SAP Transportation Management
Integration of SAP TM with SAP Global Trade Services

CUSTOMER
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Icons in Body Text

<table>
<thead>
<tr>
<th>Icon</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>!</td>
<td>Caution</td>
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<tr>
<td>⊗</td>
<td>Example</td>
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<tr>
<td>↓</td>
<td>Note</td>
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<tr>
<td>→</td>
<td>Recommendation</td>
</tr>
<tr>
<td>=</td>
<td>Syntax</td>
</tr>
</tbody>
</table>

Additional icons are used in SAP Library documentation to help you identify different types of information at a glance. For more information, see Help on Help → General Information Classes and Information Classes for Business Information Warehouse on the first page of any version of SAP Library.

Typographic Conventions

<table>
<thead>
<tr>
<th>Type Style</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Example text</strong></td>
<td>Words or characters quoted from the screen. These include field names, screen titles, pushbuttons labels, menu names, menu paths, and menu options. Cross-references to other documentation.</td>
</tr>
<tr>
<td><strong>EXAMPLE TEXT</strong></td>
<td>Emphasized words or phrases in body text, graphic titles, and table titles. TECHNICAL NAMES OF SYSTEM OBJECTS. These include report names, program names, transaction codes, table names, and key concepts of a programming language when they are surrounded by body text, for example, SELECT and INCLUDE.</td>
</tr>
<tr>
<td><strong>Example text</strong></td>
<td>Output on the screen. This includes file and directory names and their paths, messages, names of variables and parameters, source text, and names of installation, upgrade and database tools.</td>
</tr>
<tr>
<td><strong>Example text</strong></td>
<td>Exact user entry. These are words or characters that you enter in the system exactly as they appear in the documentation.</td>
</tr>
<tr>
<td><code>&lt;Example text&gt;</code></td>
<td>Variable user entry. Angle brackets indicate that you replace these words and characters with appropriate entries to make entries in the system.</td>
</tr>
<tr>
<td><strong>EXAMPLE TEXT</strong></td>
<td>Keys on the keyboard, for example, F2 or ENTER.</td>
</tr>
</tbody>
</table>
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Integration of SAP TM with SAP Global Trade Services

This configuration guide provides you with the necessary information for configuring the integration of SAP Transportation Management (SAP TM) and SAP Global Trade Services.

Ensure that you carry out the configuration steps in the order given.

1. Settings Configuration in SAP TM [Page 6]
2. Configuration of SOA Services Between SAP TM and SAP GTS [Page 7]
1 Settings Configuration in SAP TM

You can use this process to establish the connection between SAP Transportation Management (SAP TM) and SAP Global Trade Services.

Prerequisites

You have made the required Customizing settings in the SAP Global Trade Services system and connected it to your SAP ERP system. For more information, see the configuration guide for Customs Management on SAP Service Marketplace at:

http://service.sap.com/swdc

SAP Business Suite Applications > SAP Governance, Risk, Compliance (GRC) > Global Trade Services

Process

1. You define the customs profile in Customizing for SAP Transportation Management under Transportation Management > Global Trade > Define Customs Profile.

2. You define a new customs relevance check if a check for transportation within the European Union is not relevant for you. You define a new customs relevance check in Customizing for SAP Transportation Management under Transportation Management > Basic Settings > Global Trade > Define Customs Relevance Check.

3. You assign the customs profile to the freight order type and to the freight booking type in Customizing for SAP Transportation Management under Transportation Management > Freight Order Management > Freight Order > Define Freight Order Types and under Transportation Management > Freight Order Management > Freight Booking > Define Freight Booking Types.

4. You have defined the system landscape directory data of your business systems in Customizing for SAP Transportation Management under Transportation Management > Basic Functions > Define SLD Data of Business Systems.

Result

You have made the settings in SAP TM to establish the connection between SAP TM and SAP Global Trade Services.

You can now configure the SOA services for the connection between SAP TM and SAP Global Trade Services.

