Configuration guide for sourcing, contracts, and supplier data integration with SAP ERP and SAP S/ 4HANA

Ariba Sourcing Ariba Contract Management SAP Ariba Supplier Lifecycle and Performance Ariba Supplier Information and Performance Management





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About this guide

The Integrating Sourcing, Contract, and Supplier data with SAP ERP and SAP S/4HANA guide contains information about integrating sourcing, contract, and supplier master data between SAP ERP or SAP S/4HANA and the following Ariba applications:

- SAP Ariba Sourcing
- SAP Ariba Contracts
- SAP Ariba Supplier Information and Performance Management
- SAP Ariba Supplier Lifecycle and Performance, previously referred to as Ariba Supplier Management

This guide primarily focuses on feature-specific information including configuration information. For installation information, see the *Installation Guide for Sourcing, Contracts, and Supplier Data Integration with SAP ERP and SAP S/4HANA*.

About integrating sourcing, contract, and supplier data with SAP ERP and SAP S/4HANA

You can integrate sourcing, contract, and supplier data between SAP ERP or SAP S/4HANA and the following applications:

- SAP Ariba Sourcing
- SAP Ariba Contracts
- SAP Ariba Supplier Information and Performance Management
- SAP Ariba Supplier Lifecycle and Performance, previously referred to as Ariba Supplier Management

The following table provides a list of supported integrations and links to the corresponding feature documentation:

Integration feature	Documentation
Integrating Ariba Sourcing Master data and bill of materials	Integrating master data between SAP ERP and SAP Ariba Sourcing [page 11]
Creating purchase info records in SAP ERP from Ariba Sourcing awards	Creating purchase info records in SAP ERP from SAP Ariba Sourcing awards [page 22]
Integrating contracts from Ariba Contracts Manage- ment	Integrating contract information with SAP ERP [page 26]
Integrating Ariba Supplier Information and Perform- ance Management	Integrating Supplier Information and Performance Management with SAP ERP and MDG [page 42]
Integrating Ariba Supplier Lifecycle and Perform- ance integration	Integrating SAP Ariba Supplier Lifecycle and Performance with SAP ERP [page 63]

i Note

For information about QuoteRequest and QuoteMessage integrations, see the *RFQ and Award Integration with Ariba Sourcing* guide.

For information about the supported versions and integration landscapes for the integrations discussed in this guide, see Supported versions and integration landscapes [page 6].

Supported versions and integration landscapes

The following table provides the SAP ERP, SAP S/4HANA on-premise, and SAP Process Integration versions that are required for various integration features to work:

i Note

To prevent errors for the mandatory target fields containing a combination of NodeFunctions, CopyValue and Text Functions when using SAP Process Integration 7.5, refer to the following SAP Notes:

- SAP Note 2209925 -CopyValue function not getting correct output
- SAP Note 2185824-Graphical Mapping combination 'CopyValue', any Standard Functions from Text category and NodeFunctions give wrong output

Feature	Introduced in	SAP ERP version (Min- imum requirement)	SAP S/4HANA	SAP Process Integra- tion versions
Master data and mate- rial master data inte- gration	SAP Ariba cloud integration release 7.0	SAP ERP 6.0 (SAP_APPL 606 SPS02)	 SAP S/4HANA, on-premise edition 1610 SAP S/4HANA, on-premise edition 1511 SAP S/4HANA Finance SAP S/4HANA Finance, on-premise edition tion 1503 SAP S/ 4HANA Finance 1605 	 7.1 7.3 7.31 7.4 7.5
Contracts integration	SAP Ariba cloud integration release 7.0	SAP ERP 6.0 (SAP_APPL 600 SPS02)	 SAP S/4HANA, on-premise edition 1610 SAP S/4HANA, on-premise edition 1511 SAP S/4HANA Finance SAP S/4HANA Finance, on- premise edi- tion 1503 SAP S/ 4HANA Fi- nance 1605 	 7.1 7.3 7.31 7.4 7.5

Feature	Introduced in	SAP ERP version (Min- imum requirement)	SAP S/4HANA	SAP Process Integra- tion versions
Ariba Supplier Informa- tion and Performance Management integra- tion	SAP Ariba cloud integration release 7.0	SAP ERP 6.0 (SAP_APPL 606 SPS02)	 SAP S/4HANA, on-premise edition 1610 SAP S/4HANA, on-premise edition 1511 SAP S/4HANA Finance SAP S/4HANA Finance, on-premise edition tion 1503 SAP S/ 4HANA Finance 1605 	 7.1 7.3 7.31 7.4 7.5
Manufacturer parts list	SAP Ariba cloud integration release 8.0	SAP ERP (SAP_APPL 600 SP 14)	 SAP S/4HANA, on-premise edition 1610 SAP S/4HANA, on-premise edition 1511 SAP S/4HANA Fi- nance SAP Simple Finance, on- premise edi- tion 1503 SAP S/ 4HANA Fi- nance 1605 	 7.1 7.3 7.31 7.4 7.5

Feature	Introduced in	SAP ERP version (Min- imum requirement)	SAP S/4HANA	SAP Process Integra- tion versions
Bill of materials	SAP Ariba cloud integration release 8.0	SAP ERP (SAP_APPL 600 SP 14)	 SAP S/4HANA, on-premise edition 1610 SAP S/4HANA, on-premise edition 1511 SAP S/4HANA Finance SAP S/4HANA Finance, on-premise edition tion 1503 SAP S/ 4HANA Finance 1605 	 7.1 7.3 7.31 7.4 7.5
Ariba Sourcing awards integration to create Purchase info records	SAP Ariba cloud integration release 8.0	SAP ERP (SAP_APPL 617 SP 11)	 SAP S/4HANA, on-premise edition 1610 SAP S/4HANA, on-premise edition 1511 SAP S/4HANA Finance SAP Simple Finance, on- premise edition 1503 SAP S/ 4HANA Finance 1605 	 7.1 7.3 7.31 7.4 7.5

Feature	Introduced in	SAP ERP version (Min- imum requirement)	SAP S/4HANA	SAP Process Integra- tion versions
Supplier Lifecycle and Performance	SAP Ariba cloud integration release 8.0	SAP ERP 6.0 EHP6 SP1 with SAP Business Services Foundation 731	 SAP S/4HANA, on-premise edition 1610 SAP S/4HANA, on-premise edition 1511 SAP S/4HANA Finance SAP S/4HANA Finance, on-premise edition 1503 SAP S/ 4HANA Finance 1605 	 7.1 7.3 7.31 7.4 7.5
Service item lines in RFQ, Awards, and Con- tracts	SAP Ariba cloud integration release 9.0	SAP ERP 6.0 (SAP_APPL 604 SPS05 and SAP_BASIS 701 SP05)	 SAP S/4HANA, on-premise edition 1610 SAP S/4HANA, on-premise edition 1511 SAP S/4HANA Fi- nance SAP Simple Finance, on- premise edi- tion 1503 SAP S/ 4HANA Fi- nance 1605 	 7.1 7.3 7.31 7.4 7.5

Installation

For direct connectivity-based integrations, you must download and import the latest transports to SAP ERP or SAP S/4HANA. For mediated connectivity-based integrations and integrations that are applicable to SAP Ariba Start Sourcing, you must download and import the latest design objects and mappings to SAP Process Integration.

For more information about the installation procedure, see the *Installation Guide for Sourcing, Contracts, and Supplier Data Integration with SAP ERP and SAP S/4HANA* guide.

Feature-specific configurations for integration methods are explained in this guide.

Configuration guide for sourcing, contracts, and supplier data integration with SAP ERP and SAP S/4HANA About integrating sourcing, contract, and supplier data with SAP ERP and SAP S/ 4HANA

Integrating master data between SAP ERP and SAP Ariba Sourcing

This chapter contains the following sections:

In this section:

About master data integration between SAP ERP and SAP Ariba Sourcing [page 11]

How to export master data from SAP ERP to SAP Ariba Sourcing and SAP Ariba Contracts [page 16]

How to export bill of materials from SAP ERP to SAP Ariba Sourcing [page 18]

How to customize master data exports [page 19]

How to include additional information in the SLG1 log files [page 21]

About master data integration between SAP ERP and SAP Ariba Sourcing

Buyers using the SAP Ariba Sourcing and SAP Ariba Contracts applications integrated with SAP ERP can export master data from SAP ERP to SAP Ariba Sourcing and SAP Ariba Contracts. Master data elements that buyers can export from SAP ERP to the SAP Ariba Sourcing and SAP Ariba Contracts applications include organizational data, cross application data, and material master data.

You can export master data from SAP ERP to SAP Ariba Sourcing and SAP Ariba Contracts over Direct or Mediated Connectivity integration methods. You can export the organizational master data, cross application configuration data, and material master data in the full load mode. For material master, you also have an option to export the master data in the incremental mode.

When you export the material master data for the first time, choose the full load mode. You can use the incremental load for subsequent exports. An incremental export of master data sends all master data records that have been added, modified, or deleted since the last export event.

➡ Tip

Material master data contains large volume of information. For best performance, always set filters that specify the criteria based on which you can export smaller subsets. For more information on setting filters for material master data export, see How to specify filters for master data export [page 17].

The following table lists the master data groups and corresponding master data elements:

Table 1: Master Data Groups and Elements

Master Data Group	Master Data Element
Organizational Data	Plant
Organizational Data	PurchaseGroup
Organizational Data	PurchaseOrg
Organizational Data	PlantPurchaseOrg
Organizational Data	CompanyCode
Cross Application Configuration Data	PaymentTerms
Cross Application Configuration Data	IncoTerms
Material Master	Material Master
Material Master	Item Category
Material Master	ERPCommodityCode(Material Group)

When you export material master data, you also receive material master plant association data and material master language associations data. Similarly, for Incoterms, you receive the Incoterms language association data along with the Incoterms master data.

Every time you export the master data to SAP Ariba Sourcing and SAP Ariba Contracts, the SAP ERP system sends a copy of the schema file, which contains the ERP metadata information related to the master data extracts, along with the master data.

Enhancements to SAP Ariba Sourcing integration for product sourcing

SAP Ariba cloud integration release 8.0 and higher extends the SAP Ariba Sourcing integration with SAP ERP to the following features to enhance the product sourcing process:

- Material Classification [page 12]
- Valid From data for plants [page 13]
- Manufacturer Parts List [page 13]
- Bill of Materials [page 14]

Material classification

Buyers using SAP Ariba Sourcing integrated with SAP ERP can now receive classification data such as class types, class names, and characteristics along with the material master data that they export to SAP Ariba Sourcing from SAP ERP. The classification values enable you to categorize materials based on their characteristics. Classification data also enables you to search and find materials more easily.

When you export material master data from SAP ERP to SAP Ariba Sourcing, SAP ERP provides the classification information in the ItemMasterClassificationInfo.csv file. ItemMasterClassificationInfo.csv contains class and classification information along with Classification sequence and material number.

Classification sequence is a combination of the internal object number, class type, class name, and characteristic value.

i Note

If you need material classification for multiple class types, you must implement the SAP Note 65124-*Classification Change Documents*.

To extract material classification data, you need to maintain the following filters in the table /ARBA/TVARV:

- /ARBA/CLASS_TYPE
- /ARBA/CLASS

For information about maintaining these filters, see How to maintain table entries for SAP Ariba Sourcing and SAP Ariba Contracts integration with SAP ERP [page 92].

Valid From data for plants

To support the bill of materials integration, SAP ERP now provides the Valid From data along with the plant data in the ItemMasterPlantCombo_csv and ItemMasterPlantCombo_Delete.csv files. The ValidFrom field contains the date from which the cross-plant material status is valid.

Manufacturer Parts List

When buyers using SAP Ariba Sourcing integrated with SAP ERP export material master data from SAP ERP to SAP Ariba Sourcing, SAP ERP also sends the Manufacturer Parts List to SAP Ariba Sourcing.

Manufacturer Parts List is similar to the Approved Manufacturer Parts List (AMPL) in SAP ERP. You can use the Manufacturer Parts List to identify the manufacturers for materials of type manufacturer parts (HERS in SAP) and the manufacturer part numbers and the corresponding internal part numbers.

The material master data export event now sends the following additional files from SAP ERP to SAP Ariba Sourcing:

- ItemMasterAML.csv
- ItemMasterAMLDescriptionLang.csv
- ItemMasterAML_delete.csv
- ItemMasterAMLDescriptionLang_delete.csv

You can specify the material number range as input for reprocessing of failed or missed entries when performing incremental upload using SAP Menu Master Data Reports Master Data Report Integration . The DateTime stamp is not updated during this incremental upload and the change log table /ARBA/CHANGE_DOCS is not cleared.

i Note

 $\label{eq:linear} \verb| ItemMasterAML_delete.csv \ and \ \verb| ItemMasterAMLDescriptionLang_delete.csv \ are \ available \ only \ when \ you \ do \ an \ incremental \ export.$

Bill of Materials

Buyers using SAP Ariba Sourcing integrated with SAP ERP can now export bill of materials (BOM) from SAP ERP to SAP Ariba Sourcing. A bill of materials provides a structured list of parts or components that form a product.

The bill of materials information that SAP ERP exports to SAP Ariba Sourcing includes information about material, plant, validity, component quantity, unit of measure, and so on. For more information about the master data elements in bill of materials, see the Mapping Workbook.

SAP Ariba cloud integration exports only single-level bill of materials from SAP ERP to SAP Ariba Sourcing. However, SAP Ariba Sourcing can link the related bill of materials components and complete the bill of materials explosion.

SAP ERP uses SOAP messages to send bill of materials data to SAP Ariba Sourcing. SAP Ariba Sourcing integration with SAP ERP does not support bill of materials explosion. So, only single-level bill of materials is exported to SAP Ariba Sourcing from SAP ERP.

Starting SAP Ariba cloud integration release 8.0 HF19, buyers can include information about the bill of materials and approved manufacturer list for material items in the SLG1 log files. To include this information, SAP Ariba provides an optional parameter /ARBA/LOG_MASTERDATA that buyers can specify in the /ARBA/TVARV table.

When buyers run the /ARBA/MASTER_DATA_EXPORT program for the incremental load event, SAP Ariba provides information on the bill of materials number. The bill of materials number, alternative bill of materials number, and the material item number is separated with the '|' symbol in the SLG1 log file. For example, 00000014|01|P-100.

When buyers run the /ARBA/MASTER_DATA_EXPORT program for the full or incremental load event, SAP Ariba provides information on the records that have been extracted or deleted for the material items with the approved manufacturer list information.

For more information, see How to include additional information in the SLG1 log files [page 21].

Area menu and transaction codes for master data and bill of materials export

You can use the $/n/ARBA/OND_SRC$ area menu to access the master data and bill of materials export programs. The following table lists the area menu items and transaction codes for master data export and bill of material export:

Exports	Area Menu	
Master data including material master, material classification, and Manufacturer Parts List	 SAP Menu > Master Data > Reports Master Data Report Integration 	/ARBA/MASTER_DATA
Bill of Materials	 SAP Menu Master Data Reports Master Data BOM Integration 	/ARBA/BOM_MASTER_DATA

Enabling this feature

This feature is enabled for all customers. Contact your Ariba Account Manager for more information on integration services.

For information about configuring this feature, see Importing Ariba components and configuring integration methods [page 91].

Prerequisites

- Install the latest Ariba components. For more information, see How to import Ariba components [page 91].
- Maintain the entries in /ARBA/AUTH_PARAM and /ARBA/TVARV tables. For more information, see How to maintain table entries for SAP Ariba Sourcing and SAP Ariba Contracts integration with SAP ERP [page 92].
- Configure Direct [page 99] or Mediated [page 106] Connectivity.
- Export the plant, plant purchase org, purchase org, and purchase group master data before you export material master data.
- Export the material master data and ensure that the material master data synchronization between SAP Ariba Sourcing and the Arches database is over before you run the bill of materials master data export.

Limitations

- You cannot use Ariba Integration Tool Kit-based connections for exporting master data from SAP ERP systems to SAP Ariba Sourcing and SAP Ariba Contracts.
- SAP Ariba Sourcing does not support deletion of class information. If you delete a class associated with material master data in SAP ERP and run an incremental export, the incremental export does not modify the corresponding records in SAP Ariba Sourcing to indicate that the class associated with the material is deleted. This might cause the classification data in SAP Ariba Sourcing and SAP ERP to be out of sync if some records have been deleted in SAP ERP.

➡ Tip

You could edit the material master data to remove (wipe) the classification information and then run an incremental export to update the corresponding data in SAP Ariba Sourcing.

Configuration guide for sourcing, contracts, and supplier data integration with SAP ERP and SAP S/4HANA Integrating master data between SAP ERP and SAP Ariba Sourcing • Bill of materials integration does not support client certificate-based authentication.

How to export master data from SAP ERP to SAP Ariba Sourcing and SAP Ariba Contracts

Prerequisites

- Install the latest Ariba components. For more information, see How to import Ariba components [page 91].
- Configure Direct [page 99] or Mediated [page 106] Connectivity.
- Maintain the /ARBA/EXTERNAL_SID parameter in the /ARBA/TVARV table. The value you set for /ARBA/ EXTERNAL_SID must match the system ID you configured in the Master Data Manager External System Configuration panel of the Ariba application.

For more information about configuring /ARBA/EXTERNAL_SID, see How to maintain table entries for SAP Ariba Sourcing and SAP Ariba Contracts integration with SAP ERP [page 92].

Procedure

1. From the SAP ERP interface, go to the ARBA/MASTER_DATA_EXPORT program. Alternatively, run the transaction code /ARBA/MASTER_DATA.

The Master Data Export page appears.

- 2. From the Scope of Procurement Solution options, Select Contracts and Sourcing.
- 3. From the Load Options, select one of the following:
 - **Full Load**. Exports all the master data records that are available for the master data type that you select in the next step.
 - **Incremental Load**. Exports the master data records that have been updated since the last master data export event. You can export only material master data in the incremental load setting..
- 4. If you selected the **Full Load** option in the previous step, check one or more of the following master data element check boxes:
 - Plant
 - PurchaseOrg
 - CompanyCode
 - PurchaseGroup
 - PlantPurchaseOrg
 - Payment Terms
 - IncoTerms
 - Material Master
 - ItemCategory
 - ERPCommodityCode (Material Group)

If you selected the **Incremental Load** option in the previous step, only the **Material Master** option is available for selection. To export material master data in the incremental mode, check **Material Master**.

➡ Tip

Material master data contains large volume of information. For best performance, always set filters that specify the criteria based on which you can export smaller subsets. For more information about specifying filters, see How to specify filters for master data export [page 17].

5. To export the selected master data, click the **Execute** button.

How to specify filters for master data export

Context

Filters enable you to specify the criteria based on which you want to export master data. Master data elements such as material master data might contain large amount of data. For best performance, always set filters that specify the criteria to export smaller subsets.

Procedure

From SAP ERP, run the transaction code sm30 and specify the filtering criteria for the following variables in the / ARBA/TVARV table:

➡ Tip

Material master data contains large volume of information. For best performance, always set filters such as / ARBA/SPLIT NOMREC that specify the criteria based on which smaller subsets are exported.

- /ARBA/MATERIAL MASTER EXPORT
- o /ARBA/MATERIAL_LANG_EXPORT
- O /ARBA/ITEMCATEGORY_EXPORT
- /ARBA/INCOTERMS_EXPORT
- /ARBA/SPLIT_NOMREC. Specify the number of records you need to export in a batch. The recommended value for this parameter is 40,000 records.
- /ARBA/DC_WAITTIME. Specify the number of seconds that SAP ERP should wait between two Direct Connectivity calls to the SAP Ariba application. The default value is one second. This parameter is important when the export contains multiple batches of records based on the /ARBA/SPLIT NOMREC configuration.

For more information about configuring /ARBA/SPLIT_NOMREC and /ARBA/DC_WAITTIME, see How to maintain table entries for SAP Ariba Sourcing and SAP Ariba Contracts integration with SAP ERP [page 92].

How to export bill of materials from SAP ERP to SAP **Ariba Sourcing**

Prerequisites

- Install the latest Ariba components. For more information, see How to import Ariba components [page 91].
- Configure Direct [page 99] or Mediated [page 106] Connectivity.
- Maintain the following parameters in the /ARBA/TVARV table.
 - Maintain the /ARBA/EXTERNAL SID parameter. The value you set for /ARBA/EXTERNAL SID must match the system ID you configured in the Master Data Manager External System Configuration panel of the SAP Ariba application.
 - If you need to filter the bill of materials data that SAP ERP exports to SAP Ariba Sourcing, configure the / ARBA/BILLOFMATERIALS EXPORT parameter in the /ARBA/TVARV table.
 - If you need to split the bill of materials master data export into multiple batches, configure the /ARBA/ SPLIT NOMREC parameter in the /ARBA/TVARV table. If you configure /ARBA/SPLIT NOMREC, you must also configure the /ARBA/DC WAITTIME parameter.

For more information about configuring the /ARBA/TVARV table, see How to maintain table entries for SAP Ariba Sourcing and SAP Ariba Contracts integration with SAP ERP [page 92].

Context

You can export bill of materials data from SAP ERP to SAP Ariba Sourcing. You can either do a full load export or an incremental export.

Procedure

1. Go to the transaction code / ARBA / BOM MASTER DATA. Alternatively, go to the area menu, /n/ARBA /

OND SRC. From the SAP Easy Access Transaction Code for Ondemand Sourcing window, click D SAP Menu Master Data Reports Master Data BOM Integration .

In the Export All Master Data Required for On-Demand App Using Web Service window appears.

- 2. In the Export All Master Data Required for On-Demand App Using Web Service window, specify the following:
 - Select Full Load or Incremental Load.
 - Check the **Bill of Material** check box. If you selected Incremental Load, you can optionally specify a date range for which period you want to export the bill of materials.
 - i Note

If you specify a date range for the incremental update, SAP ERP does not update the timestamp in the / ARBA/INCR DTTIM table. When you do an incremental update next time without specifying a date

range, SAP ERP exports all records that have been added or modified since the last incremental export for which the timestamp is available in /ARBA/INCR_DTTIM.

3. Click Execute.

SAP ERP displays the status of the bill of materials export to SAP Ariba Sourcing. Note that for full load exports that contain multiple batches, SAP ERP returns only the high-level status in the Reports page.

How to customize master data exports

To customize master data export, you can modify the following methods in the /ARBA/MASTER DATA BAdl:

- PUBLISH PLANT
- PUBLISH PURCHASE ORGANIZATION
- PUBLISH_COMPANYCODE
- PUBLISH_PURCHASE_GROUP
- PUBLISH_PLANT_PURCHASE_ORG
- PUBLISH_PAYMENT_TERMS
- PUBLISH_INCOTERMS
- PUBLISH_MATERIALMASTER
- PUBLISH_ITEMCATEGORY
- PUBLISH_MATERIAL_GROUP

If you want to add additional master data elements to the extract, you must update the /ARBA/FIELD_MAP table to include the mapping for the newly-added fields.

