, Actions, Projects, Wiki, Security, Insights, and Settings. Below the navigation bar, there are buttons for master, 1 branch, 0 tags, Go to file, Add file, and Code. A message states "This branch is even with SAP-samples:master." with links for Pull request and Compare. On the right side, there are sections for About, Releases, and Packages. The About section describes the repository as containing sample scenario applications for SAP Logistics Business Network. The Releases section indicates no releases have been published, with a link to Create a new release. The Packages section indicates no packages have been published, with a link to Publish your first package. The main content area displays a list of recent commits:

Commit	Message	Date
	LoDr2092 Update README.md	6dd6c5b 17 days 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	17 days ago
	Ibn-gtt-template-ts Update README.md	17 days ago
	Ibn-gtt-template-tso change folder name from ABAP to abap	17 days ago
	.abapgit.xml Update .abapgit.xml	19 days ago
	FAQs_for_Template_Code_Im... Update for February release	19 days ago
	README.md Update README.md	17 days ago

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

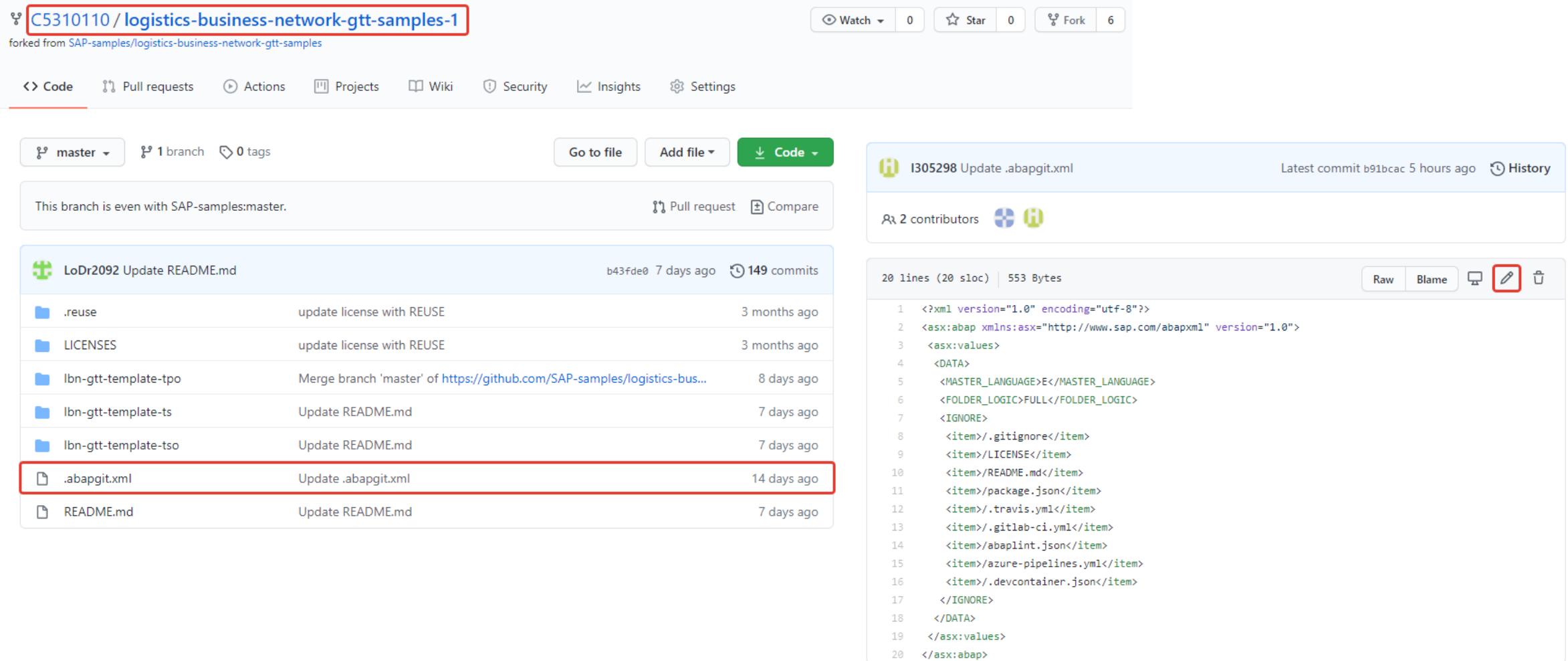
3-1: In the user’s account repository, click the file ‘.abapgit.xml’.

The screenshot shows a GitHub repository page for 'C5310110 / logistics-business-network-gtt-samples-1'. The repository is a fork 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 even with SAP-samples:master. There is 1 pull request and a compare link. The commit history includes several updates to README.md and LICENSES files, and a merge from SAP-samples. The file '.abapgit.xml' is highlighted with a red box. The 'About' section describes the repository as containing sample scenarios applications for SAP Logistics Business Network, global track and trace options, and building a tracking application. It also links to a Readme and releases. The 'Packages' section indicates no packages have been published.

File	Description	Time Ago
.abapgit.xml	Update .abapgit.xml	14 days ago
README.md	Update README.md	7 days ago
.reuse	update license with REUSE	3 months ago
LICENSES	update license with REUSE	3 months ago
Ibn-gtt-template-tpo	Merge branch 'master' of https://github.com/SAP-samples/logistics-bus...	8 days ago
Ibn-gtt-template-ts	Update README.md	7 days ago
Ibn-gtt-template-tso	Update README.md	7 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 'C5310110 / logistics-business-network-gtt-samples-1'. The repository has 0 stars and 6 forks. The 'Code' tab is selected, showing the 'master' branch with 1 branch and 0 tags. A note says 'This branch is even with SAP-samples:master.' There are 149 commits in total. A specific commit for '.abapgit.xml' is highlighted with a red border, showing it was updated 14 days ago. The commit details show it was updated to 'Update .abapgit.xml'. The code editor on the right displays the XML configuration file:

```
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       <FOLDER_LOGIC>FULL</FOLDER_LOGIC>
7     <IGNORE>
8       <item>/.gitignore</item>
9       <item>/LICENSE</item>
10      <item>/README.md</item>
11      <item>/package.json</item>
12      <item>/.travis.yml</item>
13      <item>/.gitlab-ci.yml</item>
14      <item>/abaplint.json</item>
15      <item>/azure-pipelines.yml</item>
16      <item>/.devcontainer.json</item>
17    </IGNORE>
18  </DATA>
19  </asx:values>
20 </asx:abap>
```

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

3-3: Add the sentence of ‘<STARTING_FOLDER>/lbn-gtt-template-tpo/abap/zsrc/</STARTING_FOLDER>’ as below.

3-4: Commit changes.

The screenshot shows a GitHub repository page for 'C5310110 / logistics-business-network-gtt-samples-1'. The repository is forked from 'SAP-samples/logistics-business-network-gtt-samples'. The 'Code' tab is selected. A file named '.abapgit.xml' is open, showing its XML content. Line 6 contains the added sentence: '<STARTING_FOLDER>/lbn-gtt-template-tpo/abap/zsrc/</STARTING_FOLDER>'. The code editor has tabs for 'Edit file' and 'Preview changes', and settings for 'Spaces', '1', and 'No wrap'. To the right, a 'Commit changes' dialog is open. It contains a text input field with 'Update .abapgit.xml' and a larger area for an optional extended description. Below the input fields are two radio buttons: one selected for 'Commit directly to the master branch' and one for 'Create a new branch for this commit and start a pull request'. A red box highlights the 'Commit changes' button at the bottom of the dialog.

```
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>/.gitignore</item>
10      <item>/LICENSE</item>
11      <item>/README.md</item>
12      <item>/package.json</item>
13      <item>/travis.yml</item>
14      <item>/gitlab-ci.yml</item>
15      <item>/abaplint.json</item>
16      <item>/azure-pipelines.yml</item>
17      <item>/devcontainer.json</item>
18    </IGNORE>
19  </DATA>
20 </asx:values>
21 </asx:abap>
```

Commit changes

Update .abapgit.xml

Add an optional extended description...

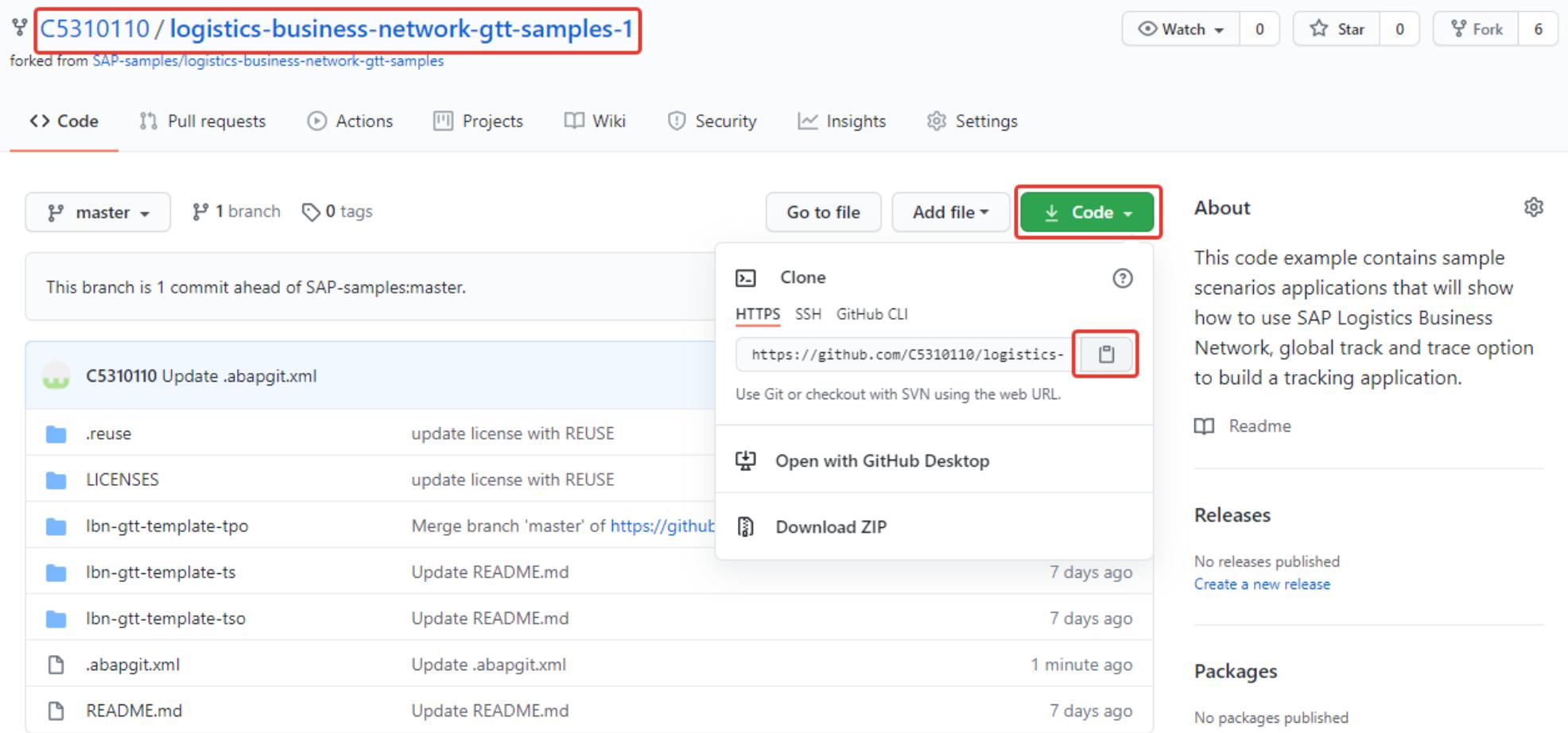
-o Commit directly to the master branch.

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

Commit changes Cancel

STEP 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 'C5310110 / logistics-business-network-gtt-samples-1'. The 'Code' dropdown menu is open, highlighting the 'Clone' option. A red box highlights the 'Clone' button, and another red box highlights the copy icon next to the URL 'https://github.com/C5310110/logistics-'. The repository has 1 branch and 0 tags. The master branch is 1 commit ahead of SAP-samples:master. The repository description mentions sample scenarios for SAP Logistics Business Network, global track and trace options, and building a tracking application. It includes links for Readme, Releases, and Packages.

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

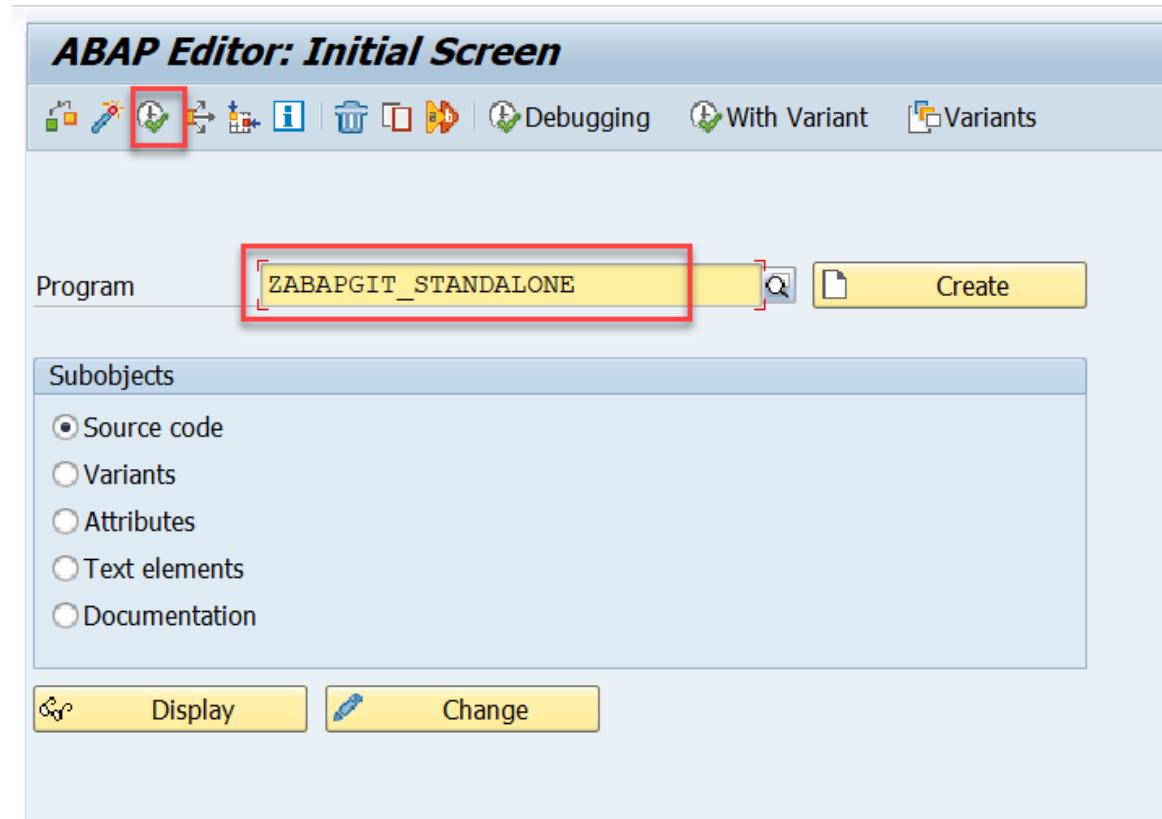
Releases

Packages

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 URL is not changed after your recreation of repository copy. Access the TPOF Repository by clicking button.

The screenshot shows the abapGit application interface. The title bar says "abapGit". Below it, the header includes the "abapGit" logo, a "Repository List" link, and several icons for "New Online", "New Offline", "Settings", and help. There are also filter options for "Only Favorites" and "Detail". The main area is a table with columns: Name, Url, Package, Branch, and Action. One row is visible, showing a repository named "logistics-business-network-gtt-samples-1" with the URL "github.com/C5310110/logistics-business-network-gtt-samples-1.git", package "zgtt_sample_pof", branch "master", and action buttons for "Check", "Stage", "Patch", and "Settings". A red box highlights the blue arrow icon next to the "Check" button.

Name	Url	Package	Branch	Action
logistics-business-network-gtt-samples-1	github.com/C5310110/logistics-business-network-gtt-samples-1.git	zgtt_sample_pof	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 abapGit interface. At the top, there's a header bar with the title "abapGit" and a navigation menu. Below the header, a breadcrumb navigation shows "abapGit > Repository". The main area displays a list of repositories. One repository is selected: "logistics-business-network-gtt-samples-1" (https://github.com/C5310110/logistics-business-network-gtt-samples-1.git). The repository details include a star icon, a "master" branch indicator, and a "zgtt_sample_pof" tag. A toolbar below the repository details contains several buttons: Pull (highlighted with a red box), Stage, Diff, Branch, Tag, Advanced, View, Refresh, and Settings. The "Pull" button is the active one. The main content area shows a table with columns "Type", "Name", and "Path". The table lists various ABAP classes and their corresponding XML files, along with "diff" buttons for each item. The "Path" column contains URLs such as "/lbn-gtt-template-tpo/abap/zsrc/zcl_im_pof_gtt_le_shipment.clas.abap" and "/lbn-gtt-template-tpo/abap/zsrc/zcl_im_pof_gtt_le_shipment.clas.xml". The "diff" buttons are represented by small colored squares (yellow, green, and grey).

