



# Feature at a Glance

## Inventory reservation for SAP ERP-integrated sites

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# Feature at a Glance

Ease of implementation  High-touch  
Geographic relevance  Global

## Introducing: Inventory reservation for SAP ERP-integrated sites

### Customer challenge

Today, SAP Ariba does not offer visibility of what a company keeps in stock. This limits the scope of most SAP Ariba implementations to non-stocked, indirect goods purchases and services, and excludes buying processes and categories that typically include stocked items, such as MRO, spare parts, safety equipment. This may lead to unnecessary spend and limited adoption.

### Meet that challenge with **SAP Ariba**

Most organizations prefer to fulfill procurement requirements from the inventory first before opting to purchase externally. In SAP Ariba Buying and SAP Ariba Buying and Invoicing, for SAP ERP-integrated sites, buyers can check and reserve material items that are present in the inventory before initiating the external purchasing process.

### Experience key benefits

With this feature, customers can expand their procurement coverage into the areas of MRO. The functionality include visibility and reservation of items kept in inventory.

### Solution area

- SAP Ariba Buying
- SAP Ariba Buying and Invoicing

### Implementation information

To have this feature enabled, please have your Designated Support Contact (DSC) submit a **Service Request (SR)**.

For detailed steps, please refer to the next slide.

### Prerequisites and Restrictions

- This feature is only available for SAP integrated sites
- The feature is only available in Core Procurement, not Guided Buying, in this release.
- Storage locations must be loaded
- Change Requisitions cannot add new inventory items

## Feature at a Glance

### Overview: Inventory reservation for SAP ERP-integrated sites

In SAP Ariba Buying and SAP Ariba Buying and Invoicing, for sites integrated with SAP ERP, buyers can now get visibility of, and reserve material items that are available at storage locations in their organization.

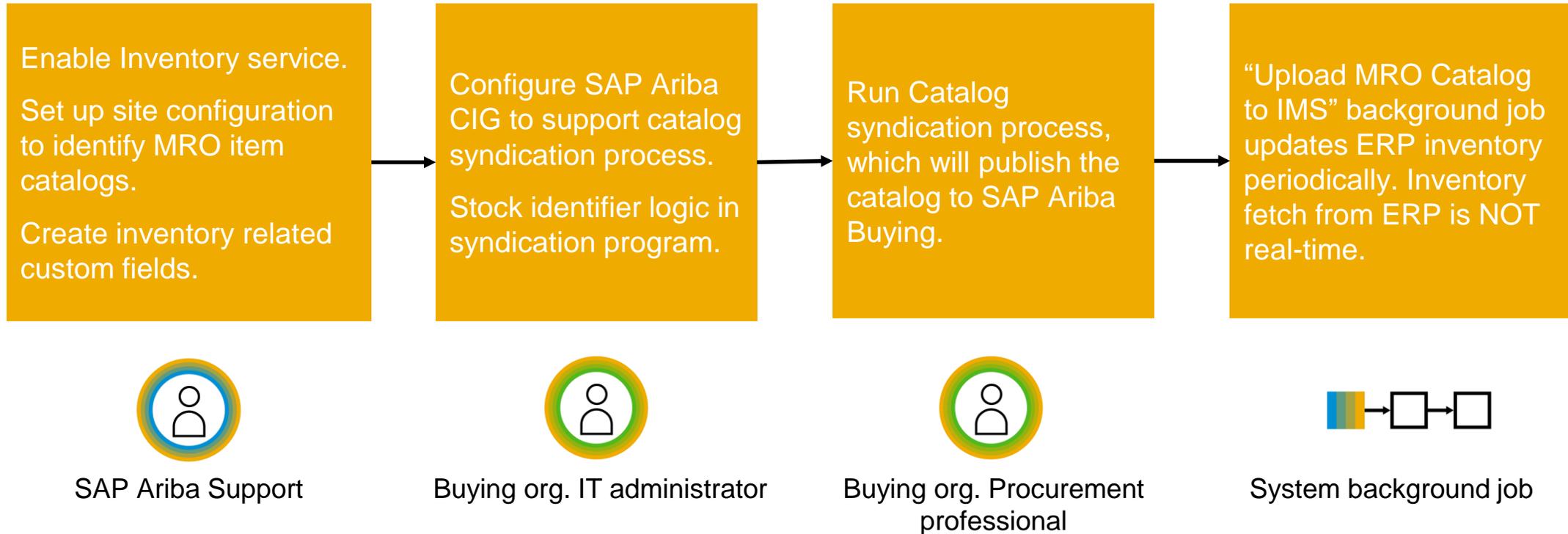
With this feature, customers can expand their procurement coverage into the areas of MRO, safety equipment, and spare parts, providing a single user experience for all types of goods. By providing visibility into inventory, customers can also expect to lower overall costs.

