



PUBLIC

SAP Build Process Automation

Purchase Requisition Header Approval and Release Template

Configuration & User Guide

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Change Log

Version	Date	Description
1.0.0	June 28 th , 2023	Document created
1.0.1	June 4 th , 2024	Decision added for Purchasing Group value help
1.0.2	July 31 st , 2025	Additional sub-process, 'Notification from IME' added to this project for Orchestration with content 'Procure to Order'. Correspondingly guide is also updated.

This document contains 3 sections. Each section cover different information about this template content package.

1. **Overview:** In this section, you will get quick overview of the use case, what are high-level components used and how the template works in a nutshell. Prerequisite section provides information of different services of SAP BTP that are required to use this template.
2. **Configuration Guide:** It contain sections which will guide you to setup your (a) SAP BTP Account with destination, cloud connector, user roles etc, (b) Integration Content via SAP Integration Suite, (c) SAPUI5 application via SAP Business Application Studio and (c) Import and configure the template using SAP Build Process Automation design studio and (d) SAP Work Zone to access the MyInbox or Task Center and other applications.
3. **User Guide:** This section provides details about different artefacts that are used in this template like process definition, decision diagram, action project details, forms, email notifications etc. to better understand how different capabilities are used in this template.

Note: This documentation is not a detailed guide to setup SAP BTP services. It assumes that IT admin who is setting the content is skilled with SAP BTP environment. Configuration section has to be mandatorily followed to import and configure the template.

Note: This template content is to accelerate your solution development. You have to modify this template according to your requirements to achieve the desired business goal. To use this template content, you need to have basic knowledge and understanding of SAP Build Process Automation, SAP Integration Suite and its capabilities.

Overview

Purchase Requisition Header Approval and Release template enables SAP S/4HANA On-Premise customers to automate Purchase Request approval and release process using SAP Build Process Automation. It includes processes, decisions, automation, and visibility scenario.

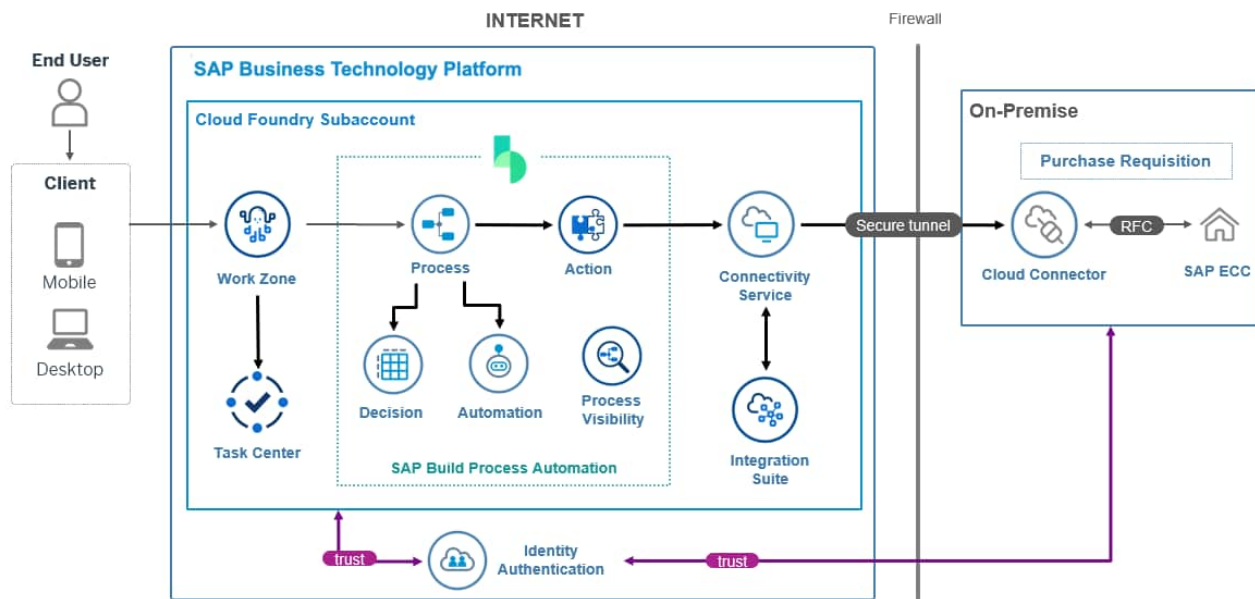
In this template, the process has a trigger form which collects Requestor's information, Header & Line-Item details that are needed to create a Purchase Request in the SAP S/4HANA On-Premise system. The process orchestrates validation, approval and release of the purchase requisition and its line-items. Decision is used to dynamically determine approvers, and Action is used to connect to SAP S/4HANA On-Premise system to release line-items one-by-one. Notifications are sent to approvers and requestor at different stages of the process via email. Process admin is informed if process is blocked due to missing approver or failure to connect to the backend system to take actions.

IMPORTANT NOTE

This content package is designed to run (a) standalone and (b) orchestrated mode.

- For standalone mode, you can directly import this content package and set it up based on the instruction of this guide. In this mode, the purchase requisition details are entered in the start UI5 application which will initiate the approval process where the purchase requisition header details gets approved, and later created in SAP S/4HANA on-premise system.
- For orchestrated mode, this content package will be initiated from Procure to Order content package. [Overview | Procure to Order | SAP Business Accelerator Hub](#). Procure to Order is complete end-to-end process where the purchase requisition header and items are approved and created in the backend S/4HANA on-premise system, and later purchase order will also be created. If you want to use this content package in orchestrated mode, then you have to follow the configuration guide in the Procure to Order content in addition to the current

configuration guide.



Below is the process flow for standalone mode, where the process is triggered from the start form:

- Business user (Requester) enters the Purchase header and items details in the SAP UI5 form.
- If more than one line item has to be added, then the requester must click on 'Add to cart' button to add line items.
- Once the Start UI5 form is submitted, a purchase requisition is created in SAP S/4HANA On-Premise system, and an approval process is triggered in SAP Build Process Automation.

Rest of the steps are common for both standalone and orchestrated mode:

note: In orchestrated mode, this process will be triggered from the procure-to-order project

- The first few steps in the process validates header & line items data based on conditions defined in the process.
- Next, approvers are determined based on decision created in the process.
- Approver(s) is notified via email about the new request which has reached his inbox for approval and in parallel requester gets a confirmation email that the request has been sent for approval.
 - If the approver(s) are not defined for any reasons, then the process administrators are notified to assign approvers to the user tasks.
 - If the approver(s) are defined, then they can access My Inbox to view the task, review the document and choose one of the following decisions:
 - Approve: Upon selecting "Approve" option, requester is notified via email about approval of the request.
 - Reject: Upon selecting "Reject" option, requester is notified via email about rejection of the request and the process is terminated.
- Once approval is completed, the process continues with releasing of the line items one-after-other in the backend system using Action
- If there is an issue while releasing PR line items in the backend system, it will notify requester via explicit form in their inbox and the process is terminated.
 - Requester can correct the data if required and submit a new request to start the approval process again.

Note:

- Currently the process template supports only multiple line items due to the limitation of schema defined in action projects (This content will be updated soon for single line item as well in the next release).

Pre-requisites

The following SAP Business Technology Platform services are required to consume the content package

Purchase Requisition Header Approval and Release Process:

- SAP Build Process Automation to orchestrate the process.
- SAP Work Zone, standard edition
- SAP Connectivity service (cloud connector) to establish access to SAP S/4HANA On-Premise
- SAP Cloud Identity Services - Identity Authentication
- SAP Build Process Automation instance for API calls to start the process.
- SAP Integration Suite to consume the RFC, BAPI from SAP S/4HANA On-Premise (EHP6 FOR SAP ERP 6.0)
- SAP Business Technology Platform, Cloud Foundry runtime.
- SAP Business Application Studio to modify and deploy SAPUI5 application.

Configuration Guide

The Purchase Requisition Header Approval and Release Process template requires SAP Build Process Automation subscription or CPEA contract. Follow the [setup and configuration section](#).

Setup SAP Business Technology Platform Cockpit

Destination Configuration

• Configure SAP Build Process Automation Email Destination

Configure email destination which will be used to send email to the approver, requestor and admin at different staged of the process execution.

Follow the steps to [Configure a SMTP Mail Destination](#) in your BTP account.

- For more information refer to [Create HTTP Destinations](#) and [OAuth User Token Exchange Authentication](#).

• Configure SAP Integration Suite Destination

Integration Flow is used in the template to connect to BAPI and/or RFC in the backend system.

To call an integration flow, a HTTP destination is required in the SAP BTP account where the SAP Build Process Automation is subscribed.

Create a destination with name **CPI** with either Basic Authentication or OAuth2ClientCredentials.

Destination with Basic Authentication

Name	CPI
Type	HTTP
Proxy Type	Internet
Authentication	Basic Authentication
URL	<integration suite runtime URL>
Username	<Username>
Password	<Password>

Destination with OAuth2ClientCredentials

Name	CPI
Type	HTTP
Proxy Type	Internet
Authentication	OAuth2ClientCredentials
URL	<runtime URL>
Username	<Username>
Password	<Password>
Token Service URL	<oauth url for client credentials>

Additional Properties to Destination

Additionally, add the following properties in the destination for cloud integration

WebIDEEEnabled	true
WebIDESystem	CPI
WebIDEUsage	odata_gen

- **Configure SAP S/4HANA On-Premise(ECC) Destination**

An RFC destination is required in the SAP BTP account where Integration capability within SAP Integration Suite is subscribed.

Refer [create a RFC destination](#) to learn how-to create an RFC destination in BTP account.

Note: The destination name need not be 'ECC' as seen below. If a different name is used, then the same needs to be configured in the Integration Flow.

Name	ECC or <ANYNAME> Note: You can name it as you wish but maintain the destination name in the integration flow configuration.
Type	RFC
Proxy Type	OnPremise
User	<ECC USER>
Password	<ECC PASSWORD>
Repository User	
Repository Password	
Location ID	<optional>
Additional Property	Name: jco.client.ashost Value: <abapServerHost> Name: jco.client.client Value: <client id> Name: jco.client.sysnr Value: <systemNumber>

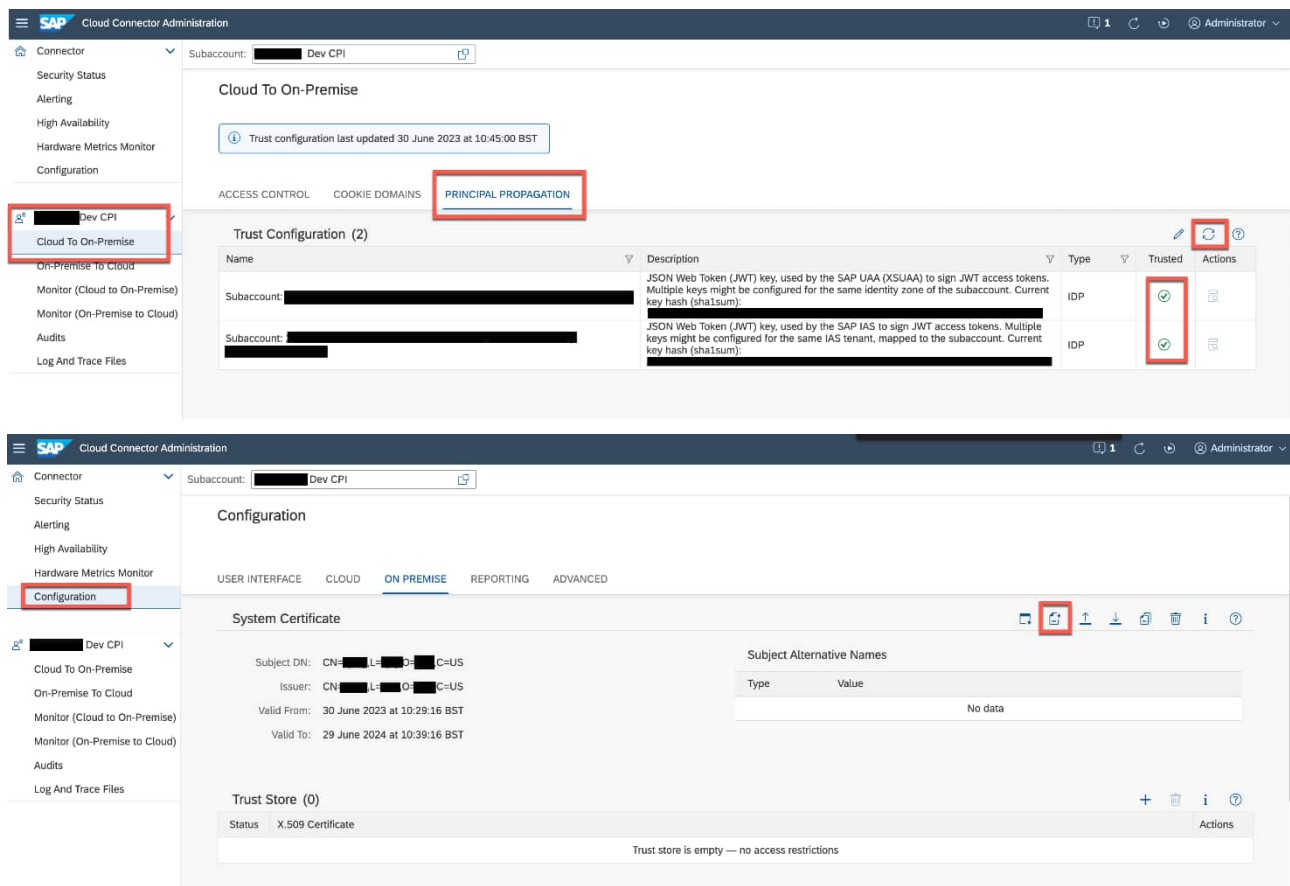
Cloud Connector Configuration

To connect to the backend ECC on-premise system, a cloud connector is needed. Configure your SAP BTP account and SAP ECC system in Cloud Connector to enable secure tunnel for RFC calls. Please refer the help documentation to [configure Cloud Connector](#).

