SAP BUSINESS TECHNOLOGY PLATFORM | EXTERNAL

Configuration Guide

Manage Credit Memo Requests using SAP Build Process Automation or SAP Workflow Management

THE BEST RUN

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Overview

This document provides information about how to configure the Manage Credit Memo Requests process. Business Process Experts and Process Operators are the target users of this document.

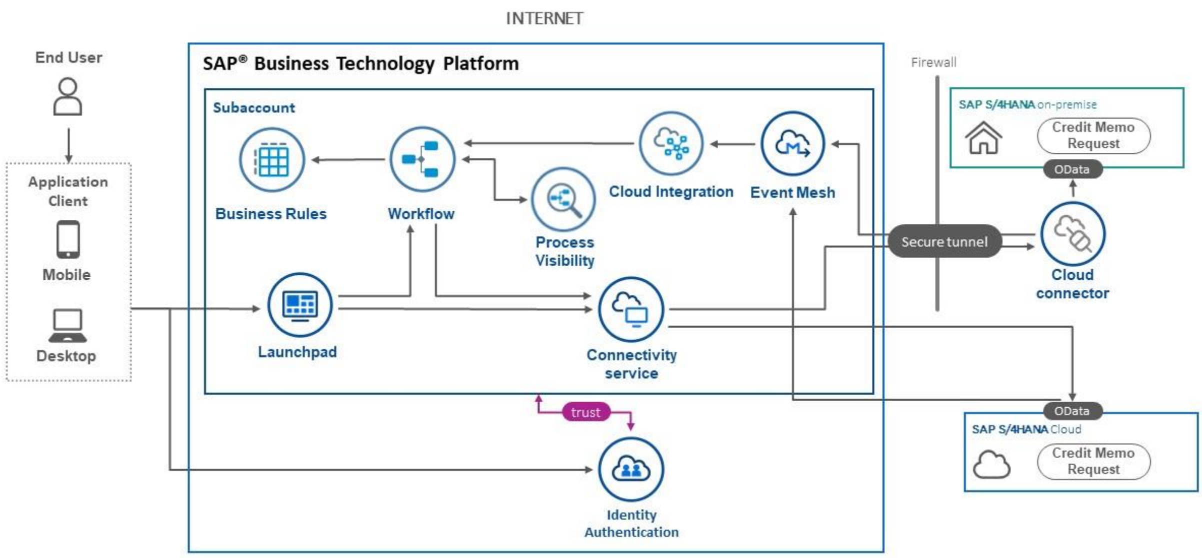
Manage Credit Memo Requests process content package for S/4HANA enables users to automate credit memo request approvals in a flexible and transparent way. It provides flexibility in executing a specific variant of the process depending on attributes like Total Net Amount, Sales Organization etc.

When a user submits a request to create a Credit Memo Request in SAP S/4HANA, a pre-configured process variant is triggered in SAP Build Process Automation or SAP Workflow Management based on business conditions configured by process expert. On approval, Credit Memo Request's status is updated in SAP S/4HANA system.

Salient features of this content package are mentioned below:

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

SAP S/4HANA – Manage Credit Memo Request Approvals



Live Process Artifacts

A process content package consists of process templates, process steps, workflow form UI, process variants, decisions, and process visibility models. Please refer help documentation about these artifacts.

Process

A process template is a set of business activities and tasks that, once completed, fulfills an organization goal. The Manage Credit Memo Request package contains the following process template:

Credit Memo Request Approval – Establish an approval process for a Credit Memo Request created in SAP S/4HANA. It includes three process steps for easy no-code/low-code process configuration.

Table 1 represents the list of process steps available to be used in manage sales order process.

Table 1. Process Steps.