C) Download ABAP Code from GitHub

C3. Download Another ABAP Code from GitHub (TSOF)



STEP 1: Fork Sample Code Repository

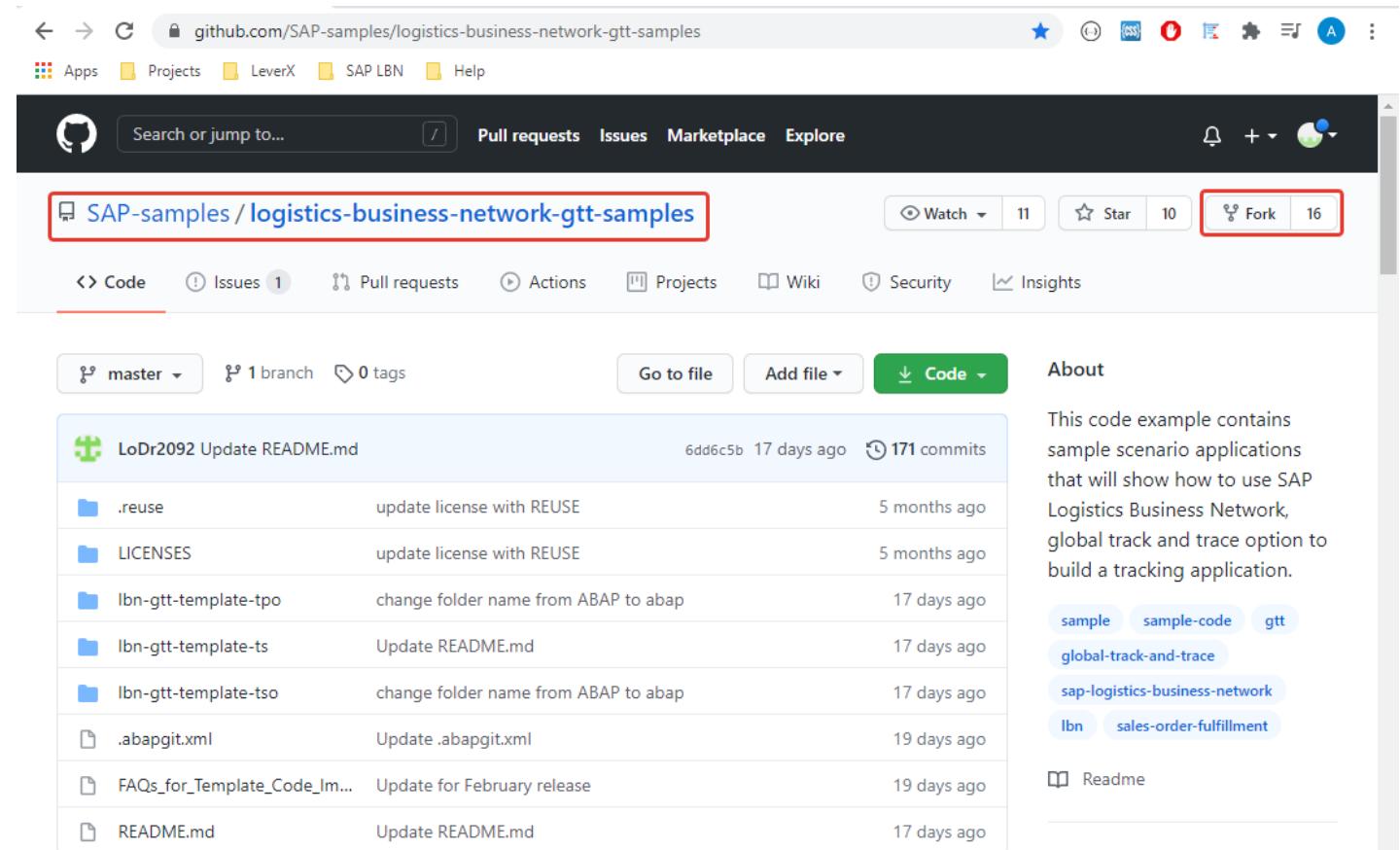
Prerequisite:

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

To install the TSOF 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 code into the user's account and meanwhile it will navigate to user's own repository.



The screenshot shows a GitHub repository page for the project "SAP-samples / logistics-business-network-gtt-samples". The URL in the address bar is github.com/SAP-samples/logistics-business-network-gtt-samples. The repository has 11 stars and 16 forks. The "Code" tab is selected. The "About" section contains a description: "This code example contains sample scenario applications that will show how to use SAP Logistics Business Network, global track and trace option to build a tracking application." Below the description are several blue circular tags: "sample", "sample-code", "gtt", "global-track-and-trace", "sap-logistics-business-network", "lbn", and "sales-order-fulfillment". The main area shows a list of commits from the "master" branch, with the most recent commit being "LoDr2092 Update README.md" by user "6dd6c5b" 17 days ago, which has 171 commits. Other commits listed include updates to ".reuse", "LICENSES", folder names, and README files, all made 5 months ago or 17 days ago.

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

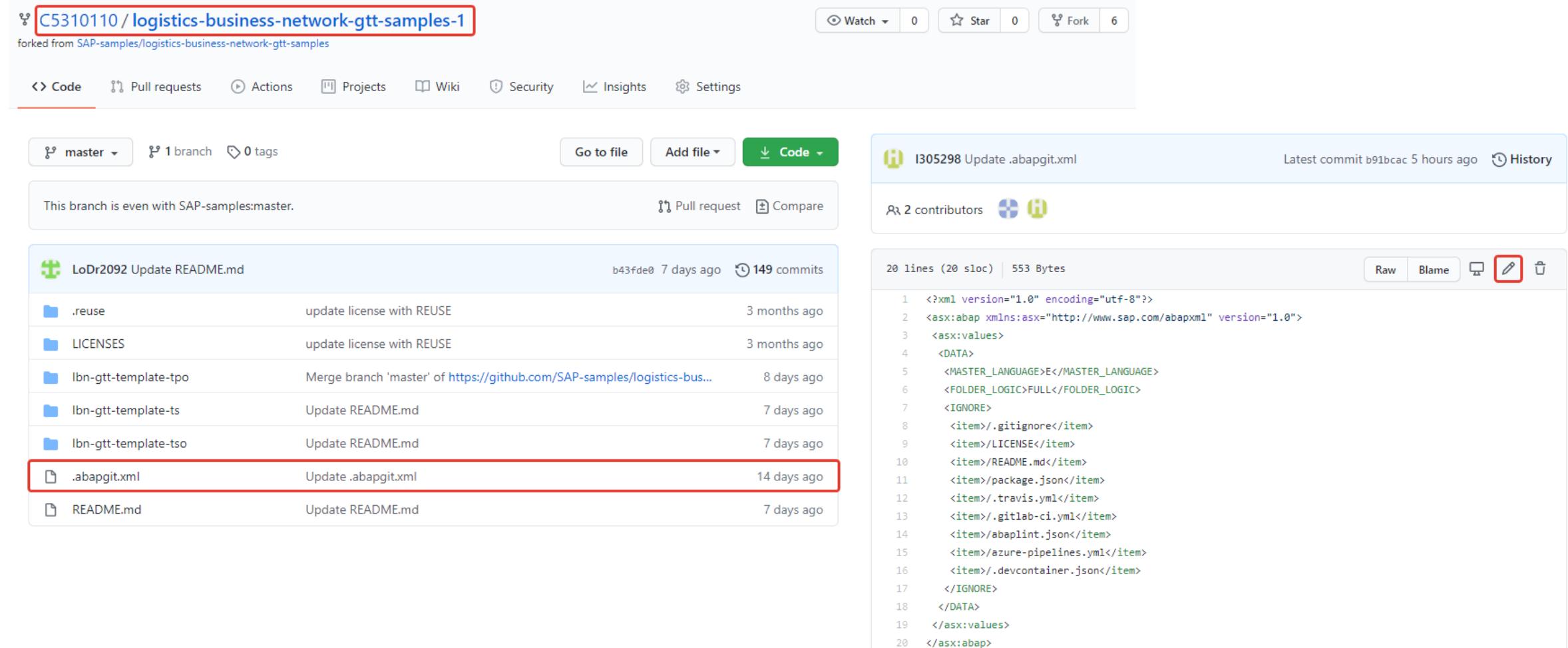
2-1: In the user’s account repository, click the file ‘.abapgit.xml’.

The screenshot shows a GitHub repository page for 'C5310110 / logistics-business-network-gtt-samples-1'. The repository is forked from 'SAP-samples/logistics-business-network-gtt-samples'. The 'Code' tab is selected, showing the commit history. A red box highlights the commit for '.abapgit.xml' which updated the configuration file 14 days ago. The commit message is 'Update .abapgit.xml'. Other commits shown include updates to README.md, LICENSES, and various template files like lbn-gtt-template-tso and lbn-gtt-template-ts. The repository has 0 stars, 0 forks, and 6 issues. The 'About' section describes the code example as containing sample scenarios for SAP Logistics Business Network, global track and trace options. There are sections for 'Readme', 'Releases', and 'Packages'.

File	Commit Message	Time Ago
.abapgit.xml	Update .abapgit.xml	14 days ago
README.md	Update README.md	7 days ago
.reuse	update license with REUSE	3 months ago
LICENSES	update license with REUSE	3 months ago
lbn-gtt-template-tpo	Merge branch 'master' of https://github.com/SAP-samples/logistics-bus...	8 days ago
lbn-gtt-template-ts	Update README.md	7 days ago
lbn-gtt-template-tso	Update README.md	7 days ago

STEP 2: Change Configuration File '.abapgit.xml'

2-2: Click  button to edit the file.



The screenshot shows a GitHub repository page for 'C5310110 / logistics-business-network-gtt-samples-1'. The repository has 0 stars, 6 forks, and 6 issues. The 'Code' tab is selected. The 'Code' section shows a list of commits. A commit for '.abapgit.xml' is highlighted with a red border. The commit details show it was updated 14 days ago by user 'I305298' with the message 'Update .abapgit.xml'. The commit history also includes updates to README.md, LICENSES, and other files. On the right, the actual XML content of the '.abapgit.xml' file is displayed, showing various configuration elements like `<?xml version="1.0" encoding="utf-8"?>`, `<asx:abap xmlns:asx="http://www.sap.com/abapxml" version="1.0">`, and `<asx:values>`.

Commit	Message	Time Ago
LoDr2092 Update README.md	b43fde0	7 days ago
.reuse	update license with REUSE	3 months ago
LICENSES	update license with REUSE	3 months ago
Ibn-gtt-template-tpo	Merge branch 'master' of https://github.com/SAP-samples/logistics-bus...	8 days ago
Ibn-gtt-template-ts	Update README.md	7 days ago
Ibn-gtt-template-tso	Update README.md	7 days ago
.abapgit.xml	Update .abapgit.xml	14 days ago
README.md	Update README.md	7 days ago

```
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 <FOLDER_LOGIC>FULL</FOLDER_LOGIC>
7 <IGNORE>
8 <item>/.gitignore</item>
9 <item>/LICENSE</item>
10 <item>/README.md</item>
11 <item>/package.json</item>
12 <item>/.travis.yml</item>
13 <item>/.gitlab-ci.yml</item>
14 <item>/abaplint.json</item>
15 <item>/azure-pipelines.yml</item>
16 <item>/.devcontainer.json</item>
17 </IGNORE>
18 </DATA>
19 </asx:values>
20 </asx:abap>
```

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

2-3: Add the sentence of ‘<STARTING_FOLDER> /lbn-gtt-template-tso/abap/zsrc/ </STARTING_FOLDER>’ as below.

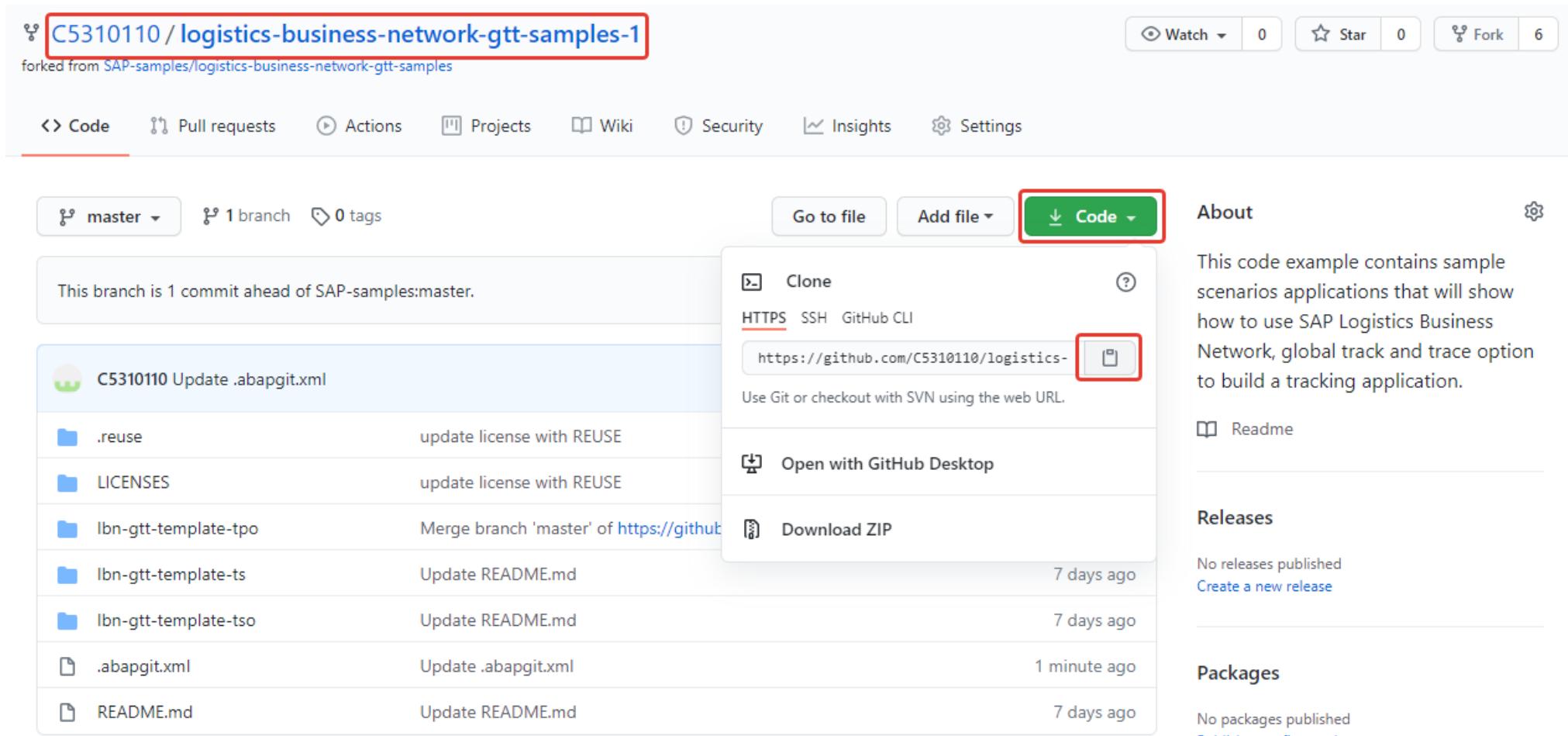
2-4: Commit changes.

The screenshot shows a GitHub repository page for 'C5310110 / logistics-business-network-gtt-samples-1'. The repository is a fork from 'SAP-samples/logistics-business-network-gtt-samples'. The 'Code' tab is selected. A modal window titled 'Commit changes' is open over the code editor for the file '.abapgit.xml'. The code editor shows the XML content of the file. Line 6 contains the line '<STARTING_FOLDER>/lbn-gtt-template-tso/abap/zsrc/</STARTING_FOLDER>', which is highlighted with a red rectangle. The 'Commit changes' modal includes fields for a commit message ('Update .abapgit.xml'), an optional extended description, and two radio button options for committing: '-o- Commit directly to the master branch.' (selected) and '>Create a new branch for this commit and start a pull request.' Below the modal are 'Commit changes' and 'Cancel' buttons.

```
<?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>
      <item>/LICENSE</item>
      <item>/README.md</item>
      <item>/package.json</item>
    </IGNORE>
```

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 'C5310110 / logistics-business-network-gtt-samples-1'. The repository is forked from 'SAP-samples/logistics-business-network-gtt-samples'. The 'Code' dropdown menu is open, and the 'Clone' option is selected, with a red box highlighting the copy icon next to the URL 'https://github.com/C5310110/logistics-'. The URL is also highlighted with a red box.

C5310110 / logistics-business-network-gtt-samples-1

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

Watch 0 Star 0 Fork 6

Code Pull requests Actions Projects Wiki Security Insights Settings

master 1 branch 0 tags

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

C5310110 Update .abapgit.xml

.reuse update license with REUSE

LICENSES update license with REUSE

Ibn-gtt-template-tpo Merge branch 'master' of https://github.com/C5310110/logistics- 7 days ago

Ibn-gtt-template-ts Update README.md 7 days ago

Ibn-gtt-template-tso Update README.md 7 days ago

.abapgit.xml Update .abapgit.xml 1 minute ago

README.md Update README.md 7 days ago

Clone HTTPS SSH GitHub CLI
https://github.com/C5310110/logistics- 

Use Git or checkout with SVN using the web URL.

Open with GitHub Desktop

Download ZIP

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

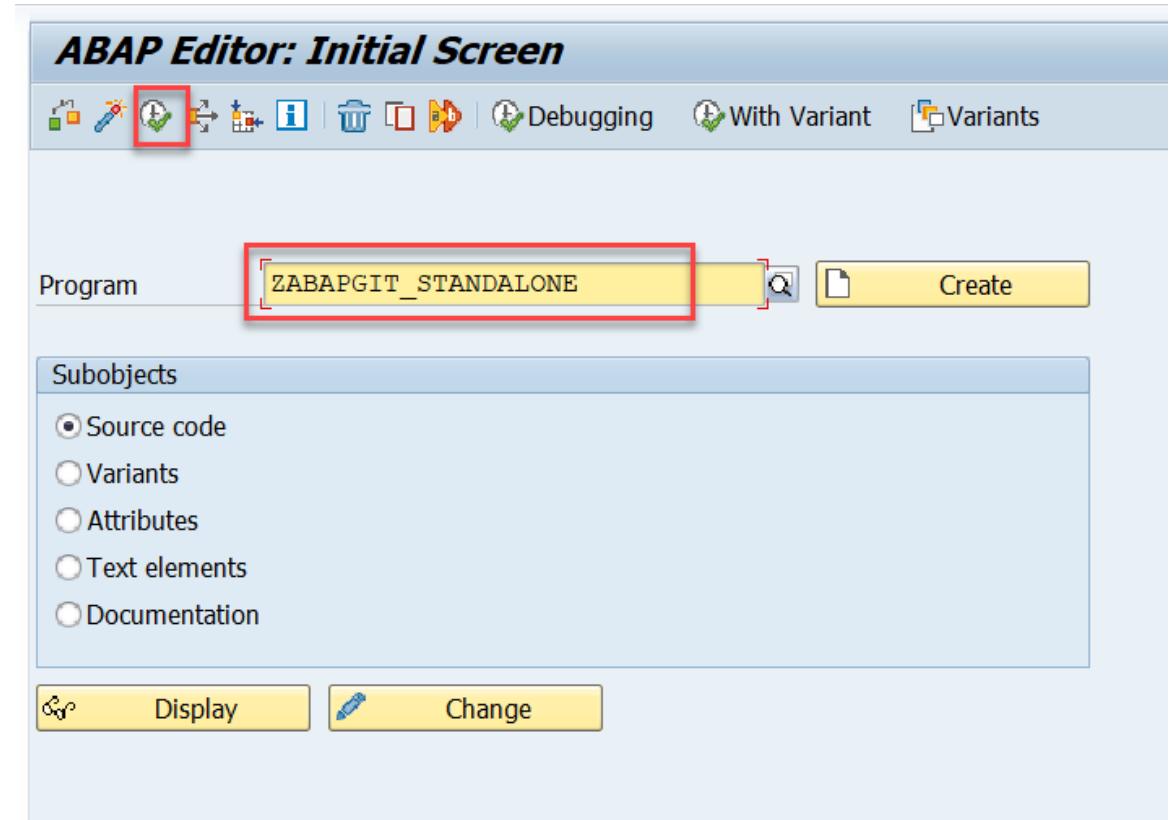
Packages

No packages published Publish your first package

STEP 3: Remove TPOF Repository in ABAPGit

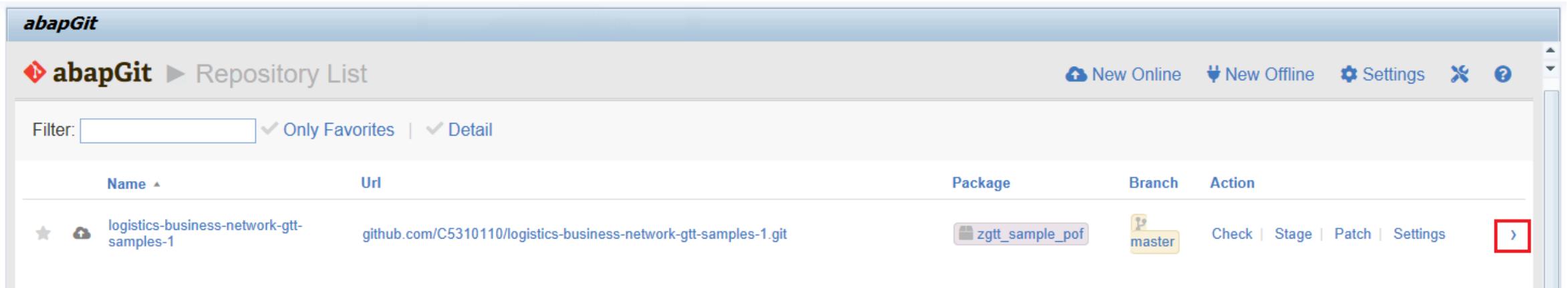
3-1: Enter T-code `SE38` and fill in the report name `ZABAPGIT_STANDALONE`.

