

SAP BUSINESS TECHNOLOGY PLATFORM | EXTERNAL

Setup Guide

Manage Asset Creation Requests using SAP
Workflow Management

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Overview

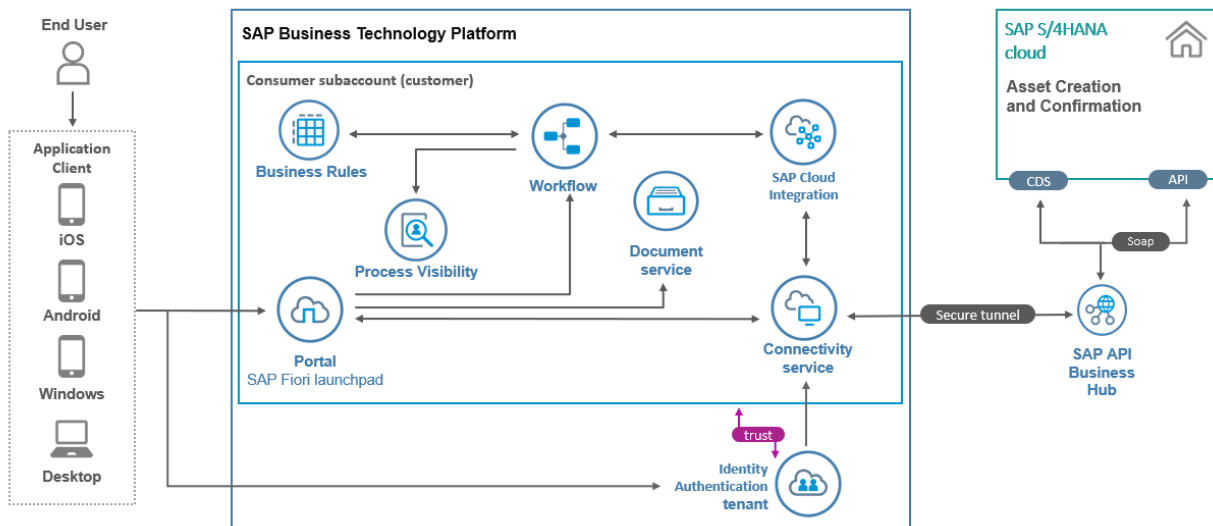
This document provides information about configuration steps to consume the live process package **Manage Asset Creation Requests**. The primary audience of this document is technical IT / system administrators.

Manage Asset Creation Requests content package for **SAP S/4HANA** automates Asset Approvals in a flexible and transparent approach. It provides flexibility in executing a specific variant of the process depending on attributes such as company code, cost center, asset class, plant etc. When an asset is created in SAP S/4HANA and is configured for external approval, a pre-configured process variant is triggered in SAP Workflow Management based on configurable business conditions. The asset is created based on the approvals and validations performed in the process.

Salient features of this content package are:

- Plug and Play with SAP S/4HANA without any additional development.
- Process steps delivered to approve an asset.
- Automatic email notification to parties involved.
- Business Rules provides flexibility in determining approver determination strategy and approvers
- Custom validation on asset 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 of the asset

Manage Asset Creation Requests



Required SAP Business Technology Platform Services

The following SAP BTP services are required to consume the content package Manage Asset Creation Requests Process for SAP S/4HANA

- SAP Workflow Management
- SAP Launchpad service
- SAP Business Application Studio
- SAP Integration Suite for data activities with Asset creation and confirmation
- SAP Document Management Service, Integration Option
- SAP Cloud Identity Services - Identity Authentication [Optional]

Setup and Configuration

The Manage Asset Creation Requests content package requires SAP Workflow Management subscription or a CPEA contract. Follow the [setup and configuration section](#) of SAP Workflow Management.

Configure Workflow Email Destination

Configure workflow email destination. For more information on configuring destination, see [configure workflow email destination](#).

Configure OAuth2ClientCredentials Workflow Destination

A HTTP destination is required in the BTP subaccount where SAP Workflow Management is subscribed. Create a destination with name "Workflow" with the following configuration, if it doesn't exist already. Please refer how to [create a HTTP destination](#) OAuth 2.0 Authentication (client credentials).