Process Steps/Subflows	Cardinality	Detailed Description
Validate Credit Memo	0..1	This step/subflow has activities to validate a Credit Memo Request based on a business rule. It is possible to add custom rule-based validations on the Credit Memo Request (such as basing it on Sales Organization, Distribution Channel, Division, Total NetAmount, Transaction Currency etc.). The step can occur maximum once in and must be the first step of the process. If the validation does not pass, the Credit Memo Request is automatically rejected.
Approve Credit Memo	0.. N	This step/subflow has activities to initiate and complete one level of approval for a Credit Memo Request that requires external approval. Based on the number of approval levels required, this step can be configured and re-used multiple times. The step can be renamed to reflect the appropriate approval roles, for example, 'Approval by Local Manager'. The approver is determined based on various conditions using a business rule and the step level attributes. The approvers are automatically notified via mail about the approval task.
Update Credit Memo	1..1	This step/subflow either Rejects or Releases the Credit Memo Request based on the approvals and validations performed on it. This is the final step and the changes are reflected in S/4HANA.

The process has attributes and these attributes are available in process visibility to search approval process instances and to define process performance indicators. Please see Table 2 for more details

Table 2. Process Attributes.

Process Attributes	Detailed Description
Approver Role	The role of the persona whose approval is required

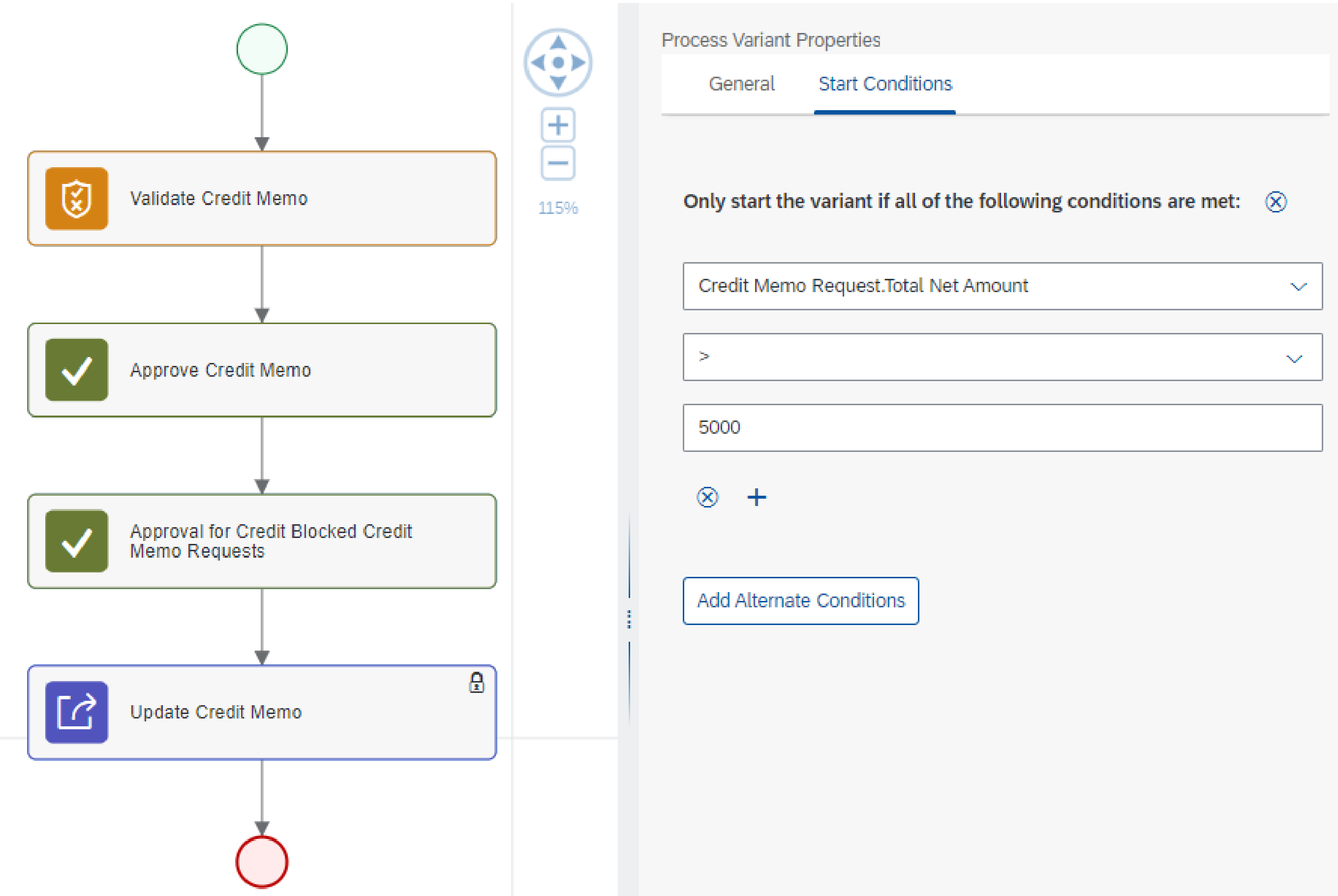
Process Variants

A process variant consists of multiple process steps configured by a line of business expert. It is possible to create multiple variants of the same process. For example, if the total net amount of Credit Memo Request is more than 5000 USD then there could be a multi-level approval process, or if the total net amount is less than 5000 USD, one-level approval is sufficient etc.

Please refer help documentationabout how to import content packages and configure a process variant.

Credit Memo Request Approval Process

An example of a Manage Credit Memo Requests Process Variant is given below.



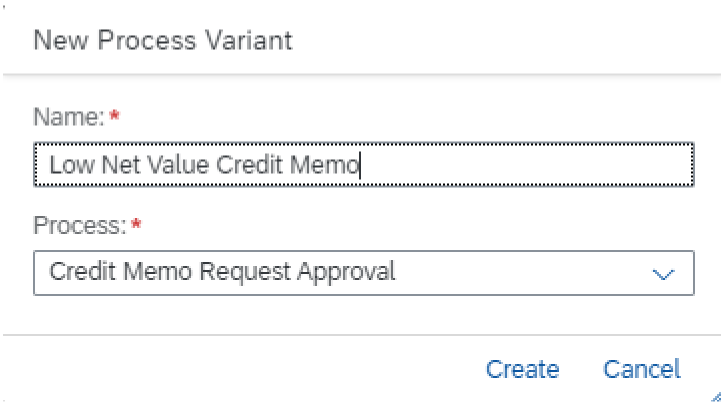
Import Manage Credit Memo Requests Process and Configure Process Variants with

SAP Build Process Automation

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

Import Manage Credit Memo Requests Content and Configure Process Variants with SAP Workflow Management

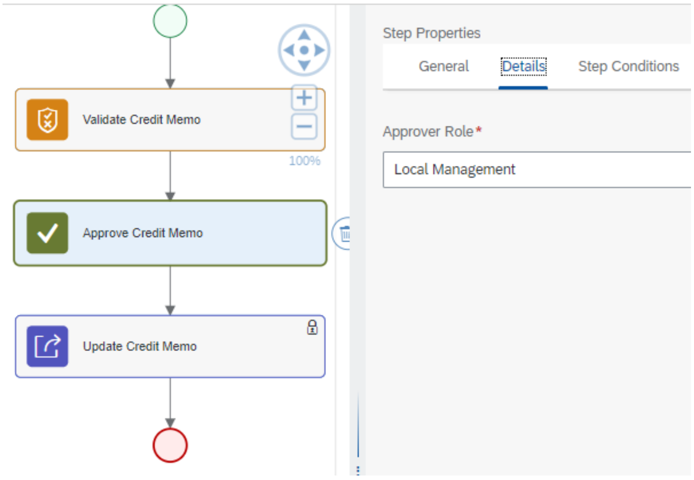
1. Import content package **Manage Credit Memo Requests**. Please refer the standard help document about [how to import a content package]().
2. Open content package in Flexibility Cockpit and click Process Variants tile.
3. Click New Process Variant.
4. Enter Name of the new Process Variant (ex, Low Net Amount Sales Order) and select "**Credit Memo Request Approval**" as Process.



