

PUBLIC

SAP Build Process Automation

Automate Posting of Goods Receipt Configuration and User Guide

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Change Log

Version	Date	Description
1.0.0	September 28, 2023	Document Created

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

1. Overview: In this section, you will get a quick overview of the use case, what high-level components are used and how the template works in a nutshell. Prerequisite section provides information of different services of SAP Business Technology Platform (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) 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 My Inbox 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.

Notes:

- 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.
- This template content is to accelerate your solution development. You must 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 and its capabilities.

Overview

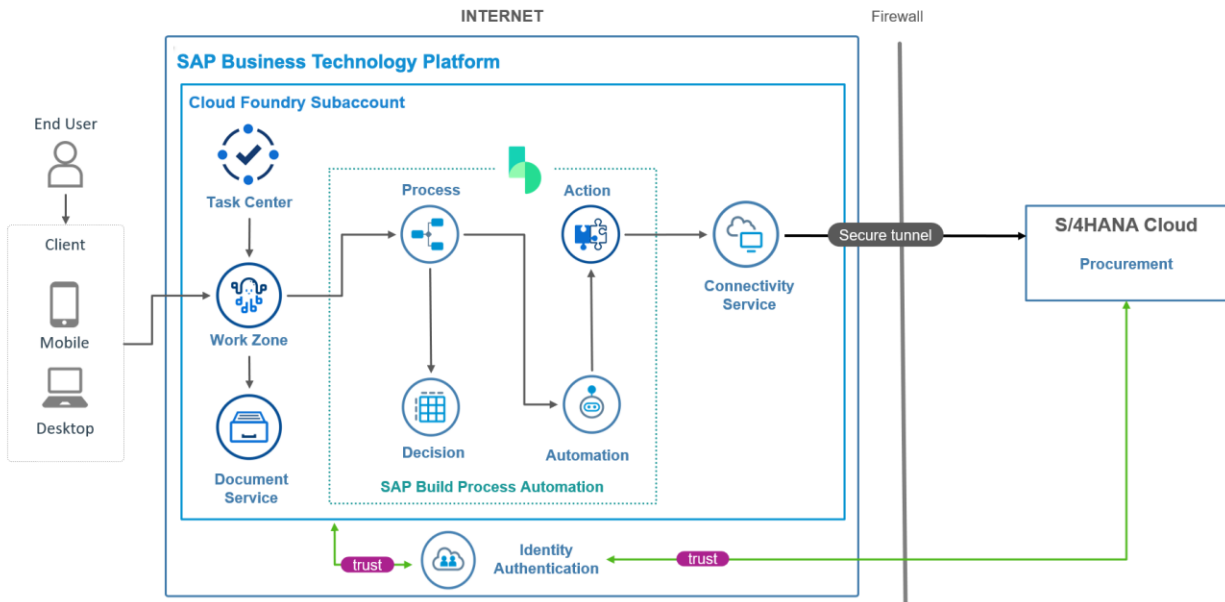
This document provides information about setting up the SAP Business Technology Platform account to consume the SAP Build Process Automation **Automate Posting of Goods Receipt** template. The main audience of this document are technical IT/system administrators.

This package facilitates reading of the purchase orders and creating the goods receipt for the purchase orders.

Features:

- This package provides functionality to get Purchase Order(s) from SAP S/4HANA system based on the selected data in start UI to fill the excel template and send the mail to requestor.
- After reading the excel template, it provides the approval flow for the provided purchase order details based on the determined approver(s).
- After approval task is completed, the template enables the creation of goods receipt for purchase order data.
- It includes automation to automatically generate the log file and send the email to requestor with log File attached.

Process Flow Diagram



Steps:

1. In Start UI, fill required selection criteria and request for download.
2. Read data from SAP S/4HANA system to fill excel template.
3. Email sent with consolidate logs once file downloaded.
4. Process will assign task to approver for approval.
5. Once tasks are approved, the approval input excel file stored in predefined folder.
6. Automation will run and execute input excel files which are stored in predefined folder. Once executed successfully it will email the excel log file to the requester.

Prerequisites

The following SAP Business Technology Platform services are required to consume the content package. Automate Posting of Goods Receipt:

- SAP Build Process Automation to orchestrate the process.
- SAP Cloud Identity Services - Identity Authentication (Optional)
- SAP Connectivity service to establish access to SAP S/4HANA, Public Edition
- SAP Business Technology Platform, Cloud Foundry runtime
- SAP Work Zone, standard or advanced edition for accessing My Inbox and Process Visibility workspaces.
- SAP Business Application Studio for SAP UI5 application
- SAP Document Management Service, Integration Option

Other Prerequisites

For this template to run successfully the following other prerequisites are needed

- SAP Desktop Agent 3.17 or higher
- Outlook mailbox configured on the system where the automations will run to send mails with attachments.

Note:

- This package is designed only to work with the provided folder structure & input template file structures. DO NOT CHANGE any column properties and structure.
- If any changes done in the input template structure, related process & automation implementation also need to be updated to handle those changes.
- You can decide the folder by the key parameters where the input template should be placed.
- Input Template, Log Report template and approval input template is placed as File artefact.
- If those files are not active, the file will not be executed in Automation.
- The input excel has 2 sheets 'Field List' and 'Purchase Orders'.
 - In **Field List sheet**, the field details are updated.

