

# Configuration Guide

SAP Ariba Integration with SAP Build Process Automation for Purchase Requisition Approvals

# Table of Contents

Table of Contents .....	2
Overview .....	3
Prerequisite .....	4
Import, Configure, and Deploy Integration Content .....	5
Import Prepackaged Integration content using SAP Integration Suite.....	5
Configure Ariba for External Approval and create Purchase Requisition View .....	6
Create Workflow or SAP Build Process Automation service instance.....	6
Configure and Deploy Security Materials .....	7
Ariba authentication .....	7
Workflow authentication.....	7
Configure and Deploy Integration model.....	8
Configure Timer.....	8
Configure Receiver .....	8
Configure additional fields .....	9
Save and Deploy .....	11
Configure and Deploy Regions Value Mapping .....	11

# Overview

This document provides information about configuration steps to consume the integration package **SAP Ariba Integration with SAP Build Process Automation for Purchase Requisition Approvals**. This package is meant to be used alongside the Process Content Package **Ariba Purchase Requisitions Approval** available in **SAP API Business Hub**. The main audience of this document are integration developers or consultants.

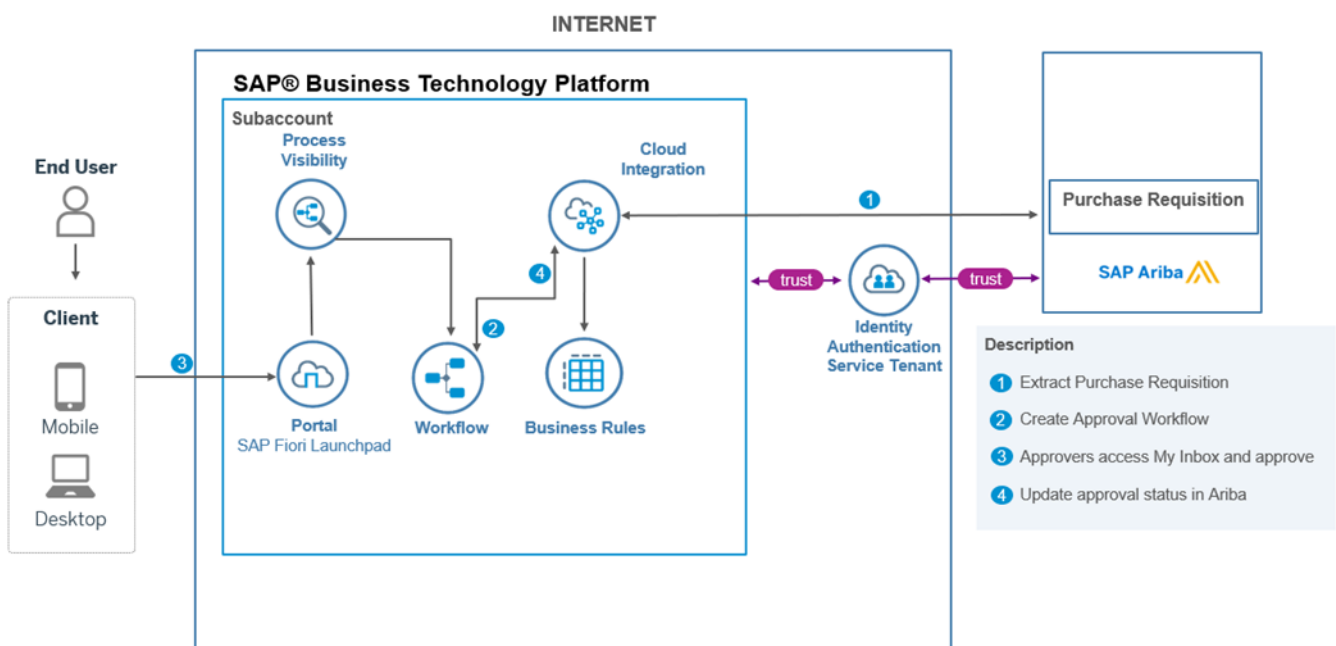
SAP Ariba Integration with SAP Build Process Automation for Purchase Requisition Approvals consists of three steps:

1. Extract Purchase Requisition (PR) events from SAP Ariba
2. Start new workflow instances for PRs in status "Submitted"
3. Terminate still running workflow instances for PRs in a different status than "Submitted"

This content package enables SAP Ariba customers to approve or reject the purchase requisitions using SAP Build Process Automation or SAP Workflow Management without additional development in SAP Ariba.

