

SAP BUSINESS TECHNOLOGY PLATFORM | EXTERNAL

Setup Guide

Purchase Order Change with SAP Workflow Management or SAP Build Process Automation

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Overview

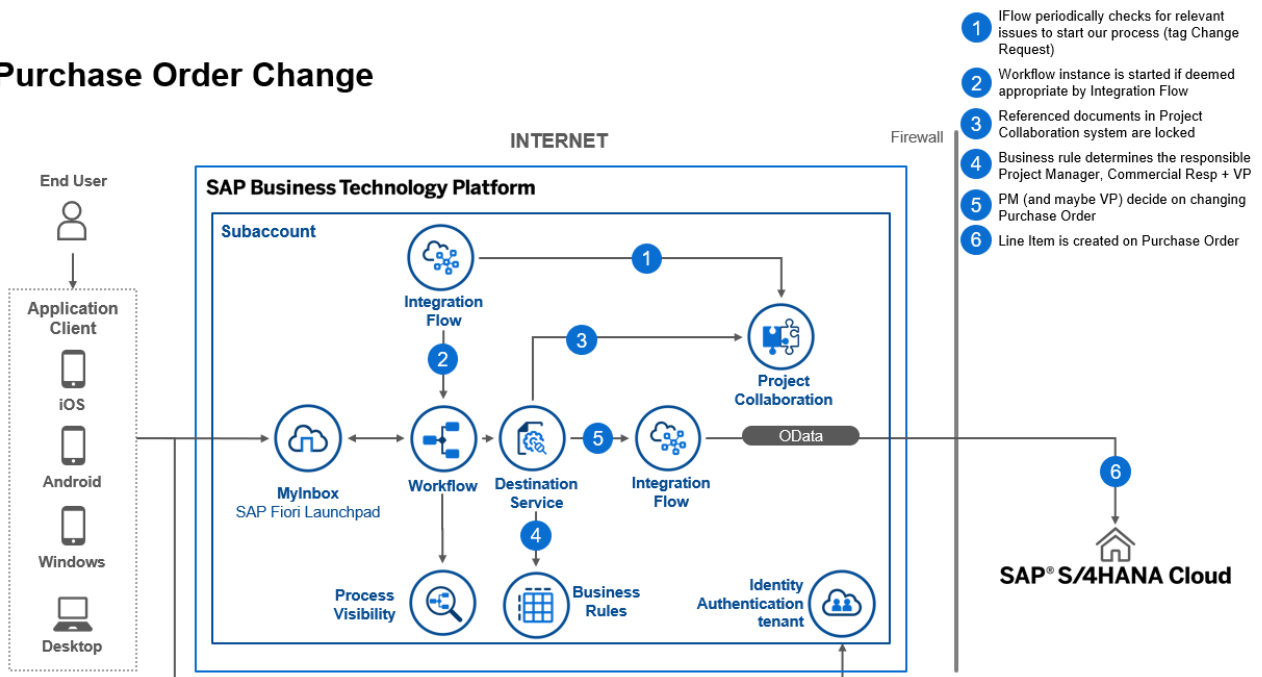
This document provides information about setting up the SAP Business Technology Platform account to consume the workflow content package **Purchase Order Change**. The main audiences of this document are technical IT/system administrators.

The workflow will check in regular intervals if an Issue for a Project in SAP S/4HANA Cloud for Projects, Project Collaboration that might lead to a change (prefix "CR_" in issue name) in the project scope has been added and closed and will then start the approval workflow. First, the referenced documents are locked. Afterwards, the project manager will have to decide if the issue leads to a change in the Purchase order. If so, the PM will have to supply additional data and confirm. If the change value exceeds a customizable threshold, an additional escalated approval will be needed. If all relevant approvals are there, an additional line item will be added to the Purchase Order.

This package contains the following features:

- Automatically detect when an issue has been created that is relevant
- Automatically mark the referenced documents as reviewed
- Escalated approval can be configured based on the change value
- Automatically create new line items in the respective purchase orders to account for the change in project scope

Purchase Order Change



Required SAP BTP Services

The workflow content package **Purchase Order Change** is intended to be used for SAP S/4HANA Cloud, SAP S/4HANA Cloud for Projects, Project Collaboration and requires the following services in SAP Business Technology Platform.

- SAP Build Process Automation or SAP Workflow Management to orchestrate the process.
- SAP S/4HANA Cloud, SAP S/4HANA Cloud for Projects, Project Collaboration
- SAP Integration Suite to push Issue lifecycle events on to Workflow Management.
- SAP Cloud Portal service or SAP Launchpad service to access the apps that are involved in the process.
- SAP Cloud Identity Services - Identity Authentication (optional).
- SAP Business Application Studio to modify/deploy the SAPUI5 applications.

Setup and Configuration

Purchase Order Change content package requires SAP Build Process Automation or SAP Workflow Management subscription or a CPEA contract. Based on which service you plan to use, follow the appropriate section to configure either SAP Build Process Automation or SAP Workflow Management.

Configure SAP Build Process Automation

Follow the setup and configuration section of SAP Build Process Automation:

1. [Subscribe to SAP Build Process Automation \(Standard Plan\)](#)
2. [Configure Destinations for Live Process Projects](#)
 - a. Import Package Destination
 - b. Business Rules Destination to support start and step conditions
3. [Optional] [Configure SAP Launchpad Service for SAP Build Process Automation](#)

Configure Process Automation Destination

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

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

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

Configure OAuth2ClientCredentials SAP Build Process Automation Destination (Service Instance)

Ignore this step if there is already a destination using SAP Build Process Automation service instance created.