How to customize material master data exports

You can implement the /ARBA/MASTER_DATA BAdI to customize the material master data exports. Customization of the export enables you to add or modify fields in an export.

Customization of material master data exports involve the following steps:

- 1. Modifying the structure [page 19]
- 2. Implementing the logic [page 20]
- 3. Updating the /ARBA/FIELD_MAP table [page 20]

Modifying the structure

Modify the structure corresponding to the .CSV file that you need to customize.

- 1. To modify a structure, go to /nsell transaction code.
- 2. In the Data Type field, enter the name of the structure that you want to modify and click Display.

Configuration guide for sourcing, contracts, and supplier data integration with SAP ERP and SAP S/4HANA

You can customize the following structures for material master data export including material classification and Manufacturer Parts List:

- /ARBA/MATERIAL_ONLY_INFO
- /ARBA/MATERIAL_PLANT
- /ARBA/MATERIAL_LANG
- /ARBA/MAT_CLASS_INFO
- /ARBA/MATERIAL_ONLY_AML
- 3. From the Dictionary: Display Structure window, click Append Structure to append new fields.

Implementing the logic

Implement the BAdl logic to ensure that the custom fields you created in the previous step get populated when you export master data from SAP ERP to SAP Ariba Sourcing.

To implement the BAdl logic, go to the se18 transaction code and enter the BAdl name. The following table contains the BAdl details for material master export including material classification and Manufacturer Parts List:

BAdl name	/ARBA/MASTER_DATA
BAdl interface name	/ARBA/IF_EXP_MASTER_DATA
Method	PUBLISH_MATERIALMASTER
Parameters	MATERIALINFO for extending material general data.
	MATERIALPLANTINFO for extending material plant data.
	MATERIALLANGINFO for extending material description data.
	MATERIALCLASSINFO for extending material classification data.
	MATERIALAML for extending Manufacturer Parts List data.
Туре	/ARBA/MATERIAL_ONLY_T
	/ARBA/MATERIAL_PLANT_T
	/ARBA/MATERIAL_LANG_T
	/ARBA/MAT_CLASS_INFO_T
	/ARBA/MATERIAL_ONLY_AML_T

Updating the /ARBA/FIELD_MAP table

After you implement the BAdl, you must maintain the mapping between SAP fields and SAP Ariba fields in the / ARBA/FIELD_MAP, go to transaction code sm30.

In the /ARBA/FIELD_MAP, set the solution to SAP Ariba Sourcing and select the structure that you want to customize for the newly-added custom fields. For the newly-added custom fields, set Field SAP and Field Ariba values. Ensure that the value you set for Field Ariba matches with the corresponding field in SAP Ariba Sourcing.

If you do not maintain the mapping in /ARBA/FIELD_MAP, the .CSV file uses the SAP field value as the column header. This might cause the integration to fail if the SAP field name does not match with an Ariba field name.

i Note

By default, the /ARBA/FIELD_MAP table contains standard field mapping between SAP ERP and SAP Ariba Sourcing as set by the latest sourcing transports you imported. Do not delete the default entries in the /ARBA/FIELD_MAP table.

How to include additional information in the SLG1 log files

Context

Starting SAP Ariba cloud integration release 8.0 HF19, buyers can include information about the bill of materials and approved manufacturer list for material items in the SLG1 log files. To include this information, SAP Ariba provides this parameter /ARBA/LOG_MASTERDATA that buyers need to specify in the /ARBA/TVARV table.

Procedure

- 1. Run the transaction code SM30.
- 2. Go the /ARBA/TVARV table and maintain the parameter /ARBA/LOG_MASTERDATA.
- 3. Maintain the following values:
 - Variable Name: /ARBA/LOG_MASTERDATA
 - Field name: Leave it empty.
 - Selection cat. : P
 - Number: 0 (zero)
 - Char 20: Leave it empty.
 - Char 20 : Leave it empty.
 - INCL/EXCL: I
 - Option:EQ
 - Selection value: For example, X.

Creating purchase info records in SAP ERP from SAP Ariba Sourcing awards

This chapter contains the following topics:

In this section:

About the integration support for creating purchase info records in SAP ERP from SAP Ariba Sourcing awards [page 22]

How to customize purchase info record fields [page 23]

How to maintain the pricing conditions [page 24]

How to schedule the /ARBA/CR_PIR_CREATE program [page 24]

Installing and configuring the integration support for creating purchase info records in SAP ERP from SAP Ariba awards [page 25]

About the integration support for creating purchase info records in SAP ERP from SAP Ariba Sourcing awards

Integration with SAP Ariba Sourcing enables SAP ERP to create purchase info records based on awards information from SAP Ariba Sourcing.

You can schedule the /ARBA/CR_PIR_CREATE program to fetch awards information from SAP Ariba Sourcing at regular intervals. When /ARBA/CR_PIR_CREATE requests SAP Ariba Sourcing for awards information, the request also contains the date and time of the last request sent to SAP Ariba Sourcing. In response to the request, SAP Ariba Sourcing sends information about awards that have been added or modified since the last time SAP Ariba Sourcing sent awards information to SAP ERP.

When SAP ERP receives awards information from SAP Ariba Sourcing, SAP ERP creates a purchase info record for each of the line items in an SAP Ariba Sourcing award. When a purchase info record is successfully created, SAP ERP sends the purchase info record (PIR) number to SAP Ariba Sourcing. If a purchase info record is already available for a line item and if there is change in any of the values associated with that item in the newly-received award information, SAP ERP modifies the corresponding purchase info record.

If SAP ERP encounters errors while creating or modifying a purchase info record, SAP ERP sends an error message to SAP Ariba Sourcing. The error message contains the details of the error.

SAP ERP supports pricing conditions and validity periods in purchase info records. A purchase info record in SAP ERP can have one or more pricing conditions that have one or more validity periods.

You can implement the /ARBA/PURINFREC BAdl to map additional fields to the purchase info record.

Prerequisites

- Install the latest SAP Ariba Sourcing transports.
- If you want to use Mediated Connectivity, install the latest TPZ files.
- Set up Direct or Mediated Connectivity between SAP ERP and SAP Ariba Sourcing.
- Maintain parameters in AUTH_PARAM and TVARV tables. For more information, see How to maintain table entries for SAP Ariba Sourcing and SAP Ariba Contracts integration with SAP ERP [page 92].
- Maintain pricing conditions mapping between SAP Ariba and SAP ERP in th /ARBA/PRC_CD_MAP table. For more information, see How to maintain the pricing conditions [page 24].

Enabling this Feature

This feature is enabled for all customers. For more information about configuring this feature, see Installing and configuring the integration support for creating purchase info records in SAP ERP from SAP Ariba awards [page 25].

Limitations

- Deletion of purchase info records is not supported.
- Scale-based conditions are not supported.
- Client certificate-based authentication is not supported for Direct and Mediated Connectivity.

How to customize purchase info record fields

You can implement the the BAdl,/ARBA/PURINFREC, to customize the fields in the purchase info records that are created from the SAP Ariba awards. The BAdl, /ARBA/PURINFREC, contains the following two methods:

• MAP_PIR for mapping additional fields to a purchase info record.

```
GET BADI go_badi.

IF go_badi IS BOUND.

CALL BADI go_badi->map_pir

CHANGING

eina = gw_eina

eine = gw_eine.

ENDIF.
```

• POST_PROCESSING for customizations after creating the purchase info record and sending the confirmation to SAP Ariba.

```
GET BADI go_badi.
IF go_badi IS BOUND.
CALL BADI go_badi->post_processing
CHANGING
eina = gt eina
```

Configuration guide for sourcing, contracts, and supplier data integration with SAP ERP and SAP S/4HANA Creating purchase info records in SAP ERP from SAP Ariba Sourcing awards

How to maintain the pricing conditions

Context

As a prerequisite to creating purchasing info records in SAP ERP from SAP Ariba Sourcing awards, you must maintain the pricing conditions in table /ARBA/PIR_CD_MAP.

Procedure

 In the SAP ERP main screen, navigate to System Services Table Maintenance Extended Table Maintenance .

Alternatively, go to transaction code sm30.

The Maintain Table Views initial screen appears.

2. Enter /ARBA/PIR CD MAP in the **Table/View** field and click **Maintain**.

Maintain values for the following fields:

- Ariba Condition Type.
- SAP Condition Type.

For example, the SAP Condition Type value for Ariba Condition Type GROSSPRICE is PB00. Similarly, for Ariba Condition Type DISCOUNTAMOUNT, the SAP Condition Type value is R002.

3. Click Save.

How to schedule the /ARBA/CR_PIR_CREATE program

From SAP ERP, you can run the transaction code sm36 and specify the program name, /ARBA/CR_PIR_CREATE, and the interval at which you want to run the program.

Installing and configuring the integration support for creating purchase info records in SAP ERP from SAP Ariba awards

For information about installing Ariba components and setting up connectivity settings, see Importing Ariba components and configuring integration methods [page 91].

Integrating contract information with SAP ERP

This chapter contains the following sections:

In this section:

- About the integration of contract information [page 26]
- Customizing contract integration [page 31]
- Installing and configuring the integration of contract information with SAP ERP [page 32]

About the integration of contract information

Buyers using Ariba Network adapter for SAP NetWeaver and SAP Ariba Contracts can integrate the contract information from SAP Ariba Contracts with SAP ERP. SAP ERP 6.0 EhP 0 and later versions and SAP NetWeaver PI 7.1, 7.3, 7.4, PO 7.3, and PO 7.4 versions support integration of contract information between SAP Ariba Contracts and SAP ERP.

When you create a new contract or a contract amendment on SAP Ariba Contracts, the contract is sent to the Ariba Network. From Ariba Network, the SAP Process Integration communication channel picks up the contract and sends the document to SAP ERP. SAP ERP creates an outline agreement based on the header and line-item data of the contract received from SAP Ariba Contracts.

When the outline agreement is created in SAP ERP, SAP ERP sends the SAP document number and outline agreement line item numbers with mapping to the corresponding line items in the SAP Ariba contract. If the contract integration fails or encounters errors, SAP ERP also sends error messages to SAP Ariba Contracts.

If you update a contract in SAP Ariba Contracts after an outline agreement has been created in SAP ERP, SAP Ariba Contracts sends the contract amendment message to SAP ERP. The contract amendment message also contains the SAP document number of the corresponding outline agreement. When SAP ERP receives the contract amendment along with the SAP document number for an outline agreement, SAP ERP updates the corresponding outline agreement.

The *Header and Line Item Fields in an Outline Agreement* section contains the header and line item fields in an outline agreement. Note that some of the fields cannot be modified in the outline agreement after an outline agreement has been created. You can add additional fields by creating the necessary mapping in the corresponding cXML.

i Note

The contract integration is unidirectional, and all updates should be made only in the SAP Ariba Contracts. Any change that you make in the outline agreement from SAP ERP will remain in SAP ERP and might cause conflict with the contract in SAP Ariba Contracts.

If you delete a contract in SAP Ariba Contracts, SAP ERP marks the line items in the outline agreement as deleted.

Enabling this Feature

This feature is enabled for all customers. However, support for this feature will be made available only as part of the upcoming Ariba Application 2016 release. Contact your SAP Ariba Account Manager for more information on integration services.

Prerequisites

Before you can integrate contract information from SAP Ariba Contracts, you must complete the following tasks:

- Install the latest versions of the SAP Process Integration TPZ and SAP ERP transports.
- Set up master data integration between SAP Ariba Contracts and SAP ERP. The master data integration provides the master data that is required for the contract integration between SAP Ariba Contracts and SAP ERP.
- Ensure that you configure the value mappings between the business system and logical system names for multiple ERP systems. Ensure that you enable the multi-ERP mode on your SAP ERP system. For more information, see the *Setting up Ariba Network adapter for SAP NetWeaver* guide.
- On Ariba Network, create a system ID for your ERP system. The System ID that you create on Ariba Network must match the System ID that you maintain on the SAP ERP system and SAP Ariba Contracts. For this newly created System ID, create one end point for your SAP ERP system and another end point to connect to your SAP Ariba Contracts system. For more information, see the *Buyer Administration Guide*.
- Configure Ariba Network adapter for SAP NetWeaver.
- Maintain value mappings for SAP Ariba Contracts and SAP ERP in the Integration Builder.
- Maintain pricing conditions mapping between SAP Ariba and SAP ERP in the /ARBA/PRC CD MAP table.

Limitations

- Attachments in contracts that are created in SAP Ariba Contracts are not included in the outline agreement generated in SAP ERP.
- Ariba Network adapter for SAP NetWeaver does not support contracts with service items having more than one level of parent and child hierarchy.
- SAP Ariba Sourcing does not support deletion of the entire contract after it has been published. You can only delete the line items in a contract.

Related Information

Integrating master data between SAP ERP and SAP Ariba Sourcing [page 11] Customizing contract integration [page 31] Installing and configuring the integration of contract information with SAP ERP [page 32]

Integrating contract information with SAP ERP

Header and line item fields in an outline agreement

The following table lists the header and line-item elements that are included in an outline agreement. The Change Contract Impact column indicates which fields might get updated in the outline agreement if the buyer updates a contract in SAP Ariba Contracts.

Table 2: Header and Line Item Fields in an Outline Agreement

Fields	Change Contract Impact
Header Elements	
Purchasing Organization	Cannot be modified
Purchasing Group	Cannot be modified
Company Code	Cannot be modified
Currency	Cannot be modified
ISO Code for Currency	Cannot be modified
Payment Term	Can be modified
Ariba Document Number	Can be modified
SAP Document Type	Cannot be modified
Vendor	Cannot be modified
Start Date	Can be modified
End Date	Can be modified
Target Value	Can be modified
Line-Item Elements	
Item Number	Cannot be modified
Item Category	Cannot be modified
Material Code	Cannot be modified
Description	Can be modified
Quantity	Can be modified
UOM	Cannot be modified if the contract contains Material Code
ISO Codes for Unit of Measure	Can be modified
Plant	Cannot be modified

Fields	Change Contract Impact
Unit Price	Can be modified
Discount Amount	Can be modified
Discount Percentage	Can be modified
Surcharge Percentage	Can be modified
Incoterms 1	Can be modified
Incoterms 2	Can be modified
Material Group	Cannot be modified if the contract contains Material Code
Account Assignment Category	Can be modified
ERP RFQ Number	Can be modified
ERP RFQ Line Number	Can be modified
ERP PR Line Number	Can be modified
ERP PR Number	Can be modified

Notes About Header and Line Item Elements

- Only Standard Material is supported for Item Category field.
- Incoterms 1 maps to Incoterms Code, and Incoterms 2 maps to Location. Incoterms 2 is a free text field of maximum 26 characters.
- For Account Assignment Category, SAP ERP requires the accounting data. SAP Ariba Contracts does not provide accounting data in contracts. SAP ERP obtains the accounting data from one of the following sources:
 - Purchase requisition if the reference number to the purchase requisition is available.
 - Request for quotation if the reference number to the RFQ is available.
 - Material master if the material code is available.

If none of these is available, SAP ERP marks the accounting data fields as "U" to indicate that the information is unknown.

SAP NetWeaver Process Integration objects for contract integration

Objects for create or change contract requests

Process Integration object	Name
Software component version	ARIBA_SOURCING_ADAPTER, CI9 of ariba.com
	i Note For customizations that you implement, use the software component ARIBA_SOURCING_CUSTOM_ADAPTER, 1.0 of ariba.com
Namespace	http://ariba.com/xi/ASN/ContractCreatReq
Service interface	MI_ContractCreateReq_Async_In
	MI_ContractCreateReq_Async_Out
Communication channel template	CCT_SourcingContractReq_cXML_Sender
Process Integration scenarios	AR_ContractRequest_Send
Message mappings	MM_ContractRequest_to_PurchasingContractER PCreateRequest
	MM_Custom_ContractRequest_to_PurchasingCon tractERPCreateRequest
Operation mapping	IFM_ContractRequest_to_PurchasingContractE RPCreateRequest
Target in message mapping	PurchasingContractERPCreateRequestConfirma tion_In

Objects for contract status response

Process Integration object	Name
Software component version	ARIBA_SOURCING_ADAPTER, CI9 of ariba.com
	i Note For customizations that you implement, use the software component ARIBA_SOURCING_CUSTOM_ADAPTER, 1.0 of ariba.com
Namespace	http://ariba.com/xi/ASN/ContractCreatRes
Service interface	MI_ContractCreateRes_Async_In
	MI_ContractCreateRes_Async_Out
Communication channel template	CCT_ContractStatusUpdateRequest_cXML_Recei ver
Process Integration scenario	AR_ContractStatusUpdate_Receive
Message mappings	<pre>MM_Custom_PurchasingContractERPCreateConfi rmation_to_ ContractStatusUpdateRequest MM_PurchasingContractERPCreateConfirmation _to_ ContractStatusUpdateRequest</pre>
Operation mapping	IFM_PurchasingContractERPCreateConfirmatio n_to_ ContractStatusUpdateRequest

Customizing contract integration

The BAdl /ARBA/SRCNG_CONTRT_CREATE_RESP enables you to customize the integration of contract information with SAP ERP. /ARBA/SRCNG_CONTRT_CREATE_RESP has the following methods associated with it:

- INBOUND_PROCESSING. For inbound request.
- OUTBOUND_PROCESSING. For outbound response.

To customize your implementation, you can follow the standard procedure for enhancing the Enterprise Service (ES). After you make the changes, regenerate the proxy and map the newly-added fields to the BAdl.

Installing and configuring the integration of contract information with SAP ERP

The following sections provide information about installing and configuring the integration of contract information with SAP ERP.

How to import Ariba components

Context

Import the latest transports to SAP ERP and the design objects to SAP Process Integration.

Procedure

For information about installing Ariba components and setting up connectivity settings, see Importing Ariba components and configuring integration methods [page 91].

How to configure Process Integration value mappings for contract integration

Context

You must maintain the following Process Integration value mappings in the Integration Builder.

Procedure

- 1. From the Integration Builder main window, go to Tools Value Mapping .
- 2. Set the mappings as shown in the following table:

	Ariba	SAP
Agency	ACM_CONTRT_TYPE	SAP_CONTRT_TYPE
Scheme	SourcingContract	SourcingContract

	Ariba	SAP
Value 1	Quantity	МК
Value 2	Value	WK
Group Name	DocType	DocType
	Ariba	SAP
Agency	XI_Global	XI
Scheme	DeliveryBasedIV	DeliveryBasedIV
Value	IsGRBasedIV	False
Group Name	DeliveryBasedIV	DeliveryBasedIV

How to maintain the pricing conditions

Context

As a prerequisite to the integration of contract information with SAP ERP, you must maintain the pricing conditions in table /ARBA/PRC_CD_MAP.

Procedure

 In the SAP ERP main screen, navigate to System Services Table Maintenance Extended Table Maintenance .

Alternatively, go to transaction code sm30.

The Maintain Table Views initial screen appears.

2. Enter /ARBA/PRC_CD_MAP in the **Table/View** field and click **Maintain**.

Maintain values for the following fields:

- **Procedure**. Specify the calculation schema, for example RM0000.
- Ariba Pricing Condition. Specify the pricing condition, such as RA00 and RB00, for the Ariba application.

Ariba Pricing C	ondition Type	SAP Pricing Condition Type
GPCD		Corresponding gross price condition type.

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Ariba Pricing Condition Type	SAP Pricing Condition Type
RAOO	Corresponding discount percentage condition type.
RBOO	Corresponding discount value condition type.
ZA00	Corresponding surcharge percentage condition type.
ZB00	Corresponding surcharge value condition type.

i Note

If you do not specify a calculation schema, the mapping remains relevant for any calculation schema that does not have any mapping associated with it.

3. Click Save.

How to configure communication channels for the contract integration scenario

Context

Configure the communication channel CC_SourcingContractReq_cXML_Sender under the AR_ContractRequest_Send configuration scenario.

Procedure

- 1. Under Communication Channel, double-click [BS_ASN] CCT_SourcingContractReq_cXML_Sender to open it, or right-click and select Open.
- 2. In the **Parameters** tab, set the parameters in the **Authentication** section to match your Ariba Network buyer account configuration.

i Note

If you created the channel by copying from an existing channel, you need to change the request type to Contract Request in the **Inbound Request Type** field.

If required, adapt the other parameters. For more information about the cXML Adapter parameters, see the cXML Adapter Parameters section in the Setting up Ariba Network adapter for SAP NetWeaver.

3. Save the changes.

Configuring contract integration scenario

You must configure the integration scenario for the contract transaction in the Integration Directory to integrate contracts from SAP Ariba Contracts with SAP ERP. All the steps of a configuration scenario section must be completed to fully configure a scenario.

Workflow

i Note

Ensure that the design package is imported into your system and ready before you run these steps. The following steps assume that the different Business Systems are defined in the SLD. For more information about configuring the SLD, see the "About Configuring the System Landscape Directory" section in the Setting up Ariba Network adapter for SAP NetWeaver guide.

To configure the contract integration scenario:

- 1. Transfer the Integration Scenario from the Integration Repository to the Integration Directory.
- 2. Configure the Integration Scenario.
- 3. Configure the Communication Channels.
- 4. Activate the new configuration.

How to transfer the contract integration scenario

Context

The first step to configure the integration scenario for the contracts transaction is to transfer to the Integration Directory, the integration scenario loaded into the Integration Repository when the design is imported.

Procedure

- 1. From the SAP NetWeaver Process Integration main page, select the IN Integration Directory Integration Builder I, and then login into Configuration: Integration Builder application.
- 2. In the Integration Builder menu, select Tools > Apply Model from ES Repository .
- 3. In the first screen of the Transfer Model from ES Repository wizard, **Select Process Integration Scenario**, click the **Name** field, and then click the Display Input Help drop down list and select **Input Help**. For inbound requests, select the following Process Integration Scenario from the Enterprise Services Repository screen:
 - Name: AR_ContractRequest_Send.
 - Namespace: http://ariba.com/xi/ASN/ContractCreatReq

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• Software Component Version: ARIBA_SOURCING_ADAPTER CIx of ariba.com.

➡ Tip

For customizations that you implement, use the software component ARIBA SOURCING CUSTOM ADAPTER 1.0 of ariba.com.

Alternatively, for the Status Response, select the following values:

- Name: AR_ContractStatusUpdate_Receive.
- Namespace:http://ariba.com/xi/ASN/ContractCreatRes
- Software Component Version: ARIBA_SOURCING_ADAPTER CIx of ariba.com

➡ Tip

For customizations that you implement, use the software component ARIBA_SOURCING_CUSTOM_ADAPTER 1.0 of ariba.com.

4. Click Continue.

- 5. If required, change the name of the scenario for the Integration Directory.
- 6. Click Finish.

Results

After the transfer is complete, the Model Configurator window appears.

About configuring the contract integration scenario

After you select the Integration Scenario, you must configure it using the following steps:

- 1. Assign the Model.
- 2. Assign Components.
- 3. Configure Connections.
- 4. Generate Configuration Objects.

How to select the model for the scenario

Procedure

In the Model Configurator window, click the **Select Component View** button, and then click **Apply** to select the unique component view that is selected by default.
Next Steps

After you select the component view, you must assign components to the application components of the selected integration scenario.

