SAP NetWeaver MDM Global Data Synchronization Configuration

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Icons in Body Text

Icon	Meaning
	Caution
	Example
	Note
	Recommendation
	Syntax

Icons used in documentation to help you identify different types of information at a glance.

Typographic Conventions

Type Style	Description
Example text	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.
Example text	Emphasized words or phrases in body text, graphic titles, and table titles.
EXAMPLE TEXT	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.
`Example text`	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.
`Example text`	Exact user entry. These are words or characters that you enter in the system exactly as they appear in the documentation.
`<Example text>`	Variable user entry. Angle brackets indicate that you replace these words and characters with appropriate entries to make entries in the system.
`EXAMPLE TEXT`	Keys on the keyboard, for example, `F2` or `ENTER`.

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SAP NetWeaver MDM Global Data Synchronization Configuration Documentation

Use

This Configuration Guide applies to the *Global Data Synchronization (GDS)* business scenario, with the corresponding releases of its SAP application components.

Business Scenario and SAP Application Components Business Scenario	SAP Application Component with Minimum Release
Global Data Synchronization (GDS)	SAP ERP (4.6C as of SP 50, 4.7 as of SP 24) *or* SAP ECC (5.0 as of SP 7) SAP MDM 7.1 SP21 or higher GDS Console 2.1 SAP NetWeaver 7.5 AS2 Adapter (SAP NetWeaver PI 7.5 B2B AS2 Adapter (SAP Note 1905193))

Contents

This guide contains all the steps required to implement the business scenario. The guide specifies the sequence of the configuration activities, and their dependencies.

It includes information about the following topics:

- System connections
- Data replication
- Current settings in production operation.

For more information about this business scenario, see help.sap.com→ global data synchronization.

Document History

Version	Date	Description
1.0	5/17/2010	First Version.
1.1	12/07/2011	SAP Help Portal links have been updated. New chapters have been added.
1.2	30/06/2012	SP03 (MR5 Changes).
1.3	03/03/2015	Added AS2 Adapter (SAP NetWeaver PI 7.3 B2B AS2 Adapter (SAP Note 1905193) or Seeburger), and references to additional SAP Notes.
1.4	06/10/2020	Support Package 6. Updated to SAP NetWeaver 7.5.

Target Group

- Technical consultants

- Application consultants
- Project team members during the implementation of an SAP solution
- SAP customer IT department.

The *System connections* section is written for technical consultants, while the *Creating component-specific master data* section is written for application consultants. The remaining sections are of equal interest to both groups of consultants. The importance of the other sections to the other target groups depends on their specific responsibilities.

Integration

SAP Solution and Business Scenarios Documentation Landscape.

The system landscape has already been created, using the Master Guide and other documentation. What other documentation exists, and where you can find their latest versions, is located at https://help.sap.com.

Business Scenario Configuration Guide Feedback

Your feedback can help SAP to continually improve the Business Scenario Configuration Guide. If you find errors in the Configuration Guide, create and report an incident to the component Global Data Synchronization (MDM -GDS) at https://support.sap.com.

1 General Settings

Purpose

This section contains general information that you need to start the business scenario configuration.

Prerequisites

- The system landscape is installed, using the SAP solution master guides, and the SAP component and business scenario installation and upgrade guides
- You are familiar with the relevant SAP notes about installation, configuration, and upgrade

  For more information, see *SAP Notes*.

Procedure

Perform the steps in these guidelines in the sequence in which they appear.

1.1 Setting Up the ERP System

Use

You make the settings in this section to make possible the extraction of material master data from the ERP system. This includes making the *GDS-Relevant* indicator visible on a screen in the material master.

Procedure

Carry out the steps in these guidelines, in the sequence in which they appear.

If your system contains the required Support Package level as stated in SAP Note 794064, install this SAP Note.

If your system has a *lower* Support Package level than that described in SAP Note 794064, you must make the required enhancements to the material master using SAP Note 792510.

This Configuration Guide applies to all ERP system releases from 4.6C. The names of certain parts of the menu paths do, however, vary slightly from release to release. Therefore, in some cases a menu path that you find in this guide might be slightly different to the path in your ERP system.

1.1.1 Creating a New Screen Sequence

Use

To make the *GDS-Relevant* indicator visible on a data screen of your choice in the maintenance transaction for material master data, which is a prerequisite for being able to flag a material as GDS-relevant, you must carry out the steps below.

Procedure

Navigation

Menu Path	Transaction Code
SAP Easy Access screen ▸ *Tools* ▸ *Customizing* ▸ *IMG* ▸ *Edit Project* ▸ *SAP Reference IMG* ▸ *Logistics - General* ▸ *Material Master* ▸ *Configuring the Material Master* ▸ *Define Structure of Data Screens for Each Screen Sequence*	*OMT3*

1. To copy an existing screen sequence, such as the standard screen sequence for industry, 21, select *Screen Sequence* 21 and choose *Edit* ▸ *Copy As…*.

2. Enter a new, free screen sequence number (*SSq*) and description, and then choose *Enter*.

   The system copies the screen sequence, data screens, subscreen assignments, and the order of the data screens.

3. Select the new screen sequence and double-click *Data Screens.*

4. Select the line containing the data screen to which you want to add the new screen sequence, such as *Basic Data 2*, and then double-click *Subscreens*.

5. In a line that contains a blank subscreen (one with the screen number (*Scr.*) 0001), enter *Program SAPLMGD1* and *Screen 2013*; this is the subscreen that contains the *GDS-Relevant* indicator.

6. Save your entries.

Result

The subscreen that contains the *GDS-Relevant* indicator appears on the data screen that you selected above.

1.1.2 Assigning a New Screen Sequence to a Group of Users

Use

We recommend you restrict the number of users that are allowed to set the *GDS-Relevant* indicator. To restrict the users that are able to set the *GDS-Relevant* indicator, carry out the steps below.

Procedure

Navigation

Menu Path	Transaction Code
SAP Easy Access screen ▸ *Tools* ▸ *Customizing* ▸ *IMG* ▸ *Edit Project* ▸ *SAP Reference IMG* ▸ *Logistics – General* ▸ *Material Master* ▸ *Configuring the Material Master* ▸ *Assign Screen Sequences to User/Material Type/Transaction/Industry Sector*	*OMT3E*

1. To create a group of users who can set the *GDS-Relevant* indicator, double-click *User screen reference*.
2. Choose *New Entries* and in the *Name* field, enter the names of the users who you want to be able to set the *GDS-Relevant* indicator.
3. In the *SRef: user* field, enter the screen sequence number (*SSq*) that you created above.
4. Save your entries.
5. Double-click *Screen sequence control*.

   You can now either enter your own screen sequence control or copy an existing one.

   If you copy an existing screen sequence control, check that the rest of the data on this screen sequence control matches your requirements. For more information, see the documentation for this IMG activity.

6. To copy an existing screen sequence control, select the line containing the screen sequence description *Std. ind. (short) tab pages* and choose *Edit* ▸ *Copy As…*

   The system displays the copied line, in change mode.

7. In the *SRef: user* field, enter the screen sequence number (*SSq*) that you used to create the user screen reference above.

   You can further adjust the authorizations using the other fields. For more information, see the documentation for this IMG activity.

8. Choose *Enter* and save your entries.

Result

The users you have defined in *User screen reference* can set the *GDS-Relevant* indicator in the maintenance transaction for the material master.

1.1.3 Determining Message Behavior for an EAN Check

Use

You should set the *GDS-Relevant* indicator only when the material you want to flag as GDS-relevant has at least one European Article Number (EAN) assigned to it: The system carries out a check to determine if a GDS-relevant material has an EAN. The function also checks if an EAN is assigned to a GDS-relevant material when, for example, you try to delete an EAN. Based on the results of the check, you can set up the system to display a message.

You perform the steps below to determine the type of message the system displays, when no EAN is assigned to a GDS-relevant material.

In the standard system, the system does *not* display the message.

Procedure

Navigation

Menu Path	Transaction Code
SAP Easy Access screen ▸ *Tools* ▸ *Customizing* ▸ *IMG* ▸ *Edit Project* ▸ *SAP Reference IMG* ▸ *Logistics - General* ▸ *Material Master* ▸ *Basic Settings* ▸ *Define Attributes of System Messages*	*OMT4*

1. Select the line containing message 657 (application area: MM).
2. Determine whether you want the system to display the message as a warning (enter *W*), an error (enter *E*), or not at all (leave the field blank).
3. Save your entries.

For more information, see the documentation for this IMG activity.

Result

When the system checks if a GDS-relevant material is assigned to an EAN, the system displays the message above as either a warning message, an error message, or it does not display the message.

1.1.4 Making ALE Settings

Use

To send materials to the GDS Console, you must make the required Application Link Enabling (ALE) settings in your ERP system. In these settings, you determine for which materials the system is to write change pointers, and the scope of the IDocs to be sent to the GDS Console.

The standard message type for sending material data is MATMAS_GDS and for sending BOM is BOMMAT. The standard message type for sending pricing data is PRICAT. If required, you can create a reduced message type, which limits the amount of data that the system sends to the GDS Console.

You must also make the required settings in the distribution model so that the system can send your required message type in the form of IDocs to the GDS Console. For more information about how to maintain the distribution model, see Maintaining the Distribution Model [Page 43].

Procedure

Perform the steps in these guidelines in the sequence in which they appear.

1.1.4.1 Creating a Reduced Message Type (Optional)

Use

If you do not want to send unnecessary data from the ERP system to the GDS Console and therefore *improve the performance* of the data transfer, we recommend that you restrict the number of IDoc segments that the system sends to the GDS Console by creating a reduced message type.

The standard message type for sending data to the GDS Console is MATMAS_GDS. If required, you can create a reduced message type, which limits the segments that the system creates, and as a result, reduces the amount of data that the ERP system sends to the GDS Console.

Procedure

Navigation

Menu Math	Transaction Code
SAP Easy Access screen ▸ *Tools* ▸ *Customizing* ▸ *IMG* ▸ *Edit Project* ▸ *SAP Reference IMG* ▸ *SAP NetWeaver* ▸ *SAP Web Application Server* ▸ *IDoc Interface / Application Link Enabling (ALE)* ▸ *Modelling and Implementing Business Processes* ▸ *Master Data Distribution* ▸ *Scope of Data Distribution* ▸ *Message Reduction* ▸ *Create Reduced Message Type*	*BD53*

1. In the *Reduced message type* field, enter a name for the reduced message type and choose *Reduction* ▸ *Create*.

   The *Selection of Message Type as Reference for the Reduction* dialog box appears.

2. In the *Message type reference* field, enter message type *MATMAS_GDS* and choose *Enter*.

The *Enter Description of Reduced Message Type* dialog box appears.

3. Enter a short description for the reduced message type and choose *Enter*.

   The *IDoc Reduction Maintenance* screen appears.

4. Activate at least the following segments and corresponding fields for the reduced message type: E1MARAM, E1MAKTM, and E1MARMM.

5. Save your entries.

For more information about activating segments, see the documentation for this IMG activity.

If you use a reduced message type, in SAP NetWeaver Process Integration (SAP NetWeaver PI), you must create corresponding interface mapping as a copy of the standard interface mapping. For more information, see Defining Operation Mapping for a Custom Message Type [Page 23].

Result

You have created a reduced message type so that the system creates only those IDoc segments that you want to send to the GDS Console.

1.1.4.2 Generating a Transport Request for a Reduced Message Type (Optional)

Use

If you create a reduced message type, you use this activity to generate a transport request that contains all data relevant to the reduced message type. You can then use the standard transport mechanism to transport this request to other systems.

Procedure

Navigation

Menu Path	Transaction Code
SAP Easy Access screen ▸ *Tools* ▸ *Customizing* ▸ *IMG* ▸ *Edit Project* ▸ *SAP Reference IMG* ▸ *SAP NetWeaver* ▸ *SAP Web Application Server* ▸ *IDoc Interface / Application Link Enabling (ALE)* ▸ *Modeling and Implementing Business Processes* ▸ *Master Data Distribution* ▸ *Scope of Data Distribution* ▸ *Message Reduction* ▸ *Create Transport Request for Message Type*	*BD63*

1. Enter the message type for which you want to create a transport request.

2. Choose *Execute*.

For more information, see the documentation for this IMG activity.

Result

If you use a reduced message type, you can transport the contents of this reduced message type to other systems.

1.1.4.3 Activating Change Pointers Generally

Use

If you want to extract data from the ERP system in the form of delta loads, you must perform the following setting so that the system writes change pointers for changes that you make to materials.

Procedure

Navigation

Menu Path	Transaction Code
SAP Easy Access screen ▸ *Tools* ▸ *Customizing* ▸ *IMG* ▸ *Edit Project* ▸ *SAP Reference IMG* ▸ *SAP NetWeaver* ▸ *SAP Web Application Server* ▸ *IDoc Interface / Application Link Enabling (ALE)* ▸ *Modelling and Implementing Business Processes* ▸ *Master Data Distribution* ▸ *Replication of Modified Data* ▸ *Activate Change Pointers - Generally*	*BD61*

1. Set the *Change pointers activated – generally* indicator.
2. Save your entry.

Result

You have set the system to write change pointers for materials.

1.1.4.4 Activating Change Pointers for a Message Type

Use

In addition to activating the general writing of change pointers, you also have to activate change pointers for the message type you want to use.

Procedure

Navigation

Menu Path	Transaction Code
SAP Easy Access screen ▸ *Tools* ▸ *Customizing* ▸ *IMG* ▸ *Edit Project* ▸ *SAP Reference IMG* ▸ *SAP NetWeaver* ▸ *SAP Web Application Server* ▸ *IDoc Interface / Application Link Enabling (ALE)* ▸ *Modelling and Implementing Business Processes* ▸ *Master Data Distribution* ▸ *Replication of Modified Data* ▸ *Activate Change Pointers for Message Types*	*BD50*

The procedure below differs depending on whether you use the standard message type or a reduced message type.

Standard Message Type

1. Set the *active* indicator for message type MATMAS_GDS.
2. Save your entry.

Custom Message Type

1. If you created a custom message type, such as a reduced version of the standard message type in Creating a Reduced Message Type [Page 11], choose *New Entries* and enter the name of the custom message type.
2. Set the *active* indicator for the reduced message type.
3. Save your entry.

Result

You have set the system to write change pointers for the specific message type that you want to use to extract data from the ERP system.

1.1.4.5 Restricting Change Pointers for Certain Materials

Use

You can restrict the writing of change pointers so that the system does *not* write change pointers for materials for which the *GDS-Relevant* indicator is set for the first time, which is *before* the initial data extraction.

If you do not make this setting and the system does write change pointers for such materials, you can use report GDS_MATERIAL_EXTRACT to reorganize the change pointers.

Procedure

Navigation

Menu Path	Transaction Code
SAP Easy Access screen > *Tools* > *Customizing* > *IMG* > *Edit Project* > *SAP Reference IMG* > *SAP NetWeaver* > *SAP Web Application Server* > *IDoc Interface / Application Link Enabling (ALE)* > *Modelling and Implementing Business Processes* > *Master Data Distribution* > *Replication of Modified Data* > *Reduce Change Pointers for Message Type*	Not applicable

1. Enter an implementation name and choose *Further*.
2. On the initial screen for implementations, enter a short text for your implementation.
3. Under *Filter types*, select the message types that you want to filter out.

4. Save your settings.

For more information, see the documentation for this IMG activity.

Result

You have limited the materials for which the system writes change pointers to those materials for which the *GDS-Relevant* indicator is *not* initial.

1.1.4.6 Assigning Change Document Items to Message Types

Use

In this activity, you define for which fields in the material master the system writes change documents. This allows you to restrict the scope of IDocs that you send to the GDS Console to those fields that were changed since the previous extraction.

Procedure

1. Call transaction *BD52*.

   The *Determine Work Area: Entry* dialog box appears.

2. Enter the message type for which you want to determine the fields for which the system is to write change documents.

   The *Change View "Change document items for message type": Overview* screen appears.

3. Enter the following data:

Detailed Settings **Field Name**	**Description**	**User Action and Values**	**Notes**
Object	Class of object	*MATERIAL*	
Table Name	Name of the table in which the master data is stored	<Name of material master table>	For example, *MARA*
Field Name	Name of the field in the material master for which you want the system to write change documents	<Name of field in material master>	For example, *GROES*

4. Save your entries.

Result

The system writes change documents for the master data fields that you enter in the table above.

1.2 Setting Up SAP NetWeaver Process Integration

Use

SAP NetWeaver Process Integration (SAP NetWeaver PI) is the central component for exchanging messages with the 1WorldSync Data Pool. This section describes all the steps you must perform to set up the system landscape to be able to exchange messages between the Global Data Synchronization Console (GDS Console) and the data pool.