Expose the following BAPI/RFC in the SAP Cloud Connector:

- Create Purchase Requisition in SAP ERP: This is an integration flow called BAPI_REQUISITION_CREATE to create Purchase Request.
- Get Purchase Requisition from SAP ERP: This is an integration flow called BAPI_REQUISITION_GETDETAIL to fetch Purchase Requisition Line-Item details.
- Get Material list from SAP ERP: This integration flow called BAPI_MATERIAL_GETLIST to get list of materials in the SAP ECC system.
- Get Material from SAP ERP: This integration flow called BAPI_MATERIAL_GET_DETAIL to fetch given material details from the SAP ECC system.
- Get Plant List from SAP ERP: This integration flow called SLS_LORD_GET_VALUES_WERKS to get list of plants available in the system.
- Release Purchase Requisition in SAP ERP: This is an integration flow called BAPI_REQUISITION_RELEASE to release purchase requisition line items.
- Update Purchase Requisition in SAP ERP: This is an integration flow called BAPI_REQUISITION_CHANGE to update purchase requisition line items data.

For implementing principal propagation from the integration flow to the SAP ECC, synchronize the IDP in SAP cloud connector, create the destination of type IDP and import the self -signed CA certificates.



In SAP ECC, follow these steps to enable principal propagation:

1. Import Cloud Connector (SCC) System certificate in STRUSTSSO2 transaction under SSL Server Standard. This established the trust between the backend and SCC.
2. Maintain subject, issuer, cert rule parameter details in default profile – RZ10 transaction.
3. Create the rule-based mapping using sample X.509 certificate – CERTRULE transaction.
4. Restart ICM.

User Roles Configuration

Role Name	Purpose
ProcessAutomationDeveloper	To fully use this content package, you need to have an active user entitled to this role to use SAP Build Process Automation
Business_Application_Studio_Administrator	To import and modify the SAPUI5 application in this content package, you need to have an active user

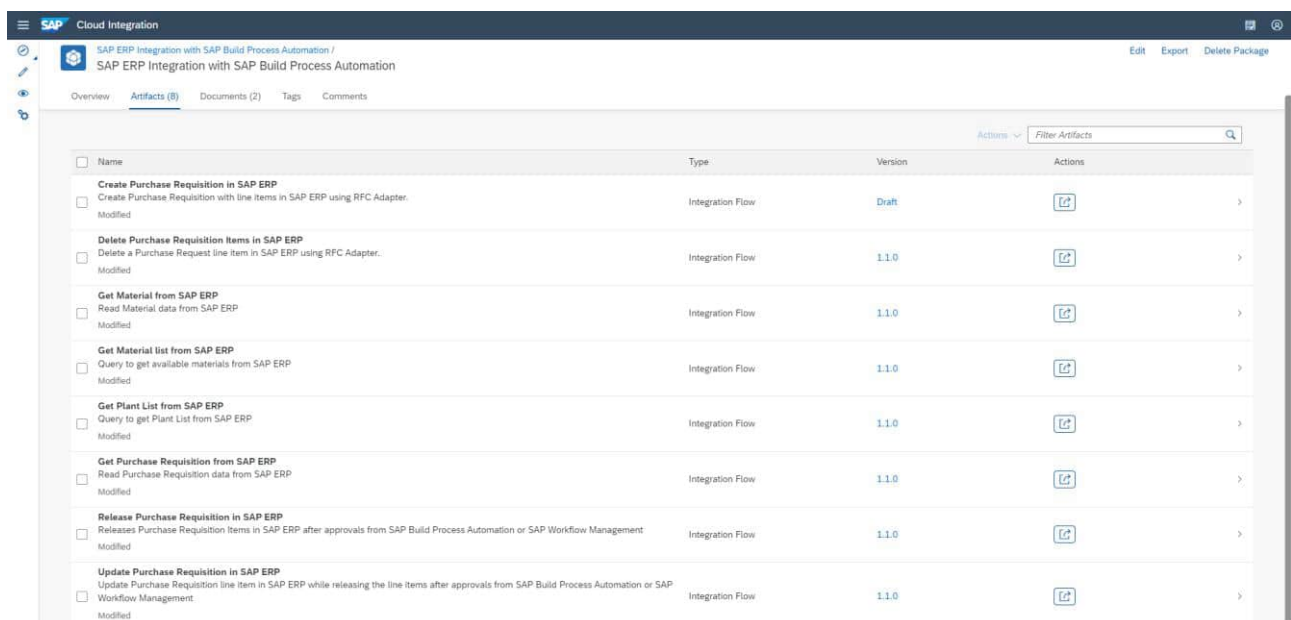
	entitled to this role to use Business Application Studio
Business_Application_Studio_Developer	To import and modify the SAPUI5 application in this content package, you need to have an active user entitled to this role to use Business Application Studio
Business_Application_Studio_Extension_Deployer	To deploy SAPUI5 application in this this content package, you need to have an active user entitled to this role to use Business Application Studio
AuthGroup.IntegrationDeveloper	To import, modify and deploy integration flow in the content package, you need to have an active user entitled to this role to use Integration Suite content package.

For more information about SAP Build Process Automation roles, see [Authorizations](#).

Setup Integration Content

This template requires Process Integration capability within SAP Integration Suite to create, approve and release purchase request. An integration content package **SAP ERP Integration with SAP Build Process Automation** is available in SAP Business Accelerator Hub to integrate SAP Build Process Automation with SAP ECC.

All integration models use the RFC Adapter to call the required RFC/BAPI in SAP ECC. The following Integration models are available in this package.



Name	Type	Version	Actions
☐ Create Purchase Requisition in SAP ERP Create Purchase Requisition with line items in SAP ERP using RFC Adapter. Modified	Integration Flow	Draft	>
☐ Delete Purchase Requisition Items in SAP ERP Delete a Purchase Request line item in SAP ERP using RFC Adapter. Modified	Integration Flow	1.1.0	>
☐ Get Material from SAP ERP Read Material data from SAP ERP Modified	Integration Flow	1.1.0	>
☐ Get Material list from SAP ERP Query to get available materials from SAP ERP Modified	Integration Flow	1.1.0	>
☐ Get Plant List from SAP ERP Query to get Plant List from SAP ERP Modified	Integration Flow	1.1.0	>
☐ Get Purchase Requisition from SAP ERP Read Purchase Requisition data from SAP ERP Modified	Integration Flow	1.1.0	>
☐ Release Purchase Requisition in SAP ERP Releases Purchase Requisition Items in SAP ERP after approvals from SAP Build Process Automation or SAP Workflow Management Modified	Integration Flow	1.1.0	>
☐ Update Purchase Requisition in SAP ERP Update Purchase Requisition line item in SAP ERP while releasing the line items after approvals from SAP Build Process Automation or SAP Workflow Management Modified	Integration Flow	1.1.0	>

Import the Content package to your SAP Integration Suite account. To be able to import and deploy integration flows, you need the **AuthGroup.IntegrationDeveloper** role assigned in your user.

Import Pre-packaged Integration Content in SAP Integration Suite:

- Access your SAP Integration Suite tenant management node (<https://<cpitenant>.hana.ondemand.com/itspaces>).
 - Refer [help documentation](#) on how to get tenant management node address.
- View all pre-packaged integration flow under Discover à Integration (<https://<cpitenant>.hana.ondemand.com/itspaces/shell/discover>).
- Search content package “**SAP ERP Integration with SAP Build Process Automation**”
- Click to open the package.
- Click **Copy** to import the integration content package to your workspace.
- Navigate to **Design** to open the imported content package.
- Open all Integration models, select **Configure** option.
 - set configured value as RFC Destination which was created in SAP BTP Cockpit
- **Deploy** the integration model

Setup SAP Build Process Automation Content

Import Content

This template can be downloaded from the Store:

- 1) Navigate to the **Store** in your SAP Build Process Automation account.
- 2) Select the Project Type filter as “**Process Automation**”
- 3) In the Search bar type “**Purchase Requisition Header Approval and Release**”
- 4) Select the “Add” button to add the template into you lobby.
- 5) After successfully adding the template, navigate back to the lobby to find the “Purchase Requisition Header Approval and Release” template available for use.

Caution: Be sure to select the **Project Type as “Process Automation” in the filters** as there is another content available for Live Process category and should not be used.

Configuration & Modification

Once you have added the content to your lobby, you will find the project in your project list. Adapt the content template based on your requirements, and then release and deploy from the Lobby.

Configure Process

The process “**Purchase Requisition Header Approval and Release**” does not need to be explicitly configured.

Configure Forms (Optional)

This template contains multiple forms. You can update or extend the forms based on your requirements. To edit the form:

- Double click the form to open the Form Editor
- You can configure existing fields or add new layout or input fields to the form by simply dragging-and-dropping them from the side menu.

The screenshot shows the SAP Build Process Automation Form Editor. The title bar indicates the process is 'Purchase Requisition Header Approval and Release'. The left sidebar contains a palette of form elements: Headline 1, Headline 2, Paragraph, Text, Text Area, Display, Choice, Checkable, Number, Date, File, Table, and Link. The main workspace displays a form layout with the following components:

- Form Header: 'Created by' followed by a 'Prepopulated Field'.
- Form Fields: 'Requisition Number' followed by a 'Prepopulated Field', and 'Requisition Date' followed by a 'Prepopulated Field' with a calendar icon.
- Section Header: 'Purchase Requisition Item Details:'
- Table: An 'Item Table' with columns: Material, Short Text, Plant, Delivery Date, Quantity, Unit of measure, Price, Currency, Purchasing Group, Purchasing Org, and Document Type. Each column contains a 'Prepopulated' field.
- Form Footer: A 'Comments' section with a text area labeled 'Enter Text'.

At the bottom of the workspace, there is a prompt: 'Drag any field or click to add here'. The bottom right corner of the editor has 'Approve' and 'Reject' buttons.

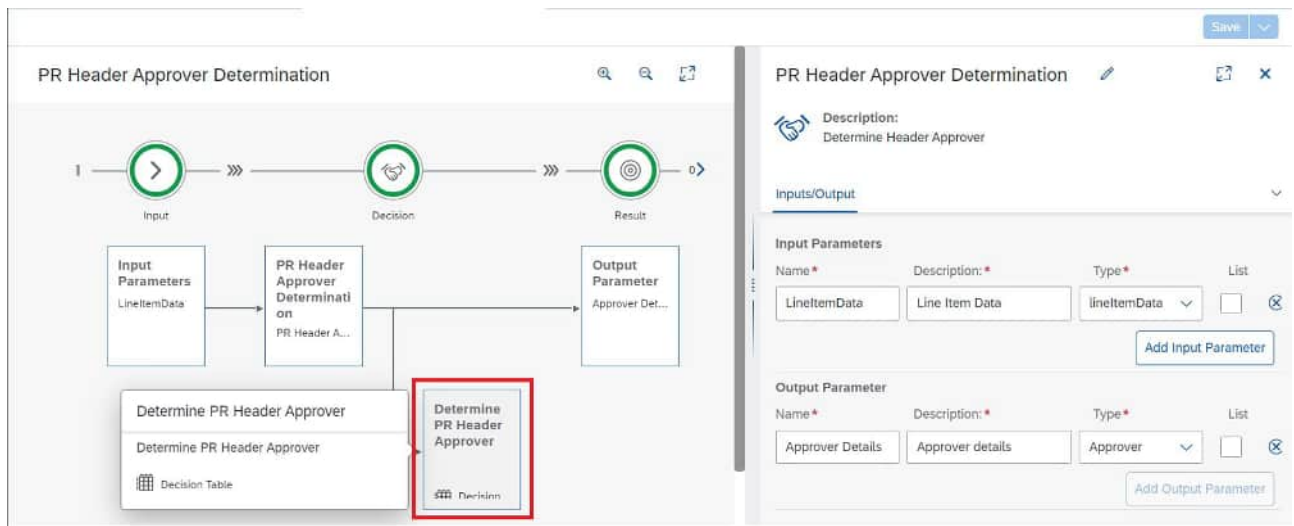
Configure Decisions

There are three decisions in this template

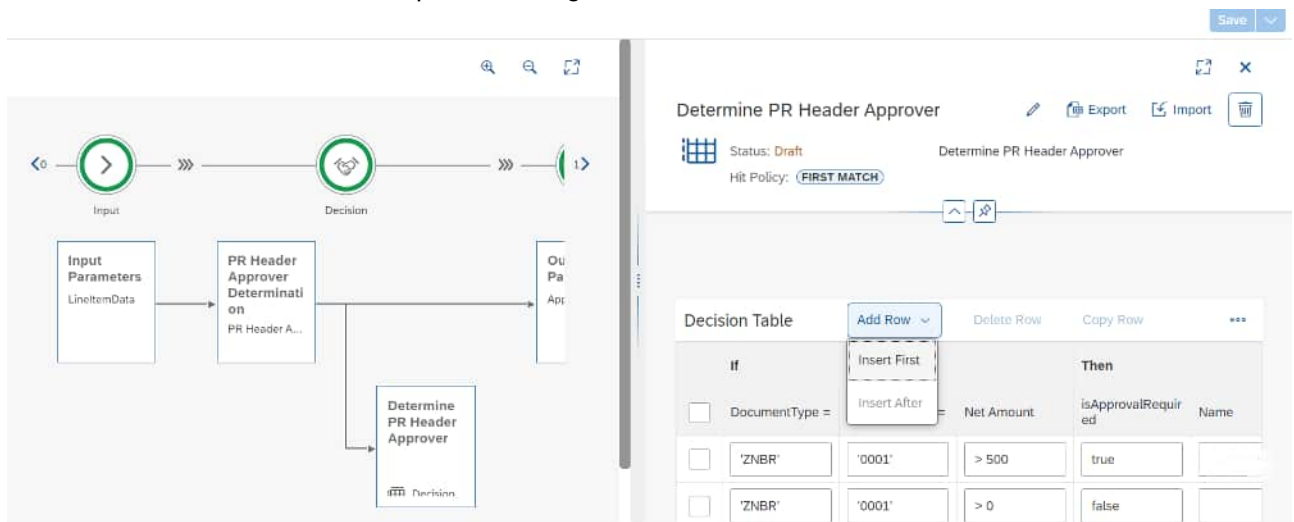
- Validate Line Item
- PR Header Approver Determination
- PR Header Determine Process Admin

