

SAP BUSINESS TECHNOLOGY PLATFORM | EXTERNAL

Configuration Guide

Accrual Object Creation Approval using SAP Build Process Automation or SAP Workflow Management

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Overview

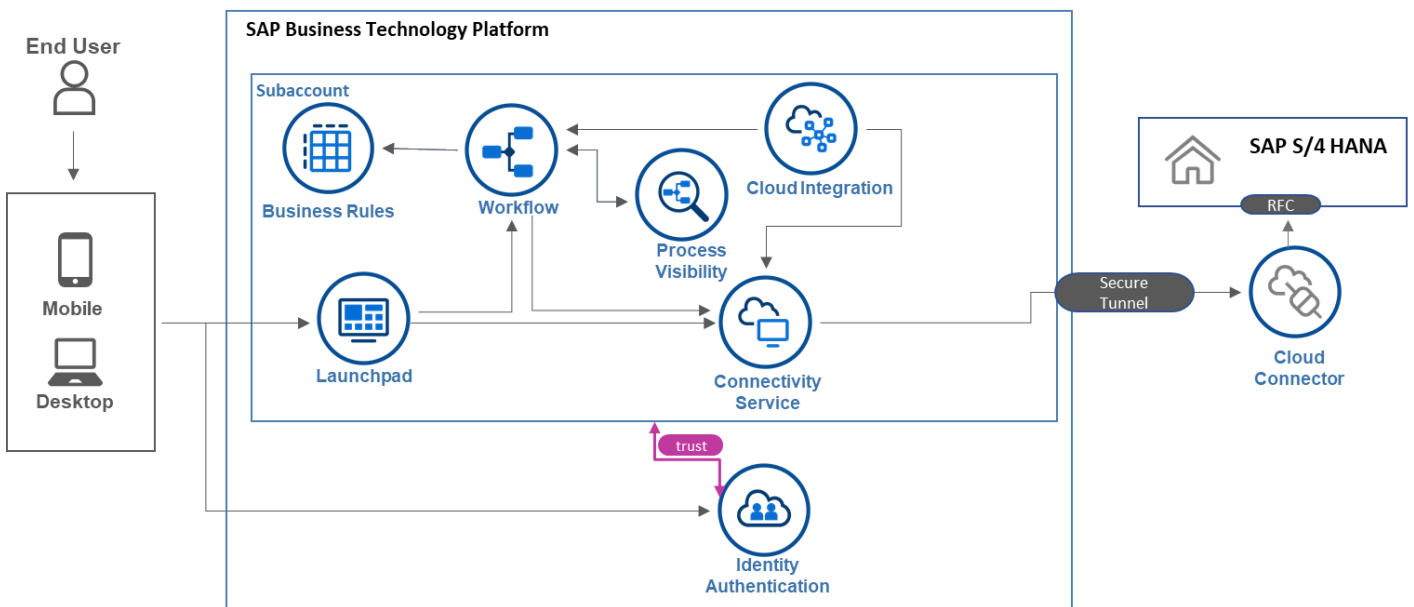
This document provides information about setting up the SAP Business Technology Platform account to consume the workflow content package **Accrual Object Creation Approval**. The main audience of this document are technical IT/system administrators.

Organizations procure a wide variety of consumables, goods and services to run their day-to-day operations. On delivery, invoicing and payment for the products or services rendered can pose quite a challenge. Some of the challenges arise from invoices being delayed or if advances had been paid – for example, insurance payments and subscriptions. Finance has the legal obligation to accrue or defer these service and consumable costs as well as advance payments at month-end or quarter-end.

Features

- Plug and Play with SAP S/4HANA without additional development.
- New Process variants can be configured in a no-code approach.
- Agent/approver determination using Business Rules or external service.
- Pre-built integration content to call SAP S/4HANA from SAP Build Process Automation or SAP Workflow Management
- Out-of-the-box visibility into key process performance indicators.

Solution Diagram



Artifacts

A package consists of process templates, process steps, 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 **Accrual Object Creation Approval** package contains the following process template:

Accrual Object Creation Approval– deals with scenarios where a company’s finance team has the legal obligation to accrue or defer these service and consumable costs as well as advance payments at month-end or quarter-end.

