

SAP Business Technology PLATFORM | EXTERNAL

# Setup and Configuration guide

Ariba Procurement Operations – Configure  
Transformation Rules

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# Overview

This document describes the configuration steps to import and deploy Business Rules part of the content package “Real time Visibility into Ariba Procurement Operations using SAP Workflow Management”. The business rules enable customers to transform Ariba Purchase Requisition data to process visibility events.

## Prerequisite

- Subscribe and configure [SAP Business Technology Platform Workflow Management](#).
- Import and configure integration content package [SAP Ariba integration with SAP Workflow Management](#) using the [setup and configuration guide](#).

# Setup and Configuration

- Open Process Flexibility and click **Discover Packages** button to navigate to Process Hub.
- Search and find content package **Real time Visibility into Ariba Procurement Operations using SAP Workflow Management**.

If the content package shows IMPORTED status, ignore the next step.

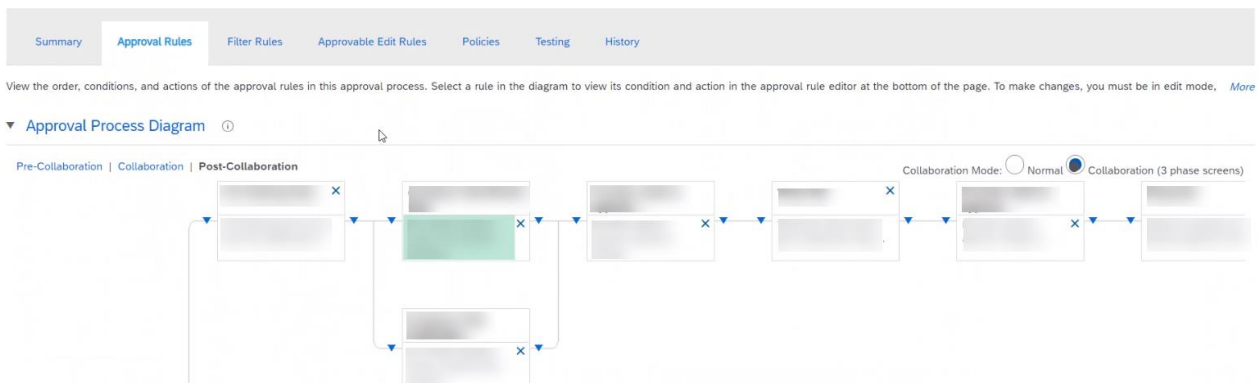
- Open the package and Click import button. After successful import of the content, follow next steps.

Please follow [help documentation](#) on how to import content packages in SAP Workflow Management.

## Extract Ariba Approval Rules from Ariba P2O.

Ariba approval rules are used while transforming Ariba Purchase Requisition approvals to transactional events for process visibility using SAP Business Rules service.

- Go to Manage ->Approval Process
- Select Approval Process Diagram , go to Approval rules.
- Copy all Rule Titles from Approval Rule Editor. This Rule names are used in the next section while configuring Business Rules section. Please refer the section [AribaPRAApprovalEventTransformation](#)

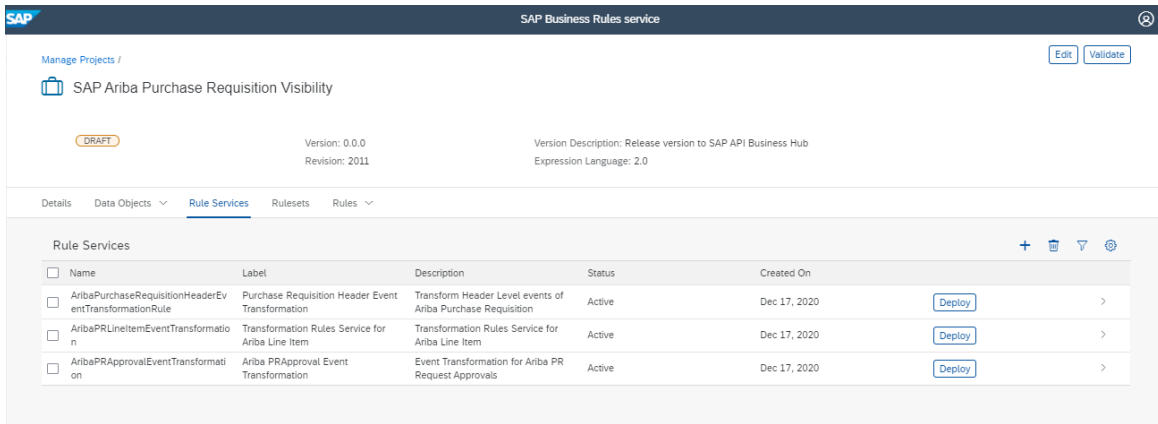


## Configure Business Rules in SAP Business Technology Platform

This package has predefined Business Rules content. The Business Rules transform Ariba Purchase Requisition data to Process visibility events. The text rules enable customers to modify or create new text rules to define new process visibility events.