- Plug and Play with SAP Ariba without additional development.
- Pre-configured process steps for approval
- Automatic email notification to parties involved
- Agent/approver determination using Business Rules or external service
- Pre-built integration content to process Purchase Requisitions
- Out-of-the-box visibility into key process performance indicators

## Ariba Purchase Requisition Approval



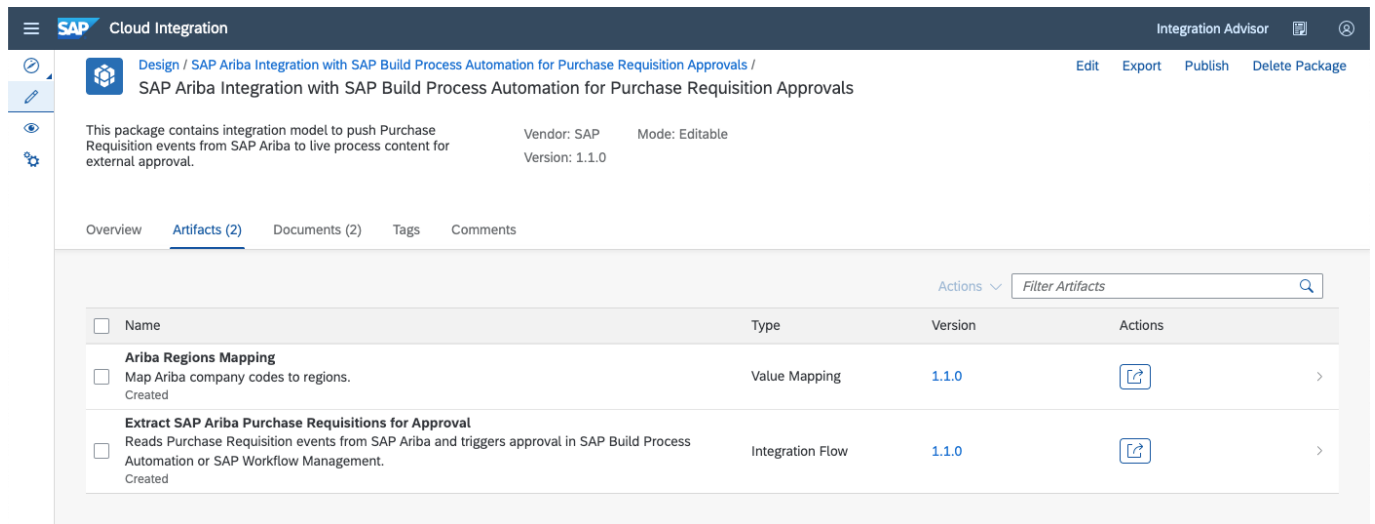
# Prerequisite

The following SAP Business Technology Platform services are required to consume the content package SAP Ariba Integration with SAP Build Process Automation for Purchase Requisition Approvals

- SAP Build Process Automation or SAP Workflow Management.
- Cloud integration capability within SAP Integration Suite
- SAP Launchpad service
- SAP Cloud Identity Services - Identity Authentication (optional).

# Import, Configure, and Deploy Integration Content

This integration package extracts Ariba Purchase Requisition (PR) event data and starts or cancels SAP Build Process Automation or SAP Workflow Management approval tasks. It consists of one Integration Flow which is called periodically by a timer. In addition, a Value Mapping to define regions based on company codes is provided. That region information can be used for approver determination. All integration models are using HTTPS Adapter to call the required APIs in SAP Ariba.



