ERP-68 System Interface - Goods Receipts Replication from Ariba Guided Buying to S/4HANA

Status	Approved
Owner	
Stakeholders	
Jira Request ID	ERP-46 - Jira project doesn't exist or you don't have permission to view it.
Jira Development ID	ERP-68 - Jira project doesn't exist or you don't have permission to view it.

High- Level Specification

Parameter	Value
Application System (Source)	Ariba Guided Buying
Application System (Target)	S/4HANA
Business Process Reference	03.04.05.01. Manage Indirect Receipts

Functional Overview

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.

Negative receipt can also be created in Ariba Guided Buying to reverse some received quantity because of incorrect shipment or manual errors.

This document describes S/4HANA System inbound interface for sending goods receipt information from Ariba Guided Buying to S/4HANA System for POs received in Ariba Guided Buying. Goods receipt data from Ariba Guided Buying will be exported to S/4HANA System via SAP Integration Suite, Managed Gateway for Spend Management and SAP Business Network (formerly known as Cloud Integration Gateway) and loaded in S/4HANA as GR material document.

Buyers using the Ariba Guided Buying integrated with S/4HANA System can create receipts in S/4 Hana. Creation of Receipt in S/4 Hana is handled by the standard integration between Ariba Guided Buying and S/4 Hana

The following steps explain how a receipt export integration event works:

1. When Buyer creates a receipt in Ariba Guided Buying, the receipt will go to approval flow based on requirements.
2. When the receipt is fully approved, a copy is sent to S/4HANA System via SAP Integration Suite, Managed Gateway for Spend Management and SAP Business Network (formerly known as Cloud Integration Gateway (CIG)) and the respective Receipt status is then sent back to Ariba Guided Buying.
3. S/4 returns a ERP Receipt Number and receipt line number and any error information to Ariba Guided Buying.

The format of the messages that are sent through the web services from Ariba Buying to S/4HANA System and the format of the expected responses from S/4HANA System are defined in WSDL files (Web Service Description Language). These files furthermore contain details about the web service end points like URLs and port numbers.

The export of data through web services is always initiated by Ariba Buying. Once a transaction has been completed in Ariba Buying, it immediately sends out a SOAP message to the configured web service end point.

The CIG transforms that SOAP message and passes the data from that message in the right format to the S/4HANA System backend. The S/4HANA System then returns either a success or error message (including error details) to the CIG. This reply from the S/4HANA System is finally sent back to Ariba Guided Buying as SOAP message through web services.

Ariba web services are only used for exporting transactional data from the Ariba Guided Buying and sending it (via CIG) to the corresponding S /4HANA System.