These decisions have to be modified for conditions and result values based on your business policies and requirements. To modify the decision:

- In process editor, double click to open the Decision
- Select the rule from the decision diagram



- Edit the rule to add more rows or update existing values

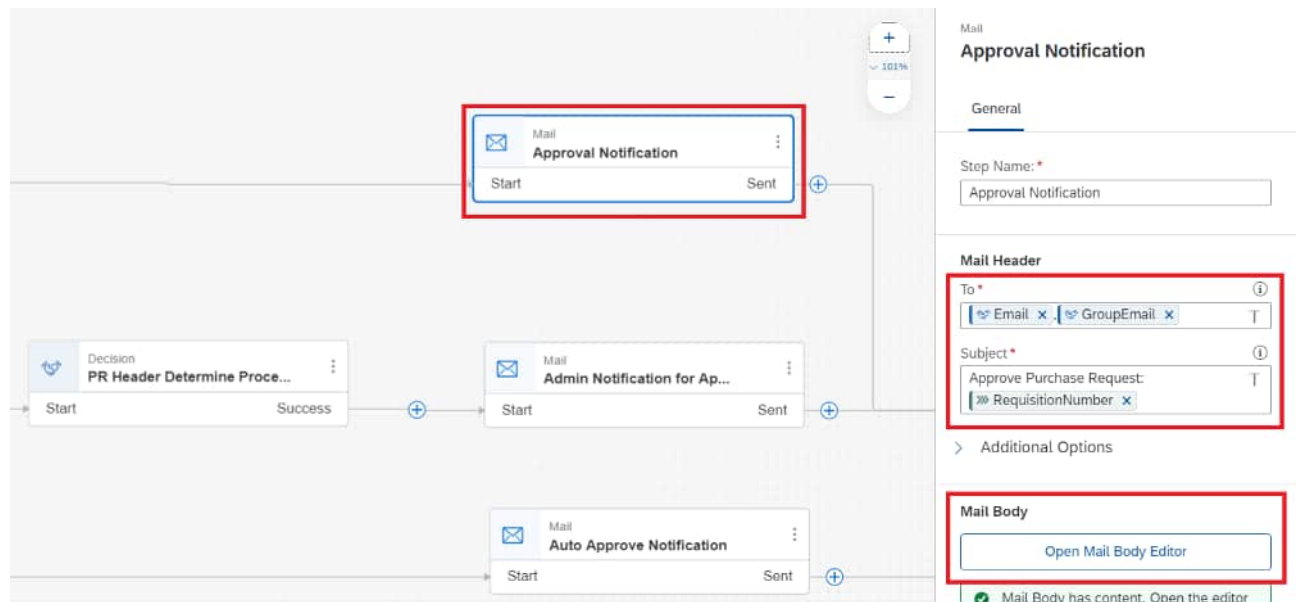


Configure Email

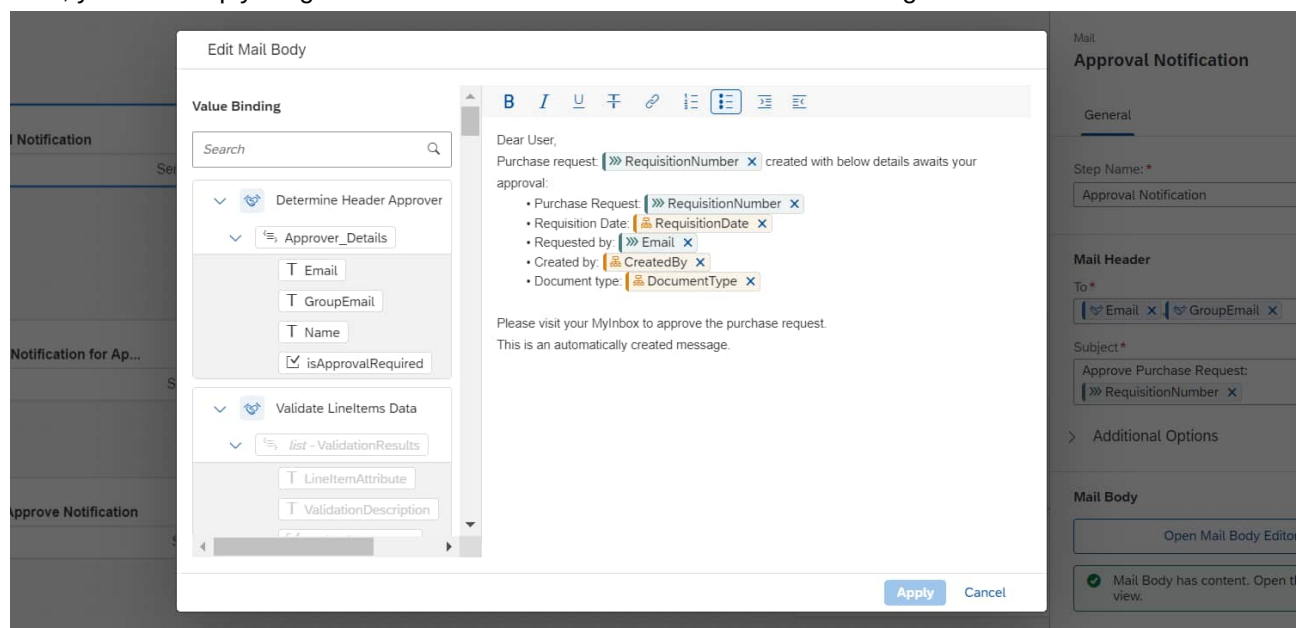
Email notifications are sent to requestor, approver and admin at different places during process execution. All the email artefacts in the process have default template body which can be changed.

To update the email body content, do the following:

- Select the mail artefact in the process
- From the Settings in the right side panel, check the Mail Header to confirm the **To** field (or email recipients) and the **Subject**. You can adjust the subject and recipient, if needed.
- Click to 'Open Mail Body Editor'.



- The mail editor allows you to write and adjust text according to your needs. You can also reuse information that has been collected during the process. If you want to use additional process context data, you can simply drag the fields from the left menu to the editor on the right



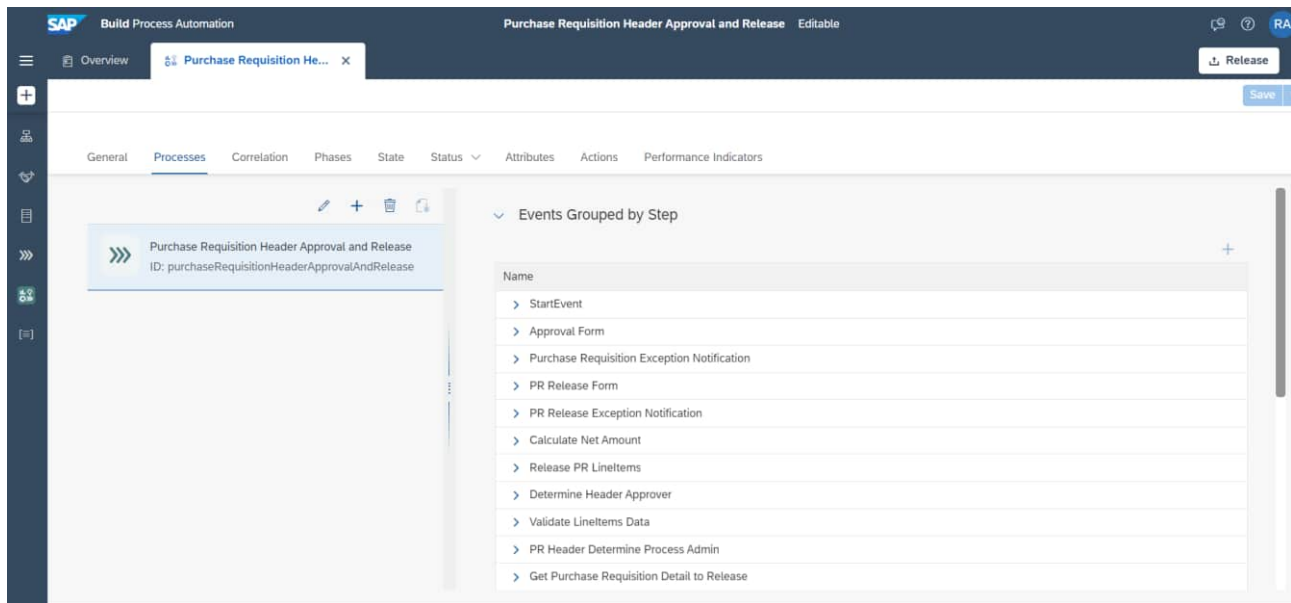
Configure Process Visibility (Optional)

This template has a pre-built dashboard with default business KPIs that can be used by the business users to track end-to-end processes in real-time. You can add more KPIs based on your business requirements.

To configure the visibility scenario:

- Open project '**Overview**' tab
- Select **Purchase Requisition Header Approval and Release** (Visibility Scenario)
- Explore and change Phases, Attributes, Performance Indicators etc. [Follow the documentation to learn how to configure process visibility scenario](#)

In case you don't have access to the process visibility workspace where you can access the newly created dashboards, please contact your IT admin.

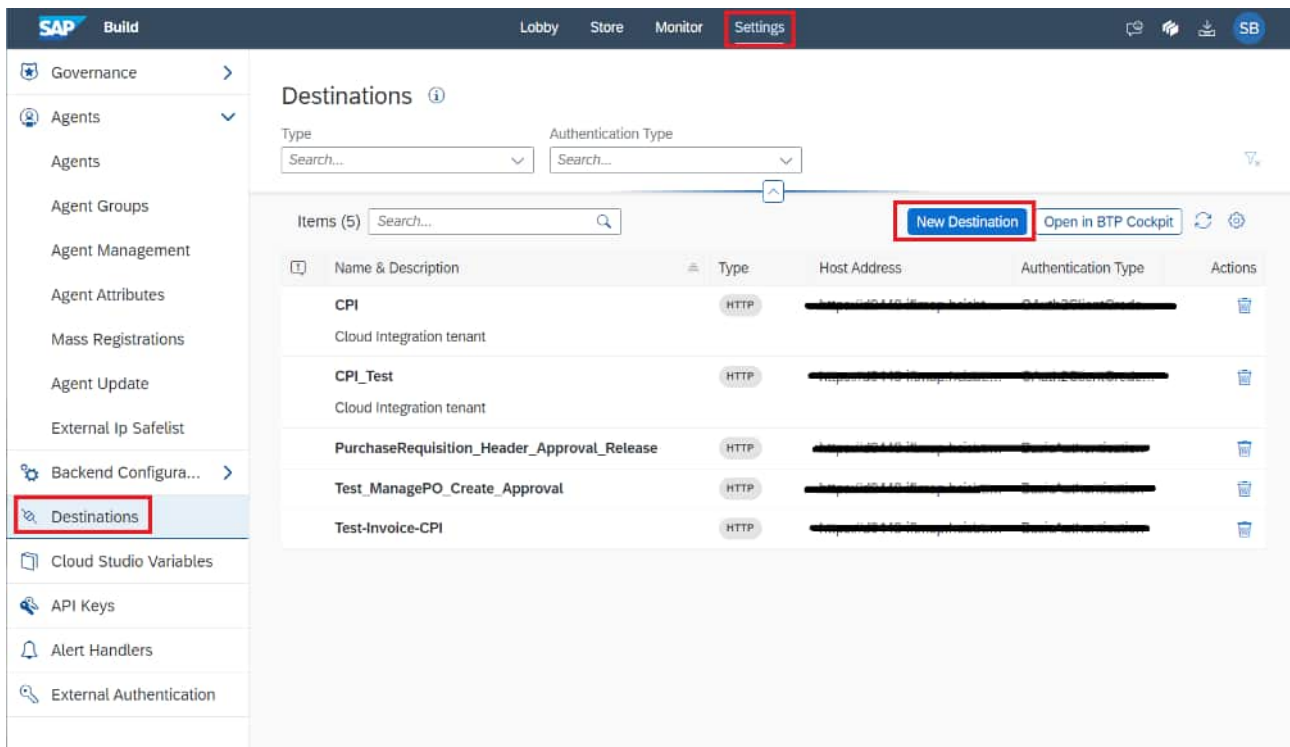


Configure Destination Settings

Actual destinations that are created in SAP BTP cockpit will be required when you deploy the process. This actual destination will be mapped with the destination environment variables during deployment.