Sheet Name	Group Name	Field Name (Technical)	Field Description	Importance	Type	Sample Value	Remarks
Purchase Orders (mandatory)							
Purchase Orders	Header	CompanyCode	Company Code	Mandatory	Text	1110	
		PurchasingGroup	Purchasing Group	Mandatory	Text	001	
		PurchaseOrder	Purchase Order	Mandatory	Text	4700000110	
	Item	PurchaseOrderItem	Purchase Order Item	Mandatory	Text	10	
		Supplier	Supplier	Mandatory	Text	1000441	
		Material	Material	Mandatory	Text	111	
		Short Text	Short Text		Text	F-MIX 27x9.50-15 HF-1 Gdyr Terra Rib	
		Plant	Plant	Mandatory	Text	1110	
		StorageLocation	Storage Location	Mandatory	Text	111A	
		OrderQuantity	Order Quantity	Mandatory	Decimal	1	
		PurchaseOrderQuantityUnit	Base Unit	Mandatory	Text	EA	
		DeliveryDate	Delivery Date	Mandatory	Date	10/31/2023	
		TotalValue	TotalValue	Mandatory	Decimal	100	
		Currency	Currency	Mandatory	Decimal	USD	

- In the **Purchase Orders** sheet the data will be fetched from the SAP S/4HANA.

CompanyCode	PurchasingGroup	PurchaseOrder	PurchaseOrderItem	Supplier	Material	ShortText	Plant	StorageLocation	OrderQuantity	PurchaseOrderQuantityUnit	DeliveryDate	TotalValue	Currency
Text	Text	Text	Text	Text	Text	Text	Text	Text	Decimal	Text	Date	Decimal	Decimal
Header			Item										
Company Code	Purchasing Group	Purchase Order	Purchase Order Item	Supplier	Material	Short Text	Plant	Storage Location	Order Quantity	Base Unit	DeliveryDate	TotalValue	Currency



- The fetched data will be downloaded and saved in the excel file "**PurchaseOrderInput_<Timestamp>.xlsx**" in the folder "Downloaded Data" which is placed in the path where you have defined in the Environment Variable (**DownloadPath**).
- The Approval Input excel is generated in the name of "**POApprovalInput_<Timestamp>.xlsx**" to display the request details for goods receipt creation and will be saved in the **To be Processed** folder which is placed in the path you have mentioned in the Environment variable (**DownloadPath**)
- After Approval task done the file "**POApprovalInput_<Timestamp>.xlsx**" in **To be processed** folder will be moved to the folder Processed which is placed in the path you have mentioned in the Environment variable (**DownloadPath**).
- The Log template has one sheet 'Logs'.
 - In log sheet the purchase order details will be fetched with the post status and error message
- After POST call the Log report will be generated in the name of "**LogReport_<Timestamp>.xlsx**" and will be saved in the Log Report folder which is placed in the path you have mentioned in the Environment variable (**DownloadPath**) and notifies the requester through email about the completion with the log report attached to it.

Configuration Guide

Automate Posting of Goods Receipt template requires SAP Build Process Automation subscription or CPEA contract. Follow the [setup and configuration section](#)

Setup SAP S/4HANA

Configure SAP S/4HANA Destination

Configure Destination to Connect to SAP S/4HANA Cloud System

Destination Property	Value
Name	<Name>
Type	HTTP
URL	<SAP S/4HANA endpoint> Example: https://<s4system-name>-api.xxxxxxxx
Proxy Type	Internet
Authentication	Basic Authentication
Username	<Username> of the SAP S/4HANA Communication User
Password	<Password> of the SAP S/4HANA Communication User

Note: For SAP S/4HANA Cloud and on-premise, the API should be accessible over internet proxy type, as iRPA Automation does not support on-premise as proxy type as explained in the [SAP Note](#).

Note: Add the following additional properties to the destination

Destination Additional Property	Value
HTML5.DynamicDestination	True
sap.applicationdevelopment.actions.enabled	True
sap.processautomation.enabled	True

Name: * S4HANA

Type: HTTP

Description: S/4 Hana System

URL: *

Proxy Type: Internet

Authentication: BasicAuthentication

User: *

Password:

Additional Properties

HTML5.Dynam...	true	
sap.application...	true	
sap.processaut...	true	
TrustAll	true	

Setup Communication

To run this template, you must have a communication user, create communication arrangements between the communication user and the following communication scenarios, and assign those communication arrangements to a communication system.

Steps to Create Communication System and Communication Arrangement are available in below documentation links:

[How to Create Communication Systems | SAP Help Portal](#)

[How to Create a Communication Arrangement | SAP Help Portal](#)

[Configuration and Role Details for accessing "Communication Systems" application.](#)

[Configuration and Role Details for accessing "Communication Arrangements" application.](#)

List of communication scenarios to be configured.

Communication Scenario	Related API
Purchase Order Integration (SAP_COM_0053)	Overview Purchase Order SAP Business Accelerator Hub
SAP Analytics Cloud for Planning Integration(SAP_COM_0087)Finance - Cloud Consolidation Data Collection Integration(SAP_COM_0241)Employee Central Financial Master Data Integration(SAP_COM_0441)SAP Analytics Cloud for Liquidity Planning Integration(SAP_COM_0443)Excise Tax Integration(SAP_COM_0568)Procurement - Supplier Quotation Management Integration(SAP_COM_0760)Public Sector API Integration(SAP_COM_0761)	Overview Company Code - Read SAP Business Accelerator Hub
Procurement Master Data Integration (SAP_COM_0116) Procurement - Supplier Quotation Management Integration (SAP_COM_0760)	Overview Purchasing Group - Read SAP Business Accelerator Hub
Material Document Integration (SAP_COM_0108)	Overview Material Documents - Read, Create SAP Business Accelerator Hub

Setup Business Technology Platform Cockpit

Configure SAP Document Management Service

In this template, the Input Template document for Automate Posting of Goods Receipt and any supporting documents can be uploaded in the approval form which are then made available as attachments for review and approval to the respective participants. To upload the document from the form, you will need SAP Document Management Service or equivalent CMIS repository and a corresponding destination in SAP BTP to connect to the repository.