#### Key features:

- Mix of catalog and inventory items on the same request
- Support for storage locations
- Inventory availability visibility in catalog
- Search by Material Number
- Store Room Managers can convert inventory requests to supplier purchase orders



# Workflow for setting up MRO catalogs



The above steps describe the high level process. Please refer to the feature documentation release guide for detailed steps.

# Searching for inventory items

In the regular Catalog view, when searching for items, the user can find both supplier catalog items as well as inventory items. The Material Number for inventory items are included in the search, and the user can further filter the results by;

- Plant,
- In Stock, or
- Storage Locations

Inventory items and their availability (across all storage locations) are visible in search results alongside with regular supplier catalog items.

The screenshot shows the SAP Catalog search interface. The search term 'mac' has yielded 78 items. The results are displayed in a list view, sorted by Price - Descending. The left sidebar contains various filters such as Contract, Keyword, Category, Supplier, Manufacturer, Price, Material Group, Plant, In Stock, and Storage Locations. The main content area shows several items, including Sony Laptops, Dell Laptops, Casio Print/Display Desktop Calculators, and Side-Load Letter Trays. Each item listing includes a checkbox, a small image, the item name, supplier information, price, and availability status.

Item Name	Supplier	Price	Availability
Sony Laptop	JCN Technologies	€310.00 EUR / each	280 in Stock
Dell Laptop	JCN Technologies	€210.00 EUR / each	1,500 in Stock
Casio Print/Display Desktop Calculator	Schafer Office (AN - Fulfillment FT)	\$189.95 USD / each	1 in Stock
Side-Load Letter Trays - Single Tray - Mirror	Schafer Office (AN - Fulfillment FT)	\$180.00 USD / each	1 in Stock
Side-Load Letter Trays - Single Tray - Mirror	Schafer Office (AN - Fulfillment FT)	\$180.00 USD / each	1 in Stock

# Catalog item showing inventory details

The screenshot displays the SAP catalog interface for a 'Sony Laptop'. The page includes a navigation bar with 'Shop By Category' and 'All Categories' dropdowns, and a search bar containing 'laptop'. The breadcrumb trail indicates the path: 'Catalog Home / Purchasing Organization : 3000 (PurchOrg US) / Machinery and Tools / Industrial Manufacturing and Processing Machinery and Accessories / Raw Materials Processing Machinery'.

The main content area features a product image placeholder, the title 'Sony Laptop', and key details: Supplier: JCN Technologies, Supplier Part #: 183, Available in: 10 Day(s), and Contract: C17. The price is listed as €310.00 EUR / each, with 280 in Stock. A 'Specify Quantity' button and an 'Add to Favorites' link are also present.

