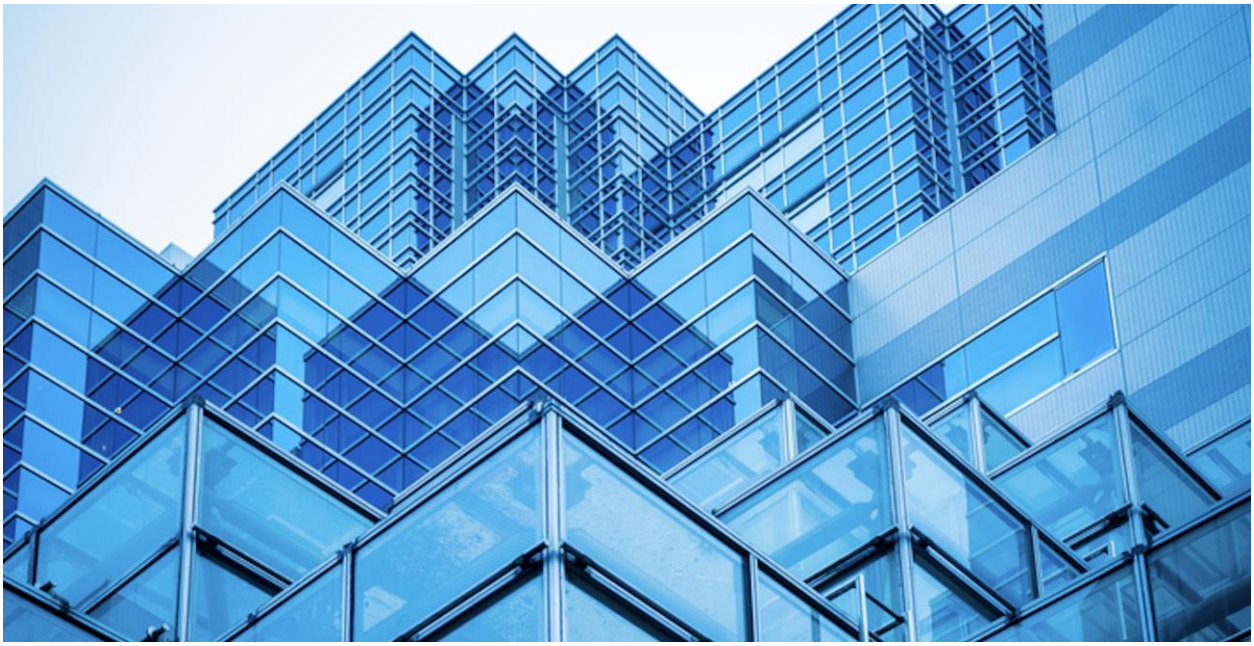


PUBLIC

SAP Build Process Automation

Non-Repairable Part Auto Recording with Goods Movement

Configuration and User Guide

Contents

Change Log **3**
Overview **4**
Prerequisites **5**
Other Prerequisites **6**
Configuration Guide **7**
Setup SAP S/4HANA 7
Configure SAP S/4HANA Destination 7
Setup Communication 8
External API creation for Plant Value Help 9
Setup Business Technology Platform Cockpit 11
Configure SAP Document Management Service 11
Configure SAP Build Process Automation Email Destination 11
User Roles Configuration 12
Setup Build Process Automation Content 12
Import Content 12
Configuration & Modification 12
Configure Decisions 13
Configure Destination Settings 16
Configure Email 16
Release and Deploy the Process 17
Configure SAP Build Work Zone 19
SAP Business Application Studio for SAP UI5 Application 19
User Guide **20**
Capabilities 20
Actions 23
Automation 23
Process 24
Forms 25
User Interface 26
Support **27**

Change Log

Version	Date	Description
1.0.0	September 28, 2023	Document Created

© 2023 SAP SE or an SAP affiliate company. All rights reserved. See Legal Notice on www.sap.com/legal-notice for use terms, disclaimers, disclosures, or restrictions related to SAP Materials for general audiences.

This document contains 3 sections. Each section covers 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 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 Business Technology Platform (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 **Non-Repairable Part Auto Recording with Goods Movement Template.** The main audience of this document are technical IT/system administrators.

This package facilitates to read the non-Repairable parts and create material documents for goods movement.

Features:

- The Automation must be able to automatically get Equipment Numbers and Material Number from SAP S/4HANA system to fill the excel template and send the mail.
- Update and fill the required additional data in excel template and uploads the file in Start UI.
- After uploading the excel template, Approver will be determined and will be sent for the approval with the equipment number and material number excel.
- Automation must be able to automatically generate the log file once the uploaded file is approved and send the email with Log File.

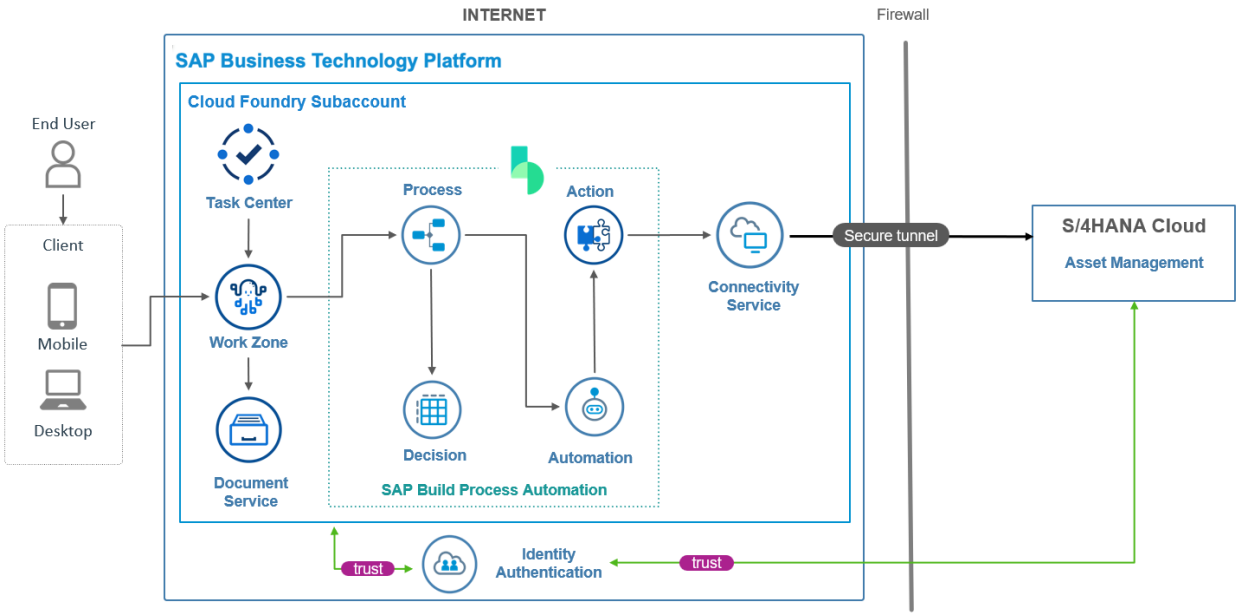
The following steps are included as a part of Non-Repairable Part Auto Recording with Goods Movement template and provide a brief overview about the process flow & features of Non-Repairable Part Auto Recording with Goods Movement template:

- This package provides automation for fetching the Equipment and Material details from SAP S/4HANA and will be entered automatically in Template excel which is placed in File artefact

© 2023 SAP SE or an SAP affiliate company. All rights reserved. See Legal Notice on www.sap.com/legal-notice for use terms, disclaimers, disclosures, or restrictions related to SAP Materials for general audiences.

- The fetched data will be downloaded and saved in the excel file "**Non-RepairableInput_<Timestamp>.xlsx**" in the folder where you have defined in the Environment Variable (**downloadFilePath**) then it allows user to update details for Equipment Deactivation and Material Goods Movement.
- After POST call the Log report will be generated in the name of "**LogReport_<Timestamp>.xlsx**" and will be saved in the folder you have mentioned in the Environment variable(**downloadFilePath)** and notifies the requester through email about the completion with the log report attached to it.

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. For update request, upload excel template in Start UI and submit for Approval.
5. Process will assign task to Approver for Approval.
6. Once tasks are approved, equipment and material excel file stored in predefined folder.
7. Another Automation will run and execute equipment and material 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. Non-Repairable Part Auto Recording with Goods Movement:

- SAP Build Process Automation to orchestrate the process.
- SAP Cloud Identity Services - Identity Authentication (Optional)

© 2023 SAP SE or an SAP affiliate company. All rights reserved. See Legal Notice on www.sap.com/legal-notice for use terms, disclaimers, disclosures, or restrictions related to SAP Materials for general audiences.