### Rules Service

There are three Rules Services provided in this content package.



AribaPurchaseRequisitionHeaderEventTransformationRule – Transform Purchase Requisition Header data to transactional events. The following Rules are provided out of the box in this Rule Service to create Process Visibility events. Customers can add new Purchase Requisition header level events to this Ruleset

**Ruleset:** PurchaseRequisitionHeaderEventTransformation

Business Rule	Process Visibility Event
PurchaseRequisitionSendToApproval	PRSendtoApproval
PurchaseRequisitionComposed	PurchaseRequestComposed
PurchaseRequisitionApproved	PRApproved
PurchaseRequisitionOrdering	POOrdering
PurchaseOrderCreatedInAriba	POCreated
PurchaseRequestCancelled	PRCancelled
PurchaseRequisitionRejected	PRRejected

AribaPRLineItemEventTransformation – Transform Ariba Purchase Requisition Line Items to transactional events.

**Ruleset:** PurchaseRequisitionLineItemEventTransformation

Business Rule	Process Visibility Event
PurchaseRequisitionProcessEnd	ProcessCompleted.

AribaPRApprovalEventTransformation - Transform Purchase Requisition Approvals to Process Visibility events. The following Rules are provided out of the box in this Rule Service to create events. The Rules in this Rule Service are dependent on the Ariba approval Rule. You may need to change these Rules based on your Ariba approval rules.

**Ruleset:** PurchaserRequisitionApprovalEventTransformation

Business Rule	Process Visibility Event
ProcOpsApprovalForCancellationRequestCompleted	ProcOpsApprovalForCancellationRequestCompleted
ProcOPsApprovalRequestCancellationCreated	ProcOpsApprovalForCancellationRequestCreated
InternalOrderResponsibleCreated	InternalOrderResponsibleCreated
InternalOrderResponsibleCompleted	InternalOrderResponsibleCompleted
CostCenterApprovalCreated	CostCenterApprovalCreated
Cost Center Approval Started	CostCenterApprovalStarted
CostCenterApprovalCompleted	CostCenterResponsibleCompleted
GPOApprovalStarted	GPOTaskStarted
GPOApprovalCreated	GPOTaskCreated
CustomerAdministratorCompleted	CustomerAdministratorCompleted'

CustomerAdministratorCreated	CustomerAdministratorCreated'
CostCenterWatcherAdHocCompleted	CostCenterWatcherAdHocCompleted
ApproveChangeRequestByProcOpsCompleted	ApproveChangeRequestByProcOpsCompleted
GPOBuyerTaskCompleted	GPOBuyerTaskCompleted'
ApproveChangeRequestByProcOpsStarted	ApproveChangeRequestByProcOpsStarted'
GPOBuyerTaskStarted	GPOBuyerTaskStarted'
CostCenterWatcherAdHocStarted	CostCenterWatcherAdHocTaskStarted'
CostCenterWatcherAdHocCreated	CostCenterWatcherAdHocTaskCreated'
CompanyCodeBlocker	UnauthorizedPurchase'
QualityControlApprovalCreated	QualityControlCheckCreated'
QualityControlApprovalCompleted	QualityControlCheckCompleted'

## Configure Data Objects

- Logon to SAP Business Technology Platform Business Rules and open Manage Business Rules Project. Please go through [help documentation](#) how to access Manage Business Rules application.
- Open Business Rules project **AribaVisibilityEventTransformation**.

Business Rules has Data Objects used while authoring Rules. There are predefined Data Objects delivered as part of the content package. These data objects have attributes with value help used while authoring business rules. Please refer Business Rules service [help documentation](#) on how to create and activate Data Objects.

### Configure Approval Rules

Ariba approval rules are mapped to Business Rules to generate transactional events and consume from Process Visibility.