How to assign components for the contract integration scenario

Procedure

- 1. In the Model Configurator, click the **Assign Component** button.
- 2. In the Assign Components window, select the **Business System Components for A2A** tab to assign components for Ariba Network.
- 3. Click on the **Insert Line** button ('+') to add a component entry in the table if no component entry line is present.
- 4. Click on the row under the **Communication Component** column, then click on the **Value List** drop down and select **Value List** <F4>. Select the communication component name, for example, BS_ASN, from the selection list and click **Apply**.
- 5. Click the **Next Role** button (the right arrow) to go to the next screen in the window.
- 6. Click on the Insert Line button ('+') to add a service entry in the table
- Click on the row under the Communication Component column, then click on the Value List drop down and select Value List <F4>. Select the communication component name, for example, BS_SAPR3_50, from the selection list and click Apply.

For Multi ERP implementation add the multiple business services defined for your multiple SAP ERP systems by repeating the steps 6 and 7.

8. Click the **Save Settings** button to save the changes.

Next Steps

After assigning services, you must activate sender/receiver relations for the individual connections in the Integration Scenario and specify Communication Channels that are relevant for the sender/receiver relations.

How to configure connections for the contract integration scenario

Procedure

- 1. In the Model Configurator, click the **Configure Connections** button. You must assign Communication Channels to set up the connections.
- 2. In the **Connections from Component Assignment** tab in the Configure Connection window, click the empty **Communication Channel** cell corresponding to BS_ASN in the **Sender Business System Components** table.

- 3. Click the **New Communication Channel** button (the icon at the top left), and then select **Create Communication Channel with Template** to start the Create Communication Channel wizard.
- 4. Click on **Continue**, and in the next page click the Name field, then click the **Display Input Help** drop down list and select **Input Help**. Select the following Communication Channel Template:
 - Name: CCT_SourcingContractReq_cXML_Sender for inbound.
 CCT_ContractStatusUpdateRequest_cXML_Receiver for status reponse.
 - Namespace: http://ariba.com/xi/ASN/ContractCreatReq for inbound. http://ariba.com/xi/ASN/ContractCreatRes for status response.
 - Software Component Version: ARIBA_SOURCING_ADAPTER CIx of ariba.co.

➡ Tip

For customizations that you implement, use the software component ARIBA_SOURCING_CUSTOM_ADAPTER 1.0 of ariba.com.

- 5. Click **Continue**, modify the channel name to, for example, CC_ContractReqCreate_cXML_Sender and then click **Finish**.
- In the Connections from Component Assignment tab in the Configure Connection window, click the empty Communication Channel cell corresponding to BS_SAPR3_50 in the Receiver Business System Components table.

The IDoc receiver Communication Channel needs to be created once for each Business System corresponding to your SAP ERP. For more information about how to create the IDoc receiver Communication Channel, see the "Creating Communication Channels for SAP ERP" section in the Setting up Ariba Network adapter for SAP NetWeaver guide.

If a Communication Channel already exists you need to use it.

7. Select the communication channel, for example, CC_Proxy_Receiver created for XI receiver adapter, corresponding to the SAP ERP Business System from the selection list.

For Multi ERP implementation, repeat the steps 6 and 7 for all the entries of the Business Systems corresponding to your SAP ERP instances.

➡ Tip

If you have already created and configured a Receiver channel for BS_ASN for another transaction, you can create the communication channel by copy from a channel already configured.

i Note

The communication channels for SAP ERP Sender system are not required.

- 8. Click the Activate All Connections button, and then click OK in the dialog box.
- 9. Click the Save Settings button to save the changes.

How to generating objects for the contract integration scenario

Context

After making all the configuration settings in the wizard, you must generate the objects. Generation creates the configuration objects if they do not yet exist. If they do already exist, they will be reused and enhanced, if required. You can also simulate generation for test purposes.

Procedure

- 1. In the Model Configurator, click the **Create Configuration Object** button.
- 2. In the Create Configuration Object window, make the following settings:
 - General: Generation (select the radio button for this option)
 - Scope of Generation: Select all the check boxes Receiver Determination, Interface Determination, and Sender/Receiver Agreement.
- 3. Select the **Create New** radio button under **Change List for Generated Objects** and use the proposed name or modify it.
- 4. Click **Start** to begin generating objects.
- 5. After the object generation is complete, click **Apply** to save the new configuration settings. Close the log that is created without saving. You can save it, if required.

How to configure receiver determination settings for the contract integration scenario

Context

Configure the receiver determination settings manually, for the receiver MI_ContractCreateReq_Async_Out under the AR_ContractRequest_Send integration scenario. Retain the default settings for the other receivers.

i Note

This configuration is required only for Multi-ERP implementations.

Procedure

- 1. Expand Receiver Determination, and then click **|BS_ASN | MI_ContractCreateReq_Async_Out**.
- 2. In the **Configured Receivers** section of the Edit Receiver Determination window, click the **Add** button to add a new line.

- 3. Click the icon next to the **Condition** field, to start the Condition Editor.
- 4. In the Condition Editor window, specify the left operand of the condition as follows:
 - Click the icon next to the Left Operand field to open the Expression Editor.
 - Select the **XPath** option, and then select the following xpath from the document tree: /cXML/ Header/To/Credential/@domain.
 - This path should be displayed in the **XPath Expression** field.
 - Click **OK** to return to the Expression Editor.
 - Select the "=" operator in the **Operator** column.
 - Select the **Right Operand** field and enter "SystemID".
- 5. Add another condition by clicking on the **Insert Expression** option. (The Boolean operator between the two conditions should be "AND".)
 - Click the icon next to the Left Operand field to open the Expression Editor.
 - Select the **XPath** option, and then select the following xpath from the document tree: /cXML/ Header/To/Credential/Identity.

This path should be displayed in the **XPath Expression** field.

i Note

You cannot select a node having child nodes or attributes, directly from the tree. You must first select the child node or attribute and edit the xpath expression in the XPath Expression field to remove the child element.

- \circ Click \mathbf{OK} to return to the Expression Editor.
- Select the "=" operator in the **Operator** column.
- Select the **Right Operand** field and specify the Logical System Name corresponding to the Business System for which you are doing the configuration. E.g. 160, EC7.
- 6. Click **OK** to close the Condition Editor.
- 7. Click the icon next to the **Communication Component** field to start the Choose Communication Component window, and select the Communication Component corresponding to the Logical System Name you specified in the Condition.

i Note

For Multi ERP implementation, repeat the steps 2 to 7 for all your SAP ERP instances.

8. Save the Receiver Determination settings.

How to configure interface determination settings for the contract integration scenario

Context

Configure the interface determination settings to enable mapping enhancements.

Procedure

- 1. Expand Interface Determination, and then click | BS_ASN | | BS_SAPR3_50 |
- 2. In the **Receiver Interfaces** section of the **Edit Interface Determination** window, click the operation mapping value under the **Operation Mapping** column, then click the Value List drop down and select **Value List**.
- Select the operation mapping IFM_ContractRequest_to_PurchasingContractERPCreateRequest and click Apply.
- 4. The Multiplicity column displays the value "0..unbounded".
- 5. Save the interface determination settings.

i Note

Configuring the Interface Determination is a mandatory step if you need to configure the mappings.

How to activate the contract integration scenario

Procedure

Using the **Change List** tab on the main application screen, activate all the Change Lists containing the objects created and modified during the scenario setup.

Results

The Contracts transaction is now ready for execution.

Integrating Supplier Information and Performance Management with SAP ERP and MDG

This chapter contains the following sections:

In this section:

- About the integration of SAP Ariba Supplier Information and Performance Management with SAP ERP and MDG [page 42]
- Configuring the integration of SAP Ariba Supplier Information and Performance Management with SAP ERP and MDG [page 50]
- Exporting and importing supplier master data [page 54]
- Implementing BAdIs to modify structures [page 57]
- Checking the status of supplier master data export [page 59]
- Viewing vendor ID and business partner mappings [page 60]
- Viewing error logs [page 60]
- MDG business functions for supplier master data integration [page 61]

About the integration of SAP Ariba Supplier Information and Performance Management with SAP ERP and MDG

Buyers using SAP Ariba Supplier Information and Performance Management can integrate supplier master data between SAP Ariba Supplier Information and Performance Management and SAP ERP. The supplier master data integration uses the SAP Business Partner integration services and the interfaces provided by SAP MDG Foundation.

SAP MDG Foundation infrastructure is available on SAP ERP 6.0 EhP 6 and later versions only. Users that have licensed the MDG application can also leverage additional master data governance features that the MDG application provides.

You can use one of the following integration methods to integrate SAP Ariba Supplier Information and Performance Management with SAP ERP and MDG:

- Direct Connectivity
- Mediated Connectivity through SAP NetWeaver PI

The SAP Ariba Supplier Information and Performance Management integration with SAP ERP is bidirectional. You can export supplier master data from SAP ERP to SAP Ariba Supplier Information and Performance Management Configuration guide for sourcing, contracts, and supplier data integration with SAP ERP and

(outbound) and import supplier master data from SAP Ariba Supplier Information and Performance Management to SAP ERP (inbound).

When you export the supplier data from SAP ERP to SAP Ariba Supplier Information and Performance Management for the first time, you can use the full load option. For the outbound full load integration, you can use the SAP Data Replication Framework (DRF).

For subsequent outbound integration events, you can use the incremental load option. The incremental load updates only those records that were added or modified since the last supplier master data integration event.

To import supplier data from SAP Ariba Supplier Information and Performance Management to SAP ERP, you can use the incremental update option. You can import only those supplier records that are marked as "Integrated" in SAP Ariba Supplier Information and Performance Management. When the master data import is complete, SAP ERP sends a confirmation message to SAP Ariba Supplier Information and Performance Management.

You can use either SAP area menu items or the transaction codes to access transactions for supplier data integration. To access the area menu, go to /n/ARBA/SIPM.

The following table lists the area menus and transaction codes that you can use for exporting and importing of supplier master data and retrieving the status of master data export:

Area menu	Transaction code	Description
	DRFOUT	Enables you to export the supplier mas- ter data from SAP ERP to SAP Ariba Supplier Information and Performance Management in the full load mode.
SAP Menu > Integration from SAP to SIPM > Reports > Integrate Suppliers to SIPM	/n/ARBA/SIPM_OUT	Enables you to export the supplier mas- ter data from SAP ERP to SAP Ariba Supplier Information and Performance Management in the incremental load mode.
SAP Menu Integration from SIPM to SAP Reports Integrate Suppliers to SAP	/n/ARBA/SIPM_IN	Enables you to import the supplier mas- ter data from SAP Ariba Supplier Infor- mation and Performance Management to SAP ERP in the incremental load mode.
SAP Menu > Integration from SAP to SIPM > Reports > Download Confirmation from SIPM >	/n/ARBA/SIPM_CONF	Enables you to retrieve the status of sup- plier master data export from SAP ERP to SAP Ariba Supplier Information and Performance Management.

Table 3: Area menu and transaction codes for supplier master data export and import

➡ Tip

If you need to download the CSV files locally, you can select the **Test Run** option that is available for the incremental load integration.

If a supplier is deleted in SAP Ariba Supplier Information and Performance Management, the corresponding records in SAP ERP are marked as deleted. Similarly, when a supplier is marked as deleted in SAP ERP, the Configuration guide for sourcing, contracts, and supplier data integration with SAP ERP and SAP S/4HANA

corresponding records are marked as inactive and sent to SAP Ariba Supplier Information and Performance Management in the next export. However, blocking of a supplier is supported only in SAP ERP. Though SAP Ariba Supplier Information and Performance Management sets a flag to indicate that a supplier is blocked, it does not block the supplier from transacting on SAP Ariba Supplier Information and Performance Management.

i Note

The SAP ERP integration discussed in this chapter applies to an earlier version of Ariba Supplier Information and Performance Management (classic functionality). SAP Ariba Supplier Lifecycle and Performance uses a new supplier database, which is different from the supplier databases that SAP Ariba Sourcing, SAP Ariba Contracts, and the earlier version of SAP Ariba Supplier Information and Performance Management (classic functionality) use. When you configure integration with SAP Ariba Supplier Lifecycle and Performance, the new supplier database replaces your existing supplier database.

For information about the SAP ERP integration with SAP Ariba supplier management solutions including SAP Ariba Supplier Lifecycle and Performance, new version of SAP Ariba Supplier Information and Performance Management (extended functionality), and SAP Ariba Supplier Risk, see the chapter Integrating SAP Ariba Supplier Lifecycle and Performance with SAP ERP [page 63].

Enabling this Feature

This feature is disabled by default. To enable this feature, please have your Designated Support Contact log a service request. An SAP Ariba Customer Support representative will follow up to complete the request.

For information about how to configure this feature, see Configuring the integration of SAP Ariba Supplier Information and Performance Management with SAP ERP and MDG [page 50].

Prerequisites

You must implement the prerequisites in the following order:

- 1. Ensure that your SAP ERP system is SAP ERP 6.0 EhP 6 and above.
- 2. Enable the business functions listed in MDG business functions for supplier master data integration [page 61], set up the Customer Vendor Integration, and assign a target system for replication model or outbound implementation. For more information, see the Configuring Master Data Governance for Supplier guide on the SAP Help portal.
- 3. Implement the following SAP notes in the order the notes are listed here:
 - 1. 1750821 (Not required if you are using SAP ERP 6.0 EhP 7.)
 - 2. 1974397
 - 3. 1912305
 - 4. 2211045
 - 5. 2274626
 - 6. 2314124
- 4. Import the latest SAP Ariba sourcing transports.
- 5. Activate the /ARBA/SIPM replication model. You can activate /ARBA/SIPM from the DRFIMG transaction. For more information, see Activating the replication model [page 52].

Configuration guide for sourcing, contracts, and supplier data integration with SAP ERP and SAP S/4HANA Integrating Supplier Information and Performance Management with SAP ERP and

- 6. Implement implicit enhancement in SAP ERP. For more information, see Configuring implicit enhancement for the integration of SAP Ariba Supplier Information and Performance Management with SAP ERP [page 52]
- 7. Maintain value mappings for region code and language in the /ARBA/VALUE_MAP table. For more information, see Configuring the integration of SAP Ariba Supplier Information and Performance Management with SAP ERP and MDG [page 50].
- 8. Ensure that the supplier records in SAP Ariba Supplier Information and Performance Management are marked as **Supplier Integration Enabled** before you import those records to SAP ERP. You can import only those records that are marked as **Supplier Integration Enabled**.
- 9. (For SAP S/4HANA) To update vendor contact in the table /ARBA/DELTA_CH, maintain the parameter / ARBA/SIPM_BPROLE_CON in the table /ARBA/TVARV. Maintain the following values:
 - Variable Name: /ARBA/SIPM BPROLE CON
 - Selection cat.: P
 - Number: 0
 - Char20: Blank
 - Char20: Blank
 - INCL/EXCL: I
 - Option: EQ
 - Selection value : BUP001
 - Selection value : Blank

Limitations

- Integration of SAP Ariba Supplier Information and Performance Management with SAP ERP is not supported over Ariba Integration Tool Kit.
- Purchase organization, company code, and bank data from SAP ERP are not exported to SAP Ariba Supplier Information and Performance Management.
- If a supplier organization does not have any users associated with that, such supplier organizations cannot be integrated with SAP ERP.
- Only one address is supported per supplier.
- SAP Ariba Supplier Information and Performance Management sends the full name to SAP ERP. SAP ERP splits the full name that is received from SAP Ariba Supplier Information and Performance Management into first name and last name. SAP ERP assigns the part before the first space in the name as the first name and the rest as the last name. If the first or last name exceeds 35 characters, SAP Ariba Supplier Information and Performance Management truncates the name by cutting the characters after the maximum allowed limit of 35 characters.
- Supplier data integration between SAP ERP and SAP Ariba Supplier Information and Performance Management does not occur in real time. Integration events occur at scheduled intervals. Between two integration events, the supplier data in SAP ERP and SAP Ariba Supplier Information and Performance Management might not be synchronized. You must check the last integration event and ensure that the data is synchronized before you trigger a transaction, such as raising a purchase order. For example, a purchase order from SAP ERP might contain an outdated address or contact if a supplier record in SAP Ariba Supplier Information and Performance Management has been modified after the last integration event.
- Ensure that you do not enter more than ten characters while creating the Login ID for users on the SAP Ariba Supplier Information and Performance Management. MDG supports only ten characters in the reference fields.

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• The maximum number of characters SAP ERP supports across columns in a row is 4096. If the data you integrate exceeds 4096 characters, SAP ERP truncates the data.

➡ Tip

When you integrate supplier data that might extend beyond the 4096-character limit, filter out less significant fields to ensure that the data does not exceed the 4096-character limit.

• Vendor roles **FLVNO0** and **FLVNO1** are not supported on SAP ERP 6 EHP 8. Ensure that you do not assign these vendor roles when you create business partners for SAP Ariba Supplier Information and Performance Management integration with SAP ERP 6 EHP 8.

Related Information

Configuring the integration of SAP Ariba Supplier Information and Performance Management with SAP ERP and MDG [page 50] Exporting and importing supplier master data [page 54] Implementing BAdIs to modify structures [page 57] Checking the status of supplier master data export [page 59] Proxies, programs, and structures for supplier master data integration [page 46]

Proxies, programs, and structures for supplier master data integration

The following sections list the proxies, programs, and structures that are required for supplier master data integration.

Proxies

Use the following proxies to set up direct and mediated connectivity:

- /ARBA/CO_SI_SOURCING_UPLOAD for outbound connections.
- /ARBA/CO_SI_SOURCING_DOWNLOAD for inbound connections.

Programs and classes

The /ARBA/MD_SUPPLIER_SIPM contains the following programs and classes:

- Programs:
 - /ARBA/CR_MD_SUPPLIER_SIPM_IN. To process the inbound incremental updates.

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- /ARBA/CR_SUPPLIER_SIPM_OUT. To process the outbound incremental updates.
- /ARBA/CR_SUPPLIER_SIPM_CONF_IN. To process the status checking of outbound updates.
- Classes:
 - /ARBA/CL_MDG_SUPPLIER. For SAP Ariba Supplier Information and Performance Management integration with SAP ERP.
 - /ARBA/CL_MDG_BP_REPLICATE_DRF. For outbound integration.
 - /ARBA/CL_MDG_BP_RPLCTRQ. For inbound integration.

Structures

- /ARBA/SUPPLIER_INFO. To maintain the fields for supplier information captured in the Suppliers.CSV file.
- /ARBA/CONTACT_INFO. To maintain the fields for contact or user information captured in the Users.CSV file.
- /ARBA/SIPM_IDNUMBERS. To maintain the fields for success confirmation information captured in the SuccessConfirmation.CSV file.
- /ARBA/SIPM ERROR. To maintain the fields for error messages captured in the Errors.CSV file.

CSV files for SAP Ariba Supplier Information and Performance Management integration with SAP ERP

Cloud Integration release 7.0 generates CSV files, which are listed in this section, to transfer supplier data between SAP ERP and SAP Ariba Supplier Information and Performance Managementt and to confirm the status of supplier master data export and import.

A mapping of fields in SAP ERP and SAP Ariba Supplier Information and Performance Management is maintained in the /ARBA/FIELD_MAP table. The /ARBA/FIELD_MAP table contains the following structures under solution SIPM:

- /ARBA/SUPPLIER_INFO
- /ARBA/CONTACT_INFO
- /ARBA/SIPM_SUCCESS
- /ARBA/SIPM ERRORS

Suppliers.CSV

The Suppliers.CSV file contains the following fields:

- VendorID
- SystemID
- MDG ID
- NetworkID

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[•] DUNS

- CustomDomainName
- CustomDomainValue
- Active
- Blocked
- Blocked Reason
- Name1
- Name2
- Name3
- Name4
- AddressID
- Street
- City
- Country
- State
- PostalCode
- Language
- CorporateEmailAddress
- CorporateFax
- CorporatePhone
- CorporateURL
- Legal Name
- State of Incorporation
- Global Location Number
- Tax ID
- State Tax ID
- Regional Tax ID
- VAT ID

Users.CSV

The Users.CSV file contains the following fields:

- CSV Column
- VendorID
- SystemID
- MDGID
- Active
- Name
- IsEmailInviteNeeded
- IsUserApproved
- Email Address
- Phone Number
- Fax

SuccessConfirmation.CSV

The SuccessConfirmation.CSV file contains the following fields:

- VendorID
- SystemID
- MDGID
- LoginID

Errors.CSV

The Errors.CSV file contains the following fields:

- LoginID
- MDGID
- Messageld
- MessageNum
- MessageText
- MessageType
- SystemID
- VendorID

Related Information

Configuring the integration of SAP Ariba Supplier Information and Performance Management with SAP ERP and MDG [page 50]

Maintaining supplier user login ID information on SAP ERP

You can maintain contact information for suppliers on the SAP ERP system. SAP Ariba sends this contact information as "supplier users" to SAP Ariba Supplier Information and Performance Management. Users in SAP Ariba Supplier Information and Performance Management must have a unique login ID to log in to SAP Ariba Supplier Information and Performance Management. You can choose to maintain unique login ID for users. To do so, maintain the Login ID for users in the /ARBA/USERID table. SAP Ariba uses this Login ID while importing and exporting the supplier information for users. When you do not maintain the Login ID for users in the /ARBA/USERID table. SAP Ariba Supplier Information to SAP Ariba uses the Business Partner/MDG ID as the Login ID while sending the supplier information and Performance Management. When SAP Ariba Supplier Information and Performance Management to SAP Ariba Supplier Information and Performance Management to SAP Ariba Supplier Information and Performance Management. When SAP Ariba Supplier Information and Performance Management. SAP Ariba updates the Login ID that is being sent from SAP Ariba Supplier Information and Performance Management in the /ARBA/USERID table on the SAP ERP system.

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Related Information

Maintaining supplier user login IDs on SAP ERP [page 53]

Configuring the integration of SAP Ariba Supplier Information and Performance Management with SAP ERP and MDG

Context

Follow these steps to configure the integration of SAP Ariba Supplier Information and Performance Management with SAP ERP and Master Data Governance (MDG). Ensure that you have the necessary prerequisites.

Procedure

- 1. Set up one of the following connectivity models between SAP ERP and SAP Ariba Supplier Information and Performance Management:
 - Direct Connectivity. To set up direct connectivity, use the SOAMANAGER transaction. For more information see the Configuring direct connectivity [page 99] section.
 - Mediated Connectivity. For more information, see Configuring mediated connectivity [page 106].

i Note

The proxy names for SAP Ariba Supplier Information and Performance Management integration are / ARBA/CO_SI_SOURCING_UPLOAD and /ARBA/CO_SI_SOURCING_DOWNLOAD. You need to configure logical ports for these proxies.

2. i Note

To access the SIPM area menu, go to /n/ARBA/SIPM.