Create new destination to call SAP Build Process Automation APIs using a service route from SAP UI5 component. For more details, follow the help document:

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

Destination Configuration Blank Template Service Instance

Service Instance: *

Name: *

Description:

Additional Properties New Property

Next Cancel

Destination Configuration

Name: *

Type:

Description:

URL: *

Proxy Type:

Authentication:

Use mTLS for token retrieval

Client ID: *

Client Secret:

Token Service URL Type: * Dedicated Common

Token Service URL: *

Token Service User:

Token Service Password:

Additional Properties

endpoints	{*api:"https://:...	
html5-apps-...	{*app_host_id:"...}	
saasregistry...	true	
sap.cloud.s...	com.sap.spa.process...	
sap.cloud.s...	spa	

Use default JDK truststore

Save Cancel

Configure SAP Workflow Management

Purchase Order Change content package requires SAP Workflow Management subscription or a CPEA contract. Follow the setup and configuration section of SAP Workflow Management.

<https://help.sap.com/viewer/6f55baaf330443bd8132d071581bbae6/Cloud/en-US/d7910e2bf7f64afc9d0eb21b0cc9e84d.html>

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_GET
- WORKFLOW_INSTANCE_START
- WORKFLOW_INSTANCE_CANCEL
- WORKFLOW_INSTANCE_GET_CONTEXT

Configure Workflow Email Destination

Configure workflow email destination to automatically send email notification to the involved parties. For more information on configuring the destination, see [configure workflow email destination](#).

Configure 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).

Name	Workflow
Type	HTTP
Proxy Type	Internet
Authentication	OAuth2ClientCredentials
URL	<rest_api_url>
Client ID	<client ID>
Client Secret	<client secret>
Token Service URL	<uaa.url>/oauth/token

Additional Properties to Destination

Additionally, add the following properties in the destination for cloud integration.

bpmprocessvisibility.triggerWorkflow	system
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Configure OAuth2ClientCredentials Workflow Destination (Service Instance)

Create new Destination to call Workflow Service APIs using a Service route from SAP UI5 Component.

- Click New Destination
- Select Service Instance as Destination Configuration
- Select Service Instance as Workflow
- Enter any name and click Next button to complete the creation of the destination.

Configure 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
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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 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>

Destination with OAuth2ClientCredentials Authentication

Name	CPI
Type	HTTP
Proxy Type	Internet
Authentication	OAuth2ClientCredentials
URL	<runtime.url>
Client Id	<client ID>
Client Secret	<client secret>
Token Service URL	<oauth.url.for.clientCredentials>

Additional Properties to Destination

Additionally, add the following properties in the destination for cloud integration.

WebIDEEEnabled	true
WebIDESystem	CPI
WebIDEUsage	odata_gen

Configure Communication Scenarios in SAP S/4HANA

Following Communication Scenarios are needed to be configured in SAP S/4HANA Cloud to use the content package.

API Purchase Order - Purchase Order Integration (SAP_COM_0053)

Inbound Services consumed:

/sap/opu/odata/sap/API_PURCHASEORDER_PROCESS_SRV/A_PurchaseOrder – for Purchase Order Header

/sap/opu/odata/sap/API_PURCHASEORDER_PROCESS_SRV/A_PurchaseOrder('{PurchaseOrder}')/to_PurchaseOrderItem– for Update Purchase Order

Follow the documentation on how to [Create Communication Arrangement](#) for Communication scenario.

SAP_COM_0053

https://api.sap.com/api/API_PURCHASEORDER_PROCESS_SRV/overview

Configure SAP S/4HANA Cloud Destination

Configure a HTTP destination to connect with SAP S/4HANA Cloud, refer to documentation [here](#) for the same. The below is a destination configuration for for *SAP S/4HANA Cloud*.

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 SAP S/4HANA Cloud for Projects, Project Collaboration Destination

Configure a HTTP destination to connect with SAP S/4HANA on-premise or SAP S/4HANA Cloud, refer to documentation [here](#) for the same. The below is a destination configuration for for *SAP S/4HANA Cloud*.

Name	COPIN
Type	HTTP
Proxy Type	Internet
User	<COMMUNICATION_USER>
Password	<COMMUNICATION_PASSWORD>
Authentication	OAuth2Password
URL	https://copin-api.cfapps.<DATACENTER>.hana.ondemand.com
Client ID	<Client ID of your COPIN API instance service key>
Client Secret	<Client Secret of your COPIN API instance service key>
Token Service URL:	<uaa.url of your COPIN API instance service key>/oauth/token

Note: Make sure to add your communication user to each project you want to monitor with this workflow package, otherwise it won't be possible to get data of the project. Please refer to the [documentation](#) on how to configure SAP S/4HANA Cloud for Projects, Project Collaboration and how to [manage users](#).

Configure SAP S/4HANA Cloud for Projects, Project Collaboration Fiori Base URL Destination

Configure a HTTP destination to connect with SAP S/4HANA on-premise or SAP S/4HANA Cloud, refer to documentation [here](#) for the same. The below is a destination configuration for for *SAP S/4HANA Cloud*.

Name	COPIN_FIORI
Type	HTTP
Proxy Type	Internet
URL	<UI URL of your COPIN instance> e.g. https://mysubdomain.copin.cfapps.eu10.hana.ondemand.com/cp.portal/site
Authentication	NoAuthentication

Import, Configure and deploy Integration Content

This package utilizes SAP Cloud Integration to provide integration between SAP ERP and SAP Workflow. Further details can be found in dedicated integration guide of the integration package “SAP Workflow Management Integration with SAP S/4HANA for Purchase Order Change”.

Setup SAPUI5 Application

The content package automatically deploys SAPUI5 applications required for the package. If you want to make changes to the SAPUI5 application, then 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 the Manage Package app, select Sources tab
- Select the archive 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 details on the [Creation of User Interfaces](#).

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