- Select Data Objects tab and choose **PurchaseRequisitionApproval** Data Object.
- Select **RuleName** attribute to update approval Rules from Ariba used later while authoring Rules.

Manage Projects / SAP Ariba Purchase Requisition Visibility / SAP Ariba Purchase Requisition Approval Request

Details Attributes Associations Annotations

Attributes

Name	Label	Description	Business Data Type
StatusString	Purchase Requisition Status String	Status String indicating the life cycle status of a Purchase Requisition in Ariba	String
LastUpdated	Last Updated Time	Last successful update Received from Ariba	Timestamp
RuleName	Ariba Approval Rule Name	Ariba Approval Rule configured to include in Ariba Approval Workflows	String
AssignedDate	Task Assigned Date	Ariba Purchase Requisition Approval Task Assigned Date	Timestamp
PRApprovalDate	PR Approval Date	Ariba Purchase Requisition Approved time and ready to create a Purchase order	Timestamp

- Select **Value List** under **Value Help** and click **Edit** button. There are some sample entries which can be deleted or reuse if there is a similar Ariba Rule name.
- Click **+** button and add Ariba Rule Names. The **value** should be the same as copied from **Ariba Rule name**. The description enables a user to understand the rule.
- **Save** and **Activate** the Data Object **PurchaseRequisitionApproval**.

## Configure Event Names

- Select **Data Objects** and Data Object **VisibilityEvent**.
- Select **EventName** attribute and click **Value list**.

The screenshot shows the configuration page for 'Process Visibility Event' in SAP Business Rules Service. The breadcrumb path is 'Manage Projects / SAP Ariba Purchase Requisition Visibility / Process Visibility Event'. There are 'Edit' and 'Validate' buttons in the top right. The main content area has tabs for 'Details', 'Attributes', 'Associations', and 'Annotations'. Under 'Details', the following information is displayed: Name: VisibilityEvent, Label: Process Visibility Event, Description: SAP Cloud Platform Process Visibility Event structure, Extensible:  NO, Status: Inactive, Created On: Dec 17, 2020, and Type: Structure. The 'Attributes' tab is active, showing a table with columns: Name, Label, Description, and Business Data Type. The table contains four rows: ProcessInstanceid, ProcessDefinitionId, EventName (highlighted with a red box), and TimeStamp.

Name	Label	Description	Business Data Type
ProcessInstanceid	Process Instance Id	Process Instance Id representing Ariba Purchase Requisition Line Items	String
ProcessDefinitionId	Process DefinitionId	Process Definition Id - AribaPurchaseRequisition	String
EventName	Event Name	Transaction event name	String
TimeStamp	Time Stamp	Transaction time stamp from Ariba	Timestamp

Click **Edit** button and **+** button to add a new Event to the value help. These events are consumed from Process Visibility scenario design time . There are some pre-defined events delivered as part of this content package. Customers can extend this by adding new events.

- Save and activate Data Object **VisibilityEvent**

## Configure Rules

Business Rules are used to transform Ariba Purchase Requisition data to visibility events. This enable customers to define new events based on various requirements. The text rules are easy to build and integrate with the solution. See below example of a Text Rule and how this can be enhanced.

Please refer SAP Business Rules Service help documentation under section **Model a Text Rule with a Result Data Object** in [model text rules](#). Use expression language 2.0 while authoring new Business Rules.

Manage Projects / SAP Ariba Purchase Requisition Visibility / Quality Control Approval Started

Details Text Rule

Label: Quality Control Approval Started Status: Active  
 Description: Quality control approval task started Created On: Dec 17, 2020

Text Rule

Text Rule

If

1 `SAP Ariba Purchase Requisition Approval Request.Task Assigned Date >= SAP Ariba Purchase Requisition Approval Request.Last Updated Time AND SAP Ariba Purchase Requisition Approval Request.Ariba Approval Rule Name = 'ProcOps Check' AND SAP Ariba Purchase Requisition Approval Request.Approval Required = True` 2

Then

3 `UPDATE( Process Visibility Event.Process DefinitionId , 'AribaPurchaseRequisition' )` ⊗ +  
 4 `UPDATE( Process Visibility Event.Process Instance Id , SAP Ariba Purchase Requisition Approval Request.PR ID )` ⊗ +  
 5 `UPDATE( Process Visibility Event.Event Name , 'QualityControlCheckStarted' )` ⊗ +  
 6 `UPDATE( Process Visibility Event.Time Stamp , SAP Ariba Purchase Requisition Approval Request.Task Assigned Date )` ⊗ +  
 7 `APPEND( Process Visibility Events , Process Visibility Event )` ⊗ +

