Ariba

CUSTOMER

Cloud Integration 8.0
Document Version: 1 – 2016-08

Ariba Procurement Solution Integration Guide for SAP ERP

Ariba Procure-to-Order
Ariba Procure-to-Pay

SAP

SAP Ariba

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SAP Integration - Overview

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About SAP Integration

The Ariba Procurement Solution integrated with SAP allow administrators to import master data and export transactional data from SAP ERP systems to a procurement system seamlessly.

The Ariba Integration Toolkit is a Java-based tool that Ariba provides to upload master data or download transactional data. This tool reads the .csv files on the SAP ERP system, zips them and sends them as MIME messages using the HTTP post to the Ariba Procurement Solution. For more information, see the *Ariba On Demand Solutions Integration Toolkit Guide*.

Buyer administrators can enable the integration of data through the following methods:

- File-based integration
- Web Services
- Direct Connectivity
- Mediated Connectivity

Related Information

Data Integration Methods [page 12]

Master Data

Master data consists of general information stored on the SAP ERP system that is used in the Ariba Procurement Solution to create business documents such as requisitions, receipts, or invoices. Master data is extracted from your SAP ERP system and sent to your Ariba Procurement Solution system. The Ariba Procurement Solution integrated with SAP provides the integration events for standard data imports from the SAP ERP system.

Master data is extracted from your SAP ERP system and sent to your Ariba Procurement Solution system. The Ariba Procurement Solution provide the integration events for standard data imports from the SAP ERP system.

To import master data, you require the latest version of the SAP transports installed on your SAP ERP system. The SAP transports contain the Ariba-specific ABAP programs required for master data export extractions. When you export master data from the SAP ERP system, the ABAP programs runs the scheduled task on the SAP ERP system. To run master data, you must schedule the master data extraction ABAP programs that , extracts the master data and creates the CSV files. The .csv file is then sent to the Ariba procurement solution. You can import master data using the following methods:

- Ariba Integration Toolkit
- Direct Connectivity
- Mediated Connectivity

Related Information

Integrating master data [page 72]

Transactional Data

Transactional data includes information about purchase orders, invoices, receipts, and remittance advice. Transactional data is sent from the Ariba Procurement Solution to the SAP ERP system. However, transactional data for Remittances and the Purchase Order Header Status is always sent from the SAP ERP system to the Ariba Procurement Solution. You can import master data using the following methods:

- Ariba Integration Toolkit
- Direct Connectivity
- Mediated Connectivity
- Web services

You can export transactional data using either the File channel or Web services:

- File Channel
  - The File channel uses the Data Transfer tool to export transactional data from Ariba Procurement Solution to the SAP ERP system as CSV files for each integration event that you run.
  - The integration event extracts the data, converts the data to a .csv file and sends the file embedded in a MIME message to the Data Transfer tool. Based on the configurations, the Data Transfer tool downloads the .csv files to your SAP ERP system.
- Web services
  - If you are using the Web services to export transactional data, the SAP Process Integration middleware is used to export transactional data between your Ariba Procurement Solution and SAP ERP system.

Related Information

Integrating Transactional Data Using File Channel [page 156]
Integrating Transactional Data Using the Web Services Channel [page 182]
Integrating Transactional Data Directly Using the User Interface [page 216]
Integrating Transactional Data Using the Mediated Connectivity Integration Method [page 223]

Data Integration Methods

Buyers can import master data and export transactional data from SAP ERP systems to a procurement system through the following methods:

- File-based integration
- Web Services
- Direct Connectivity
- Mediated Connectivity

  File-Based Integration [page 12]

  Web Services Based Integration [page 14]

  Direct Connectivity Integration [page 15]

  Mediated Connectivity Integration [page 15]

Related Information

File-Based Integration [page 12]
Web Services Based Integration [page 14]
Direct Connectivity Integration [page 15]
Mediated Connectivity Integration [page 15]

File-Based Integration

File-based integration enables you to import master data and transactional data using the Data Transfer Tool in the Ariba Integration Toolkit as follows:

- Ariba provides SAP transports that extracts master data from the SAP ERP system and writes to a *.csv file. The *.csv files are then transferred to the Ariba procurement solution using the Ariba Integration Toolkit.
- You can export transactional data using the Data Transfer Tool. o The Data Transfer tool downloads master data and transactional data from the Ariba procurement solution to the configured location on your file system based on the configuration specified in the .bat file. The data is stored as .csv files.

  Master Data - File-Based Integration [page 13]

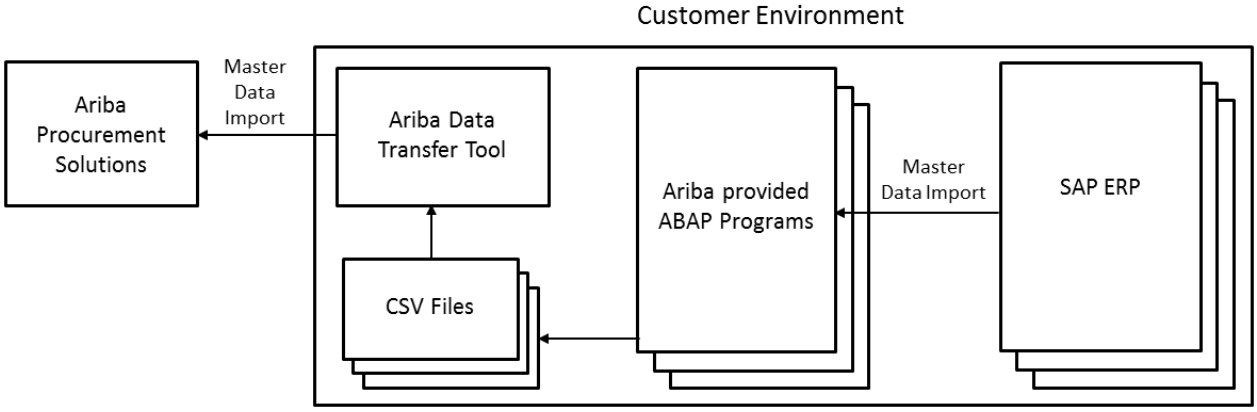
Transactional Data - File-Based Integration [page 13]

Related Information

Integrating master data [page 72]
Integrating Transactional Data Using File Channel [page 156]

Master Data - File-Based Integration

The following figure illustrates the integration of master data on file-based integration.



1. The ABAP program provided by Ariba downloads master data from SAP ERP in the form of CSV files.
2. The Data Transfer Tool then reads these CSV files and uploads data into Ariba Procurement Solutions.

Figure 1: Integration of Master Data on File-Based Integration

Related Information

Master Data [page 10]

Transactional Data - File-Based Integration

The following figure illustrates the integration of transactional data on file-based integration.

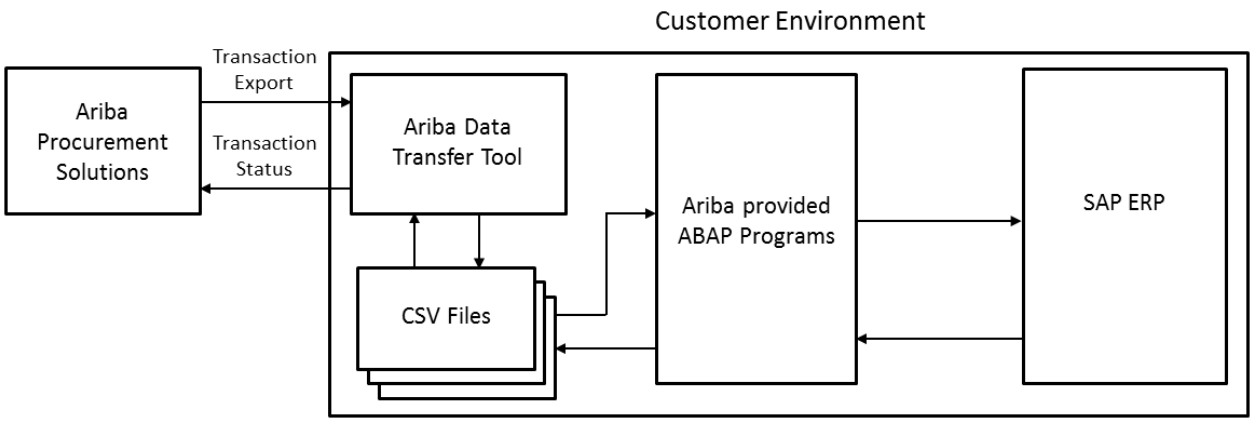


Figure 2: Integration of Transactional Data on File-Based Integration

1. The Data Transfer Tool exports data from Ariba Procurement Solutions in the form of CSV files.
2. The ABAP program provided by Ariba then read these CSV files and transfers data to the SAP ERP system.
3. The ABAP program provided by Ariba then retrieve the status of each export transaction from the SAP ERP system.
4. The Data Transfer tool reads these CSV files and uploads the status into Ariba procurement solutions.

Web Services Based Integration

Web Services based integration allows integration of master data and transactional data. However, master data integration is not complete and allows you to import only some master data.

The following diagram illustrates the integration between Ariba procurement solutions and SAP ERP using Web Services.

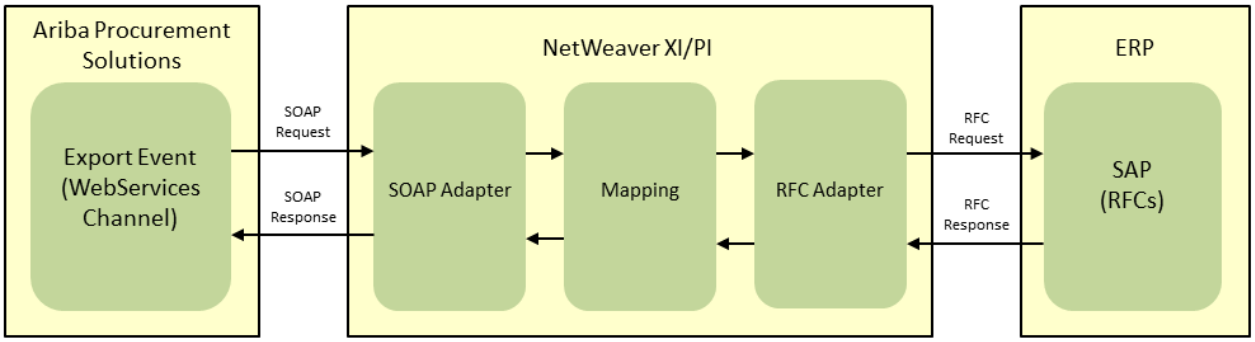


Figure 3: Integration Between Ariba Procurement Solutions and SAP ERP Using Web Services

The Web Services provide for real-time integration of the Ariba procurement solutions with SAP ERP systems using SAP Process Integration. The integration using SAP Process Integration is built out of the box. If you want to use any other application system through a SOA supporting middleware, then you will have to build your integration.

When an object is created in a procurement solution, which is configured to be sent to SAP, the Web Services generate a SOAP message based on the WSDL and dispatches it to a Web Services server such as SAP Process Integration using the URL configured through the Ariba Administrator.

SAP Process Integration is configured to receive SOAP messages using the SOAP adapter. It transforms the data using the messaging mapping and converts the SOAP message to SAP format (typically RFC). The RFC adapter then transmits the information to SAP ERP system based on the configuration.

In SAP ERP, data is created using RFC/BAPI and the response (Success or failure) is sent back to SAP Process Integration, which again transforms the data and sends it back to the Ariba procurement solutions through the Web Services. The response is then updated in the respective procurement solution.

Related Information

Integrating Transactional Data Using the Web Services Channel [page 182]

Direct Connectivity Integration

Integrate master data and transactional data directly from an SAP ERP system to an Ariba procurement solution system seamlessly without using the Ariba Integration Toolkit through the Direct Connectivity Integration method. The CSV files containing the master data is sent to the Ariba procurement solution system through SOAP messages as follows:

- The master data is compressed in a zip file and embedded in a SOAP message header.
- A proxy is called with the request header.
- If there are failures while trying to connect to the Ariba procurement solution system, the retry is based on the time duration you have configured.

Buyer administrators must configure the necessary parameters required to integrate master data. For more information, see Integrating Master Data Using the Direct Connectivity Integration Method from SAP ERP [page 138].

> **Note**
>
> The Direct Connectivity integration method for master data is available from Ariba Cloud Integration Release 4.0 and above. You can import transactional data using the Direct Connectivity integration method from Ariba Cloud Integration Release 6.0 and above.

Related Information

Mediated Connectivity Integration [page 15]

Mediated Connectivity Integration

Buyers using the Ariba Procurement Solution integrated with SAP can integrate master data and transactional data from an SAP ERP system to the Ariba Procurement Solution system seamlessly using the SAP Process

Integration layer through the Mediated Connectivity Integration Method. Buyers can securely download master data from an SAP ERP system to an Ariba Procurement Solution system or Fieldglass system through the SAP Process Integration using SOAP messages. Buyers can use either the shared secret or client certificate-based authentication.

Buyer administrators must configure the necessary parameters required to integrate master data. For more information,

> **Note**
>
> The Mediated Connectivity integration method for master data is available from Ariba Cloud Integration Release 5.0 and above. You can integrate transactional data using the Mediated Connectivity integration method from Ariba Cloud Integration Release 6.0 and above.

Related Information

Integrating Master Data Using the Mediated Connectivity Integration Method [page 147]
Integrating Transactional Data Using the Mediated Connectivity Integration Method [page 223]
Integrating Transactional Data Directly Using the User Interface [page 216]
Direct Connectivity Integration [page 15]

Supported Document Transactions

Ariba supports the following document transactions from the SAP ERP and Ariba Procurement Solution:

Document Sent From SAP ERP	Document Sent From Ariba Procurement Solution
Master Data for Supplier, User, Organization, Accounting, Cross/Application Configuration	
Transactional Data	
	Purchase Orders, Change Purchase Orders, Cancel Purchase Orders
Purchase Order Status	
	Receipts
Receipt Status	
	Invoices
Invoice Status	
Remittances	
	Expense Report
Contracts	

Document Sent From SAP ERP	Document Sent From Ariba Procurement Solution
	Requisitions, Revert Requisitions, Budget Checks, Funds Derivation: Requisition Derivations, Invoice Derivations

Supported Versions and Integration Landscapes

You can integrate Ariba Procurement Solution in the following SAP ERP versions:

- SAP ERP 6.0 SPS02 (SAP_APPL 600 SPS02 and SAP_BASIS 700 SP18) (minimum requirement)
- SAP S/4HANA, on-premise edition 1503
- SAP S/4HANA, on-premise edition 1511

If you use the web services-based integration between Ariba Procurement Solution and SAP ERP, the following SAP Process Integration versions are supported:

- SAP Process Integration 7.1
- SAP Process Integration 7.3
- SAP Process Integration 7.4
- SAP Process Integration 7.5

> **Note**
>
> To prevent errors for the mandatory target fields containing a combination of NodeFunctions, CopyValue and Text Functions, ensure that you upgrade the SAP Process Integration 7.5 to SP00 Patch Level 4.

Ariba recommends that you maintain separate installations of the integration for your Development and Production environments.

Installation

You must install the Ariba Integration Toolkit if you are using file-based integration. For more information, see the *Ariba On Demand Solutions Integration Toolkit Guide*.

Based on the solution you use, such as Ariba Procure-to-Pay and Ariba Procure-to-Order, or both, you must import the appropriate transports into your SAP system. For more information on the installation and new features available in the different Ariba Cloud Integration releases, see the *Installation Guide for Ariba Procurement Solution Integrated with SAP ERP*.

Configuring SAP Process Integration

Configuring the System Landscape Directory [page 18]

Configuring Transaction Processes [page 22]

Configuring SAP NetWeaver PI Value Mapping [page 26]

About Configuring Integration Scenarios in the Integration Directory [page 26]

About Configuring the Integration Scenario [page 27]

Configuring NetWeaver PI for Web Services Integration [page 40]

Configuring the System Landscape Directory

Configure the System Landscape Directory (SLD) by importing the Ariba procurement solutions product definition, and defining the systems involved in the integration. The SAP System Landscape Directory is a central repository that holds the information on the systems and software in the customer environment. It consolidates the information about components actively available, and on which machines, instances, and clients they are available.

The Ariba procurement solutions leverages all the advantages of the SLD in order to maintain the coherence of the system landscape as follows:

- It is defined as a product and component expressed in Common Information Interface (CIM) format importable in the SLD
- It uses a configuration using technical and business systems involved in the Ariba procurement solutions integration and defined in the SLD.

You must make the following settings in the SLD:

- Import Ariba Procurement Product and Component definitions
- Define Technical and Business Landscape for the Ariba procurement solutions
- Define Technical and Business Landscape for SAP ERP

The SAP Process Integration design packages (.tpz files) are available on Connect.ariba.com in a zip file. You must download the zip file and extract the files for your required version.

Importing Product and Component Definitions for Ariba Procurement Solutions

Context

Import the product and component definitions for Ariba Procurement Solution that you require to work with SAP Process Integration, as a CIM file.

Procedure

1. From the XI main page, open the SLD administration home page.
2. Navigate to the Content section, and then click on Import.
3. Select the `AribaOnDemand.SoftwareCatalog.zip` by clicking on the **Browse** button, and then navigating to the file location.
4. Start the import.
5. In the Product Catalog, verify that the following product is available:
   - Vendor: ariba.com
   - Product: Ariba Ondemand
   - Version: Applicable version
6. Next, verify that the following components are available:
   - Vendor: ariba.com
   - Component: `ARIBA_ONDEMAND_PURCHASEORDER`, `ARIBA_ONDEMAND_INVOICE`, `ARIBA_ONDEMAND_RECEIPT`, `ARIBA_ONDEMAND_REMITTANCE`, `ARIBA_ONDEMAND_ER_INVOICE`
   - Version: Applicable version

Results

The Ariba procurement solutions will now be recognized by the Integration Repository and Directory.

Configuring the Technical Landscape for Ariba Procurement Solutions

Procedure

1. Select Technical Landscape from the main SLD page to open the **Technical Landscape** page.
2. Click **New Technical System** here to open the Technical System Wizard.

3. In the Wizard, select **Third-Party** as the **Technical System Type** to set up a third-party (non-SAP) application such as Ariba procurement solutions, and then click **Next**.
4. Specify the system details as follows:
   - **System Name**: Specify a user-defined system name here. For example, **`TS_BUYER`**.
   - **Host Name**: Enter **`ariba_buyer`** as the host name.
5. Click **Next**.
6. Associate the Ariba Procurement product and components to the system next. Select the product **Ariba Procurement**, and then click **Add**. Ensure that the components you want to implement are selected.
7. Click **Finish**.

Next Steps

Set up the business landscape for the Ariba Procurement Solution system using the Business Landscape Wizard.

Configuring the Business Landscape for Ariba Procurement Solutions

Procedure

1. Select **Business Landscape** from the main SLD page to open the Business Landscape page.
2. Click **New Business System** to open the Business System Wizard.
3. In the wizard, enter the business system name, for example, **`BS_BUYER`**, and then click **Next**.
4. Select **Third-Party** as the **Technical System Type**, and then click **Next**.
5. Associate the new business system with the required **Technical System**. From the drop-down list, select the technical system, `TS_BUYER`, created in the previous procedure, and then click **Save**.

   > **Note**
   >
   > The **Logical System Name** is not mandatory.

6. Specify the installed products. Make sure that the product Ariba procurement solutions and the related components to be implemented (for example, `ARIBA_ONDEMAND_PURCHASEORDER`) on the technical system are selected, and then click **Next**.
7. Select the role of the business system. The only available **Business System Role** for a third-party Business System is **Application System**. Select your SAP Process Integration instance name from the drop-down list to specify the **Related Integration Server**.
8. Click **Finish**.

Configuring the Technical Landscape for SAP ERP

Procedure

1. Select **Technical Landscape** from the main SLD page to open the Technical Landscape page.
2. Click **New Technical System** to open the Technical System Wizard.
3. In the wizard, select **Web AS ABAP** as the **Technical System Type**, and then click **Next**.
4. To specify the SAP ERP system details enter the Web AS ABAP name (SID), installation number, and database host name, and then click **Next**.
5. Specify the **Message Server** and **Central Application Server**. Specify the **Host Name**, **Message Port**, and **Logon Groups** for the Message Server. Enter the **Host Name** and **Instance Number** for the Central Application Server, and then click **Next**.
6. Define additional application servers, if required. Specify the **Host Name** and **Instance Number** for the Application Server, and then click **Add**.
7. Click **Next**.
8. Define the Client. Specify the **Client Number**, and then click **Next**.
9. To add a **Logical System Name**, enter the system name, and then click **Add**. The logical system name is required for enabling the communication using IDocs between the SAP Process Integration and ERP systems, and is used for routing documents in multi-ERP implementations.
10. Define software product and components. Select the SAP ERP version installed on this technical system, as well all other products installed on the system, and then click **Add**.
11. Click **Finish**.

Next Steps

Set up the business landscape for the SAP ERP system using the Business Landscape Wizard.

Configuring the Business Landscape for SAP ERP

Procedure

1. Select **Business Landscape** from the main SLD page to open the Business Landscape page.
2. Click **New Business System** to open the Business System Wizard.
3. In the wizard, enter the business system name. For example, `BS_SAPR3_47`.
4. Click **Next**.
5. Select **Web AS ABAP** as the **Technical System Type**, and then click **Next**.
6. Select the technical system created in the previous procedure from the drop-down list, to associate it with the business system, select a client for the selected technical system, and then click **Next**.

7. Specify the installed products. Select the products that must be supported by this business system from the ones available from the associated technical system, to install them in the business system, and then click **Next**.
8. Select the role of the business system. Select **Application System** as the **Business System Role** and select your SAP Process Integration instance name from the drop-down list to specify the **Related Integration Server**. In the case of application systems, specify the integration server.
9. Click **Finish**.

Configuring Transaction Processes

After you have installed the SLD, do the following:

- Import the design package containing the transactions supported by the Ariba Procurement Solution.
- Configure SAP Process Integration connectivity to SAP ERP.
- Configure SAP Process Integration value mapping to provide the global configuration.
- Configure the different transactions in the Integration Directory by importing the scenarios from the Integration Repository.
- Configure the communication channels and the conditions for routing messages, for each supported transaction.
  For more information on installing or upgrading the Ariba components for Ariba Procurement Solution, see the *Installation Guide for Ariba Procurement Solution Integrated with SAP ERP*.

> **Note**
>
> The names for objects in the Directory used in the configuration procedures are examples provided for illustration. You may use them or replace them with names and format corresponding to your system environment.

About Importing the Design Package

The following design files are relevant for the transactions described:

Transport File	Transactions
`XI7_1_ARIBA_ONDEMAND_PURCHASEORDER_CIx_of_ariba.com.tpz`	• Purchase Order • Change Purchase Order • Cancel Purchase Order • Purchase Order Header Status Import
`XI7_1_ARIBA_ONDEMAND_RECEIPT_CIx_of_ariba.com.tpz`	Receipts (Receipt Export)
`XI7_1_ARIBA_ONDEMAND_INVOICE_CIx_of_ariba.com.tpz`	Invoices (Payment Export)
`XI7_1_ARIBA_ONDEMAND_REMITTANCE_CIx_of_ariba.com.tpz`	Remittance (Remittance Import)

Transport File	Transactions
XI7_1_ARIBA_ONDEMAND_ER_INVOICE_CIx_of_ariba.com.tpz	Expense Report (Export)
XI7_1_ARIBA_ONDEMAND_BUDGET_MGMT_CIx_of_ariba.com.tpz	• Budget Check • Requisition Submit • Requisition Revert • Requisition Derive • Invoice Derive

Importing the Design Package

Procedure

1. Copy the package file XI7_1_ARIBA_ONDEMAND_<transaction>_CIx_of_ariba.com.tpz to the import directory on the SAP Process Integration server, *****\SYS\global\xi\repository_server\import.

   For example, D:\usr\sap\ARB\SYS\global\xi\repository_server\import
2. Open the Integration Builder: Design Tool from the SAP Process Integration main page.
3. From the **Tools** menu, select the **Import Design Objects** option.
4. Select XI7_1_ARIBA_ONDEMAND_<transaction>_CIx_of_ariba.com.tpz from the available files list, and then click **OK**.

Results

After the import is complete, the component ARIBA_ONDEMAND_<transaction>, for CIx ariba.com appears in the components list of the Integration Builder Design Tool.

Configuring SAP ERP Connectivity

Context

To enable communication between SAP Process Integration and SAP ERP using IDoc documents, you need to configure several parameters on the SAP Process Integration ABAP stack.

Procedure

1. Using Transaction SM59, create an RFC destination of type `R/3` to connect to the SAP ERP system.
2. Using Transaction IDX1, create a Port for the new RFC destination. For example, for the SAP ERP system D47 client 800, you must use specify following parameters to create the port:
   - Port: SAPD47.
   - Client 800.
   - RFC Destination: Specify the destination created in SM59 here.

   > **Note**
   >
   > Enter the password in UPPER case.

Assigning Business Systems in the Integration Directory

Context

The Integration Directory configuration uses the information on the Technical and Business systems from the SLD. You must assign the Business Systems defined and involved in the integration setup.

Procedure

1. Open the **Configuration: Integration Builder** from the XI main page.
2. In the **Objects** tab of the Integration Builder, navigate to **Service Without Party** > **Business System**.
3. From the context menu for **Business System**, select **Assign Business System** to start the Assign Business System wizard.
4. Click **Continue** in the first and second windows. Leave the **Party** field in the second window blank.
5. In the third window, Select Business Systems, select the business systems `BS_BUYER` and `BS_SAPR3_46C`, created earlier, from the list. For more information about creating business systems, see Configuring the System Landscape Directory [page 18].

   In the case of Multi-ERP implementation, you must select all the Business Systems representing your SAP ERP instances involved in the integration.

   Also, uncheck the **Create Communication Channel Automatically** option to avoid the creation of unwanted channels.
6. Click **Finish**.

Creating Communication Channels for SAP ERP

Context

Create the communication channels used for SAP ERP connectivity. You must create the RFC Receiver communication channels from the Integration Builder, to enable communication using the RFC invocation on the remote SAP ERP system. This channel will be used by almost all the scenarios and are common to all of them. Therefore, you only need to create them once, for each Business System corresponding to your SAP ERP.

Procedure

1. In the **Objects** tab of the Integration Builder, navigate to **Service Without Party > Business System > BS_SAPR3_46C > Communication Channel**.
2. From the context menu for **Communication Channel**, select **New**.
3. In the Create Object window, specify `CC_RFC_Receiver` as the name of the communication channel, in the **Communication Channel** field, and then click **Create**.
4. From the **Parameters** tab of the Edit Communication Channel window, click on the icon next to the **Adapter Type** field to display the list of adapter types. From the adapter type list window, select the following adapter and click **OK**:
   - Name: RFC
   - Namespace: http://sap.com/xi/XI/System
   - Software Component Version: SAP BASIS 7.10 of SAP Process Integration 7.1 and SAP Basis 7.11 for SAP Process Integration 7.1 Ehp1
5. After selecting the adapter, click the **Receiver** option, to select the corresponding type.
6. In the **Adapter Engine** field, select **Integration Server** or **Non-Central Adapter Engine**, depending on your configuration.
7. Edit the other parameters to match your SAP ERP system (**Application Server**, **System Number**, **Authentication Mode**, **Logon User**, **Logon Password**, **Logon Language**, **Logon Client**).

   > **Note**
   >
   > Enter the password in UPPER case.

8. Edit the **Maximum Connections** option according to the excepted load.
9. Save and activate the communication channel.

   In the case of Multi-ERP implementation, you must create one `CC_RFC_Receiver` channel per Business System, representing each of the SAP ERP instances involved in the integration.

Configuring SAP NetWeaver PI Value Mapping

Configure SAP NetWeaver PI value mapping for supporting facilities such as IDoc Payload and standard code conversions.

Configuring Global Variables

Because SAP NetWeaver XI/PI acts as the integration platform between SAP ERP and Ariba Procurement Solution, there are many parameters that are global for each of the supported scenarios. This section describes the steps to configure global variables.

In the value mappings, use the following parameters for Global Variables:

- Source Values:
- Agency: XI_Global
- Schema: GlobalVariable
- Target Values:
- Agency: XI
- Schema: GlobalVariable

Key Value Pairs

XI_Global	XI	Description
AribaBuyerTimeZone	+5:30	Time zone of Ariba procurement solutions

The XI column in the above table has a sample value.

About Configuring Integration Scenarios in the Integration Directory

The following sections describe how to import and configure the integration scenarios in the SAP NetWeaver XI/PI Integration Directory for the supported transactions. Use an integration scenario from the Integration Repository as a template for configuring the corresponding transaction in the Integration Directory. The Integration Scenarios are part of the Design package, which has to be imported into the Integration Repository first.

> **Note**
>
> Do not activate the Change Lists feature of Integration Builder Configuration Tool until all the configuration steps are completed.

About Configuring the Integration Scenario

You need to configure the integration scenario for the all transactions in the Integration Directory to be able to run each transaction. All the steps of a configuration scenario section must be completed to fully configure a scenario.

If you are using a SAP Process Integration version that is higher than SAP BASIS 7.10, then you must ensure that you edit the software component version for the communication channel template to avoid receiving the following error: "Software component version with name SAP BASIS 7.10 not found. See error log for details." For more information, see Configuring the Software Component Version for Communication Channel Templates [page 34].

Ensure that the following design packages corresponding to the different transactions and functions are imported into your system before you configure an Integration Scenario.

Table 1: Integration Scenario Design Packages

Integration Scenario	Design Package
Requisition	`XI7_1_ARIBA_ONDEMAND_BUDGET_MGMT_CIx_of_ariba.com.tpz`
Requisition Revert	`XI7_1_ARIBA_ONDEMAND_BUDGET_MGMT_CIx_of_ariba.com.tpz`
Purchase Order	`XI7_1_ARIBA_ONDEMAND_PURCHASEORDER_CIx_of_ariba.com.tpz`
Change Purchase Order	`XI7_1_ARIBA_ONDEMAND_PURCHASEORDER_CIx_of_ariba.com.tpz`
Cancel Order	`XI7_1_ARIBA_ONDEMAND_PURCHASEORDER_CIx_of_ariba.com.tpz`
Purchase Order Header Status	`XI7_1_ARIBA_ONDEMAND_PURCHASEORDER_CIx_of_ariba.com.tpz`
Receipt	`XI7_1_ARIBA_ONDEMAND_RECEIPT_CIx_of_ariba.com.tpz`
Invoice	`XI7_1_ARIBA_ONDEMAND_INVOICE_CIx_of_ariba.com.tpz`
Remittance	`XI7_1_ARIBA_ONDEMAND_REMITTANCE_CIx_of_ariba.com.tpz`
Expense Report	`XI7_1_ARIBA_ONDEMAND_ER_INVOICE_CIx_of_ariba.com.tpz`
Budget Check	`XI7_1_ARIBA_ONDEMAND_BUDGET_MGMT_CIx_of_ariba.com.tpz`
Funds Derivation • Requisition Derive • Invoice Derive	`XI7_1_ARIBA_ONDEMAND_BUDGET_MGMT_CIx_of_ariba.com.tpz`

The following steps assume that the different Business Systems are defined in the SLD. For more information about configuring the SLD, see Configuring the System Landscape Directory [page 18].

Follow these procedures to configure an Integration Scenario:

1. Transfer the Integration Scenario from the Integration Repository to the Integration Directory. See Transferring the Integration Scenario [page 28]
2. Configure the Integration Scenario. See Configuring the Integration Scenario [page 29].
3. Activate the new Integration Scenario. See Activating the Integration Scenario [page 37].

Related Information

Integration Scenario Parameter Values [page 37]

Transferring the Integration Scenario

Context

The first step to configure the integration scenario for a transaction is to transfer to the Integration Directory. The integration scenario is loaded into the Integration Repository when the Design package is imported.

Procedure

1. From the SAP NetWeaver PI main page, select **Integration Directory** > **Integration Builder**, and then log in to the **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**.
4. Click the **Name** field, click the **Display Input Help** pull-down menu and then select **Input Help**.
5. Select the following options for the **Process Integration Scenario** from the **Enterprise Services Repository** screen:
   - **Name**
   - **Namespace**
   - **Software Component Version**

   For information about the values that you must specify for these fields, see Integration Scenario Parameter Values [page 37].
6. Click **Continue**.
7. If required, change the name of the scenario for the **Integration Directory**.
8. Click **Finish**.
   After the transfer is completed, the **Integration Scenario Configurator** window appears.
9. (Required only for transferring the budget integration scenario) Repeat step 3 through step 6. Select the following options for the **Process Integration Scenario** from the **Enterprise Services Repository** screen:
   - Name: `AR_PurchaseRequisition_Send`
   - Namespace: `urn:ariba.com:xi:OnDemand:BudgetCheck`
   - Software Component Version: `ARIBA_ONDEMAND_BUDGET_MGMT CIx of ariba.com`

Next Steps

Configure the integration scenario. See Configuring the Integration Scenario [page 29].

Related Information

About Configuring the Integration Scenario [page 27]

Configuring the Integration Scenario

To configure the integration scenario, you must perform the following tasks:

- Selecting the Model for the Integration Scenario [page 29]
- Assigning Components for the Integration Scenario [page 30]
- Configuring the Sender and Receiver Relations for Individual Connections for the Integration Scenario [page 31]
- Generating Objects for the Integration Scenario [page 32]
- Configuring Interface Determination Settings for the Integration Scenario [page 33]
- Configuring the Software Component Version for Communication Channel Templates [page 34]

Selecting the Model for the Integration Scenario

Procedure

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

Next Steps

After selecting the component view, you must assign components to the application components of the selected integration scenario. See Assigning Components for the Integration Scenario [page 30].

Related Information

About Configuring the Integration Scenario [page 27]

Assigning Components for the Integration Scenario

Prerequisites

- Transfer the Integration scenario. See Transferring the Integration Scenario [page 28].
- Select the model for the scenario. See Selecting the Model for the Integration Scenario [page 29].

Context

Perform the following procedure to assign the business systems to the Ariba Procurement Solution and SAP ERP components:

Procedure

1. In the **Model Configurator**, click **Assign Component**.
2. In the **Assign Components** window, select the **Business System Components for A2A** tab to assign components for the Ariba Network.
3. Click **Insert Line** ('+') to add a component entry in the table if no component entry line is available.
4. Click the row under the **Communication Component** column, click the **Value List** pull-down menu, and select **Value List or <F4>**. Select the communication component name of the business system for your SAP ERP, from the selection list and click **Apply**.

   > **Note**
   >
   > If you have multiple ERP systems, add communication components defined for each of your SAP ERP by repeating step 3 through step 4.

5. Click **Next Role** (the right arrow) to go to the next screen on the window.
6. Click **Insert Line** ('+') to add a component entry in the table if no component entry line is available.
7. Click the row under the **Communication Component** column, click the **Value List** pull-down menu, and select **Value List <F4>**. Select the communication component name of the business system for the Ariba Procurement Solution from the selection list and click **Apply**.
8. Click **Save Settings**.

Next Steps

Configure the sender and receiver relations for individual connections for the integration scenario. See Configuring the Sender and Receiver Relations for Individual Connections for the Integration Scenario [page 31].

Related Information

About Configuring the Integration Scenario [page 27]

Configuring the Sender and Receiver Relations for Individual Connections for the Integration Scenario

Prerequisites

- Assign the components for the integration scenario. See Assigning Components for the Integration Scenario [page 30].
- Create the communication channels for the SAP ERP. See Creating Communication Channels for SAP ERP [page 25].

Context

To activate the assignment of sender and receiver communication components at connection level for the integration scenario, perform the following steps:

Procedure

1. In the **Model Configurator**, click **Configure Connections**.
2. In the **Connections from Component Assignment** tab in the **Configure Connection** window, click the empty **Communication Channel** cell corresponding to the business system for the Ariba Network in the **Sender Business System Components** table.
3. On the top left corner of the screen, click **New Communication Channel** and then select **Create Communication Channel with Template** to start the Create Communication Channel wizard.
4. Click **Continue**.
5. On the next page, click the **Name** field, click the **Display Input Help** pull-down menu, and select **Input Help**. Select the following Communication Channel Template:
   - **Name**
   - **Namespace**
   - **Software Component Version**
6. Click **Apply** and then click **Continue** and if required, modify the channel name.
7. Click **Finish** and then click **Close**.
8. In the **Connections from the Component Assignment** tab in the **Configure Connection** window, click on the empty **Communication Channel** cell corresponding to the business system for SAP ERP in the **Receiver Business System Components** table.

9. Click **Value List** (`F4`) from the pull-down menu, and then select **RFC communication channel** from the **Communication Channel for Receiver Communication Component**.
10. Click **Apply** and then click **Next Connection**.

    For configurations other than requisitions and funds derivation, go to step 12.
11. To configure the sender and receiver relations for requisitions and funds derivation, you must repeat step 2 through step 10 with the following changes:
    - For requisitions:
      - In step 5, replace the communication channel template name `CCT_ReqSubmit_Sender` with `CCT_ReqWithdraw_Sender`.
      - In step 6, replace the channel name `CCT_ReqSubmit_Sender` with `CCT_ReqWithdraw_Sender`.
    - For funds derivation:
      - In step 5, replace the communication channel template name `CCT_ReqFMDerive_Sender` with `CCT_InvFMDerive_Sender`.
      - In step 6, replace the channel name `CCT_ReqFMDerive_Sender` with `CCT_InvFMDerive_Sender`.
12. Click **Activate All Connections** and then click **OK**.

Next Steps

Generate objects for the integration scenario. See Generating Objects for the Integration Scenario [page 32].

Related Information

About Configuring the Integration Scenario [page 27]

Generating Objects for the Integration Scenario

Prerequisites

Configure sender and receiver relations for the integration scenario. See Configuring the Sender and Receiver Relations for Individual Connections for the Integration Scenario [page 31].

Context

Generating the objects creates the configuration objects if they do not yet exist. If they already exist, they are reused and enhanced, if required. You can also simulate generation of objects for test purposes.

Procedure

1. In the **Model Configurator**, click **Create Configuration Object**.
2. In the **Create Configuration Object** window, do the following:
   - Click **Generation** in the **General** section.
   - Select the **Receiver Determination** and the **Interface Determination** check boxes in the **Scope of Generation** section.
3. 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.
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 and save it, if required.

Next Steps

Configure interface determination settings for the integration scenario. See Configuring Interface Determination Settings for the Integration Scenario [page 33].

Related Information

About Configuring the Integration Scenario [page 27]

Configuring Interface Determination Settings for the Integration Scenario

Prerequisites

Assign the communication channels for the integration scenario. See Creating Communication Channels for SAP ERP [page 25].

Context

To configure the interface to process the data message for the Integration scenario, perform the following steps:

Procedure

1. Expand **Interface Determination,** and then click **| Name of the Business System for Ariba Network** > **| MIOut_Sync_WSDL_<transaction>** > **| | Name of the Business System for SAP ERP** .
2. In the **Receiver Interfaces** section of the **Edit Interface Determination** window, click the operation mapping value under the **Operation Mapping** column. Click the **Value List** pull-down menu and select **Value List**.
3. Select the appropriate operation mapping and click **Apply**.
4. The **Multiplicity** column displays the value "`0..unbounded`".
5. Save and activate the interface determination settings.

   If the integration scenario includes multiple Interface Determinations then you must repeat the above procedure for each interface.

   > **Note**
   >
   > Configuring the Interface Determination is a mandatory step if you configure the mappings.

Next Steps

Configure the software component version for communication channel templates. See Configuring the Software Component Version for Communication Channel Templates [page 34].

Related Information

About Configuring the Integration Scenario [page 27]

Configuring the Software Component Version for Communication Channel Templates

Context

If you are using a SAP NetWeaver PI version that is higher than SAP BASIS 7.10, then you must ensure that you edit the communication channel template to avoid receiving an error.

Important: Ensure that you have the necessary options enabled for the Object Properties on the Software Component Version page that allows you to edit the communication channel template.

Procedure

1. Go to the **Enterprise Service Builder** and edit each of the following Software Component Versions to allow you to modify the objects:
   - `ARIBA_ONDEMAND_BUDGET_MGMT CIx of ariba.com`
   - `ARBA_ONDEMAND_ER_INVOICE CIx of ariba.com`
   - `ARBA_ONDEMAND_INVOICE CIx of ariba.com`
   - `ARBA_ONDEMAND_PURCHASEORDER CIx of ariba.com`
   - `ARBA_ONDEMAND_RECEIPT CIx of ariba.com`
   - `ARBA_ONDEMAND_REMITTANCE CIx of ariba.com`
2. Double click the required communication channel template. The **Display Communication Channel Template** page appears.
3. In the **Parameters** tab, click the **Display Input Help** button in the **Adapter Type** field. The **Choose Adapter Metadata** page appears.
4. Choose the common Basis version for each of the following communication channel templates:

Communication Channel Template	Adapter Type	Namespace	Software Component Version
`ARIBA_ONDEMAND_BUDGET_MGMT CIx of ariba.com` `CCT_BudgetCheck_Sender`	`SOAP`	`http://sap.com/xi/XI/System`	Choose the common Basis version. For example, SAP BASIS 7.40.
`ARIBA_ONDEMAND_ER_INVOICE CIx of ariba.com` `CC_Ondemand_ER_Sender`	`SOAP`	`http://sap.com/xi/XI/System`	Choose the common Basis version. For example, SAP BASIS 7.40.
`ARIBA_ONDEMAND_INVOICE CIx of ariba.com` `CCT_Invoice_WSDL_Sender`	`SOAP`	`http://sap.com/xi/XI/System`	Choose the common Basis version. For example, SAP BASIS 7.40.
`ARIBA_ONDEMAND_PURCHASEORDER CIx of ariba.com`	`SOAP`	`http://sap.com/xi/XI/System`	Choose the common Basis version. For

Communication Channel Template	Adapter Type	Namespace	Software Component Version
CCT_CancelPurchaseOrder_WSDL_Sender CCT_ChangePurchaseOrder_WSDL_Sender CCT_PurchaseOrder_WSDL_Sender CCT_PurchaseOrderHeader_WSDL_Sender			example, SAP BASIS 7.40.
ARIBA_ONDEMAND_RECEIPT CIx of ariba.com CCT_Receipts_WSDL_Sender	SOAP	http://sap.com/xi/XI/System	Choose the common Basis version. For example, SAP BASIS 7.40.
ARIBA_ONDEMAND_REMITTANCE CIx of ariba.com CCT_RemittanceImport_WSDL_Sender	SOAP	http://sap.com/xi/XI/System	Choose the common Basis version. For example, SAP BASIS 7.40.
ARIBA_ONDEMAND_BUDGET_MGMT CIx of ariba.com CCT_BudgetCheck_Sender	SOAP	http://sap.com/xi/XI/System	Choose the common Basis version. For example, SAP BASIS 7.40.
ARIBA_ONDEMAND_BUDGET_MGMT CIx of ariba.com CCT_ReqFMDerive_Sender	SOAP	http://sap.com/xi/XI/System	Choose the common Basis version. For example, SAP BASIS 7.40.

5. Save and activate the changes.

Next Steps

Activate the integration scenario. See Activating the Integration Scenario [page 37].

Related Information

Configuring the Integration Scenario [page 29]

Activating the Integration Scenario

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.

This completes the configuration of the integration scenario in SAP NetWeaver XI/PI.

Related Information

About Configuring the Integration Scenario [page 27]

Integration Scenario Parameter Values

The following table contains information about the values you need to specify when you are configuring an integration scenario for the different transactions:

Table 2: Integration Scenario Parameter Values

Transaction	Integration Scenario Transfer	Communication Channel Template	Values for configuring communication channels
Submit Requisition	• AR_PurchaseRequisition_Send • urn:ariba.com:xi:OnDemand:PurchaseRequisition • ARIBA_ONDEMAND_BUDGET_MGMT CIx of ariba.com	• CCT_ReqFMDerive_Sender • urn:ariba.com:xi:OnDemand:PurchaseRequisition • ARIBA_ONDEMAND_BUDGET_MGMT CIx of ariba.com	• urn:ariba.com:xi:OnDemand:PurchaseRequisition • MIOut_Sync_WSDL_ReqSubmit
Cancel/Revert Requisition	• AR_PurchaseRequisition_Send • urn:ariba.com:xi:OnDemand:PurchaseRequisition • ARIBA_ONDEMAND_BUDGET_MGMT CIx of ariba.com	• CCT_ReqWithdraw_Sender • urn:ariba.com:xi:OnDemand:PurchaseRequisition • ARIBA_ONDEMAND_BUDGET_MGMT CIx of ariba.com	• urn:ariba.com:xi:OnDemand:PurchaseRequisition • MIOut_Sync_WSDL_ReqWithdraw
Purchase Order	• AR_PurchaseOrder_Send • urn:ariba.com:xi:OnDemand:CreatePurchaseOrder • ARIBA_ONDEMAND_PURCHASEORDER, CIx of ariba.com	• CCT_PurchaseOrder_WSDL_Sender • urn:ariba.com:xi:OnDemand:CreatePurchaseOrder • ARIBA_ONDEMAND_PURCHASEORDER, CIx of ariba.com	• urn:ariba.com:xi:OnDemand:CreatePurchaseOrder • MI_Out_Sync_WSDL_WSPurchaseOrderPushRequestMessage

Transaction	Integration Scenario Transfer	Communication Channel Template	Values for configuring communication channels
Change Purchase Order	• AR_ChangePurchaseOrder_Send • urn:ariba.com:xi:OnDemand:ChangePurchaseOrder • ARIBA_ONDEMAND_PURCHASEORDER, CIx of ariba.com	• CCT_ChangePurchaseOrder_WSDL_Sender • urn:ariba.com:xi:OnDemand:ChangePurchaseOrder • ARIBA_ONDEMAND_PURCHASEORDER, CIx of ariba.com	• urn:ariba.com:xi:OnDemand:ChangePurchaseOrder • MI_Out_Sync_WSDL_WSPurchaseOrderChangePushRequestMessage
Cancel Purchase Order	• AR_CancelPurchaseOrder_Send • urn:ariba.com:xi:OnDemand:CancelPurchaseOrder • ARIBA_ONDEMAND_PURCHASEORDER, CIx of ariba.com	• CCT_CancelPurchaseOrder_WSDL_Sender • urn:ariba.com:xi:OnDemand:CancelPurchaseOrder • ARIBA_ONDEMAND_PURCHASEORDER, CIx of ariba.com	• urn:ariba.com:xi:OnDemand:CancelPurchaseOrder • MI_Out_Sync_WSDL_WSPurchaseOrderCancelRequestMessage
Purchase Order Header Status	• AR_PurchaseOrderHeader_Send • urn:ariba.com:xi:OnDemand:PurchaseOrderHeaderStatus • ARIBA_ONDEMAND_PURCHASEORDER, CIx of ariba.com	• CCT_PurchaseOrderHeader_WSDL_Sender • urn:ariba.com:xi:OnDemand:CreatePurchaseOrder • ARIBA_ONDEMAND_PURCHASEORDER, CIx of ariba.com	• urn:ariba.com:xi:OnDemand:PurchaseOrderHeaderStatus • MI_Out_Sync_WSDL_WSPurchaseOrderHeaderRequestMessage
Receipt	• AR_Receipt_Send • urn:ariba.com:xi:OnDemand:Receipt • ARIBA_ONDEMAND_CREATE_RECEIPT, CIx of ariba.com	• CCT_Receipt_WSDL_Sender • urn:ariba.com:xi:OnDemand:Receipt • ARIBA_ONDEMAND__CREATE_RECEIPT, CIx of ariba.com	• urn:ariba.com:xi:OnDemand:Receipt • MI_Out_Sync_WSDL_WSReceiptPushRequestMessage
Invoice	• AR_Invoice_Send • urn:ariba.com:xi:OnDemand:Invoice • ARIBA_ONDEMAND_IINVOICE, CIx of ariba.com	• CCT_Invoice_WSDL_Sender • urn:ariba.com:xi:OnDemand:Invoice • ARIBA_ONDEMAND_IINVOICE, CIx of ariba.com	• urn:ariba.com:xi:OnDemand:Invoice • MI_Out_Sync_WSDL_WSInvoicePushRequestMessage

Transaction	Integration Scenario Transfer	Communication Channel Template	Values for configuring communication channels
Remittance	• AR_RemittanceImport_Send • urn:ariba.com:xi:OnDemand:Remittance • ARIBA_ONDEMAND_ICREATE_REMITTANCE, CIx of ariba.com	• CCT_RemittanceImport_WSDL_Sender • urn:ariba.com:xi:OnDemand:Remittance • ARIBA_ONDEMAND_ICREATE_REMITTANCE, CIx of ariba.com	• urn:ariba.com:xi:OnDemand:Remittance • MI_Out_Sync_WSDL_RemittanceImportRequestMessage
Expense Report	• AR_Expense_Report_Send_Integration • urn:ariba.com:xi:OnDemand:ExpenseReport • ARIBA_ONDEMAND_ER_INVOICE, CIx of ariba.com	• CCT_ExpenseReport_WSDL_Sender • urn:ariba.com:xi:OnDemand:ExpenseReport • ARIBA_ONDEMAND_ER_INVOICE, CIx of ariba.com	• urn:ariba.com:xi:OnDemand:ExpenseReport • MI_Out_Sync_WSDL_WSExpenseReportPushRequestMessage

Table 3: Integration Scenario Parameter Values

Function	Integration Scenario Transfer	Communication Channel Template	Values for configuring communication channels
Budget Check	• AR_BudgetCheck_Send • urn:ariba.com:xi:OnDemand:BudgetCheck • ARIBA_ONDEMAND_BUDGET_MGMT CIx of ariba.com	• CCT_BudgetCheck_Sender • urn:ariba.com:xi:OnDemand:BudgetCheck • ARIBA_ONDEMAND_BUDGET_MGMT CIx of ariba.com	• urn:ariba.com:xi:OnDemand:BudgetCheck • MIOut_Sync_WSDL_BudgetCheck
Funds Derivation	• AR_Derivation_Send • urn:ariba.com:xi:OnDemand:Derivation • ARIBA_ONDEMAND_BUDGET_MGMT CIx of ariba.com	• CCT_ReqFMDerive_Sender • CCT_InvFMDerive_Sender • urn:ariba.com:xi:OnDemand:Derivation • ARIBA_ONDEMAND_BUDGET_MGMT CIx of ariba.com	• urn:ariba.com:xi:OnDemand:Derivation • MIOut_Sync_WSDL_ReqFundDerive • MIOut_Sync_WSDL_InvFundDerive

Related Information

About Configuring the Integration Scenario [page 27]
Transferring the Integration Scenario [page 28]

Configuring NetWeaver PI for Web Services Integration

This section provides information on the activities that you need to perform to enable Ariba procurement solutions to integrate with NetWeaver PI by using the Web services channel.

Generating Keys for Signing NetWeaver PI Messages

Context

In NetWeaver PI, you can manage the certificates from the key storage of the Visual administrator.

Procedure

1. To start the visual administrator, go to link: /usr/sap//DVEBMGS00/j2ee/admin and run the script go(.bat) and click service **KeyStorage**.
2. In the **Runtime** tab, under the **Entry** section for **Generate a pair of keys (public/private)**, click **Create**.
3. In the **Key and Certificate Generation** screen, enter values for all the fields as required. You can also modify existing values.
4. Select the **Store Certificate** option.
5. Click **Generate**.
   The system creates two entries, one for the private key and the other with appended -cert as suffix as the certificate (public key).
6. Select the certificate. Under the **Entry** section, click **Export**.
7. In the **Store Key Entry** screen, from the **Files of Type** field, select **x.509 certificate (*.crt)** file type.
8. In the **File Name** field, enter an appropriate name and click **OK**.

Validating Messages by Ariba Procurement Solutions

Context

To validate messages by Ariba procurement solutions, you need to import the public key exported from Ariba procurement solutions keystore. You must have copied the certificate into the XI server.

Procedure

1. Select the view where the certificate is stored.
2. In the **Runtime** tab, under the **Entry** section, click **Load**.
3. Select the required certificate and choose **OK**.

Configuration for Inbound Messages Received by NetWeaver PI

This configuration enables NetWeaver PI to verify messages sent from the Ariba procurement solutions.

Configuring the Communication Channel for Inbound Messages Received by NetWeaver XI/PI [page 41]

Configuring the Sender Agreement for Inbound Messages Received by NetWeaver XI/PI [page 42]

Configuring the Communication Channel for Inbound Messages Received by NetWeaver PI

Procedure

1. From the SAP NetWeaver PI main page, select Integration Builder: Configuration, and then login into the Integration Builder: Configuration application.
2. Select the sender communication channel for the required integration scenario for which you want to configure the WSS signature.
3. Change to edit mode.
4. Under the **Security Parameters** section, select **Select Security Profile** option.
5. For the Security Profile field, select **Web Services Security** from the drop-down list.
6. In the **Persist Duration** field, enter `30`.
7. Click **Save**.

Results

The system may display an error because the Sender agreement is not configured.

Configuring the Sender Agreement for Inbound Messages Received by NetWeaver PI

Procedure

1. From the SAP NetWeaver PI main page, select **Integration Builder: Configuration**, and then login into the Integration Builder: Configuration application.
2. Open the sender agreement for the required communication channel.
3. Change to edit mode
4. Under **Security Settings**, specify values for the following fields:
   - **Security Standard** - http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-wssecurity-secext-1.0.xsd
   - **Security Procedure** - Validate.
   - **Partner certificate to verify signature (WS)**
     Issuer - select the certificate that you imported during the generation of keys.
     Subject - select the certificate that you imported during the generation of keys.
   - **Certification Authority (WS)**
     Keystore View - select the private keycertificate that you imported during the generation of keys.
5. Click **Save**.

Next Steps

Activate the communication channel and sender agreement to ensure that your changes are validated.

Configuring Parameters

You change the way Ariba RFCs function by modifying parameters in the RFCs. This section explains how to change `/ARBA/TVARV` RFC parameters. The material in this section is appropriate for SAP developers or administrators. The following topics explain parameter configuration:

About /ARBA/TVARV [page 43]

Parameters [page 44]

Tables for Taxes and Charges [page 46]

Parameter Descriptions [page 48]

Maintaining a temporary directory in /ARBA/TVARV [page 58]

About /ARBA/TVARV

You configure all Ariba RFC parameters through the `/ARBA/TVARV` table. By editing the parameter configurations in `/ARBA/TVARV`, you:

- Perform static filtering on data pulls through `TVARV`-like selection options.
- Configure parameters that affect how Ariba RFCs function.

For information on performing static filtering, see Filtering Data [page 119].

For a list of the RFCs affected by parameters in `/ARBA/TVARV`, see /ARBA/PO_IMPORT Package [page 266].

`/ARBA/TVARV` contains a special field, called `TYPE`, which determines whether an entry is for static filtering or parameter configuration. To change parameters, you enter a "`P`" in the `TYPE` field. (If you set the field to `S`, you use `/ARBA/TVARV` for static filtering; see Filtering Data [page 119].)

In your default configuration, `/ARBA/TVARV` does not contain any parameters. Ariba RFCs that call `/ARBA/TVARV` already contain certain default values that they use. Enter a value in `/ARBA/TVARV` only if you want to change the default values.

How to edit /ARBA/TVARV parameters

Procedure

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

   The **Maintain Table Views initial** screen appears.

2. Enter `/ARBA/TVARV` in the **Table/View** field, and click **Maintain**.
3. Select **Edit** > **New Entries**, or click the **New Entries** button.
4. Enter appropriate information in the screen that appears. For details, see the following options:
   - Parameters [page 44]
   - Tables for Taxes and Charges [page 46]
5. To save your changes, select **Table View** > **Save** or (press F11).
6. If a transport window appears prompting you to enter the change request, click **Create Request** to create a new request, or choose an existing request number in the **Request** field, and then click the check mark to create the transport request.

Parameters

The following table lists possible `/ARBA/TVARV` parameters, default values, and the calling functions that reference them. The remaining sections in this section explain what these parameters do and provide other possible values.

Parameter Name	Default	Calling Function/Program
BALANCE_SHEET_ACCOUNTS	disallow	/ARBA/GENERAL_LEDGER_EXPORT
/ARBA/CURR_CONV_BANK_RATE	B	/ARBA/CURRENCY_CONVERSION_EXPORT
/ARBA/CURR_CONV_DAYS_PAST	60	/ARBA/CURRENCY_CONVERSION_EXPORT
/ARBA/CURR_CONV_EURO_RATE	EURO	/ARBA/CURRENCY_CONVERSION_EXPORT
/ARBA/INTERNAL_ORDER_AUART	blank	/ARBA/INTERNAL_ORDER_EXPORT
/ARBA/INVOICE_ALLOW_DUPS	blank	/ARBA/CR_INVOICE_CREATE/ARBA/CR_ER_INVOICE_CREATE
/ARBA/LANGUAGE	E	/ARBA/ACCOUNT_CATEGORY_EXPORT/ARBA/MATERIAL_GROUP_EXPORT /ARBA/COST_CENTER_EXPORT /ARBA/GENERAL_LEDGER_EXPORT /ARBA/MINORITY_VENDOR_EXPORT /ARBA/TAX_CODE_EXPORT
/ARBA/VENDOR_ONLY_COUNTPORGS	1	/ARBA/VENDOR_ONLY_EXPORT
/ARBA/ER_DOC_TYPE	ER	/ARBA/CR_ER_INVOICE_CREATE
/ARBA/INVOICE_DOC_TYPE	RE	/ARBA/CR_INVOICE_CREATE
/ARBA/USE_FI_POSTING_NONPO	blank For more information, see Non-PO (FI) invoices parameters [page 57].	/ARBA/CR_INVOICE_CREATE

Parameter Name	Default	Calling Function/Program
/ARBA/NOPO_INVOICE_FI_DOC_TYPE	KR For more information, see Non-PO (FI) invoices parameters [page 57].	/ARBA/CR_INVOICE_CREATE
/ARBA/ASSET_TR_TYP_FI_NONPO	020 For more information, see Non-PO (FI) invoices parameters [page 57].	/ARBA/CR_INVOICE_CREATE
/ARBA/GROSS_AMOUNT_ROUNDED	blank	/ARBA/CR_INVOICE_CREATE
BAPI_PO_CREATE_DOC_TYPE	AR	/ARBA/BAPI_PO_CREATE
BAPI_PO_CREATE_ERP_DOC_TYPE	NB	/ARBA/BAPI_PO_CREATE
ARBA/USE_BAPI_PO_CRT1	If you set the value of this parameter to X, /ARBA/BAPI_PO_CREATE calls the new BAPI BAPI_PO_CREATE1 that supports new structures and fields and is rich compared to BAPI_PO_CREATE. If you do not maintain a value for this parameter, /ARBA/BAPI_PO_CREATE calls the existing BAPI BAPI_PO_CREATE to create purchase orders in SAP ERP.	/ARBA/BAPI_PO_CREATE
/ARBA/BAPI_PR_CRT_ALLOW_DUPS	blank For more information, see Budget Check Requisition Variables [page 56].	/ARBA/ACC_PURCHASE_REQUI_CHECK
/ARBA/PURREQ_DOC_TYP	NB For more information, see Budget Check Requisition Variables [page 56].	/ARBA/ACC_PURCHASE_REQUI_CHECK
/ARBA/HELD_PR_NO	D000000001 For more information, see Budget Check Requisition Variables [page 56].	/ARBA/ACC_PURCHASE_REQUI_CHECK

Parameter Name	Default	Calling Function/Program
/ARBA/ENABLE_TLC	blank For more information, see Taxes and Charges Parameter [page 57].	• /ARBA/CR_BAPI_PO_Change • /ARBA/CR_BAPI_PO_CREATE1

Related Information

How to edit /ARBA/TVARV parameters [page 43]

Tables for Taxes and Charges

Following tables support taxes and charges on requisitions, purchase orders, and invoices in SAP ERP.

