

SAP BUSINESS TECHNOLOGY PLATFORM | EXTERNAL

Setup Guide

Maintain Purchase Info Record using SAP Workflow Management or SAP Build Process Automation

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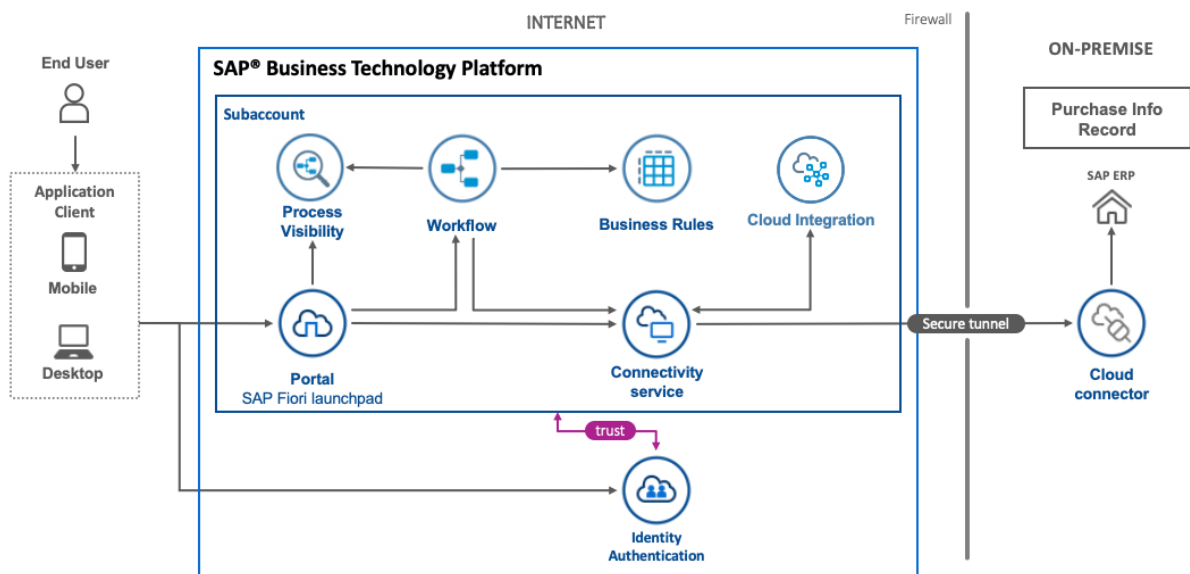
Overview

This document provides information about setting up the SAP Business Technology Platform account to consume the live process package **Maintain Purchase Info Record**. The main audience of this document is technical IT/system administrators.

The Maintain Purchase Info Record content package enables SAP ECC customers to automate the create and change of Purchase Info Record using SAP Build Process Automation or SAP Workflow Management without additional development in SAP ERP. Salient features of this content package are:

- Plug and Play with SAP ERP without additional development.
- Pre-configured process steps to create net new variants.
- New Process variants can be configured in a low-code, no-code approach.
- Add additional approvers before the purchase info record is update in SAP ERP.
- Agent/approver determination using Business Rules.
- Flexibility in determining process variants based on business conditions.
- Master data validations and additional business validations of purchase info record using business rules.
- Pre-built integration content to call SAP ERP RFC from SAP Workflow Management.
- Out-of-the-box visibility into key process performance indicators.

SAP ERP – Maintain Purchase Info Record



Required SAP BTP Services

The live process package Maintain Purchase Info Record is intended to be used for SAP ERP 6.0 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 ERP.
- SAP Cloud Connector to establish access to on-premise resources.
- 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 BTP, Cloud Foundry runtime.
- Optional: SAP Business Application Studio to modify the SAPUI5 applications.

Setup and Configuration

Maintain Purchase Info Record 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 OAuth2ClientCredentias 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 image shows a 'Destination Configuration' dialog box with two tabs: 'Blank Template' and 'Service Instance'. The 'Service Instance' tab is active. It contains the following fields:

- Service Instance: * sap_processautomation (dropdown)
- Name: * process_atuomation_service_destination
- Description: Call SAP Process Automation APIs using a service route

Below these fields is an 'Additional Properties' section with a 'New Property' button. At the bottom are 'Next' and 'Cancel' buttons.