- Follow the instructions to configure [SAP Document Management Service for Attachments](#)
- Add service instance and service key (follow [this](#)) and repository (follow [this](#)) to Configure the Destination
- Configuring destination, refer [Configure SAP Document Management Service Destination](#)

Note: The destination needs to be created with **sap_process_automation_document_store** name.

Configure SAP Build Process Automation Email Destination

Mail notifications are used in this template to send notifications to requestor, approver, and admin during different stages of the process. Follow the instructions to setup mail destination in your SAP BTP Account.

Configuring destination, see [Configure a SMTP Mail Destination](#).

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

User Roles Configuration

To access this template, the business user will need these roles:

Role Collection Name	Purpose
Process Automation Developer	Standard Business User, can model and publish processes
TaskCenterAdmin	Permission to execute calls to the Connector Status API and monitor configured destinations and running background jobs.
ProcessAutomationParticipant	To execute (like accessing MyInbox, running the automations, etc.) this content package, you need to have this role assigned to the respective user.
ProcessAutomationAdmin	To perform process admin activities like accessing monitoring applications etc., you need to have this role assigned to the respective user.
Business_Application_Studio_Administrator	Allows administrators to manage (export and delete) user data.
Business_Application_Studio_Developer	Allows developers to load and develop applications using SAP Business Application Studio.

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

Setup Build Process Automation Content

Standard automation packages released by SAP will be available at the [SAP Build Store](#)

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 “**Automate Posting of Goods Receipt**”
4. Select the “Create from Template” button to add the template into your lobby.
5. After successfully adding the template, navigate back to the lobby to find the “**Automate Posting of Goods Receipt**” template available for use.

Caution: Be sure to select the **Project Type** as “**Process Automation**” in the filters.

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. In case any enhancement needs to be made then follow the reference links below.

Create an Automation

<https://help.sap.com/docs/build-process-automation/sap-build-process-automation/create-automation-process-automation>

Create a Business Process

<https://help.sap.com/docs/build-process-automation/sap-build-process-automation/create-business-process>

Create a Forms

<https://help.sap.com/docs/build-process-automation/sap-build-process-automation/create-form>

Create a Decision

<https://help.sap.com/docs/build-process-automation/sap-build-process-automation/create-decision>

Create a Datatype

<https://help.sap.com/docs/build-process-automation/sap-build-process-automation/create-data-type-process-automation>

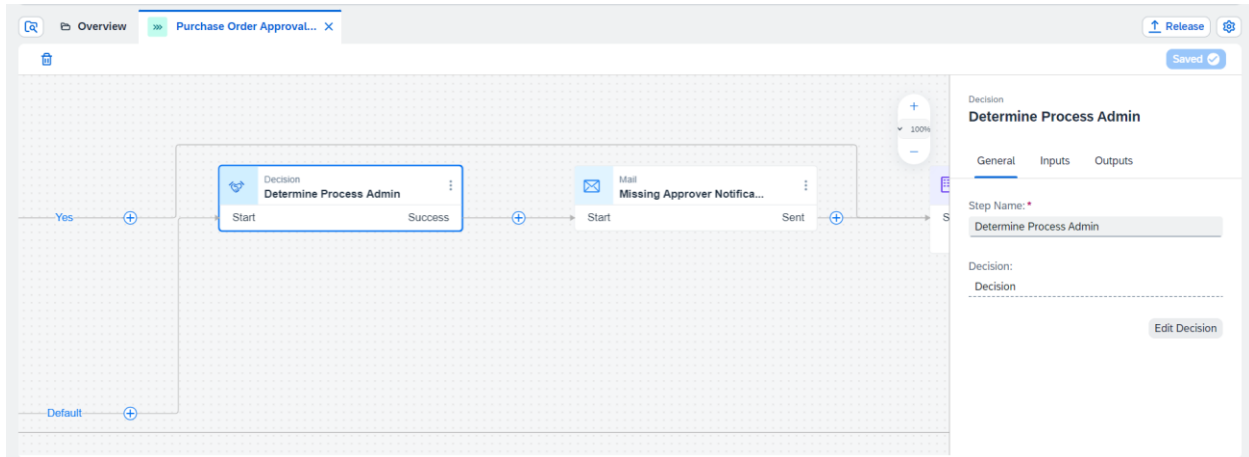
Configure Decisions

We have 3 decisions in this template. We can configure the rules as per our requirements.

