

SAP BUSINESS TECHNOLOGY PLATFORM | EXTERNAL

Integration Guide

SAP Workflow Management Integration with SAP S/4HANA –
Fixed Asset Approval for Write-Off

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Overview

This document provides information about configuration steps to setup the integration content to consume the workflow content packages **Fixed Asset Write-Off Approval**. The primary audience of this document is integration administrators and developers.

This package contains Integration Flows to

- **GET** the asset information from SAP S/4HANA and send it to SAP Workflow Management.
- **POST** the asset write off to SAP S/4HANA.

Scenario Definition

1. Objectives

- Fixed Asset workflow is to have approval process in place for Fixed asset write-off so that these transactions can be tracked and monitored before actual document postings in SAP S/4 HANA.

2. Features

- Workflow for write off on fixed assets scenarios
- Multi-level workflows with process flexibility
- Asset approval at item level, that facilitates write off on multiple assets in a single workflow

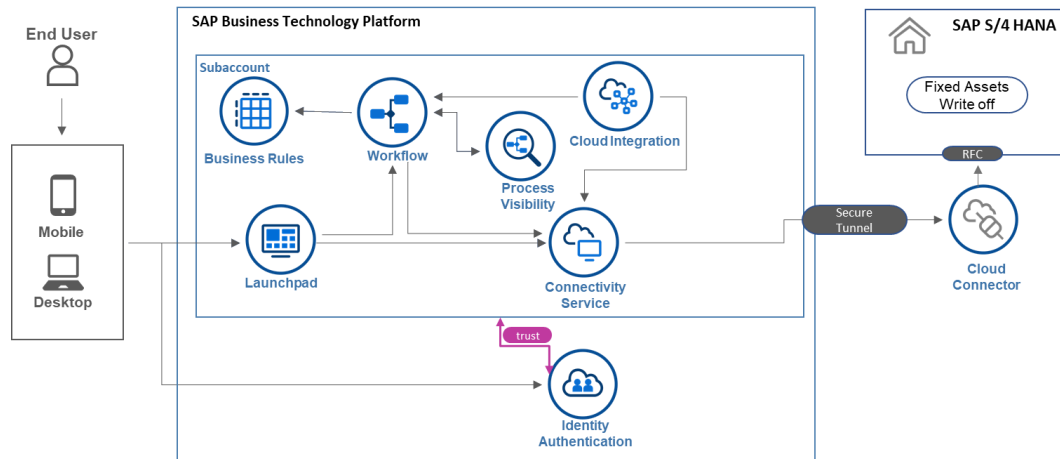
3. Benefits

- This extension will enable Write-Off transactions to be tracked separately.

4. Applicable Scenarios

- ABAA: Unplanned depreciation
- F-92: Asset sale with Customer
- ABAON: Asset sale without customer
- ABAVN: Asset retirement by Scrapping
- ABT1N: Intercompany asset transfer
- ABAWL: Asset impairment - Transaction type: Z81, Z83

SOLUTION DIAGRAM



Salient features of this integration package are:

- **Get Asset Details** – To fetch asset details from SAP S/4 HANA
- **Get Cost Center Owner** – To get the Cost Center Owner and its email-id from SAP S/4 HANA
- **Post Asset Write-Off API** – To post Asset Write-Off in SAP S/4 HANA based on the write-off details received from SAP Workflow Management
- **Get Approvers for Fixed Asset** – This is a template iFlow which can be used to implement custom iFlow for Approver Determination which may include connecting to external source system

Required SAP Business Technology Platform Services

The workflow content package SAP S/4HANA Integration with SAP Workflow Management – Fixed Asset Approval for Write-Off is intended to be used for SAP S/4HANA (on-premise and cloud) and requires the following services in SAP BTP:

- SAP Workflow Management to orchestrate the process.
- SAP Integration Suite for data activities with Fixed Asset Information.
- SAP Connectivity service (cloud connector) to establish access to SAP S/4HANA on-premise.
- SAP Launchpad service to access the apps that are involved in the process.
- SAP Business Application Studio to modify/deploy the SAPUI5 applications.
- SAP BTP, Cloud Foundry runtime.

