

SAP BUSINESS TECHNOLOGY PLATFORM | EXTERNAL

Setup Guide

Manage Purchase Order Approval and Creation using SAP Workflow Management or SAP Build Process Automation

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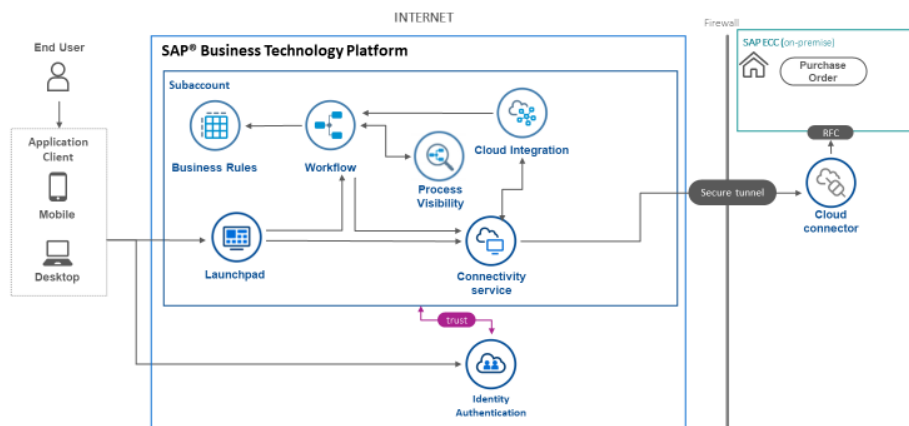
Overview

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

The Manage Purchase Order Approval and Creation content package enables SAP ECC customers to automate the process of Purchase Order Approval and Creation using SAP Build Process Automation or SAP Workflow Management without additional development in SAP ECC. Salient features of this content package are:

- Plug and Play with SAP ECC without additional development.
- Pre-configured process steps to create new variants.
- New Process variants can be configured in a low-code, no-code approach.
- Add additional approvers before the creation of Purchase orders in SAP ECC.
- Agent/approver determination using Business Rules or external service.
- Flexibility in determining process variants based on business conditions.
- Pre-built integration content to call SAP ECC RFC from SAP Workflow Management
- Out-of-the-box visibility into key process performance indicators.

SAP ECC– Manage Purchase Order Approvals and Creation



Required SAP BTP Services

The workflow content package **Manage Purchase Order Approval and Creation** is intended to be used for SAP ECC and requires the following services in SAP Business Technology Platform.

- SAP Build Process Automation or SAP Workflow Management to orchestrate the process.
- SAP Integration Suite to consume the RFC, BAPI from SAP ECC
- SAP Connectivity service (cloud connector) to establish access to SAP ECC on-premises.
- 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.
- SAP BTP, Cloud Foundry runtime.

Setup and Configuration

The **Manage Purchase Order Approval and Creation** 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	OAuth2ClientCredentias
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>.

The screenshot shows the 'Destination Configuration' dialog box with the 'Service Instance' tab selected. The 'Service Instance' dropdown is set to 'sap_processautomation'. The 'Name' field contains 'process_atuomation_service_destination' and the 'Description' field contains 'Call SAP Process Automation APIs using a service route'. There are 'Next' and 'Cancel' buttons at the bottom left, and a 'New Property' button on the right.

The screenshot shows the 'Destination Configuration' dialog box with the 'Additional Properties' tab selected. The 'Name' field is 'process_automation_service_destination', 'Type' is 'HTTP', and 'Authentication' is 'OAuth2ClientCredentials'. The 'URL' is 'https://sap.com/DUMMY_URL'. The 'Client ID' is 'sb-...' and 'Client Secret' is masked. The 'Token Service URL Type' is 'Dedicated' and the 'Token Service URL' is 'https://...'. The 'Additional Properties' table is as follows:

Property Name	Value	Action
endpoints	{"api":"https://t..."}	Remove
html5-apps...	{"app_host_id":"..."}	Remove
saasregistry...	true	Remove
sap.cloud.s...	com.sap.spa.process...	Remove
sap.cloud.s...	spa	Remove

There is a checked checkbox for 'Use default JDK truststore'. 'Save' and 'Cancel' buttons are at the bottom left.

Configure SAP Workflow Management

Manage Purchase Order Approval and Creation 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>

Configure OAuth2ClientCredentials Workflow Destination (Service Instance)

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>

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

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 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 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

Configure a destination with the following parameters:

Name	Workflow
Type	HTTP
Proxy Type	Internet
Authentication	OAuth2ClientCredentias
URL	https://api.workflow.<region-host>.hana.ondemand.com/workflow-service/rest
Client ID	
Client Secret	
Token Service URL	<"uaa":"url"/>/oauth/token
Additional Properties:	Name: bpmprocessvisibility.triggerWorkflow Value: system

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 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 Roles and Authorization

To create Purchase Order in SAP ECC the following authorization objects are used:

- M_BEST_BSA (document type in PO)
- M_BEST_EKG (purchasing group in PO)
- M_BEST_EKO (purchasing organization in PO)
- M_BEST_WRK (plant in PO)

Configure SAP ECC Destination

An RFC destination is required in the account where Cloud Integration capability within SAP Integration Suite is subscribed. Configure destination, Type as RFC, Proxy Type as OnPremise. Please refer how to [create a RFC destination](#). Add Additional Properties jco.client.ashost, jco.client.client, jco.client.sysnr

The destination name need not be 'ECC' as in the screenshot below. If a different name is used, then the same needs to be configured in the SAP Integration flows.