/ARBA/TAX_CHECK

The **/ARBA/TAX_CHECK** table is required for requisitions and change requisitions. It has two fields and specifies the company code for which the non-deductible tax amount (tax on item or tax on charges) is considered while reserving the budget for requisitions under a particular company code.

The following table shows sample mappings for the **/ARBA/TAX_CHECK** table:

Table 4: Sample Mappings in the **/ARBA/TAX_CHECK** Table

Company Code Field	Is Tax Applied Field
3000	Check box to select applicable tax for the corresponding company code. **Note** If you do not select the check box, the tax amount is ignored while reserving budget for the requisition pertaining to the relevant company code.

/ARBA/COND_MAP

The **/ARBA/COND_MAP** condition map table is required for purchase orders and change purchase orders. It has three fields and maintains mapping between condition types in Ariba Procurement Solution to relevant condition types in SAP ERP.

For example, the condition type might be **SHIPPING** in Ariba Procurement Solution and **FRB1** in SAP ERP. Buyers must maintain mapping of taxes, charges, and discounts between these condition types in the **/ARBA/COND_MAP** table.

The following table shows sample mappings for the **/ARBA/COND_MAP** table:

Table 5: Sample Mappings in the **/ARBA/COND_MAP** Table

LINETYPECATEGORY Field For Ariba Procurement Solution Condition Type	LINE_TYPE Field For Ariba Procurement Solution Condition Type	KSCHL Field For SAP ERP Condition Type
16	SPECIALCHARGE	ZS00
32	DISCOUNT	RB00
4	FREIGHTCHARGE	FRB1
8	HANDLINGCHARGE	ZB00

Note

- You cannot change the **LINETYPECATEGORY** for a particular **LINE_TYPE** as it originates from the Ariba Procurement Solution and is closely integrated with SAP ERP. To add custom charges in Ariba Procurement Solution you can only use the **LINETYPECATEGORY** 16.
- You must maintain the pricing condition type in all the pricing procedures that you want to use in SAP ERP for integration with the Ariba Procurement Solution. You must select condition types with absolute amount only, that is, condition types with the suffix **(value)**.

/ARBA/WHT_TYPE

The **/ARBA/WHT_TYPE** table is required for invoices. It has two fields and maintains mapping between withholding tax type in Ariba Procurement Solution to the relevant withholding tax code in SAP ERP.

The following table shows sample mappings for the **/ARBA/WHT_TYPE** table:

Table 6: Sample Mappings in the **/ARBA/WHT_TYPE** Table

Withholding Tax Field For Ariba Procurement Solution	Withholding Tax Field For SAP ERP
WTHTAX	T1

Related Information

How to edit /ARBA/TVARV parameters [page 43]
Integrating Taxes and Charges [page 210]

Parameter Descriptions

This section groups categories of parameters together and explains how to use them in the following topics:

Days Past Parameter [page 48]

Currency Conversion Rates [page 48]

Internal Order Types [page 49]

Vendor Export Task [page 49]

Using General Ledger Balance Sheet Accounts [page 53]

Language for Texts Parameter [page 53]

Allow Duplicates for Invoice [page 54]

Document Type for Creating Expense Report Invoices [page 54]

Document Type for Creating OK-to-Pay Invoices [page 54]

Rounding of Gross Amount for Invoices [page 54]

Document Type for Creating Purchase Orders [page 55]

Budget Check Requisition Variables [page 56]

Taxes and Charges Parameter [page 57]

Non-PO (FI) invoices parameters [page 57]

Days Past Parameter

The `DAYS_PAST` parameter allows you to configure how far back, in days, the `/ARBA/CURRENCY_CONVERSION_EXPORT` program must go to get the conversion rates.

Parameter	Description	Default Value
`/ARBA/CURR_CONV_DAYS_PAST`	Keeps track of currency conversion rates	60

Make sure that the days past parameters for Ariba procurement solutions RFCs are values less than or equal to the scheduled events in the SAP integration table.

Currency Conversion Rates

The `/ARBA/CURRENCY_CONVERSION_EXPORT` program calls `/ARBA/TVARV` to look up specifications for SAP currency conversion rates for banks or for the Euro:

- /ARBA/CURR_CONV_BANK_RATE
- `/ARBA/CURR_CONV_EURO_RATE`

The defaults are “B” and “Euro”.

> **Note**
>
> You can determine how far back the RFC looks to pull historical currency conversion information to deal with expenses from the past through the following parameter: /ARBA/CURR_CONV_DAYS_PAST.

Internal Order Types

Internal orders contain a field called `AUART`, which designates their order type. The value of `AUART` determines whether SAP can use the internal order to create a purchase order. The Ariba procurement solutions RFCs do not create purchase orders using internal orders that have an `AUART` value specified with /ARBA/INTERNAL_ORDER_AUART.

If you do not specify a value for `AUART`, your Ariba RFCs can create purchase orders from any internal order in which the `AUART` field of the order master data (`AUFK`):

- Is not equal to a space.
- Is not marked for deletion (`LOEKZ`).
- Is not already ordered or released.

Vendor Export Task

By default, Ariba RFCs pull only those vendors from SAP they have found associated with at least one purchasing organization.

The parameter `/ARBA/VENDOR_ONLY_COUNTPORGS` provides a filtering parameter for vendor pulls. Valid settings are 1 or 0. The default setting is 1.

- If the parameter is set to 1, the RFC selects only vendors assigned to at least one purchasing organization.
- If the parameter is set to 0, the RFC pulls all vendors without regard to any assigned purchasing organizations.

The default setting of 1 pulls a smaller set of data by executing two select statements within the RFC code. The 0 setting pulls more data, which the RFC refines further through a single selection query.

The Vendor Export task downloads information on the following:

- Supplier
- Supplier location
- Payment terms
- Remittance location
- User data

Function Module	`/ARBA/VENDOR_EXPORT`

CSV Files	`SupplierConsolidated.csv`
	`PurchaseOrgSupplierCombo.csv`
	`SupplierLocationConsolidated.csv`
	`RemittanceLocationConsolidated.csv`

The supplier location data contains two parameters that you maintain in the `/ARBA/TVARV` table: `/ARBA/SL_VENDOR_ADDRESS` and `/ARBA/SL_PARTNER_TYPE`.

Prerequisites

- You must maintain at least one of these parameters in the `/ARBA/TVARV` table while downloading information for supplier locations. If you do not maintain one of these parameters, an error occurs.
- PARAMETER NAME: /ARBA/SL_PARTNER_TYPE

To maintain the partner type filter for the supplier location:

- **Variable Name**: `/ARBA/SL_PARTNER_TYPE`
- **Field Name**: PARVW
- **Selection cat.**: S
- **Number**: 0
  In the **Change View "TVARV generalized for fields": Details** section, here is an example of how you can maintain the following values:
- **Char20**: VSAP
- **Char20**: PSAP
- **INCL/EXCL**: I
- **Option**: EQ
- **Selection value**: For example, OA. When you specify 'OA', Ariba procurement solutions integrated with SAP downloads all the supplier locations for the supplier.
  You can maintain the partner type based on the configuration you have maintained for the partner function for a vendor.
- **Selection value**: Blank
- PARAMETER NAME: /ARBA/SL_VENDOR_ADDRESS

To maintain the addresses filter for the supplier location:

- **Variable Name**: `/ARBA/SL_VENDOR_ADDRESS`
- **Field Name**: Blank
- **Selection cat.**: P
- **Number**: 0
  Here is an example of how you can maintain values in the **TVARV generalized for fields** section:
- **Char20**: VSAP
- **Char20**: PSAP
- **INCL/EXCL**: I
- **Option**: EQ
- **Selection value**: 'X'
  When you specify 'X', Ariba procurement solutions integrated with SAP considers the supplier as the supplier location and downloads all addresses for the supplier location. You can maintain the partner type based on the configuration you have maintained for the partner function for a vendor.

- **Selection value**: Blank

You can maintain both the parameters in the `/ARBA/TVARV` table.

Here is how Ariba procurement solutions integrated with SAP processes the supplier location. For example, the following table displays the values associated to the ABC Supplier:

Supplier	Purchase Organization	Supplier Location 1	Supplier Location 2
ABC Supplier	1000	1004	1005
	3000	1006	1007

Case 1: When you export the supplier location data, Ariba procurement solutions integrated with SAP displays the Supplier Location for ABC supplier as 1004, 1005, 1006 and 1007 in the downloaded CSV file.

Case 2: When ABC Supplier is blocked for Purchase Organization 1000, Ariba procurement solutions integrated with SAP only displays the Supplier Location as 1006 and 1007 in the downloaded CSV file.

> **Note**
>
> - Ariba procurement solutions integrated with SAP does not support a supplier location linked to multiple vendors.
> - When you do not maintain filters for `/ARBA/SL_VENDOR_ADDRESS` and `/ARBA/SL_PARTNER_TYPE`, Ariba procurement solutions integrated with SAP displays an error stating that you have not maintained filters for the Supplier Location.

Remittance Location Data

Function Module	`/ARBA/REMITTANCE_LOCATION_EXPORT`
CSV File	`RemittanceLocationConsolidatedExport.csv`

You can maintain filters while downloading remittance locations by specifying the following parameters in the `/ARBA/TVARV` table.

- You can maintain both the `/ARBA/RL_VENDOR_ADDRESS` and `/ARBA/RL_PARTNER_TYPE` parameters. However, you must maintain at least one of the parameters while downloading the remittance information.
- You can download supplier as remittance location.
- When you want to download the supplier as the remittance location, you must maintain the `/ARBA/RL_VENDOR_ADDRESS` filter.
- **PARAMETER NAME: /ARBA/RL_PARTNER_TYPE**
  To maintain the remittance partner type filter, ensure that you maintain the following values:
  - **Variable Name**: `/ARBA/RL_PARTNER_TYPE`
  - **Field Name**: PARVW
  - **Selection cat.**: S
  - **Number**: 0
    Here is an example of how you can maintain values in the **TVARV generalized for fields** section:
  - **Char20**: VSAP

- **Char20**: PSAP
- **INCL/EXCL**: I
- **Option**: EQ
- **Selection value**: IP
  When you specify 'IP' as the selection value, Ariba procurement solutions integrated with SAP considers the Remittance Location (LIFN2) with the Supplier Location (LIFNR) from the WYT3 table and downloads all the address information for the remittance location.
  You can maintain the partner type based on the configuration you have maintained for the partner function for a vendor.

- **PARAMETER NAME: /ARBA/RL_VENDOR_ADDRESS**
  To maintain the remittance address filter, ensure that you maintain the following values:
  - **Variable Name**: `/ARBA/RL_VENDOR_ADDRESS`
  - **Field Name**: Blank
  - **Selection cat.**: P
  - **Number**: 0
    Here is an example of how you can maintain values in the **TVARV generalized for fields** section:
  - **Char20**: VSAP
  - **Char20**: PSAP
  - **INCL/EXCL**: I
  - **Option**: EQ
  - **Selection value**: 'X'
    When you specify 'X' as the selection value, Ariba procurement solutions integrated with SAP considers the supplier as the remittance location and downloads all the address details for the supplier.
    You can maintain the partner type based on the configuration you have maintained for the partner function for a vendor.

You can have the following combinations for the supplier location and remittances location:

Supplier Location Address /ARBA/SL_VENDOR_ADDRESS	Supplier Location Partner Type /ARBA/SL_PART-NER_TYPE	Remittance Location Address /ARBA/ RL_VENDOR_ADDRESS	Remittance Location Partner Type /ARBA/RL_PART-NER_TYPE
Maintain	-	Maintain	-
Maintain	-	-	Maintain
Maintain	-	Maintain	Maintain
Maintain	Maintain	Maintain	-
Maintain	Maintain	-	Maintain
Maintain	Maintain	Maintain	Maintain

Note

- When you maintain only the filter for the supplier location address `/ARBA/SL_VENDOR_ADDRESS` and do not maintain the supplier location and remittance location for the supplier, Ariba procurement solutions integrated with SAP considers the supplier as the supplier location and remittance location.
- When you maintain the supplier location but do not maintain the remittance location, Ariba procurement solutions integrated with SAP considers the supplier location as the remittance location.

- When you do not maintain filters for `/ARBA/RL_VENDOR_ADDRESS` and `/ARBA/RL_PARTNER_TYPE`, Ariba procurement solutions integrated with SAP displays an error stating that you have not maintained filters for the Remittance Location.

- **PARAMETER NAME: /ARBA/RL_BANK_DETAILS**
  To maintain the bank details filter, ensure that you maintain the following values:
  - **Variable Name**: `/ARBA/RL_BANK_DETAILS`
  - **Field Name**: Blank
  - **Selection cat**.: P
  - **Number**: 0
    Here is an example of how you can maintain values in the **TVARV generalized for fields** section:
  - **Char20**: VSAP
  - **Char20**: PSAP
  - I**NCL/EXCL**: I
  - **Option**: EQ
  - **Selection value**: 'X

Ariba procurement solutions integrated with SAP processes remittance locations as follows:

Maintain filter for /ARBA/RL_BANK_DETAIL	Downloads Bank Details for Remittance Location
Maintain	Yes
Do not maintain	No

Here is an example of how the supplier location and remittance location is mapped for a vendor:

Vendor 1050 has 1001 and 1002 as supplier locations. The remittance location associated to Vendor 1050 is 2000. This remittance location is associated to two payment banks - Dresden (10050033) and Hypo (19652993).

When you download the `SupplierLocationConsolidated.csv`, you can see 1001 and 1002 as the `LocationID` for `VendorID` 1050. The `RemittanceLocationConsolidated.csv` displays the two payment banks for both the 1001 and 1002 supplier locations.

Using General Ledger Balance Sheet Accounts

You use general ledger balance sheet accounts for your procurement needs in Ariba procurement solutions. By default, `/ARBA/GENERAL_LEDGER_EXPORT` does not pull accounts for balance sheets, particularly if your SAP system is configured not to allow this pull, and returns a hard error message when a user attempts to do so.

To enable `/ARBA/GENERAL_LEDGER_EXPORT` to pull and use balance sheet accounts, you enter the value `allow` in the `BALANCE_SHEET_ACCOUNTS` parameter. To instruct the RFC not to use balance sheet accounts, even if balance sheet accounts are permitted on your system, you enter the value `disallow` instead.

Language for Texts Parameter

To get language-dependent descriptions in languages besides English (if you are running other language instances), you can set the `/ARBA/LANGUAGE` parameter. Subsequently, the descriptions are displayed in the

language set in the parameter. If English language descriptions are not maintained in SAP, set the value to the language in which descriptions need to be shown in the Ariba on-demand application.

Allow Duplicates for Invoice

By default, Ariba on-demand applications do not create duplicate invoices. When the integration pushes an invoice or expense report to SAP, it checks to see if it has already created a invoice with the same reference document for the given supplier and fiscal year. If so, it does not create a new invoice but returns the existing invoice number.

If the `/ARBA/INVOICE_ALLOW_DUPS` parameter is set, the program does not check for duplicates.

Document Type for Creating Expense Report Invoices

To distinguish invoices created by the expense report program (/ARBA/CR_ER_INVOICE_CREATE) from invoices created by the OK-to-pay invoice (`/ARBA/CR_INVOICE_CREATE`) function module, use different document types for expense report and Ok-to-pay invoices.

By default, the Ariba on-demand applications use the custom document type “ER” for expense reports. This document type does not exist in the SAP standard configuration. You need create this document type. If you want to use any other document type make an entry in `/ARBA/TVARV` table for the variable `/ARBA/ER_DOC_TYPE` with the document type you would like to use.

Document Type for Creating OK-to-Pay Invoices

By default Ariba On-demand applications use a custom document type “RE” for creating invoices using the Ariba OK-to-Pay SAP integration function module, `/ARBA/CR_INVOICE_CREATE`. If you want to use any other document type, make an entry in */ARBA/TVARV* table for the variable `/ARBA/INVOICE_DOC_TYPE` with the document type to be used.

By default, Ariba on-demand applications use the custom document type “RE” for OK-to-Pay integration. This document type does not exist in the SAP standard configuration. You need create this document type. If you want to use any other document type make an entry in `/ARBA/TVARV` table for the variable `/ARBA/ER_DOC_TYPE` with the document type you would like to use.

Rounding of Gross Amount for Invoices

By default, the `/ARBA/CR_INVOICE_CREATE` program references the `GROSS_AMOUNT` instead of the `GROSS_AMOUNT_ROUNDED`. This results in discrepancy in the total amount calculated after rounding the decimals to two places and can result in invoices sent from the Ariba Procurement Solution failing in SAP ERP.

When you maintain the `GROSS_AMOUNT_ROUNDED` parameter in the `/ARBA/TVARV` table, the `/ARBA/CR_INVOICE_CREATE` program maps the `GROSS_AMOUNT_ROUNDED` to the `GROSS_AMOUNT`.

- Parameter Name: `GROSS_AMOUNT_ROUNDED`
  - **Variable Name**: `/ARBA/GROSS_AMOUNT_ROUNDED`
  - **Field Name**: Blank
  - **Selection cat.**: `P`
  - **Number**: `0`
  - **Char20**: Blank
  - **Char20**: Blank
  - **INCL/EXCL**: `I`
  - **Option**: `EQ`
  - **Selection value**: `X`
  - **Selection value**: Blank

Related Information

Parameters [page 44]

Document Type for Creating Purchase Orders

For creating purchase orders, there are two parameters that you can use to maintain the document type.

BAPI_PO_CREATE_DOC_TYPE

If the document type sent from Ariba is “ERPCC” or blank, then specify the document type that you want to use as a value for this parameter in the /ARBA/TVARV table. If you do not specify a document type in the table, then the default value of the document type will be “AR”.

You can create custom document types for purchase orders in the BAPI_PO_CREATE_DOC_TYPE parameter. To create custom document types, ensure that you enter values in the TVARV generalized for fields section for the following fields:

Field Name	Description
`Ariba Variant`	The unique variant name for the Ariba procurement solution in your SAP system for purchase orders. For example, `VREALM_1`.
`Ariba Partition`	The unique name of your site for the Ariba procurement solution in your SAP system for purchase orders. For example, `PREALM_1`.
`INCL/EXCL`	This field must have the value “`i`”.

Field Name	Description
`Option`	This field must have the value “`eq`”.
`Selection value`	Sets the low value for filtering and settings for the parameter. For example, `ZARB`.
`Selection value`	This field can be left empty.

BAPI_PO_CREATE_ERP_DOC_TYPE

If the document type sent from Ariba is “`ERP`”, then specify the document type that you want to use as a value for this parameter in the `/ARBA/TVARV` table. If you do not specify a document type in the table, then the default value of the document type will be “`NB`”.

Budget Check Requisition Variables

To support real-time budget checks on requisitions, you must set the following variables in the /ARBA/TVARV table :

- `/ARBA/BAPI_PR_CRT_ALLOW_DUPS`
  - Set **X** value to allow duplicate values.
  - Set “ “ (blank) values if duplicate values are not allowed.

  By default, Ariba on-demand applications do not create duplicate requisitions. When the integration pushes a requisition to SAP ERP, it checks to find if it has already created a requisition with the same reference document for the given supplier and fiscal year. If so, it does not create a new requisition but returns the existing requisition number.
- `/ARBA/PURREQ_DOC_TYP`
  Specify the document type for the requisition. If you do not specify this variable, Ariba Procurement Solution uses the `NB` document type to create requisitions.
- `/ARBA/HELD_PR_NO`:
  - `Selection cat.`: `P`
  - `Char20`: `VREALM_40` (always in upper case)
  - `Char20`: `PREALM_40` (always in upper case)
  - `INCL/EXCL`: `I`
  - `Option`: `EQ`
  - `Selection value`: `0`

  Generates an internal requisition number, for example `D000000001`, and prevents requisition from moving back to the **Composing** state when you submit a requisition containing all line items as held in the Ariba Procurement Solution. If you do not set this parameter and submit a requisition containing all line items as held, the Ariba Procurement Solution displays the error message: `Please enter items first`.

Taxes and Charges Parameter

The `/ARBA/ENABLE_TLC` parameter is required to update the `SAPPOLineNumber` in the Ariba Procurement Solution.

PARAMETER NAME: /ARBA/ENABLE_TLC

To update the `SAPPOLineNumber`, ensure that you maintain the following values:

- **Variable Name**: `/ARBA/ENABLE_TLC`
- **Selection cat.**: P
- **INCL/EXCL**: I
- **Option**: EQ
- **Selection value** : X

Non-PO (FI) invoices parameters

To support creation of non-PO (FI) invoices in SAP ERP, you must set the variables for the following parameters in the `/ARBA/TVARV` table:

- Parameter: `/ARBA/USE_FI_POSTING_NONPO` is required to create non-PO based invoice posting in SAP ERP. Maintain the following values:
  - **Variable Name**: `/ARBA/USE_FI_POSTING_NONPO`
  - **Selection cat.**: `P`
  - **Number**: `0`
  - **Char20**: Maintain your realm
  - **Char20**: Maintain your partition
  - **INCL/EXCL**: `I`
  - **Option**: `EQ`
  - **Selection value** : `X`
- Parameter: `/ARBA/NOPO_INVOICE_FI_DOC_TYPE` is required to get the document to post for FI invoices. By default the document type is `KR`.
  Maintain the following values:
  - **Variable Name**: `/ARBA/NOPO_INVOICE_FI_DOC_TYPE`
  - **Selection cat.**: `P`
  - **Number**: `0`
  - **Char20**: `Maintain your realm`
  - **Char20**: `Maintain your partition`
  - **INCL/EXCL**: `I`
  - **Option**: `EQ`
  - **Selection value** : `KR`
- Parameter: `/ARBA/ASSET_TR_TYP_FI_NONPO` is required to maintain the asset transaction type if you use asset accounting assignment.
  Maintain the following values:
  - **Variable Name**: `/ARBA/ASSET_TR_TYP_FI_NONPO`

- **Selection cat.**: `P`
- **Number**: `0`
- **Char20**: `Maintain your realm`
- **Char20**: `Maintain your partition`
- **INCL/EXCL**: `I`
- **Option**: `EQ`
- **Selection value** : `020`

Related Information

Parameters [page 44]
Integrating non-PO (FI) invoices [page 214]

Maintaining a temporary directory in /ARBA/TVARV

How to maintain a temporary directory while running master data directly [page 58]
How to maintain a temporary directory while running transaction data directly [page 59]

How to maintain a temporary directory while running master data directly

Procedure

1. In the Transaction code `/osm 30`, go to the `/ARBA/TVARV` table.
2. Enter the following values:
   - **Variable Name**: `/ARBA/TEMP_DIRECTORY`
   - **Fieldname**: Blank
   - **Selection category**: `P`
   - **Number**: `0`
     In the **TVARV generalized for fields** section, specify the following:
   - **Char20**: Blank
   - **Char20**: Blank
   - **INCL/EXCL**: Blank
   - **Option**: Blank
   - **Selection value**: `/ARBA/TEMP_DIRECTORY`
   - **Selection value**: To be specified by you.

How to maintain a temporary directory while running transaction data directly

Procedure

1. In the Transaction code `/osm 30`, go to the `/ARBA/TVARV` table.
2. Enter the following values for purchase order header status and remittances:
   - **Variable Name**: `/ARBA/TEMP_DIRECTORY`
   - **Fieldname**: Blank
   - **Selection category**: `P`
   - **Number**: `0`
     In the **TVARV generalized for fields** section, specify the following:
   - **Char20**: Blank
   - **Char20**: Blank
   - I**NCL/EXCL**: Blank
   - **Option**: Blank
   - **Selection value**: `/ARBA/TEMP_DIRECTORY`
   - **Selection value**: To be specified by you.

Related Information

Integrating Transactional Data Directly Using the User Interface [page 216]

Configuring SAP ERP

About Configuring Time-out Intervals [page 60]

Verifying Data [page 61]

How to deactivate the company code validation [page 63]

About Configuring Time-out Intervals

The SAP system has a time-out limit on RFC transactions. The limit makes sure no resources stay locked in the SAP system inadvertently. The SAP time-out interval is defined by the profile parameter `rdisp/max_wprun_time`. The default value is 300 seconds.

If you have a large purchase order to export (with a large number of line items) or a large amount of data to import, you might encounter this time-out limit. In this case, the SAP system could cancel the job. To avoid this problem, you change your SAP configuration to lengthen the time-out interval. Change the interval on your central instance as well as any application servers that communicate with Ariba. For the change to take effect, restart each SAP server.

> **Note**
>
> Make sure to enlist the help of your BASIS administrator to make these changes.

How to set the time-out interval

Context

You can import or export a large amount of data, but you might encounter a time-out limit. To avoid this issue, you change your SAP configuration to increase the time-out interval.

Procedure

1. Log in as the SAP Administrator.
2. Run transaction `RZ10`.
3. Enter the **Instance Profile**.
4. Enter the most current version (you create a new version based on the most current one).

5. In the Edit profile panel, click the **Extended Maintenance** radio button.
6. Click **Change**.
7. Scroll down to **Parameter** name `rdisp/max_wprun_time`.

   If the value does not appear in your profile, create it by selecting **Parameter** > **Change**.
8. Create or change the value of `rdisp/max_wprun_time` to something longer, for example, 3000 (for 3000 seconds).
9. Select **Parameter** > **Change**.
10. Click **Copy**.
    This step makes a copy of the new profile. The status line displays the message "Changes were made."
11. Navigate back to the initial Edit Profiles screen, and save the changes.
12. Select **Profile** > **Activate**.
13. Restart your SAP server for the profile changes to take effect.
14. Repeat the steps in this procedure for each application server that exchanges data with Procurement Solutions.

Verifying Data

In some cases, the Ariba procurement solutions do not pull data from the SAP system unless that data has been set up in a particular manner in the SAP system. This section describes a few places to check the data on your SAP system, to make sure it has been set up to match the requirements of the Ariba procurement solutions.

If an integration entry fails, check this section again to look for problems.

About the Bank Selling Rate [page 61]

Blank Descriptions [page 62]

Vendor Restrictions [page 62]

Vendor ERS Tax Status [page 62]

Catalog Item Validation [page 63]

About the Bank Selling Rate

The Ariba procurement solutions import currency conversion information from the SAP system to make sure all purchase orders from Ariba use currencies valid in SAP. In the default configuration, the bank selling rate is B. The currency conversion pull imports all currency conversions associated with the bank setting rate B. The import task fails if the rate is not configured in the system. If you want to specify a different bank selling rate, add an entry in the `/ARBA/TVARV` table for the `BANK_SELLING_RATE_SYMBOL` parameter.

How to find the bank selling rate symbol

Procedure

1. Run transaction spro.
2. Choose **General Settings** > **Currencies** > **Check Exchange Rate Types**. Set the symbol, if necessary.

Blank Descriptions

For most data in the SAP system, such as Purchasing Groups, the SAP integration event imports (and uses) both ID and description fields from the SAP system. If either value is blank, the import task ignores that item, and it does not appear in the procurement solution system.

Check your SAP system to make sure all material groups and purchasing groups have valid—that is, non-blank—ID and description fields.

Vendor Restrictions

The Ariba procurement solutions/SAP integration has some restrictions on vendors. To import all available vendors, make sure none of the vendors have partner functions specifying multiple ordering addresses. The SAP integration imports one ordering address only, so users cannot choose from among multiple ordering addresses.

The Ariba procurement solutions do not import vendors that are blocked. SAP uses special codes to designate blocked vendors. The field `SPERQ` in table `LFA1` specifies the code that SAP uses for blocked vendors. The value you need to check for the `SPERQ` field is in table `TQ04A` in field `SPERRFKT`.

Vendor ERS Tax Status

The Ariba procurement solutions support vendors from SAP that offer evaluated receipt settlement (ERS) agreements. These agreements have different tax rates depending on many factors, such as the tax laws in the location of the supplier and requestor.

Purchase orders from the Ariba procurement solutions for SAP contain a field to determine whether a vendor has ERS tax information. The Ariba procurement solutions always set a value for the ERS tax field. If the Ariba procurement solutions have no tax ERS information about a vendor, it sets this field to a blank, empty, or null value.

Some SAP systems require you to set a default value for empty tax code values. Such systems return an error message during purchase order pushes if you have not configured them to handle empty values.

- To correct this problem, configure SAP to set a default tax code.
- If you cannot configure a default tax code, change the message type from error to information or warning in SAP.

Catalog Item Validation

Catalog items are validated against the purchasing organization. The vendor for each catalog item must be defined in the purchasing organization.

If a user picks a catalog item that originated in the SAP system, the Ariba procurement solutions validate the vendor of that item against the user's purchasing organization. If the vendor is not defined in the purchasing organization, the Ariba procurement solutions flag the field as invalid and does not allow the user to submit the purchase requisition until the field has been corrected.

How to deactivate the company code validation

Context

You can avoid the dump error when creating receipts from `MIGO` and invoices from `MIRO` by deactivating the validation at the company-code level.

Procedure

1. 1. Go to TCode `OBBH`.

   This transaction code validates the fields in the `BSEG` table. For example, the fields in the `BSEG` table validates `ZZREGION` at the company-code level.
2. Deactivate the validation at the company-code level.

Configuring Ariba Procurement Solution

Verifying Connection Information [page 64]
Receiving Tolerances [page 64]
Enabling Generation of an ERP Order by Default [page 65]
Specifying the Preferred Ordering Method [page 66]
Specifying a Unique Number for Purchase Orders [page 66]
Enabling Cancel Order Integration [page 66]
Enabling Creation of Split Orders Based on Currency [page 67]
Specifying Ad-hoc Ship-To Addresses to Requisition and Purchase Orders [page 69]

Verifying Connection Information

In Web-Services based integration, for all export tasks, the URL of the XI/PI system is configured through the Ariba Administrator.

A generic URL looks similar to the following:

```
SoapURL="http:///XISOAPAdapter/MessageServlet?
channel=:<BusinessSystemName>:<Communication ChannelName>";
```

For example:

```
SoapURL="http://<PIserver>:<port> sapnw01:50000/XISOAPAdapter/MessageServlet?
channel=:BS_Procurement:CC_ChangePurchaseOrder_WSDL_Sender";
```

where,

- `sapnw01`: is the server name
- `50000`: is the port
- `BS_Procurement`: is the business system name and
- `CC_ChangePurchaseOrder_WSDL_Sender`: is the communication channel name

Receiving Tolerances

The Ariba procurement solutions allow users to enter receiving information about the items they order. To support this feature, the procurement solution and SAP both need to receive items in the same way. For example, both must have similar receiving tolerances, or similar ways of allowing users to account for times when they receive fewer or more items than they have ordered.

Receiving System Parameters

The Ariba procurement solutions allow you to configure receiving tolerances through the following settings in the system parameters table:

- `Application.Procure.OverReceivingOperator`
- `Application.Procure.OverReceivingPercentage`
- `Application.Procure.OverReceivingQuantity`
- `Application.Procure.OverReceivingValue`
- `Application.Procure.UnderReceivingOperator`
- `Application.Procure.UnderReceivingQuantity`
- `Application.Procure.UnderReceivingValue`
- `Application.Procure.UnderReceivingPercentage`

These values have to be set from the Service Manager. To set values for these parameters, please have your Designated Support Contact log a service request and an Ariba Customer Support representative will contact you.

Make sure you know the following facts about Ariba procurement solutions receiving integration:

- Procurement solutions export both UnderReceiving and OverReceiving Percentages when exporting a purchase order.
- Procurement solutions do not import tolerances from SAP, but instead uses only those tolerances in the system parameters table.
- For receiving integration to work, make sure the receiving tolerances in Ariba procurement solutions match the receiving tolerances in SAP.

Enabling Generation of an ERP Order by Default

Context

When you create a requisition for the first time, a direct order or PCardOrder is generated on approval. To ensure that an ERP Order is generated by default, you must change the default behavior.

Procedure

1. Log in to the **Service Manager** as Superuser.
2. From the navigation bar on the left, under **Site Manager**, click **Customer Sites**.
3. Log in as **Customer Support Admin** to the relevant realm.
4. Click **Customization Manager**.
5. Click on **Advanced** on the top right corner.
6. Click **Parameters**.
7. Under **Search Filters**, search for ordermethods.

8. Click **Edit**.
9. Move `ariba.sap.server.SAPPOERP` to the top of the list.
10. Click **OK**.
11. Click **Save**.

Specifying the Preferred Ordering Method

The preferred ordering method determines the format in which the purchase order must be sent to the supplier based on the supplier location. The purchase order can be sent in the following formats:

- Fax
- URL
- Print
- cXML

By default the value is set to URL. To ensure that the purchase order is downloaded in a CSV file, you must set the value of the preferred ordering method to Print. To set your preferred ordering method, please have your Designated Support Contact log a service request and an Ariba Customer Support representative will contact you.

Specifying a Unique Number for Purchase Orders

By default, the order numbers in Ariba procurement solution are generated starting from EP10. To specify your preferred unique numbers for purchase orders, please have your Designated Support Contact log a service request and an Ariba Customer Support representative will contact you.

> **Note**
>
> Oracle Financials does not accept order numbers that are more than 20 characters even though in Ariba procurement solution you can provide more than 20 characters. Therefore, ensure that you do not specify order numbers that exceed 20 characters.

Enabling Cancel Order Integration

To enable cancel order integration, the parameter `Application.Procure.UseCancelOrderIntegration` must be set to Yes. To set the value for this parameter, please have your Designated Support Contact log a service request and an Ariba Customer Support representative will contact you.

Enabling Creation of Split Orders Based on Currency

Context

If you create a requisition that has line items having different currencies, then the order that will be created must be split based on the different currencies. This is because SAP ERP does not accept a purchase order that contains line items having different currencies.

Procedure

1. Log in to the **Service Manager** as Superuser.
2. From the navigation bar on the left, under **Site Manager**, click **Customer Sites**.
3. Log in as **Customer Support Admin** to the relevant realm.
4. Click **Customization Manager**.
5. Click **Field Configuration**.
6. In **Browse Classes**, enter `procurelineitem` and click **Search**.
7. Click **ProcureLineItem**.
8. Click on **Create Field** on the bottom right side and select **Computed Field**.
9. In the **Label** field, enter a label for the field.
10. In the **Expression** field, click **Add**.
11. Expand **Amount** and click on **Currency**.
12. Click **Add** next to the currency field.
13. Click on the **Advanced** tab
14. Select **Split Order on this Field** and click **OK**.
15. Click on **Customizing** on the top of the page.
16. Select **Publish**.

About ERP Orders

ERP orders are purchase orders that Ariba procurement solutions push to an ERP (such as SAP) instead of sending them to the vendor. Procurement solutions expect SAP to handle the ERP orders and transmit them to vendors.

Be careful about receiving integration with ERP orders because SAP users and processes can change an ERP order after the ERP order is in SAP. Such changes can cause errors, especially if SAP applies release strategies to purchase orders from Ariba procurement solutions. SAP does not allow you to receive against a purchase order until all the release strategies have been fulfilled.

See your Ariba Solutions Delivery representative to obtain more information and to decide if ERP orders are appropriate for your implementation.

Support for Split Amount Charges

Users using the Ariba procurement solutions integrated with SAP can send accounting information for a line item split by amount in a purchase order, change purchase order, and invoice to an SAP ERP system using the file-based or web services-based integration. ERP buyers can also send the accounting information to suppliers on Ariba Network.

Requirements for Split by Amount Accounting

You require the following to send split by amount accounting information:

- Procurement users and ERP buyers must apply the SAP Note:1387485 for split by amount to use this functionality on their SAP ECC systems. You must also activate the MM Multiple Account Assignment business function (`LOG_MM_MAA_1`) to use amount-based distribution for amount and percentage distribution. This function is available as part of the SAP Enhancement Package 4 for SAP ERP 6.0.

  > **Note**
  >
  > When you activate the MM Multiple Account Assignment business function (LOG_MM_MAA_1), it automatically also enables the valuated goods receipt for document items with multiple account assignments. Ariba procurement solutions integrated with SAP does not support receipt that contain the accounting information. However, you can customize the goods receipt transaction to support sending accounting information in receipts. For more information, see Customizing the Goods Receipt Transaction to Support Accounting Information [page 69].

- Procurement users must enable the parameter `AllowSAPSplitByAmountInPOExport` to send accounting information split by amount to an SAP system.
- To support split accounting by amount, changes have been made to the purchase order, change purchase order, and invoice integration events. You must download and import the necessary mapping changes in your SAP PI system and transport requests into your SAP ECC system.

Additional References

- The `BAPI /ARBA/BAPI_PO_CREATE1` support split accounting by amount in purchase orders. The existing `/ARBA/BAPI_PO_CREATE` is no longer applicable.
- The BAPI `/ARBA/BAPI_PO_CHANGE` supports split accounting by amount in change purchase orders.
- Mapping changes are available in the WSDL `accountassignment` amount field.
- The BADI `/ARBA/PO_IMPORT-publish_po_create1` supports customization for split accounting by amount in purchase orders.

> **Note**
>
> Ensure that you go to the **Customization Manager** page in your Ariba procurement solution and accept and publish the new parameter `AllowSAPSplitByAmountInPOExport.`

Customizing the Goods Receipt Transaction to Support Accounting Information

Use the following BADI to customize the goods receipt transaction to support the accounting information in receipts:

BADI Definition Name: `/ARBA/GR_CREATE`

Method: `GOODS_RECEIPTS_BDCDATA`

Ensure that you populate the `BDCDATA` for the split accounting information in the `GOODS_RECEIPTS_BDCDATA` method.

Specifying Ad-hoc Ship-To Addresses to Requisition and Purchase Orders

The Ariba Procurement Solution integrated for SAP allows buyers to integrate the ad-hoc Ship-To addresses available in the purchase orders sent from Ariba Procurement Solution.

When a buyer enables the parameter, **Application.Procure.AllowAdhocShipToAddress** in their Ariba Procurement Solution system, they can create an ad-hoc ship-to address while creating a requisition or editing the purchase order. The **Export Purchase Order to ERP** task exports the ad-hoc ship-to-address available in the purchase order to the SAP ERP system. Ariba Procurement Solution for SAP processes the ad-hoc ship-to-address instead of the address ID stored at the plant-level on the SAP ERP system. The ad-hoc ship-to address gives buyers the flexibility to receive the goods at a different location.

The ad-hoc ship-to address is stored in the `PurcOrdLineDetails.csv` file and exported to the SAP ERP system through the **Export Purchase Order to ERP** task.

Prerequisites

Buyers must enable the parameter **Application.Procure.AllowAdhocShipToAddress** in theirAriba Procurement Solution system to create an ad-hoc ship-to address while creating a requisition or editing the purchase order.

Limitations

- When a buyer specifies an ad-hoc ship-to address for line items, the ad-hoc Ship-To address is stored as the delivery address on the SAP ERP system. When a buyer resets the delivery address to use the plant address when changing purchase orders on the Ariba Procurement Solution, the delivery addressed is updated to the plant address accordingly on the SAP ERP system. However, the delivery address does not get updated to the plant address for buyers using SAP ERP 6.0 EHP0. Buyers must ensure that they manually select the delivery address to use the plant address when changing purchase orders on the SAP ERP system.

- When a buyer using the Ariba Procurement Solution creates a purchase order having an ad-hoc Ship-To address, the purchase order is created successfully with the ad-hoc Ship-To address on the SAP ERP system. However, when an invoice is created against this purchase order, the invoice fails with a tax calculation error as the Ariba Procurement Solution cannot identify the tax code for the ad-hoc Ship-To address. To process invoices with ad-hoc Ship-To addresses, buyers must ensure that they specify a valid tax code for the ad-hoc Ship-To address while creating an invoice on the Ariba Procurement Solution system.

Customization

Customers can also use the BAdI to customize and add additional fields on a purchase order. The following are the available BAdIs for customization:

- BAdI for `/ARBA/BAPI_PO_CREATE1`
  - `/ARBA/PO_IMPORT`
  - Method `PUBLISH_PO_CREATE1`
- BAdI for `/ARBA/BAPI_PO_CHANGE`
  - `/ARBA/PO_CHANGEORDER`
  - Method `PUBLISH_PO_CHANGE`

Ship-To Address Fields with Ad-hoc Ship-To Information [page 70]

Ship-To Address Fields with Ad-hoc Ship-To Information

Ariba Procurement Solution for SAP processes the following fields for the ad-hoc ship-to address available in the `PurchOrdLineDetails.csv` file:

Field Name	This field stores...
`PLANT`	The temporary Plant ID for the newly created ad-hoc ship to address. When the requisition does not have an ad-hoc ship-to address, this field stores the Plant ID for the SAP ERP system.
`HAS_ADHOC_SHIPTO_ADDRESS`	The “Yes” value to denote that the requisition stores an ad-hoc ship-to address.
`CITY`	The name of the city.
`POSTAL_CODE`	The postal code of the city.
ADDRESS_LINES	The street information for the ad-hoc ship-to address. Buyers can view the address details for the ad-hoc ship-to address in the **Delivery Address** tab while creating or updating the purchase order on the SAP ERP system. When the requisition does not store the ad-hoc ship-to address, this field stores the address details of the Plant ID for the SAP ERP system.
`STATE`	The state for the ship-to address.
`COUNTRY`	The country for the ship-to address.

Field Name	This field stores...
DEFAULT_SHIPTO	The Plant ID for the SAP ERP system. The Plant ID is derived from the user profile data. Ensure that you do not store the ad-hoc address on your SAP ERP system.

Although the following fields are available in the Ariba Procurement Solution system, they are not sent to the SAP ERP system:

- NAME
- STREET 2
- STREET 3
- PHONE
- FAX
- EMAIL

Integrating master data

About master data [page 72]

Importing master data [page 73]

Importing master data to Federated Process Control-enabled systems [page 89]

Incremental Load Events [page 99]

Company Code Import RFC Example [page 115]

Customizing RFC [page 116]

Filtering Data [page 119]

Master Data Integration Events [page 128]

Integrating Master Data Using the Direct Connectivity Integration Method from SAP ERP [page 138]

Integrating Master Data Using the Mediated Connectivity Integration Method [page 147]

About master data

Master data consists of general information from SAP ERP that is used in the Ariba procurement solutions to construct business documents such as requisitions, receipts, and invoices.

The Ariba procurement solutions provide the integration events for standard data imports from SAP. Because your SAP ERP implementation might contain additional data to be included with the Ariba procurement solutions purchase orders, invoices, or receipts, you modify these data imports to include such data.

The information presented in this chapter is intended for SAP ERP administrators and developers. Performing the tasks detailed in this chapter requires familiarity with the ABAP/4 (Advanced Business Application Programing) language and proficiency in basic SQL tasks.

This chapter describes how to create and edit objects in your SAP instance. When you make changes to Ariba procurement solutions objects in SAP, you might encounter the following warning: “Only urgent repairs in the consolidation system.” This warning appears when you change objects on both consolidation and development systems and indicates that you are making changes to objects that originated in another system. In this particular case, the objects originated from Ariba. The SAP ERP client expects you to develop your own objects on a development system rather than to change objects from third-party vendors. Therefore, in the context of this chapter, it is safe to disregard this warning message.

Importing master data

This section has the following topics:

- Required Data [page 74]
- Requirements for Importing Master Data [page 75]
- Limitations for Importing Master Data [page 75]
- Backward Compatibility [page 75]
- Simplified Master Data Integration [page 76]
- Defining authorizations for running Ariba Procure-to-Pay transactions [page 77]
- Support Integration for Outline Agreements in SAP [page 85]

Master data consists of general information stored in SAP that is used in Ariba procurement solutions to construct requisitions, receipts, or invoices. Transaction data includes information like remittance advice, invoice, purchase orders, and receipts.

You can import master data using only one of the following methods:

- Using the Data Transfer Tool.
- Running integrations events manually from Ariba Administrator.
- Importing directly without using the Ariba Integration Toolkit through the Direct Connectivity Integration method.
- Integrating master data directly from an SAP ERP system to the Ariba Procurement Solution system seamlessly using the SAP Process Integration through the Mediated Connectivity Integration method.

Buyers using the Ariba procurement solutions integrated with SAP can do the following:

- Perform a simplified master data integration for supplier, supplier location, payment terms, remittance location, and user data between the Ariba procurement solution and SAP ERP.
- Integrate master data through the Direct Connectivity Integration method from an SAP system to an Ariba procurement solution system more efficiently using the interface in the `ARBA/MASTER_DATA_EXPORT` program.
- Integrate master data directly from SAP ERP to an Ariba procurement solution system seamlessly directly or using the Ariba Integration Toolkit.
- Run the Incremental Load while running the master data events directly or using the Ariba Integration Toolkit.
- Integrate master data from SAP ERP to Ariba procurement solutions in a Federated Process Control-enabled environments. You can use the Direct Connectivity or Mediated Connectivity integration methods to integrate master data with Federated Process Control-enabled systems..
- Pull the `Payment Terms Language` master data in different languages directly or using the Ariba Integration Toolkit.
- Run the Full and Incremental Delete operation directly through the Direct Connectivity Integration method or using the Ariba Integration Toolkit while integrating master data from the buyer's SAP ERP.
- Integrate master data directly from an SAP ERP system to the Ariba Procurement Solution system seamlessly using the SAP Process Integration through the Mediated Connectivity Integration method.

Related Information

Direct Connectivity Integration [page 15]
Mediated Connectivity Integration [page 15]
Integrating Master Data Using the Direct Connectivity Integration Method from SAP ERP [page 138]
Integrating Master Data Using the Mediated Connectivity Integration Method [page 147]

Required data

Ariba procurement solutions imports only the data it needs to create properly formed purchase orders, invoice, and receipt information for SAP.

Ariba procurement solutions imports the following data from SAP:

- Account assignment categories
- Accounting field display status
- Language-specific names for data imports
- Asset accounts
- Cost centers
- Company Codes
- General ledger accounts
- Internal orders
- WBS (Work Breakdown Structure) elements
- Currency conversion rates
- Material groups
- Plants
- Purchasing organizations
- Purchasing groups
- Vendors
- Tax codes
- Supplier Locations
- Payment terms
- Remittance Locations
- User and User groups

Optionally, you can import the following data from SAP with some configuration on your part:

- Users
- Release authorizations
- User release authority

> **Note**
>
> Vendor master payment terms import is available in Ariba procurement solutions.

The *Ariba Procurement Data Import and Administration Guide* discusses how to configure this optional data and also about imports and integration events related to SAP.

Requirements for importing master data

- You must download and export the transport requests into your SAP ERP system. Ensure that you implement the following SAP notes before importing the master data to avoid a dump occurring with the runtime error:
  - 1402826 - Supplement to Note 548131
  - 1716777 - Runtime error IMPORT_WRONG_END_POS when displaying class
- Before you import the master data, you must create the Authorization Object class. For more information, see Defining authorizations for running Ariba Procure-to-Pay transactions [page 77].

> **Note**
>
> When you import large amounts of master data from your procurement ERP system, ensure that you run the `/ARBA/MASTER_DATA_EXPORT` task in the background.

Limitations for importing master data

The following limitations are applicable while importing the master data:

- You cannot archive the master data (supplier information, payment terms, remittance location, and user data) that has been exported directly without the Ariba Integration Toolkit.
- Ariba Procurement Solution integrated with SAP does not support a supplier location linked to multiple vendors.
- The legacy supplier export task is no longer supported. You must use the Export Supplier Data (Consolidated File) task.
- You can create payment terms with day limit in SAP. But Ariba Procurement Solution integrated with SAP does not support the day limit. If you have maintained payment terms in your SAP ERP system, Ariba Procurement Solution integrated with SAP downloads only one entry.

For more limitations, see the specific sections for each type of incremental load export tasks in Incremental Load Events [page 99].

Backward compatibility

This feature is compatible with previous versions of the Ariba Cloud Integration releases. However, if you have customization for Customer Exit functions, then it is required that you migrate the changes to the corresponding BADI.

Simplified master data integration

To export the master data from your SAP system to your Ariba Procurement Solution system, a custom table `/ARBA/FIELD_MAP` must be maintained to map the SAP and Ariba Procurement Solution system field values. Ensure that you maintain the following values:

Field Name in the /ARBA/FIELD_MAP	Key	Initial Values	Data Element	Data Type	Length	Decimals	Description
STRUCTURE	Selected	Selected	/ARBA/STRUCTURE	CHAR	30	0	The structure name used in the TABLES parameter for the RFC function.
FIELD_SAP	Selected	Selected	/ARBA/FNAME_SAP	CHAR	30	0	The field name in the SAP system.
FIELD_ARIBA			ARBA/FNAME_ARIBA	CHAR	255	0	The field name in the ARIBA system that you want to receive in the output .csv file.

> **Note**
>
> If you add fields to the customized RFC structure, add this field and the corresponding column name to the `/ARBA/FIELD_MAP` table to have a preferred column name in the output csv files. If you do not add this field, Ariba Procurement Solution integrated with SAP displays the SAP field name for that column in the Ariba Procurement Solution system.

Here is an example of how a field name in SAP can be maintained to a corresponding preferred column name in the `/ARBA/FIELD_MAP` table.

For example,

STRUCTURE	Field Name in the Ariba Procurement Solution system FIELD_SAP	Field Name in the Ariba Procurement Solution system FIELD_ARIBA
/ARBA/PAYMENT_TERMS	NAME	UniqueName
/ARBA/PAYMENT_TERMS	PRZTY	DiscountType
/ARBA/PAYMENT_TERMS	RATNR	InstallmentNumber

Defining authorizations for running Ariba Procure-to-Pay transactions

If you want to authorize only selected users to execute these transactions, you must create the profiles for the authorization objects /ARBA/RFC and /ARBA/PROG. These authorization objects are part of the transport and they must be assigned to a role in PFCG transaction code. If the role exists for the RFC Communication Channel user, assign the authorization object to the role directly, or create a new role and profile, and then assign the authorization object.

In PFCG, while assigning the authorization object to the role, select the check box **FUGR** for **RFC_TYPE** and for **RFC_NAME**, provide the names of the Ariba Procure-to-Pay RFC function modules based on the user's transaction level authorization. For example, /ARBA/BAPI_PO_CREATE1 and other Ariba Procure-to-Pay function modules must be assigned to users who are authorized to run the transaction data export report transaction.

You must create the authorization object with the following details:

- **Object name**: F_KKMIGRAT
- **Description**: FI-CA IS Migration Workbench
- **Authorization Class**: FI Authorization

Fields:

- **EMG_ACTVT** = 1
- **EMG_FIRMA** = *
- **EMG_GROUP** = FIL

Creating roles for the authorization object

Context

You create roles for the authorization objects in SAP ERP to authorize only selected users to execute certain transactions.

Procedure

1. Create roles for the authorization object using TCode, `PFCG`. Enter the following values:
   - **Role**: for example, `ZTRANSACTION_DATA`
2. Click **Single Role**.

   The **Change Roles** page appears.
3. Click the **Authorizations** tab and click **Change Authorization Data**.

   The **Choose Template** page appears.
4. Click **Do not select templates**.
5. In the **Manual** selection of authorizations page, enter a name in the **Authorization object** text box. Ensure that you enter `/ARB`.

6. Click **Continue**.

   The **Change Role: Authorizations** page appears.
7. Click the parent node, for example, **ZTRANSACTION_DATA** to expand it.

   You can see the /ARB object class you created.
8. Click the second child **Manually** node.

   The **Activity** and **Program Name** with **Search Help** child nodes appear.
9. Click the **Program Name** child node.

   The **Field Values** dialog box appears.
10. In the **Field values** dialog box, ensure that you have the following entries:
    - **Object**: **/ARBA/PROG**
    - **Field name**: **PROGRAM**
11. In the **Value Intrvl** section, enter all the transaction data report names in the **From** column.
12. Save the entries and regenerate the profiles created.
13. In the **Change Roles** page, you must see the profiles assigned to the role.

    The **Authorization** tab turns to Green color to indicate that the roles have been created successfully.
14. In the **Roles** tab, copy the role, for example, **ZTRANSACTION_DATA**. Go to `SU01`, click the **Roles** tab and assign the role to the user.
15. Save the changes.

    Now, you can export the transaction data task.

Importing supplier data

Function Module	`/ARBA/VENDOR_EXPORT`
CSV Files	`SupplierConsolidated.csv`
	`PurchaseOrgSupplierCombo.csv`

When you import the supplier data, Ariba Procurement Solution integrated with SAP downloads supplier data in the `SupplierConsolidated.csv` for the following:

- Suppliers available in the LFA1 (Vendor Master Table)
- Suppliers that are not marked for deletion for a given PORG
- Suppliers that do not have a centrally imposed purchasing block
- Suppliers that are not blocked for any function

The `/ARBA/SYSTID_MAPS` table stores values for the systemID and vendor. Before you import the supplier data, ensure that you maintain the correct values in the **SystemID** and **Vendor** fields in this table. When you import the supplier data, the values for the **SystemID** field is imported in the `SupplierConsolidated.csv` file.

Here is an example of how you can download a subset of the master data for suppliers by specifying the following parameters in the `/ARBA/TVARV` table.

- **Variable Name**: `/ARBA/VENDOR_ONLY_EXPORT`

- **Field Name**: LIFNR
- **Selection cat.**: S
- **Number**: 0

In the **Change View "TVARV generalized for fields": Details** section, you can enter the following values:

- **Char20**: VSAP
- **Char20**:PSAP
- **INCL/EXCL**: I
- **Option**: EQ
- **Selection value**: 0000001001
- **Selection value**: Blank

PurchaseOrg Supplier Combo

Ariba Procurement Solution integrated with SAP downloads supplier data in the `PurhaseOrgSupplierCombo.csv` for the following:

- Suppliers available in the LFM1 (Vendor Master Record Purchasing Organization Data)
- Suppliers that are not marked for deletion for a given PORG
- Suppliers that do not have a centrally imposed purchasing block

Supplier Location Data

Function Module	`/ARBA/SUPPLIER_LOCATION_EXPORT`
CSV File	`SupplierLocationConsolidated.csv`

The supplier location data contains two parameters that you maintain in the `/ARBA/TVARV` table: `/ARBA/SL_VENDOR_ADDRESS` and `/ARBA/SL_PARTNER_TYPE`.

- You must maintain at least one of these parameters in the `/ARBA/TVARV` table while downloading information for supplier locations. If you do not maintain one of these parameters, an error occurs.
- **PARAMETER NAME: /ARBA/SL_PARTNER_TYPE**

To maintain the partner type filter for the supplier location:

- **Variable Name**: `/ARBA/SL_PARTNER_TYPE`
- **Field Name**: PARVW
- **Selection cat.**: S
- **Number**: 0
  In the **Change View "TVARV generalized for fields": Details** section, here is an example of how you can maintain the following values:
- **Char20**: VSAP
- **Char20**: PSAP
- **INCL/EXCL**: I

- **Option**: EQ
- **Selection value**: For example, OA. When you specify 'OA', Ariba Procurement Solution integrated with SAP downloads all the supplier locations for the supplier.
  You can maintain the partner type based on the configuration you have maintained for the partner function for a vendor.
- **Selection value**: Blank
- **PARAMETER NAME: /ARBA/SL_VENDOR_ADDRESS**

To maintain the addresses filter for the supplier location:

- **Variable Name**: `/ARBA/SL_VENDOR_ADDRESS`
- **Field Name**: Blank
- **Selection cat.**: P
- **Number**: 0
  Here is an example of how you can maintain values in the **TVARV generalized for fields** section:
- **Char20**: VSAP
- **Char20**: PSAP
- **INCL/EXCL**: I
- **Option**: EQ
- **Selection value**: 'X'
  When you specify 'X', Ariba Procurement Solution integrated with SAP considers the supplier as the supplier location and downloads all addresses for the supplier location. You can maintain the partner type based on the configuration you have maintained for the partner function for a vendor.
- **Selection value**: Blank

You can maintain both the parameters in the `/ARBA/TVARV` table.

Here is how Ariba Procurement Solution integrated with SAP processes the supplier location. For example, the following table displays the values associated to the ABC Supplier:

Supplier	Purchase Organization	Supplier Location 1	Supplier Location 2
ABC Supplier	1000	1004	1005
	3000	1006	1007

Case 1: When you import the supplier location data, Ariba Procurement Solution integrated with SAP displays the Supplier Location for ABC supplier as 1004, 1005, 1006 and 1007 in the downloaded CSV file.

Case 2: When ABC Supplier is blocked for Purchase Organization 1000, Ariba Procurement Solution integrated with SAP only displays the Supplier Location as 1006 and 1007 in the downloaded CSV file.

> **Note**
>
> - Ariba Procurement Solution integrated with SAP does not support a supplier location linked to multiple vendors.
> - When you do not maintain filters for `/ARBA/SL_VENDOR_ADDRESS` and `/ARBA/SL_PARTNER_TYPE`, Ariba Procurement Solution integrated with SAP displays an error stating that you have not maintained filters for the Supplier Location.

Remittance Location Data

Function Module	`/ARBA/REMITTANCE_LOCATION_EXPORT`
CSV File	`RemittanceLocationConsolidatedExport.csv`

You can maintain filters while downloading remittance locations by specifying the following parameters in the `/ARBA/TVARV` table.

- You can maintain both the `/ARBA/RL_VENDOR_ADDRESS` and `/ARBA/RL_PARTNER_TYPE` parameters. However, you must maintain at least one of the parameters while downloading the remittance information.
- You can download supplier as remittance location.
- When you want to download the supplier as the remittance location, you must maintain the `/ARBA/RL_VENDOR_ADDRESS` filter.
- PARAMETER NAME: /ARBA/RL_PARTNER_TYPE

To maintain the remittance partner type filter, ensure that you maintain the following values:

- **Variable Name**: `/ARBA/RL_PARTNER_TYPE`
- **Field Name**: PARVW
- **Selection cat.**: S
- **Number**: 0
  Here is an example of how you can maintain values in the **TVARV generalized for fields** section:
- **Char20**: VSAP
- **Char20**: PSAP
- I**NCL/EXCL**: I
- **Option**: EQ
- **Selection value**: IP
  When you specify 'IP' as the selection value, Ariba Procurement Solution integrated with SAP considers the Remittance Location (LIFN2) with the Supplier Location (LIFNR) from the WYT3 table and downloads all the address information for the remittance location.
  You can maintain the partner type based on the configuration you have maintained for the partner function for a vendor.
- **PARAMETER NAME: /ARBA/RL_VENDOR_ADDRESS**

To maintain the remittance address filter, ensure that you maintain the following values:

- **Variable Name**: `/ARBA/RL_VENDOR_ADDRESS`
- **Field Name**: Blank
- **Selection cat.**: P
- **Number**: 0
  Here is an example of how you can maintain values in the **TVARV generalized for fields** section:
- **Char20**: VSAP
- **Char20**: PSAP
- I**NCL/EXCL**: I
- **Option**: EQ
- **Selection value**: 'X'
  When you specify 'X' as the selection value, Ariba Procurement Solution integrated with SAP considers the supplier as the remittance location and downloads all the address details for the supplier.

