



FAQs for Track Shipments Template App

SAP Logistics Business Network, Global Track and Trace Option

October 2021

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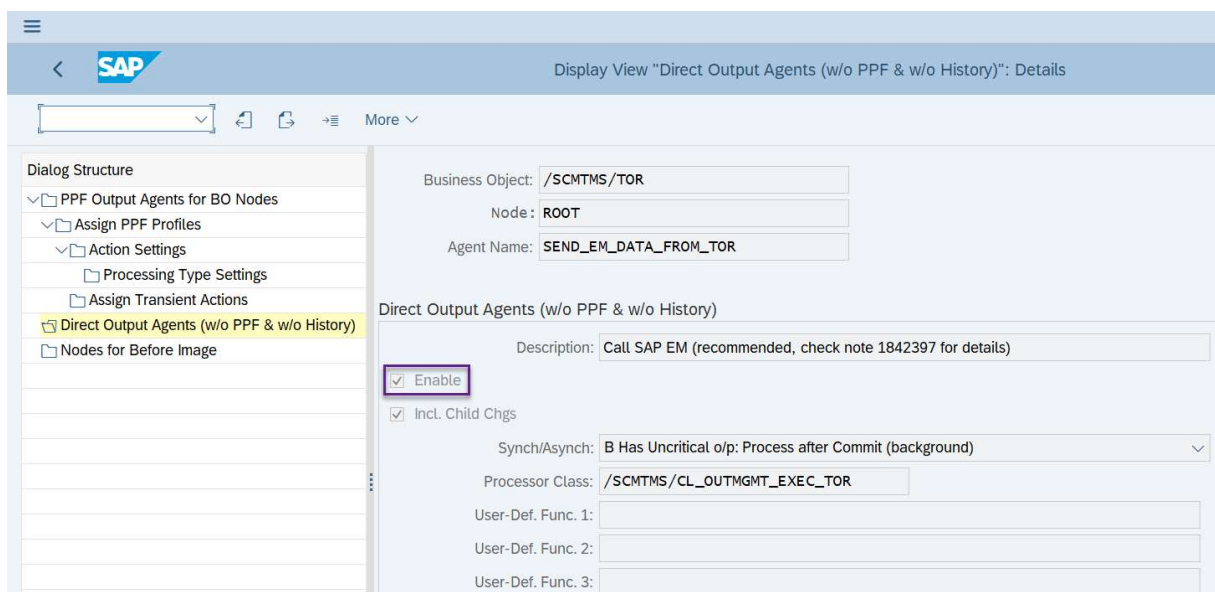
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1. After the configuration of GTT and SAP TM, we found that the freight unit / freight order / freight booking IDOC cannot be sent to GTT, how can we do the troubleshooting?

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

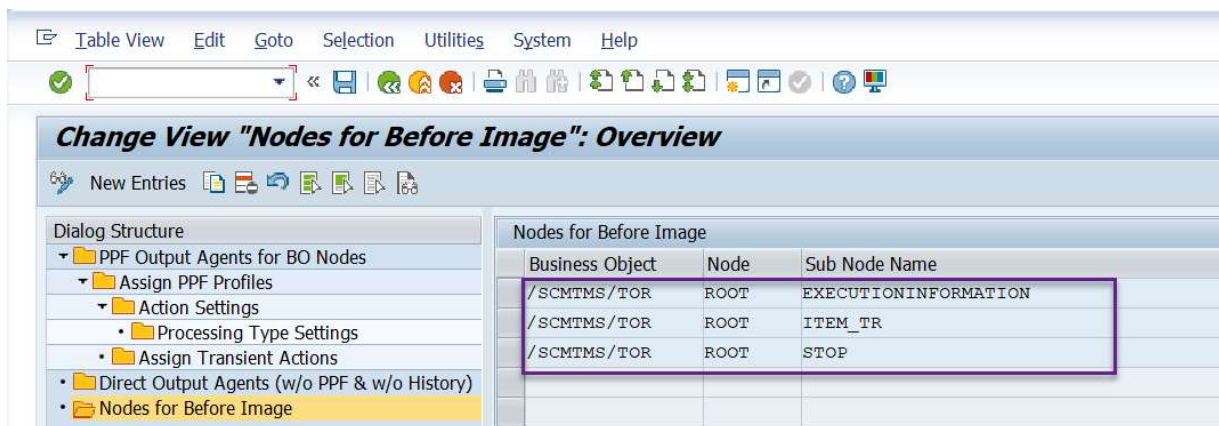
The Post Processing Framework (PPF) is used to trigger the communication from SAP Transportation Management (SAP TM) to SAP Event Management (SAP EM). You need to maintain the output management adapter for this communication to work.