SAP NetWeaver PI is also used for exchanging material information with the ERP system. The configuration steps needed to allow this exchange of data is also detailed below.

The procedure below ensures that you make all the required settings in the System Landscape Directory (SLD) to enable the message exchange with SAP NetWeaver PI.

Prerequisites

The following components are installed:

- SAP NetWeaver PI
- GDS Console
- SAP NetWeaver PI Adapter Engine for GDS Console
- ERP system (SAP ERP or SAP ECC)
- SAP NetWeaver PI Engine for AS2 adapter.

  You can also install the AS2 adapter on the SAP NetWeaver PI adapter engine that is used for the GDS Console.

- You have installed and configured the SLD, which is part of the installation procedure for the SAP NetWeaver PI adapter engine.

  For more information, see help.sap.com→ *SAP NetWeaver PI 7.5* › *Installation Configuration.*

- For the purpose of sending IDocs, you have integrated your ERP system in the Integration Server, as described in the *Integration of Business Systems Using the IDoc Adapter*, *Settings for the IDoc Sender System (R/3)* , and *Settings of the Integration Server System* sections of the Configuration Guide for SAP NetWeaver PI.

Procedure

You perform the following steps to configure the systems in the SLD.

1. In the Technical Landscape, ensure that a technical system of type Web AS ABAP is defined for your ERP system.

   If there is no such entry, check the SLD registration steps described in the Installation Guide and Configuration Guide for SAP NetWeaver PI.

2. In the Technical Landscape, ensure that a technical system of type Web AS Java is defined for the system on which your GDS Console is installed. If there is no such

entry, check the settings for the SLD data supplier, as described in the Configuration Guide for SAP NetWeaver PI.

3. *Optional*: Edit the technical system for the GDS Console, by choosing this system and in the *Installed Products* section, adding the product SAP_MDM_7.1. MarkGDS_Console_2.1as an installed software component version.

   This makes it easier to select the required interface names for configuration in the *Integration Builder*.

4. In the Business Landscape, ensure that a business system is defined for the ERP system client, from which you want to receive material data.

   For more information about creating such a business system, see the *Integration of Business Systems Using the IDoc Adapter* section in the Configuration Guide for SAP NetWeaver PI.

   From this point on, the business system name is referred to as <ERP_BS>.

5. In the Business Landscape, create a new business system for the GDS Console, by entering the following information:

Business System Data for the GDS Console

Field	Data
Name	Enter a name of your choice according to your naming convention for business systems, such as com_company_GDSConsole. From this point on, the business system is referred to as <GDS_BS>.
Technical System Type	Web AS Java
System	Select the technical system for the Web AS Java of the GDS Console that you defined in step 2 above.
Logical System Name	Enter a name for the ALE logical system that you want to use for the GDS Console, for the purpose of sending and receiving IDocs. Make sure that you adhere to any naming conventions. From this point on, the logical system name is referred to as <GDS_LS>.
Related Integration Server	Select the Integration Server that you are going to use for communicating with the GDS Console.

Result

You have defined the systems relevant to the GDS scenario in the SLD, which forms the basis in SAP NetWeaver PI for exchanging data between the various systems in the GDS scenario.

1.3 Configuring the Non-Central PI Adapter Framework Procedure

Use

A central component of the adapter runtime is the Adapter Framework, with middleware services like messaging, queuing. The adapter framework supports all relevant JCA standards and communicates with resource adapters. These components must be configured for a proper functioning of the system. Note that the NetWeaver PI Adapter Engine must be updated to the same support package level as the NetWeaver PI Integration Server.

For more information, see the section on the NetWeaver PI Adapter Engine in the Installation Guide for NetWeaver PI at help.sap.com→*SAP NetWeaver 7.5* ›*Adapter Engine (Java EE) on <operating System> for SAP NetWeaver 7.5*. Choose the appropriate installation guide for your operating system.

The steps below describe the necessary steps to configure a non-central instance of the NetWeaver PI Adapter Framework. For more information, see the documentation mentioned above.

Procedure

1. Start the Web AS Config Tool.
2. Choose to work with your database settings as required (default if you installed the underlying database with the default installation settings).
3. Increase the number of available threads.

If you do not increase the number of available threads, an application server restart is more likely to fail during deployment. For more information, see SAP Note 937159.

1. Change the following configuration properties:
   - `Global server configuration/managers/ThreadManager/ChangeThreadCountStep=20`
   - `Global server configuration/managers/ThreadManager/MaxThreadCount=200`
   - `Global server configuration/managers/ApplicationThreadManager/MaxThreadCount= 200`

Configure the Non-Central Adapter Engine

Install and configure Decentral Adapter Engine as outlined in SAP Note 1778649. For relevant Adapter Framework SPs and Patches, consider SAP Note 1943283. For known issues, see SAP Note 1773881. If necessary, according to SAP Note 1346933, execute the CTC Wizard template *PI Adapter Engine in JPR Mode*.

Also see SAP Help Portal at http://help.sap.com/nwpi.

Configuring the SLD

1. Open the System Landscape Directory on the Integration Builder.

2. On the first screen select *Web AS Java* as the type of the new Technical System.
3. Set the following parameters:

Web AS ABAP	**None (Standalone J2EE)**
System Name (SID)	System ID of the sender service
System Home	System ID of the sender service

4. Skip the next two screens.
5. Select NetWeaver 7.5 as the installed product and select all installed software components.

Creating a Business System

1. Select Web AS Java
2. Select the following:

System	**Select the previously configured technical system**
Logical System Name	GDS_SENDER

3. Provide the sender host name as requested.
4. Select the correct value for *Related Integration Server* (for example, X7T_000).

Setting Data Pool Outgoing Parameters

1. Log on to SAP NetWeaver Administrator with url *http://<host>:<port>/nwa*
2. Navigate to *Configuration Management* > *Infrastructure* > *Java System Properties*.
3. Select the *Applications* tab on the *Details* section.
4. Filter table for *is~gds~core~app*.
5. In the *Extended Detail* table, search for properties *GDSN_PROVIDER_ID*, *GDSN_PROVIDER_GLN*, and *GDS.SchemaLocation* and set the appropriate value for these properties.
6. Save the details and Stop/Start the *is~gds~core~app* application by choosing *Operation management* > *Systems* > *Stop/Start* > *Java EE Application in NWA application*.

Result

You have assigned authorizations to users who can perform NetWeaver PI configuration tasks on the Web AS Java for the GDS Console. You also created the required service users.

1.4 Setting Up MDM Change Tracker

For more information about the configuration of MDM Change Tracker, see SAP Help Portal at https://help.sap.com → *SAP NetWeaver Master Data Management 7.1* > *MDM Change Tracker*. During the configuration, use *gdstr* as the alias name of the data source.

As of GDS 2.1 SP06 Patch 1, MDM does not require additional authentication since the component is embedded into GDS 2.1. The minimal version of the required change tracker is 7.1 SP21. To use the MDM Change Tracker from the GDS application, a dedicated role is required as described in the *MDM Change Tracker* guide. The necessary GDS-related settings are described in SAP Note 1517801.

2 System Connections

Purpose

This section contains information about connecting the systems in an SAP system landscape.

This involves, for example:

- Defining logical systems and assigning clients in the Online Transaction Processing System (OLTP)
- Determining the systems, servers, clients, distribution models, and so on, in the system in which the SAP application component is installed
- Completing the configuration settings and performing other activities required for the interactions in an SAP system landscape.

Procedure

Perform the steps in these guidelines in the sequence in which they appear.

2.1 Setting Up Data Transfer from ERP System to GDS Console

Use

To enable data to be transferred between the ERP system and the GDS Console, you must perform various settings in SAP NetWeaver Process Integration, the ERP system, and the GDS Console.

Procedure

Perform the steps in these guidelines in the sequence in which they appear.

2.1.1 Registering Inbound Interfaces of GDS Console

Use

To enable the GDS Console to receive inbound messages from SAP NetWeaver Process Integration (SAP NetWeaver PI), you must register the inbound interfaces of the GDS Console in the Java Proxy Runtime (JPR). You perform this task on the PI Adapter Engine on the Web AS Java for the GDS Console.

Procedure

1. Open the JPR proxy server configuration pages of the Web AS Java on which the GDS Console is installed: *http://<server name>:<port number>/ProxyServer/* .

   The page lists the various commands that you can perform, such as registering and unregistering interfaces, and listing registered commands.

2. Use the */register* command to register the following interfaces one after the other, using the nomenclature shown on the JPR proxy server page:

Inbound Interface to Receive Data from the ERP System

Part of Register Command	Entry
myNamespace	http://sap.com/xi/GDS/1Sync/IM/70

Interface	*MI_TradeItems_In*
Bean	*TradeItemsInProxy*
Method	*mITradeItemsIn*

After adding your server name and port number, copy and paste the following URL to your browser:

http://<servername>:<port_name>/ProxyServer/register?
http://sap.com/xi/GDS/1Sync/IM/70&interface=MI_TradeItems_In&bean=TradeItemsInProxy&
method=mITradeItemsIn

Inbound Price Synchronization Interface to Receive Pricing Data from the ERP System (if you are using the price synchronization features)

Part of Register Command	**Entry**
myNamespace	*http://sap.com/xi/GDS/1Sync/IM/70*
Interface	*MI_PriceSyncImport_In*
Bean	*PriceSyncImportInProxy*
Method	*mIPriceSyncImportIn*

After adding your server name and port number, copy and paste the following URL to your browser:

http://<servername>:<port_name>/ProxyServer/register?ns=http://sap.com/xi/GDS/1Sync/IM/
70&interface=MI_PriceSyncImport_In&bean=PriceSyncImportInProxy&method=mIPriceSyncI
mportIn

Inbound Interface to Receive Data from the Data Pool (if you are using the 1WorldSync Data Pool)

Part of Register Command	**Entry**
myNamespace	http://sap.com/xi/GDS/1Sync/IM/**NN***
Interface	*MI_DataPoolResponse_In*
Bean	*DataPoolResponseInProxy*
Method	*mIDataPoolResponseIn*

After adding your server name and port number, copy and paste the URL for registration to your browser:

http://<servername>:<port_name>/ProxyServer/register?ns=
http://sap.com/xi/GDS/1Sync/IM/<NN>&interface= MI_DataPoolResponse_In &bean=
DataPoolResponseInProxy &method= mIDataPoolResponseIn

Inbound Price Synchronization Confirmation Interface to Receive External Pricing Confirmation Data in GS1 Format (if you are using the price synchronization features)

Part of Register Command	**Entry**
myNamespace	http://sap.com/xi/GDS/1Sync/IM/**NN***
Interface	*MI_PriceSyncConfirmation_In*

Bean	*PriceSyncConfirmationInProxy*
Method	*mIPriceSyncConfirmationIn*

After adding your server name and port number, copy and paste the URL for registration to your browser:

http://<servername>:<port_name>/ProxyServer/register?ns= http://sap.com/xi/GDS/1Sync/IM/<NN>&interface= MI_PriceSyncConfirmation_In &bean= PriceSyncConfirmationInProxy &method= mIPriceSyncConfirmationIn

Inbound Interface to Receive Data from the Data Pool (if you are using the SA2 Atrify Data Pool)

Part of Register Command	**Entry**
myNamespace	http://sap.com/xi/GDS/1Sync/IM/70
Interface	*MI_SA2DataPoolResponse_In*
Bean	*SA2DataPoolResponseInProxy*
Method	*mISA2DataPoolResponse In*

After adding your server name and port number, copy and paste the URL for registration to your browser:

http://<servername>:<port_name>/ProxyServer/register?ns= http://sap.com/xi/GDS/1Sync/IM/70&interface= MI_SA2DataPoolResponse_In &bean= SA2DataPoolResponseInProxy &method= mISA2DataPoolResponseIn

1. Check that every interface is correctly registered using the */ListAll* command: *http://<server_name>:<port_number>/ProxyServer/ListAll*.

   To update the information displayed, refresh the page.

2.1.2 Making Settings in SAP NetWeaver PI to Transfer Data to GDS Console

Use

To enable data to be transferred between the ERP system and the GDS Console, you must perform various settings in SAP NetWeaver PI (SAP NetWeaver PI).

Procedure

Perform the steps in these guidelines in the sequence in which they appear.

2.1.2.1 Content in the Integration Repository

The following interfaces are used in the Integration Repository of SAP NetWeaver Process Integration (SAP NetWeaver PI) to allow messages to be exchanged between the ERP system and the GDS Console.

Interfaces Used By the ERP System

Interface Name	Software Component Version
MATMAS_GDS.MATMAS03	SAP APPL 4.70
BOMMAT.BOMMAT04	SAP APPL 4.70

Optional Interface Used By the ERP System (if the price synchronization feature is used) Interface Name	Software Component Version
PRICAT.PRICAT02	SAP APPL 4.70

You can choose interfaces from those software component versions that correspond to the release of your ERP system.

Interfaces Used By the GDS Console

Name of Interface	Description
MI_TradeItems_In	Used to receive materials from the ERP system

Optional Interface Used By the GDS Console (if the price synchronization feature is used) Name of Interface	Description
MI_PriceSyncImport_In	Used to receive pricing data from the ERP system

2.1.2.1.1 Defining Operation Mapping for a Custom Message Type

Use

If you use a custom message type in the ERP system, you can no longer use the standard SAP NetWeaver PI mappings that are part of the PI content for MDM. You must create a new SAP NetWeaver PI operation mapping that transforms this custom message type to the format of the GDS Console interface MI_TradeItems_In (namespace: http://sap.com/xi/GDS/1Sync/IM/70).

The custom message type might be a reduced version of the standard MATMAS.GDS message type, as described in the Making ALE Settings [Page 11] section above.

For more information and recommendations on import mapping, see SAP Note 1892813.

This documentation assumes that you are experienced in working with SAP NetWeaver PI design objects, such as interfaces, message types, and mappings.

Prerequisites

The software component version of the ERP system exists in the Software Landscape Directory (SLD). This is part of the PI content available on SAP Service Marketplace.

Updating the component repository (CR) content in the SLD is part of the regular system administration tasks and should be performed after you install Support Packages. You should check for updates once a month on SAP Service Marketplace at service.sap.com/sld *Updating SLD Component Information.*

- You have created a custom software component version in the SLD, which will be used for the PI design objects that you need to create
- You have imported the required software component versions into the SAP NetWeaver PI Integration Repository:
  - GDS 2.1
  - Software component version of your ERP system (for example, SAPAPPL 4.70)
  - Custom software component version of your SAP NetWeaver PI design objects.

For more information about importing software component versions, see the documentation for SAP NetWeaver on SAP Help Portal at http://help.sap.com/nwpi.

Procedure

1. In the Integration Builder (Design), create a new interface mapping and a related mapping program, such as an SAP NetWeaver PI message mapping or SSLT transformation.

The interface mapping must use the following data:

- Source interface: <NAME OF CUSTOM MESSAGE TYPE> (namespace: urn:sap-com:document:sap:idoc:messages)
- Target interface: MI_TradeItemst_In (namespace: http://sap.com/xi/GDS/1Sync/IM/70) If you want to use a custom message type to transfer data from the ERP system to the GDS Console and the fields are not already in the IDoc segments below, see SAP Note 936554 for details of how to map this data to the GDS Console.

We recommend that you use the message mapping supplied with the PI content for GDS and mapping outlined in the Standard Message Mapping [Page 25] section below as the basis for any mapping that you create.

For more information about creating SAP NetWeaver PI messages, see the documentation for Process Integration on SAP Help Portal at http://help.sap.com/nwpi.

2.1.2.1.1.1 Standard Message Mapping

The mapping below corresponds to the message type that is shipped as standard. The mapping is divided into the three minimum IDoc segments that the message type must contain in the ERP system.

Segment E1MARAM

ERP			**GDS**
Field	**Description**		**Field**
MATNR	Material Number	→	ERP material number
NTGEW	Net weight of base GTIN	→	
GEWEI	*Weight unit of base GTIN*	→	

Segment E1MAKTM

ERP			**GDS**
Field	**Description**		**Field**
SPRAS_ISO	Language according to ISO 639	→	Not applicable as only English is supported.
MAKTX	Material description	→	Short description

Segment E1MARMM

ERP			**GDS**
Field	**Description**		**Field**
UMREZ	Numerator for conversion to base units of measure	→	BaseUnitIndicator
MEINH	Unit of measure for display	→	N/A
EAN11	International Article Number (EAN/ UPC)	→	GTIN
LAENG	Length	→	Depth
Breit	Width	→	Width
HOEHE	Height	→	Height
MEABM	Unit of dimension for length/width/height	→	Depth (unit)
		→	Width (unit)
		→	Height (unit)
VOLUM	Volume	→	Volume

VOLEH	Volume unit	→	Volume unit
BRGEW	Gross weight	→	Gross weight
GEWEI	Weight unit	→	Gross weight
		→	Net weight
UMREN	Denominator for conversion to base units of measure	→	N/A
(UMREZ/UMREN)* E1MARAM.NTGEW	Net weight of non-base GTIN	→	Net weight
(UMREZ[n]/UMREN[n])/ (UMREZ[n-1] / UMREN[n-1])	GTIN link quantity	→	Contained items/quantity

Example

This example refers to ** *lower level in hierarchy* in the above table: If you want to calculate the net weight of a pallet, you use the unit of measure display field (MEINH) of a case, since case is the next lowest level in the packaging hierarchy below pallet.

