ERP-92 System Interface - Purchase Order Replication from Ariba Guided Buying to S/4HANA

Status	Approved
Owner	
Stakeholders	
Jira Request ID	ERP-49 - Jira project doesn't exist or you don't have permission to view it.
Jira Development ID	ERP-92 - 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	03.04.03.01. Create Purchase Orders

test-integration.eu.managedgateway.cloud.sap

Functional Overview

Once a requisition is fully approved in Ariba Guided Buying, a PO is immediately created. This approved PO is then exported **in real-time** to S/4HANA using the standard Ariba Purchase Order export feature, which relies on the **Cloud Integration Gateway (CIG)** for seamless communication through the Cloud Connector. Exporting purchase orders, when using CIG channel occur in real-time. This interface is triggered when the Purchase Orders are created and fully approved in Ariba Guided Buying and are ready to be sent to S/4HANA.

End-to-end integration via CIG is achieved using Cloud Connector. The format of the messages that are sent through CIG via Cloud Connector from Ariba Guided Buying to S/4HANA and the format of the expected responses from S/4HANA are defined in WSDL files (Web Service Description Language).

CIG receives and consumes the PO data. CIG maps the web service XML to the required RFC structure by S/4HANA and CIG sends the PO data to S /4HANA through Cloud Connector.

S/4HANA then returns either a success or error message (including error details) to Ariba Guided Buying via CIG.

Scope and Objectives

This document describes S/4HANA System inbound interface for sending purchase order information from Ariba Guided Buying to S/4HANA System. Purchase Order 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).

The following Purchase Order web service integration events (and the corresponding document types) will be used to export PO creation, changes and cancellation:

- **Export Purchase Orders Asynchronously**

  Document Type in CIG - PurchaseOrderExportRequest

- **Export Change Purchase Orders Asynchronously**

Document Type in CIG - PurchaseChangeOrderExportRequest

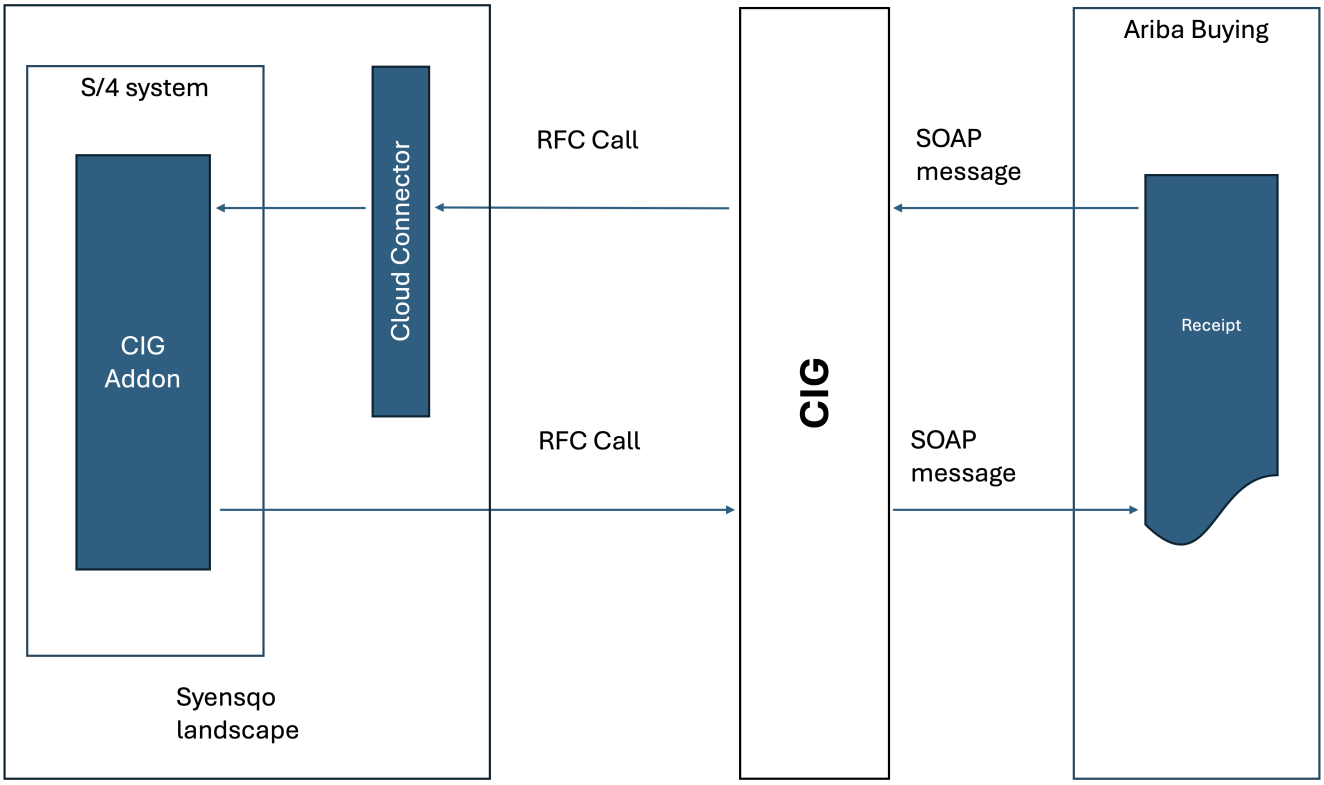
- **Export Cancel Purchase Orders Asynchronously**