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



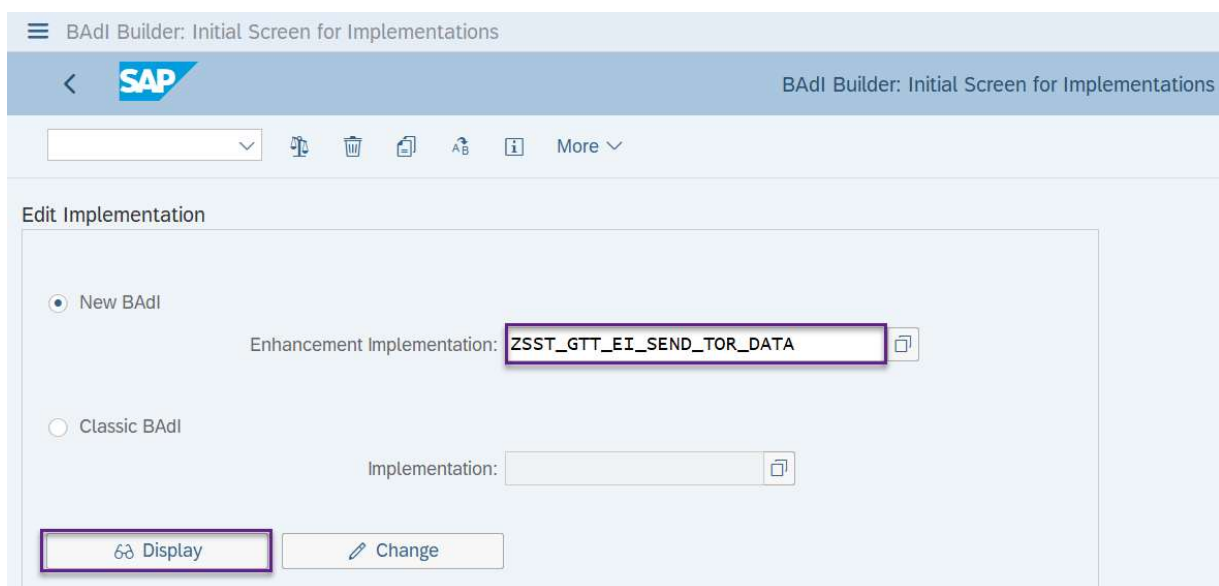
- In the [Dialog Structure](#) section, choose [Nodes for Before Image](#).

- e. Create the following three entries:



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

- a. Go to T-code SE19, fill in the [Enhancement Implementation](#) with "ZSST_GTT_EI_SEND_TOR_DATA" and click [Display](#).



- b. Ensure that the **Enhancement Implementation** “ZSST_GTT_EI_SEND_TOR_DATA” is active.
In the **Enh. Implementation Elements** tab, ensure that **BAdI Implementation** “ZSST_GTT_BI_SEND_TOR_DATA” is active.