- 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

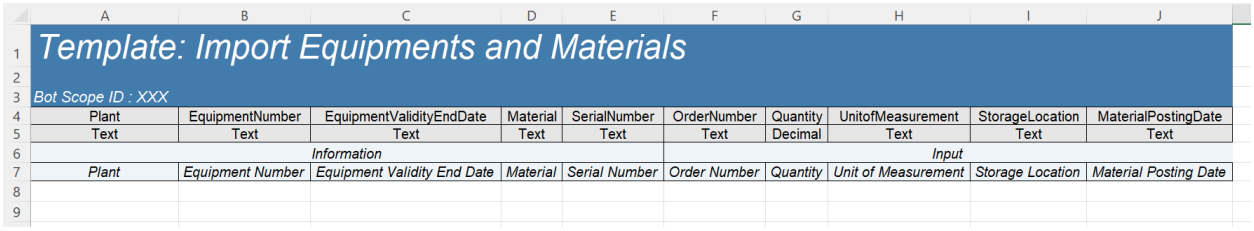
Other Prerequisites

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 is placed as File artefact. If Input Template File is not active, the file will not be executed in Automation.

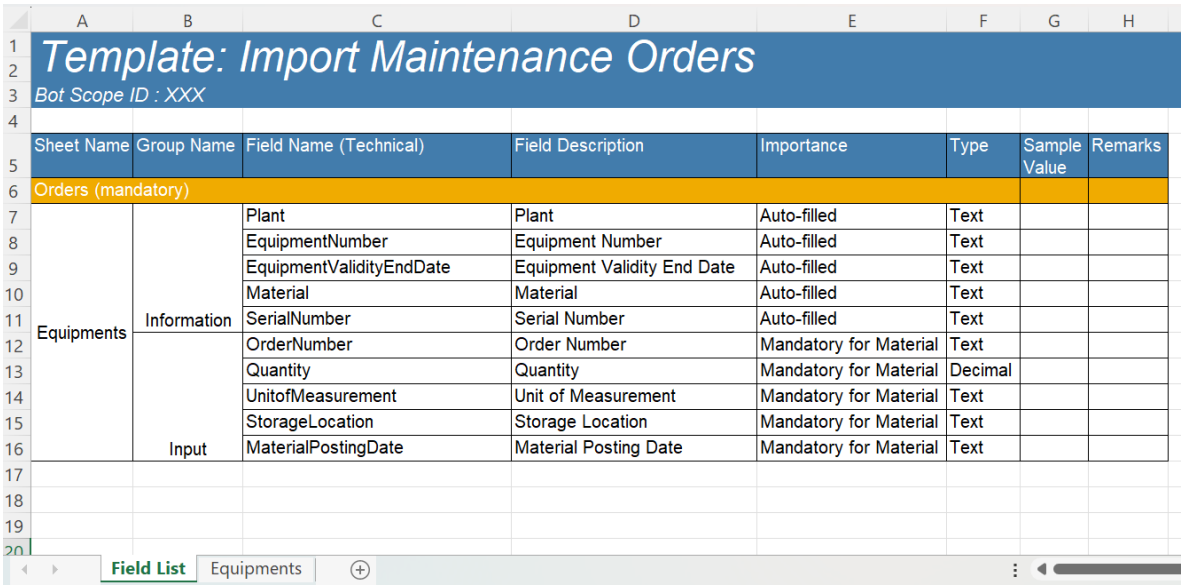


	A	B	C	D	E	F	G	H	I	J
1	*Template: Import Equipments and Materials*									
2										
3	*Bot Scope ID : XXX*									
4	Plant	EquipmentNumber	EquipmentValidityEndDate	Material	SerialNumber	OrderNumber	Quantity	UnitofMeasurement	StorageLocation	MaterialPostingDate
5	Text	Text	Text	Text	Text	Text	Decimal	Text	Text	Text
6			*Information*			*Input*				
7	*Plant*	*Equipment Number*	*Equipment Validity End Date*	*Material*	*Serial Number*	*Order Number*	*Quantity*	*Unit of Measurement*	*Storage Location*	*Material Posting Date*
8										
9										

- The input excel has 2 sheets ‘Field List’ and ‘Equipments’.

In the Equipments sheet the data will be fetched from the SAP S/4HANA and we will update and fill the input data for Material Goods Movement and Equipment Deactivation.

© 2023 SAP SE or an SAP affiliate company. All rights reserved. See Legal Notice on www.sap.com/legal-notice for use terms, disclaimers, disclosures, or restrictions related to SAP Materials for general audiences.



Template: Import Maintenance Orders

Bot Scope ID : XXX

Sheet Name	Group Name	Field Name (Technical)	Field Description	Importance	Type	Sample Value	Remarks
Orders (mandatory)							
Equipments	Information	Plant	Plant	Auto-filled	Text		
		EquipmentNumber	Equipment Number	Auto-filled	Text		
		EquipmentValidityEndDate	Equipment Validity End Date	Auto-filled	Text		
		Material	Material	Auto-filled	Text		
		SerialNumber	Serial Number	Auto-filled	Text		
	Input	OrderNumber	Order Number	Mandatory for Material	Text		
		Quantity	Quantity	Mandatory for Material	Decimal		
		UnitofMeasurement	Unit of Measurement	Mandatory for Material	Text		
		StorageLocation	Storage Location	Mandatory for Material	Text		
		MaterialPostingDate	Material Posting Date	Mandatory for Material	Text		

Field List | Equipments

In Field List sheet, mandatory fields details are updated in “**Importance**” column as **Mandatory for Material**. Please fill mandatory fields and upload input template. If mandatory fields are not filled, then Automation will throw errors.

- The fetched data will be downloaded and saved in the excel file "**Non-RepairableInput_<Timestamp>.xlsx**" in the folder where you have defined in the Environment Variable (**downloadFilePath**) then it allows user to update details for Equipment Deactivation and Material Goods Movement.
- After POST call the Log report will be generated in the name of "**LogReport_<Timestamp>.xlsx**" and will be saved in the folder you have mentioned in the Environment variable(**downloadFilePath)** and notifies the requester through email about the completion with the log report attached to it

Configuration Guide

Non-Repairable Part Auto Recording with Goods Movement 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

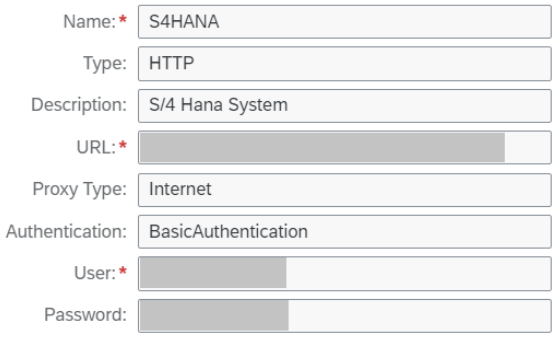
© 2023 SAP SE or an SAP affiliate company. All rights reserved. See Legal Notice on www.sap.com/legal-notice for use terms, disclaimers, disclosures, or restrictions related to SAP Materials for general audiences.

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





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

© 2023 SAP SE or an SAP affiliate company. All rights reserved. See Legal Notice on www.sap.com/legal-notice for use terms, disclaimers, disclosures, or restrictions related to SAP Materials for general audiences.

Configuration and Role Details for accessing "Communication Systems" application.

Configuration and Role Details for accessing "Communication Arrangements" application.

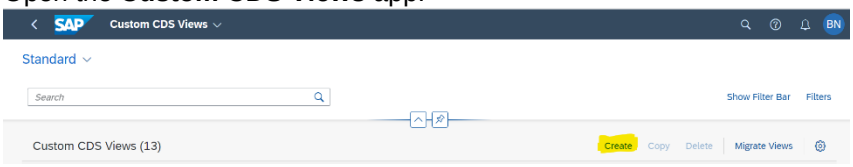
List of communication scenarios to be configured.