From the SIPM area menu, go to SAP Menu > Configuration Parameter > Direct Connectivity

Parameters and configure the following parameters in the /ARBA/AUTH_PARAM table:

- Solution. The SAP Ariba application that you want to integrate the master data with. For example, SIPM.
- **Realm**. The name of your company as configured in the SAP Ariba application. For example, s4All.
- **Wait**. Number of minutes to wait before SAP ERP attempts to reconnect with the SAP Ariba application. For example, 02.
- 3. From the SIPM area menu, go to SAP Menu Configuration Parameter Define Parameters and maintain the following variables in the /ARBA/TVARV table:

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SAP S/4HANA Integrating Supplier Information and Performance Management with SAP ERP and

- /ARBA/SIPM_IN_TEST. The location to which you want to save the inbound files when you use the Test Run option.
- /ARBA/SIPM_IN_DC. The location to which you want to save the inbound files when you use direct or mediated connectivity.
- /ARBA/SIPM_BPROLE. The value of the BPROLE that you have configured to connect SAP Ariba Supplier Information and Performance Management and MDG.
- /ARBA/SIPM_ACCGRP. The account group that you have maintained for the BPROLE. Specify an internally-generated number for account group.
- /ARBA/SIPM_OUT_TEST. The location to which you want to save the outbound files when you use the **Test Run** option in the Incremental mode.
- /ARBA/SIPM_OUT_DC. The location to which you want to save the outbound files when you use direct or mediated connectivity.
- 4. Go to SAP Menu Configuration Parameter Define SAP to Sourcing (SIPM) Field and maintain the mappings for solution SIPM in the /ARBA/FIELD MAP table.

This table contains the field mapping between SAP ERP and SAP Ariba Supplier Information and Performance Management under solution SIPM.

If you want to customize any of the fields, you must make the necessary changes to the corresponding entries in this table.

If you want to add new fields, add an entry under the corresponding structure.

- 5. (Required only for Full Load) Set the PacketSize parameter. The number of records that SAP ERP imports at a time depends on the value configured for the PacketSize parameter in MDG. If PacketSize is set to 1000, only 1000 records are exported or imported in one batch. For more information about setting the PacketSize parameter, see *Configuring Master Data Governance for Supplier*.
- 6. From the SIPM area menu, go to SAP Menu Configuration Parameter Define Value Mapping and maintain the mappings for region code and language in the /ARBA/VALUE_MAP table.

SAP Ariba Supplier Information and Performance Management uses expanded forms for province names and languages, whereas SAP ERP uses custom codes. You need to maintain a mapping between the names in SAP Ariba Supplier Information and Performance Management and the corresponding values in SAP ERP. A typical entry in /ARBA/VALUE MAP contains the following values:

- Integration Field
- Internal Value (SAP)
- External Value (Ariba)
- Country

i Note

While specifying the Region in the /ARBA/VALUE_MAP table on your SAP ERP, ensure that the case you maintain for the region is the same case you maintain on the SAP Ariba Supplier Information and Performance Management system to avoid errors during import and export of supplier data.

- 7. Configure implicit enhancements in SAP ERP. For more information see Configuring implicit enhancement for the integration of SAP Ariba Supplier Information and Performance Management with SAP ERP [page 52].
- 8. (Optional) If you want to maintain unique login IDs for users, you must ensure that you maintain the Login ID for each user in the /ARBA/USERID table before you import supplier master data from SAP Ariba Supplier Information and Performance Management to SAP ERP.

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Activating the replication model

Context

When you install the transports, the /ARBA/SIPM replication model is imported to SAP ERP. However, you must activate the replication model /ARBA/SIPM before you can use it for any configuration.

Procedure

1. Go to transaction code DRFIMG.

The **Display IMG** screen appears.

- 2. Expand Define Custom Settings for Data Replication and click Define Replication Models. The Change View "Define Replication Model" : Overview screen appears.
- 3. From the **Define Replication Model** table in the right panel, select /ARBA/SIPM.
- 4. Click Activate.

The **Active** check box that corresponds to the replication mode /ARBA/SIPM is selected.

Configuring implicit enhancement for the integration of SAP Ariba Supplier Information and Performance Management with SAP ERP

Context

To enable the integration between SAP Ariba Supplier Information and Performance Management and SAP ERP, you must configure an implicit enhancement in SAP ERP.

Procedure

- 1. In your SAP ERP system, navigate to transaction code **SE37 MDG_BS_BP_OUTBOUND_DRF** and click **Display**.
- 2. Click **Enhance** in the application toolbar.
- Click Edit > Enhancement Operations > Show Implicit Enhancement Options to display a line after the FUNCTION mdg_bs_bp_outbound_drf form.
- 4. Right-click the line and select **Enhancement Implementation > Create**.
- 5. Click **Code** on the **Choose Type of Enhancement** popup to display **Select or Create Enhancement Implementation**.

- 6. Click Create Enhancement Implementation.
- 7. Enter a name and description for the enhancement and press Enter.
- 8. In the package popup, specify your Z or Y package, press Enter, and save the package to a transport request.
- 9. Copy the following code:

```
DATA :

go_proxy TYPE REF TO /arba/cl_mdg_supplier.

CREATE OBJECT go_proxy.

CALL METHOD go_proxy->UPDATE_DELTA_TABLE

EXPORTING

ET LS BP = ct bp.
```

- 10. Paste the copied code into the Enhancement Implementation.
- 11. Activate the enhancement and save it.

Defining the business system for SAP Ariba Supplier Information and Performance Management

Procedure

- 1. Select **Business System** from the main SLD page to open the Business System page.
- 2. Click New Business System here to open the Business System Wizard.
- 3. In the Wizard, select **Third-Party** as the technical system type to associate the business system with, and then click **Next**.
- 4. Select the technical system, for example, TS ASN, created from the **System** field, and then click **Next**.

i Note

The Logical System Name is not required.

- 5. Enter the business system name, ARIBA SIPM, in the Name field, and click Next.
- 6. Specify the installed products. Make sure that the product ASN, NW04.1 and the related component ARIBA_SUPPLIER_CONN_ADAPTER, CIX of ariba.com, installed on the technical system, are selected, and then click **Next**.
- 7. Click Finish.

Maintaining supplier user login IDs on SAP ERP

Context

You can choose to maintain unique login ID for users. To do so, maintain the Login ID for users in the /ARBA/ USERID table. Configuration guide for sourcing, contracts, and supplier data integration with SAP ERP and SAP S/4HANA Integrating Supplier Information and Performance Management with SAP ERP and MDG

Procedure

- 1. Run the transaction code SM30.
- 2. Choose table view /ARBA/USERID.
- 3. Click New Entries. The New Entries: Overview of Added Entries page appears.
- 4. Enter the Business Partner/MDG ID of the contact person in the SAP MDG ID column.
- 5. Enter a corresponding Login ID in the Ariba Userid column. Add an entry for each user.
- 6. Save the changes.

Exporting and importing supplier master data

After you set up connectivity between SAP ERP and SAP Ariba Supplier Information and Performance Management, you can export or import supplier master data. Always check the status of the export event before you initiate an import event.

i Note

To be able to integrate supplier and user data with SAP Ariba Supplier Information and Performance Management, the data that you export must contain the following information:

- Email address and telephone number for users.
- Telephone number for suppliers.

The following sections contains instructions for exporting and importing supplier master data:

Related Information

About the integration of SAP Ariba Supplier Information and Performance Management with SAP ERP and MDG [page 42] Configuring the integration of SAP Ariba Supplier Information and Performance Management with SAP ERP and MDG [page 50] Checking the status of supplier master data export [page 59]

Exporting supplier master data in the full load mode

Prerequisites

Ensure that you have configured the integration of SAP Ariba Supplier Information and Performance Management with SAP ERP.

Context

You can use the full load option when you export the supplier data from SAP ERP to SAP Ariba Supplier Information and Performance Management for the first time.

Procedure

1. Run the transaction code DRFOUT.

The Execute Data Replication screen appears.

- 2. Specify Replication Model as /ARBA/SIPM.
- 3. Specify **Outbound Implementation** as /ARBA/SIPM.
- 4. In Replication Mode, select Manual.
- 5. To specify filters based on which you want to export supplier master data, click **Manual Replication Filter Criteria**.

The Manual Replication Filter Criteria screen appears.

6. In the **Manual Replication Filter Criteria** screen, specify the filtering criteria based on which you want to export supplier master data.

For example, to export only master data that map to vendor numbers 5000 to 6000, click **Vendor** from the left-side pane and enter 5000 to 6000 in the range fields that correspond to the **Vendor** entry in the right-side pane.

7. Save the filter criteria.

The Execute Data Replication page appears.

8. Click the Execute button.

The supplier master data execution begins.

Exporting supplier master data in the incremental load mode

Prerequisites

Ensure that you have configured the integration of SAP Ariba Supplier Information and Performance Management with SAP ERP.

Context

You can use the incremental load option to export supplier master data from SAP ERP to SAP Ariba Supplier Information and Performance Management. The incremental load option updates only those records that have Configuration guide for sourcing, contracts, and supplier data integration with SAP ERP and SAP S/4HANA been updated since the last supplier master data integration event. You can schedule this event to run at regular intervals.

Procedure

1. Go to transaction code /n/ARBA/SIPM OUT.

The Program for Incremental Load - SAP Outbound screen appears.

- 2. Select one of the following options:
 - **Test Run**. Select this option to download the CSV files to a local storage. If you select this option, the CSV files are downloaded to the location specified for /ARBA/SIPM_OUT_TEST in the /ARBA/TVARV table.
 - **Upload from SAP to SIPM**. Select this option to import the supplier master data from SAP ERP to SAP Ariba Supplier Information and Performance Management. If you select this option, the CSV files are downloaded to the location specified for /ARBA/SIPM OUT DC in the /ARBA/TVARV table.
- 3. Click the **Execute** button.

Supplier master data import from SAP ERP to SAP Ariba Supplier Information and Performance Management begins.

Importing supplier master data

Prerequisites

- Ensure that you have configured the integration of SAP Ariba Supplier Information and Performance Management with SAP ERP.
- You must mark the supplier records as integrated before you can import those records from SAP Ariba Supplier Information and Performance Management to SAP ERP.

➡ Tip

Before you import supplier master data from SAP Ariba Supplier Information and Performance Management to SAP ERP for the first time, mark all the supplier records in SAP Ariba Supplier Information and Performance Management as integrated.

Context

You can import supplier master data from SAP Ariba Supplier Information and Performance Management to SAP ERP. Only the incremental load mode is supported for the import of supplier master data. You can schedule this transaction to run at regular intervals.

Procedure

1. Run the transaction code $/n/ARBA/SIPM_IN$.

The Program for Incremental Load - SAP Inbound page appears.

- 2. Select one of the following options:
 - **Test Run**. Select this option to download the CSV files to a local storage. If you select this option, the CSV files are downloaded to the location specified for /ARBA/SIPM IN TEST in the /ARBA/TVARV table.
 - **Download from SIPM**. Select this option to import the supplier master data from SAP Ariba Supplier Information and Performance Management to SAP ERP. If you select this option, the CSV files are downloaded to the location specified for /ARBA/SIPM IN DC in the /ARBA/TVARV table.
- 3. Click the **Execute** icon.

Supplier master data import from SAP Ariba Supplier Information and Performance Management to SAP ERP begins.

Implementing BAdIs to modify structures

The BAdls /ARBA/SUPPLIER_SIPM_IN and /ARBA/SIPM_OUTBOUND enable you to modify the structures and to map additional supplier information.

- To enhance the Supplier.CSV and Contacts.CSV structures, implement /ARBA/SIPM_OUTBOUND.
 - You can use the following code to modify the Supplier.CSV structure:

```
** Enhancement to change Suppliers.CSV structure
    GET BADI go_badi_out.
    IF go_badi_out IS BOUND.
    CALL BADI go_badi_out->create_supplier_csv
        EXPORTING
        et_bupa_msg = lt_proxy_data
        CHANGING
        et_csv_out = gt_csv_out.
    ENDIF.
```

• You can use the following code to modify the Contact_Info (for Users.CSV) structure:

```
** Enhancement to change contacts.csv structure
GET BADI lo_badi_out.
IF lo_badi_out IS BOUND.
CALL BADI lo_badi_out->create_contacts_csv
EXPORTING
        et_csv_out = lt_csv_out
        et_relshp_msg = et_relshp_msg
CHANGING
        et_csv_out_contact = lt_con_out.
ENDIF.
```

Configuration guide for sourcing, contracts, and supplier data integration with SAP ERP and SAP S/4HANA

i Note

To map contact person workplace address information in SAP S/4HANA 1610, add the following code in the method CREATE_CONTACTS_CSV of the BAdl /ARBA/SUPPLIER_SIPM_OUT:

- To modify the error and ID number structures and to map additional suppliers, implement /ARBA/ SUPPLIER SIPM IN.
 - You can use the following code to modify the error and ID number structures:

```
*Enhancement to change error and id number structures.
GET BADI go_badi.
IF go_badi IS BOUND.
CALL BADI go_badi->call_proxy_in
EXPORTING
it_vendor = gt_vendor
it_contact = gt_contact
CHANGING
et_error = gt_error
et_idnumbers = gt_idnumbers.
ENDIF.
```

• You can use the following code to map additional contact information:

```
*Enhancement to map additional contact information
IF go_badi IS BOUND.
CALL BADI go_badi->map_contactpersons_to_proxy
EXPORTING
    it_contact = it_contact
    it_vendor = it_vendor
    CHANGING
    ct_business_partner_suiterepli = lt_business_partner_suiterepli.
ENDIF.
```

• You can use the following code to map additional supplier information:

Checking the status of supplier master data export

Prerequisites

Ensure that you have configured the integration of SAP Ariba Supplier Information and Performance Management with SAP ERP.

Context

You can retrieve the status of supplier master data export from SAP ERP to SAP Ariba Supplier Information and Performance Management. You can schedule this transaction to run at regular intervals between supplier master data export events.

Procedure

1. Run the transaction code /n/ARBA/SIPM CONF.

The SIPM Outbound Confirmation page appears.

- 2. Select one of the following options:
 - **Test Run**. Select this option to download the CSV files that contain the export status to a local storage. If you select this option, the CSV files are downloaded to the location specified for /ARBA/SIPM_OUT_TEST in the /ARBA/TVARV table.
 - **Call Confirmation In**. Select this option to import the CSV files that contain the export status to SAP ERP. If you select this option, the CSV files are downloaded to the location specified for /ARBA/SIPM_OUT_DC in the /ARBA/TVARV table.
- 3. Click the **Execute** button.

Related Information

Viewing error logs [page 60]

Viewing vendor ID and business partner mappings

Context

After getting the success confirmation from the SAP ERP and SAP Ariba Supplier Information and Performance Management, customers can view the mapping for the vendor ID and business partner using the transaction Code MDG_ANALYSE_IDM.

Procedure

- 1. Go to TCode MDG_ANALYSE_IDM.
- 2. Choose Business Partner in the **Bus. Obj. Type** field.
- 3. Choose 888 in the Object ID Type field.
- 4. Enter the System ID In the ID Value field.

i Note

Enter the System ID that you have for the vendor on the SAP Ariba Supplier Information and Performance Management.

5. View the mapping for the vendor ID and business partner.

Viewing error logs

Context

You can view the application errors that might occur during the integration of SAP Ariba Supplier Information and Performance Management with SAP ERP from the SAP ERP application log.

Procedure

1. Run the transaction code SLG1.

The Analyse Application Log screen appears.

- 2. In the Object field, enter /ARIBA/SIPM.
- 3. In the Subobject field, enter /ARIBA/SUB_SIPM.
- 4. Specify the filters.

5. Click Execute.

The **Display Logs** screen lists the logs associated with the SAP Ariba Supplier Information and Performance Management integration with SAP ERP.

MDG business functions for supplier master data integration

Before you set the master data integration between SAP Ariba Supplier Information and Performance Management and SAP ERP, you must activate the following business functions:

i Note

For instructions to activate business functions, see the *Configuring Master Data Governance for Supplier* guide on the SAP Help portal.

SAP ERP 6.0 EhP 6 and EhP 7 with MDG license

Activate the following business functions:

- MDG_FOUNDATION
- CA_BP_SOA
- CA_SUPPLIER_SOA

SAP ERP 6.0 EhP 6 and EhP 7 without MDG license

- Create a custom business function to activate the following switches:
 - MDG_BS_CA_MDGAF_UI_SFWS_06
 - MDG_BS_CA_UI_SFWS_06
 - MDG_DATALOAD_SFWS_01
 - MDG_DRF_MAIN_05
 - MDG_DRF_MAIN_UI_05
 - MDG_DRF_SFWS_06
 - MDG_DRF_UI_SFWS_06
 - MDG_KEY_MAPPING_05
 - MDG_KEY_MAPPING_UI_05
 - MDG_VALUE_MAPPING_05
 - MDG_VALUE_MAPPING_UI_05
- Activate the following business functions:
 - CA_BP_SOA

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Integrating Supplier Information and Performance Management with SAP ERP and MDG

• CA_SUPPLIER_SOA

Integrating SAP Ariba Supplier Lifecycle and Performance with SAP ERP

This chapter contains the following topics:

In this section:

About SAP Ariba Supplier Lifecycle and Performance integration with SAP ERP and Master Data Governance [page 63]

Integration workflow [page 65]

- MDG business functions for SAP Ariba Supplier Lifecycle and Performance integration [page 66]
- How to define a replication model for supplier data integration [page 67]
- Installing and configuring SAP Ariba Supplier Lifecycle and Performance integration with SAP ERP [page 68]
- Customizing supplier master data integration [page 83]
- How to set up supplier data synchronization [page 87]
- How to replicate Business Partner master data from SAP Ariba Supplier Lifecycle and Performance [page 88]

How to monitor errors in SAP ERP [page 89]

About SAP Ariba Supplier Lifecycle and Performance integration with SAP ERP and Master Data Governance

Buyers using SAP Ariba Supplier Lifecycle and Performance can now integrate Business Partner master data between SAP Ariba Supplier Lifecycle and Performance and SAP ERP and Master Data Governance (MDG).

The integration between SAP Ariba Supplier Lifecycle and Performance and SAP ERP and MDG is bidirectional and enables you to replicate vendor master data as business partners in SAP ERP and SAP Ariba Supplier Lifecycle and Performance application.

The outbound integration from SAP ERP to SAP Ariba Supplier Lifecycle and Performance is achieved through business partner interfaces provided by MDG and standard SAP programs such as Data Replication Framework (DRF) programs. You can use the DRFOUT transaction code for initial replication of business partners from SAP ERP to SAP Ariba Supplier Lifecycle and Performance.

The inbound integration from SAP Ariba Supplier Lifecycle and Performance to SAP ERP and MDG is achieved through a polling client, /ARBA/SM_BUSINESS_PARTNER_PULL, that runs on SAP ERP. You can specify the polling frequency and configure the polling client to poll SAP Ariba Supplier Lifecycle and Performance at regular intervals for business partner master data or confirmation messages for the business partners exported from SAP ERP.

Alternatively, you can manually trigger the poll by executing the /ARBA/SM_BUSINESS_PARTNER_PULL program from the SAP ERP user interface. When you execute this program, you can choose one or more of the following options:

- Business Partner Bulk Replicate Request
- Business Partner Bulk Replicate Confirmation
- Business Partner Relationship Bulk Replicate Request
- Business Partner Relationship Bulk Replicate Confirmation

i Note

SAP Ariba Supplier Lifecycle and Performance does not currently support Business Partner Relationship Bulk Replicate Request and Business Partner Relationship Bulk Replicate Confirmation.

➡ Tip

Create a scheduled job to run the polling client and data replication at regular intervals. You can use the sm36 transaction code to schedule the program to run at regular intervals.

For every successful poll, SAP Ariba Supplier Lifecycle and Performance 2.0 includes the sequence number of the message in the response. The polling client updates the sequence number in the /ARBA/SM_SEQNUM table when a poll is successfully completed. In case of an error, an error log is created in SLG1. For subsequent polls, the polling client includes the sequence number of the last successful poll, which is stored in /ARBA/SM_SEQNUM.

When a polling request goes without a sequence number, SAP Ariba Supplier Lifecycle and Performance identifies it as a first time request and sends the business partner records starting from the first record. The number of records that SAP Ariba Supplier Lifecycle and Performance sends in response to a poll request depends on the configuration in the SAP Ariba Supplier Lifecycle and Performance application for the maximum number of records to include in a response. Currently, this is set to 10 records.

If there are more than the configured number of records to replicate, SAP Ariba Supplier Lifecycle and Performance sends the remaining records as responses to subsequent polls until there are no new records to replicate. SAP ERP continues to use the same sequence number in the polls until SAP Ariba Supplier Lifecycle and Performance sends a new record and updates the sequence number.

SAP ERP and MDG integration with SAP Ariba Supplier Lifecycle and Performance 2.0 uses SOAP messages for requesting and receiving data from SAP Ariba Supplier Lifecycle and Performance. SAP Ariba Supplier Lifecycle and Performance uses MDG business partner interface structure to store supplier master data. However, SAP Ariba Supplier Lifecycle and Performance integration with SAP ERP supports extension of the business partner data structure to enable you to use custom fields to address your specific requirements. For more information about extensions and customizations, see Customizing supplier master data integration [page 83].

You can use the Direct Connectivity or Mediated Connectivity integration method to integrate SAP Ariba Supplier Lifecycle and Performance with SAP ERP.

i Note

SAP Ariba Supplier Lifecycle and Performance uses a new supplier database, which is different from the supplier databases that SAP Ariba Sourcing, SAP Ariba Contracts, and the previous version of SAP Ariba Supplier Information and Performance Management (classic functionality) use. When you configure integration with SAP Ariba Supplier Lifecycle and Performance, the new supplier database replaces your existing supplier database. The SAP ERP integration discussed in this chapter applies to SAP Ariba supplier management

solutions including SAP Ariba Supplier Lifecycle and Performance, new version of SAP Ariba Supplier Information and Performance Management (extended functionality), and SAP Ariba Supplier Risk.

Prerequisites

- Ensure that your system meets the following minimum software requirements:
 - SAP ERP 6.0 EHP6 SP1
 - SAP Business Services Foundation 731
- Install the latest SAP Ariba Supplier Lifecycle and Performance transports. If you want to implement this feature over the Mediated Connectivity integration method, import the latest TPZ files. For more information, see How to import the Ariba components [page 68].

Enabling this feature

This feature is enabled for all customers. For more information on installing and configuring this feature, see Integration workflow [page 65].

Integration workflow

The following high-level steps describe the workflow for setting up integration between SAP Ariba Supplier Lifecycle and Performance and SAP ERP:

- 1. If you have not done so already, configure MDG or DRF integration for suppliers. For more information, see the Configuring Master Data Governance for Suppliers or XX on the SAP Help portal. For outbound integration, complete the following tasks:
 - Enable the business functions listed in the topic MDG business functions for SAP Ariba Supplier Lifecycle and Performance integration [page 66].
 - Set up the Customer-Vendor integration, define a replication model [page 67] and assign a target system or replication model or outbound implementation.

