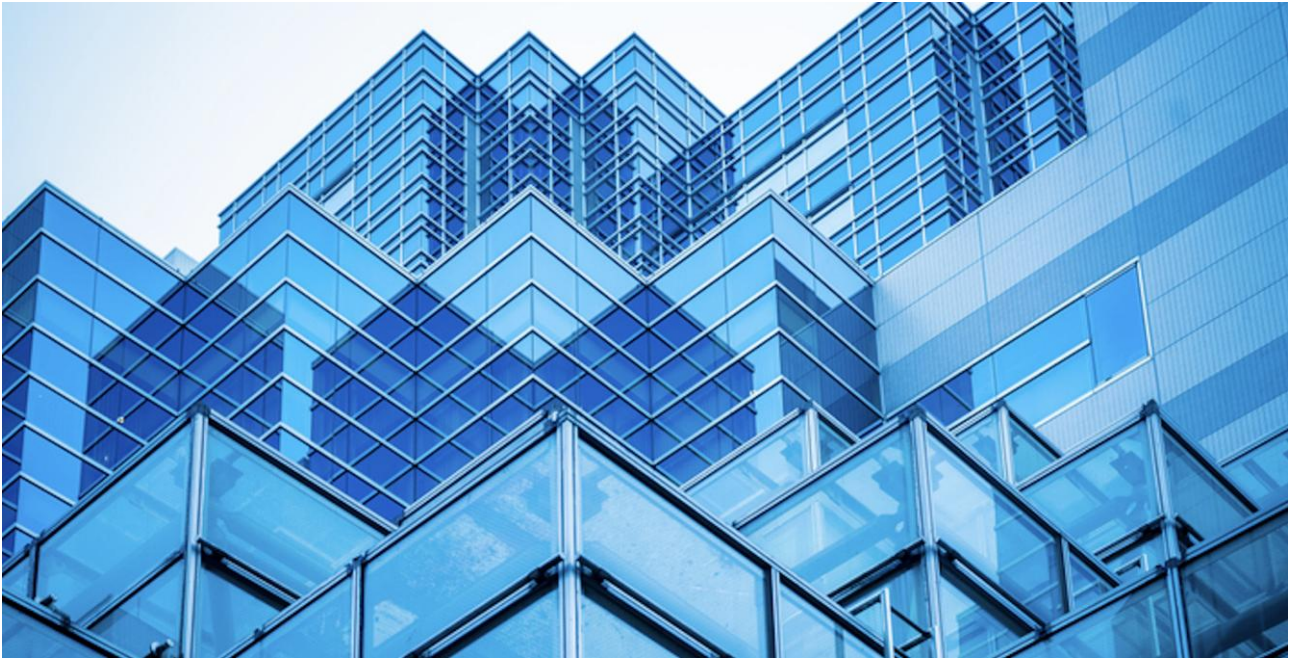




PUBLIC

SAP Build Process Automation

Authorization For Expenditure Configuration and User Guide

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Change Log

Version	Date	Description
1.0.1	May 26, 2025	Document updated: Appendix updated

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 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 Account with destination, cloud connector, user roles etc., (b) Integration Content via SAP Integration Suite, (c) SAPUI5 application via SAP Business Application Studio and (d) Import and configure the template using SAP Build Process Automation design studio and (e) 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.

Note:

- Learning contents are published only for demo and reference purposes. We do not provide any support to learning / sample content.
- This documentation is not a detailed guide to setup SAP Business Technology Platform services. It assumes that IT admin who is setting the content is skilled with SAP Business Technology Platform environment. **Configuration section must be followed.**
- 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, SAP Integration Suite, and its capabilities.

Overview

This document provides technical information about what needs to be configured to make the package - Authorization For Expenditure approval process content package run. The main audience of this document are technical personas like IT Administrators or Developers.

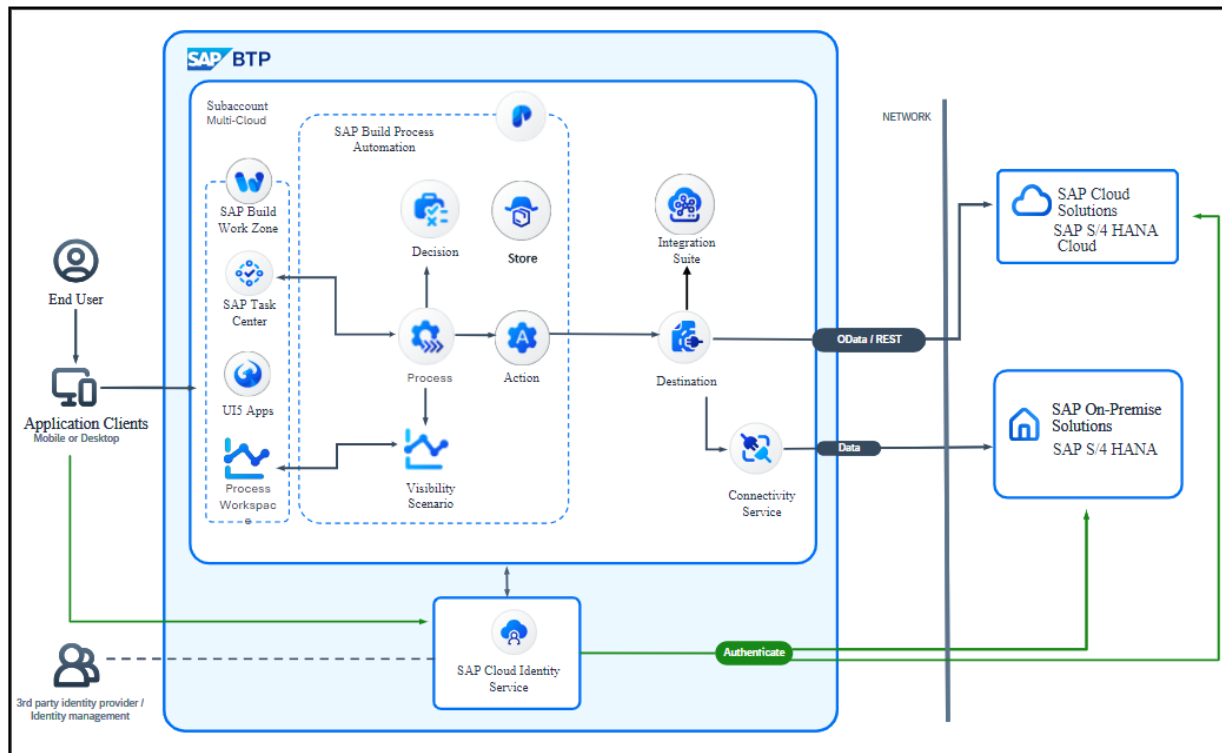
Authorization For Expenditure (AFE) is common in upstream oil and gas industry and used to approve, control, and monitor high value investments in capital and operational expenditure processes. AFEs are created at an oil / gas well level and there can be many AFEs for a particular well. These AFEs can be used for well development, maintenance etc. There are internal and oil and gas joint venture partner approvals needed before AFE can be taken up for execution.