Communication Scenario	Related API
Asset Management Master Data Integration(SAP_COM_0395)	Overview | Equipment | SAP Business Accelerator Hub
Product Integration(SAP_COM_0009)IC Configure - Variant Configuration Bundle Model Integration(SAP_COM_0932)	Overview | Product | SAP Business Accelerator Hub
Material Document Integration(SAP_COM_0108)	Overview | Material Documents - Read, Create | SAP Business Accelerator Hub
An additional communication scenario assigned with custom inbound services	You need to create custom CDS views in your SAP S/4HANA Cloud system, expose them as external APIs, and then create a communication scenario and add these inbound services to this scenario. For details, see next section.

External API creation for Plant Value Help

Note: This Section is optional. In UI, if you want to change F4 value Help for plant field then follow the below steps to configure the custom CDS.

1. Open the **Custom CDS Views** app.

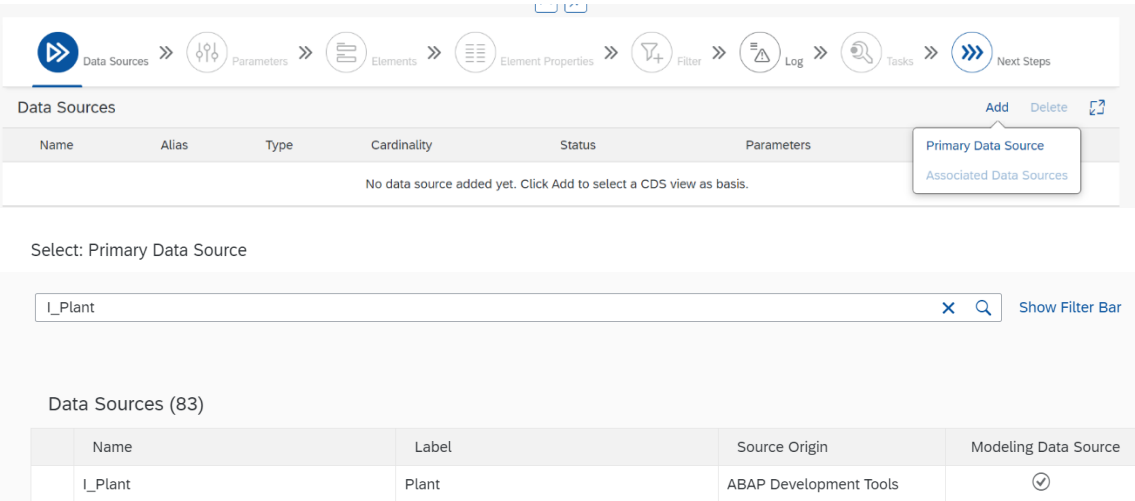


2. Click **Create** and select the scenario **External API**.

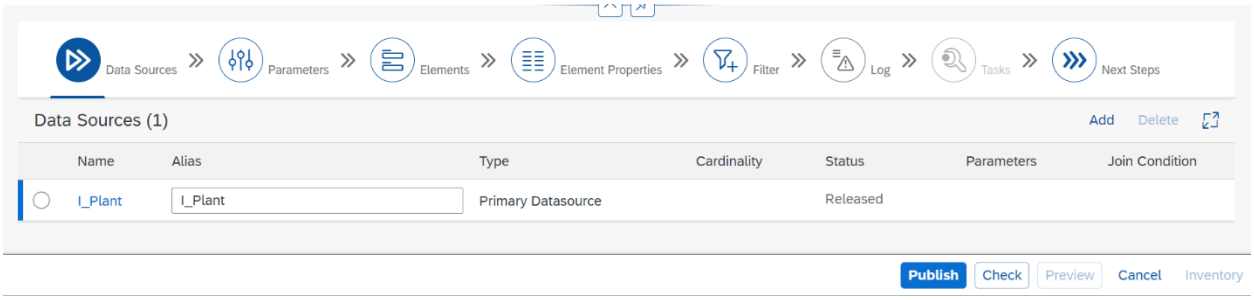
   Name - **YY1_Plant_VH**

3. Select your **Primary Data Source – I_Plant**

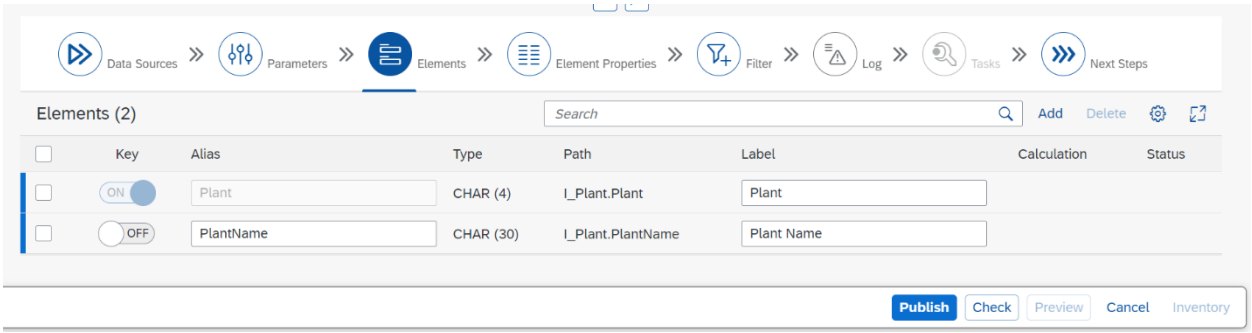
© 2023 SAP SE or an SAP affiliate company. All rights reserved. See Legal Notice on www.sap.com/legal-notice for use terms, disclaimers, disclosures, or restrictions related to SAP Materials for general audiences.



4. Go To Elements Tab and add **Elements** –Plant and PlantName



5. **Check** and **Publish**



6. Open the **Communication Scenarios** app and create a new communication scenario.

   (We have referred to -Create an Additional Communication Scenario | SAP Help Portal)

7. Add the inbound services *CustomCDSViewNAme*_CDS to the communication scenario and publish it:

   - **YY1_Plant_VH _CDS**

8. Open the **Communication Arrangements** app and create a communication arrangement based on this newly created custom communication scenario.

© 2023 SAP SE or an SAP affiliate company. All rights reserved. See Legal Notice on www.sap.com/legal-notice for use terms, disclaimers, disclosures, or restrictions related to SAP Materials for general audiences.

9. In the **Communication System** field under **Common Data**, select the communication system that you have created following the **Create Communication System** step mentioned in Set Up Communication.

10. Save your entries.

Setup Business Technology Platform Cockpit

Configure SAP Document Management Service

In this template, the Input Template document for Non-Repairable Part Auto Recording with Goods Movement 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.

© 2023 SAP SE or an SAP affiliate company. All rights reserved. See Legal Notice on www.sap.com/legal-notice for use terms, disclaimers, disclosures, or restrictions related to SAP Materials for general audiences.

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 application 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 “**Non-Repairable Part Auto Recording with Goods Movement**”
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 “**Non-Repairable Part Auto Recording with Goods Movement**” 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 do then follow the below reference links.

© 2023 SAP SE or an SAP affiliate company. All rights reserved. See Legal Notice on www.sap.com/legal-notice for use terms, disclaimers, disclosures, or restrictions related to SAP Materials for general audiences.

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

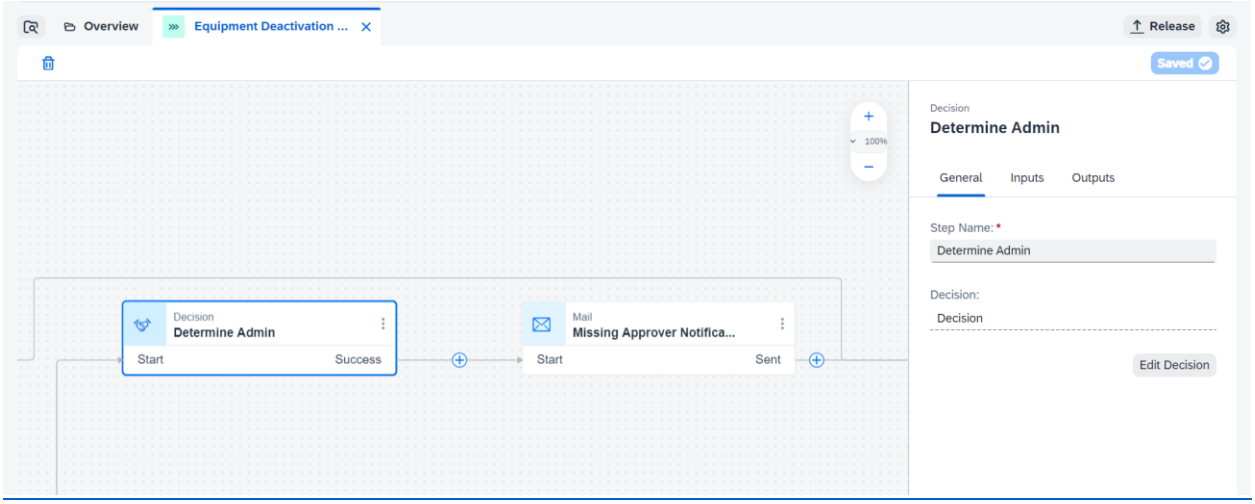
Configure Decisions

We have 5 decision table in this template. We can configure the rule as per our requirements.