(SAP ERP)

- 2. Import the latest SAP Ariba Supplier Lifecycle and Performance transports into SAP ERP [page 68]. (SAP ERP)
- 3. Maintain table entries for SAP Ariba Supplier Lifecycle and Performance in the /ARBA/SM_SEQNUM table [page 69] (SAP ERP)
- 4. Set up the SAP ERP system credentials in SAP Ariba Supplier Lifecycle and Performance [page 82]. (SAP Ariba Supplier Lifecycle and Performance)
- 5. Configure Direct Connectivity [page 70] or Mediated Connectivity [page 74] integration method. (SAP ERP)

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- Replicate Business Partner master data from SAP Ariba Supplier Lifecycle and Performance [page 88]. (SAP ERP)
- 7. Set any default values for supplier fields that you want to send to SAP ERP during supplier synchronization. At minimum, you must set vendor.vendorInfoExt.categoryCode to 2 so that SAP ERP recognizes the data sent from SAP Ariba Supplier Lifecycle and Performance as supplier data. You must also set default values for any required fields that aren't included in, and mapped from, required questions on forms and questionnaires, so that those fields will include data during initial synchronization. For more information, see theSAP Ariba Supplier Lifecycle and Performance)
- 8. Specify how and when suppliers created in SAP Ariba Supplier Lifecycle and Performance [page 87] are first synchronized to SAP ERP.

MDG business functions for SAP Ariba Supplier Lifecycle and Performance integration

For the outbound integration between SAP ERP and SAP Ariba Supplier Lifecycle and Performance, you must activate the following business functions:

i Note

You do not require MDG license to activate these business functions.

- CA_BP_SOA
- CA_SUPPLIER_SOA
- DRF_FOUNDATION

i Note

DRF_FOUNDATION is activated only in SAP_BS_FOUNDATION 748 and later. If you are running a lower version of SAP_BS_FOUNDATION, you can use the transaction code SFW2 to define a custom business function named z_DRF_FOUNDATION with the following switches:

- MDG_BS_CA_MDGAF_UI_SFWS_06
- MDG_BS_CA_UI_SFWS_06
- MDG_DATALOAD_SFWS_01
- MDG_DRF_MAIN_05
- MDG_DRF_MAIN_UI_05
- MDG_DRF_SFWS_06
- MDG_DRF_SFWS_07
- MDG_DRF_UI_SFWS_06
- MDG_KEY_MAPPING_05
- MDG_KEY_MAPPING_UI_05
- MDG_VALUE_MAPPING_05
- MDG_VALUE_MAPPING_UI_05

i Note

MDG_DRF_SFWS_07 is not included in versions lower than SAP ERP 6.0 EHP7 and is optional. If you have SAP ERP 6.0 EHP6, the switch is not installed and you can ignore it.

If you have an MDG license and have the CA_BP_SOA, CA_SUPPLIER_SOA, and MDG_FOUNDATION business functions activated, ensure that you also define and activate the DRF_FOUNDATION business function, which contains the following additional switches that MDG_FOUNDATION does not contain:

- MDG_BS_CA_MDGAF_UI_SFWS_06
- MDG_BS_CA_UI_SFWS_06
- MDG_DRF_SFWS_06
- MDG_DRF_SFWS_07
- MDG_DRF_UI_SFWS_06

How to define a replication model for supplier data integration

Context

For the outbound integration between SAP ERP and SAP Ariba supplier management solutions to work, you must configure the data replication settings.

Procedure

- 1. Run the transaction code DRFIMG from the SAP ERP user interface. The **Display IMG** window appears.
- Click Data Replication Define Custom Settings for Data Replication Define Technical Settings
 Define Technical Settings for Business Systems
 The Change View "Define Business Systems": Overview window appears.
- 3. To define a new business system and to maintain the logical system for the receiving systems, click **New Entries**.
- 4. In the **New Entries: Overview of Added Entries** window, specify a business system, for example **ABC_123**, and a logical system, **ABCCLIENT123**.
- 5. Click **Save** and go back to the **Display IMG** window.
- To define a replication model, click Data Replication Define Custom Settings for Data Replication Define Replication Models .

The Change View "Define Replication Model": Overview window appears.

- 7. Click **New Entries** to enter a name for the replication model and add a description.
- 8. Select the line that contains the newly-added replication model and click **Assign Outbound Implementation**. Create a new entry and enter the following values using the input help:

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Integrating SAP Ariba Supplier Lifecycle and Performance with SAP ERP

- Outbound Implementation: 986_3 Outbound Impl. for BP/REL via Services
- Communication Channel: Replication via Services
- Filter time: Filter After Change Analysis
- 9. Mark the line and choose **Assign Target Systems for Repl. Model /Outb.Impl**. Create a new entry and enter the business system name for the receiving system that you created.
- 10. Click Assign Outbound Parameter. Create a new entry, enter the following values, and save.
 - Outb. Parameter: PACK_SIZE_BULK
 - Outb. Parameter value: For example, 100
- 11. Go back to the Define Replication Model view. Optionally, you can also add an expiration time for the log.
- 12. Save the replication model.
- 13. Select the newly-created replication model, and click Activate.

For more information, click the **IMG activity documentation** icon on the left side of **Data Replication Define Custom Settings for Data Replication Define Replication Models** in the **Display IMG** window.

Installing and configuring SAP Ariba Supplier Lifecycle and Performance integration with SAP ERP

This section contains the following topics:

In this section:

How to import the Ariba components [page 68]

How to maintain table entries [page 69]

Configuring integration methods [page 70]

How to set up SAP ERP credentials in SAP Ariba [page 82]

How to import the Ariba components

Context

You must download the latest version of the SAP Ariba Supplier Lifecycle and Performance transports to implement the integration between SAP Ariba Supplier Lifecycle and Performance and SAP ERP. To implement Mediated Connectivity, you must download the latest .TPZ files.

Procedure

- 1. Go to https://support.ariba.com/Connect/Log_In and log in using your user ID and password. If you do not have a User ID and Password for SAP Ariba Connect, contact your SAP Ariba account executive.
- 2. On the Home page, click Product Information and Documentation.
- 3. Click Cloud Integration in the Product Information section and then click Resources.

The Cloud Integration Resources page appears.

- 4. Click the Integration tools for Ariba Supplier Management link.
- 5. On the **Resources** tab, click **ABAP Transports for SAP ERP**. If the list does not contain this entry, contact your SAP Ariba account executive.

The Sourcing SAP Transports page appears.

- 6. Click **Download** and save the Ariba_Supplier_Management_V_CI_x.zip package.
- 7. Extract the contents of the ZIP file and import the transports to SAP ERP.
- If you want to implement the feature over Mediated Connectivity, go back to the Integration Tools for Ariba Supplier Lifecycle and Performance page and click SAP NetWeaver PI Mapping from the Resources tab. The Ariba Supplier Lifecycle and Performance SAP NetWeaver PI Mapping page appears.
- 9. Click **Download** and save the Ariba_Supplier _Management_SAP_Netweaver_Repositor_CIx.zip package.
- 10. Extract and import the relevant TPZ files into the SAP Process Integration.

How to maintain table entries

You can use the sm30 transaction code to access tables. To maintain a table, enter the name of the table in the **Table/View** field of the **Maintain Table Views: Initial Screen**, and click **Maintain**.

For the SAP ERP integration with SAP Ariba Supplier Lifecycle and Performance 2.0 to work, you must maintain the following entries in the /ARBA/SM_SEQNUM table:

Parameter	Description	Example/Value
Service Name	Name of the Supplier Management import service.	BP_REPLICATE_CONFIRM BP_REPLICATE_REQUEST BP_RELATNSHP_CONFIRM BP_RELATNSHP_REQUEST
		i Note SAP Ariba Supplier Lifecycle and Per- formance currently does not support BP_RELATNSHP_CONFIRM and BP_RELATNSHP_REQUEST serv- ices.

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Parameter	Description	Example/Value
Logical Port	The logical port that you configure in	For example, Polling_Client
	i Note If you are using Mediated Connectiv- ity integration method, leave this pa- rameter blank.	i Note If you are using Mediated Connectiv- ity integration method, leave this pa- rameter blank.
Sequence Number	The sequence number for the last successful import for the given service.	You can leave this blank. When this pa- rameter is left blank, SAP Ariba Supplier Lifecycle and Performance identifies the request as a first time request and sends records starting with the first record to the maximum number of records as con- figured to send in one batch.
		The sequence number received from SAP Ariba Supplier Lifecycle and Per- formance replaces the value for this pa- rameter and is included in the next re- quest.
		If the request contains a sequence num- ber, SAP Ariba Supplier Manage- mentsends the records since the last re- cord as indicated by the sequence num- ber.

Configuring integration methods

This section contains the following topics:

In this section:

How to configure direct connectivity [page 70] How to configure mediated connectivity [page 74]

How to configure direct connectivity

You can configure direct connectivity between SAP ERP and SAP Ariba Supplier Management 2.0. You can use the SOAMANAGER [page 71] transaction to configure direct connectivity.

Prerequisites

- Install the latest SAP Ariba Sourcing transports. For more information, see How to import the Ariba components [page 68].
- Maintain the entries in the /ARBA/SM SEQNUM table. For more information, see How to maintain table entries [page 69].
- Specify the system ID of SAP ERP and the shared secret password as explained in How to set up SAP ERP credentials in SAP Ariba [page 82].

i Note

Only the password is required for shared secret based authentication for SAP Ariba Supplier Management integration with SAP ERP.

 Configure the Web Service Runtime for SAP ERP on Client 000 and the actual business system client. For more information, see Configuring the Web Service Runtime on the SAP Help portal.

How to configure SOAMANAGER

Context

You can use the SOAMANAGER configuration to set up Direct Connectivity for integrating SAP Ariba supplier management solutions with SAP ERP. This topic explains the SOAMANAGER configuration for the polling client.

To set up SOAMANAGER configuration for the outbound services, repeat these steps with the proxy name and URL access path that correspond to the DRFOUT and confirmation out services.

Procedure

- 1. Go to transaction code SOAMANAGER.
- 2. In the Service Administration tab, click **Web Service Configuration**.
- 3. Specify the following Search Criteria:
 - In the Search By pull-down list, select Consumer Proxy.
 - Select **Contains** from the options.
 - Enter the first few characters of the proxy name that you want to search for and click **Search**.

The name of the proxy for the inbound integration is /ARBA/CO_POLLING_CLIENT_REQRES.

The list of proxies that match the specified criteria appears.

4. From the list of proxies, click /ARBA/CO POLLING CLIENT REQRES.

The **Details of Consumer Proxy:<proxy name>** page appears.

- 5. From the Configuration tab, click Create Logical Port. and select Manual Configuration.
- 6. Under General Configuration, specify the following:

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- Logical Port name.
- Description
- Check the Logical Port is Default check box.
- 7. Click Next.

The New Manual Configuration of Logical Port for Consumer Proxy <proxy name> page appears.

8. From the **Authentication Settings**, select Shared Secret-based authentication, select **User ID/Password**, and enter the User ID and the Password in the corresponding fields that appear.

i Note

User ID is the name of the sourcing realm and the password is the shared secret that you configured in the SAP Ariba application.

9. Click Next.

The Transport Bindings page appears.

10. In the Transport Bindings page, specify the following:

- URL Access Path:
 - /SM/soap/PollingService for the polling client (inbound integration).
- **Computer Name of Access URL**: Specify the path to your SAP Ariba application. For example, sl.ariba.com.
- Port Number of Access URL: 443
- URL Protocol Information: HTTPS
- 11. Click Next.
 - The Reliable Messaging (Asynchr.) page appears.
- 12. In the Reliable Messaging (Asynchr.) page, specify the following:
 - **RM Protocol** to SAP RM.
 - i Note

SAP Ariba Supplier Management solutions integration with SAP ERP does not support ws-rm .

- Message ID Protocol to Suppress ID Transfer.
- 13. Click **Finish** to save the changes.

i Note

When you do a Web Service Ping, you might receive a "Web service ping failed (RC=403). Service Ping ERROR: Forbidden." This is expected behavior and does not indicate any error in the SOAMANAGER configuration.

Next Steps

Repeat the SOAMANAGER configuration for the following proxies:

• CO MDG BP RPLCTRQ for outbound integrations from SAP ERP.
• CO_MDG_BP_RPLCTCO for outbound confirmations from SAP ERP.

Except for the URL access path, the configuration remains the same as that for /ARBA/ CO POLLING CLIENT REQRES.

- For CO MDG BP RPLCTRQ, the URL access path is /SM/soap/BPIntegrationServiceIn.
- For CO_MDG_BP_RPLCTCO, the URL access path is /SM/soap/BPIntegrationServiceInConf.

How to install the SSL server certificate

Context

To enable HTTPS connection between SAP Aribaand SAP ERP, install SSL server certificate.

Procedure

- 1. Open your browser in Internet Explorer or Google Chrome and download the SSL certificate for the URL that you have configured in SOAMANAGER.
- 2. Click the Secure Lock indicator on the address bar and then click the **Connection** tab.
- 3. Click the **Certificate information** link to download the certificates. The Certificate dialog box appears.
- 4. Click the Details tab and then click **Copy to File**. The Certificate Export Wizard appears.
- Follow the steps in the Certificate Export Wizard. Ensure that you select the DER encoded binary X.509 (.CER) option. This option is selected by default.
- 6. Specify the path where you want to store the certificates. Click **Finish**.
- 7. On your ERP system, go to STRUST and click SSL Client SSL Client(Anonymous).
- 8. Click the Import Certificates button and then choose the path where you exported the certificates.
- 9. Click Allow and then Continue to download the certificates.
- 10. Click Add to Certificate List.

You will see a message that you have added the certificates successfully.

i Note

Ensure that you save the newly added certificates. This notifies the ICM about the new certificates you have just imported.

- 11. After you have saved the entries in the STRUST, go to the Tcode ${\tt SMICM}.$
- 12. On the Administration menu, click ICM > Exit Soft and then Global.
- 13. In the Internet Communication Manager dialog box, Do you really want to restart all ICM processes in the system?, click Yes.
- 14. On the Administration menu, click ICM > Exit Hard and then Global. Restart the services for the Exit Global.

- 15. In the Internet Communication Manager dialog box, Do you really want to restart all ICM processes in the system?, click Yes.
- 16. Test your connection using SOAMANAGER.
- 17. On the Search tab, select Consumer Proxy in the Search By pull-down list.
- 18. Enter first few characters of the proxy name in the **Search Pattern** text box and select **Both Names** in the Field pull-down list.
- 19. From the list of results, select one or more of the following proxies:
 - /ARBA/CO_POLLING_CLIENT_REQRES for the polling client.
 - CO_MDG_BP_RPLCTRQ for DRFOUT.
 - CO_MDG_BP_RPLCTCO for confirmation out.
- 20.0n the Configurations tab, click **Ping Web Service**.
 - In case you see an ICM_HTTP_SSL_ERROR, verify that the SSL certificate is valid and the configuration is correct.
 - If the connection is successful, you see a message saying the connection is successful.

How to configure mediated connectivity

i Note

The integration scenario [page 75] configuration explained in this section is specific to the polling client-based inbound integration from SAP Ariba Supplier Lifecycle and Performance to SAP ERP. SAP Ariba does not provide an out-of-the-box integration option for outbound integration and confirmation out from SAP ERP to SAP Ariba Supplier Lifecycle and Performance. You might want to create custom configuration scenarios [page 78] for the outbound integration and confirmation out.

This section contains the following topics:

In this section:

Requirements for mediated connectivity [page 74]
How to configure the integration scenario [page 75]
How to configure SSL certificate for mediated connectivity [page 77]
How to configure shared secret authentication for mediated connectivity [page 78]
How to create a configuration scenario [page 78]

Requirements for mediated connectivity

i Note

The mediated connectivity configuration explained in this section is specific to the polling client-based inbound integration between SAP Ariba Supplier Lifecycle and Performance and SAP ERP. SAP Ariba does not provide

an out-of-the-box integration option for outbound integration or confirmation out. For the outbound integration and confirmation out services, you can create custom configuration scenarios [page 78].

- Install the latest SAP Ariba Supplier Lifecycle and Performance transports and TPZ file. For more information, see Installing and configuring SAP Ariba Supplier Lifecycle and Performance integration with SAP ERP [page 68]. You can import the TPZ file XI7_1_ARIBA_SUPPLIER_MANAGEMENT_2.0_of_ariba.com.tpz to the Enterprise Services Repository on SAP Process Integration.
- Configure SSL certificate for HTTPS connection. For more information, see How to configure SSL certificate for mediated connectivity [page 77]
- Configure the Shared Secret password as explained in How to set up SAP ERP credentials in SAP Ariba [page 82].
- Complete the following configuration in the System Landscape Directory (SLD):
 - Ensure that the software component ARIBA_SUPPLIER_MANAGEMENT 2.0 of ariba.com is available in the System Landscape Directory (SLD). You need to import the CIM file from AribaSupplierManagement2.0.SoftwareCatalog.zip.
 - (For SAP ERP) Download and configure the SAP_BS_FOUNDATION version that corresponds to the SAP BS Foundation version that you run as a dependent component of ARIBA_SUPPLIER_MANAGEMENT 2.0 of ariba.com.
 (For SAP S/4HANA) Download and configure s4CORE as a dependent component of ARIBA_SUPPLIER_MANAGEMENT 2.0 of ariba.com.
 You can use the **Define Prerequisite Software Component Versions** button on the **Dependencies** tab of the ARIBA_SUPPLIER_MANAGEMENT 2.0 of ariba.com page to specify the dependent component.
 For more information, see About Configuring the System Landscape Directory in the Integrating SAP Ariba cloud solutions procurement and invoicing data with SAP ERP and SAP S/4HANA.
- Set up the proxy configuration between the SAP ERP and SAP Process Integration to send and receive the proxy request and response messages. For more information, see How to configure the proxy on SAP ERP systems [page 111].
- If you have configured a logical port for the proxy, delete or deactivate the logical port in SOAMANAGER and remove the logical port information from the /ARBA/SM SEQNUM table.

How to configure the integration scenario

Context

i Note

The integration scenario configuration explained in this topic is specific to the inbound integration between SAP Ariba supplier management solutions and SAP ERP. SAP Ariba does not provide an out-of-the-box integration option for outbound integration or confirmation out. You might want to create your own custom dual stack [page 79] or single stack [page 80] configuration scenario for the outbound integration and confirmation out.

Procedure

- 1. From the SAP NetWeaver Process Integration main page, select Integration Directory > Integration Builder, and then log in to the **Configuration: Integration Builder** application.
- 2. In the Integration Builder page, select Tools > Apply Model from ES Repository.
- 3. In the first screen of the Transfer Model from ES Repository wizard > Select ES Repository Model and then click Process Integration Scenario.
- 4. Click the Name field and then click the Display Input Help pull-down menu and then click Input Help.
- 5. Select AR_Supplier_Management from the Select Process Integration Scenario from Enterprise Services Repository screen.
- 6. Click Apply. The Transfer Model from ES Repository wizard appears. The Namespace and the Software Component Version is available in the wizard.
- 7. Click Continue and then click Close. Based on the value you set in the Select Process Integration Scenario from Enterprise Services Repository field, this completes the export or import configuration scenario .
- 8. In the Model Configurator, click the Assign Component button.
- 9. In the Select Component View for Configuration page, select the Business System Components for A2A tab to assign components for your SAP ERP.
- 10. Click the **Insert Line** button ('+') to add a component entry in the table if no component entry line is present.
- 11. Click the row under the Communication Component column, then click the Value List drop down and select Value List ...F4. Select the communication component name, SAP ERP, from the selection list and click Apply.
- 12. Click the **Next Application Component** button (the right arrow) to go to the next screen in the window.
- 13. In the Model Configurator page, choose the Business System Components for A2A tab to assign the communication component for your SAP Ariba solution.
- 14. Click the **Insert Line** button ('+') to add a component entry in the table if no component entry line is present.
- 15. Click the row under the Communication Component column, then click the Value List dropdown and choose Value List ... F4. Choose the communication component name for the business system from the selection list and click Apply.
- 16. Click the Save Settings button to save the changes.
- 17. In the Model Configurator page, click the Configure Connections button. You must assign a Communication Channel to set up the connections.
- 18. In the **Connections from Component Assignment** tab, click the empty **Communication Channel** cell corresponding to the to the business system component value.
- 19. Click the Value List dropdown and select Value List ...F4. Choose the communication component and click Apply.
- 20. Choose the Proxy Sender communication channel from the selection list and click Apply.

i Note

You require the Proxy Sender communication channel only for a single stack Java machine. If you are using a dual stack Java machine, the **Communication Channel** cell must be left blank.

- 21. Click the **New Communication Channel** button (the icon at the top left) on the **Communication Channels** page to start the Create Communication Channel wizard.
- 22. Click **Continue** and in the next page click the **Name** field, then click the **Display Input Help** dropdown list and select Input Help. Select the following Communication Channel Template:

CCT_PollingClient_SOAP_Receiver

- 23. Click Finish. The Model Configurator window appears.
- 24. In the Model Configurator, click the Create Configuration Object button.
- 25. In the Create Configuration Object window, do the following:
 - Click Generation in the General section.
 - Select the **Receiver Determination**, and **Interface Determination** checkboxes in the **Scope of Generation** section.
- 26. Click **Create New** in the **Change List for Generated Objects** section. The text box already contains an object name that you can use or modify.
- 27. Click Start to begin generating objects.
- 28. After the object generation is complete, click **Apply** to save the new configuration settings. Close the log that is created without saving. You can save it, if required.
- 29. Edit the communication channel you created and specify the following settings:
 - **Target URL**:https://<*SAPAribaSMdomain*>/SM/soap/PollingService.
 - **User** name and **Password** for shared secret authentication [page 78]. User name is name of the sourcing realm.

30. Save the changes and activate the configuration scenario along with its associated objects.

How to configure SSL certificate for mediated connectivity

Context

The SSL certificate enables the SAP Process Integration to successfully establish an SSL connection with the SAP Ariba application. To enable HTTPS connection over mediated connectivity, configure the SSL certificate.

Procedure

- 1. To download the SSL certificate from the SAP Ariba application URL, follow these steps.
 - 1. Open your browser in Internet Explorer or Google Chrome, and download the SSL certificate for the URL that you configured in the SOAP communication channel.
 - 2. Click the Secure Lock indicator on the address bar and then, click the Connection tab.
 - 3. Click the Certificate information link to download the certificates. The Certificate dialog box appears.
 - 4. Click the Details tab and then click Copy to File. The Certificate Export Wizard appears.
 - 5. Follow the steps in the **Certificate Export Wizard**. Ensure that you select the **DER encoded binary X.509** (.CER) option. This option is selected by default.
 - 6. Specify the path where you want to store the certificates and click Finish.
- 2. The SSL client certificates that SOAP Adapter uses to connect to the SAP Ariba application must be stored in the SAP Process Integration keystore.
- 3. Go to the SAP Process Integration main page and click NetWeaver Administration Configuration Management .

