

SAP BUSINESS TECHNOLOGY PLATFORM | EXTERNAL

# Configuration Guide

## Retail Sales Price Update using SAP Build Process Automation or SAP Workflow Management

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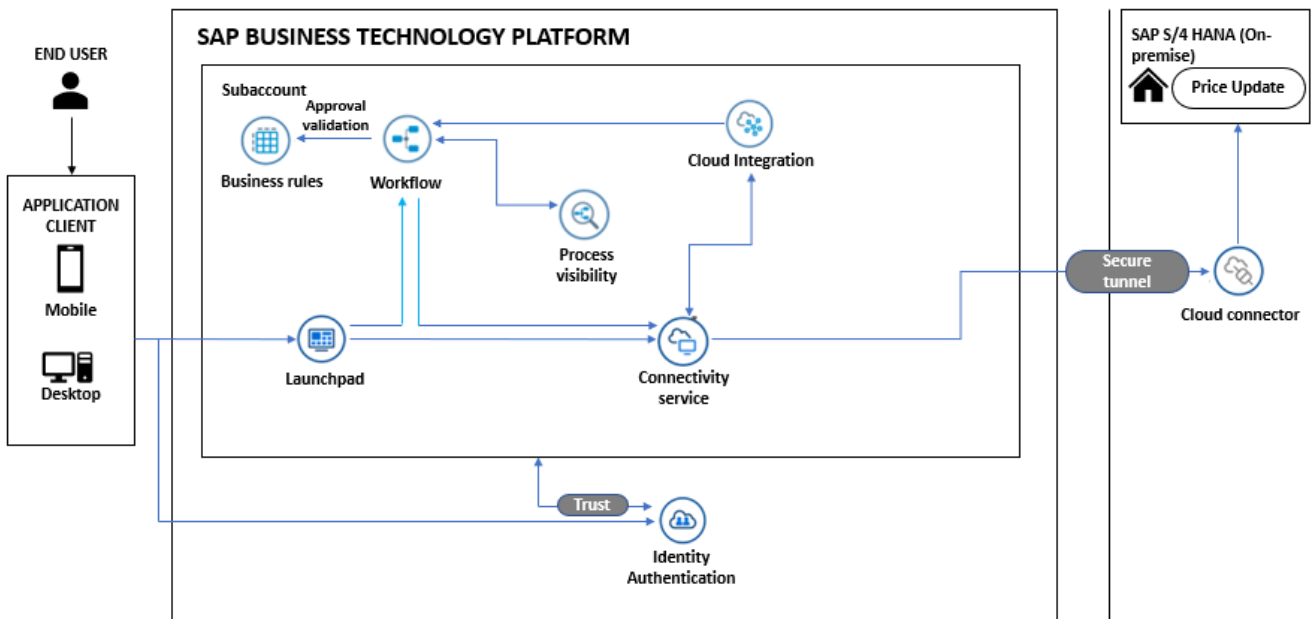
# Overview

This document provides information about configuration steps to consume the **Retail Sales Price Update**. Business Process Experts and process Operators are the target users of this document.

Retail Sales Price Update content package for SAP S/4 HANA enables to update the price using markup. When a user submits a request to update the price in SAP S/4HANA, a pre-configured process variant is triggered in SAP Build Process Automation or SAP Workflow Management based on business conditions configured by process expert.

Salient features of this content package are:

- Plug and Play with SAP S/4HANA without any additional development
- Automatic email notification to parties involved
- Business Rules provides flexibility in determining approvers strategy and approvers.
- New variant of the process can be created using the pre-delivered process steps in a no-code/low-code approach.
- Out-of-the-box visibility into key process performance indicator



# Artifacts

A package consists of process templates, process steps, process variants, decisions, and process visibility models. Please refer [help documentation](#) about these artifacts.

## Process

A process template is a set of business activities and tasks that, once completed, fulfills an organization goal. The **Retail Sales Price Update** package contains the following process template:

**Retail Sales Price Update** – Establish an approval process for updating retail sales price in SAP S/4HANA. It includes four process steps for easy no-code/low-code process configuration which include a technical start step and an end step.

A business process can be broken down logically into smaller parts or steps. Each process step is a collection of activities to perform a specific task. For example, an approval process step can contain activity to determine the approvers, approval task, notifications, and handle the approval result. **Table 1** represents the list of process steps/sub flows available to be used in **Retail Sales Price Update**.