This content package can be used with both SAP S/4HANA Cloud Private Edition (2023 onwards) and S/4HANA Cloud Public Edition (2502 onwards)

Features:

- Plug and Play with SAP S/4HANA without any additional development
- Flexibility in determining process variants based on business conditions.
- Automatic email notification to parties involved.
- Out-of-the-box visibility into key process performance indicator

Process Flow Diagram



Solution flow :

1. The requestor submits an expenditure detail for review and evaluation on start UI.
2. Approvers thoroughly evaluate the AFE (Authorization For Expenditure) based on established criteria and organizational policies to decide whether to approve or reject the request.
3. If approved, the AFE initiates the release process in SAP S/4HANA, and its status is updated to 'Approved,' indicating readiness for further actions.
4. If the AFE is rejected, its status is updated to 'Rejected' in the SAP S/4HANA system, clearly marking it as not approved for any processing.
5. The AFE process concludes with either the successful posting of authorized expenditures in the system or the formal acknowledgment of the rejected AFE, ensuring transparency and accountability.

Note:

- The process can be triggered via a Start UI application and it supports request for projects with OPCR status.
- My Inbox Application must be accessed through Work Zone.

Required SAP Business Technology Platform Services

The following SAP Business Technology Platform services are required to consume the **Authorization For Expenditures**:

- SAP Build Process Automation
- SAP Connectivity service
- SAP Business Application Studio
- SAP Application Runtime Service
- SAP Work Zone, standard or advanced

- SAP Cloud Identity Services - Identity Authentication (optional)
- SAP Business Technology Platform, Cloud Foundry runtime.

Prerequisites

For this template to run successfully the following prerequisites are needed

- SAP Desktop Agent 3.28 or higher.
- Get Access to BTP Account.
- Need Valid S/4HANA User.
- This template requires Integration package SAP Build Process Automation Integration with SAP S/4 HANA for Authorization for Expenditure to run. You can download this package separately from the store. The guide to set-up and configure integration package is mentioned along with the integration package itself.

Configuration Guide

Authorization For Expenditure template requires SAP Build Process Automation subscription and Destination Setup for SAP Build Process Automation. Follow the [setup and configuration section](#).

Setup SAP S/4HANA

Setup Communication

NOTE: This Section is needed only if you are connecting to SAP S/4HANA Cloud

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
Company Code - Read	Overview Company Code - Read SAP Business Accelerator Hub
Cost Center - Read (A2X)	Overview Cost Center - Read (A2X) SAP Business Accelerator Hub
Profit Center-Read(A2X)	Overview Profit Center - Read (A2X) SAP Business Accelerator Hub

Setup Business Technology Platform Cockpit

Configure SAP Build Process Automation Destination

To Access the SAP Build process Automation, you can configure the destination. Please create destination accordingly

Destination Property	Value
Name	sap_process_automation_service
Type	HTTP
URL	<" endpoints"."api">
Client ID	<"uaa"."clientid">
Client Secret	<"uaa"."clientsecret">
Token Service URL	<"uaa"."url"/>/oauth/token
Proxy Type Internet	Internet
Authentication	OAuth2ClientCredentials

Add the property **sap.processautomation.enabled** as **true** to view the destination in the SAP Build Process Automation tenant. Please refer [help document](#) for more details.

Configure SAP S/4HANA Destination

This content package can be used with both SAP S/4HANA Cloud Private Edition (2023 onwards) and S/4HANA Cloud Public Edition (2502 onwards). Destinations can be created accordingly.

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

Configure SAP Integration Suite Destination

Configure Destination to connect to Integration Suite destination cloud system.

Destination Property	Value
Name	IntegrationSuite
Type	HTTP
URL	<Integration Suite Destination endpoint> <a href="https://<CPI>.hana.ondemand.com">https://<CPI>.hana.ondemand.com
Proxy Type Internet	Internet

Authentication	Basic Authentication
Username	<Username> of the SAP S/4HANA Communication User
Password	<Password> of the SAP S/4HANA Communication User

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 Business Technology Platform Account.

Configuring destination, [Configure 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
TaskCenterAdmin	Permission to execute calls to the connector status API and monitor configured destinations and running background jobs.
Process Automation Developer	Standard Business User, can model and publish processes
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](#).

Cloud Connector Configuration

For SAP S/4HANA on-premise landscape, configure cloud connector to enable secure tunnel to SAP Business Technology Platform tenant. Please refer the help documentation to [configure Cloud Connector](#).

Services/Resources that need to be exposed from SAP S/4HANA on-premise using Cloud Connector.