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



STEP 3: Remove TPOF Repository in ABAPGit

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

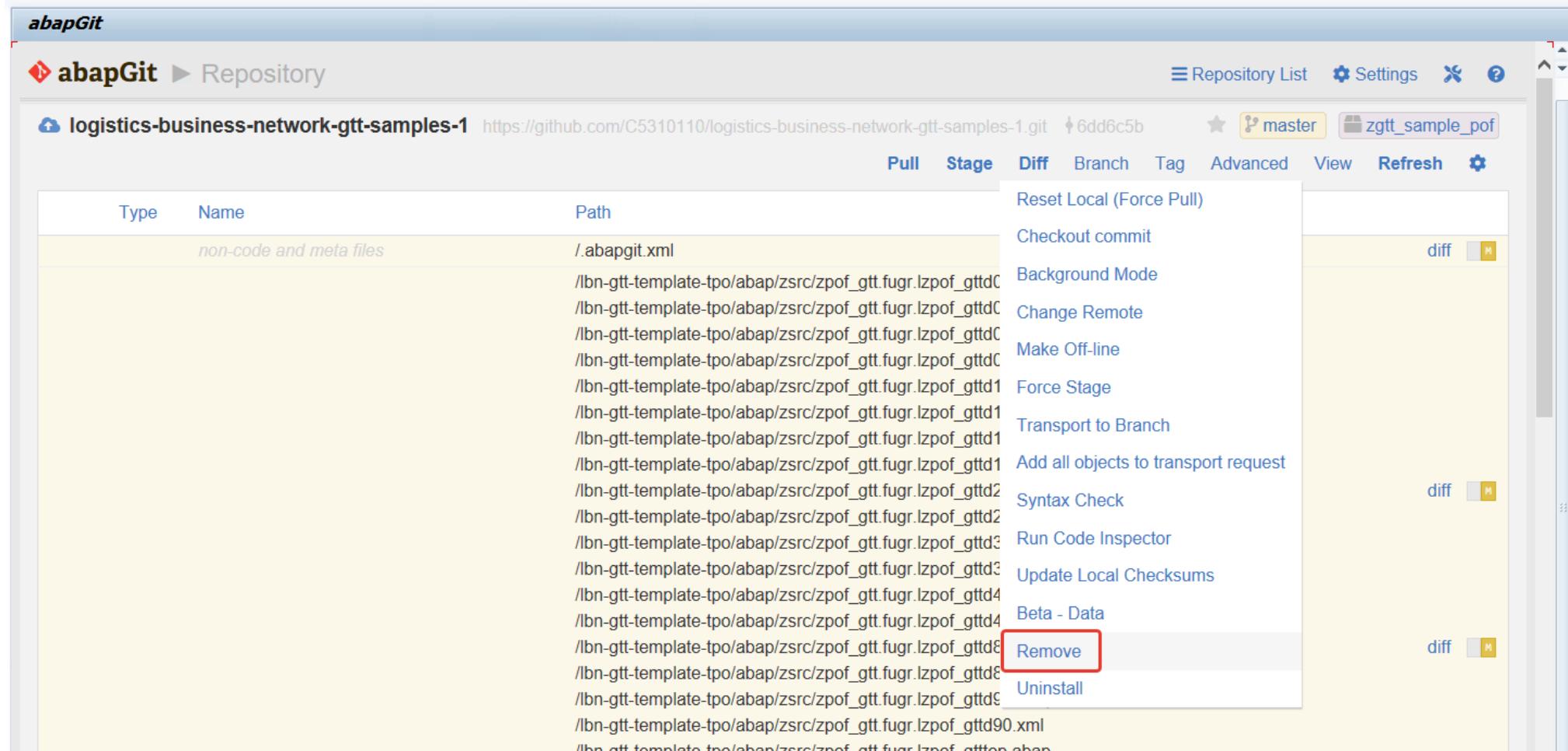


The screenshot shows the abapGit application interface. At the top, there's a header with the title "abapGit" and a navigation bar with icons for "New Online", "New Offline", "Settings", and a question mark. Below the header is a search bar labeled "Filter:" and two filter options: "Only Favorites" and "Detail". The main area is a table titled "Repository List" with columns: "Name", "Url", "Package", "Branch", and "Action". There is one entry in the table:

Name	Url	Package	Branch	Action
logistics-business-network-gtt-samples-1	github.com/C5310110/logistics-business-network-gtt-samples-1.git	zgtt_sample_pof	master	Check Stage Patch Settings 

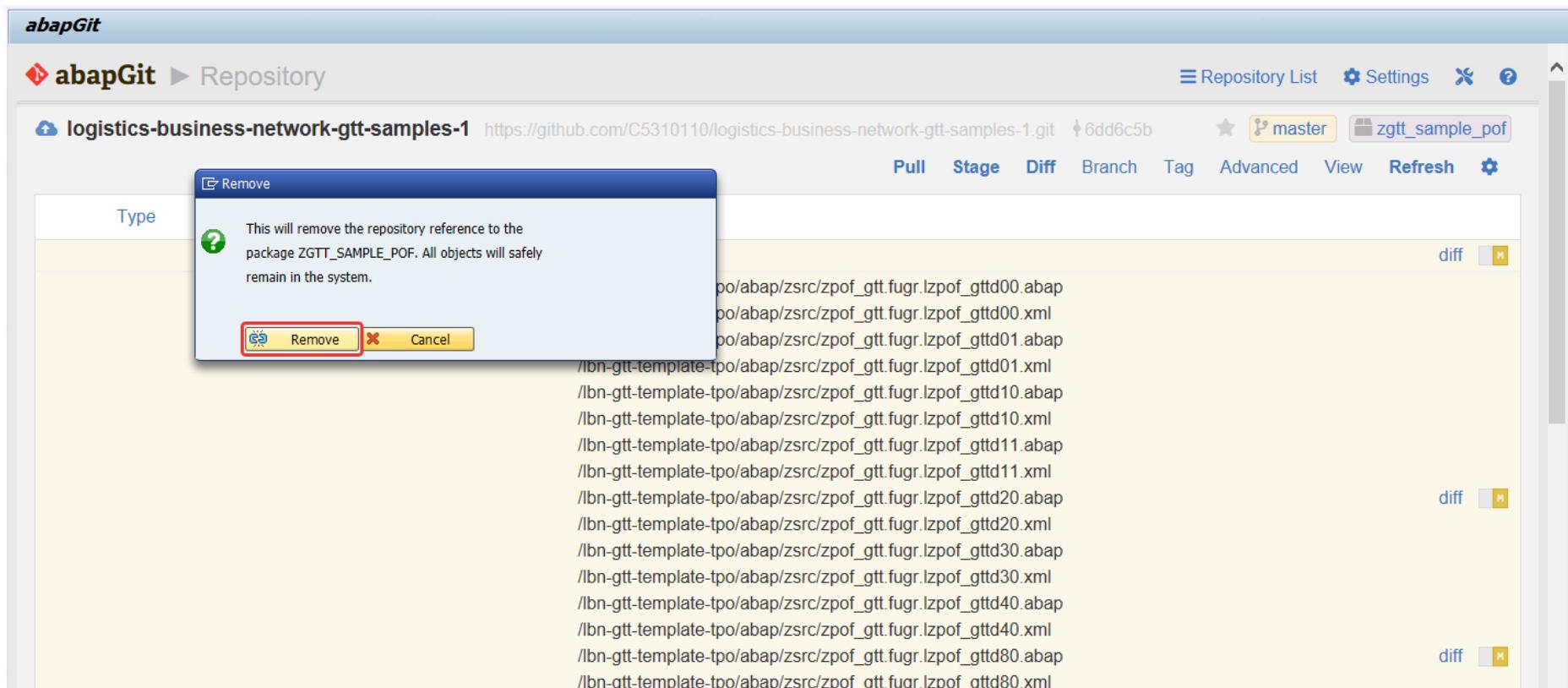
STEP 3: Remove TPOF Repository in ABAPGit

3-4: Under the ‘Advanced’ menu, choose and click ‘Remove’.

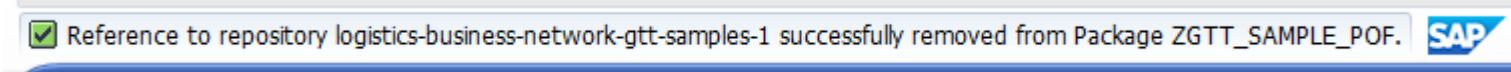


STEP 3: Remove TPOF Repository in ABAPGit

3-5: Click 'Remove' button in the popup window. The reference to TPOF repository will be removed.

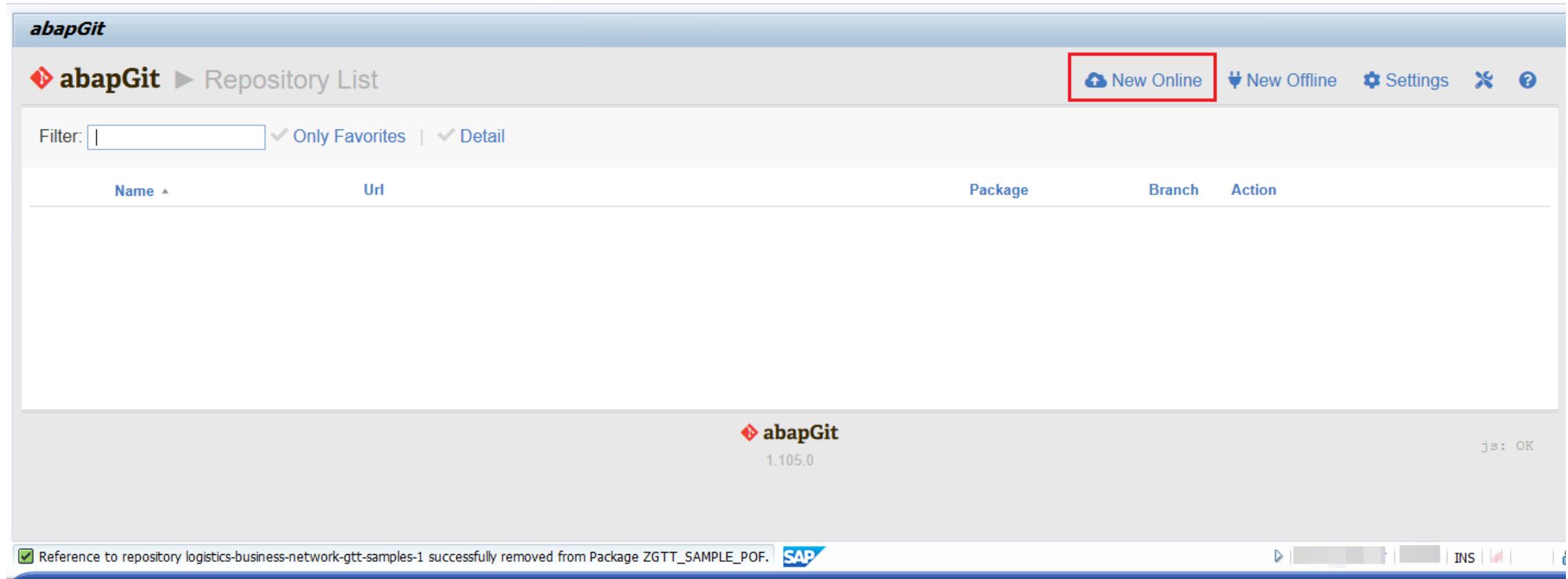


3-6: After repository removal you will see the following message:



STEP 4: Download TSOF Code from GitHub

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



The screenshot shows the abapGit application interface. At the top, there is a header bar with the title "abapGit" and a navigation menu. Below the header is a toolbar with several icons: a red diamond icon, "abapGit", "Repository List", "New Online" (which is highlighted with a red box), "New Offline", "Settings", and two other icons. There is also a question mark icon. Below the toolbar is a search bar labeled "Filter:" with a placeholder and two checkboxes: "Only Favorites" and "Detail". The main area is a table with columns: "Name", "Url", "Package", "Branch", and "Action". The table is currently empty. At the bottom of the screen, there is a footer bar with the "abapGit" logo, version "1.105.0", and a message "js: OK". The status bar at the very bottom shows a checked checkbox, a message about removing a reference from a package, the SAP logo, and some navigation icons.

STEP 4: Download TSOF 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>

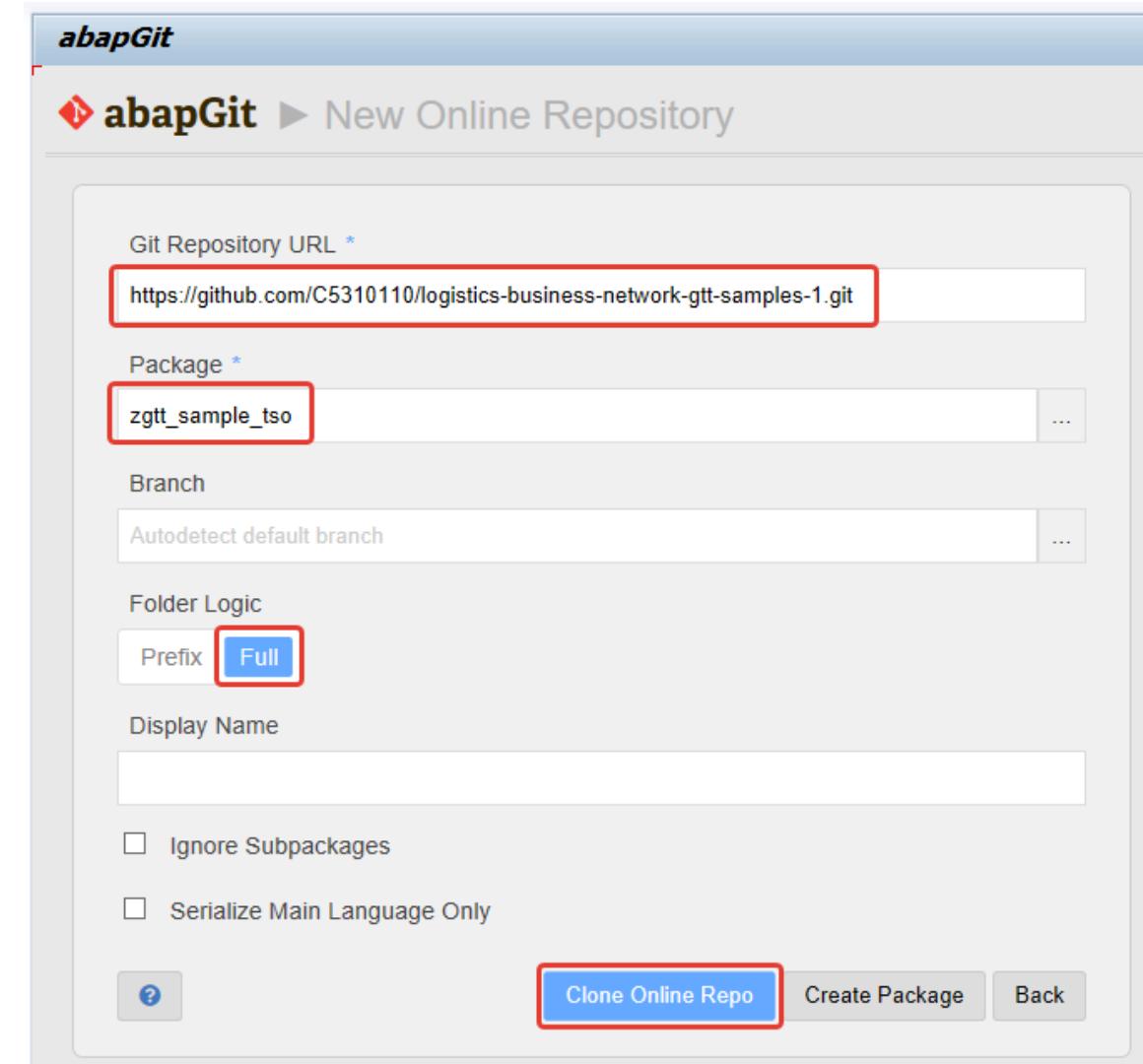
Caution:

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.