  Document Type in CIG - PurchaseCancelOrderExportRequest

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.

Reply message for PO creation, change and cancel is not in scope of this FS and separate FS covers the reply message

Process Flow Diagram



PO Create

Step	Description	Comment
1	Purchase Requisition (PR) is created and fully approved in Ariba Guided Buying. PR status is updated from “Approved” to “Ordering”. Purchase Order (PO) data is automatically created and sent to S/4HANA via CIG through Cloud Connector. PO Data is sent to CIG in XML format.	
2	CIG receives and consumes the PO data. CIG maps the web service XML to the required RFC structure by S/4HANA and sends the data to S/4HANA through Cloud Connector.	
3	In S/4HANA, the RFC/BAPI is executed. The PO data is created, and RFC/BAPI will return a response message back to CIG with SAP record ID of the document. The response message includes the S/4HANA ERP Order ID when PO is successfully created in S/4HANA; otherwise, error response is sent back to Ariba Guided Buying via CIG.	
4	CIG consumes the response message, converts to Web Service message and push to Ariba Guided Buying.	

5	Ariba Guided Buying consumes the WS message and updates the status of the transactional document. When a success response message is received from S/4HANA: • The PR and PO is updated with the ERP Order ID from S/4HANA. PR and PO status is updated from “Ordering” to “Ordered”. When an error response message is received from S/4HANA The PR status is updated from “Ordering” to “Composing”, a new version of the PR is created, and S/4HANA error details are reflected on the PR comments in Ariba Guided Buying.	

PO Change

Step	Description	Comment
1	Purchase Order (PO) change is submitted and fully approved in Ariba Guided Buying. PO status is updated from “Ordered” to “Ordering”. PO change data is automatically created and sent to S/4HANA via CIG through Cloud connector. PO Data is sent to CIG in XML format.	
2	CIG receives and consumes the PO data. CIG maps the web service XML to the required RFC structure by S/4HANA and sends the data to S/4HANA through Cloud Connector.	
3	In S/4HANA, the RFC/BAPI is executed. The PO change data is posted, and RFC/BAPI will return a response message back to CIG with SAP record ID of the document. The response message includes the S/4HANA ERP Order ID when PO is successfully changed/updated in S/4HANA; otherwise, error response is sent back to Ariba Guided Buying via CIG.	
4	CIG consumes the response message, converts to Web Service message and push to Ariba Guided Buying.	
5	Ariba Guided Buying consumes the WS message and updates the status of the transactional document. When a success response message is received from S/4HANA: • The new version of the PR and PO status is updated from “Ordering” to “Ordered”. When an error response message is received from S/4HANA: The PR status is updated from “Ordering” to “Composing”, a new version of the PR is created, and S/4HANA error details are reflected on the PR comments in Ariba Guided Buying.	