Scope and Objectives

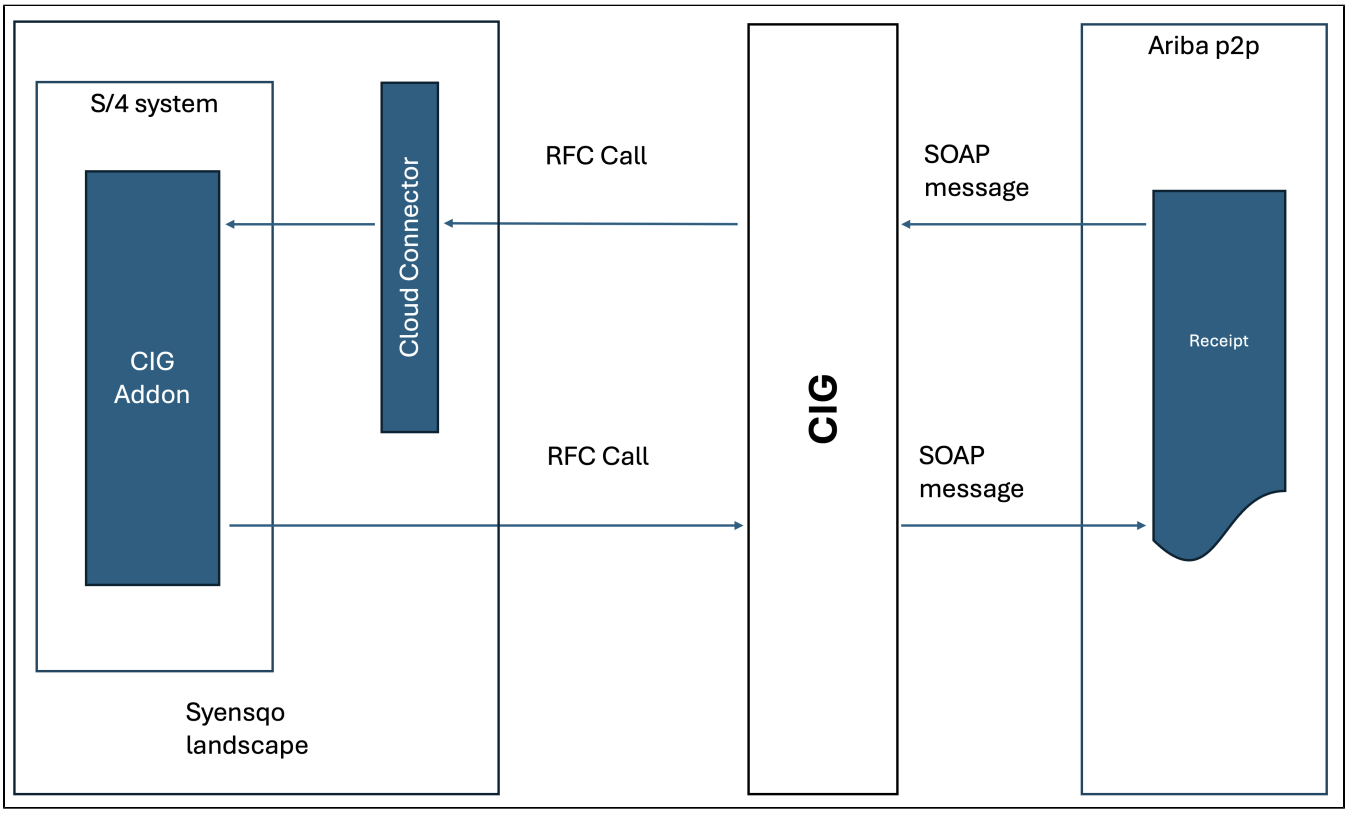
. The following Receipt web service integration events will be used:

- **Export Receipts Asynchronously**

There will be no scheduled task of data transmission as data is transferred in real-time. Each submission of transactional data from Ariba Buying to the S/4HANA System requires a response from the receiving S/4HANA system that the data was successfully received and imported, or details about the error that occurred during the import. The receipts are being exported to S/4HANA with this event and the CIG document type is- **ReceiptExportRequest.**

Reply message for Receipt creation is not in scope of this FS and separate FS covers the reply message

Process Flow Diagram



Step	Description	Comment
1	Ariba Guided Buying generates a SOAP message based on configuration	
2	Ariba Guided Buying sends it to CIG, using the URL designated in Event Configuration	
3	CIG translates the data into SAP acceptable format and sends it to the Cloud Connector	
4	The Cloud Connector then transmits the information to the S/4HANA system based on the configuration.	
5	Data is created using RFC/Business Application Programming Interface (BAPI) and the response (success or failure) is sent back to CIG, which again transforms the data and sends it back to Ariba Guided Buying through the web services channel.	
6	The response is then updated in Ariba Guided Buying.	

Assumptions

- Ariba Guided Buying is utilized for integration of Goods Receipts with S/4HANA System.
- Ariba tolerance settings for under and over-receiving are synchronized with S/4HANA System.
- Ariba source object and S/4HANA System target field mappings, including custom fields, will be updated based on mapping requirements in S/4HANA System.

Dependencies

- All configurations should already be implemented before the interface is deployed.
- Ariba Buying packages have been successfully installed and configured in S/4HANA System.
- The connection information for Web-Services based integration have been successfully configured in Ariba Buying.
- Receiving feature is enabled in Ariba Guided Buying.
- Receiving parameters have been configured in Ariba Guided Buying.
- Master data loaded in Ariba Guided Buying is synchronized with S/4HANA System.