Determine Process Admin:

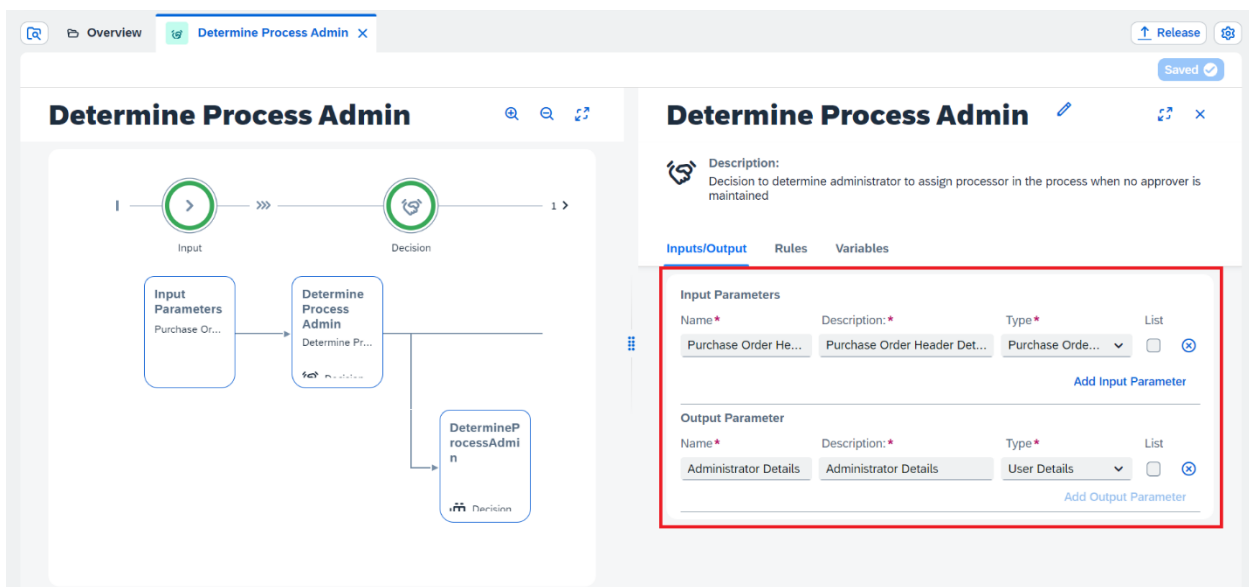
This decision is used to maintain the details of the administrator (i.e., email id, group id, user id), who will assign the approver if approver is not maintained.

This decision can be selected from process as shown below:



These decisions must 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.



The attributes used in the decision rule can be selected as per requirement.

Edit Rule

1 Rule Details — 2 **Configure Conditions** — 3 Configure Results — 4 Review

2. Configure Conditions

Click a vocabulary or its fields to configure the conditions.

Vocabulary

Search vocabulary or its fields

Input / Output

- Purchase Order Header Details
- Administrator Details

Condition Details

Condition Attributes	Label	Operator (Optional)
<input type="checkbox"/> Purchase Order Header Details.CompanyCode	Company Code	▼
<input type="checkbox"/> Purchase Order Header Details.PurchasingGroup	Purchasing Group	▼
<input type="checkbox"/> Use vocabulary or Ctrl+Space for expressions		▼

Previous Step **Next Step** Cancel

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

Overview Determine Process Admin

↑ Release

Saved

Determine Process Admin

General Information: Status: **Draft** Hit Policy: **FIRST MATCH**

Description: Decision table to determine administrator who will assign the processor for the process where no approver is maintained.

Decision Table

Company Code	Purchasing Gr...	Email ID	User ID	Group ID
MATCHES !*	MATCHES !*			

Determine Approval Needed:

This decision is used to determine whether approval is required or not for the purchase orders. This decision can be selected from process “Purchase Order Approval Process by Determining Approver”.

These decisions must be modified for conditions and result values based on your business policies and requirements. To modify this decision, follow similar steps as those mentioned for Decision **Determine Process Admin**.

Determine Approver:

This decision is used to maintain the details of the approver (i.e., email id, group id, user id), who will review and make decision for goods receipt creation.

This decision can be selected from process “Purchase Order Approval Process by Determining Approver”.

These decisions must be modified for conditions and result values based on your business policies and requirements. To modify this decision, follow similar steps as those mentioned for Decision **Determine Process 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 the destination environment variables during deployment.

For this package following destination needs to be configured in the SAP BTP cockpit:

- **S4HANA_CLOUD**
- **sap_process_automation_document_store**

Note: Above destination names have been configured in BTP but can be named as per the project requirement.

To configure destination,

- Click on **Settings**.
- Select **Destinations** from the left panel.
- Click **New Destination**

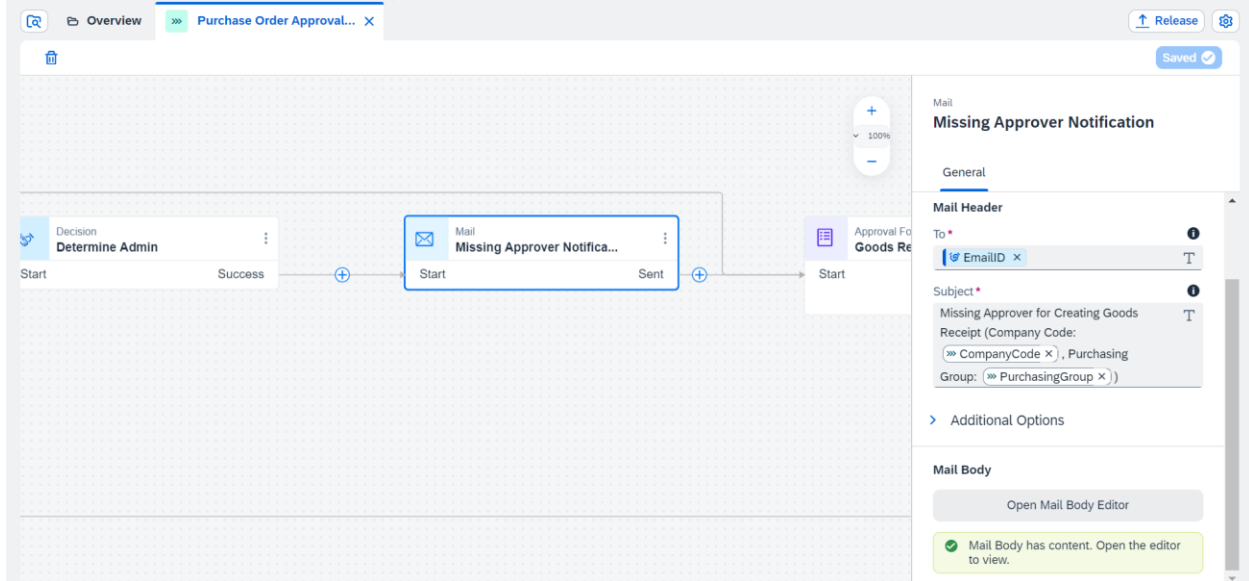
Select these destinations to be added (Created in the above section). For more information and screen shots, please refer to [this link](#) .