More Information

Configuration of SOA Services Between SAP TM and SAP GTS [Page 7]
# 2 Configuration of SOA Services Between SAP TM and SAP GTS

You can use this process to configure service-oriented architecture (SOA) services. SOA middleware facilitates communication between disparate applications and systems based on the exchange of XML messages. With SOA middleware, you can accelerate business integration and use standards-based Web services to form new and innovative business solutions that meet your changing business needs quickly. SAP NetWeaver Process Integration (SAP NetWeaver PI) is SAP's implementation of SOA middleware.

The connection between SAP Transportation Management (SAP TM) and SAP Global Trade Services can be established using either PI (mediated) or a point-to-point-connection.

The communication between SAP TM (software component SCMTM) and SAP Global Trade Services (software component SAP SLL-LEG) has to be set up for the following SOA services:

<table>
<thead>
<tr>
<th>From Sender SOA Service</th>
<th>To Receiver SOA Service</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Name:</strong> ExportDeclarationSUITERequest_Out</td>
<td><strong>Name:</strong> ExportDeclarationSUITERequest_In</td>
</tr>
<tr>
<td><strong>Namespace:</strong> <a href="http://sap.com/xi/TMS/Global">http://sap.com/xi/TMS/Global</a></td>
<td><strong>Namespace:</strong> <a href="http://sap.com/xi/GTS/Global2">http://sap.com/xi/GTS/Global2</a></td>
</tr>
<tr>
<td><strong>Software Component:</strong> SCMTM &lt;Version&gt;</td>
<td><strong>Software Component:</strong> SAP SLL-LEG &lt;Version&gt;</td>
</tr>
<tr>
<td><strong>Name:</strong> ExportDeclarationSUITECancellationRequest_Out</td>
<td><strong>Name:</strong> ExportDeclarationSUITECancellationRequest_In</td>
</tr>
<tr>
<td><strong>Namespace:</strong> <a href="http://sap.com/xi/TMS/Global">http://sap.com/xi/TMS/Global</a></td>
<td><strong>Namespace:</strong> <a href="http://sap.com/xi/GTS/Global2">http://sap.com/xi/GTS/Global2</a></td>
</tr>
<tr>
<td><strong>Software Component:</strong> SCMTM &lt;Version&gt;</td>
<td><strong>Software Component:</strong> SAP SLL-LEG &lt;Version&gt;</td>
</tr>
<tr>
<td><strong>Name:</strong> ExportDeclarationSUITEConfirmation_Out</td>
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</tr>
<tr>
<td><strong>Namespace:</strong> <a href="http://sap.com/xi/GTS/Global2">http://sap.com/xi/GTS/Global2</a></td>
<td><strong>Namespace:</strong> <a href="http://sap.com/xi/TMS/Global">http://sap.com/xi/TMS/Global</a></td>
</tr>
<tr>
<td><strong>Software Component:</strong> SAP SLL-LEG &lt;Version&gt;</td>
<td><strong>Software Component:</strong> SCMTM &lt;Version&gt;</td>
</tr>
</tbody>
</table>

## Prerequisites

- You have set up SAP Global Trade Services 10.0 (relevant software component version: SAP SLL-LEG10.0).
- You have set up SAP TM 8.0 (relevant software component version SCMTM 8.0) is set up.
- If the connection is established by PI, you have set up SAP NetWeaver PI 7.0 and higher.

## Process

To configure the SOA services, decide between one of following options:

- You configure the connection using SAP NetWeaver PI.

  For more information see, Configuring the Connections using SAP NetWeaver Process Integration [Page 9].
• You configure the connection using a point-to-point-Connection.

For more information see, Configuring a Point-to-Point Connection [Page 11].

More Information

For more information about SAP NetWeaver PI, see SAP Library for SAP NetWeaver at http://help.sap.com/netweaver SAP NetWeaver Process Integration. 
2.1 Configuring Connections using SAP NetWeaver Process Integration

You can use a process integration scenario from the Enterprise Services Repository (ES Repository) as a configuration template. The system uses the information saved in the process integration scenario, together with additional assignments, to calculate the relevant configuration objects. To configure the connection, you have access to the predefined content of the integration scenario TM_GTSExportDeclarationIntegration (SAPTM IC) under http://sap.com/xi/TMS/Global/IC.