Resources	Protocol	Backend-Type
/sap/opu/odata/sap/API_COMPANYCODE_SRV/A_CompanyCode	OData	SAP S/4HANA
/sap/opu/odata/sap/API_COSTCENTER_SRV/A_CostCenterText	OData	SAP S/4HANA
/sap/opu/odata/sap/API_PROFITCENTER_SRV/A_ProfitCenterText	OData	SAP S/4HANA
/sap/opu/odata/sap/ZWF_PROJECTS_CDS/ZWF_PROJECTS	OData	SAP S/4HANA

/sap/opu/odata/sap/ZWF_PROJECTS_CDS/ZWF_PROJECT_JV	OData	SAP S/4HANA
/sap/opu/odata/sap/ZWF_PROJECTS_CDS/ZWF_STATISTICAL_WBS	OData	SAP S/4HANA
/sap/opu/odata/sap/ZWF_STD_WBS_SRV/ZWF_STANDARD_WBS	OData	SAP S/4HANA
/sap/opu/odata/sap/ZWF_PROJECT_STATUS_CDS/ZWF_PROJECT_STATUS	OData	SAP S/4HANA
/sap/opu/odata/sap/ZWF_PROJECT_TYPE_CDS/ZWF_PROJECT_TY PE	OData	SAP S/4HANA
ZWF_RFC_PS_SET_STATUS	RFC	SAP S/4HANA
ZWF_RFC_PS_UPDATE_BUDGET	RFC	SAP S/4HANA

Setup Content Package

Import SAP Build Process Automation content

Standard automation packages released by SAP will be available at the store. To know more about the store visit [SAP Build Process Automation Store](#).

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 “Business Process.”
3. In the Search bar type “**Authorization for Expenditure**”
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 “**Authorization For Expenditure**” template available for use.

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

Import and deploy TASK UI application

The content package requires the SAP UI5 user interface which is available in Authorization For Expenditure Process content package. Below are details of Task UI application

Task UI Application: AFE_UserTask

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

- Download the SAPUI5 application Task UI from the imported store project.
- Open Business Application Studio and import the previously downloaded SAPUI5 project.
- Build SAPUI5 project using mta.yaml file and the generated project (generated mtar file will be available in the mta_archives folder) file can be deployed.

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.

Configure Decisions

There are 6 decisions in this template. We can configure as required.

1. Determine Administrators

This Decision is used in determine administrators in case of any errors in fetching the approvers for AFE approval. To modify the decision:

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

The screenshot displays the SAP Process Editor interface for the 'Determine Administrators' decision. On the left, the decision diagram shows a flow from an 'Input' node to a 'Decision' node, which then leads to an 'Output Parameter' node labeled 'Admin Details'. A tooltip for the 'Input Parameters' shows 'Approval Step' (Type: String) and 'Expenditure Header Details' (Type: Expenditure Header Details). The right panel, titled 'Determine Administrators', provides configuration options. Under 'Inputs/Output', there are fields for 'Input Parameters' (Name, Description, Type, List) and 'Output Parameter' (Name, Description, Type, List). The 'Output Parameter' section shows 'Admin Details' with a description 'Admin details in case approver not found'.

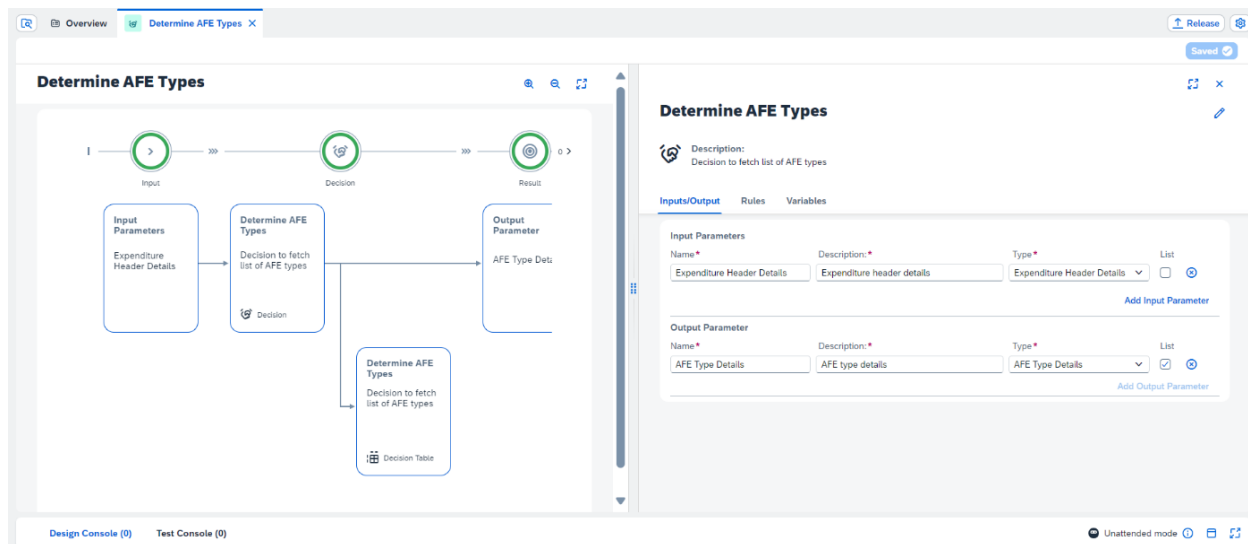
- Edit the rule to add more rows or update existing value.

This screenshot shows the same SAP Process Editor interface, but with the 'Decision Table' configuration panel open on the right. The decision diagram on the left is identical. The 'Decision Table' panel includes a table with columns for 'If' and 'Then'. The 'If' column contains 'AFE Type' and 'MATCHES :*'. The 'Then' column contains 'Approval Step', 'Admin User ID', 'Admin Group ID', and 'Admin Email'. The table is currently empty, with a 'MATCHES :*' entry in the 'If' column. The 'General Information' section shows 'Status: Draft' and 'Hit Policy: FIRST MATCH'.

