SAP® Ariba® Cloud Integration Gateway:
Integrating SAP Ariba Solutions with SAP ERP and SAP S/4HANA®

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SAP Ariba is the only cloud provider with true bidirectional integration into SAP® ERP and SAP S/4HANA®,* including more than 100 integration processes and over 8,000 fields integrated to the SAP core.

This document explains how buyers can use SAP Ariba® Cloud Integration Gateway to integrate the procurement capabilities provided by SAP ERP and SAP S/4HANA with SAP Ariba on-demand solutions.

*Unless otherwise noted, all references to SAP S/4HANA in this document refer to the on-premises edition.
The Customer Comes First

At SAP Ariba, we understand that customers have already made significant investments in IT and infrastructure, and that SAP ERP and SAP S/4HANA landscapes in particular can be very complex for large enterprises. Many SAP ERP customers have a long history of customizations and extensions that fine-tune the solution to perfectly fit their specific needs. Hence, no two SAP ERP landscapes are exactly alike. As a result, there is no single integration solution that can be deployed in exactly the same way for all environments. However, that does not mean that there cannot be a consistent and simple approach to integration.

SAP Ariba Cloud Integration Gateway, enabled by the SAP Cloud Platform Integration service, allows you to unlock the full value of your SAP Ariba solutions by providing a quick, easy way to integrate them to your existing infrastructure. It transforms the integration process by making it simple to connect your trading partners, SAP Ariba applications, and backend systems such as SAP ERP and SAP S/4HANA for touchless, end-to-end transacting. You benefit from:

- **Simplicity**: A single gateway with prepackaged mapping content provides everything you need to make integrations fast and painless, eradicating the effort and expense of one-off, adapter-based integrations.
- **Self-service**: Intuitive wizard-based setup and a user-friendly self-testing framework guide you through a streamlined three-step process that lets you configure, extend, and test transactions on your own.
- **Speed**: Automated processes eliminate lengthy deployments and manual testing, enabling you to complete integration in a fraction of the time formerly required – and make stakeholders happy with go-lives that happen in weeks, not months.
SAP Ariba Cloud Solutions Integration with SAP ERP and SAP S/4HANA

The way SAP Ariba Cloud Integration Gateway supports SAP Ariba solutions can be divided into two key areas:
- Ariba Network – SAP Ariba Supply Chain solutions, payment capability, and SAP Ariba Commerce Automation
- SAP Ariba applications – The SAP Ariba Strategic Sourcing Suite and SAP Ariba Procurement solutions

This paper explores the value proposition for each of these product areas and how they can be integrated seamlessly to provide added benefits for SAP ERP and SAP S/4HANA customers.

Integration Solutions for SAP Ariba Cloud Products
Integration of SAP Ariba cloud solutions with SAP solutions was previously achieved through adapters for SAP Process Integration/SAP Process Orchestration, the integration toolkit, ABAP® transports, and the SAP Business Suite add-on for Ariba Network. SAP Ariba Cloud Integration Gateway introduces a simpler, cloud-based, self-service solution for all your integration needs.

Integration through SAP Ariba Cloud Integration Gateway
Enabled by SAP Cloud Platform Integration, SAP Ariba Cloud Integration Gateway facilitates the integration of buyers’ SAP ERP or SAP S/4HANA systems with Ariba Network and SAP Ariba applications. The integration solution framework using SAP Ariba Cloud Integration Gateway consists of two components:
- An SAP add-on (SAP Ariba Cloud Integration Gateway add-ons for both SAP ERP and SAP S/4HANA) available from the SAP Service Marketplace for all customers who currently have a support contract with SAP. These contain the necessary data extract/import programs and configuration programs.
- A comprehensive infrastructure that provides all standard and custom mappings, connections, and conversions to connect Ariba Network and SAP Ariba applications with SAP ERP; for example, with SAP ERP Central Component (SAP ECC) and SAP S/4HANA. (Connection to other SAP and non-SAP cloud and on-premises applications will be available in the future.)

Benefits
SAP Ariba Cloud Integration Gateway gives you a single solution to integrate with Ariba Network and SAP Ariba applications. With a lightweight add-on, SAP Ariba provides a standardized, streamlined way to deliver and maintain integration software and tools. You benefit from smoother upgrades, simpler configurations, and easier testing and monitoring.