To configure destination,

- click on **Settings**
- Select **Destinations** from the left panel
- Click **New Destination**
- Select **CPI** destination to be added



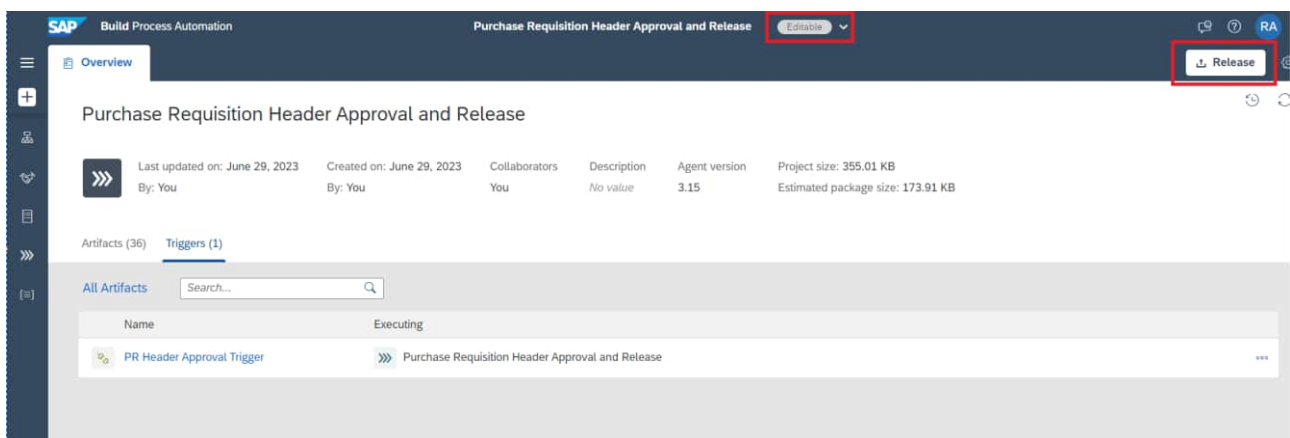
Release and Deploy Process

After configuring your process, it's time to publish, test and run it. To run a process, you must first release and deploy it.

Release - This locks the version of your process, meaning that no further edits can be made to that version. At this stage, the process can't be run and isn't available to participants yet.

To release a version of your process,

- first ensure that the status is listed as 'Editable'.
- The click 'Release':

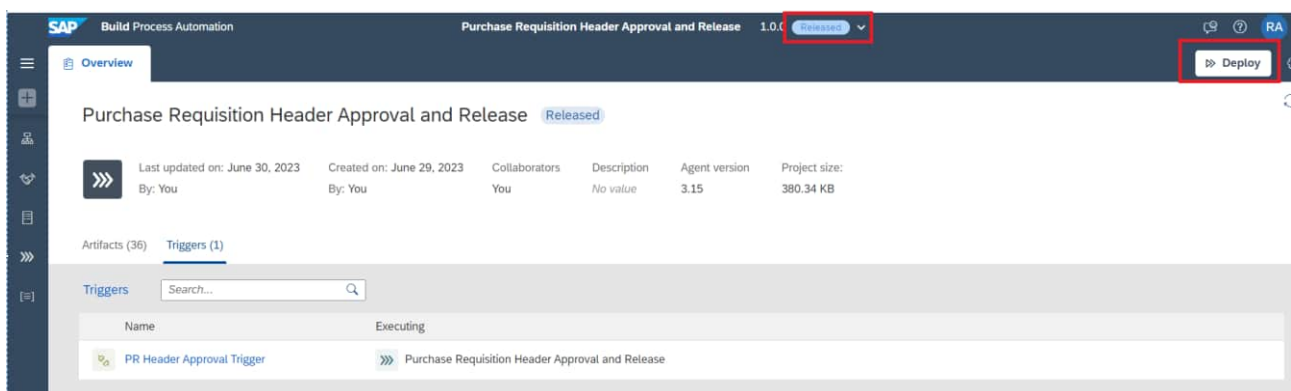


If this is the first time you've released the process, a version labelled 1.0.0 is released. For subsequent releases, you're prompted to select a version type before the process is released.

Deploy — This takes a released version of a process and enables it to be actively run and monitored. A deployed version of this approval process unlocks the request form, allowing participants to submit requests and the approvers to view items in their inbox.

To deploy a released version of your process,

- first ensure that the status is listed as 'Released'.
- Then click 'Deploy'



In order to deploy your project, you will be prompted to provide a Destination as an environment variable. Select the destination from the drop-down.

Note: If you do not map your destination environment variable with actual SAP BTP destination during deployment, then the process will enter Erroneous state when it tries to connect to the external system

For more details about the Destination artefact, please read our [documentation](#).

SAP Business Application Studio

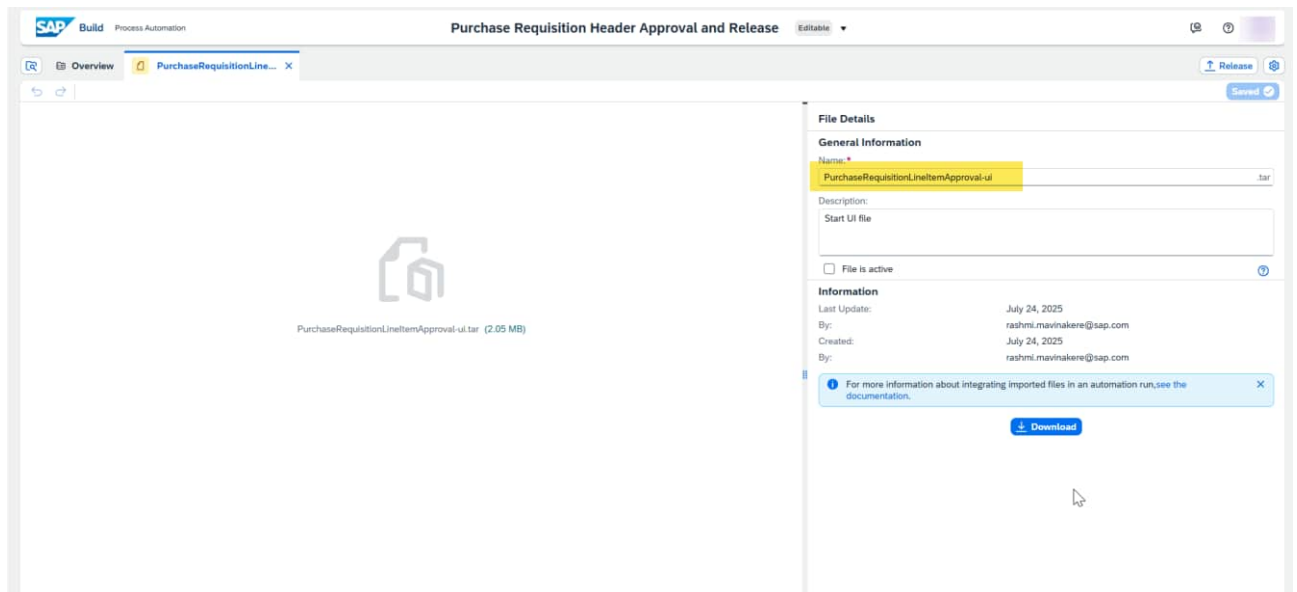
Import and deploy SAPUI5 application (in case of standalone usage of this package)

A SAPUI5 application is available with this template. This application is used to collect purchase requisition details and start the process in SAP Build Process Automation.

Following the below steps to use the SAP UI5 application provided with this template content package:

- From the Lobby, open the project and navigate to Overview page.
- Click to open **PurchaseRequisitionLineItemApproval-ui.tar**

- Download the SAPUI5 application file from the File Details section (as shown in the image below)



- To deploy the SAPUI5 package, open Business Application Studio and import the previously downloaded SAPUI5 project. Follow the [documentation](#) to learn how-to setup business application studio.

- Open the CreatePR->Webapp->controller->main.controller.js

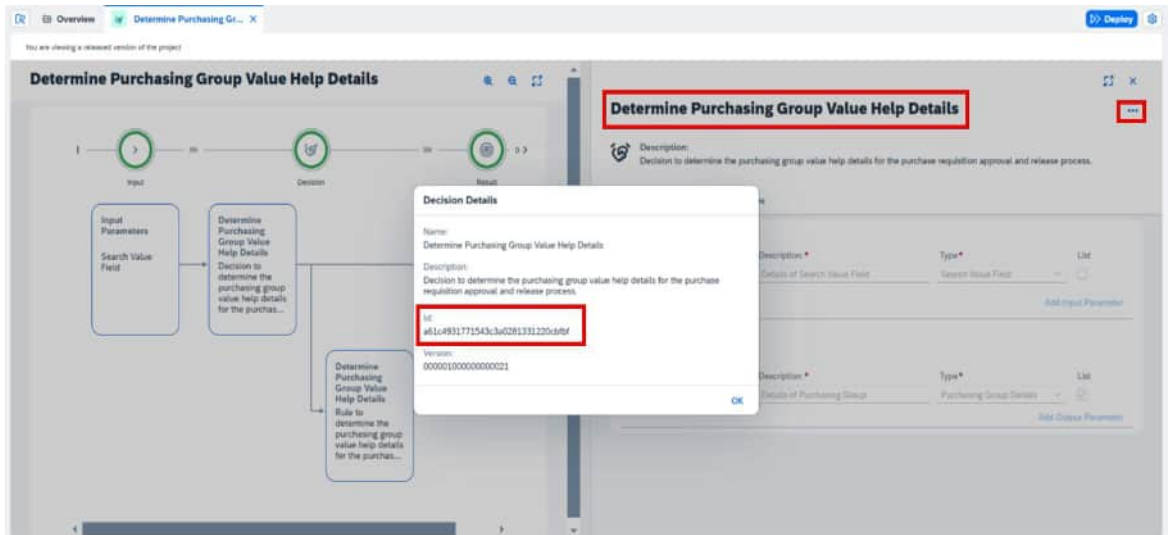
Search for 'definition id' and you will find it in the Success function. Here, provide the definition id of the main process, which is received once you deploy the project.

The definition id for a deployed project can be found in the below path of the Tenant:
Control Tower->Environments-><Environment where project is deployed>->Process and Workflows

Copy the ID for the main process in the project. In this case, ID of the process, 'Purchase Requisition Header Approval and Release'.

```
$.ajax({
  //url: self._getRuntimeBaseUrl() + "/bpmworkflowruntime/public/spa/commons/v1/xsrf-token",
  url: self._getRuntimeBaseUrl() + "/bpmworkflowruntime/public/workflow/rest/v1/workflow-instances",
  method: "GET",
  async: false,
  headers: {
    "X-CSRF-Token": "Fetch"
  },
},
success: function (result, xhr, data) {
  token = data.getResponseHeader("X-CSRF-Token");
  $.ajax({
    type: "POST",
    contentType: "application/json",
    headers: {
      "X-CSRF-Token": token
    },
    url: self._getRuntimeBaseUrl() + "/bpmworkflowruntime/public/workflow/rest/v1/workflow-instances",
    data: JSON.stringify({
      // definitionId: "initializepurchase requisition approval.create_line_item_workflow",
      // definitionId: "createlineitemworkflow",
      definitionId:
        "sap.build.pa.content.purchase requisition header approval and release copy.purchase requisition header approval and release",
      context: RequestContext
    }),
    success: function (result2, xhr2, data2) {
      // MessageToast.show("Workflow started with success");
    },
    error: function (err) {
      MessageToast.show("Error submitting the request");
    }
  })
})
```

Since the main process of **Purchase Requisition Header Approval and Release** has been deployed as mentioned in the previous section, 'Release and Deploy', go to the deployed process and click on the decision: Determine Purchasing Group Value Help Details. Here, open the decision and see in the deployed version, you will have 3 dots to the right side. Click on that and you will get a link to 'view details'. Click on view details and you will find the id for the decision. This is the rule id in this case.