Configure Email

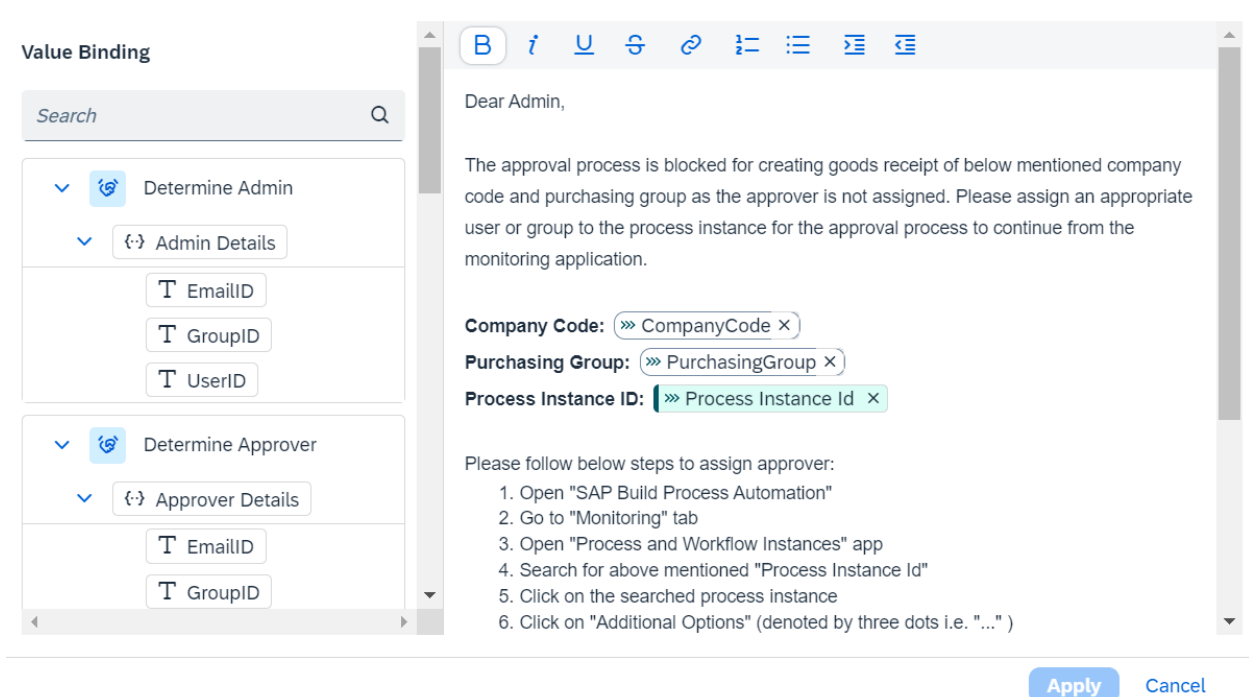
Email notifications are sent to requestor and approver at different places during process and task execution. All the email artefacts in the process have default template body which can be changed.

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.
- You may also add someone in **CC**.
- Click to **‘Open Mail Body Editor’**.



Edit Mail Body



- 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.

For more information on email configuration and text, refer to [this link](#)

Release and Deploy the 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'.
- Then click 'Release'.