4. Click Certificate and Keys.

5. Search for the default keystore **TrustedCAs** and Click **Import Entry** button.

i Note

Alternatively, you can add the SSL client certificate to a keystore you created.

- 6. Select X.509 Certificate option from the Select Entry Type drop-down list in the Entry Import window.
- 7. Select file and import.

How to configure shared secret authentication for mediated connectivity

Procedure

- 1. Open the Configuration Integration Builder from the main SAP Process Integration page.
- 2. In the **Objects** tab of the Integration Builder, click **Communication Channel**.
- 3. Click Edit button that corresponds to the Communication Channel, and click Configure User Authentication.
- 4. In the **Target URL** field, specify the URL of the Supplier Management system. For Example:
 - http://<SAP Ariba Supplier Lifecycle and Performance system URL>/SM/soap/ PollingService for inbound integration.
 - http://<SAP Ariba Supplier Lifecycle and Performance system URL>/SM/soap/ BPIntegrationServiceIn for outbound integration.
 - http://<SAP Ariba Supplier Lifecycle and Performance system URL>/SM/soap/ BPIntegrationServiceInConf for confirmation out.
- 5. In the **User** text box, enter the name of the Sourcing realm.
- 6. In the **Password** text box, enter the same shared secret that you specified on the **Integration Toolkit Security** page of the SAP Ariba application.
- 7. Save and activate the communication channel.

How to create a configuration scenario

For outbound integration and the confirmation out service, you need to configure custom configuration scenarios.

This section contains the following topics:

In this section:

How to create a configuration scenario on a dual stack system [page 79]

How to create a configuration scenario on a single stack system [page 80]

How to create a configuration scenario on a dual stack system

Context

For outbound integration and the confirmation out service from SAP ERP to SAP Ariba supplier management solutions, you must set up configuration scenarios. This topic contains the steps for creating a configuration scenario on a dual stack system.

Procedure

- 1. From the SAP Process Integration main page, log in to later **Integration Directory** Integration Builder **J**.
- 2. Right click the object type **Configuration Scenario** in the left pane, and click **Create** from the popup menu.

The Create object page appears.

3. Specify a name for the configuration scenario and click Create.

For example, you may name the configuration scenario for outbound integration as AR_Supplier_Outbound_DRF, and the one for the confirmation out service as AR_Supplier_Outbound_Confirmation.

The Edit Configuration Scenario page appears.

- 4. Go to the the **Object** tab and add a business system each for SAP ERP and SAP Ariba Supplier Management.
- 5. Create a communication channel for the receiver and specify the following settings:
 - Specify a name for the communication channel. For example, you may name the receiver communication channel for outbound integration as CC DRF SOAP Receiver, and the communication channel for confirmation out as CC Con SOAP Receiver.
 - Set the Adapter Type to SOAP.
 - Set the **Message Protocol** to **SOAP 1.1**.
 - Set one of the following values for **Target URL**:

For outbound integration: https://<domain name>/SM/soap/BPIntegrationServiceIn.

- For confirmation out: https://<domain name>/SM/soap/BPIntegrationServiceInConf.
- Add the communication channel to the Configuration Scenario.
- 6. Create Receiver Determination and configure the following settings:
 - Specify the SAP ERP business system as the communication component for Receiver Determination.
 - For Receiver Determination for the outbound integration, set Sender interface to BusinessPartnerSUITEBulkReplicateRequest Out.
 - For Receiver Determination for the confirmation out service, set Sender interface to BusinessPartnerSUITEBulkReplicateConfirmation Out.
 - Add a local rule to Receiver Determination and set the SAP AribaSupplier Management business system as the communication component for the rule.
 - If the newly-created Receiver Determination is not added to the configuration scenario, add Receiver Determination to the configuration scenario.
- 7. Create Interface Determination and configure the following settings:

- Specify the SAP ERP business system as the communication component.
- Set the **Sender Interface** for the outbound integration to BusinessPartnerSUITEBulkReplicateRequest_Out.
- Set the **Sender Interface** for the confirmation out service to BusinessPartnerSUITEBulkReplicateConfirmation Out.
- Set Receiver Communication Component to the SAP Ariba Supplier Management business system.
- Set the following values for **Receiver Interface**:

Integration Type	Name	Namespace
Outbound integration	BusinessPartnerSUITEBulk ReplicateRequest_In	https:// <domainname>/SM/ soap/ BPIntegrationServiceIn</domainname>
Confirmation out	BusinessPartnerSUITEBulk ReplicateConfirmation_In	https:// <domainname>/SM/ soap/ BPIntegrationServiceInConf</domainname>

Interface Operation Mapping is not required.

- 8. Define Receiver Agreement and configure the following settings: After you create the Receiver Agreement, specify the Receiver Communication channel CC_DRF_SOAP_Receiver.
 - Set the Sender Communication Component to the SAP ERP business system.
 - Set the Receiver Communication Component to the SAP Ariba Supplier Management business system.
 - Set one of the following values for the Receiver Interface:

BusinessPartnerSUITEBulkReplicateRequest_In for outbound integration.

BusinessPartnerSUITEBulkReplicateConfirmation_In for the confirmation out service.

- After you define Receiver Agreement, specify the Receiver Communication channel.
 For example, you may set the Receiver Communication channel for outbound integration as
 CC_DRF_SOAP_Receiver, and Receiver Communication channel for the confirmation out service as
 CC_Con_SOAP_Receiver.
- 9. Save the objects and the configuration scenario.
- 10. Click **Configuration Scenario** on the menu bar and select **Activate**. The **Activate Change** list popup appears. Select the newly created or modified objects and click **Activate**.

Repeat the steps to create configuration scenarios for both outbound integration and the confirmation out service.

How to create a configuration scenario on a single stack system

Context

For outbound integration and the confirmation out service from SAP ERP to SAP Ariba supplier management solutions, you must set up configuration scenarios. This topic contains the steps for creating a configuration scenario on a single stack system.

Procedure

- 1. From the SAP Process Integration main page, log in to Integration Directory Integration Builder].
- 2. Right click the object type **Configuration Scenario** in the left pane, and click **Create** from the popup menu.

The Create object page appears.

3. Specify a name for the configuration scenario and click **Create**.

For example, you may name the configuration scenario for outbound integration as AR_Supplier_Outbound_DRF, and the one for the confirmation out service as AR Supplier Outbound Confirmation.

The Edit Configuration Scenario page appears.

- 4. Go to the the **Object** tab and add a business system each for SAP ERP and SAP Ariba Supplier Management.
- 5. Create a communication channel for the sender and specify the following settings.
 - Specify a name for the communication channel. For example, CC SOAP Sender.
 - Set the Adapter Type to SOAP.
 - Set the **Message Protocol** to **x1** 3.0.
 - Add the communication channel to the Configuration Scenario.
- 6. Create a communication channel for the receiver and specify the following settings:
 - Specify a name for the communication channel. For example, you may name the receiver communication channel for outbound integration as CC_DRF_SOAP_Receiver, and the communication channel for confirmation out as CC_CON_SOAP_Receiver.
 - Set the Adapter Type to SOAP.
 - Set the Message Protocol to SOAP 1.1.
 - Set one of the following values for Target URL:

For outbound integration: https://<domain name>/SM/soap/BPIntegrationServiceIn. For confirmation out: https://<domain name>/SM/soap/BPIntegrationServiceInConf.

- Add the communication channel to the Configuration Scenario.
- 7. Define Integrated Configuration and configure the following settings.
 - Set the Communication Component to the SAP ERP business system.
 - \circ $\;$ Set one of the following values for the sender interface:

For outbound integration: BusinessPartnerSUITEBulkReplicateRequest_Out

For confirmation out: BusinessPartnerSUITEBulkReplicateConfirmation_Out

- On the Inbound Processing tab, set the Sender Communication Channel to CC_SOAP_Sender.
- On the **Receiver** tab, specify a local rule and set the SAP Ariba Supplier Management business system as the communication component for the rule.

Set the following values for **Receiver Interface**:

Integration Type	Name	Namespace
Outbound integration	BusinessPartnerSUITEBulk ReplicateRequest_In	https:// <domain name="">/SM/ soap/ BPIntegrationServiceIn</domain>

Integration Type	Name	Namespace
Confirmation out	BusinessPartnerSUITEBulk ReplicateConfirmation_In	https:// <domainname>/SM/ soap/ BPIntegrationServiceInConf</domainname>

Interface Operation Mapping is not required.

- On the **Outbound Processing** tab, specify the communication channels for receiver.
 For example, you may name the receiver communication channel for the outbound integration as
 CC_DRF_SOAP_Receiver, and the one for the confirmation out service as CC_Con_SOAP_Receiver.
- If the Integrated Configuration is not part of the Configuration Scenario, add the Integrated Configuration to the configuration scenario.
- 8. Save the objects and the configuration scenario.
- 9. Click **Configuration Scenario** on the menu bar and select **Activate**. The **Activate Change** list popup appears. Select the newly created or modified objects and click **Activate**.

Repeat the steps to create configuration scenarios for both outbound integration and the confirmation out service.

How to set up SAP ERP credentials in SAP Ariba

Prerequisites

You must be a member of the **SM ERP Admin** group in order to manage ERP integration settings in the **SM Admin** area.

Context

Integration configurations in **SM Admin** only support shared secret authentication for integration. It does not support certificate authentication. The shared secret you use here does not have to be the same password you use for other SAP Ariba integration configurations.

Procedure

- 1. On the dashboard, click Manage SM Admin .
- 2. Click ERP Integration.
- 3. In the Enter ERP Credentials area, enter the following information:

- The business or ERP system ID of the SAP ERP system, which is the ID the ERP system uses to identify itself in all messages.
- The shared secret password you want to use for this integration setup.
- 4. Click Save.

Customizing supplier master data integration

SAP Ariba supplier management solutions use MDG business partner interface structure to store supplier master data. However, SAP Ariba supplier management solutions integration with SAP ERP supports extension of the business partner data structure to enable you to use custom fields to address your specific requirements.

The following structures have been modified to include the GenericCustomField element and the genericCustomFieldListCompleteTransmissionIndicator attribute:

- BPSUITERplctReqSuplr for supplier information.
- BPSUITERplctReqBkDets for bank details.
- BPSUITERplctReqAcctgInfo for accounting information.
- BPSUITERplctReqBP for business partner information.

The GenericCustomField element contains the following attributes:

Attribute Name	Attribute Type	Description
Name	GenericCustomFieldName	Name of the field. This is both the default display name and also the identifier for the field.
i Note The following attributes are currently not used by the integration. These attributes are added for future use.		
Туре	GenericCustomFieldType	General type of the field, selected from the GenericCustomerFieldType enumerated values. If it is not specified or not recognized, the type defaults to Text.
Title	GenericCustomFieldTitle	Display title of the field.
Description	GenericCustomFieldDescription	Description of the field.
Language Code	LanguageCode	SAP Language code for the title and de- scription of the field. If no value is speci- fied, it defaults to en.
Table	GenericCustomFieldMappingName	Sender's table name where the value of the mapped field is stored.

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Attribute Name	Attribute Type	Description
Field	GenericCustomFieldMappingName	Sender's field name in the table where the value of the mapped field is stored.
Check Table	GenericCustomFieldMappingName	Sender's name of the check table used to validate the code values.
Receiver Table	GenericCustomFieldMappingName	Receiver's table name, if any, where the value of the mapped field is stored. recei- verTable and receiverField should ap- pear together, or not at all.
Receiver Field	GenericCustomFieldMappingName	Receiver's field name in the table where the value of this mapped field is stored. receiverTable and receiverField should appear together, or not at all.
Receiver Check Table	GenericCustomFieldMappingName	Receiver's name of the check table used to validate the code values.
Maximum Length	GenericCustomFieldMappingName	Maximum length of the value string in characters, for input validation, if type="Text".
Minimum Length	NumberValue	Minimum length of the value string in characters, for input validation, if type="Text".
Pattern	NumberValue Pattern	A regular expression that must match valid input, if type="Text".
Total Digits	NumberValue	Maximum total digits, for input valida- tion, if type="Decimal".
Fraction Digits	NumberValue	Maximum digits in the fractional part, for input validation, if type="Decimal".
Maximum Inclusive	Inclusive	Maximum decimal value, for input valida- tion, if type="Decimal".
Minimum Inclusive	Inclusive	Minimum decimal value, for input valida- tion, if type="Decimal".
Display Restrictions	GenericCustomFieldRestrictions	A comma separated list of display con- texts in which this field should be dis- played.
Edit Restrictions	GenericCustomFieldRestrictions	A comma separated list of display con- texts in which this field should be edita- ble.

If you need to extend your business partner data to include these custom fields, you can implement the following BAdls of the enhancement spot MDG_SE_SPOT_BPBUPA:

- MDG SE BP BULK REPLRQ IN to extend the business partner data while creating the record in ERP.
- MDG_SE_BP_BULK_REPLRQ_OUT to extend the business partner data in ERP while sending to SAP Ariba Supplier Lifecycle and Performance.

Customizations using the MDG_SE_SPOT_BPBUPA enhancement spot are specific to the Business Partner tables in SAP ERP.

You can implement the BAdl CVI_CUSTOM_MAPPER to replicate these extensions in the vendor master data tables. The CVI_CUSTOM_MAPPER BAdl enables you to map customizations in business partner tables to vendor master data tables.

In this section:

ABAP example code for processing incoming GenericCustomField data [page 85] How to create custom message mappings in SAP Process Integration [page 86]

Related Information

ABAP example code for processing incoming GenericCustomField data [page 85]

ABAP example code for processing incoming GenericCustomField data

The following example contains a sample ABAP code for processing incoming GenericCustomField data.

```
METHOD if mdg_se_bp_bulk_replrq_in~inbound processing.
***Implementation for customer data
***Local Declaration for Internal table
   DATA: lt ariba generic data TYPE /arba/generic_custom_fiel_tab1.
***Local Declaration for Work Area
   DATA: ls_ariba_generic_data TYPE /arba/generic_custom_field.
***Local Declaration for variable for generic fields
   DATA: lv sup creator TYPE string,
         lv_sup_sponsor TYPE string.
***Field symbol declaration
   FIELD-SYMBOLS:<fs_org_data> TYPE bus_ei_bupa_central_data,
<fs_org_datax> TYPE bus_ei_bupa_central_data_xflag.
***Assigment of genereic field
   lt ariba generic data = in-business partner-supplier-/arba/generic custom field.
***Assign the field symbol
   ASSIGN out-partner-central data-common-data TO <fs org data>.
ASSIGN out-partner-central_data-common-datax TO <fs_org_datax>. ***Loop at internal table for custom field.
   LOOP AT lt ariba generic data INTO ls ariba generic data.
    IF ls ariba generic data-name EQ 'SupplierCreator'.
       lv sup creator = ls ariba generic data-content.
    ENDIF.
    IF ls ariba generic data-name EQ 'SupplierSourcingSponsor'.
       lv sup sponsor = ls ariba generic data-content.
```