#	Then
☐ AFE Type	Approval Step
☐ MATCHES :*	MATCHES :*

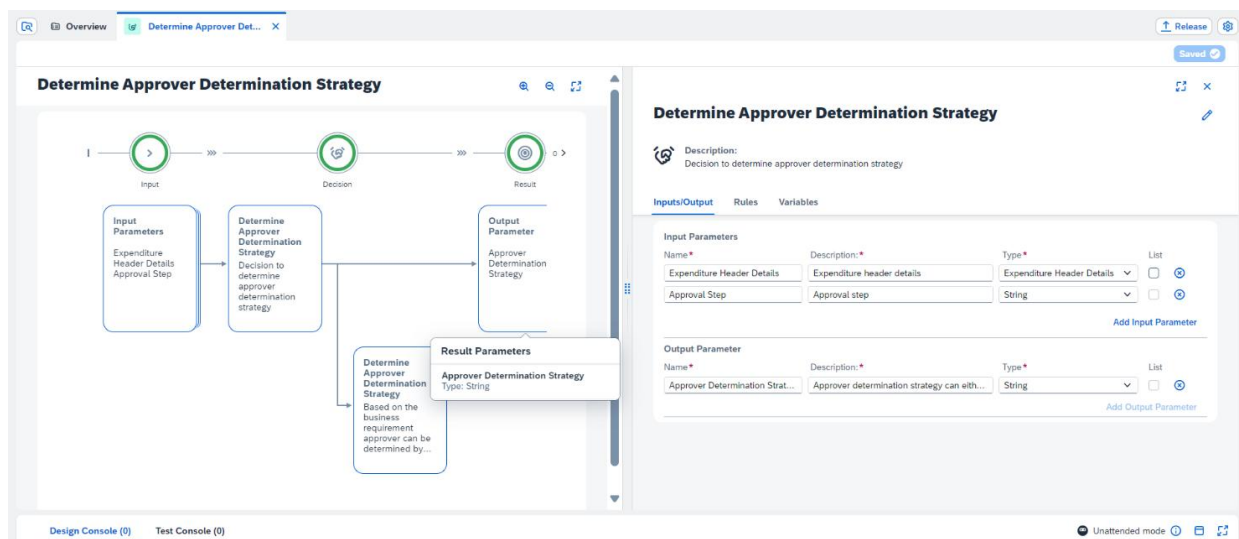
2. Determine AFE Types

This decision is used to fetch list of AFE types.



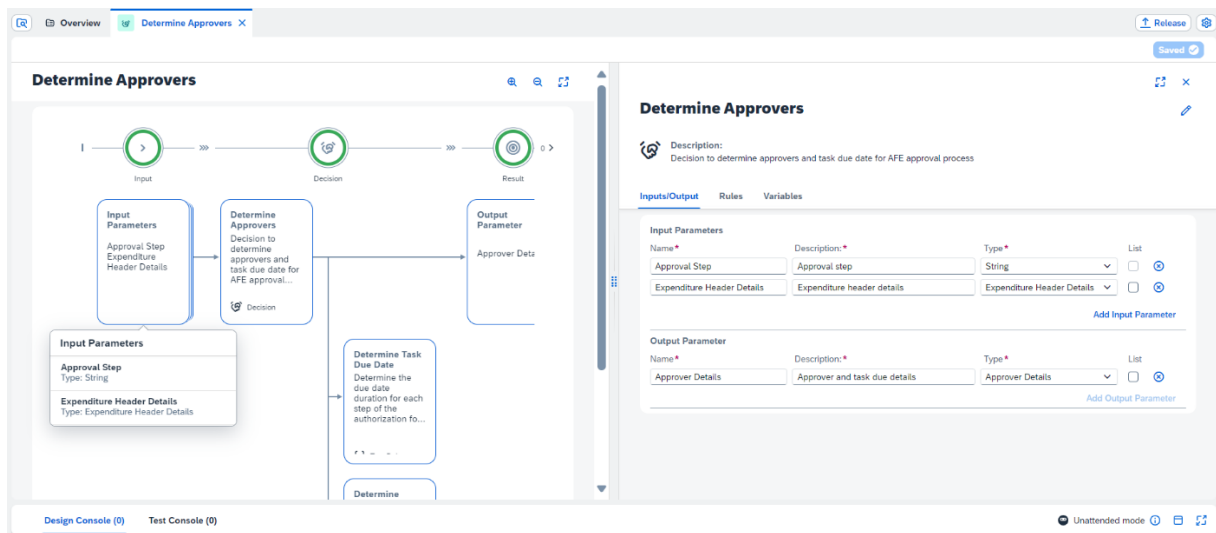
3. Determine Approver Determination Strategy

The decision is used to determine approver determination strategy.