The screenshot shows the SAP Enhancement Implementation ZSST_GTT_EI_SEND_TOR_DATA Display screen. The top bar indicates the title "Enhancement Implementation ZSST_GTT_EI_SEND_TOR_DATA Display". Below the title bar, there is a navigation bar with tabs: Properties, History, Technical Details, and Enh. Implementation Elements. The Enh. Implementation Elements tab is selected. In the top right corner, there is a button labeled "Active". The main area is divided into two sections. The left section, titled "BAdI Implementations", shows a list of implementations. The right section, titled "BAdI Implementation: ZSST_GTT_BI_SEND_TOR_DATA", shows the details of the selected implementation. The "Description" field contains the text "Implementation: Send TOR Data to Event Management". Under the "Runtime Behavior" section, the checkbox "Implementation is active" is checked. The "Runtime Behavior" field contains the text "The implementation will be called". The "Properties of BAdI Definition" section shows the following details: BAdI Definition Name: /SCMTMS/SEND_TOR_DATA, Description: Send TOR Data to Event Management, Interface: /SCMTMS/IF_SEND_TOR_DATA, and Instance Creation Mode: No Reuse of BAdI Instance.

Step 3: Check the freight unit type settings

- a. On the IMG, go to **SAP Transportation Management -> Transportation Management -> Planning -> Freight Unit -> Define Freight Unit Types**.

- b. In the table, open the applicable freight unit type to be tracked with SAP Event Management.
 - In the [Integration Settings](#), fill in the [Application Obj.Type](#) field.

Integration Settings

Dangerous Goods Profile:

Customs Profile:

Application Obj.Type: **ZGTT_SHP_FU_ACC**

☐ BW Relevance

Note: the value of [Application Obj.Type](#) shown in the screenshot is just an example. Make sure the value you filled in is the same as the ones in the other two fields:

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

SAP Display View "Define Application Object Types": Details

Dialog Structure

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

Bus. Proc. Type: **TMS_TOR**

Appl. Obj. Type: **ZGTT_SHP_FU_ACC** Extract freight unit information to Global Track and Trace-Acc

Text:

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

Sequencing / Destination

Seq. No.: **10**

CI for GTT: **ZGTTSSSTAC** CI For GTT SST Sample APP - Acceptance

- Application Object Type field in the “sof” model in the Manage Models app.

sof **Active** Edit Deploy ... Draft Runtime Deployed

Sales Order Fulfillment

Namespace: com.lbrngttsamples.gtt.app.sof Correlation Level: 5 Model Category: User Defined Model Cache: Off

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

Tracked Process: FreightUnit Integration Switch: ON

Tracked Process Mapping

ERP Object Type: Others Application Object Type: ZGTT_SHP_FU_ACC

Tracked Process / Events (1)

| Name | IDOC | Event Code |
|------------------------|---------|------------|
| Tracked Process | | |
| FreightUnitEvent | E1EHPAO | |

User Model Fields

| Field | IDOC Segment | IDOC Field |
|---------------|--------------|----------------------|
| freightUnitNo | E1EHPCP | YN_SHP_NO |
| shippingType | E1EHPCP | YN_SHP_SHIPPING_TYPE |

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

Execution Settings

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

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

Propagation Mode: Standard Propagation ▼

Last Exp. Event: UNLOAD_END

☐ Immediate Processing

Step 4: Check the freight order type settings

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

Integration Settings

Dangerous Goods Profile:

Customs Profile:

Document Creation Relevance: ▼

Delivery Profile:

EWM Integration Profile:

Application Object Type:

☒ BW Relevance

Note: the value of [Application Obj.Type](#) shown in the screenshot is just an example. Make sure the value you filled in is the same as the ones in the other two fields:

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

- In the [Execution Settings](#), the [Execution Tracking Relevance](#) field is set to “Execution Tracking with External Event Management”.