2.1.2.2 Basic Configuration of Integration Directory

Use

You use the Integration Builder (Configuration) to create basic configuration objects in the Integration Directory.

You refer to these objects during subsequent activities.

Prerequisites

You have access to the SAP NetWeaver PI Integration Builder and a user with appropriate authorizations.

Procedure

1. Start the SAP NetWeaver PI Integration Builder (Configuration).
2. Create a new configuration scenario by choosing *Object New…*
3. Enter a name and description for the configuration scenario and save your entries.

   You use this scenario to group together the configuration objects that are required to transfer data from the ERP system to the GDS Console.
4. Check if the business system for your ERP system (<ERP_BS>) already exists in the Integration Builder, by choosing the *Objects* tab page:

   a. If the business system does exist, add it to the newly -created configuration scenario.

   b. If the business system does not exist, in the newly created configuration scenario, choose *Business System* with the secondary mouse button, and then choose *Assign Business System*.

Make sure that the *Create Communication Channels Automatically* indicator is not selected.

To update the list of available systems displayed, you might have to clear the SLD cache of the Integration Builder. To do this, choose *Environment Clear SLD Data Cache.*

5. Add the business system for the GDS Console (<GDS_BS>) to the newly created configuration scenario, by choosing *Business System* with the secondary mouse button, and then choosing *Assign Business System*.

2.1.2.2.1 Configuring the Integration Directory

Use

You use the configuration wizard of the Integration Builder (Configuration) to create the configuration objects required for communication from the ERP system to the GDS Console.

Procedure

1. In the Integration Builder (Configuration), choose *Tools* ▸ *Configuration Wizard*.
2. In the first step of the configuration wizard, select the type of the scenario. Choose *Communication Using Integration Server* ▸ *Internal Communication.*
3. Choose *Continue*.
4. Perform the following steps in the order in which they appear.

2.1.2.2.2 Specifying the Sender for GDS Material Import

Use

You specify the sender service for Material IDocs that you want to send from your ERP system to the GDS Console.

Procedure

1. In the *Communication Component Type* field, select *Business System*.
2. In the *Communication Component* field, choose the *Display List of Permitted Values F4* pushbutton to display the list of business systems maintained in System Landscape Directory (SLD). Select your ERP system.
3. In the *Adapter Type* field, choose the *Display Input Help F4* pushbutton and select *IDoc*.
4. In the *Interface* field, select the interface based on the release of your ERP system and the basic type of the message:

Interface Name	Software Component Version
MATMAS_GDS.MATMAS05	SAP APPL 4.70

5. For example, for release 4.70, select interface `MATMAS_GDS.MATMAS05` of software component version `SAP APPL 4.70`.

6. If you are using a custom message type, select the interface name that corresponds to this message type. Choose *Continue.*

   The section in which you specify the receiver appears.

2.1.2.2.3 Specifying the Receiver for GDS Material Import

Use

You specify the receiver service to handle incoming messages for GDS Material Import.

Procedure

1. In the *Communication Component Type* field, select *Business System.*
2. In the *Communication Component* field, choose the *Display List of Permitted Values F4* pushbutton to select the business system for the GDS Console (<GDS_BS>), as maintained in the System Landscape Directory (SLD).
3. In the *Adapter Type* field, select *XI*.
4. In the *Interface* field, choose the *Display List of Permitted Values F4* pushbutton to select *MI_TradeItems_In*.

   The corresponding namespace (*http://sap.com/xi/GDS/1Sync/IM/70*) is added to the *Namespace* field.
5. In the *Interface* field, choose the *Display List of Permitted Values F4* pushbutton to select *MI_PriceSyncImport_In.*

   The corresponding namespace (*http://sap.com/xi/GDS/1Sync/IM/70*) is added to the *Namespace* field.

   This is an optional step, only relevant for the price synchronization feature.
6. In the configuration wizard, choose *Continue*.

   The *Sender Agreement: Specify a Sender Agreement* screen appears.
7. Since a sender agreement is not necessary, choose *Continue*.

2.1.2.2.4 Specifying the Receiver Configuration for GDS Material Import

Use

This is used for receiver and interface determination for GDS Material Import.

Procedure

1. In the receiver determination part of the wizard, make sure that the *communication component* created for the SAP Java System (GDS Console) is in the *Communication Component* field.
2. Choose *Continue*.

The *Interface Determination: Create an Interface Determination* screen appears.

3. In the *Interface* field, choose the *Display List of Permitted Values F4* pushbutton and select `MI_TradeItems_In`.

   The corresponding namespace (*http://sap.com/xi/GDS/1Sync/IM/70*) is added to the *Namespace* field.

4. In the *Operation Mapping* field, choose the *Display Input Help F4* pushbutton to select the operation mapping that corresponds to the interface you chose under Specifying the Sender for GDS Material Import [Page 27].

Interface Name	Software	Mapping Program
MATMAS_GDS.MATMAS05	SAP APPL 4.70	MatmasGdsMatmas05_TradeItems

If you are using a custom message type, select the operation mapping that you created for this message type.

5. Choose *OK*.

6. In the wizard, choose *Continue* to progress to the next step, which is to specify the receiver agreement.

2.1.2.2.5 Specifying the Receiver Agreement for GDS Material Import

Use

You use the receiver agreement to specify the communication channel that is to be used by the SAP NetWeaver Process Integration (SAP NetWeaver PI) adapter to send messages to the SAP Java system (GDS Console).

Procedure

1. In the *Communication Channel* field, enter a name for the SAP NetWeaver PI receiver communication channel that you want to create for sending messages to the GDS Console, such as *XI_Receive*.

2. Choose *Continue*.

3. In the *Add to Scenario* field, select the name of the configuration that you created in the Basic Configuration of Integration Directory [Page 26] section above.

4. Choose *Finish*.

   A generation log appears detailing the configuration objects that you have created and added to the new scenario that you created above.

   Your newly created scenario appears on the *Scenarios* tab page on the left of the screen.

2.1.2.2.6 Specifying Communication Channel Data

Use

After you create the configuration objects for transferring data from the ERP system to the GDS Console, you must modify the communication channel to allow this transfer of data to take place.

Data transfer requires an SAP NetWeaver Process Integration (SAP NetWeaver PI) communication channel.

Procedure

1. On the *Scenarios* tab page on the left side of the Integration Builder, open the scenario that you created above in Basic Configuration of Integration Directory [Page 26] and choose *Service Without Party* ▸ *Business System* ▸ *<GDS_BS>* ▸ *Communication Channel.*

2. Double-click the communication channel that the wizard created automatically.

   The communication channel data appears in the main frame.

3. Choose *Communication Channel* ▸ *Display/Edit* and enter the following:

Field Name	Value
Transport Protocol	*HTTP 1.0*
Message Protocol	*XI 3.0*
Adapter Engine	*Integration Server*
Addressing Type	*URL Address*
Target Host	*<Host name of Web AS Java on which the GDS Console is running>*
Service Number	*<HTTP Port number of Web AS Java>*
Path	*/MessagingSystem/receive/JPR/XI*
Authentication Type	*Use Logon Data for Non-SAP System*
User Name	*<Username>* in line with user information for system created in *Assigning Authorizations for SAP NetWeaver PI Components* [External].
User Password	*<Password>* in line with user information for system created in *Assigning Authorizations for SAP NetWeaver PI Components* [External].

4. Choose *Communication Channel* ▸ *Save.*

5. To activate the changes you have made, in the left part of the screen, choose the *Change Lists* tab page.

6. Right click *Standard Change List* and choose *Activate*.

The *Activate change list* dialog box appears.

7. Select the objects you want to activate (the scenario you created above) and choose *Activate*.

2.1.2.2.7 Specifying the Sender for GDS BOM Import

Use

You specify the sender service for BOM IDocs that you want to send from your ERP system to the GDS Console.

Procedure

1. In the Integration Builder (Configuration), choose *Tools* > *Configuration Wizard*.
2. In the first step of the configuration wizard, select the type of the scenario. Choose *Communication Using Integration Server* > *Internal Communication.*
3. Choose *Continue.*
4. In the *Communication Component Type* field, select *Business System.*
5. In the *Communication Component* field, choose the *Display List of Permitted Values* pushbutton to display the list of business systems maintained in the System Landscape Directory (SLD). Select your ERP system.
6. In the *Adapter Type* field, choose the *Display Input Help* pushbutton and select *IDoc*.
7. In the *Interface* field, select the interface based on the release of your ERP system and the basic type of the message:

Interface Name	Software Component Version
BOMMAT.BOMMAT04	SAP APPL 4.70

8. For example, for release 4.70, select interface `MATMAS_GDS.MATMAS05` of software component version `SAP APPL 4.70`.

   If you are using a custom message type, select the interface name that corresponds to this message type.

9. Choose *Continue.*

   The section in which you specify the receiver appears.

2.1.2.2.8 Specifying the Receiver for GDS BOM Import

Use

You specify the receiver service to handle incoming messages for GDS BOM import.

Procedure

1. In the *Communication Component Type* field, select *Business System.*
2. In the *Communication Component* field, choose the *Display List of Permitted Values* pushbutton, and select the business system for the GDS Console (<GDS_BS>), as maintained in the System Landscape Directory (SLD).

3. In the *Adapter Type* field, select *XI.*

4. In the *Interface* field, choose the *Display List of Permitted Values* pushbutton to select *MI_TradeItems_In.*

   The corresponding namespace (*http://sap.com/xi/GDS/1Sync/IM/70*) is added to the *Namespace* field.

5. In the configuration wizard, choose *Continue.*

   The *Sender Agreement: Specify a Sender Agreement* screen appears.

6. Choose *Continue,* as the sender agreement is not necessary.

2.1.2.2.9 Specifying the Receiver Configuration for GDS BOM Import

Use

You determine the receiver and interface for GDS BOM Import.

Procedure

1. In the receiver determination part of the wizard, make sure that the *communication component* created for the SAP Java System (GDS Console) can be found in the *Communication Component* field.

2. Choose *Continue.*

   The *Interface Determination: Create an Interface Determination* screen appears.

3. In the *Interface* field, choose the *Display List of Permitted Values* pushbutton, and select *MI_TradeItems_In.*

   The corresponding namespace (*http://sap.com/xi/GDS/1Sync/IM/*70) is added to the *Namespace* field.

4. In the *Operation Mapping* field, choose the *Display Input Help* pushbutton, and select the operation mapping that corresponds to the interface you chose under Specifying the Sender for GDS BOM Import [Page 27].

Interface Name	Software	Mapping Program
BOMMAT.BOMMAT04	SAP APPL 4.70	BommatBommat04_TradeItems

   If you are using a custom message type, select the interface mapping that you created for this message type.

5. Choose *OK*.

6. In the wizard, choose *Continue* to progress to the next step, which is about specifying the receiver agreement.

2.1.2.2.10 Specifying the Receiver Agreement for GDS BOM Import

Use

You use the receiver agreement to specify the communication channel that is to be used by the SAP NetWeaver Process Integration (SAP NetWeaver PI) adapter to send messages to the SAP Java system (GDS Console).

Procedure

1. In the *Communication Channel* field, select the SAP NetWeaver PI receiver communication channel that you have created in the Specifying the Receiver Agreement for GDS Material Import [Page 29] step, such as *XI_Receive.*
2. Choose *Continue.*
3. In the *Add to Scenario* field, select the name of the configuration that you created in section Basic Configuration of Integration Directory [Page 26].
4. Choose *Finish.*

   A generation log appears with the details of the configuration objects that you have created and added to the new scenario that you created above.

   Your newly created scenario appears on the *Scenarios* tab page.
5. To activate the changes you have made, in the left part of the screen, choose the *Change Lists* tab page.
6. In the context menu of *Standard Change List,* choose *Activate.*

   The *Activate Change List* dialog box appears.
7. Select the objects you want to activate (in the scenario you created above) and choose *Activate.*

2.1.2.2.11 Specifying the Sender for GDS Pricing Data Import

Use

This step is only relevant for the price synchronization features.

You specify the sender service for Pricing Data IDocs that you want to send from your ERP system to the GDS Console.

Procedure

1. In the Integration Builder (Configuration), choose *Tools* > *Configuration Wizard.*
2. In the first step of the configuration wizard, select type of scenario. Choose *Communication Using Integration Server* > *Internal Communication.*
3. Choose *Continue*.
4. In the *Communication Component Type* field, select *Business System.*

5. In the *Communication Component* field, choose the *Display List of Permitted Values* pushbutton to display the list of business systems maintained in the System Landscape Directory (SLD). Select your ERP system.

6. In the *Adapter Type* field, choose the *Display Input Help* pushbutton and select *Idoc*.

7. In the *Interface* field, select the interface based on the release of your ERP system, and the basic type of the message.

Interface Name	Software Component Version
PRICAT.PRICAT02	SAP APPL 4.70

8. For example, for release 4.70, select interface *MATMAS_GDS.MATMAS05* of software component version *SAP APPL 4.70*.

   If you are using a custom message type, select the interface name that corresponds to this message type.

9. Choose *Continue.*

   The section in which you specify the receiver appears.

2.1.2.2.12 Specifying the Receiver for GDS Pricing Data Import

Use

This step is only relevant for the price synchronization features.

You specify the receiver service to handle incoming messages for GDS Price Synchronization Import.

Procedure

1. In the *Communication Component Type* field, select *Business System.*

2. In the *Communication Component* field, choose the *Display List of Permitted Values* pushbutton to select the business system for the GDS Console (<GDS_BS>), as maintained in the System Landscape Directory (SLD).

3. In the *Adapter Type* field, select *XI.*

4. In the *Interface* field, choose the *Display List of Permitted Values* pushbutton to select *MI_PriceSyncImport_In.*

   The corresponding namespace (*http://sap.com/xi/GDS/1Sync/IM/NN**) is added to the *Namespace* field.

5. In the configuration wizard, choose *Continue.*

   The *Sender Agreement: Specify a Sender Agreement* screen appears.

6. Since a sender agreement is not necessary, choose *Continue.*

2.1.2.2.13 Specifying the Receiver Configuration for GDS Pricing Data Import

Use

This step is only relevant for the price synchronization features.

You specify the receiver and the interface for the GDS Price Synchronization Import.

Procedure

1. In the receiver determination part of the wizard, make sure that the *communication component* created for the SAP Java System (GDS Console) is in the *Communication Component* field.
2. Choose *Continue.*

   The *Interface Determination: Create an Interface Determination* screen appears.
3. In the *Interface* field, choose the *Display List of Permitted Values* pushbutton and select *MI_PriceSyncImport_In*.

   The corresponding namespace (*http://sap.com/xi/GDS/1Sync/IM/NN**) is added to the *Namespace* field.
4. In the *Operation Mapping* field, choose the *Display Input Help* pushbutton to select the operation mapping that corresponds to the interface you chose under Specifying the Sender for GDS Pricing Data Import [Page 33].

Interface Name	Software	Mapping Program
PRICAT.PRICAT02	SAP APPL 4.70	PricatPricat02_PriceSyncImport

If you are using a custom message type, select the interface mapping that you created for this message type.

5. Choose *OK.*
6. In the wizard, choose *Continue* to progress to the next step, which is to specify the receiver agreement.

2.1.2.2.14 Specifying the Receiver Agreement for GDS Pricing Data Import

Use

This step is only relevant for the price synchronization features.

You use the receiver agreement to specify the communication channel that is to be used by the SAP NetWeaver Process Integration (SAP NetWeaver PI) adapter to send messages to the SAP Java system (GDS Console).

Procedure

1. In the *Communication Channel* field, select the SAP NetWeaver PI receiver communication channel that you have created in step Specifying the Receiver Agreement for GDS Material Import [Page 29], such as *XI_Receive.*

2. Choose *Continue.*

3. In the *Add to Scenario* field, select the name of the configuration that you created in section Basic Configuration of Integration Directory [Page 26].

4. Choose *Finish.*

   A generation log appears detailing the configuration objects that you have created and added to the new scenario that you created above.

   Your newly created scenario appears on the *Scenarios* tab page on the left of the screen.