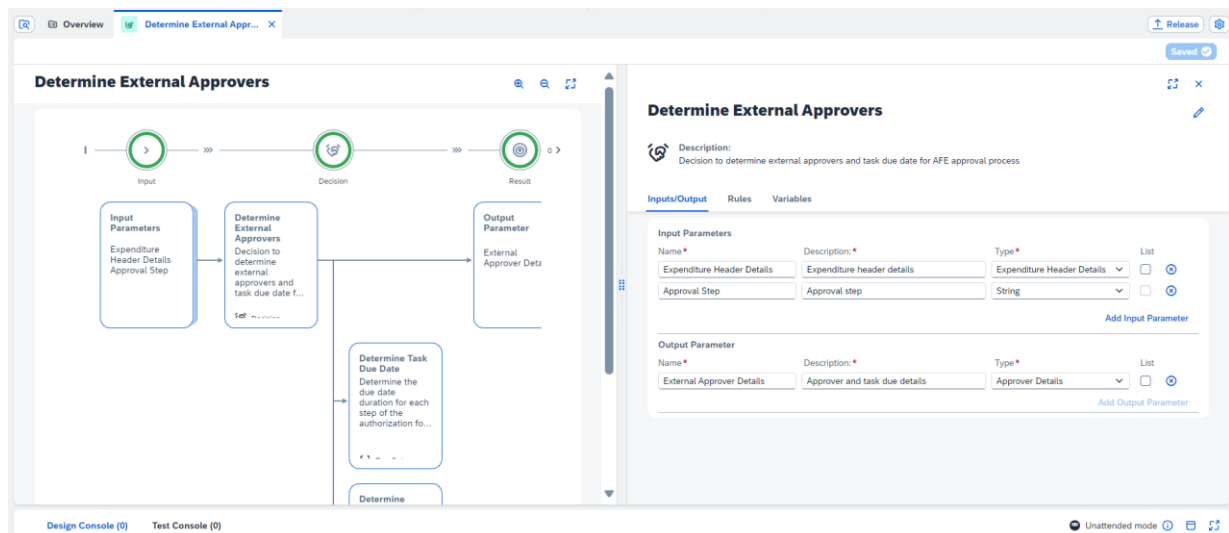
4. Determine Approvers

This is used to determine approvers and task due date for AFE approval process.



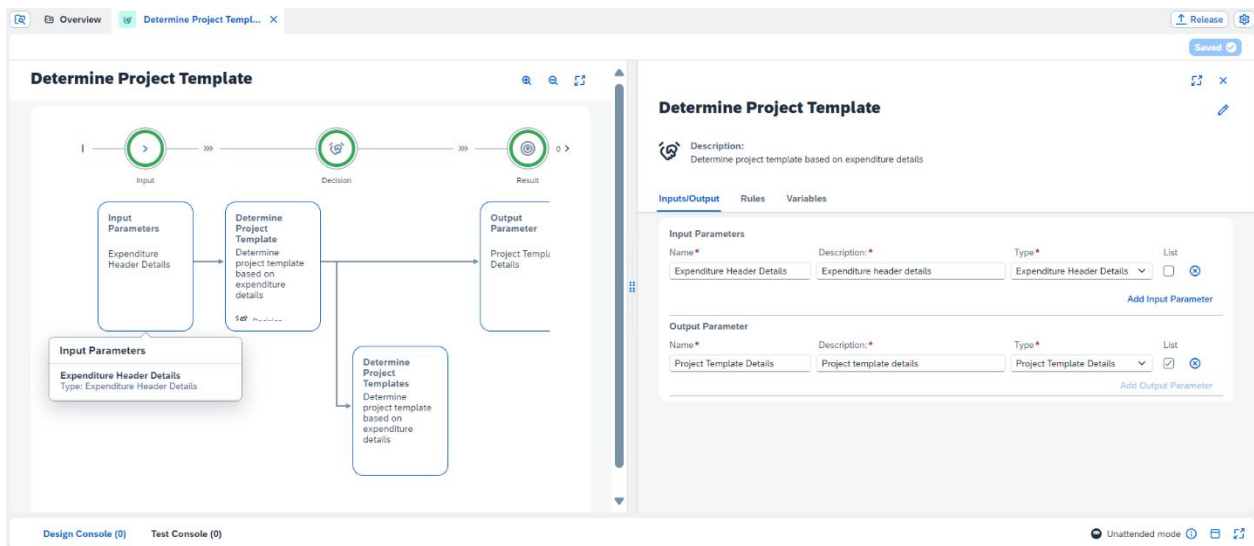
5. Determine External Approvers

Decision to determine external approvers and task due date for AFE approval process.



6. Determine Project Template.

This decision used to determine project template based on expenditure details.



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 modified.

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**'.

Mail Body

Dear Requestor,
 The Authorization for project id - <projectid> has been approved.
 Release status update, WBS creation and Budget update has been completed.
 Updated data can be viewed using transaction codes - CJ03 and CJ31 in backend system.
 Thank You.

*****This is a system generated mail*****

Close

- 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](#)

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

Create Process

[Create a Business Process | SAP Help Portal](#)

Create Forms

[Create a Form | SAP Help Portal](#)

Create Automation

[Create an Automation | SAP Help Portal](#)

Create Decision

[Create a Decision | SAP Help Portal](#)

Create Process Visibility Scenario

[Create a Visibility Scenario | SAP Help Portal](#)

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'.

For more information please visit: [SAP Build Process Automation](#)

Note: 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.

Import Destination

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

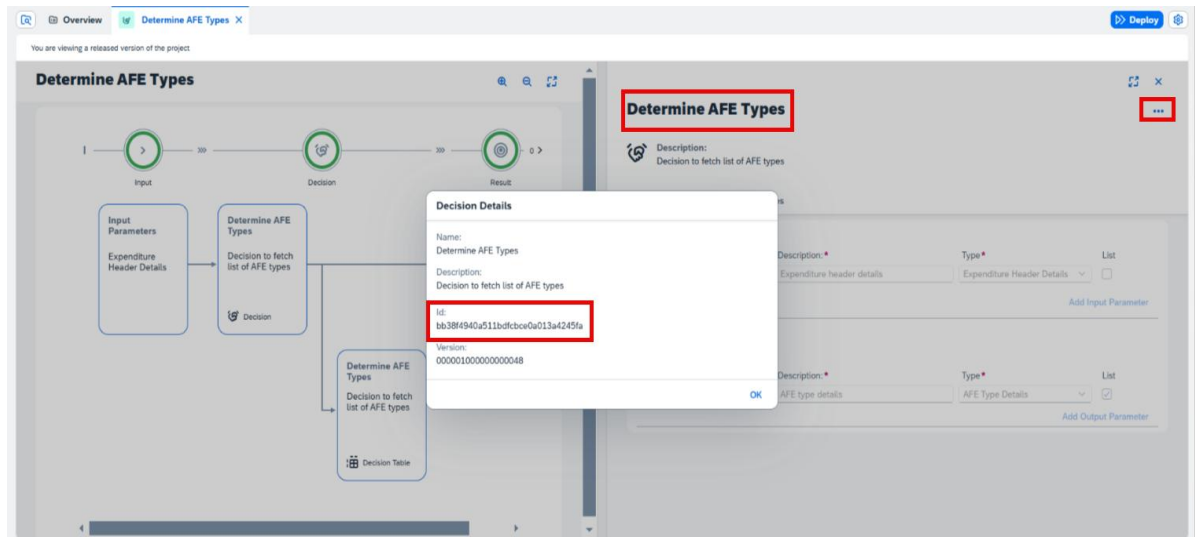
To configure destination,

- Click on **Control Tower**.
- Select **Destinations** from the right panel.
- Click **Add**

Select the destinations created in the setup section to be added.