The screenshot displays the SAP Cloud Integration Integration Advisor interface. The main header shows 'SAP Cloud Integration' and 'Integration Advisor'. The breadcrumb trail is 'Design / SAP Ariba Integration with SAP Build Process Automation for Purchase Requisition Approvals / SAP Ariba Integration with SAP Build Process Automation for Purchase Requisition Approvals'. The package name is 'SAP Ariba Integration with SAP Build Process Automation for Purchase Requisition Approvals'. The description states: 'This package contains integration model to push Purchase Requisition events from SAP Ariba to live process content for external approval.' The vendor is 'SAP' and the mode is 'Editable'. The version is '1.1.0'. The package is categorized under 'Artifacts (2)'. A table lists the artifacts:

Name	Type	Version	Actions
<b>Ariba Regions Mapping</b> Map Ariba company codes to regions. Created	Value Mapping	1.1.0	[Copy] >
<b>Extract SAP Ariba Purchase Requisitions for Approval</b> Reads Purchase Requisition events from SAP Ariba and triggers approval in SAP Build Process Automation or SAP Workflow Management. Created	Integration Flow	1.1.0	[Copy] >

## Import Prepackaged Integration content using SAP Integration Suite.

To be able to import and deploy integration flows, you need the AuthGroup.IntegrationDeveloper role assigned in your tenant. Please refer to the [help documentation](#) how to import integration content package.

### Import Integration Content

- Access your SAP Integration Tenant management node. Please refer [help documentation](#) on how to get Tenant management node address.
- View all pre-packaged integration content under *Discover* menu.
- Search content package “SAP Ariba Integration with SAP Build Process Automation for Purchase Requisition Approvals”
- Click on the package “SAP Ariba Integration with SAP Build Process Automation for Purchase Requisition Approvals”.
- Click Copy to import the Integration content package to your workspace.

## Configure Ariba for External Approval and create Purchase Requisition View

Please refer to the appendix “SAP Ariba Configurations” in the Setup documentation of the SAP Build Process Automation or SAP Workflow Management Content Package “Ariba Purchase Requisitions Approval”.

You will need to:

- configure Ariba to use a technical user for approvals
- configure Ariba to provide a custom view for the operational reporting API
- get the authentication credentials, API keys (see [Ariba Help](#)), and endpoints for both

## Create Workflow or SAP Build Process Automation service instance

Use an existing or create a new workflow or process automation service instance in your SAP BTP account where SAP Build Process Automation or SAP Workflow Management Service is subscribed and configured, with at least the following authorities (scopes):

WORKFLOW_INSTANCE_START
WORKFLOW_INSTANCE_GET
WORKFLOW_INSTANCE_CANCEL

For Workflow service instance, ensure that the service instance contains these data visibility fields in the json parameter:

- "dataVisibility": "shared",
- "defaultCollectionQueryFilter": "shared"

Then create or use an existing a Service Key to retrieve OAuth2 Client Credential information for accessing this service instance.

## Configure and Deploy Security Materials

In Integration Suite, open Operations view, then click on Security Material to create and deploy security materials.

### Ariba authentication

- select Create → OAuth2 Client Credentials
- Choose a name, e.g. "Ariba"
- Fill in the Token Service URL, Client ID, and Client Secret from Ariba for accessing the Operational Reporting Custom View
- Deploy and save the security material

The screenshot shows a dialog box titled "Edit OAuth2 Credentials". It contains the following fields and options:

- Name:** \* Ariba
- Grant Type:** Client Credentials (dropdown menu)
- Description:** (empty text field)
- Token Service URL:** \* https://api-eu.ariba.com/v2/oauth/token?grant\_ty...
- Client ID:** \* <client id>
- Client Secret:** \* (empty text field)
- Client Authentication:** Send as Request Header (dropdown menu)
- Include Scope:

At the bottom right, there are two buttons: "Deploy" and "Cancel".