Security, Integrity and Controls

The following are the Security and Authorization considerations for this interface:

- Define a Web Services Security certificate and/or the shared secret key to use to secure the End Point connection.
- Access to interface parameters in Ariba Guided Buying are being addressed by Ariba standard security controls. Only authorized person with Ariba administrator's role can access/ change interface parameters.
- Web service security configuration allows secure communications protocol provides a means for applying security to Web services.

Configuration Requirements

Ariba Configuration

Ariba Web Services enables exchange of data between Ariba Guided Buying and other systems, such as S/4HANA System, for real-time data integration.

Ariba Web Services provide integration tasks that send and receive SOAP messages for web services. An integration task requires an end point for the logical communication channel used by the web service. An end point consists of the URL and authentication information that controls access to the end point. There are two types of end points: inbound and outbound. Inbound end points are used when the task is initiated by the S/4HANA system. Outbound end points are used when the task is initiated by the Ariba Guided Buying.

Here, the Web Services channel provides real-time integration of Ariba Buying with S/4HANA system using SAP Integration Suite, Managed Gateway for Spend Management and SAP Business Network.

The following table lists operations for the integration tasks and end point types needed:

Ariba Integration Task	**End Point Type**	**Interface Name**
Export Receipts Asynchronously	Outbound	CIG

CIG Configuration

Project setup is required in CIG to cover product type Ariba Procurement. One project is required per system ID of the backend S/4 system. Project must be published and set to "in testing" in order for transactions to be used

CIG Custom Routing

Project definition in CIG configuration is repeated for every backend S/4 system [at the moment there's a plan for Global, US and China S/4 backends]. In CIG My Configurations Custom Routings there's a definition for

Direction	Inbound
Action	Replace SystemID
Document Type	• ReceiptExportRequest
Xpath	• Receipt Company Code
Action Value	respective SystemID based on the Company Code value

CIG Addon Configuration

Configuration for CIG addon is consolidated in one place and should be completed in the logical order of the menu items. In the S/4 instance, navigate to ***SPRO SAP Reference IMG SAP Customizing Implementation Guide Integration with Other SAP Components Managed Gateway for Spend&Network for Buyer***

Logical order of the menu is as following :

- Global Settings:
  - Maintain Certificates - SSL certificate of CIG to be added under *SSL client SSL Client (Anonymous).* Certificate can be downloaded from CIG Resources CIG Certificates. Official documentation covering this section can be found here
  - Create RFC Destination - new RFC destination to be added under *HTTP Connections to External Server.* Official documentation can be found here. Values are as following:

Parameter Name	Value [TEST]	Value [PROD]
Technical Settings.Target System Settings.Host	http://test-integration.eu.managedgateway.cloud.sap	http://integration.eu.managedgateway.cloud.sap
Technical Settings.Target System Settings.Path Prefix	/cxf/receiveERPMD	/cxf/receiveERPMD
Login And Security User	P007937	P007937
Login And Security Password	<confidential>	<confidential>

  - Create Port Definition - new Port to be added under XML HTTP. In the port there's a reference to the previously created RFC Destination. Official documentation can be found here
  - Create Logical System - there is no client specific information in here, only the entry is needed. Official documentation can be found here
  - Send SAP Information to Managed Gateway for Spend&Network
  - Synchronize SAP Information with Managed Gateway for Spend&Network - enter same credentials as with RFC destination. Choose Test or Prod environment, depending on the instance. Choose EU Data Center and SAP Ariba Procurement Solutions. Execute. This task creates information about the S/4 backend in the CIG itself. Successful execution can be verified in the CIG, by clicking on your user avatar in the right top corner and clicking on Basic Data section. S/4 System ID should be in the list. Official documentation can be found here
  - Support Attachments
    - Maintain Parameter for Line Level Attachments - Define DMS_STORAGE_CATEGORY as SAP-SYSTEM and DOCUMENT_TYPE as DRW
  - Map the Variant and Partition for SAP Ariba solutions - define new entry for BUY Ariba Procurement Integration with values Variant = VREALM_53334 [to be retrieved from Ariba Guided Buying] and Partition = PREALM_53334 [to be retrieved from Ariba Guided Buying]
- SAP Ariba Procurement Integration
  - General Settings
    - **Configure the connections to send messages** - enter the same credentials as in RFC destination definition. Choose EU Data Center and choose following transactions
      - Receipt Export Request
    - Documentation can be found here. Upon the successful execution, web services for inbound transactions can be found in SOAMANAGER
      - BUYERGOODSRECEIPTCREATE_ASYNC_I

