

Setup Guide

Goods Receipt Inspection Lot Supplier Negotiation
using SAP Build Process Automation or SAP
Workflow Management

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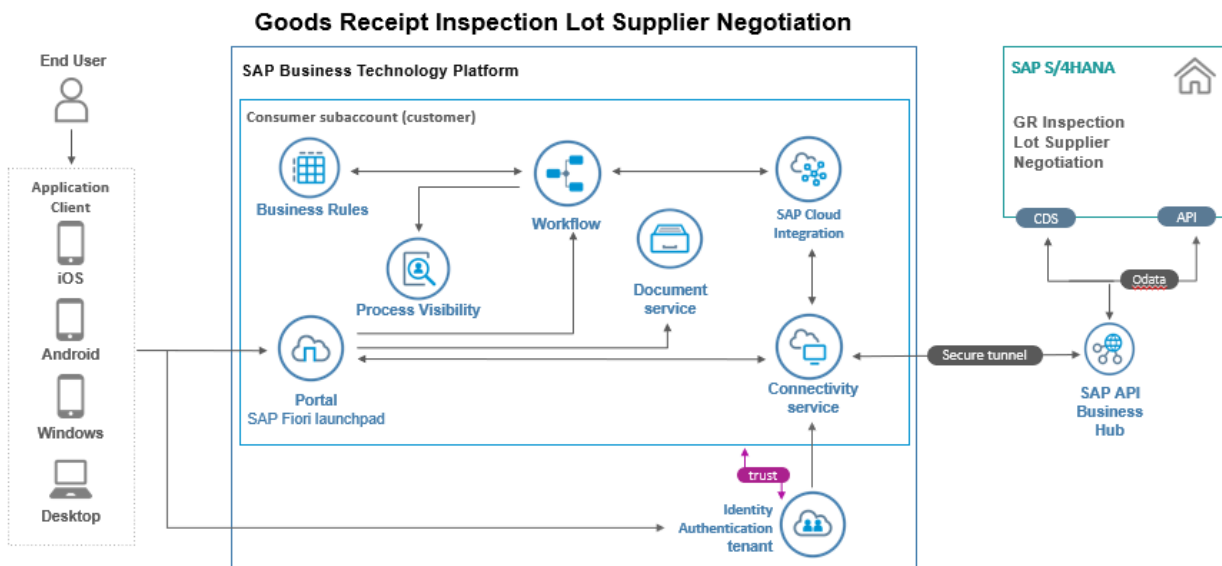
Overview

This document provides information about setting up the SAP Business Technology Platform account to consume the workflow content package **Goods Receipts Inspection Lot Supplier Negotiation**. The main audience of this document are technical IT/system administrators.

Goods Receipts Inspection Lot Supplier Negotiation content package for **SAP S/4HANA** automates rejected Goods Receipts inspection lot 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, plant, purchase organization etc. When an inspection lot is rejected in SAP S/4HANA and is configured for external approval, a pre-configured process variant is triggered in SAP Build Process Automation or SAP Workflow Management based on configurable business conditions. The material document gets posted (to move the stock from blocked to unrestricted) based on the negotiations and approvals 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 negotiate with supplier and approve rejected inspection lots.
- Automatic email notification to parties involved.
- Business Rules provides flexibility in determining approver determination strategy and approvers
- 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 rejected inspection lots.



Required SAP Business Technology Platform Services

The workflow content package **Goods Receipts Inspection Lot Supplier Negotiation** is intended to be used for SAP S/4HANA or S4/HANA Cloud system and requires the following services in SAP Business Technology Platform.

- SAP Build Process Automation or SAP Workflow Management to orchestrate the process.
- SAP Business Application Studio to modify/deploy the SAPUI5 applications.
- SAP Cloud Portal service or SAP Launchpad service to access the apps that are involved in the process.
- SAP Document Management Service, Integration Option.
- SAP Cloud Identity Services - Identity Authentication [Optional]
- SAP BTP, Cloud Foundry runtime.