Type	HTTP
Proxy Type	Internet
Authentication	OAuth2ClientCredentials
URL	https://api.workflow.<region-host>.hana.ondemand.com/workflow-service/rest
Client ID	<Client ID>
Client Secret	<Client Secret>
Token Service URL	<"uaa":"url">/oauth/token

Note: While creating the service instance for Workflow service, make sure that at least the following scopes are assigned (help documentation to [enable technical authentication](#) to access the workflow APIs). If the scopes are not assigned, you can also [update the service instance](#) with the following scopes.

- WORKFLOW_INSTANCE_START
- WORKFLOW_INSTANCE_UPDATE_CONTEXT
- WORKFLOW_INSTANCE_GET
- MESSAGE_SEND

Please refer help documentation [how to get URL, Client ID, Client Secret and Token Service URL](#). For more information refer to how to [create a HTTP destination](#) and [how to use Workflow APIs](#).

Configure OAuth2ClientCredentials Business Rules Destination

A HTTP destination is required in the Cloud Foundry account where SAP Workflow Management is subscribed. Create a destination with name "BUSINESS_RULES" with the following configuration, if it doesn't exist already. Please refer how to [create a HTTP destination](#) and [how to access business rules APIs](#) using OAuth 2.0 Authentication (client credentials)

Name	BUSINESS_RULES
Type	HTTP
Proxy Type	Internet
Authentication	OAuth2ClientCredentials
URL	<rule_runtime_url>/rules-service
Client ID	<client ID>
Client Secret	<client secret>
Token Service URL	<uaa.url>/oauth/token

Configure OAuth2ClientCredentials Business Rules Destination (Service Instance)

Ignore this step if there is already a destination using Business Rules service instance created. Create new Destination to call Business Rules Service APIs using a service route from SAP UI5 Component.

- Click New Destination.
- Select **Service Instance** as Destination Configuration.
- Select Service Instance as BusinessRules.
- Enter Name as BusinessRules_CFLP and click Next button.

Destination Configuration Blank Template **Service Instance**

Service Instance: *

Name: *

Description:

- Click **Save** button.

Destination Configuration

Name: *	<input type="text" value="BusinessRules_CFLP"/>	Additional Properties	
Type:	<input type="text" value="HTTP"/>	<input type="text" value="endpoints"/>	<input rule_repository_url\":..."="" type="text" value="{\"/>
Description:	<input type="text" value="Rules destination from SAP UI5 API calls using ..."/>	<input type="text" value="html5-apps-r..."/>	<input app_host_id\":\"cbd0c..."="" type="text" value="{\"/>
URL: *	<input type="text" value="https://sap.com/DUMMY_URL"/>	<input type="text" value="saasregistrye..."/>	<input type="text" value="true"/>
Proxy Type:	<input type="text" value="Internet"/>	<input type="text" value="sap.cloud.se..."/>	<input type="text" value="com.sap.bpm.rule"/>
Authentication:	<input type="text" value="OAuth2ClientCredentials"/>	<input checked="" type="checkbox"/> Use default JDK truststore	
Client ID: *	<input type="text"/>		
Client Secret:	<input type="text" value="*****"/>		
Token Service URL: *	<input type="text"/>		
Token Service User:	<input type="text"/>		
Token Service Password:	<input type="text"/>		

Configure Destination to Enable Start & Step Conditions

To enable the usage of start conditions and step conditions on a process variant, create a destination for business rules with the configuration as mentioned in the following help document:

https://help.sap.com/viewer/6f55baaf330443bd8132d071581bbae6/Cloud/en-US/543b5dbd77d940b4b1f972298b559911.html?q=WM_BUSINESSRULES

Configure OAuth2ClientCredentials Workflow Destination (Service Instance)

Ignore this step if there is already a destination using Workflow service instance created.

Similarly, create new Destination to call Workflow Service APIs using a service route from SAP UI5 Component. For more details, follow the official help document:

<https://help.sap.com/viewer/cca91383641e40ffbe03bdc78f00f681/Cloud/en-US/685f383cebb54c009b2fac633b32c90f.html>.