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```
ENDIF.
  ENDLOOP.
***Updating the value into the MDG BS BP S EXTERN
    IF lv_sup_creator IS NOT INITIAL OR lv_sup_sponsor IS NOT INITIAL.
        IF <fs org data> IS ASSIGNED.
        <fs org data>-zsup creator = lv sup creator.
        <fs org data>-zsup sponsor = lv sup sponsor.
    ENDIF.
    IF <fs org datax> IS ASSIGNED.
       IF <fs org data>-zsup creator IS NOT INITIAL.
        <fs_org_datax>-zsup_creator = abap_true.
        ENDIF.
        IF <fs org data>-zsup sponsor IS NOT INITIAL.
        <fs org datax>-zsup sponsor = abap true.
       ENDIF.
   ENDIF.
 ENDIF.
ENDMETHOD.
```

The LOOP AT lt_ariba_generic_data INTO ls_ariba_generic_data code creates a loop for the list of GenericCustomField data in the structure generated from the SOAP WSDL. You could add your processing at this point in the code to check for GenericCustomField records with specific names and process each of the custom fields appropriately.

You can choose which of the custom fields you need to implement and at which extension [page 83] point. You can specify the name of the field and also specify to which fields in your SAP Ariba supplier management solution the custom fields you add map to.

To create custom fields to SAP Ariba supplier management solutions, you can implement the BAdlMDG_SE_BP_BULK_REPLRQ_OUT, which extends the master data when SAP ERP sends the data to the SAP Ariba supplier management solution.

How to create custom message mappings in SAP Process Integration

Context

To extend the business partner data, you can create custom message mappings in the SAP Process Integration.

Procedure

- 1. From the SAP Process Integration main page, click Enterprise Service Repository.
- 2. Select the Software Component Version ARIBA_SUPPLIER_MANAGEMENT 2.0 of ariba.com.
- 3. Select the customization namespace http://ariba.com/xi/SupplierManagement/Cutomization.
- 4. Right click and create new mapping and operation mapping for customization.
- 5. Customize the mapping to suit your requirements, create new message mapping by assigning the request and source message type.
- 6. Save the changes and activate the mapping.

- 7. Assign the message mapping in Operation Mapping.
- 8. Save and activate the Operation mapping.
- 9. Go to the Integration Directory and click Integration Builder.
- 10. Click the Configuration Scenario for Supplier Management.
- 11. Select Interface Determination and click the Edit icon.
- 12. Assign the operation mapping as per the customization in Interface Determination.
- 13. Save the changes and activate Interface Determination.

How to set up supplier data synchronization

Prerequisites

You must be a member of the SM ERP Admin group in order to set up supplier synchronization.

Context

Setting up supplier data synchronization involves choosing manual or automatic synchronization and specifying the supplier status at which synchronization occurs.

Automatic synchronization occurs automatically when the supplier reaches the specified status and is designed to synchronize all suppliers of that status in the SAP Ariba supplier management solution database with the ERP.

With manual synchronization, when the supplier reaches the specified status, an ERP synchronization link appears in the upper right corner of the supplier 360° view. A category or supplier manager clicks the link when they are ready to transact with the supplier. Otherwise, suppliers of that status are not synchronized with the ERP.

i Note

The supplier data synchronization setting is for the initial synchronization of a supplier between SAP Ariba supplier management solution database and SAP ERP. Changes that are made to a synchronized record in the SAP Ariba supplier management solution are automatically transmitted to SAP ERP.

Procedure

- 1. On the dashboard, click 🌗 Manage > SM Admin 】.
- 2. Click ERP integration.
- 3. In the **Initial supplier synchronization**, choose either **Automatic synchronization** or **Manual synchronization**.
- 4. Choose one of the following statuses for initial synchronization:

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Status	Description
Not Invited	The supplier request has been approved and the supplier is created in the SAP Ariba supplier management solution da- tabase, but the supplier has not been invited to register yet.
Invited	The supplier has been invited to register. (Manual synchro- nization only.)
In Registration	The supplier has been sent the registration questionnaire. (Manual synchronization only.)
Pending Approval	The approval flow for the registration has started and there is one final approval pending. (Manual synchronization only.)
Registered	The supplier registration has been finally approved.

5. Click Save.

How to replicate Business Partner master data from SAP Ariba Supplier Lifecycle and Performance

Prerequisites

- Maintain values in the /ARBA/SM_SEQNUM table as explained in How to maintain table entries [page 69].
- Set up Direct Connectivity [page 70] or Mediated Connectivity [page 74] integration method between SAP Ariba Supplier Lifecycle and Performance and SAP ERP.

Context

You can replicate Business Partner master data from SAP Ariba Supplier Lifecycle and Performance in SAP ERP and Master Data Governance.

➡ Tip

Always schedule this program to run at regular intervals. Use the sm36 transaction code to schedule the program to run in the background at regular intervals.

Procedure

1. From SAP ERP, execute the /ARBA/SM_BUSINESS_PARTNER_PULL program.

The Ariba Supplier Lifecycle and Performance Business Partner Pull Interface window appears.

- 2. Choose one or more of the following options:
 - Business Partner Bulk Replicate Request. To import the supplier master data.
 - **Business Partner Bulk Replicate Confirmation**. To receive confirmation for the supplier master data import.
- 3. Click Execute.

How to monitor errors in SAP ERP

You can use one of the following transaction codes to monitor errors that might occur in the SAP Ariba Supplier Management solutions integration with SAP ERP:

- SLG1 [page 89]
- SRT_TOOLS [page 89]
- SXMB_MONI [page 90]

SLG1

- Go to transaction code SLG1.
 The Analyse Application Log screen appears.
- 2. In the **Object** field, enter /ARIBA/SM.
- 3. In the Subobject field, enter /ARIBA/SUB_SM.
- 4. Specify the filters.
- 5. Click the **Execute** icon.

The **Display Logs** screen lists the logs associated with the SAP Ariba Supplier Management solutions integration with SAP ERP.

SRT_TOOLS

- 1. Go to transaction code SRT_TOOL. The SOA Runtime Tools window appears.
- Click SOA Runtime Tools Monitoring Web Service Utilities: Message Monitor .
 The Web Service Utilities: Message Monitor window appears.
- Specify the filters and click the Execute icon.
 The Web Service Utilities: Message Monitor page lists the errors, if any.

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SXMB_MONI

You can use the $SXMB_MONI$ transaction code to view errors occurred on SAP Process Integration when you use the Mediated Connectivity integration method.

Importing Ariba components and configuring integration methods

This chapter contains the following topics:

In this section:

How to import Ariba components [page 91]

How to maintain table entries for SAP Ariba Sourcing and SAP Ariba Contracts integration with SAP ERP [page 92]

Configuring direct connectivity [page 99]

Configuring mediated connectivity [page 106]

How to import Ariba components

Procedure

- 1. Go to https://support.ariba.com/Connect/Log_In and log in using your user ID and password. If you do not have a User ID and Password for SAP Ariba Connect, contact your SAP Ariba account executive.
- 2. On the Home page, click Product Information and Documentation.
- 3. Click Cloud Integration in the Product Information section and then click Resources.

The Cloud Integration Resources page appears.

- 4. In the Integration Tools section, click Integration tools for Ariba Sourcing and Ariba Contract Management.
- 5. Go to the **Integration Tools** section, and click **ABAP Transports for SAP ERP**. If the list does not contain this entry, contact your SAP Ariba account executive.
- 6. Click **Download** and save the Ariba_Sourcing_SAP_Transports_V_CI_x.zip package.
- 7. Extract the contents of the ZIP file and import the transports to SAP ERP.
- If you want to implement the feature over Mediated Connectivity, go back to the Integration tools for Ariba Sourcing and Ariba Contract Management page and click SAP NetWeaver PI Mapping from the Resources tab.

The Sourcing SAP NetWeaver PI Mapping page appears.

- 9. Click **Download** and save the Ariba_Sourcing_SAP_Netweaver_Repository_CIx.zip package.
- 10. Extract and import the relevant TPZ files into the SAP Process Integration.

How to maintain table entries for SAP Ariba Sourcing and SAP Ariba Contracts integration with SAP ERP

You must maintain certain entries in the following tables for the integration between SAP ERP and SAP Ariba Sourcing to work:

- /ARBA/AUTH_PARAM [page 92]
- /ARBA/TVARV [page 93]

You can use the sm30 transaction code to access tables. To maintain a table, enter the name of the table in the **Table/View** field of the **Maintain Table Views: Initial Screen**, and click **Maintain**.

/ARBA/AUTH_PARAM

Parameter	Description	Example
Solution	Name of the SAP Ariba solution that you integrate SAP ERP with.	Ariba Sourcing
Ariba Realm ID	The name of your company as config- ured in the SAP Ariba application.	s4All
Wait Time	Number of minutes to wait before SAP ERP attempts to reconnect with the SAP Ariba application if connection attempts encounter temporary errors such as service not available.	02
Logical Port	Name of the logical port that you config- ure as part of the SOAMANAGER config- uration.	Not applicable for SAP Ariba Sourcing in- tegration for Product Sourcing.
	i Note Not applicable for SAP Ariba Sourcing integration for Product Sourcing.	

In the /ARBA/AUTH PARAM table, maintain the following parameters.

Parameter	Description	Example
Is Parent	Whether the realm is a parent realm. A checked Is Parent check box indi- cates that the corresponding realm is a parent realm. An unchecked Is Parent check box indicates that the corresponding realm is a child realm.	Not applicable for SAP Ariba Sourcing in- tegration for Product Sourcing.
	i Note Not applicable for SAP Ariba Sourcing integration for Product Sourcing.	

/ARBA/TVARV

Maintain the following parameters in the /ARBA/TVARV table:

/ARBA/EXTERNAL_SID is a mandatory parameter in the /ARBA/TVARV table that you need to configure for the direct connectivity to work. You must specify a name for the SAP ERP system in /ARBA/EXTERNAL_SID and enter the same name in the Service Manager Site Manager Customer Site Master Data
 Manager External System Configuration Create External System window of the SAP Ariba Sourcing application.

Field	Values for
Variable Name	/ARBA/EXTERNAL_SID
Field Name	
Selection Category	Р
Number	0
Char 20	
Char 20	
INCL/EXCL	1
Options	EQ
Selection Value	<external example,="" for="" id.="" saperpsystem1="" system=""></external>
Selection Value	

• /ARBA/TEMP_DIRECTORY is a mandatory parameter for exporting master data over file-based integrations.

This parameter is not required for web services integrations, such as bill of materials integration, that do not use file channels.

Field	Values for TEMP_DIRECTORY
Variable Name	/ARBA/TEMP_DIRECTORY
Field Name	
Selection Category	P
Number	0
Char 20	
Char 20	
INCL/EXCL	I
Options	EQ
Selection Value	The file path for extracting master data from the CSV files. For example, $\ . \ /$ <code>MASTERDATA</code>
Selection Value	

• /ARBA/SPLIT_NOMREC is an optional parameter in the /ARBA/TVARV table. Configure this parameter if you want to split the full load export of material master data into multiple batches. For example, if you set /ARBA/SPLIT_NOMREC to 3000 when there are 10,000 material master data records, SAP ERP exports the records in four batches that include three batches of 3000 records each and one batch that contains 1000 records.

Field	Values for
Variable Name	/ARBA/SPLIT_NOMREC
Field Name	
Selection Category	Р
Number	0
Char 20	
Char 20	
INCL/EXCL	I
Options	EQ

Field	Values for
Selection Value	Number of records that you need to export in a batch. For example, 2000.
Selection Value	

• /ARBA/SPLIT BOM NOMREC is an optional parameter in the /ARBA/TVARV table. Configure this parameter if you want to split the bill of materials full load export into multiple batches. For example, if you set /ARBA/ SPLIT BOM NOMREC to 300 when there are 1,000 records, SAP ERP exports the records in four batches that include three batches of 300 records each and one batch that contains 100 records.

Field	Values for
Variable Name	/ARBA/SPLIT_BOM_NOMREC
Field Name	
Selection Category	Р
Number	0
Char 20	
Char 20	
INCL/EXCL	I
Options	EQ
Selection Value	Number of records that you need to export in a batch. For example, 300.
Selection Value	

• DC WAITTIME is a parameter in the /ARBA/TVARV table. Configure this parameter to specify the number of seconds that SAP ERP should wait between two Direct Connectivity calls to the SAP Ariba application. The default value is one second. This parameter is mandatory if you configure the /ARBA/SPLIT_NOMREC parameter to split the export into multiple batches.

Field	Values for
Variable Name	DC_WAITTIME
Field Name	
Selection Category	Р
Number	0
Char 20	
Char 20	

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Field	Values for
INCL/EXCL	I
Options	EQ
Selection Value	Number of seconds SAP ERP should wait between two Direct Connectivity calls. The default value is one (1) second.
Selection Value	

• /ARBA/BILLOFMATERIALS_EXPORT is an optional parameter that you can use to filter bill of materials master data when you export bill of materials from SAP ERP to SAP Ariba Sourcing.

Field	Values for BILLOFMATERIALS_EXPORT
Variable Name	/ARBA/BILLOFMATERIALS_EXPORT
Field Name	The filtering criterion that you want to apply. For example: STLNR for bill of materials number. STLAL for alternative BOM. MATNR for material number. WERKS for plant. STLAN for BOM usage.
Selection Category	S
Number	Number of the filter criterion you configure. For example, 0, 1, 2, and so on
Char 20	
Char 20	
INCL/EXCL	l or E
Options	EQ, NE, or BT
Selection Value	Filter value for the criterion you set for Field. For example the Bill of materials number.
Selection Value	Filter value for the range if you set Options to BT, which indicates a range.

i Note

You can configure multiple filters by incrementing the value of Number by 1. For example, you can set Number to 1 for the second filter you configure.

• /ARBA/MATERIAL_CHARACT is an optional parameter that you can use to filter material classification data when you export bill of materials from SAP ERP to SAP Ariba Sourcing.

Field	Values for MATERIAL_CHARACT
Variable Name	/ARBA/MATERIAL_CHARACT
Field Name	ATINN
Selection Category	S
Number	0
Char 20	
Char 20	
INCL/EXCL	l or E
Options	EQ
Selection Value	CharacteristicInternalValue based on which you want to filter the output.
Selection Value	

You can configure multiple filters by incrementing the value of Number by 1. For example, you can set Number to 1 for the second filter you configure.

• /ARBA/MATERIAL_ONLY_AML is an optional parameter that you can use to filter the Manufacturer Parts List data for a specific material number when you export Manufacturer Parts List from SAP ERP to SAP Ariba Sourcing.

Field	Values for MATERIAL_CHARACT
Variable Name	/ARBA/MATERIAL_ONLY_AML
Field Name	MATNR
Selection Category	S
Number	0
Char 20	
Char 20	
INCL/EXCL	l or E
Options	EQ
Selection Value	The HERS material number.

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Field	Values for MATERIAL_CHARACT
Selection Value	

You can configure multiple filters by incrementing the value of Number by 1. For example, you can set Number to 1 for the second filter you configure.

• /ARBA/CLASS_TYPE is a parameter that you need to maintain if you want to extract material classification data when you export material master data from SAP ERP to SAP Ariba Sourcing.

Field	Values for CLASS_TYPE
Variable Name	/ARBA/CLASS_TYPE
Field Name	
Selection Category	Р
Number	0
Char 20	
Char 20	
INCL/EXCL	l or E
Options	EQ
Selection Value	Class type value, for example 001.
Selection Value	

i Note

You can configure multiple filters by incrementing the value of Number by 1. For example, you can set Number to 1 for the second filter you configure.

• /ARBA/CLASS is a parameter that you need to maintain if you want to extract material classification data when you export material master data from SAP ERP to SAP Ariba Sourcing.

Field	Values for CLASS
Variable Name	/ARBA/CLASS
Field Name	
Selection Category	P

Field	Values for CLASS
Number	0
Char 20	
Char 20	
INCL/EXCL	l or E
Options	EQ
Selection Value	Class value, for example CL1111.
Selection Value	

You can configure multiple filters by incrementing the value of Number by 1. For example, you can set Number to 1 for the second filter you configure.

Configuring direct connectivity

This section contains the following topics:

About direct connectivity

Direct connectivity enables direct communication between SAP ERP and the SAP Ariba application without any middleware. When you use the direct connectivity integration method, you can configure a connection between the logical port of the consumer proxy (SAP ERP) and the endpoint of the provider proxy (SAP Ariba application).

Direct connectivity integration method is supported only for master data integration. Transactional data integrations do not work over direct connectivity.

SAP Ariba cloud integration transfers master data over direct connectivity in one of the following methods:

- CSV files embedded in SOAP message headers
- Embedded data in SOAP message body

You can use the SOAMANAGER transaction to configure Direct Connectivity integration method. For more information about the SOAMANAGER settings, see How to configure SOAMANAGER [page 100].

Prerequisites

- Install the latest SAP Ariba transports as explained in How to import Ariba components [page 91].
- Maintain the entries in /ARBA/AUTH_PARAM and /ARBA/TVARV tables as explained in How to maintain table entries for SAP Ariba Sourcing and SAP Ariba Contracts integration with SAP ERP [page 92].

i Note

For a list of parameters that you need to maintain in the /ARBA/TVARV table for the SAP Ariba Supplier Information and Performance Management integration with SAP ERP, see Configuring the integration of SAP Ariba Supplier Information and Performance Management with SAP ERP and MDG [page 50].

- Specify the system ID of SAP ERP on the Service Manager Site Manager Window of the SAP Ariba
 Data Manager External System Configuration Create External System window of the SAP Ariba
 Sourcing application.
- Based on the security model you choose, configure one of the following:
 - If you are using Shared Secret-based authentication, configure the Shared Secret settings in the
 Service Manager > Site Manager > Customer Site > Integration Manager > Integration Toolkit
 Security > window of the SAP Ariba Sourcing application.
 - If you are using the certificate-based authentication, install the client certificates and configure the certificate settings at the Service Manager Site Manager Customer Site Integration Manager
 Integration Toolkit Security window of the SAP Ariba Sourcing application.

i Note

SAP Ariba Sourcing does not support certificate-based authentication for bill of materials integration between SAP ERP and SAP Ariba Sourcing.

For more information on installing the certificate, see How to configure the client certificate for certificatebased authentication [page 103].

- Install the SSL client certificates before running the master data. For more information, see How to install the SSL certificate [page 104].
- Create a logical file path for the ISMW ROOT.

How to configure SOAMANAGER

Context

Complete the SOAMANAGER configuration to set up direct connectivity between the SAP Ariba application and SAP ERP. When you configure SOAMANAGER, specify the proxy and endpoint names. For the proxy and endpoint names, see Proxy names and URL access paths for sourcing, contracts, and supplier data integration [page 105]. Alternatively, see the feature documentation for values specific for the integration that you want to set up.

Procedure

- 1. Go to transaction code **SOAMANAGER**.
- 2. In the Service Administration tab, click Web Service Configuration.
- 3. Specify the following Search Criteria:
 - In the **Search By** dropdown, select Consumer Proxy.
 - Select **Contains** from the options.
 - Enter the first few characters of the proxy name that you want to search for and click **Search**.

The Proxy Class page appears.

4. From the list of proxies, click the name of the proxy that you want to configure.

The **Details of Consumer Proxy: <proxy name>** page appears.

- 5. From the Configuration tab, click Create Logical Port. and select Manual Configuration.
- 6. Under General Configuration, specify the following:
 - Logical Port name.
 - Description
 - Check the Logical Port is Default check box.
- 7. Click Next.

The New Manual Configuration of Logical Port for Consumer Proxy <proxy name> page appears.

- 8. From the Authentication Settings, select one of the following options:
 - If you plan to use Shared Secret-based authentication, select **User ID/Password**, and enter the User ID and the Password in the corresponding fields that appear.

i Note

User ID is the name of the sourcing realm and the password the shared secret that you configured in the Ariba application.

- If you plan to use client certificate-based authentication, select **X 509 SSL Client Certificate**, and specify the certificate file in the **SSL Client PSE of transaction STRUST** field.
- 9. Click Next.

The Transport Bindings page appears.

10. In the Transport Bindings page, specify the following:

- URL Access Path. Realm name in the URL access path should be the same name that you maintain in the AUTH_PARAM table.
- **Computer Name of Access URL**: Specify the path to your Ariba application.

For example, s1.ariba.com.

If you are using client certificate-based authentication, enter ${\tt certs1.ariba.com}.$

- Port Number of Access URL: 443
- URL Protocol Information: HTTPS

11. Save changes.

Next Steps

• For purchase info record integrations, after you complete the SOAMANAGER configuration, you must edit the logical port to set the **Message ID Protocol** to **Suppress ID Transfer**.

How to configure LPCONFIG for SAP ERP EhP4 and earlier versions

Context

i Note

SAP Ariba Supplier Information and Performance Management is supported only on SAP ERP EhP6 and later versions.

Procedure

- 1. You must create a new RFC connection. For more information, see Creating a New RFC Connection [page 103].
- 2. From SAP ERP, run the transaction code LPCONFIG.
- 3. Search for the proxy class that you want to associate the logical ports with. The **Display/Create Logical Port** page appears.
- 4. Enter the port name in the Logical Port field.
- 5. Click Create.
- 6. Enter a description for the logical port.
- 7. Select the **Default Port** check box.
- 8. In the General Settings > Runtime tab, click Web Service Infrastructure.
- 9. Click the Call Parameters tab and select HTTP Destination.
- 10. Specify the newly created RFC destination.
- 11. Select the **Operations** tab. You can see the newly-generated proxy.
- 12. In the SOAP Action field, enter the following URL:

http://<Path to your Ariba applcation>/Sourcing/fileupload?realm. For example, https:// svcmachss.ariba.com/Sourcing/fileupload?realm=s4All.

13. Save and activate the entries.

Creating a New RFC Connection

Context

Create a new RFC Connection before you configure the LPCONFIG for SAP ERP EhP4 and earlier versions.

Procedure

1. Go to transaction code sm59.

The Configuration of RFC Connection page appears.

- 2. Click to select HTTP Connection to External Server.
- 3. Click Create.

The RFC Destination page appears.

- 4. Click the **Connection Type** check box and select the **G** connection type.
- 5. Enter a description in the **Description 1** text box.
- 6. Click the **Technical Settings** tab.
- 7. Enter values in the following fields: .
 - 1. Target Host: Enter the host name of the Ariba procurement system
 - 2. **Path Prefix**: Enter the URL of the Ariba procurement solution system -http://<Path to your Ariba procurement solutions>/Buyer/fileupload?realm name <realm name that you maintain in SM30>. For example, https://s1.ariba.com/Buyer/fileupload?realm=p2pTeSap.
- 8. Click the Logon & Security tab.
- 9. Click Basic Authentication.

10. In the Logon section enter the following:

- 1. User ID: Enter the user name for the procurement realm. For example, ERP2PTESAP_T.
 - 2. **Password**: Enter the shared secret that you specified on the **Integration Toolkit Security** page of your Ariba Buyer system..

How to configure the client certificate for certificate-based authentication

Procedure

- 1. Ensure that you have the client certificate that you have received from an Ariba-trusted Certificate Authority.
- Import the private key of the certificate into the SAP Business Site system by using the Trust Manager (transaction STRUST). You can only import certificates in the Personal Security Environment (PSE) format. Certificates in other formats must be converted to the PSE format. Use the command line tool SAPGENPSE to

do the conversion. Install the **SAPGENPSE** tool with the SAP Cryptographic Library installation package. For more information, see *The SAP Cryptographic Library Installation Package* [external document].

For example, to convert the P12 (Public-Key Cryptography Standards) format to PSE format, enter the following command line:

sapgenpse import_p12 -v -r <root certificate> -p <Target PSE file><Source File>.

- 1. Create a new Client Identity in the Trust Manager. Go to Environment > SSL Client Identities.
 - Enter **ARIBA** as the identity name and **Ariba Network Client** as the description.
 - Save the entries.
- 2. Import the private key of the certificate into the SAP Business Site system by using **Trust Manager** (transaction **STRUST**).
 - Select the newly-created ARIBA SSL Client ID and choose **PSE** > **Import** to import the PSE file.
 - Enter the password for the certificate if required.
 - To save, click **PSE** > **Save as** > **SSL Client**.
 - Enter **ARIBA** as the SSL Client.
 - Navigate to the **Own Certificate** group box on the **Trust Manager** screen, and double click the certificate to add it to the certificate list. You can now see the newly-added certificate in the **Certificate List** of Trust Manager.
- 3. Import the root certificate into the SAP Business Site system by using Trust Manager as follows:
 - 1. Double-click the SSL Client Identity **ARIBA** that you have created.
 - 2. Navigate to the **Certificate** group box and choose **Import certificate**. Click **Add to Certificate List** to add the imported certificate to the certificate list.
- $\mbox{4. Use transaction $MICM$ to activate the changes and restart the Internet Communication Manager (ICM). Click } \label{eq:linear}$

Administration ICM Restart Yes . For more information, go to the SAP documentation portal and search for the phrase Using the ICM Monitor.

How to install the SSL certificate

Context

Install the SSL certificate to set up HTTPS connectivity. For information about the proxy names to configure, see Proxy names and URL access paths for sourcing, contracts, and supplier data integration [page 105]. Alternatively, see the feature documentation for values that are specific for the integration that you want to set up.

Procedure

- 1. Open your browser in Internet Explorer or Google Chrome and download the client certificate for the URL that you have configured in SOAMANAGER.
- 2. Click the Secure Lock indicator on the address bar and then click the **Connection** tab.
- 3. Click the **Certificate information** link to download the certificates. The Certificate dialog box appears.

- 4. Click the Details tab and then click **Copy to File**. The Certificate Export Wizard appears.
- Follow the steps in the Certificate Export Wizard. Ensure that you select the DER encoded binary X.509 (.CER) option. This option is selected by default.
- 6. Specify the path where you want to store the certificates. Click **Finish**.
- 7. On your ERP system, go to STRUST and click SSL Client SSL Client(Anonymous).
- 8. Click the **Import Certificates** button and then choose the path where you exported the certificates.
- 9. Click **Allow** and then **Continue** to download the certificates.

10. Click Add to Certificate List.

You will see a message that you have added the certificates successfully.

i Note

Ensure that you save the newly-added certificates. This notifies the ICM about the new certificates you have just imported.

- 11. After you have saved the entries in the STRUST, go to the Tcode SMICM.
- 12. On the Administration menu, click ICM > Exit Soft and then Global.
- 13. In the Internet Communication Manager dialog box, Do you really want to restart all ICM processes in the system?, click **Yes**.
- 14. On the Administration menu, click ICM > Exit Hard and then Global.
- 15. In the Internet Communication Manager dialog box, Do you really want to restart all ICM processes in the system?, click **Yes**
- 16. Test your connection using the SOAMANAGER.
- 17. On the Search tab, select Consumer Proxy in the Search By pull-down list.
- 18. In the **Search Pattern** field, enter the first few letters of the proxy. From the **Field** dropdown, choose **Both Names**.
- 19. From the list of proxy names that appear, choose the proxy names.