Below the main details, there are sections for 'Product Description' and 'Product Specifications'. The 'Product Specifications' section contains the following information:

Price:	€310.00 EUR
Supplier:	JCN Technologies
Supplier Part #:	183
Available in:	10 Day(s)
Material Group:	01
Material Number:	00000000000000232
Plant:	2000
In Stock:	<input checked="" type="checkbox"/>
Storage Locations:	0001 Mandya, 0002 Mysore, 0003 Tumkur, 0004 Kolar, 0005 Hassan, 0006 Bangalore, 0007 Chennai, 0008 Hubli, 0009 Gulbarga, 0010 Mangalore

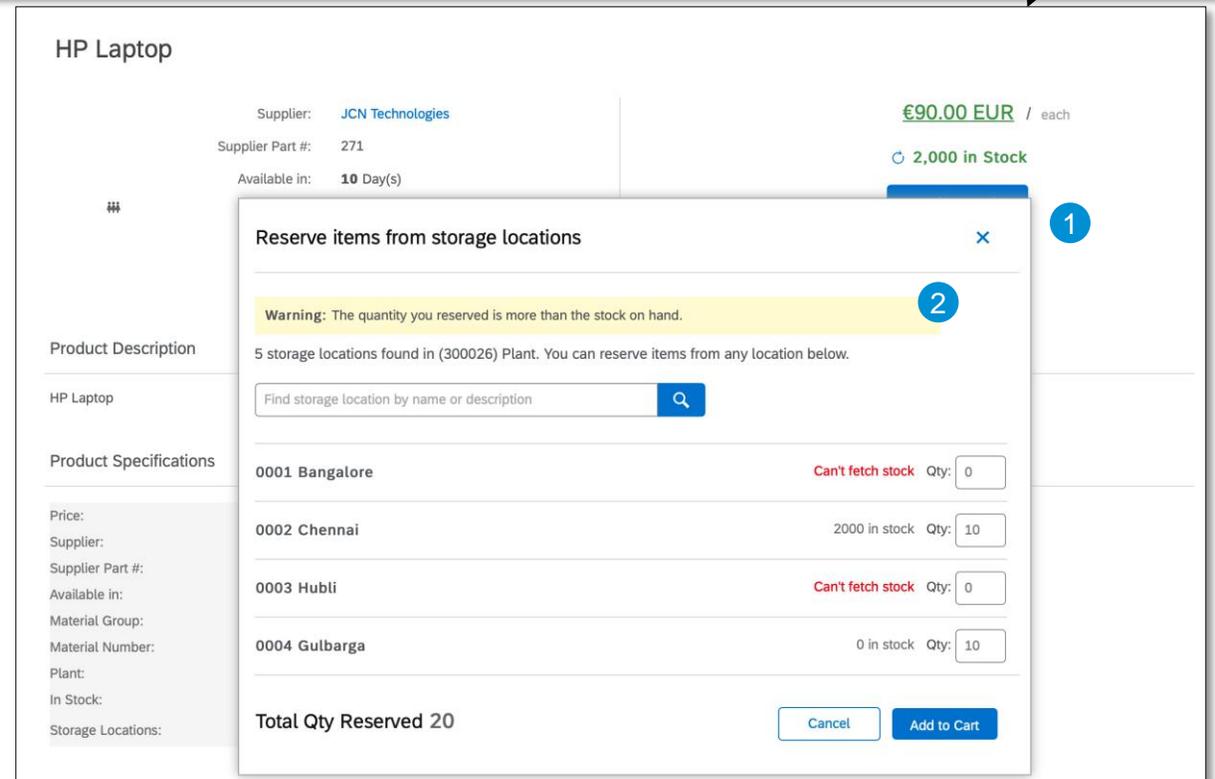
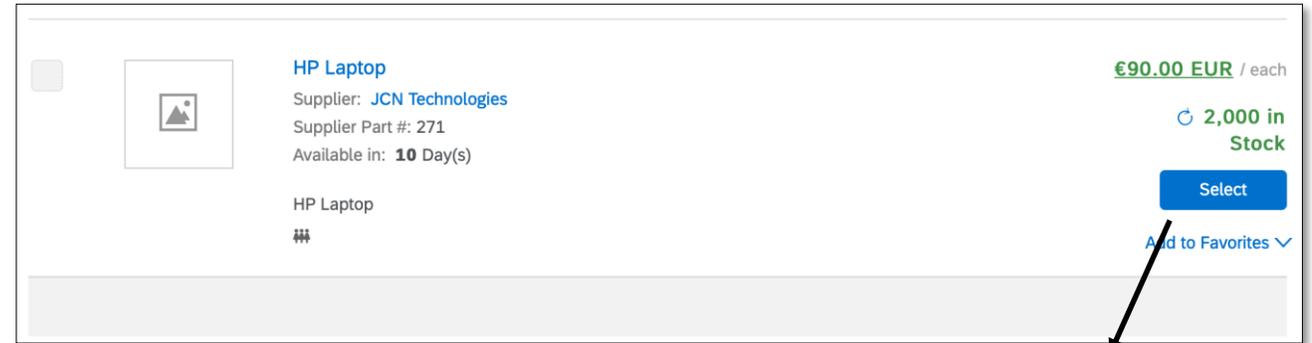
A callout box on the left side of the image contains the text: 'Inventory related custom fields on the catalog item details page'. Two lines from this box point to the 'Material Group', 'Material Number', and 'Storage Locations' fields in the 'Product Specifications' section.