Determine Admin - This decision is used to determine the administrator who will assign the task to the approver when the approver is not maintained.

The process contains this decision are:

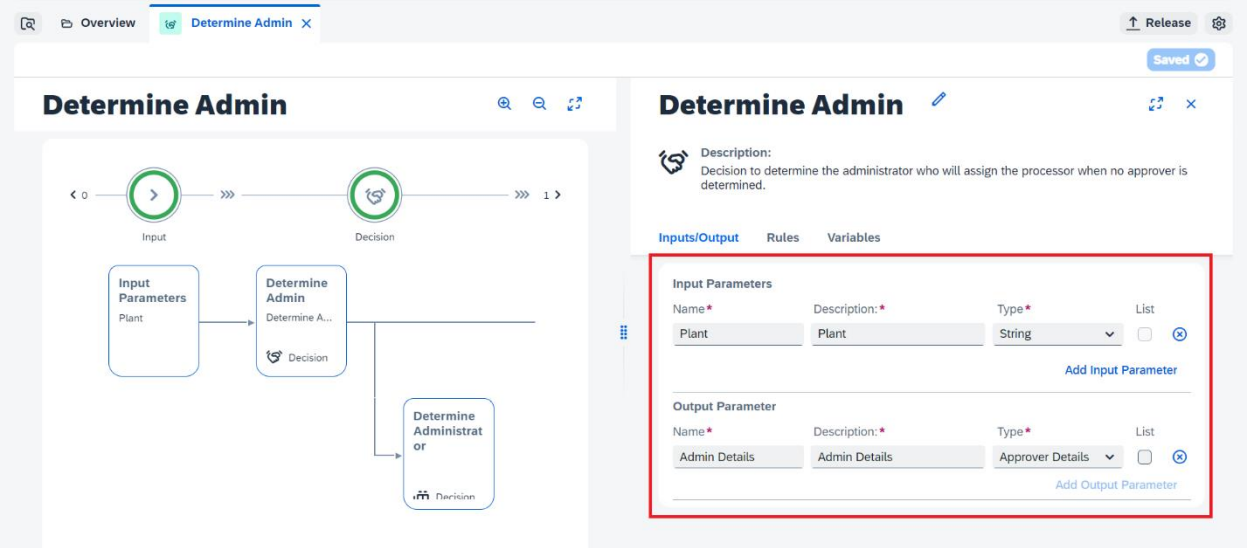
1. Equipment Deactivation and Material Goods Movement Process
2. Equipment Deactivation Process
3. Material Good Movement Process



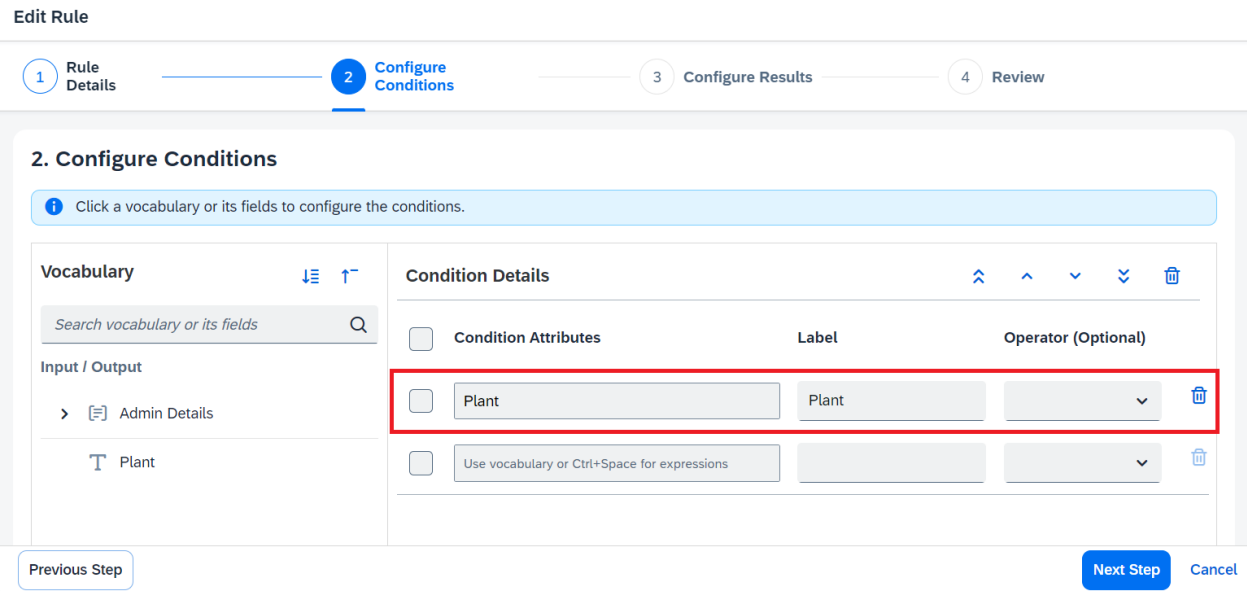
These decisions must be modified for conditions and result values based on your business policies and requirements. To modify the decision:

© 2023 SAP SE or an SAP affiliate company. All rights reserved. See Legal Notice on www.sap.com/legal-notice for use terms, disclaimers, disclosures, or restrictions related to SAP Materials for general audiences.

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

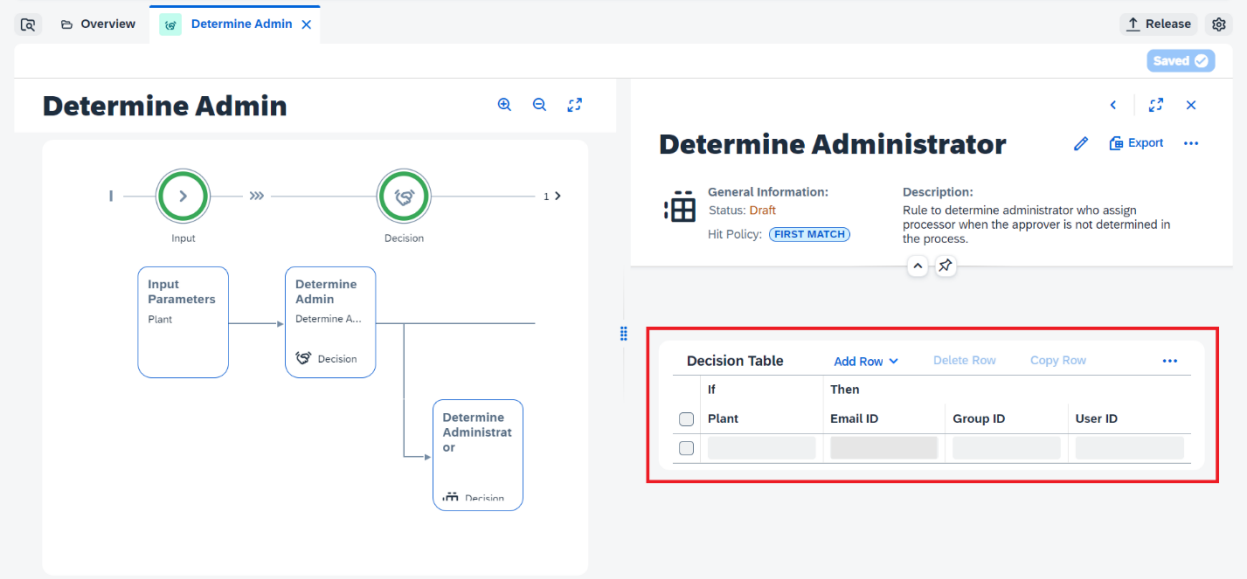


The attributes used in the decision rule can be selected as per requirement.