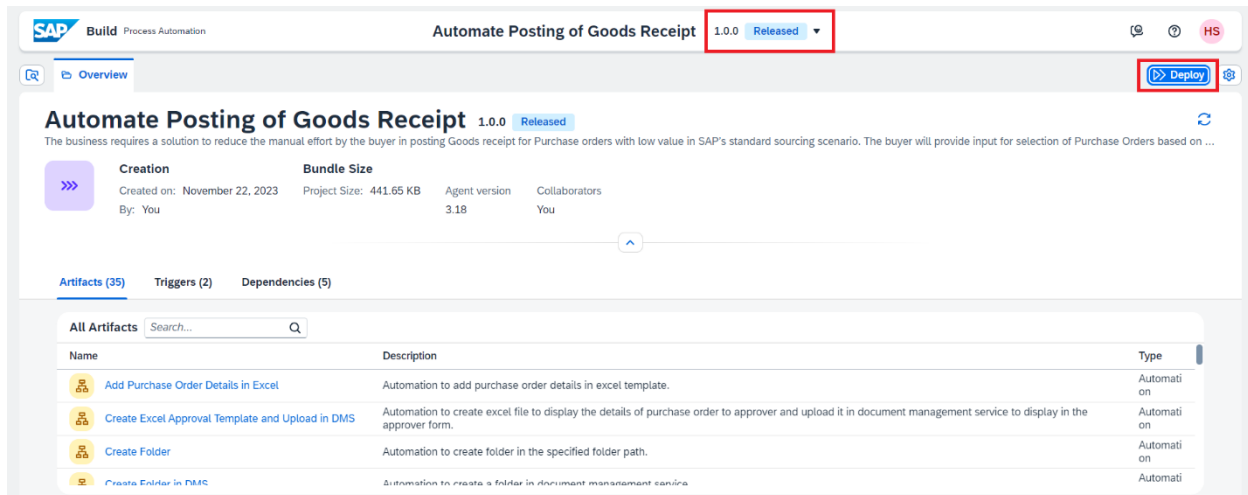
The screenshot shows the SAP Build Process Automation interface for a process named 'Automate Posting of Goods Receipt'. The process is currently in an 'Editable' state. The interface includes a 'Release' button in the top right corner. Below the process title, there is a description: 'The business requires a solution to reduce the manual effort by the buyer in posting Goods receipt for Purchase orders with low value in SAP's standard sourcing scenario. The buyer will provide input for selection of Purchase Orders based on ...'. The interface also displays metadata for the process, including 'Update' (Last updated on: November 22, 2023, By: You), 'Creation' (Created on: November 22, 2023, By: You), and 'Bundle Size' (Project Size: 413.37 KB, Estimated Package Size: 176.78 KB, Agent version: 3.18, Collaborators: You). Below the metadata, there are tabs for 'Artifacts (35)', 'Triggers (2)', and 'Dependencies (5)'. The 'Artifacts' tab is active, showing a table of artifacts with columns for Name, Description, Type, Last edited, Last edited by, and Created On. Two artifacts are listed: 'Add Purchase Order Details in Excel' and 'Create Excel Approval Template and Upload in DMS'.

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".



To deploy your project, you will be prompted to provide a Destination as an environment variable. Select the destination from the drop-down and fill other environment variables as well.

- **S4_Destination:** S4 System Destination
- **DMS_Destination:** Destination to connect with SAP Document Management Service
- **DmsPath:** Path to place the files or folders in SAP Document Management Service
- **DownloadPath:** Path to download the files in local machine.

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.

Configure SAP Build Work Zone

Configure SAP Build Work Zone to access the start UI for this automation. Please refer help documentation [Configuring SAP Build Work Zone](#)

Once SAP Build 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 Goods Receipt Start UI from the list of apps and choose Add.

The screenshot shows the SAP Content Manager interface. At the top, there is a search bar with the text "Search in Title, Description, ID" and a dropdown menu set to "All Items". Below the search bar, there is a table titled "All Items (22)". The table has columns for Type, Title, Description, ID, Channel, and Last Modified. The "Goods Receipt Start UI" item is highlighted with a red border. The table also includes buttons for "Create", "Content Explorer", "Import", and "Export".

Type	Title	Description	ID	Channel	Last Modified
	Everyone	Content assigned to this role is visible t...	sap_subaccount_everyone	Local	03/11/2023
	Start UI Apps	Start UI Applications.	3c6593ab-c62f-4c7a-958a-5d913f31436b	Local	03/11/2023
	Journal Entry Clearing Start UI	Journal Entry Clearing Start UI Applicati...	com.sap.JEClearingStartUIModule	HTML5 Apps	03/11/2023
	Goods Receipt Start UI	Goods Receipt Start UI Application	com.sap.GoodsReceiptStartUIModule	HTML5 Apps	03/11/2023
	Process Trigger	Process Automation Trigger Form	com.sap.spa.bpi.process.form.trigger	Local	03/11/2023
	M Asset Acquisition Start UI	M Asset Acquisition Start UI	com.sap.MAssetAcquisitionStartUIModule	HTML5 Apps	03/11/2023
	My Inbox		com.sap.spa.inbox	Local	03/11/2023

3. Add the relevant roles to the user. The Goods Receipt application start UI will be available to the user as a tile in the launchpad.

SAP Business Application Studio for SAP UI5 Application

Import and deploy SAPUI5 application:

Following steps can be followed to utilize the SAP UI5 application provided with this process package:

- Download the SAPUI5 application file from the imported store project, it will be available under the file section in the package.
- Open Business Application Studio and import the previously downloaded SAPUI5 project.
- Ensure that you have already created the SBPA instance and the same instance details need to be updated in the mta.yaml file available in the SAP UI5 application project.
- Update your process definition id (Package needs to be deployed) in the Property.json file (property: definitionId) as shown in the following snippets (definition id only needs to be updated in start UI application).
- **definitionId** process will be used to read and download the data.

```

Property.json X
GoodsReceiptStartUI > GoodsReceiptStartUIModule > webapp > model > Property.json > ...
1 {
2   "deliveryDateFrom": null,
3   "deliveryDateTo": null,
4   "orderThresholdValue": "",
5   "documentCurrency": "",
6   "sendEmailTo": "",
7   "saveToFolder": "C:\\",
8   "definitionId": "eu10.store-content-dev-acc.automatepostingofgoodsreceipt.getPurchaseOrderDetailsProcess",
9   "companyCodeAPI": {
10    "service": "API_COMPANYCODE_SRV",
11    "entityset": "A_CompanyCode"
12  },
13  "purchasingGroupAPI": {
14    "service": "api_purchasinggroup/srvc_a2x/sap/purchasinggroup/0001",
15    "entityset": "A_PurchasingGroup"
16  }
17 }

```









- Build SAPUI5 project using mta.yaml file & the generated project (generated mtar file will be available in the mta_archives folder) file can be deployed.
- After successful deployment of the project, it can be accessed using SAP standard work zone & user can provide the required details & submit the form for the approval & posting.