Setup and Configuration

The **Goods Receipts Inspection Lot Supplier Negotiation** 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: *

Token Service URL: *

Token Service User:

Token Service Password:

Additional Properties

endpoints	{ "api": "https://t...	
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

Goods Receipts Inspection Lot Supplier Negotiation 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

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).

Type	HTTP
Proxy Type	Internet
Authentication	OAuth2ClientCredentias
URL	<a href="https://api.workflow.<region-host>.hana.ondemand.com/workflow-service/rest">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 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: * BusinessRules

Name: *

Description:

Next Cancel

- Click **Save** button.

Destination Configuration

Name: *

Type:

Description:

URL: *

Proxy Type:

Authentication:

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...	🗑
saasregistrye...	true	🗑
sap.cloud.se...	com.sap.bpm.rule	🗑

Use default JDK truststore

Save Cancel

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 Build Process Automation or 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](#)

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>

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 GR Inspection Lot Supplier Negotiation, you need to subscribe to 'Document Management, Integration Option' in order to upload the negotiation between procurement and supplier 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 **Goods Receipts inspection lot supplier negotiation**, 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 Goods receipts inspection lot supplier negotiation details. 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 **Goods receipts inspection lot supplier negotiation - CDS Setup guide**.

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 S/4HANA Integration with SAP Build Process Automation for Manage Inspection Lots".

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.

Deploy Custom UI and Configure Manage Purchase Order tile on Central Fiori Launchpad Site

Perform the following steps to add the "Manage Purchase Order" app as a tile in the launchpad site:

- Open SAP Launchpad site manager application.
- Select Content Manager
- Click on New Button in My Content tab.
- Provide title as Manage Purchase Order, system(S4 HANA system) and relative path to App as shown below

Site Manager - Content Manager

APP
Manage Purchase Order

PROPERTIES NAVIGATION VISUALIZATION TRANSLATION

<p>General</p> <p>Title: Manage Purchase Order</p> <p>Description: -</p> <p>ID: 7f9afdd0-ba3c-457d-9e22-6d53f3dccc0aa</p> <p>Open App: In a new tab</p>	<p>Configuration</p> <p>System: S4HANA</p> <p>App UI Technology: Dynamic URL</p> <p>Relative Path to App: /ui#PurchaseOrder-manage</p> <p>Parameters:</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 50%;">Name</th> <th style="width: 50%;">Value</th> </tr> </thead> <tbody> <tr> <td colspan="2" style="text-align: center;">No data</td> </tr> </tbody> </table> <p><input type="checkbox"/> Add intent and default SAP parameters to URL</p> <p><input checked="" type="checkbox"/> Use intent parameters as URL parameters</p>	Name	Value	No data		<p>Additional Info</p> <p>Keywords: -</p> <p>Created: Dec 14, 2021, 12:42:48 PM</p> <p>Created By:</p> <p>Last Modified: Dec 14, 2021, 1:09:11 PM</p>
Name	Value					
No data						