To change the RuleServiceID in the UI5 application, go to CreatePR.controller.Main.js file and click on ctrl+F and search for the function, '_setRulesModel'. You will find the RuleServiceId used in the file as shown below. Change this to the ID that you have noted in the above step.

```
_setRulesModel: function () {
    // set rulesModel
    var rulesModel = new sap.ui.model.json.JSONModel();
    var langCode = sap.ui.getCore().getConfiguration().getLanguage().substring(0, 2).toUpperCase();
    var inputPayload = {
        'RuleServiceId': 'a61c4931771543c3a0281331220cbfbf',
        'Vocabulary': [{ 'Search_Value_Field': { 'SearchField': '', 'Language': langCode } }]
    };
    var self = this;
```

- Once changes are done, build the SAPUI5 project using mta.yaml file. The build-generated mtar file will be available in the mta_archives folder. Deploy the mtar in your subaccount.
- Once you have deployed a new version of the UI5 application, goto the WorkZone and refresh the HTML applications. Refer [help documentation](#) or refer Configure WorkZone section below.

Configure SAP Work Zone

Configure SAP Work Zone to access the start UI for this automation.

Once SAP Work zone is configured, perform the following steps to create the tile for the start UI:

1. Open content manager and click on the HTML5 Apps.
2. Select the Import Purchase Requisition Approval Start UI from the list of apps and choose Add.
3. Add the relevant roles to the user. Purchase Requisition Approval Start UI will be available to the user as a tile in the SAP Work Zone.

If you plan to use SAP Work Zone service, then configure [SAP Work Zone with SAP Build Process Automation Applications](#) using help documentation.

User Guide

Icon	Type	Name	Description
	Process	Purchase Requisition Header Approval and Release	This is the leading process and responsible to orchestrate Purchase Requisition Approval and Release.
	Process	Notification from IME	This artefact is for orchestrated mode. It is a sub-process, which will notify the main process in procure-to-order project which is waiting for “purchase requisition header approval and release” process to finish. Instructions to add this sub-process is provided in procure-to-order user guide.
	Form	Purchase Requisition Header Approval	This Approval Form is used by the approver to view requester's details. The Purchase header and line-item details can be viewed here. The Approver can approve (to the next level if it exists) or reject the request.
	Form	PR Exception Notification	This is the notification Form and responsible for displaying list of validation errors for PR line items.
	Form	PR Release Exception Notification	This is the notification Form and responsible for displaying list of release errors for PR line items.
	Form	PR Release Notification	This is the notification Form and responsible for displaying PR header data and list of released PR line items.
	Decision	PR Header Approver Determination	This is the decision and responsible for providing approver details based on business rules defined.
	Decision	Validate Line Item	This is the decision and responsible for validating all PR

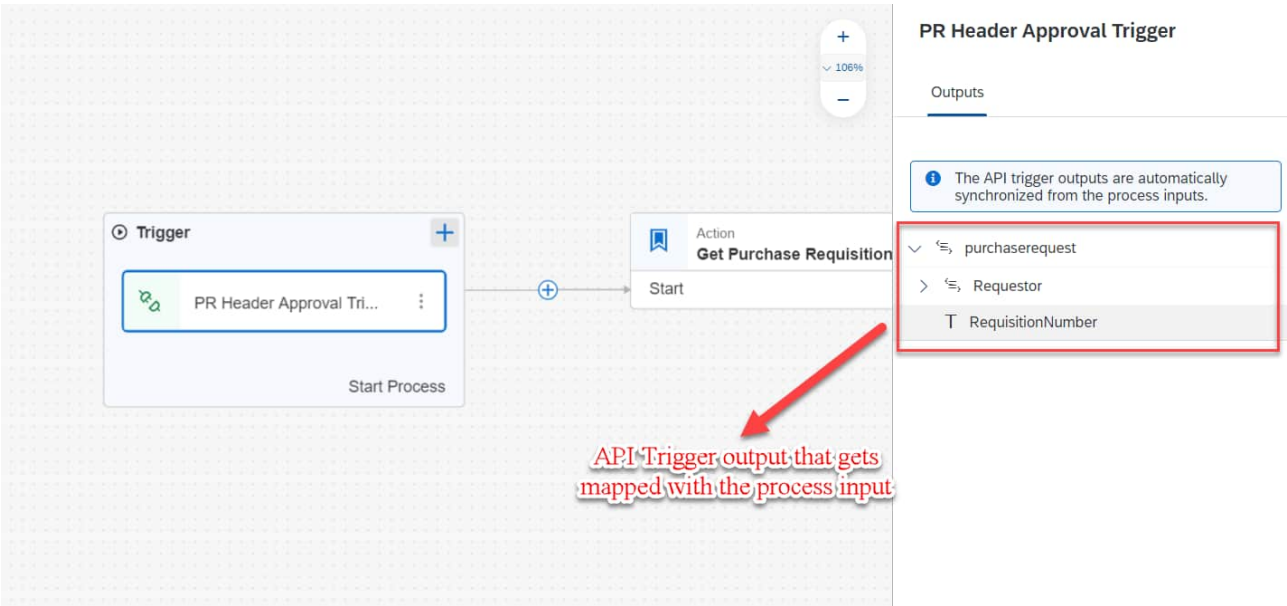
			line items based on text rules defined.
	Decision	PR Header Determine Process Admin	This is the decision and responsible for providing process admin details based on text rule defined.
	Decision	Purchasing Group Value Help	This decision is used to define values for purchasing group that appears in the UI5 screen
	Automation	Calculate Net Amount	This Automation is used to calculate net amount (Price * Quantity) for all line items in Purchase Request.
	Automation	Release PR LineItems	This Automation is used to release all PR line items after Purchase Request is approved.
	Mail	Approval Notification	This Email is responsible to notify the approver and requester saying that request has been sent for approval.
	Mail	Auto Approve Notification	This Email is responsible to notify approver is not required and PR is auto approved.
	Mail	Admin Notification for Approver Not Defined	Email is used to notify the process administrator when approver is not defined.
	Mail	Approval Confirmation	This Email notification is responsible to notify the requester after PR approved by approver.
	Mail	Rejection Notification	This Email notification is responsible to notify the requester when PR is rejected by approver with comments.
	Action	Get Purchase Requisition Detail	This Action is used to get the purchase requisition line-item details from the backend ECC system.
	Action	Get Purchase Requisition Details to Release	This Action is used to get the purchase requisition line-item details from the backend ECC system.
	Action	Update Purchase Requisition Line Item	This Action is used to update purchase requisition line-item details from the backend ECC system.

	Action	Sendback Message to Procure to Order Process Action	This action is used to call 'Procure to Order'(parent process) process from Purchase Requisition Header Approval and Release' process in an orchestration mode. The POST API used within the action project is used to give the control back to parent process once the requisition is released in the current process.
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Process & Triggers

API Trigger

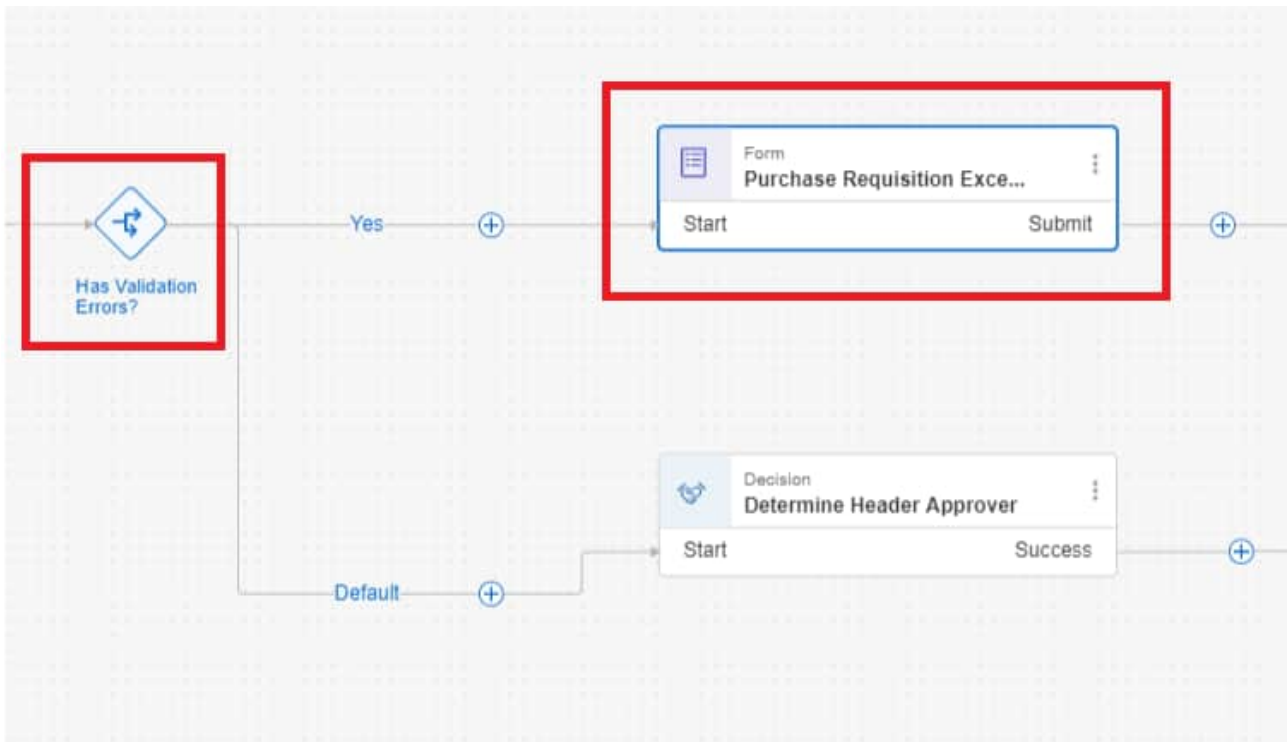
This process gets triggered after successful deployment & submission of purchase request details through SAP UI5 application. For this API trigger (PurchaseRequisitionTrigger) is configured in the main process which is responsible for getting purchase request details from SAP UI5 application & its output is automatically mapped to the configured process input.



Forms

Purchase Requisition Exception Notification Form:

This Form gets trigger if validation failed for purchase requisition line items and validationResult field is true.



The forms are editable, and you may add additional layout and input fields to the forms by drag and drop them from the side menu.

↶ ↷
Other users won't be a

H₁
Headline 1

H₂
Headline 2

A4
Paragraph

T
Text

☰
Text Area

☰
Dropdown

⦿
Choice

☑
Checkbox

Number

📅
Date

📎
File

📊
Table

🔗
Link

Purchase Requisition Line Items Exception Notification

Your purchase requisition line items data has one or more discrepancies. This requires resolution from your side. Please check on the items below and take necessary actions to resolve them.

Validation Details:

Validation Info: ⓘ

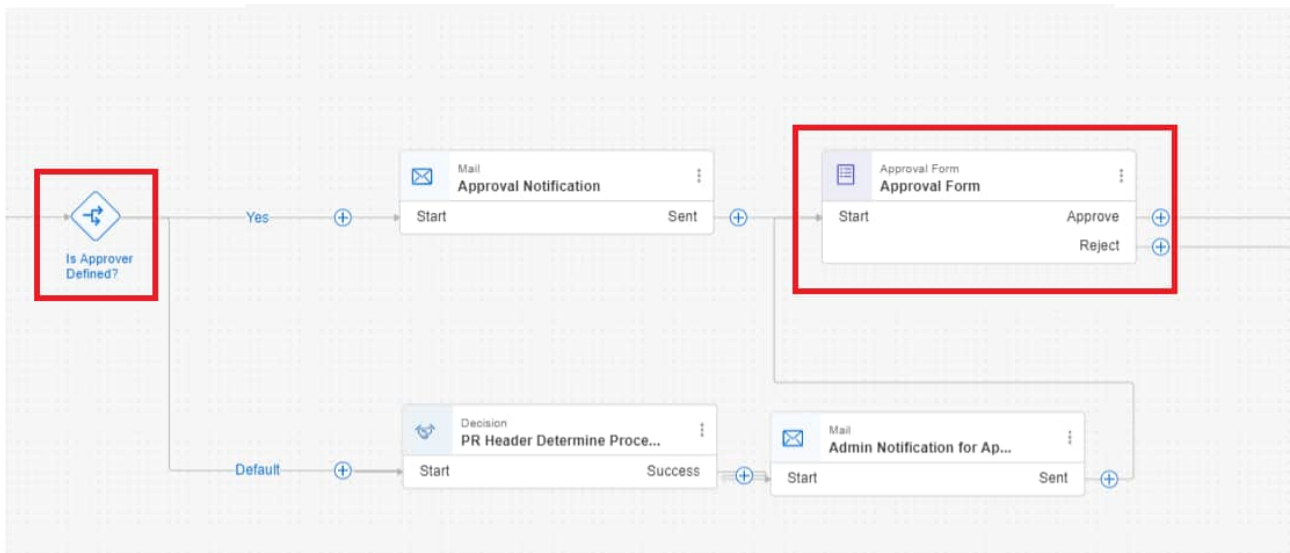
LineItem ⓘ	Validation Description ⓘ	Validation Success ⓘ
Prepopulated Field T	Prepopulated Field T	☐

Please respond by clicking SUBMIT button to acknowledge the receipt of the exception notice.
If you have any questions regarding this notice, access Help Center to find documentation or submit a support case.

+ Drag any field or click to add here

Approval Form

This Form gets trigger once approver is determined, and approver email & group email fields are not empty.



The screenshot shows the 'Purchase Requisition Header Approval' form. The form is titled 'Purchase Requisition Approval Request'. It contains two main sections: 'Purchase Requisition Header Details' and 'Purchase Requisition Item Details'.