5. To activate the changes you have made, in the left part of the screen, choose the *Change Lists* tab page.

6. Choose *Activate* from the context menu of *Standard Change List.*

   The *Activate change list* dialog box appears.

7. Select the objects you want to activate (the scenario you created above) and choose *Activate.*

2.1.2.2.15 Maintaining Ownership of Value Mapping Data

Use

SAP GDS maintains who the owner of a trade item is. If the trade item is imported from an SAP ERP system, GDS tries to map the creator of the material in SAP ERP as the owner of trade item. SAP GDS only recognizes the users that are maintained in SAP GDS. The users maintained in SAP GDS can be and most likely are different as the users maintained in SAP ERP system. Therefore, a value conversion mechanism is required to process the ownership of a trade item. For example, if in SAP ERP a material is created by user “I01234”, which is maintained by user “abcUser” in SAP GDS, we need to convert “I01234” to “abcUser” for the GDS import process.

To ensure proper conversions of ownership values during the import process, a value mapping mechanism is utilized. The corresponding *Value Mapping* table must be maintained to allow the conversion to take place.

The target *Item Owner* field is not generated if there is no match for the corresponding record maintained in the value mapping table.

Procedure

1. On the *Objects* tab, select the *GDS Material Import Message Mapping* object at the following location:

Field name	Value
Software Component	GDS
Software Component Version	GDS 2.1
Namespace	http://sap.com/xi/GDS/1Sync/IM/*NN**
Mapping Objects > *Message Mappings*	MatmasGdsMatmas05_TradeItems

* where NN refers to the latest supported 1Sync release numbers. For example, for 1Sync release 7.0, NN = 68. For 1Sync release 7.0, NN = 70

1. The Message Mapping Object *MatmasGdsMatmas05_TradeItems* is now displayed in the *Mapping Editor* of the right pane.
2. In the *Mapping Editor*, go to the *Target Structure Overview Pane*, which is the right-most pane.
3. Locate the target field *Item Owner* under *MT_TradeItems* > *Payload* > *Item* > *Target Market Data* > *Item Owner*.
4. Double-click the target field *Item Owner* in the *Target Structure Overview Pane*. The mapping logic of *Item Owner* is now displayed in the *Data-Flow Editor* underneath.
5. Choose the *Switch Between Display and Edit Modes* pushbutton on the top of the *Structure Overview Pane* to switch to edit mode.
6. In the *Data-Flow Editor*, locate the standard function *Fix Values* in the middle of the mapping logic.
7. Double-click the function *Fix Values* in the *Data-Flow Editor* to open the *Fix Values Properties* table.
8. Maintain the *Fix Values Properties* conversion table entries. The key column indicates the source values to be converted and the value column shows the target value if a match is found.

   Leave the *Default* entry empty.

9. Choose *OK* to close and save the *Fix Values Properties* table after all the conversion entries are maintained.
10. Choose the *Save* pushbutton on the top of the *Structure Overview Pane* to save the changes you made.
11. To activate the changes you have made, choose the *Change Lists* tab.
12. Right click the *Standard Change List* and choose *Activate*.

    The *Activate Change List* dialog window appears.

13. Select the objects you want to activate (the scenario you created above) and choose *Activate*.

2.1.2.3 Setting Up ALE and IDoc Connections

Use

You must specify configuration data for ALE and IDoc connections between SAP application components and the Integration Server.

On the Integration Server:

- RFC destinations to the business systems
- IDoc metadata for the IDoc adapter.

In the respective business system:

- RFC destination to the Integration Server
- ALE and IDoc outbound processing.

For more information about IDoc communication and the integration technology Application Link Enabling (ALE), see the documentation for SAP NetWeaver on the SAP Help Portal at http://help.sap.com/nwpi → *SAP NetWeaver 7.5*.

For information about the IDoc adapter, see the Integration of Business Systems Using IDoc Adapter section of the *SAP NetWeaver PI Configuration Guide* at http://help.sap.com/nwpi.

To call the transactions that are required for the configuration steps below, use a user that is assigned the following roles:

SAP_CA_BFA_DATATRANSFER

SAP_IDOC_ADMINISTRATION

2.1.2.4 Setting Up an RFC Destination to a Business System

Use

To define an RFC destination from the Integration Server to the business system, you must perform the following steps.

Procedure

Perform the following steps in the Integration Server client.

Navigation

Menu Path	Transaction
SAP Easy Access screen > *Tools* > *ALE* > *ALE Administration* > *Runtime Settings* > *Maintain RFC Destinations*	*SM59*

1. Select the *R/3 connections* node and choose *Create*.
2. In the *RFC Destination* field, enter the following name for the RFC destination from the Integration Server to a business system; *XIIS_TO_<Business System>*.
3. In the *Connection type* field, in the dropdown list box, select *3 - Connection to R/3 System*.
4. In the *Description* frame, in the *Description 1* field, enter the following: *Connection to <Business System>*.
5. Choose *Enter*.
6. On the *Technical settings* tab page, enter the following information:

   In the *Target host* field, enter < *name of the target host* >.

   In the *System Number* field, specify the system number of the business system (for example, *73*).

   To find the system number, choose *Properties* in the logon dialog box (SAP Logon). The system number is displayed in the *System Number* field.

7. On the *Logon/Security* tab page, enter the logon data for the business system. In the *Logon* frame, enter the following information:
   - In the *Client* field, specify the client of the business system.
   - In the *User* field, specify a user that is assigned the role SAP_XI_IS_SERV_USER and a role <Own Role> that you define yourself.
   - Assign the following authorization objects to the <Own Role> role:
     - S_RFC (Activity Execute, RFC object EDIN , object type Function Group)
     - B_ ALE _RECV
   - In the *Password* field, enter a password for this user.
8. Save the RFC destination.
9. To test the RFC destination, choose *Test connection*.
10. Choose *Back*.

2.1.2.5 Creating IDoc Metadata for IDoc Adapter on Integration Server

Use

The IDoc adapter on the Integration Server requires metadata to be able to convert the IDocs sent to it from the business system into IDoc XML.

For more information about the IDoc adapter, see the documentation for SAP NetWeaver on SAP Help Portal at http://help.sap.com/nwpi.

2.1.2.6 Defining Port for Business System on the Integration Server

Use

To establish an RFC connection to the system that contains the metadata, you must perform the following steps.

Procedure

Perform the following steps in the Integration Server client.

Navigation

Menu Path	**Transaction Code**
SAP Easy Access screen(User menu) ▸ *Exchange Infrastructure: Administration* ▸ *Port Maintenance in IDoc Adapter*	*IDX1*

1. Choose *Create*.
2. In the *Port* field, enter *SAP <Business System>*, for example, *EBP*.
3. In the *Client* field, enter *<Client Business System>*, for example, *911*.
4. In the *Description* field, enter *Business system <Business System> Client <Client>*.
5. In the *RFC Destination* field, specify the RFC destination for the business system *<XIIS_TO_<Business System>*.
6. Save your entries.

The name of the port is generated automatically: `<Business System>_<Client>`.

2.1.3 Making Settings in ERP System to Transfer Data to GDS Console

Use

To enable data to be transferred between the ERP system and the GDS Console, you must perform various settings in the ERP system.

Procedure

Perform the steps in these guidelines in the sequence in which they appear.

2.1.3.1 Setting Up RFC Destination to Integration Server

Use

To define an RFC destination from the business system to the Integration Server, you must perform the following steps.

Procedure

Perform the following steps in the business system.

Navigation

Menu Path	Transaction Code
SAP Easy Access screen ▸ *Tools* ▸ *ALE* ▸ *ALE Administration* ▸ *Runtime Settings* ▸ *Maintain RFC Destinations*	SM59

1. Select the *R/3 connections* node and choose *Create*.
2. In the *RFC destination* field, enter the following name for the RFC destination to the Integration Server:<Business System>_TO_XIIS.
3. In the *Connection type* field, in the dropdown list box, select *3 - Connection to R/3 System*.
4. In the *Description* frame, in the *Description 1* field, enter Connection to <Integration Server>.
5. Choose *Enter*.
6. On the *Technical settings* tab page, enter the following information:
   - In the *Target host* field, enter<Integration Server host>
   - In the *System Number* field, specify the system number of the Integration Server (for example, 73.

   To find the system number, choose *Properties* in the logon dialog box (SAP Logon). The system number is displayed in the *System Number* field.
7. On the *Logon/Security* tab page, enter the logon data for the target system. In the *Logon* frame, enter the following information:

- In the *Client* field, specify the client of the Integration Server
- In the *User* field, specify a user that is assigned the roleSAP_XI_IS_SERV_USER and a role <Own Role> that you define yourself
- Assign the following authorization objects to the <Own Role> role:
  - S_RFC (Activity Execute, RFC objectEDIN, object type Function Group)
  - B_ALE_RECV
- In the *Password* field, enter your password, such asXIPASS.

8. Save the RFC destination.
9. To test the RFC destination, choose *Test connection* in the pushbutton bar.
10. Choose *Back*.

2.1.3.2 Defining the Integration Server Port

Use

To enable the IDocs to be sent from the business system to the Integration Server system, you must define a port for the Integration Server.

Procedure

Perform the following steps in the business system.

Navigation

Menu Path	**Transaction Code**
SAP Easy Access screen ▸ *Tools* ▸ *ALE* ▸ *ALE Administration* ▸ *Runtime Settings* ▸ *Port Maintenance*	*WE21*

1. Select the *Ports* ▸ *Transactional RFC* node and choose *Create*.
2. In the *Ports in IDoc processing* dialog box, select the own port name radio button.
3. Enter the following port name: *<Integration Server>*.
4. Choose *Continue*.
5. In the *Description* field, enter *Integration Server*.
6. In the *RFC destination* field, specify the RFC destination of the Integration Server: *<Business System>_TO_XIIS*.
7. Save your entries.

2.1.3.3 Specifying IDocs in the Outbound Channel

Use

In ALE/IDoc outbound processing, the IDocs are not sent directly to the receiver business system but to the Integration Server.

By following the procedures described in this guide, you configure the Integration Server as the receiver on the ERP system and not the GDS Console directly. The GDS Console is not actually defined as the receiving business system until the Integration Server performs the receiver determination.

Depending on your preferences, you can also use other configuration variants.

Procedure

Navigation

Menu Path	Transaction Code
SAP Easy Access screen > *Tools* > *ALE* > *ALE Administration* > *Runtime Settings* > *Partner Profiles*	*WE20*

1. In the *Partner Profiles* dialog box, choose *Create*.
2. In the *Partner no.* field, specify the logical system of the Integration Server: *<Integration Server>CLNT<Client Integration Server>*.
3. In the *Partn.Type* field, in the dropdown list box, select *LS* (logical system).
4. On the *Post processing: permitted agent* tab page, specify the user for the IDoc administrator. The IDoc administrator can then execute the IDoc monitoring.
5. In the *Type* field, specify the user type (for example, organizational unit, normal user).
6. Save your entries.
7. In the *Outbound parmtrs.* table, choose *Create outbound parameter* to create a new line.
8. In the *Partner profiles: Outbound parameters* dialog box, in the *Message Type* field, enter the message types *MATMAS*, *MATMAS_GDS,BOMMAT*, and if applicable, the reduced message type for the outbound IDoc.
9. On the *Outbound Options* tab page, in the *Receiver Port* field, select the IDoc port of the Integration Server: *<Integration Server>*.
10. In the *Output Mode* frame, select *Transfer IDoc immed.*
11. In the *IDoc Type* frame, in the *Basic type* field, select the basic type of the outbound IDoc.
12. Save your entries.

2.1.3.4 Maintaining the Distribution Model

Use

To distribute IDocs to the GDS Console, you have to maintain the distribution model by adding your required message type(s) to a model view so that you can send materials by means of an IDoc to SAP NetWeaver Process Integration (SAP NetWeaver PI). You also generate a partner profile for each system that is part of your distribution model.

For more information, see the documentation for the IMG activity *Maintain Distribution Model and Distribute Views* described below.

Prerequisites

- You have defined the sender system (your ERP system) and recipient system (SAP NetWeaver PI) as logical systems in Customizing for *SAP NetWeaver*, by choosing *Application Server* > *IDoc Interface / Application Link Enabling (ALE)* > *Basic Settings* > *Logical System* > *Define Logical System*.
- You have assigned the logical *sender* system to a client in Customizing for *SAP NetWeaver*, by choosing *Application Server* > *IDoc Interface / Application Link Enabling (ALE)* > *Basic Settings* > *Logical System* > *Assign Logical System to Client*.

Procedure

Navigation

Menu Path	Transaction Code
SAP Easy Access screen > *Tools* > *Customizing* > *IMG* > *Edit Project* > *SAP Reference IMG* > *SAP NetWeaver* > *SAP Web Application Server* > *IDoc Interface / Application Link Enabling (ALE)* > *Modelling and Implementing Business Processes* > *Maintain Distribution Model and Distribute Views*	*BD64*

1. Switch to change mode by choosing *Distribution model* > *Switch processing mode*.
2. Create a new model view by choosing *Edit* > *Model view* > *Create*.

   The *Create Model View* dialog box appears.
3. In the *Short Text* field, enter *Global Data Synchronization*.
4. In the *Technical name* field, enter *XI - IDoc*.
5. If you require the distribution model to be valid for only a certain time period, enter the corresponding start and end dates.
6. Choose *Continue*.

   The new model view appears in the list of model views.
7. Select the new model view and choose *Edit* > *Add message type*.
8. In the *Add Message Type* dialog box, enter the *Sender* (sending system), *Recipient* (receiving system), and *Message Type*.

   If you want to set up the distribution model to send data using both a standard message type and a reduced message type, you must add both message types to the distribution model by repeating the above two steps.
9. Choose *Continue*.

In the next steps in this section, you create partner profiles *manually*. You can also generate the partner profiles *automatically*. If you create the profiles manually, any settings you make are overwritten by the generation process. However, if you generate the profiles automatically, you can nevertheless make fine adjustments to these settings as described below.

10. To create a partner profile, select the model view you created above and choose *Environment* ▸ *Change partner profile*.
11. In the left of the *Partner profiles* screen, open the *Partner Type LS* folder and select the logical system to which you want to send IDocs, as entered in the distribution model above.
12. On the *Post processing: permitted agent* tab page, enter the *Type*, *Agent*, and *Language*.
13. Under the *Outbound parmtrs.* (outbound parameters) table, choose the *Create outbound parameter* push button.

    The *Partner profiles: Outbound parameters* screen appears.
14. In the *Message Type* field, enter the message type that you want to send using IDocs.
15. On the *Outbound Options* tab page, enter a *Receiver port* and the *Basic type* for the IDoc type. If necessary, adjust the *Output Mode* settings to meet your requirements.

    The basic type you enter depends on the processing capabilities of the receiving system.
16. In the *Partner Type LS* folder, select the logical system to which you want to send IDocs, as entered in the distribution model above.
17. Save your entries.

Result

You have configured the distribution model to allow the system to send your required message type(s) in the form of IDocs to SAP NetWeaver PI.

To send the IDocs for your message type to SAP NetWeaver PI, you use report GDS_MATERIAL_EXTRACT.

For more information about this report, see the report documentation or, as ofSAPECC5.0, the following documentation on SAP Help Portal at help.sap.com → *Material Master (LO-MD-MM)* ▸ *Transfer and Distribution of Material Master Data* ▸ *Extraction of Material Master Data in a GDS Scenario*.

2.2 Setting Up Data Exchange with 1WorldSync Data Pool

Use

To enable a message exchange between the GDS Console and the 1WorldSync Data Pool, you must make the following settings.

Prerequisites

- SAP NetWeaver PI is installed
- GDS Console is installed
- AS2 adapter is installed.

  If you use the SAP NetWeaver PI 7.5 B2B AS2 Adapter, more information is available on SAP Help Portal at http://help.sap.com/nwpi → *Process Integration*. SAP Notes 1695520 and 1695563 provide further information about download and compatibility.

- You have completed the required administrative activities with 1WorldSync and obtained the 1WorldSync certificate. For more information, see the 1WorldSync document repository at *https:/www.1worldsync.com/*.

Procedure

Perform the steps in these guidelines in the sequence in which they appear.

2.2.1 Content in the Integration Repository for Communication with the 1WorldSync Data Pool

The following interfaces are used in the Integration Repository of SAP NetWeaver Process Integration (SAP NetWeaver PI) to allow messages to be exchanged between the GDS Console and the 1WorldSync Data Pool.

Interfaces Used By the GDS Console

Name of Interface	Description
`MI_TradeItemsExport_Out`	Used to send messages to the 1WorldSync Data Pool
`MI_DataPoolResponse_In`	Used to receive responses from the 1WorldSync Data Pool

The integration scenario is also valid for the link and publication process.

