



Feature at a GlancePlanning collaboration API for Supply Chain Collaboration

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Introducing: Planning collaboration API for Supply Chain Collaboration

Customer challenge

Currently there is no way for buyers to extract forecast, suppliers forecast commitments, suppliers inventory or planning data from the Ariba Network in order to feed it to buyers planning, monitoring and execution applications.

Solution area

SAP Ariba APIs SAP Ariba Developer Portal SAP Ariba Supply Chain Collaboration

Meet that challenge with

SAP Ariba

The APIs enable customers to retrieve forecast, supplier commitments, inventory and planning data directly from the Ariba Network to make information on planning processes easily available to the buyer.

Information available via API(s):

- Supplier Inventory data (provided by supplier through External Manufacturing Visibility or Forecast collaboration)
- Supplier Managed Inventory data
- Forecast and Commitment data

Implementation information

This feature is automatically on for all customers with the applicable solutions but requires customer configuration.

Experience key benefits

Data provided by suppliers via the Ariba network is of extreme value for the customer and in many cases this value is best expressed when feeding such data to planning, monitoring and execution applications that might at times be different from the SAP solutions with which SAP Ariba already provides standard integrations.

Open APIs provide a standardized data access mechanism to extend existing and build new, innovative applications.

Prerequisites and Restrictions

This API can retrieve data only for suppliers in a relationship with you as a Buyer enabled for SAP Ariba Supply Chain Collaboration with the respective collaboration components:

The forecast API endpoint requires the forecast collaboration component and forecast collaboration default transaction rules to be enabled.

The supplier inventory and supplier-managed inventory API endpoints require the inventory collaboration component.

Complete the onboarding process on the SAP Ariba developer portal. Ensure that your application conforms to expected OAuth authentication. Only applications approved by the SAP Ariba APIs administration can execute OAuth authentication.

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Use cases

Use Supplier-managed inventory data export API to retrieve planning information from Ariba Network

You have inventory you want to maintain at a certain level. Your supplier agrees to ship goods to maintain the stock on hand within a certain range. You can use this API to get supplier-managed inventory data with the quantity of goods the supplier is planning to ship during a certain time period. This data might include supplier commitments, planned replenishment by suppliers, and projected stock at a certain location. This data is expressed as key figure time series. You provide to the API the parameters to filter the data you want.

Use Supplier inventory data export API to get supplier inventory data levels

A supplier manages certain goods for you at one of their warehouses. You can use the supplier inventory API endpoint to retrieve from Ariba Network total stock on hand data and a breakdown across the different stock types it contains at that location. You provide to the API the parameters to filter the data you want.

Use the **Forecast API** to retrieve supplier forecast and commitment data

You might need to place a rush order of a certain material. You can use this API to learn which suppliers made commitments for the desired material in the required timeframe. You can then determine whether your suppliers can individually or collectively provide the needed quantity of the material, by the date you need it.

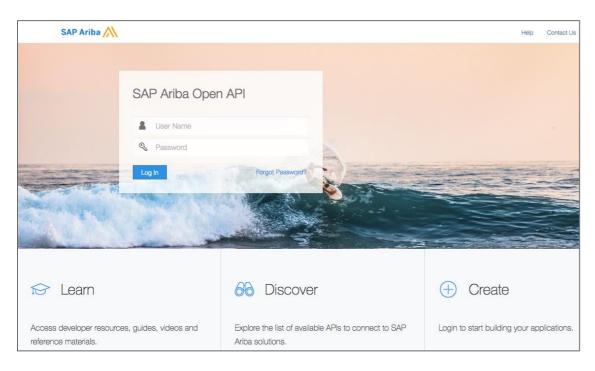
Prerequisite

For the forecast API to work, enable the forecast collaboration default transaction rules:

- Allow suppliers to view forecast data
- Allow suppliers to commit to forecast data

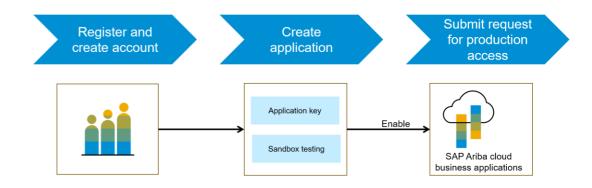
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How to develop an application that consumes the planning collaboration API for Supply Chain Collaboration



Go to https://developer.ariba.com/api/

Check the **Learn** section to get detailed information on how to develop your application. The process to develop an application generally includes following steps:

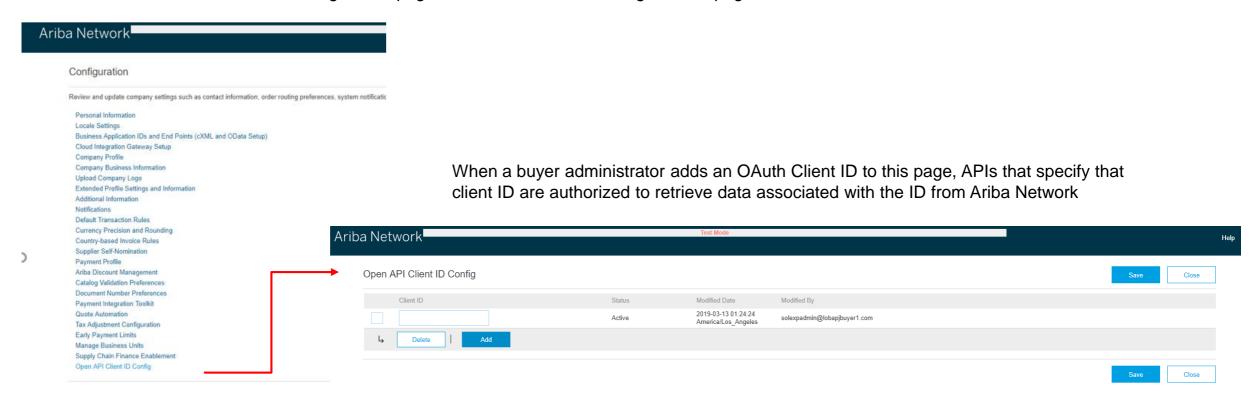


- 1. Once registered on the Developer portal, explore available APIs under Ariba Network to find the "Planning collaboration API for Supply Chain Collaboration", a detailed description of the API is available.
- 2. Create a new application and activate the application to get an application key.
- 3. You'll need to request 'Production access' for your application by submitting a service request on http://connect.ariba.com. Upon approval an OAuth Client ID is generated of the application.
- 4. As a buyer administrator, add your OAuth Client ID to your profile, see next page.

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Buyer administrator profile setting

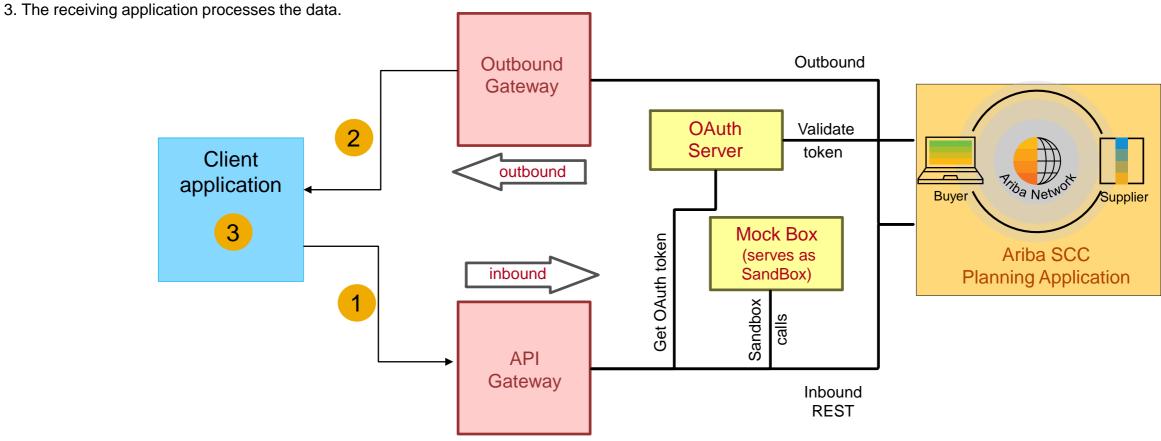
This feature adds an API Client ID Configuration page to the *username* → *Manage Profile* page:



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Workflow for the planning collaboration API for Supply Chain Collaboration

- 1. The client application queries Ariba Network with a defined set of parameters.
- 2. In response to the query, the API returns a JSON data set that contains all matching records in a formatted structure.



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Sample code

API requests can pass multiple <u>parameters</u> in the request URL, see documentation of APIs on available parameters and syntax. In the sample code below, replace *{{runtime_url}}* with the desired runtime URL from the Environment Details table on the SAP Ariba developer portal discovery page for this API.

1. The following example retrieves all supplier inventory records for vendor ID 1234 at the North10B plant, and displays 15 records per page.

GET {{runtime_url}}/supplierInventory?rsqlfilter=VendorId==1234;plantId==North10B&limit=15

2. The following example retrieves all records for vendor ID 9876 of the projected stock demand and planned shipment of material with buyer part number ABCD345. The retrieved data is for the period between the start of business on March 4, 2019, through end of business March 15, 2019. Data is sorted by lead time and displays ten records per page.

GET{{runtime_url}}/supplierManagedInventory?rsqlfilter=buyerPartNumber==ABCD345;VendorId==9876;startDate==2019-03-04T0800; endDate==2019-03-15T1700;sortCol==LEADTIME&limit=10

3. The following example retrieves all supplier forecast records for buyer part number XYZ.5678 dated from June 1, 2019, and June 15, 2019, and displays 20 records per page.

 $GET \{\{runtime \ url\}\} / forecast ? rsqlfilter = buyer Part Number = = XYZ.5678; startDate = = 2019-06-01T0800 \& endDate = = 2019-06-15T1700 \& limit = 2019-06-01T0800 \& endDate = = 2019-06-15T1700 \& limit = 2019-06-01T0800 \& endDate = = 2019-06-15T1700 \& limit = 2019-06-01T0800 \& endDate = = 2019-06-15T1700 \& limit = 2019-06-01T0800 \& endDate = = 2019-06-15T1700 \& limit = 2019-06-01T0800 \& endDate = = 2019-06-15T1700 \& limit = 2019-06-01T0800 \& endDate = = 2019-06-15T1700 \& limit = 2019-06-01T0800 \& endDate = = 2019-06-15T1700 \& limit = 2019-06-01T0800 \& endDate = = 2019-06-15T1700 \& limit = 2019-06-01T0800 \& endDate = = 2019-06-15T1700 \& limit = 2019-06-01T0800 \& endDate = = 2019-06-15T1700 \& limit = 2019-06-01T0800 \& endDate = 2019-06-15T1700 \& limit = 2019-06-01T0800 \& endDate = 2019-06-15T1700 \& limit = 2019-06-01T0800 \& endDate = 2019-06-01T08000 \& endDate = 2019-06-01T08000 \& endDate = 2019-06-01T08000 \& e$