Configure a Destination to SAP S/4HANA system

Create a destination to connect to either SAP S/4HANA or SAP S/4HANA Cloud system. For example, in this case you see the destination to connect to SAP S/4HANA Cloud system. Configure a destination with the name as "S4HANA", with Type as HTTP, Proxy Type as Internet, URL as hostname of your SAP S/4HANA Cloud tenant, and authentication as Basic Authentication. Please refer how to [create an HTTP destination](#)

Name	S4HANA
Type	HTTP
Proxy Type	Internet
User	<COMMUNICATION_USER>
Password	<COMMUNICATION_PASSWORD>
Authentication	BasicAuthentication
URL	<OData base URL of SAP S/4HANA cloud>

Configure Cloud Integration Destination

To call an integration flow, a HTTP destination is required in the SAP BTP tenant where the SAP Workflow Management is subscribed. Create a destination called CPI with either Basic Authentication or OAuth2ClientCredentials.

Destination with Basic Authentication

Name	CPI
Type	HTTP
Proxy Type	Internet
Authentication	Basic Authentication
URL	<runtime.url>
Username	<user>
Password	<password>

For more information refer how to [create a HTTP destination](#) and Authentication (client credentials).The URL should be the runtime url Please refer how to get your Integration tenant [runtime url](#)

Configure Document Management Service Repository

SAP Document Management service, in short Document Management, is the content management solution on the Cloud Foundry environment of SAP Business Technology Platform. For the Manage Asset Creation Requests, you need to subscribe to 'Document Management, Integration Option' in order to upload the asset related documents and other supporting documents for the approval process.

Create and configure root Document Management Service repository by following the steps described in [Initial Setup for Document Management, Integration Option](#) and [Connect to Document Management, Repository Option Using API \(incl. Prerequisites\)](#). Save generated Repository ID from the response to be used the destination configuration as described in the next section.

Configure Document Management Destination

Configure a Document Management Service destination with the following parameters.

Name	bpmworkflowruntime_attachments
Type	HTTP
Proxy Type	Internet
Authentication	OAuth2UserTokenExchange
URL	<"endpoints":"ecmservice":"url">/browser/ <Repository_ID>/root/
Token Service URL	<"uaa":"url">/oauth/token
Token Service URL Type	Dedicated

Populate Client ID and Client Secret with the values from the Service Key created on the previous step (see [Create Service Keys Using the Cockpit](#)). For more information refer to [Create HTTP Destinations](#) and [OAuth User Token Exchange Authentication](#). Make sure that the users which are going to use the application have "SDM_Admin" or "SDM_User" roles assigned to them.

Custom CDS View and Custom communication scenario

To call the APIs related to **Manage Asset Creation Requests**, the following CDS Views and custom communication scenarios along with communication arrangement should be enabled for the communication user. The SAP S/4HANA custom communication scenario consists of the external API details which is used to display the Asset details and value help used in Manage Asset creation request application. This application is developed based on [CDS as external ODATA API](#) and [creation of custom communication scenario](#).

The creation of Custom CDS View as external API's and custom communication scenario setup is provided in another **Manage Asset Creation Requests- CDS Setup guide**.

Import, Configure and deploy Integration Content

The workflow content requires cloud integration to process Asset creation and confirmation from SAP S/4HANA. The integration content package **SAP Workflow Management Integration with S/4HANA – Manage Asset Creation Requests** is available in SAP API Business hub to integrate SAP Workflow Management with SAP S/4HANA.

1. Asset Creation
2. Asset Confirmation



This package contains Integration Flows to create Assets in S/4 HANA from SAP Workflow Management and to receive confirmation from S/4 HANA and update in SAP Workflow.

Vendor: SAP Mode: Editable
 Version: 1.0.0

Overview **Artifacts (2)** Documents (1) Tags Comments

Actions				Filter Artifacts
Name	Type	Version	Actions	
<input type="checkbox"/> Asset Confirmation Confirmation of asset creation from S4 HANA- Message is received from S/4 HANA which contains details such as Asset Number, company code and asset creation status. This is further sent to Workflow management. Created	Integration Flow	1.0.0		>
<input type="checkbox"/> Asset Creation Creation of Asset in S4 HANA- Message is received from Workflow. JSON to XML conversion takes place before updating the API. XML message is posted to S/4 HANA. On Failure, Exception is sent back to workflow Management. 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 Cloud Foundry environment) assigned in your tenant. Follow the guide in the integration content package to setup and use it in conjunction with this workflow content.