1. Task assigned date >= Last Successful date of data extraction from Ariba  
Last Updated Time is a global variable part of Integration model delivered with this content.
2. Ariba Approval Rule Name = Rule Name defined in Business rules
3. Update Process Visibility Event Definition – Process Definition ID. This is a static value across all events.
4. Update Process Instance ID – This is Purchase Requisition Id from Ariba.
5. Update Event Name – Event names are static. It is a value help defined in the Data Object. Event Name is used in SAP Process Visibility Service.
6. Update Event Time stamp – Transaction time stamp. In this case Task assigned date.

Please refer the [Process Visibility Event signature](#) for more details.

It is possible to add additional context attributes to an event by adding these attribute and value. Add attributes apart from the predefined attributes available in the standard content. The attributes are added to the Process Visibility context. This content package include set of attributes from Purchase Requisition by default.

Eg: Update(Event.AttributeName, Attribute Value)

Manage Projects / Ariba Visibility Event Transformation Rule / ProcOps Payment Approval Completed

Details Text Rule

Text Rule

If

`Approval Request.Task Approved Date >= Approval Request.Last Updated Time AND Approval Request.Rule Name = 'WOC_OC_Payment' AND Approval Request.Approval Required = True`

Then

`UPDATE( Event.Process DefinitionId , 'AribaPurchaseRequisition' )` ⊗ +  
`UPDATE( Event.Process Instance Id , Approval Request.PR ID )` ⊗ +  
`UPDATE( Event.Event Name , 'WOCOCPaymentTaskCompleted' )` ⊗ +  
`UPDATE( Event.Time Stamp , Approval Request.Task Approved Date )` ⊗ +  
`UPDATE( Event.Proc Ops OCPayment Approver , Approval Request.Approver Unique Name or Group )` ⊗ +  
`UPDATE( Event.Proc Ops Approval , True )` ⊗ +  
`UPDATE( Event.Proc Ops Task InProgress , False )` ⊗ +  
`UPDATE( Event.Proc Ops Task Approver , Approval Request.Approver Unique Name or Group )` ⊗ +  
`APPEND( Events , Event )` ⊗ +