Execution Settings

| | |
|---|---|
| Execution Tracking Relevance: | 3 Execution Tracking with External Event M... ▾ |
| Check Condition "Ready for Exec": | |
| Display Mode for Execution Tab: | Actual Events from TM and EM, Expected ... ▾ |
| Expected Event for Goods Issue: | |
| Expected Event for Goods Receipt: | |
| Last Exp. Event: | ARRIV_DEST |
| <input type="checkbox"/> Immediate Processing | |
| Execution Propagation Mode: | Standard Propagation ▾ |
| Discrepancy Profile: | |

Step 5: Check the freight booking type settings

- On the IMG, go to [SAP Transportation Management > Transportation Management > Freight Order Management > Freight Booking > Define Freight Booking Types](#).
 - In the table, open the applicable freight booking type to be tracked with SAP Event Management.
- In the [Integration Settings](#), fill in the [Application Object Type](#) field.

Integration Settings

| | |
|--|-----------------------------------|
| Dangerous Goods Profile: | DG1 |
| Customs Profile: | |
| Document Creation Relevance: | N No External Document Creation ▾ |
| Delivery Profile: | |
| EWM Integr. Profile: | |
| Application Object Type: | ZGTT_SHP_ACC_HD |
| <input checked="" type="checkbox"/> BW Relevance | |

Note: the value of [Application Obj. Type](#) shown in the screenshot is just an example. Make sure the value you filled in is the same as the ones in the other two fields:

- [Appl. Obj. Type](#) field
(Navigation Path: IMG->Integration with Other SAP Components->
Interface to Global Track and Trace -> Define Application Interface, choose [Define Used](#)

Business Process Types, Appl. Object Types and Event Types, choose Business Process Type TMS_TOR->Define Application Object Types.)

- Application Object Type field in the “sof” model in the Manage Models app.
- In the Execution Settings, the Execution Tracking Relevance field is set to “Execution Tracking with External Event Management”.

Execution Settings

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

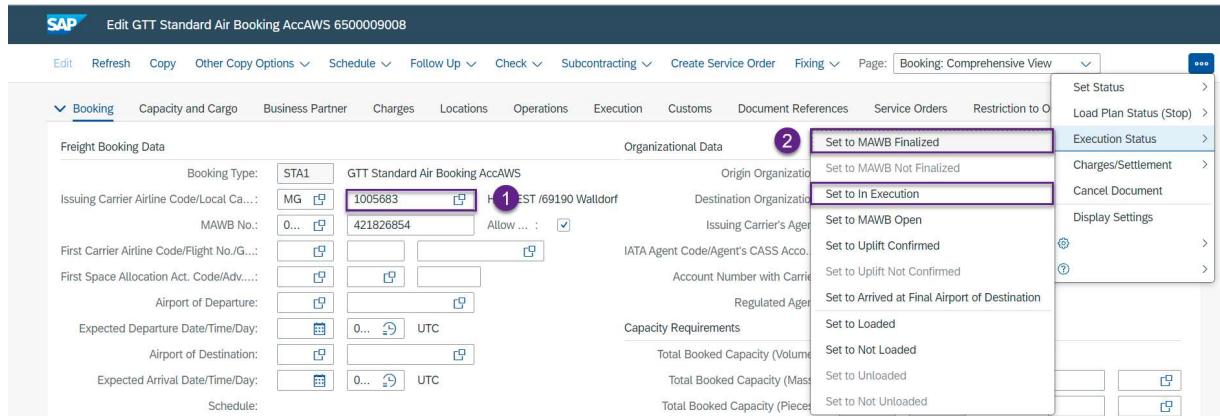
Step 6: Check the freight order / freight booking master data

To send freight orders or freight bookings to GTT, do the following:

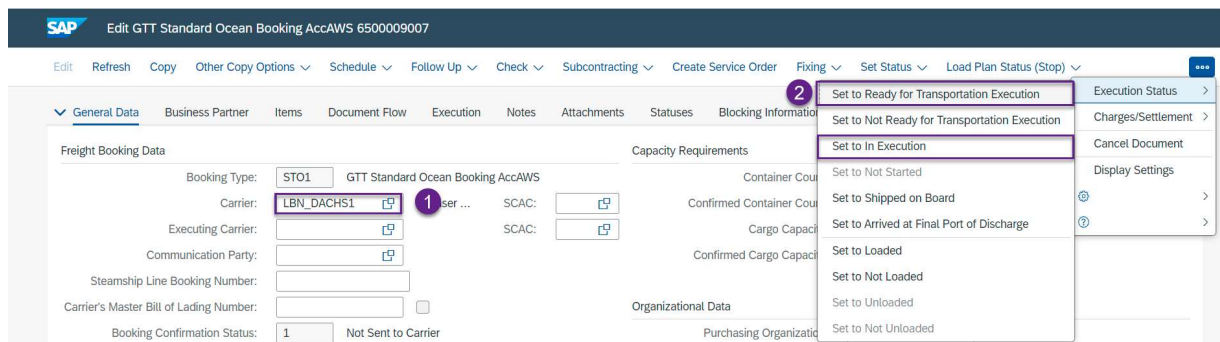
- a. Assign the carrier.
- b. Change the execution status.
 - For freight orders: in the **Execution Status** tab on the top, change the **Execution Status** to "Set to Ready for Transportation Execution" or "Set to In Execution".

The screenshot shows the SAP GTT Standard Freight Order Type AccAWS 6100063618 interface. The 'Set Status' dropdown menu is open, displaying various execution status options. The 'Carrier' field is set to 'LBN_CAR100'. The interface includes tabs for General Data, Business Partner, Items, Overview, Stages, Utilization, and Subcontracting. The 'General Data' tab is active, showing fields for Truck, Cargo Information, and General Information. The 'Set Status' dropdown menu is open, showing options like 'Set to Ready for Transportation Execution', 'Set to Not Ready for Transportation Execution', 'Set to In Execution', 'Set to Not Started', 'Set to Checked Out', 'Set to Departed', 'Set to Arrived', 'Set to Checked In', 'Set to Loaded', 'Set to Not Loaded', 'Set to Unloaded', and 'Set to Not Unloaded'. The 'Carrier' field is set to 'LBN_CAR100'. The 'Execution Status' dropdown menu is also open, showing options like 'Load Plan Status (Stop)', 'Execution Status', 'Fixing', 'Customs', 'Charges/Settlement', 'Cancel Document', 'Load Plan Status (Packaging)', and 'Load Plan Status (Load Planning)'. The 'Carrier' field is set to 'LBN_CAR100'. The 'Execution Status' dropdown menu is also open, showing options like 'Load Plan Status (Stop)', 'Execution Status', 'Fixing', 'Customs', 'Charges/Settlement', 'Cancel Document', 'Load Plan Status (Packaging)', and 'Load Plan Status (Load Planning)'. The 'Carrier' field is set to 'LBN_CAR100'.

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



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



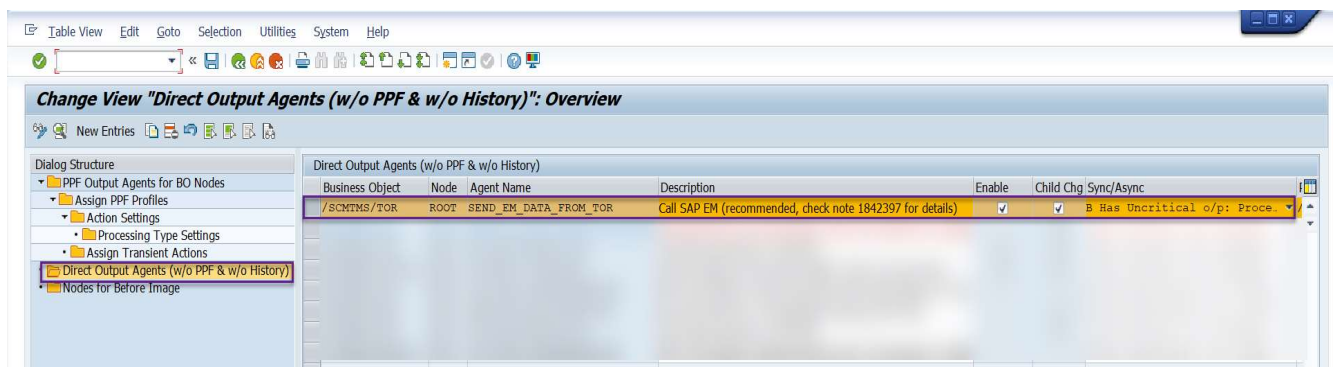
2. Are there easier ways to debug the generation of freight unit / freight order / freight booking IDOC?