2.2.2 Creating a Party and Communication Components for 1WorldSync Data Pool

Use

You perform the steps in this section to create the 1WorldSync Data Pool as a service with party in the Integration Directory.

Procedure

1. In the Integration Directory, choose the *Objects* tab page.
2. Right click *Party* and choose *New*.

   The *Create Object* dialog box appears.

3. Enter the name and description of the party that you use for communicating with the 1WorldSync Data Pool (for example, 1Sync).
4. In the *Add to Scenario* field, select *None*.
5. Choose *Create*.
6. On the subsequent screen, choose *Party* > *Save.*
7. In the *Communication Component* section beneath the newly created party, choose the *Create Object* pushbutton, followed by *Business Component*.

   The *Create Object* dialog box appears.
8. Enter a name and description of the GDS service of 1Sync (for example, 1Sync_GDS).
9. Choose *Create*.
10. On the subsequent screen, choose *Communication Component* > *Save.*
11. On the *Receiver* tab page under *Inbound Interface*, in the *Name* field, choose the *Display List of Permitted Values* pushbutton.
12. Select `MI_DataPollResponse_In`, namespace *http://sap.com/xi/GDS/1Sync/IM/70*, and choose *OK*.
13. Choose the *Sender* tab page.
14. Under *Outbound Interface*, in the *Name* field, choose the *Display List of Permitted Values* pushbutton.
15. Select `MI_TradeItemExport_Out`, namespace *http://sap.com/xi/GDS/1Sync/IM/70*, and choose *OK*.
16. Choose *Communication Component* > *Save.*
17. Select the objects you want to activate and choose *Activate on the Change Lists tab page.*

2.2.3 Creating AS2 Adapter Channels for the 1WorldSync Data Pool

Use

To allow the GDS Console to communicate with a data pool through SAP NetWeaver Process Integration (SAP NetWeaver PI) and the AS2 adapter, you must apply the AS2 vendor-specific parameters in SAP NetWeaver PI.

If you use the SAP NetWeaver PI 7.5 B2B AS2 Adapter, more information is available on SAP Help Portal at http://help.sap.com/nwpi. SAP Notes 1695520 and 1695563 provide further information about download and compatibility.

Prerequisites

You have installed the AS2 adapter.

Procedure

1. Perform the configuration steps as described in the Configuration Guide for your AS2 adapter.
2. Create a sender communication channel with the adapter type AS2.

   This communication channel handles messages that the data pool sends.
3. Create a receiver communication channel with the adapter type AS2.

   This communication channel handles messages that the receiver channel is to receive.

2.2.4 Creating the Configuration Scenario for Communication with the 1WorldSync Data Pool

Use

You use the integration scenario configurator to create the necessary configuration objects using the *GDS_ExportProcess* integration scenario that you select from the Integration Repository and your own additional settings.

You can also call the integration scenario configurator directly in a scenario in the Integration Directory. In the menu bar in the *Edit Scenario* editor (in the Integration Directory), choose *Configuration Scenario* > *Configuration Wizard*.

For more information about the integration scenario configurator, see the documentation for SAP NetWeaver on SAP Help Portal at http://help.sap.com/nwpi.

You execute the followings steps using the integration scenario configurator.

1. Select the SAP NetWeaver PI integration scenario from the enterprise services repository (Enterprise Services Builder) for communication with the 1WorldSync Data Pool.
2. Select the application components and assign communication components for communication with the 1WorldSync Data Pool.
3. Select and configure connections for communication with the 1WorldSync Data Pool.
4. Generate the configuration objects for communication with the 1WorldSync Data Pool.

2.2.4.1 Selecting SAP NetWeaver PI Integration Scenario from Enterprise Services Repository (Enterprise Services Builder) for the Communication with 1WorldSync Data Pool

Use

The SAP NetWeaver Process Integration (SAP NetWeaver PI) process integration scenario configurator contains information for integration scenarios and cross-component integration processes that is relevant for communication using SAP NetWeaver PI.

To use a process integration scenario as the template for configuring the message exchange, you must first transfer it from the Enterprise Services Repository (Enterprise Services Builder).

You use the steps below to transfer the scenario. The integration scenario configurator is started once the transfer is complete.

Procedure

1. In the main menu bar of the Integration Builder (Integration Directory), choose *Tools* *Apply Model from ES Repository.*

2. The first step in the transfer wizard is *Select ES Repository Model*. In the *Type of ES Repository Model* field, choose *Process Integration Scenario*. In the *Name* field, choose the *Display List of Permitted Values* pushbutton to display the available SAP NetWeaver PI process integration scenarios from the Enterprise Services Repository (Enterprise Services Builder).

3. Select the following process integration scenario.

Name	Namespace	Software Component Version
GDS_ExportProcess	*http://sap.com/xi/GDS/1Sync/IM/ NN* *	GDS 2.1

* where NN refers to the latest supported 1Sync release numbers. For example, for 1Sync release 6.6, NN = 66. For 1Sync release 7.0, NN = 70

1. In the wizard, choose *Continue*.

2. The second step in the wizard is *Create Scenario*. The name of the SAP NetWeaver PI process integration scenario in the Enterprise Services Repository (Enterprise Services Builder) is proposed as the name for the scenario in the Integration Directory. Use the proposed name to create the scenario (in the Integration Directory). If a scenario with this name already exists in the Integration Directory, choose another suitable name.

3. Choose *Finish*.

   The scenario is created in the Integration Directory. If a scenario with the same name already exists, the system displays a corresponding message. If this is the case, change the proposed name for the scenario and choose *Finish* again.

4. Choose *Close*.

   When you close the transfer wizard, the system calls the integration scenario configurator. The SAP NetWeaver PI process integration scenario that you selected from the Enterprise Services Repository (Enterprise Services Builder) is displayed in

a graphical editor and is available as the configuration template for the subsequent configuration steps.

2.2.4.2 Selecting Application Components and Assigning Communication Components for Communication with 1WorldSync Data Pool

Use

There are three types of communication components in the Integration Directory:

- Business system components
- Business components for B2B communication (external partner)
- Integration processes components.

These communication components can act as either sender or receiver and are assigned to the application components (the swim lanes in the graphical representation of the PI integration scenario).

You assign communication components to an application component to determine whether there will be a communication with the assigned communication components. If you do not want to configure a connection to the application component in question, do not assign any communication components to it.

For more information about communication components, see the documentation for SAP NetWeaver PI on SAP Help Portal at http://help.sap.com/nwpi.

Prerequisites

All application components must be specified in the PI integration scenario.

Role	Product	Product Version
GDS Application	Template	2.1
Data Pool	Template	2.1

You can reuse services in the Integration Directory. By assigning communication components using the model configurator, you can search for existing communication components and create new communication components if a particular communication component does not yet exist. For more information, see Creating a Party and Communication Components for 1WorldSync Data Pool [Page 46].

The required business systems must be correctly defined in the System Landscape Directory (SLD) before you can execute the following steps.

Procedure

You use the steps below to assign the existing services to the application components of the PI integration scenario.

1. In the model configurator, choose the *Assign Components* pushbutton.

   The *Assign Components* tab page appears.

2. On the *Business System Components* table, choose the *Insert Line Below Selection* pushbutton if there is no entry under it.
3. To display the components that you can assign, choose the *Display List of Permitted Values* pushbutton.
4. Select the component that corresponds to your GDS Console and choose *Apply*.
5. On the corresponding *Business Components for External Communication* table, choose the *Insert Line Below Selection* pushbutton if there is no entry under it.
6. Select the party that corresponds to your GDS Console, the same one you selected on the *Business System Components* table.
7. To display the components that you can assign, choose the *Display List of Permitted Values* pushbutton.
8. Select the component that corresponds to your GDS Console for the external communication, and choose *Apply*.
9. At the top of the *Assign Components tab*, choose the *Next Role* pushbutton.

   The *Business Components for B2B* tab appears.
10. On the *Business Components for B2B* tab page, choose the *Insert Line Below Selection* pushbutton if there is no entry under it.
11. Select the component that you created in Creating a Party and Communication Components for 1WorldSync Data Pool [Page 46].
12. To display the available components that you can assign, in the *Component* column, choose the *Display List of Permitted Values* pushbutton.
13. Select the party that you created for the 1WorldSync Data Pool in Creating a Party and Communication Components for 1WorldSync Data Pool [Page 46], and choose *Apply.*
14. To display the available parties that you can assign, in the *Party* column choose the *Display List of Permitted Values* pushbutton.

    This completes the selection of application components and assignment of communication components.

2.2.4.3 Selecting and Configuring Connections for Communication with 1WorldSync Data Pool

Use

Once you have assigned the services to the application components, you configure the connections. The integration scenario configurator uses the information from the integration scenario template from the Integration Repository and your communication component assignments to calculate all possible communication connections between senders and receivers. You must configure the following:

- Whether a connection is active and thus to be included when the required configuration objects are calculated
- Which communication channel is to be used for the connection

Procedure

For each of the connections listed below, you must perform the steps below to configure a connection of the integration scenario.

Connection 1	From	To
Actions	**From Action:** SendCatalogueResponse_Export **Namespace:** http://sap.com/xi/GDS/1Sync/IM/70 **Software Component Version:**	**To Action:** ProcessCatalogueRequest_Export **Namespace:** http://sap.com/xi/GDS/1Sync/IM/70 **Software Component Version:**
Operations	**Outbound operation:** MI_TradeItemExport_Out **Namespace:** http://sap.com/xi/GDS/1Sync/IM/NN*http://sap.com/xi/GDS/1Sync/IM/70 **Software Component Version:**	**Inbound operation:** CatalogueRequestProxy **Namespace:** http://sap.com/xi/GDS/1Sync/IM/70 **Software Component Version:**
Service Interfaces	**Outbound interface:** MI_TradeItemExport_Out **Namespace:** http://sap.com/xi/GDS/1Sync/IM/70 **Software Component Version:** http://sap.com/xi/GDS/1Sync/IM/70	**Inbound interface:** CatalogueRequestProxy **Namespace:** http://sap.com/xi/GDS/1Sync/IM/NN* **Software Component Version:** http://sap.com/xi/GDS/1Sync/IM/70
Operation Mapping	**Name:** TradeItemExport_CatalogueRequestProxy **Namespace:** http://sap.com/xi/GDS/1Sync/IM/NN* **Software Component Version:** http://sap.com/xi/GDS/1Sync/IM/70	
Standard Communication Channel	**Not required**	**Receiver channel** Select the AS2 receiver channel that

		you created in Creating AS2 Adapter Channels for the 1WorldSync Data Pool [Page 47]

* where NN refers to the latest supported 1Sync release numbers. For example, for 1Sync release 6.6, NN = 66. For 1Sync release 6.8, NN = 68.

Connection 2	**From**	**To**
Actions	**From Action:** ProcessCatalogueRequest_Export **Namespace:** http://sap.com/xi/GDS/1Sync/IM/NN* **Software Component Version:** http://sap.com/xi/GDS/1Sync/IM/70	**To Action:** ReceiveResponse_Export **Namespace:** http://sap.com/xi/GDS/1Sync/IM/NN* **Software Component Version:** http://sap.com/xi/GDS/1Sync/IM/70
Operations	**Outbound operation:** ResponseProxy **Namespace:** http://sap.com/xi/GDS/1Sync/IM/NN* **Software Component Version:** http://sap.com/xi/GDS/1Sync/IM/70	**Inbound operation:** MI_DataPoolResponse_In **Namespace:** http://sap.com/xi/GDS/1Sync/IM/70 **Software Component Version:** http://sap.com/xi/GDS/1Sync/IM/70
Interfaces	**Outbound interface:** ResponseProxy **Namespace:** http://sap.com/xi/GDS/1Sync/IM/NN* **Software Component Version:** http://sap.com/xi/GDS/1Sync/IM/70	**Inbound interface:** MI_DataPoolResponse_In **Namespace:** http://sap.com/xi/GDS/1Sync/IM/70 **Software Component Version:** http://sap.com/xi/GDS/1Sync/IM/70
Operation Mapping	**Name:** ResponseProxy_DataPoolResponse **Namespace:** http://sap.com/xi/GDS/1Sync/IM/70 **Software Component Version:**	

	2.1	
Standard Communication Channel	**Sender channel** Select the AS2 sender channel for 1Sync that you created in Creating AS2 Adapter Channels for the 1WorldSync Data Pool [Page 47].	**Receiver channel** Choose the receiver communication channel of the GDS Console that you created in Specifying Communication Channel Data [Page 30].

* where NN refers to the latest supported 1Sync release numbers. For example, for 1Sync release 6.8, NN = 68. For 1Sync release 7.0, NN = 70

1. In the model configurator, choose the *Configure Connections ...* pushbutton.
2. The *Connections from Component Assignment s* tab appears with the first connection as well as its associated actions highlighted. Select the *Details* tab.
3. Check that all the settings on the *Actions, Operations, Interfaces*, and *Operation Mapping* tab pages are complete.
4. Go back to *Connections from Component Assignments* tab, choose the *Next Connection* pushbutton on the right to check the above settings for each of the connections in the integration scenario.
5. When you have checked that all the connections are correct, choose the *Save* pushbutton.

2.2.4.4 Generating the Configuration Objects for Communication with 1WorldSync Data Pool

Use

The integration scenario configurator enables you to use the information specified in the previous steps to generate the configuration objects that control runtime. To generate these objects, the integration scenario configurator analyzes the current configuration information in the Integration Directory and uses your entries to calculate the necessary configuration objects for the integration scenario. This can result in new configuration objects being created, or existing configuration objects being reused or adapted.

The generation procedure does the following:

- Generates receiver determinations
- Generates interface determinations
- Generates sender and receiver agreements
- Enters the objects in the scenario (in the Integration Directory)
- Creates a generation log.

Procedure

1. In the model configurator, choose the *Create Configuration Objects ...* pushbutton at the bottom.

   The *Connections from Component Assignments* tab appears with the first connection and its associated actions are highlighted.

2. Select the *Details* tab page.

   The *Create Configuration Objects* dialog box appears.

   To check your entries before generation, choose *Check Configurability...* in the model configurator.

3. Under *General*, select the *Generation* radio button.

4.

   You can also simulate the generation as a preliminary step. The simulation result shows which configuration objects would be created, and which would have to be reused or adapted.

5. Define the scope of generation by selecting the *Receiver Determination*, *Interface Determination*, and *Sender/Receiver Agreement* checkboxes.

   The integration scenario configurator creates detailed directory objects that complete a task as exactly as possible and reduce dependencies in the configuration. If you want to keep the number of configuration objects small, you need more general objects that perform a wider range of tasks.

6. To start the generation, choose *Start*.

   The *Generation Progress* dialog box appears and shows the generation protocol.

7. A generation log appears; in the top of this window, choose *Save as*.

   The generation log contains an overview of all information relating to the generation and indicates if any manual editing is necessary for the generated objects.

8. Select the objects you want to activate and choose *Activate under the Change Lists tab.*

2.2.4.5 Configuring the Catalog Export Features with 1WorldSync Data Pool

Use

There are some basic configuration settings that you have to make for the catalog export features in PI. These configuration settings differ depending on the data pool you have selected to use. If you use the 1WorldSync Data Pool, perform the steps below to configure the catalog export features.

Procedure

1. In the Integration Directory, choose the *Objects* tab page to create a *Communication Component* for the catalog export receiver.

2. In the context menu of *Communication Component Without Party,* choose *Business Component,* then *New*.

   The *Create Object* dialog box appears.

3. Enter a name and description for the business component for the catalog export (for example, *Catalog Export Receiver*).
4. Choose *Create.*
5. On the subsequent screen, choose *Communication Component* > *Save.*
6. On the *Receiver* tab page under *Inbound Interface*, in the *Name* field, choose the *Display List of Permitted Values* pushbutton.
7. Select `MI_SA2DataPoolResponse_In`, namespace http://sap.com/xi/GDS/1Sync/IM/70, and choose *OK*.
8. Choose *Communication Component* > *Save*.
9. Select the objects you want to activate and on the *Change Lists* tab page choose *Activate.*
10. In the Integration Directory, choose the *Objects* tab page to create a *Receiver Determination.*
11. In the context menu of *Receiver Determination,* choose *New.*

    The *Create Object* dialog box appears.
12. Under *Sender*, leave the *Communication Party* empty.
13. Select the communication component that corresponds to your GDS Console.
14. For the interface, select `MI_SA2DataPoolResponse_In` and namespace http://sap.com/xi/GDS/1Sync/IM/70.
15. Select the *Sender Uses Virtual Receiver* checkbox.
16. Choose *Create.*
17. On the subsequent screen, choose *Receiver Determination* > *Save.*
18. Under *Configured Receivers*, select the communication component you just created for the catalog export receiver.
19. Choose *Receiver Determination* > *Save.*
20. Choose the *Configuration Overview* tab, and then the *Refresh* pushbutton.
21. Expand the configured receiver. On right pane of *Objects of Selected Connection*, you can add the corresponding interface determination, receiver agreement, and communication channel objects for the catalog export.