# Adding inventory items to a Requisition

When adding an item to a requisition, the user specifies from which Storage Location(s) the items should be reserved and shipped - see 1. When the user clicks "Select Quantity", a popup shows

- Available quantity at each location is listed
- The user can define multiple locations to reserve the items from
- Each selected Storage Location will create separate Inventory Line Items on the Requisition

Note: If the user selects more items than what is available, a warning message is presented – see 2



# Differentiation of catalog items and inventory items added to shopping cart

Separate grouping for Catalog and Inventory items added to shopping cart

The screenshot displays the SAP Catalog Home interface. A shopping cart overlay is open, showing two distinct groups of items:

- Inventory Items (2):**
  - Sony Laptop: 3 x €279.00 EUR
  - Sony Laptop: 15 x €279.00 EUR
- Catalog Items (1):**
  - EPrint Technologies (ACP, Fulfillment FT): \$6.67 USD / each
  - Supplier RPC 06 (Manual Supplier): \$99.50 USD / each

The background interface includes a navigation menu on the left with categories like 'Books, Forms and Printed Media', 'Computers and IT equipment', and 'Services'. The main content area shows 'Recently Viewed Items' with products like 'Apple In-Ear Headphones' and 'Sony Laptop'. A 'Recently Viewed Suppliers' section lists 'JCN Technologies', 'EPrint Technologies (ACP, Fulfillment FT)', 'Supplier RPC 02 (AN - RCP FT)', and 'Supplier RPC 06 (Manual Supplier)'. A 'Favorites' section is also visible at the bottom.

# Review cart screen

Cart review screen showing catalog and inventory items grouped in separate tabs

The screenshot displays the SAP Review Cart interface. At the top, there is a navigation bar with the SAP logo, a search bar, and user information (CN). Below the navigation bar, there are buttons for 'Continue Shopping' and 'Proceed to Checkout'. The main content area shows a list of items in the cart, with a '2 Items Total' summary. The first item is a 'Sony Laptop' with a quantity of 1, a unit of 'each', and a price of €279.00 EUR. The total amount for this item is €837.00 EUR. Below the item details, there are buttons for 'Delete' and 'Update Total'. The footer of the screen contains the SAP logo, user information, and copyright notice.

No.	Type	Description	Qty	Unit	Price	Storage Location	Plant	Amount
1		Sony Laptop	1	each	€279.00 EUR	0001		€837.00 EUR Fx

# Requisition with Catalog Items and Inventory Items

A new section **Line Items From Inventory** is visible on the Requisition, below the Line Items section – see 1 and 2.

Following additional attributes are copied from the catalog for Inventory items:

- Material Number
- Plant
- Storage Location

This information is passed to the ERP when the reservation is done.