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

© 2023 SAP SE or an SAP affiliate company. All rights reserved. See Legal Notice on www.sap.com/legal-notice for use terms, disclaimers, disclosures, or restrictions related to SAP Materials for general audiences.



Check If Approval Required – This decision is used to determine whether the approval is required or not for non-Repairable. If required, it will send for the approval else it will deactivate the equipment or moves the material goods to non-Repairable.

The process contains this decision are:

1. Equipment Deactivation and Material Goods Movement Process
2. Equipment Deactivation Process
3. Material Good Movement Process

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 Admin.**

Determine Approver for Equipment Deactivation - This decision is used to determine the approver details where the approval task for equipment deactivation will be sent.

This decision can be selected from process “Equipment Deactivation Process” and 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 Admin.**

Determine Approver for Equipment deactivation and Material Goods movement - This decision is used to determine the approver details where the approval task for equipment deactivation and material goods movement will be sent.

This decision can be selected from process “Equipment Deactivation and Material Goods Movement Process” and 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 Admin**

Determine Approver for Material Goods Movement - This decision is used to determine the approver details where the approval task for material goods movement will be sent.

© 2023 SAP SE or an SAP affiliate company. All rights reserved. See Legal Notice on www.sap.com/legal-notice for use terms, disclaimers, disclosures, or restrictions related to SAP Materials for general audiences.

This decision can be selected from process “Material Goods Movement Process” and 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 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 the below link:

https://help.sap.com/docs/build-process-automation/sap-build-process-automation/manage-destinations?q=destination%20setting

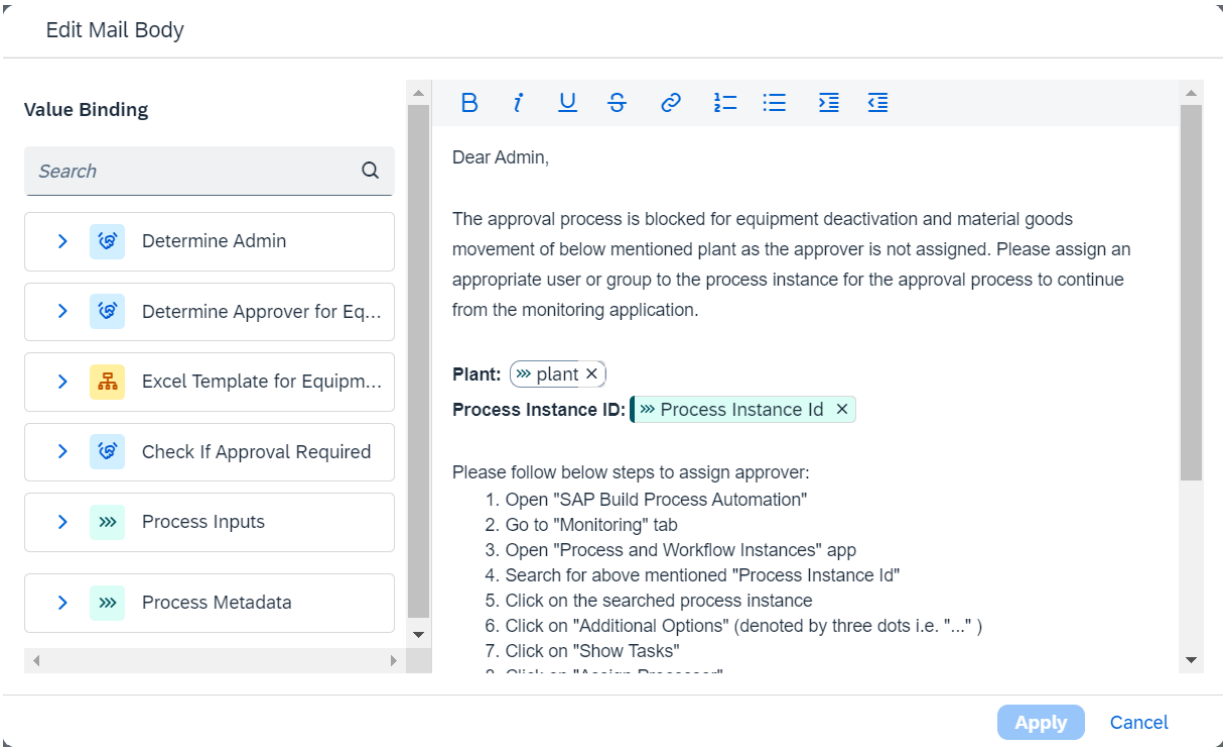
Configure Email

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. (Equipment Deactivation and Material Goods Movement Process, Equipment Deactivation Process, Material Good Movement 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’**.

© 2023 SAP SE or an SAP affiliate company. All rights reserved. See Legal Notice on www.sap.com/legal-notice for use terms, disclaimers, disclosures, or restrictions related to SAP Materials for general audiences.



- 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 the below link:

https://help.sap.com/docs/build-process-automation/sap-build-process-automation/add-mail-notifications-to-process?q=email%20body

Release and Deploy the Process

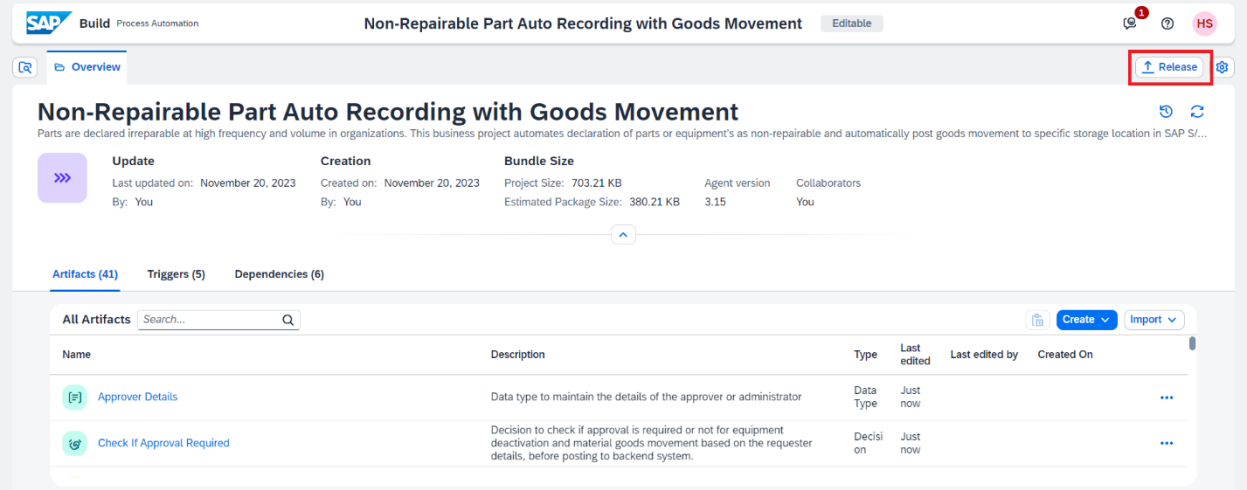
After configuring your process, it's time to publish, test and run it. To run a process, you must first release and deploy it.

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'.

© 2023 SAP SE or an SAP affiliate company. All rights reserved. See Legal Notice on www.sap.com/legal-notice for use terms, disclaimers, disclosures, or restrictions related to SAP Materials for general audiences.

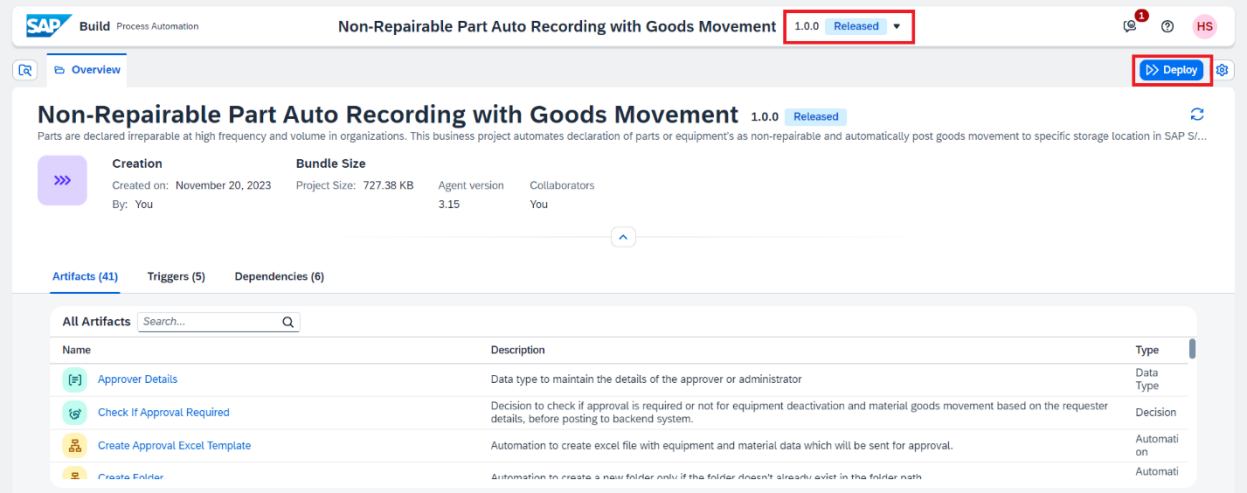


If this is the first time you've released the process, a version labelled 1.0.0 is released. For subsequent releases, you're prompted to select a version type before the process is released.