Coexistence of SAP Ariba Cloud Integration Gateway and Other Integration Methods
Integration through SAP Ariba Cloud Integration Gateway is designed to work in conjunction with existing means of integration to Ariba Network and SAP Ariba applications, providing flexibility and ease of use for a variety of integration scenarios as well as easy migration to simpler integration through the solution. For example, it can coexist with adapter-based cloud integration, where some business processes are integrated through SAP Ariba Cloud Integration Gateway and others through adapters for SAP Process Integration/SAP Process Orchestration.
Deployment Options
SAP Ariba Cloud Integration Gateway offers a variety of deployment options:
• SAP Ariba Cloud Integration Gateway add-on for SAP ERP, which supports integration between Ariba Network and applications with SAP ERP
• Mediated connectivity with SAP Process Integration/SAP Process Orchestration or SAP Cloud Platform Integration private tenant between SAP and SAP Ariba Cloud Integration Gateway

ARIBA NETWORK SOLUTIONS
Ariba Network is a cloud-based network where buyers and suppliers collaborate by managing different business processes, either through the Ariba Network portal or through integrated solutions by exchanging commerce extensible markup language (cXML) messages. Buying organizations use Ariba Network to find suppliers and to run automated business transactions from ordering to issuing payments. Suppliers use Ariba Network to find new business opportunities and to work more efficiently and effectively with their customers on all the shared aspects of business commerce: proposals, contracts, orders, invoices, and payments.

SAP ERP and SAP S/4HANA customers integrate their system with Ariba Network when they want to manage their procurement process within their SAP ERP or SAP S/4HANA environment while also benefiting from the collaboration capabilities and efficiency gains that Ariba Network can provide.

Ariba Network integration with SAP ERP and SAP S/4HANA is limited to buying organizations currently, with supplier SAP integration on the roadmap.
Ariba Network and cXML
SAP Ariba, with the input of many other companies, has defined cXML as an open protocol for business-to-business transactions in a commerce domain. This is the most comprehensive XML standard covering a wide variety of common business processes and the integration protocol that Ariba Network is built upon. The cXML protocol is continuously updated to support new business processes and new business documents. See https://cXML.org for more information.

Ariba Network and SAP ERP or SAP S/4HANA Integration Scenarios

SAP Ariba Commerce Automation
SAP Ariba offers many different integration scenarios to support many business processes, but the most typical process is document automation for purchase order (PO) and invoice automation for goods and services. In this scenario, users create POs in their SAP ERP or SAP S/4HANA system, which sends them to the suppliers on Ariba Network for processing. Suppliers confirm orders or let their customers know if items are backordered; they can notify them that items have shipped and send a PO invoice for payment. Business rules enforce process and document compliance. For example, you can require that a supplier must confirm an order, create a ship notice, or wait for a goods receipt notice before they can send an invoice.

Service Entry Sheet
Additionally, the supplier can create a service entry sheet against a PO containing service-type line items. As a buyer, you can receive service entry sheets with or without hierarchy containing planned or unplanned service from a contract. You can also send service entry sheets on behalf of your suppliers from your systems to Ariba Network.

SAP Ariba Supply Chain Collaboration for Buyers
Ariba Network provides enhanced supply chain visibility for direct materials for discrete and process manufacturing and many other industries. SAP Ariba Supply Chain Collaboration for Buyers was developed to improve visibility, communica-
tion, and collaboration among supply chain partners. It offers comprehensive direct material and supply chain collaboration tools with industry-specific aspects, connecting all systems and stakeholders to a common plan so they can better orchestrate multtier supply chains and reduce inventory. Supported scenarios include processes for subcontracting, consignment, forecasting, and supplier-managed inventory as well as returns.

Contract Manufacturing Collaboration (Subcontract PO)
There are several steps in the subcontracting process. The first is the basic subcontracting purchase orders with components, purchase order confirmation, and ship notice of finished goods to the buyer. The buyer sends a goods receipt and invoice to the supplier.

In addition, basic subcontracting allows buyers/suppliers to monitor component shipments/deliveries. Component shipments are supported as well as visibility of component inventory and component acknowledgement. The flow below shows two different options for component shipments.