You can maintain the partner type based on the configuration you have maintained for the partner function for a vendor.

You can have the following combinations for the supplier location and remittances location:

Supplier Location Address /ARBA/SL_VENDOR_ADDRESS	Supplier Location Partner Type /ARBA/SL_PART-NER_TYPE	Remittance Location Address /ARBA/ RL_VENDOR_ADDRESS	Remittance Location Partner Type /ARBA/RL_PART-NER_TYPE
Maintain	-	Maintain	-
Maintain	-	-	Maintain
Maintain	-	Maintain	Maintain
Maintain	Maintain	Maintain	-
Maintain	Maintain	-	Maintain
Maintain	Maintain	Maintain	Maintain

Note

- When you maintain only the filter for the supplier location address `/ARBA/SL_VENDOR_ADDRESS` and do not maintain the supplier location and remittance location for the supplier, Ariba Procurement Solution integrated with SAP considers the supplier as the supplier location and remittance location.
- When you maintain the supplier location but do not maintain the remittance location, Ariba Procurement Solution integrated with SAP considers the supplier location as the remittance location.
- When you do not maintain filters for `/ARBA/RL_VENDOR_ADDRESS` and `/ARBA/RL_PARTNER_TYPE`, Ariba Procurement Solution integrated with SAP displays an error stating that you have not maintained filters for the Remittance Location.

- **PARAMETER NAME: /ARBA/RL_BANK_DETAILS**

To maintain the bank details filter, ensure that you maintain the following values:

- **Variable Name**: `/ARBA/RL_BANK_DETAILS`
- **Field Name**: Blank
- **Selection cat.**: P
- **Number**: 0
  Here is an example of how you can maintain values in the **TVARV generalized for fields** section:
- **Char20**: VSAP
- **Char20**: PSAP
- **INCL/EXCL**: I
- **Option**: EQ
- **Selection value**: ‘X

Ariba procurement solutions integrated with SAP processes remittance locations as follows:

Maintain filter for /ARBA/RL_BANK_DETAIL	Downloads Bank Details for Remittance Location
Maintain	Yes
Do not maintain	No

Here is an example of how the supplier location and remittance location is mapped for a vendor:

Vendor 1050 has 1001 and 1002 as supplier locations. The remittance location associated to Vendor 1050 is 2000. This remittance location is associated to two payment banks - Dresden (10050033) and Hypo (19652993).

When you download the `SupplierLocationConsolidated.csv`, you can see 1001 and 1002 as the `LocationID` for `VendorID` 1050. The `RemittanceLocationConsolidated.csv` displays the two payment banks for both the 1001 and 1002 supplier locations.

> **Note**
>
> SAP ERP allows you to specify multiple bank accounts for the remittance location for a supplier. However, Ariba Procurement Solution does not support multiple bank accounts having the same payment method for a remittance location.

Limitations for supplier location and remittance location

When a supplier is either marked for Block or Delete and you run the master data for suppliers, Ariba Procurement Solution integrated for SAP does not extract the supplier, supplier purchase org, supplier location, or remittance location .

However, if the supplier is not marked for Block or Delete and active, but the supplier location or remittance location is either marked for Block or Delete, Ariba Procurement Solution integrated for SAP processes the information as follows:

- When you run the full load master data, , Ariba Procurement Solution integrated for SAP downloads the:
  - Supplier information
  - Supplier purchase org, supplier location, or remittance location in the SupplierLocationConsolidated.csv and RemittanceLocationConsolidated.csv files . This information is downloaded as the supplier/vendor is active and not marked for Block or Delete.
- When you run the incremental master data:
  - Downloads information on the supplier, supplier location, or remittance location that has been changed recently for the supplier. The changed information is only available in the first run of the incremental load in the `SupplierLocationConsolidated__Delete.csv` files and `RemittanceLocationConsolidated__Delete.csv` files.

For example, you have Supplier 1000, having Supplier Location 2000 and Remittance Location 3000.

Use Case 1

1. Supplier 1000 is marked for Block or Delete.
2. When running the full load master data, Supplier 1000, Supplier Location 2000, and Remittance Location 3000 are not available in the `SupplierLocationConsolidated.csv` and `RemittanceLocationConsolidated.csv` files.
3. When you run the incremental load for suppliers, Supplier 1000 is available as blocked or deleted in the `SupplierConsolidated_Delete.csv` file.

Use Case 2

1. Supplier 1000 is not marked for Block or Delete.
2. Supplier Location 2000 or Remittance Location 3000 are marked for Block or Delete.

3. When running the full load master data, Supplier 1000 is extracted. However, Supplier Location 2000, and Remittance Location 3000 are also extracted and available in the `SupplierLocationConsolidated.csv` and `RemittanceLocationConsolidated.csv` files.
4. When running the incremental load for suppliers, Supplier Location 2000, and Remittance Location 3000 are extracted and available in the SupplierConsolidated_Delete.csv file.

> **Note**
>
> Although SAP ERP supports the Mark for Block or Delete functionality, Ariba Procurement Solution integrated for SAP does not support the Mark for Block or Delete functionality. When you run the master data for suppliers, this information about the supplier location or remittance location that has been blocked or deleted is still available in the .csv files.

Importing payment terms data

Payment terms indicate the negotiated discount between a buying organization and supplier for a specified number of days before payment is due.

Function Module	`/ARBA/PAYMENTTERM_EXPORT`
CSV File	`PaymentTermsConsolidated.csv`

> **Note**
>
> - When you import the payment terms data, Ariba Procurement Solution integrated with SAP imports only the Normal Payment Terms; the Installment Payment terms are excluded.
> - `/ARBA/PAYMENT_TERMS` is the parameter to specify filters for payment terms.
> For information on ERP considerations for importing payment terms and adding payment terms using a CSV file, see the *Ariba Invoicing and Payment Data Import and Administration Guide*.

Importing user data and user group data

Function Modules	`/ARBA/USER_EXPORT` `/ARBA/USER_GROUP_EXPORT`
CSV Files Downloaded	`UserConsolidated.csv` `GroupConsolidated.csv`

- The `/ARBA/USR_GRP` table must contain all the groups (SAP roles) for users. If the user group is not maintained in this table, the user and the related user groups are not exported to the Ariba procurement solution system.
- Create user groups in the Ariba procurement solution system with the SAP role names using the import event **Import User Group Mapping**.

- Import the users in the Ariba procurement solution system using the import event **Import User to Group Mapping Data**.

You can specify the following parameters in the program `/ARBA/MASTER_DATA_EXPORT` to specify filters for user and user group data export task:

- `/ARBA/USER_EXPORT`
- `/ARBA/USER_GROUP_EXPORT`

> **Note**
>
> If you add fields to the customized RFC structure, add this field and the corresponding column name to the `/ARBA/FIELD_MAP` table to have a preferred column name in the output csv files. If you do not add this field, Ariba Procurement Solution integrated with SAP displays the SAP field name for that column available in the procurement system. For more information, see Simplified master data integration [page 76].
>
> When you export user data, only the information available in the Tcode SU01 is exported to the Ariba Procurement Solution. The HR information for the cost center, company code and the locale is also exported. The locale is the concatenation of HR nationality plus the HR Language (info type 0002). Ariba Procurement Solution integrated with SAP does not import information about users maintained in the HR Info tables.

Support integration for outline agreements in SAP ERP

Buyers can create contracts from outline agreements on their SAP ERP system and send them to the Ariba procurement solutions integrated with SAP. ERP buyers can export contract information to the Ariba procurement solutions using CSV files in the Ariba Integration Toolkit or directly without the Ariba Integration Toolkit for the following:

- Single line contracts
- Multiple line contracts
- Service line contracts
- Contracts containing split-accounting
- Contracts containing tiered pricing
- Contracts containing term pricing

Requirements for outline agreements in SAP ERP

Before you import contract information, you must ensure that the master data information for the user, company code, plant, UOM, and accounting information on your ERP ECC system already exists on the Ariba procurement solution system.

You must maintain the parameter /ARBA/TEMP_DIRECTORY in the /ARBA/TVARV table before you import the contract information. For more information, see . [page 58]

You must download the transport requests into your SAP ECC system and maintain the required parameters. For more information on the parameters, see Additional Information [page 86].

Limitations for outline agreements in SAP ERP

- The Ariba procurement solution integrated with SAP does not support the “Update” operation.
- Contracts containing both parent and child line items are not exported with this hierarchy. All child line items in contracts are exported as individual line items.
- You cannot export contracts for all the term types; only item-level containing specific items from supplier is supported.
- No support is available for split by amount accounting information. It also does not support the multi-line contract with duplicate material numbers.
- The following are the limitations for the term and tiered pricing:
  - The Ariba procurement solution integrated with SAP supports only two condition types: `“PRICE_CONDITION_TYPE”, and “DISCOUNT_CONDITION_TYPE”`
    However, the same line item cannot contain both these condition types.
  - The Term-based pricing supports only Discount Percentage and Gross Price. The Gross Price condition type is considered as the unit price. Only the Scale Type “From” is supported.
  - When a contract contains both tiered and term-based pricing, the Ariba procurement solution integrated with SAP only supports tiered-based pricing.
  - When the contract contains both the discount type and pricing type in a tiered pricing, only the pricing type values is used.
  - Only the current time validity period option in the tiered or term pricing is supported.

Additional references

- If you choose to use the Ariba Integration Toolkit to send the contract information, you require the following:

Configure the `/ARBA/CONTRACT_EXPORT` report with the following parameters:

- Enable the usage of the Ariba Integration Toolkit to export files to the procurement systems,
- `Parent Directory`: Specify the absolute directory path to which the Ariba Data Transfer Tool exports the ZIP file.
- `Encoding`: Specify the character encoding to zip and unzip the files.

> **Note**
>
> If you have not enabled the Ariba Integration Toolkit, the ERP system sends the contract files to the procurement systems.

- If you use the Ariba Integration Toolkit, the ERP buyer extracts the contract information in the following CSV files:
  - ContractHeader.csv
  - ContractItemInformation.csv
  - Accounting.csv
  - TermPricing.csv
  - TieredPricing.csv
- If the Ariba Integration Toolkit parameter is not enabled:

The function module `/ARBA/DIRECT_CONNECT` extracts the contract information as batch files and sends it to the procurement system as MIME type documents in to a temporary location.

Ensure that you maintain the following parameters in the configuration tables using the transaction code `SM30`:

- `ARBA/P2P_VENDOR`: Stores the vendors with contracts.
- `ARBA/LAST_CONTR`: This parameter is used for incremental exports. You must set the **CONTRACTID** and its associated **CONTRACTTYPE**. The parameter exports contracts with the **CONTRACTID** you set for the contract type. The **CONTRACTID** is a mandatory parameter; the **CONTRACTTYPE** is not mandatory.

If you maintain a different number range for different contract types, you must maintain the **CONTRACTTYPE** parameter here.

If you filter contracts by **CONTRACTTYPE,** then it is recommended that you use the **CONTRACTTYPE** parameter in this table.

- `ARBA/TVARV`: Use this parameter to filter by the document type adding the following entries in the `/ARBA/TVARV` table:
  - **Variable Name**: `ARBA/CONTRACT_EXPORT`
  - **Field Name**: BSART
  - **Selection cat**.: S
  - **Number**: 1

TVARV generalized for fields

- **Char20:** Blank
- **Char20:** Blank
- **INCL/EXCL**: I
- **Option**: EQ
- **Selection value**: WK
- **Selection value**: Blank
- **Variable Name**: `ARBA/CONTRACT_EXPORT`
- **Field Name**: BSART
- **Selection cat**.: S
- **Number**: 2

TVARV generalized for fields

- **Char20:** Blank
- **Char20:** Blank
- **INCL/EXCL**: I
- **Option**: EQ
- **Selection value**: MK
- **Selection value**: Blank

The `/ARBA/TVARV` table contains two additional parameters required only for term and tiered-based pricing:

- `PRICE_CONDITION_TYPE`
- `DISCOUNT_CONDITION_TYPE`

> **Note**
>
> The Ariba procurement solutions integrated with SAP supports only the price and discount type condition types.

Ensure that you maintain the following parameters for term based and tired pricing contracts:

- **Variable Name**: `PRICE_CONDITION_TYPE`
- **Field Name**: Blank
- **Selection cat.**: P
- **Number**: Blank

TVARV generalized for fields

- **Char20:** Blank
- **Char20:** Blank
- **INCL/EXCL**: I
- **Option**: EQ
- **Selection value**: PB00
- **Selection value**: Blank
- **Variable Name**: `DISCOUNT_CONDITION_TYPE`
- **Field Name**: Blank
- **Selection cat.**: P
- **Number**: Blank

TVARV generalized for fields

- **Char20:** Blank
- **Char20:** Blank
- **INCL/EXCL**: I
- **Option**: EQ
- **Selection value**: RA00
- **Selection value**: Blank
- The report **/ARBA/CONTRACT_EXPORT** is available to export contracts to the procurement system using the Ariba Integration Toolkit or directly without the Ariba Integration Toolkit.

If you choose to export contracts directly without the Ariba Integration Toolkit, ensure that you maintain the following parameters in the table `/ARBA/HTTP_POST`:

- Realm
- SharedSecret
- URL

When you enable the Ariba Integration Toolkit, the following parameters are available:

- Parent Directory
- Encoding to be used
- Variant
- Partition

Importing master data to Federated Process Control-enabled systems

Master data integration between SAP ERP and Ariba procurement solutions supports export of master data from SAP ERP to Ariba procurement solutions in Federated Process Control-enabled environments. Buyers using Ariba procurement solutions integrated with SAP ERP can enable master data integration for Federated Process Control-enabled systems and specify the site, or realm, to which they want to export the master data.

You can implement this feature over Direct Connectivity or Mediated Connectivity integration methods.

To export master data to Federated Process Control-enabled systems, you must set the `/ARBA/FPC_ENABLED` parameter in the `/ARBA/TVARV` table to `X`. When you access the master data export program after you set the `/ARBA/FPC_ENABLED` to `X`, SAP ERP provides additional options in the **Export All Master Data Required for On-Demand Applications** window to help you specify settings for exporting master data to Federated Process Control-enabled systems.

You can specify the name of the site to which you want to export the master data in the **Realm** field of the **Export All Master Data Required for On-Demand Applications** window. In a Federated Process Control-enabled environment, you can export the same set of master data to multiple sites.

You can export the following master data from SAP ERP to Federated Process Control-enabled systems:

- Organizational Data
- Accounting Data
- Cross/Application Configuration Data
- Supplier Related Data
- User Related Data

SAP ERP supports both full load and incremental load export of the master data.

Incremental export of Master Data to Federated Process Control-enabled systems

SAP ERP uses a combination of the following three variables to ensure that the incremental master data is available to all sites to which you want to do incremental exports:

- Site information
- Date and time stamp
- Retention Period

When you do an incremental export to a Federated Process Control-enabled system, SAP ERP tags each of the records that you export with the date and time of the export and the name of the site to which you export the record. SAP ERP uses the site information and date and time stamp to identify the records to be exported when a new incremental export is triggered.

You can configure the `/ARBA/CHANGELOG_RETENTION_DAYS` in the `/ARBA/TVARV` table to specify the number of days you want SAP ERP to retain the change records in the `/ARBA/CHANGE_DOC` table. When the configured retention period expires, SAP ERP clears the change log.

> **Note**
>
> If you set the `/ARBA/FPC_ENABLED` parameter in `/ARBA/TVARV` to `X` and do not maintain a value for `/ARBA/CHANGELOG_RETENTION_DAYS`, SAP ERP returns an error when you access the master data export program.

Segregation of supplier and user master data elements for specific sites

When you export user and supplier master data to a Federated Process Control-enabled system, you can segregate various elements of the user and supplier master data and send subsets or supersets based on the specific requirements. When you export user master data to a parent site, as configured in the `/ARBA/AUTH_PARAM` table, SAP ERP sends only those master data elements that are relevant for the parent site. If the realm is not marked as a parent realm in the `/ARBA/AUTH_PARAM` table, SAP ERP sends only those master data fields that are relevant for a child site.

For example, the user master data sent to a parent site does not contain accounting information, whereas the user master data sent to a child site contains accounting information.

When you select user master data for export in non-Federated Process Control-enabled environment, SAP ERP sends both user and user group master data. However, in Federated Process Control-enabled environments, you can choose to export either the user or the user group master data, or both.

Similarly, you can choose to segregate the supplier master data into various master data elements based on the specific requirements of the site to which you export the supplier master data. The supplier master data segregation options include supplier location, supplier purchase organization, and remittance location.

The parent and child differentiation applies only to user and supplier master data events. The following table lists the .CSV files generated for the user and supplier master data events and their availability to parent and child sites:

.CSV Filename	Applicable Site
UserConsolidated.csv	Parent and child sites. **Note** The `UserConsolidated.csv` file for the parent realm contains only a subset of master data elements. For a list of master data elements that are exported to a parent sites User master data elements exported to a parent site [page 92].
SupplierConsolidated.csv	Parent and child sites **Note** The `SupplierConsolidated.csv` file for Federated Process Control-enabled sites contains a new field, `ImportCtrl`.

.CSV Filename	Applicable Site
GroupConsolidated.csv	Child sites
PurchaseOrgSupplierCombo.csv	Child sites
RemittanceLocationConsolidated.csv	Child sites
SupplierLocationConsolidated.csv	Child sites

Prerequisites for importing master data to Federated Process Control-enabled systems

- SAP ERP 6 EhP 0 SP14 or later versions.
- Install the latest transports. If you want to use Mediated Connectivity, import the latest TPZ files.
- Configure Direct or Mediated Connectivity settings.
- Run the database utility to update the enhancements made to the following tables:
  - `/ARBA/AUTH_PARAM`
  - `/ARBA/INCR_DTTIM`
  - `/ARBA/TVARV`
  - `/ARBA/USR_GRP`
- Maintain values for the REALM, LOGICAL_PORT, and IS_PARENT fields in the `/ARBA/AUTH_PARAM` table. The logical port field contains the logical port that you configure as part of the SOAMANAGER configuration.

  > **Note**
  >
  > If you are using Mediated Connectivity, ensure that the logical port field is empty.

- Maintain supplier and remittance location in the `/ARBA/TVARV` table.
- Maintain the `/ARBA/USR_GRP` table.
- If you are upgrading from a non-Federated Process Control system to Federated Process Control-based system, maintain the last run time for the user master data export in the `/ARBA/INCR_DTTIM` table.
- If you are using Mediated Connectivity, in SAP Process Integration create a business system each for the parent and child sites you have configured.

Limitations for importing master data to Federated Process Control-enabled systems

- Integrated Toolkit-based connections are not supported for master data integration between SAP ERP and Ariba procurement solutions in Federated Process Control-enabled environments.
- The remittance location data is linked to the supplier location. When you export remittance location, even if you select only the remittance location for export, SAP ERP extracts the corresponding supplier location information too. When you export supplier location in the incremental load mode after exporting remittance

location, the export does not contain those supplier location records that SAP ERP extracted while exporting remittance location master data.
- Remittance location option is not available for Procure-to-Order users.

User master data elements exported to a parent site

The `UserConsolidated.csv` file exported to a parent site contains the following user master data elements:

- UniqueName
- Name
- EmailAddress
- DefaultCurrency.UniqueName
- LocaleID.UniqueName
- TimeZoneID
- Phone
- Fax
- Supervisor.UniqueName
- Supervisor.PasswordAdapter
- Title Prefix
- First Name
- Last Name
- Mobile Number
- Address 1
- Address 2
- City
- Country
- State
- Postal Code
- Employee ID
- Deactivation Date
- Role Name

How to maintain table entries

Before you can export master data from SAP ERP to Ariba procurement solutions in Federated Process Control-enabled environments, you must maintain the table parameters listed in the following sections:

- `/ARBA/AUTH_PARAM` [page 93]
- `/ARBA/TVARV` [page 93]
- `/ARBA/USR_GRP` [page 96]
- /ARBA/INCR_DTTIM [page 97]

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

In the `/ARBA/AUTH_PARAM` table, maintain the following parameters.

Parameter	Description	Example
Solution	Name of the Ariba solution that you integrate SAP ERP with.	Ariba
Ariba Realm ID	The name of your company as configured in the Ariba application.	s4All
Wait Time	Number of minutes to wait before SAP ERP attempts to reconnect with the Ariba application.	02
Logical Port	Name of the logical port that you configure as part of the SOAMANAGER configuration.	ARIBA_PARENT
Is Parent	Whether the realm is a parent realm. A checked `Is Parent` check box indicates that the corresponding realm is a parent realm. An unchecked `Is Parent` check box indicates that the corresponding realm is a child realm.	Checked or unchecked

/ARBA/TVARV

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

- `/ARBA/EXTERNAL_SID` is a mandatory parameter that is required for the Direct Connectivity configuration.

Field	Values for
Variable Name	/ARBA/EXTERNAL_SID
Field Name	--
Selection Category	P
Number	0
Char 20	--
Char 20	--

Field	Values for
INCL/EXCL	I
Options	EQ
Selection Value	External system ID. For example, SAPERPSYSTEM1
Selection Value	--

- `/ARBA/FPC_ENABLED` is a mandatory parameter for exporting master data to Federated Process Control-enabled systems. The value you set for this parameter indicates whether master data export is enabled for Federated Process Control-enabled systems or not.

Field	Values for FPC_ENABLED
Variable Name	/ARBA/FPC_ENABLED
Field Name	--
Selection Category	P
Number	0
Char 20	--
Char 20	--
INCL/EXCL	I
Options	EQ
Selection Value	X
Selection Value	--

- `/ARBA/CHANGELOG_RETENTION_DAYS` is a mandatory parameter for exporting master data to Federated Process Control-enabled systems. The value you set for this parameter indicates the number of days that you want SAP ERP to retain change log for incremental export.

Field	Values for CHANGELOG_ RETENTION_DAYS
Variable Name	/ARBA/CHANGELOG_ RETENTION_DAYS
Field Name	--
Selection Category	P
Number	0
Char 20	--

Field	Values for CHANGELOG_ RETENTION_DAYS
Char 20	--
INCL/EXCL	I
Options	EQ
Selection Value	2 **Note** Number of days you want to retain the change log for incremental exports.
Selection Value	--

- `/ARBA/TEMP_DIRECTORY` is a mandatory parameter for exporting master data using CSV files.

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 location to which you want to extract the master data. For example, `.\MASTERDATA`.
Selection Value	--

- `/ARBA/RL_PARTNER_TYPE` is a mandatory parameter for supplier master data export. The value you set for this parameter indicates the remittance location.

Field	Values for RL_PARTNER_TYPE
Variable Name	/ARBA/RL_PARTNER_TYPE
Field Name	PARVW
Selection Category	S

Field	Values for RL_PARTNER_TYPE
Number	0
Char 20	--
Char 20	--
INCL/EXCL	I
Options	EQ
Selection Value	IP
Selection Value	--

- `/ARBA/SL_PARTNER_TYPE` is a mandatory parameter for supplier master data export. The value you set for this parameter indicates the supplier location.

Field	Values for SL_PARTNER_TYPE
Variable Name	/ARBA/SL_PARTNER_TYPE
Field Name	PARVW
Selection Category	S
Number	0
Char 20	--
Char 20	--
INCL/EXCL	I
Options	EQ
Selection Value	OA
Selection Value	--

/ARBA/USR_GRP

In the `/ARBA/USR_GRP` table, maintain the following parameters:

Parameter	Description	Example
Solution	Name of the Ariba solution that you integrate SAP ERP with.	Ariba

Parameter	Description	Example
Role	User role.	
Realm	The name of your company as configured in the Ariba application.	S4all

/ARBA/INCR_DTTIM

For user master data integration, maintain the following values In the `/ARBA/INCR_DTTIM` table:

Parameter	Description	Example
Export Name	Name of the export.	USER
Realm	Name of the Ariba procurement realm to which the data was exported.	P2P
Timestamp	Date and time of the export. Configure an initial value of 0. After every successful export, the timestamp value gets updated based on the timestamp Ariba procurement solution sends to SAP ERP. If you are moving from a non-FPC implementation to an FPC-based implementation, specify the timestamp of the last succesful run of the user master data export.	0

How to import master data in Federated Process Control-enabled environments

Prerequisites

- Configure Direct [page 99] or Connectivity integration method.
- Maintain necessary table entries as explained in How to maintain table entries [page 92].

Context

In Federated Process Control-enabled environments, you can specify the site to which you want to import the master data from SAP ERP. When you import user and supplier master data in a Federated Process Control-

enabled environment, you can segregate user and supplier master data into specific elements that you want to export to specific sites.

> **Note**
>
> Always export the master data to the parent realm before you export the master data to child realms.

Procedure

1. Go to transaction code `/ARBA/MASTER_DATA`.

   The **Export All Master Data Required for On-Demand Application** screen appears.
2. Select one of the following options from the **Specify the Scope of the Procurement Solutions** section:
   - **Procure-to-Pay**
   - **Procure-to-Order**
3. From **Connectivity Methods**, select **Direct Connectivity**.

   > **Note**
   >
   > Integration Toolkit-based connections are not supported for master data integration with Federated Process Control-enabled systems.
4. From **Load Options**, select one of the following options:
   - **Full Load**
   - **Incremental Load**
5. In the **Realm** text box, enter the name of the site to which you want to send the master data.
6. From the **Select Master Data for Export** list of check boxes, select the master data elements that you want to export.

   When master data integration for Federated Process Control-enabled systems is enabled, the following additional check boxes are available for the Supplier and User master data groups:

   For the Supplier master data:
   - **Supplier Location**
   - **Remittance Location**

     > **Note**
     >
     > The additional check boxes appear after you check the **Supplier** check box.
     >
     > The **Remittance Location** option is not available for Procure-to-Order users.
   - **Supplier PurchaseOrg**

   For the User master data:
   - **User Group**
7. Click **Execute**.

How to configure Direct Connectivity

You can configure Direct Connectivity to enable seamless integration of master data between Ariba procurement solutions and SAP ERP. You can use the SOAMANAGER [page 142] configuration to set up direct connectivity between Ariba procurement solutions and SAP ERP.

Prerequisites

- Install the latest transports as explained in .
- Maintain the table parameters as listed in How to maintain table entries [page 92].
- Install the SSL client certificates as explained in How to install the SSL client certificate for HTTPS connection [page 145].
- Create a logical file path for the ISMW_ROOT. For more information, see How to create a logical file path [page 144].
- Specify the system ID of SAP ERP on the **Service Manager** > **Site Manager** > **Customer Site** > **Master Data Manager** > **External System Configuration** > **Create External System** window of the Ariba 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 Ariba 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 Ariba application.
    For more information on installing the certificate, see How to configure the client certificate for certificate-based authentication [page 147].

Incremental Load Events

You can run the Incremental change transactions either using the Ariba Integration Toolkit or directly while running the master data events to pick up the new, updated, or deleted changes.

You can run the incremental change transactions for the following master data tasks:

- User and User Group information

For more information, see User and User Group Incremental Load [page 108].

- Supplier-related information that includes supplier location and supplier remittance location

For more information, see Supplier Incremental Load [page 110].

- General Ledger

For more information, see General Ledger Incremental Load [page 104].

- Internal Order and Company Code

For more information, see Internal Order Incremental Load [page 107].

- Cost Center

For more information, seeCost Center Incremental Load [page 102].

- WBS Element and Company Code

For more information, see WBS Element Incremental Load [page 107].

- Assets

For more information, see Asset Incremental Load [page 100].

The function module `/ARBA/CHANGE_DOC` stores details of all the changes to the master data in the `/ARBA/CHANGE_DOC` table.

The `/ARBA/INCR_DTTIM` table captures the time stamp for the last run master data export tasks.

The Ariba procurement solutions integrated with SAP supports the following incremental change transactions operations for the master data export tasks:

Object	Create	Change	Block	Unblock	Lock	Unlock	Delete	Undelete
Supplier	Y	Y	Y	Y	N/A	N/A	Y	Y
User	Y	Y	N/A	N/A	Y	Y	Y	N
Asset	Y	Y	Y	Y	N/A	N/A	Y	N
Cost Center	Y	Y	N/A	N/A	Y	Y	N	N
General Ledger	Y	Y	Y	Y	N/A	N/A	Y	Y
WBS	Y	Y	N/A	N/A	Y	Y	Y	Y
Internal Order	Y	Y	N/A	N/A	Y	Y	Y	Y

Asset Incremental Load

The asset incremental change transaction supports the following:

- Creating a new asset - AS01
- Changing an existing asset - AS02
- Blocking an existing asset - AS05
- Deleting an existing asset - AS06

The `/ARBA/CHANGE_DOC` table records all the changes for these transactions. All the created and changed assets are stored in the Asset.csv file. The Asset_Delete.csv file stores all the deleted changes.

The following parameters have been added to the `/ARBA/ASSET_EXPORT` function module:

- INCREMENTAL: This parameter is required for the full and incremental load.
- CHANGE_DOC: This parameter stores the changes that are fetched from the `/ARBA/CHANGE_DOC` table. This can be used to delete the processed records from the change log table.

The following is the configuration that your ERP system maintains for the asset incremental change transaction:

In SWO1, the business object, /ARBA/1022 contains the following events:

- AssetCreated
- AssetChanged
- AssetDeleted

In the SWEC, the change document object ANLA is assigned to the business object /ARBA/1022.

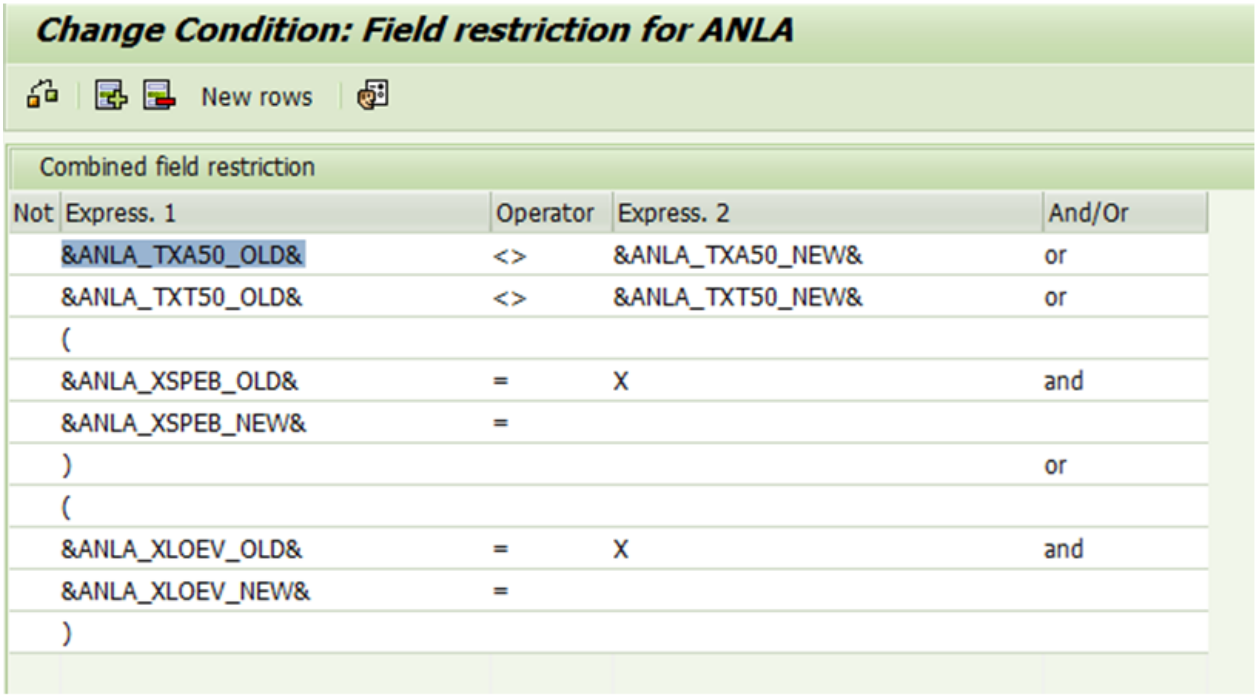
The following are the options maintained for the create, change, delete, and block events:

Business Obj. Type	Event	Select Option
/ARBA/1022	ASSETCREATED	On Create
/ARBA/1022	ASSETDELETED	On Delete
/ARBA/1022	ASSETDELETED	On Change
/ARBA/1022	ASSETCHANGED	On Change **Note** This option is also for block events.

Note

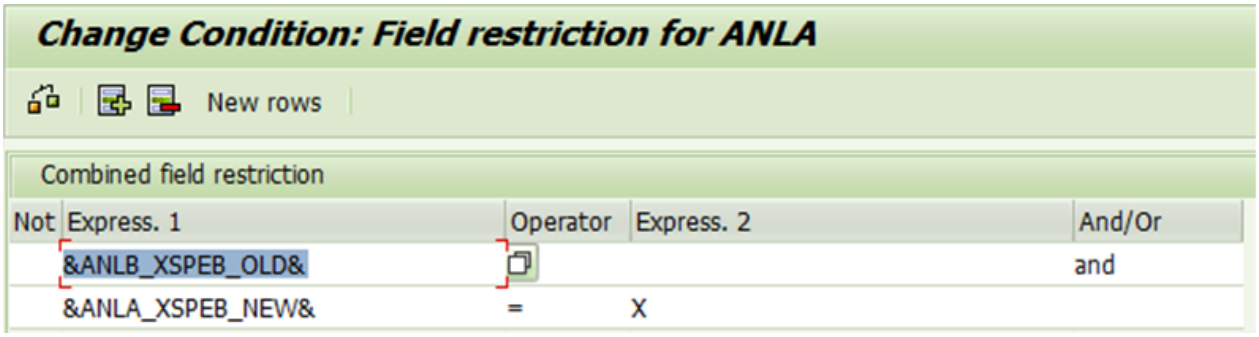
Ariba procurement solutions integrated with SAP tracks only the changes to the fields in the change and block event; all other changes are ignored. The field restrictions for the change and block events track only the changes to the fields; all other changes are ignored.

The following are field restrictions available for change events:



Not	Express. 1	Operator	Express. 2	And/Or
	&ANLA_TXA50_OLD&	<>	&ANLA_TXA50_NEW&	or
	&ANLA_TXT50_OLD&	<>	&ANLA_TXT50_NEW&	or
	(			
	&ANLA_XSPEB_OLD&	=	X	and
	&ANLA_XSPEB_NEW&	=		
	)			or
	(			
	&ANLA_XLOEV_OLD&	=	X	and
	&ANLA_XLOEV_NEW&	=		
	)			

The following are field restrictions available for block events:



In the SWETYPV, following are the options assigned to the receiver function for each event:

- Object Category: BOR Object Type
- Object Type: Specify the extension value for each of the change object.
- Event: Specify the event type. For example, CHANGEGL.
- Receiver Type: CHANGE
  The Linkage Setting (Event Receiver) section contains the following settings:
- Receiver Call: Function Module
- Receiver Function Module: /ARBA/CHANGE_DOC
- Check Function Module: /ARBA/CHANGE_DOC
- Receiver Type Function Module: Blank
- Destination of Receiver: Blank
- Event Delivery: Using tRFC (Default)
- Linkage Activated check box: Checked
- Behavior Upon Error Feedback pull-down list: System defaults
- Receiver Status pull-down list: No errors

Cost Center Incremental Load

The cost center change transaction supports the following:

- Creating a new cost center - KS01
- Changing an existing cost center- KS02
- Locking an existing cost center - KS02

> **Note**
>
> You cannot run the incremental delete load for cost centers.

The `/ARBA/CHANGE_DOC` table records all the changes for these transactions. All the created and changed information for cost centers is stored in the CostCenter.csv file. The CostCenter_Delete.csv file stores all the deleted changes.

The following parameters have been added to the `/ARBA/COST_CENTER_EXPORT` function module:

- INCREMENTAL: This parameter is required for the full and incremental load.

- CHANGE_DOC: This parameter stores the changes that are fetched from the `/ARBA/CHANGE_DOC` table. This can be used to delete the processed records from the change log table.

The following is the configuration that your ERP system maintains for the cost center incremental change transaction.

In SWO1, the business object, /ARBA/0012 contains the following events:

- CostCenterCreated
- CostCenterChanged
- CostCenterDeleted

In the SWEC, the change document object event is assigned to the business object /ARBA/0012.

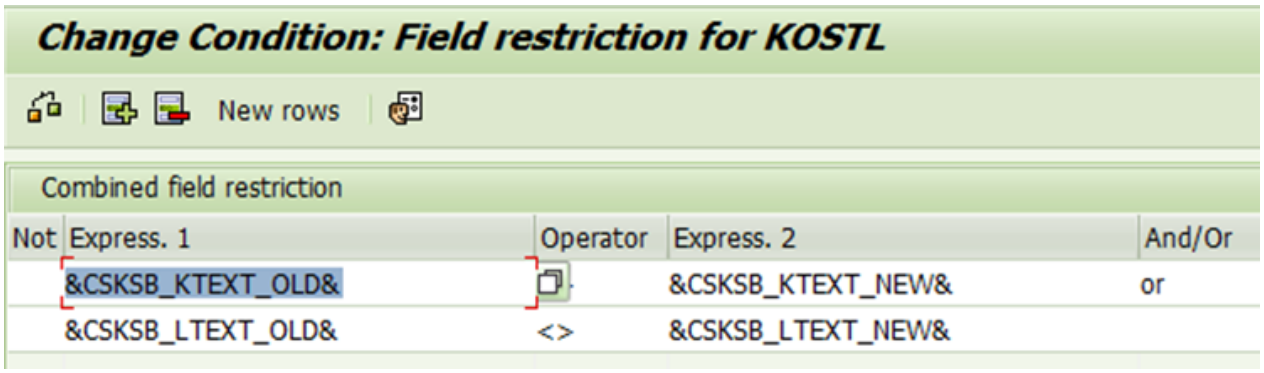
The following are the options maintained for the create, change, and delete events:

Object Type	Event	Select Option
/ARBA/USER	CLONED	On Change **Note** This entry is for user export.
/ARBA/0012	COSTCENTERCREATED	On Create
/ARBA/0012	COSTCENTERDELETED	On Change **Note** This entry is for block events.
/ARBA/0012	COSTCENTERCHANGED	On Change

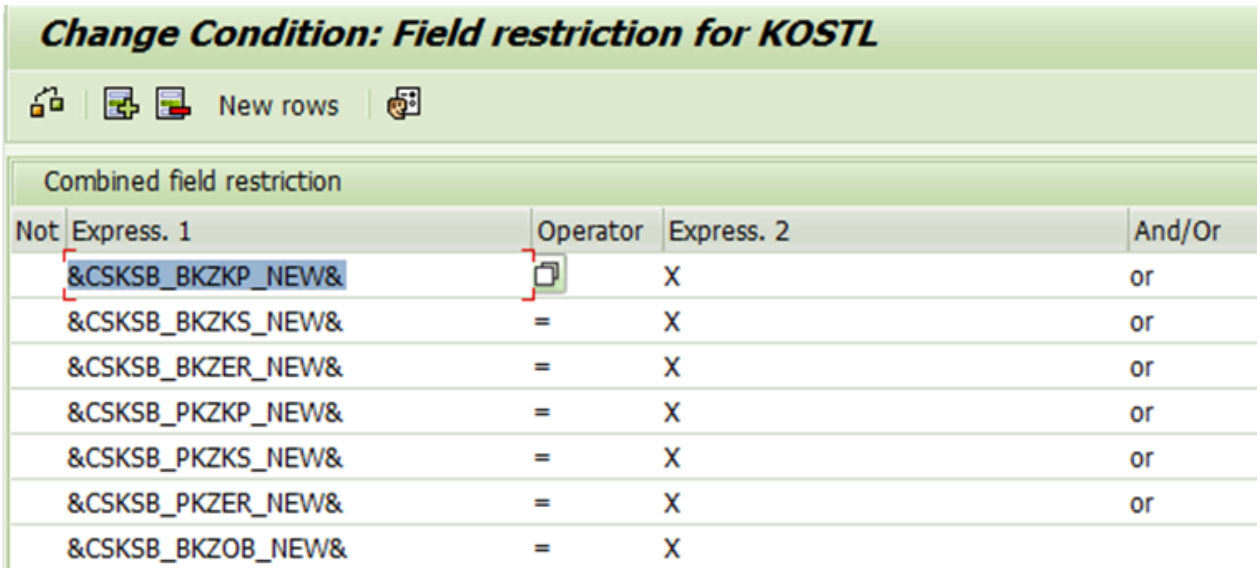
Note

Ariba procurement solutions integrated with SAP tracks only the changes to the fields in the change and block event; all other changes are ignored. The field restrictions for the change and block events track only the changes to the fields; all other changes are ignored.

The following are the field restrictions available for change events:



The following are the field restrictions available for block events:



Change Condition: Field restriction for KOSTL

New rows

Combined field restriction

Not	Express. 1	Operator	Express. 2	And/Or
	&CSKSB_BKZKP_NEW&		X	or
	&CSKSB_BKZKS_NEW&	=	X	or
	&CSKSB_BKZER_NEW&	=	X	or
	&CSKSB_PKZKP_NEW&	=	X	or
	&CSKSB_PKZKS_NEW&	=	X	or
	&CSKSB_PKZER_NEW&	=	X	or
	&CSKSB_BKZOB_NEW&	=	X	

In the SWETYPV, following are the options assigned in the receiver function module `/ARBA/CHANGE_DOC`:

- Object Category: BOR Object Type
- Object Type: Specify the extension value for each of the change object.
- Event: Specify the event type. For example, COSTCENTERCHANGED.
- Receiver Type: CHANGE
  The Linkage Setting (Event Receiver) section contains the following settings:
- Receiver Call: Function Module
- Receiver Function Module: /ARBA/CHANGE_DOC
- Check Function Module: /ARBA/CHANGE_DOC
- Receiver Type Function Module: Blank
- Destination of Receiver: Blank
- Event Delivery: Using tRFC (Default)
- Linkage Activated check box: Checked
- Behavior Upon Error Feedback pull-down list: System defaults.
- Receiver Status pull-down list: No errors

General Ledger Incremental Load

The general ledger incremental change transaction supports the following:

- Creating a new general ledger - FS01
- Changing an existing general ledger- FS02
- Blocking an existing general ledger - FS02
- Deleting an existing general ledger - FS02

The block general ledger supports the following operations:

- Block in chart of accounts
  - Block for creation

  - Block for posting
  - Block for planning
- Block in company code
  - Block for posting

The delete general ledger supports the following operations:

- Deletion flag chart of accounts
  - Mark for deletion
- Deletion flag in company code
  - Mark for deletion

The `/ARBA/CHANGE_DOC` table records all the changes for these transactions. All the created and changed events are stored in the GeneralLedger.csv file. The GeneralLedger_Delete.csv file stores all the deleted changes.

The following parameters have been added to the `/ARBA/GENERAL_LEDGER_EXPORT` function module:

- INCREMENTAL: This parameter is required for the full and incremental load.
- CHANGE_DOC: This parameter stores the changes that are fetched from the `/ARBA/CHANGE_DOC` table. This can be used to delete the processed records from the change log table.

The following is the configuration that your ERP system maintains for the incremental load for general ledgers.

In the SWO1, the business object, /ARBA/3066 contains the following events:

- CreateGL
- ChangeGL
- DeleteGL

In the SWEC, the change document object event is assigned to the business object /ARBA/3006.

The following are the entries for the create, change, and delete events:

Object Type	Event	Select Option
/ARBA/3066	CREATEGL	On Create
/ARBA/3066	DELETEGL	On Change **Note** This entry is also for block events.
/ARBA/3066	CHANGEGL	On Change

Note

Ariba procurement solutions integrated with SAP tracks only the changes to the fields in the change and block event; all other changes are ignored. The field restrictions for the change and block events track only the changes to the fields; all other changes are ignored.

The following are the field restrictions available for change events:

Change Condition: Field restriction for SACH

New rows

Combined field restriction

Not	Express. 1	Operator	Express. 2	And/Or
	&SKAT_TXT20_OLD&		&SKAT_TXT20_NEW&	or
	&SKAT_TXT50_OLD&	<>	&SKAT_TXT50_NEW&	or
	&SKB1_FSTAG_OLD&	<>	&SKB1_FSTAG_NEW&	or
	&SKB1_XLOEB_NEW&	=		or
	&SKA1_XLOEV_NEW&	=		or
	&SKA1_XSPEA_NEW&	=		or
	&SKA1_XSPEB_NEW&	=		or
	&SKA1_XSPEP_NEW&	=		or
	&SKB1_XSPEB_NEW&	=		

The following are the field restrictions available for block events:

Change Condition: Field restriction for SACH

New rows

Combined field restriction

Not	Express. 1	Operator	Express. 2	And/Or
	&SKA1_XLOEV_NEW&	=	X	or
	&SKA1_XSPEA_NEW&	=	X	or
	&SKA1_XSPEB_NEW&	=	X	or
	&SKA1_XSPEP_NEW&	=	X	or
	&SKB1_XLOEB_NEW&	=	X	or
	&SKB1_XSPEB_NEW&	=	X	

In the SWETYPV, following are the options assigned in the receiver function module `/ARBA/CHANGE_DOC` for each event:

- Object Category: BOR Object Type
- Object Type: Specify the extension value for each of the change object.
- Event: Specify the event type. For example, CHANGEGL.
- Receiver Type: CHANGE
  In the Linkage Setting (Event Receiver) section, specify the following:
- Receiver Call: Function Module
- Receiver Function Module: /ARBA/CHANGE_DOCS
- Check Function Module: /ARBA/CHANGE_DOCS
- Receiver Type Function Module: Blank

- Destination of Receiver: Blank
- Event Delivery: Using tRFC (Default)
- Linkage Activated check box: Checked
- Behavior Upon Error Feedback pull-down list: System defaults.
- Receiver Status pull-down list: No errors

Internal Order Incremental Load

The internal order incremental change transaction supports the following:

- Creating an internal order - KO01
- Changing an existing internal order - KO02
- Locking an existing internal order - KO02
- Deleting an internal order - KO02

Changes for the internal order is maintained and tracked using the last run time stamp in the `/ARBA/INCR_DTTIM` table. All the created and changed assets are stored in the InternalOrder.csv and CompanyCodeIOCombo.csv files. The InternalOrder_Delete.csv and CompanyCodeIOCombo_Delete.csv files store all the locked and deleted changes.

The following parameter has been added to the `/ARBA/INTERNAL_ORDER_EXPORT` function module:

- INCREMENTAL: This parameter is required for the full and incremental load.

You must configure the date and time on your SAP system to run the incremental load for internal orders.

Configuring the Date and Time in the Incremental Load for Internal Orders

Procedure

In the `/ARBA/INCR_DTTIM` table, ensure that you maintain the following entries:

- MANDT: Specify the number of the client SAP system.
- ExportName: `IO`
- DTTIME: Specify the date and time.

WBS Element Incremental Load

The WBS incremental change transaction supports the following:

- Creating a WBS element - CJ11
- Changing a WBS element - CJ12

- Deleting a WBS element - CJ12

The `/ARBA/INCR_DTTIM` table stores the date and time stamp in the `DTTIME` column. However, Ariba procurement solution integrated with SAP does not export the time stamp value available in this column. To export the date stamp correctly, Ariba recommends that you maintain a zero value for the timestamp in the `DTTIME` column for the WBS element. For example, 20140916000000.

> **Note**
>
> The timestamp changes in the WBS element are not considered while exporting the incremental load. Ariba procurement solution integrated with SAP exports only the date stamp.

Configuring the Date and Time in the Incremental Load for WBS Element

Procedure

In the `/ARBA/INCR_DTTIM` table, ensure that you maintain the following entries:

- MANDT: Specify the number of the client SAP system.
- ExportName: `WBS`
- DTTIME: Specify the date and time.

User and User Group Incremental Load

The user and user group incremental change transaction supports the following:

- Changes to users maintained in SU01
- Changes to users HR data in PA transactions

Supported operations for change of users in SU01:

- Lock users
- Delete users permanently
- Change validity dates
- Add or delete Ariba groups
- Change addresses

Supported operations for change of users HR data:

- Create info type PA0105 (communications) with the user type as user ID, lock of PA0105, validity changes of PA0105
- Changes to organizational assignment PA0001
- Changes to personal data PA0002

The following are not supported for Users in SU01:

- The incremental changes for the time zone in the Defaults tab in the Tcode SU01 are not supported as there no changes logged in SAP.

The incremental changes for the parameter tab in SU01 is not supported as there no changes logged in SAP, The Ariba procurement solutions integrated with SAP extracts only the Purchase Org., Purchase Group, Currency from the parameters tab. In the parameter tab, changes done to these fields are not recorded and hence we do not support an incremental load.

The following are not supported for the HR- PA transactions:

- SAP does not support the delete, change, lock and change validity dates. Hence Ariba procurement solutions integrated with SAP does not support the delete, lock, or validity changes of 0001 (Organization) and 0002 (Personal) info types.
- The delete of infotype 0105 (Communications) does not trigger any changes.
- Changes to the Organizational, Communication, or Personal infotypes are recorded only if there is a user to the HR link (Infotype 0105) (valid or locked).
- No field restrictions are available in the Organizational, Communication, or Personal infotypes. Ariba procurement solutions integrated with SAP records all field changes.
- If the infotype 0105 (Communications) is locked, deleted, or not valid, no HR details is pulled in either the incremental or full load export task.
- Any addition or deletion to user groups in the SU01 Role tab is only maintained in the SAP ERP system.
- When user information has been changed, deleted or locked, Ariba procurement solutions integrated with SAP does not validate if the user is already available in the Ariba procurement solution system.
- If a user is locked on the SAP ERP system and you export the user, the user is removed from the Ariba procurement solution system. However, the user that is locked still remains on the ERP system. If you make changes to the locked user on the ERP system and then run the incremental load, Ariba procurement solution error out while exporting the locked user to the buyer system. This is because the locked user does not exist in the buyer system.

Configuring the Date and Time in the Incremental Load for Users

Prerequisites

- You must configure the date and time for users. See Configuring the Date and Time in the Incremental Load for Users [page 109].
- See Exporting User Data and User Group Data [page 84] for more information on the other prerequisites required for the user and user group incremental change transaction.

Procedure

In the `/ARBA/INCR_DTTIM` table, ensure that you maintain the following entries:

- MANDT: Specify the number of the client SAP system.
- ExportName: `USER`

- DTTIME: Specify the date and time.

Supplier Incremental Load

The supplier incremental change transaction supports the following:

- Creating suppliers - XK01
  - Extending suppliers to certain purchase organizations
- Changing suppliers - XK02
  - Changes to the supplier address fields that have been configured
  - Unblock for quality reasons
  - Unblock selected purchase organizations
  - Unblock all purchase organizations
  - Undo the delete flags for all areas
  - Create supplier location
  - Create remittance location
  - Delete supplier location
  - Delete remittance location
- Delete or block suppliers - XK02 (XK05/XK06)
  - Block for quality reasons
  - Block selected purchase organizations
  - Block all purchase organizations
  - Delete flags for all areas

> **Note**
>
> To extract deleted suppliers, select only the **All areas** checkbox. If you select the checkbox for **All areas**, **Selected company code**, and/or **Selected purchasing organization**, then the suppliers are extracted not as deleted suppliers but as changed suppliers.

The supplier incremental load uses the /ARBA/VENDOR_INCRMENT_EXPORT function module and supports the following events:

- VENDORCREATED
- VENDORCHANGED
- VENDORDELETED

Prerequisites

- The `/ARBA/CHANGE_DOC` table captures all the changes for the supplier incremental load event.
- The business object LFA1 is extended to the sub object /ARBA/LFA1. The change or delete events for supplier, supplier location, and remittance location is captured using the business object and event linkages.
- In the transaction code, SWETYVP, create a link between the function module `/ARBA/CHANGE_DOC` and the `/ARBA/LFA1` for the VENDORCREATED, VENDORCHANGED, and VENDORDELETED events.
- The `/ARBA/LFA1` is linked to the change document object VENDORCREATED and VENDORCHANGED in the SWEC transaction and has the following field restrictions:
  - Name

- Postal Code
- Region
- House or Street Number
- Telephone Number
- Fax Number
- URL
- Vendor Number
- Purchase Organization
- Partner Function
- Center Deletion Flag For Master Data
- Centrally imposed purchasing block
- Function that is blocked

The following is the configuration that your ERP system maintains for the incremental load for suppliers.

In the SWO1, the business object, /ARBA/LFAI contains the following events:

- VENDORCREATED
- VENDORCHANGED
- VENDORDELETED

In the SWEC, the change document object event is assigned to the business object /ARBA/LFAI.

The following are the options maintained for the create, change, and delete events:

Object Type	Event	Select Option
/ARBA/LFAI	VENDORCREATED	On Create
/ARBA/LFAI	VENDORDELETED	On Change **Note** This entry is also for block events.
/ARBA/LFAI	VENDORCHANGED	On Change

The following are the field restrictions available for VENDORDELETED and VENDORCHANGED events:

VENDORDELETED

Change Condition: Field restriction for KRED

New rows

Combined field restriction

Not	Express. 1	Operator	Express. 2	And/Or
	&LFA1_LOEVM_OLD&	=		
	&LFA1_LOEVM_NEW&	=		or
	&LFA1_SPERM_OLD&	=		and
	&LFA1_SPERM_NEW&	=	X	or
	&LFA1_SPERQ_NEW&	=	99	or
	&LFA1_SPERQ_NEW&	=	01	or
	&LFA1_SPERQ_NEW&	=	02	or
	&LFA1_SPERQ_NEW&	=	03	or
	&LFA1_SPERQ_NEW&	=	04	or
	&LFA1_SPERQ_NEW&	=	99	or
	&LFM1_LOEVM_NEW&	=	X	or
	&LFM1_SPERM_NEW&	=	X	

VENDORCHANGED

Change Condition: Field restriction for KRED

New rows

Combined field restriction

Not	Express. 1	Operator	Express. 2	And/Or
	FA1_NAME1_OLD&	<>	&LFA1_NAME1_NEW&	or
	&LFA1_PSTLZ_OLD&	<>	&LFA1_PSTLZ_NEW&	or
	&LFA1_REGIO_OLD&	<>	&LFA1_REGIO_NEW&	or
	&LFA1_STRAS_OLD&	<>	&LFA1_STRAS_NEW&	or
	&LFA1_TELF1_OLD&	<>	&LFA1_TELF1_NEW&	or
	&LFA1_TELFX_OLD&	<>	&LFA1_TELFX_NEW&	or
	&LFA1_LFURL_OLD&	<>	&LFA1_LFURL_NEW&	or
	&WYT3_LIFNR_OLD&	<>	&WYT3_LIFNR_NEW&	or
	&WYT3_LIFN2_OLD&	<>	&WYT3_LIFN2_NEW&	or
	&WYT3_EKORG_OLD&	<>	&WYT3_EKORG_NEW&	or
	&WYT3_PARVW_OLD&	<>	&WYT3_PARVW_NEW&	or
	&LFA1_LOEVM_OLD&	=	X	and
	&LFA1_LOEVM_NEW&	=		or
	&LFA1_SPERM_OLD&	=	X	and
	&LFA1_SPERM_NEW&	=		or
	&LFA1_SPERQ_NEW&	=		or
	&LFM1_LOEVM_OLD&	=	X	and
	&LFM1_LOEVM_NEW&	=		or
	&LFM1_SPERM_OLD&	=	X	or
	&LFM1_SPERM_NEW&	=		

For email address changes, maintain the **On Change** option and the VENDORCHANGED event for the **Change Doc.Obj**. `ADRESSE`.

Working with Changes to Supplier Locations and Remittance Locations

Administrators must make changes when modifying existing supplier locations or remittance locations.

When you make changes to the existing supplier location or remittance location for a supplier and run the supplier incremental load, the changes are not downloaded in the **Supplierlocationconsolidated.csv**, **Remittancelocation.csv**, and **Remittancelocationconsolidated.csv** files.

For example,

Supplier 1000

Supplier Location 2000

Remittance Location 3000

1. In the Partner Function tab, change the value for the Supplier Location from 2000 to 2100.
2. In the Partner Function tab, change the value for the Remittance Location from 3000 to 3100
3. Save the changes.

When running the incremental load for suppliers, the newly changed Supplier Location 2100 and Remittance Location 3100 is not available in the **Supplierlocationconsolidated.csv** and **Remittancelocationconsolidated.csv** files.

> **Note**
>
> Ariba Procurement Solution integrated for SAP does not support downloading the changes done for existing supplier locations or remittance locations.

To pull the newly changed values for the supplier location and remittance location in the incremental load , administrators must delete the existing supplier location and remittance location and create new values for the supplier location and remittance location for the supplier.

> **Note**
>
> When you run the incremental load after deleting the supplier location or remittance location for a supplier, the **SupplierLocationConsolidated_Delete.csv** files and the **RemittanceLocationConsolidated_Delete.csv** files display information on the supplier location and remittance location that have been deleted.

Making Changes to Supplier Locations and Remittance Locations

Context

To download the changes in the incremental load, administrators must make changes to the supplier locations and remittance locations:

Procedure

1. Go to TCode **XL02** (change mode) for the supplier that needs changes in the supplier location and remittance location.
2. In the **Partner Function** tab, delete the existing Supplier Location and Remittance Location. Save the changes.
3. In the Partner Function tab, add a new Supplier Location and Remittance Location. Save the changes.

   The supplier information displays the newly changed supplier location and remittance location.