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**: Destination will fetch the Material Document from SAP S/4HANA.
- **dmsDestination**: Destination to connect to Document Management Service

© 2023 SAP SE or an SAP affiliate company. All rights reserved. See Legal Notice on www.sap.com/legal-notice for use terms, disclaimers, disclosures, or restrictions related to SAP Materials for general audiences.

- **dmsPath**: Folder to Download Files from DMS.
- **downloadFilePath**: Folder to Download Input Template Generated and Log Reports Generated

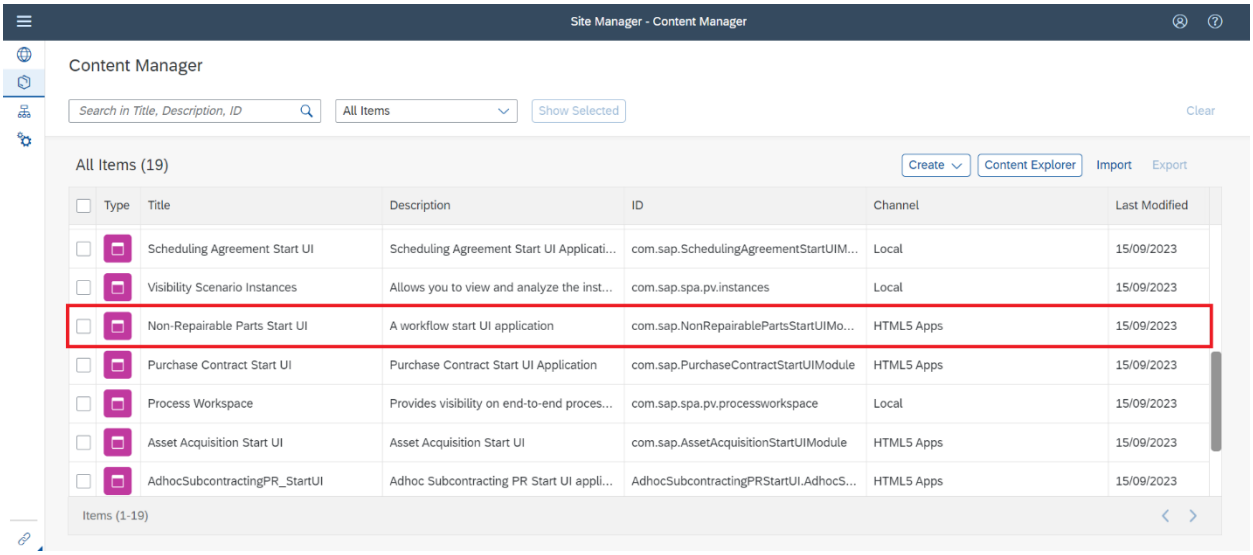
Note: If you do not map your destination environment variable with actual SAP BTP destination during deployment, then the process will enter Erroneous state when it tries to connect to the external system.

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 Non-Repairable Parts Start UI from the list of apps and choose Add



3. Add the relevant roles to the user. The Non-Repairable Parts application start UI will be available to the user as a tile in the launchpad.

SAP Business Application Studio for SAP UI5 Application

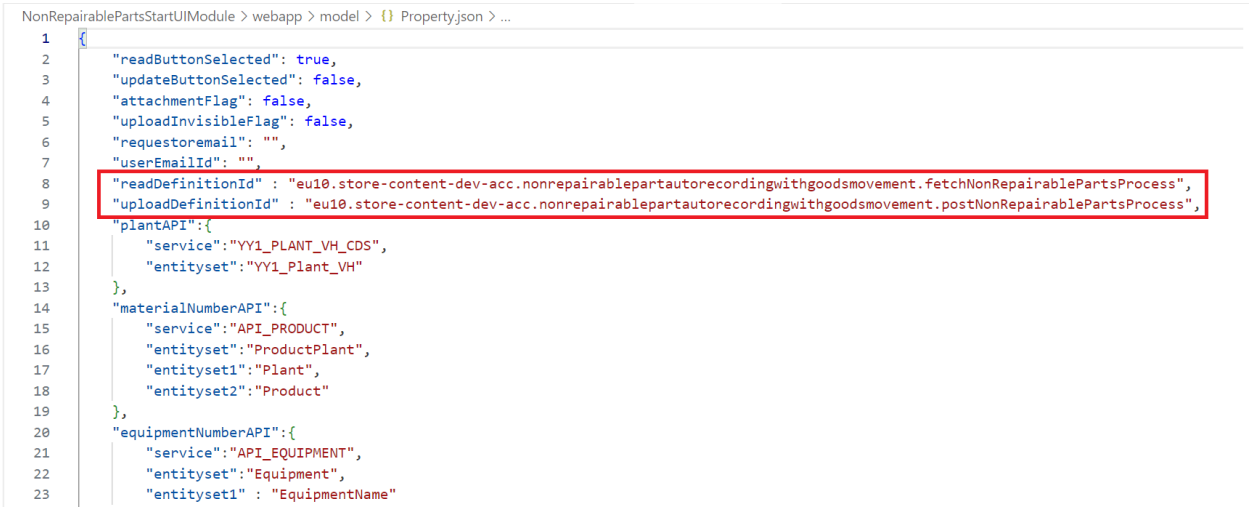
Import and deploy SAPUI5 application:

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 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.

© 2023 SAP SE or an SAP affiliate company. All rights reserved. See Legal Notice on www.sap.com/legal-notice for use terms, disclaimers, disclosures, or restrictions related to SAP Materials for general audiences.

- Update your process definition id (Package needs to be deployed) in the Property.json file (property: readDefinitionId,uploadDefinitionId) as shown in the following snippets (definition id only needs to be updated in start UI application).
- **readDefinitionId** process will be used to read and download the data.
- **uploadDefinitionId** process will be used for approval process.



- Build SAPUI5 project using mta.yaml file & the generated project (generated mtar file will be available in the mta_archieves folder) file can be deployed.
- After successful deployment of the project, it can be accessed using through SAP standard work zone & user can provide the required Equipment, Material 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	Create Approval Excel Template	Automation to create excel file with equipment and material data which will be sent for approval.
	Automation	Create Folder	Automation to create a new folder only if the folder doesn't already exist in the folder path.
	Automation	Create Folder for DMS	Automation to create a new folder in document management service to upload the excel template file based on non-repairable goods

© 2023 SAP SE or an SAP affiliate company. All rights reserved. See Legal Notice on www.sap.com/legal-notice for use terms, disclaimers, disclosures, or restrictions related to SAP Materials for general audiences.