2.3 Setting Up Data Exchange with SA2 Atrify Data Pool

Use

To enable a message exchange between the GDS Console and the SA2 data pool, you must make the following settings.

Prerequisites

- SAP NetWeaver PI is installed
- GDS Console is installed

- AS2 adapter is installed.

  If you use the SAP NetWeaver PI 7.5 B2B AS2 Adapter, more information is available on SAP Help Portal at http://help.sap.com/nwpi → *Process Integration Add-Ons*. SAP Notes 1695520 and 1695563 provide further information about download and compatibility.

- You have completed the required administrative activities with https://www.atrify.com/ and obtained the certificate.

  For more information, see the document repository at https://www.atrify.com/.

Procedure

Perform the steps in these guidelines in the sequence in which they appear.

2.3.1 Content in the Integration Repository for Communication with SA2 Atrify Data Pool

The following interfaces are used in the Integration Repository of SAP NetWeaver Process Integration (SAP NetWeaver PI) to allow messages to be exchanged between the GDS Console and the SA2 Atrify Data Pool.

Interfaces Used By the GDS Console

Name of Interface	Description
`MI_GDSNCatalogueItemNotification_Out`	Used to send Catalog Item Notification messages to the SA2 Atrify Data Pool
`MI_GDSNCatalogueItemPublication_Out`	Used to send Catalog Item Publication messages to the SA2 Atrify Data Pool
`MI_SA2DataPoolResponse_In`	Used to receive responses from the SA2 Atrify Data Pool

2.3.2 Creating a Party and Communication Components for SA2 Atrify Data Pool

Use

You perform the steps in this section to create the SA2 Atrify Data Pool as a service with party in the Integration Directory.

Procedure

1. In the Integration Directory, choose the *Objects* tab page.
2. Choose *New* from the context menu of *Party.*

   The *Create Object* dialog box appears.
3. Enter the name and description of the party that you use for communicating with the SA2 Atrify Data Pool (for example, *SA2*).

4. In the *Add to Scenario* field, select *None.*
5. Choose *Create.*
6. On the subsequent screen, choose *Party* > *Save.*
7. In the *Communication Components* section beneath the newly created party, choose the *Create Object* pushbutton, and then the *Business Component* pushbutton.

   The *Create Object* dialog box appears.
8. Enter a name and description of the GDS service of SA2 Worldsync (for example, *SA2_GDS*).
9. Choose *Create*.
10. On the subsequent screen, choose *Communication Component* > *Save.*
11. On the *Receiver* tab page under *Inbound Interface*, in the *Name* field, choose the *Display List of Permitted Values* pushbutton.
12. Select `MI_SA2DataPoolResponse_In`, namespace *http://sap.com/xi/GDS/1Sync/IM/NN**, and choose *OK*.
13. Choose the *Sender* tab page.
14. Under *Outbound Interface*, in the *Name* field, choose the *Display List of Permitted Values* pushbutton.
15. Select `MI_GDSNCatalogueItemNotification_Out` and `MI_GDSNCatalogueItemPublication_Out`, namespace http://sap.com/xi/GDS/1Sync/IM/81, and choose *OK*.
16. Choose *Communication Component* > *Save*.
17. Select the objects you want to activate and choose *Activate under the Change Lists tab.*

2.3.3 Creating AS2 Adapter Channels for the SA2 Atrify Data Pool

Use

To allow the GDS Console to communicate with a data pool through SAP NetWeaver Process Integration (SAP NetWeaver PI) and the AS2 adapter, you must apply the AS2 vendor-specific parameters in SAP NetWeaver PI.

If you use the SAP NetWeaver PI 7.5 B2B AS2 Adapter, more information is available on SAP Help Portal at http://help.sap.com/nwpi → *Process Integration Add-Ons*. SAP Notes 1695520 and 1695563 provide further information about download and compatibility.

Prerequisites

You have installed the AS2 adapter.

Procedure

1. Perform the configuration steps as described in the Configuration Guide for your AS2 adapter.
2. Create a sender communication channel with the adapter type AS2.

   This communication channel handles messages that the data pool sends.
3. Create a receiver communication channel with the adapter type AS2.

   This communication channel handles messages that the receiver channel is to receive.

2.3.4 Creating the Configuration Scenario for Communication with the SA2 Atrify Data Pool

Use

You use the integration scenario configurator to create the necessary configuration objects using the *GDS_ExportProcess_SA2* integration scenario that you select from the Integration Repository and your own additional settings.

You can also call the integration scenario configurator directly in a scenario in the Integration Directory. In the menu bar in the *Edit Scenario* editor (in the Integration Directory), choose *Configuration Scenario* ▸ *Configuration Wizard*.

For more information about the integration scenario configurator, see the documentation for SAP NetWeaver on SAP Help Portal at http://help.sap.com/nwpi → *Function-Oriented View* ▸ *Process Integration* ▸ *Integration Directory* ▸ *Using Tools to Configure Efficiently* ▸ *Using the Process Model as a Configuration Template* ▸ *Configuring Process Integration Scenarios.*

Procedure

Execute the followings steps using the integration scenario configurator.

1. Select the SAP NetWeaver PI integration scenario from the enterprise services repository (Enterprise Services Builder) for communication with the SA2 Atrify Data Pool [Page 60].
2. Select the application components and assign communication components for communication with the SA2 Atrify Data Pool [Page 61].
3. Select and configure the connections for communication with the SA2 Atrify Data Pool [Page 62].
4. Generate the configuration objects for communication with the SA2 Atrify Data Pool [Page 67].

2.3.4.1 Selecting SAP NetWeaver PI Integration Scenario from Enterprise Services Repository (Enterprise Services Builder) for Communication with the SA2 Atrify Data Pool

Use

The SAP NetWeaver Process Integration (SAP NetWeaver PI) process integration scenario configurator contains information for integration scenarios and cross-component integration processes that is relevant for communication using SAP NetWeaver PI.

To use an integration scenario as the template for configuring the message exchange, you must first transfer it from the Enterprise Services Repository (Enterprise Services Builder) by performing the steps below. The integration scenario configurator is started once the transfer is complete.

Procedure

1. In the main menu bar of the Integration Builder (Integration Directory), choose *Tools* *Apply Model from ES Repository...*

2. The first step in the transfer wizard is *Select ES Repository Model.* In the *Type of ES Repository Model* field, choose *Process Integration Scenario*. In the *Name* field, choose the *Display List of Permitted Values* pushbutton to display the available SAP NetWeaver PI process integration scenarios from the Enterprise Services Repository (Enterprise Services Builder).

3. Select the following process integration scenario.

Name	Namespace	Software Component Version
GDS_ExportProcess_SA2	*http://sap.com/xi/GDS/SA2/IM/*313	GDS 2.1

4. In the wizard, choose *Continue.*

5. The second step in the wizard is *Create Scenario*. The name of the SAP NetWeaver PI process integration scenario in the Enterprise Services Repository (Enterprise Services Builder) is proposed as the name for the scenario in the Integration Directory. Use the proposed name to create the scenario (in the Integration Directory). If a scenario with this name already exists in the Integration Directory, choose another suitable name.

6. Choose *Finish.*

   The scenario is created in the Integration Directory. If a scenario with the same name already exists, the system displays a message. If this is the case, change the proposed name for the scenario and choose *Finish* again.

7. Choose *Close.*

   When you close the transfer wizard, the system calls the integration scenario configurator. The SAP NetWeaver PI integration scenario that you selected from the Enterprise Services Repository (Enterprise Services Builder) is displayed in a graphical editor and is available as the configuration template for the subsequent configuration steps.

2.3.4.2 Selecting Application Components and Assigning Communication Components for the Communication with SA2 Atrify Data Pool

Use

There are three types of communication components in the Integration Directory:

- Business system components
- Business components for B2B communication (external partner)
- Integration processes components.

These communication components can act as either sender or receiver and are assigned to the application components (the swim lanes in the graphical representation of the PI integration scenario).

You assign communication components to an application component to determine whether there will be communication with the assigned communication components. If you do not want to configure a connection to the application component in question, do not assign any communication components to it.

For more information about communication components, see the documentation for SAP NetWeaver PI on the Help Portal at http://help.sap.com/nwpi→ *Function-Oriented View* > *Process Integration* > *Integration Directory* > *Defining Collaboration Profiles* > *Defining Communication Components* > *Communication Component.*

Prerequisites

All application components must be specified in the PI integration scenario.

Role	Product	Product Version
GDS Application	Template	2.1
Data Pool	Template	2.1

You can reuse services in the Integration Directory. By assigning communication components using the model configurator, you can search for existing communication components and create new communication components if a particular communication component does not yet exist. For more information, see Creating a Party and Communication Components for SA2 Atrify Data Pool [Page 57].

The required business systems must be correctly defined in the System Landscape Directory (SLD) before you can perform the following steps.

Procedure

You perform the steps below to assign the existing services to the application components of the PI integration scenario.

1. In the model configurator, choose the *Assign Components* pushbutton.

   The *Assign Components* tab appears.

2. On the *Business System Components* table, choose the *Insert Line Below Selection* pushbutton if there is no entry under it.
3. To display the components that you can assign, choose the *Display List of Permitted Values* pushbutton.
4. Select the component that corresponds to your GDS Console and choose *Apply.*
5. In the corresponding *Business Components for External Communication* table, choose the *Insert Line Below Selection* pushbutton if there is no entry under it.
6. Select the party that corresponds to your GDS Console, the same one you selected in the *Business System Components* table.
7. To display the components that you can assign, choose the *Display List of Permitted Values* pushbutton.
8. Select the component that corresponds to your GDS Console for the External Communication and choose *Apply*.
9. At the top of the *Assign Components tab*, choose the *Next Role* pushbutton on the right.

   The *Business Components for B2B* tab appears.
10. In the *Business Components for B2B* table, choose the *Insert Line Below Selection* pushbutton if there is no entry under it.
11. Select the component that you created in Creating a Party and Communication Components for SA2 Atrify Data Pool [Page 57].
12. To display the available components that you can assign, in the *Component* column, choose the *Display List of Permitted Values* pushbutton.
13. Select the party that you created for the SA2 Atrify Data Pool in Creating a Party and Communication Components for SA2 Atrify Data Pool [Page 57], and choose *Apply.*
14. To display the available parties that you can assign, in the *Party* column under, choose the *Display List of Permitted Values* pushbutton.

    This completes the selection of application components and assignment of communication components.

2.3.4.3 Selecting and Configuring Connections for Communication with the SA2 Atrify Data Pool

Use

Once you have assigned the services to the application components, you configure the connections. The integration scenario configurator uses the information from the integration scenario template from the Integration Repository and your communication component assignments to calculate all the possible communication connections between senders and receivers. You must make the following configuration settings:

- Define whether a connection is active and thus has to be included when the required configuration objects are calculated
- Define which communication channel has to be used for the connection.

Procedure

For each of the connections listed below, you must perform the steps below to configure a connection of the integration scenario.

Connection 1

	From	To
Actions	**From Action:** SendSA2CatalogueItem_Export **Namespace:** http://sap.com/xi/GDS/SA2/IM/313 **Software Component Version:** http://sap.com/xi/GDS/1Sync/IM/81	**To Action:** SA2ProcessCatalogueItem_Export **Namespace:** http://sap.com/xi/GDS/1Sync/IM/81 **Software Component Version:** http://sap.com/xi/GDS/1Sync/IM/81
Operations	**Outbound operation:** MI_GDSNCatalogueItemNotification_Out **Namespace:** http://sap.com/xi/GDS/1Sync/IM/81 **Software Component Version:** http://sap.com/xi/GDS/1Sync/IM/81	**Inbound operation:** StandardBusinessDocument **Namespace:** http://sap.com/xi/GDS/SA2/IM/313 **Software Component Version:** http://sap.com/xi/GDS/1Sync/IM/81
Service Interfaces	**Outbound interface:** MI_GDSNCatalogueItemNotification_Out **Namespace:** http://sap.com/xi/GDS/1Sync/IM/81 **Software Component Version:** http://sap.com/xi/GDS/1Sync/IM/81	**Inbound interface:** StandardBusinessDocument **Namespace**: http://sap.com/xi/GDS/SA2/IM/313 **Software Component Version:** http://sap.com/xi/GDS/1Sync/IM/81
Operation Mapping	**Name**: GDSNCatalogueItemNotification_StandardBusinessDocument **Namespace:** http://sap.com/xi/GDS/SA2/IM/313 **Software Component Version:**	

	http://sap.com/xi/GDS/1Sync/IM/81	
Standard Communication Channel	**Not required**	**Receiver channel** Select the AS2 receiver channel that you created in Creating AS2 Adapter Channels for the SA2 Atrify Data Pool [Page 58]

Connection 2

	From	**To**
Actions	**From Action:** SA2ProcessCatalogueItem_Export **Namespace:** http://sap.com/xi/GDS/SA2/IM/313 **Software Component Version:** http://sap.com/xi/GDS/1Sync/IM/81	**To Action:** ReceiveSA2Response_Export **Namespace:** http://sap.com/xi/GDS/SA2/IM/313 **Software Component Version:** http://sap.com/xi/GDS/1Sync/IM/81
Operations	**Outbound operation:** StandardBusinessDocumentResponse **Namespace:** http://sap.com/xi/GDS/SA2/IM/313 **Software Component Version:** http://sap.com/xi/GDS/1Sync/IM/81	**Inbound operation:** MI_SA2DataPoolResponse_In **Namespace:** http://sap.com/xi/GDS/1Sync/IM/70 **Software Component Version:** http://sap.com/xi/GDS/1Sync/IM/81
Service Interfaces	**Outbound interface:** StandardBusinessDocumentResponse **Namespace:** http://sap.com/xi/GDS/SA2/IM/313 **Software Component Version:** http://sap.com/xi/GDS/1Sync/IM/81	**Inbound interface:** MI_SA2DataPoolResponse_In **Namespace:** http://sap.com/xi/GDS/1Sync/IM/70 **Software Component Version:** http://sap.com/xi/GDS/1Sync/IM/81
Operation	**Name:**	

Mapping	StandardBusinessDocumentResponse_SA2DataPoolResponse **Namespace:** http://sap.com/xi/GDS/SA2/IM/313 **Software Component Version:** GDS 2.1	
Standard Communication Channel	**Sender channel** Select the AS2 sender channel for SA2 Worldsync that you created in Creating AS2 Adapter Channels for the SA2 Atrify Data Pool [Page 58]	**Receiver channel** Select the receiver communication channel of the GDS Console that you created in Specifying Communication Channel Data [Page 30]

Connection 3

	From	**To**
Actions	**From Action:** SendSA2CatalogueItem_Export **Namespace:** http://sap.com/xi/GDS/SA2/IM/313 **Software Component Version:** http://sap.com/xi/GDS/1Sync/IM/81	**To Action:** SA2ProcessCatalogueItem_Export **Namespace:** http://sap.com/xi/GDS/SA2/IM/313 **Software Component Version:** http://sap.com/xi/GDS/1Sync/IM/81
Operations	**Outbound operation:** MI_GDSNCatalogueItemPublication_Out **Namespace:** http://sap.com/xi/GDS/1Sync/IM/70 **Software Component Version:** http://sap.com/xi/GDS/1Sync/IM/81	**Inbound operation:** StandardBusinessDocument **Namespace:** http://sap.com/xi/GDS/SA2/IM/313 **Software Component Version:** http://sap.com/xi/GDS/1Sync/IM/81
Service Interfaces	**Outbound interface:** MI_GDSNCatalogueItemPublication_Out **Namespace:** http://sap.com/xi/GDS/1Sync/IM/81	**Inbound interface:** StandardBusinessDocument **Namespace:** http://sap.com/xi/GDS/SA2/IM/313

	Software Component Version: http://sap.com/xi/GDS/1Sync/IM/81	**Software Component Version:** http://sap.com/xi/GDS/1Sync/IM/81
Operation Mapping	**Name:** GDSNCatalogueItemPublication_StandardBusinessDocument **Namespace:** http://sap.com/xi/GDS/SA2/IM/313 **Software Component Version:** http://sap.com/xi/GDS/1Sync/IM/81	
Standard Communication Channel	**Not required**	**Receiver channel** Select the AS2 receiver channel that you created in Creating AS2 Adapter Channels for the SA2 Atrify Data Pool [Page 58]

Connection 4

	From	**To**
Actions	**From Action:** SA2ProcessCatalogueItem_Export **Namespace:** http://sap.com/xi/GDS/SA2/IM/313 **Software Component Version:** http://sap.com/xi/GDS/1Sync/IM/81	**To Action:** ReceiveSA2Response_Export **Namespace:** http://sap.com/xi/GDS/SA2/IM/313 **Software Component Version:** http://sap.com/xi/GDS/1Sync/IM/81
Operations	**Outbound operation:** StandardBusinessDocumentResponse **Namespace:** http://sap.com/xi/GDS/SA2/IM/313 **Software Component Version:** http://sap.com/xi/GDS/1Sync/IM/81	**Inbound operation:** MI_SA2DataPoolResponse_In **Namespace:** http://sap.com/xi/GDS/1Sync/IM/70 **Software Component Version:** http://sap.com/xi/GDS/1Sync/IM/81
Service Interfaces	**Outbound interface:** StandardBusinessDocumentResponse	**Inbound interface:** MI_SA2DataPoolResponse_In

	Namespace: http://sap.com/xi/GDS/SA2/IM/313 **Software Component Version:** http://sap.com/xi/GDS/1Sync/IM/81	**Namespace:** http://sap.com/xi/GDS/1Sync/IM/70 **Software Component Version:** http://sap.com/xi/GDS/1Sync/IM/81
Operation Mapping	**Name:** StandardBusinessDocumentResponse_SA2DataPoolResponse **Namespace:** http://sap.com/xi/GDS/SA2/IM/313 **Software Component Version:** http://sap.com/xi/GDS/1Sync/IM/81	
Standard Communication Channel	**Sender Channel** Select the AS2 sender channel for SA2 Worldsync that you created in Creating AS2 Adapter Channels for the SA2 Atrify Data Pool [Page 58]	**Receiver channel** Select the receiver communication channel of the GDS Console that you created in Specifying Communication Channel Data [Page 30]

* where NN refers to the latest supported 1Sync release numbers. For example, for 1Sync release 6.8, NN = 68. For 1Sync release 7.0, NN = 70

1. In the model configurator, choose the *Configure Connections ...* pushbutton.
2. The *Connections from Component Assignments* tab appears with the first connection and its associated actions highlighted. Select the *Details* tab.
3. Check that all the settings on the *Actions*, *Operations, Interfaces*, and *Operation Mapping* tab pages are complete.
4. Go back to the *Connections from Component Assignments* tab and choose the *Next Connection* pushbutton on the right to check the above settings for each of the connections in the integration scenario.
5. When you have checked that all the connections are correct, choose the *Save* pushbutton.