Table 1. Process Steps

Process Steps	Cardinality	Detailed Description
Retail Sales Price Update	1..1	This step/sub flow is the start step of the process will execute only further if the error is present in the context i.e., if the Retail Data was not successfully posted to SAP S/4HANA due to some error in data.
Approve Retail Sales Data	1..N	This step/sub flow has activities to initiate and complete one level of approval of Retail Sales Data. Based on the number of approval levels, this step can be configured and re-used multiple times. The step can be renamed to reflect the appropriate approval roles, for example, approval by 'Merchandise Team'. The approver is determined based on various conditions using a business rules and the step level attributes. The approvers are automatically notified via mail about the approval task.
Update Price	1..1	This step/sub flow is the end step of the process where the overall status is checked and price data is updated in SAP S/4HANA, if the status is approved. If the data is not posted successfully and if there are data-related error, the workflow will be started again from the start step. For any other error, an 'administrator' shall be determined via the business rules to process further.

A process step can have customizable properties and they could influence the outcome of the process step. For example, the Approval step can be reused multiple times and based on the properties the approver is determined. Please see Table 2 for more details.

Table 2. Process Step Properties

Process Step	Properties	Detailed Description
Approve Retail Sales Data	Role	The role of the persona whose approval is required.

The process has attributes, and these attributes are available in process visibility to search approval process instances and to define process performance indicators. Please see Table 3 for more details.

Table 3. Process Attributes.

Process Attributes	Detailed Description
Markup Price	Markup price is used to update the price for Products.
Sales Organisation	Sales Organisation is a responsible for selling products of the customer.
Plant	Plant is used to store the stocks.
Distribution Channel	Distribution Channel through which products sold to the customer.
Overall	Status of the process whether the approval have been executed successfully or not.
Error	Error occurred while posting to SAP S/4HANA.

### Sample Conditions to directly start a variant Workflow

```
{
"RetailSalesData":{
"Material": "",
"SalesOrganisation": "",
"DistributionChannel": "",
"PlantGroup": "",
"Plant": "",
"Pricelist": "",
"ValidityFrom": "",
"ValidityTo": "",
"PurchasePriceDeterminationSeq": "",
"SalesPriceDeterminationSeq": "",
"Currency": "",
```

```

"MarkupPrice":,
"GrossPrice": "",
"FinalPrice": "",
"MarginGrossPrice": "",
"CurrentPrice": "",
"BasicPurchasePrice": "",
"UnitofMeasurement": ""
},
"History": [],
"Status": {},
"RetailDetails": {
"MailID": "",
"UserID": ""
}
}

```

## Process Variants

A process variant consists of multiple process steps configured by a line of business expert. It is possible to create multiple variants of the same process.

Please refer [help documentation](#) about how to import content packages and configure a process variant.

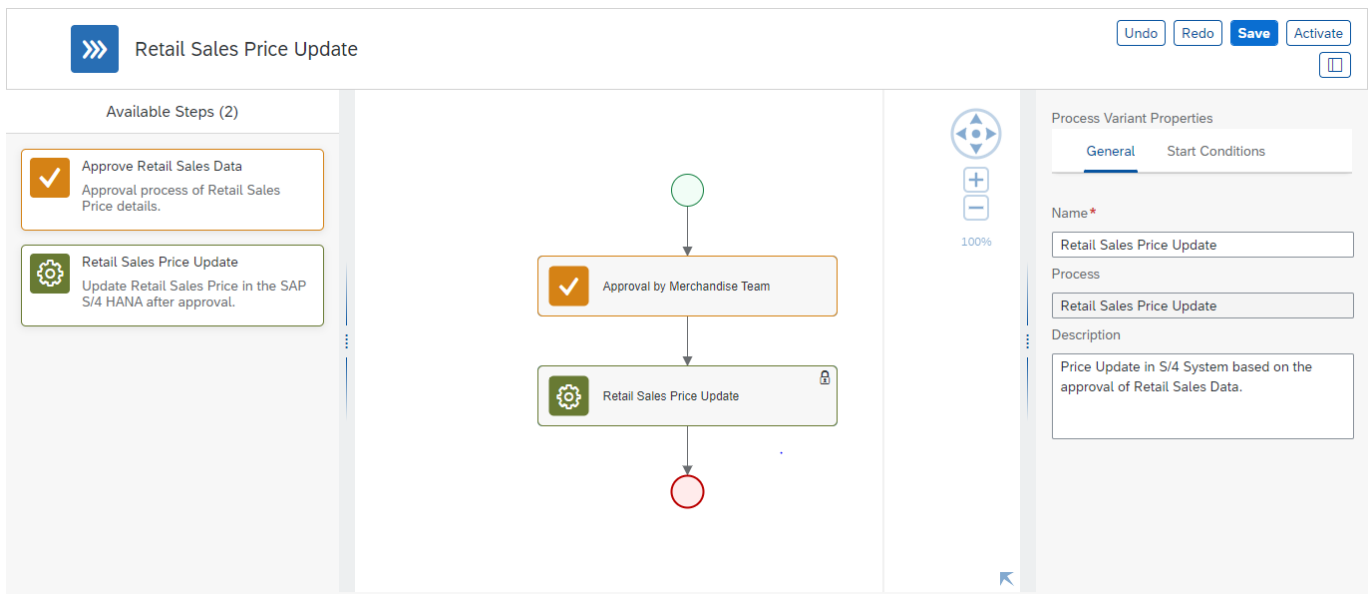
### Import Retail Sales Price Update and Configure Process Variants with SAP Build Process Automation