- **One-step process**: In this process both the ship notice request and product activity message are sent in a single step. The proof of delivery is triggered at the supplier side once the components have been received.
- **Two-step process**: Although the overall steps are the same as the one-step process, the main difference is when these steps are taken. The two-step process waits for the product to be received before the product is moved into the buyer system, and a product activity message is triggered.
- **Finished production**: Integrated suppliers have the option to notify the buyer of production of the finished goods via manufacturing execution system (MES) visibility. These messages are usually triggered from completed production orders in the supplier system and sent to inform the buyer of how much finished goods has been produced.

- **Real-time consumption**: Real-time consumption occurs when the supplier uses up the components originally shipped by the buyer and then notifies them. Once the buyer receives the notification, a product activity message is sent to the supplier from SAP with current component quantities, as SAP needs to be the system of record. If real-time computation is not used, then the product activity message for component overview is sent when the goods receipts from the ship notice of finished goods is sent.

The illustration on the following page shows typical contract manufacturing process flows along with consumption and execution visibility at the component level.
SAP Ariba Cloud Integration Gateway: Integrating SAP Ariba Solutions with SAP ERP and SAP S/4HANA

**SAP ARIBA SUPPLY CHAIN COLLABORATION FOR BUYERS – CONTRACT MANUFACTURING PROCESS FLOWS**

**Basic Subcontracting**
- Ariba Network: Subcontract PO → PO Confirmation
- SAP ERP or SAP S/4HANA: Subcontract PO → PO Confirmation

**Component Shipment (Direct Consumption)**
- Ariba Network: Component Ship Notice & Inventory Overview of Components → Component Acknowledge ment
- SAP ERP or SAP S/4HANA: Component Ship Notice → Proof of Delivery → Inventory Overview of Components

**Component Shipment (Stock in Transit/Consumption)**
- Ariba Network: Component Ship Notice → Component Acknowledge ment
- SAP ERP or SAP S/4HANA: Component Ship Notice → Proof of Delivery → Inventory Overview of Components

**MES Visibility**
- Ariba Network: Manufacturing Execution Visibility
- SAP ERP or SAP S/4HANA: PO Confirmation for MES Visibility

**Real-Time Consumption**
- Ariba Network: Component Consumption → Inventory Overview of Components → Ship Notice
- SAP ERP or SAP S/4HANA: Inbound Delivery → Goods Receipt & Component Inventory (No Real-Time Consumption)

**Basic Subcontracting**
- Ariba Network: Invoice for Subcontracting
- SAP ERP or SAP S/4HANA: Invoice

Legend:
- ![Buyer activity](image)
- ![Supplier activity](image)
- ![Existing standard integration scenarios](image)

General flows left to right. Arrows illustrate the key integration touch points between solutions. Integration flows inside a solution are not considered. Vertical gray topics have integration to many areas; arrows are not shown for brevity.
Multitier Contract Manufacturing Collaboration Support (Multitier Subcontracting)
In addition to supporting straightforward subcontracting scenarios, SAP Ariba Supply Chain Collaboration for Buyers has been extended to allow for full visibility of goods movements between subcontract manufacturers and parts manufacturers via multitier purchase order and goods receipts.

To provide full visibility to both the subcontracting manufacturer and the supplier providing materials to the subtracting manufacturer, the buyer creates two purchase orders in their ERP system. The first is sent to the subcontractor that will assemble the final product and to the supplier who will drop ship materials to the subcontractor. Once the subcontractor confirms that they can build the final product, the buyer will send a standard PO to the supplier providing one or more of the components required to build that product, who will also confirm they can deliver the components.

Since the subcontractor and supplier don’t have visibility into each other’s systems, the supplier will send a component shipment notice to Ariba Network. A copy of that will be created on Ariba Network and made visible to the subcontractor via the component inventory tab (note that component inventory is not PO-specific, but based purely on overall quantity). When that component inventory is received, a goods receipt is sent from Ariba Network to the buyer’s ERP system. Normally, a proof of delivery would be generated, but for multitier scenarios, the process will generate an outbound goods receipt to the original supplier in Ariba Network. Component inventory will be updated in accordance with the standard product activity message sent to the subcontractor.