User Guide










Capabilities

The following are the capabilities of this template:

For detailed information about different artifacts, please refer [help documentation](#).

Icon	Type	Name	Description
	Automation	Add Purchase Order Details in Excel	Automation to add purchase order details in excel template.
	Automation	Add Purchase Order Details in Approval Template	Automation to add purchase order details in excel template to display to the approver.
	Automation	Create Approval Excel Template	Automation to create template excel file for displaying grouped purchase order details which will be sent for the approval
	Automation	Create Excel Approval Template and Upload in DMS	Automation to create excel file to display the details of purchase order to approver and upload it in document management service to display in the approver form.
	Automation	Create Folder	Automation to create folder in the specified folder path.
	Automation	Create Folder in DMS	Automation to create a folder in document management service.
	Automation	Delete File in DMS	Automation to delete the files inside a particular folder in document management service.
	Automation	Delete Folder and File in DMS	Automation to delete the folder and file in document management service.

	Automation	Delete Folder in DMS	Automation to delete the folder in document management service.
	Automation	Generate Log Report	Automation to generate log report to display the status of goods receipt creation in SAP S/4HANA
	Automation	Get Folder Content from DMS	Automation to get the folder content details from document management service.
	Automation	Get Purchase Order Details	Automation to get purchase order details from SAP S/4HANA then the input excel will be generated which will be sent to the requestor.
	Automation	Get Purchase Order Details via Action	Automation to get Purchase Order Details from SAP S4/HANA via Action
	Automation	Goods Receipt Creation	Automation to create goods receipt for purchase orders in SAP S/4HANA system using API. Also, updates the success and error messages in the final log report file which will be sent to the requestor.
	Automation	Goods Receipt Creation via Action	Automation to create goods receipt of purchase orders using action.
	Automation	Move Excel to Processed Folder	Automation to move input excel template from to be processed folder to processed folder.
	Automation	Read Purchase Order Data from excel	Automation to read purchase order details from the input excel generated
	Automation	Read Purchase Order Details	Automation to read the purchase order details from the purchase order input excel generated by the automation, then it groups the company code and purchasing group for approval process
	Automation	Rejection Email to the Requestor	Automation to send email with attachment to the requestor when the approval is rejected.
	Automation	Send Email to Requestor	Automation to send email to requestor with the excel template file attachment.
	Automation	Upload Document in DMS	Automation to upload the cost center input excel in document management service.
	Decisions	Determine Admin	Decision to determine administrator to assign processor in the process when no approver is maintained
	Decisions	Determine Approval Needed	Decision to determine whether the approval is required or not for the purchase orders.
	Decisions	Determine Approver	Decision to determine the approver who will review and approve the purchase orders based on the company code and purchasing group details.
	Form	Goods Receipt Creation Approval Form	Approval form for the approver to review and decide of goods receipt creation
	Process	Get Purchase Order Details Process	Process to get purchase order details from SAP S/4HANA based on the filter criteria and read the generated excel template to trigger the approval process
	Process	Purchase Order Approval Process by Determining Approver	Process to get approver details from determine approver decision and to send purchase order approval task to approver. After approval task the

			process triggers the automation to create goods receipt
	Data type	DMS Object	Data type for storing object information to delete files in document management service after processing
	Data type	Log Details	Data type to maintain the structure of log report data.
	Data type	Purchase Order	Datatype for maintaining purchase order details.
	Data type	Purchase Order Header Details	Datatype to maintain purchase order header details
	Data type	Read Data	Datatype for maintaining the input data from start UI.
	Data type	Selected Data	Datatype to maintain the data of selected filter criteria in the start UI
	Data type	User Details	Datatype for maintaining approver or administrator details.
	File	Goods Receipt Creation - Log Report	Excel file to fill the log details after the posting purchase orders
	File	Goods Receipt Creation - Template	Excel file that can be used to fill the purchase order details for the goods receipt creation

Actions

Read Purchase Order

This action is responsible for reading the purchase order details for the given filter query.

Material Document for Goods Receipt

This action is responsible for creating the material document for goods receipt for the provided data in the payload.

Automation

Create Excel Approval Template and Upload in DMS

Automation to create excel file to display the details of purchase order to approver and upload it in document management service to display in the approver form.

Delete Folder and File in DMS

Automation to delete the folder and file in document management service after the approval process is completed.

Get Purchase Order Details

Automation to get purchase order details from SAP S/4HANA then the input excel will be generated which will be sent to the requestor.

API	API Path	Purpose
API_PURCHASE_ORDER_2	/sap/opu/odata4/sap/api_purchaseorder_2/srvd_a2x/sap/purchaseorder/0001/PurchaseOrderScheduleLine?\$expand=_PurchaseOrder,_PurchaseOrderItem&\$filter=filterurl	GET call to fetch the Purchase Orders

Goods Receipt Creation

Automation to create goods receipt for purchase orders in SAP S/4HANA system using API. Also, updates the success and error messages in the final log report file which will be sent to the requestor.

API	API Path	Purpose
API_MATERIAL_DOCUMENT_SRV	/sap/opu/odata/sap/API_MATERIAL_DOCUMENT_SRV/A_MaterialDocumentHeader	POST API call to create Goods Receipt

Read Purchase Order Details

Automation to read the purchase order details from the purchase order input excel generated by the automation, then it groups the company code and purchasing group for approval process.

Rejection Email to the Requestor

Automation to send email with attachment to the requestor when the approval is rejected.