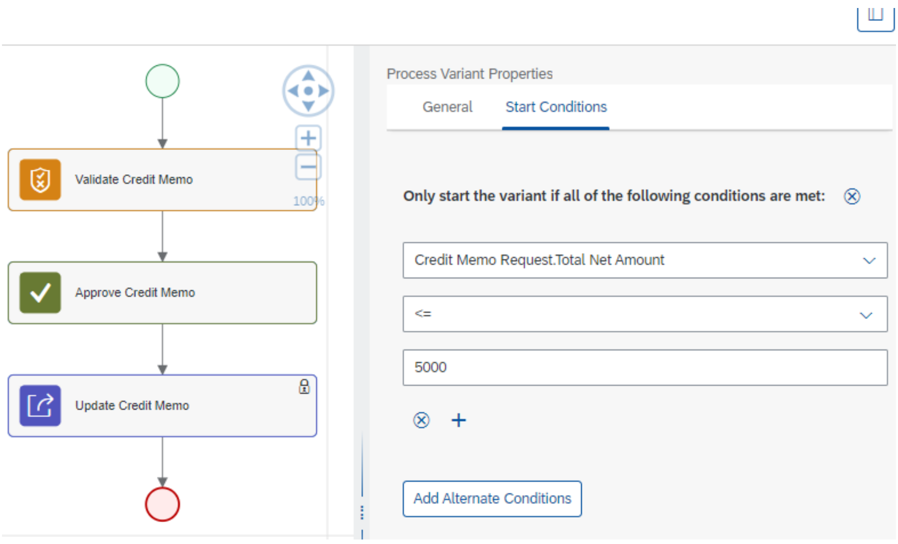
5. Click Create button.
6. Select the newly created Process Variant tile to save and activate the process variant.

7. The process variant has a default implementation with three steps to approve a sales order

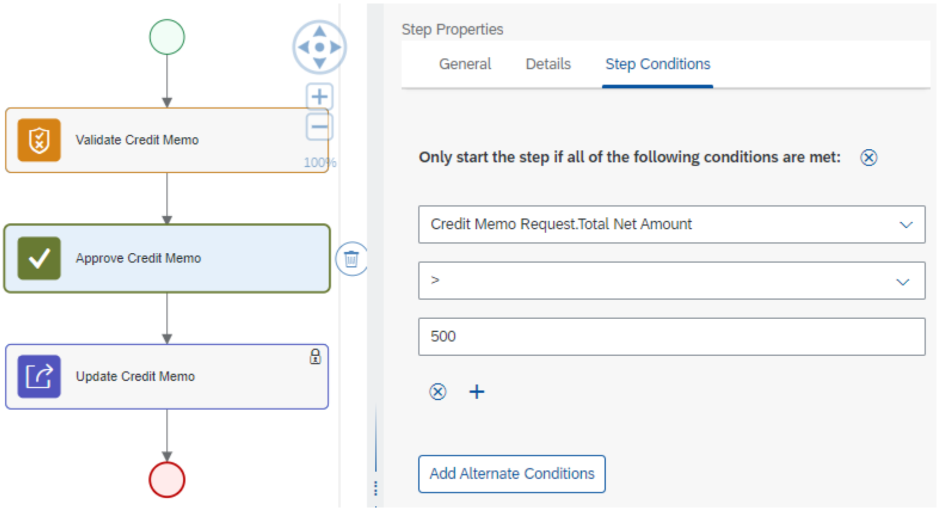
8. It is possible to add step like "Approve Credit Memo" multiple times to a process variant. Drag and drop these steps where applicable.
9. Process expert can influence whom this approval step will be assigned to by configuring the step level attribute - Approval Role. This value is used in Decisions and in Comment History



10. Process expert can also decide conditions for the Process to start. For example, start the process only when the net amount is less or equal than 5000



11. Similarly, a more granular condition can be applied at step level, for instance, the step must execute only if the net amount is more than 500. Or else, no need to approve



12. Save and Activate the variant. A successful activation will create a new workflow definition in the account that can be viewed in the Monitor Workflows – Workflow Definitions app in SAP Fiori Launchpad.

Decisions & Policies

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

Manage Credit Memo Requests Process, enable customers to configure decisions to gain flexibility to

1. Perform (additional) Business Validation on Credit Memo Request.
2. Determine Approver Strategy
3. Determine Approver

Please go through Manage Decisions application in SAP Build Process Automation or SAP Workflow Management.