The following illustrates the typical multitier contract manufacturing process (shipments, finished goods ship notice, and invoicing will all continue as in the standard subcontracting flow above):

![SAP Ariba Supply Chain Collaboration for Buyers - Multitier Contract Manufacturing Diagram]

General flow is left to right. Arrows illustrate the key integration touch points between solutions. Integration flows inside a solution are not considered. Vertical gray topics have integration to many areas; arrows are not shown for brevity.
Consignment Collaboration (Consignment PO)
The nature of consignment inventory is that “change of ownership” is unrelated to the shipment/receipt processes. This is contrary to the basic design of most inventory/accounting systems' transactional processes. Because of this, most inventory systems do not handle consignment inventory very well. This feature enables buyers to send consignment line items on POs to suppliers and receive consignment goods that are still owned by the suppliers. The feature provides visibility of the consignment PO items, visibility of the consignment material movements, transfer of ownership of stock, and invoice settlement based on the material movements.

- **Consignment Movement:** After the goods receipt is generated in SAP, the consignment movement using transaction MB1B triggers the product activity message to Ariba Network to transfer consignment stock to own stock.
- **Consignment Settlement and Invoice:** After the consignment to own stock is performed, a settlement is performed and an invoice is created and sent to the supplier.

The following illustrates typical consignment process flows:

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**SAP ARIBA SUPPLY CHAIN COLLABORATION FOR BUYERS – CONSIGNMENT COLLABORATION PROCESS FLOWS**

<table>
<thead>
<tr>
<th>Ariba Network</th>
<th>SAP ERP or SAP S/4HANA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consignment PO</td>
<td>Consignment PO</td>
</tr>
<tr>
<td>PO Confirmation</td>
<td>PO Confirmation</td>
</tr>
<tr>
<td>Ship Notice</td>
<td>Inbound Delivery</td>
</tr>
<tr>
<td>Goods Receipt</td>
<td>Goods Receipt</td>
</tr>
<tr>
<td>Consignment Withdrawals</td>
<td>List of Withdrawals from Consignment Stock</td>
</tr>
<tr>
<td>Execute Consignment Settlement &amp; Post (FI) Invoice</td>
<td>List of Update Settlement Status &amp; (Non-PO) Invoice</td>
</tr>
</tbody>
</table>

- **Buyer activity**
- **Supplier activity**
- **Existing standard integration scenarios**

General flow is left to right. Arrows illustrate the key integration touch points between solutions. Integration flows inside a solution are not considered. Vertical grey topics have integration to many areas; arrows are not shown for brevity.
Forecast Collaboration
Forecast collaboration provides several benefits to the supplier. First, by providing suppliers with near real-time visibility into demand forecast, it allows them to more effectively schedule operations and plan capacity usage in order to meet the buyer’s requirements. It also allows suppliers to provide commitment against the buyer-requested forecast quantities, which can then be mapped to processes in the buyer’s material requirements planning (MRP) software.

Supplier-Managed Inventory Collaboration
In addition to sending a long-term plan, supplier-managed inventory (SMI) functionality allows suppliers to manage the stock levels for a buyer and send the product based on scheduled agreements. This process allows suppliers to see the gross demand and current inventory levels and make any necessary adjustments based on capacity to satisfy the needs of buyers. It also allows suppliers to manage the day-to-day execution of the forecast plan and send back the SMI agreement schedule lines to buyers. They can then ship against those schedule lines and be measured to the original forecast commitment they agreed upon.

SAP Ariba Cloud Integration Gateway: Integrating SAP Ariba Solutions with SAP ERP and SAP S/4HANA
Quality Notification
In today’s competitive marketplace – with suppliers, trading partners, and logistics providers spanning the globe – it is imperative for companies to have real-time, end-to-end visibility and control across their supply networks, ensuring that they can meet fluctuating customer demands and maximize revenues while satisfying quality requirements. Buyers integrated with Ariba Network, SAP Ariba Supply Chain Collaboration for Buyers, and SAP Ariba Cloud Integration Gateway can send suppliers a request to inspect the quality of the goods they are sending. On receiving the request, suppliers complete the inspection and send the results to the buyers, who can confirm their decision to make the purchase based on the information they receive. During this time, suppliers can also include a quality certificate on ship notices, and buyers can then create quality records in their systems. This collaboration between buyers and suppliers supports a seamless process in the inspection and quality of goods.

SAP ARIBA SUPPLY CHAIN COLLABORATION FOR BUYERS – QUALITY INSPECTION COLLABORATION PROCESS FLOW

General flow is left to right. Arrows illustrate the key integration touch points between solutions. Integration flows inside a solution are not considered. Vertical gray topics have integration to many areas; arrows are not shown for brevity.
Supply Chain Finance Capability
The supply chain finance capability allows third-party funders to provide financing for early payment to a supplier in exchange for discounts on the total invoice amount. The supplier receives funds early at a discount, and the buyer increases days payable outstanding (DPO) by extending terms.