- Go to Navigation and provide semantic object and action as below screenshot

Site Manager - Content Manager

APP
Manage Purchase Order

PROPERTIES **NAVIGATION** VISUALIZATION TRANSLATION

Intent ⓘ

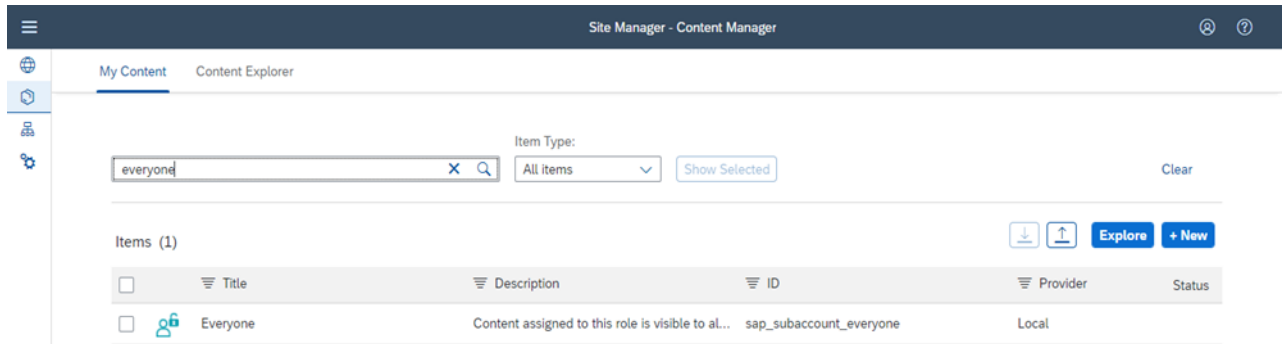
Semantic Object PurchaseOrder	Action manage
----------------------------------	------------------

∨ **Parameters** ⓘ

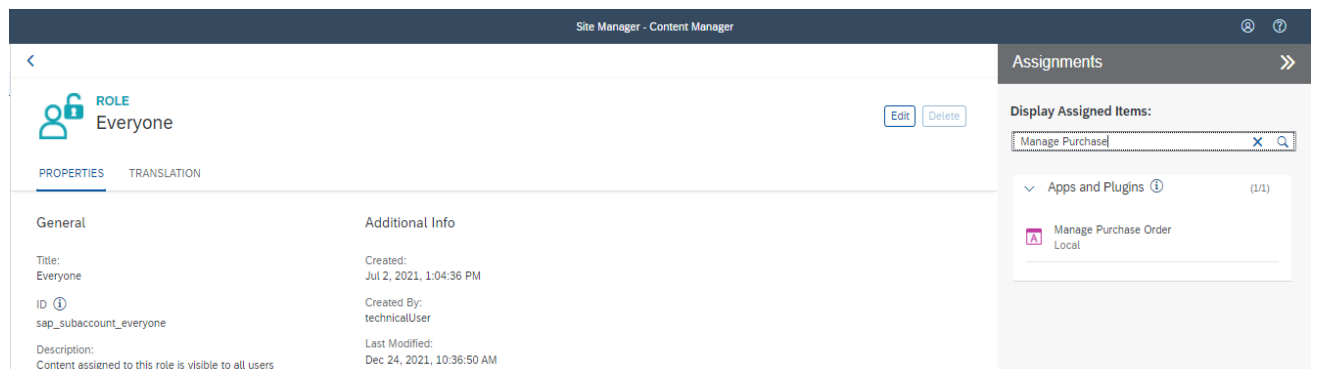
Name	Default Value	Filter Value	Rename To	Required
No data				

Allow additional parameters

- 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 'Manage Purchase Order' and click the + button to assign the app to the role.



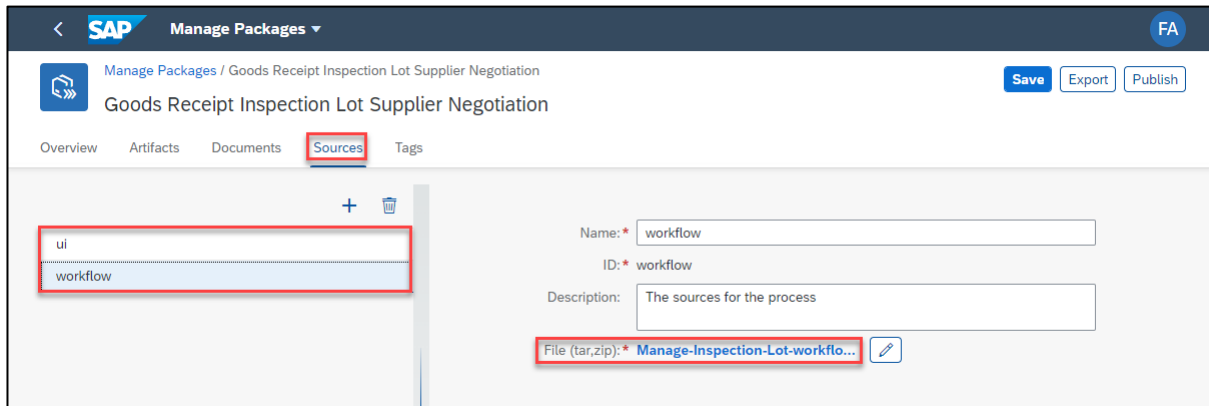
- Save the changes to enable the app permission based on user role.
- You can either create a new group and add the Manage Purchase Order app to that group or you can add the Asset Management existing group.