To configure the connection, run the configuration wizard once for each SOA service pair.

Prerequisites

- The sender business system SAP Transportation Management (SAP TM) and receiver business system (SAP Global Trade Services) exist as business systems in SAP NetWeaver Process Integration (SAP NetWeaver PI) with completely configured XI receiver communication channels.

Procedure

1. In the main menu bar of the Integration Builder, choose Tools > Apply Model from ES Repository.

   A wizard starts.

2. Perform the following steps:
   - Select ES Repository Model
   - Create Configuration Scenario

3. In the Type of ES Repository Model screen area, select the Process Integration Scenario radio button.

4. In the ES Repository Model Reference(s) screen area, select the process integration scenario from the ES Repository:
   - TM_GTSExportDeclarationIntegration
   - SAPTM IC 1.0
   - http://sap.com/xi/TMS/Global/IC

   Choose the Continue pushbutton.

5. In the Create Configuration Scenario screen area, enter a name for the configuration scenario and choose the Finish pushbutton.

   The system transfers the integration scenario from the integration repository and the Integration Scenario Configuration wizard starts.

6. Perform the following configuration steps:
   - Select Model
- Assign Components
- Configure Connections
- Generate Configuration Objects

7. You can configure multiple component views within the same configuration scenario. For this connection, there is only one component view defined and therefore you skip this step.

8. To map the participants in a process displayed in the model to actual senders and receivers of messages in your system landscape, assign the components by choosing Assign Components. On the Business System Components for A2A tab page, choose the communication component of the sender and the receiver system. To select the next system, use the navigation arrows to navigate.

9. To configure the three connections, choose Configure Connections. For each connection, select a communication channel for the receiver business system communication component, and choose the Apply pushbutton. The navigation arrows enable you to navigate to the other connections in the process integration scenario.

10. To generate all connections, choose Generate All Connections for the Integration Server Communication and Create Configuration Objects.

A dialog box appears.

11. Configure the following settings:

### Settings for Generation

<table>
<thead>
<tr>
<th>General</th>
<th>Generation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scope of Generation</td>
<td>You can limit the scope of generation to particular object types. Select the checkboxes of the following object types:</td>
</tr>
<tr>
<td></td>
<td>o Receiver Determination</td>
</tr>
<tr>
<td></td>
<td>o Interface Determination</td>
</tr>
<tr>
<td></td>
<td>o Sender/Receiver Agreement</td>
</tr>
</tbody>
</table>

| Change List for Generated Objects | Select the Create New radio button if you want to create a new change list for the generated objects. You can also use an existing change list. The process integration scenario is predefined. |

12. Choose Start.

13. The system displays the generation log, which you can save.

### Result

The relevant receiver determinations, interface determinations, and collaboration agreements are generated for your connection.
2.2 Configuring a Point-to-Point Connection

Procedure

1. Configure the service provider. The service provider receives the message and calls the service backend implementation. For more information, see SAP Library for SAP NetWeaver at http://help.sap.com/netweaver. In SAP NetWeaver Process Integration Library, choose SAP NetWeaver Process Integration Library › SOA Middleware › SOA Management section › Configuring the Web Service Runtime › Working with the SOA Manager › Configuring Service Providers and Consumers › Configuring a Service Provider.

2. Configure a consumer proxy. To call a service provider of SAP Global Trade Services, SAP Transportation Management (TM) calls a consumer proxy. The result of the call is that SAP TM sends a message to the SAP Global Trade Services service provider. For more information, see SAP Library for SAP NetWeaver at http://help.sap.com/netweaver. In SAP NetWeaver Process Integration Library, choose SAP NetWeaver Process Integration Library › SOA Middleware › SOA Management section › Configuring the Web Service Runtime › Working with the SOA Manager › Configuring Service Providers and Consumers › Configuring a Consumer Proxy.

3. Perform the configuration for each SOA service pair once.