Credit Memo Request Validation

With this decision, it is possible to add any business-specific validation on a Credit Memo Request.

Rule Service Name: Credit Memo Request Validation

Input: Credit Memo Request (Structure data type)

ATTRIBUTE	TYPE	DESCRIPTION
Transaction Currency	String	The currency that applies to the sales document
Sales Group	String	A group of sales people who are responsible for processing sales of certain products or services
Sales Office	String	A physical location (for example, a branch office) that has responsibility for the sale of certain products or services within a given geographical area
Sales District	String	
Overall SD Process Status	String	The processing status of the entire sales document
Sales Organization	String	An organizational unit responsible for the sale of certain products or services.
Distribution Channel	String	Organizational channel through which goods or services reach customers, for example, wholesale, retail, and direct sales
Organization Division	String	A way of grouping materials, products, or services. The system uses divisions to determine the sales areas and the business areas for a material, product, or service
Total Net Amount	Number	The net value of the sales document in document currency

Sold To Party	String	The customer who orders the goods or services. The sold-to party is contractually responsible for sales orders
Approval Step	String	Approval Step
Approver Role	String	Approver Role
Credit Memo Request	String	The number that uniquely identifies the credit memo request
Credit Memo Request Type	String	The sales and distribution document category (CR, for example)
Sales Document Type	String	Classifies types of sales document that require different processing by the system.

Output: **Validation Status** (Structure)

Validate Purchase Info Record attributes with various attributes.

ATTRIBUTE	TYPE	DESCRIPTION
Status	String	'Passed' if validation is successful and 'Failed' if validation failed.
Reason	String	Explanation of validation status

Rule Definition

It is possible to maintain additional business validation using this rule to Validate Credit Memo Requests.

Where used

Step: Validate Sales Order

Approver Determination Strategy

This decision is used in the Approval process step to determine the Approver strategy based on different attributes of Credit Memo Request. Based on the business requirement approver can be determined by external service or business rules. Say, if the Sales Organization is 1730, approver will be determined by 'External Service' and for other Sales Organizations, approver will be determined by Business Rules.

Input and output

Rule Service Name: Approver Determination Strategy

Input: Credit Memo Request (Structure data type)

ATTRIBUTE	TYPE	DESCRIPTION
Transaction Currency	String	The currency that applies to the sales document
Sales Group	String	A group of sales people who are responsible for processing sales of certain products or services
Sales Office	String	A physical location (for example, a branch office) that has responsibility for the sale of certain products or services within a given geographical area

Sales District	String	
Overall SD Process Status	String	The processing status of the entire sales document
Sales Organization	String	An organizational unit responsible for the sale of certain products or services.
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Approval Step	String	Approval Step
Credit Memo Request	String	The number that uniquely identifies the credit memo request
Credit Memo Request Type	String	The sales and distribution document category (sales order, for example)
Sales Document Type	String	Classifies types of sales document that require different processing by the system.

Output Approver Determination Strategy (Structure)

ATTRIBUTE	TYPE	DESCRIPTION
Determination Strategy	String	Determination strategy can either “Business Rule” or “External Service” depending on Sales order details.

Important Note: Refer to appendix to understand how to configure and implement approver determination based on 'External Service'.

Determine Approver

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

Input and output

Rule Service Name: Determine Approver

Input: Credit Memo Request (Structure data type)

ATTRIBUTE	TYPE	DESCRIPTION

Transaction Currency	String	The currency that applies to the sales document
Sales Group	String	A group of sales people who are responsible for processing sales of certain products or services
Sales Office	String	A physical location (for example, a branch office) that has responsibility for the sale of certain products or services within a given geographical area
Sales District	String	
Overall SD Process Status	String	The processing status of the entire sales document
Sales Organization	String	An organizational unit responsible for the sale of certain products or services.
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Total Net Amount	Number	The net value of the sales document in document currency
Sold To Party	String	The customer who orders the goods or services. The sold-to party is contractually responsible for sales orders
Approval Step	String	Approval Step
Credit Memo Request	String	The number that uniquely identifies the credit memo request
Credit Memo Request Type	String	The sales and distribution document category (sales order, for example)
Sales Document Type	String	Classifies types of sales document that require different processing by the system.