## Note:

Approvers and requesters who belong to the “**Store Room Manager**” group (new) can select Line Items From Inventory and **Order from Supplier** - see 3. This action will *move* selected lines from Line Items From Inventory section to Line Items section, and subsequently generate a purchase order instead of a reservation document.

The screenshot displays the SAP Requisition interface. It is divided into two main sections: 'Line Items' and 'Line Items From Inventory'. The 'Line Items' section shows a table with one item: 'Monitor DB13W3M/HD15M' with a quantity of 20, unit 'each', price '\$96.00', and amount '\$1,920.00 USD'. Below the table are fields for 'Supplier Part #', 'Commodity Code', 'Material Group', 'Purch Org', 'Vendor', 'Line Item Text', 'Contact', and 'Payment Terms'. The 'Line Items From Inventory' section shows a table with two items, both 'HP Laptop' with a quantity of 10, unit 'each', price '€90.00 EUR', and amount '€900.00 EUR Fx'. Below the table are fields for 'Material Number', 'Plant', and 'Storage Location'. At the bottom of the interface, there are buttons for 'Actions' and 'Update Total' in the top section, and 'Actions' and 'Order from supplier' in the bottom section. A bracket on the left side of the screenshot groups the top section as '1' and the bottom section as '2'. A callout '3' points to the 'Order from supplier' button.

# Actions on Inventory Items

Each Inventory line will require the user to enter a **Required Date** (reservation date).

**Actions** available are:

- Copy
- Update Required Date - see 1
  - Selecting multiple items are possible
- Edit - see 2
  - Only single line can be selected
  - Quantity can be edited
  - Required Date is required
  - Access to Accounting details
- Delete

The screenshot shows the 'Line Items From Inventory' interface. A table lists two items: 'HP Laptop' with a quantity of 10 and a price of €900.00 EUR. An 'Update Required Date' dialog box is open, prompting the user to enter a required date for the selected items. The date 'Fri, 13 Dec, 2019' is entered. A red circle with the number '1' is placed over the dialog box. An arrow points from the 'Update Required Date' option in the 'Actions' menu to the dialog box.

No.	Type	Description	Qty	Unit	Price	Required Date	Amount
1		HP Laptop	10	each	€900.00 EUR		€900.00 EUR Fx
2		HP Laptop	10	e			EUR Fx

The screenshot shows the 'Catalog Item' details for 'CIPR382: New hires'. The 'Quantity' is 10, 'Material Number' is 00000000000000301, 'Required Date' is 'Fri, 13 Dec, 2019', 'Plant' is 300026, and 'Storage Location' is 0002. The 'Accounting - by Line Item' section shows 'Account Assignment' as 'K (Cost center)', 'Account Type' as 'Cost Center', 'Bill To' as '3000 (New York)', 'GL Account' as '0000404000 (Consumables consumed)', and 'Cost Center' as '0000004120 (IT Service)'. A red circle with the number '2' is placed over the 'Update Required Date' option in the 'Actions' menu from the previous screenshot, with an arrow pointing to the 'Required Date' field in this screenshot.

CIPR382: New hires

Quantity: 10

Material Number: 00000000000000301

Required Date: Fri, 13 Dec, 2019

Plant: 300026

Storage Location: 0002

Accounting - by Line Item

Account Assignment: \* K (Cost center)

Account Type: Cost Center

Bill To: \* 3000 (New York)

GL Account: 0000404000 (Consumables consumed)

Cost Center: 0000004120 (IT Service)

# Reservation document

Once the Requisition has been submitted *and fully approved*, the Catalog lines create Purchase Orders subsequently sent to the suppliers, and Inventory lines create Reservation documents in the ERP:

- Each Reservation document can contain many line items, grouped by accounting and Required date, which are header fields of the Reservation document
- The status of the Reservation document is “Reserving” in SAP Ariba until a confirmation is received from the ERP, at which time the status is changed to “Reserved”.
- The ERP Reservation ID returned is also visible.
- The Reservation document can be viewed from the line item directly - see 1, or from the Orders tab - see 2.