Setup and Configuration

This section will explain how to setup the integration content that is required for the workflow content packages **SAP S/4HANA Integration with SAP Workflow Management – Lease Termination**.

Configure SAP S/4HANA Communication User

Communication User is not required as there is no connection needed with SAP S/4 HANA Cloud.

Configure SAP S/4HANA Destination

Configure S/4 HANA destination to connect with SAP S/4HANA on-premise . The below is a destination configuration for *SAP S/4HANA on-premise*.

Note: This destination is required by SAP Workflow Management as well as Cloud Integration (Suite).

| | |
|-----------------------|---------------------------------|
| Name | S4HANA |
| Type | HTTP |
| Proxy Type | On-Premise |
| User | <ONPREMISE_ USER> |
| Password | <ONPREMISE_ PASSWORD> |
| Authentication | BasicAuthentication |
| URL | <OData base URL of SAP S/4HANA> |
| Additional Properties | sap-client: <client number> |

Configure RFC Destination

Configure a RFC destination to connect with SAP S/4HANA on-premise. Below is a destination configuration for *SAP S/4HANA on-premise*.

Note: This destination is required by Cloud Integration (Suite).

| | |
|------------|------------------------|
| Name | <RFC_DESTINATION_NAME> |
| Type | RFC |
| Proxy Type | OnPremise |

| | |
|---------------------|----------------------|
| User | <ONPREMISE_USER> |
| Password | <ONPREMISE_PASSWORD> |
| Repository User | <ONPREMISE_USER> |
| Repository Password | <ONPREMISE_PASSWORD> |

| | |
|-----------------------|-----------------------------------|
| Additional Properties | jco.client.ashost: <host> |
| Additional Properties | jco.client.client:<client number> |
| Additional Properties | jco.client.lang: <language> |
| Additional Properties | jco.client.sysnr:<system number > |

Configure Cloud Connector

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

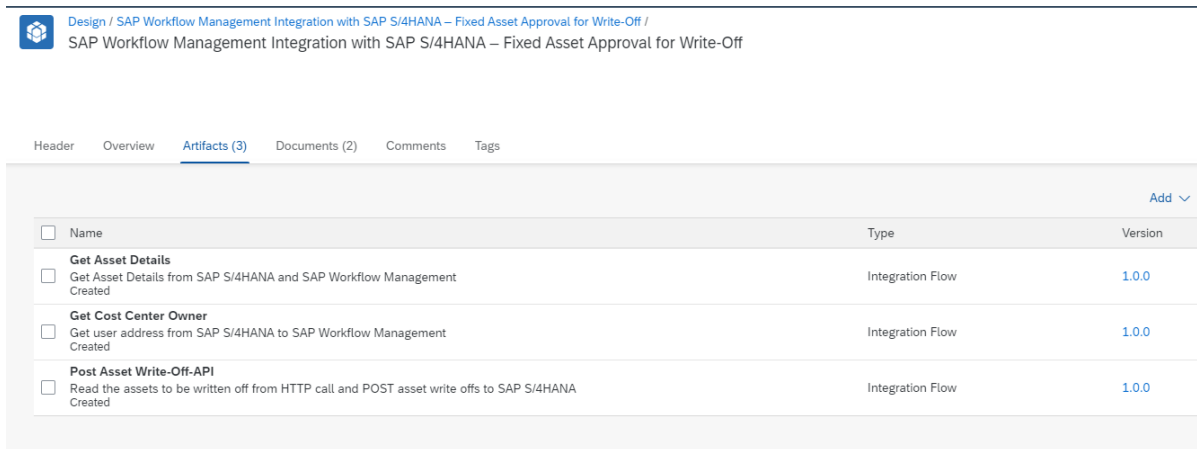
Services/Resources that need to be exposed from SAP S/4HANA on-premise using Cloud Connector

