

SAP BUSINESS TECHNOLOGY PLATFORM | EXTERNAL

Configuration Guide

Fixed Assets Write-Off Approval using SAP Workflow Management

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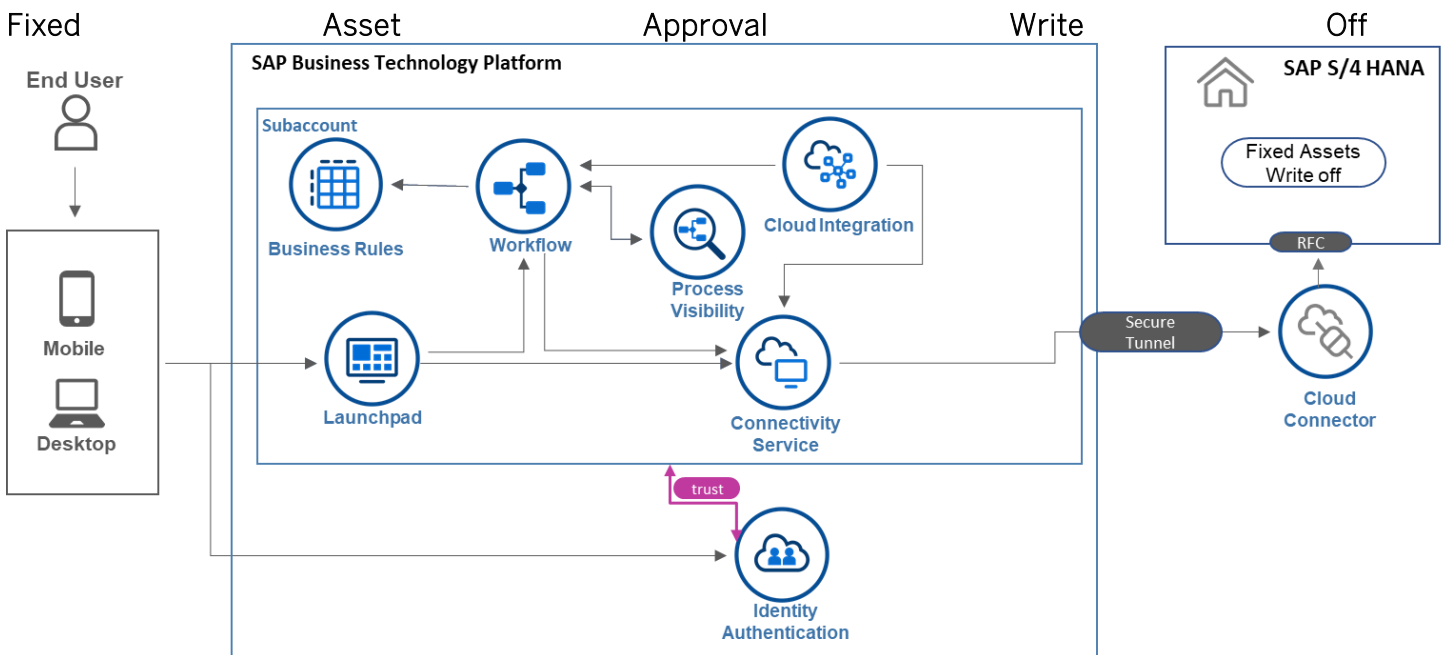
Overview

This document provides information about how to configure the **Fixed Asset Write-Off Approval** process. Business Process Experts and Process Operators are the target users of this document.

The Fixed Asset Write-Off Approval content package for SAP S/4HANA automates the approval process required when fixed assets are written off in an organization. An asset write off can happen due to various reasons like scrapping, intercompany transactions, retirement etc. In SAP, each of the asset write off scenario is posted against its specific type. The workflow bridges the gap between standard SAP S/4HANA process of asset write off with approval from the relevant cost center owner. In this workflow, a requestor can raise an asset write off choosing the relevant assets and trigger a workflow for approval. After appropriate user action, the posting is done on SAP S/4HANA

Salient features of this content package are:

- Plug and Play with SAP S/4HANA without any additional development.
- Process steps delivered to approve a write off on organization assets
- Automatic email notification to parties involved.
- Business Rules provides flexibility in determining approver determination strategy and approvers
- 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



Live Process 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 Fixed Assets Write-Off Approval package contains the following process template:

Fixed Asset Write-Off – Establish an approval process where user can raise approval for write off on company assets.