Each trading participant may therefore meet its opposing working capital objective. The financing is facilitated by a financier who has relationships with one or more funders to pay approved invoices early in exchange for payment from the buyer on the net due date (at maturity).
Payment Capability
The payment capability allows buyers to send payments to the bank using the payment provider’s network. It also provides suppliers with rich and timely remittance advice about each electronic payment – before the payment is received. This allows you to complete the procure-to-pay process simply, securely, and with a high degree of certainty about who is paying, to whom, for what, and when. All because the capacity of Ariba Network for facilitating buyer-supplier collaboration has been enhanced with the payment provider’s expertise in securely managing sensitive bank information and moving money.
Quote Automation

Sometimes buyers have an unplanned and immediate need for certain items that are not covered by contracts and strategic sourcing. These ad-hoc, one-time purchases are known as tactical spend. Quote automation, which builds upon the core functionality provided by SAP Ariba Discovery and Ariba Network, is a capability that optimizes such ad-hoc activities and automates the process completely or partially. Quote automation also includes supplier enablement features of Ariba Network to onboard new suppliers and to import their vendor data from the buyer’s ERP system.

Quote automation with SAP ERP or SAP S/4HANA integration starts in the SAP system when a user creates a request for quotation (RFQ) from a purchase requisition or from scratch. Users enter event open and close dates, and specify line items with material groups and receiving plants.

The RFQs are sent through SAP Ariba Cloud Integration Gateway to Ariba Network, which automatically creates a quote automation posting and publishes it on SAP Ariba Discovery. Suppliers can either be invited as part of the quote automation posting or matched through SAP Ariba Discovery based on product and service categories and location. If an invited supplier is not registered on Ariba Network, an Ariba Network account is automatically created for them.

Invited and matched suppliers receive notifications about the quote automation posting from SAP Ariba and can then respond directly to the posting on SAP Ariba Discovery. Depending on how quote automation is configured, supplier responses can automatically be sent back to the SAP ERP or SAP S/4HANA system as purchase orders with no action from project owners, or buyers can manually award suppliers directly within the quote automation feature.
SAP Ariba Strategic Sourcing Suite covers what is often called strategic procurement. Integration with strategic procurement is designed to support strategic management of supplier relationships, sourcing, negotiations, and related contracts and spend.

The SAP Ariba Strategic Sourcing Suite is designed to help companies address the challenge of ensuring sustainable results in the sourcing process. It includes multiple solutions that help buyers discover suppliers and manage supplier information and the supplier lifecycle effectively without compromising supply chain cost, quality, or performance.

SAP Ariba Strategic Sourcing Suite integration with SAP ERP or SAP S/4HANA is implemented when a customer wants to manage their strategic procurement process within their SAP ERP or SAP S/4HANA separately from their operational procurement process.

SAP Ariba Sourcing and SAP Ariba Contracts Integration with SAP ERP and SAP S/4HANA

SAP Ariba Sourcing

The standard integration between SAP and SAP Ariba Sourcing supports integrated sourcing events initiated from SAP ERP or SAP S/4HANA:

- Manually created purchase requisitions in SAP ERP materials management (MM) that then create a request for quotation (RFQ)
- Automatically created purchase requisitions during MRP runs that then create an RFQ
- Manual creation of SAP ERP RFQs without purchase requisition

An RFQ is directly sent to Ariba Network via SAP Ariba Cloud Integration Gateway, and from there to SAP Ariba Sourcing as a sourcing request. The sourcing request is routed to the appropriate sourcing manager based upon the

header data sent from SAP ERP or SAP S/4HANA. The sourcing manager is notified to review the sourcing request and edit and send it for approval if required, and then creates a sourcing project based upon the most appropriate template.

The sourcing project allows the sourcing manager to manage every aspect of the sourcing event, including creation, collaboration with suppliers, monitoring the execution, scoring and grading of supplier responses, and awarding suppliers. A sourcing event can be a request for information (RFI), a request for proposal (RFP), or an auction. When the sourcing manager creates awards for the event, SAP Ariba Sourcing sends a cXML document based on the award to the ERP system. The ERP creates a purchase order or contract from the cXML document. Additionally, buyers integrated with SAP Ariba Sourcing or SAP Ariba Strategic Sourcing Suite and SAP Ariba Cloud integration Gateway can create purchase information records from the awards that SAP Ariba Sourcing sends to SAP ERP.