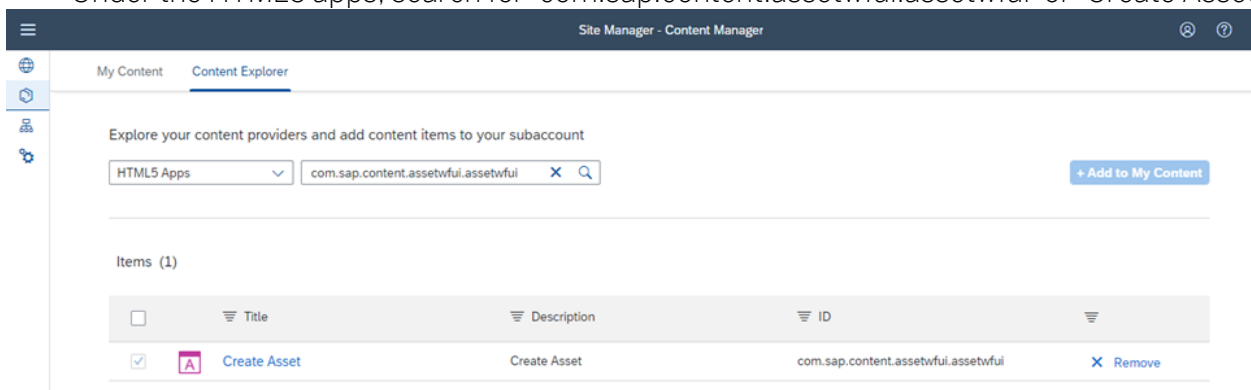
Configure SAP Central Fiori Launchpad Site

If you plan to use SAP Launchpad service, then configure [SAP Central Fiori Launchpad Site with Workflow Applications](#) using help documentation.

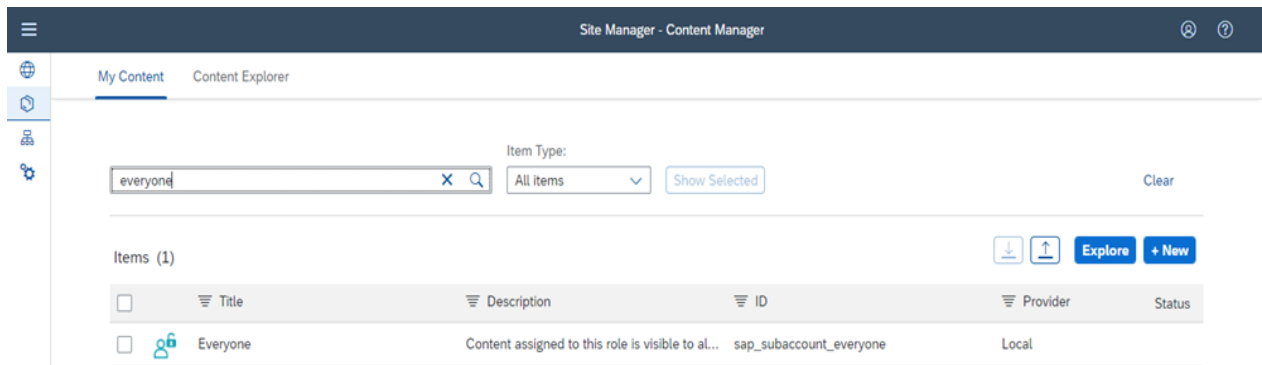
Deploy Custom UI and Configure Create Asset tile on Central Fiori Launchpad Site

Perform the following steps to add the Create Asset app as a tile in the launchpad site:

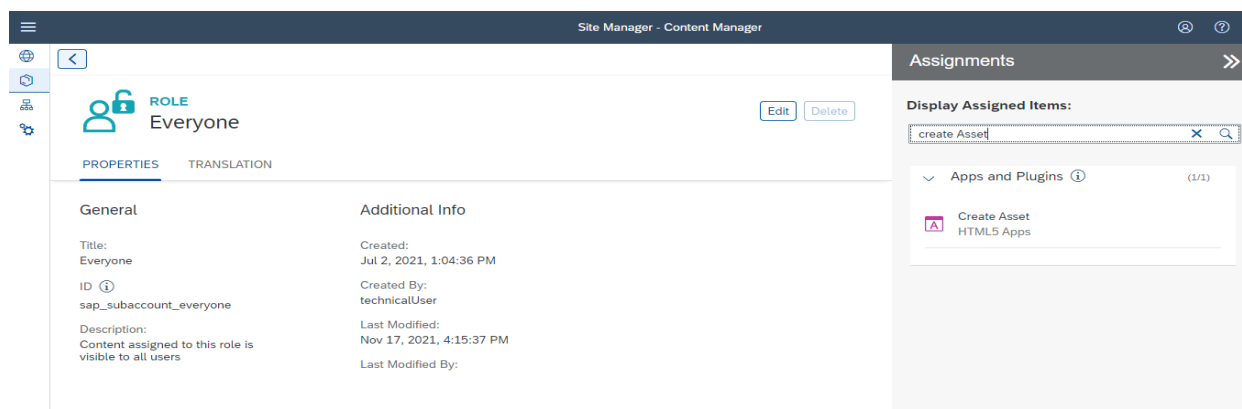
- Open SAP Launchpad site manager application.
- Select Content Manager
- Go to Content Explorer tab.
- Under the HTML5 apps, search for 'com.sap.content.assetwfui.assetwfui' or 'Create Asset'.



