



ERP-856 System Interface Service Entry Sheet replication from S/4Hana into Business Network

Status	Approved
Owner	
Stakeholders	
Jira Request ID	 ERP-746 - Jira project doesn't exist or you don't have permission to view it.
Jira Development ID	 ERP-856 - Jira project doesn't exist or you don't have permission to view it.

High- Level Specification

Implementing System	S/4 Hana
Invoked by/Invokes	
Business Process Reference	03.04.05.02. Manage Service Entry Sheets

Functional Overview

Service Entry Sheet entered against Service Purchase Orders in ERP system is sent to the Business Network after its approval.

Service Entry Sheet from ERP is triggered upon the create or change event over the business object. As opposite to other Business Network flows, message is send as a regular Web Service Message and is translated to the CXML message in the CIG.

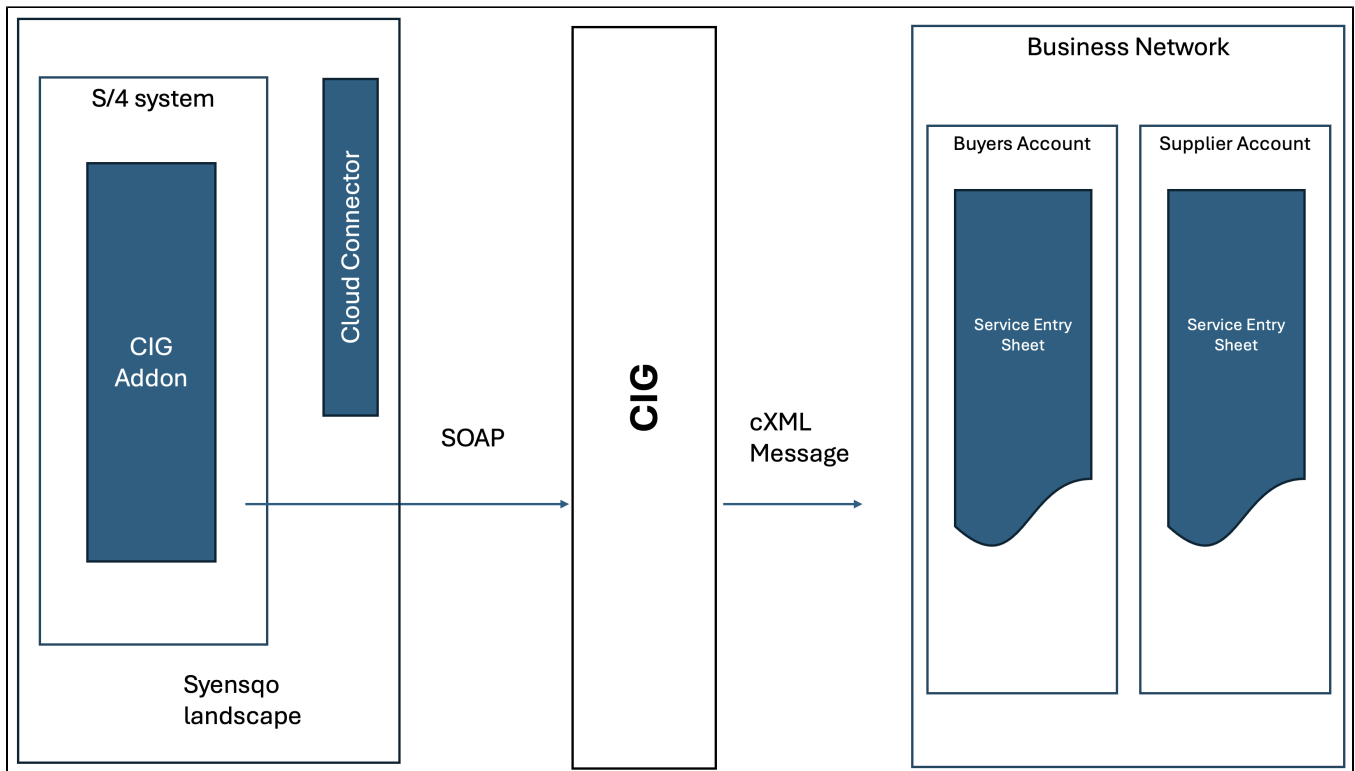
Service Entry Sheet is received in Business Network Buyers account and is routed to the Business Network Suppliers account, where the supplier is notified based on his preference. Assumption is that the supplier already has a trading relationship established,

due to the fact the Service Entry Sheet follows previously created Purchase Order.