SAP Ariba Contracts

When a buyer publishes a contract, SAP Ariba Contracts sends contract information such as the contract header data and line-item data to SAP ERP or SAP S/4HANA. SAP ERP or SAP S/4HANA then creates an outline agreement based on the contract information received from SAP Ariba Contracts.

Master Data Integration

 Buyers using SAP Ariba Sourcing or SAP Ariba Contracts can import organizational data, cross-application data such as incoterm and payment terms, and material master data from SAP ERP systems. This allows buyers to initiate the sourcing process in SAP Ariba Sourcing and send the award to SAP ERP or SAP S/4HANA.
Direct Material Sourcing
Buyers using the SAP Ariba Strategic Sourcing Suite will be able to integrate additional master data elements such as bill of material (BOM) and purchasing information records (PIRs) with SAP ERP or SAP S/4HANA.

Service Items Integration with Service Hierarchies
Sourcing of service items has been enhanced with the support of service hierarchies. Buyers using SAP Ariba Sourcing and SAP Ariba Contracts can add multiple service items with up to five-level hierarchy (one parent item and four-level child hierarchy) in the integration flow from an RFQ in their SAP backend system (SAP ERP or SAP S/4HANA) to an SAP Ariba sourcing request, SAP Ariba award to PO and outline agreement, and SAP Ariba contract to outline agreement in their SAP backend system.

With SAP for Retail, you can leverage SAP technology to build a highly efficient, customer-centric retail environment.

Integrating SAP for Retail with SAP Ariba Strategic Sourcing Suite helps you effectively handle the sourcing and inventory management of the retail articles in your distribution center or store while optimizing your supply chain. Integration of retail master data is an important part of integrating SAP for Retail with SAP Ariba Strategic Sourcing Suite, enabling you to use retail master data in SAP Ariba Strategic Sourcing Suite to create sourcing events. You can also integrate a specific type of structured retail master data (such as characteristic, profile/config class, merchandise category, merchandise hierarchy, and article master data) created in SAP Ariba Strategic Sourcing Suite with SAP for Retail.

SAP for Retail Integration with SAP Ariba Strategic Sourcing Suite
SAP for Retail enables your retail company to respond to the demands of your market quickly.

SAP Ariba Cloud Integration Gateway: Integrating SAP Ariba Solutions with SAP ERP and SAP S/4HANA

### SAP ARIBA SOURCING AND SAP ARIBA CONTRACTS

<table>
<thead>
<tr>
<th>SAP Ariba Sourcing and SAP Ariba Contracts</th>
<th>Sourcing Request</th>
<th>Sourcing Project</th>
<th>RFX/Auction</th>
<th>Award</th>
<th>Contract</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ariba Network</td>
<td>Supplier Response</td>
<td>Award</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SAP ERP or SAP S/4HANA</td>
<td>Purchase Requisition</td>
<td>RFQ</td>
<td>Purchase Info Record Created</td>
<td>Purchase Order</td>
<td>Contract OA (MK/WK)</td>
</tr>
</tbody>
</table>

General flow is left to right. Arrows illustrate the key integration touch points between solutions. Integration flows inside a solution are not considered. Vertical gray topics have integration to many areas; arrows are not shown for brevity.

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You can integrate supplier organization data by using the direct connectivity integration method or middleware. Inbound and outbound integration occurs through standard SAP business partner interfaces provided by SAP ERP or SAP Master Data Governance, and outbound integration uses standard SAP programs such as the Data Replication Framework (DRF).

**SAP Ariba Procurement Solutions Integration with SAP ERP and SAP S/4HANA**

The data managed by SAP Ariba Procurement solutions includes the buyer catalogs, transaction documents (such as requisitions, POs, receipts, and invoices including line items with item category B and framework order document type), and master data (such as user, accounting, and supplier data). SAP Ariba Cloud Integration Gateway enables the integration between SAP Ariba Procurement solutions and SAP ERP or SAP S/4HANA for the exchange of both transactional data and master data. Among the master data that SAP Ariba Procurement solutions can import from an SAP ERP system are users, user groups, vendors, accounting information, purchasing organizations, tax codes, currency exchange rates, plant, internal orders, work breakdown structure (WBS) elements, and fund management accounting objects.