PO Cancel

Step	Description	Comment
1	Purchase Order (PO) is canceled in Ariba Guided Buying. PO status is updated from “Ordered” to “Canceling”. PO cancelation is automatically sent to S/4HANA via CIG through Cloud Connector. PO Data is sent to CIG in XML format.	
2	CIG receives and consumes the PO cancel data. CIG maps the web service XML to the required RFC structure by S/4HANA and sends the data to S/4HANA through Cloud Connector.	
3	In S/4HANA, the RFC/BAPI is executed. The PO Cancel data is posted, and RFC/BAPI will return a response message back to CIG with SAP record ID of the document. The response message includes the S/4HANA ERP Order ID when PO is successfully canceled in S/4HANA; otherwise, error response is sent back to Ariba Guided Buying via CIG.	
4	CIG consumes the response message, converts to Web Service message and push to Ariba Guided Buying.	
5	Ariba Guided Buying consumes the WS message and updates the status of the transactional document. The PR and PO status is updated from “Canceling” to “Canceled”.	

Assumptions

- Ariba Guided Buying is utilized for integration of Purchase Orders 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.
- Purchase Order 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 point is 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.

- Configure the purchase order integration, change purchase order integration, and cancel purchase order integration between SAP Ariba Procurement solutions and SAP ERP or SAP S/4HANA.
- Enable the following asynchronous integration events in SAP Ariba Procurement solutions:

Ariba Integration Task	End Point Type	Interface Name
Export Purchase Orders Asynchronously	Outbound	CIG
Export Change Purchase Orders Asynchronously	Outbound	CIG
Export Cancel Purchase Orders Asynchronously	Outbound	CIG

- Enable the following parameters in Ariba
  - Application.Procure.PullAckFromERP
  - Application.Purchasing.RenumberReqLineItemSplits
  - POApplication.Procure.UseCancelOrderIntegration
- Attachments:
  - For purchase orders and change purchase orders, enable `Application.Procure.AllowAttachmentToERP` and `Application.Ordering.AllowOrderAttachmentToERP` parameters.
  - To control the file formats that can be attached to purchase orders in Ariba, use the parameter `Application.Approvable.AllowedAttachmentExtensions`. File formats that are not specified cannot be used as attachments. This parameter is useful for restricting file formats (such as EXE files) that might violate company security policies.

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. With respect to Purchase Order Create and Change, there's additional setting in the Cross Reference Parameter section where the set of parameters have to be maintained

	PurchaseOrderExportRequest	PurchaseOrderChangeExportRequest
Service Text ID	LTXT	LTXT
Header Text ID	F01	F01
SAP Document Type	**ZAR**	**N/A**
Item Text ID	F01	F01
SAP CC Document Type	**ZAR**	**N/A**
SAP Framework Order DocType	**ZAR**	**N/A**

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

Parameter	Value
Direction	Inbound
Action	Replace SystemID
Document Type	• PurchaseOrderExportRequest • PurchaseOrderChangeExportRequest • PurchaseOrderCancelExportRequest
Xpath	• CompanyCode • PO Change CompanyCode • PO Cancel 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
      - ERP Response to Procurement
      - Purchase Order Export
      - Purchase Order Change Export
      - Purchase Order Cancel Export
    - Documentation can be found here. Upon the successful execution, web services for inbound transactions can be found in SOAMANAGER
      - BUYERPURCHASEORDCREATEREQUEST
      - BUYERPURCHASEORDCHANGEREQUEST
      - BUYERPURCHASEORDERCANCELREQ

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

- CreatePurchaseOrder (Soap to Proxy)
- ChangePurchaseOrder (Soap to Proxy)
- CancelPurchaseOrder (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 Purchase Requisition is fully approved, Purchase Order is created and the SOAP message is triggered 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 Purchase Order flows is not needed. Customisation will be defined in the later stage of the project once all processes are finalised. FS will be extended against a new Jira ticket if needed