The image shows a 'Destination Configuration' dialog box with detailed configuration options. It is divided into two main sections: 'Name' and 'Additional Properties'.

Name: process_automation_service_destination

Type: HTTP

Description: Call SAP Process Automation APIs using a s...

URL: * https://sap.com/DUMMY_URL

Proxy Type: Internet

Authentication: OAuth2ClientCredentials

Use mTLS for token retrieval:

Client ID: * sb-... I9...

Client Secret: *****

Token Service URL Type: * Dedicated (selected) / Common

Token Service URL: * https://... ..

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

At the bottom are 'Save' and 'Cancel' buttons.

Configure SAP Workflow Management

Maintain Purchase Info Record live process 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 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 "BusinessRules" 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	BusinessRules
Type	HTTP
Proxy Type	Internet
Authentication	OAuth2ClientCredentials
URL	<rule_runtime_url>/rules-service
Client ID	
Client Secret	
Token Service URL	<uaa.url>/oauth/token

Configure OAuth2ClientCredentials Business Rules Destination (Service Instance)

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

Service Instance: *

Name: *

Description:

- Click **Save** button.

Destination Configuration

Name: * BusinessRules_CFLP

Type: HTTP

Description: Rules destination from SAP UI5 API calls using ...

URL: * https://sap.com/DUMMY_URL

Proxy Type: Internet

Authentication: OAuth2ClientCredentials

Client ID: *

Client Secret: *****

Token Service URL: *

Token Service User:

Token Service Password:

Additional Properties

endpoints: [{"rule_repository_url": "..."}]

html5-apps-r...: [{"app_host_id": "cbd0c..."}]