A business process can be broken down logically into smaller parts or steps. Each process step is a collection of activities to perform a specific task. For example, an approval process step can contain activity to determine the approvers, approval task, notifications, and handle the approval result. **Table 1** represents the list of process steps/sub flows available to be used in **Accrual Object Creation Approval**.

Table 1. Process Steps

Process Steps	Cardinality	Detailed Description
Approval	1..N = Mandatory Step	Workflow for the Approver to take the action on the Accrual Object Creation.
Create Accrual Object	1..1 = mandatory step	Create new accrual object in the S/4 HANA system.

Table 2. Process Attributes.

Process Attributes	Detailed Description
Is Rework	Flag to indicate if the flow is reworked and retriggered newly.
Company Code	Company code to which accrual object is created.
Transaction Currency	Currency field to accrual amount posted.
Cost Center	Cost Center to which accrual object is created.
Total Accrual Amount	Total accrual amount posted.
Accrual Object Key	Business key to identify accrual object creation requests.
WBS	WBS to which accrual object is created.
Accrual Object Category	Category to which accrual object belong to.
Profit Center	Profit Center to which accrual object is created.
Created By	Person who requested accrual object creation.
Order	Order to which accrual object is created.

End Of Life	End of life period of accrual object.
Start Of Life	Start of life period of accrual object.

Sample Context with Start Conditions:

```

{
  "accrualObjectDetails": {
    "companyCode": "4000",
    "transactionCurrency": "AMD",
    "totalAccrualAmount": 3000,
    "headerDetails": {
      "accrualObjectKey": "4000_OVENDORINV",
      "createdBy": "XYZ",
      "createdByEmail": "xyz@email.com",
      "companyCode": "4000",
      "applicationComponent": "ACAC",
      "totalAccrualAmount": 3000,
      "transactionCurrency": "AMD",
      "accrualObjectCategory": "OVENDORINV",
      "text": "Text",
      "personResponsible": "Test",
      "startOfLife": "2022-02-01",
      "endOfLife": "2022-02-28",
      "costCenter": "",
      "profitCenter": "",
      "WBS": "00000108",
      "order": "",
      "validityStartDate": "2022-02-01"
    }
  },
  "items": [
    {
      "accrualItemType": "PLNCST",
      "itemTypeText": "Planned costs",
      "ledgerGroup": "CP",
      "totalAccrualAmount": 2000,
    }
  ]
}

```

```

    "transactionCurrency": "AMD",
    "accrualDeferralMethod": "ACT_COSTS",
    "folderKey": "4000_OVENDORINV_PLNCST_CP_1643710821664",
    "startOfLife": "2022-02-01",
    "endOfLife": "2022-02-28"
  },
  {
    "accrualItemType": "COSTSP_LGAP",
    "itemTypeText": "Cost Accruals, Only Periodic Postings",
    "ledgerGroup": "N1",
    "totalAccrualAmount": 1000,
    "transactionCurrency": "AMD",
    "accrualDeferralMethod": "PLN-ACT",
    "folderKey": "4000_OVENDORINV_COSTSP_LGAP_N1_1643710844269",
    "startOfLife": "2022-02-01",
    "endOfLife": "2022-02-28"
  }
]
}
}

```

Sample Context without Start Conditions:

```

{
  "accrualObjectDetails": {
    "headerDetails": {
      "accrualObjectKey": "4000_OVENDORINV",
      "createdBy": "XYZ",
      "createdByEmail": "xyz@email.com",
      "companyCode": "4000",
      "applicationComponent": "ACAC",
      "totalAccrualAmount": 3000,
      "transactionCurrency": "AMD",
      "accrualObjectCategory": "OVENDORINV",
      "text": "Text",
      "personResponsible": "Test",
    }
  }
}