A reserved item can be cancelled by selecting “Cancel Reservation” - see 3.

- The status of the Reservation document is “Cancelling” until a confirmation is received, at which time the status is changed to “Cancelled”

**1** Line Items From Inventory

No.	Type	Reservation	Description	Qty	Unit	Price	Reservation Date	Amount
1		RES67	HP Laptop	1	each	€90.00 EUR	Wed, 27 Nov, 2019	€90.00 EUR Fx

Material Number: 00000000000000301

**2** RES67 - Reservation1

Reservation ID: RES67  
Title: Reservation1  
Status: Reserved  
Reservation Date: Wed, 27 Nov, 2019

Line Items

No.	ERP Line Number	Material Number	Quantity	Unit Of Measure	Storage Location	Plant
1	E1	00000000000000301	1	each	0001	300026

**3** CIPR250 - Reservation1 Status: Approved

Copy Print

Summary Orders Receipts History

Orders (0)

Order ID	Version	Date Created	Status	Title	Supplier	Total
No items						

Reservations (1)

Reservation ID	ERP Reservation ID	Time Created	Title	Status	Reservation Date
RES67		Wed, 20 Nov, 2019	Reservation1	Reserved	Wed, 27 Nov, 2019

Cancel Reservation

# Searching and Reporting

An option to search for **Requisitions** containing inventory items has been added – see 1

Limitations:

- There's no search for Reservation documents
- You cannot search Requisitions by ERP Reservation ID

### Search Filters

[Search Options](#) ▾

Title:

ID:

Commodity Code: (select a value) [[select](#)]

Date Created:  ▾

From:

To:

Has Inventory Items:  Yes  No  Either

Non-Catalog Item (any line item):  Yes  No  Either

Order ID (any line item):

Requester: (select a value) [[select](#) ▾]

Status:  ▾

Supplier (any line item): (select a value) [[select](#)]

Total Cost: From:  To:

[EUR](#) ▾

### Search Results

Found 46 items

<input type="checkbox"/>	Type	ID	Title	Status	Date Created ↑	Total	FM Posting Date
<input type="checkbox"/>		<a href="#">CIPR324</a>	<a href="#">InventoryReservation</a>	Approved	27 Nov 2019	\$0.00 USD	Tue, 26 Nov, 2019
<input type="checkbox"/>		<a href="#">CIPR325</a>	<a href="#">InventoryReservation</a>	Approved	27 Nov 2019	\$0.00 USD	Tue, 26 Nov, 2019