saasregstrye...: true

sap.cloud.se...: com.sap.bpm.rule

Use default JDK truststore

Save Cancel

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>

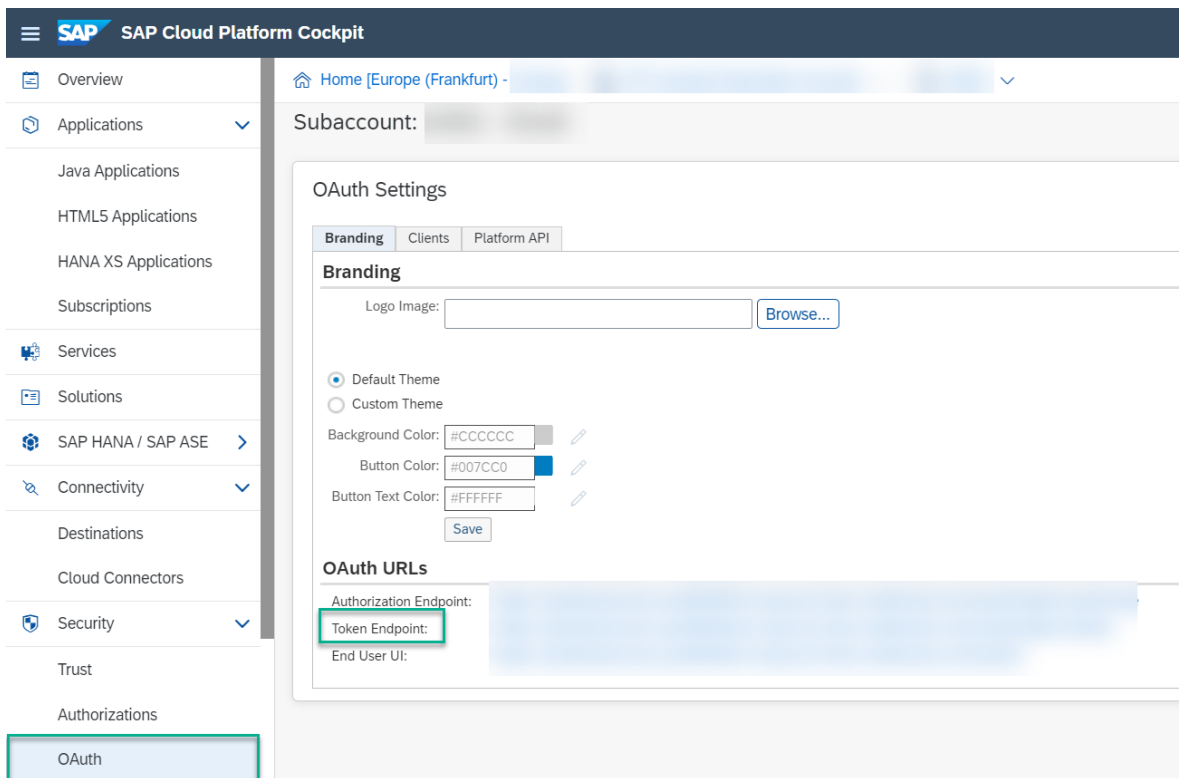
Configure Integration Destination

To call an integration flow, a HTTP destination is required in the SAP BTP tenant where the SAP Build Process Automation or SAP Workflow Management is subscribed. Create a destination with name CPI with Type as HTTP, Proxy Type as Internet and Authentication as BasicAuthentication. Please refer how to [create a HTTP destination](#). The URL should be the runtime URL. Please refer how to get your SAP Integration Suite tenant [runtime URL](#).

You can also choose to configure the destination to use the Authentication as OAuth2ClientCredentials. If you are using SAP BTP Neo environment tenant, create an OAuth client and enter Client ID and Client Secret. Please refer [how to create an OAuth client in SAP BTP Neo environment](#).

Name	CPI
Type	HTTP
Proxy Type	Internet
Authentication	Basic Authentication OR OAuth2ClientCredentials
URL	<runtime.url>
Username OR Client ID	
Password OR Client Secret	
Token Service URL	<oauth.url.for.clientCredentials>

Token Service URL is available in your SAP Integration Suite Neo account as shown below.



Assign the required [Integration roles](#) to your OAuth client (with user id in the format `oauth_client_<client ID>`).

Configure SAP ERP 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: <code>jco.client.ashost</code>

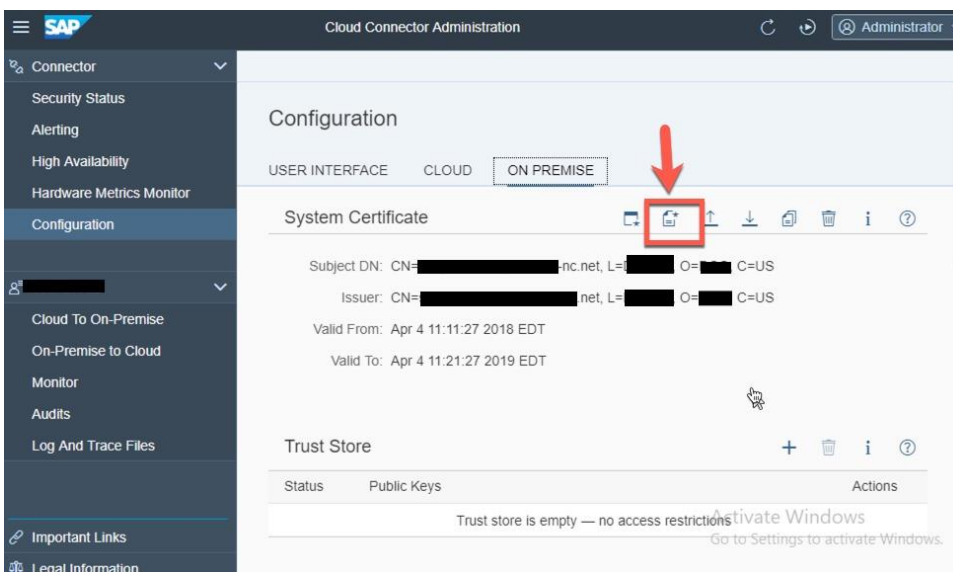
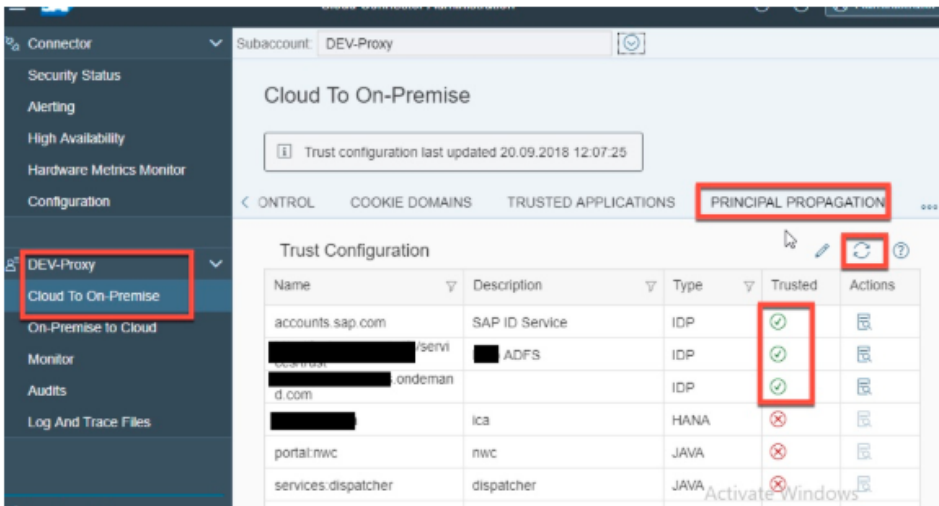
	<p>Value: <abapServerHost></p> <p>Name: jco.client.client</p> <p>Value: <client id></p> <p>Name: jco.client.sysnr</p> <p>Value: <systemNumber></p>
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Configure Cloud Connector