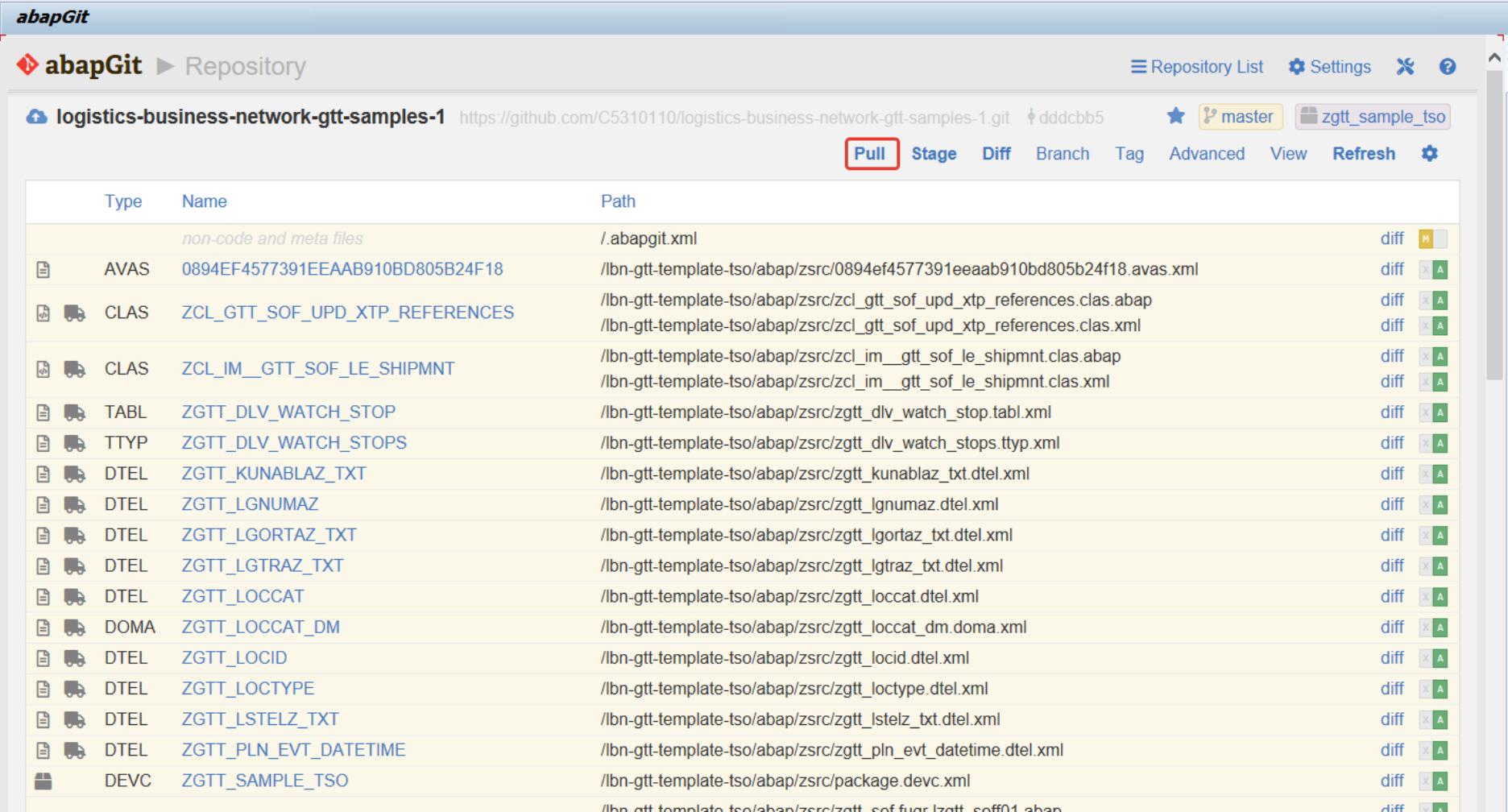
4-4: Set *Full* for **Folder Logic**

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



STEP 4: Download TSOF Code from GitHub

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



The screenshot shows the abapGit interface with the following details:

- Repository:** logistics-business-network-gtt-samples-1
- URL:** https://github.com/C5310110/logistics-business-network-gtt-samples-1.git
- Branch:** master
- Current View:** zgtt_sample_tso
- Buttons:** Pull (highlighted), Stage, Diff, Branch, Tag, Advanced, View, Refresh, Settings
- Table Headers:** Type, Name, Path
- Table Data:** A list of files and their paths, categorized by type (AVAS, CLAS, TABL, TTYP, DTEL, DOMA) and name. Each row includes a 'diff' button with a status indicator (M, A, or C).

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	A
CLAS	ZCL_IM_GTT_SOF_LE_SHIPMNT	/lbn-gtt-template-tso/abap/zsrc/zcl_im_gtt_sof_le_shipmnt.clas.abap	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_kunablaz_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_LOCAT	/lbn-gtt-template-tso/abap/zsrc/zgtt_locat.dtel.xml	A
DOMA	ZGTT_LOCAT_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.dtel.xml	A
DEVC	ZGTT_SAMPLE_TSO	/lbn-gtt-template-tso/abap/zsrc/package.devc.xml	A

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*.

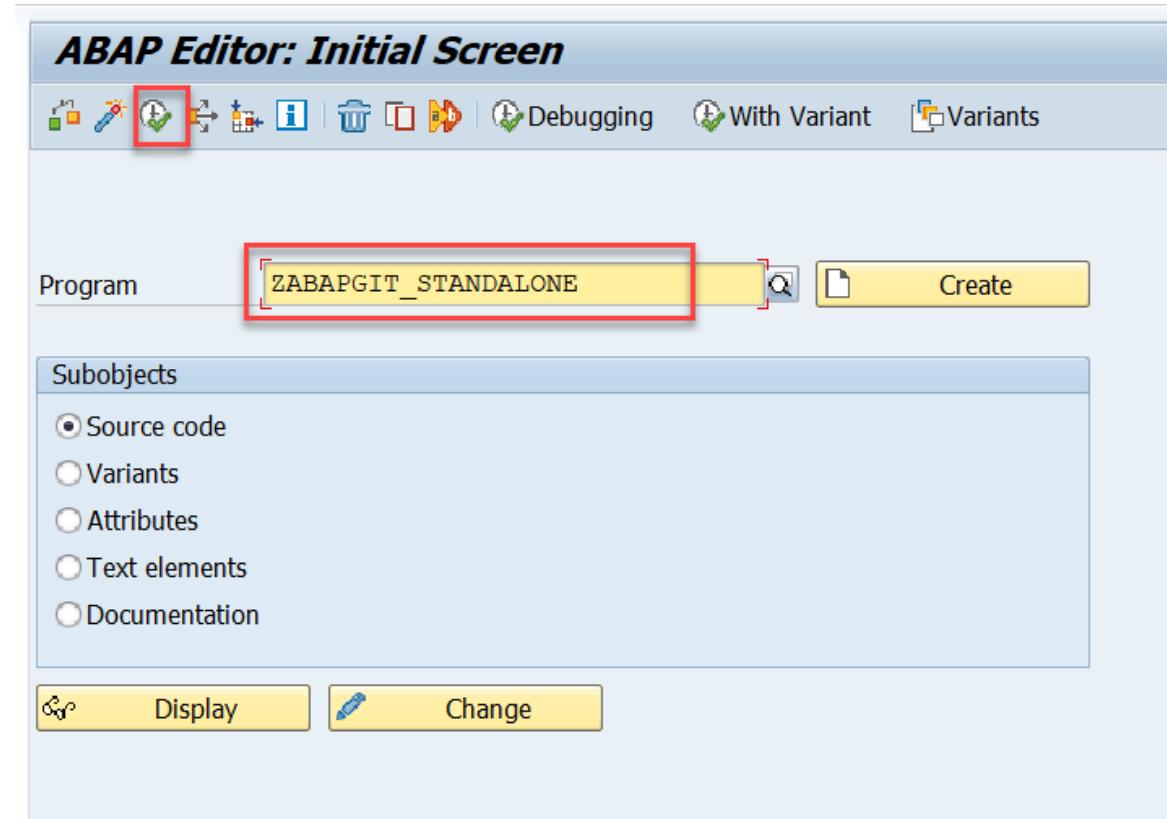
Note: ABAPGit version 1.105.0 is used to create this guide. In case you use different version of ABAPGit, you may face distinctions in interface of the app.

The screenshot shows the abapGit documentation page. The header reads "abapGit › documentation". The left sidebar has sections for "Getting Started" (Installation, Upgrading, Uninstalling, UI features), "Setup" (SSL setup, Proxy configuration, Development version), "Online Projects" (Installing online repo, Keeping code up to date, Uninstall repository, First project, Moving package into git, Contributing to a project), "Offline Projects" (Import zip, Export zip), and "Reference" (Repo Settings (abapgit.xml), Supported object types, Icon Legend, User Exits, Authorizations, Namespaces). The main content area starts with a "Summary" section stating that abapGit exists in two flavours: standalone or developer version. It then describes the standalone version as targeted at users and the developer version as targeted at developers. Below this is a "Prerequisites" section mentioning SAP BASIS version 702 or higher. The "Install standalone version" section is highlighted with a red border and contains four numbered steps: 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. A note below says 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 says now you can use abapGit by executing the report in transaction SE38.

STEP 2: Download ABAP Code

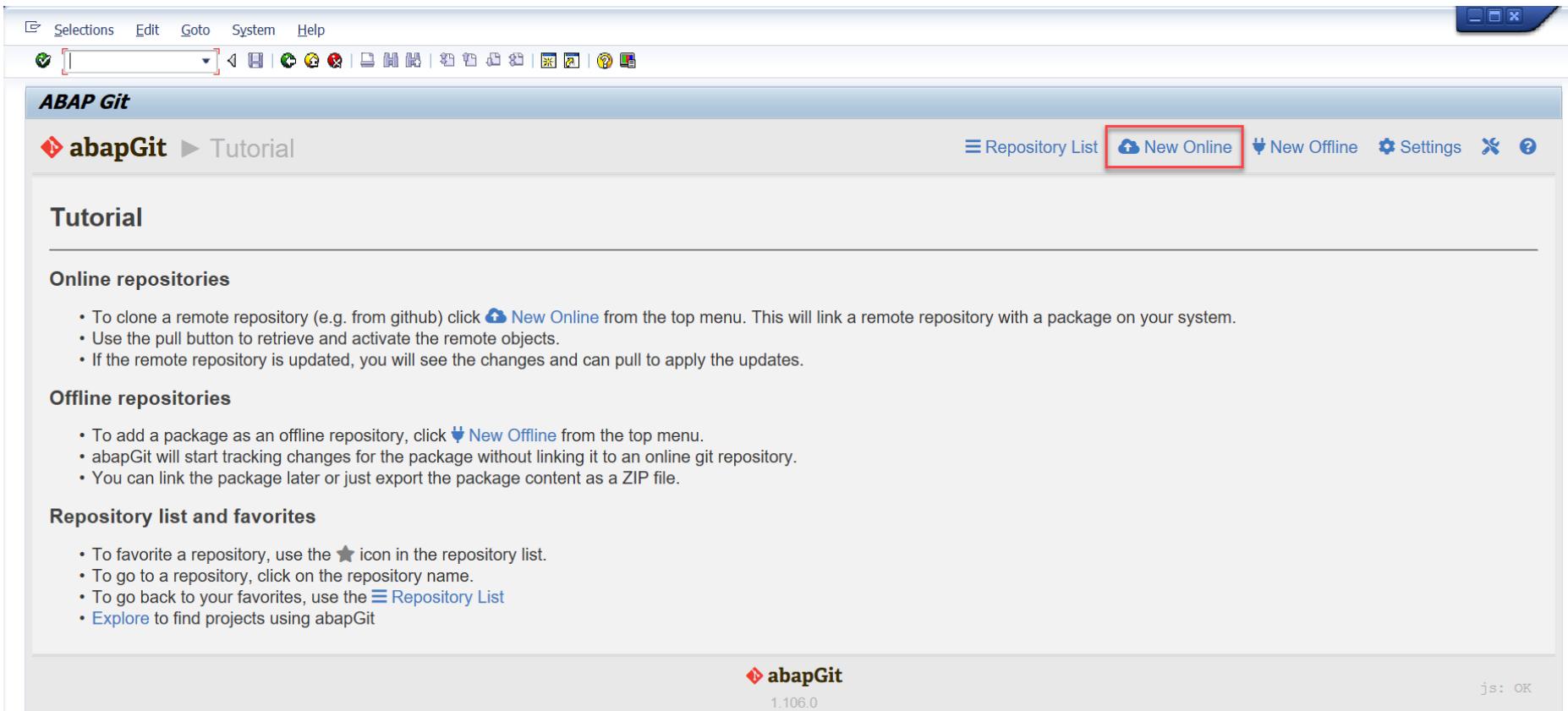
2-1: Enter T-code **SE38** and fill in the report name from STEP 1,
ZABAPGIT_STANDALONE.

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



STEP 2: Download ABAP Code

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



STEP 2: Download ABAP Code

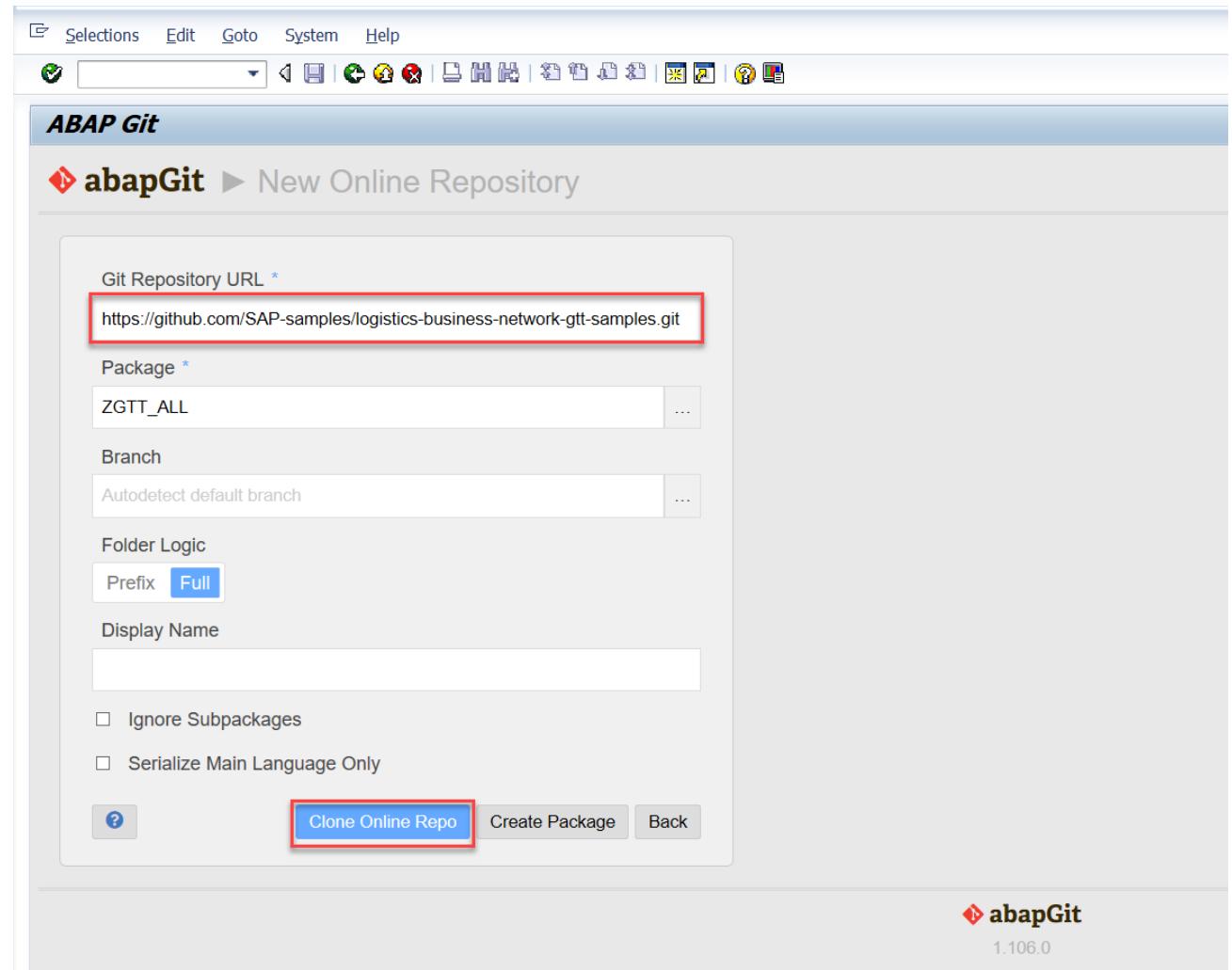
2-4: Fill in the **Git Repository URL**:

<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.

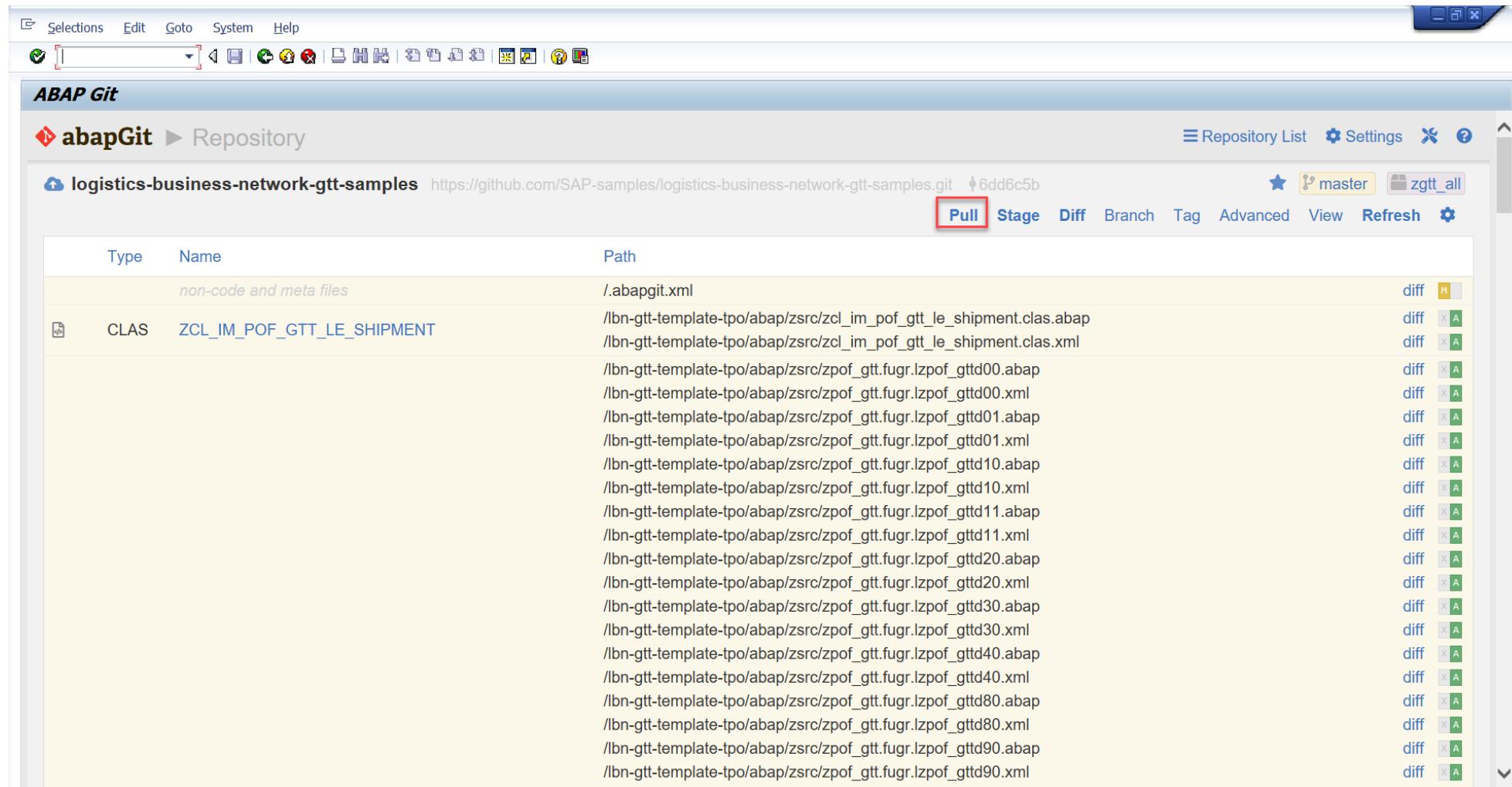
2-6: Set *Full* for **Folder Logic**

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.