Purchase Requisition Header Details:

- Requisition Date: Prepopulated Field
- Requested by: Prepopulated Field
- Requestor Number: Prepopulated Field

Purchase Requisition Item Details:

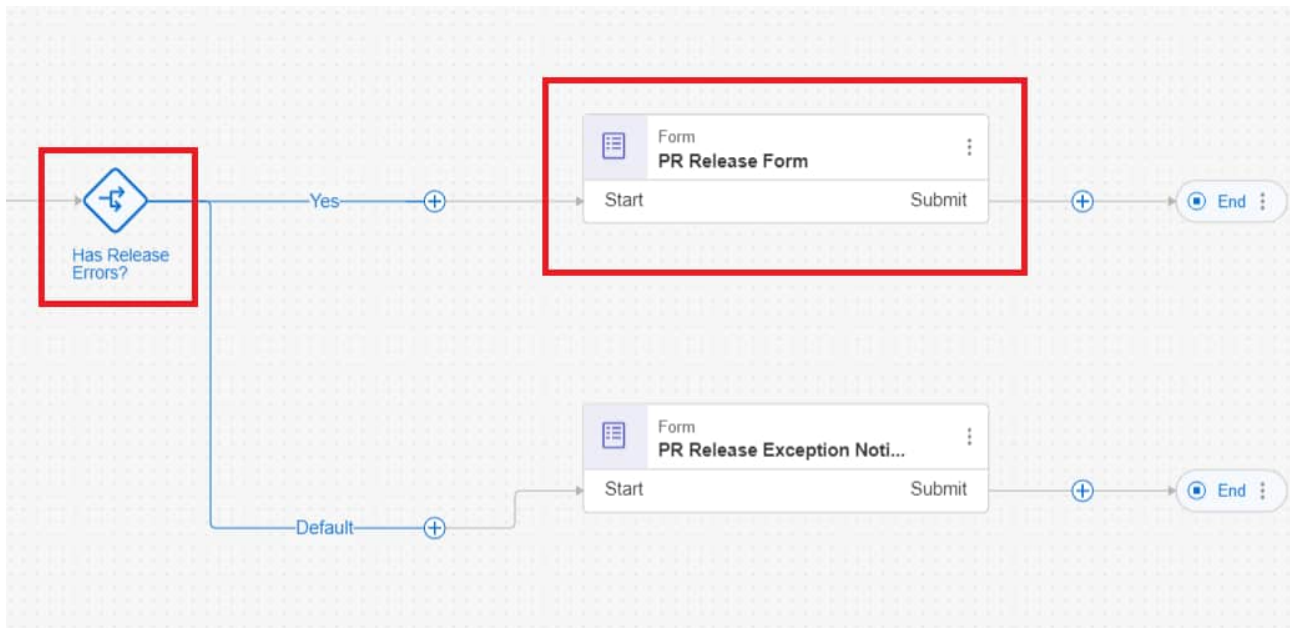
Item Table:

Material	Short Text	Plant	Delivery Date	Quantity	Unit of measure	Price	Currency	Purchasing Group	Purchasing Org	Document Type
Prepopulat...	Prepopulat...	Prepop...	Prepopulated F...	Prepopulat...	Prepopulated Field	Prepop...	Prepopulat...	Prepopulated Field	Prepopulated Field	Prepopulated Field

Comments: Enter Text

PR Release Form

This Form gets triggered if **has release errors** condition is **true** (refer below screenshot) and PR line items are released successfully.



Your purchase requisition has been released. Please find the below details for your reference.

Your Purchase Requisition Header Details:

Requestor Email 
 T

Requisition Date 
 T

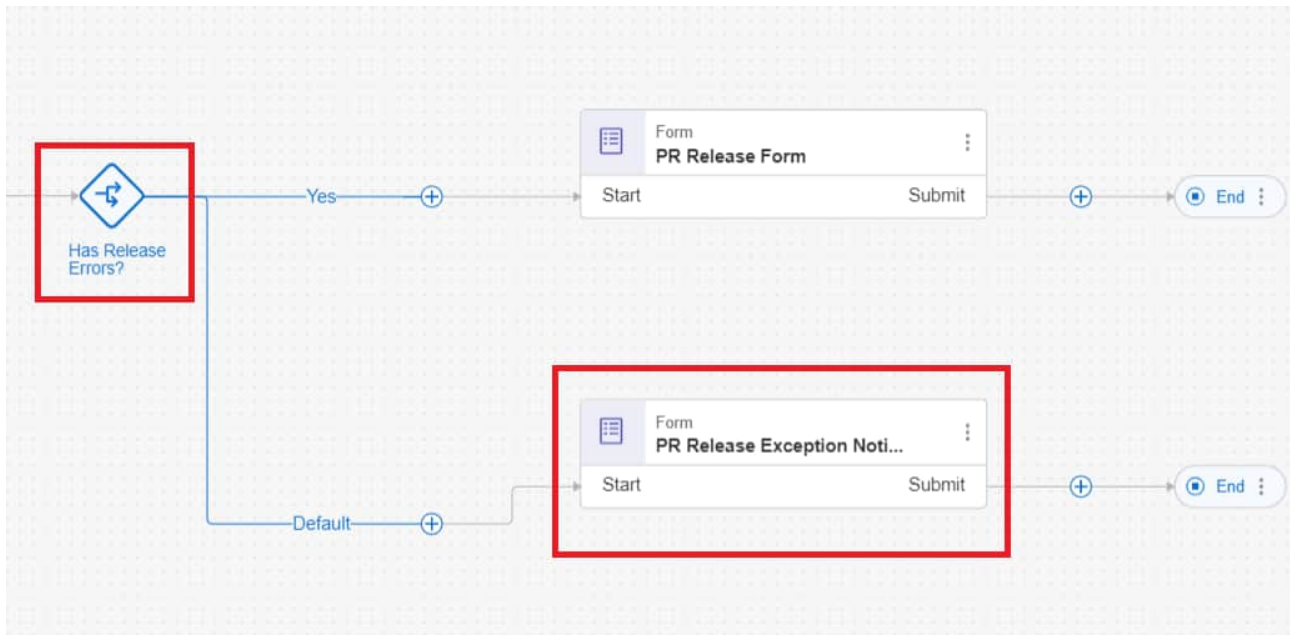
LinItem Data 

Material 	Short Text 	Plant 	Delivery Date 	Price 	Unit of measure 	Currer
Prepopulat... T	Prepopulate... T	Prepop... T	Prepopulated Fi... 	Prepop... T	Prepopulated Field T	Prepo

Please respond by clicking SUBMIT button to acknowledge the receipt of the release notice.

PR Release Exception Notification

This Form gets triggered if **has release errors** condition is **false** (refer below screenshot) and PR line items are not released.



Your purchase requisition line items were not released. Please check on the items below and take necessary actions.

Your Purchase Requisition Header Details:

Requestor Email T

Requisition Date

PR Release Details:

Release Info:

LineItem	New Release Status	CODE	Message
<input type="text" value="Prepopulated Field"/> T	<input type="text" value="Prepopulated Field"/> T	<input type="text" value="Prepopulated Field"/> T	<input type="text" value="Prepopulated Field"/> T

Please respond by clicking SUBMIT button to acknowledge the receipt of the exception notice.
If you have any questions regarding this notice, access Help Center to find documentation or submit a support case.

Actions

For each action, there is an associated Action Project, which also gets imported when you import the business project. If you have to modify the Action input and output, then you have to update the Action Project, release and publish the changes. Follow this [documentation](#) to learn more about Action Projects

Get Purchase Requisition Details

This Action is triggered when process starts. Purchase requisition number can be send as input to action as shown below:

The screenshot displays a process flow on the left with a 'Trigger' block labeled 'PR Header Approval Tri...' and an 'Action' block labeled 'Get Purchase Requisition ...'. The action is configured with 'Start' and 'Success' events. On the right, the 'Inputs' tab for the 'Get Purchase Requisition Detail' action is shown. It includes an 'Accept' field with the value 'Select item' and a 'NUMBER' field with the value 'RequisitionNumber'.

Result of this action will be seen in this format:

The screenshot shows the same process flow as the previous image. The 'Outputs' tab for the 'Get Purchase Requisition Detail' action is displayed on the right. It shows a hierarchical structure of the output data, including 'result', 'BAPI_REQUISITION_GETDETAIL_RESPO', 'REQUISITION_ITEMS', and 'Item'. The 'Item' field is expanded, showing a list of requisition line items with various attributes such as 'ACCTASSCAT', 'ADVANCE', 'AGMT_ITEM', 'AGREEMENT', 'ASSIGNED', 'BATCH', 'BOMEXPL_NO', 'BUDGET_PERIOD', 'C_AMT_BAPI', 'CH_ON', 'CHANGE_ID', 'CHANGEABLE', 'CLOSED', and 'CMMT_ITEM'.

Update Purchase Requisition Line Item:

This Action is triggered when PR Line Item REQ_BLOCKED value is "3". Purchase requisition line item data can be send as input to action as shown below.

Release PR Lineltems

Release

Save

11

Is REQ_BLOCKED == 3?

12

Step6.currentMemb...

14

Check Requisition Block

15

Update Purchase Requisition...

16

Check update errors

17

updateResponse flag is true

18

Add Update failed data

Step4.WFBackendC...

Step6.currentMemb...

Step15.updateResp...

default

Add Lineltem Release Errors t...

Update Purchase Requisition

Step name*

Update Purchase Requisition Line Item

Parameters Tester Advanced

Configuration

destination:*

PurchaseRequisitionHeaderApproval

Input Parameters

Accept:

A-z

ItemData:

Custom Data

ItemNew:

Custom Data

FUND:

6 currentMember.FUND

UNIT:

6 currentMember.UNIT

BATCH:

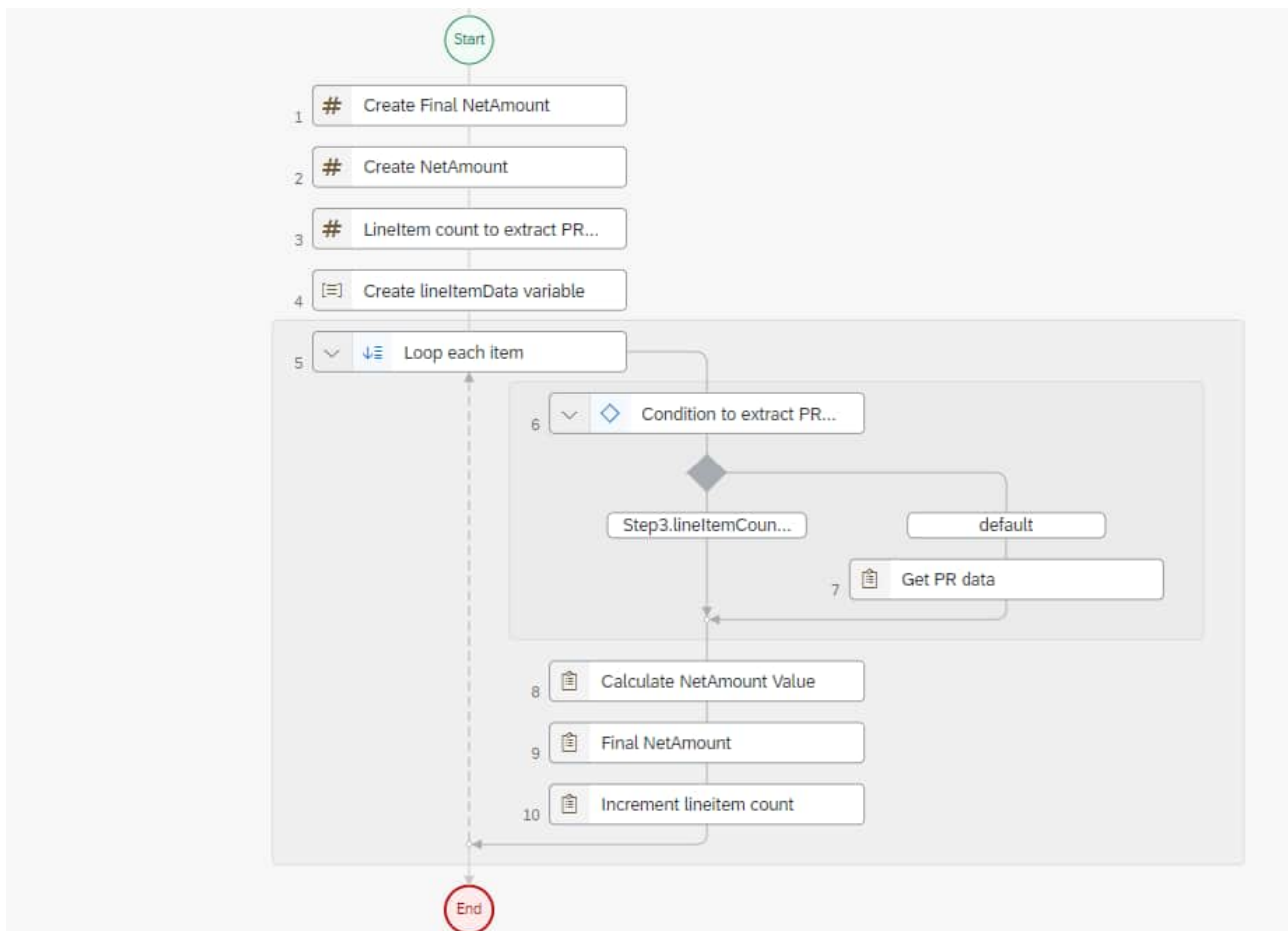
currentMember.BATCH

Result of this action will be stored in a variable, and this will have values as TYPE, CODE and MESSAGE.