Name	ECC or <ANYNAME> Note: You can name it as you wish but maintain the destination name in the integration flow configuration.
Type	RFC
Proxy Type	OnPremise
User	<ECC USER>

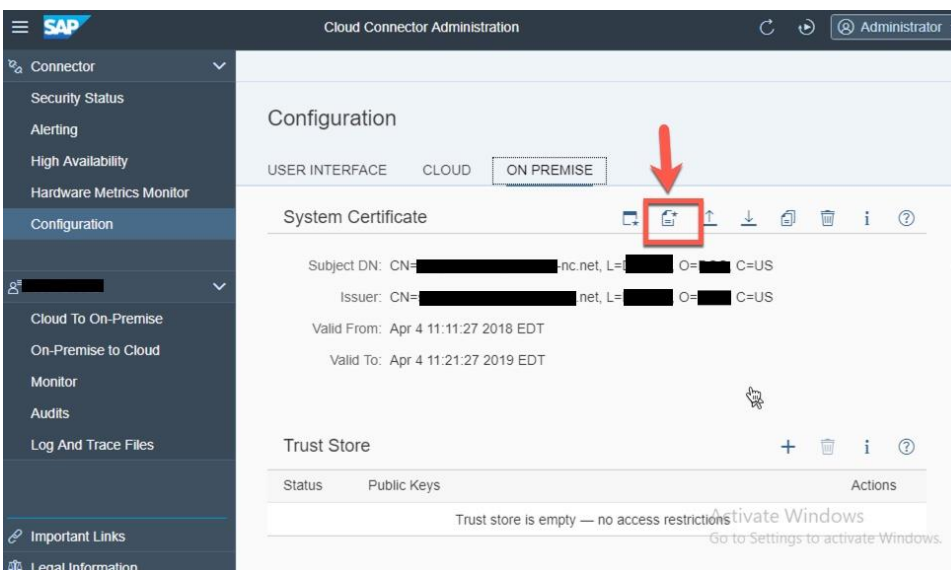
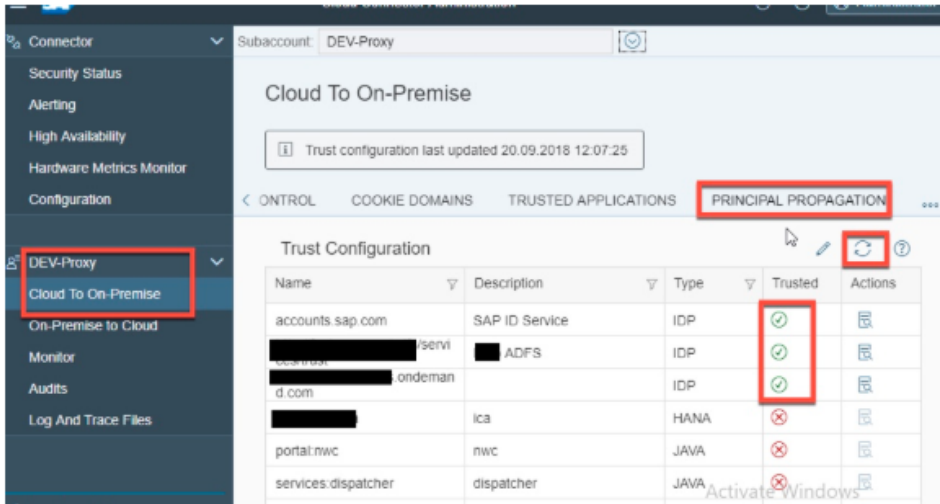
Password	<ECC PASSWORD>
Repository User	
Repository Password	
Location ID	<optional>
Additional Property	Name: jco.client.ashost Value: <abapServerHost> Name: jco.client.client Value: <client id> Name: jco.client.sysnr Value: <systemNumber>

Configure Cloud Connector

Configure your SAP BTP tenant and SAP ECC system in Cloud Connector to enable secure tunnel for RFC calls. Please refer the help documentation to [configure Cloud Connector](#). Expose the Following BAPI/RFC in the SAP Cloud Connector:

- BAPI_PR_GETDETAIL
- BAPI_PO_CREATE1
- RFC_READ_TABLE – This RFC is used in the integration flow ‘**Get Company Code**’ to fetch the Valuation Area data from T001W table and get the Company Code data from table T001K. This RFC is also used in the integration flow ‘**Get Payment and Inco Terms from SAP ERP**’ to fetch the Payment Terms and Inco Terms from the table LFM1. The specific tables and fields have been fixed in the integration flows so that only required data are exposed to the cloud.
- BAPI_TRANSACTION_ROLLBACK
- BAPI_TRANSACTION_COMMIT

For implementing principal propagation from the integration flow to the SAP ECC, synchronize the IDP in SAP cloud connector, create the destination of type IDP and import the self-signed CA certificates.



In SAP ECC, follow these steps to enable principal propagation

1. Import Cloud Connector (SCC) System certificate in STRUSTSSO2 transaction under SSL Server Standard. This established the trust between the backend and SCC.
2. Maintain subject, issuer, cert rule parameter details in default profile – RZ10 transaction.
3. Create the rule-based mapping using sample X.509 certificate – CERTRULE transaction.
4. Restart ICM.

Import, Configure and deploy Integration Content

This package utilizes Cloud Integration capability within SAP Integration Suite to provide integration between SAP ERP (or SAP S/4HANA) and SAP Build Process Automation or SAP Workflow Management. Further details can be found in dedicated integration guide of the integration package **“Manage Purchase Order Approval and Creation”**.

Configure SAP Central Fiori Launchpad Site for SAP Workflow

Management

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