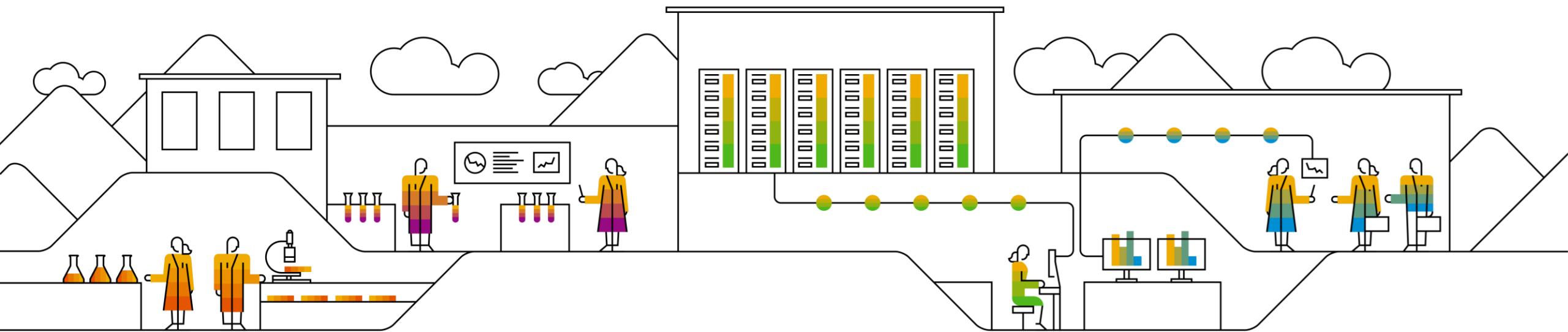


The screenshot shows the ABAP Git interface within SAP. The title bar includes 'Selections', 'Edit', 'Goto', 'System', and 'Help'. Below the title bar is a toolbar with various icons. The main area is titled 'ABAP Git' and shows the path 'abapGit > Repository'. A repository card for 'logistics-business-network-gtt-samples' is displayed, including its URL and a commit hash. The 'Pull' button in the top right of the card 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, such as 'ZCL_IM_POF_GTT_LE_SHIPMENT' and various XML and ABAP files under the path '/bn-gtt-template-tpo/abap/zsrc/'. Each row in the table has a 'diff' link and a small status icon.

Type	Name	Path	diff
non-code and meta files			
		./abapgit.xml	[M]
CLAS	ZCL_IM_POF_GTT_LE_SHIPMENT	/bn-gtt-template-tpo/abap/zsrc/zcl_im_pof_gtt_le_shipment.clas.abap	[diff] [A]
		/bn-gtt-template-tpo/abap/zsrc/zcl_im_pof_gtt_le_shipment.clas.xml	[diff] [A]
		/bn-gtt-template-tpo/abap/zsrc/zpof_gtt.fugr.lzpof_gttd00.abap	[diff] [A]
		/bn-gtt-template-tpo/abap/zsrc/zpof_gtt.fugr.lzpof_gttd00.xml	[diff] [A]
		/bn-gtt-template-tpo/abap/zsrc/zpof_gtt.fugr.lzpof_gttd01.abap	[diff] [A]
		/bn-gtt-template-tpo/abap/zsrc/zpof_gtt.fugr.lzpof_gttd01.xml	[diff] [A]
		/bn-gtt-template-tpo/abap/zsrc/zpof_gtt.fugr.lzpof_gttd10.abap	[diff] [A]
		/bn-gtt-template-tpo/abap/zsrc/zpof_gtt.fugr.lzpof_gttd10.xml	[diff] [A]
		/bn-gtt-template-tpo/abap/zsrc/zpof_gtt.fugr.lzpof_gttd11.abap	[diff] [A]
		/bn-gtt-template-tpo/abap/zsrc/zpof_gtt.fugr.lzpof_gttd11.xml	[diff] [A]
		/bn-gtt-template-tpo/abap/zsrc/zpof_gtt.fugr.lzpof_gttd20.abap	[diff] [A]
		/bn-gtt-template-tpo/abap/zsrc/zpof_gtt.fugr.lzpof_gttd20.xml	[diff] [A]
		/bn-gtt-template-tpo/abap/zsrc/zpof_gtt.fugr.lzpof_gttd30.abap	[diff] [A]
		/bn-gtt-template-tpo/abap/zsrc/zpof_gtt.fugr.lzpof_gttd30.xml	[diff] [A]
		/bn-gtt-template-tpo/abap/zsrc/zpof_gtt.fugr.lzpof_gttd40.abap	[diff] [A]
		/bn-gtt-template-tpo/abap/zsrc/zpof_gtt.fugr.lzpof_gttd40.xml	[diff] [A]
		/bn-gtt-template-tpo/abap/zsrc/zpof_gtt.fugr.lzpof_gttd80.abap	[diff] [A]
		/bn-gtt-template-tpo/abap/zsrc/zpof_gtt.fugr.lzpof_gttd80.xml	[diff] [A]
		/bn-gtt-template-tpo/abap/zsrc/zpof_gtt.fugr.lzpof_gttd90.abap	[diff] [A]
		/bn-gtt-template-tpo/abap/zsrc/zpof_gtt.fugr.lzpof_gttd90.xml	[diff] [A]

D) Configuration and Coding Guide

- Advanced



1: Maintain AOT Type

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

The image displays two SAP application screens side-by-side. On the left, the 'Change View "Define Application Object Types": Details' screen shows the configuration of an Application Object Type (AOT). The 'Bus. Proc. Type' is set to 'ESC_PURORD' and the 'Appl. Obj. Type' is set to 'ZPOF_GTT_AC_HD'. The 'Text' field contains the description 'Purchase Order Head for Procurement Visibility (GTT) - Acceptance'. Below this, the 'General Data' tab is selected, showing the 'Sequencing / Destination' and 'Business Object Reference' sections. In the 'Sequencing / Destination' section, the 'Seq. No.' is 10 and the 'CI for GTT' is 'ZGTTPOFAC'. In the 'Business Object Reference' section, the 'Object Type' is 'BUS2012' and the 'PurchaseOrder' is selected. The 'Appl. Obj. Type' 'ZPOF_GTT_AC_HD' is highlighted with a red box. On the right, the 'Model Details' screen for the model 'pof' (Active) shows the 'IDOC Integration' tab selected. It lists the 'Tracked Process' as 'PurchaseOrder' and the 'Application Object Type' as 'ZPOF_GTT_AC_HD'. The 'Fields' section lists various fields and their corresponding IDOC segments and field names. The 'Tracked Process / Events' section shows the mapping between the tracked process and events like 'PurchaseOrderEvent' and 'E1EHPAO'. The 'Integration Switch' is turned 'ON'.

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 the Manage Models app in GTT Version 2.

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

Change View "Define Application Object Types": Details

D. Bus. Proc. Type: ESC_PURORD
Appl. Obj. Type: ZPOF_GTT_AC_HD [Purchase Order Head for Procurement Visibility (GTT) - Acceptance]
Text: PO Head Proc. Visib.

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

Tracking ID Setup
TrkID Method: B Determine from Field
Tr.ID Tab. Type: 1 Main Object Table
Tr. ID Code Set: PURCHASE_ORDER
Trk.ID Function:

Parameter Setup
Cntl Data Function: ZPOF_GTT_OTE_PO_HD
Info Data Function:
Planned Event Function: ZPOF_GTT_EE_PO_HD

SAP Model Details Internal - Test

pof Active
Purchase Order Fulfillment
Namespace: com.lbngtssamples.gtt.app.pof Correlation Level: 4

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

Items (6) Create Edit Delete

Object	Description	Tracking Id Type	Grant	Readable	Writable
PurchaseOrder	Purchase Order	PURCHASE_ORDER			
PurchaseOrderItem	PurchaseOrderItem	PURCHASE_ORDER_ITEM			
InboundDelivery	Inbound Delivery	INBOUND_DELIVERY			
InboundDeliveryItem	Inbound Delivery Item	INBOUND_DELIVERY_IT			
plannedDelivery	plannedDelivery Date				
Net Value	netValue	Decimal(15,2)			
Currency	currency	String(5)			
Incoterms					

Create Tracked Process

Name: * PurchaseOrder
Description: Purchase Order
Tracking Id Type: PURCHASE_ORDER

OK Cancel

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 categories:

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

Select one of the above categories, create the extractor function and assign the corresponding modules.

For customization of Tracking ID Type and AOT ID, you need to enable the *Determine by Function* option.

For customization of GTT relevance, you need to enable the *Check Function (Function Module)* option.

Extractor	Description
510_WRF CONTR_01	Control Parameters for Purchase Order (Seasonal Procurement)
CONTR_PARAM_DELIV	Selection of Control parameters for Deliveries in Shipment
OBP10_DELIV	Selection of CPs for Delivery - Outbound Delivery Visibility Process
OBP10_HU_IN_DLV	Selection of CPs for HUs in Delivery - Outbound Delivery Visibility Process
OCB10_CONTAINER	Selection of CPs for Containers in Ocean Carrier Booking Process
OCB10_ORDER	Selection of CPs for Booking Orders in Ocean Carrier Booking Process
ODT20_TOR	Selection of Control Parameters - Transportation Execution Visib. Proc.
ODT30_INS	Selection of Cntrl Parameters - Instruction Execution Visibility Procces
ODT40_TOR	Selection of Control Parameters - Transportation Execution Visib. Proc.
PCM10_ITEM	Selection of CPs for Purchase Order Item - Procurement Visibility Process
PMF10_NOTIF	Selection of CPs for Notification - Production Malfunction Visibility Process
PMF10_ORDER	Selection of CPs for Manuf. Order - Production Malfunction Visibility Process
RES30_CPARAM	Selection of Control Parameters - Resource Tracking Visibility Process
SNC10_MSGIN	Control Parameter Extractor for SNC Messages
SNC10_PURORD	Control Parameter Extractor for SNC Purchase Order
SNC10_RPLORD	Control Parameter Extractor for SNC Replenishment Order
TRA10_DELIV	Selection of CPs for Deliveries in Road Shipment - Transp. Visibility Process
TRA10_ROADSEA	Selection of CPs for Road/Sea Shipment - Transp. Visibility Process
ZGTT_OBP10_DELIV	Selection of CPs for Delivery - Outbound Delivery Visibility Process
ZGTT_OTE_DE_HDR	Control Parameter Extractor for Outbound Delivery Header
ZGTT_OTE_DE_ITEM	Control Parameter Extractor for Outbound Delivery Item
ZGTT_OTE_SHP_HDR	Control Parameter Extractor for Shipment Header
ZGTT_OTE_SO_HDR	Control Parameter Extractor for Sales Order Header
ZPOF_GTT_OTE_DL_HDR	Control Parameter Extractor for Inbound Delivery Header
ZPOF_GTT_OTE_DL_ITEM	Control Parameter Extractor for Inbound Delivery Item
ZPOF_GTT_OTE_PO_HDR	Control Parameter Extractor for Purchasing Order Header
ZPOF_GTT_OTE_PO_ITEM	Control Parameter Extractor for Purchasing Order Item
ZPOF_GTT_OTE_SH_HDR	Control Parameter Extractor for Shipment Header
ZSST_GTT_OTE_FO_HDR	Control Parameter Extractor for Freight Order

4: Sample Code for Track PO Fulfillment Template App

4-1 To support the Track PO Fulfillment template app, the sample code covers the following cases by function group ZPOF_GTT:

Category	Business Process Type	Function Module Name	Description
Control Parameter Extractors	ESC_DELIV	ZPOF_GTT_OTE_DL_HDR	Control Parameter Extractor for Inbound Delivery Header
Control Parameter Extractors	ESC_DELIV	ZPOF_GTT_OTE_DL_ITEM	Control Parameter Extractor for Inbound Delivery Item
Control Parameter Extractors	ESC_PURORD	ZPOF_GTT_OTE_PO_HDR	Control Parameter Extractor for Purchasing Order Header
Control Parameter Extractors	ESC_PURORD	ZPOF_GTT_OTE_PO_ITEM	Control Parameter Extractor for Purchasing Order Item
Control Parameter Extractors	ESC_SHIPMT	ZPOF_GTT_OTE_SH_HDR	Control Parameter Extractor for Shipment Header
Event Data Extractors	ESC_MATDOC	ZPOF_GTT_EE_DL_HDR_GR	Actual event DLV Header Goods Receipt
Event Data Extractors	ESC_DELIV	ZPOF_GTT_EE_DL_ITEM_PA	Actual event DLV Item Put Away
Event Data Extractors	ESC_DELIV	ZPOF_GTT_EE_DL_ITEM_PKNG	Actual event DLV Item Packing
Event Data Extractors	ESC_PURORD	ZPOF_GTT_EE_PO_ITEM_CONF	Actual event PO Item Confirmation
Event Data Extractors	ESC_PURORD	ZPOF_GTT_EE_PO_ITEM_DEL	Actual event PO Item Deletion
Event Data Extractors	ESC_MATDOC	ZPOF_GTT_EE_PO_ITEM_GR	Actual event PO Item Goods Receipt
Event Data Extractors	ESC_SHIPMT	ZPOF_GTT_EE_SH_HDR_ARR	Actual event Shipment Header Arrival
Event Data Extractors	ESC_SHIPMT	ZPOF_GTT_EE_SH_HDR_CI	Actual event Shipment Header Check In
Event Data Extractors	ESC_SHIPMT	ZPOF_GTT_EE_SH_HDR_DEP	Actual event Shipment Header Departure
Event Data Extractors	ESC_SHIPMT	ZPOF_GTT_EE_SH_HDR_LE	Actual event Shipment Header Load End
Event Data Extractors	ESC_SHIPMT	ZPOF_GTT_EE_SH_HDR_LS	Actual event Shipment Header Load Start
Planned Event Extractors	ESC_DELIV	ZPOF_GTT_EE_DL_HDR	Selection of EEs for Inbound Delivery Item - Procurement Visibility Process
Planned Event Extractors	ESC_PURORD	ZPOF_GTT_EE_PO_HDR	Selection of EEs for Purchasing Order Header - Procurement Visibility Process
Planned Event Extractors	ESC_PURORD	ZPOF_GTT_EE_PO_ITEM	Selection of EEs for Purchasing Order Item - Procurement Visibility Process
Planned Event Extractors	ESC_SHIPMT	ZPOF_GTT_EE_SH_HDR	Selection of EEs for Shipment Header - Procurement Visibility Process
Tracking ID Extractors	ESC_DELIV	ZPOF_GTT_OTE_DL_ITEM_TID	Tracking ID Extractor for Inbound Delivery Item
Tracking ID Extractors	ESC_PURORD	ZPOF_GTT_OTE_PO_ITEM_TID	Tracking ID Extractor for Purchasing Order Item
Tracking ID Extractors	ESC_SHIPMT	ZPOF_GTT_OTE_SH_HDR_TID	Tracking ID Extractor for Shipment Header

4: Sample Code for Track PO Fulfillment Template App

Continued from the previous table:

Category	Business Process Type	Function Module Name	Description
GTT relevance function of AOT	ESC_DELIV	ZPOF_GTT_OTE_DL_HDR_REL	Appl. Object Type Relevance for Inbound Delivery Header
GTT relevance function of AOT	ESC_DELIV	ZPOF_GTT_OTE_DL_ITEM_REL	Appl. Object Type Relevance for Inbound Delivery Item
GTT relevance function of AOT	ESC_PURORD	ZPOF_GTT_OTE_PO_HDR_REL	Appl. Object Type Relevance for Purchasing Order Header
GTT relevance function of AOT	ESC_PURORD	ZPOF_GTT_OTE_PO_ITEM_REL	Appl. Object Type Relevance for Purchasing Order Item
GTT relevance function of AOT	ESC_SHIPMT	ZPOF_GTT_OTE_SH_HDR_REL	Appl. Object Type Relevance for Shipment Header
GTT relevance function of Event Type	ESC_MATDOC	ZPOF_GTT_EE_DL_HDR_GR_REL	Relevance function for Actual event DLV Header Goods Receipt
GTT relevance function of Event Type	ESC_DELIV	ZPOF_GTT_EE_DL_ITEM_PA_REL	Relevance function for Actual event DLV Item Put Away
GTT relevance function of Event Type	ESC_DELIV	ZPOF_GTT_EE_DL_ITEM_PKNG_REL	Relevance function for Actual event DLV Item Packing
GTT relevance function of Event Type	ESC_PURORD	ZPOF_GTT_EE_PO_ITEM_CONF_REL	Relevance function for Actual event PO Item Confirmation
GTT relevance function of Event Type	ESC_PURORD	ZPOF_GTT_EE_PO_ITEM_DEL_REL	Relevance function for Actual event PO Item Deletion
GTT relevance function of Event Type	ESC_MATDOC	ZPOF_GTT_EE_PO_ITEM_GR_REL	Relevance function for Actual event PO Item Goods Receipt
GTT relevance function of Event Type	ESC_SHIPMT	ZPOF_GTT_EE_SH_HDR_ARR_REL	Relevance function for Actual event Header Arrival
GTT relevance function of Event Type	ESC_SHIPMT	ZPOF_GTT_EE_SH_HDR_CI_REL	Relevance function for Actual event Header Check In
GTT relevance function of Event Type	ESC_SHIPMT	ZPOF_GTT_EE_SH_HDR_DEP_REL	Relevance function for Actual event Header Departure
GTT relevance function of Event Type	ESC_SHIPMT	ZPOF_GTT_EE_SH_HDR_LE_REL	Relevance function for Actual event Header Load End
GTT relevance function of Event Type	ESC_SHIPMT	ZPOF_GTT_EE_SH_HDR_LS_REL	Relevance function for Actual event Header Load Start
Cross TP Update Function	ESC_DELIV	ZPOF_GTT_CTP_SH_TO_DL	Cross TP Update from Shipment to Delivery

4: Sample Code for Track PO Fulfillment Template App

4-2 To support the Track PO Fulfillment template app, the following extractors should be set up:

Business Process Type	Extractor Type	Extraction Level	Description	Control Tables	Used Function Modules
ESC_PURORD	AOT Type	PO Header	Purchase Order Head for Procurement Visibility (GTT)	PURCHASE_ORDER_HEADER_NEW	ZPOF_GTT_OTE_PO_HDR ZPOF_GTT_OTE_PO_HDR_REL
ESC_PURORD	AOT Type	PO Item	Purchase Order Item for Procurement Visibility (GTT)	PURCHASE_ITEM_NEW PURCHASE_ORDER_HEADER_NEW PURCHASE_ITEM_OLD	ZPOF_GTT_OTE_PO_ITEM ZPOF_GTT_OTE_PO_ITEM_REL ZPOF_GTT_EE_PO_ITEM ZPOF_GTT_OTE_PO_ITEM_TID
ESC_PURORD	Event Type	PO Item	Purchase Order Item Confirmation Event	PURCHASE_ITEM_NEW PURCHASE_ORDER_HEADER_NEW PURCHASE_ITEM_OLD PURCHASE_ORDER_HEADER_OLD	ZPOF_GTT_EE_PO_ITEM_CONF ZPOF_GTT_EE_PO_ITEM_CONF_REL
ESC_PURORD	Event Type	PO Item	Purchase Order Item Deletion Event	PURCHASE_ITEM_NEW PURCHASE_ORDER_HEADER_NEW PURCHASE_ITEM_OLD PURCHASE_ORDER_HEADER_OLD	ZPOF_GTT_EE_PO_ITEM_DEL ZPOF_GTT_EE_PO_ITEM_DEL_REL
ESC_MATDOC	Event Type	PO Item	Purchase Order Item Goods Receipt Event	MATERIAL_SEGMENT MATERIAL_HEADER	ZPOF_GTT_EE_PO_ITEM_GR ZPOF_GTT_EE_PO_ITEM_GR_REL
ESC_DELIV	AOT Type	DLV Header	Inbound Delivery Head for Procurement Visibility (GTT)	DELIVERY_HEADER_NEW DELIVERY_HEADER_OLD	ZPOF_GTT_OTE_DL_HDR ZPOF_GTT_OTE_DL_HDR_REL ZPOF_GTT_EE_DL_HDR
ESC_DELIV	AOT Type	DLV Item	Inbound Delivery Item for Procurement Visibility (GTT)	DELIVERY_ITEM_NEW DELIVERY_HEADER_NEW DELIVERY_ITEM_OLD	ZPOF_GTT_OTE_DL_ITEM ZPOF_GTT_OTE_DL_ITEM_REL ZPOF_GTT_EE_DL_ITEM ZPOF_GTT_OTE_DL_ITEM_TID
ESC_DELIV	Event Type	DLV Item	Inbound Delivery Item Put Away Event	DELIVERY_ITEM_NEW DELIVERY_HEADER_NEW DELIVERY_ITEM_OLD DELIVERY_HEADER_OLD	ZPOF_GTT_EE_DL_ITEM_PA ZPOF_GTT_EE_DL_ITEM_PA_REL