1. In the [SAP Build Process Automation Store](#), search for live process package Retail Sales Price Update and import the same. This content package has one process template and process variant(s) for that template.
2. In the Application Development [Lobby](#), click to open the package with name Retail Sales Price Update. This opens the package in a new tab/window.
3. Click the + icon next to the process template to create a new process variant.
4. Enter Name of the new Process Variant (ex, Two Step Approval).
5. Click the newly created Process Variant tile to save and activate the process variant.
6. The process variant has a default implementation with two steps and at least one level of approval.
7. It is possible to remove steps like "Approval for Retail Sales Price Update" from a process variant only if there are multiple approvals. Please note that whether a step is mandatory or optional, and how many a times any step can be used within a variant, are dependent on the constraints defined on the process steps.

8. Save and activate the variant. A successful activation will create a new workflow definition in the account that can be viewed in the [Monitor Processes and Workflows app](#).

## Import Retail Sales Price Update and Configure Process Variants with SAP Workflow Management

1. In Process Flexibility Cockpit app, search for content package **Retail Sales Price Update** and import the same. Please refer the standard help document about [how to import a content package](#).
2. To Create a new variant of **Retail Sales Price Update**, open content package **Retail Sales Price Update** in Flexibility Cockpit and click on Process Variants tile.
3. Click New Process Variant.
4. Enter the Name for the new Process Variant and select “Retail Sales Price Update” as Process.
5. Click on Create button.
6. Click the newly created Process variant tile to edit the process variant.
7. The Process Variant has two steps by default - Approval by Merchandise Team and Retail Sales Price Update.



8. Configure Step Property “Role” for Approve Retail Sales Price Update Step. Approval Step property is used to determine the Approver using the business rule Determine Approver.
9. It is possible to add additional Approval steps to a process variant. Drag and drop the Approve Retail Sales Data where required and update the name in Approval Step property.
10. Start Conditions can be configured at the variant level. The variant will be triggered only if the start conditions are satisfied.
11. If required, at every process step, the step conditions can be configured. Only when the conditions are met, the step shall be executed.

12. Save and Activate the variant. Successful activation will create a new workflow definition in the account that can be viewed in the Monitor Workflow- Workflows-Workflow Definition application in the Fiori Launchpad.
13. Update the Determine Approver Policy and include the Role to the rule condition.

## Decisions & Policies

Decisions allow to encapsulate the business logic from core applications and supports the reuse of business rules across different business processes. Decisions enable customers to adopt changes in processes without changing the underlying workflows or application logic. SAP Build Process Automation or SAP Workflow Management has business rules capabilities that enables customers to centrally manage all decisions. Please go through the [business rules capabilities](#) in SAP Build Process Automation or SAP Workflow Management.

**Retail Sales Price Update** enable customers to flexibly configure decisions to gain flexibility to

1. DetermineStrategy
2. DetermineApprover
3. DetermineAdmin
4. DetermineErrorHandler

### Determine Approver Strategy

This rule is used for determining the strategy for approver determination whether it will be form business rules or form external service

**Rule Service Name:** DetermineApproverStrategy

**Input:** RetailSalesData (Structure data type)

ATTRIBUTE	TYPE	DESCRIPTION
MarkupPrice	Number	Markup Price
SalesOrganisation	String	Sales Organisation
Plant	String	Plant
DistributionChannel	String	Distribution Channel

**Output:** ApproverStrategy (Structure Type)

ATTRIBUTE	TYPE	DESCRIPTION
ApproverStrategy	String	Strategy for Approver



### Rule Definition

Rule to determine the approver strategy and approval process step based on Markup Price. It can either "Business Rule" or "External Service".