### Workflow authentication

- select Create → OAuth2 Client Credentials
- Choose a name, e.g., "Workflow"
- Fill in the Token Service URL, Client ID, and Client Secret from Cloud Foundry Service Key of the Workflow service instance or process automation service instance
- Deploy and save the security material

## Configure and Deploy Integration model

Open Package SAP Ariba Integration with SAP Build Process Automation for Purchase Requisition Approvals and select Configure from the 'Actions' menu of the integration model 'Extract SAP Ariba Purchase Requisitions for Approval'.

### Configure Timer

The Integration flow is called in regular intervals to fetch Ariba Purchase Requisition (PR) events and trigger workflows. The timer configuration can be used to decide in which intervals those polling events are triggered. The recommendation is to use 5-minute intervals.

Please note that each call only fetches a limited number of events from Ariba (usually 40) to prevent high system load. If too many events accumulate between each call, consider a more frequent setting.

Select Timer tab and configure the Start Timer 'Schedule to Recur' on a 'Daily' base 'Every' '5 min' between '00:00' and '24:00'.

The screenshot shows the configuration interface for a timer. The 'Timer' tab is active. The configuration is as follows:

- Timer: Start Timer 1 [StartEvent\_12635180]
- Run Once:
- Schedule on Day:
- Schedule to Recur:
- Schedule to Recur base: Daily
- On Time:  10:30 PM
- Every:  5 min
- Time Zone: (UTC 0:00) Greenwich Mean Time(Etc/GMT)
- Between: 00:00 and 24:00

Buttons: Save, Deploy, Close

Note: during testing it might be useful to set the timer to "Run Once" and trigger each run by an explicit deployment of the Integration Flow.

### Configure Receiver

Receiver 'Workflow Management'

- The Adapter type shows 'HTTP' three times. They all use the same base endpoint and credentials, so choose either one.
- Enter the endpoint URL for your workflow service instance or process automation service instance. For SAP Build Process Automation, the workflow APIs could be of format <https://<api-gateway-url>/public/workflow>, while the workflow APIs in SAP workflow management could be of format <https://<api.workflow>/workflow-service>
- Enter the name of the Security Material you have created, e.g., Workflow

Receiver 'Ariba'

- The Adapter type shows 'HTTP'.
- Enter the hostname of the Ariba system



- Enter the name of the Reporting View in Ariba you have created
- Enter the name of the Security Material you have created, e.g., Ariba

## Configure additional fields

Select the 'More' tab, select 'All Parameters' for Type, and fill in these fields:

Configure "Extract SAP Ariba Purchase Requisitions for SAP Process Automation Approval"

The screenshot shows a configuration window with the following fields:

- Timer: Receiver **More**
- Type: All Parameters (dropdown)
- ApprovalAPIkey: <Ariba API key for Document Approval API>
- Ariba Approver Passwor...: <Ariba Approver technical user passwordadapter>
- Ariba Approver Userid: <Ariba Approver technical user userid>
- Ariba Last Update varia...: <Global Variable Name>
- Ariba Page Token varia...: <Global Variable Name>
- Ariba\_APIKey: <Ariba API key for Reporting View>
- Ariba\_Realm: <Ariba Realm>
- debugOutput: false
- Default Last Updated Ti...: 2021-08-01T00:00:00Z
- Workflow Definition Id: <Workflow definition id>

Buttons: Save Deploy Close

### Ariba API Key

The API key for the Operational Reporting View call, corresponding to the Security Material configured above.

### Ariba Realm

The Realm configured in Ariba.

### ApprovalAPIkey, Ariba Approver Userid, AribaApprover PasswordAdapter

These are the values for the technical user which is configured in Ariba to perform the approval.

In addition to these, the 'AribaAPI' destination with the technical OAuth2 Client Credentials needs to be created, as described in the Setup Guide of SAP Build Process Automation or SAP Workflow Management Content Package 'Ariba Purchase Requisitions Approval'

### Ariba Last Update variable

This Global variable is used to save the timestamp when the last new request to Ariba has been made. The next call will then fetch the subsequent events from that time until now.