Company Code Import RFC Example

The content of the company code import RFC, `/ARBA/COMPANY_CODE_EXPORT`, provides an example of the mechanisms and techniques this chapter presents:

```
FUNCTION /ARBA/COMPANY_CODE_EXPORT.
*"----------------------------------------------------------------------
*"*"Local Interface:
*" IMPORTING
*" VALUE(FILE_NAME) LIKE RLGRAP-FILENAME OPTIONAL
*" VALUE(ENCODING) TYPE CHAR10 OPTIONAL
*" VALUE(VARIANT) TYPE /ARBA/TVARV-VARIANT1 OPTIONAL
*" VALUE(PARTITION) TYPE /ARBA/TVARV-PARTIT OPTIONAL
*" TABLES
*" COMPANY_INFO STRUCTURE /ARBA/COMPANY_CODE
*" EXCEPTIONS
*" NOAUTHORIZATION
*"----------------------------------------------------------------------
* DATA Declaration
*---------------------------------------------------------------------
* Internal table
*************************SLIN CHECK CHANGES ********************
 types: t_wtab type standard table of /arba/wheretab initial size 0,
 t_select_list type standard table of sdit_qry initial size 0.
 data: wtab type t_wtab,
* DATA: wtab LIKE /arba/wtab OCCURS 1 WITH HEADER LINE,
*l_fm_name TYPE rs38l_fnam VALUE '/ARBA/MATERIAL_MANAGE_RFC',
 select_list type t_select_list.
*---------------------------------------------------------------------
*Authority check for the Remote Function module
 PERFORM authorization_check USING C_fm_name.
 if sy-subrc <> 0.
 raise noauthorization. "#EC RAISE_OK
 endif.
* refresh internal table
 REFRESH company_info. CLEAR company_info.
* Get the addtional filter. The parameter /arba/company_export
* needs to be maintained in /ARBA/TVARV table
 CALL FUNCTION '/ARBA/PREFILTER'
 EXPORTING
 name = '/ARBA/COMPANY_CODE_EXPORT'
 variant = variant
 partition = partition
 TABLES
 where = wtab
 EXCEPTIONS
 invalid_selection_sign = 1
 invalid_selection_option = 2
 OTHERS = 3.
 IF sy-subrc <> 0. "#EC NEEDED
 ENDIF.
* Get the Columns to be downloaded
 CALL FUNCTION '/ARBA/SELECT_LIST'
 EXPORTING
 structure_name = '/ARBA/COMPANY_CODE'
 intersection_struct = 'T001'
 TABLES
 select_fields = select_list
 EXCEPTIONS
 OTHERS = 1.
 IF sy-subrc <> 0. "#EC NEEDED
 ENDIF.
* Fetch data's from T001
 SELECT (select_list) FROM t001
 INTO CORRESPONDING FIELDS OF TABLE company_info
```

```
 WHERE (wtab).
*BADI - Modify Company Code
 CALL METHOD cl_exithandler=>get_instance
 EXPORTING
 exit_name = '/ARBA/MASTER_DATA'
 null_instance_accepted = 'X'
 CHANGING
 instance = l_badi
 EXCEPTIONS
 OTHERS = 1.
 IF l_badi IS NOT INITIAL.
 CALL METHOD l_badi->publish_companycode
 EXPORTING
 variant = variant
 partition = partition
 CHANGING
 company_info = company_info[].
 ENDIF.
* Downloading the data to the file
 IF NOT file_name IS INITIAL.
 CALL FUNCTION '/ARBA/DATA_CONVERT_WRITE_FILE'
 EXPORTING
 i_filename = file_name
 i_fileformat = 'CSV'
 i_field_seperator = ','
 i_tabname = '/ARBA/COMPANY_CODE'
 i_encoding = encoding
 TABLES
 i_tab_sender = company_info
 EXCEPTIONS
 open_failed = 1
 close_failed = 2
 write_failed = 4
 conversion_failed = 5
 OTHERS = 6.
 IF sy-subrc <> 0. "#EC NEEDED
 ENDIF.
 ENDIF.
ENDFUNCTION.
```

Customizing RFC

This section describes how to configure Ariba procurement solutions custom RFCs to import additional fields into Ariba procurement solutions for existing import integration events. It includes the following sections:

- About Extension Structures [page 117]
- Adding Fields to Extension Structures [page 118]
- Typical Extension Structure [page 119]

To customize Ariba procurement solutions RFCs, you identify the data to be imported, the RFCs to be used, and the structures where this data appears.

About Extension Structures

The term extrinsic refers to any data field you import into an Ariba procurement solutions object that is not part of the object as supplied with Ariba procurement solutions. You import extrinsics into Ariba procurement solutions from CSV (comma separated value) files, databases, or ERP systems.

Customer packages provide special structures, called extension structures. You use extension structures to define extrinsic data in the Ariba procurement solutions RFCs on your SAP instance. Most Ariba procurement solutions RFCs offer one or more extension structures for you to configure extrinsic import tasks. See Summary of Ariba SAP Packages [page 253] for a comprehensive list of customer packages.

Extension Structures for Import Tasks

Ariba procurement solutions RFCs use these extension structures to determine which fields to create in the tables they export to Ariba procurement solutions. Essentially, extension structures function as a template to define the structure of the Ariba procurement solutions RFC tables. A diagram of this concept follows:

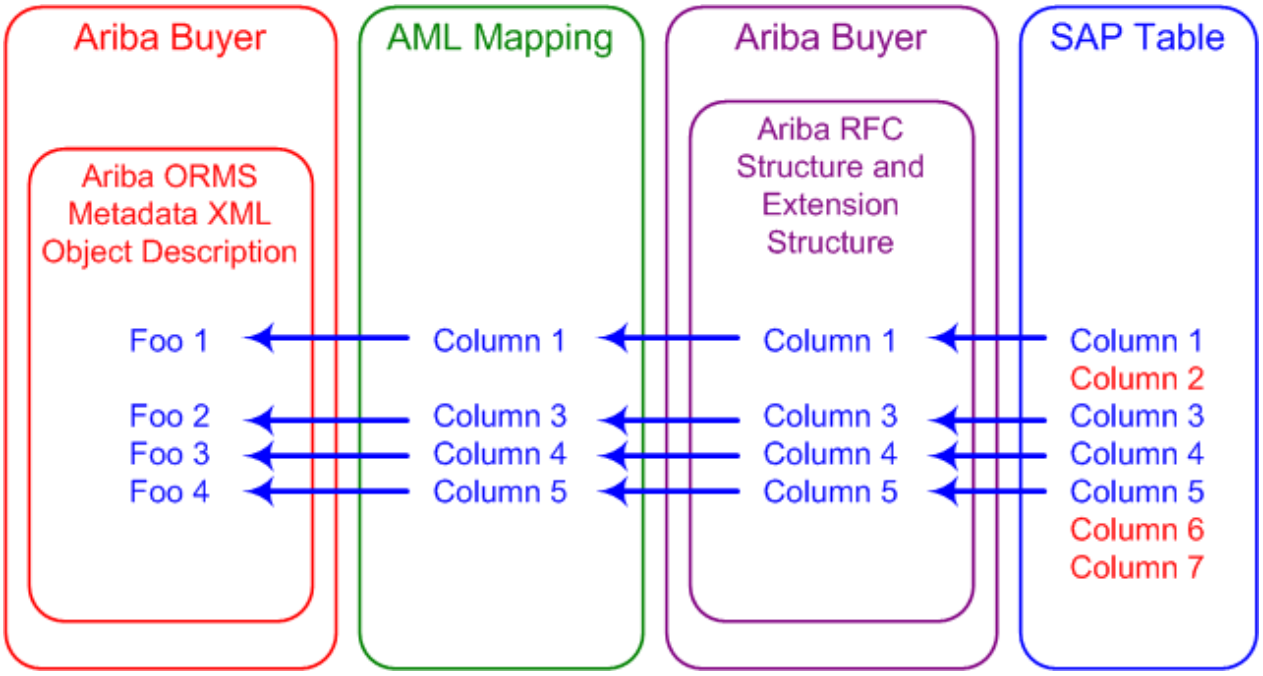


Figure 4: Extension Structure Example

Extension structures have all the fields in the core Ariba development structures in addition to any fields you add. The contents of an extension structure are shown in the following diagram:

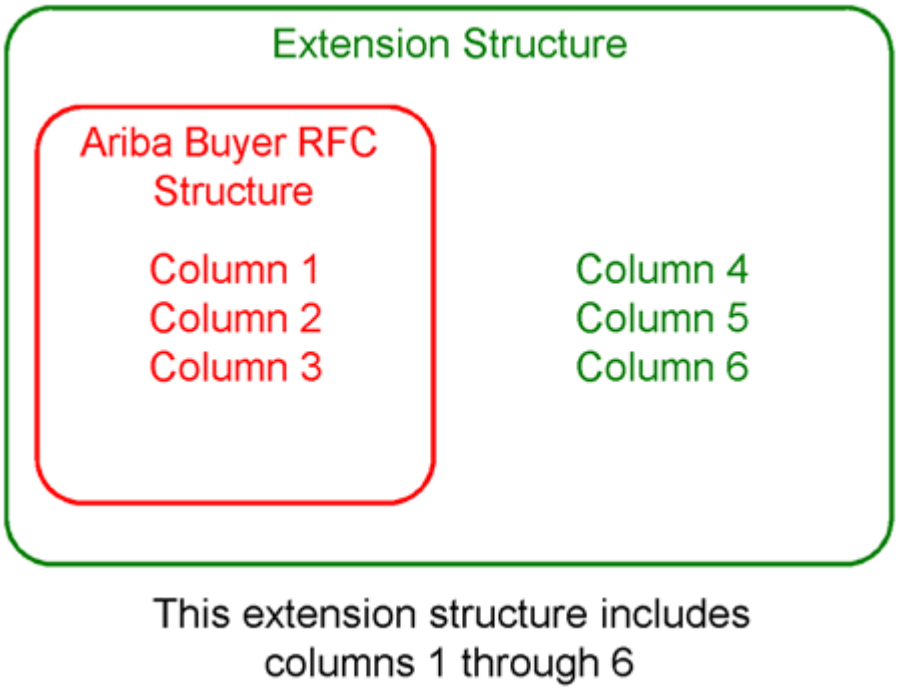


Figure 5: Contents of an Extension Structure

For example, the `/ARBA/ASSET_EXPORT` extension structure for asset imports contains a substructure called `/ARBA/ASSET_EXPORT`. The `/ARBA/ASSET_EXPORT` substructure holds all the base fields that Ariba procurement solutions RFCs need to run. To add new asset fields to Ariba procurement solutions RFC data imports, you add them to the `/ARBA/ASSET_EXPORT` structure.

> **Note**
>
> If you change the original structures of Ariba-supplied RFCs, your SAP integration might not function properly. Similarly, you include the original structures as well as the .include statements within the extensions.

This chapter explains only how to define extrinsic data within an extension structure. If you make changes to extension structures, you modify your channel's data mapping (AML Mapping) to map and transform these fields appropriately. You also modify the Ariba procurement solutions metadata XML to include your changes.

Adding Fields to Extension Structures

Context

In most circumstances, each structure and extension structure selects data from one table only. Consequently, you return additional fields from one table only.

Procedure

1. Determine the table in SAP that contains the column of data you want to import.
2. Determine which Ariba procurement solutions RFC selects data from that particular table.
3. Add the field to the RFC extension structure for the table.
4. Click **Activate**.

Typical Extension Structure

Assume you want Ariba procurement solutions to identify the country where an asset originates. The asset master record, `ANLA`, contains a column called `LAND1`, which indicates the country origin of an asset. In this case, the Ariba procurement solutions RFC that handles asset imports from `ANLA` is `/ARBA/ASSET_EXPORT`. For a detailed list of Ariba procurement solutions SAP objects, see Ariba SAP Objects [page 252].

`ARBA/ASSET_EXPORT` exports an extension structure called `/ARBA/ASSET`, which includes the Ariba procurement solutions structure `/ARBA/ASSET`. The `/ARBA/ASSET` structure does not contain the `LAND1` field by default, so you add it to the Ariba procurement solutions extrinsic asset import structure, `/ARBA/ASSET`, and then activate your changes. Make sure to enter `AM_LAND1` for the data element description exactly as it appears in the `ANLA` table. Subsequently, your SAP system includes a new extrinsic, `LAND1`, in `/ARBA/ASSET`, which it imports from `ANLA`.

You use the exact field name and data element descriptions for the column from which you import data. When the Ariba procurement solutions RFC runs, it uses the information you provided to find the column in the table.

> **Note**
>
> Whenever you make changes to a structure, make sure to click **Activate**.

Filtering Data

Your SAP packages for Ariba procurement solutions offer three ways to filter, or restrict the data included in a data import. These filtering methods are described in the following sections:

- Static Filtering [page 119]
- ABAP Filtering [page 124]
- Post-Hook Filtering [page 126]

Static Filtering

Static filtering allows you to construct conditional searches of your SAP tables according to the values of specified fields. The table `/ARBA/TVARV` allows you to construct queries to limit the data you import from SAP into Ariba

procurement solutions. Defining queries within /ARBA/TVARV is referred to as static filtering because the data exists in a structured form within /ARBA/TVARV, and data isn't selected based on dynamically formed queries.

Every Ariba procurement solutions RFC that imports data from your SAP system first makes a call to /ARBA/TVARV to see if it needs to restrict its search. The RFCs search for any entries that match their names. If they find a match, they restrict the query according to the instructions in the /ARBA/TVARV entry. The RFCs used to import master data from SAP into Ariba procurement solutions can use the table /ARBA/TVARV to filter the data before it is imported into Ariba procurement solutions. Each RFC has a specific table whose fields can be used in /ARBA/TVARV. For more information, see About /ARBA/TVARV [page 43].

Static filtering is quick and simple, but it does not handle inner join queries against more than one table. If you need to restrict data imports from more than one table, use the filtering techniques explained in ABAP Filtering [page 124]

Modifying /ARBA/TVARV

To restrict the data that an Ariba procurement solutions RFC imports, make a corresponding entry in /ARBA/TVARV. Enter a new row in the /ARBA/TVARV table with the RFC name, the field you want to use, and information about what you're trying to find.

> **Note**
>
> Ariba suggests you run transaction SM30 to examine /ARBA/TVARV. Your SAP user ID must have authorization S_TABU_DIS to run transaction SM30. /ARBA/TVARV resides as a table within the dictionary objects for the /ARBA/MASTER_DATA_EXPORT package.

You also use the /ARBA/TVARV table to configure variable settings in certain RFCs. In particular, you use it to store and retrieve parameters through calls to the /ARBA/TVARV_PARAMETER RFC. This text refers to /ARBA/TVARV's configuration and parameter capabilities as parameter use. To learn more about parameter use, see Configuring Parameters [page 43]. For instructions on editing the /ARBA/TVARV parameters, see About /ARBA/TVARV [page 43].

/ARBA/TVARV Field Reference

The following table presents the fields you set in /ARBA/TVARV.

Table 7: /ARBA/TVARV Field Reference (continued)

Field Name	Description	Use and Necessity
Ariba Variant	Identifies the unique name for the shape of data in your SAP system as it appears within Ariba procurement solutions. An Ariba procurement solutions variant is different from a variant in SAP.	Necessary for both filtering and parameter use (selection types S and P).
Ariba Partition	Describes the unique instance name of a specified variant shape as you represent it to Ariba procurement solutions.	Necessary for both filtering and parameter use (selection types S and P).

Field Name	Description	Use and Necessity
Variable Name	Provides an index to the table. Ariba procurement solutions uses the Name field either to pass the name of the calling function or to pass the name of the parameter it seeks. See , "Configuring Parameters," [page 43] to find out more about /ARBA/TVARV and parameters.	Necessary for both filtering and parameter use (selection types S and P).
Field Name	Refers to the column name you use to filter data. Leave this field blank to use /ARBA/TVARV for parameters and selection type P.	Necessary for filtering only (selection type S).
Selection Category	Determines whether to use /ARBA/TVARV to filter data or to configure a parameter for an RFC. Enter a value of S to perform filtering and P to configure parameters. See Configuring Parameters [page 43] to find out more about /ARBA/TVARV and parameters.	Necessary for both filtering and parameter use (selection types S and P).
Number	Determines the sequential order of selection statements. The order determines how to construct the entire selection. See Selection Condition Options [page 122].	Optional and used for filtering (selection type S).
Incl/Excl	Determines whether to include or exclude the selection condition. Set this value to I for inclusion if the condition is positive or to E for exclusion if the condition is negative. See Selection Condition Options [page 122]	Required for filtering use (selection type S).
Option	Allows you to create conditions based on equality, value ranges, and patterns. Set it to the following conditions: BT — The "BeTween" option specifies a selection within the range of values in the LOW and HIGH fields. For example, names between "Reid" and "Sligh". CP — The "Contains Pattern" option allows you to return data with a given pattern, for instance, names that begin with "Dan". EQ — The "EQual" option determines equivalency, such as names = "Angus". GE — The "Greater than or Equal to" option determines if the FIELDNAME is greater than or equal to a value, such as names >= "Bruce".	Required for filtering use (selection type S).
Selection Value (LOW)	Sets the low value for filtering and settings for parameters. To enter particularly long values—like strings—overlap values to the HIGH field.	Optional for parameter configuration and required for most filtering statements.
Selection Value (HIGH)	Sets the high value and works with LOW values and BT option fields.	Optional for most parameter configuration and filtering, except BT option fields.

Selection Condition Options

The selection options in the /ARBA/TVARV table reflect the internal structure of select options in SAP report tables. The /ARBA/TVARV structure itself resembles the SAP TVARV structure, and the fields function similarly.

The /ARBA/TVARV structure allows you to create the following conditions:

- Equality and inclusion
- Ranges and exclusion
- Patterns and comparisons

Equality and Inclusion

Equality and inclusion conditions allow you to set a selection criteria that equals or includes a specified value.

The following example takes you through the steps of creating an equality and inclusion filter condition.

Scenario: You need to create a static filter that pulls only company information for companies in specific countries.

Creating a Static Filter

1. See /ARBA/COMPANY_CODE_EXPORT to determine where this information originates.
   In this example, the information originates from table T001. Table T001 contains an entry called LAND1, which designates countries. In this example, the only countries you want to import company information from are Australia and Japan, which LAND1 designates with the strings AU and JP.
   You have the information you need to build your static filter:
   - The Ariba procurement solutions RFC that imports the data
   - The column that contains the data (and the table)
   - The data set you want to return
2. Build your select statement.
   The statement depends on the data set you want to capture. In this example, you want to import rows where LAND1 is equal to AU or rows in which LAND1 is equal to JP. Another way of saying this might be:
   (LAND1 = "AU") OR (LAND1 = "JP")
   In this example, you want to define a logical "OR" based on two conditions of equality. Each condition in a selection requires its own row in /ARBA/TVARV. The two rows might look similar to the entries in the following table (the VARIANT and PARTITION fields are not included):

VARIABLE NAME	FIELD NAME	SELECTION CATEGORY	NUMBER	INCL/EXCL	OPTION	SELECTION VALUE (LOW)	SELECTION VALUE (HIGH)
/ARBA/ COMPANY_CODE_EX-PORT	LAND1	S	0000	I	EQ	AU	

VARIABLE NAME	FIELD NAME	SELECTION CATEGORY	NUMBER	INCL/EXCL	OPTION	SELECTION VALUE (LOW)	SELECTION VALUE (HIGH)
/ARBA/ COMPANY_CODE_EX-PORT	LAND1	S	0001	I	EQ	JP	

The fields in the `VARIABLE NAME` column indicate this filter is for the data imported by the RFC `/ARBA/ COMPANY_CODE_EXPORT`.
The fields in the `FIELD NAME` column indicate you are importing data from the `LAND1` column.
The fields in the `SELECTION CATEGORY` column specify to the calling function that the row is for filtering, or selecting, data. In this case, the `S` specifies filtering.
The fields in the `NUMBER` column include more than one row of the same filtering table in the condition. It starts at zero, or 0000. The order is not significant.
The fields in the `INCL/EXCL` column indicate whether to exclude the condition from the statement or include it, signified by `I` or `E`. An included condition is generally specified with an `OR` statement. To specify an excluded condition, you generally use an `AND NOT` statement. For an example of exclusion, see Ranges and Exclusion [page 123].
The fields in the `OPTION` column determine that you're selecting for a condition of equality (`EQ`). It is also possible to specify:

- Ranges of values (`BT`)—The "BeTween" option specifies a selection within the range of values in the `LOW` and `HIGH` fields, such as the names between "Daly" and "Thompson."
- Pattern matches (`CP`)—The "Contains Pattern" option allows you to return data with a given pattern, for example, names that begin with "Lu." For more information, see Patterns and Comparisons [page 124]
- Greater than or equal to conditions (`GE`)—The "Greater than or Equal to" option determines if the `FIELDNAME` is greater than or equal to a value, for example names >= "Bruce."

Ranges and Exclusion

You can also create other kinds of selection options. Suppose you want to import only countries whose SAP codes alphabetically range between, and include, AU and GB (for Australia and Great Britain). However, you need to exclude Canada (CA) from this import. Here's a rough statement of the logic:

```
("AU" >= LAND1 >= "GB") AND NOT (LAND1 = "CA")
```

The `/ARBA/TVARV` entries could resemble the rows in the following table.

VARIABLE NAME	FIELD NAME	SELECTION TYPE	NUMBER	INCL/EXCL	OPTION	SELECTION VALUE (LOW)	SELECTION VALUE (HIGH)
/ARBA/ COMPANY_CODE_EX-PORT	LAND1	S	0000	I	BT	AU	GB
/ARBA/ COMPANY_CODE_EX-PORT	LAND1	S	0001	E	EQ	CA	

The selection first includes the range between AU and GB and then excludes CA.

Patterns and Comparisons

You also select data according to its pattern and by comparing values.

Suppose you want to import only vendors that certain users have created, according to the user's name. You want to import only users who have names that begin with the letter "M" or "N". For some reason, however, you want only some of the "N" users, specifically, only those in the alphabetic range "N" through "NE".

The Ariba procurement solutions RFC, `/ARBA/VENDOR_ONLY_EXPORT`, imports vendors from the table `LAFI`. `LAFI` contains the column `ERNAM` for the user name. The logic of the selection can resemble the following statement:

```
(ERNAM LIKE "M*") OR (ERNAM LIKE "N*") AND NOT (ERNAM >= "ND")
```

You do not have to use `AND NOT ERNAM >= "ND"`, but this example does so for illustrative purposes. Using `AND ERNAM < "ND"` is more concise.

The values in `/ARBA/TVARV` might resemble the following:

VARIABLE NAME	FIELD NAME	SELECTION TYPE	NUMBER	INCL/EXCL	OPTION	SELECTION VALUE (LOW)	SELECTION VALUE (HIGH)
/ARBA/ VENDOR_ONLY_EXPORT	ERNAM	S	0000	I	CP	M	
/ARBA/ VENDOR_ONLY_EXPORT	ERNAM	S	0001	I	CP	N	
/ARBA/ VENDOR_ONLY_EXPORT	ERNAM	S	0002	E	GE	ND	

This filter selects three conditions:

- Names that begin with "M."
- Names that begin with "N."
- After the first two conditions, the filter refines the set to only those names that are equal to or less than "NE" (or not greater than or equal to "ND").

ABAP Filtering

ABAP filtering is a method by of selecting data by implementing the BAdI `/ARBA/MASTER_DATA`. To customize programs, use the `PUBLISH_PREFILTER` method to customize the ABAP filtering.

You use conditional tests to determine how and if the BAdI method restricts the data set of the table based on the calling RFC name. This process is called ABAP filtering because you write ABAP/4 code to get the results you want.

This section explains how ABAP filtering:

- Performs inner joins
- Provides an RFC interface
- Works in a sample configuration

Joins and ABAP Filters

You use ABAP filters to reduce your data set through references to more than one table. Because you are writing the code yourself, you can implement inner join statements.

Prefilter Interface

`METHOD PUBLISH_PREFILTER.`

The following are the method parameters:

Parameter	Type	P	O	Typing	Associated Type	Default value	Description
NAME	Importing	Unchecked	Checked	Type	/ARBA/TVARV-NAME	Blank	ABAP: Name of variant variable
VARIANT	Importing	Unchecked	Checked	Type	/ARBA/TVARV-VARIANT1	Blank	Char20
PARTITION	Importing	Unchecked	Checked	Type	/ARBA/TVARV-PARTIT	Blank	Char20
WHERE	Changing	Unchecked	Checked	Type	/ARBA/PREFILTER_T	Blank	Table Type for Prefilter

The RFCs pass your unique Ariba procurement solutions variant, site, and RFC name.

Sample ABAP Filter

It is possible for you to create dynamic `WHERE` statements for selections in the `WHERE` structure. The example code in `PUBLISH_PREFILTER` demonstrates the use of dynamic `WHERE` statements. The `WHERE` statements in the code can come from another table.

Following is an example of an inner join ABAP filter. This example joins a purchase organization table to a company code table to retrieve all purchase organizations for company codes tied to the US:

```
TABLES: T001.
DATA: US_BUKRS LIKE T001-BUKRS.
IF '/ARBA/PURCHASE_ORG_EXPORT' = NAME.
    SELECT DISTINCT BUKRS INTO US_BUKRS
    FROM T001
    WHERE LAND1 = 'US'.
        DESCRIBE TABLE WHERE LINES COUNT.
        IF COUNT > 0.
            WHERE = 'or'. APPEND WHERE.
        ENDIF.
        CONCATENATE 'bukrs = ''' US_BUKRS '''' INTO WHERE.
        APPEND WHERE.
    ENDSELECT.
ENDIF.
```

Post-Hook Filtering

Both static filters and ABAP filters cut down on data before an Ariba procurement solutions RFC begins to process anything. You filter data after the Ariba procurement solutions RFCs complete through post-hook filtering. SAP commonly provides this feature through "BAdI methods."

This section introduces:

- BAdI Methods
- Post-hook filtering suggestions

BAdI Methods

The following are the available `BAdI` methods:

Method	Description
`PUBLISH_COMPANYCODE`	Publish Company Code Details After Processing
`PUBLISH_PLANT`	Publish Plant Details After Processing
`PUBLISH_PREFILTER`	Publish Prefilter Details After Processing
`PUBLISH_PURCHASE_GROUP`	Publish Purchase Group Details After Processing
`PUBLISH_PURCHASE_ORGANIZATION`	Publish Purchase Organization Details After Processing
`PUBLISH_ACCOUNT_CATEGORY`	Publish Account Category Details After Processing
`PUBLISH_ASSET`	Publish Asset Details After Processing
`PUBLISH_COST_CENTER`	Publish Cost Center Details After Processing
`PUBLISH_GENERAL_LEDGER`	Publish General Ledger Details After Processing
`PUBLISH_INTERNAL_ORDER`	Publish Internal Order Details After Processing
`PUBLISH_WBS`	Publish WBS Details After Processing
`PUBLISH_MATERIAL_GROUP`	Publish Material Group Details After Processing
`PUBLISH_CURRENCY_CONVERSION`	Publish Currency Conversion Details After Processing
`PUBLISH_PLANT_PURCHAGE_ORG`	Publish Plant Purchase Organization Details After Processing
`PUBLISH_ACCOUNT_FIELD`	Publish Account Field Details After Processing
`PUBLISH_VENDOR_ONLY`	Publish Vendor Only Details After Processing
`PUBLISH_VENDOR`	Publish Vendor Details After Processing
`PUBLISH_TAX_CODE`	Publish Tax Code Details After Processing
`PUBLISH_COST_CENTER_NAMES`	Publish Cost Center Names Details After Processing
`PUBLISH_GENERAL_LEDGER_NAMES`	Publish General Ledger Names Details After Processing
`PUBLISH_MATERIAL_GROUP_NAMES`	Publish Material Group Names Details After Processing

Method	Description
PUBLISH_TAX_CODE_NAMES	Publish Tax Code Names Details After Processing
PUBLISH_ACCOUNT_CAT_NAMES	Publish Account Category Names Details After Processing
PUBLISH_ADDITIONAL_DATA	Publish File Path Details After Processing
PUBLISH_PAYMENT_TERMS	Publish Terms of Payment details after processing
PUBLISH_USER_DATA	Publish User Data
MODIFY_USER_DATA	Modify User Data
PUBLISH_USER_GROUP	Publish User Data
PUBLISH_SUPPLIER_LOC	Publish Supplier Location
PUBLISH_REMITTANCE_LOC	Publish Remittance Location
PUBLISH_PAYMENT_TERM_LANG_PULL	Publish Payment Terms Language Pull
PUBLISH_SUPPLIER_INCREMENT	Publish Supplier Incremental

Ariba procurement solutions provides post- hook filtering through BAdI methods. Ariba procurement solutions RFCs call BAdI methods just before they exit.

Each Ariba procurement solutions RFC has its own BAdI method. Here is an example for the `PUBLISH_ASSET`:

Parameter	Type	Part Value	Optional	Typing Method	Associated Type	Default value	Description
VARIANT	Importing	Unchecked	Checked	Type	/ARBA/TVARV-VARIANT1	Blank	Char20
PARTITION	Importing	Unchecked	Checked	Type	/ARBA/TVARV-PARTIT	Blank	Char20
ASSET_INFO	Changing	Unchecked	Checked	Type	/ARBA/ASSET_T	Blank	Table Type for Prefilter

Post-Hook Filtering Suggestions

Ariba procurement solutions RFCs expose filtering for only some of the tables from which they take data in SAP. Ariba procurement solutions RFCs sometimes depend on filtering for one table to restrict the data imported from a second table. For example, you might filter one table for a data type in the first table, and then use that filtered result to import data from a second table.

In most circumstances, this arrangement works just fine. However, if the Ariba procurement solutions RFCs retrieve data from the second table that you do not want, you need some mechanism to restrict it further. ABAP and static filters do not work because they only provide you access to the first table, not the second. You need to restrict the data after the Ariba procurement solutions RFCs have finished with it. Post-hook filters let you restrict the data.

You need to write ABAP code to change the data within the given internal table for an Ariba procurement solutions RFC.

Master Data Integration Events

Ariba procurement solutions imports master data from CSV files that the SAP integration program `/ARBA/MASTER_DATA_EXPORT` creates on your SAP instance client.

This section has the following topics:

- Understanding the Master Data Import [page 128]
- Exporting Master Data Using the User Interface [page 128]
- Running the Master Data Import Event [page 131]
- Checking Output CSV Files [page 133]
- About Importing Data in Multiple Languages [page 135]

Understanding the Master Data Import

The following high-level steps describe the master data import process:

1. Run the SAP program `/ARBA/MASTER_DATA_EXPORT`. This program transfers the SAP master data into Ariba CSV files on the SAP server.
2. Set up the Ariba Data Transfer Tool on the SAP server to run when the master data download is complete.
3. The Ariba Data Transfer Tool picks up the master data CSV files and sends them to the Ariba procurement solutions.
4. Ariba procurement solutions then creates the master data objects.

> **Note**
>
> - All master data loads can be run as full loads or incremental master data loads
> - The `/ARBA/MASTER_DATA_EXPORT` program displays the text for the fields only in English. Ensure that you log in to the SAP ERP system in the English (EN) language.
>
> .

Integrating Master Data Using the User Interface

The `ARBA/MASTER_DATA_EXPORT` program has an user interface that provides different options to select either a full or incremental load while running the master data events using the Ariba Integration Toolkit. You can use the **Ariba Integration Toolkit** option to transfer mater data.

The following are the options available while running the `ARBA/MASTER_DATA_EXPORT` program using the Ariba Integration Toolkit:

Option	This option allows you to....
Connectivity	

Option	This option allows you to....
Ariba Integration Toolkit (ITK)	Use the Ariba Integration Toolkit to run the master data integration events. If you do not use the Ariba Integration Toolkit, but use your own tool, select this option and specify the export tasks to transfer master data.
Load Option	
Full Load	Import the complete master data from your SAP ERP to your Ariba Procurement Solution. The **Full Load** option allows you to run all the import master data tasks. This option uses the **Load** and **Delete** operations.
Incremental Load	Import only the changed or newly added master data from your SAP ERP to your Ariba Procurement Solution. The **Incremental Load** option allows you to run the following import master data tasks: **Accounting Data:** • **GeneralLedger** • **InternalOrder** • **CostCenter** • **WBSElement** • **Asset** **Supplier Related Data:** • **Supplier** **User Related Data:** • **User and User Group** **Funds Management Data** **Earmarked Fund** The incremental change transaction for the earmarked fund supports the following: • Creating a new earmarked fund • Changing an existing earmarked fund • Marking an existing line item for deletion **Note** You must perform a one-time initial setup of `/ARBA/INCR_DTTM`. Incremental **Earmarked Fund** data import from SAP ERP is based only on the date and not the time.
Scope of Ariba Solution	
P2P Customers	Import master data for Ariba Procure-to-Pay customers.
P2O Customers	Import master data for Ariba Procure-to-Order customers. This option does not support downloading the remittance location of suppliers.
Configuration	
Encoding to be used	Specify the encoding type for the data transfer or use the default value available to you.

Option	This option allows you to....
Variant	Specify the unique variant name for the Ariba Procurement Solution in your SAP ERP for purchase orders. For example, VREALM_1. If you have maintained a value for the variant in the `/ARBA/TVARV` table, ensure that you maintain the same value in this field. If the values differ, an error occurs and the files fail during download.
Partition	Specify the unique name of your site for the Ariba Procurement Solution in your SAP ERP for purchase orders. For example, PREALM_1 If you have maintained a value for the partition in the `/ARBA/TVARV` table, ensure that you maintain the same value in this field. If the values differ, an error occurs and the files fail during download.
Download File Location	
Dir path for file download	Specify the directory path for downloading the files.
Choose Master Data for Import	
Organization Data	Import data using the following options: • **Plant** • **CompanyCode** • **PurchaseOrg** • **PlantPurchaseOrg** • **PurchaseGroup**
Accounting Data	Import data using the following options: • **GeneralLedger** • **InternalOrder** • **CostCenter** • **WBSElement** • **Asset**
Cross/Application Configuration Data	Import data using the following options: • **AccountCategory** • **AcctCategoryFieldStatus** • **ERPCommodityCode** • **CurrencyConversion** • **TaxCode** • **Payment Terms**

Option	This option allows you to....
Funds Management Data	Import Funds Management data using the following options: **Note** You must select **Enable Fund Management** to view the following options: • **Fund** • **Funds Center** • **FM Area** • **Earmarked Fund** • **Commitment Item** • **Grant** • **Functional Area** • **Budget Period** **Note** The **Budget Period** option is available only on SAP ERP version EHP4.0 and above and when the business function for the budget period is activated.
Supplier Related Data	Import supplier data using the **Supplier** option.
User Data	Import data for users and user groups using the **User & User Group** option.

You can use the `/ARBA/MASTER_DATA` Business AddIns (BADI) to customize the master data for the supplier, user, and payment terms.

Related Information

About Importing Data in Multiple Languages [page 135]

Running the Master Data Import Event

Context

The input for the `/ARBA/MASTER_DATA_EXPORT` program includes the directory where the CSV files should be written, encoding, and the data to import.

Procedure

1. In the command field of the SAP ERP main screen, type `/N/ARBA/OND_PROC`.

2. Navigate to **SAP menu** > **Master Data** > **Report** option to expand the tree structure.
3. Double-click **Master Data Report Integration.**
   The Export All Master Data Required For Ariba On-Demand Application page appears.
4. Do one of the following:
   - Click Ariba Integration Toolkit to run the master data using the Ariba Integration Toolkit or your own tool,
   - Click **Direct Connectivity** to run the master data tasks directly. For more information, see Integrating Master Data Directly From an SAP ERP System [page 138].
5. Choose one of the following load options:
   - Click **Full Load** to run the complete master data on your SAP system.
   - Click I**ncremental Load** to fetch the changed or updated master data on your SAP system.
6. Choose one of the Ariba solutions in the Scope of Ariba Solution section
7. Enter the following configuration for the master data:

   Encoding to be used: Specify the encoding type or use the default value available. For example, UTF-8.

   Variant: Specify the variant for your Ariba procurement solution system.

   Partition: Specify the partition for your Ariba procurement solution system.

   > **Note**
   >
   > If you have maintained values for the variant and partition in the `/ARBA/TVARV` table, ensure that you maintain the same values in these fields. If the values differ, an error occurs and files are not downloaded.

8. Specify the file path to the application server to download files in the **Download File Location** section.

   > **Note**
   >
   > This option is only available if you have selected the Ariba Integration Toolkit option.

9. Select the master data tasks to be exported to the Ariba procurement solution system.
10. Click the **Execute** button.

Next Steps

- To schedule `/ARBA/MASTER_DATA_EXPORT` to run at regular intervals, save the program input as a variant that you can specify to run as a job. Schedule this program using SAP transaction SM36. For more information about this transaction or scheduling SAP function modules, see your SAP documentation.
- When writing the master data CSV files is complete:
  - Schedule the Ariba Data Transfer Tool to run event “Import Batch Data” to load the CSV files each time `/ARBA/MASTER_DATA_EXPORT` has written them.
  - Make sure the Ariba Data Transfer Tool input directory specification matches the directory where you created the CSV files, as noted in step 2.

Checking Output CSV Files

When `/ARBA/MASTER_DATA_EXPORT` has completed, you can check that the CSV files are generated as expected and that they are located where the Ariba Data Transfer Tool can find them.

The `/ARBA/MASTER_DATA_EXPORT` program creates a temporary directory called `processingyyyymmddhhmmss`, where `yyyymmddhhmmss` is the date and time stamp indicating when the directory was created. It writes all the requested CSV files into this directory, depending on which data you chose to pull. The `Processing` directory is placed inside the folder you specified as input in step 2, above.

> **Note**
>
> Set your Ariba Data Transfer Tool options file to specify "`processing`" as the filterPrefix value so that the Ariba Data Transfer Tool ignores it.

When `/ARBA/MASTER_DATA_EXPORT` is finished writing the files, it renames the temporary directory to `processedy`*yyymmddhhmmss*. This directory is where the Ariba Data Transfer Tool looks for the CSV files. The next time the Ariba Data Transfer Tool runs, it finds this directory and transfers the data.

The following table lists the SAP remote function calls (RFCs) and the CSV files they generate for each data import task.

RFC Used	Generated CSV File
/ARBA/COMPANY_CODE_EXPORT	CompanyCode.csv
/ARBA/PLANT_EXPORT	Plant.csv
/ARBA/PURCHASE_ORG_EXPORT	PurchaseOrg.csv
/ARBA/PURCHASE_GROUP_EXPORT	PurchaseGroup.csv
/ARBA/PLANT_PURCHASE_EXPORT	PlantPurchaseOrgCombo.csv
/ARBA/ASSET_EXPORT	Asset.csv
/ARBA/COST_CENTER_EXPORT	CostCenter.csv
/ARBA/GENERAL_LEDGER_EXPORT	GeneralLedger.csv
/ARBA/INTERNAL_ORDER_EXPORT	InternalOrder.csv
/ARBA/WBS_EXPORT	WBSElement.csv
/ARBA/ACCOUNT_CATEGORY_EXPORT	AccountCategory.csv
/ARBA/ACCOUNT_FIELD_EXPORT	AccCategoryFieldStatus Combo.csv
/ARBA/INTERNAL_ORDER_EXPORT	CompanyCodeIOCombo.csv
/ARBA/WBS_EXPORT	CompanyCodeWBSCombo.csv
/ARBA/MATERIAL_GROUP_EXPORT	ERPCommodityCode.csv
/ARBA/CURRENCY_CONVERT_EXPORT	CurrencyConversion Rate.csv

RFC Used	Generated CSV File
/ARBA/VENDOR_EXPORT	PurchaseOrgSupplierCombo.csv SupplierConsolidated.csv SupplierLocationConsolidated.csv RemittanceLocationConsolidated.csv
/ARBA/SUPPLIER_LOCATION_EXPORT	SupplierLocationConsolidated.csv
/ARBA/PAYMENT_TERM_EXPORT	PaymentTermsConsolidated.csv
/ARBA/REMITTANCE_LOCATION_EXPORT	RemittanceLocationConsolidatedExport.csv
/ARBA/USER_EXPORT	UserConsolidated.csv
/ARBA/USER_GROUP_EXPORT	GroupConsolidated.csv
/ARBA/TAX_CODE_EXPORT	TaxCode.csv

The following table lists the class used and the CSV files they generate for each Funds Management data import task.

Class Used	Generated CSV File
/ARBA/CL_BP_EXPORT	BudgetPeriod.csv
/ARBA/CL_COMMIT_EXPORT	Commit.csv
/ARBA/CL_FMAREA_EXPORT	FMArea.csv
/ARBA/CL_GRANT_EXPORT	Grantee.csv
/ARBA/CL_FUNCTAREA_EXPORT	FunctionalArea.csv
/ARBA/CL_FUNDS_CTR_EXPORT	FundsCenter.csv
/ARBA/CL_FUND_EXPORT	Fund.csv
/ARBA/CL_EARMARKED_EXPORT	• EarmarkedFundsDocuement.csv • EarmarkedFundsItem.csv

Buyers can use the **SLG1** T-code to view all messages in the application log on the SAP system.

Viewing the Application Log

Procedure

1. Go to Transaction Code **SLG1**.
   The Analyze Application Log appears.
2. Enter **/ARBA/MASTERDATA** in the **Object** field.
3. Enter **/ARBA/SUB_MASTERDATA** in the **SubObject** field.

About Importing Data in Multiple Languages

The `/ARBA/MASTER_DATA_LANG_EXPORT` program provides options to download translations of the following master data:

RFC Used	Generated CSV File
`/ARBA/GENRAL_LDGR_NAMES_EXPORT`	`GeneralLedgerLang.csv`
`/ARBA/ACCOUNT_CAT_NAMES_EXPORT`	`AccountCategoryLang.csv`
`/ARBA/PAYMENT_TERM_NAMES_EXPORT`	`PaymentTermsLang.csv`
`/ARBA/TAX_CODE_NAMES_EXPORT`	`TaxCodeLang.csv`
`/ARBA/MATERAL_GRP_NAMES_EXPORT`	`CommodityCodeLang.csv`
`/ARBA/COST_CENTER_NAMES_EXPORT`	`CostCenterLang.csv`

Table 8: Funds Management Master Data

Class Used	Generated CSV File
`/ARBA/CL_BP_LANG_EXPORT`	`BudgetPeriod.csv`
`/ARBA/CL_COMMIT_LANG_EXPORT`	`Commit.csv`
`/ARBA/CL_FMAREA_LANG_EXPORT`	`FMArea.csv`
`/ARBA/CL_GRANT_LANG_EXPORT`	`Grantee.csv`
`/ARBA/CL_FUNCTAREA_LANG_EXPORT`	`FunctionalArea.csv`
`/ARBA/CL_FUNDS_CTR_LANG_EXPORT`	`FundsCenter.csv`
`/ARBA/CL_FUND_LANG_EXPORT`	`Fund.csv`

You can run the following Master Data Language Export tasks directly or using theAriba Integration Toolkit using the `/ARBA/MASTER_DATA_LANG_EXPORT` program:

- **Account Category Language**
- **General Ledger Language**
- **TaxCode Language**
- **Cost Center Language**
- **ERPCommodityCode Language**
- **Payment Terms Language**
- **Funds Management Data Language**

Importing Data in Multiple Languages from SAP Systems

Procedure

1. Download the relevant SAP transports from connect.ariba.com. In the Readme file, the SAP transport corresponding to the description **"Contains objects for Master data pulls and Language pulls (File)"** must be imported into your SAP ERP system.

2. Configure the Import ERP Master Data Translations data import task for use with the Ariba Data Transfer Tool. For information on configuring data import tasks in the Data Transfer Tool, refer to the *Ariba Integration Toolkit Guide*.

Customizing Funds Management Extracts

You can customize the Funds Management extract from SAP ERP to Ariba Procurement Solution to meet your requirements.

To add a new field to extract Funds Management data from SAP ERP and map the field to Ariba Procurement Solution, see the following sections:

Adding Custom Fields for Funds Management Extract in SAP ERP

Prerequisites

Identify the export for which you want to perform the customization.

Context

You can customize extraction of Funds Management data to extract only the Funds Management data relevant for you. The following procedure lists the steps required to add field(s) to extract Funds Management data:

Procedure

1. Copy the class name. For example, `/ARBA/CL_FUND_EXPORT`.
2. From the SAP ERP main screen, navigate to **Tools** > **ABAP Workbench** > **Development** > **SAP Business Workflow** > **Definition tools** > **Application Integration** > **Class Builder**.

   Class Builder: Initial Screen window appears.
3. Paste the class name in the **Object type** field.
4. Click **Display**.

   Class Builder: Display Class /ARBA/CL_FUND_EXPORT window appears which lists all the methods.
5. Double-click **GET_STRUCT_NAME** method listed under **Methods**.
6. Copy the **STRUCTURE_NAME**, `/ARBA/FMFINCODE_STR`.
7. From the SAP ERP main screen, navigate to **Tools** > **ABAP Workbench** > **Development** > **ABAP Dictionary**.

ABAP Dictionary: Initial Screen window appears.

8. Paste the structure name `/ARBA/FMFINCODE_STR` in the **Data Type** field.
9. Click **Display**.

   Dictionary: Initial Screen screen appears.
10. To add a new field, click **Display/Change** icon (`Ctrl+F1`).
11. Add a new field, for example, `FINUSE` by entering the following details and then press **Enter**:
    - **Component**: `FINUSE`
    - **Typing Method**: `Types`
    - **Component Type**: `FM_FINUSE` (data element name)

    Data Type, **Length**, **Decimal**, and **Short Description** fields are auto-populated.
12. To add more fields in the structure name, repeat the above steps and then click **Save**.

    Prompt for local Workbench Request appears. Close this prompt.
13. Click **Activate** (`Ctrl+F3`).
14. Repeat step 6 through step 13 to activate the **STRUCTURE_NAME**, `CSV_STRUC_Name`.

Next Steps

You must map the custom fields for Funds Management extract added in SAP ERP to Ariba Procurement Solution.

Mapping Custom Fields for Funds Management Extract between SAP ERP and Ariba Procurement Solution

Context

The names of the custom fields for Funds Management extract in SAP ERP may be different from the names of these fields in Ariba Procurement Solution. To map these custom fields, perform the following steps in SAP ERP.

Procedure

1. In the command field of the SAP ERP main screen, type `/N/ARBA/OND_PROC`.

   SAP Easy Access Transaction Code for Ondemand Procurement window appears.
2. Navigate to **SAP menu** > **Configuration Parameters** > **Define SAP to Buyer field Map** >.

   Display View "Table to maintain mapping of SAP to Buyer Fields": Overview window appears.
3. To add a new field, click **Display/Change** icon (`Ctrl+F1`).

   Caution: The table is cross-client window appears. Click **Continue** to continue.

4. Click **New Entries** (`F5`).

   New Entries: Overview of Added Entries window appears.
5. Add a new field to map from SAP ERP to Ariba Procurement Solution, for example, `FINUSE` by entering the following details:
   - **Structure**: `/ARBA/FUND_STR` (CSV structure in SAP ERP)
   - **Field Sap**: `FINUSE` (field name in SAP ERP)
   - **Field Ariba**: `Source Fund` (field name in Ariba Procurement Solution)
6. Click **Save** (`Ctrl+S`).

   Prompt for Workbench request window appears. Click **Continue** to continue.
7. In the **Create Task** window, click **Continue**.

   The `FINUSE` field in SAP ERP is now mapped to the `Source Fund` field in Ariba Procurement Solution.

   To map additional fields, as needed, repeat step 4 through step 7.

Integrating Master Data Using the Direct Connectivity Integration Method from SAP ERP

This section has the following topics:

- Limitations of Integrating Master Data Directly from an SAP ERP System [page 139]
- Exporting Master Data Directly Using the User Interface [page 139]

Integrate master data directly from SAP ERP to the Ariba Procurement Solution seamlessly without using the Ariba Integration Toolkit through the Direct Connectivity Integration method .

> **Note**
>
> This feature is supported on SAP ERP 6.0 SPS02 (SAP_APPL 600 SPS02 and SAP_BASIS 700 SP18) and higher versions.

Buyers must configure the necessary parameters required to export master data seamlessly. You must:

- Configure the LPCONFIG if you are using ECC6.0 EHP3
- Configure the SOAMANAGER if you are using ECC 6.0 EHP4 and higher

Buyers can use the **SLG1** T-code to view all messages in the application log on the SAP system. For more information, see Viewing the Application Log [page 134].

Prerequisites

- You must maintain the parameter **/ARBA/TEMP_DIRECTORY** in the **/ARBA/TVARV** table before you export the master data through the Direct Connectivity Integration method. For more information see, Maintaining a Temporary Directory While Running Master Data Directly [page 58].
- Before you export the master data, you must create the Authorization Object class. For more information, see Defining authorizations for running Ariba Procure-to-Pay transactions [page 77].
- Ensure that you maintain the following parameters on your SAP ERP :

In the Transaction code `/nsm30`, go to the table `/ARBA/AUTH_PARAM` and enter the following values:
  - **Realm**: Specify the name of your company as defined in your Ariba procurement solution. If you use something like, “http://mycompany-T.procurement.ariba.com to access your Ariba product, specify your company name as “mycompany-T” without the quotes. For example, mycompany-T.
  - **Shared Secret**: Specify the shared secret in the SOAMANAGER or LPCONFIG based on your SAP ERP EHP version.
  - **Wait (in minutes)**: Specify the wait duration between the retry attempts.
- Ensure the you install the client certificates before running the master data.
  - While you export master data, the Ariba Procurement Solution attempts to connect to the procurement system up to three times.
  - If the export master data fails due to incorrect shared secret, go to the table `/ARBA/AUTH_PARAM`, enter the correct shared secret and export the master data again.
- Create a logical file path for the `ISMW_ROOT`. For more information, see How to create a logical file path [page 144].

Limitations on Integrating Master Data Directly from an SAP ERP System [page 139]

Importing Master Data Using the Direct Connectivity Integration Method [page 139]

Related Information

Direct Connectivity Integration [page 15]
Integrating Master Data Using the Mediated Connectivity Integration Method [page 147]

Limitations on Integrating Master Data Directly from an SAP ERP System

- When you run the master data tasks without using the Ariba Integration Toolkit, you cannot do the following:
  - The **NTLM** and **digest**`proxyAuthMod` authentication methods are not supported while exporting master data.
  - Send any email notifications when the mater data integration fails. Buyers can use the **SLG1** T-code to view all messages in the application log on the SAP system.
  - Run the Incremental Delete for User information master data.
  - Run the Incremental load for the Plant Export master data.

Importing Master Data Using the Direct Connectivity Integration Method

The `ARBA/MASTER_DATA_EXPORT` program has an user interface that provides different options to select either a full or incremental load while running the master data events directly. You can use the **Direct Connectivity** option to transfer mater data.

The following are the options available while running the `ARBA/MASTER_DATA_EXPORT` program using Direct Connectivity:

Option	This option allows you to....
Connectivity	
Direct Connectivity	Run the master data integration events without the use of the Ariba Integration Toolkit. The master data is sent directly using the `/ARBA/DIRECT_CONNECT` function module to the Ariba procurement solution system.
Load Option	
Full Load	Import the complete master data from your ERP system to your Ariba procurement solution system. This option uses the Load and Delete operations. The Full Load option allows you to run all the import master data tasks.
Incremental Load	Import only the changed or newly added master data from your ERP system to your Ariba procurement solution system. The incremental load option uses the Load operation. The Incremental Load option allows you to run the following export master data tasks: Accounting Data: • **GeneralLedger** • **InternalOrder** • **CostCenter** • **WBSElement** • **Asset** Supplier Related Data: • **Supplier** • **Supplier Location** • Remittance Location • PurchaseOrgSupplierCombo User Related Data: • **User and User Group**
Scope of Ariba Solution	
P2P Customers	Import master data for Ariba Procure-to-Pay customers.
P2O Customers	Import master data for Ariba Procure-to-Order customers. This option does not support downloading the remittance location of suppliers.
Configuration	
Encoding to be used	Specify the encoding type for the data transfer or use the default value available to you.
Variant	Specify the unique variant name for the Ariba procurement solution in your SAP system for purchase orders. For example, VREALM_1. If you have maintained a value for the variant in the `/ARBA/TVARV` table, ensure that you maintain the same value in this field. If the values differ, an error occurs and the files fail during download.

Option	This option allows you to....
Partition	Specify the unique name of your site for the Ariba procurement solution in your SAP system for purchase orders. For example, PREALM_1 If you have maintained a value for the partition in the `/ARBA/TVARV` table, ensure that you maintain the same value in this field. If the values differ, an error occurs and the files fail during download.
Choose Master Data for Export	
Organization Data	Import data using the following options: • **Plant** • **CompanyCode** • **PurchaseOrg** • **PlantPurchaseOrg** • **PurchaseGroup**
Accounting Data	Import data using the following options: • **GeneralLedger** • **InternalOrder** • **CostCenter** • **WBSElement** • **Asset**
Cross/Application Configuration Data	Import data using the following options: • **AccountCategory** • **AcctCategoryFieldStatus** • **ERPCommodityCode** • **CurrencyConversion** • **TaxCode** • **Payment** > **Terms**
Supplier Related Data	Import supplier data using the **Supplier** option.
User Data	Import data for users and user groups using the **User & User Group** option.

This section has the following procedures:

- How to configure SOAMANAGER [page 142]
- How to configure the LPCONFIG for ECC6.0 EHP3 [page 143]
- How to maintain table entries [page 92]
- How to install the SSL client certificate for HTTPS connection [page 145]
- How to configure the client certificate for certificate-based authentication [page 147]
- How to create a logical file path [page 144]

How to configure SOAMANAGER

Context

You can use the SOAMANAGER configuration to set up Direct Connectivity between Ariba procurement solutions and SAP ERP.

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, `/ARBA/CO_MIOUT_SYNC_ARIBA_UPLO`, and click **Search**.

   The Proxy Class page appears.
4. From the list of proxies, click the name of the proxy, `/ARBA/CO_MIOUT_SYNC_ARIBA_UPLO`, 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:
   - To use `Shared Secret`-based authentication, select **User ID/Password**, and enter the User ID and the Password in the corresponding fields that appear.

     > **Note**
     >
     > User ID is the name of the procurement realm and the password the shared secret that you configured in the Ariba application.

   - 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. For more information, see .How to configure the client certificate for certificate-based authentication [page 147].
9. Click **Next**.

   The **Transport Bindings** page appears.

10. In the **Transport Bindings** page, specify the following:
    - **URL Access Path**: `/Buyer/fileupload?realm=<p2prealm>`. Realm name 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 `certs1.ariba.com`.
    - **Port Number of Access URL**: 443
    - **URL Protocol Information**: HTTPS
11. Save the changes.

How to configure the LPCONFIG for ECC6.0 EHP3

Procedure

1. You must create a new RFC connection. For more information, see Creating a New RFC Connection [page 144] .
2. Go to LPCONFIG on your SAP instance,
3. Search for the proxy class `ARBA/MIOut_Sync_AribaUpload`,
   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. In the **Application-Specific Settings** > **Global Settings** tab, select the **State Management** check box.
10. Click the **Call Parameters** tab and select **HTTP Destination.**
11. Specify the newly created RFC destination.
12. Select the **Operations** tab. You can see the proxy `MIOut_Sync_AribaUpload`that has been generated.
13. In the **SOAP Action** field, enter the following URL:

    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=ERP2PTESAP_T.
14. Save and activate the entries.

Next Steps

How to maintain a temporary directory while running master data directly [page 58].

Creating a New RFC Connection

Context

Create a new RFC Connection before you configure the LPCONFIG for ECC6.0 EHP3.

Procedure

1. Go to **Tcode 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=ERP2PTESAP_T.
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 create a logical file path

Context

You must create a logical file path for the ISMW_ROOT. This is required when you import master data and export transactional data for Purchase Order Header Status, Remittances, and any status updates sent for the transactions through the Direct Connectivity Integration method.

Procedure

1. Go to Tcode `file`.
2. Click **New Entries**.
3. Enter ISMW_ROOT as an entry in the **Logical file path** column.
4. Enter a name for the ISMW_ROOT logical file path.
5. Select the ISMW_ROOT logical file path and then double-click **Logical File Name Definition, Cross-Client** in the **Dialog Structure** section.
6. Ensure you have the following values for the ISMW_ROOT logical file path:
   - **Logical File**: ISMW_FILE
   - **Name**: ISMW_FILE-logical file name
   - **Physical file**: To be left blank without any values.
   - **Data format**: DIR
   - **Applcat.area**: To be left blank without any values.
   - **Logical path**: ISMW_ROOT
7. Save the changes.

Related Information

About Integrating Transactional Data Directly Using the User Interface [page 216]

How to install the SSL client certificate for HTTPS connection

Context

To enable HTTPS connection between Ariba procurement solutions and SAP ERP, install SSL client certificate.

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.
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. 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.

    > **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**. 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 `/ARBA/CO*` in the **Search Pattern** text box and select **Both Names** in the Field pull-down list.
19. From the list of results, select `/ARBA/CO_MIOUT_SYNC_ARIBA_UPLO`.
20. On the Configurations tab, click **Ping Web Service**.
21. In case you see an ICM_HTTP_SSL_ERROR, go to the Tcode `SM59` and search for the HTTP destination. You can see the HTTP destination in the **HTTP Destination** text box.
22. If there is an ICM_HTTP_SSL_ERROR, go to `SM59` and search for the HTTP destination.
23. Check if there is any service number available for the HTTP destination in the **Service No.** text box. By default, the value for this port is set to 80.
24. Delete the default service number in the **Service No.** text box and test the connection again.

Results

You must see a message that the connection was successful.

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.
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 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 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.
4. 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."

Integrating Master Data Using the Mediated Connectivity Integration Method

Buyers using the Ariba Procurement Solution integrated with SAP can integrate master data directly from an SAP ERP system to the Ariba Procurement Solution system seamlessly using the SAP NetWeaver PI layer through the Mediated Connectivity Integration Method.

Related Information

Integrating Master Data Using the Direct Connectivity Integration Method from SAP ERP [page 138]

About Integrating Master Data Using the Mediated Connectivity Integration Method

Buyers using the Ariba Procurement Solution integrated with SAP can integrate master data directly from an SAP ERP system to the Ariba Procurement Solution seamlessly using the SAP Process Integration through the Mediated Connectivity Integration Method.

Mediated Connectivity provides enhanced security while transferring master data from an SAP ERP system to an Ariba Procurement Solution system. Ariba downloads master data from an SAP ERP system to the Ariba Procurement Solution through SAP Process Integration using SOAP messages.

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

If you are using the client certificate [page 151], the SAP Process Integration keystore stores the certificates and keys that you create in SAP Process Integration. You can create a view to group these certificates and keys based on views.

If you are using the shared secret-based authentication [page 153], you must configure the shared secret in the Communication Channel of SAP Process Integration.

> **Note**
>
> Buyer using the Ariba Procurement Solution can also choose to integrate master data from an SAP ERP system to the Ariba Procurement Solution directly. To do this, the administrator must configure SOAMANAGER [page 99].

Prerequisites and limitations

- Install the latest Ariba procurement transports and TPZ files. For more information, see .
- Maintain the table entries as explained in How to maintain table entries [page 92].

  > **Note**
  >
  > If you have configured logical port for the realms to which you export master data, you must delete or deactivate the logical port configuration.

- Configure SSL client certificate for HTTPS connection. For more information, see .
- Specify the system ID of SAP ERP on the **Service Manager** > **Site Manager** > **Customer Site** > **Master Data Manager** > **External System Configuration** > **Create External System** window of the Ariba procurement application.

- Based on the security model you choose, configure one of the following:
  - For Shared Secret-based authentication, configure the Shared Secret settings such as the user name and password on the **Service Manager** > **Site Manager** > **Customer Site** > **Integration Manager** > **Integration Toolkit Security** window of the Ariba application.
    For more information, see How to configure the shared secret authentication for Mediated Connectivity [page 153].
  - For client 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 Ariba application.
    For more information on configuring client certificate, see How to configure client certificate-based authentication for Mediated Connectivity [page 151].
- Ensure that software component `ARIBA_UPLOAD 1.0 of ariba.com` is available in the System, Landscape Directory (SLD).
- 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 149].

Requirements for Federated Process Control-enabled systems

1. Maintain a parent realm and a child realm and create a business system each for the parent and child realms.
2. Create a communication channel each for the parent and child realms based on the same communication channel template. Set the target URL of the communication channel for the child realm to the child realm name and the target URL of the communication channel for the parent realm to the parent realm name.
3. Create the integration scenario and specify the communication channels that you created for the parent and child realm.
4. Specify receiver determination condition for the integration scenario.

Limitations

Mediated Connectivity 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

How to configure the Proxy on SAP ERP Systems

Procedure

1. Start 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)
- 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 SAP Process Integration server appears and the **Summary** section indicates that the connection to XI is successful.

How to configure proxy for Single Stack (Java Only) instances for SAP Process Integration 7.3 and Higher

Procedure

1. Start 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.

How to configure client certificate-based authentication for Mediated Connectivity

Context

For Mediated Connectivity integration that uses client certificate-based authentication, configure the certificate that you want to use for authentication.