If				Then
Markup Price	Sales Organisation =	Plant =	Distribution Channel =	Approver Strategy
< 10				'ExternalService'
> 10				'BusinessRules'

Where used

Step: Used in Approve Retail Sales Data

### Determine Approver

This rule is used for determining the approver details

Rule Service Name: DetermineApprover

Input: RetailSalesData (Structure data type)

ATTRIBUTE	TYPE	DESCRIPTION
MarkupPrice	Number	Markup Price
SalesOrganisation	String	Sales Organisation
Plant	String	Plant
DistributionChannel	String	Distribution Channel
Role	String	Role of the Person Approving

Output: ApproverDetails (Structure Type)

ATTRIBUTE	TYPE	DESCRIPTION
ApproverMailID	String	Mail ID of Approver
ApproverUserID	String	User ID of Approver
ApproverUserGroup	String	User Group of Approver

### Rule Definition

Rules to determine approver in approval process step based on Markup Price .

If						Then		
<input type="checkbox"/>	Markup Price	Sales Organisatio...	Plant =	Distribution Chan...	Role =	Approver Mail ID	Approver User ID	Approver User Gr...
<input type="checkbox"/>	IN [ 10 .. 30 ]				'Merchandise T...	'abc@email.com'	'UserId'	'UserGroup'
<input type="checkbox"/>	IN [ 30 .. 50 ]				'Merchandise T...	'abc@email.com'	'UserId'	'UserGroup'
<input type="checkbox"/>	IN [ 50 .. 70 ]				'Merchandise T...	'abc@email.com'	'UserId'	'UserGroup'
<input type="checkbox"/>	IN [ 70 .. 100 ]				'Merchandise T...	'abc@email.com'	'UserId'	'UserGroup'

Where used

Step: Used in Approve Retail Sales Data step

## Determine Admin

This rule is used for determining the admin to assign a new approver when the approver is not determined.

**Rule Service Name:** DetermineAdmin

**Input:** RetailSalesData (Structure data type)

ATTRIBUTE	TYPE	DESCRIPTION
MarkupPrice	Number	Markup Price
SalesOrganisation	String	Sales Organisation
Plant	String	Plant
DistributionChannel	String	Distribution Channel

**Output:** AdminDetails (Structure Type)

ATTRIBUTE	TYPE	DESCRIPTION
AdminMailID	String	Mail ID of Admin
AdminUserID	String	User ID of Admin
AdminUserGroup	String	User Group of Admin

## Rule Definition

Rule to determine the admin, when the approver are not determine by "Business rules: or "External Service" in approval process step based on Markup Price.

If				Then			
<input type="checkbox"/>	Markup Price	Sales Organisation =	Plant =	Distribution Channel =	Admin Mail ID	Admin User ID	Admin UserGroup ID
<input type="checkbox"/>	NOTIN [ 10 .. 100 ]				'abc@email.com'	'UserId'	'UserGroup'
<input type="checkbox"/>	IN [ 70 .. 100 ]				'abc@email.com'	'UserId'	'UserGroup'
<input type="checkbox"/>	IN [ 50 .. 70 ]				'abc@email.com'	'UserId'	'UserGroup'
<input type="checkbox"/>	IN [ 30 .. 50 ]				'abc@email.com'	'UserId'	'UserGroup'
<input type="checkbox"/>	IN [ 10 .. 30 ]				'abc@email.com'	'UserId'	'UserGroup'

Where used

Step: Used in Admin Retail Sales Data step

### Determine Error Handler

This rule is used for determining the person who will handle the error when any technical error occurs while posting Retail Sales Details to the SAP S/4HANA

**Rule Service Name:** DetermineErrorHandler

**Input:** RetailSalesData (Structure data type)

ATTRIBUTE	TYPE	DESCRIPTION
MarkupPrice	Number	Markup Price
Sales Organisation	String	Sales Organisation
Plant	String	Plant
DistributionChannel	String	Distribution Channel Sales Organisation

**Output:** ErrorHandlerDetails (Structure Type)

ATTRIBUTE	TYPE	DESCRIPTION
ErrorHandlerMailID	String	Mail ID of error handler
ErrorHandlerUserID	String	User ID of error handler
ErrorHandlerUserGroup	String	UserGroup of error handler

### Rule Definition

Rule to determine the person who will handle the technical error occurred while posting the data to SAP S/4HANA, based Markup Price.