Output: Approver Details

ATTRIBUTE	TYPE	DESCRIPTION
User Id	String	User ID (comma separated list) of the individual approvers
Unit Of Time	String	Unit of time of due duration
Due Duration	Number	The task due duration target by when the Approval (user task) needs to be completed
Due Duration Reference	String	This is either 'Task' or 'Workflow'. The duration will be calculated based on the start time of either the entire process (Workflow), or the current Approval Task (Task)

Email	String	Email address of the approver or approvers
User Group	String	The user group who can approve the step in the process

Rulesets

To determine approvers two Rulesets are working sequentially. Rulesets are given below.

1. Due Date Determination Policy: Policy to determine the due date for each approval step of Manage Sales Order.

   Rule Definition: Determine Task Due Date

2. Approver Determination Policy: Determine approver for each approval step in the process based on the conditions like sales organization, sales order type, total net amount of order, transaction Currency, sold to party.

   Rule Definition: Determine Approver

Where used

Step: Approve Credit Check

Determine Process Administrator

This decision is used in the Approval process step to determine in the event where approvers could not be determined for the Credit Memo Request.

Input and output

Rule Service Name: Determine Process Administrator

Input: Credit Memo Request (Structure data type)

ATTRIBUTE	TYPE	DESCRIPTION
Transaction Currency	String	The currency that applies to the sales document
Sales Group	String	A group of sales people who are responsible for processing sales of certain products or services
Sales Office	String	A physical location (for example, a branch office) that has responsibility for the sale of certain products or services within a given geographical area
Sales District	String	
Overall SD Process Status	String	The processing status of the entire sales document
Sales Organization	String	An organizational unit responsible for the sale of certain products or services.

Distribution Channel	String	Organizational channel through which goods or services reach customers, for example, wholesale, retail, and direct sales
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Approval Step	String	Approval Step
Credit Memo Request	String	The number that uniquely identifies the credit memo request
Credit Memo Request Type	String	The sales and distribution document category (sales order, for example)
Sales Document Type	String	Classifies types of sales document that require different processing by the system.

Output: Process Administrator Details

ATTRIBUTE	TYPE	DESCRIPTION
Administrator User IDs	String	User ID (comma separated list) of the process administrator
Administrator Group IDs	String	Group ID (comma separated list) of the process administrator
Administrator Email IDs	String	Email Address (comma separated list) of the process administrator

Rulesets

Determine Process Administrator Policy: Policy to determine the process administrator

Rule Definition: Determine Process Administrator

Where used:

Step: Approve Credit Check

Process Visibility

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

Manage Credit Memo Request

Manage Credit Memo Requests process content package provides out of the box visibility on all the process variants in SAP Build Process Automation or SAP Workflow Management. Sales expert or line of business expert will be able to enhance the visibility scenario.

Configure Visibility Scenarios in SAP Build Process Automation

1. Go to the Application Development Lobby.
2. Select Manage Credit Memo Requests Process Project.
3. Click to open Manage Credit Memo Requests Process scenario.
4. Click Activate button.

Please go through the help documentation on how to configure the visibility scenario.

Configure Visibility Scenarios in SAP Workflow Management

1. Go to Process Visibility Cockpit.
2. Select Manage Credit Memo Requests Process tile.
3. Click Visibility Scenarios tile.
4. Select Manage Credit Memo Requests Process scenario and click Activate.

You can modify the business scenario and activate it. Refer to the end user guide to learn more about using the Visibility Dashboard.

Please go through help documentation to learn more on how to model a visibility scenario.

Access Process Workspace in SAP Build Process Automation

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

g. Under the Parameters section, provide the following:

Parameter Name	Parameter Value
Name	scenarioId
Default Value	com.sap.content.ManageCreditMemo
Required	Toggle to Yes

h. Choose Save.

i. Assign the local copy to a group and make sure that they're visible to users. For more information, see Assign Apps to a Group and to a Catalog and Assign Content to a Role.