Special Requirements

Not Applicable

Design Rationale

Not Applicable

Data Structure

Source Structure and Target Structure

Standard mappings are a subject to change and are not linked in this documentation, latest excel sheet can be downloaded from CIG Resources Implementation Guides Mapping Specs Ariba Buyer

- CreateGoodsReceipt (Soap to Proxy)

Each of the mapping contain basic field mapping from SOAP message into RPC structure with a basic logic explained in the pseudo code

Processing Logic

Processing within Source

Web Service is triggered based on the state of the source document. Once Receipt is fully approved it is send as SOAP message to the backend system. Message is triggered in the asynchronous way, meaning the web service doesn't wait for the reply from S/4, but consider success if reply 200 is received from CIG.

At this moment, no customisations are agreed on and extension to the standard WSDL data structure for any of the Goods Receipt flows is not needed

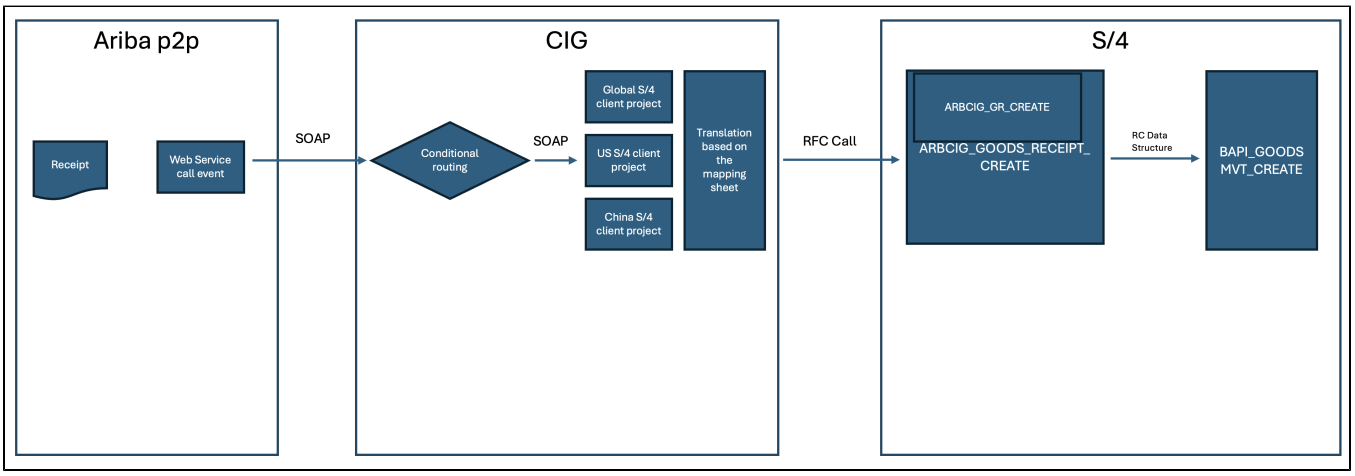
Processing within Middleware

At this moment, standard transformation as referenced above is in place. In a case of any custom field is needed, custom field will be mapped in the CIG to the predefined custom field structure in the SAP

Processing within Target

Each flow triggers an Ariba specific BAPI, which serves as a wrapper over SAP standard BAPI. On top of it, there's BAdI that can be used to handle customisations if needed. It's called before the data structure is passed to the standard SAP BAPI for processing.

Flow	Ariba CIG BAPI	Standard BAPI called	Available BAdI
Receipt Create	ARBCIG_GOODS_RECEIPT_CREATE	BAPI_GOODSMVT_CREATE	ARBCIG_GR_CREATE



Interface Dependency

Not Applicable

Interface Constraints

Not Applicable

Delivery Requirements

Not Applicable

Delta or Full Load Requirements

Not Applicable

Interface Alert & Monitoring

Ariba Guided Buying	Integration events Data Import Export Web Service Status • ReceiptAsyncExport	In the event of failure of communication between Ariba Guided Buying a CIG, error message can be found here. Notification about the failure can be send to the admin of the system

CIG	Transaction Tracker • ReceiptExportRequest	Transactions are stored for 30 days. Each transaction is referenced by the PO ID and the payloads, one received from Ariba and one sent to S/4 instance can be downloaded
S/4 system	SRT_MONI	details of the inbound web service in the event of failure, the exception can be found in here

Interface Reporting

Not Applicable

Language Requirements

Not Applicable

User Interface Requirements

Not Applicable

Volumetrics

Taking into account we target for 50-100 Pos a day, assume half of the POs are Materials - target for Receipts created a day would be 25-50

Performance Consideration

There are no specific performance requirements or considerations related to this interface.