The process diagram below demonstrates a typical integration flow between SAP ERP or SAP S/4HANA and SAP Ariba Buying and Invoicing. The process begins when a user creates a requisition in SAP Ariba Buying and Invoicing. The user can optionally check real-time availability of budget in SAP ERP or SAP S/4HANA and reserve against the budget. When the requisition is fully approved, one or more POs are created that are sent to the suppliers on Ariba Network and to SAP ERP or SAP S/4HANA. Depending on the integration technology the user chooses from the SAP Ariba cloud integration framework, any changes or cancellations to POs in SAP Ariba Buying and Invoicing can be reflected in SAP ERP or SAP S/4HANA in near real time. If receiving is enabled in SAP Ariba Buying and Invoicing, goods receipt information can also be transferred from the SAP Ariba solution to SAP ERP or SAP S/4HANA.
Suppliers typically create invoices on Ariba Network by “flipping” a PO into an invoice. Ariba Network’s business rules engine ensures that each invoice meets certain defined criteria. If the invoice passes validation, it is sent to SAP Ariba Buying and Invoicing, where the invoice is either manually or automatically checked (reconciled) against receipts and the PO in a three-way match. If the invoice is successfully reconciled, it is sent to SAP ERP or SAP S/4HANA as an approved invoice for payment. And payment remittance records can be sent to SAP Ariba Procurement solutions.

**Integration for Procurement of Services**
Procurement of services is now integrated with SAP ERP and SAP S/4HANA, Ariba Network, and SAP Ariba Procurement solutions. The process begins with service requisitions. Service items support a single level of subitems to represent service lines. The supplier has to create the service entry sheet and submit it in Ariba Network. After the buyer receives and approves the service entry sheet document, the supplier in Ariba Network can flip the approved document to create an invoice. Additionally, buyers integrated with Ariba Network and SAP Ariba Invoice Management can create service entry sheets from their systems on behalf of the suppliers and send a copy of the service entry sheet to Ariba Network and SAP Ariba Invoice Management.

### SAP ARIBA BUYING AND INVOICING – BASIC SCENARIO

<table>
<thead>
<tr>
<th>Supplier activity</th>
<th>Buyer activity</th>
<th>Existing standard integration scenarios</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Ariba Network</strong></td>
<td>Purchase Order</td>
<td>Budget Check &amp; Reserve</td>
</tr>
<tr>
<td><strong>SAP Ariba Buying and Invoicing</strong></td>
<td>Approval</td>
<td>Purchase Order(s)</td>
</tr>
<tr>
<td><strong>SAP ERP or SAP S/4HANA</strong></td>
<td>Down Payment Request</td>
<td>Goods Receipt</td>
</tr>
<tr>
<td><strong>Invoice (MROI or FB01)</strong></td>
<td>Payment</td>
<td></td>
</tr>
</tbody>
</table>
Management of Assets within SAP Ariba Procurement Solutions
If a buyer using SAP Ariba Procurement solutions integrated with SAP Ariba Cloud Integration Gateway wants to create a purchase requisition for an asset that is not available, they can do the following:
- Import the relevant asset class from SAP ERP
- Create the asset and submit a purchase requisition for it

Importing Payment Terms Data
Most suppliers are willing to agree to provide discounts in exchange for earlier payment of their invoices. Payment terms indicate the negotiated discount between a buying organization and a supplier for a specified number of days before payment is due.

While importing payment terms master data from SAP ERP or SAP S/4HANA with SAP Ariba Procurement solutions and SAP Ariba Cloud Integration Gateway, buyers can send:
- Day limit
- Baseline date calculation on fixed day and additional months
- Baseline date
- Payment terms – fixed and additional
This helps buyers to make these additional payment options visible to suppliers, enabling them to offer various choices. It also gives suppliers a say in the payment timing, discounts, and discount amounts calculated dynamically based on invoice posting and due date.
Appendix

SUPPORTED SAP SYSTEMS

<table>
<thead>
<tr>
<th>SAP ERP Releases</th>
<th>SAP S/4HANA</th>
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<tr>
<td>• SAP ERP 6.0</td>
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<tr>
<td>• SAP ERP 6.0 EhP2</td>
<td>• 1709</td>
</tr>
<tr>
<td>• SAP ERP 6.0 EhP3</td>
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<td>• SAP ERP 6.0 EhP4</td>
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<tr>
<td>• SAP ERP 6.0 EhP5</td>
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<td>• SAP ERP 6.0 EhP6</td>
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<td>• SAP ERP 6.0 EhP7</td>
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<td>• SAP ERP 6.0 EhP8</td>
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SAP Ariba Cloud Integration Supported Solutions and Capabilities