Yes, there are two ways.

Option 1: Debug in PPF asynchronous mode

In the IMG, go to node [Cross-Application Components -> Processes and Tools for Enterprise Applications -> Reusable Objects and Functions for BOPF Environment -> PPF Adapter for Output Management -> Maintain Output Management Adapter Settings](#).

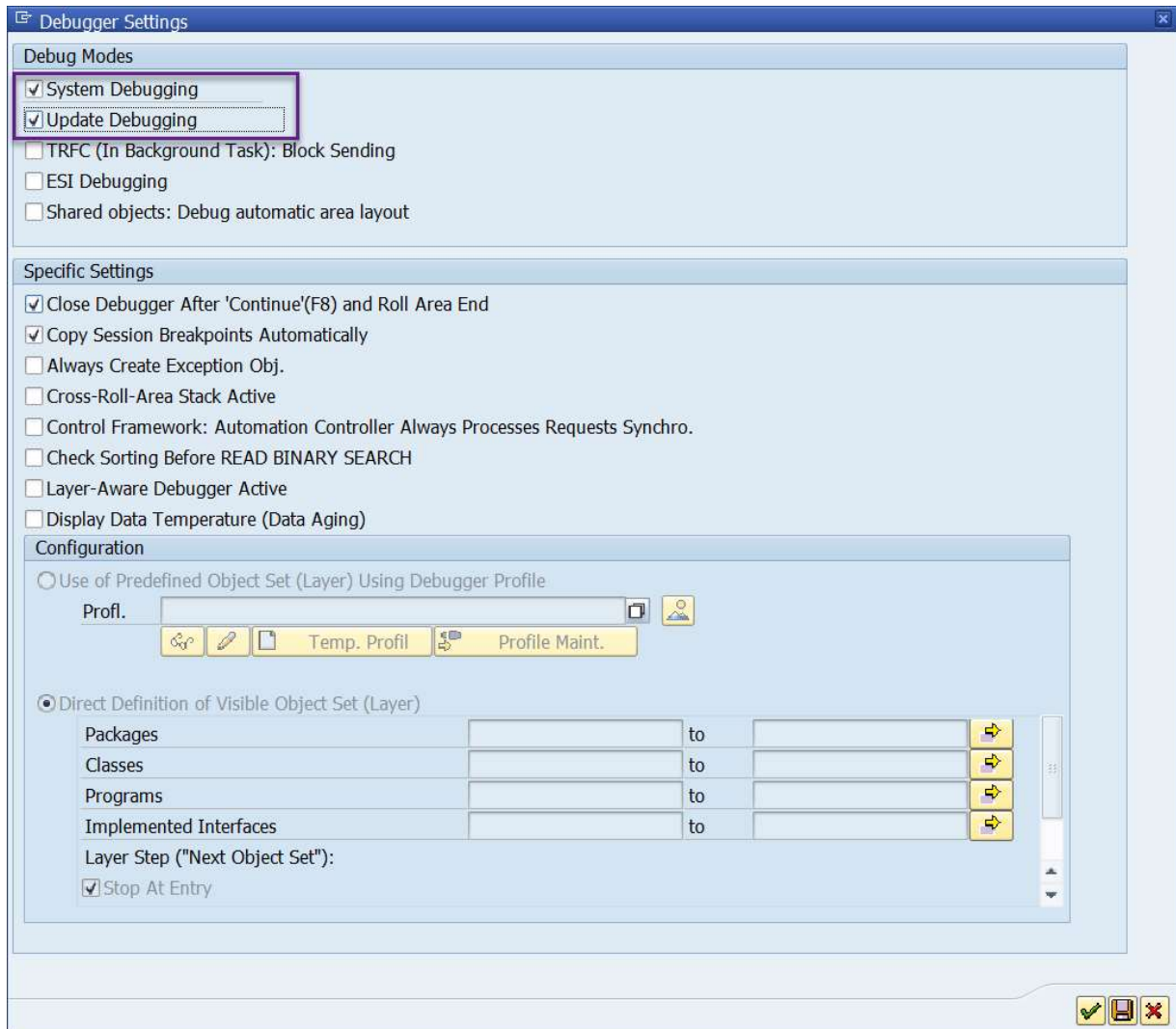
In the [Dialog Structure](#) section, choose [Direct Output Agents \(w/o PPF & w/o History\)](#). Ensure that the following entry is enabled:



Note: in this entry, the value of [Synch/Asynch](#) column is "B Has Uncritical o/p Process after Commit (background)".

Debug procedures are as follows:

- 1) Activate "System Debugging" and "Update Debugging".

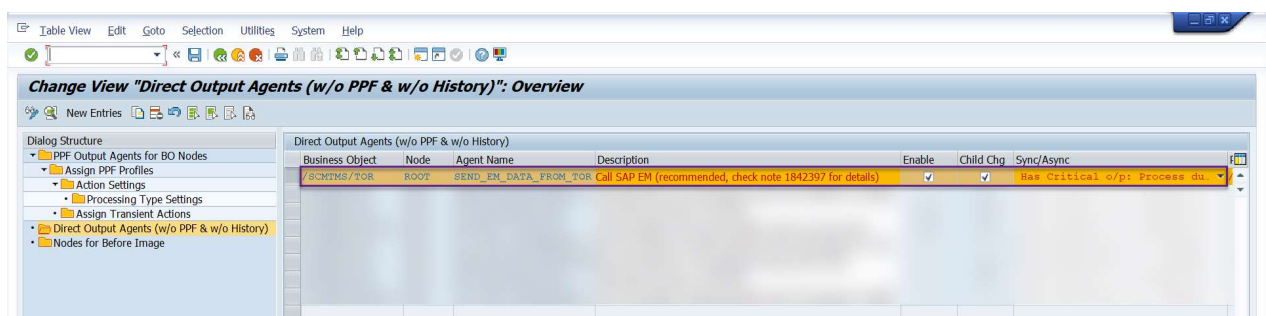


- 2) Set a break point in method /SCMTMS/IF_SEND_TOR_DATA~CALL_EVENT_MGR of the BAdI implementing class ZSST_GTT_CL_SEND_TOR_DATA and start the debugging.

Option 2: Debug in PPF synchronous mode

On the IMG, go to node [Cross-Application Components -> Processes and Tools for Enterprise Applications -> Reusable Objects and Functions for BOPF Environment -> PPF Adapter for Output Management -> Maintain Output Management Adapter Settings](#).

In the [Dialog Structure](#) section, choose [Direct Output Agents \(w/o PPF & w/o History\)](#). Ensure that the following entry is enabled:



Note: in this entry, the value of [Sync/Async](#) column is "Has Critical o/p: Process during Save - before Commit".

Now you can set a break point in method `/SCMTMS/IF_SEND_TOR_DATA~CALL_EVENT_MGR` of the BAdI implementing class `ZSST_GTT_CL_SEND_TOR_DATA` and start the debugging.

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