You must download the client certificate from an Ariba-trusted Certificate Authority and store the certificate in the SAP Process Integration keystore.

Procedure

1. From the **SAP Process Integration** main page, go to **Administration** , and click **Configuration Management**.
2. Click **Certificate and Keys**.

   The **Certificate and Keys** page appears.
3. Click **Create View** and enter the view name and description.
4. Select the created view and click **Import Entry** button.
5. From the **Entry Import** window, select an entry type based on the certificate and key format.
6. Based on the entry type you selected, specify the certificate attributes.
7. Click **Import**.
8. Click **Edit** button corresponding to the communication channel and click **Configure Certificate Authentication**.

   The communication channel for master data integration between Ariba procurement solutions and SAP ERP is `CCT_Ariba_Upload_Receiver`.
9. In the **Target URL** field, specify the location of your procurement system.

The URL starts with the prefix `cert`. For Example: `http://cert.<URL to your Ariba procurement solutions>/Buyer/fileupload?<realm>` such as, `https://cert.buyer.ariba.com/Buyer/fileupload?p2p.`

10. Select the Keystore Entry and Keystore View that you have created.
11. Save and activate the communication channel.

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

Procedure

1. Go to **SAP Process Integration** > **Netweaver Administration** and 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.

   > **Note**
   >
   > Ensure that your required certificates are signed by an 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.

   > **Note**
   >
   > Ensure that your URL starts with “https://cert...

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

How to configure the shared secret authentication for Mediated Connectivity

Procedure

1. Open the Configuration Integration Builder from the main page of SAP Process Integration.
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 procurement system. For Example:

   http://<URL to the Ariba procurement solution>/Buyer/fileupload?<realm<realm name that you maintain in `/ARBA/AUTH_PARAM`>> such as, https://buyer.ariba.com//Buyer/fileupload?<realmp2p>
5. In the **User** text box, enter the realm name for your procurement system.
6. In the **Password** text box, enter the same shared secret that you specified on the **Integration Toolkit Security** page of your Ariba procurement system.
7. Save and activate the communication channel.

How to configure the Integration Scenario

Procedure

1. From the SAP Process Integration main page, select **Integration Directory** > **Integration Builder** and log in to the **Configuration: Integration Builder** application.
2. In the **Integration Builder** page, select **Tools** > **Apply Model from ES Repository**.
3. From the **Transfer Model from ES Repository** wizard, go to **Select ES Repository Model** and click **Process Integration Scenario**.
4. Click the **Name** field and click **Input Help** from the **Display Input Help** drop-down list.
5. Select the following from the **Select Process Integration Scenario from Enterprise Services Repository** screen.
   - **AR_Ariba_Upload**
6. Click **Apply**. The **Transfer Model from ES Repository** wizard appears. The Namespace and the Software Component Version are available in the wizard.
7. Click **Continue** and then, click **Close**. This completes the 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 the Ariba procurement solution.
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 **AR_Ariba_Upload** 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 Ariba procurement solution.
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**.

    > **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**.
    1. Select the following Communication Channel Template: `CCT_Ariba_Upload_Receiver`
    2. Specify the communication channel name.
    3. Select the communication component that corresponds to the business system to which you want to associate this channel.

    > **Note**
    >
    > When you integrate master data with FPC-enabled systems, repeat these steps to create communication channels for parent and child realms. Communication channels for parent and child use the same communication channel template, `CCT_Ariba_Upload_Receiver`.
    >
    > When you specify the target URL for the communication channel, ensure that you specify the URL of the child site for the channel created for the child site and the parent site URL for the one created for the parent site.

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** check boxes 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.

Next Steps

After you create the integration scenario, edit the integration scenario to specify the following condition for receiver determination:`/p1:MT_UploadReq/Header/Parameters/Parameter/@name = realm AND / p1:MT_UploadReq/Header/Parameters/Parameter/value = <realmname>`. You need to specify the condition for both parent and child realms and associate the condition with the corresponding business system communication components.

Integrating Transactional Data

Integrating Transactional Data Using File Channel [page 156]

Integrating Transactional Data Using the Web Services Channel [page 182]

Integrating Transactional Data Directly Using the User Interface [page 216]

Integrating Transactional Data Using the Mediated Connectivity Integration Method [page 223]

Integrating Transactional Data Using File Channel

Transaction data includes information like remittance advice, invoice, purchase orders, and receipts. You import/export data using scheduled integration events, or run integrations events manually from Ariba Administrator.

Transactional Data Integration Event Process Flow [page 156]

Advanced Pricing Details [page 162]

Exporting Purchase Orders [page 162]

Exporting Change Purchase Orders [page 165]

Exporting Cancel Purchase Orders [page 167]

Importing Purchase Order Header Status [page 168]

Exporting Receipts [page 169]

Exporting Invoices [page 171]

Exporting Expense Reports [page 175]

Accommodating Custom Fields [page 177]

Calling the SAP BAPI [page 177]

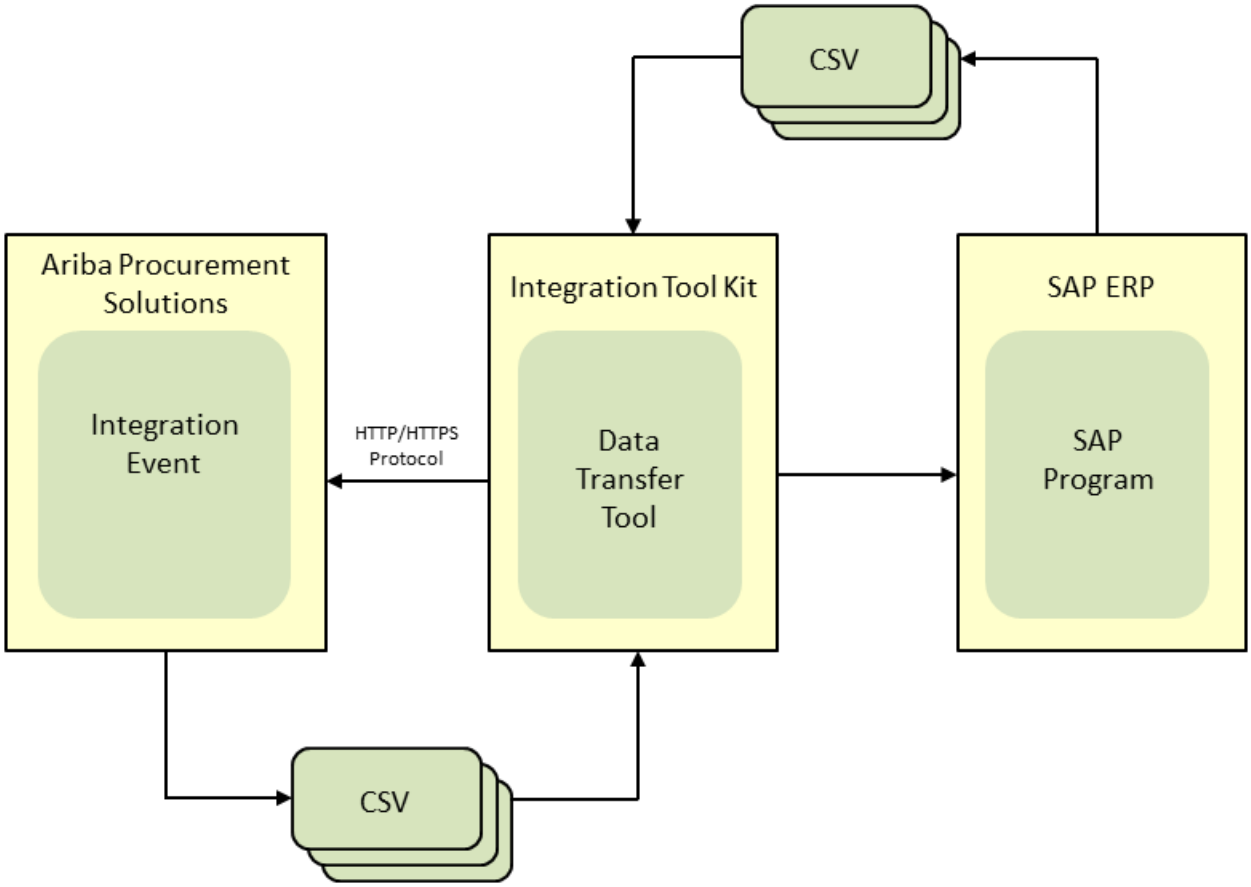
Scheduling [page 178]

Importing Remittance Advice [page 179]

Transactional Data Integration Event Process Flow

An executable program is defined for each File channel integration event. This program can be scheduled to run in the background listening to input CSV data files from Ariba procurement solutions and export it to SAP database.

The following illustration shows a typical data integration process flow using the File channel:



Transactional data is downloaded into CSV file formats by executing the appropriate transaction integration events. The Data Transfer Tool then picks up these CSV files and moves them into the SAP database.

The custom RFC programs are provided to read the data from CSV files on the SAP database. Invoke the SAP RFC/BAPI to create the data in SAP, and send the response back to Ariba procurement solutions.

Figure 6: Typical Data Integration Process Flow Using the File Channel

Configuration Tasks

Importing SAP Transports [page 157]

File Channel Integration - Program Structure [page 158]

Working with Logical File Names [page 160]

Importing SAP Transports

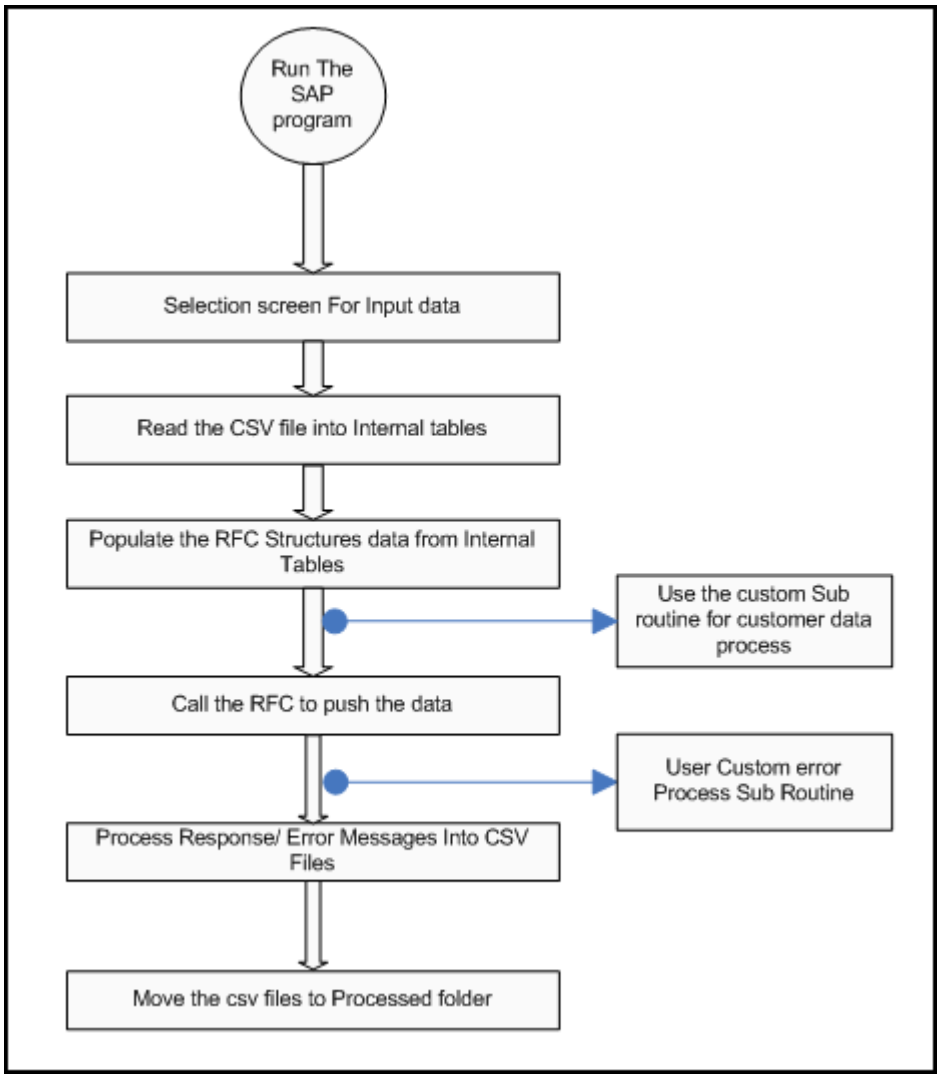
Integrating transactional data using the File channel involves importing of SAP Transports as a prerequisite.

These SAP Transports contain SAP Programs, RFCs, and supporting structures. The SAP executable programs are used to move the exported data into SAP. Each program internally calls the BAPI function. The BAPI function facilitates the moving of data into SAP.

For more information on how to import SAP transports, see the *Installation Guide for Ariba Procurement Solution Integrated with SAP ERP*.

File Channel Integration - Program Structure

The following diagram illustrates how the SAP programs are wrapped around the BAPI function modules.



Each stage (layer) in this illustration is acted upon by an executable program and is explained briefly below.

Figure 7: How SAP Programs Wrap Around BAPI Function Modules

Selection Screen

This program comprises five parameters. These parameters are briefly described in the following table:

Parameter	Description
Logical File Name	Defines the logical path and the physical location of the CSV files.
Directory Separator	Physical separator for directories in SAP.
Encoding in response files	Encoding technique that is used. This is UTF-8 by default.
Variant	Variant Name.
Partition	Partition Name.

Read CSV Files

At this stage, the executable program reads the CSV files that are specified in the logical path directory and inserts them into the internal tables.

Populate Data from Internal Tables to RFC Structures

Here, program picks up the data from internal tables and moves it to the appropriate RFC Function Module.

Call RFC Function Module

This program exports the data into the SAP database.

RFC Returns Response Messages

In this final stage, the messages are written into CSV files. If the export is successful, the messages are written to the NumberImport CSV files. If there are errors in the export event, messages are written to the ErrorImport CSV files and placed under the Response directory.

Move CSV Files to Processed Folder

The corresponding program finally moves the incoming CSV files into a `processed` folder. The output is displayed with corresponding Order Numbers.

Working with Logical File Names

A logical file name defines the logical path and the physical location of the CSV files in SAP. Every transaction has a default Logical File Name.

You can choose to modify the logical path to the file directory, or create a new logical file name to overwrite the default logical file name. To do this, execute the corresponding program (for transactional data integration) and specify the new logical file name that you are creating, and save it as a variant.

> **Note**
>
> The physical path to the logical file name should not exceed more than 50 characters.

Ensure the CSV file is placed under the incoming\ERPOrder directory, which is preceded by the logical file path. For example, if the logical file path is

```
C:\usr\sap\<SYSID>\DVEBMGS00\work\POPush\<CSV FileName>
```

you must create an "incoming" directory in the server and place the CSV file in this directory, as shown below:

```
C:\usr\sap\<SYSID>\DVEBMGS00\work\POPush\incoming\ERPOrder\<FileName>
```

Here:

- `\incoming`: is common to all transactions
- `ERPOrder`: is specific to each transaction.

> **Note**
>
> - Do not change the `ERPOrder` directory name. You can choose to extend this directory name, for example, `ERPOrder_FOO`.
> - The number of characters comprising the full path (for example, `C:\usr\sap\<SYSID>\DVEBMGS00\work\POPush`) must not exceed 50 characters.

During run time, the following two directories are created under the Root directory:

- processed
- response

For example:

```
C:\usr\sap\<SYSID>\DVEBMGS00\work\POPush\processed
```

```
C:\usr\sap\<SYSID>\DVEBMGS00\work\POPush\response
```

The `processed` directory contains the executed CSV files (that are moved from the `incoming` directory location to here), and the `response` directory contains the response CSV files for Ariba procurement solutions.

Configuring the Options File

When running any export integration event, the corresponding SAP program picks up the CSV files from a pre-determined location. This directory path must be configured in the Options file of the Data Transfer Tool.

Configure the Options file as follows:

- Include `\incoming` at the end of the `downloadDir` option.
- Specify the `downloadDir` and `filePrefix` options.

Scheduling Data Transfer Tool

In a scenario where there are very frequent transactions occurring, you can schedule the Data Transfer Tool to run at regular time intervals to automatically download the transaction CSV files and export them to the SAP database.

You can use any third-party scheduler, such as the one that is provided with your operating system.You must also schedule the corresponding SAP program to automatically pick up the CSV files every time the files are downloaded by the Data Transfer Tool.

Transaction Data Integration Event Components

The following table lists the various components that constitute every transactional data integration event.

Transactional Data	Event Name	SAP Program	RFC Used
Purchase Order	PurchaseOrderExport	/ARBA/CR_BAPI_PO_CREATE	/ARBA/BAPI_PO_CREATE
Changed Purchase Order	PurchaseOrderChangeExport	/ARBA/CR_BAPI_PO_CHANGE	/ARBA/BAPI_PO_CHANGE
Canceled Purchase Order	PurchaseOrderCancelExport	/ARBA/CR_BAPI_PO_CANCEL	/ARBA/BAPI_PO_CANCEL
Purchase Order Header Status	PurchaseOrdHeaderStatusImport	/ARBA/CR_PO_HEADER_STATUS	/ARBA/PO_HEADER_STATUS
Receipts	ReceiptExport	/ARBA/CR_GR_CREATE	/ARBA/GOODS_RECEIPTS_CREATE
Invoice	PaymentExport	/ARBA/CR_INVOICE_CREATE	/ARBA/BAPI_INVOICE_CREATE
Remittance	RemittanceImport	/ARBA/CR_REMITTANCE_EXPORT	/ARBA/REMITTANCE_EXPORT
Requisition Submit	RequisitionRealTimeBudgetExport		/ARBA/PURREQ
Requisition Revert	RequisitionRealTimeRevertBudgetExport		/ARBA/PURREQ_DELETE
Budget Check	RequisitionBudgetCheckExport		/ARBA/ACC_PURCHASE_REQUI_CHECK

Transactional Data	Event Name	SAP Program	RFC Used
• Requisition Derive • Invoice Derive	• RequisitionDeriveAccountingExport • InvoiceReconciliationDeriveAccountingExport		/ARBA/DERIVATION

> **Note**
>
> Ariba Procurement Solution integrated with SAP does not support purchase orders or invoices containing service line items.

Advanced Pricing Details

While creating a requisition in Ariba procurement solutions, the user can specify advanced pricing details for a line item or multiple line items. Advanced pricing details includes:

- Quantity Based Pricing
- Unit Conversion Pricing

Quantity based pricing allows the unit price of an item to be based on a different price unit quantity than 1. Unit Conversion Pricing allows unit of measure conversion in the pricing calculation, when the unit of measure on the order differs from the pricing unit of measure.

Exporting Purchase Orders

Purchase Orders that are in the Ordering state are exported to SAP ERP. Ariba Procurement Solution writes the exported purchase order details into five CSV files:

- `PurchOrdAcctDetails.csv`
- `PurchOrdHeaderDetails.csv`
- `PurchOrdLineDetails.csv`
- `PurchOrdScheduleDetails.csv`
- `PurchOrdLineAddDetails.csv`

While creating a requisition in Ariba Procurement Solution, if the user has specified advanced pricing details for a line item, then in the exported `PurchOrdLineDetails.csv` file, the following fields are added:

- `PriceBasisQuantity`
- `PriceBasisQuantityUOM`
- `ConversionFactor`
- `PriceBasisQuantityDesc`

Advanced pricing details are also applicable for change purchase order and payment requests. Therefore, when a change PO and payment request are exported, the above mentioned fields are available in the `ChangePurchOrdLineDet.csv` and `PaymentLineItemDet.csv` files respectively.

A sample CSV file with the above mentioned fields appears as follows:

“UTF-8”

`PurchOrdLineDetails.csv`

```
ERPOrderID,RequisitionRequester,Due_Time,BillTo,ServiceLineItemDetails,ShortName,Sup
plierPartAuxiliaryID,ShipTo,ERPCommodityCode,ConversionFactor,UnitPrice,Line_Amount,
Quantity,PriceBasisQuantityUOM,Description,SupplierLocation,ReceivingType,ReqID,Curr
ency_cd,SupplierPartNumber,PriceBasisQuantityDesc,UOM,SupplierLocationName,PriceBasi
sQuantity,SupplierName,CommodityCode,DeliverToOrigSysRefID,OrigSysLineNumber,Line_Am
ount_InBaseCurrency,POLineNum
“ERP1”,”ADeep”,”4:00:00 PM”
"2445","PO1292464699548","1","1","AdHocItem","PR313","adeep","AdHocItem",,"RANDOM123
","EA","43211
503","150.0000","USD","150.0000","100","15000.0000","USD","15000.0000","US002","US01
7","Arnold
Deep",,,,,"1",,,,
```

To ensure that the above mentioned fields related to advanced pricing details are processed in SAP ERP, download the relevant SAP ERP transport requests from connect.ariba.com and import them into your SAP ERP.

To perform a purchase order export event, you run the Ariba Data Transfer Tool from the SAP server. The Data Transfer Tool downloads these CSV files from Ariba Procurement Solution and places them in a location that is accessed by the `/ARBA/CR_BAPI_PO_CREATE` SAP program. This SAP program picks up these CSV files and transfers them into the SAP database.

Related Information

Integrating Taxes and Charges [page 210]

How to run the purchase order export event

Prerequisites

The purchase order integration with Ariba Procurement Solution does not provide support for the following features:

- Exporting tax code information
- Split accounting for service-line items
- Ariba procurement solutions export field mapping mechanism.
  If you need to add Ariba Procurement Solution extrinsic fields to RFC objects, you add these fields to the RFC structures. Next, you add this field in the AML mapping, re-import the schema and make appropriate changes in the mapping.
  If a purchase order or a change purchase order is exported using a RFC, the carriage returns in the line item text are exported and displayed as the hash character ('#') in the line item text in the SAP ERP purchase order.

- You cannot export amount-based purchase orders with line items that have a zero price.

Procedure

1. Create a purchase order (PO) with multiple line items in Ariba Procurement Solution.

   > **Note**
   >
   > When creating the PO, the NeedByDate field is not mandatory. However, when you push the PO to SAP ERP, this field is required else the PO push fails.

2. In the SAP ERP, use the SAP Transaction code `SE38` to start the SAP user interface and run the `/ARBA/CR_BAPI_PO_CREATE` program.
3. Specify the parent directory path and folder to which the Data Transfer Tool downloads the CSV files from Ariba Procurement Solution. The `/ARBA/CR_BAPI_PO_CREATE` program also requires a logical file path as an input parameter. This logical file path must be the same as the one specified in the Data Transfer Tool and is the location where the CSV files are located.

   > **Note**
   >
   > - You can create a new logical file name (use `ZARIBA_POPUSH_LOG_FNAME`, which is the default value) using the `FILE` transaction. When running this transaction, you must specify a logical path and a physical file name. See Working with Logical File Names [page 160].
   > The parent directory that you specify must contain a sub-directory called `incoming`. The Data Transfer Tool loads the CSV files into the `incoming` directory.
   > - This directory name and path must match the `%downloadDir%\%filePrefix%` directory that you specified in the Data Transfer Tool `Options` file.

4. Specify the path directory separator value (\ or /).
5. To schedule the `/ARBA/CR_BAPI_PO_CREATE` program to run at regular (or pre-defined) time intervals, save the program input as a `variant`, which you can later specify to be run as a job.

   You can schedule this program using the SAP ERP `SM36` transaction.
6. When this program is executed, it returns the response records in CSV file format and places these files in the `/response` directory.

Results

- If the export event is successful, the program returns a `NumberImportxxxxxx.csv` file (where `xxxxxx` is the timestamp).
- If the export event failed due to errors, the program returns an `ErrorImportxxxxxx.csv` file (where `xxxxxx` is the timestamp).

Adjusting the Need By Date

When exporting purchase orders, the Need by Date field value contained only the date and not the time or time zone information. Because of time zone differences, the Need by Date specified while creating a requisition was not getting stored correctly in the Ariba server. As a result, when you executed the Export Purchase Order to ERP integration task, incorrect date was getting exported. This behavior was seen in both file-based and Web Services-based integrations.

To ensure that the correct date is stored in Ariba Server, you can adjust the Need by Date based on the time zone of the requester. To achieve this, new fields called DLV_DT and SAPNeedByDate have been added to File-based and Web Services-based integrations respectively.

> **Note**
>
> You need to apply this fix only if you want the Need By Date value adjusted to the time zone of the requester.

To adjust the Need By Date based on the time zone of the requester, you must:

1. Import the relevant SAP Transports.
2. Import the SAP NetWeaver design package for purchase Orders into your SAP NetWeaver system.

You can download the changed SAP transports and the design package for purchase orders from connect.ariba.com.

Exporting Change Purchase Orders

Purchase Orders that are in the Ordering state are exported from Ariba Procurement Solution to SAP ERP. After the export, the exported change purchase order details are available in the following seven CSV files:

- `ChangePurchOrdAcctDet.csv`
- `ChangePurchOrdDelAcct.csv`
- `ChangePurchOrdDelItems.csv`
- `ChangePurchOrdHeaderDet.csv`
- `ChangePurchOrdLineDet.csv`
- `ChangePurchOrdLineText.csv`
- `ChangePurchOrdSchdlDet.csv`

To perform a change/cancel purchase order export event, you run the Ariba Data Transfer Tool from the SAP server. The Data Transfer Tool downloads these CSV files fromAriba Procurement Solution and places them in a location that is acessed by the `/ARBA/CR_BAPI_PO_CHANGE` SAP program. This SAP program picks up these CSV files and transfers them into the SAP database.

The following are important notes on exporting changed and canceled purchase orders to SAP ERP:

- If you enable the change/cancel purchase order feature, users must always change and cancel orders through Ariba Procurement Solution and not change or cancel them through SAP ERP. Therefore, apply the appropriate authorization concept in SAP ERP to prevent users from changing purchase orders directly in SAP ERP.

- To enable the change/cancel purchase order feature, you install the change/cancel order transport. The transport number is listed in the transport readme.txt file. For more information see the *Installation Guide for Ariba Procurement Solution Integrated with SAP ERP*.
- A limitation in the standard SAP BAPI creates the following situation: If the Account Assignment category is modified in Ariba Procurement Solution, the Account Assignment category is changed in SAP ERP. Furthermore, the GLAccount is changed to a default GLAccount after it has been pushed to SAP ERP. To resolve this issue, modify the GLAccount in SAP ERP using the **Account Assignment** tab in the Item Detail section.
- On SAP ERP service orders, you cannot change the line items, but you can delete them or cancel the entire order.
- To debug the change/cancel purchase order feature, set the parameter `/ARBA/DEBUG_CPO` to X and set `Z_ARIBA_CPO_FNAME` to the name of a log file where the change/cancel order information is logged. You set both of these parameters in the `/ARBA/TVARV` table.
- Plant data is not editable if the purchase order line Item is partially or fully received or partially or fully invoiced in Ariba Procurement Solution or SAP ERP.
- Changing the net price of a zero amount line item in a purchase order to a non-zero value is not supported.
- You cannot export amount-based purchase orders with line items that have a zero price.

Related Information

Integrating Taxes and Charges [page 210]

How to run the change purchase order export event

Procedure

1. In SAP ERP, use the SAP Transaction code `SE38` to start the SAP user interface and run the `/ARBA/CR_BAPI_PO_CHANGE` program.
2. Specify the parent directory path and folder to which the Data Transfer Tool downloads the CSV files from Ariba Procurement Solution. The `/ARBA/CR_BAPI_PO_CHANGE` program also requires a logical file path as an input parameter. This logical file path must be the same as the one specified in the Data Transfer Tool and is the location where the CSV files are located.

   Note

   - You can create a new logical file name (use `ZARIBA_CHANGEPO_LOG_FNAME`, which is the default value) using the `FILE` transaction. When running this transaction, you must specify a logical path and a physical file name. For more information, see Working with Logical File Names [page 160].
     The parent directory that you specify must contain a sub-directory called `incoming`. The Data Transfer Tool loads the CSV files into the `incoming` directory.
   - This directory name and path must match the `%downloadDir%\%filePrefix%` directory that you specified in the Data Transfer Tool `Options` file.

3. Specify the path directory separator value (\ or /).
4. To schedule the /ARBA/CR_BAPI_PO_CHANGE program to run at regular (or pre-defined) time intervals, save the program input as a variant, which you can later specify to be run as a job.

   You can schedule this program using the SAP SM36 transaction.
5. When this program is executed, it returns the response records in CSV file format and places these files in the /response directory.

Results

- If the export event is successful, the program returns a NumberImportxxxxx x.csv file (where xxxxxx is the timestamp).
- If the export event failed due to errors, the program returns an ErrorImportxxxxxx.csv file (where xxxxxx is the timestamp).

Payment Terms Integration

The payment terms information is now exported as part of the purchase order (PO) and change purchase order (CPO) transactions and sent to the SAP ERP system. To export payment terms, a new field called PaymentTerms is added to the PurchOrdHeaderDetails.csv and ChangePurchOrdHeaderDet.csv files.

When a user creates a requisition in Ariba procurement solutions, the payment terms information associated with the specified supplier is selected. When the purchase order or change purchase order is exported, this value is populated to the new field PaymentTerms in the respective CSV file.

Exporting Cancel Purchase Orders

Purchase Orders that are in the Ordering state are exported from Ariba procurement solutions to SAP. After the export, the exported cancel purchase order details are available in the CancelPurchOrdHeader.csv file.

To perform a cancel purchase order export event, you run the Ariba Data Transfer Tool from the SAP server. The Data Transfer Tool downloads these CSV files from Ariba procurement solutions and places them in a location that is acessed by the /ARBA/CR_BAPI_PO_CANCEL SAP program. This SAP program picks up these CSV files and transfers them into the SAP database.

How to run the cancel purchase order export event

Procedure

1. In SAP ERP, use the SAP Transaction code `SE38` to start the SAP user interface and run the `/ARBA/CR_BAPI_PO_CANCEL` program.
2. Specify the parent directory path and folder to which the Data Transfer Tool downloads the CSV files from Ariba Procurement Solution. The `/ARBA/CR_BAPI_PO_CANCEL` program also requires a logical file path as an input parameter. This logical file path must be the same as the one specified in the Data Transfer Tool and is the location where the CSV files are located.

   Note

   - You can create a new logical file name (use `ZARIBA_CANCELPO_LOG_FNAME`, which is the default value) using the `FILE` transaction. When running this transaction, you must specify a logical path and a physical file name. For more information, see Working with Logical File Names [page 160].
     The parent directory that you specify must contain a sub-directory called `incoming`. The Data Transfer Tool loads the CSV files into the `incoming` directory.
   - This directory name and path must match the `%downloadDir%\%filePrefix%` directory that you specified in the Data Transfer Tool `Options` file.
3. Specify the path directory separator value (\ or /).
4. To schedule the `/ARBA/CR_BAPI_PO_CANCEL` program to run at regular (or pre-defined) time intervals, save the program input as a `variant`, which you can later specify to be run as a job.

   You can schedule this program using the SAP `SM36` transaction.
5. When this program is executed, it returns the response records in CSV file format and places these files in the `/response` directory.

Results

- If the export event is successful, the program returns a `NumberImportxxxxxx.csv` file (where `xxxxxx` is the timestamp).
- If the export event failed due to errors, the program returns an `CancelPOErrorpullXXXXXX.csv` file (where `xxxxxx` is the timestamp).

Importing Purchase Order Header Status

When changed orders are in `Received`, `Receiving`, `Invoiced`, or `Invoicing` state, Ariba procurement solutions cannot cancel the orders. Similarly, when purchase orders have been received or invoiced in SAP, the cancel export event to SAP fails.

If an order reaches SAP successfully, its status can still change in SAP. For example, if you receive against an order in SAP, a subsequent cancel order from Ariba procurement solutions is certain to be rejected. To reduce the

occurrence of such situations, the `ProcessERPHeaderStatusPull` scheduled task, imports header status information from SAP. This task sets the `ERPAllowCancel` field, which specifies whether or not the order can be canceled.

> **Note**
>
> - Use `ProcessERPHeaderStatusPull` only if you have enabled change and cancel order exports to SAP, and you are doing a lot of receiving in SAP.
> - The `ProcessERPHeaderStatusPull` scheduled task does not eliminate all the cancel export failure errors. SAP uses many factors to determine if it is possible to cancel an order. However, the status import is based on the invoicing and receiving status. This is applicable for the Web services channel. For file channel, this is a batch data import and pulled as part of status import.

`ProcessERPHeaderStatusPull` imports the status for all orders that are in the `Ordered` state for the time period (days before the current date) you specify in the `QueryPeriod` parameter.

Running the Purchase Order Header Status Import

The `/ARBA/CR_PO_HEADER_STATUS` RFC program is used to import the status information from SAP. It downloads the `PurchaseOrderERPHeaderStatusFileImport.csv` file. The file path would be based on the logical file name defined on the selection screen. This file will be picked up when the `ProcessERPHeaderStatusPull` schedule task is run in Ariba procurement solutions.

You can also specify the schedule for the `ProcessERPHeaderStatusPull` task in the `ScheduledTask.table`.

Exporting Receipts

The files received in Ariba procurement solutions are:

- ReceiptHeaderDetails.csv
- ReceiptLineDetails.csv

To perform a receipt export event, you run the Ariba Data Transfer Tool from the SAP server. The Data Transfer Tool downloads these CSV files from Ariba procurement solutions and places them in a location that is acessed by the `/ARBA/CR_GR_CREATE` SAP program. This SAP program picks up these CSV files and transfers them into the SAP database.

How to run the receipts export event

Procedure

1. In SAP ERP, use the SAP Transaction code `SE38` to start the SAP user interface and run the `/ARBA/CR_GR_CREATE` program.

2. Specify the parent directory path and folder to which the Data Transfer Tool downloads the CSV files from Ariba Procurement Solution. The `/ARBA/CR_GR_CREATE` program also requires a logical file path as an input parameter. This logical file path must be the same as the one specified in the Data Transfer Tool and is the location where the CSV files are located.

   > **Note**
   > - You can create a new logical file name (use `ZARIBA_GRPUSH_LOG_FNAME`, which is the default value) using the `FILE` transaction. When running this transaction, you must specify a logical path and a physical file name. See Working with Logical File Names [page 160].
   > The parent directory that you specify must contain a sub-directory called `incoming`. The Data Transfer Tool loads the CSV files into the `incoming` directory.
   > - This directory name and path must match the `%downloadDir%\%filePrefix%` directory that you specified in the Data Transfer Tool `Options` file.

3. Specify the path directory separator value (\ or /).
4. To schedule the `/ARBA/CR_GR_CREATE` program to run at regular (or pre-defined) time intervals, save the program input as a `variant`, which you can later specify to be run as a job.

   You can schedule this program using the SAP `SM36` transaction.
5. When this program is executed, it returns the response records in CSV file format and places these files in the `/response` directory.

Results

- If the export event is successful, the program returns a `NumberImportxxxxxx.csv` file (where `xxxxxx` is the timestamp).
- If the export event failed due to errors, the program returns an `ErrorImportxxxxxx.csv` file (where `xxxxxx` is the timestamp).

Filtering and BAdI Methods

Customized fields must be extended in the `zxtgrheadr` and `/ARBA/GOODS_RECEIPTS_ITEM` custom structures that are provided in the program.

Custom Error Process Routines

The `customer_exit_gr_error` routine is available in the `/ARBA/CR_GR_CREATE` program. If you want to perform any other error data processing on the internal tables, you must do so before writing them on to the CSV file.

Limitations for Exporting Receipts

In a receipt, if you have both accepted quantity and rejected quantity, only accepted quantity is integrated with the SAP system. All rejected quantities are ignored.

Exporting Invoices

After an invoice has been approved, the final step is to send a payment to the supplier. When it creates an invoice reconciliation document, Ariba Procurement Solution also creates a new approvable document, called a payment request, to track the payment process.

Ariba Procurement Solution exports payment requests that use the External System payment model only. Ariba Procurement Solution does not export partial payments, even if you import a partial remittance from your SAP ERP.

Related Information

Integrating non-PO (FI) invoices [page 214]
Integrating Taxes and Charges [page 210]

Prerequisites for Exporting Payments

Ensure the following prerequisites are met before proceeding with the payment export:

1. Tax Data is populated (includes Tax Code Pull, TaxCodelookup, TaxRatelookupbuTaxCode)
2. Remittance Location Information is loaded
3. Payment Term and Method are loaded

In general, the process works as follows:

- Ariba Procurement Solution writes the reconciled invoices to the following CSV files:
  - `PaymentAccountDet.csv`
  - `EnhancedPaymentAccountDet.csv`
  - `PaymentGLAccDet.csv`
  - `PaymentHeaderExport.csv`
  - `PaymentLineItemDet.csv`
  - `PaymentTaxExport.csv`

For information about these files, see *Understanding SAP Payment Data* in the *Ariba Procurement Data Import and Administration Guide*. You configure the directory path to these files in the Ariba Data Transfer Tool.

- On the SAP server, run the Ariba Data Transfer Tool, which requestsAriba Procurement Solution to download the CSV files.

- Run the SAP ERP program /ARBA/CR_INVOICE_CREATE, which transfers the invoice data from the CSV files into the SAP ERP database. The response files are stored in the Response directory.

How to run the payments export event

Context

The input for /ARBA/CR_INVOICE_CREATE includes the directory where the CSV files should be written and the path separator character. The file location is specified in the Ariba Data Transfer Tool options file for this download. Set the options file as follows:

- Use the Ariba Data Transfer Tool Event ExportPaymentFile.
- The downloadDir option must include \incoming at the end.
- The downloadDir + filePrefix options.

Procedure

1. In SAP ERP, run the program /ARBA/CR_INVOICE_CREATE using SAP transaction code SE38 to start the SAP user interface for this program.
2. Specify the parent directory path and folder to which the Ariba Data Transfer Tool writes the invoice CSV files. ZARIBA_INVOICE_LOG_FNAME expects as input, a logical file path, which indicates where the Ariba Data Transfer Tool has downloaded the files. To input to this field you must create a logical file name (you can use ZARIBA_INVOCIE_LOG_FNAME as it is defaulted) using the transaction FILE. In this transaction, you must specify a logical path and assign a physical file name. This physical file path should be less than 50 characters in length. /ARBA/CR_INVOICE_CREATE expects this input directory to contain subdirectories called Incoming, Processed, and Response. The Ariba Data Transfer Tool loads the data into the Incoming directory.

   This directory should match the %downloadDir%\%filePrefix% directory you specified in the Ariba Data Transfer Tool options file.
3. Specify the path directory separator character (\ or /).
4. To schedule /ARBA/CR_INVOICE_CREATE to run at regular intervals, save the program input as a variant that you can specify to be run as a job. Schedule this program using SAP transaction SM36. For more information about this transaction or scheduling SAP programs, see your SAP documentation.

Ensuring that Shipping and Special Handling are Included as Charges

When exporting invoices to SAP, if shipping and special handling were included as Charges, the export was failing in SAP. This was happening for both file-based integration and Web services-based integration. To ensure that the export is successful if shipping and special handling are included as Charges, a new field CHARGE_FLAG is

introduced in Ariba procurement solutions. To ensure that invoices with shipping and special handling included as Charges are exported successfully, you must perform the following steps:

1. Publish the new field CHARGE_FLAG in Ariba procurement solution.
2. Import the latest `ARIBA_ONDEMAND_INVOICE_CI_x_of_ariba.com.tpz` file into your SAP NetWeaver system. You can download this file from connect.ariba.com. this step is applicable only for Web services-based integration.
3. Import the relevant SAP transport request into your SAP ERP system. You can download the transport request from connect.ariba.com.

Accommodating Custom Fields

The `/ARBA/CR_INVOICE_CREATE` program reads the CSV files through CSV structures and internally calls the `/ARBA/BAPI_INVOICE_CREATE` RFC. If you want to add any custom/ additional fields, you must add the fields in the CSV structures. The following are extendable structures in RFC:

- Header data: `/ARBA/INVOICE_CSV_HEADER`
- GL Account data: `/ARBA/INVOICE_CSV_LINE`
- Account data: `/ARBA/INVOICE_CSV_LINE`
- Item data: `/ARBA/INVOICE_CSV_ITEMDATA`
- Tax data: `/ARBA/INVOICE_CSV_TAX`

The following are extendable structures in RFC:

- Header data: `/ARBA/INVOICE_CREATE_HEADER`
- GL Account data: `/ARBA/INVOICE_CREATE_GLACCOUNT`
- Account data: `/ARBA/BAPI_INVOICE_CREATE`
- Item data: `/ARBA/INVOICE_CREATE_ITEM`
- Tax data: `BAPI_INCINV_CREATE_TAX`

Calling the SAP RFC

The `/ARBA/CR_INVOICE_CREATE` program internally calls the `/ARBA/BAPI_INVOICE_CREATE` RFC, process the data, and exports the invoice to SAP through the BAPI.

Checking for Duplicate Invoices

Duplicate invoices are detected when there is an existing invoice with the same `Ref_Doc_No` (supplier invoice number), vendor, and fiscal year of the posting date. You can allow duplicate invoices by setting the `/ARBA/INVOICE_ALLOW_DUPS` parameter in the `/ARBA/TVARV` table. This table is the custom table for specifying parameter values for the integration function module.

Posting Special Charges

Header level shipping and special handling charges are posted as unplanned delivery costs in SAP, if the SAP configuration is set to “Distribute among invoice line items” for unplanned delivery costs. If this value is set to “Different GL Line,” the header level charges are posted to GL accounts sent from the Ariba on-demand product.

Jurisdiction Codes

Jurisdiction code comes from the plant master and is placed in the GL account data table structure of the RFC. This is because Ariba procurement solutions do not maintain a jurisdiction code and it is not included in the CSV files. However, jurisdiction codes are required for tax calculations and tax postings in SAP.

Time-Out Settings for Invoice Exports

Users can configure time-out settings for the Invoice export task to prevent invoices from being locked in the SAP system. The RFC Connection time interval setting is maintained in seconds in the `/ARBA/TVARV` table.

You can specify the following column values in the `/ARBA/TVARV` table:

- **Variable Name** = `/ARBA/INVOICE_PUSH`
- **Selection Category** = `P`
- **INCL/EXCL** = `I`
- **Selection Value** = `<Specify the SAP RFC Time Interval>`

Scheduling

You should schedule the Ariba Data Transfer Tool frequently enough to keep up with new transactions. Use a third-party scheduler such as the one provided by your operating system. The frequency you set will vary depending on the nature of your business. You should schedule `/ARBA/CR_INVOICE_CREATE` to pick up new CSV files whenever they arrive.

Limitations for Exporting Invoices

Payments integration in this release has the following limitations:

- Ariba does not include mixed invoices in CSV files for SAP. A mixed invoice is one that has both positive and negative amounts. For example, if there is a cash discount line, that is represented as a negative amount in Ariba.
- Invoices are sent to the SAP ERP after reconciliation in Ariba procurement solutions. Hence, these are reconciled Invoices sent to ERP.

- Ariba procurement solutions send Tax Code to SAP ERP. During invoice reconciliation, if you accept any tax variances, it can fail in the SAP system based on the ERP system set up.
- Taxes shipping and handling.
- Discounts are not supported.
- When you create an invoice for a PO which has a line item split into two line items, you must retain the same accounting information combination for each line item as was specified while creating the PO.
- An invoice cannot have only zero amount line items.
- If an invoice contains a mix of both zero and non-zero amount line items, invoices are created only for the non-zero amount line items.
- The OK-to-Pay Invoice Push feature applies only to Ariba Procure-to-Pay.
- PO based and non-PO based invoices are integrated to MM module of SAP. Ariba provided ABAP programs ensure that all MM invoices create an FI document (accounting document) internally.
- There is no OOTB contract integration with SAP. Therefore, contract reference information is not sent to SAP along with non-PO invoice integration. To do this, customers need to perform customizations accordingly.
- When you create a non-PO based invoice, Ariba does not support Assets as an account assignment category.

Exporting Expense Reports

The SAP integration function module `/ARBA/CR_ER_INVOICE_CREATE` loads expense report CSV files into your SAP instance client as invoices. You can run `/ARBA/CR_ER_INVOICE_CREATE` manually or by scheduling it in SAP. The following topics explain `/ARBA/CR_ER_INVOICE_CREATE`:

- Understanding the Expense Report Export [page 175]
- Running the Expense Report Export [page 176]
- Accommodating Custom Fields [page 177]
- Calling the SAP BAPI [page 177]
- Scheduling [page 178]

> **Note**
>
> Expense reports are created as invoices in SAP. For this reason you should create employees as suppliers. Load the supplier information for the employee into Ariba on-demand applications using the `User.csv` file (the `SAPEmployeeSupplierID` field). For more information on this CSV file, see the *Ariba Travel and Expense Data Import Guide for SAP*.

Understanding the Expense Report Export

In general, the process works as follows:

- The Ariba procurement solutions applications create the invoice data objects in the following CSV files:
  - `SAPExpenseReportHeaderExport.csv`.
  - `SAPExpenseReportDistributionExport.csv`
  - `SAPExpenseReportTaxationExport.csv`

For information on these files see the *Ariba Travel and Expense Administration Guide*.

- Run the Ariba Data Transfer Tool on the SAP server to make sure all the latest data is present in the CSV files.
- Run the SAP program `/ARBA/CR_ER_INVOICE_CREATE`. This pushes the Ariba expense report data in the CSV files into the SAP database.

Running the Expense Report Export

The input for this function module includes the directory where the CSV files should be written and the path separator character. Setting that up requires the following settings in the Ariba Data Transfer Tool options file for this download:

- Use the Ariba Data Transfer Tool Event "Export Expense Reports."
- The `downloadDir` option must include `\incoming` at the end.
- The `downloadDir` + `filePrefix` options cannot exceed 75 characters.

How to run the invoice data push

Procedure

1. In SAP ERP, run the program `/ARBA/CR_ER_INVOICE_CREATE` using SAP transaction code `SE38`. This starts the SAP user interface for this program.
2. `/ARBA/CR_ER_INVOICE_CREATE` expects as input, a logical file path, which indicates where the Ariba Data Transfer Tool has downloaded the files. To input to this field, you must create a logical file name (you can use `ZARIBA_INV_SSP_LOG_FNAME` as it is defaulted) using the transaction `FILE`. In this transaction, you must specify a logical path and assign a physical file name. This physical file path should be less than 50 characters in length. `/ARBA/CR_ER_INVOICE_CREATE` expects this input directory to contain subdirectories called `Incoming`, `Processed`, and `Error`. The Ariba Data Transfer Tool loads the data into the `Incoming` directory.

   The specified parent directory must match the `%downloadDir%\%filePrefix%` directory you specified in the Ariba Data Transfer Tool options file that you are using to push expense report data to SAP.
3. Specify the path directory separator character (\ or /).
4. To schedule `/ARBA/CR_ER_INVOICE_CREATE` to run at regular intervals, save the program input as a variant that you can specify to run as a job. Schedule this program using SAP transaction `SM36`. For more information about this transaction or scheduling SAP programs, see your SAP documentation.

   > **Note**
   >
   > The `/ARBA/CR_ER_INVOICE_CREATE` program has the following includes:

   - `/ARBA/CR_ER_ERRORHANDLING`
   - `/ARBA/CR_ER_READERF01`

Accommodating Custom Fields

The main function module is /ARBA/READ_ER_FILES, which reads all the folders in the parent directory. There are three BAdI methods so that you can use to extend the CSV file read and populate any additional fields.

The main function module uses these additional function modules:

- RZL_READ_DIR – This is a standard SAP function module that reads all the files.
- /ARBA/KCD_CSV_FILE_CONVERSION – This function module is copied from the standard SAP function module KCD_CSV_FILE_TO_INTERN_CONVERT. The difference is that /ARBA/KCD_CSV_FILE_CONVERSION calls the function module FILE_OPEN and the input parameter UPL = ' ', to read data from the application server. Input to /ARBA/KCD_CSV_FILE_CONVERSION is the file name and the file separator.

/ARBA/KCD_CSV_FILE_CONVERSION is called three times to read the three CSV files. It opens the CSV files and uses the data to populate the data internal table. The main table reads the internal table and populates the internal tables HEADERDATA, GLACCOUNTDATA, and TAXDATA which are in the Ariba structures /ARBA/ER_CSV_HEADER, /ARBA/ER_CSV_LINE, and /ARBA/ER_CSV_TAX.

If you have made any changes to the downloaded CSV files and want to get additional information into internal tables, add the additional fields to the structures /ARBA/ER_CSV_HEADER, /ARBA/ER_CSV_LINE, and /ARBA/ER_CSV_TAX.

If you would like to ask Ariba to consider adding a new field to a CSV file, call Ariba Customer Support to find out if this addition is feasible.

Calling the SAP BAPI

The Ariba on-demand applications use /ARBA/ER_INVOICE_CREATE to create the expense data in SAP. Before calling this BAPI, the function module code does some messaging or computations, as described in the following sections.

Determining Document Type

The document type that SAP uses to create invoices for expense report integration is determined by the /ARBA/ER_DOC_TYPE parameter, which is set in the /ARBA/TVARV table. If there is no value there, the document type is set to ER.

Offset Entry for Company Paid expense

The expense report could contain expenses that are paid by the company and are paid by the employee. In the distribution file, if the column EMP_PAID is NO and DB_CR_IND is S, then it is a company-paid expense and the employee will not get reimbursed. Therefore, you must add an additional line item with the posting for the offset/clearing account.

To determine the offset/clearing account there is a custom table /ARBA/ER_GL_DATA. This table has the following fields:

- MANDT – client
- BUKRS – company code
- SAKNR – G/L account

There is a table maintenance generated for this table and you can populate the values in this table using the SAP transaction SM30.

Calculating the Gross Amount

The Ariba/SAP integration does not consider the cash advance for two reasons:

- Cash advances are paid to employees before travel. There would be some accounting documents created before the payment is made to the employee.
- The cash advance on the T&E expense report is a single field that can just capture the amount but no accounting information related to it. Therefore, you cannot include this as-is amount line in the invoice.

For this reason, you must compute the gross amount in the invoice header. To compute this, Ariba adds the ITEM_AMOUNT on all the lines of the expense report, and adds the TAX_AMOUNT on each line to the ITEM_AMOUNT to arrive at the GROSS_AMOUNT.

Changing INVOICE_IND

The INVOICE_IND set in the CSV file is based on the GROSS_AMOUNT, which considers the CASH_ADVANCE. Therefore, in some cases it may indicate the credit memo, but with the CASH_ADVANCE taken into account, it may have to be created as an INVOICE. This is determined by the GROSS_AMOUNT computation mentioned above. If the GROSS_AMOUNT computed is positive, then Ariba creates INVOICE. If it is negative, Ariba creates a CREDIT_MEMO.

Scheduling

You should schedule the Ariba Data Transfer Tool frequently enough to keep up with new transactions. The frequency you set will vary depending on the nature of your business. You should schedule /ARBA/CR_ER_INVOICE_CREATE to pick up new CSV files whenever they arrive.

Importing Remittance Advice

Ariba procurement solutions load remittance data from CSV files that the SAP integration program `/ARBA/CR_REMITTANCE_EXPORT` creates on your SAP instance client. This function module can import remittance advice for payments created for the following:

- Invoices
- Credit and debit memos
- Future-dated payments
- Voided payments, including voided checks and reverse payments

The following topics explain the remittance import process:

- Understanding the Remittance Data Import Event [page 179]
- Running the Remittance Data Import Event [page 180]
- Checking Output CSV Files [page 180]
- Additional Considerations for Remittance Data Import [page 181]
- Accommodating Custom Fields [page 182]

Understanding the Remittance Data Import Event

The following high-level steps describe the remittance data import process:

> **Note**
>
> To process remittances, customers must first maintain the following document type entry in the **/ARBA/TVARV** table before running the /ARBA/CR_REMITTANCE_EXPORT program:
>
> - **Variable Name**: REMITTANCE_EXPORT
> - **Field name**: BLART
> - **Selection cat.**: P
> - **Number**: 0
>
> In the **TVARV generalized for fields** section, enter the document type for remittances in the **Selection value** field.

1. Run the `/ARBA/CR_REMITTANCE_EXPORT` SAP program. This function program reads from the `/arba/rem_datetm` table to get the last date time when this program was run, picks up all the payments done after the last run, and transfers the SAP remittance data into the CSV files on the SAP server.
2. Set up the Ariba Data Transfer Tool on the SAP server to run when the remittance data download is complete.
3. The Ariba Data Transfer Tool picks up the remittance data CSV files and sends them to the Ariba procurement solutions.

How to run the remittance data import event

Context

The input for `/ARBA/CR_REMITTANCE_EXPORT` includes the directory where the CSV files should be written, the path separator character, and the character encoding to use.

Procedure

1. In SAP ERP, run the function module `/ARBA/CR_REMITTANCE_EXPORT` using SAP transaction code `SE38`. This starts the SAP user interface for this function module.
2. Specify the directory path on the SAP application server in which to create the CSV files. This directory should already exist. For example `c:\remittance\InDir`. Be sure to use the same directory you specify in the Ariba Data Transfer Tool options file that you use when you import remittance data from SAP ERP. The directory should match `%topDir%\%inDir%`.
3. Specify the directory separator character (/ or \).
4. Specify the character encoding to use in the generated CSV files. Use the encoding that corresponds to the data you are supplying from SAP ERP. Ariba supports any of the encodings listed for the Java.io API at

   http://java.sun.com/j2se/1.4.2/docs/guide/intl/encoding.doc.html
5. To schedule `/ARBA/CR_REMITTANCE_EXPORT` to run at regular intervals, save the function module input as a variant that you can specify to be run as a job. Schedule the job using SAP transaction `SM36`. For more information about this transaction or scheduling SAP function modules, see your SAP documentation.

   > **Note**
   >
   > To import remittance advice from a specified date for the initial run, use SAP transaction `SM30`. Specify the table `/arba/rem_datetm` and click **Maintain**. Enter the start date/time as `YYYYMMDDHHMMSS`. When `/ARBA/CR_REMITTANCE_EXPORT` runs, it stores the run date/time in this table and uses it for the next run.
6. When writing the remittance data CSV files is complete:
   - Schedule the Ariba Data Transfer Tool to run event `Import Remittance Data` to load the CSV files each time `/ARBA/CR_REMITTANCE_EXPORT` has written them.
   - Make sure the Ariba Data Transfer Tool input directory specification matches the directory where you created the CSV files, as noted in step 2.

Checking Output CSV Files

When `/ARBA/CR_REMITTANCE_EXPORT` has finished, you can check that the CSV files are generated as expected and they are located where the Ariba Data Transfer Tool can find them.

`/ARBA/CR_REMITTANCE_EXPORT` creates a temporary directory called `processingyyyymmddhhmmss`, where `yyyymmddhhmmss` is the time stamp indicating when the directory was created. It writes the `Remittance.csv`

and `RemittanceDetails.csv` files into this directory. The `Processing` directory is placed inside the folder you specified as input in step 2, above.

> **Note**
>
> In the Ariba Data Transfer Tool options file, leave the default value of "`processing`" as the filterPrefix value so that the Ariba Data Transfer Tool ignores this directory.

When `/ARBA/CR_REMITTANCE_EXPORT` is finished writing the files, it renames the temporary directory to `processedyyyymmddhhmmss`. This directory is where the Ariba Data Transfer Tool looks for the CSV files. The next time the Ariba Data Transfer Tool runs, it finds this directory and transfers the data.

The `/ARBA/CR_REMITTANCE_EXPORT` program creates two files, `Remittance.csv`, and `RemittanceDetails.csv`.

Additional Considerations for Remittance Data Import

SAP does not support remittance import in the following scenarios:

- The payment document contains withholding tax.
- The payment document has been reset.
- The payment document is an intercompany payment.
- The payment is for an invoice created for an expense report.
- The payment document is a down payment or a residual payment.

The following considerations pertain to remittance advice import:

- When you use the Check Payment method, remittance advice is imported only after the checks have been printed.
- If you make a payment to a special general ledger (G/L) account, remittance advice is not imported into your Ariba on-demand application. Common special G/L accounts might include:
  - Down payments
  - Bills of exchange
  - Guarantees
  - Security deposits
  - Individual value adjustments
  - Amortization
  - Interest payable
- The payment documents generated in SAP from manual payment might not include the payment method by default as this is not a required field in SAP. However, in Ariba procurement solutions, the payment method is a required field and if it is empty in `Remittance.csv`, the load fails. To avoid a load failure, make sure you enter the payment method in the payment documents generated from a manual payment.
- The payment documents generated in SAP from cancel payment might not include the payment method by default as this is not a required field in SAP. However, in Ariba procurement solutions, the payment method is a required field and if it is empty in `Remittance.csv`, the load fails. To avoid a load failure, when mapping the values in Ariba procurement solutions, ensure Ariba procurement solutions map the payment method as "C" (Check) for cancel Payments, when there is no value set in SAP.
- For manual payment, if you print the check after `/ARBA/CR_REMITTANCE_EXPORT` runs, then `/ARBA/CR_REMITTANCE_EXPORT` pulls the check number into Ariba on-demand application during the next

remittance advice run and updates the Payment Number in the Payment Transaction object. However, the payment number is not pushed to the Ariba Network supplier.

- `/ARBA/CR_REMITTANCE_EXPORT` imports down payments as credit-line items after subsequent payments are made, not at the time they are created.

Accommodating Custom Fields

The custom user BAdI methods `/ARBA/CR_REMITTANCE_EXPORT` is provided so that you can add or change fields in the transferred data. Restricting your customizations to custom user BAdI methods will help you integrate new versions of the Ariba SAP integration function modules.

Integrating Transactional Data Using the Web Services Channel

About Transaction Data [page 182]

Components of an Integration Event [page 185]

Integrating Purchase Orders [page 188]

Integrating Changed and Canceled Purchase Orders [page 189]

Integrating Receipts [page 191]

Integrating Payments [page 202]

Integrating Remittance [page 203]

Integrating Amount-Based Purchase Orders [page 206]

Integrating Real-Time Budget Check [page 206]

Integrating Taxes and Charges [page 210]

Integrating non-PO (FI) invoices [page 214]

How to customize an existing integration event [page 216]

About Transaction Data

Transaction data includes information like remittance advice, invoice, purchase orders, and receipts. Export events, when using the Web Services channel occur in real-time (triggered when the transactions are ready to be sent to the SAP ERP).

Import events such as a Remittance Import are scheduled tasks.

Typical Integration Event Process Flow

The following illustration shows a typical data integration process flow using Web Services:

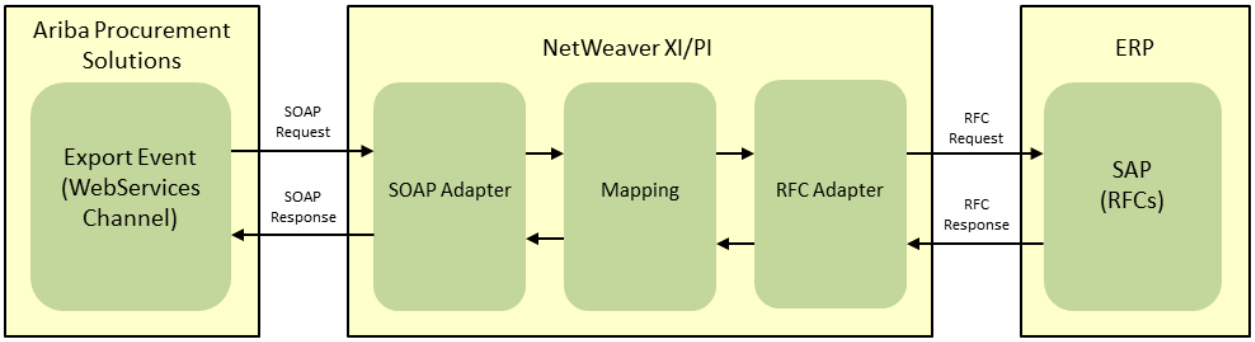


Figure 8: Typical Data Integration Process Flow Using Web Services

Understanding SOAP URLs

The SOAP URL is the endpoint on the Web Service. For outbound events (where performs the request: Request-Reply and Publish), this SOAP URL needs to be explicitly configured through Ariba Administrator.