3. Once created, select app that corresponds to "Manage Credit Memo Requests Process".
4. User will see the process visibility dashboard.

Access Process Workspace in SAP Workflow Management

1. Go to Process Flexibility Cockpit
2. Select Manage Credit Memo Requests Process
3. Click Live Process Insights Manage Credit Memo Requests Process
4. User will see the process visibility dashboard.

Please go through help documentation on how to access process workspace.

Appendix

Approver Determination Strategy – External Service

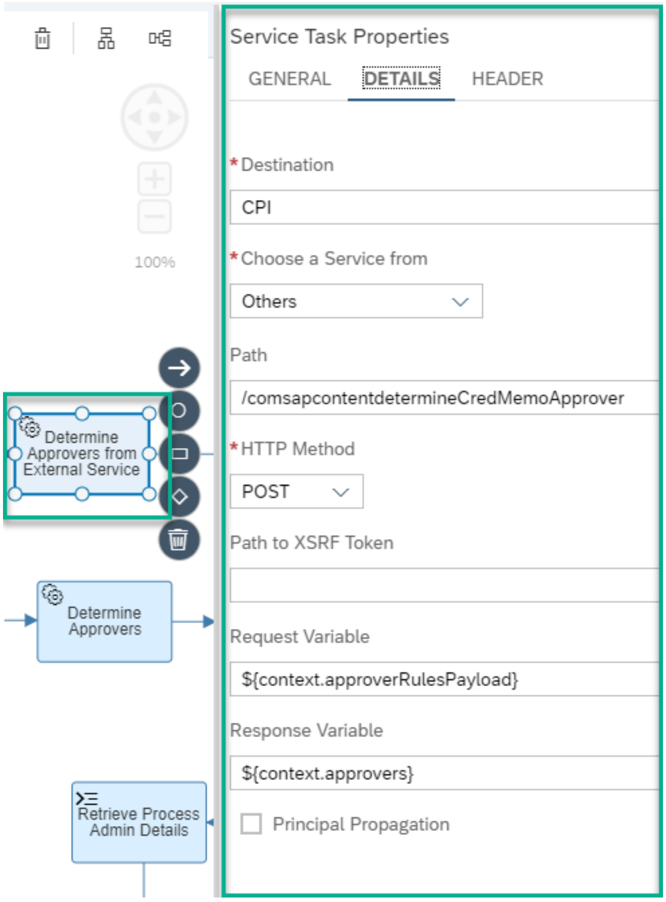
The process content provides an option to determine approvers using an alternative strategy, i.e. External Service instead of Busines Rule.

To leverage this strategy, the Approve Process step has a provision to call an iFlow with the following configuration. This iFlow needs to be implemented as per your business requirement.

Destination	CPI [Refer to Setup Guide]
CPI Adapter	HTTP
Endpoint	/comsapcontentdetermineCredMemoApprover
HTTP Method	POST
Request Payload Type	Application/json

Request Payload Structure	{
	"Vocabulary": [
	{
	"CreditMemoRequest": <Credit Memo Request Details>
	}
	]
	}

Response Payload Structure	{
	"Result": [
	{
	"Approver": {
	"DueDurationReference": < "Task" OR "Workflow" >,
	"Email": <comma separated email ids>,
	"UnitOfTime": < "h" OR "m" OR "Y" OR "M" OR "D" >,
	"UserId": <comma separated User Ids>,
	"DueDuration": <Duration units (integer/number)>,
	"UserGroup" :<comma separated user-group ids>
	}
	}
	]
	}



Service Task Properties
GENERAL
DETAILS
HEADER
*Destination
CPI
*Choose a Service from
Others
Path
/comsapcontentdetermineCredMemoApprover
*HTTP Method
POST
Path to XSRF Token
Request Variable
${context.approverRulesPayload}
Response Variable
${context.approvers}
Principal Propagation
100%
Determine Approvers from External Service
Determine Approvers
Retrieve Process Admin Details