Automations

Calculate Net Amount:

This automation is used to calculate net amount of all PR line items. Input of this automation is line items list with quantity and price.

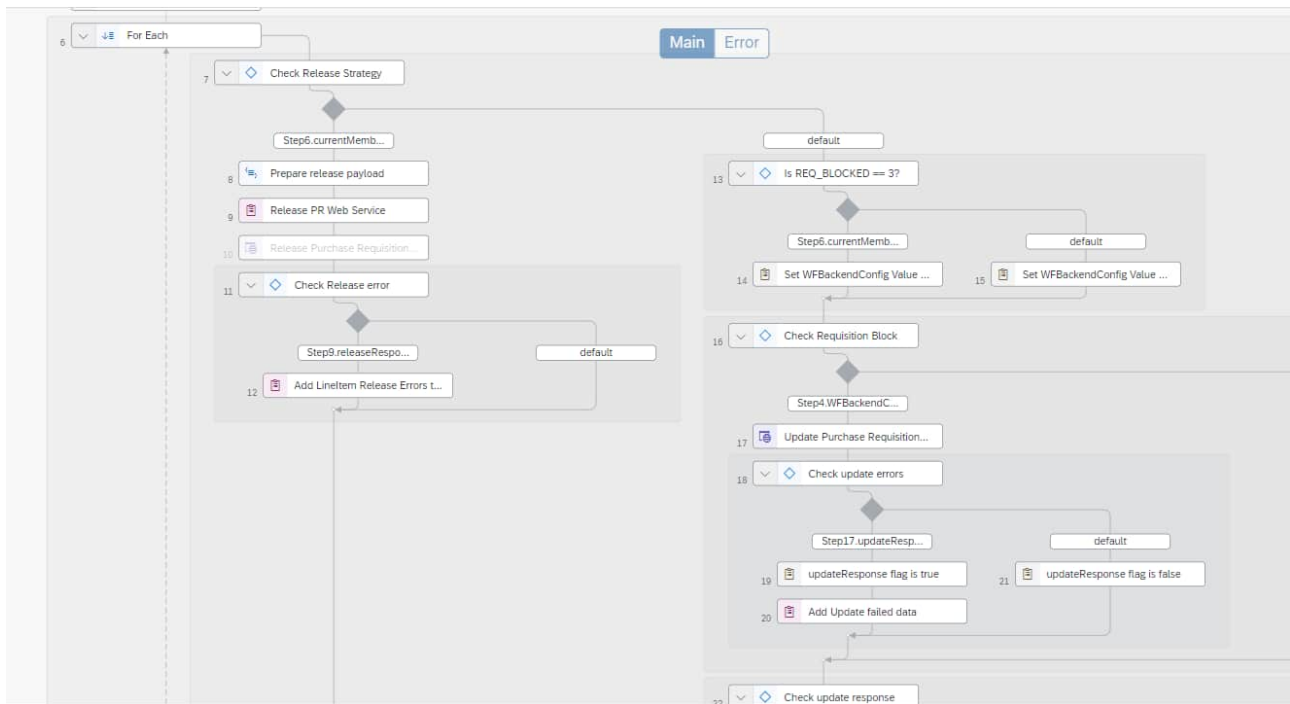


- Step 5: loop each line item data
- Step 7: Read first line item data with document type, material group, purchasing group, plant, purchasing organisation and etc. to display in forms and emails as a output data.
- Step 8: Calculate amount for current line item by multiply quantity with price.
- Step 9: Add current amount to the final net amount.

Result of this automation will be Net Amount calculated for all the line items and maintaining first line item data to display required information in output forms and emails.

Release PR LineItems:

This automation used release line items one after other. Input of this automation is line items list of purchase request.



- Step 6: foreach loop on *purchase request line items* details
- Step 7: Check release strategy is not empty.
- Step 8: Prepare payload to release line item

payload details:

Input field	Values
LinItem	Current PR line item in the loop
Request Number	Purchase Request number
REL_CODE	Enter REL_CODE required for current purchase request.
No_commit_work	Enter value if you wish to add.
Use Exceptions	Enter value as 'X' to get any exceptions are there.

- Step 13: If release strategy is empty then it will check REQ_BLOCKED is with value '3'.
- Step 16: If REQ_BLOCKED is true
 - Step 17: Run Update action to change REQ_BLOCKED value to null.

Payload for Update action:

API Attributes	Values
Path	https://<cloudintegrationruntimeurl> http/PURCHASE_REQUISITION_CHANGE
HTTP Method	POST
Payload sent by Process (sample data)	{ "ItemData":{ "ItemOld":{ "PREQ_ITEM":"00010", "REQ_BLOCKED":"3", } ItemNew":{ "PREQ_ITEM":"00010", "REQ_BLOCKED":""," }

	<pre> } } </pre>
Response Payload from integration flow	<pre> Success (Status = 200): OK { "BAPI_REQUISITION_CHANGE_RESPONSE": { "RETURN": { "item": { "TYPE": "S", "CODE": "002", "MESSAGE": "Instance 10803222 of object type PurchaseRequisition has been changed.", "LOG_NO": "", "LOG_MSG_NO": "000000", "MESSAGE_V1": "PurchaseRequisition", "MESSAGE_V2": "10803222", "MESSAGE_V3": "", "MESSAGE_V4": "" } } } } </pre>
Payload Type	Application / JSON

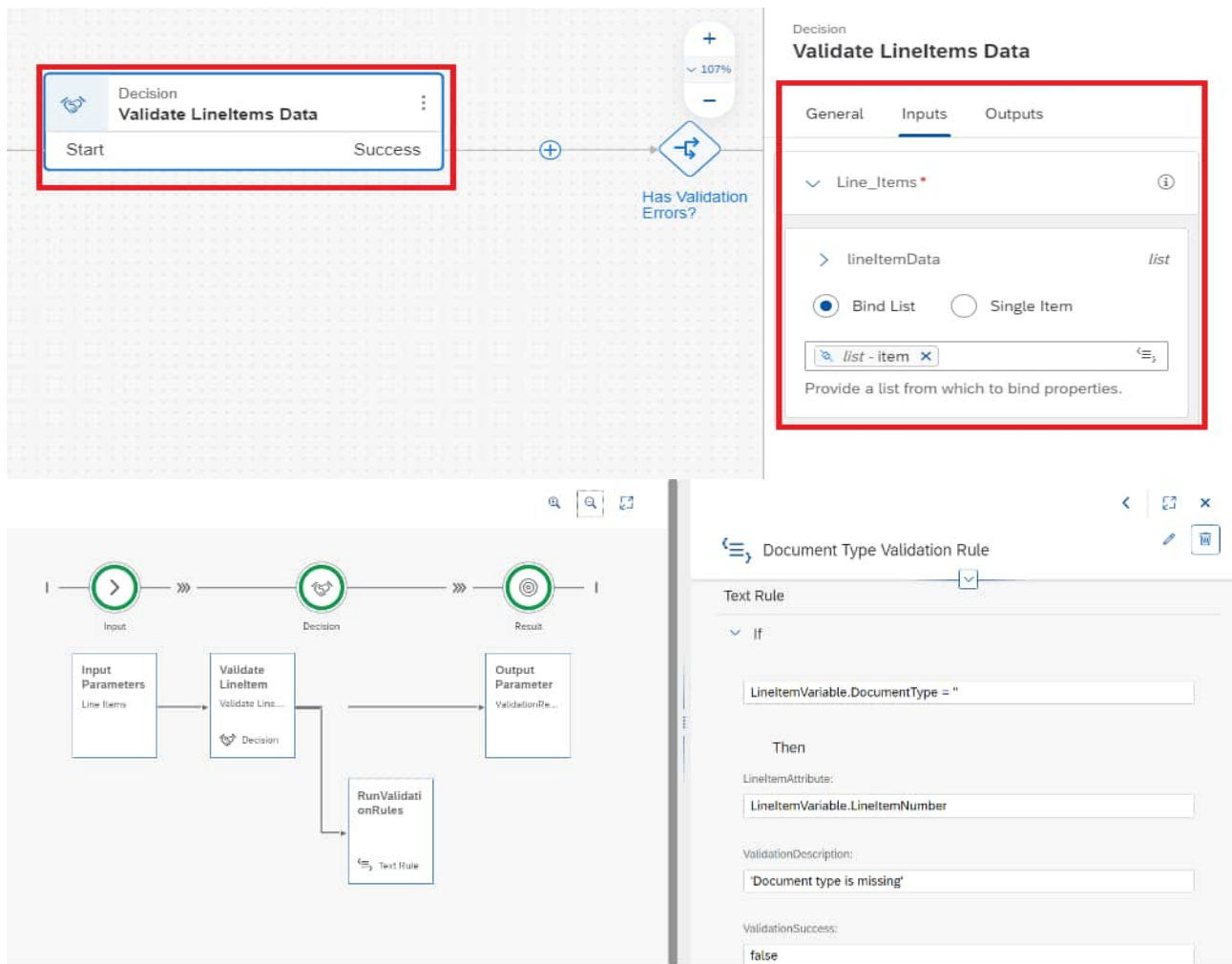
- Step 18: Check If TYPE is 'E'.
- Step 24: Check release strategy after REQ_BLOCKED is updated to null.
- Step 26: Run web service to release line item.
- Step 31: If REQ_BLOCKED is not updated to null, then add the current line item data to release errors.
- Step 34: Calculate release errors count.

Result of this automation will be release error details for all line items and release errors count.

Decisions

Validate Line Item:

This decision is used to validate PR line items data based on text rules defined inside.



PR Header Approver Determination:

This decision is used in the Approval process step to determine the potential approver(s) based on different Purchase Requisition attributes.

The image displays the SAP Decision Manager interface for configuring a decision named "Determine Header Approver".

Top Left: A small preview of the decision node in a process flow, labeled "Decision Determine Header Approver" with "Start" and "Success" states.

Top Right: The "Inputs" tab for the decision. It shows a list of input parameters for "LinItemData":

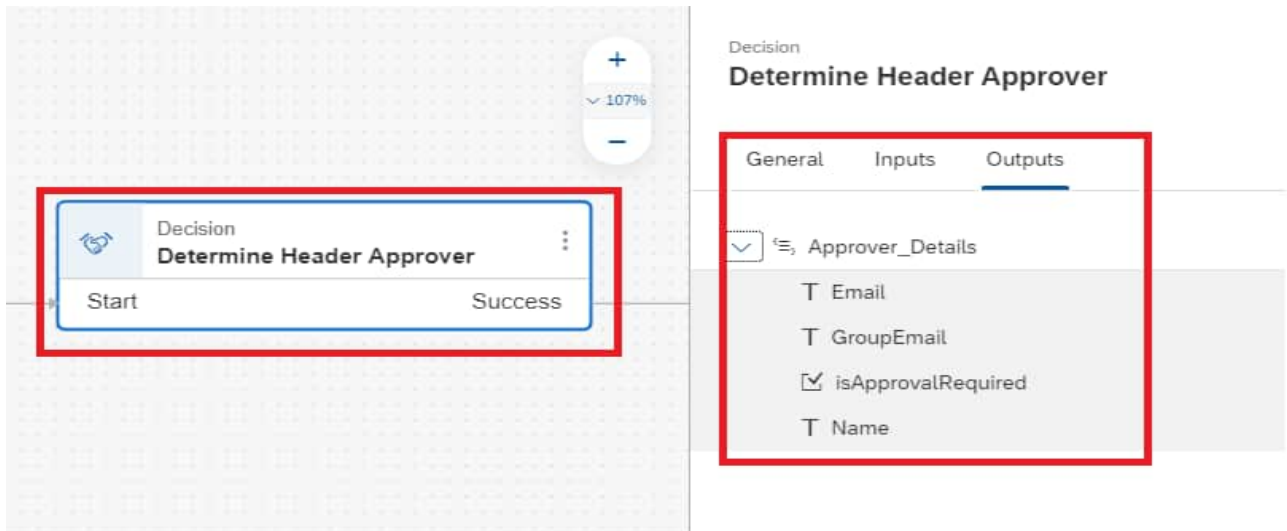
- Currency: CURRENCY (Type: T)
- DocumentType: DOC_TYPE (Type: T)
- LinItemNumber: PREQ_ITEM (Type: T)
- MaterialGroup: MAT_GRP (Type: T)
- NetAmount: NetAmount (Type: #)

Bottom Left: A process flow diagram showing the decision node in the center. It receives input from "Input Parameters" (LinItemData) and outputs to "Output Parameter" (Approver Details). Below the decision node is a "Decision Table" configuration.

Bottom Right: The "Decision Table" configuration for the "Determine PR Header Approver" decision. It includes a "Hit Policy" set to "FIRST MATCH".