4: Sample Code for Track PO Fulfillment Template App

Continued from the previous table:

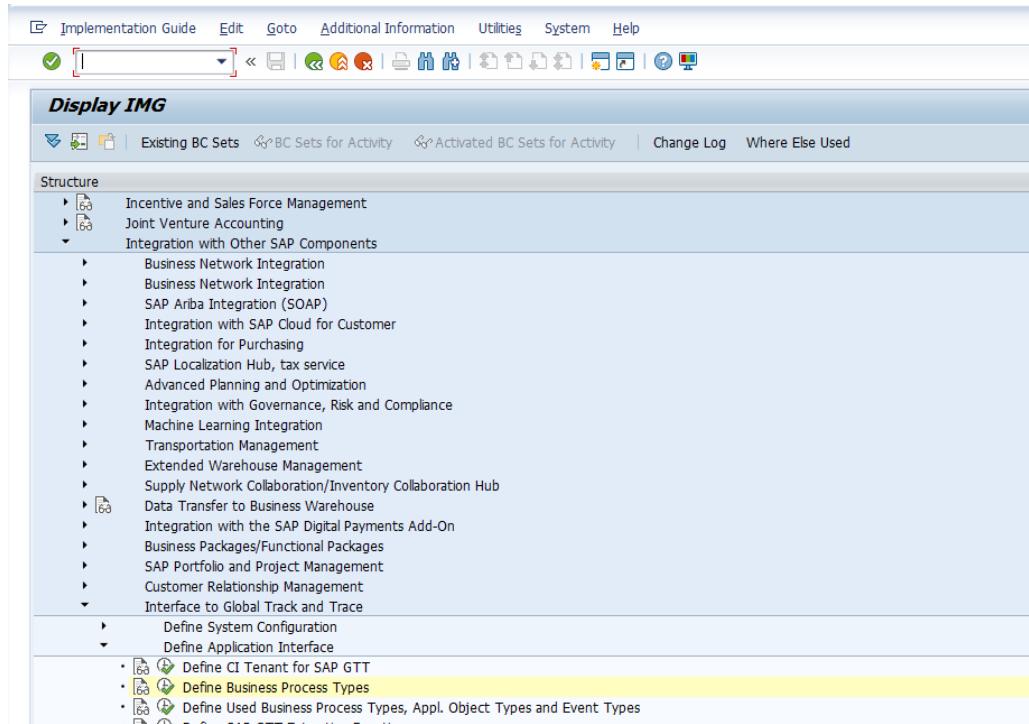
Business Process Type	Extractor Type	Extraction Level	Description	Control Tables	Used Function Modules
ESC_DELIV	Event Type	DLV Item	Inbound Delivery Item Packing Event	DELIVERY_ITEM_NEW DELIVERY_HEADER_NEW DELIVERY_ITEM_OLD DELIVERY_HEADER_OLD	ZPOF_GTT_EE_DL_ITEM_PKNG ZPOF_GTT_EE_DL_ITEM_PKNG_REL
ESC_MATDOC	Event Type	DLV Header	Inbound Delivery Header Goods Receipt Event	DELIVERY_ITEM_NEW DELIVERY_HEADER_NEW DELIVERY_ITEM_OLD DELIVERY_HEADER_OLD	ZPOF_GTT_EE_DL_HDR_GR ZPOF_GTT_EE_DL_HDR_GR_REL
ESC_SHIPMT	AOT Type	Shipment	Shipment for Procurement Visibility (GTT)	SHIPMENT_HEADER_NEW SHIPMENT_HEADER_OLD	ZPOF_GTT_OTE_SH_HDR ZPOF_GTT_OTE_SH_HDR_REL ZPOF_GTT_EE_SH_HDR ZPOF_GTT_OTE_SH_HDR_TID
ESC_SHIPMT	Event Type	Shipment	Shipment Arrival Event	SHIPMENT_HEADER_NEW SHIPMENT_HEADER_OLD	ZPOF_GTT_EE_SH_HDR_ARR ZPOF_GTT_EE_SH_HDR_ARR_REL
ESC_SHIPMT	Event Type	Shipment	Shipment Check In Event	SHIPMENT_HEADER_NEW SHIPMENT_HEADER_OLD	ZPOF_GTT_EE_SH_HDR_CI ZPOF_GTT_EE_SH_HDR_CI_REL
ESC_SHIPMT	Event Type	Shipment	Shipment Departure Event	SHIPMENT_HEADER_NEW SHIPMENT_HEADER_OLD	ZPOF_GTT_EE_SH_HDR_DEP ZPOF_GTT_EE_SH_HDR_DEP_REL
ESC_SHIPMT	Event Type	Shipment	Shipment Load End Event	SHIPMENT_HEADER_NEW SHIPMENT_HEADER_OLD	ZPOF_GTT_EE_SH_HDR_LE ZPOF_GTT_EE_SH_HDR_LE_REL
ESC_SHIPMT	Event Type	Shipment	Shipment Load Start Event	SHIPMENT_HEADER_NEW SHIPMENT_HEADER_OLD	ZPOF_GTT_EE_SH_HDR_LS ZPOF_GTT_EE_SH_HDR_LS_REL

5: Available Contexts for the Extractors' Modules

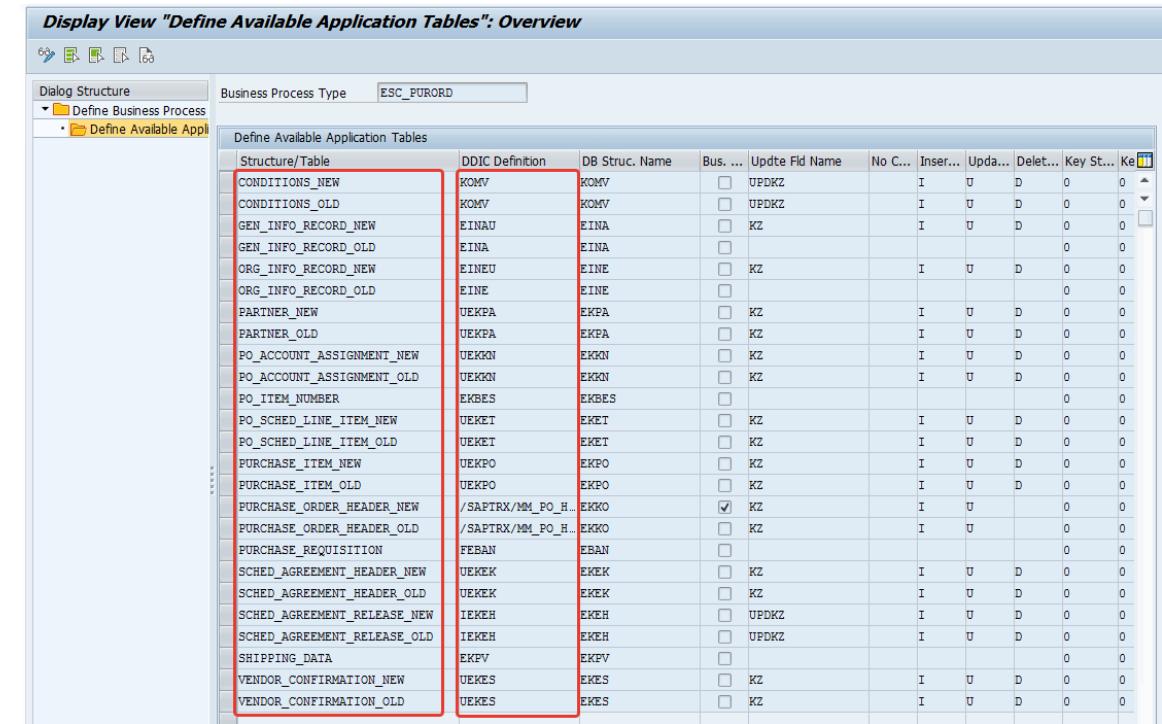
5-1: In Display IMG page, click
Integration with Other SAP Components -> Interface to Global Track and Trace -> Define Application Interface

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

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



The screenshot shows the SAP Display IMG interface. The navigation bar at the top includes: Implementation Guide, Edit, Goto, Additional Information, Utilities, System, and Help. Below the navigation bar, there are several icons. The main area is titled "Display IMG" and contains a breadcrumb trail: Existing BC Sets > BC Sets for Activity > Activated BC Sets for Activity. Below this, there are tabs for Change Log and Where Else Used. The left sidebar has a "Structure" section with a tree view. The expanded "Integration with Other SAP Components" node contains the following items: Incentive and Sales Force Management, Joint Venture Accounting, Integration with Other SAP Components (which is expanded), Business Network Integration, SAP Ariba Integration (SOAP), Integration with SAP Cloud for Customer, Integration for Purchasing, SAP Localization Hub, tax service, Advanced Planning and Optimization, Integration with Governance, Risk and Compliance, Machine Learning Integration, Transportation Management, Extended Warehouse Management, Supply Network Collaboration/Inventory Collaboration Hub, Data Transfer to Business Warehouse, Integration with the SAP Digital Payments Add-On, Business Packages/Functional Packages, SAP Portfolio and Project Management, Customer Relationship Management, Interface to Global Track and Trace (which is expanded), Define System Configuration, Define Application Interface (which is expanded), Define CI Tenant for SAP GTT, Define Business Process Types (which is highlighted in yellow), and Define Used Business Process Types, Appl. Object Types and Event Types.



The screenshot shows the SAP Display View "Define Available Application Tables": Overview. The title bar indicates the dialog structure is "Define Business Process" and the sub-dialog is "Define Available App". The main area is a table titled "Define Available Application Tables". The columns are: Structure/Table, DDIC Definition, DB Struc. Name, Bus. ... (partially visible), Updtde Fld Name, No C..., Inser..., Upda..., Delet..., Key St..., and Ke... (partially visible). The table lists numerous tables, many of which are highlighted with red boxes. Some examples include: CONDITIONS_NEW (DDIC: KOMV, DB: EINAU), CONDITIONS_OLD (DDIC: KOMV, DB: EINAU), GEN_INFO_RECORD_NEW (DDIC: EINAU, DB: EINA), GEN_INFO_RECORD_OLD (DDIC: EINAU, DB: EINA), ORG_INFO_RECORD_NEW (DDIC: EINEU, DB: EINE), ORG_INFO_RECORD_OLD (DDIC: EINEU, DB: EINE), PARTNER_NEW (DDIC: UEKPA, DB: EKPA), PARTNER_OLD (DDIC: UEKPA, DB: EKPA), PO_ACCOUNT_ASSIGNMENT_NEW (DDIC: UKKGN, DB: EKKN), PO_ACCOUNT_ASSIGNMENT_OLD (DDIC: UKKGN, DB: EKKN), PO_ITEM_NUMBER (DDIC: EKBES, DB: EKBE), PO_SCHED_LINE_ITEM_NEW (DDIC: UKEKT, DB: EKET), PO_SCHED_LINE_ITEM_OLD (DDIC: UKEKT, DB: EKET), PURCHASE_ITEM_NEW (DDIC: UKEPO, DB: EKPO), PURCHASE_ITEM_OLD (DDIC: UKEPO, DB: EKPO), PURCHASE_ORDER_HEADER_NEW (DDIC: /SAPTRX/MM_PO_H..., DB: EKKO), PURCHASE_ORDER_HEADER_OLD (DDIC: FEBAN, DB: EBAN), PURCHASE_REQUSITION (DDIC: UKEKE, DB: EKEK), SCHED_AGREEMENT_HEADER_NEW (DDIC: UKEKE, DB: EKEK), SCHED_AGREEMENT_HEADER_OLD (DDIC: UKEKE, DB: EKEK), SCHED_AGREEMENT_RELEASE_NEW (DDIC: IEKEH, DB: EKEH), SCHED_AGREEMENT_RELEASE_OLD (DDIC: IEKEH, DB: EKEH), SHIPPING_DATA (DDIC: EKPV, DB: EKPV), VENDOR_CONFIRMATION_NEW (DDIC: UKEKS, DB: EKES), and VENDOR_CONFIRMATION_OLD (DDIC: UKEKS, DB: EKES).

Structure/Table	DDIC Definition	DB Struc. Name	Bus. ...	Updtde Fld Name	No C...	Inser...	Upda...	Delet...	Key St...	Ke...
CONDITIONS_NEW	KOMV	EINAU		UPDKZ	I	U	D	0	0	
CONDITIONS_OLD	KOMV	EINAU		UPDKZ	I	U	D	0	0	
GEN_INFO_RECORD_NEW	EINAU	EINA		KZ	I	U	D	0	0	
GEN_INFO_RECORD_OLD	EINAU	EINA							0	0
ORG_INFO_RECORD_NEW	EINEU	EINE		KZ	I	U	D	0	0	
ORG_INFO_RECORD_OLD	EINEU	EINE							0	0
PARTNER_NEW	UEKPA	EKPA		KZ	I	U	D	0	0	
PARTNER_OLD	UEKPA	EKPA		KZ	I	U	D	0	0	
PO_ACCOUNT_ASSIGNMENT_NEW	UKKGN	EKKN		KZ	I	U	D	0	0	
PO_ACCOUNT_ASSIGNMENT_OLD	UKKGN	EKKN		KZ	I	U	D	0	0	
PO_ITEM_NUMBER	EKBES	EKBE							0	0
PO_SCHED_LINE_ITEM_NEW	UKEKT	EKET		KZ	I	U	D	0	0	
PO_SCHED_LINE_ITEM_OLD	UKEKT	EKET		KZ	I	U	D	0	0	
PURCHASE_ITEM_NEW	UKEPO	EKPO			I	U	D	0	0	
PURCHASE_ITEM_OLD	UKEPO	EKPO		KZ	I	U	D	0	0	
PURCHASE_ORDER_HEADER_NEW	/SAPTRX/MM_PO_H...	EKKO		KZ	I	U	D	0	0	
PURCHASE_ORDER_HEADER_OLD	FEBAN	EBAN							0	0
PURCHASE_REQUSITION	UKEKE	EKEK		KZ	I	U	D	0	0	
SCHED_AGREEMENT_HEADER_NEW	UKEKE	EKEK		KZ	I	U	D	0	0	
SCHED_AGREEMENT_HEADER_OLD	UKEKE	EKEK							0	0
SCHED_AGREEMENT_RELEASE_NEW	IEKEH	EKEH		UPDKZ	I	U	D	0	0	
SCHED_AGREEMENT_RELEASE_OLD	IEKEH	EKEH		UPDKZ	I	U	D	0	0	
SHIPPING_DATA	EKPV	EKPV							0	0
VENDOR_CONFIRMATION_NEW	UKEKS	EKES		KZ	I	U	D	0	0	
VENDOR_CONFIRMATION_OLD	UKEKS	EKES		KZ	I	U	D	0	0	

6: Coding Tips in the GTT Relevance Function Modules

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

1. Make sure that the Main / Master tables 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: *ZPOF_GTT_OTE_PO_ITEM_REL*

The image shows two SAP ABAP development environments side-by-side.

Function Builder: Display ZPOF_GTT_OTE_PO_ITEM_REL

This window shows the source code for the function module *ZPOF_GTT_OTE_PO_ITEM_REL*. The code handles various application objects and their relationships, including catching errors and performing relevance checks.

```
DATA: lt_app_objects TYPE trxas_apppobj_ctabs,  
      lo_udm_message TYPE REF TO cx_udm_message,  
      ls_bapiret     TYPE bapiret2.  
  
lt_app_objects = VALUE #( ( i_app_object ) ).  
  
TRY.  
  e_result = lcl_ef_performer->check_relevance(  
    is_definition = VALUE #(  
      maintab = lif_pof_constants->cs_tabledesc-po_item_new  
      mastertab = lif_pof_constants->cs_tabledesc-po_header_new  
    ).  
    io_bo_factory = NEW lcl_factory_po_item( )  
    iv_appsystypes = i_appsystypes  
    is_app_obj_types = i_app_obj_types  
    it_all_appl_tables = i_all_appl_tables  
    it_app_objects = lt_app_objects ).  
  
  CATCH cx_udm_message INTO lo_udm_message.  
    lcl_tools->get_errors_log(  
      EXPORTING  
        io_udm_message = lo_udm_message  
        iv_appsystypes = i_appsystypes  
      IMPORTING  
        es_bapiret = ls_bapiret ).  
  
  " add error message  
  APPEND ls_bapiret TO c_logtable.  
  
  " throw corresponding exception  
  CASE lo_udm_message->textid.  
    WHEN lif_ef_constants->cs_errors-stop_processing.  
      RAISE stop_processing.  
    WHEN lif_ef_constants->cs_errors-table_determination.  
      RAISE parameter_error.  
  ENDCASE.  
ENDTRY.
```

ABAP Editor: Display Include LZPOF_GTTD20

This window shows the source code for the include *LZPOF_GTTD20*. It contains several methods, with the *lif_bo_reader-check_relevance* method being the primary focus. This method performs a series of checks and comparisons between application objects and their headers.