For more information and screen shots, please refer to the below link: [Manage Destinations](#)

1. In the previous section of 'Release and Deploy Process', the process would have got successfully deployed. In the deployed process, click on the decision: **Determine AFE Types**. Here, open the decision and see in the deployed version, you will have 3 dots to the right side. Click on that and you will get a link to 'view details'. Click on view details and you will find the **id for the decision**. This is the rule id in this case.



2. This is different for each of us when we deploy the package. Hence this must be changed in the Business Application Studio. To do this, Go to **afeplanner>controller>UpdatePage.controller.js** file and click on ctrl+F and search for the function, 'onWBSTemplate'. You will find the 'RuleServiceId' used in the file as shown below. Change this to the ID that you have noted in the above step.

```

onWBSTemplate: function () {
    var wbsTemplate = { afeTypeArr: [], projectTypeArr: [], valueChainArr: [ { "valueChain": "0" } ] };
    var rulesData = {
        "RuleServiceId": "bb38f4940a511bdfcbce0a013a4245fa",
        "Vocabulary": [ {
            "Expenditure_Header_Details": {}
        } ]
    };
    var data = JSON.stringify(rulesData);
    var token = that._fetchTokenDecisions();
    $.ajax({
        url: that.getWorkflowBusinessRulesBaseUrl() + "/public/rule/runtime/rest/v2/rule-serv

```

5. Repeat the steps 5 and 6 to replace other decision id's present in the application. Refer below the table for more details:

S No	Decision Name	UI5 Application File Path	Function Name	Decision Id to be replaced
1	Determine Approver Determinat	afeplanner>controller>UpdatePage.controller.js	getApprovers	6aa4a59d3010073e0e817ed682061da3

	ion Strategy			
2	Determine Approvers	afeplanner>controller>UpdatePage.controller.js	getBRFinanceApprovers, getBRPartnerApprovers	54d92fb637e89b9d46aa7cd41b01a4d7
3	Determine Project Template for Expenditure	afeplanner>controller>UpdatePage.controller.js	onTemplateValueHelp	071a87b438b3ce1f28e7f35c86201e26

- Once changed, 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.

Configure SAP Work Zone

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

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

- Open content manager and click on the HTML5 Apps.
- Select the Import Financial Data Start UI from the list of apps and choose Add.
- Add the relevant roles to the user. Authorization For Expenditure Start UI will be available to the user as a tile in the SAP Work Zone.

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

User Guides

Capabilities

The following are the capabilities of this template:

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

Type	Name	Description
Automation	Initialization	Automation to initialize internal entity
Automation	Process Approval Result	Automation to process outcome from AFE approval

Decision	Determine Administrators	Determine administrators in case of any errors in fetching the approvers for AFE approval
Decision	Determine AFE Types	Decision to fetch list of AFE types
Decision	Determine Approver Determination Strategy	Decision to determine approver determination strategy.
Decision	Determine Approvers	Decision to determine approvers and task due date for AFE approval process
Decision	Determine External Approvers	Decision to determine external approvers and task due date for AFE approval process.
Decision	Determine Project Template	Determine project template based on expenditure details
Process	Approval Process	Process for approval of AFE.
Process	Authorization For Expenditure Process	Main process for expenditure authorization from internal, partner and finance team before posting them to S/4HANA system
Process	Initialization Process	Initialize data for AFE approval process
Process	Post Expenditures	Process to post expenditure details to SAP S/4HANA system
Form	AFE Admin Form	Admin form for AFE process
Form	AFE Approval Form	Approval form for Approval process
Data type	Approver Details	Contains information about the individuals authorized to approve quotations or tasks, including their roles and contact information.
Data type	Approver Determination Strategy	A defined strategy or set of rules to determine who should be assigned as the approver for a given sales quotation.
Data type	Approvers	A list or database of individuals or roles that can approve sales quotations. This may include their permissions and responsibilities.
Data type	History	A record of changes, actions, and approvals related to sales quotations over time, which helps in tracking progress and accountability.
Data type	Process Admin Details	Information about the administrators managing the sales quotation process, including their roles, responsibilities, and access rights.

Data type	Quotation Details	Overall information about the sales quotation, such as the quotation number, date, customer details, and total amount.
Data type	Validation Status	Indicates the current validation state of a sales quotation, showing whether it has been approved, rejected, or is pending review.

Actions

Authorization For Expenditure - Create WBS Elements

This action is used to create WBS elements for the project in SAP S/4HANA.

Method	API	API Path	Purpose
POST	/http/createWBSafewfm	/http/createWBSafewfm	This service will Creates WBS Element

Authorization For Expenditure - Fetch Project Status Action

This action enables to fetches project statuses from SAP S/4HANA.

Method	API	API Path	Purpose
GET	/sap/opu/odata/sap/ZWF_PROJECT_STATUS_CDS	/sap/opu/odata/sap/ZWF_PROJECT_STATUS_CDS/ZWF_PROJECT_STATUS?\$filter=StatusDescription eq '{StatusDescription}' and Language eq '{Language}'	The service fetches project status

Authorization For Expenditure - Update the Project Status Action

This action enables to update status in SAP S/4HANA.