```

```

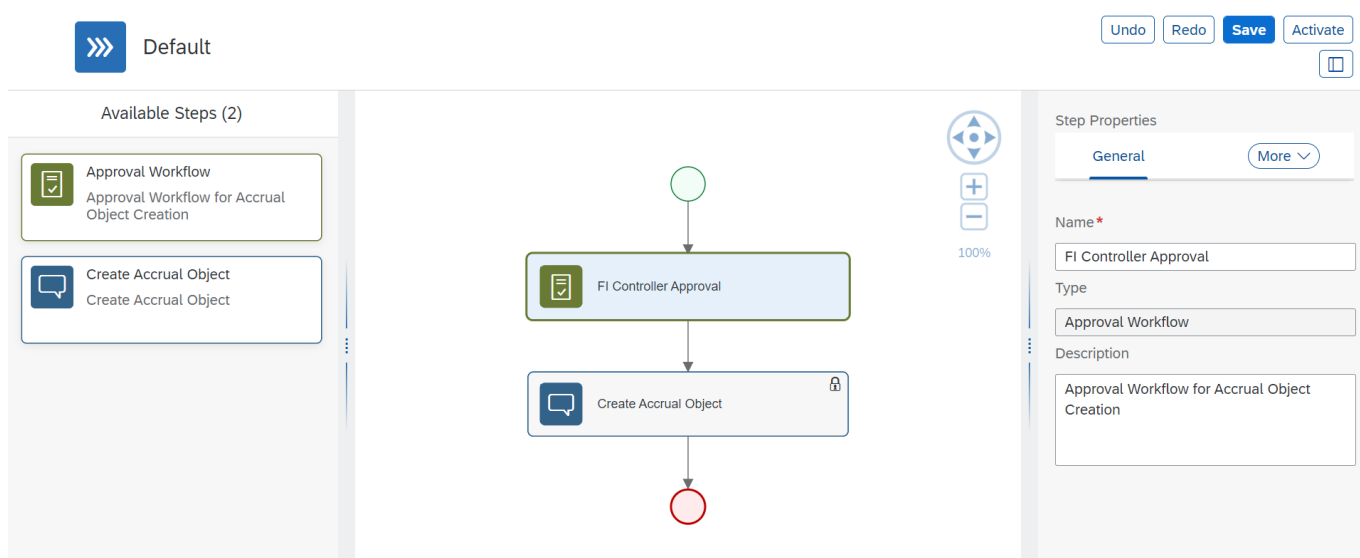
    "startOfLife": "2022-02-01",
    "endOfLife": "2022-02-28",
    "costCenter": "",
    "profitCenter": "",
    "WBS": "00000108",
    "order": "",
    "validityStartDate": "2022-02-01"
  },
  "items": [
    {
      "accrualItemType": "PLNCST",
      "itemTypeText": "Planned costs",
      "ledgerGroup": "CP",
      "totalAccrualAmount": 2000,
      "transactionCurrency": "AMD",
      "accrualDeferralMethod": "ACT_COSTS",
      "folderKey": "4000_OVENDORINV_PLNCST_CP_1643710821664",
      "startOfLife": "2022-02-01",
      "endOfLife": "2022-02-28"
    },
    {
      "accrualItemType": "COSTSP_LGAP",
      "itemTypeText": "Cost Accruals, Only Periodic Postings",
      "ledgerGroup": "N1",
      "totalAccrualAmount": 1000,
      "transactionCurrency": "AMD",
      "accrualDeferralMethod": "PLN-ACT",
      "folderKey": "4000_OVENDORINV_COSTSP_LGAP_N1_1643710844269",
      "startOfLife": "2022-02-01",
      "endOfLife": "2022-02-28"
    }
  ]
}
}

```

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.

Please refer [help documentation](#) about how to import content packages and configure a process variant.



Default Variant

Import Accrual Object Creation Approval and Configure Process Variants with SAP Build Process Automation

1. In the [SAP Build Process Automation Store](#), search for live process package Accrual Object Creation Approval 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 Accrual Object Creation Approval. 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 Accrual Object Creation Approval" 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 Accrual Object Creation Approval and Configure Process Variants with SAP Workflow Management

1. In Process Flexibility Cockpit app, search for content package Accrual Object Creation Approval and import the same. Please refer the standard help document about [how to import a content package](#). This content package has one process template and process variant(s) for that template.
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, default) and select “Accrual Object Creation Approval” as Process.
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 Accrual Object Creation Approval” 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 Workflows – Workflow Definition 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 business rules capabilities that enables customers to centrally manage all decisions. Please go through the [business rules capabilities](#) in SAP Build Process Automation or SAP Workflow Management.

Accrual Object Creation Approval enable customers to flexibly configure decisions to gain flexibility to

1. Approver Determination Strategy
2. Determine Task Due Date
3. Determine Administrators
4. Determine Approvers
5. Determine Position

Approver Determination Strategy

Based on the business requirement approver can be determined by external service or business rules.