For outbound events (where the external EAI system performs the request: Service and Subscribe), the SOAP URL is generated automatically to be present in the generated WSDL according to the following logic:

```
<IncomingHttpServerURL> / <ContextRoot> / soap / <realm name> / <event_name>
```

where:

- `IncomingHttpServerURL`, `ContextRoot`: are taken from the `AppInfo.xml` file located in `<install>/config/asmshared`
- `soap`: is the static alias for the Web Service Servlet intended to process the WS requests
- `soap_servlet_alias`: is the alias used for the WS channel servlet
- `partition`: is the name of the partition
- `event_name`: is the name of the event

Consider the following `AppInfo.xml` example, where the partition is `psap` and the topic name is `PurchaseOrderExport`:

```
<AppInfo Version="3.0">
    <Instance isCDS="true" name="Buyer">
        <Param name="ContextRoot" value="Buyer"/>
        <Param name="IncomingHttpServerURL" value="https://buyer.ariba.com:4443"/>
[...]
    </Instance>
</AppInfo>
```

The generated SOAP URL will be:

https://buyer.ariba.com:4443/Buyer/soap/psap/PurchaseOrderExport

The value of the SOAP URL for the inbound events can be configured through the Ariba Administrator.

Understanding WSDLs

WSDL is an XML format for describing network services as a set of endpoints operating on messages containing either document-oriented or procedure-oriented information. It provides a model and an XML format for describing Web services.

The abstract definition of ports and messages is separated from their concrete use or instance, allowing the reuse of these definitions. A port is defined by associating a network address with a reusable binding, and a collection of ports define a service. Messages are abstract descriptions of the data being exchanged, and port types are abstract collections of supported operations. The concrete protocol and data format specifications for a particular port type constitutes a reusable binding, where the operations and messages are then bound to a concrete network protocol and message format. In this way, WSDL describes the public interface to the web service.

WSDL is often used in combination with SOAP and XML Schema to provide web services over the Internet. A client program connecting to a web service can read the WSDL to determine what functions are available on the server. Any special data types used are embedded in the WSDL file in the form of XML Schema. The client can then use SOAP to actually call one of the functions listed in the WSDL.

A WSDL is made up of the following sections:

Section	Description
import	This element is used to associate a namespace with a document location. We do not currently use this tag.
types	This element is used to define user created data types which will be used in the document.
message	This element defines all the parts of an individual message.
portType	This is a container of supported operations by the web service. The operations in the portType are ordered and indicate whether a message is inbound or outbound.
binding	This element defines the operation to protocol mapping. (for example, http, https, MIME, etc.).
service	This element defines the operation to address mapping. So this is the actual address the request should be sent to.

Ariba provides `vsap` as the default target namespace in the WSDL. You must convert your target namespace to `vsap` namesapce, otherwise all transactions fail with an error message, for example:

```
EXCEPTION_DURING_EXECUTE
com/sap/xi/tf/_MM_WSPurchaseOrderPush_RequestMess~
com.sap.aii.mappingtool.tf7.IllegalInstanceException: Cannot create target element /
ns1:_-ARBA_-BAPI_PO_CREATE1/PARTITION.
Values missing in queue co~
Runtime exception occurred during application mapping
com/sap/xi/tf/_MM_WSPurchaseOrderPush_RequestMess~;
com.sap.aii.mappingtool.tf7.IllegalInstanceException: Cannot create target element /
ns1:_-ARBA_-BAPI_PO_CREATE1/PARTITION.
Values missing in queue co~
```

To convert your target namespace to `vsap` namespace, contact your Ariba Support Representative.

Additional References

For more information about how to configure Web Services events from the Ariba Administrator, see the *Ariba Procurement Data Import and Administration Guide*.

Components of an Integration Event

The following table lists the various components that constitute every transactional data integration event. These components are spread across both Ariba Procurement Solution and SAP ERP.

Transactional Data	Event Name	SWC Name and NameSpace	RFC/IDoc
Requisition	RequisitionRealTimeBudgetExport	ARIBA_ONDEMAND_BUDGET_MGMT CIx of ariba.com (urn:ariba.com:xi:OnDemand:PurchaseRequisition)	`/ARBA/PURREQ`
Delete Requisition	RequisitionRealTimeRevertBudgetExport	ARIBA_ONDEMAND_BUDGET_MGMT CIx of ariba.com (urn:ariba.com:xi:OnDemand:PurchaseRequisition)	`/ARBA/PURREQ_DELETE`
Purchase Order	PurchaseOrderExport	ARIBA_ONDEMAND_PURCHASEORDER, CIx of ariba.com (urn:ariba.com:xi:OnDemand:CreatePurchaseOrder)	`/ARBA/BAPI_PO_CREATE`
Changed Purchase Order	PurchaseOrderChangeExport	-do- (urn:ariba.com:xi:OnDemand:ChangePurchaseOrder)	`/ARBA/BAPI_PO_CHANGE`
Canceled Purchase Order	PurchaseOrderCancelExport	-do- (urn:ariba.com:xi:OnDemand:CancelPurchaseOrder)	`/ARBA/BAPI_PO_CANCEL`
Purchase Order Header Status	PurchaseOrdHeaderStatusImport	-do- (urn:ariba.com:xi:OnDemand:PurchaseOrderHeaderStatus)	`/ARBA/PO_HEADER_STATUS`
Receipts	ReceiptExport	ARIBA_ONDEMAND_RECEIPT, CIx of ariba.com (urn:ariba.com:xi:OnDemand:Receipt)	`/ARBA/GOODS_RECEIPTS_CREATE`
Invoice	PaymentExport	ARIBA_ONDEMAND_INVOICE, CIx of ariba.com (urn:ariba.com:xi:OnDemand:Invoice)	`/ARBA/BAPI_INVOICE_CREATE`

Transactional Data	Event Name	SWC Name and NameSpace	RFC/IDoc
Remittance (Is a scheduled task)	RemittanceImport	ARIBA_ONDEMAND_REMITTANCE, CIx of ariba.com (urn:ariba.com:xi:OnDemand:Remittance)	`/ARBA/CR_REMITTANCE_EXPORT`

The following table lists the various components that constitute every functional data integration event. These components are spread across both Ariba Procurement Solution and SAP ERP.

Functional Data	Event Name	SWC Name and NameSpace	RFC/IDoc
Budget Check	RequisitionBudgetCheckExport	ARIBA_ONDEMAND_BUDGET_MGMT CIx of ariba.com (urn:ariba.com:xi:OnDemand:BudgetCheck)	`/ARBA/ACC_PURCHASE_REQUI_CHECK`
Funds Derivation: • Requisition Derive • Invoice Derive	• RequisitionDeriveAccountingExport • InvoiceReconciliationDeriveAccountingExport	ARIBA_ONDEMAND_BUDGET_MGMT CIx of ariba.com (urn:ariba.com:xi:OnDemand:Derivation)	`/ARBA/DERIVATION`

The sample URLs in the Ariba Administrator under Integration Manager -> End Point Configuration for each data integration event is listed here:

- PurchaseRequisitionExport

http://sapnw01:50000/XISOAPAdapter/MessageServlet?channel=:BS_Procurement:CC_ReqSubmit_Sender

- PurchaseOrderExport

http://sapnw01:50000/XISOAPAdapter/MessageServlet?channel=:BS_Procurement:CC_PurchaseOrder_WSDL_Sender

- PurchaseOrderChangeExport

http://sapnw01:50000/XISOAPAdapter/MessageServlet?channel=:BS_Procurement:CC_ChangePurchaseOrder_WSDL_Sender

- PurchaseOrderCancelExport

http://sapnw01:50000/XISOAPAdapter/MessageServlet?channel=:BS_Procurement:CC_CancelPurchaseOrder_WSDL_Sender

- PurchaseOrdHeaderStatusImport

http://sapnw01:50000/XISOAPAdapter/MessageServlet?channel=:BS_Procurement:CC_PurchaseOrderHeader_WSDL_Sender

- ReceiptExport

http://sapnw01:50000/XISOAPAdapter/MessageServlet?channel=:BS_Procurement:CC_Receipts_WSDL_Sender

- PaymentExport

http://sapnw01:50000/XISOAPAdapter/MessageServlet?channel=:BS_Procurement:CC_Invoice_WSDL_Sender

- RemittanceImport

http://sapnw01:50000/XISOAPAdapter/MessageServlet?channel=:BS_Procurement:CC_RemittanceImport_WSDL_Sender

Advanced Pricing Details

While creating a requisition in Ariba procurement solutions, the user can specify advanced pricing details for a line item or multiple line items. Advanced pricing details includes:

- Quantity Based Pricing
- Unit Conversion Pricing

Quantity based pricing allows the unit price of an item to be based on a different price unit quantity than 1. Unit Conversion Pricing allows unit of measure conversion in the pricing calculation, when the unit of measure on the order differs from the pricing unit of measure.

While creating a requisition in Ariba procurement solutions, if the user has specified advanced pricing details for a line item, then in the exported `SOAP message`, the following fields are added:

- PriceBasisQuantity
- PriceBasisQuantityUOM
- ConversionFactor
- PriceBasisQuantityDesc

Advanced pricing details are also applicable for change purchase order and payment requests. Therefore, when a change PO and payment request are exported, the above mentioned fields are available in the respective SOAP message.

To ensure that the above mentioned fields related to advanced pricing details are processed in SAP NetWeaver PI and your SAP ERP system, download the relevant .TPZ files and SAP transport requests from connect.ariba.com and import them into SAP NetWeaver PI and SAP ERP system respectively.

Scheduled Task for PurchaseOrdHeaderStatusImport

The `PurchaseOrderHeaderStatusImport` integration event can also be scheduled by using the ProcessERPHeaderStatusPull scheduled task. An example of the scheduled task is as follows:

```
ProcessERPHeaderStatusPull = {
  QueryPeriod = 30;
  ScheduledTaskClassName = "ariba.purchasing.ordering.ProcessERPHeaderStatusPull";
  Schedules = { Schedule1 = { DayOfWeek = Everyday; Hour = 1;};};
};
```

This schedule tasks picks up all ERP Orders in having the “Ordered” status, and have been created in the last 30 days (QueryPeriod), and exports them to SAP through NetWeaverXI.

SAP returns values such as `ERPAllowCancel` to be `True` or `False` (that determines whether or not to allow the Cancel PO action.

Scheduled Task for RemittanceImport

The `RemittanceImport` integration event can also be scheduled using the IncrementalRemittanceImport scheduled task. An example of the scheduled task is as follows:

```
IncrementalRemittanceImport = {
  DefaultStartDate = 20080901000000;
  Event = RemittanceImport;
  LoggingName = IncrementalRemittanceImport;
  Partition = psap;
  ScheduledTaskClassName = "ariba.integration.core.IncrementalIntegrationEventTask";
  Variant = vsap;
  Schedules = { Schedule1 = { DayOfWeek = Everyday; Hour = 4;};};
};
```

> **Note**
>
> The `DefaultStartDate` parameter can be used as shown in the above example, to import the remittance documents from a particular date and time when running event for the very first time.

Subsequent runs will be incremental and the start date submitted in the event request will be the end date of the previously executed instance of the event.

Scheduled Task for ReceiptExport

The `ReceiptExport` integration event can also be scheduled by using the ProcessPendingReceipts scheduled task. An example of the scheduled task is as follows:

```
ProcessPendingReceipts = {
  ProcessPeriod = 1;
  ScheduledTaskClassName = ariba.receiving.ProcessPendingReceipts;
  Schedules = { Schedule1 = { DayOfWeek = Weekday; Hour = 0;};};
};
```

> **Note**
>
> The `ProcessPeriod` parameter value indicates the lag in the number of days before the receipts are exported to SAP when the scheduled task is executed.

If you want the scheduled task to pick up the receipts created on the current day, the `ProcessPeriod` parameter value needs to be changed to "`0`" (zero.)

Integrating Purchase Orders

An Ariba Procurement Solution purchase order is exported to SAP as soon as it is fully approved in Ariba Procurement Solution.

The following steps explain how a purchase order export integration event works:

1. Create a purchase order (PO) with multiple line items in. After the Requisition is fully approved, ERP Order Objects is created and sent to NetWeaverXI as per the WSDL.

   > **Note**
   >
   > When creating the PO, the **NeedByDate** field is not mandatory. However, when you push the PO to SAP, this field is required else the PO push fails.

2. NetWeaverXI transmits the XML messages to the RFC Adapter, which process data and sends the response back, either as a Success (Number Import) or Error (Error Import). If the ERP Order is created successfully in SAP ERP, you receive the PO number from the SAP ERP, and the order status changes from `Ordering` to `Ordered`. If there is an error in the event, the status changes to `Composing`
3. Update the Requisition Object with the ERP Order ID. The Requisition status changes to Ordered.

The following features are not provided in the export purchase order integration event:

- Exporting the PO titles to SAP ERP.
- Support for the “deliver to” or “ship to” address in an Ariba Procurement Solution PO. In many circumstances, the plant field provides the information for SAP ERP to deliver to the address field in PO.

Related Information

Integrating Real-Time Budget Check [page 206]
Integrating Taxes and Charges [page 210]

Understanding BAPI Import Limitations

The BAPI integration with Ariba procurement solutions does not provide support for the following features:

- Exporting tax code information
- Split accounting for service-line items
- Ariba procurement solutions export field mapping mechanism. If you need to add Ariba procurement solutions extrinsic fields to RFC objects, you add these fields to the RFC structures. Next, you add this field in the AML mapping, re-import the schema into XI and make appropriate changes in the mapping.

If a purchase order or a change purchase order is exported using a RFC, the carriage returns in the line item text are exported and displayed as the hash character ('#') in the line item text in the SAP purchase order.

Integrating Changed and Canceled Purchase Orders

Ariba Procurement Solution can export changed and canceled purchase orders (CPO) to SAP. For information on this feature and how to enable it, see the chapter on changing existing orders in the *Ariba Procurement Data Import and Administration Guide*.

When Ariba Procurement Solution exports a changed or canceled purchase order, it uses the RFC `/ARBA/BAPI_PO_CHANGE` or `/ARBA/BAPI_PO_CANCEL` to fill the RFC tables, and, in turn, calls `BAPI_PO_CHANGE` to export the purchase order to SAP.

The following are important notes on exporting changed and canceled purchase orders to SAP ERP:

- If you enable the change/cancel purchase order feature, users must always change and cancel orders through Ariba Procurement Solution and not change or cancel them through SAP ERP. Therefore, apply the appropriate authorization concept in SAP ERP to prevent users from changing purchase orders directly in SAP ERP.
- To enable the change/cancel purchase order feature, you install the change/cancel order transport. The transport number is listed in the transport readme.txt file. For more information see the *Installation Guide for Ariba Procurement Solution Integrated with SAP ERP*.
- A limitation in the standard SAP BAPI creates the following situation: If the Account Assignment category is modified in Ariba Procurement Solution, the Account Assignment category is changed in SAP ERP. Furthermore, the GLAccount is changed to a default GLAccount after it has been pushed to SAP ERP. To resolve this issue, modify the GLAccount in SAP ERP using the **Account Assignment** tab in the Item Detail section.
- On SAP ERP service orders, you cannot change the line items, but you can delete them or cancel the entire order.
- Plant data is not editable if the Purchase Order Line Item is partially or fully received or partially or fully invoiced in Ariba Procurement Solution or SAP ERP.

Related Information

Integrating Real-Time Budget Check [page 206]
Integrating Taxes and Charges [page 210]

Adjusting Net Price

When exporting amounts, the Ariba procurement solutions RFC adjusts the net price to the number of decimals specified for that currency in the SAP TCURX table.

If the currency is listed and specifies a number greater than zero in the Decimals column, the RFC adjusts the net price to the number of decimals and price unit accordingly.

- If the currency is not listed in the table, the RFC adjusts the net price to two decimal places, which is the default specified in the RFC.
- If the currency is listed in the table, but specifies zero in the Decimals column, the lengths of the net price and price unit are adjusted accordingly.
- Price units are adjusted to a maximum of 10,000 units, at which point, an error message is sent.
- In a changed purchase order, you cannot export a zero value amount in the Net Price for line items.
  For example, if the number of decimals allowed in SAP is two for USD, and if Ariba procurement solutions sends a net price (price unit) of 100.023, the wrapper RFC adjusts the net price to 1000.23 and the price unit to 10. If the price unit exceeds 10000, an error message is sent to Ariba procurement solutions if PO Push using RFC is in use.

Importing Header Status of Purchase Orders

When changed orders are in a Received, Receiving, Invoiced, or Invoicing state, Ariba procurement solutions cannot cancel them. Similarly, when purchase orders have been received or invoiced in SAP, the cancel export to SAP fails.

If an order reaches SAP successfully, its status can still change in SAP. For example, if you receive against an order in SAP, a subsequent cancel order from Ariba procurement solutions is certain to be rejected. To reduce the occurrence of such situations, the scheduled task, ProcessERPHeaderStatusPull, imports header status information from SAP. This task sets a field in Ariba procurement solutions, `ERPAllowCancel`, which specifies whether the order can be canceled.

> **Note**
>
> Use ProcessERPHeaderStatusPull only if you have enabled change and cancel order exports to SAP, and you are doing a lot of receiving in SAP.

The scheduled task ProcessERPHeaderStatusPull does not eliminate all the cancel export failure errors. SAP uses many factors to determine if it is possible to cancel an order. However, the status import is based on invoicing and receiving status.

ProcessERPHeaderStatusPull imports the status for all orders in the Ordered state for the time period (days before the current date) you specify in the `QueryPeriod` parameter.

You can also specify the schedule for the ProcessERPHeaderStatusPull task in `ScheduledTask.table`.

The RFC `/ARBA/PO_HEADER_STATUS` is used to import the status information from SAP.

Integrating Receipts

A receipt is an acknowledgment of the goods that have arrived. The receiving process starts when an order has been sent to a supplier and the supplier ships goods in exchange. When the shipment arrives, the person who receives those items, submits a receipt to acknowledge that the items have indeed arrived. The Ariba provided integration code integrates receipts as goods receipts with Movement Type as 101.

You may also need to create a negative receipt in Ariba procurement solutions if you want to reverse some received quantity as a result of incorrect shipment or manual errors. The ariba provided integration code integrates negative receipts as goods receipts with Movement Type as 102.

The following steps explain how a receipt export integration event works:

1. When an item is received in Ariba procurement solutions, a receipt object instance is approved.
2. When the scheduled receipt export scheduled task runs, Ariba procurement solutions sends the receipt object to the NetWeaver XI/PI process.

   > **Note**
   >
   > The scheduled task ProcessRendingReceipts posts receipts from Ariba procurement solutions to SAP. However, you cannot post a receipt successfully in SAP if the period has been closed in SAP.

The following are ways to address this problem:
ProcessPendingReceipts scheduled task's delay period must be set to ensure the receipt is approved in Ariba procurement solutions and, in turn, is posted in SAP on the same day.
Postpone the closing period in SAP for one or two days so that when you post the receipt in SAP, the period is still open.
For more information on scheduled tasks, see the *Ariba Procurement Data Import and Administration Guide*.

3. The NetWeaver XI mapping defines the transformation of the data into the format required by the RFC. Then NetWeaver XI sends the data to the Ariba procurement solutions receipt export RFCs through the RFC Adapter for SAP ERP.
4. Ariba procurement solutions `/ARBA/GOODS_RECEIPTS_CREATE` RFC processes the data and inserts it in receipt creation screens in SAP.
5. The RFC returns a receipt line number and any error information to Ariba procurement solutions.

Related Information

Integrating Receipts - Cloud Integration Release 6.0 Onwards [page 192]
Integrating Receipts - Cloud Integration Release 5.0 and Earlier [page 196]

Integrating Receipts - Cloud Integration Release 6.0 Onwards

Starting from Cloud Integration release 6.0, receipts are created using a standard SAP delivered BAPI, **BAPI_GOODSMVT_CREATE** which provides following enhanced receipt functionalities:

- Fields customization using the BAPI parameter options
- Multiple account assignments for purchase orders

In addition, this feature reduces implementation efforts and avoids disruption in case of future SAP upgrades.

The following sections apply if you are using Cloud Integration release 6.0:

Functional Changes [page 193]

Mandatory Fields for Creating Receipts [page 195]

Migrating Customization for Receipts [page 195]

About Filtering and BAdI Methods [page 196]

Extension Structures for Export Tasks [page 196]

Related Information

Time-out Settings for Receipt Exports [page 201]
Exporting Amount-Based Receipts [page 201]
Limitations for Integrating Receipts [page 202]

Additional References

For more information pertaining to BAPI, see **BAPI_GOODSMVT_CREATE** documentation [external document].

Functional Changes

Buyers using the Ariba Procurement Solution integrated with SAP ERP can create receipts using a standard SAP delivered BAPI, `BAPI_GOODSMVT_CREATE` instead of using the batch input technique.

The following table describes the functional changes implemented to support `BAPI_GOODSMVT_CREATE`:

Functional Area	SAP Object Name	Change Description
Goods Receipt Program	**/ARBA/CR_GR_CREATE**	The calls to RFC function module **/ARBA/GOODS_RECEIPTS_CREATE** is updated with a new signature to support the BAPI. The error handling logic has been updated to accommodate the field changes in **/ARBA/GOODS_RECEIPTS_ERROR** structure.

Remote Function Module	**/ARBA/GOODS_RECEIPTS_CREATE**	To replace the batch input logic with BAPI:
		• **Deleted**
		  ○ The BDC codes from the RFC function module **/ARBA/GOODS_RECEIPTS_CREATE**.
		  ○ Calls to BAdI method **GOODS_RECEIPTS_BDCDATA**.
		• **Modified**
		  ○ **/ARBA/GOODS_RECEIPTS_ERROR** structure to accommodate the BAPI return errors and display the same in the new report.
		  ○ Call transaction to `MB01` replaced with **BAPI_GOODSMVT_CREATE** in the function module **/ARBA/GOODS_RECEIPTS_CREATE**.

Functional Area	SAP Object Name	Change Description
Business Add-ins	**/ARBA/GR_CREATE**	• Deleted the BAdI method **GOODS_RECEIPTS_BDCDATA** from **/ARBA/GR_CREATE**. • Created a new method in existing **BADI /ARBA/GR_CREATE** as **PUBLISH_GR_CREATE** with an option for customer enhancements. • Exposed all the importing and tables parameters of **BAPI_GOODSMVT_CREATE** excluding **BAPIRET2** structure for enhancement. The new method **PUBLISH_GR_CREATE** consists of parameters that can be customized and are passed to *BAPI_GOODSMVT_CREATE*.
Structure	**/ARBA/GOODS_RECEIPTS_ERROR**	In the **/ARBA/GOODS_RECEIPTS_ERROR** structure: • The BDC screen fields have been replaced with BAPI return fields to display errors in the new report. • The earlier embedded structure **/ARBA/ERROR_MESSAGE_CORE** has been deleted. The fields used for the present interface are directly included in the **/ARBA/GOODS_RECEIPTS_ERROR** structure. **Note** For **MSGID**, the field length is now increased from 2 characters to 20 characters.

Data Dictionary Objects

The following table lists the structures created and provided as modifiable parameters in the method **BADI /ARBA/GR_CREATE~PUBLISH_GR_CREATE**:

Note

To enhance customization options, the structures and table types are created in **/ARBA** namespace.

Structure	Parameter
/ARBA/GOODS_RECEIPTS_HEADER	Structure embeds **BAPI2017_GM_HEAD_01** (Material Document Header Data from: **BAPI_GOODSMVT_CREATE**)

Structure	Parameter
/ARBA/GOODS_RECEIPTS_ITEM	Structure embeds **BAPI2017_GM_ITEM_CREATE** (BAPI Communication Structure: Create Material Document Item)

Mandatory Fields for Creating Receipts

To create receipts in SAP ERP, the following mandatory fields that are required to be populated in the `BAPI_GOODSMVT_CREATE` are available and mapped, in the Ariba Procurement Solution integrated with SAP:

- `GOODSMVT_HEADER`
  - `Posting Date`
  - `Document Date`
- `GOODSMVT_CODE - 01` (for PO)
- `GOODSMVT_ITEM`
  - `Cost Center`
  - `Movement Type`
  - `Quantity`
  - `Unit of Measurement`
  - `Plant`
  - `PO Number`
  - `PO Item`
  - `Movement Indicator`

The RFC function module `/ARBA/GOODS_RECEIPTS_CREATE` signature has been enhanced with the BAPI parameter options, `Import` and `Tables`, and is accessible for customization.

Migrating Customization for Receipts

Buyers upgrading from an earlier version to Cloud Integration release 6.0 or higher are required to manually migrate receipts customization, if any, from the previous versions which used batch input technique.

After the upgrade, buyers can update the customization in the following **BADI /ARBA/GR_CREATE** methods:

- **GOODS_RECEIPTS_CREATE**
- **GOODS_RECEIPTS_ERROR**
- **PUBLISH_GR_CREATE**

About Filtering and BAdI Methods

The goods receipt RFCs offer several BAdI methods that allow you to filter the data they export. The BAdI methods work the same for exports as they do for imports—the only difference is the direction in which the data is moving.

For example, the goods receipt export RFCs offer several BAdI methods, which execute in the following order:

- BAdI method before any data processing begins:
  `GOODS_RECEIPTS_CREATE`
- BAdI method consisting of parameters that can be customized:
  `PUBLISH_GR_CREATE`
- BAdI methods at the end for testing error conditions:
  `GOODS_RECEIPTS_ERRORS`

Use these BAdI methods to manipulate goods receipt pushes in ways that field mappings do not offer.

Extension Structures for Export Tasks

Ariba procurement solutions export RFCs provide extension structures that work the same as the extension structures for imports. The extension structures allow you to add fields or columns to the data that Ariba procurement solutions sends to SAP.

For example, goods receipt export RFC, `/ARBA/GOODS_RECEIPTS_CREATE`, provides the following extension structures:

- `/ARBA/GOODS_RECEIPTS_ITEM` - for line item receiving information
- `/ARBA/GOODS_RECEIPTS_HEADER` - for header-level receiving information
- `/ARBA/GOODS_RECEIPTS_ERROR` - for error messages the RFC sends to Ariba procurement solutions (not part of the export)

Make sure that the corresponding worksheets set values for any fields you add to the extension structures.

Integrating Receipts - Cloud Integration Release 5.0 and Earlier

In Cloud Integration release 5.0 and earlier versions, receipts were created using batch input technique. This method populated values to `BDCDATA` table and processed updates screen by screen. The following sections apply if you are using Cloud Integration release 5.0 and earlier:

About Filtering and BAdI Methods [page 197]

Extension Structures for Export Tasks [page 197]

Understanding Screen Field Mappings [page 198]

About Mapping Fields for Receipts [page 198]

How to find the screen field to map [page 199]

Finding the Source Field [page 199]

How to edit the extension table [page 200]

Changing and Removing Fields [page 200]

Related Information

Time-out Settings for Receipt Exports [page 201]
Exporting Amount-Based Receipts [page 201]
Limitations for Integrating Receipts [page 202]

About Filtering and BAdI Methods

The goods receipt RFCs offer several BAdI methods that allow you to filter the data they export. You use these BAdI methods to manipulate data at different stages:

- From when the RFCs first import the data to the final batch data control (BDC) posting for receipt export
- To the completion of the RFC

The BAdI methods work the same for exports as they do for imports—the only difference is the direction in which the data is moving.

For example, the goods receipt export RFCs offer several BAdI methods, which execute in the following order:

- BAdI method before any data processing begins:
  `GOODS_RECEIPTS_CREATE`
- BAdI methods before the batch data control push:
  `GOODS_RECEIPTS_BDCDATA`
- BAdI methods at the end for testing error conditions:
  `GOODS_RECEIPTS_ERRORS`

Use these BAdI methods to manipulate goods receipt pushes in ways that field mappings do not offer.

Extension Structures for Export Tasks

Ariba procurement solutions export RFCs provide extension structures that work the same as the extension structures for imports. The extension structures allow you to add fields or columns to the data that Ariba procurement solutions sends to SAP.

For example, goods receipt export RFC, `/ARBA/GOODS_RECEIPTS_CREATE`, provides the following extension structures:

- `/ARBA/GOODS_RECEIPTS_ITEM` - for line item receiving information
- `/ARBA/GOODS_RECEIPTS_HEADER` - for header-level receiving information
- `/ARBA/GOODS_RECEIPTS_BDCDATA` - can be used when you want to include a customized field in receipts
- `/ARBA/GOODS_RECEIPTS_ERROR` - for error messages the RFC sends to Ariba procurement solutions (not part of the export)

Make sure that the corresponding worksheets set values for any fields you add to the extension structures.

Understanding Screen Field Mappings

This section discusses screen field mappings that are applicable for pushes using the CALL transaction method. If you add new fields to push extension structures, you also define and map these fields in the screen field mappings.

Ariba procurement solutions exports orders into SAP by populating fields within the SAP purchase order entry screens, and Ariba procurement solutions exports goods receipts to SAP by populating the fields within SAP goods receipts entry screens. The Ariba procurement solutions RFC determines which fields to export and what information the fields contain through special tables for field mappings.

This section describes:

- Field mappings
- Data export mapping tables
- Sources of data for export mapping tables

Field Mappings

The Ariba procurement solutions packages allow you to modify the following kinds of SAP screen field information. You change the way to set or remove values for fields as screens by notifying the Ariba procurement solutions RFCs about:

- Specific fields in a screen where it should insert or set values.
- Specific fields in a screen where it should not insert or set values. It is possible to change or remove the fields that Ariba procurement solutions RFCs set for purchase orders or goods receipts as part of your default Ariba procurement solutions RFC configuration.
- Where to find the information to place within a given field, for example, from a purchase order or goods receipt internal table or elsewhere in your SAP system.

About Mapping Fields for Receipts

This section explains how to map fields to the GR Creation transaction screens available within your SAP system. This section does not explain how to send new fields to Ariba procurement solutions RFCs. It describes only how to map the fields to screens.

The process of mapping fields for goods receipt export consists of three steps:

1. Find the screen field to map (also called the destination field).
2. Find the source field.
3. Edit the corresponding extension table.
   These steps are related to each other and can become complex. You might find it easier to complete each of these steps in a separate SAP user interface session, and to keep all three SAP user interface sessions open, for cross reference, until you have finished your field mappings.

How to find the screen field to map

Context

The first step in mapping new fields is to determine the destination of the field you want to map in either of the goods receipt screens.

Procedure

1. View a goods receipt.
2. To find the field you need, either display an existing document or create a new one. To do so, use one of the following transaction codes:
   - `MB01`—allows you to create new goods receipts
   - `MB03`—displays existing goods receipts

   If you choose to create a new document, be prepared to enter any necessary information, and remember not to submit the document when you finish.
3. Find the field.
4. If you chose to create a new goods receipt, navigate through the SAP ERP screens until you find the field you want to map, entering information, as necessary.
5. If you chose to display an existing goods receipt, enter the material document number or use the selection box to locate a document on your system to display. Then, navigate through the SAP ERP screens until you find the field you want to map.
6. Find the field information.
7. Select the field you want to map, and press the F1 key. In the help screen, click **Technical Info**.

   The screen that appears provides most of the information you need to enter in the extension table about the destination field, including:
   - Program name
   - Screen number
   - Table name
   - Field name
8. Write down this information, or keep your SAP ERP user interface open and use another session to find the source field and edit the extension table.

Finding the Source Field

You need to know two things about the source of a field mapping:

- The table from which the data comes
- The field name

How to edit the extension table

Context

This topic describes how to edit the extension table, mapping fields that exist within your SAP ERP, including those within Ariba Procurement Solution RFC internal tables. Make changes to the extension table by adding new rows, not by adding new columns.

Procedure

1. Run transaction `SE11`.
2. Access the initial screen of the ABAP Dictionary, and enter the following data export extension table within the Database table field:
   - `ZARGRFMAPX`—to map fields for Ariba Procurement Solution goods receipts
3. Click **Display**.
4. In the **Display Table** window, choose **Utilities** > **Table Contents** > **Create Entries**.
5. Press F5, or click **New Entries**.
6. Enter the following information in the **New Entries** window:
   - **Ariba Variant**—the name of the Ariba Procurement Solution SAP variant where the purchase order or goods receipt originates.
   - **Ariba Partition**—the name of the Ariba Procurement Solution SAP site where the purchase order or goods receipt originates.
   - **Program name**—the program name of the destination screen field.
   - **Screen number**—the number of the destination screen.
   - **Table name**—the destination table of the screen field.
   - **Field name**—the destination field.
   - **Import parameter**—the source import parameter or other table.
   - **Field name**—the source field from the import parameter or other table.
   - **Short Description**—a short description of the mapping for documentation purposes.
   - **Indicator: delete entry**—the field for removing field mappings from your default Ariba Procurement Solution RFC configuration. Leave this field blank if you are creating a new field mapping.
7. Choose **Table View** > **Change** > **Display**, and then choose **Table** > **Activate** to activate your changes.

Changing and Removing Fields

The purchase order and goods receipt extension mapping tables allow you to change or delete the default field mappings that Ariba procurement solutions RFCs use.

To change a mapping of a field that Ariba procurement solutions RFCs map, enter a mapping for the field you need to change within the extension table, together with the relevant source information.

To remove a mapping of a field that Ariba procurement solutions RFCs already maps, enter a mapping for the field you want to change within the extension table, but place an “X” in the Deletion Flag field.

Additional Tables

You only add extrinsic fields to the header and line item tables for purchase orders or goods receipts. The extension table mechanism does not allow you to create new tables and add fields to them. If you need the Ariba procurement solutions export RFCs to use additional tables, write the code to do so within the BAdI methods.

Additional Screens

The Ariba procurement solutions export RFCs and mapping files navigate through SAP goods receipt screens in a predefined order, based on the configuration of SAP screens in an IDES (International Demo Education System) SAP instance. If you changed the order or content of the goods receipts screens on your SAP system, you might be able to use the BAdI methods to implement the changes you need to Ariba procurement solutions RFCs. You cannot use the mapping mechanism to map to fields in screens not included in the RFCs navigation sequence.

For example, you can use the BAdI methods that execute before the BDC export to insert rows as appropriate within the BDC table. See the Ariba procurement solutions export RFC ABAP code for more information.

Time-out Settings for Receipt Exports

The RFC Connection Time Interval is maintained in the `/ARBA/TVARV` table as an entry in seconds. This time interval must be the SAP RFC connection time interval.

The column values for the `/ARBA/TVARV` table are;

- `Varible Name = /ARBA/GOODS_RECEIPTS_CREATE`
- `Selection Category = P`
- `INCL/EXCL = I`
- `Selection Value = <RFC Time Interval >`

Exporting Amount-Based Receipts

The Ariba procurement solutions allows you to receive based on quantity or amount. For more information, see the *Ariba Procurement User Guide*.

For amount-based receipts, the Ariba integration code maps the amount to the quantity in SAP, and sets the price to 1. For example, if the amount of the receipt in the Ariba procurement solutions is $95, it is exported to SAP as an receipt with a quantity of 95 and with a price of $1.

Limitations for Integrating Receipts

In a receipt, if you have both accepted quantity and rejected quantity, only accepted quantity is integrated with the SAP system. All rejected quantities are ignored.

Integrating Payments

Related Information

Integrating non-PO (FI) invoices [page 214]

About Payment Requests

After an invoice has been approved, the final step is to send a payment to the supplier. When it creates an invoice reconciliation document, Ariba procurement solutions also creates a new approvable document, called a payment request, to track the payment process.

Most payment requests represent amounts due to a supplier, such as for an unpaid invoice. Ariba procurement solutions also provides support for payment requests associated with credit memos. A credit memo is an invoice that represents a refund owed to your company by the supplier. For example, if your company purchased equipment that was later returned, the supplier might first issue an invoice and then (after the return) a credit memo, which represents the amount due to be refunded to you. Ariba procurement solutions creates credit payment requests to represent credit memos.

Ariba procurement solutions exports payment requests that use the External System payment model only. Ariba procurement solutions does not export partial payments, even if you import a partial remittance from your SAP system.

When exporting payments, discounts are supported both at header level and line level.

> **Note**
>
> - PO based and non-PO based invoices are integrated to MM module of SAP. Ariba provided ABAP programs ensure that all MM invoices create an FI document (accounting document) internally.
> - There is no OOTB contract integration with SAP. Therefore, contract reference information is not sent to SAP along with non-PO invoice integration. To do this, customers need to perform customizations accordingly.

Prerequisites for Integrating Payments

Ensure the following prerequisites are met before proceeding with the payment export:

1. Tax Data is populated (includes Tax Code Pull, TaxCodelookup, TaxRatelookupbuTaxCode)
2. Remittance Location Information is loaded
3. Payment Term and Method are loaded

Integration Events for Exporting Payment Requests

The following table describes the integration event that exports payment requests.

Integration Event	Integration Channel	Integration Event
PaymentExport	Ariba Web Services Channel	Exports payment request data to SAP. The display name for this integration event in Ariba Administrator is "Export Payment Requests."

You can run this integration event by using either Ariba Administrator or the Ariba Data Transfer Tool. For information on using the Ariba Data Transfer Tool, see the *Ariba On-Demand Integration Toolkit Guide*.

Limitations for Integrating Payments

Payments integration in this release has the following limitations:

- Invoices are sent to the SAP ERP after reconciliation in Ariba procurement solutions. Hence, these are reconciled Invoices sent to ERP.
- Ariba procurement solutions send Tax Code to SAP ERP. During invoice reconciliation, if you accept any tax variances, it can fail in the SAP system based on the ERP system set up.
- Taxes shipping and handling.
- Invoices with zero value amount for line items.
- Invoices with line items containing the net price and zero value amount. In such a case, Ariba procurement solution create an invoice only for the line items have the Net Price.

Integrating Remittance

Importing Remittance Advice

Remittance advice is an electronic or paper document that identifies and provides details about the open invoices that are in the process of being paid. Remittance details include the payment methods, bank information, and a list of paid invoices with discount and paid amounts.

Remittance import is available through the Ariba Settlement module. You can import remittance advice for payments created for the following, within a specified time period:

- Invoices
- Credit and debit memos

Remittance import is also available for:

- Future-dated payments
- Voided payments, including void checks and reverse payments

> **Note**
>
> To process remittances, customers must maintain the following document type entry in the **/ARBA/TVARV** table before running the /ARBA/CR_REMITTANCE_EXPORT program:
>
> - **Variable Name**: REMITTANCE_EXPORT
> - **Field name**: BLART
> - **Selection cat.**: P
> - **Number**: 0
>
> In the **TVARV generalized for fields** section, enter the document type for remittances in the **Selection value** field.

Limitations for Integrating Remittance

SAP does not support remittance imports in the following scenarios:

- Payment document contains withholding tax.
- Residual payments are involved.
- Payment document has been reset.
- Payment document is an intercompany payment.
- Payment document is a down payment.

Process Flow for Integrating Remittance

1. Run or schedule the IncrementalRemittanceImport schedule task from Ariba procurement solutions.
   This incremental task uses the `defaultStartDate` specified in the `Scheduledtask.table` as input for the first time. The date and time sent by SAP is used as input for all subsequent imports.

   > **Note**
   >
   > With the date and time sent from Ariba procurement solutions, SAP returns all payments completed in the SAP system (including Full and partial payments).

2. Each payment document in SAP is mapped to create a payment transaction in Ariba procurement solutions, or, in the case of a void document, is mapped to update a payment transaction in Ariba procurement solutions.

In SAP, it is possible to cancel a payment document for a specified payment, or to re-issue a check for a payment document without cancelling the payment document.

- If a payment document is cancelled in SAP, the corresponding payment transaction imported into Ariba procurement solutions is voided.
- If a check is re-issued in SAP without cancelling the payment document, the entire payment transaction in Ariba procurement solutions is voided, and a new payment transaction with a new check number is created.

Remittance Advice Import Considerations

SAP does not support remittance import in the following scenarios:

- The payment document contains withholding tax.
- The payment document has been reset.
- The payment document is an intercompany payment.
- The payment is for an invoice created for an expense report.
- The payment document is a down payment or a residual payment.
  The following considerations pertain to remittance advice import:
- When you use the Check Payment method, remittance advice is imported only after the checks have been printed.
- If you make a payment to a special general ledger (G/L) account, remittance advice is not imported into Ariba procurement solutions. Common special GL accounts might include:
  - Down payments
  - Bills of exchange
  - Guarantees
  - Security deposits
  - Individual value adjustments
  - Amortization
  - Interest payable
- The payment documents generated in SAP from manual payment might not include the payment method by default as this is not a required field in SAP. However, in Ariba procurement solutions, the payment method is a required field and if it is empty in `<RemittanceEventName>.response`, the load fails.
- The payment documents generated in SAP from cancel payment might not include the payment method by default as this is not a required field in SAP. However, in Ariba procurement solutions, the payment method is a required field and if it is empty in `<RemittanceEventName>.response`, the load fails. To avoid a load failure, when mapping the values in Ariba procurement solutions map the payment method as “C” (Check) for cancel Payments, when there is no value set in SAP.
- For manual payment, if you print the check after `/ARBA/CR_REMITTANCE_EXPORT` runs, then `/ARBA/CR_REMITTANCE_EXPORT` imports the check number into Ariba procurement solutions during the next remittance advice run and updates the Payment Number in the Payment Transaction object. However, it is not exported to the supplier on the Ariba Network.
  `/ARBA/CR_REMITTANCE_EXPORT` imports down payments as credit-line items after subsequent payments are made. Down payments are not imported at the time of creation.

For additional information on ERP considerations when importing remittance advice, see the *Ariba Settlement Guide*.

Integrating Amount-Based Purchase Orders

Ariba procurement solutions allows you to export amount-based purchase orders to SAP. For amount-based purchase orders, Ariba procurement solutions map the amount to the quantity in SAP, and sets the unit price to 1. For example, if the amount of the purchase order in Ariba procurement solutions is $95, it is exported to SAP as a receipt with a quantity of 95 and with a price of $1.

> **Note**
>
> Ariba procurement solutions does not support exporting zero value amount for line items in amount-based purchase orders.

Integrating Real-Time Budget Check

This feature is supported on Ariba Procurement Solution integrated with SAP ERP versions starting with SAP ERP 6.0 up to SAP ERP 6.0 EHP 7.

Buyers using SAP ERP must complete the configuration tasks required for integration with the Ariba Procurement Solution to enable budget checks. The budget check functionality is available for WBS elements, Internal Orders, Funds Management, and Grants Management in SAP ERP.

In addition, using the `ARBA/MASTER_DATA_EXPORT` program, buyers can extract the Funds Management master data from SAP ERP to integrate Funds Management accounting with the Ariba Procurement Solution. Using the Full Load option, you can extract all the fields of the Funds Management master data, excepting Earmarked Funds. You can extract Earmarked Funds using the incremental load only. Funds Management derivation is supported on the following transactions:

- Requisitions (Internal Orders, WBS, Funds Management, and Grants Management)
- Change Requisitions (Internal Orders, WBS, Funds Management, and Grants Management)
- Purchase Orders
- Change Purchase Orders
- Invoices

To enable real-time budget check, you must configure the integration scenario for the following:

1. Budget check
2. Requisition

For more information about configuring the integration scenario, see About Configuring the Integration Scenario [page 27].

To configure enhancements for budgets, see How to configure enhancements for budgets [page 208].

Prerequisites

- Before creating requisitions, if not already applied, apply the following SAP Notes in your SAP ERP:
  - 1279915: Purchase requisition BAPI: Release date is not transferred.

- 970686: Item category change deletes source of supply.
- 962638: Valuation price is not output.
- 1510700: BAPI_PR_CHANGE: account assignment failure.

- Set the following variables in the `/ARBA/TVARV` table in your SAP ERP to support real-time budget checks on requisitions:
  - `/ARBA/BAPI_PR_CRT_ALLOW_DUPS`
  - `/ARBA/PURREQ_DOC_TYP`
  - `/ARBA/HELD_PR_NO`

  For more information about setting variable in the `/ARBA/TVARV`, see How to edit /ARBA/TVARV parameters [page 43].

Limitations

- The Ariba Procurement Solution integrated with SAP ERP does not support both web services and file channel to integrate all transactional documents containing the budget information. Ariba recommends that you use only web services to integrate corresponding transactional documents associated with a requisition containing the budget information.
- When users edit a requisition in the Ariba Procurement Solution and change a multiple split-accounting to a single account assignment, the **Distribution** flag indicator for the requisition cannot be reset to zero on SAP ERP.
  The Ariba Procurement Solution integrated with SAP ERP resets the **Distribution** flag indicator to 1 (Distribution by Quantity) and sets the **Partial Invoice** indicator to 2.
  Ariba recommends that you update the requisition only on the Ariba Procurement Solution. However, if you edit the requisition in SAP ERP and change the multiple split accounting to a single account assignment, the following error appears: `If only one account assignment item, choose "Single Account Assignment.`
- The Ariba Procurement Solution integrated with SAP ERP does not support non-PO based invoices with earmarked fund as the signature of the BAPI `BAPI_INCOMINGINVOICE_CREATE` does not have the following fields for the earmarked fund:
  - `Document Number for Earmarked Funds`
  - `Earmarked Funds Document Item`

  As a result, for non-PO based invoices, the amount is consumed from the overall budget instead of the earmarked fund.

How to configure enhancements for budgets

Context

To configure the implicit enhancement for budgets, perform the following steps:

Procedure

1. In the SAP ERP main screen, navigate to **SAP Menu** > **Tools** > **ABAP Workbench** > **Development** > **ABAP Editor**.

   The **ABAP Editor: Initial Screen** screen appears.
2. Open `include LACC4F10` in the display mode.
3. Click **Menu** > **Program** > **Enhance**.
4. Click **Menu** > **Edit** > **Enhancement Option** > **Show Implicit Enhancement options**.
5. To add the enhancement, click on the line containing quotes (' ') after the code as shown:

   Source Code

   ```
   FORM check_awtyp
     USING r_awtyp     LIKE acchd-awtyp
           r_parameter LIKE accbapifd1-parameter
           r_tabix     LIKE accbapifd1-tabix.
   ''''''
   ```

15. Activate the program.

Integrating Funds Management

When Funds Management accounting functionality is enabled, Funds Management master data from the SAP ERP system is loaded in the Ariba Procurement Solution. This functionality allows Ariba Procurement Solution to derive accounting values from the SAP ERP for Funds Management account assignment fields on requisitions and invoice reconciliation documents based on other accounting information that is included in such documents.

Fields Available for Funds Management Integration

The following screens in SAP ERP include the **Enable Funds Management** check box under **Funds Management Data**:

- **Export All Master Data Required For On-DemandApplication**
- **Pull All The Master Data In Diff Lang Required For Ariba Application**

Selecting the **Enable Funds Management** check box displays the following check boxes:

- **Fund**
- **Funds Center**
- **FM Area**
- **Earmarked Fund**
- **Commitment Item**
- **Grant**
- **Functional Area**
- **Budget Period**

Integrating Funds Management Master Data

To integrate Funds Management master data with the Ariba Procurement Solution, see

- Integrating Master Data Using the User Interface [page 128]
- About Importing Data in Multiple Languages [page 135]

To configure funds derivation integration scenario, see About Configuring the Integration Scenario [page 27].

Maintaining Filtering for Funds Management Extract

To restrict the data that an Ariba Procurement Solution RFC imports, make a corresponding entry in the `/ARBA/TVARV` table by creating a variable **Variable Name**.

> **Note**
>
> Prefilter name is the same as the class name for Funds Management extract but without the `CL_` prefix. For example:
>
> - Class name: `/ARBA/CL_FUND_EXPORT`
> - Prefilter name: `/ARBA/FUND_EXPORT`

For more information about filtering data, see Static Filtering [page 119].

To customize the Funds Management extract from SAP ERP to Ariba Procurement Solution, see Customizing Funds Management Extracts [page 136].

Related Information

Prerequisites [page 206]
Limitations [page 207]

Integrating Taxes and Charges

This feature is supported on Ariba Procurement Solution integrated with SAP ERP versions starting with SAP ERP 6.0 up to SAP ERP 6.0 EHP 7.

The following transactions have been enhanced to support this feature:

Table 9: Supported Transactions

Using Web Services	Using File Channel
Requisitions (with budget check functionality)	-
Change Requisitions	-
Purchase Orders	Purchase Orders
Change Purchase Orders	Change Purchase Orders
Invoices	Invoices

> **Note**
>
> The Ariba Procurement Solution sends discount and charges to SAP ERP only in amount and not in percentage values.

To configure taxes and charges on requisitions, purchase orders, and invoices, you can use the following configuration parameters available on the **SAP Easy Access Transaction Code for Ondemand Procurement** screen under **SAP Menu** > **Transactional Data** > **Configuration Parameter**:

- **Define tax check at company code level**
- **Maintain Ariba condition mappings in SAP**
- **Maintain Withholding Tax Type for Buyer tax type**

The following sections describe the behavior in SAP ERP for requisitions, purchase orders, and invoices with taxes, charges, and discounts received from the Ariba Procurement Solution:

Requisitions

> **Note**
>
> The budget reserved amount is equal to the final requisition amount derived in SAP ERP after calculating all applicable taxes, charges, and discounts.

The following examples describe the behavior of SAP ERP when requisitions received from Ariba Procurement Solution contain a:

line item with a charge	From Ariba Procurement Solution: A line item of USD 100 has a shipping charge of USD 10. Result in SAP ERP: Single line with amount = USD 110.
line item with charges	From Ariba Procurement Solution: A line item of USD 100 has a shipping charge of USD 10 and a handling charge of USD 5. Result in SAP ERP: Single line with amount = USD 115.
line item with a charge and tax on charge	From Ariba Procurement Solution: A line item of USD 100 has a shipping charge of USD 10 along with a tax amount of USD 5. Result in SAP ERP: Two lines: • First line contains the actual line item amount = USD 100. • Second line contains the total amount of shipping charge and tax on the shipping charge = USD 15.
line item with a non-deductible tax amount	From Ariba Procurement Solution: A line item of USD 100 has a non-deductible tax of USD 5. Result in SAP ERP: Single line with amount = USD 105.
line item with a deductible tax amount	From Ariba Procurement Solution: A line item of USD 100 has a deductible tax of USD 5. Result in SAP ERP: Single line with amount = USD 100.
line item with a discount	From Ariba Procurement Solution: A line item of USD 100 has a discount of USD 10. Result in SAP ERP: Single line with amount = USD 90.

Purchase Orders

The following examples describe the behavior of SAP ERP when purchase orders received from Ariba Procurement Solution contain a:

line item with a charge	From Ariba Procurement Solution: A line item of USD 100 has a shipping charge of USD 10. Result in SAP ERP: Single line with amount = USD 110. **Shipping charge** = USD 10 is maintained as a condition in the **Conditions** tab of the purchase order transaction.
line item with charges	From Ariba Procurement Solution: A line item of USD 100 has a shipping charge of USD 10 and a handling charge of USD 5. Result in SAP ERP: Single line with amount = USD 115. **Shipping charge** = USD 10 and **Handling charge** = USD 5 are maintained as separate conditions in the **Conditions** tab of the purchase order transaction.
line item with a charge and tax on charge	From Ariba Procurement Solution: A line item of USD 100 has a shipping charge of USD 10 along with a tax code, for example, I1. Result in SAP ERP: Two lines: • First line contains the actual line item amount = USD 100. • Second line contains the shipping charge (net price) and tax on the shipping charge. **Tax code** I1 is maintained in the **Invoice** tab of the purchase order transaction.
line item with a tax amount	From Ariba Procurement Solution: A line item of USD 100 has a tax code, for example, I1. Result in SAP ERP: Single line with amount = USD 100. **Tax code** I1 is maintained in the **Invoice** tab of the purchase order transaction.
line item with a discount	From Ariba Procurement Solution: A line item of USD 100 has a discount of USD 10. Result in SAP ERP: Single line with amount = USD 90. Discount = USD 10 is maintained as a condition in the **Conditions** tab of the purchase order transaction.

Invoices

The following example describes the behavior of SAP ERP when invoices received from Ariba Procurement Solution contains a:

header with a withholding tax	From Ariba Procurement Solution: Total amount = USD 100 has a header with a withholding tax WT1 = USD 5. Result in SAP ERP: Withholding tax = USD 5 along with the **Tax Code** and **Tax Type** is displayed in the **Withholding Tax** tab of the invoice transaction.

Related Information

Tables for Taxes and Charges [page 46]

Prerequisites

- You must maintain the following tables in SAP ERP for:
  - Requisitions: `/ARBA/TAX_CHECK` - To specify the company code for which the non-deductible tax amount (tax on item or tax on charges) is considered while reserving the budget for requisitions under a particular company code.
  - Purchase orders: `/ARBA/COND_MAP` - To specify the condition types in the Ariba Procurement Solution to the relevant condition types in SAP ERP.
  - Invoices: `/ARBA/WHT_TYPE` - To specify the withholding tax type in the Ariba Procurement Solution to the relevant withholding tax code in SAP ERP.
    To support withholding tax on invoices, you must configure and enable the withholding tax at the vendor level in SAP ERP. The tax code configuration must be in sync between the Ariba Procurement Solution and SAP ERP.
- For purchase orders and change purchase orders, you must maintain the `/ARBA/ENABLE_TLC` parameter in the `/ARBA/TVARV` table in SAP ERP. The `/ARBA/ENABLE_TLC` parameter is required to update the `SAPPOLineNumber` in the Ariba Procurement Solution.
  For more information about setting variables in the `/ARBA/TVARV`, see How to edit /ARBA/TVARV parameters [page 43].
- To avoid calculation errors in SAP ERP, you must not exceed the configured decimal limit when entering values in the Ariba Procurement Solution.

Related Information

Tables for Taxes and Charges [page 46]

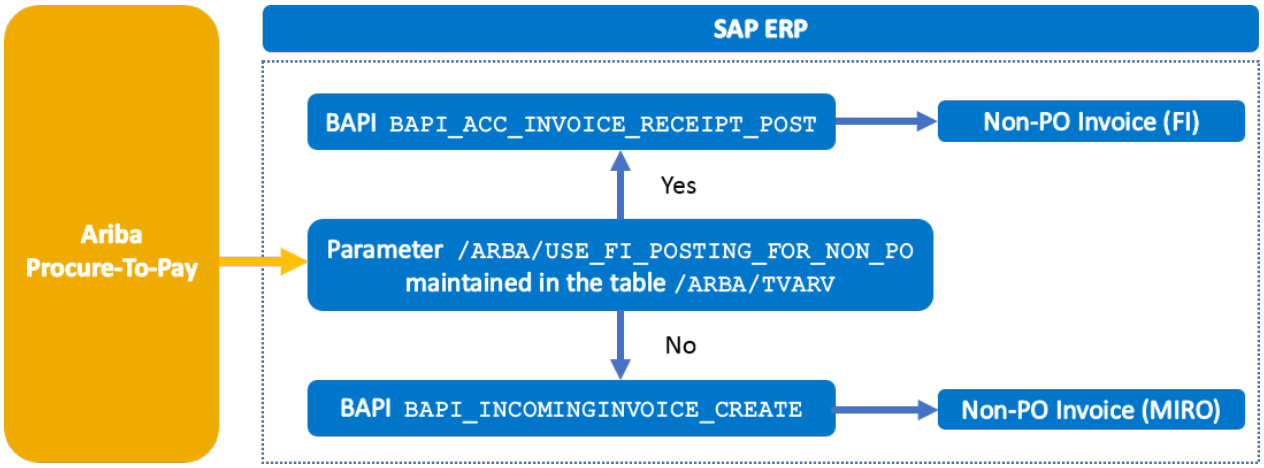
Limitations

- Conditions must be amount based (fixed value). Percentage is not supported.
- When a new line item contains tax on charges on a change purchase order, addition of split on the line item is supported only from SAP ERP 6.0 EHP5 and higher.
- Withholding tax is not supported for the following:
  - line items on invoices
  - remittances
- Header-level credit memos and line-level credit memos with tax code are not supported.
- When real-time budget check is enabled in the Ariba Procurement Solution, SAP ERP does not support changing units of measure in a purchase order referencing a requisition. If you attempt to change the units of measure when creating the purchase order in the Ariba Procurement Solution, the following error message appears in SAP ERP:
  `Order unit XX not convertible into unit XX of requisition"`

Integrating non-PO (FI) invoices

This feature enables buyers using Ariba Procurement Solution integrated with SAP ERP to create non-PO (FI) invoices in SAP ERP.

The following graphic shows the process flow for creation of non-PO (FI) invoices:



Creation of non-PO (FI) invoice in SAP ERP supports the current non-PO (MIRO) invoice fucntionalities such as discounts and withholding taxes. In addition, it has the following advantages when compared to the logistics invoice verification API `BAPI_INCOMINGINVOICE_CREATE` to create non-PO (MIRO) invoices:

- Does not require MM module on SAP ERP to integrate payments from Ariba Procure-to-Pay.
- Supports asset posting.

To support non-PO (FI) invoices in SAP ERP :

- RFC `/ARBA/BAPI_INVOICE_CREATE` has been enhanced.
- BAPI `BAPI_ACC_INVOICE_RECEIPT_POST` is called in the RFC.
- BAdI `/ARBA/INVOICE_CREATE` has been enhanced and uses the method `FI_INVOICE_CREATE`.

> **Note**
>
> Shipping and special handling as unplanned delivery costs are posted as G/L lines.