<table>
<thead>
<tr>
<th>Ariba Network</th>
<th>Strategic Procurement</th>
<th>Operational Procurement</th>
<th>Industry</th>
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<tr>
<td>• Supply Chain Finance Capability</td>
<td>• SAP Ariba Sourcing</td>
<td>• SAP Ariba Buying and Invoicing</td>
<td>• SAP for Retail</td>
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<tr>
<td>• SAP Ariba Commerce Automation</td>
<td>• SAP Ariba Contracts</td>
<td>• SAP Ariba Buying and Invoicing, Multi-ERP Edition</td>
<td>• Coverage for All Industries</td>
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<tr>
<td>• SAP Ariba Supply Chain Collaboration for Buyers</td>
<td>• SAP Ariba Start Sourcing</td>
<td>• SAP Ariba Buying</td>
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<tr>
<td>• SAP Ariba Contract Invoicing</td>
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<td>• SAP Ariba Buying, Multi-ERP Edition</td>
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<td>• Discounting Capability</td>
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<td>• Payment Capability</td>
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<td>• SAP Ariba Invoice Management</td>
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<td>• Quote Automation</td>
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</table>
# STANDARD INTEGRATIONS – 213

## SAP Ariba Cloud Integration Gateway: Integrating SAP Ariba Solutions with SAP ERP and SAP S/4HANA

### SAP Ariba Applications

#### Procurement – Sourcing

- **Master**
  - 21 Sourcing and Contracts
  - 38 Buying and Invoicing

#### Network

- **Bay Side**
  - 42 Contract Management

### Aruba Network

### 133 = SAP ERP and SAP S/4HANA

### 60 = Other Formats – Network Sell Side

### 80 = Network Sell Side

### 122 Planned: 3rd H 2019

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## Standard Integrations Chart

### Master – 21

- **Sourcing and Contracts**
  - Purchase orders
  - Purchase requests
  - Material requests
  - Planned orders
  - Leads
  - Customer requests
  - RFQs
  - Contracts
  - Quotations

### Master – 38

- **Buying and Invoicing**
  - Invoices
  - Sales orders
  - Sales quotes
  - Sales campaign orders
  - Sales campaign quotes

### Master – 42

- **Contract Management**
  - Contracts
  - Contract attachments
  - Claim submissions
  - Claim submissions
  - Claim receipts
  - Claim status

---

## Transaction – 26

- **Sourcing**
  - RFQs
  - Quotations
  - Orders
  - Invoices
  - Shipments
  - In-transit notifications

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## Transaction – 6

- **Supplier Management**
  - Supplier request
  - Supplier evaluation
  - Supplier contract
  - Supplier status
  - Supplier payments

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## Master – 21

- **Supplier Management**
  - Supplier request
  - Supplier evaluation
  - Supplier contract
  - Supplier status
  - Supplier payments

## Master – 38

- **Sourcing and Contracts**
  - Purchase orders
  - Purchase requests
  - Material requests
  - Planned orders
  - Leads
  - Customer requests
  - RFQs
  - Contracts
  - Quotations

## Master – 42

- **Contract Management**
  - Contracts
  - Contract attachments
  - Claim submissions
  - Claim submissions
  - Claim receipts
  - Claim status

---

## SAP Ariba Cloud Integration Gateway: Integrating SAP Ariba Solutions with SAP ERP and SAP S/4HANA

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About SAP Ariba

SAP Ariba is how companies connect to get business done. On Ariba Network, buyers and suppliers from more than 4.2 million companies and 190 countries discover new opportunities, collaborate on transactions, and grow their relationships. Buyers can manage the entire purchasing process while controlling spending, finding new sources of savings, and building a healthy supply chain. And suppliers can connect with profitable customers and efficiently scale existing relationships – simplifying sales cycles and improving cash control along the way. The result is a dynamic, digital marketplace where over US$2.9 trillion in commerce gets done every year. To learn more about SAP Ariba, visit www.ariba.com.

http://www.ariba.com/about/contact-us