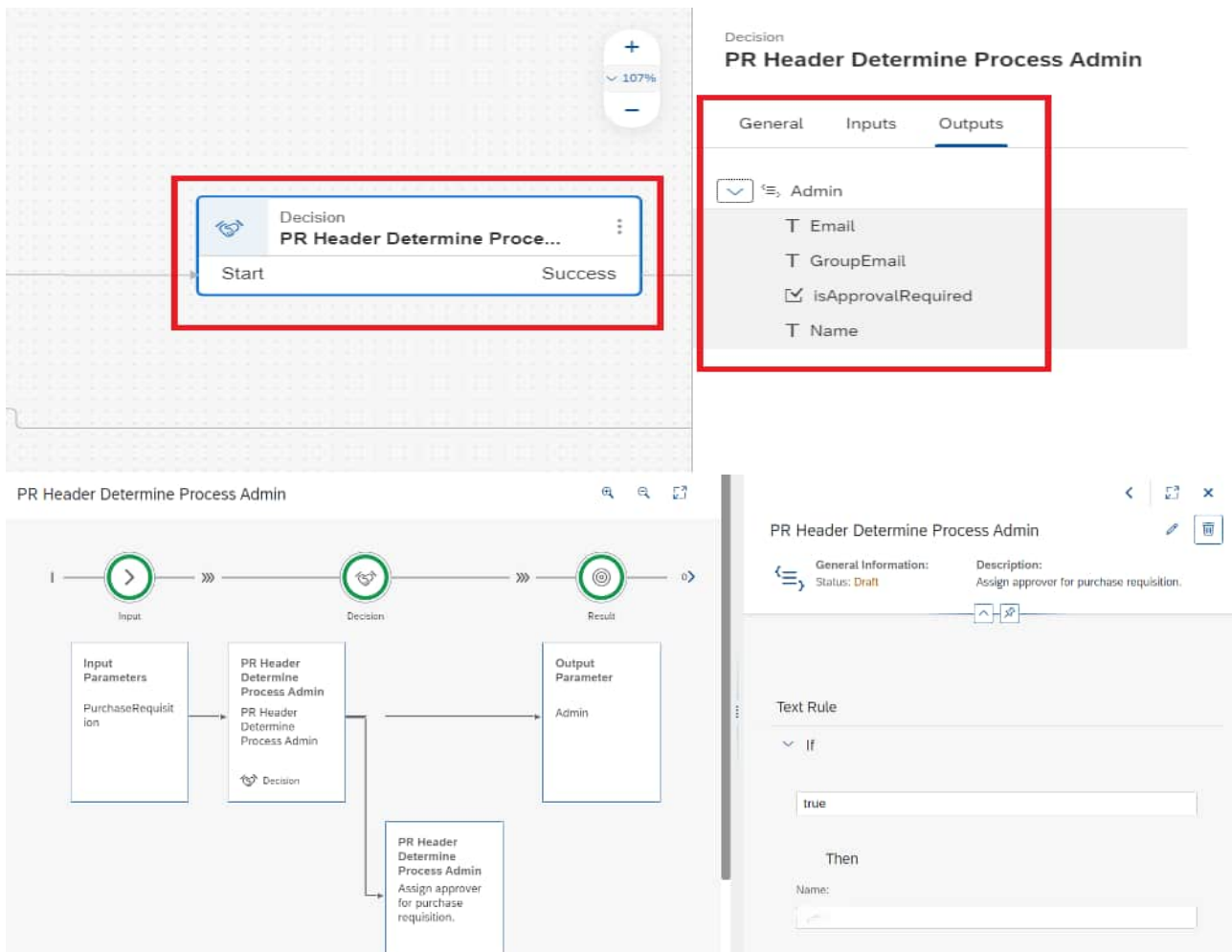
if	Then
DocumentType = PurchasingOrg = Net Amount	isApprovalRequired
'ZNBR' '0001' > 500	true
'ZNBR' '0001' > 0	false

Output of this decision will be approver details like below.



PR Header Determine Process Admin:

This decision is used to determine process administrator to assign approver when approver is not defined.



Email Notifications

The multiple email blocks throughout the process serve to:

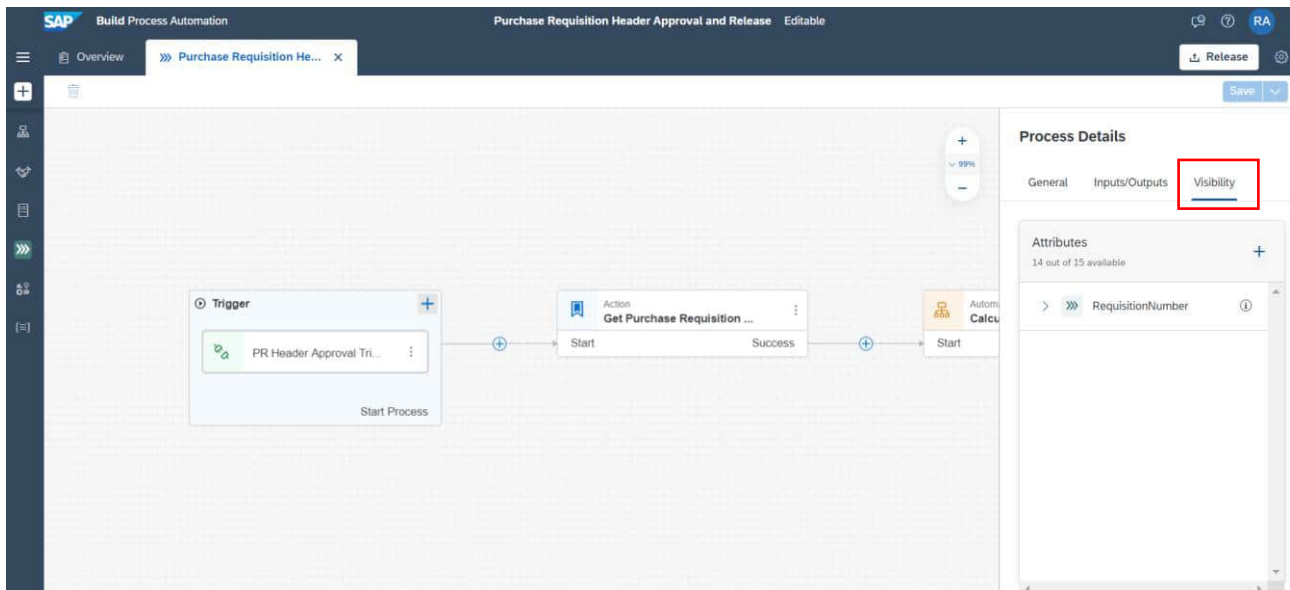
- Notify the Requester via email that the request has been approved/rejected/auto approved for purchase requisition.

The image below shows how the mail is configured, in the template, to send an email to the requestor after the purchase request is successfully approved.

The screenshot displays the SAP Mail configuration interface for an "Approval Notification" email. The left pane shows the "General" tab with the "Step Name" set to "Approval Notification". Under "Mail Header", the "To" field is configured with "Email" and "GroupEmail" as recipients, and the "Subject" is "Approve Purchase Request: » RequisitionNumber". The "Mail Body" section has a red box around the "Open Mail Body Editor" button. A green message at the bottom states "Mail Body has content. Open the editor to view." The right pane, titled "Edit Mail Body", shows the email content with a "Value Binding" section. A red arrow points to the "Determine Header Approver" block, which includes fields for "Email", "GroupEmail", "Name", and a checked "isApprovalRequired" checkbox. The email body text reads: "Dear User, Purchase request » RequisitionNumber created with below details awaits your approval:" followed by a list of details: "Purchase Request » RequisitionNumber", "Requisition Date » RequisitionDate", "Requested by: » Email", "Created by: » CreatedBy", and "Document type » DocumentType". The body concludes with "Please visit your MyInbox to approve the purchase request. This is an automatically created message." and "Apply" and "Cancel" buttons at the bottom right.

Process Visibility Scenario

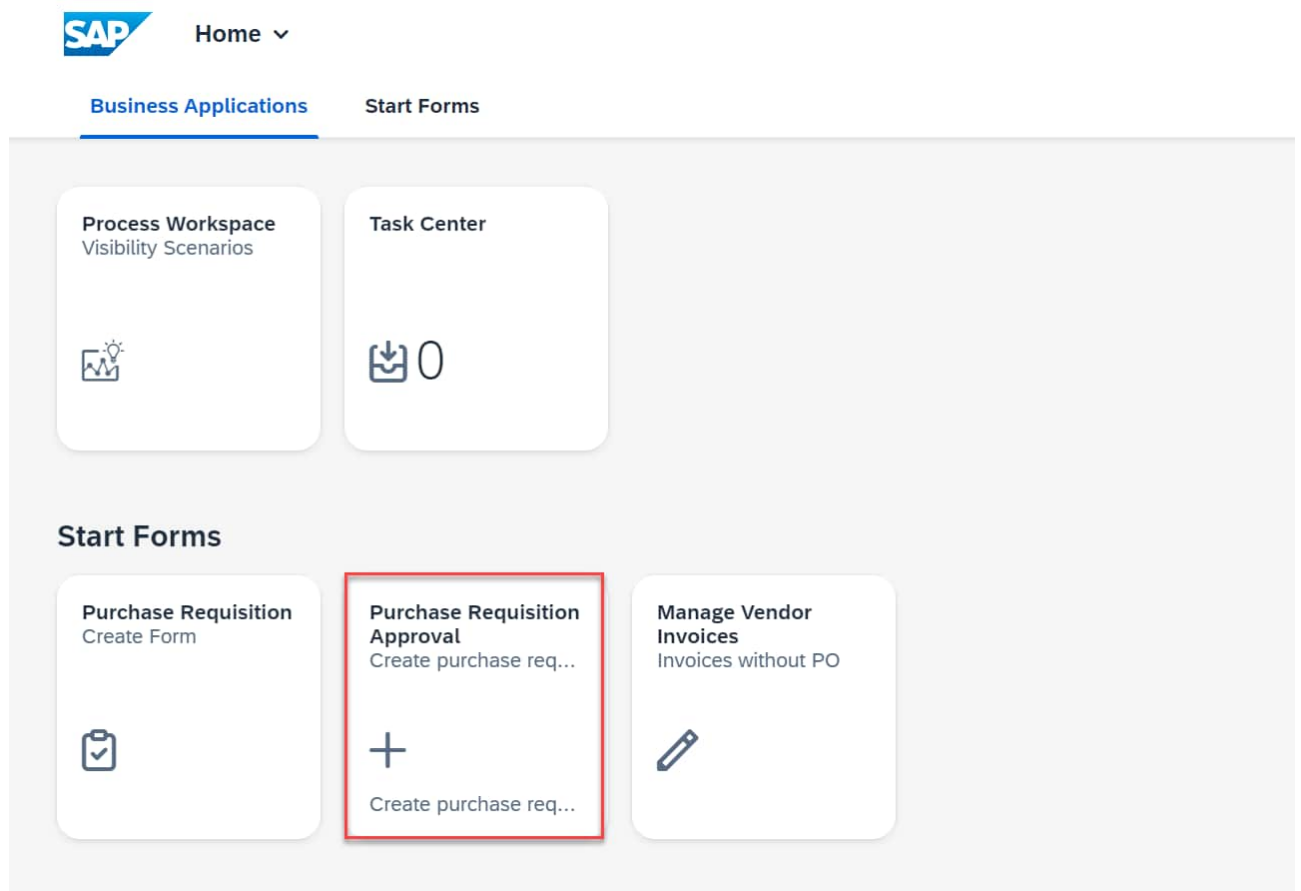
The visibility scenario is a dashboard which allows business users to track relevant process KPIs and statuses. A default dashboard is provided with this template, and it can be customized by selecting attributes from your process which you want to track in the process dashboard.



Trigger Process

This process can be triggered by submitting the SAP UI5 application form. Follow below steps to start the process:

- Access the SAP UI5 start form through SAP Work Zone



- Fill the required header and line item details of purchase request.
 - This SAP UI5 application also includes feature of search help that will allow user to search with known values to get the correct field value.
 - It also includes purchase request fields whose values gets auto filled based on the dependent selected field value

For example:

Based on the Material selected, the Plant values will be automatically retrieved in the item details. If the Material is not mapped with the Plant names in SAP ERP, user has to map them manually and retry the request here.

Also, on the selection of Plant name, the unit of measure, currency and price will be automatically populated.

- Click on Add to Cart If purchase request will have more than one line item.
- Finally, on click of 'Order' button, the validations are performed (mandatory field checks, validate the information provided with header and line item data) and appropriate messages will be shown to the user.
- If the input data validation is successful, then it will create purchase request and pass it as input in the process.

Dependencies

Technical Dependencies

The below component versions are used to generate the mentioned Purchase Requisition Header Approval and Release process.

Component	Version
Desktop Agent	3.17.55

Component	Version
SDK Core	1.39.24
SDK Excel	1.39.24

Note: Automation will work with the version greater than above mentioned version

Support

There is no support available for template content. If you experience general issues with SAP Build Process Automation, raise an incident via SAP Support Portal on **BPI-PA-BPC** component.

This template can be modified using SAP Process Automation. For example: add decision to determine the approver based on a certain business logic or add an action to post collected information to backend SAP system. Refer [Help Portal](#) for more details.

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