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 Fixed Assets Write-off Approval Scenario

Table 1. Process Steps

Process Steps	Cardinality	Detailed Description
Initialization	1:1 = mandatory step	Initialize the workflow attributes
Cost Center owner approval	1:1 = mandatory step	Workflow for the cost center approver to take the action on the assets raised for write-off by the requestor
Asset write-off approval	0..N = optional step	Workflow for the approver to take the action on the assets raised for write-off by the requestor, after the cost center owner approval
Post write-off assets	1..1 = Mandatory step	Workflow step for posting the asset write off to S/4HANA

A process step can have customizable properties and they could influence the outcome of the process step. For example, the Approval step can be reused multiple times and based on the properties the approver is determined. Please see Table 2 for more details.

Table 2. Process Step Properties

Process Step	Properties	Detailed Description
Approval	Role	Role name of the approver who approves the assets to be written off

	Approval Step	Team ID which approves the assets to be written off which is used to determine approvers from business rules
--	---------------	--

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 3 for more details.

Table 3. Process Attributes.

Process Attributes	Detailed Description
Total Netbook Value	Total netbook value of the assets raised for write off
Total Netbook Currency	Currency of the netbook value of the assets raised for write off
Asset Count	Number of assets raised for write off
Write Off Key	Unique identifier for the process
Company Code	Company code to which the asset belongs to
Cost Center	Cost Center to which the asset belongs to
Asset Request Type	Type of write off requested for the asset
Is Retried	Flag to indicate if there is a retry condition for the asset

Sample Context without Start Conditions

```
{
"assetDetails": {
"companyCode": "4001",
"assetItem": [
{
"cumulativeAcquisitionValue": "60000.00",
"assetPostStatus": "176",
"assetCapitalizationDate": "2021-05-01",
"assetDescription": "Test for Unplanned depreciation 2",
"amountPosted": "1000.00",
"accumulatedDepreciationValue": "-4000.00",
"assetNumber": "1000000000083",
"assetTransactionType": "200",
"netbookValue": "56000.00",
"depreciationArea": "",
"assetPostMessage": "Transaction type 200 cannot be used for activity 'Retirement with revenue'",
"assetSubNumber": "0000",
"currency": "USD",
"comment": "",
"assetStatus": "Approve",
```

```

"showOnlyRetriedItemsInUIFlag": false
},
{
"cumulativeAcquistionValue": "25000.00",
"assetPostStatus": "176",
"assetCapitalizationDate": "2021-07-01",
"assetDescription": "Test for Unplanned depreciation 3",
"amountPosted": "2000.00",
"accumulatedDepreciationValue": "-1250.00",
"assetNumber": "100000000084",
"assetTransactionType": "200",
"netbookValue": "23750.00",
"depreciationArea": "",
"assetPostMessage": "Transaction type 200 cannot be used for activity 'Retirement with revenue'",
"assetSubNumber": "0000",
"currency": "USD",
"comment": "",
"assetStatus": "Approve",
"showOnlyRetriedItemsInUIFlag": false
}
],
"writeoffKey": "4001_40011000_XXX_10/28/2021 1:47:56 PM",
"assetRequestType": "Asset Scrap",
"assetHeader": {
"companyCode": "4001",
"costCenter": "40011000",
"docType": "AA",
"assetRequestType": "Asset Scrap",
"totalNetbookCurrency": "USD",
"transactionTypeGroup": 20,
"docDate": "20211028",
"postingDate": "20211028",
"totalNetbookValue": "23750.00",
"customCreatedBy": "XXX",
"assetValueDate": "20211028",

```

```
"text": "hi",
"customCreatedByEmail": "sample@email.com"
}
}
}
```

Sample Context with Start Conditions

```
{
"assetDetails": {
"companyCode": "4001",
"assetItem": [
{
"cumulativeAcquistionValue": "60000.00",
"assetPostStatus": "176",
"assetCapitalizationDate": "2021-05-01",
"assetDescription": "Test for Unplanned depreciation 2",
"amountPosted": "1000.00",
"accumulatedDepreciationValue": "-4000.00",
"assetNumber": "1000000000083",
"assetTransactionType": "200",
"netbookValue": "56000.00",
"depreciationArea": "",
"assetPostMessage": "Transaction type 200 cannot be used for activity 'Retirement with revenue'",
"assetSubNumber": "0000",
"currency": "USD",
"comment": "",
"assetStatus": "Approve",
"showOnlyRetriedItemsInUIFlag": false
},
{
"cumulativeAcquistionValue": "25000.00",
"assetPostStatus": "176",
"assetCapitalizationDate": "2021-07-01",
"assetDescription": "Test for Unplanned depreciation 3",
"amountPosted": "2000.00",
"accumulatedDepreciationValue": "-1250.00",
"assetNumber": "1000000000084",
"assetTransactionType": "200",
"netbookValue": "23750.00",
"depreciationArea": "",
"assetPostMessage": "Transaction type 200 cannot be used for activity 'Retirement with revenue'",
"assetSubNumber": "0000",
"currency": "USD",
"comment": "",
"assetStatus": "Approve",
"showOnlyRetriedItemsInUIFlag": false
}
],
}
```

```
"writeoffKey": "4001_40011000_XXX_10/28/2021 1:47:56 PM",
"assetRequestType": "Asset Scrap",
"assetHeader": {
"companyCode": "4001",
"costCenter": "40011000",
"docType": "AA",
"assetRequestType": "Asset Scrap",
"totalNetbookCurrency": "USD",
"transactionTypeGroup": 20,
"docDate": "20211028",
"postingDate": "20211028",
"totalNetbookValue": "23750.00",
"customCreatedBy": "XXX",
"assetValueDate": "20211028",
"text": "hi",
"customCreatedByEmail": "sample@email.com"
}
}
}
```