- 20.0n the Configurations tab, click **Ping Web Service**.
 - In case you see an ICM_HTTP_SSL_ERROR, verify that the SSL certificate is valid and the configuration is correct.
 - \circ $\:$ If the connection is successful, you see a message saying the connection is successful.

Proxy names and URL access paths for sourcing, contracts, and supplier data integration

The following table lists various master data integrations and the corresponding proxy names. The table also provides examples for endpoint URLs:

Integration	Proxy name	URL access path
SIPM outbound	/ARBA/CO_SI_SOURCING_UPLOAD	/Sourcing/fileupload?
		realm= <realmname></realmname>

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Integration	Proxy name	URL access path
SIPM inbound	/ARBA/ CO_SI_SOURCING_DOWNLOAD	/Sourcing/filedownload? realm= <realmname></realmname>
Master data	/ARBA/CO_SI_SOURCING_UPLOAD	/Sourcing/fileupload? realm= <realmname></realmname>
Purchase info record	/ARBA/ CO_SI_PURCHASE_INFO_RECO	/dms/ws/PIRRequests? realm= <realmname></realmname>
Purchase info record	/ARBA/ CO_SI_PURCHASE_INFO_REC1	/dms/ws/PIRRequests? realm= <realmname></realmname>
Bill of materials	/ARBA/ CO_SOURCNG_BOMUPLOAD_OUT	/dms/ws/BOMRequests? realm= <realmname></realmname>
Supplier Management polling client	/ARBA/ CO_POLLING_CLIENT_REQRES	/SM/soap/PollingService
Supplier Management outbound integra- tions from SAP ERP	CO_MDG_BP_RPLCTRQ	/SM/soap/ BPIntegrationServiceIn
Supplier Management outbound confir- mations from SAP ERP	CO_MDG_BP_RPLCTCO	/SM/soap/ BPIntegrationServiceInConf

Configuring mediated connectivity

This section contains the following topics:

In this section:

About integrating master data using the mediated connectivity integration method [page 107]

Requirements [page 107]

Error handling [page 110]

How to configure the proxy on SAP ERP systems [page 111]

How to configure the proxy for single stack (Java only) instances for SAP Process Integration 7.3 and higher [page 112]

Configuring client certificates to import master data directly [page 113]

How to configure certificates and keys to import master data using the SAP Process Integration layer [page 115]

How to configure the shared secret authentication [page 115]

Configuring the integration scenario [page 116]

About integrating master data using the mediated connectivity integration method

i Note

This topic applies to the the material master data integration and SAP ERP integration with SAP Ariba Supplier Information and Performance Management. For information about the Mediated Connectivity integration of contracts master data, see Installing and configuring the integration of contract information with SAP ERP [page 32].

Buyers using an SAP Ariba application integrated with SAP can integrate master data directly from an SAP ERP system to the SAP Ariba application system seamlessly using the SAP NetWeaver PI layer through the Mediated Connectivity Integration Method. This provides enhanced security while transferring master data from an SAP ERP system to an SAP Ariba application system. SAP Ariba downloads master data from an SAP ERP system to the SAP Ariba application through the SAP Process Integration using SOAP messages. Buyers can use either the shared secret or client certificate-based authentication.

To integrate master data, a buyer can use either client certificates or shared secret authentication to connect to the SAP Ariba application through the SAP Process Integration.

If you are using the client certificate, the SAP Process Integration keystore stores the certificates and keys that you create in SAP NetWeaver. You can create a view to group these certificates and keys based on views. For more information, see How to configure certificates and keys to import master data using the SAP Process Integration layer [page 115].

If you are using the shared secret authentication, you must configure the shared secret in the Communication Channel of your SAP Process Integration system. For more information, see How to configure certificates and keys to import master data using the SAP Process Integration layer [page 115].

i Note

Buyer using the SAP Ariba application can also choose to integrate master data from an SAP ERP system to the SAP Ariba application directly. For more information, see Installing and configuring the integration of contract information with SAP ERP [page 32].

Requirements

Prerequisites

You must download and export the transport requests into your SAP ERP system. Ensure that you do the following:

- If you choose to directly integrate the master data to the SAP Ariba application using the SAP Process Integration:
 - Install client certificates if you use the client certificate authentication. You must get a client certificate from a Certificate Authorities that is trusted by SAP Ariba.

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- The shared secret field in the /ARBA/AUTH_PARAM must be left empty if you are integrating master data directly using the client certificate authentication. However, you must ensure that the **Realm** and **Wait**(in minutes) are configured.
- Do not create the logical port for the consumer proxy in the SOAMANAGER: MIOut Sync AribaUpload.

- The shared secret is no longer stored in the /ARBA/AUTH_PARAM table on the SAP ERP system. However, customers must specify a user name and password in the SOAMANAGER.
- Enter the following consumer Proxy classes:
 - To upload files to SAP Ariba Contracts and SAP Ariba Supplier Information and Performance Management: /ARBA/CO_SI_SOURCING_UPLOAD
- To download files from SAP Ariba Contracts: /ARBA/CO SI SOURCING DOWNLOAD.
- To support Transport Layer Security, TLS version 1.1 and TLS version 1.2, on mediated connectivity, implement SAP Note: 2284059-Update of SSL library within NW Java server.

i Note

In the step 5 of the note, ensure that you specify the following values:

- Legacy URL: client.minProtocolVersion (default: TLS10)
- Advanced URL: client.maxProtocolVersion (default: TLS11 OR TLS12)

The following table provides a comparison between legacy and advanced URLs for SHA-2 certificates:

Table 4: SAP Ariba SHA-256 (commonly known as SHA-2) certificates

Data Center	Legacy URLs (RSA)	Advanced URLs (RSA)
US	 s1.ariba.com certs1.ariba.com service.ariba.com certservice.ariba.com 	 s1-2.ariba.com certs1-2.ariba.com service-2.ariba.com certservice-2.ariba.com
EU	service-eu.ariba.com	 s1-2-eu.ariba.com certs1-2-eu.ariba.com service-2.ariba.com
RU	 s1-ru.ariba.com certs1-ru.ariba.com service-ru.ariba.com 	 s1-2-ru.ariba.com certs1-2-ru.ariba.com service-2.ariba.com

➡ Tip

To enhance the level of security, restrict the cipher suite support to a limited set of cipher suites that provide the highest level of security.

- TLS_ECDHE_RSA_WITH_AES_256_GCM_SHA384
- TLS ECDHE RSA WITH AES 128 GCM SHA256
- TLS ECDHE RSA WITH AES 256 CBC SHA384
- TLS_ECDHE_RSA_WITH_AES_256_CBC_SHA • TLS ECDHE RSA WITH AES 128 CBC SHA256 • TLS ECDHE RSA WITH AES 128 CBC SHA • TLS ECDHE_ECDSA_WITH_AES_128_CBC_SHA256 • TLS_DHE_RSA_WITH_AES_256_GCM_SHA384 • TLS DHE RSA WITH AES 128 GCM SHA256 • TLS DHE RSA WITH AES 256 CBC SHA256 • TLS DHE RSA WITH AES 256 CBC SHA • TLS DHE RSA WITH AES 128 CBC SHA256 • TLS DHE RSA WITH AES 128 CBC SHA • TLS DHE RSA WITH CAMELLIA 256 CBC SHA • TLS DHE RSA WITH CAMELLIA 128 CBC SHA • TLS DHE DSS WITH AES 256 CBC SHA256 • TLS DHE DSS WITH AES 128 CBC SHA256 • TLS DHE DSS WITH AES 256 CBC SHA • TLS_DHE_DSS_WITH_AES_128_CBC_SHA • TLS RSA WITH AES 256 GCM SHA384 • TLS_RSA_WITH_AES_128_GCM_SHA256 • TLS RSA WITH AES 256 CBC SHA256 • TLS_RSA_WITH_AES_256_CBC_SHA • TLS RSA WITH AES 128 CBC SHA256 • TLS_RSA_WITH_AES_128_CBC_SHA • TLS RSA WITH CAMELLIA 256 CBC SHA • TLS RSA WITH CAMELLIA 128 CBC SHA • TLS RSA WITH 3DES EDE CBC SHA • TLS ECDHE ECDSA WITH AES 128 GCM SHA256
- TLS ECDHE ECDSA WITH AES 256 GCM SHA384

Requirements for the SAP Process Integration

The following are the changes required to be configure the integration scenario in the SAP Process Integration to integrate master data:

- Software component ARIBA_UPLOAD 1.0 of ariba.com in the System Landscape Directory (SLD).
- NameSpace for the software component:
 - Outbound:http://ariba.com/xi/AribaUpload
 - Inbound:http://ariba.com/xi/AribaDownload
- SOAP receiver Communication Channel Templates:
 - Outbound: CCT_AribaSourcingUpload_Receive
 - Inbound:CCT_AribaSourcingDownload_Receive
- Data Types for the request and response:
 - Outbound:DT_UploadReq

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- Inbound:DT_UploadRes
- Message Types for the request and response:
 - Outbound: MT_UploadReq
 - Inbound:**MT_UploadRes**
- Service Interfaces for the inbound and outbound messages:
 - Outbound:SI_SourcingUpload_Sync_In and SI_SourcingUpload_Sync_Out
 - $\circ \ \ Inbound: SI_SourcingDownload_Sync_In \ and \ SI_SourcingDownload_Sync_Out$
- Actions for the outbound proxy action and SOAP receiver action: OutboundProxy and SOAPReceiver
- Process Integration Scenario Object:
 - Outbound: AR_AribaSourcing_Upload
 - Inbound: AR_AribaSourcing_Download

For more information, see Configuring the integration scenario [page 116].

Requirements for SAP ERP

The following are the changes required in the SAP ERP to integrate master data:

• Set up the proxy configuration between the SAP ERP and SAP Process Integration to generate the proxy objects, send and receive the proxy request and response messages. For more information, see How to configure the proxy on SAP ERP systems [page 111] and How to configure the proxy for single stack (Java only) instances for SAP Process Integration 7.3 and higher [page 112].

Limitations

This feature has the following limitations:

- Administrators do not get email notifications when an error occurs during the master data integration.
- Administrators can only view the log files in the runtime monitor of the SAP ERP and SAP Process Integration.
- The log files do not store a record of all the error conditions in the SLGI.

Backward Compatibility

This feature is compatible with previous versions of the SAP Ariba cloud integration releases.

Error handling

System errors faced while exporting master data directly

System error can occur either when data is sent from the ERP system to the Process Integration or from the Process Integration to the NetWeaver system. An administrator can monitor the errors from the SXMB_MONI if a

system error occurs while sending the data from the ERP system to the Process Integration . The monitor of the NetWeaver system displays the error when the data is sent from the Process Integration to the NetWeaver system.

When a system error occurs, the ABAP program tries to upload the master data up to three times based on the time delay specified in the /ARBA/AUTH_PARAM table. If it still fails, the master data is not lost and is available on the SAP ERP server. To retrieve the master data, the administrator must make the necessary changes to the configuration (RealmID, shared secret, or URL) based on the error and run the Full or Incremental Load exports for the master data tasks again from your ERP system.

When exporting the master data, the data is posted on the SAP Ariba application. The data validation does not occur immediately on posting the data but later. When there are data dependencies or inconsistencies, an error is recorded on the SAP Ariba application.

Administrators can check errors using the following methods:

- 1. Configure email notification alerts on their SAP Ariba application system to receive notification when an error occurs. This enables the administrator to log in to the SAP Ariba application to check the details of the errors.
- 2. Directly log in to the SAP Ariba application and check the details of the errors.

To correct the error, the administrator must ensure that the data inconsistency is resolved in ERP system and then must rerun the tasks for the master data again from the ERP system.

i Note

Buyers can also manually run the master data import tasks.

Single Stack

To view errors in a single stack instance, go to the **Configuration and Monitoring Home>Adapter Engine>Message Monitor** page.

Dual Stack

To view errors in a dual stack instance, go to the **SXMB_MONI** page.

How to configure the proxy on SAP ERP systems

Procedure

- 1. Run the transaction **SM59** and check if following configurations exist:
 - SAP_PROXY_ESR under HTTP Connections to External Server
 - XI_INTEGRATIONSERVER_<SID> (SID system identifier) under HTTP Connections to ABAP System (H Type RFC)

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- LCRSAPRFC under TCP/IP Connections. Specify the program ID similar to the one created under Jco RFC destinations (LCRSAPRFC_<SID>, where SID - system identifier)
- SAPSLDAPI under TCP/IP Connections. Specify the program ID similar to the one created under Jco RFC destinations (SAPSLDAPI <SID>, where SID system identifier)
- 2. Start transaction SLDAPICUST.
- 3. Enter SAP XI hostname, port, XI user ID, and password.
- 4. Start transaction **SXMB_ADM**.
- 5. Expand Integration Engine> Configuration.
- 6. Click Integration Engine Configuration to edit global configuration data.
- 7. In the Global Configuration Data section, enter the following:
 - Role of Business System: Application System
 - **Corresponding Integ. Server**: dest://<XI_INTEGRATIONSERVER_PPI> This is the same H Type RFC destination mentioned in Step 1.
- 8. Run SLDCHECK command in SAP ERP.

The Process Integration server appears and the **Summary** section indicates that the connection to XI is successful.

How to configure the proxy for single stack (Java only) instances for SAP Process Integration 7.3 and higher

Procedure

- 1. Run the transaction SM59 and create RFC destination SAP_PROXY_ESR (Type G) under HTTP Connections to External Server.
 - 1. Under the Technical Settings tab, add AEX (PI Java Stack) server host name and port.
 - 2. In the Path Prefix field, enter /rep.
 - 3. Under the Logon & Security tab, you must ensure that the user is assigned to the role SAP_XI_REP_SERV_USER.
- 2. Create an HTTP destination to AEX of Type G (example: PI_AEX) as follows:
 - 1. Under the Technical Settings tab, add AEX (PI Java Stack) server host name and port.
 - 2. In the **Path Prefix** field, enter /XISOAPAdapter/MessageServlet?ximessage=true.
 - 3. Under the Logon & Security tab, user must be assigned to role SAP_XI_REP_SERV_USER.
- 3. Start transaction SXMB_ADM.
- 4. Expand Integration Engine > Configuration.
- 5. Click Integration Engine Configuration to edit global configuration data.
- 6. Under Global Configuration Data, enter:
 - Role of Business System: Application System
 - **Corresponding Integ. Server**: dest://<PI_AEX> This is the same G Type RFC destination mentioned in step 2.

- 7. Click Specific Configuration and enter the following:
 - Category: Runtime
 - Parameter: IS URL
 - Current Value: dest://<PI_AEX> This is the same G Type RFC destination mentioned in step 2.
- 8. Start transaction SLDAPICUST.
- 9. Enter SAP XI hostname, port, XI user ID, and password.
- 10. Run SLDCHECK command in SAP ERP.

Configuring client certificates to import master data directly

Procedure

- 1. Ensure that you have the client certificate that you have received from an SAP Ariba trusted Certificate Authority.
- 2. Import the private key of the certificate into the SAP Business Site system by using the **Trust Manager** (transaction STRUST). You can only import certificates in the Personal Security Environment (PSE) format. Certificates in other formats must first be converted to the PSE format. Use the command line tool SAPGENPSE to do the conversion. Install the SAPGENPSE tool with the SAP Cryptographic Library installation package. For more information, see The SAP Cryptographic Library Installation Package [external document1.

For example, to convert the P12 (Public-Key Cryptography Standards) format to PSE format, enter the following command line:

sapgenpse import pl2 -v -r <root certificate> -p <Target PSE file><Source File>.

- 1. Create a new Client Identity in the Trust Manager. Go to Environment > SSL Client Identities.
 - Enter "ARIBA" as the identify name and "Ariba Network Client" as the description.
 - Save the entries.
- 2. Import the private key of the certificate into the SAP Business Site system by using the Trust Manager (transaction STRUST).
 - Select the newly created ARIBA SSL Client ID and choose PSE > Import to import the PSE file.
 - Enter the password for the certificate. if required.
 - To save, click PSE > Save as > SSL Client.
 - Enter "ARIBA" as the SSL Client.
 - Navigate to the **Own Certificate** group box on the **Trust Manager** screen, and double-click the certificate to add it to the certificate list. You can now see the newly added certificate in the Certificate List of the Trust Manager.
- 3. Import the root certificate into the SAP Business Suite system by using Trust Manager as follows:
 - 1. Double-click the SSL Client Identity **ARIBA** that you have created.
 - 2. Navigate to the Certificate group box and choose Import certificate. Click Add to Certificate List to add the imported certificate to the certificate list.

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- 4. Obtain the server certificate from SAP Ariba for the HTTPS SSL encryption:
 - 1. Go to https:\\svcmachss.ariba.com.
 - Download the certificate using your browser.
 For example, if you are using Internet Explorer, go to Internet Explorer, click View>Security Report>View
 Certificates. On the Details tab, click Copy to File and export it in the Base-64 encoded X.509 format.
 - 3. Import the server certificate into the SAP Business Suite system using Trust Manager.
 - 4. Double click the **ARIBA** SSL Client ID that you have created.
 - 5. Navigate to the **Certificate** group box and choose **Import certificate**. Add the imported certificate to the certificate list by clicking **Add to Certificate List**.
- Use transaction SMICM to activate the changes and restart the Internet Communication Manager (ICM). Click Administration > ICM > Restart > Yes. For more information, go to the SAP documentation portal and search for the phrase "Using the ICM Monitor."
- 6. Go to TCode **SOAMANAGER** to configure the Web services.
 - 1. Click Web Service Configuration.
 - 2. In the **Design Time Object Search** tab, search for CO_SI consumer proxy.
 - 3. In the Search Result section, click / ARBA/CO_SI_SOURCING_UPLOAD.
 - 4. In the **Configurations** tab, click **Create** and then click **Manual Configuration** to create a manual logical port.
 - 5. In the Logical Port Name text box, enter a name for the logical port.
 - 6. Enter a description in the **Description** text box.
 - 7. Click the **Logical Port is Default** checkbox.
 - 8. Click Next.
 - 9. On the **Consumer Security** page, select the **X.509 SSL Client Certificate** and then click **X.509 SSL Client Certificate**.
 - 10. Enter "Ariba" in the SSL Client PSE of transaction STRUST text box and click Next.
 - 11. On the HTTP Settings page, enter the URL Access Path, Computer Name of Access URL, Port number of Access URL and URL Protocol Information.

i Note

If you choose HTTPS as the **URL Protocol Information**, ensure that you enter "443." If you choose HTTP, enter "80."

- 12. Click Finish.
- 13. Ping the web service URL. The following error message appears: "Web service ping failed. (RC=403. Service Ping ERROR Forbidden."
- Log in to your SAP Ariba buyer account. Go to Core Administrator > Integration Tool Kit Security. The Integration Toolkit Security page appears.
- 8. In the **Select the Authentication Method** pull-down menu, choose **Certificate**. Paste the contents of the public certificate.

i Note

If you are integrating master data directly using the client certificate authentication, you must leave the shared secret field in the /ARBA/AUTH_PARAM empty.

How to configure certificates and keys to import master data using the SAP Process Integration layer

Procedure

- 1. Go to SAP Process Integration > NetWeaver Administration >, and then click Configuration Management.
- 2. Click Certificate and Keys.
- 3. On the **Certificate and Keys** page, click **Create** to create a new view. Create the required keys and certificates for the newly created view.

i Note

Ensure that your required certificates are signed by an SAP Ariba trusted Certificate Authority to successfully establish the SSL connection.

- 4. Go the SOAP Receiver Communication Channel page and in the General tab, click the Configure Certificate Authentication check box.
- 5. In the **Keystore Entry** field, select the key newly created in the keystore.
- 6. In the **Keystore View** field, select the newly created view in the keystore.
- 7. In the Target URL field, ensure that you specify the location of the certificates stored on your SAP NetWeaver Administrator system.

i Note

Ensure that your URL starts with "https://cert...

- 8. Save and activate the communication channel.
- 9. Log in to your SAP Ariba buyer account. Go to Core Administrator > Integration Tool Kit Security. The Integration Toolkit Security page appears.
- 10. In the Select the Authentication Method dropdown, choose Certificate. Paste the contents of the client certificates.

How to configure the shared secret authentication

Procedure

- 1. Open the Configuration Integration Builder from the SAP Process Integration main page.
- 2. In the **Objects** tab of the Integration Builder, click **Communication Channel**.
- 3. Click Edit button that corresponds to the Communication Channel, and click Configure User Authentication.
- 4. In the **Target URL** field, specify the URL of your Sourcing system. For Example:
 - For material master, material classification, and Manufacturer Parts List: http://<URL to your SAP Ariba Sourcing solutions>/Sourcing/fileupload?realm <realm name that you maintain in SM30> for example, https://s1.ariba.com/Sourcing/fileupload?realm=s4All.

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- For bill of materials: https://<URL to SAP Ariba Sourcing>/dms/ws/BOMRequests?realm=<realm name that you maintain in SM30>.
- 5. In the **User** text box, enter the realm name for your Sourcing system.
- 6. In the **Password** text box, enter the same shared secret that you specified on the **Integration Toolkit Security** page of your SAP Ariba Sourcing system.
- 7. Save and activate the communication channel.

Configuring the integration scenario

Procedure

- 1. From the SAP Process Integration main page, select **Integration Directory** > **Integration Builder**, and then login to the **Configuration: Integration Builder** application.
- 2. In the Integration Builder page, select Tools > Apply Model from ES Repository.
- 3. In the first screen of the **Transfer Model from ES Repository** wizard > **Select ES Repository Model** and then click **Process Integration Scenario**.
- 4. Click the Name field and then click the Display Input Help pull-down menu and then click Input Help.
- 5. Select the one of the following values from the **Select Process Integration Scenario from Enterprise Services Repository** screen:
 - AR_AribaSourcing_Upload for export.
 - AR_AribaSourcing_Download for import.
- 6. Click **Apply**. The **Transfer Model from ES Repository** wizard appears. The Namespace and the Software Component Version is available in the wizard.
- 7. Click **Continue** and then click **Close**. Based on the value you set in the **Select Process Integration Scenario from Enterprise Services Repository** field, this completes the export or import configuration scenario .
- 8. In the Model Configurator, click the Select Component View button.
- 9. In the **Select Component View for Configuration** page, select the **Business System Components for A2A** tab to assign components for your SAP Ariba Buying solutions.
- 10. Click the Insert Line button ('+') to add a component entry in the table if no component entry line is present.
- Click the row under the Communication Component column, then click the Value List drop down and select Value List ...F4. Select the communication component name AR_AribaSourcing_Upload (for export) or AR_AribaSourcing_Download (for import) from the selection list and click Apply.
- 12. Click the Assign Component button.
- 13. In the **Model Configurator** page, select the **Business System Components for A2A** tab to assign the communication component for your SAP Ariba Buying solutions.
- 14. Click the row under the **Communication Component** column, then click the **Value List** pull down menu and select **Value List <F4>**. Select the communication component name from the selection list and click **Apply**.
- 15. Click the Next Application Component button (the right arrow) to go to the next screen in the window.
- 16. Click the Insert Line button ('+') to add a component entry in the table if no component entry line is present.
- 17. Click the row under the **Communication Component** column, then click the **Value List** pull-down and select **Value List ..F4**. Select the communication component name for the business system from the selection list and click **Apply**.

- 18. Click the **Save Settings** button to save the changes.
- 19. In the **Model Configurator** page, click the **Configure Connections** button. You must assign a Communication Channel to set up the connections.
- 20. In the **Connections from Component Assignment** tab, click the empty **Communication Channel** cell corresponding to the to the business system component value.
- 21. Click the Value List pull down menu and select Value List ..F4. Select the communication component and click Apply.
- 22. Select the CC_Proxy_Sender communication channel from the selection list and click Apply.

i Note

You require the Proxy Sender communication channel only for a single stack Java machine. If you are using a dual stack Java machine, the **Communication Channel** cell must be left blank.

- 23. Click the **New Communication Channel** button (the icon at the top left) on the **Communication Channels** page to start the **Create Communication Channel** wizard.
- 24. Click **Continue** and in the next page click the **Name** field, then click the **Display Input Help** drop down list and select **Input Help**. Select the following Communication Channel Template:
 - Communication Component: Specify the communication component.
 - Communication Channel: Specify the communication channel.
- 25. Click Finish. The Model Configurator window appears.
- 26. In the Model Configurator, click the Create Configuration Object button.
- 27. In the Create Configuration Object window, do the following:
 - Click Generation in the General section.
 - Select the **Receiver Determination**, and **Interface Determination** checkboxes in the **Scope of Generation** section.
- 28. Click **Create New** in the **Change List for Generated Objects** section. The text box already contains an object name that you can use or modify.
- 29. Click **Start** to begin generating objects.
- 30. After the object generation is complete, click **Apply** to save the new configuration settings. Close the log that is created without saving. You can save it, if required.
- 31. On the **Communication Channel** page, you can specify the shared secret or client certificate authentication in the **Parameters** tab. Ensure that you set the parameters in the **General** tab>**Connection Parameters** section that matches your Ariba Buyer account configuration.
- 32. Save the changes.

➡ Remember

The proxy settings and the subsequent reflection of **Ariba_Upload ESR** object in the SAP ERP **SPROXY** transaction is done for integrating master data through the Process Integration layer. By default, the connectivity is always direct through SOAMANAGER.

Revision history

The following table provides a brief history of the updates to this guide. SAP Ariba updates the technical documentation for its cloud solutions if

- software changes delivered in service packs or hot fixes require a documentation update to correctly reflect the new or changed functionality;
- the existing content is incorrect or user feedback indicated that important content is missing.

SAP Ariba reserves the right to update its technical documentation without prior notification. Most documentation updates will be made available in the same week as the software service packs are released, but critical documentation updates may be released at any time.

Cloud inte- gration re- lease	Month/year of update	Updated chapter/ section	Short description of change
9.0	December 2016	n/a	Reset revision history for Cloud Integration Release 9.0.
		Multiple Chapters	Ariba Cloud Integration Release 9.0
			Updated throughout for the Ariba Cloud Integration Release 9.0.
	January 2017	About this guide	Added a pointer to the Installation Guide for Sourcing, Contracts, and Supplier Data Integration with SAP ERP.
		About integrating sourcing, contract, and supplier data with SAP ERP	Added a new chapter.
	March 2017	Configuring Medi- ated Connectivity	Added TLS version 1.1 and TLS version 1.2 support on mediated connectivity
9.0 SP1	March 2017	Integrating Contract Information with SAP ERP	Added a limitation for service line item hierarchies.
	April 2017	 Enhancements to Ariba Sourc- ing integration for Product Sourcing How to include additional infor- mation in the SLG1 log files 	Added information on the optional parameter for storing AML and BOM information in the SLG1 log files.

Cloud inte- gration re- lease	Month/year of update	Updated chapter/ section	Short description of change
		Enhancements to SAP Ariba Sourcing integration for prod- uct sourcing	Added information about filtering option when performing incre- mental upload for Manufacturer Parts List and Approved Manufac- turer Parts List.

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