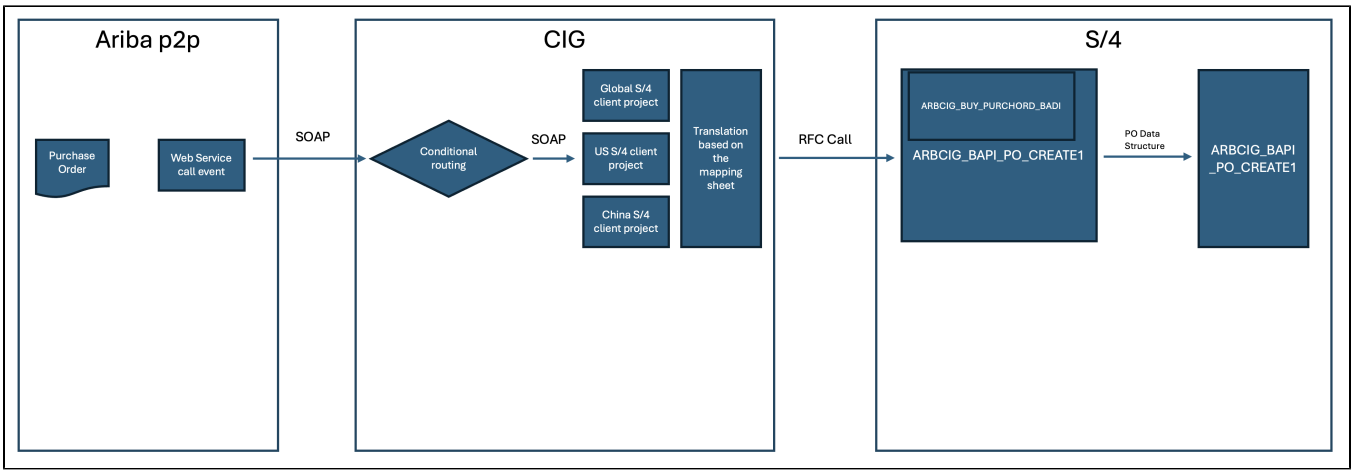
Processing within Middleware

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
Purchase Order Create	ARBCIG_BAPI_PO_CREATE1	BAPI_PO_CREATE1	ARBCIG_BUY_PURCHORD_BADI
Purchase Order Change	ARBCIG_BAPI_PO_CHANGE	BAPI_PO_CHANGE	ARBCIG_BUY_ORDCHANGE_BADI
Purchase Order Cancel	ARBCIG_BAPI_PO_CANCEL	BAPI_PO_CANCEL	ARBCIG_BUY_ORDCHANGE_BADI



Posted PO can be viewed in me23n transaction

Interface Dependency

Not Applicable

Interface Constraints

Not Applicable

Delivery Requirements

Not Applicable

Delta or Full Load Requirements

Not Applicable

Interface Alert & Monitoring

System to be monitored	How to monitor	What can be monitored
Ariba Guided Buying	Integration events Data Import Export Web Service Status • Export Purchase Orders Asynchronously • PurchaseOrderChangeAsyncExport • PurchaseOrderCancelAsyncExport	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 • PurchaseOrderExport • ChangeOrderRequest • PurchaseOrderCancelExportRequest	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

30 days of history per transactional document type can be retrieved from CIG. It's not possible to pull a consolidated report, just the details of the particular transaction

Language Requirements

Not Applicable

User Interface Requirements

Not Applicable

Volumetrics

approximately 50-100 POs a day are expected on the PROD environment.

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.

Testing

How to Test

Test Conditions and Expected Results

ID	Condition	Expected Results
	Create requisition in Ariba Guided Buying and fully approve. PO creation in S/4HANA successfully	Purchase Order should flow from Ariba Guided Buying to S/4HANA via CIG. PO is created in S /4HANA and returns a response to Ariba Guided Buying that includes the ERP PO ID. The PR and PO is updated with the ERP Order ID from S/4HANA. PR and PO status is updated from “Ordering” to “Ordered” in Ariba Guided Buying.
	Create requisition in Ariba Guided Buying and fully approve. PO creation in S/4HANA unsuccessful	Purchase Order should flow from Ariba Guided Buying to S/4HANA via CIG. PO is not successfully created in S/4HANA and an error response is sent to Ariba Guided Buying. The PR status is updated from “Ordering” to “Composing”, a new version of the PR is created, and S/4HANA error details are reflected on the PR comments in Ariba Guided Buying.
	Change requisition in Ariba Guided Buying and fully approve Change PO successful in S/4HANA	Changed Purchase Order should flow from Ariba Guided Buying to S/4HANA via CIG. S/4HANA returns a response message to Ariba Guided Buying. The response message includes the S /4HANA ERP Order ID when PO is successfully changed/updated in S/4HANA The new version of the PR and PO status is updated from “Ordering” to “Ordered” in Ariba Guided Buying.
	Change requisition in Ariba Guided Buying and fully approve. Change PO unsuccessful in S/4HANA	Changed Purchase Order should flow from Ariba Guided Buying to S/4HANA via CIG. S/4HANA returns an error response message to Ariba Guided Buying. The PR status is updated from “Ordering” to “Composing” in Ariba Guided Buying, a new version of the PR is created, and S /4HANA error details are reflected on the PR comments in Ariba Guided Buying.
	Cancel PO in Ariba Guided Buying	Canceled Purchase Order should flow from Ariba Guided Buying to S/4HANA via CIG. The PR and PO status is updated from “Canceling” to “Canceled” in Ariba Guided Buying.