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.

Fixed Asset Approval Write-Off

An example of a fixed Asset Write Off Approval Process Variant is given below:

The screenshot shows the SAP Manage Process Variants interface for a process variant named "One Step Cost Center Approval". The interface includes a top navigation bar with the SAP logo and "Manage Process Variants" dropdown. Below the navigation bar are buttons for "Undo", "Redo", "Save", and "Activate". The main area is divided into three sections:

- Available Steps (3):** A list of three steps: "Asset WriteOff..." (Approval workflow for Fixed Assets Write Off), "Cost Center Owner..." (Approval workflow for Fixed Assets Write Off), and "Post Approved Assets..." (Workflow to post the approved assets for write off).
- Process Flow Diagram:** A central diagram showing a sequence of steps. It starts with a green circle, followed by "Cost Center Owner Approval" (with a lock icon), then "PostWriteOffAssets" (with a lock icon), and ends with a red circle. A "100%" completion indicator is shown next to the diagram.
- Process Variant Properties:** A panel on the right with a "Start Conditions" tab. It contains the text "Only start the variant if all of the following conditions are met:" followed by two conditions: "Asset Header Details.Asset Request ..." and "Asset Scrap". There is an "Add Alternate Conditions" button at the bottom.

Import Fixed Assets Write-Off Approval and Configure Process Variants

In Process Flexibility Cockpit app, search for content package Fixed Assets Write-Off 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 are required.

Please refer to the standard help document about [Configuring a process variant](#)

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 Workflow Management has business rules capabilities that enables customers to centrally manage all decisions. Please go through the [business rules capabilities](#) in SAP Workflow Management.

Determine Approvers


Rule service to determine approvers for the Fixed Assets Write-Off Approval process

Rule Service Name: Determine Approvers

Input: Fixed Assets Header

 Fixed Assets Header

Details **Attributes** Associations Annotations


Simple Attributes + 

Name	Label	Description	Business Data Type	
CostCenter	Cost Center	Cost center to which the assets to be written off belongs to.	String	>
TotalNetbookValue	Total Netbook Value	Total netbook value calculated by adding individual netbook values for write off assets.	Number	>
ApprovalStep	Approval Step	Unique identification of the approval step. Ex: Finance Team	String	>

Output: Approver Details (Structure data type)

 Approver Details

Details **Attributes** Associations Annotations

Simple Attributes + 

Name	Label	Description	Business Data Type	
Userid	User ID	User ID of the approver responsible for fixed assets write off.	String	>
UserGroup	User Group	Group ID of the approvers responsible for fixed assets write off.	String	>
Email	Email	Email address of the approvers responsible for fixed assets write off.	String	>
SupervisorEmail	Supervisor Email	Email address of the supervisor.	String	>
DueDuration	Due Duration in Days	Due Duration in Days	Number	>

Rule Definition

Determine approvers for an approval step in Fixed Assets Write-off Approval process

Determine Approvers

Details [Decision Table](#)

If			Then			
Cost Center	Total Netbook Value	Approval Step	Supervisor Email	Email	User Group	User ID
= 'XYZ'	>= 0	= 'Approval Team'	'email@example....'	'email@example....'	'Approver_GroupId'	'Approver_UserId'

Where used

Step: Called from Approval step

Determine Administrators


Rule service to determine administrators for the **Fixed Assets Write-off Approval process**

Rule Service Name: Determine Administrators

Input: Fixed Assets Header (Structure data type)

Fixed Assets Header

Details [Attributes](#) Associations Annotations

Simple Attributes				+ 
Name	Label	Description	Business Data Type	
CostCenter	Cost Center	Cost center to which the assets to be written off belongs to.	String	>
TotalNetbookValue	Total Netbook Value	Total netbook value calculated by adding individual netbook values for write off assets.	Number	>
ApprovalStep	Approval Step	Unique identification of the approval step. Ex: Finance Team	String	>

Output: Administrator Details (Structure data type)

Administrator Details

Details **Attributes** Associations Annotations

Simple Attributes

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 Definition

Determine administrators for an approval step in Fixed Assets Write-off Approval process.