Scope and Objectives

This document describes S/4 Hana outbound interface for sending ERP Initiated Service Entry Sheets into Business Network and the basic configuration needed in all the components in order for this interface to be operational.

Process Flow Diagram



Step	Description	Comment
1.	Requester enters Service Entry sheet against a Service PO in Fiori	
2.	Approved Service Entry sheet triggers create / change event over predefined Business Object	
3.	CIG provided BAPI is executed	
4.	Web Service Call is placed to the CIG	
5.	CIG translates message into cXML format	
6.	cXML is sent to the Business Network, received in the Buyers Account	
7.	Service Entry Sheet is translated into Suppliers account and is matched against the Purchase Order	

Assumptions

- In SWEC transaction, document type ENTRYSHEET is assigned to the business object BUS2091 for On Create and On Change event
- Service Entry Sheet output must use BUS2091 only

Dependencies

- CIG Addon installed in S/4 Hana
- Cloud Connector installed in Syensqo landscape
- Initial setup of CIG Addon is done already as described in [ERP-92](#), section Configuration Requirements.CIG Configuration.
- Connectivity from CIG Addon to CIG is established, as described in [ERP-92](#)
- **ARBICIG_AN_VENDOR** table is updated for every vendor and company code combination applicable for AN integration

Security, Integrity and Controls

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

- Message exchange between S/4 and CIG is encrypted over https.
- Access to interface parameters in CIG Addon is only available to the person with access to the SPRO authorization.
- Access to the CIG is restricted to the integration administrators within Ariba Guided Buying or Ariba Business Network

Configuration Requirements

CIG Configuration

Project setup is required in CIG to cover product type Ariba Network. One project is required per system ID of the backend S/4 system - Global, US and China. There are no additional setting for the Document Type *ServiceEntrySheet*

CIG Routing

Each Soap message sent from S/4 Hana contains System ID reference. No additional routing is needed in the CIG Addon - any subsequential message related to the Purchase Order sent from the S/4 Hana will use the System ID of the Purchase Order or the system id of the follow up document from S/4 Hana

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 - majority of the common configuration is shared with Procurement solution and is already described in [ERP-92](#), section Configuration. Only sections that are different are described in here.
 - Create RFC Destination - new RFC destination to be added under *HTTP Connections to External Server*. Official documentation can be found [here](#). This is a part of the generic Business Network setup, mandatory for this flow to work. However RFC destination definition is used by the incoming IDOC messages from the Business Network, not relevant for this integration. 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/receiveAddonIDOC	/cxf/receiveAddonIDOC
Login And Security User	P007937	TBD - Not available at the moment
Login And Security Password	<confidential>	<confidential>
 - Create Logical System - new Logical System to be created for Business Network. Apart from the name definition, there's no additional setting needed. Official documentation can be found [here](#)
- SAP Business Network Integration
 - General Settings.Setup Interface.**Configure the Connections to Send Messages**
 - In the section for **Interface Setup for Web Service** select EU Data Center for Europe and same credentials as in the RFC Destination
 - General Settings.Setup Interface.**Configure the Connections to Send Messages**
 - In the section for **Interface Setup for Web Service**, under the Outbound messages sent to Managed Gateway for Spend&Network select ERP Initiated Service Entry Sheet
 - execute the program Configure the Connections to Send Messages. This execution effectively creates the web service definition in the SOAMANAGER
 - Application Specific Settings
 - ERP-initiated Service Sheet.Maintain Parameters for ERP-initiated Service Sheet: Parameter ERP_SES_ENABLED set to X. Official documentation can be found [here](#)
 - ERP-initiated Service Sheet.Maintain the Change Document Event for ERP-initiated Service Sheet - create CHANGED and CREATED event types for the document object ENTRY SHEET for object type BUS2091. Official documentation can be found [here](#)
 - ERP-initiated Service Sheet.Maintain Event Type Linkages for ERP-initiated Service Sheet - for object type BUS2091, define Receiver Function Module ARBCIG_EXT_EVENT_ERP_SES for event Create. Official documentation can be found [here](#)

Special Requirements

Not Applicable

Design Rationale

Not Applicable

API Use

Not Applicable

Data 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 Network

- ERPSES(proxy-cxml)