- Select the app from the result and click 'Add to My Content' button to include the UI5 component.
- Go to My Content tab, and search for the role to which you want to add the app (for example, the default role called **Everyone**).



- Click the role from the result table and navigate into it.
- Click the Edit button.
- Search for the app 'Asset' and click the + button to assign the app to the role.



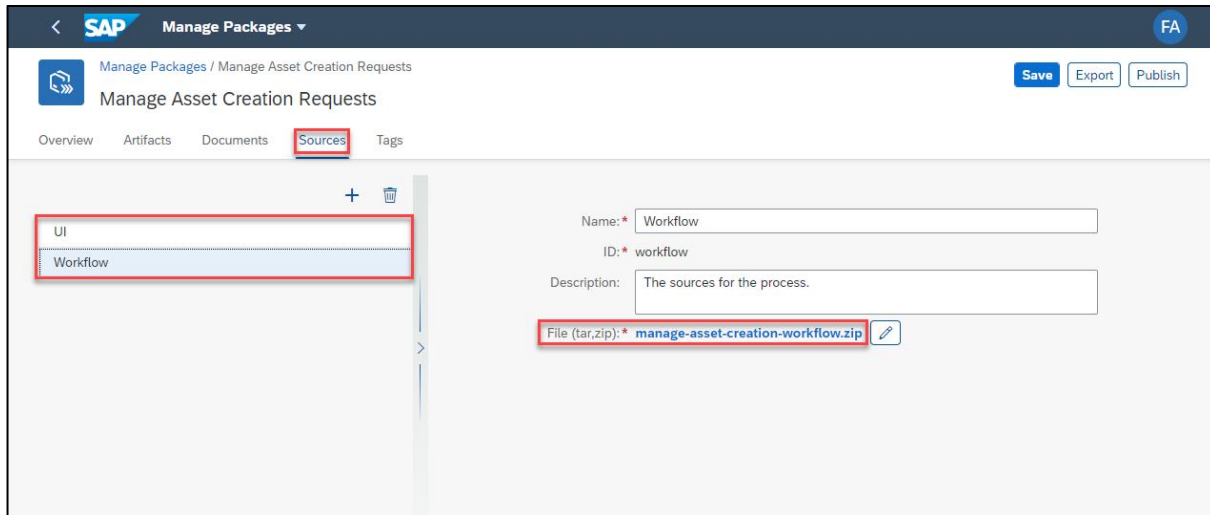
- Save the changes to enable the app permission based on user role.
- You can either create a new group and add the Asset Create app to that group or you can add the Asset Management app to an existing group.

Please refer help documentation to know more about [configure start UI tile on central Fiori Launchpad](#) .

Optional: Making Custom changes

Prerequisite: an account with access to SAP Business Application Studio as well as space developer permissions in BTP.

The source code for both the process and the SAPUI5-based user interfaces are available as part of the content package. With this, custom modifications can be implemented to adapt the content for specific needs.



- in **Manage Package** app, select **Sources** tab
- select the archive you want to download in the list on the left side
- click on the blue filename behind **File (tar, zip)** to download the attached source archive
- Import the archive into SAP Business Application Studio
- make any necessary modifications
- Build and deploy the MTA archive, using the space developer credentials

Please refer to the documentation for [SAP Business Application Studio](#), the documentation for [Modeling a Workflow](#) and the documentation for [Creating User Interfaces](#) for details.