Related Information

Non-PO (FI) invoices parameters [page 57]
Configuring the Integration Scenario [page 29]
Exporting Invoices [page 171]
/ARBA/INVOICE_INTEGRATION Package [page 279]

Prerequisites

SAP ERP

- Maintain the following parameters in the table `/ARBA/TVARV`:
  - `/ARBA/USE_FI_POSTING_NONPO` to use FI based posting for non-PO invoices.
  - `/ARBA/NOPO_INVOICE_FI_DOC_TYPE` to set the document for an FI invoice.
    By default the document type is `KR`.
  - `/ARBA/ASSET_TR_TYP_FI_NONPO` to maintain the asset transaction type, if you use asset accounting assignment.
    By default the asset transaction type is `020`.
- If you use the withholding tax or asset account assignment functionality, then you must:
  - Maintain the table `/ARBA/WHT_TYPE` to specify the relevant withholding tax code in SAP ERP correspoding to the tax type in the Ariba Procurement Solution.
  - To support withholding tax on invoices, you must configure and enable the withholding tax at the vendor level in SAP ERP. The tax code configuration must be in sync between the Ariba Procurement Solution and SAP ERP.
    1. Create a custom project in the TCode `CMOD` and link it to the enhancement `ACBAPI01`.
    2. Use the function exit `EXIT_SAPLACC4_001` and create the include `ZXACCU15`.
    3. Place the SAP Ariba provided include program `/ARBA/FILL_MISS_FI_NONPO` in the `ZXACCU15` as follows:
       ```
       INCLUDE /ARBA/FILL_MISS_FI_NONPO IF FOUND
       ```
       The above steps are in accordance with the following SAP Notes:
       - SAP Note 556311 - *BAPI in the extended withholding tax* (for withholding tax)
       - SAP Note 487722 - *Using EXTENSION1 for accounting BAPIs* (for withholding tax and asset account assignment)

Limitations

SAP ERP

- Tax-relevant posting in a company code in which the line-by-line tax calculation is active is not supported. For more information, see section *4.6 Postings with a customer program* in the SAP Note 2011553 - *FAQ: Error FF 817 or FF 818 with postings via BAPI_ACC_DOCUMENT_POST*.
- Although tax code with dual tax rates is supported, both the tax rates must be either with a G/L account or with a non-GL account. Dual tax rates with both G/L account and non-GL account together are not supported.
- Header-level credit memos and line-level credit memos with tax code are not supported.
- The withholding tax is supported only at the header level.

Ariba Procure-to-Pay

Ariba Procure-to-Pay does not provide G/L account for asset lines. Therefore, the G/L account for asset lines is derived from the table `T095_ACI` based on chart of accounts.

If the table `T095_ACI` also does not include G/L account for asset lines, then the G/L account for asset lines is derived from the table `T095` based on the chart of accounts, account determination, and real depreciation area. The real depreciation area is always `01`.

How to customize an existing integration event

Prerequisites

Before proceeding with the customization, ensure the following prerequisites are met:

- The required fields have been added using the Customization Manager or any other customizing tool.
- The SAP ERP code (Custom RFC among others) has been modified to handle the newly introduced fields.

Procedure

1. Generate the required WSDL.
2. Reload the WSDL file in the External Definition, which can be found at the following location in the SAP XI Integration Repository.

   `SWC > NameSpace > Interface Objects > External Definitions`
3. Save the file and activate it.
4. Import the RFC into Imported Objects on NetWeaver XI/PI. Save and activate it.
5. Now, re-import the modified RFC from the SAP ERP system. Save and activate it.
6. Open the appropriate Messaging Mapping object in **edit** mode and load the new WSDL schema.
7. Complete the mapping between the new elements in the source and target structures.
8. Save and activate.

Integrating Transactional Data Directly Using the User Interface

About Integrating Transactional Data Directly Using the User Interface [page 216]

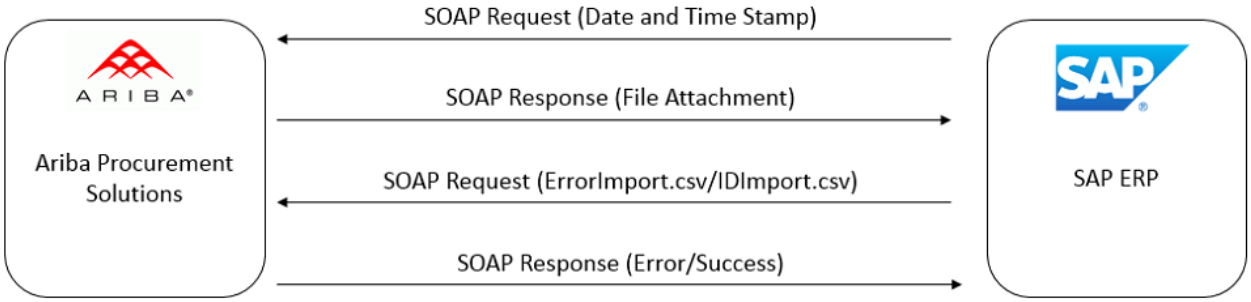
Configuring Transactional Data Directly Using the User Interface [page 218]

About Integrating Transactional Data Directly Using the User Interface

Buyers using the Ariba Procurement Solution can integrate transactional data directly from the Ariba Procurement Solution to an SAP ERP system using the **Direct Connectivity** option.

> **Note**
>
> This feature is supported on SAP ERP 6.0 SPS02 (SAP_APPL 600 SPS02 and SAP_BASIS 700 SP18) and higher versions.

In direct connectivity, the SAP ERP sends a request to Ariba Procurement Solution. The request in its header contains all the required parameters for successful extraction of transactional data. Parameters include event name, operation, and time stamp. The download of files to SAP ERP involves two synchronous proxies with a **Request** > **Response** > **Request** > **Response** approach.



Prerequisites

You must download and export the transport requests into your SAP ERP system.

Ensure that you do the following:

- Create a logical port in the SOAMANAGER for the consumer proxy class: `/ARBA/CO_MIOUT_SYNC_ARIBA_DOWN`.
- Implement the following SAP notes:
  - 1402826 - Supplement to Note 548131
  - 1716777 - Runtime error IMPORT_WRONG_END_POS when displaying class
- Before you export the transactional data, you must create the Authorization Object class.
- Maintain the parameter `/ARBA/TEMP_DIRECTORY` in the `/ARBA/TVARV` table before you export the transactional data for the folowing transactions:
  - Purchase Order Header Status
  - Remittances

  For more information see, How to maintain a temporary directory while running transaction data directly [page 59].
- Create a logical file path for the ISMW_ROOT. This is only required to export data for purchase order header status, remittances, and any status updates sent for the transactions through the Direct Connectivity Integration method. For more information, see How to create a logical file path [page 144].

Limitations

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

Configuring Transactional Data Directly Using the User Interface

Perform the following procedures to configure transactional data directly using the user interface:

1. Installing Client Certificates [page 218]
2. Defining authorizations for running Ariba Procure-to-Pay transactions [page 77]
3. Defining Site Name in the Maintenance Table [page 219]
4. Configuring the SOAMANAGER for ECC 6.0 EHP5 and ECC 6.0 EHP6 Systems [page 219]
5. Configuring Client Certificates to Import Transactional Data Directly [page 221]
6. Running the Transactional Data Integration Tasks [page 223]

Installing Client Certificates

Context

To ensure that the connection request is originating from a known client, you must install client certificates before importing transactional data using direct or mediated connectivity.

Procedure

1. On your SAP ERP system, go to **STRUST** and click **SSL Client SSL Client(Anonymous)**.
2. Click the **Import Certificates** button and then choose the path where you exported the certificates.
3. Click **Allow** and then click **Continue** to download the certificates.
4. Click **Add to Certificate List**.

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

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

5. After you have saved the entries in the **STRUST**, go to the Tcode **SMICM**.
6. On the **Administration** menu, click **ICM** > **Exit Soft** > **Global**.
7. On the **ICM Monitor** page, restart the services.
8. On the **Administration** menu, click **ICM** > **Exit Hard** > **Global**. Restart the services for the **Exit Global**.

   The certificate is now displayed in **STRUST**.

Defining Site Name in the Maintenance Table

Context

You can define the direct connectivity parameters using Tcode `SM30` in /ARBA/AUTH_PARAM table. Defining site name is required for mediated connectivity using SAP NetWeaver PI and direct connectivity.

Procedure

1. Go to Tcode `SM30`.
2. Enter /ARBA/AUTH_PARAM.
3. Click on **Maintain**.
4. Select **ARIBA** from the drop-down menu under **Solution**.
5. Enter the site name under **Realm**.
6. Optional: Specify the wait duration between the retry attempts in **Wait (in minutes)**.

Configuring the SOAMANAGER for ECC 6.0 EHP5 and ECC 6.0 EHP6 Systems

Context

To establish connectivity for transactional data between the SAP ERP system and Ariba Procurement Solution, you must define the endpoints for the service by configuring **SOAMANAGER**.

You must create two logical ports for transactional data:

- Download port: to download the transactional data from Ariba Procurement Solution
- Upload port: to upload the status to Ariba Procurement Solution

To create the logical ports, you must perform the following procedure separately, for download and upload:

Procedure

1. Go to TCode **SOAMANAGER**.
2. In the Service Administration tab:
   - For EHP5, click **Single Service Configuration**
   - For EHP6, click **Web Service Configuration**
3. Select the following in the **Search** tab:

- In the **Search By** pull-down list, select Consumer Proxy.
- In the **Search Pattern** pull-down list, enter “MIO*”.
- (only for EHP5) In the Field pull-down list, select “Both Names”.

The following Proxy Class appears:

- For download: `MIOut_Sync_AribaDownload`.
- For upload: `MIOut_Sync_AribaUpload`.

The Proxy Class `MIOut_Sync_AribaUpload` appears for upload.

The Proxy Class `MIOut_Sync_AribaDownload` appears for download.

4. Click **Apply Selection**.
5. Click **Create Logical Port.**
6. In the SOA Management page, enter the port name in the Logical Port field.
7. In the **Description** field, enter a description.
8. Click to select the **Logical Port is Default** check box.
9. In the **Configuration Type**, select **Manual Configuration**.
10. Click **Apply Settings**.
11. Click the **Consumer security** tab.
12. In the **Authentication** settings, 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.
13. Click the **Transport Settings** tab and enter the following details:
    - **URL Access Path**:
      - For download: MIOut_Sync_AribaDownload /Buyer/filedownload?realm= <realm name that you maintain in `SM30`>
      - For upload: MIOut_Sync_AribaUpload /Buyer/fileupload?realm= <realm name that you maintain in `SM30`>
    - **Computer Name of Access URL**: Specify the path to your Ariba procurement solution. For example, s1.ariba.com.
    - **URL Protocol Information**: HTTPS
    - **Logon Language**: Language of User Context
    - **Make Local Call**: No Call in Local System
    - **Transport Binding Type**: SOAP 1.1
    - **Maximum Wait for WS Consumer**: 0 (zero)
    - **Optimized XML Transfer**: None
    - **Compress HTTP Message**: Inactive
    - **Compress Response**: False
14. Save the changes and send a ping message to the web service. You receive the following Web Service ping error message:

    “Web Service ping failed (RC-503). Service Ping ERROR. Service Temporarily Unavailable.”

Configuring Client Certificates to Import Transactional Data Directly

Prerequisites

You must have the client certificate that you have received from an Ariba trusted Certificate Authority.

Context

To ensure that the connection request is originating from a known client, you must configure client certificates when importing transactional data using direct connectivity.

> **Note**
>
> You are not required to perform this procedure if you already use direct connectivity for the master data on the same service.

Procedure

1. 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 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 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.

2. 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.
3. Obtain the server certificate from Ariba for the HTTPS SSL encryption:
   1. Go to `https:\\buyer.ariba.com`.
   2. 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**.
4. 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`.
5. Go to TCode **SOAMANAGER** to configure the Web services.
   1. Click **Web Service Configuration**.
   2. In the **Design Time Object Search** tab, search for `MIOut*` consumer proxy.
   3. In the **Search Result** section, click **/ARBA/CO_MIOUT_SYNC_ARIBA_DOWN**.
   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** check box.
   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**.

       > **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 webservice URL. The following error message appears: `Web service ping failed. (RC=403. Service Ping ERROR Forbidden.`
6. Log in to your Ariba Buyer account and go to **Core Administrator** > **Integration Tool Kit Security**.

   The **Integration Toolkit Security** page appears.

7. In the **Select the Authentication Method** pull-down menu, choose **Certificate**. Paste the contents of the public certificate.

Running the Transactional Data Integration Tasks

Context

To create transactional data in SAP ERP using either direct connectivity or Ariba Integration Toolkit, you run the following transactional data integration tasks.

Procedure

1. In the command field of the SAP ERP main screen, type `/N/ARBA/OND_PROC`.
2. Navigate to **SAP menu** > **Transactional Data** > **Reports** > option to expand the tree structure.
3. Double-click the required transactional data report.
4. Do one of the following:
   - Click **Ariba Integration Toolkit** to run the transactional data using the Ariba Integration Toolkit or your own tool.
   - Click **Direct Connectivity** to run the transactional data tasks directly.
5. Enter the following configuration for the transactional data:
   - **Encoding to be used**: Specify the encoding type or use the default value available. For example, UTF-8.
   - **Variant**: Specify the variant for your Ariba Procurement Solution.
   - **Partition**: Specify the partition for your Ariba Procurement Solution.
6. Select the transactional data tasks to be exported to the Ariba Procurement Solution system.
7. Click **Execute**.

Integrating Transactional Data Using the Mediated Connectivity Integration Method

About Integrating Transactional Data Using the Mediated Connectivity Integration Method [page 224]

Configuring Transactional Data Using the Mediated Connectivity Integration Method [page 225]

About Integrating Transactional Data Using the Mediated Connectivity Integration Method

Buyers can integrate transactional data directly from the Ariba Procurement Solution to an SAP ERP system using the SAP NetWeaver PI layer using the Mediated Connectivity integration method. This provides enhanced security while downloading transactional data from Ariba Procurement Solution to the SAP ERP system using the mediated connectivity.

To integrate transactional data, a buyer can use either client certificates or shared secret authentication to connect to the Ariba Procurement Solution through the SAP NetWeaver PI using the **Direct Connectivity** option.

> **Note**
>
> You can use the **Direct Connectivity** option for both mediated and direct connectivity.

If you are using the client certificate, the SAP NetWeaver PI 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.

If you are using the shared secret authentication, you must configure the shared secret in the Communication Channel of your NetWeaver PI system.

> **Note**
>
> If you are using direct connectivity, then the shared secret is maintained in the logical port.

Prerequisites

You must download and export the transport requests into your SAP ERP system.

Ensure that you do the following:

- Install client certificates if you use the client certificate authentication. You must get a client certificate from Certificate Authorities that are trusted by Ariba.
  Additionally, you must implement the SAP Note 1669829. This SAP Note is applicable for the following releases:
  - SAP_BASIS release 7.0 lower than SP27
  - SAP_BASIS release 7.01 lower than SP12
  - SAP_BASIS release 7.02 lower than SP11
  - SAP_BASIS release 7.31 lower than SP03
- Do not create the logical port for the consumer proxy in the SOAMANAGER: `MIOut_Sync_AribaDownload`.
- Implement the following SAP notes:
  - 1402826 - Supplement to Note 548131
  - 1716777 - Runtime error IMPORT_WRONG_END_POS when displaying class
- Before you export the transactional data, you must create the Authorization Object class.

Limitations

- Administrators do not get email notifications when an error occurs during the transactional data integration.
- Administrators can only view the error messages in the runtime monitor of the SAP ERP and SAP NetWeaver PI.
- The error messages do not store a record of all the error conditions in the transaction `SLGI`.

Related Information

Configuring Client Certificates to Import Transactional Data Directly [page 221]
Configuring the Shared Secret Authentication [page 228]

Configuring Transactional Data Using the Mediated Connectivity Integration Method

Perform the following procedures to configure transactional data using the SAP NetWeaver PI layer:

1. Installing Client Certificates [page 218]
2. Defining authorizations for running Ariba Procure-to-Pay transactions [page 77]
3. Defining Site Name in the Maintenance Table [page 219]
4. How to configure the Proxy on SAP ERP Systems [page 149]
5. How to configure proxy for Single Stack (Java Only) instances for SAP Process Integration 7.3 and Higher [page 150]
6. Configuring Certificates and Keys to Import Transactional Data Using the SAP NetWeaver PI Layer [page 227]
7. Configuring the Shared Secret Authentication [page 228]
8. Configuring the Integration Scenario [page 228]

How to configure the Proxy on SAP ERP Systems

Procedure

1. Start 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)
   - 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 SAP Process Integration server appears and the **Summary** section indicates that the connection to XI is successful.

How to configure proxy for Single Stack (Java Only) instances for SAP Process Integration 7.3 and Higher

Procedure

1. Start 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 Certificates and Keys to Import Transactional Data Using the SAP NetWeaver PI Layer

Procedure

1. Go to the NetWeaver PI main page and click **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.

   > **Note**
   >
   > Ensure that your required certificates are signed by an 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.

   > **Note**
   >
   > Ensure that your URL starts with “https://cert...

8. Save and activate the communication channel.
9. Log in to your Ariba Buyer account. Go to **Core Administrator** > **Integration Tool Kit Security**.

   The **Integration Toolkit Security** page appears.
10. In the **Select the Authentication Method** pull-down menu, choose **Certificate**. Paste the contents of the client certificates.

Configuring the Shared Secret Authentication

Context

You are required to configure the shared secret in the **Communication Channel** of your NetWeaver PI system for upload and download communication channels.

You must perform the following procedure separately for download and upload communication channels:

Procedure

1. Open the Configuration Integration Builder from the main PI page.
2. In the **Objects** tab of the Integration Builder, click **Communication Channel.**
3. Go to the **Communication Channel** page and click **Configure User Authentication**.
4. In the **Target URL** field, ensure that you specify the location of your procurement system. For example:
   - For upload: /Buyer/fileupload?realm
   - For download: /Buyer/filedownload?realm
5. In the **User** text box, enter the realm name for your procurement system.
6. In the **Password** text box, enter the same shared secret that you specified on the **Integration Toolkit Security** page of your Ariba Buyer system.
7. If you are using the HTTPS SSL encryption, you must obtain the server certificate from Ariba. To obtain the server certificate, do the following:
   1. Go to https:\\buyer.ariba.com.
   2. 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 NetWeaver PI keystore view.

Configuring the Integration Scenario

Context

To establish a connection between the SAP ERP system and Ariba procurement solution when using Mediated Connectivity (SAP NetWeaver PI), you need two communication channels. One communication channel for download and another for upload. This is a one-time configuration that is required to send and receive all document transactions using the Mediated Connectivity integration method.

To create the communication channels, you must perform the following procedure separately, for download and upload:

Procedure

1. From the SAP NetWeaver PI 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. From the **Select Process Integration Scenario from Enterprise Services Repository** screen, select the required option:
   - For download: **AR_Ariba_Download**
   - For upload: **AR_Ariba_Upload**
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**. This completes the configuration scenario for the selected option:
   - **AR_Ariba_Download** for download
   - **AR_Ariba_Upload** for upload
8. In the **Model Configurator**, click **Select Component View**.
9. In the **Select Component View for Configuration** page, select the **Business System Components for A2A** tab to assign components for your Ariba procurement solution.
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**. From the selection list, select the required communication component name and click **Apply**:
    - **AR_Ariba_Download** for download
    - **AR_Ariba_Upload** for upload
12. Click **Assign Component**.
13. In the **Model Configurator** page, select the **Business System Components for A2A** tab to assign the communication component for your Ariba procurement solution.
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 **Configure Connections**. 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**.

> **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 **Create Configuration Object**.
27. In the **Create Configuration Object** window, do the following:
    - Click **Generation** in the **General** section.
    - Select the **Receiver Determination**, and **Interface Determination** check boxes 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** > **Connection Parameters** section that matches your Ariba Buyer account configuration.
32. Save the changes.

> **Note**
>
> The proxy settings and the subsequent reflection of **Ariba_Download ESR** or **Ariba_Upload ESR** object in the SAP ERP **SPROXY** transaction is done for integrating transactional data through the SAP NetWeaver PI layer. By default, the connectivity is always direct through **SOAMANAGER**or **LPCONFIG**.

Error Handling and Troubleshooting

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Application Errors [page 231]

System Errors [page 234]

Viewing the Application Log [page 237]

Troubleshooting [page 238]

Enabling Debugging [page 239]

About Error Handling and Troubleshooting

The SAP integration provides reliable data exchange between Ariba Procurement Solution integrated with SAP. The integration is designed to recover automatically whenever possible with minimal intervention. The integration event can recover automatically from any error that occurs before the data has been committed to the SAP system. After the data has been committed on the SAP system, the integration event does not try to recover from errors. The integration event reports the error and waits for an administrator to intervene. However, in some cases, the integration event on the Ariba Procurement Solution cannot recover automatically and must report the error to the appropriate administrator. When an error occurs, the integration event on the Ariba Procurement Solution does the following:

- Recover automatically
- Report the error and wait for an administrator to take action

Errors can occur when you integrate master data and transactional data, directly using the Direct Connectivity integration method, the File Channel, or Web Service Channel. The following are the two types of errors that can occur while integrating master data and transactional data:

- Application Error
- System Error

Application Errors

An application error occurs when there are inconsistencies in the data that is being exported to the Ariba Procurement Solution. Ariba recommends that you ensure that the data already exists before you export either from your ERP system or the Ariba Procurement Solution.

Application Errors When Importing Master Data Using Direct Connectivity [page 232]

Application Errors When Exporting Transactional data Using the File Channel [page 232]

Application Errors When Exporting Transactional Data Using the Web Service Channel [page 233]

Application Errors When Importing Master Data Using Direct Connectivity

When exporting the master data, the data is posted on the Ariba Procurement Solution system. At that point, data validation does not occur. Ariba Procurement Solution system validates the data later. When there are data dependencies or inconsistencies, an error is recorded on the Ariba Procurement Solution. Administrators can check email errors through the following methods:

- Configure email notification alerts on their Ariba Procurement Solution system to receive notification when an error occurs. This enables the administrator to log in to the Ariba Procurement Solution to check the details of the errors.
- Log in to the Ariba Procurement Solution and check the details of the errors.

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

Application Errors When Exporting Transactional data Using the File Channel

Application Errors During Purchase Order Exports [page 232]

Application Errors During Receipt Exports [page 233]

Application Errors During Payment Exports [page 233]

Application Errors During Purchase Order Exports

The SAP program that reads and populates the exported data in the SAP system can fail due to a data error. In such events, the program generates an error file on the ERP ERP system. This error file creates an error object (PurchaseOrderError) on uploading to the Ariba Procurement Solution system and the requisition status changes to “Composing.”

When a requisition is stuck in the “Composing” state, the administrator for Ariba Procurement Solution must perform the following tasks:

- Check the error in the requisition is in the “Composing” state
- Diagnose the problem
- Correct the error
- Submit or approve the requisition

Errors in SAP are logged as .csv files (for example, PurchaseOrderErrorpullXXXX. csv). These files are transferred to the Ariba Procurement Solution through an import integration event. The Ariba Procurement Solution creates the error objects and the order status changes accordingly.

Application Errors During Receipt Exports

The Receipts File export event can be run manually or scheduled through the Data Transfer Tool. This event exports the data into CSV files.

After the items are received in the Ariba Procurement Solution, the ProcessReceipts schedule task must be run. This scheduled task picks up all receipts in the "Awaiting processing" state and adds the entries in PushDataEntry.

If an application-level error occurs during the receipt export (that is, the posting period is not open in SAP), the SAP ERP system rejects the receipt. The SAP ERP system also generates an error file. After this error file is uploaded to the Ariba Procurement Solution, the receipt status changes from "Processing" to "Awaiting processing", and the subsequent **ProcessReceipts** task processes the receipts.

Application Errors During Payment Exports

When invoices are reconciled, payment objects are generated and entries are added to the PushDataEntry. Administrators can run the PaymentExport task and download the data into CSV files on the ERP ERP system

While processing the payment files and an application error occurs. This usually occurs when there is an invalid supplier or a purchase order is already under process or is being processed by another user. In such a case, the ERP ERP system creates an error file.

When the administrator uploads this error file to the Ariba Procurement Solution, it creates the PayablePushError objects and the status changes to "Paying Failed". Administrators can correct the data and submit again. This data is processed again when the next export event is run.

Application Errors When Exporting Transactional Data Using the Web Service Channel

Application Errors Using Web Service Channel for Purchase Order Exports [page 233]

Application Errors Using Web Service Channel for Receipt Exports [page 234]

Application Errors Using Web Service Channel for Purchase Order Exports

An Ariba Procurement Solution always initiates a purchase order export with an integration event that exports the order out to the Web Services integration channel.

The most common error is when the SAP ERP system rejects the incoming order because it contains data that is not valid for the SAP ERP system. For example, if a supplier is invalid in the SAP ERP system after the order has been created in the Ariba Procurement Solution, the incoming order is rejected because it has an invalid supplier. For purchase orders, the export event returns error messages and details about exports immediately. When an SAP ERP system rejects an order, it sends that order back with an error message indicating why the order has been rejected

If an error occurs during the integration event of the real-time purchase order export through Web Services and NetWeaver PI is initiated, Ariba Procurement Solution logs an error, and the purchase requisition associated with that order returns to the “Composing” state.

When a requisition is stuck in the “Composing” state, the Ariba procurement solutions administrator should perform the following tasks:

- Check the error in the requisition that is in the “Composing” state
- Diagnose the problem
- Correct the error
- Submit and approve the requisition

Application Errors Using Web Service Channel for Receipt Exports

If an application-level error occurs during the receipt export (that is, the posting period is not open in SAP), the SAP ERP system rejects the receipt. The processing state of the receipt object in Ariba procurement solutions changes from "Processing" to "Awaiting Processing". Ariba Procurement Solution attempt to export the receipts again when the **ProcessReceipts** scheduled task is run.

System Errors

A system error occurs when there are network errors due to an incorrect URL address or when the connection to the Ariba Procurement Solution is lost.

System Errors When Importing Master Data Using Direct Connectivity [page 234]

System Errors When Exporting Transactional Data Using Direct Connectivity [page 235]

System Errors When Exporting Transactional Data Using the File Channel [page 236]

System Errors When Exporting Transactional Data Using the Web Service Channel [page 236]

System Errors When Importing Master Data Using Direct Connectivity

System error can occur either when data is sent from the ERP system to the PI or from the PI 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 PI. The monitor of the NetWeaver system displays the error when the data is sent from the PI 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 Ariba Procurement Solution system. 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 Ariba Procurement Solution.

Administrators can check errors using the following methods:

1. Configure email notification alerts on their Ariba Procurement Solution system to receive notification when an error occurs. This enables the administrator to log in to the Ariba Procurement Solution to check the details of the errors.
2. Directly log in to the Ariba Procurement Solution 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. The administrator must rerun the Full or Incremental Load for the master data tasks again from your ERP system.

> **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. You can also view errors faced when integrating master data using the Mediated Connectivity integraton method.

Dual Stack

To view errors in a dual stack instance, go to the **SXMB_MONI** page. You can also view errors faced when integrating master data using the Mediated Connectivity integraton method.

System Errors When Exporting Transactional Data Using Direct Connectivity

An administrator can monitor the errors from the SXMB_MONI, of the SAP ECC system or SAP Netweaver PI, if a system error occurs while sending the data from the SAP ERP system to the SAP Netweaver PI. The monitor of the SAP Netweaver PI system displays the error when the data is sent from the SAP Netweaver PI to the Ariba Procurement Solution.

When a system error or application error occurs, timestamp is not updated in the **/ARBA/DATE_TIME** table. As a result, the transactional data created in the Ariba Procurement Solution does not change its status. The administrator must correct the errors in the SAP ERP and then rerun the relevant report.

When any data error occurs, timestamp is updated in the **/ARBA/DATE_TIME** table. However, the administrator must correct the errors in the Ariba Procurement Solution and then rerun the relevant report. If there are any data

errors when creating the transaction data, the corresponding status is uploaded to the Ariba Procurement Solution.

System Errors When Exporting Transactional Data Using the File Channel

When exporting transactional data using the File channel through the Ariba Integration Toolkit and an error occurs, the error is recorded in the log files.

In case of a configuration error, or errors in the Ariba Integration Toolkit, SAP never receives any transactional data from Ariba Procurement Solution. In such situations, all transactional objects remain in the same state and will not change.

When there is a system level error the administrator must try to export the data again from Ariba Procurement Solution using the time stamp from that you need the data. If the CSV file that is exported to the SAP ERP system is not picked up by the SAP program, these files remain on the SAP server, and are picked up the next time the SAP program is run. For additional information, see the *Ariba Procurement Data Import and Administration Guide*.

System Errors When Exporting Transactional Data Using the Web Service Channel

System Error During the Purchase Order Export [page 236]

System Error During the Receipt Export [page 237]

System Error During the Purchase Order Export

If there is a network issue or the NetWeaver PI is down, the SAP ERP system cannot receive a purchase order from Ariba Procurement Solution. In this case, the purchase orders or requisitions are stuck in the “Ordering” state.

Once a system-level error has been found, nothing is required to be done to restart the export task. The scheduled task *FailedOrders* checks for the unfinished orders and executes the order transmission again. As an administrator, you can either wait until the next scheduled run of this task, or execute it manually from Ariba Administrator.

The *ProcessStuckERPOrders* scheduled task, is not run on a regular schedule but is run manually by an administrator to correct the error. This task changes the state of purchase orders, change orders, and cancel orders in the SAP ERP system to "Ordering/Failed" so that the *FailedOrders* scheduled task can attempt to process them again. For example, an order might get stuck in "Ordering" if a network problem or web service channel error occurs and the SAP ERP system does not receive the order or Ariba Procurement Solution does not receive the status.

System Error During the Receipt Export

If a system level error occurs during the receipts export, the receipts remain in the "Processing" state. The administrator must run the *ProcessPendingReceipts* schedule task. This changes the status from "Processing" to "Awaiting Processing", and the receipts are picked up by the *ProcessReceipts* task.

For more information on scheduled tasks, see the *Ariba Procurement Data Import and Administration Guide*.

Viewing the Application Log

Context

To determine if the connection between the SAP ERP system and Ariba Procurement Solution succeeded or failed, and the reason for failure, you can view the application log using the following procedure.

Procedure

1. Go to transaction code **SLG1**.

   The **Analyze Application Log** appears.
2. Enter `/ARBA/TR_OBJECT` in the **Object** field.
3. Enter any of the following required sub-object in the **SubObject** field:

Sub-Object Name	Sub-Object For Ariba Procurement Solution
`/ARBA/PURCHASEORDER`	Purchase Orders
`/ARBA/CHANGEORDER`	Change Purchase Orders
`/ARBA/CANCELORDER`	Cancel Purchase Orders
`/ARBA/POHEADER`	Purchase Order Header Status
`/ARBA/GOODS_RECEIPTS`	Goods Receipts
`/ARBA/REMITTANCE`	Remittances
`/ARBA/INVOICE`	Invoices
`/ARBA/EXPENSE`	Expenses

Troubleshooting

This section provides tips for solving problems associated with integrating Ariba Procurement Solution integrated with SAP.

The “Internal Error” stack traces that you may encounter do not cause error conditions and can be safely ignored. Furthermore, your SAP events run successfully while or after these traces appear.

Failures When Importing Remittances from SAP ERP System

When importing remittances, an error can occur due to an application or system error.

Errors while importing remittances using the Web Service channel

When remittances fails during the import, the date and time stamp must be changed in the `OverrideStartDate` parameter on the Ariba Procurement Solution and the **Incremental Remittance Import** task must be run again. Administrators can run the task manually or schedule it to run.

Errors while importing remittances using the File channel

When remittances fail during the import, the administrator must change the date and time stamp in the `/ARBA/REM_DATETM` table and run the **RemittanceImport** program again. This task can be scheduled or run manually.

Error condition when you re-import the RFC schema for requisition, purchase order, invoice, or derivation into the SAP NetWeaver PI and you use the RFC schema for mapping:

Error Message:

```
The source structure, target structure, or a function library has been changed or could
not be found in the Enterprise Services Repository. The mapping definition contains
elements or attributes that do not exist in the changed structure, or functions that
were changed in a function library. The relevant entries will be deleted.
```

```
Target structure has no such path:/ns1:_-ARBA_-DERIVATION/CHECK_CODINGBLOCK/item/
BUDGET_PERIOD.
```

```
Skipping mapping
```

Cause: This error occurs when you re-import the RFC schema for requisition, purchase order, invoice, or derivation into the SAP NetWeaver PI and you are using:

- SAP ERP EHP version 4.0 and above and you have not activated the budget period business function
- SAP ERP EHP version lower than 4.0

Solution: Perform the following steps when the error message appears:

1. Click **Close**.
2. On the **Definition** tab of the **Display Message Mapping** screen that appears, click the **Correct Structural Inconsistencies** button (extreme right).
3. In the **Move Field** screen that appears, click **Skip**.
4. Click **Save** and activate.

Related Information

Application Errors [page 231]
System Errors [page 234]

Enabling Debugging

When you call an RFC, you can turn on a debugging switch. This action enables you to access the SAP user interface, where you can set breakpoints.

> **Note**
>
> To debug File channel integration programs, you can use the standard SAP ABAP debugging functionality.

Debugging Using the SAP User Interface [page 239]
Debugging Parameters in Receipts [page 240]

Debugging Using the SAP User Interface

Procedure

1. Go the transaction **SE38** and open the program that you want to debug, in the display mode.
2. Put the break point at the required code statement.
3. Execute the program. ABAP debugger stops at the break point that you have set

Debugging Parameters in Receipts

Ariba Procurement Solution RFCs offer the `/ARBA/GR_PUSH_DISPLAY_MODE` parameter. To view export tasks, the administrator must change the parameters from ‘N’ to ‘E’ or ‘A’. Changing these parameters also enables you to view goods receipt screens in debug mode.

Account Assignment Categories

The material in this chapter is appropriate for SAP administrators and developers and Ariba procurement solutions implementation personnel.

About Account Assignment Categories [page 241]

Configuring Account Assignment Categories [page 242]

About Account Assignment Categories

SAP uses account assignment categories to specify how to assign a line-item expenditure to an account. Examples of account assignment categories are assets, WBS elements, or cost centers. Account assignment categories determine what information a user must provide for a line item, such as the account number of an asset.

For example, if you were to purchase an elevator for your company's building through Ariba procurement solutions, you could apply the cost of the elevator through an asset account category. You might do so because buildings are usually considered assets. Quite often, special tax and accounting considerations exist for expenses related to the improvement or maintenance of assets.

Such considerations might make it necessary for your SAP system to handle expenses for assets in a different manner than expenses for other items such as manufacturing raw materials or office supplies. These differences affect the type of information SAP displays to users who enter asset line items, and what they must do with this information. Account assignment categories let SAP know how to handle these differences.

For example, if a user chooses an asset account assignment category, SAP does not require the entry of any information related to cost centers. When possible, SAP includes default values for required information based upon current data.

It is possible to configure all existing SAP account assignment categories to display and require the accounting fields you want. If the default account assignment categories do not suit your needs, you create your own categories.

Account Assignment Category Imports

Ariba Procurement Solution imports account assignment categories from SAP. The import from SAP includes information about how the Ariba Procurement Solution user interface must treat account assignment categories to know:

- What types of accounts to display in the user interface.
- Whether to require the user to choose or provide certain types of account information in the user interface.

The default Ariba Procurement Solution SAP configuration imports the categories listed in the following table. The table identifies which entries are required for each assignment category. The requirement settings for these entries are fixed; the entries are required regardless of the values in the `FAUS1` field in `AccountCategory.csv`.

Symbol	Assignment Category	Required Entries
A	Asset	Asset Number
F	Order	Internal Order, GL Account, Asset, and Sub Asset
K	Cost Center	Cost Center, GL Account
P	Project	WBS Element, GL Account

> **Note**
>
> In the default configuration, the **CostCenter** field is not displayed on the line-item details screen when the user chooses account assignment category "F" (Order).

> **Note**
>
> The `/ARBA/MASTER_DATA_EXPORT` program does not extract statistical WBS elements.

Configuring Account Assignment Categories

Ariba procurement solutions imports account category information and uses it in similar ways to those used by SAP. This section explains how SAP allows you to configure account assignment categories, and then explains how Ariba procurement solutions imports, displays, and handles account assignment categories in the user interface.

Understanding Ariba Procurement Solutions Accounting Types

Ariba procurement solutions defines a generic accounting entity, which is a piece of accounting information. Examples of accounting entities include Project, Cost Center, Account, and SubAccount.

In a typical configuration, each site defines its own set of accounting entities. The accounting fields are not extrinsic—they are just specific instances of the generic accounting entity.

The default Ariba procurement solutions configuration for SAP defines the following accounting entities:

- asset—Asset
- Sub Asset — Sub Asset
- cost center—Cost Center
- general ledger—G/L Account
- internal order—RK/PPC order
- WBS element—Project

Ariba procurement solutions imports appropriate data from your SAP system and uses that data to populate the choosers and accounting information in Ariba procurement solutions. Ariba procurement solutions imports and uses SAP account assignment category information to determine what users need to enter for a line item.

When setting up your Ariba procurement solutions configuration, you define the accounting entities you plan to use. You also set up your configuration to default accounting information for catalog items from commodity codes. For information on how to configure accounting information in Ariba procurement solutions, see the *Ariba Procurement Data Import and Administration Guide*.

Configuring SAP Accounting Fields

Context

SAP has a set of information fields it can display or require for any account assignment category. You control the way in which the SAP user interface displays a field and how a user can modify it.

Procedure

1. To control how SAP displays fields and how users modify them, choose one of the following four options:
   - **Required Entry**—SAP displays the accounting field and requires user input. (This setting is ignored for some account category entries. See Account Assignment Category Imports [page 241] for a list.)
   - **Optional Entry**—SAP displays the accounting field, and a user can change it, but SAP does not require the user to make any changes.
   - **Display**—SAP displays the accounting field, but the user cannot change it.
   - **Hidden**—SAP does not display the accounting field.
2. To maintain these properties for each account assignment category, choose **Go to** > **Details in transaction OME9** in the SAP user interface.

Example Account Assignment Category Settings

The default asset account assignment category settings within an International Demonstration and Education System (IDES) are as follows:

- Display and require the user to enter an asset name or ID.
- Display but do not require the user to enter the following:
  - Asset sub-number
  - Business area
  - Deletion indicator
  - Details account assignment block
  - Quantity/Percent for material account assignment
  - Goods recipient/Ship-to party
  - Unloading point
  - Special region
- Display the following for informational purposes, but do not allow the user to change:

- General ledger account
- Project
- CO/PP order

- Do not display the remaining fields.

Understanding Field Status Group Strings

SAP stores information about when to display or require user input for account assignment categories in field status group strings. SAP uses these strings to store the settings previously discussed in the Change View "Account Assignment Categories": Details screen, in transaction `OME9`.

One field status group string exists for each account assignment category in your SAP instance. The strings reside in table `T162K`, within field `faus1`. Ariba procurement solutions imports the strings and interprets them to handle accounting fields within the user interface.

Each string consists of a series of four characters or spaces. Each of the four characters corresponds to the four settings SAP allows for accounting fields for a given account assignment category. Ariba procurement solutions treats some settings differently from SAP within the user interface.

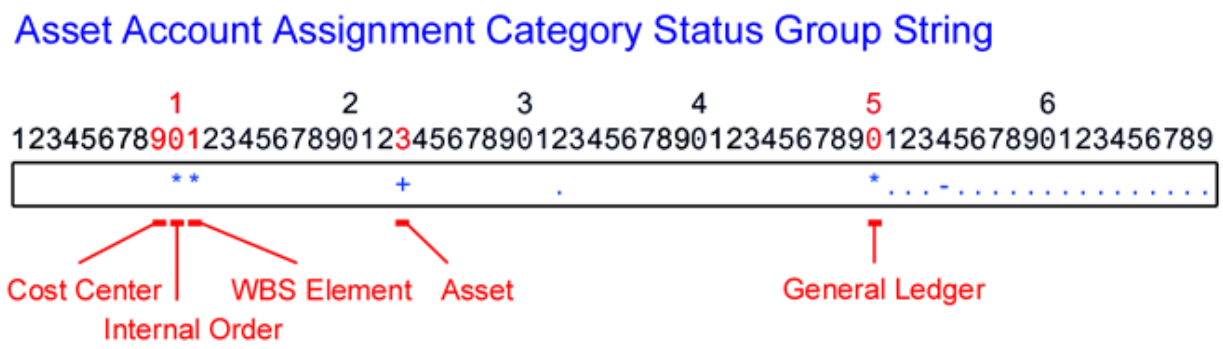
Character	SAP User Interface	Ariba procurement solutions
'+' (plus sign)	Required entry	Displays the field and requires user input.
'.' (period)	Optional entry	Displays the field, and the user can decide to whether to change it.
'*' (asterisk)	Display	Does not display this field because it does not require user input.
'-' (minus sign)	Suppressed	Does not display this field because it is not relevant.

The position of each character within the string determines the accounting field to which it applies. For example, in an IDES system, the field status group strings for the default Ariba procurement solutions account assignment categories are as follows:

The position of the characters within the string corresponds to the accounting fields within the `OME9` maintenance screen. Ariba procurement solutions imports all the characters in the string, but the default configuration uses only those that apply to the five account types. The character positions relevant to a default configuration for an SAP partition are as follows:

Account Type	Position
Cost Center	10
Internal Order	11
WBS Element	12
Asset	24
General Ledger	51

For example, the positions for an asset category from an IDES system resemble those in the following diagram:



Ariba procurement solutions interprets this field status group string in the following way:

The Cost Center character is a minus sign, which means it is not relevant to asset line items and does not appear in the Ariba procurement solutions user interface.

The Internal Order, WBS Element (project), and General Ledger characters are asterisks. Ariba procurement solutions does not display them because it does not require the user to enter a value.

The Asset character is a plus sign. Ariba procurement solutions displays the asset field in the user interface and requires the user to enter a value.

Ariba procurement solutions imports the entire field status group, even though the default configuration examines only five of the character positions. Ariba procurement solutions does so in case you want to customize Ariba procurement solutions to use and display other accounting type objects.

Your SAP sites create objects with unique names. The file ariba/variants/*variant*/partitions/*partition*/data/FieldStatusToAccountingFieldNameMap.csv contains mappings of field positions to the account type. Make sure to check this file for the new account type you added.

If you implement your own SAP accounting objects to import other accounting categories, the status strings are available for you to use. You can modify the RFCs that pull account categories with selection filters in `/ARBA/TVARV` to include categories for custom accounting objects.

The implementation of a new accounting object in Ariba procurement solutions is beyond the scope of this document, but generally includes creating a new ClusterRoot object that resembles the existing accounting types.

Viewing Field Status Group Strings

Context

It is possible to view the field status group strings that the Ariba procurement solutions RFC imports for account assignment categories on your SAP instance.

Procedure

1. Run transaction `SE37` to access the Function Builder Library: Initial Screen.
2. Type **`/ARBA/ACCOUNT_CATEGORY_EXPORT`** in the **Function module** field, and click **Sngl.test** or select **Function mode** > **Test** > **Single test**.
   The Test Function Module Initial Screen appears.
3. In the **Value** column, enter your Ariba procurement solutions variant name and partition, and then click the green check mark button to execute.

   For example, enter **`vsap`** and **`sappart1`**.

Importing New Accounting Objects From SAP

Context

You might want to configure account assignment imports to provide display information for a new accounting object you have created in Ariba procurement solutions.

Procedure

1. Within SAP, set up a parameter to an entry in `/ARBA/TVARV` for the account assignment category RFC, `/ARBA/ACCOUNT_CATEGORY_EXPORT`.

   In the default configuration, use the `showField` method to validate custom account categories with their field status strings.
2. The default behavior of displaying these fields is based on the visibility conditions in the code that follows this task. If you want other behavior, you could add a cluster root object in the metadata XML visibility condition calls.
3. For ideas about how to validate custom account assignment categories with their field status strings, examine the code that follows this task. For example, you could use the `showField`, within a metadata XML user interface description.

   The comments provide a good summary of the `showField` method:

```
/**
Given a field on Accounting for the SAP variant, and a given
account assignment category on that Accounting object,
determine if the accounting field should show up. This is
based on SAP's account category property called FieldStatus
Group. We pull this field status group back from SAP when we
pull AACs (Account Assignment Categories. The field status
group is a string of dots, slashes, plusses, and stars.
Each of these means a different thing.
'Optional' ('.') means the accounting field should be shown,
but does not require any kind of input.
'Suppressed' ('-') means the accounting field should not be
shown at all.
'Required' ('+') means the accounting field requires input,
```

```
and therefore it should be shown.
'Display' ('*') in SAP means visible, but no input possible.
In Ariba that means that the field is simply not visible. SAP
has this option 'display' for when it defaults values to an
accounting field and wants the field to be visible for
informational purposes only. Since we don't do any defaulting
like that, it's not necessary to show such a field.
@aribaapi external
*/
public static boolean showField (String fieldName, ValueSource aac)
{
    if (null == aac) {
        return false;
    }
    String Unique_Name = (String)aac.getFieldValue("UniqueName");
    String fstag = (String)aac.getFieldValue("FieldSelectionString1");
    char code = fstag.charAt(positionForField(fieldName));
    /**For an optional field, if the following combinations of Account
    Category (InternalOrder) and Accounting Field (CostCenter) are
    encountered, then we will suppress the display of the CostCenter field.*/
    if ('.' == code){
        if (Unique_Name.equals("F") ) {
            if ( fieldName.equals("CostCenter") ) {
                return false;
            }
        }
        //Optional
        return true;
    }
    else if ('-' == code) {
        // Suppressed
        return false;
    }
    else if ('+' == code) {
        // Required
        return true;
    }
    else if ('*' == code) {
        // Display-only
        return false;
    }
    else {
        // error handling
        return false;
    }
}
```

Integration Events Reference

This appendix lists the integration events provided with Ariba procurement solutions that work with SAP configurations on the Web Services and FIle channels. For complete information on these integration events, see the *Ariba Procurement Data Import and Administration Guide*.

Common Integration Events [page 248]

Common Integration Events

The following table provides a comprehensive list of all integration event names. This list includes integration events for both File as well as Web Services channel.

> **Note**
>
> All master data integration events are performed using the File Channel, while transactional data integration can be performed using either File or Web Services, with Web Services being the default channel.

In the "SAP Integration Events" [page 248] table, all transactional data integration events specific to File Channel are indicated explicitly. For example, **PaymentFileExport (File Channel)**.

Integration Events

Table 10: SAP Integration Events

Event Name	Description
AccCategoryFieldStatusComboPull	Imports combinations of Account Category and Field Status codes, used in Ariba Procurement Solution to simulate accounting combinations used in SAP.
AccountCategoryLanguagePull	Defines translations for the names of Account Categories.
AccountCategoryPull	Defines the accounting entity AccCategory, used in the default configurations.
AccountTypeLanguagePull	Defines translations for the names of Account Types from manually maintained CSV files.
AssetPull	Defines the accounting entity Asset, used in the default configurations.
BuyerPaymentBankLocationPull	Reads payment bank information for the buying company from a CSV file. For more information, see the *Ariba Invoicing and Payment Data Import and Administration Guide*.

Event Name	Description
CombinedDataPull	Performs a batch data load for all master data events. Language pulls can also be run in batch and also part of the CombinedDataPull.
CommodityExportMapPull	Defines a mapping from commodity codes to SAP-specific ones. Data is loaded from manually maintained CSV files.
CompanyCodeIOComboPull	Defines combinations of company codes and internal orders, used in default configurations.
CompanyCodePull	Defines the SAP accounting entity CompanyCode.
CompanyCodeWBSComboPull	Defines combinations of company codes and WBS elements, used in default configurations.
CostCenterLanguagePull	Defines translations for the names of Cost Centers.
CostCenterPull	Defines the accounting entity CostCenter.
CurrencyConversionRatePull	Loads the currency conversion rates.
CostCenterIdocImport	Performs real-time cost-center integrations.
FieldStatusToAccountingFieldNameMapPull	Maps SAP field status strings to accounting field names.
GeneralLedgerLanguagePull	Defines translations for General Ledger Pulls. Data is loaded from manually maintained CSV file.
GeneralLedgerPull	Defines the SAP accounting entity GL (General Ledger).
GlobalCompanyCodeMapPull	Uses a mapped type to map between local and global company code data within the partition.
InternalOrderPull	Defines the SAP accounting entity IO (InternalOrder).
ItemCategoryPull	Defines the kinds of orders that Ariba Procurement Solution can generate and push into your SAP ERP system. Data is loaded from manually maintained CSV file.
PaymentRealTimeExport	Exports payment information using the Web Services channel.
PaymentExport (File Channel)	Exports payment information using the File channel.
PartitionedCommodityCodePull	Loads ERP commodity codes from SAP ERP.
PartitionedCommodityCodeLanguagePull	Defines translations for ERP commodity code names.
PlantPull	Defines a set of “plants,” which is a concept similar to addresses. Data is loaded from manually maintained CSV file.
PlantPurchaseOrgComboPull	Imports combinations of plants and purchasing organizations, used in Ariba Procurement Solution to simulate SAP ERP accounting combinations.
PurchaseGroupPull	Defines a set of PurchaseGroups, by reading from SAP ERP.
PurchaseOrderCancelErrorImport(File Channel)	Imports canceled purchase order error data from SAP ERP.
PurchaseOrderCancelExport (File Channel)	Exports the canceled purchase order data from to SAP ERP.
PurchaseOrderCancelNumberImport (File Channel)	Imports the successfully canceled purchase order data from SAP ERP.
PurchaseOrderErrorImport (File Channel)	Imports the puchase order error information from SAP ERP.

Event Name	Description
PurchaseOrderExport (File Channel)	Exports the purchase order data from to SAP ERP.
PurchaseOrderNumberImport (File Channel)	Imports the purchase order status from SAP ERP.
PurchaseOrderChangeErrorImport (File Channel)	Imports changed puchase order error information from SAP ERP.
PurchaseOrderChangeExport (File Channel)	Exports the changed purchase order data from to SAP ERP.
PurchaseOrderChangeNumberImport (File Channel)	Imports the successfully changed purchase order data from SAP ERP.
PurchaseOrderCancelRealTimeExport	Exports canceled purchase orders to SAP ERP.
PurchaseOrderChangeRealTimeExport	Exports changed purchase orders to SAP ERP.
PurchaseOrderERPHeaderStatusImport	Imports the SAP ERP header status for a set of Ariba Procurement Solution purchase orders that are in an Ordered state and that are created during a specified time period.
PurchaseOrderRealTimeExport	Exports purchase orders to SAP ERP.
PurchaseOrgPull	Imports a set of purchasing organizations, by reading from SAP ERP.
ReceiptErrorImport (File Channel)	Imports the receipt error information from SAP ERP.
ReceiptExport (File Channel)	Exports the receipt data from to SAP ERP.
ReceiptNumberImport (File Channel)	Imports the receipt data from SAP ERP.
ReceiptRealTimeExport	Exports receipts to SAP ERP.
ReleaseAuthorityPull	Imports release authorization information from SAP ERP.
RemittanceImport (File Channel)	Imports remittance data from SAP ERP to Ariba Procurement Solution using the File Channel.
RemittanceImport	Imports remittance data from SAP ERP to Ariba Procurement Solution.
TaxCodeLanguagePull	Defines translations for the names of tax codes.
TaxCodePull	Defines tax codes required in SAP ERP partitions and used only in SAP ERP partitions.
WBSElementPull	Defines the SAP ERP accounting entity WBSElement. The ProjectNumber field was not available in this event. As a result, WBSElements were not getting linked to the relevant ProjectNumbers in Ariba Procurement Solution. To ensure that the ProjectNumber field is included in this event, you must download SAP transport, U47K900070 from connect.ariba.com and import it into your SAP ERP system.
Import Supplier Data (Consolidated File)	Imports the supplier information from the SAP ERP system to the Ariba Procurement Solution system.
Import Supplier Location Data (Consolidated File)	Imports the supplier location for the supplier from the SAP ERP system to the Ariba Procurement Solution system.
Import Payment Terms Data (Consolidated File)	Imports the payment terms data from the SAP ERP system to the Ariba Procurement Solution system.

Event Name	Description
Import Remittance Location Data (Consolidated File)	Imports remittance location from SAP ERP system to the Ariba Procurement Solution system.
Import User Data (Consolidated File)	Imports user information from the SAP ERP system to the Ariba Procurement Solution system.
Import User to Group Mapping Data (Consolidated File)	Imports user groups from the SAP ERP system to theAriba Procurement Solution system.
Import Purchase Organization Supplier Combo data (Consolidated File)	Imports the combinations of purchasing organizations and supplier information from the SAP ERP system to the Ariba Procurement Solution system.
Import Contracts in 5 CSV files	Imports contract information from the SAP ERP system to the Ariba Procurement Solution using CSV files.

Ariba SAP Objects

This section describes the SAP development objects provided by Ariba as part of the SAP integration and the naming conventions for those objects. The audience for this appendix includes:

- BASIS administrators who import Ariba's SAP transports and need to see the list of objects they're importing.
- ABAP developers who are responsible for customizing the Ariba SAP objects.

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/ARBA/PURCHREQP2P Package [page 261]

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/ARBA/BUDGET_MGMT Package [page 286]

Naming Conventions for Ariba SAP Objects

The general naming conventions for Ariba SAP objects are as follows:

- **Package** names begin with the prefix `/ARBA/`.
- **Function group** names begin with the `/ARBA/` prefixes.
- **Function module** names begin with the prefix `/ARBA/`. These modules are customizable. Ensure that you do not modify the Ariba function modules.
- **Table** names begin with the prefix `/ARBA/`. Do not modify any of these Ariba core tables.
- **Structure** names begin with the prefix `/ARBA/`. The structures are core Ariba structures that you must not modify; however you can customize them.

- **Data element** names begin with the prefix `/ARBA/`.
- **Message class:** Ariba's message class is named `/ARBA/`.

Summary of Ariba SAP Packages

This section lists the packages and the Ariba SAP objects in those classes. The following table describes the packages:

Package	Contents
`/ARBA/MASTER_DATA_EXPORT`	Ariba development objects
`/ARBA/INVOICE_CREATE`	Ariba on-demand invoice objects
`/ARBA/REMITTANCE_FILE`	Ariba on-demand remittance pull objects
`/ARBA/PO_IMPORT`	Ariba purchase order push object
`/ARBA/CHANGEORDER`	Ariba change purchase order PO push object
`/ARBA/GOODS_RECEIPTS_CREATE`	Ariba receipt push object
`/ARBA/FILE_CHANNEL`	Ariba file channel objects
`/ARBA/INVOICE_INTEGRATION`	Ariba Invoice object
`/ARBA/EXPENSE_INTEGRATION`	Ariba expense report object
`/ARBA/GR_INTEGRATION`	Ariba goods receipt object using File Channel
`/ARBA/EXPENSE_REPORT`	Ariba expense report object using File Channel
`/ARBA/REMITTANCE_EXPORT`	Ariba remittance export object using Web services
`/ARBA/REMITTANCE_FILE`	Ariba remittance file object using File Channel

Each package topic describes its objects, including any of the following:

- Function groups and function modules
- Tables
- Structures
- Data elements
- Includes
- Message classes

/ARBA/MASTER_DATA_EXPORT Package

The `/ARBA/MASTER_DATA_EXPORT` package contains Ariba development objects for master data.

Function Groups and Modules

The following are the function groups in the /ARBA/MASTER_DATA_EXPORT package:

Function Group	Description
/ARBA/MATERIAL_MANAGE_RFC	Ariba Materials Management RFCs
/ARBA/FICO_RFC	Ariba FICO RFCs
/ARBA/CORE_RFC	Ariba Core RFCs
/ARBA/IMG_RFC	Ariba IMG RFCs
/ARBA/TMG	/ARBA/TVARV maintenance dialog-generated
/ARBA/READ_CSV	Reads the CSV contents
/ARBA/MASTER_LANGUAGE_RFC	Ariba master data language pulls
/ARBA/DOWNLOAD_FILE	Ariba on-demand download CSV files
/ARBA/AUTH_PARAM	Ariba Direct Connectivity parameters
/ARBA/CHANGE_DOCS	Reads the change events for the incremental change transaction
/ARBA/DIRECT_CONNECTIVITY	Applicable to Direct Connectivity
/ARBA/SYSTID_MAP	Maps the system ID for the vendors
/ARBA/USER_RFC	Information on the users and user groups

In the /ARBA/MASTER_DATA_EXPORT package, the function group /ARBA/TMG contains only function modules automatically generated by the SAP maintenance dialog. The function modules in these function groups are not customizable and are not described in this document. This is applicable for the following function modules:

- /ARBA/AUTH_PARAM
- /ARBA/CHANGE_DOCS
- /ARBA/SYSTID_MAP
  You cannot customize the /ARBA/DIRECT_CONNECTIVITY function module.

The function modules for the rest of the function groups are described in the following tables.

Table 11: /ARBA/MATERIAL_MANAGE_RFC Function Group

Function Module	Description
/ARBA/ACCOUNT_CATEGORY_EXPORT	The function module that exports the account assignment categories and their properties.
/ARBA/ACCOUNT_FIELD_EXPORT	The function module that exports the account category and field status information.
/ARBA/COMPANY_CODE_EXPORT	The function module that exports the company code information.
/ARBA/MATERIAL_GROUP_EXPORT	The function module that exports the material group information.
/ARBA/PLANT_EXPORT	The function module that exports the plant (ship To) information.
/ARBA/PLANT_PURCHASE_EXPORT	The function module that exports the plant and purchase organization information.

Function Module	Description
/ARBA/PURCHASE_GROUP_EXPORT	The function module that exports the purchase group information.
/ARBA/PURCHASE_ORG_EXPORT	The function module that exports the purchase organization information.
/ARBA/VENDOR_EXPORT	The function module that exports the vendor and purchase organization information.
/ARBA/VENDOR_ONLY_EXPORT	The function module that exports the vendor information.
/ARBA/REMITTANCE_LOC_EXPORT	The function module that exports the remittance location information.
/ARBA/VENDOR_INCRMENT_EXPORT	The function module that exports the changed vendor information.
/ARBA/SUPPLIER_LOCATION_EXPORT	The function module that exports the supplier location information.

Table 12: /ARBA/FICO_RFC Function Group

Function Module	Description
/ARBA/ASSET_EXPORT	The function module that exports the asset information.
/ARBA/COST_CENTER_EXPORT	The function module that exports the cost center information.
/ARBA/GENERAL_LEDGER_EXPORT	The function module that exports the general ledger information.
/ARBA/INTERNAL_ORDER_EXPORT	The function module that exports the internal order information.
/ARBA/WBS_EXPORT	The function module that exports the WBS information.

Table 13: /ARBA/CORE_RFC Function Group

Function Module	Description
/ARBA/LAST_CHANGE_DATE	Gets last change date for an object given its object class
/ARBA/PARAMETER	Gets the value of a parameter
/ARBA/PREFILTER	Retrieves prefiltering restrictions
/ARBA/SELECT_LIST	Returns fields of structure

Table 14: /ARBA/IMG_RFC Function Group

Function Module	Description
/ARBA/CURRENCY_CONVERSION_EXPORT	Ariba Adapter Currency Conversion Pull Function Module
/ARBA/TAX_CODE_EXPORT	Tax Code Pull for Use in Ariba

Table 15: /ARBA/DOWNLOAD_FILE Function Group

Function Module	Description
/ARBA/CONVERT_TO_CSV_FORMAT	Converts SAP data into CSV format
/ARBA/CONVERT_TO_TEXT_FORMAT	Converts the data into text format
/ARBA/DATA_CONVERT_WRITE_FILE	Converts the SAP data and downloads the data

Table 16: /ARBA/READ_CSV Function group

Function Module	Description
/ARBA/KCD_CSV_FILE_CONVERSION	Parse the data in CSV format

Table 17: /ARBA/MASTER_LANGUAGE_RFC Function group

Function Module	Description
/ARBA/ACCOUNT_CAT_NAMES_EXPORT	Pulls account assignment category multi-lingual names
/ARBA/COST_CENTER_NAMES_EXPORT	Pulls cost center multi-lingual names
/ARBA/GENERAL_LDGR_NAMS_EXPORT	Pull general ledgers multi-lingual names
/ARBA/MATERIAL_GRP_NAME_EXPORT	Pulls material group multi-lingual names
/ARBA/TAX_CODE_NAMES_EXPORT	Pulls tax code multi-lingual names
/ARBA/PAYMENT_TERM_NAME_EXPORT	Pulls payment terms

Tables

The following are the tables for the /ARBA/MASTER_DATA_EXPORT package:

Table 18: /ARBA/MASTER_DATA_EXPORT Tables

Table	Description
/ARBA/TVARV	TVARV generalized for fields
/ARBA/AUTH_PARAM	Ariba Direct Connectivity parameters
/ARBA/FIELD_MAP	Maps the SAP and Ariba procurement solution system field values
/ARBA/INCR_DTTIM	Stores the time stamp for the last run master data export tasks
/ARBA/SYSTID_MAP	Maps the system ID for the vendors
/ARBA/USR_GRP	Stores the Ariba user roles

Structures

The following are the structures for the /ARBA/MASTER_DATA_EXPORT package:

Table 19: /ARBA/MASTER_DATA_EXPORT Structures

Structure	Description
/ARBA/ACCOUNT_ASSIGNMENT_CATGY	Account assignment category and its properties
/ARBA/ACCOUNT_CATEGORY	Account Category/Field Status Group combination
/ARBA/ACCOUNT_CATEGORY_NAMES	Names for account categories
/ARBA/ASSET	Stores main asset information for use in Ariba
/ARBA/BP_LANG_STR	Budget Period Language Pull
/ARBA/BP_STR	Budget Period Sturcture
/ARBA/CELLS	Ariba cells in flat structure for flexible excel upload.