Rule Service Name: Approver Determination Strategy

Input

Details	Attributes	Associations	Annotations
AccrualObjectCategory	Accrual Object Category	Category to which Accrual Object belongs to.	String
ApprovalStep	Approval Step	Approval Step	String
TotalAccrualAmount	Total Accrual Amount	Total accrual amount of accrual object to be created.	Number
Currency	Currency	Currency	String
CostCenter	Cost Center	Cost center to which accrual object belong to.	String
ProfitCenter	Profit Center	Profit center to which accrual object belong to.	String
WBS	WBS	WBS of accrual object.	String
Order	Order	Order id of accrual object.	String
StartofLife	Start of Life	Start of Life of accrual object.	Date
EndofLife	End of Life	End of Life of accrual object.	Date
CompanyCode	Company Code	Company Code to which Accrual Object belongs to.	String

Result

Name	Label	Description	Business Data Type
DeterminationStrategy	Determination Strategy	Approver Determination Strategy can either "Business Rule" or "External Service" depending on accrual object details.	String

Rule

If				Then
<input type="checkbox"/>	Company Code	Cost Center	Accrual Object Category	Determination Strategy
<input type="checkbox"/>	= 'XYZ'	= 'XYZ'	= 'XYZ'	'Business Rules'

Determine Administrators

Determine administrators in case of any errors in fetching the approvers for Accrual Object Creation Approval.

Rule Service Name: Determine Administrators

Input: [Refer](#) – Approver Determination Strategy Rule Input section.

Result

Name	Label	Description	Business Data Type
UserId	User ID	User ID of the administrator	String
UserGroup	User Group	Group ID of the administrator	String
Email	Email	Email address of the administrator	String

Rule

<input type="checkbox"/>	Company Code	Cost Center	Accrual Object Cat...	Approval Step	Email	User Group	User ID
<input type="checkbox"/>	= 'XYZ'	= 'XYZ'	= 'XYZ'	= 'XYZ'	'email@example...	'Admin_GroupId'	'Admin_UserId'

Determine Approvers

Determine approvers for an approval step in Accrual Object Creation Approval.

Rule Service Name: Determine Approvers

Input: [Refer](#) – Approver Determination Strategy Rule Input section.

Result

Name	Label	Description	Business Data Type
UserId	User ID	User ID of the approver responsible for accrual object.	String
UserGroup	User Group	Group ID of approvers responsible for accrual object.	String
Email	Email	Email address of the approver responsible for accrual object.	String
DueDuration	Due Duration	Due Duration	Number
UnitofTime	Unit of Time	Unit of Time	String

Rule Definition

If				Then			
<input type="checkbox"/>	Company Code	Cost Center	Accrual Object Cat...	Approval Step	Email	User Group	User ID
<input type="checkbox"/>	= 'XYZ'	= 'XYZ'	= 'XYZ'	= 'XYZ'	'email@example...	'Approver_Grou...	'Approver_UserId'

Determine Task Due Date

Determine the due date duration for each step of the Accrual Object Creation Approval

Rule Service Name: Determine Task Due Date

Input: [Refer](#) – Approver Determination Strategy Rule Input section.

Result

Name	Label	Description	Business Data Type
UserId	User ID	User ID of the approver responsible for accrual object.	String
UserGroup	User Group	Group ID of approvers responsible for accrual object.	String
Email	Email	Email address of the approver responsible for accrual object.	String
DueDuration	Due Duration	Due Duration	Number
UnitofTime	Unit of Time	Unit of Time	String

Rule Definition

Text Rule

∨ If

Accrual Object Details.Approval Step = 'XYZ'

Then

Unit of Time: 'D'

Due Duration: 1

Text Rule

> If

∨ Else

Unit of Time: 'D'

Due Duration: 1

Determine Position

Determine the position who approves for each step of the Accrual Object Creation Approval

Input: [Refer](#) – Approver Determination Strategy Rule Input section.

Result

Name	Label	Description	Business Data Type
PositionNumber	Position Number	Position number of person who approves the accrual object.	Number >
PositionName	Position Name	Position name of person who approves the accrual object.	String >

Rule

If				Then		
<input type="checkbox"/>	Company Code	Cost Center	Accrual Object Category	Approval Step	Position Name	Position Number
<input type="checkbox"/>	= 'XYZ'	= 'XYZ'	= 'XYZ'	= 'XYZ'	'XYZ'	1

Vocabulary Business Rule

Name	Label	Description	Business Data Type
companyCode	Company Code	Company Code for which accrual object is created.	String
totalAccrualAmount	Total Accrual Amount	Total Accrual Amount of accrual object to be created.	Number
transactionCurrency	Transaction Currency	Transaction Currency for accrual amount.	String

Determine Approvers from External Service

If external service is used to determine the approvers, then document what are the requirements – destination, api, api signature, etc.