Configure your SAP BTP tenant and SAP ERP 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:

- CKBA_PURCHORG_GET_LIST_RFC
- SMB_UIE_GET_PURCHASING_GROUP
- BAPI_MATERIAL_GETLIST
- BAPI_MATERIALGROUP_GET_LIST
- MMPUR_UI_GET_SUPPLIERS
- BBP_PLANTS_GET
- ME_INFORECORD_MAINTAIN
- BAPI_INFORECORD_GETLIST
- RFC_READ_TABLE – This RFC is used in the integration flow 'Read Purchase Info Record Conditions from SAP ERP' to fetch the condition data from A017 and KONP tables and get condition record number, Price, Currency, condition validity. The specific tables and fields have been fixed in the integration flows so that only required data are exposed to the cloud.
- BAPI_MATERIAL_GET_ALL
- BAPI_TRANSACTION_ROLLBACK
- BAPI_TRANSACTION_COMMIT

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



In SAP ERP, 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 “SAP ERP Integration with SAP Build Process Automation for Info Record”.

Configure SAP Central Fiori Launchpad Site for SAP Workflow Management

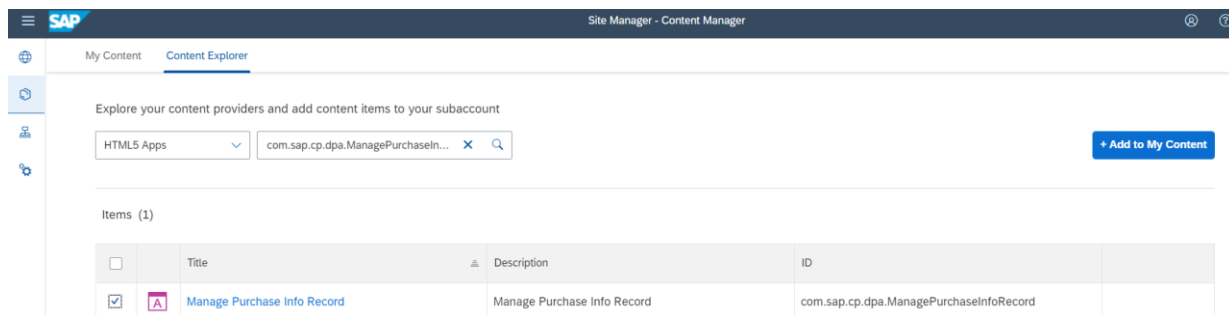
If you plan to use SAP Launchpad service, then configure [SAP Central Fiori Launchpad Site with Workflow Applications](#) using help documentation.