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

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.



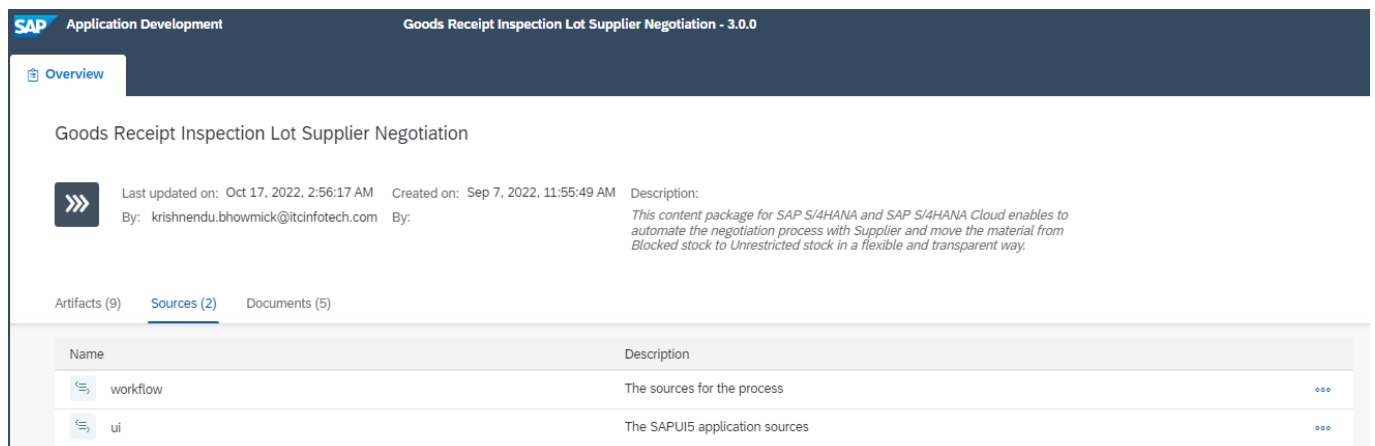
- In **Manage Package** app, select **Sources** tab
- Select the archive you want to download in the list on the left side
- Click on the blue filename behind **File (tar, zip)** to download the attached source archive
- Import the archive into SAP Business Application Studio
- Make any necessary modifications
- 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.



The screenshot displays the SAP Business Application Studio interface. At the top, the header reads 'SAP Application Development' and 'Goods Receipt Inspection Lot Supplier Negotiation - 3.0.0'. Below this, the 'Overview' tab is active. The main content area shows the package name 'Goods Receipt Inspection Lot Supplier Negotiation'. It includes metadata such as 'Last updated on: Oct 17, 2022, 2:56:17 AM' and 'Created on: Sep 7, 2022, 11:55:49 AM'. A description states: 'This content package for SAP S/4HANA and SAP S/4HANA Cloud enables to automate the negotiation process with Supplier and move the material from Blocked stock to Unrestricted stock in a flexible and transparent way.' Below the metadata, there are three tabs: 'Artifacts (9)', 'Sources (2)', and 'Documents (5)'. The 'Sources (2)' tab is selected, showing a table with two entries:

Name	Description
workflow	The sources for the process
ui	The SAPUI5 application sources

- 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.