	Create requisition with one item, select item category material in Ariba Guided Buying. Fully approve requisition. PO Created in S/4 successfully	PO Created in S/4 system. EKPO table contains correct item category - blank space
	Create requisition with one item, define planned service in Ariba Guided Buying. Fully approve requisition. PO Created in S/4 successfully	PO Created in S/4 system. EKPO table contains correct item category - E
	Create requisition with one item, define unplanned service in Ariba Guided Buying. Fully approve requisition. PO Created in S/4 successfully	PO Created in S/4 system. EKPO table contains correct item category - E
	Create requisition with one item, select commodity code that is setup as receivable. Fully approve requisition. PO Created in S/4 successfully	PO Created in S/4 system. EKPO table contains GR flag set to X
	Create a requisition with On Behalf Of value different from your user. Fully approve requisition. PO Created in S /4 successfully	PO Created in S/4 system. EKKO table has a creator set for the user who created Requisition in Ariba. EKPO Table has a requisitinioner set to the On Behalf Of value from Ariba
	Create requisition for the company code used in China S/4 system. Fully approve requisition. PO Created in S /4 successfully	PO Created in China S/4 system. In the transactional history in CIG, in the payload the system id of S/4 system is correctly set by the conditional routing logic
	Create a Requisition in GB with three line items, fully approve. All the items are for the same supplier	Single PO is created in S/4HANA via CIG. PR and PO status is updated from “Ordering” to “Ordered” in Ariba Guided Buying.
	Create a Requisition in GB with three line items, fully approve. Each Line Item has a different supplier	Three different POs are created in S/4HANA via CIG. PR and POs status is updated from “Ordering” to “Ordered” in Ariba Guided Buying.
	Create a Requisition in GB with the attachment on the header, fully approve.	PO Created in S/4 system. Attachment is available on the Purchase Order viewed in me23n transaction
	Create a Requisition in GB with the attachment on the line item, fully approve.	PO Created in S/4 system. Attachment is available on the Purchase Order viewed in me23n transaction

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. 23)	**Nov 12, 2025 15:36**	**EPASINGHE-ext, Kapila**	
v. 22	Nov 12, 2025 14:55	**EPASINGHE-ext, Kapila**	Minor change - title and HLS section
v. 21	Oct 23, 2025 11:22	**TONHAUSER-ext, Juraj**	
v. 20	Oct 23, 2025 11:17	**TONHAUSER-ext, Juraj**	
v. 19	Oct 23, 2025 11:12	**TONHAUSER-ext, Juraj**	
v. 18	Oct 19, 2025 21:23	**TONHAUSER-ext, Juraj**	
v. 17	Oct 14, 2025 10:02	**TONHAUSER-ext, Juraj**	
v. 16	Oct 14, 2025 09:42	**TONHAUSER-ext, Juraj**	
v. 15	Oct 14, 2025 09:39	**TONHAUSER-ext, Juraj**	
v. 14	Oct 14, 2025 09:37	**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 2:55 pm	
Nov 10, 2025				

	WILLIAM S-ext, Julie	State	changed state to Approved at 9:34 pm	v21
Lead Approval	WILLIAM S-ext, Julie	State	gave *POD Lead Review* approval at 9:34 pm	

Oct 31, 2025

	WEINER T-ext, Patrick	State	changed expiry date to '07 Nov, 2025 05:40 am' at 5:40 am	
		State	changed state to Lead Approval at 5:40 am	v21
Tech Review	WEINER T-ext, Patrick	State	gave *Tech Review* approval at 5:40 am	

> *DMS_STORAGE_CATEGORY as SAP-SYSTEM for attachements needs to be validated via build and test to ensure that Open Text is used as repository.*