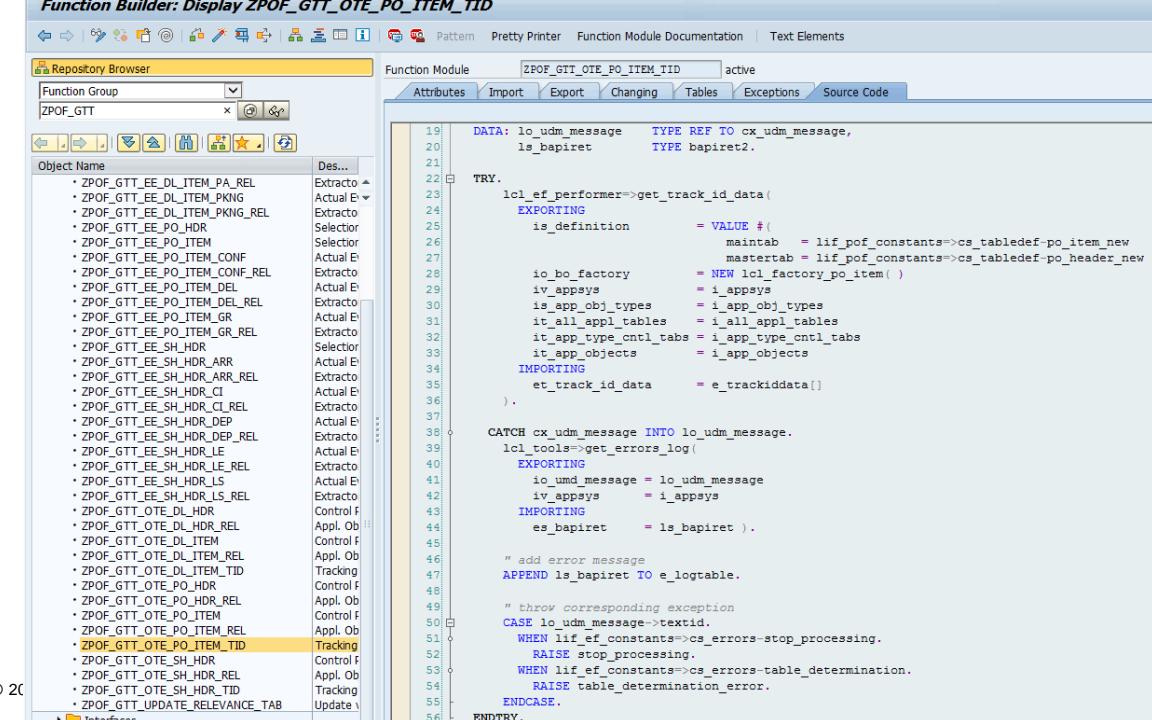
```
METHOD lif_bo_reader->check_relevance.  
  " 1. Basic check of main table which shall be following  
  " the AOT configuration  
  " 2. Check that only 1 PO type is relevance for GTT,  
  " which could be the standard PO type: NB  
  " 3. If it's CREATING PO, always flag TRUE  
  " 4. If it's UPDATING PO, check whether there is any  
  " change for all the above fields or not, comparing  
  " their NEW / OLD value pairs  
  " 5. Don't need to consider DELETING PO, which will be  
  " considered by standard logic of EM framework and  
  " extractors cannot impact this case  
  
  rv_result = lif_pof_constants->cs_condition-false.  
  
  " is_app_object-maintabdef = lif_pof_constants->cs_tabledesc-po_item_new AND  
  IF lcl_po_tools->is_appropriate_po_type( ir_ekko = is_app_object-maintabref ) = abap_true AND  
  lcl_po_tools->is_appropriate_po_type( ir_expo = is_app_object-maintabref ) = abap_true AND  
  is_object_changed = is_app_object = is_app_object ) = abap_true.  
  
  CASE is_app_object-update_indicator.  
    WHEN lif_ef_constants=>cs_change_mode-insert.  
      rv_result = lif_ef_constants->cs_condition-true.  
    WHEN lif_ef_constants=>cs_change_mode-update OR  
      lif_ef_constants=>cs_change_mode-undefined.  
      rv_result = lcl_tools->are_structures_different(  
        ir_data1 = lif_bo_reader->get_data( )  
        is_app_object = is_app_object )  
        ir_data2 = lif_bo_reader->get_data_old( )  
        is_app_object = is_app_object ) ).  
  ENDCASE.  
ENDIF.  
ENDMETHOD.  
  
METHOD lif_bo_reader->get_data.  
  FIELD-SYMBOLS: <ls_item> TYPE ts_po_item.  
  rr_data = NEW ts_po_item( ).  
  ASSIGN rr_data->* TO <ls_item>.  
  IS_CREDIT_CHANGED
```

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 in the output table *E_TRACKIDDATA*.
3. The Tracking ID Type needs to be the same as the definition in the process type of model in Manage Models app.
4. GTT v2 accepts delta transport for tracking IDs, which means that only the newly-created / changed / deleted tracking IDs shall be filled in, while the ones without changes need to be ignored in the logic.
5. The tracking ID for its own process type needs to be filled in for each process update.
6. In case of tracking ID deletion, the field ACTION shall be filled in with 'D'.

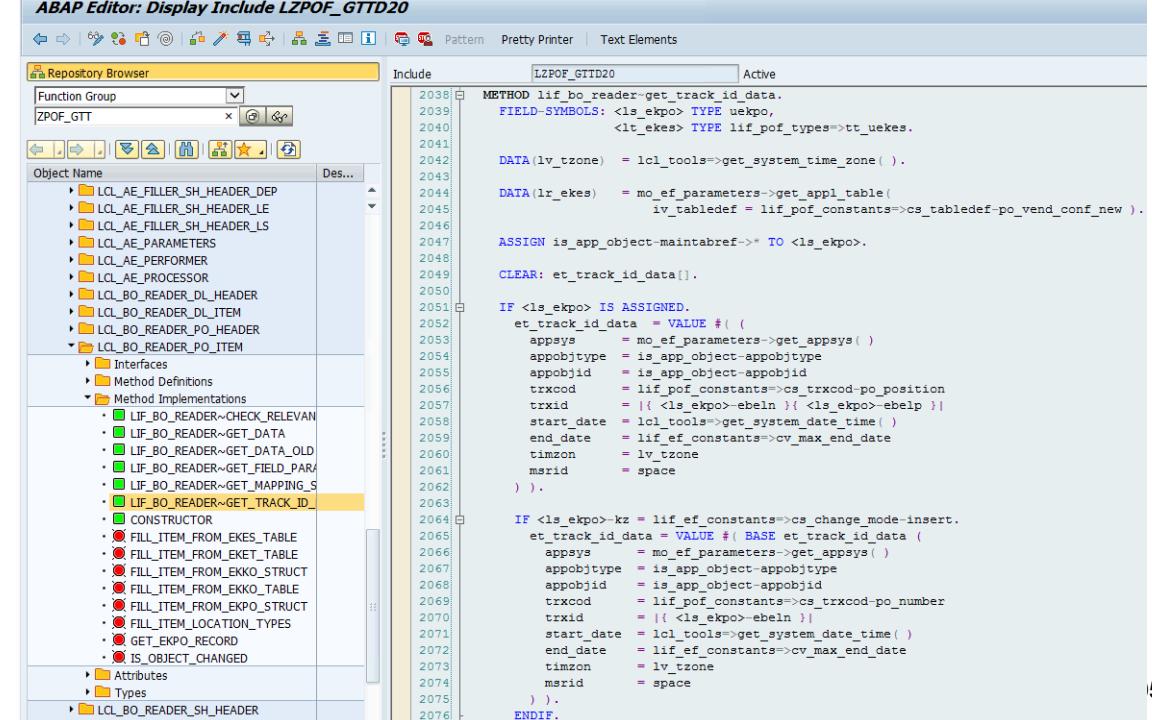
See sample code of function: *ZPOF_GTT_OTE_PO_ITEM_TID*



The screenshot shows the ABAP Function Builder interface with the function module *ZPOF_GTT_OTE_PO_ITEM_TID* selected. The code implements a function with parameters *lo_udm_message* and *ls_bapiret*. It uses *lcl_ef_performer->get_track_id_data* to retrieve tracking data. The code handles errors by catching *cx_udm_message* exceptions and logging them. It also includes a *CASE* block for handling specific error codes.

```
Function Builder: Display ZPOF_GTT_OTE_PO_ITEM_TID
Function Module ZPOF_GTT_OTE_PO_ITEM_TID active
Attributes Import Export Changing Tables Exceptions Source Code

19 DATA: lo_udm_message TYPE REF TO cx_udm_message,
20      ls_bapiret TYPE bapiret2.
21
22 TRY.
23   lcl_ef_performer->get_track_id_data(
24     EXPORTING
25       is_definition = VALUE #( ...
26         maintab = lif_pof_constants->cs_tabledef-po_item_new
27         mastertab = lif_pof_constants->cs_tabledef-po_header_new )
28     IMPORTING
29       io_bo_factory = NEW lcl_factory_po_item( )
30       i_appsyst = i_appsyst
31       is_app_obj_types = i_app_obj_types
32       it_all_appl_tables = i_all_appl_tables
33       it_app_type_ctrl_tabs = i_app_type_ctrl_tabs
34       it_app_objects = i_app_objects
35     CATCH cx_udm_message INTO lo_udm_message.
36   CATCH cx_udm_message INTO lo_udm_message.
37     lcl_tools->get_errors_log(
38       EXPORTING
39         ic_udm_message = lo_udm_message
40         iv_appsyst = i_appsyst
41       IMPORTING
42         es_bapiret = ls_bapiret .
43     " add error message
44     APPEND ls_bapiret TO e_logtable.
45
46     " throw corresponding exception
47     CASE lo_udm_message->textid.
48       WHEN lif_ef_constants=>cs_errors-stop_processing.
49         RAISE stop_processing.
50       WHEN lif_ef_constants=>cs_errors-table_determination.
51         RAISE table_determination_error.
52     ENDCASE.
53
54   ENDTRY.
```



The screenshot shows the ABAP Editor interface with the include *LZPOF_GTTD20* selected. The code defines methods for reading tracking data. It includes imports for *LCL_BO_READER*, *LCL_BO_READER_SH_HEADER*, and *LCL_BO_READER_SH_HEADER_DEP*. The *get_track_id_data* method uses *lif_bo_reader->get_track_id_data* and handles various parameters like *lv_timezone* and *is_app_object*. It also includes logic for clearing track data and setting start and end dates.

```
ABAP Editor: Display Include LZPOF_GTTD20
Include LZPOF_GTTD20 Active
METHOD lif_bo_reader->get_track_id_data.
  FIELD-SYMBOLS: <ls_ekpo> TYPE uekpo,
                 <lt_ekes> TYPE lif_pof_types->tt_uekes.

  DATA(lv_timezone) = lcl_tools->get_system_time_zone( ).

  DATA(lr_ekes) = mo_ef_parameters->get_appl_table(
    iv_tabledef = lif_pof_constants->cs_tabledef-po_vend_conf_new ).

  ASSIGN is_app_object-maintabref-> TO <ls_ekpo>.

  CLEAR: et_track_id_data[].

  IF <ls_ekpo> IS ASSIGNED.
    et_track_id_data = VALUE #( ( ...
      appsyst = mo_ef_parameters->get_appsyst( )
      appobjtype = is_app_object-appobjtype
      appobjid = is_app_object-appobjid
      trxcod = lif_pof_constants->cs_trxcod-po_position
      trxid = |<ls_ekpo>-ebeln { <ls_ekpo>-ebelp }|
      start_date = lcl_tools->get_system_date_time( )
      end_date = lif_ef_constants->cv_max_end_date
      timzon = lv_timezone
      msrid = space
    ) ).

    IF <ls_ekpo>-kz = lif_ef_constants->cs_change_mode-insert.
      et_track_id_data = VALUE #( BASE et_track_id_data (
        appsyst = mo_ef_parameters->get_appsyst( )
        appobjtype = is_app_object-appobjtype
        appobjid = is_app_object-appobjid
        trxcod = lif_pof_constants->cs_trxcod-po_number
        trxid = |<ls_ekpo>-ebeln |
        start_date = lcl_tools->get_system_date_time( )
        end_date = lif_ef_constants->cv_max_end_date
        timzon = lv_timezone
        msrid = space
      ) ).
```

8: Coding Tips in the Control Parameter Function Modules

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

1. Make sure that the Main / Master tables are following the configuration of corresponding AOT.
2. Add customization logics to fill in the output table *E_CONTROL_DATA*.
3. GTT v2 asks for full transport for all the control parameters, which means 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 type) fields defined in Manage Models app, use the parameter field *PARAMINDEX* to specify the line number. If the field is empty, GTT regards it as a simple flat field.
5. To clear a composition, fill in the key field using invalid values, for which key attribute has been checked in Manage Models app. It's not recommended to fill in a code list type field to clear a composition even if it's a key field.
6. The fields with fixed names 'ACTUAL_BUSINESS_DATETIME' and 'ACTUAL_BUSINESS_TIMEZONE' are mandatory fields to be transported for event handling sequencing in GTT Version 2.
7. The fields with fixed names 'ACTUAL_TECHNICAL_TIMEZONE' and 'ACTUAL_TECHNICAL_DATETIME' are optional and recommended for minimizing IDOC sequencing issue (after object creation in S/4 actual event might be processed before object creation in GTT via TP request, which leads to an error)
8. In 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 GTT Version 2. The BAPI will output the conversion result in 4 decimals as fixed, which needs additional rounding in the extractor if the corresponding field defined in the tracking model is less than 4 decimals.
11. In the shipment extractor, add the prefix LBN# into the fields 'SERVICE AGENT LBN ID' for integration with Visibility Providers.

See sample code of function: *ZPOF_GTT_OTE_PO_ITEM*

8: Coding Tips in the Control Parameter Function Modules

Field mapping is set up in the IDOC Integration tab of the Manage Models app:

The screenshot shows the SAP Manage Models app interface for a tracked process named "pof". The "IDOC Integration" tab is selected and highlighted with a red box. The "Tracked Process" dropdown is set to "PurchaseOrder". The "Integration Switch" is turned "ON".

Tracked Process Mapping

ERP Object Type:	Others	Application Object Type:	ZPOF_GTT_AC_HD
------------------	--------	--------------------------	----------------

Tracked Process / Events (1)

Name	IDOC	Event Code
Tracked Process		
PurchaseOrderEvent	E1EHPAO	

Fields

Field	IDOC Segment	IDOC Field
purchaseOrderNo	E1EHPCP	YN_PO_NUMBER
supplierId	E1EHPCP	YN_PO_SUPPLIER_ID
plannedDeliveryDate	E1EHPCP	YN_PO_DELIVERY_DATE
netValue	E1EHPCP	YN_PO_NET_VALUE
currency	E1EHPCP	YN_PO_CURRENCY
incotermsVersion	E1EHPCP	YN_PO_INCOTERMS_VERSION
incoterms	E1EHPCP	YN_PO_INCOTERMS
incotermsLocation	E1EHPCP	YN_PO_INCOTERMS_LOCATION

8: Coding Tips in the Control Parameter Function Modules

Main logic of Purchase Order Item is implemented in class LCL_BO_READER_PO_ITEM

Function Module ZPOF_GTT_OTE_PO_ITEM active

Attributes Import Export Changing Tables Exceptions Source Code

```
19 DATA: lo_udm_message      TYPE REF TO cx_udm_message,
20      ls_bapiret        TYPE bapiret2.
21
22 TRY.
23   lcl_ef_performer->get_control_data(
24     EXPORTING
25       is_definition      = VALUE #(
26         maintab           = lif_pof_constants->cs_tabledef-po_item_new
27         mastertab          = lif_pof_constants->cs_tabledef-po_header_new )
28   io_bo_factory      = NEW lcl_factory_po_item( )
29   iv_appsps          = i_appsps
30   is_app_obj_types   = i_app_obj_types
31   it_all_appl_tables = i_all_appl_tables
32   it_app_type_ctrl_tabs = i_app_type_ctrl_tabs
33   it_app_objects     = i_app_objects
34
35 CHANGING
36   ct_control_data    = e_control_data[] .
37
38 CATCH cx_udm_message INTO lo_udm_message.
39   lcl_tools->get_errors_log(
40     EXPORTING
41       io_udm_message = lo_udm_message
42       iv_appsps     = i_appsps
43     IMPORTING
44       es_bapiret    = ls_bapiret .
45
46 " add error message
47 APPEND ls_bapiret TO e_logtable.
48
49 " throw corresponding exception
50 CASE lo_udm_message->textid.
51   WHEN lif_ef_constants->cs_errors-stop_processing.
52     RAISE stop_processing.
53   WHEN lif_ef_constants->cs_errors-table_determination.
54     RAISE table_determination_error.
55 ENDCASE.
56 ENDTRY.
57 ENDFUNCTION.
```

ABAP Editor: Display Include LZPOF_GTTD20

Repository Browser

Include LZPOF_GTTD20 Active

```
1984 METHOD lif_bo_reader~get_data.
1985   FIELD-SYMBOLS: <ls_item>      TYPE ts_po_item.
1986
1987   rr_data  = NEW ts_po_item( ).
1988
1989 ASSIGN rr_data->* TO <ls_item>.
1990
1991 fill_item_from_ekko_struct(
1992   EXPORTING
1993     ir_ekko      = is_app_object-mastertabref
1994   CHANGING
1995     cs_po_item  = <ls_item> .
1996
1997 fill_item_from_ekpo_struct(
1998   EXPORTING
1999     ir_ekpo      = is_app_object-maintabref
2000   CHANGING
2001     cs_po_item  = <ls_item> .
2002
2003 fill_item_from_eket_table(
2004   EXPORTING
2005     ir_ekpo      = is_app_object-maintabref
2006     ir_eket      = mo_ef_parameters->get_appl_table(
2007       iv_tabledef = lif_pof_constants->cs_tabledef-po_sched_new )
2008   CHANGING
2009     cs_po_item  = <ls_item> .
2010
2011 fill_item_from_ekes_table(
2012   EXPORTING
2013     ir_ekpo      = is_app_object-maintabref
2014     ir_ekes      = mo_ef_parameters->get_appl_table(
2015       iv_tabledef = lif_pof_constants->cs_tabledef-po_vend_conf_new )
2016   CHANGING
2017     cs_po_item  = <ls_item> .
2018
2019 fill_item_location_types(
2020   CHANGING
2021     cs_po_item  = <ls_item> .
2022
2023 ENDMETHOD.
```

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 in the output table *E_EXPEVENTDATA*.
3. As default when no change has been made on the model configuration, GTT Version 2 will ask for full transport for all the planned events, which means that all the events needs to be extracted in all cases, no matter whether their values have been changed. If nothing is transported, the planned events will be removed in GTT Version 2.
4. The field *MILESTONE* is mandatory to be transported.
5. The field *EVT_EXP_DATETIME* is optional, but needs to be filled in with relevant time zone *EVT_EXP_TZONE* together if it needs to be transported.
6. The field *LOC_ID1* is optional, but need to be filled in with relevant location type *LOCTYPE* together if it needs to be transported. The values for field *LOCTYPE* are limited by *Manage Locations* app in GTT Version 2.
7. The field *LOC_ID2* is mandatory to specify the stop ID (match key) in case of shipment tracking.