	Automation	Delete Folders in DMS	Automation to delete the folders in the SAP document management service after the process is done.
	Automation	Delete item	Automation to delete all the existing files inside the folder in SAP document management service.
	Automation	Download Document from DMS	Automation to download the non-repairable excel file from document management service and save it in a predefined folder.
	Automation	Equipment Deactivation	Automation for deactivating any equipment in the SAP S/4HANA system using action group. Also, updates the success and error messages in the final excel log file which will be sent to the requestor.
	Automation	Fetch Non Repairable Equipment and Material	Automation to fetch non-repairable equipment and material data from SAP S/4HANA using action group. Also, updates the non-repairable excel template which will be send to the requestor in email
	Automation	Fetch Non Repairable Equipment Data	Sub automation to fetch non repairable equipment data from SAP S/4HANA using API.
	Automation	Fetch Non Repairable Equipment Data via Action	Sub automation to fetch non repairable equipment data from SAP S/4HANA using action group.
	Automation	Fetch Non Repairable Material Data	Sub automation to fetch non repairable material data from SAP S/4HANA using web service call.
	Automation	Fetch Non Repairable Material Data via Action	Sub automation to fetch non repairable material data from SAP S/4HANA using action group.
	Automation	Generate Log Report	Automation to generate log report to display the status of equipment deactivation and material goods movement in SAP S/4HANA.
	Automation	Get folder content	Automation to get the folder content from SAP document management service.
	Automation	Material Goods Movement	Automation to move the non repairable material goods in SAP S/4HANA system using action group. Also, updates the success and error messages in the final log report file which will be sent to the requestor.
	Automation	Move Excel to Processed Folder	Automation to move input excel template from to be processed folder to processed folder.
	Automation	Post Equipment Deactivation	Automation to update equipment deactivation status in SAP S/4HANA using APIs.
	Automation	Post Equipment Deactivation via Actions	Automation to update equipment deactivation status in SAP S/4HANA using action group.
	Automation	Post Material Goods Movement	Automation to post non repairable material goods movement in SAP S/4HANA using APIs.
	Automation	Post Material Goods Movement using Actions	Automation to post non repairable material goods movement in SAP S/4HANA using action group.
	Automation	Post Non-Repairable Parts	Automation to group equipment, material and serialized equipment and material in the given non-repairable excel file. It then starts the approval process with grouped data.

© 2023 SAP SE or an SAP affiliate company. All rights reserved. See Legal Notice on www.sap.com/legal-notice for use terms, disclaimers, disclosures, or restrictions related to SAP Materials for general audiences.

	Automation	Rejection Email to the Requestor	Automation to send email with attachment to the requestor when the approval is rejected.
	Automation	Remove Processed Files and Folders in DMS	Automation to remove the folder content and folder details in document management service after the approval process.
	Automation	Upload Document in DMS	Automation to upload non-repairable equipment excel file in document management service
	Decisions	Check If Approval Required	Decision to check if approval is required or not for equipment deactivation and material goods movement based on the requester details, before posting to backend system.
	Decisions	Determine Admin	Decision to determine the administrator who will assign the processor when no approver is determined.
	Decisions	Determine Approver for Equipment Deactivation	Decision to automatically determine approver for reviewing equipment deactivation based on the plant details.
	Decisions	Determine Approver for Equipment deactivation and Material Goods movement	Decision to automatically determine approver for reviewing equipment deactivation and material goods movement, based on the plant details.
	Decisions	Determine Approver for Material Goods Movement	Decision to automatically determine approver for reviewing material goods movement based on the plant details.
	Form	Equipment Deactivation and Material Goods Movement Approval	Approval form to review and approve equipment deactivation and material goods movement.
	Form	Equipment Deactivation Approval	Approval form for the approver to review and decide of equipment deactivation.
	Form	Material Goods Movement Approval	Approval form for the approver to review and decide of material goods movement
	Process	Equipment Deactivation and Material Goods Movement Process	UI will trigger this process. Approver task, Equipment deactivation, Material goods movement handled together in this process.
	Process	Equipment Deactivation Process	UI will trigger this process. Approver task, Equipment deactivation post call done in this process.
	Process	Fetch Non-Repairable Parts Process	Fetch Non-Repairable Parts Process will call the Automation to fetch Non-Repairable Equipment and Material data from SAP S/4HANA.
	Process	Material Good Movement Process	UI will trigger this process. Approver task, Material goods movement handled in this process.
	Process	Post Non-Repairable Parts Process	Post Non-Repairable Parts Process trigger Automation to post the Non-Repairable Parts in SAP S/4HANA.
	Data type	Approver Details	Data type to maintain the details of the approver or administrator
	Data type	DMS Object	Data type for storing object information to delete files in document management service after processing

© 2023 SAP SE or an SAP affiliate company. All rights reserved. See Legal Notice on www.sap.com/legal-notice for use terms, disclaimers, disclosures, or restrictions related to SAP Materials for general audiences.

	Data type	DMS Upload	Data type for input structure to upload documents in document management service.
	Data type	Equipment And Material Type	Data type to store equipment and material data which are read from the non-repairable input excel template.
	Data type	Equipment Deactivation	Data type with equipment details required for equipment deactivation
	Data type	Log Details	Data type to prepare structure to generate log report.
	File	Non-Repairable - Template	Excel file that can be used to fill the equipment and material data for equipment deactivation and material goods movement

Actions

Read and Deactivates Equipment:

This action is responsible for deactivating equipment by POST call based on the data provided in the payload. It also reads the equipment details for the provided filter criteria.

Get Product Plant Details:

This action is maintained to read the product plant details for the provided filter criteria.

Create Material Documents - Goods Movement

This action is responsible for material goods movement by POST call based on the data provided in the payload.

Automation

Fetch Non Repairable Equipment and Material

This automation is used to fetch existing Equipment Numbers and Material Number data from SAP S/4HANA.

API	API Path	Purpose
API_EQUIPMENT	/sap/opu/odata/sap/API_EQUIPMENT/Equipment?$format=json&$filter=EquipmentIsMarkedForDeletion eq false and EquipmentIsInactive eq false&$select=Equipment,EquipmentName,MaintenancePlant,Material,SerialNumber	GET call to fetch the Equipment Numbers
API_PRODUCT	/sap/opu/odata4/sap/api_product/srvd_a2x/sap/product/0001/ProductPlant?$format=json&$expand=_Product($expand=_ProductDescription($filter=Language eq 'EN');$select=Product,BaseUnit)&$filter=IsMarkedForDeletion eq false&$select=Product,Plant	GET call to fetch the Material Numbers

© 2023 SAP SE or an SAP affiliate company. All rights reserved. See Legal Notice on www.sap.com/legal-notice for use terms, disclaimers, disclosures, or restrictions related to SAP Materials for general audiences.

Equipment Deactivation

This Automation will Deactivated Equipment Number then it generates the Log report and will be send to the Requestor.

API	API Path	Purpose
API_EQUIPMENT	"/sap/opu/odata/sap/API_EQUIPMENT/SetEquipmentToInactive?Equipment='"+equipment+"'&ValidityEndDate=datetime'" +validityEndDate+ "'";	POST call to Equipment Deactivation

Material Goods Movement

This Automation will move Material Goods as Non Repairable then it generates the Log report and will be send to the Requestor

API	API Path	Purpose
API_MATERIAL_DOCUMENT_SRV	/sap/opu/odata/sap/API_MATERIAL_DOCUMENT_SRV/A_MaterialDocumentHeader	POST call to Create the Material Goods Movement

Post Non-Repairable Parts

This Automation will read the input excel template and group the data with combination criteria of Equipment Numbers and Material Numbers then it will trigger each process according to the conditions.

Create Approval Excel Template

This Automation will create excel with the grouped data and it will send this generated excel for the approver.

Process

Fetch Non-Repairable Parts Process

This Process is used to fetch existing Equipment Numbers and Material Number data from SAP S/4HANA by executing “Fetch Non Repairable Equipment and Material” Automation

Post Non-Repairable Parts Process

This Process will read the input excel template and group the data with combination criteria of Equipment Numbers and Material Numbers then it will trigger each process according to the conditions by executing “Post Non-Repairable Parts” Automation

© 2023 SAP SE or an SAP affiliate company. All rights reserved. See Legal Notice on www.sap.com/legal-notice for use terms, disclaimers, disclosures, or restrictions related to SAP Materials for general audiences.

Equipment Deactivation Process

This Process will generate the Excel template with Equipment Numbers and send for the approval then it deactivates that equipment number by “Equipment Deactivation” automation if approved, else it will send the rejection notification to the requestor.

Material Good Movement Process

This Process will generate the Excel template with Material Numbers then send for the approval, it moves Material Goods as Non-Repairable by “Material Goods Movement” automations if approved, else it will send the rejection notification to the requestor.