API Attributes	Values
Path	/http/getApproversaocawfm
HTTP Method	GET
Payload sent by workflow (sample data)	<pre>{ "d": { "companyCode": "4001", "positionID": "99999999" } }</pre>
Response Payload from integration flow	<p>RESPONSE STATUS, Ex 200 OK</p> <pre>{ "d": { "approvers": [{ "userID": "app1", "emailID": "app1@test.com", "name": "Approver 1" }, { "userID": "app2", "emailID": "app2@test.com", "name": "Approver 2" }] } }</pre> <p>Note: When Status is not 200, then it is considered a failed service call.</p>
Payload Type	Application / JSON

Process Visibility

Process Visibility capability in 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.

Accrual Object Creation Approval process content package provide out of the box visibility on all the process variants in SAP Build Process Automation or SAP Workflow Management. Line of business expert will be able to enhance the visibility scenario to their requirements.

Configure Visibility Scenarios in SAP Build Process Automation

1. Go to the Application Development Lobby.
2. Select Accrual Object Creation Approval Project.
3. Click to open **Accrual Object Creation Approval** 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 Flexibility Cockpit
2. Select **Accrual Object Creation Approval** tile
3. **Click on Visibility Scenarios**
4. User will get the screens to configure the Visibility

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 Accrual Object Creation Approval 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	scenariold
Default Value	com.sap.content.Accrual_Object_Creation_Approval

Required

Toggle to Yes

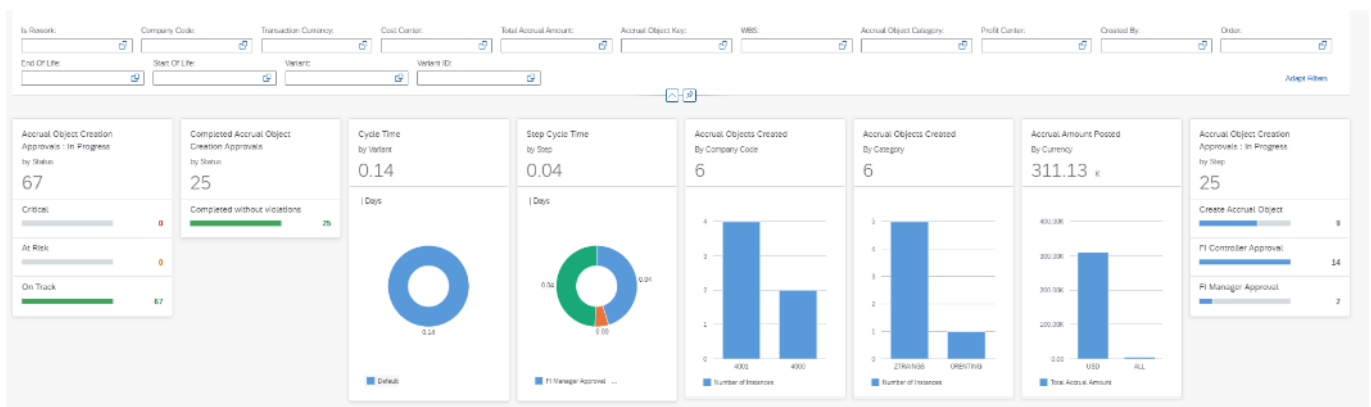
- h. Choose Save.
- i. Assign the local copy to a group and make sure that they're visible to users. For more information, see [Assign Apps to a Group and to a Catalog](#) and [Assign Content to a Role](#).

3. Once created, select app that corresponds to "Accrual Object Creation Approval".

4. User will see the process visibility dashboard below.

Access Process Workspace in SAP Workflow Management

1. Go to Process Flexibility Cockpit
2. Select **Accrual Object Creation Approval** tile
3. Click Live Process Insights – **Accrual Object Creation Approval**
4. User will get the following screens



Please go through [help documentation](#) on how to model a visibility scenario