SAPUI5 Application

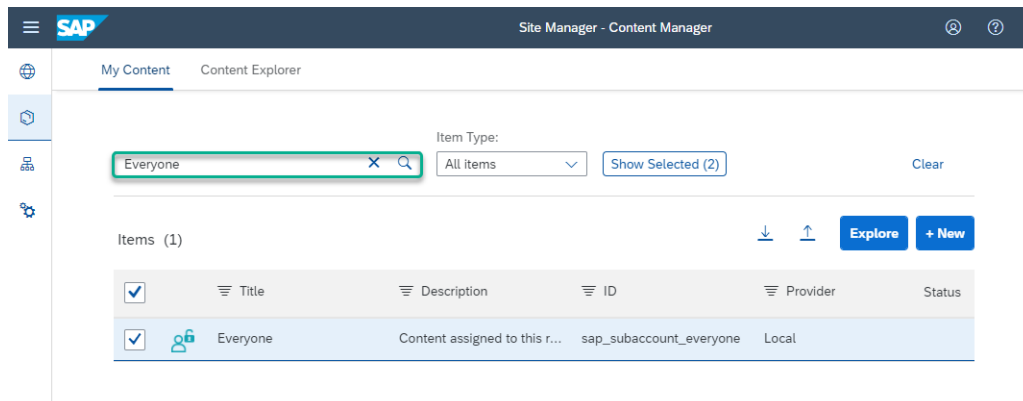
The Maintain Purchase Info Record process content package requires a SAPUI5 application in order to initiate the create or change process. The application is attached to the content package and will be deployed when you import the package.

Add Custom UI Application (as Workflow Start UI) in Fiori Launchpad Site

- Open SAP Launchpad site manager application.
- Select **Content Manager** and **Content Explorer**.
- Search `com.sap.cp.dpa.ManagePurchaseInfoRecord` and select SAP UI5 component.
- Click **Add to My Content** button to include the UI5 component.



- Select **My Content** tab and search **Everyone**.
- Click **Everyone** from the result and navigate to the details.



- Click **Edit** button to enable all users to access the new Start UI tile.

- In **Assignments** section on right, search for text **info** and select **Manage Purchase Info Record** from the **Results**.
- Click the **+** button and click **Save**.
- Under **My Content** tab, click **New** button and select **Group**.
- Add a **Title** for e.g.: **Manage Purchase Info Record** under **PROPERTIES**.
- In the **Assignments** section on right, search for text **info** and select **Manage Purchase Info Record** from the **Results**.
- Click **+** button and **Save** button.

Please refer help documentation to know more about [configuring start UI tile on Central Fiori Launchpad](#)

Configure Roles and Authorization

To create or change purchase info record in SAP ERP the following authorization objects are used:

- M_EINF_EKG – Authorization Object for Purchasing Group in Purchasing Info Record
- M_EINF_EKO – Authorization Object for Purchasing Organization in Purchasing Info Record
- M_EINF_WRK – Authorization Object for Plant in Purchasing Info Record

If the same authorization should be available in SAP BTP, then create a corresponding role template & scopes should be added to the SAPUI5 application. Role collections should be created with the role template and assigned to the required users. Only those users who have that role collection should be able to access the app Purchase Info Record – Manage in SAP Fiori Launchpad.

Limitations

Below are the limitations for Maintain Purchase Info Record content package:

- The application can only handle Purchase Info Record with plant specific data.
- When a creation or change request is in-process with SAP Build Process Automation or SAP Workflow Management, the corresponding purchase info record is not 'locked' for modification in SAP ERP. Any changes directly made in SAP ERP during the approval process will be overwritten by the data submitted from the application. If the use case requires both SAP ERP as well as the cloud application to be used in conjunction, then implement appropriate locking mechanism.
- Mass maintenance of purchase info record is not supported.
- Archiving or deleting purchase info record is not supported.