Method	API	API Path	Purpose
POST	/http/updateProjectStatusafewfm	/http/updateProjectStatusafewfm	The service will update the status of project

Authorization For Expenditure - Update the WBS Budgets

This action is used to updates the budget of project in SAP S/4HANA.

Method	API	API Path	Purpose
POST	/http/updateProjectBudgetafewf	/http/updateProjectBudgetafewf	The service will Update the budget of project

Appendix

Creating CDS

Pre-requisite:

1. Eclipse must be installed along with ADT plugins.
2. Developer access and authorizations should be available in SAP S/4HANA to create CDS views

Steps:

1. Open Eclipse in ABAP perspective
2. Go to Files -> New -> ABAP Project
3. Select the system in which you want to create the CDS view
4. Enter the system connection details and credentials
5. Right click on project and the go to New -> Other and select "Data Definition" (Name of CDS will be "ZWF_STANDARD_WBS")
6. Copy paste the code in code editor from ZWF_STANDARD_WBS.txt in SAP Note 3118538
7. Click on Save
8. Click on Activate Similarly, copy paste the code in code editor from these files in SAP Note 3118538
 - ZWF_STATISTICAL_WBS.txt
 - ZWF_PROJECTS.txt
 - ZWF_PROJECT_JV.txt
 - ZWF_PROJECT_STATUS.txt
 - ZWF_PROJECT_TYPE.txt

Creating Function Group

Steps:

1. Go to t-code "SE37"
2. In Menu, select Goto -> Function Groups -> Create Group
3. Enter Function Group name as "ZWF_FG_AFE" and enter a meaningful Short Text (Select the required package name to save this object)
4. Go to t-code "SE80" 5. Select "Function Group" from dropdown
6. Enter "ZWF_FG_AFE" as the name of function group and click on Display button
7. Right click on the Function Group "ZWF_FG_AFE" on the left side panel and "Click on "Activate" (Click OK button on the pop-up which shows list of inactive objects)

Creating Function Modules

Steps:

1. Go to t-code "SE37"
2. Click on "Create" button
3. Enter "ZWF RFC_PS_SET_STATUS" as name of Function Module
4. Enter "ZWF_FG_AFE" as Function Group
5. Enter a meaningful short text
6. Click on "Save" (Click on OK in successive pop-ups)
7. Go to "Attributes" tab and select radio button for "Remote-Enabled Module"
8. Go to "Import" tab and enter the below mentioned entries

Import Parameters:

Parameter Name	Typing	Associated Type	Pass By Value
PROJECT_DEFINITION	TYPE	BAPIPR-PROJECT_DEFINITION	Yes
SET_USER_STATUS	TYPE	BAPI_USER_STATUS	Yes

9. Go to "Export" tab and create the below entries

Export Parameters:

Parameter Name	Typing	Associated Type	Pass By Value
POSTINGSTATUS	TYPE	CHAR1	Yes

10. Go to "Source Code" tab
11. Copy and paste the code in source code editor from the file in SAP Note 3118538
12. Click on "Save"
13. Click on "Activate" (Click OK button on the pop-up which shows list of inactive objects)
14. Go to t-code SE11

15. Select "Data Type" radio button
16. Enter "ZSTR_UPDATE_BUDGET" as name of "Data Type"
17. Select "Structure" and click on OK
18. Enter the below mentioned fields and description

Structure Name: ZSTR_UPDATE_BUDGET

Short Description: Update budget structure

Components:

Components	Typing Method	Component Type
TRANSACTIONCURRENCY	Types	CHAR100
PLANNINGCOST	Types	CHAR100
PARENTPROJECT	Types	CHAR100
PROJECTELEMENTDESCRIPTION	Types	CHAR100
PROJECTELEMENT	Types	CHAR100

19. Click on "Save"

20. Click on "Activate" (Click OK button on the pop-up which shows list of inactive objects)

Note: Perform the same steps (1 to 12) for Function Module

"ZWF RFC PS_UPDATE_BUDGET" but with below mentioned entries for "Import" and

"Export" tabs. (Copy and paste the code in source code editor from the file in SAP Note 3118538)

Import Parameters:

Parameter Name	Typing	Associated Type	Pass By Value
I_PROJECT_DEFINITION	TYPE	PROJ-PSPID	Yes

Tables Parameters:

Parameter Name	Typing	Associated Type	Pass By Value
I_WBSELEMENTS	TYPE	ZSTR_UPDATE_BUDGET	Yes
RETURN	TYPE	BAPIRET2	Yes

Creating OData

Steps:

1. Go to t-code "SEGW"
2. Click on "Create" to create new project
3. Enter Project as "ZWF_STD_WBS", Description as "OData to fetch Standard WBS" and select the required package
4. Expand the newly created project.
5. Right click on "Data Model" folder and then select "Reference" -> "Data Source"
6. Enter "ZWF_STANDARD_WBS" as CDS-Entity Name and click on Next
7. Click on Finish
8. Click on Save
9. Click on "Generate Runtime Objects" (red color circular) button on top left corner (Select the required Transport Request and Package)
10. Now go to "Runtime Artifacts" folder, right click on "ZCL_ZWF_STD_WBS_DPC_EXT" and select "Go to ABAP Workbench"
11. Go to Methods -> Inherited Methods and "Redefine" the method ZWF_STANDARD_WBS_GET_ENTITYSET" by right clicking on the method
12. Copy paste the code from the file of SAP Note 3118538 in source code editor
13. Click on Save
14. Click on Activate

Register OData Services in SAP Gateway

Steps:

1. Go to t-code "/IWFND/MAINT_SERVICE"
2. Click on "Add Service"
3. Select the required System Alias
4. Enter Technical Service Name as "ZWF_STD_WBS_SRV" and click on "Get Services"

5. Select "ZWF_STD_WBS_SRV" and click on "Add Selected Services"
6. Enter the required package and click on OK
7. Repeat steps 1 to 6 for Technical Service "ZWF_PROJECTS_CDS"

Configure Status Profile

Steps:

1. Go to t-code "STVARV"
2. Go to "Parameter" tab
3. Maintain the below mentioned entry: Name -> WF_AFE_PROFILE Value ->
4. Click on Save

SAP S/4HANA configuration for PS module

Pre-requisite: Select Comp Code which is activated in Joint venture accounting.