2.3.4.4 Generating the Configuration Objects for Communication with the SA2 Atrify Data Pool

Use

The integration scenario configurator enables you to use the information specified in the previous steps to generate the configuration objects that control runtime. To generate these objects, the integration scenario configurator analyzes the current configuration information in the Integration Directory and uses your entries to calculate the necessary configuration

objects for the integration scenario. This can result in new configuration objects being created, or existing configuration objects being reused or adapted.

The generation procedure consists of the following steps:

- Generates receiver determinations
- Generates interface determinations
- Generates sender and receiver agreements
- Enters the objects in the scenario (in the Integration Directory)
- Creates a generation log.

Procedure

1. In the model configurator, choose the *Create Configuration Objects ...* pushbutton at the bottom.

   The *Connections from Component Assignments* tab appears with the first connection and its associated actions highlighted.

2. Select the *Details* tab.

   The *Create Configuration Objects* dialog box appears.

   To check your entries before generation, choose the *Check Configurability...* pushbutton in the model configurator.

3. Under *General,* select the *Generation* radio button.

   You can also simulate the generation as a preliminary step. The simulation result shows which configuration objects would be created, and which would have to be reused or adapted.

4. Define the scope of generation by selecting the *Receiver Determination*, *Interface Determination*, and *Sender/Receiver Agreement* checkboxes.

   The integration scenario configurator creates detailed directory objects that complete a task as exactly as possible and reduce dependencies in the configuration. If you want to keep the number of configuration objects small, you need more general objects that perform a wider range of tasks.

5. To start the generation, choose *Start.*

   The *Generation Progress* dialog box appears and shows the generation protocol.

   A generation log appears at the top of this window. Choose *Save as*. The generation log contains an overview of all information relating to the generation and indicates if any manual editing is necessary for the generated objects.

6. Select the objects you want to activate and choose *Activate on the Change Lists* tab page.

2.3.4.5 Configuring the Catalog Export Features with SA2 Atrify Data Pool

Use

There are some basic configuration settings that you have to make for the catalog export features in PI. These configuration settings differ depending on the data pool you have selected to use. If you use the SA2 Atrify Data Pool, perform the steps below to configure the catalog export features.

Procedure

1. In the Integration Directory, choose the *Objects* tab page to create a *Communication Component* for the catalog export receiver.
2. In the context menu of *Communication Component Without Party,* choose *Business Component,* then *New*.

   The *Create Object* dialog box appears.
3. Enter a name and description for the business component for the catalog export (for example, *Catalog Export Receiver*).
4. Choose *Create.*
5. On the subsequent screen, choose *Communication Component* > *Save.*
6. On the *Receiver* tab page under *Inbound Interface*, in the *Name* field, choose the *Display List of Permitted Values* pushbutton.
7. Select `MI_SA2DataPoolResponse_In`, namespace http://sap.com/xi/GDS/1Sync/IM/70, and choose *OK.*
8. Choose *Communication Component* > *Save.*
9. Select the objects you want to activate and choose *Activate on the Change Lists* tab page.
10. In the Integration Directory, choose the *Objects* tab page to locate the receiver determination of `MI_SA2DataPoolResponse_In`.
11. Open the corresponding receiver determination and choose the *Switch Between Display and Edit Modes* pushbutton.
12. Under the *Configured Receivers*, add an additional condition for the existing receiver. Select the condition, and press F4.
13. In the *Condition Editor*, select the left operand, and press F4.
14. In the *Expression Editor*, select *XPath*, and enter the following expression:

    /MT_GDSNCatalogueItemNotification/Header/IsCatalogueExport
15. Choose the *OK* pushbutton.
16. In the *Condition Editor*, select the right operand, and enter *false.* Choose the *OK* pushbutton.

17. In the configured receivers of the receiver determination, choose the small arrow of the *Add* pushbutton, and choose *Insert Condition.*
18. For the newly added condition entry, under the *Receiver* column, select the communication component you just created for the catalog export receiver.
19. Go to the condition for the particular entry and add an additional condition for the existing receiver. Select the condition, and press F4.
20. In the *Condition Editor*, select the left operand, and press F4.
21. In the *Expression Editor*, select *XPath*, and enter the following expression:

    /MT_GDSNCatalogueItemNotification/Header/IsCatalogueExport
22. Choose the *OK* pushbutton.
23. In the *Condition Editor*, select the right operand, and enter *true.* Choose the *OK* pushbutton.
24. Choose *Configuration Overview* tab, and choose the *Refresh* pushbutton.
25. Expand the configured receiver. On right pane of *Objects of Selected Connection*, you can add the corresponding interface determination, receiver agreement, and communication channel objects for the catalog export.

2.4 Setting Up Data Exchange for the Price Synchronization Features

Use

This procedure is only relevant for the price synchronization features.

To enable a price synchronization message exchange between the GDS Console and the external party, you must make the following settings.

Prerequisites

- SAP NetWeaver PI is installed
- GDS Console is installed
- Additional Adapter is installed if applied.

Procedure

Perform the following steps in the sequence in which they appear.

2.4.1 Content in the Integration Repository for the Price Synchronization Features

This section is only relevant for the price synchronization features.

The following interfaces are used in the Integration Repository of SAP NetWeaver Process Integration (SAP NetWeaver PI) to allow messages to be exchanged between the GDS Console and the price synchronization external parties, for example, trading partners and data pools.

Interfaces Used By the GDS Console

Name of Interface	Description
MI_PriceSyncExport_Out	Used to send Price Synchronization messages to the external parties, for example, trading partners and data pools.
MI_PriceSyncConfirmation_In	Used to receive Price Synchronization Confirmation messages from the external parties, for example, trading partners and data pools.

2.4.2 Creating a Party and Communication Components for the Price Synchronization Features

Use

This section is only relevant for the price synchronization features.

You perform the steps in this section to create the external party as a service with party in the Integration Directory.

Procedure

1. In the Integration Directory, choose the *Objects* tab page.
2. Choose *New* from the context menu of *Party.*

   The *Create Object* dialog box appears.
3. Enter the name and description of the party that you use for communicating with the external party.
4. In the *Add to Scenario* field, select *None.*
5. Choose *Create*.
6. On the subsequent screen, choose *Party* > *Save.*
7. In the *Communication Components* section beneath the newly created party, choose the *Create Object* pushbutton, then *Business Component.*

   The *Create Object* dialog box appears.
8. Enter a name and description for the GDS Price Synchronization service of the external party.
9. In the *Add to Scenario* field, select *None.*
10. Choose *Create*.
11. On the subsequent screen, choose *Communication Component* > *Save.*

12. On the *Receiver* tab page under *Inbound Interface*, in the *Name* field, choose the *Display List of Permitted Values* pushbutton.
13. Select `MI_PriceSyncConfirmation_In`, namespace http://sap.com/xi/GDS/1Sync/IM/70, and choose *OK.*
14. Choose the *Sender* tab page.
15. Under *Outbound Interface*, in the *Name* field, choose the *Display List of Permitted Values* pushbutton.
16. Select `MI_PriceSyncConfirmation_In`, namespace http://sap.com/xi/GDS/1Sync/IM/70, and choose *OK .*
17. Choose *Communication Component* > *Save*.
18. Select the objects you want to activate and choose *Activate on the Change Lists* tab.

2.4.3 Creating Adapter Channels for the Price Synchronization Features

Use

This section is only relevant for the price synchronization features.

To allow the GDS Console to communicate with an external party through SAP NetWeaver Process Integration (SAP NetWeaver PI) and the selected adapter, you must apply the specific parameters in SAP NetWeaver PI.

Apply any vendor-specific configuration for the selected adapter if necessary.

2.4.4 Creating the Configuration Scenario for the Price Synchronization Features

Use

This step is only relevant for the price synchronization features.

You use the integration scenario configurator to create the necessary configuration objects using the *GDS_GS1PriceSync_ExportProcess* integration scenario that you select from the Integration Repository and your own additional settings.

You can also call the integration scenario configurator directly in a scenario in the Integration Directory. In the menu bar in the *Edit Scenario* editor (in the Integration Directory), choose *Configuration Scenario* > *Configuration Wizard.*

For more information about the integration scenario configurator, see the documentation for SAP NetWeaver on SAP Help Portal at http://help.sap.com/nwpi → *Function-Oriented View* › *Process Integration* › *Integration Directory* › *Using Tools to Configure Efficiently* › *Using the Process Model as a Configuration Template* › *Configuring Process Integration Scenarios.*

Procedure

You perform the followings steps using the integration scenario configurator:

1. Select the SAP NetWeaver PI integration scenario from the enterprise services repository for the price synchronization [Page 73] features.
2. Select the application components and assign communication components for the price synchronization features [Page 74].
3. Select and configure connections for the price synchronization [Page 76] features.
4. Generate the configuration objects for the price synchronization features [Page 79].

2.4.4.1 Selecting SAP NetWeaver PI Integration Scenario from Enterprise Services Repository (Enterprise Services Builder) for the Price Synchronization Features

Use

This step is only relevant for the price synchronization features.

The SAP NetWeaver Process Integration (SAP NetWeaver PI) process integration scenario configurator contains information for integration scenarios and cross-component integration processes that are relevant for communication using SAP NetWeaver PI.

To use an integration scenario as the template for configuring the message exchange, you must first transfer it from the Enterprise Services Repository (Enterprise Services Builder).

You perform the steps below to transfer the scenario. The integration scenario configurator is started once the transfer is complete.

Procedure

1. In the main menu bar of the Integration Builder (Integration Directory), choose *Tools* › *Apply Model from ES Repository…*
2. The first step in the transfer wizard is *Select ES Repository Model.* In the *Type of ES Repository Model* field, choose *Process Integration Scenario.* In the *Name* field, choose the *Display List of Permitted Values* pushbutton to display the available SAP NetWeaver PI process integration scenarios from the Enterprise Services Repository (Enterprise Services Builder).
3. Select the following process integration scenario:

Name	Namespace	Software Component Version
GDS_GS1PriceSync_ExportProcess	*http://sap.com/xi/GDS/GS1/PM/23*	GDS 2.1

4. In the wizard, choose *Continue.*

5. The second step in the wizard is *Create Scenario*. The name of the SAP NetWeaver PI process integration scenario in the Enterprise Services Repository (Enterprise Services Builder) is proposed as the name for the scenario in the Integration Directory. Use the proposed name to create the scenario (in the Integration Directory). If a scenario with this name already exists in the Integration Directory, choose another suitable name.

6. Choose *Finish.*

   The scenario is created in the Integration Directory. If a scenario with the same name already exists, the system displays a message. If this is the case, change the proposed name for the scenario and choose *Finish* again.

7. Choose *Close.*

   When you close the transfer wizard, the system calls the integration scenario configurator. The SAP NetWeaver PI integration scenario that you selected from the Enterprise Services Repository (Enterprise Services Builder) is displayed in a graphical editor and is available as the configuration template for the subsequent configuration steps.

2.4.4.2 Selecting Application Components and Assigning Communication Components for the Price Synchronization Features

Use

This step is only relevant for the price synchronization features.

There are three types of communication components in the Integration Directory:

- Business system components
- Business components for B2B communication (external partner)
- Integration processes components.

These communication components can act as either sender or receiver and are assigned to the application components (the swim lanes in the graphical representation of the PI integration scenario).

You assign communication components to an application component to determine whether there will be communication with the assigned communication components. If you do not want to configure a connection to the application component in question, do not assign any communication components to it.

For more information about communication components, see the documentation for SAP NetWeaver PI on SAP Help Portal at http://help.sap.com/nwpi → *Function-Oriented View* ▸ *Process Integration* ▸ *Integration Directory* ▸ *Defining Collaboration Profiles* ▸ *Defining Communication Components* ▸ *Communication Component.*

Prerequisites

All application components must be specified in the PI integration scenario.

Role	Product	Product Version
GDS Application	Template	2.1
Data Pool	Template	2.1

You can reuse services in the Integration Directory. By assigning communication components using the model configurator, you can search for existing communication components and create new communication components if a particular communication component does not yet exist. For more information, see Creating a Party and Communication Components for the Price Synchronization Features [Page 71].

The required business systems must be correctly defined in the System Landscape Directory (SLD) before you can perform the following steps.

Procedure

You perform the steps below to assign the existing services to the application components of the PI integration scenario.

1. In the model configurator, choose the *Assign Components* pushbutton.

   The *Assign Components* tab page appears.

2. In the *Business System Components* table, choose the *Insert Line Below Selection* pushbutton if there is no entry under it.

3. To display the components that you can assign, choose the *Display List of Permitted Values* pushbutton.

4. Select the component that corresponds to your GDS Console and choose *Apply.*

5. In the corresponding *Business Components for External Communication* table on the right, choose the *Insert Line Below Selection* pushbutton if there is no entry under it.

6. Select the party that corresponds to your GDS Console, the same one you selected in the *Business System Components* table on the left.

7. To display the components that you can assign, choose the *Display List of Permitted Values* pushbutton.

8. Select the component that corresponds to your GDS Console for the external communication and choose *Apply.*

9. At the top of the *Assign Components* tab, choose the *Next Role* pushbutton on the right.

   The *Business Components for B2B* tab appears.

10. In the *Business Components for B2B* table, choose the *Insert Line Below Selection* pushbutton if there is no entry under it.

11. Select the component that you created in section Creating a Party and Communication Components for the Price Synchronization Features [Page 71] for the external party.

12. To display the available components that you can assign, in the *Component* column, choose the *Display List of Permitted Values* pushbutton.

13. Select the party that you created for the 1WorldSync Data Pool in section Creating a Party and Communication Components for the Price Synchronization Features [Page 71] for the external party, and choose *Apply.*

14. To display the available parties that you can assign, in the *Party* column under, choose the *Display List of Permitted Values* pushbutton.

    This completes the selection of application components and assignment of communication components.

2.4.4.3 Selecting and Configuring Connections for the Price Synchronization Features

Use

This step is only relevant for the price synchronization features.

When you have assigned the services to the application components, you configure the connections. The integration scenario configurator uses the information from the integration scenario template from the Integration Repository and your communication component assignments to calculate all possible communication connections between senders and receivers. You must make the following configuration settings:

- Specify whether a connection is active and thus has to be included when the required configuration objects are calculated
- Specify which communication channel has to be used for the connection.

Procedure

For each of the connections listed below, you must perform the steps below to configure a connection of the integration scenario.