Determine Administrators

Details **Decision Table**

Decision Table			
If	Then		
Approval Step	User ID	User Group	Email
= 'Approval Team'	'Admin_UserId'	'Admin_GroupId'	'email@example.com'

Where used

Step: Called from Approval step

Determine Task Due Date



Determine Task Due Date

Details **Text Rule**

Text Rule

Text Rule

▼ If

Fixed Assets Header.Approval Step = 'Cost Center Owner'

Then

Due Duration in Days:



Determine Task Due Date

Details **Text Rule**

Text Rule

Text Rule

> If

> Else If (1)

▼ Else

Due Duration in Days:

Approver Determination Strategy

Rule Service to determine if the approval determination is based on external service or business rule

Rule Service Name: Approver Determination Strategy

Input: Fixed Assets Header (Structure data type)

Fixed Assets Header

Details **Attributes** Associations Annotations

Simple Attributes +

Name	Label	Description	Business Data Type
CostCenter	Cost Center	Cost center to which the assets to be written off belongs to.	String >
TotalNetbookValue	Total Netbook Value	Total netbook value calculated by adding individual netbook values for write off assets.	Number >
ApprovalStep	Approval Step	Unique identification of the approval step. Ex: Finance Team	String >

Output: Approver Determination Strategy (Structure data type)

Approver Determination Strategy

Details **Attributes** Associations Annotations

Simple Attributes +

Name	Label	Description	Business Data Type
DeterminationStrategy	Determination Strategy	Determination strategy can either "Business Rule" or "External Service" depending on asset details	String >

Rule Definition

Determine administrators for an approval step in Fixed Assets Write-off Approval process.

Approver Determination Strategy

Details **Decision Table**

If			Then
Cost Center	Total Netbook Value	Approval Step	Determination Strategy
= 'XYZ'	> 0	= 'Approval Team'	'External Service'
			'Business Rules'

Fixed Assets Vocabulary for start condition and step condition

Simple Attributes



Name	Label	Description	Business Data Type
assetRequestType	Asset Request Type	Asset request type for write off approval process.	String >
companyCode	Company Code	Company code to which the asset belongs to.	String >

Determine Approvers from External Service

Sample Input payload for external service

```
{
  "d": {
    "Role": "Cost Center Owner",
    "AssetDetails": {
      "companyCode": "4001",
      "assetItem": [
        {
          "cumulativeAcquisitionValue": "60000.00",
          "assetPostStatus": "176",
          "assetCapitalizationDate": "2021-05-01",
          "assetDescription": "Test for Unplanned depreciation 2",
          "amountPosted": "1000.00",
          "accumulatedDepreciationValue": "-4000.00",
          "assetNumber": "1000000000083",
          "assetTransactionType": "200",
          "netbookValue": "56000.00",
          "depreciationArea": "",
          "assetPostMessage": "Transaction type 200 cannot be used for activity 'Retirement with revenue'",
          "assetSubNumber": "0000",
          "currency": "USD",
          "comment": "",
          "assetStatus": "Approve",

```

```

"showOnlyRetriedItemsInUIFlag": false
},
{
"cumulativeAcquistionValue": "25000.00",
"assetPostStatus": "176",
"assetCapitalizationDate": "2021-07-01",
"assetDescription": "Test for Unplanned depreciation 3",
"amountPosted": "2000.00",
"accumulatedDepreciationValue": "-1250.00",
"assetNumber": "100000000084",
"assetTransactionType": "200",
"netbookValue": "23750.00",
"depreciationArea": "",
"assetPostMessage": "Transaction type 200 cannot be used for activity 'Retirement with revenue'",
"assetSubNumber": "0000",
"currency": "USD",
"comment": "",
"assetStatus": "Approve",
"showOnlyRetriedItemsInUIFlag": false
}
],
"writeoffKey": "4001_40011000_XXX_10/28/2021 1:47:56 PM",
"assetRequestType": "Asset Scrap",
"assetHeader": {
"companyCode": "4001",
"costCenter": "40011000",
"docType": "AA",
"assetRequestType": "Asset Scrap",
"totalNetbookCurrency": "USD",
"transactionTypeGroup": 20,
"docDate": "20211028",
"postingDate": "20211028",
"totalNetbookValue": "23750.00",
"customCreatedBy": "XXX",