Process

Get Purchase Order Details Process

Process to get purchase order details from SAP S/4HANA based on the filter criteria and read the generated excel template to trigger the approval process.

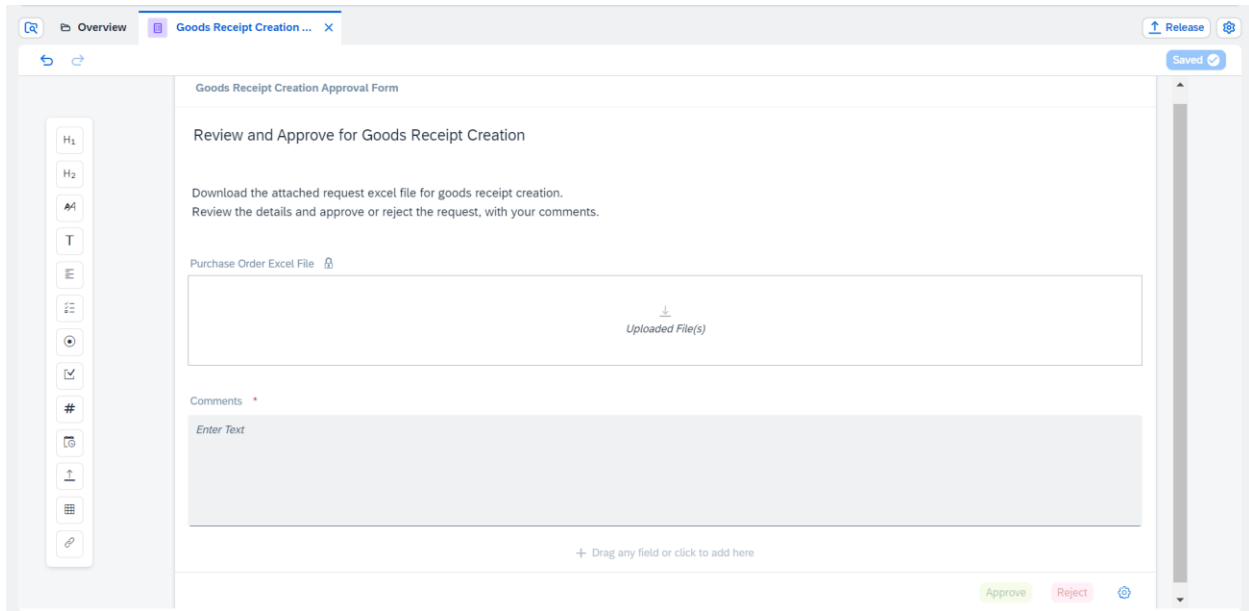
Purchase Order Approval Process by Determining Approver

Process to get approver details from determine approver decision and to send purchase order approval task to approver. After the approval task the process triggers the automation to create goods receipt.

Forms

Goods Receipt Creation Approval Form

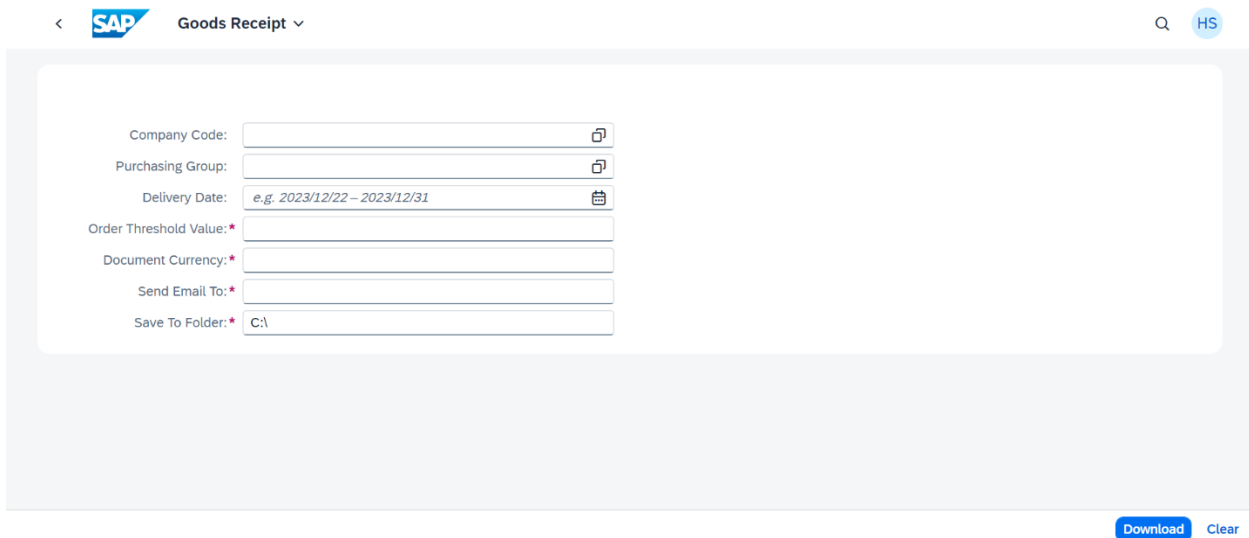
Approval form for approver to review and take decision on goods receipt creation process. The approval form layout used for approval is as shown below:



User Interface

Start UI

- This template uses a Start UI which the user can use to get the purchase order details from SAP S/4HANA.
- Users can select from F4 Help or can enter data manually for filter criteria then click “Download” button to trigger Process to get Purchase Order details and download it.



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 business rules 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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