1. Create Project Profile

We define AFE project profile in this step.

Path: IMG > Project system > Structures > Operative structure > Work breakdown structure > Create Project Profile

T-Code: OPSA

SAP			Change View "Project Profile": Overview	
Back (F3)			New Entries Print Zoom Refresh List Table BC Set: Change Field Values More	
Project Profile	Description			
☐ 0000001	Standard project profile			
☐ 0000002	Investment projects			
☐ CPR0001	cProjects-PS Integration (Automat. Case)			
☐ H000001	HVES Project Profile			
☐ L000001	LP Project Profile			
☒ Z000001	AFE- Investment projects			
☐ ZCAP	HVES CAPEX PROJECTS			

Change View "Project Profile": Details

Proj.Prof.: **Z000001** **AFE- Investment projects**

Steuerung Organisation Plantafel/Termine Controlling

Basic Data

Project Type: **IN** INVESTMENT ☒ All acct asst elem

Field key - WBS: **0000001** User-defined fields ☐ Only one root

Field key -PD: ☐ Trsftr to proj.def.

Version prof.: **0000001** Standard version profile ☐ ChangeDocuments

Simulation prof.: ☒ Proj. summ. MastDa

Display options: **1** Identification using project n ☐ IPPE Proj. Rel.

PartnDet.Proc. Level of detail: **10**

Validation

Project def.: ☐ Autom. validation

WBS Elements:

Save Cancel

2. User status (T-Code: OK02)

In this step, we define the user status for project definition and these user statuses will be used during approval process

Path: IMG > IMG > Project system > Structures > Operative structure > Work breakdown structure > WBS User status > Create Status Profile

Change Status Profile: User Status

Status Profile: **ZPS00005** AFE User status

Maintenance Language: **EN** English

User Status

Status...	Status	Short Text	Long t...	Init. stat...	Lowest st...	Highest S...	Position	Priority	Auth. code
10	OPCR	Opportunity Created	☐	☒	10	60	1	1	
20	SUBM	Submitted	☐	☐	10	60	1	1	
30	INPR	Internal Approved	☐	☐	10	60	1	1	
40	PAPR	Partner Approved	☐	☐	10	60	1	1	
50	FAPR	Finance Approved	☐	☐	10	60	1	1	
60	REJC	Rejected	☐	☐	10	60	1	1	
			☐	☐					
			☐	☐					

Position cursor

Save Cancel

3. Assign this User profile to above project profile.

4. Status Profile – (T-Code – STARV)

Above status profile needs to be maintained STVARV

Go to Transaction: STVARV, parameter tab

Maintain below mentioned entry: Name->W_AFE_PROFILE; Value ->Status profile created for AFE

5. Master data - Transaction: CJ91

Standard project template is created to use this in AFE Approval process and for WBS creation as well.

S	Lev	WBS element	Description	Short ID	Pro	Pri	Su	PE	Acct	Bill
☐	1	I.0001	Dev Drill	I.0001	IN		☐	☐	☒	☐
☐	2	I.0001.001	Feasibility	I.0001.001	IN		☐	☐	☒	☐
☐	3	I.0001.001.001	Engineering	I.0001.001.001	IN		☐	☐	☒	☐
☐	3	I.0001.001.002	Procurement	I.0001.001.002	IN		☐	☐	☒	☐
☐	3	I.0001.001.003	Environment	I.0001.001.003	IN		☐	☐	☒	☐

To see the Project/AFE in AFE Planner App. Follow below steps:

1. Open SAP GUI
2. Enter T Code CJ01 –Project id, Description, controlling area, comp code, Start and end date
3. Go to Joint venture tab – Update Joint venture, Equity Type, Recovery Indicator and Object
4. Save project definition.
5. Search this Project Definition in AFE Planner App in BTP.

Project def.: I.1029 Dev Drilling -AFE testing-16

Basic Data Joint venture Control Administration LongText

Status

System Status: CRTD User status: OPCR

Project coding mask

Screen: I. XXXX.000. XXX.000. XX.00 Mask ID:

Responsibilities

Pers.Resp.No.: 1400000 Finance & Administration Applicant no.: 0

Organization

CO area: 6000 Company code: 4001

6. In the BTP system, Goto: AFE Planner App

<
AFE Planner

Company Code	JV Number	Cost Center	Profit Center
4001	2000	40011101	13000020
LP Company Code US- Ops	OPERATED VENTURE	CORP/Matoh	SEG 3/Corporate
Functional Area	Project Profile	Status	JV Equity
	Z000001	OPCR	ET1
	AFE- Investment projects	Opportunity Created	Operation 1

Cost Overview ▾
WBS Template Selection Criteria
Applicable WBS Templates
Calculate Gross Amount
Additional Details
Partner Approver
Final Approver

Cost Overview

Gross AFE Amt:

AFE Type:

Net AFE Req Amt:

Operated Share:

[Submit for Approval](#)

Support

There is no support available for template content. If you experience general issues with SAP Build Process Automation, please follow the links below:

- [Troubleshoot Support Guided Answer](#)
- [Test an Automation Help portal Article](#)
- [Test an Application Help portal Article](#)
- [Get traces Support Guided Answer](#)

If the issue persists, please raise an incident via SAP Support Portal on **BPI-PA-BPC** component.

This template can be modified using SAP Process Automation. For example: add decisions 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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