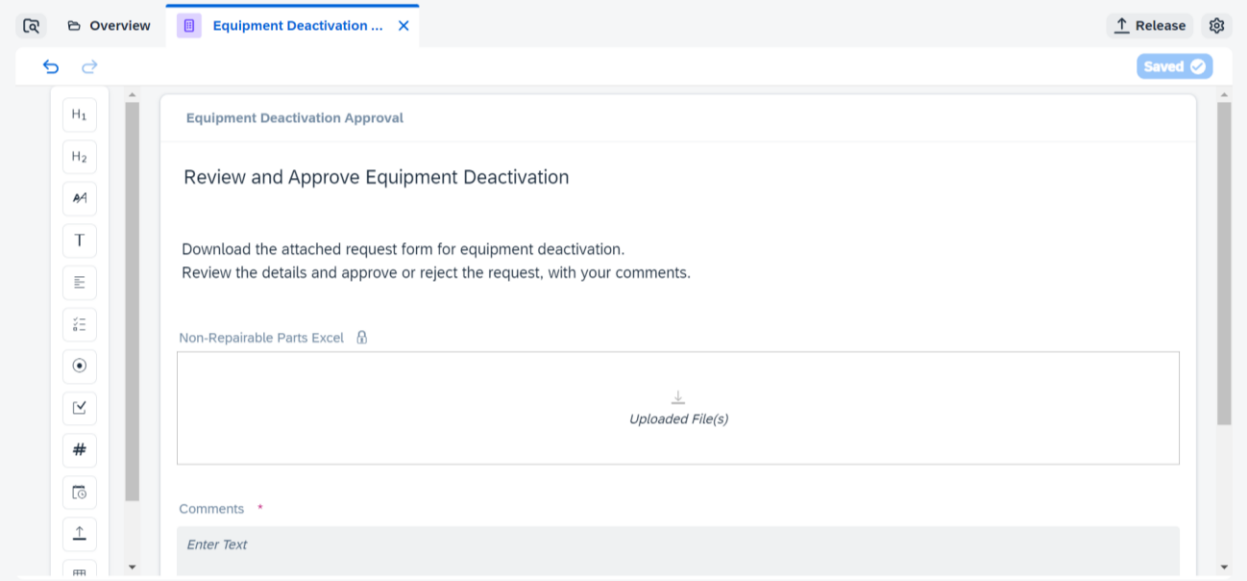
Equipment Deactivation and Material Goods Movement Process

This Process will generate the Excel template with Equipment Numbers and Material Numbers then send for the approval, it deactivates that equipment number, and it moves Material Goods as Non-Repairable by “Equipment Deactivation” and “Material Goods Movement” automations if approved, else it will send the rejection notification to the requestor.

Forms

Equipment Deactivation Approval

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



Material Goods Movement Approval

Approval form for approver to review and take decision on material goods movement process. The approval form layout used for approval and it’s like Equipment Deactivation Approval form screen which is mentioned above.

© 2023 SAP SE or an SAP affiliate company. All rights reserved. See Legal Notice on www.sap.com/legal-notice for use terms, disclaimers, disclosures, or restrictions related to SAP Materials for general audiences.

Equipment Deactivation and Material Goods Movement Approval

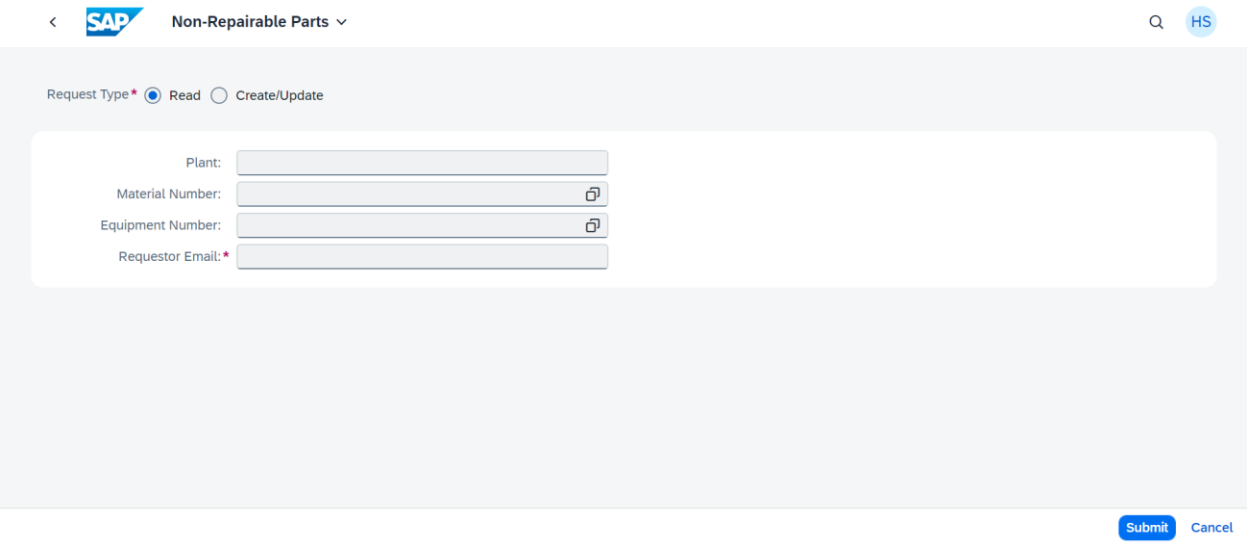
Approval form for approver to review and take decision on Equipment Deactivation and Material Goods Movement process. The approval form layout used for approval and it's like Equipment Deactivation Approval form screen which is mentioned above.

User Interface

Start UI

This template uses a Start UI which the user can use to Read the Equipment's and material details from SAP S/4HANA. Equipment deactivation and Material goods movements will be done for uploaded data.

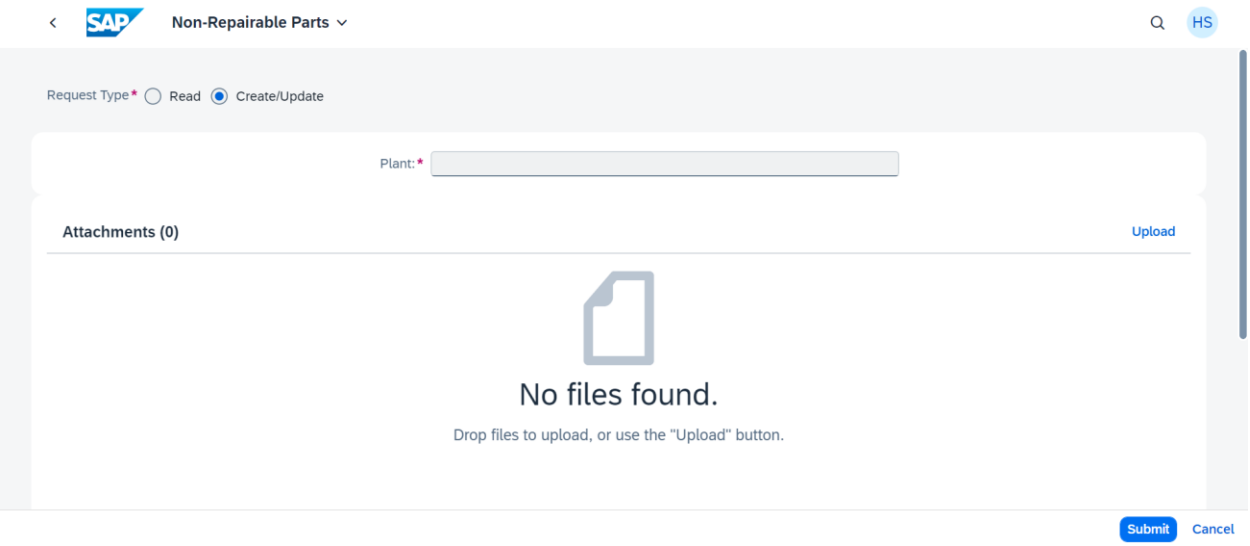
Users can select from F4 Help or can enter data manually for filter criteria then click "Submit" button to trigger Process to read Non-Repairable Parts data and download it.



Choose "Create/Update" Request Type and upload the Non-Repairable Input Template and click "Submit" button. It will trigger Post Non-Repairable process for Equipment Deactivation and Material Goods Movement

Note: Multiple files upload is not supported.

© 2023 SAP SE or an SAP affiliate company. All rights reserved. See Legal Notice on www.sap.com/legal-notice for use terms, disclaimers, disclosures, or restrictions related to SAP Materials for general audiences.



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.

www.sap.com

© 2023 SAP SE or an SAP affiliate company. All rights reserved. See Legal Notice on www.sap.com/legal-notice for use terms, disclaimers, disclosures, or restrictions related to SAP Materials for general audiences.