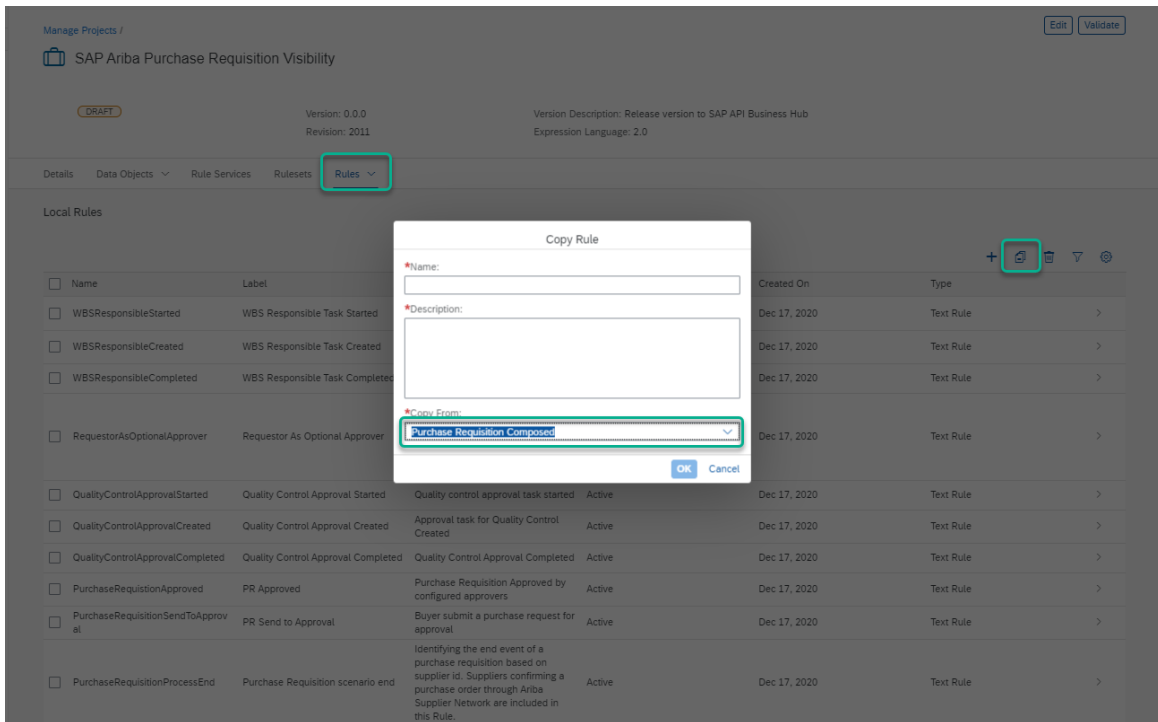
## Copying Rules

Existing Text Rules can be copied and create new Text Rules. The new rule requires changes in condition (If) and Actions (Then).

- Select **Rules** tab and click **copy** icon.



- Select an existing Rule from the dropdown.
- Enter Name and Description.



- Copied Rules can be modified by changing the conditions or actions.
- Save and activate Text Rules.

## Configure Rulesets

- Select Ruleset tab and open PurchaseRequisitionApprovalEventTransformation. **PurchaseRequisitionApprovalEventTransformation** Ruleset has a set of text rules to create events based on Approvals Created and Completed in Ariba. An Approval Request in Ariba has a creation time and Completion time. It is also possible to capture when the approval request has started by the approver.

Each Rule in this Ruleset has a Started and Completed event for an approval step. This Ruleset provide a set of rules as templates which can be modified or copy this rule.

- Click **Edit** and **Add Rule** to add newly created Text Rules

The screenshot shows the SAP Business Rules service interface. At the top, there is a navigation bar with the SAP logo and the text 'SAP Business Rules service'. Below this, the breadcrumb path is 'Manage Projects / SAP Ariba Purchase Requisition Visibility / Event Transformation Rules for Approvals'. There are 'Edit' and 'Validate' buttons in the top right corner. The main content area is divided into three tabs: 'Details', 'Vocabulary', and 'Rules'. The 'Vocabulary' tab is currently selected, showing sections for 'Data Objects Included:', 'Data Objects Excluded:', and 'Rules Included:'. Below this, the 'Rules' tab is selected, displaying a table of rules. An 'Add Rule' button is visible in the top right of the rules section.

Name	Description	Origin
ProcOps Approval For CancellationRequest Completed	ProcOps Approval For Cancellation Request Completed	Local
Customer Administrator Completed	Customer Administrator Completed	Local
Customer Administrator Created	Customer Administrator Created	Local
WBS Responsible Task Completed	WBS Responsible Task Completed	Local
Cost Center Approval Task Completed	Cost Center Approval Task Completed	Local
Cost Center Watcher AdHoc Task Completed	Cost Center Watcher AdHoc Task Completed	Local
Approve Change Request By Proc Ops Completed	Approve Change Request By ProcOps Completed	Local
Quality Control Approval Completed	Quality Control Approval Completed	Local
GPO Buyer Task Completed	GPO Buyer Task Completed	Local
Approve Change Request By ProcOps Created	Approve Change Request By ProcOps Created	Local

Select the newly added Rule from the drop down. Repeat the same for all newly added approval text rules. Click **Activate** button.

## Release and Deploy Business Rules Changes

### Release Business Rules Project

After completing the changes in Business Rules Project Release the new version and deploy the rules. Please refer the [Manage Project Versions and Revisions](#) section in Business Rules help document.

- Click **Release Version** button to Update Revision and Version number.

SAP has preconfigured the Revision as **2102** and use this revision in the Integration model while calling Business Rules APIs. If the Revision need to change, update the same in the Integration model. Please refer the [Integration model configurations](#) in SAP API Business Hub.

- Update **Version**, **Revision** and **Description**. Version is incremented across Revision. Last deployed version can be available under deployment **history** section. Please refer next section how to see history of deployments.
- Click **Release** button.

Release Version: AribaVisibilityEventTransformation

\*Version:

1.0.10

\*Revision:

2102

\*Description:

Release version

240 characters remaining

Release

Cancel

## Deploy Business Rules Service

- Select **AribaVisibilityEventTransformation** Project and click **History** button.
- Select the last Version and click the row.
- Click the Deploy action to deploy the Rule Services.