Mapping contains basic field mapping from the IDOC message into the cXML target structure with a basic logic explained in the pseudo code

Processing Logic

Processing within Source

Logic defined in the CIG specific *ARBCIG_EXT_EVENT_ERP_SES* is triggered by the workflow event defined in the SWEC table. Logic checks for the SES in the table ESSR and retrieve KZABN - acceptance indicator value - only accepted Service Entry Sheets are send to the Business Network

Code checks whether for the Vendor and Company Code from Purchase Order header there's entry in **ARBCIG_AN_VENDOR**. Only if there's entry in the table, e.g. supplier is defined as a Business Network Vendor, SES is send to the Business Network.

Predefined BAdI is available - *ARBCIG_ERPSERVICE_ENTRY* - that allows to change the data structure before the message is send out to the Business Network

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

Message Received by Business Network is routed to the Suppliers account.

Interface Alert & Monitoring

System to be monitored	How to monitor	What can be monitored
S/4 Hana	SRT_MONI transaction	Outbound SOAP messages
CIG	Transaction Tracker -> <i>ServiceEntrySheet</i>	Transactions are stored for 30 days. Each transaction is referenced by the SES ID. Payloads can be downloaded, both - soap message and cXML one
Business Network	Fulfilment Service Sheets	List of Service Entry sheets received by Ariba Network.

Language Requirements

Not Applicable

User Interface Requirements

Not Applicable

Sequencing

Not Applicable

Volumetrics

20-40 Per Day

Performance Consideration

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

Error Handling

In a case soap message fails to be sent to the CIG, it can be monitored and manually reprocessed in SRT_MONI. A background job can be scheduled to reprocess failed Web Services as documented in [KBA 3280647](#) if required.

Testing

How to Test

Access to the Fiori app to enter the SES is required. Test Supplier account must be available and accessible. Supplier must be created in S/4 hana and Service PO has to be created for the supplier

Test Conditions and Expected Results

ID	Condition	Expected Results
	A User submits an SES against a Service PO in the Fiori ap	SES is created. If SES is within tolerance and quantity matches Service PO, it's sent for Approval
	SES Approver approves SES	Service PO Status Updated
	Approved SES triggers logic in the CIG Addon	SOAP message constructed and send over to the CIG
	CIG translates message to cXML format	cXML message is sent to the Buyers account of Business Network
	Buyer Network receives SES in the cXML format, routes it to the Suppliers account	Supplier received SES

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

File **Modified**

No files shared here yet.







Change log

Version	Published	Changed By	Comment
CURRENT (v. 15)	Dec 17, 2025 15:07	TORRES-ext, Benedict	added a brief info on automatic reprocessing in Error Handling section
v. 14	Dec 17, 2025 14:56	TONHAUSER-ext, Juraj	
v. 13	Dec 16, 2025 13:17	TONHAUSER-ext, Juraj	
v. 12	Dec 11, 2025 19:06	WILLIAMS-ext, Julie	
v. 11	Dec 10, 2025 09:03	TONHAUSER-ext, Juraj	
v. 10	Dec 07, 2025 21:47	TONHAUSER-ext, Juraj	
v. 9	Dec 01, 2025 11:07	TONHAUSER-ext, Juraj	
v. 8	Nov 30, 2025 21:22	TONHAUSER-ext, Juraj	
v. 7	Nov 28, 2025 16:00	TONHAUSER-ext, Juraj	
v. 6	Nov 28, 2025 15:07	TONHAUSER-ext, Juraj	

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Workflow history

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

Dec 17, 2025	Actor	Type	Activity	Version
Approved	 WILLIAMS-ext, Julie	State	changed state to Approved at 11:15 pm	v15
Lead Approval	 WILLIAMS-ext, Julie	State	gave <i>POD Lead Review</i> approval at 11:15 pm	
	TONHAUSER-ext, Juraj and TORRES-ext, Benedict	Edit	multiple updates from  TONHAUSER-ext, Juraj and  TORRES-ext, Benedict	
	 TORRES-ext, Benedict	State	changed expiry date to '24 Dec, 2025 02:07 pm' at 2:07 pm	
		State	changed state to Lead Approval at 2:07 pm	v15
Tech Review	 TORRES-ext, Benedict	State	gave <i>Tech Review</i> approval at 2:07 pm	