Import Business Rules for Value Help

The SAPUI5 app has two fields (Currency and Unit) that requires value help. Since the value do not change frequently, the values are maintained in a business rule to make the scenario self-sufficient with minimal dependency to other services.

To setup the rule, download the rule archive from the **Sources** tab in **Manage Packages** app and [import the rule project](#) into your [Business Rules service](#). Once the project is imported, modify the decision tables to add/remove any unit or currency as per the values available in your SAP ERP system.

After updating the decision tables, activate the rule project in the following sequence

- Data Objects
- Rule
- Rule Service
- Rule Set
- Project.

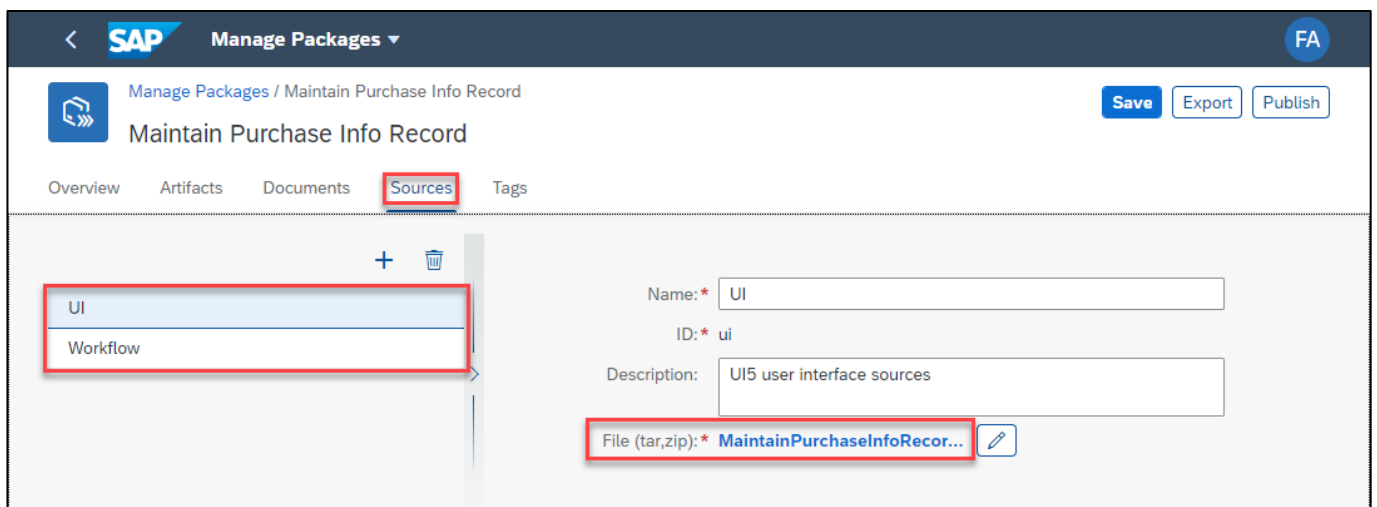
After successful activation [release the rule](#) as revision 2006 and e.g. version 1.0.0 and [deploy both rule services from the released version](#).

If there is already a service (any REST or OData service) available in your landscape, then the same can be used instead of business rules. Look for `getCurrency` and `getOrderUnit` methods in the `controller.js` for create and change operations.

Optional: Making Custom changes in SAP Workflow Management

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.

Optional: Making Custom changes in SAP Build Process Automation

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.

SAP Application Development Maintain Purchase Info Record - 3.0.0

[Overview](#)

Maintain Purchase Info Record

Last updated on: Oct 17, 2022, 6:05:52 PM
 Created on: Sep 7, 2022, 12:06:42 PM
 Description: *Create or update a Purchase Info Record in SAP ERP after an approval process in SAP Process Automation or SAP Workflow Management.*

[Artifacts \(6\)](#)
 [Sources \(3\)](#)
 [Documents \(5\)](#)

Name	Description
Workflow	Sources for the process.
UI	UI5 user interface sources
Business Rule for Value Help	Business Rule which is used for Value Help in SAPUI5

- in **Application Lobby**, search the package name and 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.