| Resources | Protocol | Backend-Type |
|---|----------|--------------|
| /sap/opu/odata/sap/API_COMPANYCODE_SRV | HTTPS | ABAP System |
| /sap/opu/odata/sap/API_COSTCENTER_SRV | HTTPS | ABAP System |
| /sap/opu/odata/sap/ZZ1_ASSETTRANSACTIONTYPE_CDS | HTTPS | ABAP System |
| /sap/opu/odata/sap/ZZ1_DEPRAREAFORLEDGERVH_CDS | HTTPS | ABAP System |
| BAPI_ASSET_RETIREMENT_POST | RFC | ABAP System |
| BAPI_ASSET_REVALUATION_POST | RFC | ABAP System |
| BAPI_ASSET_VALUE_ADJUST_POST | RFC | ABAP System |
| BAPI_FIXEDASSET_GETLIST | RFC | ABAP System |
| BAPI_USER_GET_DETAIL | RFC | ABAP System |
| BAPI_TRANSACTION_COMMIT | RFC | ABAP System |
| BAPI_TRANSACTION_ROLLBACK | RFC | ABAP System |

Import, configure and deploy cloud integration content

The workflow content requires cloud integration to process – Fixed Asset Approval for Write-Offs in SAP S/4HANA. The integration content package **SAP Workflow Management Integration with SAP S/4HANA – Fixed Asset Approval for Write-Off** is available in SAP API Business hub to integrate SAP Workflow Management with SAP S/4HANA. Integration models use RFC to integrate with SAP S/4HANA. The following integration models are available in this package.

1. Get Asset Details
2. Get Cost Center Owner
3. Post Asset Write-Off API



The screenshot displays the SAP API Business Hub interface for the integration package. The breadcrumb path is 'Design / SAP Workflow Management Integration with SAP S/4HANA – Fixed Asset Approval for Write-Off / SAP Workflow Management Integration with SAP S/4HANA – Fixed Asset Approval for Write-Off'. The navigation tabs include 'Header', 'Overview', 'Artifacts (3)', 'Documents (2)', 'Comments', and 'Tags'. The 'Artifacts (3)' tab is active, showing a table of integration flows.

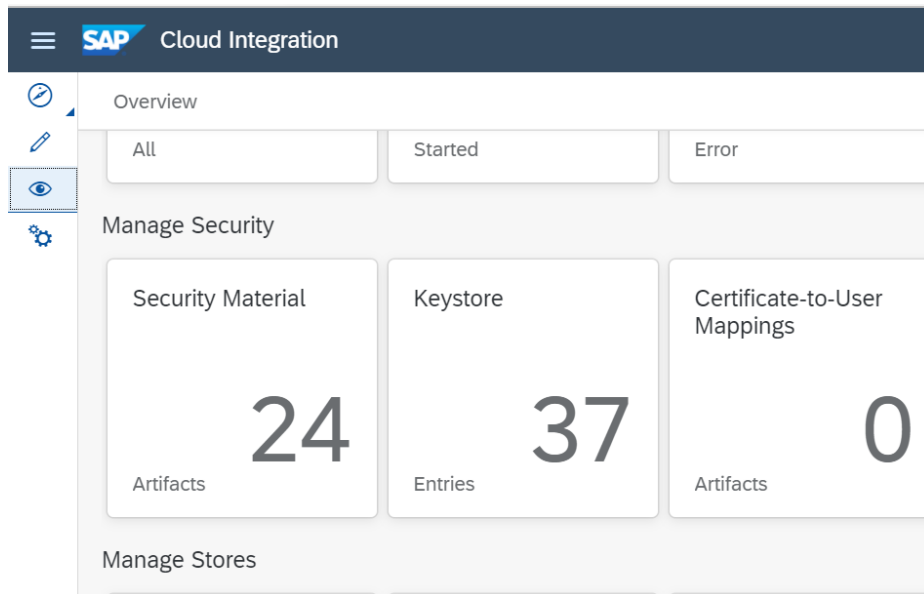
| <input type="checkbox"/> | Name | Type | Version |
|--------------------------|---|------------------|---------|
| <input type="checkbox"/> | Get Asset Details Get Asset Details from SAP S/4HANA and SAP Workflow Management Created | Integration Flow | 1.0.0 |
| <input type="checkbox"/> | Get Cost Center Owner Get user address from SAP S/4HANA to SAP Workflow Management Created | Integration Flow | 1.0.0 |
| <input type="checkbox"/> | Post Asset Write-Off-API Read the assets to be written off from HTTP call and POST asset write offs to SAP S/4HANA Created | Integration Flow | 1.0.0 |