Error Handling

The S/4HANA System integration provides reliable data exchange between Ariba Guided Buying through CIG. However, in some cases, the integration event on the Ariba Guided Buying cannot recover automatically and must report the error to the appropriate administrator. When an error occurs, the integration event on the Ariba Buying System does the following:

- Recover automatically
- Report the error and wait for an administrator to take action

An administrator can monitor the errors using the transaction code, SRT_MONI.

If any errors occur for Goods Receipt, the instance goes into “Rejected” state and the buyers are being requested to create another instance.

Testing

How to Test

Test Conditions and Expected Results

ID	Condition	Expected Results
	Create Receipt in Ariba Guided Buying	Receipt should flow from Ariba Guided Buying to S/4HANA via CIG. Receipt is carbon copied in S/4HANA and the status is updated in Ariba Guided Buying.
	Create multiple partial receipts in Ariba Guided Buying.	Partial receipts should flow from Ariba Guided Buying to S/4HANA via CIG without any issues. Partial Receipt is carbon copied in S/4HANA and the status is updated in Ariba Guided Buying. In S/4, receipt entry is created with a correct movement type - 101

	Check Negative Receipt in Ariba Guided Buying.	Negative receipt flows from Ariba Guided Buying to S/4HANA via CIG. Carbon copied in S/4Hana and the status is updated in Ariba Guided Buying. In S/4, receipt entry is created with a correct movement type - 102

Test Considerations/Dependencies

Other Information

Development Details

Package

Package Name	Parent Package

Other Development Objects

Object Type	Object Name	Purpose/High Level Logic	Design Rationale Reference

Appendix

See also

Change log

Version	Published	Changed By	Comment
CURRENT (v. 24)	**Nov 12, 2025 15:35**	**EPASINGHE-ext, Kapila**	
v. 23	Nov 12, 2025 15:34	**EPASINGHE-ext, Kapila**	
v. 22	Nov 12, 2025 14:52	**EPASINGHE-ext, Kapila**	
v. 21	Nov 12, 2025 14:44	**EPASINGHE-ext, Kapila**	Title and HLS Description
v. 20	Oct 23, 2025 11:30	**TONHAUSER-ext, Juraj**	
v. 19	Oct 23, 2025 11:27	**TONHAUSER-ext, Juraj**	
v. 18	Oct 21, 2025 13:27	**TONHAUSER-ext, Juraj**	
v. 17	Oct 14, 2025 09:33	**TONHAUSER-ext, Juraj**	
v. 16	Oct 14, 2025 09:28	**TONHAUSER-ext, Juraj**	

v. 15	Oct 14, 2025 09:26	**TONHAUSER-ext, Juraj**

Go to Page History

Workflow history

Title	Last Updated By	Updated	Status
There are no pages at the moment.			

Workflow history

This view shows the 5 most recent entries. The complete workflow log is available from the 'Document Activity' menu item.

Nov 12, 2025	Actor	Type	Activity	Version
Approved	EPASINGHE-ext, Kapila	Edit	updated the page at 2:44 pm	
Nov 10, 2025				
	WILLIAMS-ext, Julie	State	changed state to Approved at 9:32 pm	v20
Lead Approval	WILLIAMS-ext, Julie	State	gave *POD Lead Review* approval at 9:32 pm	
Oct 31, 2025				
	WEINERT-ext, Patrick	State	changed expiry date to '07 Nov, 2025 05:37 am' at 5:38 am	
		State	changed state to Lead Approval at 5:37 am	v20
Tech Review	WEINERT-ext, Patrick	State	gave *Tech Review* approval at 5:37 am	