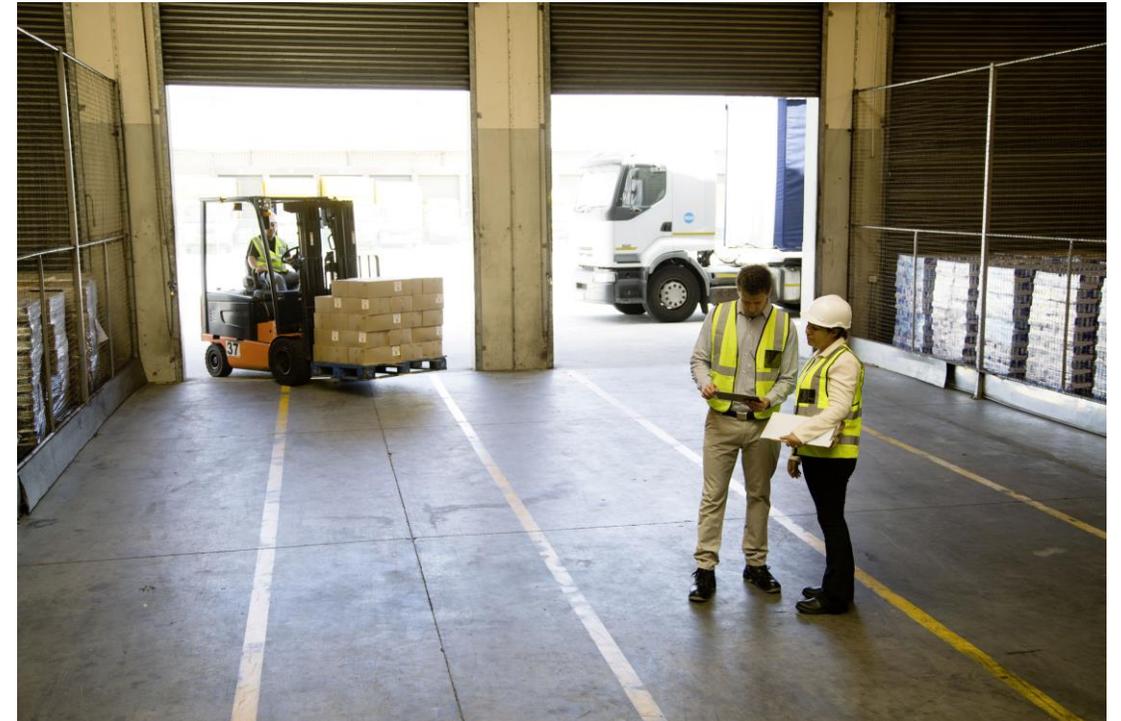
# Storage locations

Storage Locations are required to define where the inventory items are located. Each location belong to a Plant. Each Plant can have multiple storage locations.

The storage location has following properties;

- SlocID
- NAME
- Address
- SAPPlantId

The storage locations are imported through Import Storage Locations task.



# Web services

Web service	Description
Export Reservation Request Asynchronously	Used to send the reservation request from either SAP Ariba Buying, or SAP Ariba Buying and Invoicing, to SAP ERP for confirmation.
Import Reservation Status Asynchronously	Used to send the reservation success or failure notification from SAP ERP to the buying solutions from SAP Ariba.
Export Reservation Deletion Request	Used to send the reservation cancellation confirmation from SAP ERP to the buying solutions from SAP Ariba.
Import Reservation Deletion Status Asynchronously	Used to send the reservation cancellation request from the buying solutions from SAP Ariba to SAP ERP for confirmation.

# Implementation Steps

1. The following parameters must be enabled for your site, which SAP Ariba support shall do.
  - **Application.Purchasing.EnableInventoryReservation**

Specifies whether users can view details of and reserve inventory items from within the SAP Ariba Procurement solutions. It also specifies whether the Inventory Service to process the details of inventory items from SAP ERP systems is enabled. A scheduled job on the Inventory Service periodically checks the SAP ERP system (through the SAP Ariba Cloud Integration Gateway, add-on for SAP ERP) for the details of inventory items and synchronizes the data between the two systems.

    - This functionality specified by this parameter is applicable only to sites integrated with SAP ERP
    - The default value of this parameter is No.
  - **Application.Catalog.IS.TenantConfig**

Specifies the inventory service related configuration settings for the tenant in a JSON format with the following parameters: "tenantId", "freq", and "catalogQualifier". "tenantId" is the ID of the tenant, "freq" indicates the frequency in minutes of the schedule job that synchronizes inventory data, and "catalogQualifier" specifies the catalogs that contain inventory items.
  - **Application.Common.EnablePlantBasedDefaultingForSAP**
2. Configure the SAP Ariba Cloud Integration Gateway to integrate catalog data from an SAP ERP to Ariba Network seamlessly.
3. Configure the SAP Ariba Cloud Integration Gateway to support checking the stock of inventory items and making reservations.
4. Following custom catalog fields (supplemental attributes) to enable inventory related information to be consumed and displayed in the catalog user interface should be created. This will be done by SAP Ariba support.
  - Plant, Storage Locations, Material Number, Material Group, Stock Identifier
5. Run the Import Plant to Purchase Organization Mapping data import task to map plants to purchase organizations.