Example value: AribaLastUpdate

### Default Last Update Time

An initial value for the Ariba Last Update variable. The first call to Ariba will fetch all data from this value until now. It is recommended to set this to the current time during first deployment.

Example value: 2021-08-01T00:00:00Z

### Ariba Page Token variable

This Global variable is used to save the Ariba page token. Ariba uses this token for pagination when more results would be available than delivered in one request. The next call will then fetch the subsequent events from the last query.

Example value: AribaPageToken

### Workflow Definition Id

This is the technical identifier of the workflow definition used for Ariba Purchase Requisition Approval processes.

Usually this would be the ID of the Process Variant created and activated in SAP Build Process Automation (Application Development Lobby) or SAP Workflow Management (Flexibility Cockpit). Please refer to the Configuration Guide of the live process content package 'Ariba Purchase Requisitions Approval' for details.

### debugOutput

For normal operations, set this to false.

When this Boolean value is set to true, each Integration Flow run will create three log attachments. Those can be used to verify correct configuration and working of the solution.



1 – Ariba payload	the JSON result from the call to Ariba Operational Reporting view. Relevant fields are "Status" and "UniqueName"
2 – running Workflow instances	the JSON result from a call to Workflow Management to retrieve all running (and erroneous) instances for the configured Workflow Definition.
3 – Workflow action log	The calculated actions to be taken based on the above two results, i.e., submitted PRs which should trigger new workflows and PRs

	<p>in non-submitted status which might need to cancel running workflow instances.</p> <p>Note that this list is created before the actual calls to SAP Build Process Automation or SAP Workflow Management.</p>
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## Save and Deploy

- Select Save. Two warnings of type “JSON to XML converter” are to be expected and can safely be ignored

### Messages (2)

Type	Location	Message
	JSON to XML Converter 1 [CallActivity_12538240]	Process Call may not pass JSON message to JSON To XML Converter. JSON To XML Converter supports JSON input only.
	JSON to XML Converter 1 [CallActivity_12538240]	Content Modifier may not pass JSON message to JSON To XML Converter. JSON To XML Converter supports JSON input only.

- Select Deploy

## Configure and Deploy Regions Value Mapping

- Open Value mapping model **Regions Value Mapping**.

### Ariba Regions Mapping

Bi-Directional Mapping

Agency	Identifier	↔	Agency	Identifier	State
Ariba	CompanyCode	↔	Workflow	Region	

[Value Mappings](#) Default Values:

Value Mappings for

Ariba, CompanyCode	↔	Workflow, Region
<input type="text" value="0001"/>	↔	<input type="text" value="EMEA"/>

**Usage:**  
*ValueMap (Source agency, Source identifier, Source value, Target agency, Target identifier) = Target value;*

**Example:**  
*ValueMap (Ariba, CompanyCode, 0001, Workflow, Region) = EMEA;*  
*ValueMap (Workflow, Region, EMEA, Ariba, CompanyCode) = 0001;*

### Configure Region value mapping table

Value mapping maps Company Codes to Regions.

There are two ways can be used for configuration of Value mapping table:

- create each of value mappings in editor

- import value mapping from csv file

Create each of value mappings in editor:

1. Click **Edit**.
2. Click **Add Value mapping**
3. Specify values in **Ariba, CompanyCode** and **Workflow, Region** input fields.
4. Repeat step **2** and **3** for adding of all necessary Value mappings (Company Code – Region).
5. **Save** and **Deploy** Value mapping.

Import value mapping from csv file:

CSV file with Value mappings (Company Code – Regions) should be prepared in the following format:

```
,Ariba|CompanyCode,Workflow|Region,  
1,<Company code value>|,<Region name>,  
2,<Company code value>|,<Region name>,  
3,<Company code value>|,<Region name>,  
4,<Company code value>|,<Region name>.
```

1. Select **Edit**.
2. Select **Import**
3. Select csv file.
4. **Save** and **Deploy** Value mapping.