If				Then			
<input type="checkbox"/>	Markup Price	Sales Organisation =	Plant =	Distribution Channel =	Error Handler Mail ID	Error Handler User ID	Error Handler UserGr...
<input type="checkbox"/>	NOTIN [ 10 .. 100 ]	<input type="text"/>	<input type="text"/>	<input type="text"/>	'abc@email.com'	'UserID'	'UserGroup'
<input type="checkbox"/>	IN [ 70 .. 100 ]	<input type="text"/>	<input type="text"/>	<input type="text"/>	'abc@email.com'	'UserID'	'UserGroup'
<input type="checkbox"/>	IN [ 50 .. 70 ]	<input type="text"/>	<input type="text"/>	<input type="text"/>	'abc@email.com'	'UserID'	'UserGroup'
<input type="checkbox"/>	IN [ 30 .. 50 ]	<input type="text"/>	<input type="text"/>	<input type="text"/>	'abc@email.com'	'UserID'	'UserGroup'
<input type="checkbox"/>	IN [ 10 .. 30 ]	<input type="text"/>	<input type="text"/>	<input type="text"/>	'abc@email.com'	'UserID'	'UserGroup'

Where used

Step: Used in Update Retail Sales Price

### Vocabulary Rules Project

Vocabulary Rules project Retail Sales Vocabulary project helps with creation of start and step conditions

ATTRIBUTE	TYPE	DESCRIPTION
MarkupPrice	Number	Actual Markup in Sales Price Calculation
SalesOrganisation	String	Sales Organisation
Plant	String	Plant
DistributionChannel	String	Distribution Channel
Material	String	Material Number
PlantGroup	String	PlantGroup
Pricelist	String	Price list Type
ValidityFrom	String	Sales Condition Validity From
ValidityTo	String	Sales Condition Validity To
PurchasePriceDeterminationSeq	String	Purchase Price Determination Sequence
SalesPriceDeterminationSeq	String	Sales Price Determination Sequence
Currency	String	Currency Key
GrossPrice	String	Sales Price (Gross)
FinalPrice	String	FinalPrice
MarginGrossPrice	String	Margin (Gross) in Sales Price Calculation
CurrentPrice	String	Current Final Price
BasicPurchasePrice	String	Basic Purchase Price
UnitofMeasurement	String	Unit of Measurement

## Determine Approvers from External Service

If the approvers need to be determined from an external system (ex., SAP S/4HANA or HR systems), then an integration flow shall be implemented with the following properties.

API Attributes	Values
Path	/http/comsapcontentRetailSalesApprover
HTTP Method	POST
Input payload sent to integration flow (sample data)	<pre>{   "Vocabulary": [     {       "RetailSalesData": {         "MarkupPrice":50,         "SalesOrganisation":"0001",         "Plant":" DC01",         "DistributionChannel":"01",         "Role":"Merchandise Team"       }     }   ] }</pre>
Expected response payload from integration flow	<pre>{   "Result": [     {       "ApproverDetails": {         "UnitOfTime": &lt;"H" OR "M" OR "m" OR "Y" OR "D"&gt;,         "ApproverMailID": "abc@email.com",         "ApproverUserID": " &lt;UserID&gt;",         "ApproverUserGroup": "&lt;UserGroup&gt;",         "Duration":       }     }   ] }</pre> <p>Note: When Status is not 200, then it is considered a failed service call.</p>
Payload Type	Application / JSON

## Process Visibility

Process Visibility capability in SAP Build Process Automation or SAP Workflow Management enables Process Owners and Process Operators to gain real time visibility on processes and key process performance indicators. It also enables customers gain out of the box process visibility into their deployed processes. Please refer [help documentation](#) for more details.

**Retail Sales Price Update** content package provide out of the box visibility on all the process variants in SAP Build Process Automation or SAP Workflow Management. Line of business expert will be able to enhance the visibility scenario to their requirements.

### Configure Visibility Scenarios in SAP Build Process Automation

1. Go to the Application Development Lobby.
2. Select Retail Sales Price Update Project.
3. Click to open **Retail Sales Price Update** scenario.
4. Click Activate button.

Please go through the [help documentation](#) on how to configure the visibility scenario.

### Configure Visibility Scenarios in SAP Workflow Management

1. Go to Process Flexibility Cockpit.
2. Select **Retail Sales Price Update** tile.
3. Click Visibility Scenarios tile.

Please go through [help documentation](#) on how to model a visibility scenario.