Connection 1

	From
Actions	**From Action:** *SendPriceSyncDocument_Export* **Namespace:** *http://sap.com/xi/GDS/GS1/PM/23* **Software Component Version:** *GDS 2.1*
Operations	**Outbound operation:**

	MI_PriceSyncExport_Out **Namespace:** http://sap.com/xi/GDS/1Sync/IM/70 **Software Component Version:** *GDS 2.1*
Service Interface	**Outbound interface:** *MI_PriceSyncExport_Out* **Namespace:** http://sap.com/xi/GDS/1Sync/IM/70 **Software Component Version:** *GDS 2.1*
Operation Mapping	**Name:** *PriceSyncExport_PriceSyncStandardBusinessDocument* **Namespace:** *http://sap.com/xi/GDS/GS1/PM/23* **Software Component Version:** *GDS 2.1*
Standard Communication Channel	**Not required**

Connection 2

	From	**To**
Actions	**From Action:** *ProcessPriceSyncDocument_Export* **Namespace:** *http://sap.com/xi/GDS/GS1/PM/23* **Software Component Version:** *GDS 2.1*	**To Action:** *ReceivePriceSyncConfirmation_Export* **Namespace:** *http://sap.com/xi/GDS/GS1/PM/23* **Software Component Version:** *GDS 2.1*
Operations	**Outbound operation:** *PriceSyncConfirmationStandardBusinessDocument*	**Inbound operation:** *MI_PriceSyncConfirmation_In* **Namespace:**

	Namespace: *http://sap.com/xi/GDS/GS1/PM/23* **Software Component Version:** *GDS 2.1*	http://sap.com/xi/GDS/1Sync/IM/70 **Software Component Version:** *GDS 2.1*
Service Interface	**Outbound interface:** *PriceSyncConfirmationStandardBusinessDocument* **Namespace:** *http://sap.com/xi/GDS/GS1/PM/23* **Software Component Version:** *GDS 2.1*	**Inbound interface:** *MI_PriceSyncConfirmation_In* **Namespace:** http://sap.com/xi/GDS/1Sync/IM/70 **Software Component Version:** *GDS 2.1*
Operation Mapping	**Name:** *PriceSyncConfirmationStandardBusinessDocument_PriceSyncConfirmation* **Namespace:** *http://sap.com/xi/GDS/GS1/PM/23* **Software Component Version:** *GDS 2.1*	
Standard Communication Channel	**Sender channel** Select the AS2 sender channel for 1Sync that you created in Creating Adapter Channels for the Price Synchronization Features [Page 72].	**Receiver channel** Choose the receiver communication channel of the GDS Console that you created in Specifying Communication Channel Data [Page 30].

* where NN refers to the latest supported 1Sync release numbers. For example, for 1Sync release 6.8, NN = 68. For 1Sync release 7.0, NN = 70

1. In the model configurator, choose the *Configure Connections ...* pushbutton.

   The *Connections from Component Assignments* tab appears with the first connection and its associated actions are highlighted. Select the *Details* tab.

2. Check that all the settings on the *Actions*, *Operations, Interfaces*, and *Operation Mapping* tab pages are complete.

3. Go back to the *Connections from Component Assignments* tab and choose the *Next Connection* pushbutton on the right to check the above settings for each of the connections in the integration scenario.

4. When you have checked that all the connections are correct, choose the *Save* pushbutton.

2.4.4.4 Generating the Configuration Objects for the Price Synchronization Features

Use

This step is only relevant for the price synchronization features.

The integration scenario configurator enables you to use the information specified in the previous steps to generate the configuration objects that control runtime. To generate these objects, the integration scenario configurator analyzes the current configuration information in the Integration Directory and uses your entries to calculate the necessary configuration objects for the integration scenario. This can result in new configuration objects being created, or existing configuration objects being reused or adapted.

The generation procedure consists of the following steps:

- Generates receiver determinations
- Generates interface determinations
- Generates sender and receiver agreements
- Enters the objects in the scenario (in the Integration Directory)
- Creates a generation log.

Procedure

1. In the model configurator, choose the *Create Configuration Objects ...* pushbutton at the bottom.

   The *Connections from Component Assignments* tab appears with the first connection and its associated actions are highlighted.

2. Select the *Details* tab.

   The *Create Configuration Objects* dialog box appears.

   To check your entries before generation, choose *Check Configurability...* in the model configurator.

3. Under *General*, select the *Generation* radio button.

   You can also simulate the generation as a preliminary step. The simulation result shows which configuration objects would be created, and which would have to be reused or adapted.

4. Define the scope of generation by selecting the *Receiver Determination*, *Interface Determination*, and *Sender/Receiver Agreement* checkboxes.

The integration scenario configurator creates detailed directory objects that complete a task as exactly as possible and reduce dependencies in the configuration. If you want to keep the number of configuration objects small, you need more general objects that perform a wider range of tasks.

5. To start the generation, choose *Start.*

   The *Generation Progress* dialog box appears and shows the generation protocol.

   A generation log appears. At the top of this window, choose *Save as*. The generation log contains an overview of all information relating to the generation and indicates if any manual editing is necessary for the generated objects.

6. Select the objects you want to activate and choose *Activate* on the *Change Lists* tab.

2.5 Setting Up an MDM Server Session Timeout

Use

This adjustment is necessary to prevent unexpected session timeouts.

Prerequisites

The MDM Server is installed.

Procedure

1. Check the `mds.ini` file for the parameter *Session Timeout Minutes* and set its value to *0.*

2. In case this parameter does not exist in the `mds.ini` file it must be created and set to *0*.

3 Transport of Settings in System Landscapes

Definition

The following information describes how you can transport the settings you make to configure the various systems in the global data synchronization (GDS) scenario to other systems in the system landscape.

3.1 SAP NetWeaver Process Integration

Use

You can transport all the settings described in this guide.

For the following purposes, you transport SAP NetWeaver Process Integration (SAP NetWeaver PI) objects within the Exchange Infrastructure:

- To deliver objects from the Enterprise Services Repository (Enterprise Service Builder)
- To test a development in the Enterprise Services Repository or a configuration of the Integration Directory separately.

You can transport PI objects by exporting and importing files. For more information, see SAP Help Portal at http://help.sap.com/nwpi.

We recommend that you use a System Landscape Directory (SLD) that contains both the test landscape and the productive landscape.

To import configuration objects from the test directory to the productive directory, you must define Transport Targets in the SLD. This assigns services of the test directories that are entered as business systems in the SLD to services of the productive directories, and converts dependent objects.

For more information, see SAP Help Portal at http://help.sap.com/nwpi.

3.2 ERP System

Use

The Application Link Enabling (ALE) settings in Making ALE Settings [Page 11] are all system-specific, and must be post-processed in the test, development, and productive systems.

You can also transport these settings and post-process all system-specific entries manually.

4 Configuration of Fields Before Importing Trade Items

Definition

We recommend that you configure some of the key fields before importing any trade items from ERP, or any 3 rd party system, as trade items can be created with wrong keys in the GDS Console.

The following should be configured:

- Information provider
- Trade partner.

4.1 Setting Up an Information Provider

Use

An information provider can be set to a constant in the mapping for the MI_TradeItems_In interface or it can be set as value *Default* and the value for the information provider will be picked up from UI Configuration.

Procedure

1. Log on to GDS Console with the user *Admin.*
2. Choose *Application Administration* > *UI Configuration* > *Tab Configuration*.
3. In the *Tab Hierarchy* navigation tree, open the *Main (System) folder.*
4. Open the *Main* field group and select *Information Provider*.
5. Choose *Edit*.
6. In the *Default Value* dropdown list, select an information provider.
7. Choose *Save*.

4.2 Setting Up a Target Market

Use

Where an ERP system is the source for a trade item, you should map the sales organization of GDS relevant materials to a target market(s) in the GDS repository.

This mapping can be done by associating a sales organization code with the key value against system R3 for the records in the *Target Markets* lookup table.

Procedure

1. Log on to the GDS Console with the user *Admin*.
2. Choose *Application Administration* > *Metadata Management.*
3. In the *Key Mapping* tab, select *Target Markets* from the dropdown list.
4. In the K*ey Mapping: Target Markets* table, select a record and maintain the right sales organization number for the *R3* column.

5 Process Log Configuration

The GDS process log allows administrators to view important log messages for GDS backend processes, such as import processes, export processes, and data pool response processing.

To be able to check the process log, make the following settings:

- If GDS is running in portal mode, then the portal user should have the role SAP _JAVA_NWADMIN_LOCAL_READONLY to see the process log
- If GDS is not running in portal mode, one central user for viewing the application log can be shared among all MDM users, or one user can be assigned to each MDM

user. In either case, users using the web application server should have the role SAP _JAVA_NWADMIN_LOCAL_READONLY to see the process log.

Additionally, for each web application server user the following views must be created in the Log Viewer application:

- GDS Log for Import Process
- GDS Log for Export Process
- GDS Log for Export Response Process
- GDS Log for Price Synchronization Import Process.

You can create these views after logging in to the application server using the Log Viewer application. Alternatively, an administrator user can create them by directly changing the web application server's configuration as it is described in SAP Note 1437596.

Creating the views by directly modifying the web application server's configuration ensures that the settings are highly optimized, which may lead to better response times when the server logs are very large.

6 Creating Views Using the Log Viewer Application

Use

You must create four different views in the Log Viewer application to ensure that server logs are properly displayed.

Procedure

1. Launch the Log Viewer application at the following URL:
   http://<host>:<port>/webdynpro/dispatcher/sap.com/tc~lm~itsam~ui~mainframe~wd/FloorPlanApp?applicationID=com.sap.itsam.problems.logviewer&isLocal=true
2. Log in with the user you want the configuration to be effective for.
3. Choose *Show View* > *Custom View* > *<Create Custom View>.*
4. Choose *Customization* > *Table*.
5. Make sure that only the first three items are selected in the dialog box that is opened (*Date*, *Time*, *Message*).
6. Choose the *OK* pushbutton.
7. Choose the *Save View* pushbutton.
8. Enter the name of the view.

   The name must exactly match one of the following values:

   - GDS Log for Import Process
   - GDS Log for Export Process
   - GDS Log for Export Response Process
   - GDS Log for Price Synchronization Import Process.
9. Close the dialog box by choosing the *OK* pushbutton.
10. Repeat the procedure from step 3 to 9 to create all the four views.

7 Configuration of Automatic Registration

SAP GDS can send the trade items for automatic registration while importing them from an external system if data is valid. If you want to restrict only certain trade items to go for automatic registration, you can create a validation with the name *VALIDATION_TO_BE_USED_ONLY_BY_AUTOMATION* and create an appropriate logical expression for this validation. Only items passing these validations will be sent for automatic registration.

For more information about automatic registration, see SAP Note 1305807.

8 External Validations on Publication

If the role defined in the application property VALIDATION.PUBLICATION_VALIDATION_ROLE is not valid, SAP GDS executes all external validations on a trade item before publishing that item. If this property contains a valid role, only the external validations of this role are executed before publication.

9 Tolerance on Weight-Related External Validations

In SAP GDS, you can set the tolerance value for 1Sync-mandated external validation on the attributes 'Net weight' and 'Gross weight' in a hierarchy. To do this, use the application property XVALID.WEIGHT_TOLARANCE_PERCENT.

10 Extending the GDS Repository with Additional Fields

For more information, see SAP Note 1375813.

11 Configuring External Validations

Use

You specify the P4 port of the J2EE engine where the EJB bean for external validations can be found.

Procedure

1. Set the value of the *XVALID.EJB.server.1* application property to the P4 port of your J2EE engine.
2. To check what the current P4 port is, perform the steps below:
    - Start SAP Management Console (SAPMMC)
    - Navigate to your system ID (SID)
    - Select Access Points and check your P4 protocol port number. This is usually *5<SID>04.*
3. Restart your GDS application.

12 Configuring Automatic Publication

Use

You set up automatic publication by performing the steps below.

Procedure

1. Set the GDS.IS_AUTOMATIC_PUBLISHING_ENABLED application property to *True*.
2. Make the following configuration settings for the trade partner or trade partner group you want to send automatic publication to:
   - In trade partner management, enable automatic publication
   - Associate appropriate target markets to the trade partner
   - Add any additional criteria for automatic publication to the particular trade partner or trade partner group using the value restrictions. The set of fields that you can set criteria for is defined by the AUTOMATIC_PUBLICATION_RESTRICTIONS_MDM_FIELDS application property.

     An MDM validation is executed at the item level to decide if an item qualifies for automatic publication or not. The MDM validation name is defined by the GDS.VALIDATION_AUTOMATIC_PUBLISHING_IS_ITEM_AUTOMATIC_PUBLISHABLE application property. It returns *True* if the item is eligible for automatic publishing.
3. As automatic publication is a background process, define another MDM validation to decide the publication type of the item.

   The validation is at the item level. If it returns *True*, the publication type is *Initial Load*. It is defined by the GDS.VALIDATION_AUTOMATIC_PUBLISHING_IS_PUBLICATION_TYPE_INITIAL_LOAD application property.

   If you need different criteria to decide publication types for different partners, you have to create one validation for each partner that you want a different publication type for. The validation name has to be of the following format:

   Value of the GDS.VALIDATION_AUTOMATIC_PUBLISHING_IS_PUBLICATION_TYPE_INITIAL_LOAD application property followed by an underscore (‘_’), and followed by the partner GLN (Trade Partner) or Partner Group Name (Partner Group)

   If no such validation is defined for a partner, the default validation (defined by GDS.VALIDATION_AUTOMATIC_PUBLISHING_IS_PUBLICATION_TYPE_INITIAL_LOAD) is used to decide the publication type.

   To avoid unsuccessful automatic publications caused by the slow processing of trade item subhierarchies in a registration at the Datapool, set the application property GDS.AUTO_PUB_DELAY_AFTER_CORR_RESPONSE in the NetWeaver Administrator as described in SAP Note 1523278.

13 Limiting the Number of Trade Items Processed Simultaneously

To provide acceptable performance on the GDS Console when the large number of simultaneous validations, registrations, and publications could lower system performance, SAP GDS gives a dialog box warning the user when the number of trade items to be validated, registered, and published simultaneously exceeds this limit.

For this feature to take effect, the following new application properties were defined: GDS.maxItemNumberForPublication, GDS.maxItemNumberForRegistration, and GDS.maxItemNumberForValidation.

14 Performance Optimization on the GDS UI

To provide better balance between the import process and the work of users on the GDS Console UI, a new application property has been introduced. Application property *MDM.Import.MaxWaitTime* supersedes the application property *GDS.UIHasPriorityOverImport*: it specifies the maximum time in seconds the import process can be blocked for by the interactive UI tasks. Zero value means that the import process is not blocked by interactive users at all.

15 Modifiable Catalogs

GDS 2.1 SP 02 allows later modification of catalogs (changing the set of trade items and removing trade partners) by the user if the application property *GDS.CatalogManagementEnabled* is set to true. In this case, an appropriate button appears on the catalog maintenance page.

16 Configuring Default Search and Result Fields

Use

Administrators set up the default values for search and result fields for all the users in the system.

Procedure

Go to *http://<host>:<port>/GDS/Console* > *Application Administration* > *UI Configuration* > *Search Fields Configuration* or *Result Fields Configuration* respectively.

17 Security Configuration of GDS Web Services

GDS provides some functionality as web services that can be invoked from external applications. These web services are deployed along with *GDSCORE.sca*.

Web services include the following:

Service Interface	Namespace
TradeItemQuery	http://sap.com/xi/GDS/1Sync/IM/70
TradeItemValidation	http://sap.com/xi/GDS/1Sync/IM/70
TradeItemPublish	http://sap.com/xi/GDS/1Sync/IM/70
TradePartnerQuery	http://sap.com/xi/GDS/1Sync/IM/70
PriceComponentPublish	http://sap.com/xi/GDS/1Sync/IM/70

* where NN refers to the latest supported 1Sync release numbers. For example, for 1Sync release 6.8, NN = 68. For 1Sync release 7.0, NN = 70

The web services can be run on the same Java server instance where the GDS application (GDSCORE) is deployed and configured.

SAP Note 1813229 provides further details about GDS-Specific Web Services.

GDS web services require a valid MDM user to be specified as an input parameter. This user must exist in the GDS repository and must have the necessary authorizations in the GDS applications (based on the role) to execute the operations.

In addition, you can use the standard web service security mechanisms to improve security.

Log on to the NetWeaver Administrator at *http://j2eehost:port/nwa* and go to *Management* › *Connectivity* › *Single Service Administration* and configure the necessary security settings for the web services deployed.

For more information, see the SAP Help Portal at *http://help.sap.com/nwce72* › *SAP Library* › *Administrator's Guide* › *SAP NetWeaver CE Security Guide* › *Security Guides for CE Core Components* › *Security Aspects for Web Services.*