Structure	Description
/ARBA/COMMIT_LANG_STR	Commitment Item language pull csv structure
/ARBA/COMPANY_CODE	Company code, name, and other details
/ARBA/COST_CENTER	To export all cost structure information for use in Ariba
/ARBA/COST_CENTER_NAMES	Cost center names
/ARBA/CURRENCY_CONVERSION	Currency Conversion Type information for use in Ariba
/ARBA/CURRENCY_TIME_ZONE	Structure for currency conversion type information for Ariba AribaFCURR F.
/ARBA/FM01T_STR	FMArea language structure
/ARBA/FMAREA_LANG_STR	FMArea language pull csv structure
/ARBA/FMBUDGETPD_STR	Budget Period Query Structure
/ARBA/FMBUDGETPDT_STR	Budget Period Language Pull
/ARBA/FMCIT_STR	Commitment item language structure
/ARBA/FMFCTR_STR	Funds Center
/ARBA/FMFCTRT_STR	Fund Center Language Pull
/ARBA/FMFINCODE_STR	FIFM: Financing code
/ARBA/FMFINT_STR	Fund Lanuage Pull
/ARBA/FMGRANT_LANG_STR	Grant Language Pull
/ARBA/FMGRANT_STR	FM Grant Structure
/ARBA/FUNCTAREA_LANG_STR	Functional Area Language Pull
/ARBA/FUND_LANG_STR	Fund language pull
/ARBA/FUND_STR	Fund Export
/ARBA/FUNDCTR_LANG_STR	Fund Center language Pull
/ARBA/FUNDCTR_STR	Funds Center Export
/ARBA/GENERAL_LEDGER	General ledger information
/ARBA/GENERAL_LEDGER_NAMES	Names of general ledgers
/ARBA/GMGR_STR	Grant Query Structure
/ARBA/GMGRTEXTS_STR	Grant Language Pull
/ARBA/KBLK_STR	Document Header: Manual Document Entry
/ARBA/KBLP_STR	Document Item: Manual Document Entry
/ARBA/MATERIAL_GROUP	To export all material group information for use in Ariba
/ARBA/MATERIAL_GROUP_NAMES	Material group names
/ARBA/ORDER	Holds order numbers for Ariba
/ARBA/PAYMENT_TERMS	Payment terms
/ARBA/PAYMENT_TERM_NAMES	Payment terms names

Structure	Description
/ARBA/PLANT	To export all plant information for use in Ariba
/ARBA/PLANT_PURCHASE	Plant/Purchase Orgs combinations for use in Ariba
/ARBA/PURCHASE_ORGANISATION	To export purchase organizations for use in Ariba
/ARBA/PURCHASING_GROUP	To export all purchasing Groups for use in Ariba
/ARBA/TAX_CODE	Tax code information for use in Ariba
/ARBA/TAX_CODE_NAMES	Tax code names for use in Ariba
/ARBA/TFKBT_STR	Functional Area Language Pull
/ARBA/USER	User information
/ARBA/USER_GROUP	User group names
/ARBA/USER_HR	User HR information
• /ARBA/VENDOR • /ARBA/SUPPLIER_LOCATION • /ARBA/REMITTANCE_LOCATION	To export vendor information for use in Ariba
/ARBA/VENDOR_PO	To export vendor/purchase org information for use in Ariba
/ARBA/WBS	WBS element information
/ARBA/WTAB	Table structure for “WHERE (itab)” statement

Proxy Structures

The following are the proxy structures for the /ARBA/MASTER_DATA_EXPORT package:

/ARBA/DT_MASTER_DATA

- /ARBA/DT_MASTER_DATA_ATTACHMEN
- /ARBA/DT_MASTER_DATA_HEADER
- /ARBA/DT_MASTER_DATA_PARAMETE1
- /ARBA/DT_MASTER_DATA_PARAMETER
- /ARBA/DT_MASTER_DATA_PARAM_TAB
- /ARBA/DT_MAScTER_DATA_REQ
- /ARBA/DT_MASTER_DATA_REQ_ATTAC
- /ARBA/DT_MASTER_DATA_REQ_HEADE
- /ARBA/DT_MASTER_DATA_REQ_PARA1
- /ARBA/DT_MASTER_DATA_REQ_PARAM
- /ARBA/DT_MASTER_DATA_REQ_P_TAB
- /ARBA/DT_MASTER_DATA_RES
- /ARBA/DT_RESPONSE
- /ARBA/DT_MASTER_DATA_PARAM_TAB
- /ARBA/DT_MASTER_DATA_REQ_P_TAB

Table Types

The following are the table types for the structures in the `/ARBA/MASTER_DATA_EXPORT` package:

Table Type	Description
`/ARBA/ACCOUNT_ASSIGMNT_CTG_T`	Table type for Account Assignment Category
`/ARBA/ACCOUNT_CATEGORY_NAMES_T`	Table type for names of the Account Category/Field Status Group combination
`/ARBA/ACCOUNT_CATEGORY_T`	Table type for Account Category/Field Status Group combination
`/ARBA/ACCOUNT_FIELD_T`	Table type For Account Category/Field Status
`/ARBA/ADDFAX_T`	BAPI structure Fax Numbers
`/ARBA/ADDPAG_T`	BAPI structure Pager Numbers
`/ARBA/ADDSMTP_T`	E-mail addresses BAPI Structure
`/ARBA/ADDTEL_T`	BAPI structure Telephone Numbers
`/ARBA/ADDTLX_T`	BAPI structure Telex Numbers
`/ARBA/ADDTTX_T`	BAPI structure Teletex Numbers
`/ARBA/ASSET_T`	Table type for Asset information for use in Ariba
`/ARBA/BAPIRET_DC`	Table type for Return Parameter
`/ARBA/BP_LANG_STR_T`	Budget Period Language Pull
`/ARBA/BP_STR_T`	Budget Period Table Type
`/ARBA/CHANGE_DOC_T`	Table type for Change Docs
`/ARBA/COMMIT_LANG_STR_T`	Commitment item language pull CSV structure table
`/ARBA/COMPANY_CODE_T`	Table type for Company Code, Name, and other details
`/ARBA/COST_CENTER_NAMES_TTable` type for	Table type for Cost Center names
`/ARBA/COST_CENTER_T`	Table type for Cost Centers
`/ARBA/CURRENCY_CONVERSION_T`	Table type for Currency Conversion Type information for use in Ariba
`/ARBA/EXCHANGE_LOG_DATA_TAB`	Proxy table type (generated)
`/ARBA/FM01T_STR_T`	FMArea Language Table Type
`/ARBA/FMAREA_LANG_STR_T`	FMArea Language pull
`/ARBA/FMGRANT_LANG_STR_T`	Grant Language Pull
`/ARBA/FMGRANT_STR_T`	FM Table Type
`/ARBA/FUNCTAREA_LANG_STR_T`	Functional Area Language Pull
`/ARBA/FUNDCTR_STR_T`	Funds Center Export
`/ARBA/FUNDCTR_LANG_STR_T`	Fund Center Language Pull
`/ARBA/FUND_LANG_STR_T`	Fund Language Pull
`/ARBA/FUND_STR_T`	Fund Export

Table Type	Description
/ARBA/GENERAL_LEDGER_NAMES_T	Table type for General Ledger names
/ARBA/GENERAL_LEDGER_T	Table type for General Ledgers
/ARBA/INTERNAL_ORDER_T	Table type For Internal Orders
/ARBA/MATERIAL_GROUP_NAMES_T	Table type For Material Group Names
/ARBA/MATERIAL_GROUP_NAME_T	Table type for Material Group names
/ARBA/MATERIAL_GROUP_T	Table type for the Material Groups
/ARBA/PARAMETER1_T	Replaces parameter (Length 18 -> 40)
/ARBA/PARAMETER_T	Table with User Parameters
/ARBA/PAYMENT_TERMS_T	Table type for Payment terms
/ARBA/PAYMENT_TERM_NAMES_T	Table type for Payment terms names
/ARBA/PLANT_PURCHASE_T	Table type for Plant/Purchase Orgs Combinations information
/ARBA/PLANT_T	Table type for Plant information
/ARBA/PREFILTER_T	Table type For Prefilter
/ARBA/PURCHASE_ORGANISATION_T	Table type for Purchasing organizations
/ARBA/PURCHASING_GROUP_T	Table type for Purchasing groups
/ARBA/REMITTANCE_LOCATION_T	Table type for Remittance locations
/ARBA/SDIT_QRY_T	SG01, Internal Structure: Input Table for Dynamic SQL
/ARBA/SUPPLIER_LOCATION_T	Table type for Supplier locations
/ARBA/TAX_CODE_NAMES_T	Table type for Tax code names
/ARBA/TAX_CODE_T	Table type for Tax codes
/ARBA/USER_GROUP_T	Table type for User groups
/ARBA/USER_T	Table type for Users
/ARBA/VENDOR_PO_T	Table type for Vendor/Purchase Org
/ARBA/VENDOR_T	Table type for Vendors
/ARBA/WBS_T	Table type for WBS elements

Data Elements

The following are the data elements for the /ARBA/MASTER_DATA_EXPORT package:

Data Element	Description
/ARBA/FM_BUDGET_PERIOD_NAME	Budget Period Name
/ARBA/FNAME_ARIBA	Field name in Ariba

Data Element	Description
/ARBA/FNAME_SAP	Field name for SAP
/ARBA/LOWER_CASE	Field name case sensitive
/ARBA/PASSWORD	Field name for password
/ARBA/STRUCTURE	Field name for structure

Message Class

The following is the message class for the /ARBA/MASTER_DATA_EXPORT package:

Message Class	Description
/ARBA/MESSAGE_CLASS	Error messages for Ariba SAP ABAP code

BAdI

The following is the BAdI information for the /ARBA/MASTER_DATA_EXPORT package:

BAdI Class	BAdI Interface	BAdI Name	Description
/ARBA/ CL_EX_MASTER_DATA	/ARBA/ IF_EXP_MASTER_DATA	/ARBA/MASTER_DATA	BADI definition For Master Data Pull

/ARBA/PURCHREQP2P Package

This package contains the Ariba requisition objects.

/ARBA/PURCHREQP2P Tables

The following is the table for the /ARBA/PURCHREQP2P package:

Table 20: /ARBA/PURCHREQP2P Table

Table	Description
/ARBA/PR_HISTORY	SAP requisitions which were pushed to SAP by Ariba

/ARBA/PURCHREQP2P Table Types

The following are the table types for the /ARBA/PURCHREQP2P:

Proxy Structure	Description
/ARBA/BNFPO	Requisition line item
/ARBA/TY_BAPIMEREQACCOUNT	Table type for BAPIMEREQACCOUNT
/ARBA/TY_BAPIMEREQITEMIMP	Table type for item map

/ARBA/PURCHREQP2P Structures

The following are the structures for the /ARBA/PURCHREQP2P package:

Table 21: /ARBA/PURCHREQP2P Sructures

Structure	Description
/ARBA/BAPIACCRPO	For posting in FI/CO: commitments (currency fields)
/ARBA/BAPIACPR00	For posting in accounting: requisition (item)
/ARBA/BAPIMEREQITEMIMP	Change toolbar for requisition (item)

/ARBA/PURCHREQP2P Domain

The following is the domain in the /ARBA/PURCHREQP2P package:

Domain	Description
/ARBA/REQ_FILTER	BADI filter parameter for the requisition transaction

/ARBA/PURCHREQP2P Function Group

The /ARBA/PURCHREQP2P package contains the following function group:

Function Group	Description
/ARBA/PURREQ	Ariba Procurement Solution requistion integration

/ARBA/PURCHREQP2P Function Modules

The /ARBA/PURCHREQP2P package contains the following function modules:

Function Module	Description
/ARBA/PURREQ	Requisition function group
/ARBA/PURREQ_DELETE	Mark requisition line item for deletion

/ARBA/PURCHREQP2P BAdI

The following is the BAdI information for the /ARBA/PURCHREQP2P package:

BAdI Class (ABAP Objects)	BAdI Interface (ABAP Objects)	BAdI Name	Description
/ARBA/CL_PURREQ_P2P	/ARBA/IF_PURREQ	/ARBA/PURREQ	Utility class for budget check

/ARBA/INVOICE_CREATE Package

This package contains the Ariba invoice objects.

/ARBA/INVOICE_CREATE Tables

The following are the tables for the /ARBA/INVOICE_CREATE package:

Table 22: /ARBA/INVOICE_CREATE Tables

Table	Description
/ARBA/PO_HISTORY	SAP POs which were pushed to SAP by Ariba

/ARBA/INVOICE_CREATE Structures

The following are the structures for the /ARBA/INVOICE_CREATE package:

Table 23: /ARBA/INVOICE_CREATE Sructures

Structure	Description
/ARBA/INVOICE_CSV_HEADER	Ariba CSV structure for invoice header

Structure	Description
/ARBA/INVOICE_CSV_LINE	Ariba CSV structure for invoice line items
/ARBA/INVOICE_CSV_TAX	Ariba CSV structure for invoice tax
/ARBA/INVOICE_CREATE_ACC_DATA	Ariba invoice account data structure
/ARBA/INVOICE_CSV_ITEMDATA	Ariba CSV structure for invoice item (File Channel)
/ARBA/INVOICE_CREATE_TAX	Ariba tax structure for invoice
/ARBA/INVOICE_CSV_ACCOUNT_DATA	Ariba CSV structure for invoice accounting data (File Channel)
/ARBA/INVOICE_CSV_ERROR	Ariba invoice error pull CSV (File channel)
/ARBA/INVOICE_CSV_NUMBER_PULL	Ariba CSV structure for invoice number pull file channel

/ARBA/INVOICE_CREATE Table Types

The following are the table types for the /ARBA/INVOICE_CREATE :

Table 24: /ARBA/INVOICE_CREATE -- Structures

Proxy Structure	Description
/ARBA/INVOICE_CSV_LINE_T	Table type for invoice CSV line
/ARBA/INVOICE_CSV_HEADER_T	Table type for invoice CSV header
/ARBA/INVOICE_CSV_TAX_T	Table type for invoice CSV tax
/ARBA/INVOICE_CREATE_ITEM_T	Table type for item data
/ARBA/INVOICE_CREATE_TAX_T	Table type for invoice create tax
/ARBA/INVOICE_CSV_ACCT_DATA_T	Table type CSV structure for invoice accounting data
/ARBA/INVOICE_CSV_ERROR_T	Table type for CSV error
/ARBA/INVOICE_CSV_NUMBER_PUL_T	Table type for Number Pull

/ARBA/INVOICE_CREATE Programs

The following are the programs in the /ARBA/INVOICE_CREATE package:

Table 25: /ARBA/INVOICE_CREATE -- Programs

Program	Description
/ARBA/CR_INVOICE_CREATE	Create Ariba invoices into SAP
/ARBA/CRINVOICE_READ	Include program for invoices
/ARBA/CRINVOICE_ERROR_HANDLING	Include program for invoices

BAdI

The following is the BAdI information for the `/ARBA/INVOICE_CREATE` package:

BAdI Class (ABAP Objects)	BAdI Interface (ABAP Objects)	BAdI Name	Description
`/ARBA/CL_EX_INVOICE_LOAD`	/ARBA/IF_EX_INVOICE_LOAD	/ARBA/INVOICE_LOAD	Add-in to load Ariba invoices into SAP

/ARBA/REMITTANCE_EXPORT Package

This class contains Ariba remittance pull programs.

/ARBA/REMITTANCE_EXPORT Function Group

The following is the function group in the /ARBA/REMITTANCE_EXPORT package:

Function Group	Description
`/ARBA/REMITTANCE_RFC`	Function group for the Remittance RFC

/ARBA/REMITTANCE_EXPORT Data Element

The following is the element in the /ARBA/REMITTANCE_EXPORT package:

Data Element	Description
`/ARBA/REM_DATETIME`	Data element for date time stamp

/ARBA/REMITTANCE_EXPORT Function Group

The following is the function group in the /ARBA/REMITTANCE_EXPORT package:

Function Group	Description
`/ARBA/REMITTANCE_RFC`	Function group for the Remittance RFC

/ARBA/REMITTANCE_EXPORT Structures

The following are the structures in the /ARBA/REMITTANCE_EXPORT package:

Function Group	Description
/ARBA/REMDETAIL	Ariba payment export line items
/ARBA/REMHEADER	Ariba payment export line items

/ARBA/REMITTANCE_EXPORT Table Types

The following are the table types in the /ARBA/REMITTANCE_EXPORT package:

Table Type	Description
/ARBA/REMDETAIL_T	Table type for Ariba payment export line items
/ARBA/REMHEADER_T	Table type for Ariba payment export line items

BAdI

The following is the BAdI information for the /ARBA/REMITTANCE_EXPORT package:

BAdI Class (ABAP Objects)	BAdI Interface (ABAP Objects)	BAdI Name	Description
/ARBA/CL_EX_REMIT_EXPORT	/ARBA/IF_EX_REMIT_EXPORT	/ARBA/REMIT_EXPORT	BAdI for remittance export

/ARBA/PO_IMPORT Package

This package contains Ariba purchase order export objects.

/ARBA/PO_IMPORT Function Group

The following is the function group in the /ARBA/PO_IMPORT package:

Function Group	Description
/ARBA/PO_RFC	Function group for PO RFC's

/ARBA/PO_IMPORT Table Types

The following are the table type structures in the `/ARBA/PO_IMPORT` package:

Table Type	Description
/ARBA/BAPIESKLC_T	Table type for Acct Assgt Distr. for service lines
/ARBA/BAPIESLLC_T	Table type for Communication Structure: Create Service Line
/ARBA/BAPIESUCC_T	Table type for Communication Structure: Contract Limits
/ARBA/BAPIESUHC_T	Table type for Communication Structure: Limits
/ARBA/BAPIMEPOACCOUNTX_T	Table type for Account Assignment Fields in Purchase Order
/ARBA/BAPIMEPOACCOUNT_T	Table type for Account Assignment Fields for Purchase Order
/ARBA/BAPIMEPOADDRDELIVERY_T	Table type for Address Structure BAPIADDR1 for Inbound Delivery
/ARBA/BAPIMEPOCONDHEADERX_T	Table type for conditions (Header, Change Bar)
/ARBA/BAPIMEPOCONDHEADER_T	Table type for conditions
/ARBA/BAPIMEPOCONDX_T	Table type for conditions in purchase order
/ARBA/BAPIMEPOCOND_T	Table type for conditions in purchase order
/ARBA/BAPIMEPOITEM_T	Table type for purchase order item
/ARBA/BAPIMEPOSCHEDULE_T	Table type for fields for purchase order delivery schedule
/ARBA/BAPIMEPOSCHEDULX_T	Table type for fields for schedule lines in purchase order
/ARBA/BAPIMEPOTEXT_T	Table type for texts: (Header or Item)
/ARBA/BAPIPAREX_T	Table type for BAPI parameter ExtensionIn/ExtensionOut
/ARBA/BAPIEIKPX_T	Foreign trade: Import/Export Header Data (Change Parameter)
/ARBA/BAPIEIKP_T	Foreign trade: Export/Import: Header Data
/ARBA/BAPIEIPOX_T	Table type for Import/Export: Item Data (Change Bar)
/ARBA/BAPIEIPO_T	Table type for foreign trade: Export/Import: Item Data
/ARBA/BAPIEKKOP_T	Table type for transfer structure for partner roles purchase order create
/ARBA/BAPIEKLC_T	Table type for: Acct Assgt Distr. for service lines
/ARBA/BAPIELLC_T	Table type for create service lines
/ARBA/BAPIESLTX_T	Table type for BAPI Services long text
/ARBA/BAPIITEMSHIPX_T	BAPI Shipping Data Change parameter
/ARBA/BAPIITEMSHIP_T	BADI shipping data for stock transport orders
/ARBA/BAPIMEDCM_ALLVERSIONS_T	Table type for version management - all version data
/ARBA/BAPIMEPACCOUNT_T	Table type for Account Assignment fields for purchase order
/ARBA/BAPIMEPOACCOUNTPROFTS_T	Table type for BAPI_PROFITABILITY_SEGMENT
/ARBA/BAPIMEPOACOUNTX_T	Table type for Account Assignment fields in purchase order

Table Type	Description
/ARBA/BAPIMEPOADDRDELVERY_T	Table type for BAPIADDR1 for Inbound Delivery
/ARBA/BAPIMEPOCOMPONENTX_T	Update information for components in BUS2012 API
/ARBA/BAPIMEPOCOMPONENT_T	BADI table for components
/ARBA/BAPIMEPOCONDHEDERX_T	Table type for conditions (Header, Change Bar)
/ARBA/BAPIMEPOCONDHEDER_T	Table type for conditions (Header)
/ARBA/BAPIMEPOITEM1_T	Structure for BAPIitem
/ARBA/BAPIMEPOITMX_T	Table type for purchase order item data (Change Toolbar)
/ARBA/BAPIMEPOITM_T	Table type for purchase order item
/ARBA/BAPIMEPOSCEDULX_T	Table type for fields for schedule lines in purchase orders
/ARBA/BAPIMEPOSCHEDLE_T	Table type for fields for purchase order delivery schedule
/ARBA/BAPIMEPOSHIPPEXP_T	Export structure for shipping data
/ARBA/BAPIMEPOTEXTHEDER_T	Table type for header texts
/ARBA/BAPIMEPOTXT_T	Table type for texts: (Header or Item)
/ARBA/BAPIMPOCONDX_T	Table type for conditions in purchase orders
/ARBA/BAPIMPOCOND_T	Table type for conditions in purchase orders
/ARBA/BAPIPREX_T	Table type for BAPI parameter ExtensionIn/ExtensionOut
/ARBA/BAPIRET2_T	Table type for Return parameter
/ARBA/BAPISUCC_T	Table type for Communication Structure: Contract Limits
/ARBA/BAPISUHC_T	Table type for limits
/ARBA/ERROR_MESSAGE_T	Table type for error messages
/ARBA/IT_BAPIEIPOX_T	Foreign Trade: Change Parameter: Item Data
/ARBA/IT_BAPIEIPO_T	Foreign Trade: Item Data
/ARBA/IT_BAPIEKKOP_T	Partner
/ARBA/IT_BAPIESKLC_T	External Services: Account Assignment Distribution for Services
/ARBA/IT_BAPIESLLC_T	External Services: Service Lines
/ARBA/IT_BAPIESLLTX_T	External Services: Service Long Text
/ARBA/IT_BAPIESUHC_T	External Services: Limits
/ARBA/IT_BAPIESUCC_T	External Services: Contract Limits
/ARBA/IT_BAPIITEMSHIPX_T	BAPI Shipping Data Change parameter
/ARBA/IT_BAPIITEMSHIP_T	BAPI Shipping data for stock transport orders
/ARBA/IT_BAPIMED_ALLVERSIONS_T	All versions (Export Parameter)
/ARBA/IT_BAPIMEPOACCOUNTX_T	BAPI PO accounts
/ARBA/IT_BAPIMEPOACCOUNT_T	BAPI PO account

Table Type	Description
/ARBA/IT_BAPIMEPOACCPROFITSE_T	BAPI PO account profit segment
/ARBA/IT_BAPIMEPOADDRDELIVER_T	BAPI PO Address Delivery
/ARBA/IT_BAPIMEPOCOMPONENTX_T	Update information for Components in BUS2012 API
/ARBA/IT_BAPIMEPOCOMPONENT_T	BAPI structure for Components
/ARBA/IT_BAPIMEPOCONDHEADERX_T	BAPI PO condition headers
/ARBA/IT_BAPIMEPOCONDHEADER_T	BAPI PO condition header
/ARBA/IT_BAPIMEPOCONDX_T	BAPI PO conditions
/ARBA/IT_BAPIMEPOCOND_T	BAPI PO conditions
/ARBA/IT_BAPIMEPOITEMX_T	BAPI PO Items table type
/ARBA/IT_BAPIMEPOITEM_T	BAPI PO Item
/ARBA/IT_BAPIMEPOSCHEDULEX_T	Delivery schedule (Change Parameter)
/ARBA/IT_BAPIMEPOSCHEDULE_T	BAPI PO schedule
/ARBA/IT_BAPIMEPOSCHEDULX_T	BAPI PO schedule
/ARBA/IT_BAPIMEPOSHIPPEXP_T	Export structure for shipping data
/ARBA/IT_BAPIMEPOTEXTHEADER_T	Header texts
/ARBA/IT_BAPIMEPOTEXT_T	Item texts
/ARBA/IT_BAPIPAREX_IN_T	Customer's Own fields (Import Parameters)
/ARBA/IT_BAPIPAREX_OUT_T	Customer's Own fields (export Parameters)
/ARBA/IT_NFM_BAPIDOCITM_T	BAPI Communication Structure NF Document Item Data
/ARBA/NFM_BAPIDOCITM_T	BAPI Communication Structure NF Document Item Data

/ARBA/PO_IMPORT Structures

The following are the structures for the /ARBA/PO_IMPORT package:

Structure	Description
/ARBA/APIMEPOACC_PROF_SEGMENT Reservation Profitability Seg	BAPI_PROFITABILITY_SEGMENT
/ARBA/BAPIEIKP Foreign Trade	Export/Import: Header Data
/ARBA/BAPIEIKPX Foreign Trade	Import/Export Header Data (Change Parameter)
/ARBA/BAPIEIPO Foreign Trade	Export/Import: Item Data
/ARBA/BAPIEIPOX Foreign Trade	Import/Export: Item Data (Change Parameter)
/ARBA/BAPIEKKOP	Transfer Structure for Partner Roles in BAPI_PO_CREATE

Structure	Description
/ARBA/BAPIESKLC Create Comm. Structure	Acct Assgt Distr. for Service Line
/ARBA/BAPIESLLC Communication Structure	Create Service Line
/ARBA/BAPIESLLTX	BAPI Services Long Text
/ARBA/BAPIESUCC Communication Structure	Contract Limits
/ARBA/BAPIESUHC	Structure for Limit
/ARBA/BAPIITEMSHIP BAPI	Shipping Data for Stock Transport Orders
/ARBA/BAPIITEMSHIPX	BAPI Shipping Data Change Parameter
/ARBA/BAPIMEDCM	Version Management
/ARBA/BAPIMEDCM_ALLVERSIONS	Version Management - All Version Data
/ARBA/BAPIMEPOACCOUNT Transfer Structure	Bapi PO Create Account Assignment
/ARBA/BAPIMEPOACCOUNTX	Account Assignment Fields in Purchase Order (Change Toolbar)
/ARBA/BAPIMEPOADDRDELIVERY PO Item	Address Structure BAPIADDR1 for Inbound Delivery
/ARBA/BAPIMEPOADDRVENDOR	Transfer Structure: Address of Vendor
/ARBA/BAPIMEPOCOMPONENT BAPI	Structure for Components
/ARBA/BAPIMEPOCOMPONENTX	Update Information for Components in BUS2012 API
/ARBA/BAPIMEPOCOND	Conditions in Purchase Order
/ARBA/BAPIMEPOCONDHEADER	Transfer Structure: Bapi PO Create Condition Header
/ARBA/BAPIMEPOCONDHEADERX	Conditions (Header, Change Bar)
/ARBA/BAPIMEPOCONDX	Change Toolbar: Conditions in Purchase Order
/ARBA/BAPIMEPOHEADER	Transfer Structure: Create PO header
/ARBA/BAPIMEPOHEADERX	Purchase Order Header Data (Change Parameter)
/ARBA/BAPIMEPOITEM	Transfer Structure: Bapi PO Create Item
/ARBA/BAPIMEPOITEMX	Purchase Order Item Data (Change Parameter)
/ARBA/BAPIMEPOSCHEDULE	Transfer Structure: Bapi PO Create Schedule
/ARBA/BAPIMEPOSCHEDULX	Fields for Schedule Lines in Purchase Order (Change Toolbar)
/ARBA/BAPIMEPOSHIPPEXP	Export Structure for Shipping Data
/ARBA/BAPIMEPOTEXT	Transfer Structure: PO Create Item Text
/ARBA/BAPIMEPOTEXTHEADER	Transfer Structure: Bapi PO Create Header Text
/ARBA/BAPIPAREX	Ref. structure for BAPI parameter ExtensionIn/ExtensionOut
/ARBA/ERROR_MESSAGE	Error Message Structure for PO Push
/ARBA/NFM_BAPIDOCITM /NFM/	BAPI Communication Structure NF Document Item Data

Structure	Description
/ARBA/PO_CREATE_HRADER_INFO	Ariba structure for BAPI_PO_CREATE Header information
/ARBA/PO_CREATE_ITEMS/	Transfer Structure: Create PO Item
/ARBA/PO_DELIVERY_INFO	Ariba Purchase Order delivery date
/ARBA/PO_DETAILS	Structure for pulling purchase order details
/ARBA/PO_HEADER1	Structure for the purchase order header data
/ARBA/PO_POHEADERX	Header Data (Change Parameter)

BAdI

The following is the BAdI information for the /ARBA/PO_IMPORT package:

BAdI Class (ABAP Objects)	BAdI Interface (ABAP Objects)	BAdI Name	Description
/ARBA/CL_EX_PO_IMPORT	/ARBA/IF_EX_PO_IMPORT	/ARBA/PO_IMPORT	BADI for PO Import

/ARBA/CHANGEORDER Package

The /ARBA/CHANGEORDER package contains Ariba development objects for change and cancel order integration.

/ARBA/CHANGEORDER Function

The /ARBA/CHANGEORDER package has the following function:

Function	Description
/ARBA/CHANGEORDER_RFC	Holds change/cancel & PO Header status function modules

/ARBA/CHANGEORDER Table Types

The following are the table type structures in the /ARBA/CHANGEORDER package:

Table Type	Description
/ARBA/BAPIESKLC_T	Table type for Acct Assgt Distr. for service line
/ARBA/BAPIESLLC_T	Table type for communication structure: Create Service Line

Table Type	Description
/ARBA/BAPIESLLTX_T	Table type for BAPI Services Long Text
/ARBA/BAPIESUCC_T	Table type for communication structure: Contract Limits
/ARBA/BAPIESUHC_T	Table type for communication structure: Limits
/ARBA/BAPIMEPOACCOUNTPROFITS_T	Table type for BAPI_PROFITABILITY_SEGMENT
/ARBA/BAPIMEPOACCOUNTX_T	Table type for Account Assignment Fields in Purchase Order
/ARBA/BAPIMEPOACCOUNT_T	Table type for Account Assignment Fields for Purchase Order
/ARBA/BAPIMEPOADDRDELIVERY_T	Table type for Address Structure BAPIADDR1 for Inbound Delivery
/ARBA/BAPIMEPOCONDHEADERX_T	Table type for conditions (Header, Change Bar)
/ARBA/BAPIMEPOCONDHEADER_T	Table type for conditions
/ARBA/BAPIMEPOCONDX_T	Table type for conditions in purchase orders
/ARBA/BAPIMEPOCOND_T	Table type for conditions in purchase orders
/ARBA/BAPIMEPOITEMX_T	Table type for purchase order item data (Change Toolbar)
/ARBA/BAPIMEPOITEM_T	Table type for purchase order item
/ARBA/BAPIMEPOSCHEDULE_T	Table type for purchase order delivery schedule fields
/ARBA/BAPIMEPOSCHEDULX_T	Table type for schedule lines in purchase order fields
/ARBA/BAPIMEPOTEXTHEADER_T	Table type for header text
/ARBA/BAPIMEPOTEXT_T	Table type for texts: (Header or Item)
/ARBA/BAPIPAREX_T	Table type for BAPI parameter ExtensionIn/ExtensionOut
/ARBA/POHEADER_INFO_T	Table type for PO Header Info for Change Orders
/ARBA/PO_ACCOUNT_INFO_T	Table type for PO Account Info
/ARBA/PO_DELETE_ACCOUNTS_T	Table type for PO Delete Accounts
/ARBA/PO_DELETE_ITEMS_T	Table type for PO Delete Items
/ARBA/PO_HEADER_STATUS_T	Table type for PO Header Status Structure
/ARBA/PO_ITEM_T	Table type for PO Items for Change Orders (Ensure that you do not modify this table type)
/ARBA/PO_ITMS_T	Table type for PO Items
/ARBA/STRING_T	Table type for String

/ARBA/CHANGEORDER Structures

The following are the structures for the `/ARBA/CHANGEORDER` package:

Structure	Description
`/ARBA/POHEADER_INFO`	PO Header information for Change Orders (Ensure that you do not modify this structure)
`/ARBA/PO_ACCOUNT_INFO`	PO Accounting information for Change Orders (Ensure that you do not modify this structure)
`/ARBA/PO_DELETE_ACCOUNTS`	PO Deleted Accounts for Change Orders (Ensure that you do not modify this structure)
`/ARBA/PO_DELETE_ITEMS`	PO Deleted Items for Change Orders (Ensure that you do not modify this structure)
`/ARBA/PO_HEADER_STATUS`	Ariba Extension for Order Header Status Structure
`/ARBA/PO_ITEMS`	PO Items for Change Orders (Ensure that you do not modify this structure)
`/ARBA/STRING`	Structure for text data for PO Push for Ariba

/ARBA/CHANGEORDER Data Element

The following is the element are the in the /ARBA/CHANGEORDER package:

Data Element	Description
`/ARBA/SERIAL_NUM`	Serial number of account assignment

BAdI

The following is the BAdI information for the /ARBA/CHANGEORDER package:

BAdI Class (ABAP Objects)	BAdI Interface (ABAP Objects)	BAdI Name	Description
`/ARBA/CL_EX_PO_CHANGEORDER`	/ARBA/IF_EX_PO_CHANGEORDER	/ARBA/PO_CHANGEORDER	BADI for change purchase order

/ARBA/GOODS_RECEIPTS_CREATE Package

The `/ARBA/GOODS_RECEIPTS_CREATE` package comprises the function groups listed in the following section.

/ARBA/GOODS_RECEIPTS_CREATE Function Groups

The /ARBA/GOODS_RECEIPTS_CREATE package contains the following function groups:

Function Group	Description
/ARBA/GOODSRECEIPTS_CREATE	Ariba goods receipts function group
/ARBA/GR_TMG	Table maintenance function group for the receipt table

/ARBA/GOODS_RECEIPTS_CREATE Structures

The /ARBA/GOODS_RECEIPTS_CREATE package contains the following structures:

Table 26: /ARBA/GOODS_RECEIPTS_CREATE Structures

Structure	Description
/ARBA/ERROR_MESSAGE_CORE	Error message structure for po_push
/ARBA/GOODS_RECEIPTS_ERROR	Error message structure for goods receipt push
/ARBA/GOODS_RECEIPTS_HEADER	Goods receipt header information
/ARBA/GOODS_RECEIPTS_ITEM	Material document item information for Ariba goods receipt (Ensure that you do not modify this table,)

/ARBA/GOODS_RECEIPTS_CREATE Tables

The /ARBA/GOODS_RECEIPTS_CREATE package contains the following tables:

Table	Description
/ARBA/GR	Goods receipt pushed to SAP from Ariba
/ARBA/GRFLDSMAP	Maps interface tables to screen fields (This is maintained by the customer,)
/ARBA/GRFLDS_MAP	Maps interface tables to screen fields (Ensure that you do not modify this table,)

ARBA/GOODS_RECEIPTS_CREATE Table Types

The /ARBA/GOODS_RECEIPTS_CREATE package contains the following table types:

Table Type	Description
/ARBA/BDCDATA_T	Table type for BDCdata
/ARBA/GOODS_RECEIPTS_ERROR_T	Table type for error messages

Table Type	Description
/ARBA/GOODS_RECEIPTS_ITEM_T	Table type for goods receipts item

Data Element

The following is the element in the /ARBA/GOODS_RECEIPTS_CREATE package:

Data Element	Description
/ARBA/FILE Line Number	File number of the receipt

BAdI

The following is the BAdI information for the /ARBA/GOODS_RECEIPTS_CREATE package:

BAdI Class (ABAP Objects)	BAdI Interface (ABAP Objects)	BAdI Name	Description
/ARBA/CL_EX_GR_CREATE	/ARBA/IF_EX_GR_CREATE	/ARBA/GR_CREATE	Add-in for goods receipts creation

/ARBA/GR_INTEGRATION Package

The /ARBA/GR_INTEGRATION package is applicable for the Ariba goods receipts push using the file channel integration.

ARBA/GR_INTEGRATION Program

The ARBA/GR_INTEGRATION package contains the following programs:

Program	Description
/ARBA/CR_GR_CREATE	Ariba goods receipts push for file channel integration
/ARBA/CR_GR_CREATEF01	Include for receipt program

ARBA/GR_INTEGRATION Structures

The ARBA/GR_INTEGRATION package contains the following structures:

Table 27: /ARBA/GR_INTEGRATION Structures

Structure	Description
/ARBA/GR_CSV_LINEITEMS	Ariba customer CSV goods receipt lineitems structure
/ARBA/GR_CSV_NUMBERPULL	Ariba goods receipt push structure for the PO Number Pull response

BAdI

The following is the BAdI information for the ARBA/GR_INTEGRATION package:

BAdI Class (ABAP Objects)	BAdI Interface (ABAP Objects)	BAdI Name	Description
/ARBA/CL_EX_CREATE_GR	/ARBA/IF_EX_CREATE_GR	/ARBA/CREATE_GR	Add-in for Goods Receipts

/ARBA/FILE_CHANNEL Package

The /ARBA/FILE_CHANNEL package is applicable for the Ariba file channel objects.

/ARBA/FILE_CHANNEL Programs

The /ARBA/FILE_CHANNEL package contains the following programs:

Program	Description
/ARBA/CI_BAPI_PO_COMMON	Include for PO create, change, cancel and header status pull
/ARBA/CR_BAPI_PO_CANCEL	Ariba Cancel Purchase Order for File Channel Integration
/ARBA/CR_BAPI_PO_CHANGE	Ariba Purchase Order Change for File Channel Integration
/ARBA/CR_BAPI_PO_CREATE1	PO Push File Channel Import
/ARBA/CR_PO_HEADER_STATUS	Ariba Purchase Order header status pull for File Channel

Data Element

The following is the element in the /ARBA/FILE_CHANNEL package:

Data Element	Description
/ARBA/DATE_TIME_STAMP	DateTime stamp

/ARBA/FILE_CHANNEL Function Group

The /ARBA/FILE_CHANNEL package contains the following function group:

Function Group	Description
/CREATE/ARBA/FILE_TABL	Table maintenance generator function group

/ARBA/FILE_CHANNEL Structures

The /ARBA/FILE_CHANNEL package contains the following structures:

Table 28: /ARBA/FILE_CHANNEL Structures

Structure	Description
/ARBA/CANCELPO_CSV_NUMBERPULL	Ariba CSV structure for Cancel PO response message
/ARBA/CPOPUSH_CSV_ACCTDATA	Ariba CSV structure for Change PO accounting data
/ARBA/CPOPUSH_CSV_DELACCNTS	Ariba CPO deleted accounts for File channel
/ARBA/CPOPUSH_CSV_DEL_LINES	Ariba CPO deleted line items CSV for File channel
/ARBA/CPOPUSH_CSV_LINEITEMS	Ariba CSV structure for Change PO push line items
/ARBA/CPOPUSH_CSV_PO_TEXT	Ariba CPO text data CSV for File channel
/ARBA/POPUSH_CSV_ACCDATA	Ariba custom CSV structure for PO Account Assignment
/ARBA/POPUSH_CSV_HEADER	Ariba customer CSV PO Header Structure for PO
/ARBA/POPUSH_CSV_LADDETAIL	Ariba customer CSV PO Lineitems add details Structure for PO
/ARBA/POPUSH_CSV_LINEITEMS	Ariba customer CSV PO Lineitems Structure for PO
/ARBA/POPUSH_CSV_LINETEXT	Ariba customer CSV PO LINE Structure for PO
/ARBA/POPUSH_CSV_LINETEXT_NEW	Ariba structure for PO Line item text for reading CSV file
/ARBA/POPUSH_CSV_NUMBERPULL	Ariba PO Push Structure for PO Number Pull response
/ARBA/POPUSH_CSV_SCHEDULES	Ariba customer CSV Structure for PO Schedule lines

/ARBA/FILE_CHANNEL Table

The /ARBA/FILE_CHANNEL package contains the following table:

Table	Description
/ARBA/POH_DAT_TM	Ariba On-demand - Remittance date time storage

/ARBA/FILE_CHANNEL Table Types

The /ARBA/FILE_CHANNEL package contains the following table types:

Table Type	Description
/ARBA/BAPIMEPOACCOUNTF_T	Table type for PO File Channel Accounting
/ARBA/BAPIMEPOADDRVENDORF_T	Table type for PO File Channel Vendor Address
/ARBA/BAPIMEPOHEADERF_T	Table type for File Channel Header Table Type
/ARBA/BAPIMEPOITEMF_T	Table type for PO File Channel Item Table Type
/ARBA/BAPIMEPOSCHEDULEF_T	Table type for PO File Channel Schedule item Table Type
/ARBA/BAPIMEPOTEXTHEADR_T	Table type for Header Text
/ARBA/ERRORS_MESSAGE_T	Table type for Error Message
/ARBA/POPUSH_CSV_ACCDATA_T	Table type for PO PUSH CSV ACCDATA
/ARBA/POPUSH_CSV_HEADER_T	Table type for POPUSH CSV HEADER
/ARBA/POPUSH_CSV_LADDETAIL_T	Table type for POPUSH CSV LADDETAIL
/ARBA/POPUSH_CSV_LINEITEMS_T	Table type for POPUSH CSV LINEITEMS
/ARBA/POPUSH_CSV_LINETEXT_T	Table type for POPUSH CSV LINETEXT
/ARBA/POPUSH_CSV_SCHEDULES_T	Table type For POPUSH CSV SCHEDULES
/ARBA/PO_ACCOUNTS_INFO_T	Table type for PO account information
/ARBA/PO_IATEM_T	Table type for PO items
/ARBA/STRINGS_T	Table type for string

BAdI

The following is the BAdI information for the `/ARBA/FILE_CHANNEL` package:

BAdI Class (ABAP Objects)	BAdI Interface (ABAP Objects)	BAdI Name	Description
`/ARBA/CL_EX_PO_FILE_CHANNL`	/ARBA/IF_EX_PO_FILE_CHANNL	/ARBA/PO_FILE_CHANNL	Badi Definition For PO File Channel

/ARBA/INVOICE_INTEGRATION Package

The `/ARBA/INVOICE_INTEGRATION` package is applicable for the Ariba Invoice Integration package.

/ARBA/INVOICE_INTEGRATION Function Group

The `/ARBA/INVOICE_INTEGRATION` package contains the following function group:

Function Group	Description
`/ARBA/INVOICE_CREATE`	Invoice verification function group

/ARBA/INVOICE_INTEGRATION Tables

The `ARBA/INVOICE_INTEGRATION` package contains the following tables:

Tables	Description
`/ARBA/BAPIRETURN`	Ariba return structure for invoices
`/ARBA/BAPI_INVOICE_CREATE`	Ariba invoice account data structure
`/ARBA/INVOICE_CREATE_GLACCOUNT`	Ariba GL account structure for invoices
`/ARBA/INVOICE_CREATE_HEADER`	Ariba header structure for invoices
`/ARBA/INVOICE_CREATE_ITEM`	Ariba item structure for invoices

/ARBA/INVOICE_INTEGRATION Table Types

The /ARBA/INVOICE_INTEGRATION package contains the following table types:

Table Types	Description
/ARBA/BAPI_INCINV_CREATE_MAT_T	Table type for BAPI material
/ARBA/BAPI_INCINV_CREATE_TAX_T	Table type for BAPI tax
/ARBA/BAPI_INCINV_CR_ADRDATA_T	Table type for BAPI address data
/ARBA/BAPI_INCINV_CR_HEADER_T	Table type for BAPI Invoice header
/ARBA/BAPI_INCIN_CREATE_ACCT_T	Table type for BAPI invoice create account
/ARBA/BAPI_INCIN_CREATE_GLAC_T	Table type for BAPI GL account
/ARBA/BAPI_ININV_CREATE_ITEM_T	Table type for BAPI item data
/ARBA/BAPI_ININV_CREATE_WTAX_T	Table type for BAPI witholding tax
/ARBA/BAPI_ININV_CR_VENSPLIT_T	Table type for vendor invoice vendor split
/ARBA/BAPI_INVOICE_CREATE_T	Table type for invoice create
/ARBA/INVOICE_CREATE_HEADER_T	Table type for invoice create header
/ARBA/INV_CREATE_GLACC_T	Table type for invoice create GL account text
/ARBA/ITEM_DATA_T	Table type for item data
/ARBA/BAPIACAP03_T	Table type for vendor line items
/ARBA/BAPIACCR01_T	Table type for line item currency fields
/ARBA/BAPIACCRPO_T	Table type for posting in FI/CO: commitments (currency fields)
/ARBA/BAPIACGL03_T	Table type for G/L account line items
/ARBA/BAPIACKECR_T	Table type for posting in accounting: CO-PA account assignment characteristics
/ARBA/BAPIACKEVA_T	Table type for posting in FI/CO: CO-PA account assignment value fields
/ARBA/BAPIACPO00_T	Table type for posting in accounting: purchase order (item)
/ARBA/BAPIACTX01_T	Table type for posting to FI accounting: tax (item)
/ARBA/BAPIEXTC_T	Table type for container for Customer Exit parameter
/ARBA/BAPIRETURN_T	Table type for Ariba return table type
/ARBA/INVOICE_CREATE_GLACCNT_T	Table type for Ariba GL account structure for invoice

BAdI

The following is the BAdI information for the `/ARBA/INVOICE_INTEGRATION` package:

BAdI Class (ABAP Objects)	BAdI Interface (ABAP Objects)	BAdI Name	Description
`/ARBA/CL_EX_INVOICE_CREATE`	/ARBA/IF_EX_INVOICE_CREATE	/ARBA/INVOICE_CREATE	Add-in for Invoice Create

/ARBA/EXPENSE_INTEGRATION Package

The following `/ARBA/EXPENSE_INTEGRATION` package is applicable for the Ariba Expense Report Integration package:

Related Information

Integrating non-PO (FI) invoices [page 214]
Ariba SAP Objects [page 252]

Function Groups

The `/ARBA/EXPENSE_INTEGRATION` package contains the following function groups:

Function Group	Description
`/ARBA/ER_INVOICE`	Ariba ER Invoice Create function group
`/ARBA/ER_TMG`	Table maintenance function group

/ARBA/EXPENSE_INTEGRATION Table

The `/ARBA/EXPENSE_INTEGRATION` package contains the following table:

Table	Description
`/ARBA/ER_GL_DATA`	Offset G/L entry information for the Expense report Integration

/ARBA/EXPENSE_INTEGRATION Structures

The /ARBA/EXPENSE_INTEGRATION package contains the following structures:

Structure Name	Description
/ARBA/ER_CSV_HEADER	Ariba structure for CSV ER header
/ARBA/ER_CSV_LINE	Ariba structure for CSV ER line
/ARBA/ER_CSV_TAX	Ariba structure for CSV ER tax

/ARBA/EXPENSE_INTEGRATION Table Types

The /ARBA/EXPENSE_INTEGRATION package contains the following table types:

Table Types	Description
/ARBA/BAPI_ERINV_CREATE_ITEM_T	Table type for BAPI item data
/ARBA/BAPI_ERINV_CREATE_MAT_T	Table type for BAPI material
/ARBA/BAPI_ERINV_CREATE_TAX_T	Table type for BAPI tax
/ARBA/BAPI_ERINV_CREATE_WTAX_T	Table type for BAPI witholding tax
/ARBA/BAPI_ERINV_CR_VENSPLIT_T	Table type for vendor invoice vendor split
/ARBA/BAPI_ERIN_CREATE_ACCT_T	Table type for BAPI invoice create account
/ARBA/BAPI_ERIN_CREATE_GLAC_T	Table type for BAPI GL account
/ARBA/ER_CSV_HEADER_T	Table type for ER CSV header
/ARBA/ER_CSV_LINE_T	Table type for the general ledger account
/ARBA/ER_CSV_TAX_T	Table type for tax data

BAdI

The following is the BAdI information for the /ARBA/EXPENSE_INTEGRATION package:

BAdI Class (ABAP Objects)	BAdI Interface (ABAP Objects)	BAdI Name	Description
/ARBA/ CL_EX_EXPENSE_CREATE	/ARBA/ IF_EX_EXPENSE_CREATE	/ARBA/EXPENSE_CREATE	Add-in for Expense Create

/ARBA/EXPENSE_REPORT Package

The following /ARBA/EXPENSE_REPORT package is applicable for the Ariba Expense Report Push Integration package:

/ARBA/EXPENSE_REPORT Programs

The /ARBA/EXPENSE_REPORT package contains the following programs:

Program	Description
/ARBA/CR_ER_INVOICE_CREATE	Read the ER files and create invoices
/ARBA/CR_ER_ERRORHANDLING	Include program for Expense Report
/ARBA/CR_ER_READERF01	Include program for Expense Report

/ARBA/EXPENSE_REPORT Function Group

The /ARBA/EXPENSE_REPORT package contains the following function group:

Function Group	Description
/ARBA/READ_ER_FILE	Function group for Expense CSV reading

/ARBA/EXPENSE_REPORT Table Types

The /ARBA/EXPENSE_REPORT package contains the following table types:

Table Types	Description
/ARBA/BAPI_INCINV_CRTE_ADATA_T	Table type for address data
/ARBA/BAPI_INCINV_CRTE_GLACC_T	Table type for invoice GL account

BAdI

The following is the BAdI information for the /ARBA/EXPENSE_REPORT package:

BAdI Class (ABAP Objects)	BAdI Interface (ABAP Objects)	BAdI Name	Description
/ARBA/CL_EX_READ_ER	/ARBA/IF_EX_READ_ER	/ARBA/READ_ER	Add-in for Expense report

/ARBA/REMITTANCE_FILE Package

The /ARBA/REMITTANCE_FILE package using the File Channel comprises the function groups listed in the following section.

/ARBA/REMITTANCE_FILE Program

The /ARBA/REMITTANCE_FILE package contains the following program:

Program	Description
/ARBA/CR_REMITTANCE_EXPORT	Read the ER files and create invoices

/ARBA/REMITTANCE_FILE Function Group

The /ARBA/REMITTANCE_FILE package contains the following function group:

Function Group	Description
/ARBA/REM_TMG	Table maintenance generator package

/ARBA/REMITTANCE_FILE Table

The /ARBA/REMITTANCE_FILE package contains the following table:

Table	Description
/ARBA/REM_DATETM	Ariba on-demand - Remittance Date Time Storage

/ARBA/CONTRACT Package

The /ARBA/CONTRACT package comprises the function groups listed in the following section.

/ARBA/CONTRACT Program

The /ARBA/CONTRACT_EXPORT package contains the following program:

Program	Description
/ARBA/CONTRACT_EXPORT	Export contract information to Ariba On-Demand application

/ARBA/CONTRACT Function Groups

The /ARBA/CONTRACT_EXPORT package contains the following function groups:

Function Group	Description
/ARBA/CONTRACT	Function group for Contract RFC's
/ARBA/LAST_CONTR	Table maintenance function group
/ARBA/P2P_VENDOR	Table maintenance function group

/ARBA/CONTRACT Tables

The /ARBA/CONTRACT_EXPORT package contains the following tables:

Table	Description
/ARBA/LAST_CONTR	Ariba last-pulled contract document
/ARBA/P2P_VENDOR	Ariba procurement vendor table

/ARBA/CONTRACT Table Types

The /ARBA/CONTRACT package contains the following table types:

Table Types	Description
/ARBA/CONTRACTACCOUNTINGS_T	Table type for Ariba Contract Accountings

Table Types	Description
/ARBA/CONTRACTHEADER_T	Table type for Ariba Contract Header Details
/ARBA/CONTRACTLINEITEMS_T	Table type for Ariba Contract Line Item Details
/ARBA/CONTRACTTERMPRICING_T	Table type for Ariba Contract Pricing
/ARBA/CONTRACTTIEREDPRICING_T	Table type for Ariba Contract Tiered Pricing
/ARBA/LAST_CONTR_T	Table type for /ARBA/LAST_CONTR
/ARBA/RET_T	Table type for BAPIRET2

/ARBA/CONTRACT Structures

The /ARBA/CONTRACT package contains the following structures:

Structure Name	Description
/ARBA/CONTRACTACCOUNTINGS	Ariba structure for Contract Accounting Details
/ARBA/CONTRACTHEADER	Ariba structure for Contract Header Export
/ARBA/CONTRACTLINEITEMS	Ariba structure for Contract Line Item Details
/ARBA/CONTRACTTERMPRICING	Ariba structure for Contract Term Pricing
/ARBA/CONTRACTTIEREDPRICING	Ariba structure for Contract Tiered Pricing

Enhancement Spot

The following is the Enhancement Sport information for the /ARBA/CONTRACT package:

Enhancement Spot	Interface (ABAP Objects)	Description
/ARBA/CONTRACT_DETAIL	/ARBA/IF_EX_CONT_DETAIL	Enhancement spot to customize contract details

/ARBA/BUDGET_MGMT Package

This package contains the Ariba budget check objects.

/ARBA/BUDGET_MGMT Tables

The following is the table for the /ARBA/BUDGET_MGMT package:

Table 29: /ARBA/BUDGET_MGMT Table

Table	Description
/ARBA/TAX_CHECK	Check tax applied or not at company code level

/ARBA/BUDGET_MGMT Table Types

The following are the table types for the /ARBA/BUDGET_MGMT:

Proxy Structure	Description
/ARBA/BAPICOBL_AAT_T	BAPICOBL_AAT data type
/ARBA/BAPICOBL_T	Poss. derived coding block
/ARBA/RESPONSE_IMPORT_ITEM_T	Response Derivation Item Structure

/ARBA/BUDGET_MGMT Structures

The following are the structures for the /ARBA/BUDGET_MGMT package:

Table 30: /ARBA/BUDGET_MGMT Structures

Structure	Description
/ARBA/BAPICOBL	Poss. derived coding block
/ARBA/BAPICOBL_AAT	BAPICOBL_AAT data type
/ARBA/BAPICOBL_CUST	Customer fields to validate in coding block
/ARBA/BAPIMEREQACCOUNT	Transfer structure for requisition - account assignment
/ARBA/BAPIRETURN1	Funds Management return table
/ARBA/RESPONSE_IMPORT_ITEM	Response derivation item structure

/ARBA/BUDGET_MGMT Data Elements

The following are the elements in the /ARBA/BUDGET_MGMT package:

Data Element	Description
/ARBA/REQ_NO	Ariba requisition number

Data Element	Description
/ARBA/TAX_APPLIED	Specifies whether the tax is applied or not

/ARBA/BUDGET_MGMT Function Groups

The /ARBA/BUDGET_MGMT package contains the following function groups:

Function Group	Description
/ARBA/BUDGET_MGMT	Function group for budget management
/ARBA/DERIVATION	Function group to hold fund derivations
/ARBA/TAX_CHECK	Extended table maintenance (generated)

/ARBA/BUDGET_MGMT Function Modules

The /ARBA/BUDGET_MGMT package contains the following function modules:

Table 31: /ARBA/BUDGET_MGMT Function Group

Function Module	Description
/ARBA/ACC_PURCHASE_REQUI_CHECK	Real-time budget check function module

Table 32: /ARBA/DERIVATION Function Group

Function Module	Description
/ARBA/DERIVATION	Function module to derive FM/GM related data from standard accounting elements

Table 33: /ARBA/TAX_CHECK Function Group

Function Module	Description
TABLEFRAME_/ARBA/TAX_CHECK	Upper-level extended table maintenance
TABLEPROC_/ARBA/TAX_CHECK	Lower-level extended table maintenance

/ARBA/BUDGET_MGMT Enhancement Spot

The following is the enhancement spot information for the /ARBA/BUDGET_MGMT package:

Enhancement Spot	BAdI Interface (ABAP Objects)	BAdI Name	Description
/ARBA/DERIVATION	/ARBA/IF_DERIVATION	/ARBA/DERIVATION	Derivation

About SAP ERP Transports

If you are integrating your procurement solution with SAP ERP, you must install the SAP ERP transports as part of your Ariba Procurement Solution installation.

Ariba recommends that you ask your SAP BASIS personnel to install the Ariba-delivered transports.

Installing Transport Files [page 289]

Installing Transport Files

The process for installing transports is the same for both first-time installations and upgrades. Before you start, note the following:

- The transports contain both client-dependent and independent configurations. Therefore, specify a target client when adding these transports to the import queue. If you are using SAP's Transport Management System (STMS), use extended transport control to specify the target client.
- Do not use umodes when installing the transports.
  In general, you do not use any umodes when installing these transports. Use umodes in the following instances:
  - You have a previous version of the Ariba objects in your SAP ERP, and some core objects have been modified. In this situation, override the repair flag on import by using a umode. Reinstate any overwritten modifications to Ariba core objects using the appropriate SAP ERP tools.
  - You need to re-import one of the delivered transports. In this case, make sure the transport is fully re-imported by using umode 1.
- Ariba recommends that you ask your SAP BASIS personnel to install the Ariba transports.
- The order in which you need to install the transports is specified in the Readme.txt file. This file is available in the ZIP file that you download from connect.ariba.com.
- If you do not require real-time integration, you do not have to import the real-time integration transport. However, if you do install this transport, configure your SAP ERP to use real-time integration with Ariba Procurement Solution after the import is complete.

Revision History

The following table provides a brief history of the updates to this guide. Ariba updates the technical documentation for its On Demand 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.

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.

Document Version	Month/Year of Update	Updated Chapter/ Section	Short Description of Change
1	August 2016	N/A	Reset revision history for release Cloud Integration Release 8.0.
		Multiple Chapters	Ariba Cloud Integration Release 8.0 • Updated throughout for the Ariba Cloud Integration Release 8.0.

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