### Access Process Workspace in SAP Build Process Automation

1. The process visibility scenario can be accessed using SAP Launchpad Service. Refer to the help document for [creating UI applications on central SAP Fiori Launchpad](#) for SAP Build Process Automation.
2. Once you have added the applications process Visibility Scenario Instances (with app ID com.sap.spa.pv.instances) and Visibility Scenario Dashboard (with app ID com.sap.spa.pv.ovp), follow the below steps to add a tile to access the Retail Sales Price Update dashboard.
  - a. Navigate into “Visibility Scenario Dashboard”.
  - b. On the screen that opens, choose Create a Local Copy.
  - c. To use custom texts, choose Edit and adapt the texts in the General section.
  - d. You can use a custom title, description, and subtitle for the tile.
  - e. Choose the Navigation tab.
  - f. Under the Intent section, ensure that the value in the Action tab is unique for every application.
  - g. Under the Parameters section, provide the following:

Parameter Name	Parameter Value
----------------	-----------------

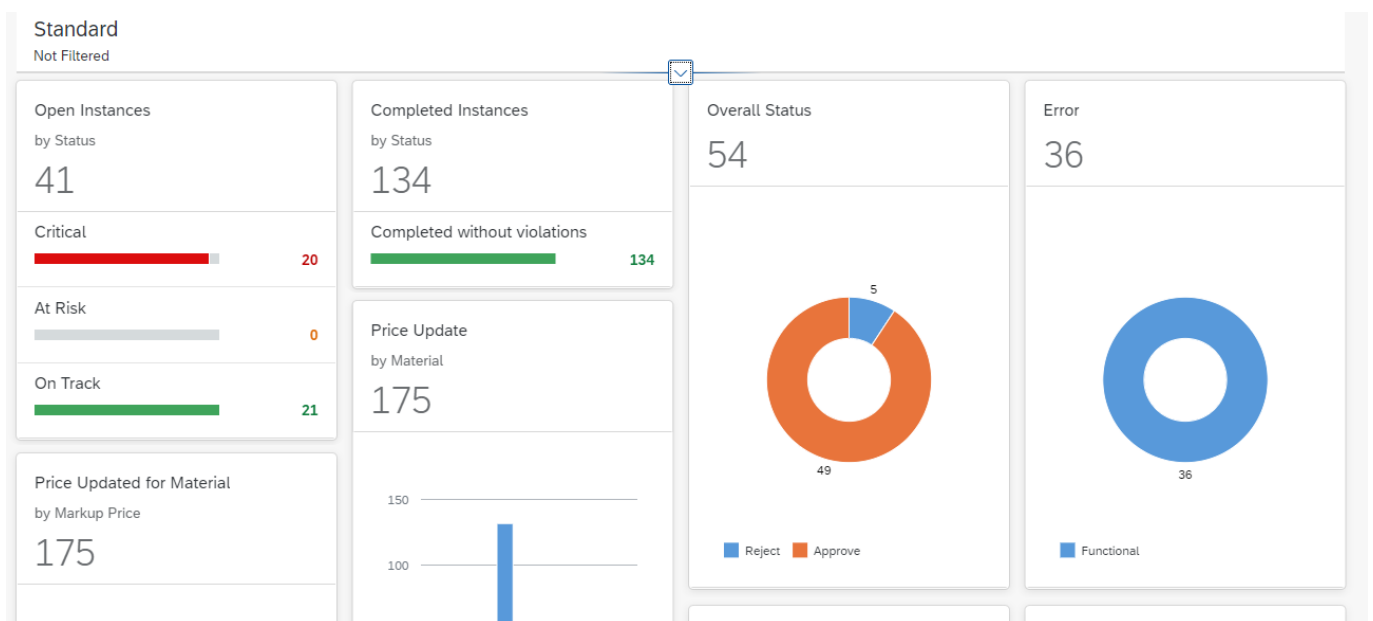
Name	scenariold
Default Value	com.sap.content.RetailSales
Required	Toggle to Yes

- h. Choose Save.
- i. Assign the local copy to a group and make sure that they're visible to users. For more information, see [Assign Apps to a Group and to a Catalog](#) and [Assign Content to a Role](#).

- 3. Once created, select app that corresponds to "Retail Sales Price Update".
- 4. User will see the process visibility dashboard below.

### Access Process Workspace in SAP Workflow Management

- 1. Go to Process Flexibility Cockpit
- 2. Select **Retail Sales Price Update**
- 3. Click Live Process Insights
- 4. User will see the below detailed process visibility dashboard.



Please go through [help documentation](#) on how to access process workspace.