Import the integration package to your SAP Cloud Integration tenant. To be able to import and deploy integration flows, you need the role AuthGroup-IntegrationDeveloper (in Neo environment) or PI_Integration_Developer (in eCloud Foundry environment) assigned in your tenant.

Import pre-packaged Integration content in SAP Integration Suite

- Access your SAP Integration Suite tenant management node (<https://<integrationtenant>/itspaces>).
- View all pre-packaged integration flow under Discover->Integration. (<https://<integrationtenant>/itspaces/shell/discover>)
- Search content package “**SAP Workflow Management Integration with SAP S/4HANA – Fixed Asset Approval for Write-Off**”.
- Click on the package SAP Workflow Management Integration with SAP S/4HANA – Fixed Asset Approval for Write-Off.
- Click Copy to import the Integration content package to your workspace.

- Navigate to the *Monitor* view (<https://< integrationtenant >/itspaces/shell/monitoring>) to setup the security materials required for the package.
- Deploy the following credentials using the Security Material app. In Integration Suite, open Operations view, then click on Security Material to create and deploy security materials.



○ **S4HANA – (User Credentials)**

Create User Credentials

Name: *

Description:

Type: * ▼

User: *

Password:

Repeat Password:

[Deploy](#) [Cancel](#)

RFC and OData Adapter Configuration

- Open the integration model *Get Cost Center Owner*.
- Click **Configure** button, choose receiver (SAP_S4HANA) and set their respective endpoint, credential names, destination and SAP Client details.

Configure "Get Cost Center Owner"

Sender **Receiver** More

Connection

Receiver: SAP_S4HANA

Adapter Type: RFC

Destination: [Redacted]

Configure "Get Cost Center Owner"

Sender **Receiver** More

Connection

Receiver: SAP_S4HANA_ODATA

Adapter Type: HCIOData

Address: {{OData_URL}}/sap/opu/odata/sap/API_COSTCENTER_SRV

OData_URL: http://[Redacted].com:[Redacted]

Proxy Type: On-Premise

Authentication: Basic

Credential Name: [Redacted]

Configure "Get Cost Center Owner"

Sender Receiver **More**

Type: All Parameters

SAP_Client: [Redacted]

Transaction_handling: Not Required

- Save and Deploy the integration model.

- Maintain the same RFC Adapter settings for both receivers “SAPS4HANA” and “SAP_S4HANA” in *Get Asset Details* integration model and deploy the same.
- Maintain the same RFC Adapter settings for receiver “SAP_S4HANA” in *Post Asset Write-Off-API* integration model and deploy the same.

Note: In case the Approver Determination Strategy is selected as “External Service” in workflow configurations, then a CPI iFlow needs to be implemented with the below mentioned endpoint, input and output details.

Endpoint: /getApproversFA

Input from Workflow:

```
{
  "d":
  {
    "AssetDetails" : $.context.assetDetails,
    "Role" : $.context.role
  }
}
```

Output to Workflow:

```
{
  "d": {
    "approvers": [
      {
        "supervisorEmail": "email@example.com",
        "email": "email@example.com",
        "userGroup": "Approver_GroupId",
        "userId": "Approver_UserId"
      },
      {
        "supervisorEmail": "email1@example.com",
        "email": "email1@example.com",
        "userGroup": "Approver_GroupId1",
        "userId": "Approver_UserId1"
      }
    ]
  }
}
```