```



```
"assetValueDate": "20211028",
"text": "hi",
"customCreatedByEmail": "sample@email.com"
}
}
}
```

Sample output response

```
"ApproverRulesResult": {
  "d": {
    "approvers": [
      {
        "supervisorEmail": "email@example.com",
        "email": "email@example.com",
        "userGroup": "Approver_GroupId",
        "userId": "Approver_UserId"
      }
    ]
  }
}
```

URL Construct: /http/getApproversFA

Process Visibility

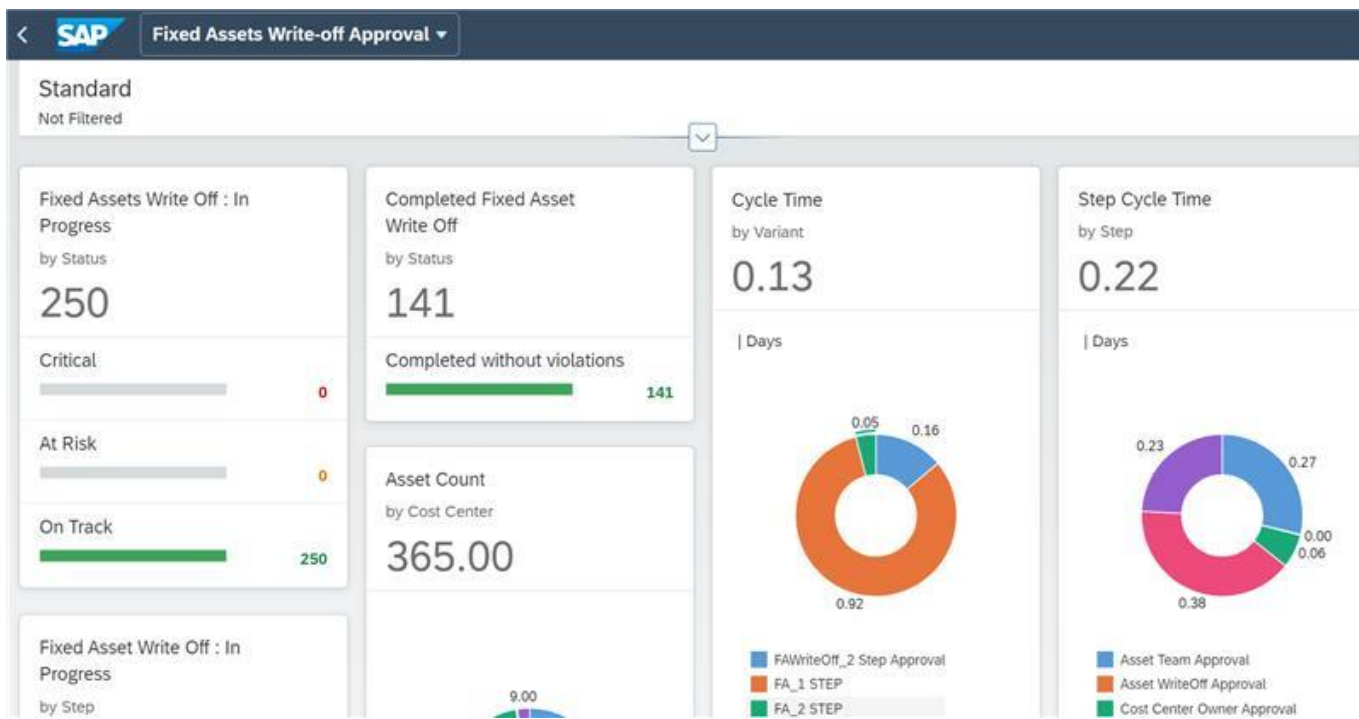
Process Visibility capability in SAP Workflow Management enables Process Owners and Process Operators to gain real time visibility on processes and key process performance indicators. It also enables customers gain out of the box process visibility into their deployed processes. Please refer [help documentation](#)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

Fixed Assets Write-Off Approval process content package provide out of the box visibility on all the process variants in SAP Workflow Management. Line of business expert will be able to enhance the visibility scenario to their requirements.

Configure Visibility Scenarios

1. Go to Process Flexibility Cockpit.
2. Select **Fixed Assets Write-Off Approval** tile in package **Fixed Assets Write-Off Approval**

3. Click Visibility Scenarios tile.



Dashboard of Fixed Asset Write-off process visibility

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