See sample code of function: *ZPOF_GTT_EE_PO_ITEM*

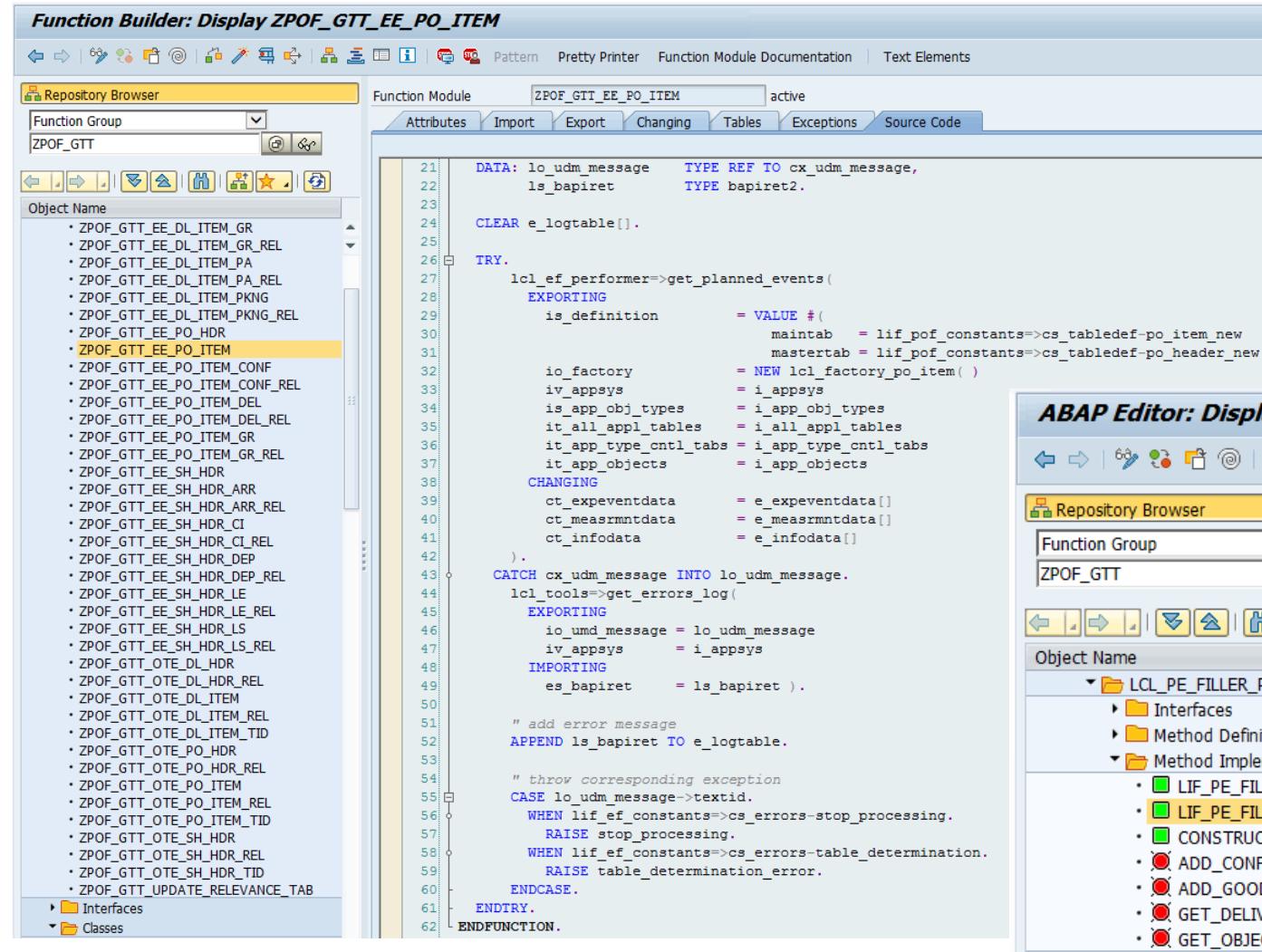
The screenshot shows the SAP Fiori interface for managing Planned Event Function Modules. The page title is "pof Active" under "Purchase Order Fulfillment". The namespace is "com.lbngttsamples.gtt.app.pof" and the correlation level is 4. The top navigation bar includes tabs for "Tracked Process", "Field Type Pool", "Event Type Pool", "Code List", "IDOC Integration" (which is highlighted with a red box), and "Visibility Provider". Below the tabs, there is a dropdown for "Tracked Process" set to "PurchaseOrderItem". The main content area is titled "Tracked Process Mapping" and shows an "ERP Object Type: Others". Under "Tracked Process / Events (5)", there is a table with columns "Name", "IDOC", and "Event Code". One row is selected, showing "PurchaseOrderItemEvent" in the Name column and "E1EHPAO" in the IDOC and Event Code columns. This row is also highlighted with a red box. Below this table is another table titled "Event Types" with columns "Event Type", "IDOC", and "Event Code". It contains four rows: "ConfirmationEvent" (IDOC E1EVMHDR02, Event Code CONFIRMATION), "GoodsReceipt" (IDOC E1EVMHDR02, Event Code GOODS_RECEIPT), "DeletionEvent" (IDOC E1EVMHDR02, Event Code DELETION), and "UndeletionEvent" (IDOC E1EVMHDR02, Event Code UNDELETION). The entire "Event Types" table is also highlighted with a red box.

Name	IDOC	Event Code
PurchaseOrderItemEvent	E1EHPAO	

Event Type	IDOC	Event Code
ConfirmationEvent	E1EVMHDR02	CONFIRMATION
GoodsReceipt	E1EVMHDR02	GOODS_RECEIPT
DeletionEvent	E1EVMHDR02	DELETION
UndeletionEvent	E1EVMHDR02	UNDELETION

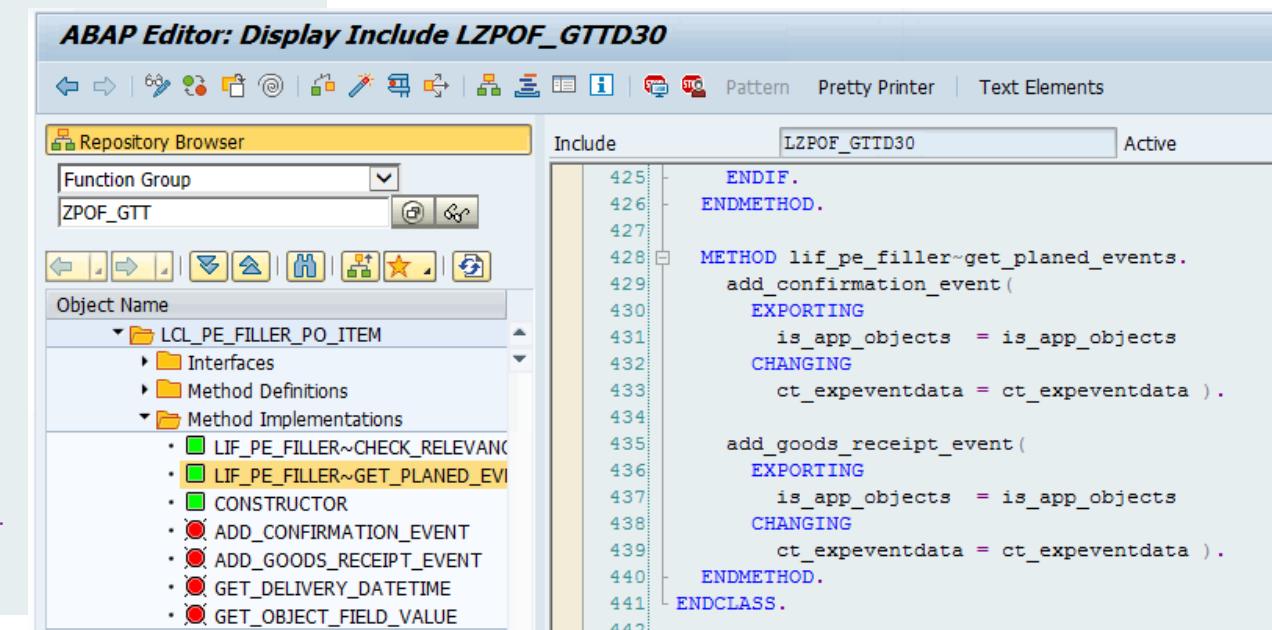
9: Coding Tips in the Planned Event Function Modules

Main logic of Purchase Order Item Planned Events is implemented in class LCL_PE_FILLER_PO_ITEM



```
Function Builder: Display ZPOF_GTT_EE_PO_ITEM
Function Module ZPOF_GTT_EE_PO_ITEM active
Attributes Import Export Changing Tables Exceptions Source Code

21 DATA: lo_udm_message    TYPE REF TO cx_udm_message,
22      ls_bapiret     TYPE bapiret2.
23
24 CLEAR e_logtable[].
25
26 TRY.
27   lcl_ef_performer->get_planned_events(
28     EXPORTING
29       is_definition      = VALUE #(
30         maintab          = lif_pof_constants->cs_tabledef-po_item_new
31         mastertab        = lif_pof_constants->cs_tabledef-po_header_new )
32   io_factory           = NEW lcl_factory_po_item( )
33   iv_appsyst          = i_appsyst
34   is_app_obj_types    = i_app_obj_types
35   it_all_appl_tables = i_all_appl_tables
36   it_app_type_cntl_tabs = i_app_type_cntl_tabs
37   it_app_objects      = i_app_objects
38
39   CHANGING
40     ct_expeventdata   = e_expeventdata[]
41     ct_measrmntdata  = e_measrmntdata[]
42     ct_infodata       = e_infodata[]
43   .
44   CATCH cx_udm_message INTO lo_udm_message.
45   lcl_tools->get_errors_log(
46     EXPORTING
47       io_udm_message = lo_udm_message
48       iv_appsyst    = i_appsyst
49     IMPORTING
50       es_bapiret    = ls_bapiret ).
51
52   " add error message
53   APPEND ls_bapiret TO e_logtable.
54
55   " throw corresponding exception
56 CASE lo_udm_message->txid.
57   WHEN lif_ef_constants=>cs_errors-stop_processing.
58     RAISE stop_processing.
59   WHEN lif_ef_constants=>cs_errors-table_determination.
60     RAISE table_determination_error.
61   ENDCASE.
62 ENDTRY.
63
64 ENDFUNCTION.
```



```
ABAP Editor: Display Include LZPOF_GTTD30
Include LZPOF_GTTD30 Active
425 ENDIF.
426 ENDMETHOD.
427
428 METHOD lif_pe_filler~get_planed_events.
429   add_confirmation_event(
430     EXPORTING
431       is_app_objects = is_app_objects
432     CHANGING
433       ct_expeventdata = ct_expeventdata .
434
435   add_goods_receipt_event(
436     EXPORTING
437       is_app_objects = is_app_objects
438     CHANGING
439       ct_expeventdata = ct_expeventdata .
440
441 ENDMETHOD.
442
443 ENDCCLASS.
```

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

See sample code of function: *ZPOF_GTT_EE_PO_ITEM_CONF*

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:

pof Active

Purchase Order Fulfillment

Namespace: com.lbngttsamples.gtt.app.pof Correlation Level: 4

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

Tracked Process: PurchaseOrderItem ▼ Integration Switch: ON

Tracked Process Mapping

ERP Object Type: Others Application Object Type: ZPOF_GTT_AC_ITEM

Tracked Process / Events (5)

Name	IDOC	Event Code
Tracked Process		
PurchaseOrderItemEvent	E1EHPAO	
Event Types		
ConfirmationEvent	E1EVMPAR02	CONFIRMATION
GoodsReceipt	E1EVMPAR02	GOODS_RECEIPT
DeletionEvent	E1EVMPAR02	DELETION
UndeletionEvent	E1EVMPAR02	UNDELETION

Fields

Field	IDOC Segment	IDOC Field
quantity	E1EVMPAR	QUANTITY
confirmType	E1EVMPAR	CONFIRM_TYPE

10: Coding Tips in the Event Data Function Modules

Main logic of Purchase Order Item Confirmation event is implemented in class LCL_AE_FILLER_PO_ITEM_CONF

Function Module ZPOF_GTT_EE_PO_ITEM_CONF active

Attributes Import Export Changing Tables Exceptions Source Code

```
59: DATA: lo_udm_message      TYPE REF TO cx_udm_message,
60:         ls_bapiret        TYPE bapiret2.
61:
62: TRY.
63:   lcl_ae_performer->get_event_data(
64:     EXPORTING
65:       is_definition      = VALUE #((
66:         maintab          = lif_pof_constants->cs_tabledef-po_item_new
67:         mastertab         = lif_pof_constants->cs_tabledef-po_header_new )
68:       io_ae_factory     = NEW lcl_ae_factory_po_item_conf( )
69:       iv_appsyst        = i_appsyst
70:       is_event_type     = i_event_type
71:       it_all_appl_tables = i_all_appl_tables
72:       it_event_type_cntl_tabs = i_event_type_cntl_tabs
73:       it_events         = i_events
74:     CHANGING
75:       ct_eventid_map    = c_eventid_map[]
76:       ct_trackingheader = ct_trackingheader[]
77:       ct_tracklocation  = ct_tracklocation[]
78:       ct_trackreferences = ct_trackreferences[]
79:       ct_trackparameters = ct_trackparameters[]
80:   .
81: CATCH cx_udm_message INTO lo_udm_message.
82:   lcl_tools->get_errors_log(
83:     EXPORTING
84:       io_udm_message = lo_udm_message
85:       iv_appsyst     = i_appsyst
86:     IMPORTING
87:       es_bapiret     = ls_bapiret .
88:
89:   " add error message
90:   APPEND ls_bapiret TO ct_logtable.
91:
92:   " throw corresponding exception
93:   CASE lo_udm_message->textid.
94:     WHEN lif_ef_constants->cs_errors-stop_processing.
95:       RAISE stop_processing.
96:     WHEN lif_ef_constants->cs_errors-table_determination.
97:       RAISE event_data_error.
98:   ENDCASE.
99: ENDTRY.
100: ENDFUNCTION.
```

ABAP Editor: Display Include LZPOF_GTTD40

Repository Browser

Object Name

- ZPOF_GTT_UPDATE_RELEVANCE_TAB
- Interfaces
- Classes
 - LCL_AE_FACTORY
 - LCL_AE_FACTORY_DL_ITEM_GR
 - LCL_AE_FACTORY_DL_ITEM_PA
 - LCL_AE_FACTORY_DL_ITEM_PKNG
 - LCL_AE_FACTORY_PO_ITEM_CONF
 - LCL_AE_FACTORY_PO_ITEM_DEL
 - LCL_AE_FACTORY_PO_ITEM_GR
 - LCL_AE_FACTORY_SH_HEADER_ARR
 - LCL_AE_FACTORY_SH_HEADER_CI
 - LCL_AE_FACTORY_SH_HEADER_DEP
 - LCL_AE_FACTORY_SH_HEADER_LE
 - LCL_AE_FACTORY_SH_HEADER_LS
 - LCL_AE_FILLER_DL_ITEM_GR
 - LCL_AE_FILLER_DL_ITEM_PA
 - LCL_AE_FILLER_DL_ITEM_PKNG
 - LCL_AE_FILLER_PO_ITEM_CONF
- Method Implementations
 - LIF_AE_FILLER~CHECK_RELEVANCY
 - LIF_AE_FILLER~GET_EVENT_DATA
 - CONSTRUCTOR
 - GET_CONFIRMATION_QUANTITY
 - GET_CONFIRMATION_QUANTITY_
 - HAS_CHANGES
 - IS_APPROPRIATE_CONF CONTRC
 - IS_APPROPRIATE_CONF_TYPE
- Attributes
- LCL_AE_FILLER_PO_ITEM_DEL
- LCL_AE_FILLER_PO_ITEM_GR
- LCL_AE_FILLER_SH_HEADER_ARR
- LCL_AE_FILLER_SH_HEADER_BH

Include LZPOF_GTTD40 Active

```
98: METHOD lif_ae_filler~get_event_data.
99:   DATA (lv_difference) = get_confirmation_quantity_diff(
100:         is_events = is_events ).
101:
102:   ct_trackingheader = VALUE #( BASE ct_trackingheader (
103:     language      = sy-langu
104:     trxid        = lcl_po_tools->get_tracking_id_po_item(
105:       ir_ekpo = is_events-maintabref )
106:     trxcod      = lif_pof_constants->cs_trxcod-po_position
107:     evtcnt      = is_events-eventid
108:     evtid        = lif_pof_constants->cs_milestone-po_confirmation
109:     evtdat      = sy-datum
110:     evttim      = sy-uzzeit
111:     evtzon      = lcl_tools->get_system_time_zone( )
112:   )).
113:
114:   ct_eventid_map = VALUE #( BASE ct_eventid_map (
115:     eventid      = is_events-eventid
116:     evtcnt      = is_events-eventid
117:   )).
118:
119:   ct_tracklocation = VALUE #( BASE ct_tracklocation (
120:     evtcnt      = is_events-eventid
121:     loccod      = lif_ef_constants->cs_loc_types-plant
122:     locidl      = lcl_tools->get_field_of_structure(
123:       ir_struct_data = is_events-maintabref
124:       iv_field_name = 'WERKS' )
125:   )).
126:
127:
128:   " QUANTITY
129:   ct_trackparameters = VALUE #( BASE ct_trackparameters (
130:     evtcnt      = is_events-eventid
131:     param_name  = lif_pof_constants->cs_event_param-quantity
132:     param_value = lcl_tools->get_pretty_value( iv_value = lv_difference )
133:   )).
134:
135:   " CONFIRMATION TYPE
136:   ct_trackparameters = VALUE #( BASE ct_trackparameters (
137:     evtcnt      = is_events-eventid
138:     param_name  = lif_pof_constants->cs_event_param-confirm_type
139:     param_value = lif_pof_constants->cs_relevance-ebtyp
140:   )).
141: ENDMETHOD.
```

11: Enhancement Codes for Cross-process Tracking

The Track PO Fulfillment template app asks for cross-process tracking that is used in the following:

- When the shipment process is updated and transported to GTT, the preceding inbound delivery and item process, and their planned events need to be updated and transported to GTT.

IMPORTANT: To enable cross-process tracking, update the sample code below after downloading:

- Update Inbound Delivery Header and Item AOT type Mask in Method GET_AOTYPE_RESTRICTIONS of LCL_CTP_SENDER_SH_TO_DL_HEAD and LCL_CTP_SENDER_SH_TO_DL_ITEM

```
ABAP Editor: Display Include LZPOF_GTTD80
Include LZPOF_GTTD80 Active
1551 CLASS lcl_ctp_sender_sh_to_dl_head IMPLEMENTATION.
1552 METHOD get_aotype_restrictions.
1553   et_aotype = VALUE #( (
1554     low   = 'ZPOF_GTT_*_DL_HD'
1555     option = 'CP'
1556     sign   = 'I'
1557   )).
1558 ENDMETHOD.
1559
1560 METHOD get_instance.
1561   DATA(lt_trk_obj_type) = VALUE tt_trk_obj_type(
1562     ( lif_ef_constants=>cs_trk_obj_type-esc_shipmt )
1563     ( lif_ef_constants=>cs_trk_obj_type-esc_deliv )
1564   ).
```

11: Enhancement Codes for Cross-process Tracking

The cross-process tracking scenarios cover the following:

Shipment -> Inbound Delivery and Inbound 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 update IDOC. If the event IDOC approaches GTT prior to the order IDOC, it will lead to a processing failure.

This issue has been minimized 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

SAP Global Track & Trace Definitions			
CI for Global Track & Trace	CI Log. System	SAP Track & Trace Version	Description
ZGTTPOFAC2	ZGTTPOFAC	GTT2.0 Logistics Business N...	CI For GTT Purchasing Order Sample APP - Acceptance

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`

RFC Destination ZGTT_POF_PO_TP_ACC2

Connection Test

RFC Destination	ZGTT_POF_PO_TP_ACC2
Connection Type	G HTTP Connection to External Server
Description	
Description 1	RFC for Tracted Process of POF Sample Application to Acceptance
Description 2	
Description 3	

Administration Technical Settings Logon & Security Special Options

Target System Settings

Host		Port	443
Path Prefix	<code>/api/idoc/em/v1/TrackedProcessAndEvent</code>		

Thank you.

SAP Business Network
March 2021



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