

SAP BUSINESS TECHNOLOGY PLATFORM | EXTERNAL

# Integration Guide

SAP S/4HANA Integration with SAP Build Process Automation  
for Goods Receipt Inspection Lot Supplier Negotiation

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## Overview

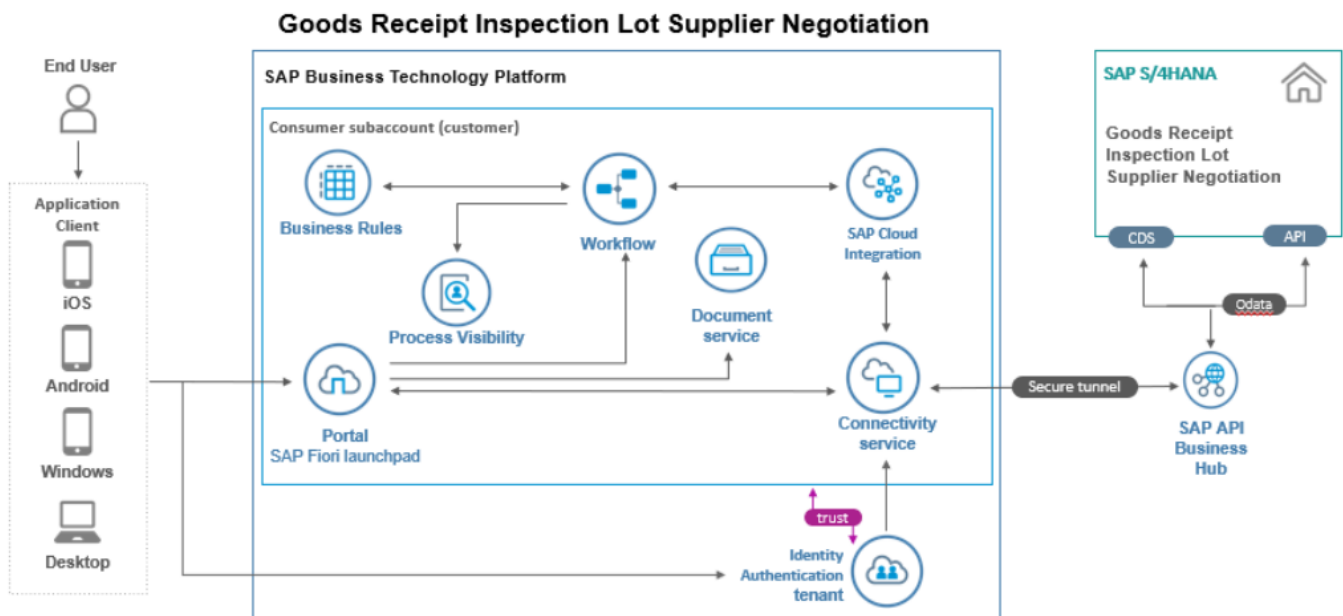
This package contains Integration Flows to Retrieve Rejected Inspection Lots, Create Material documents and Get supplier Details from SAP S/4HANA and send it to SAP Build Process Automation or SAP Workflow Management.

This package contains the below Integration flows

- **Get Rejected Lots** - This Integration flow retrieves rejected inspection lots from SAP S/4HANA system between the previous run DateTime and current DateTime and sends it to SAP Build Process Automation or SAP Workflow Management.
- **Get Supplier Email Address** – This Integration flow provides the supplier email address in Json format with Supplier id as input from SAP Build Process Automation or SAP Workflow Management.
- **Material Document Create and Confirmation** - This Integration flow posts material document in SAP S/4HANA system for the rejected inspection lots.

Scenario Definition

- Based on the Job scheduled in cloud integration IFlow, Rejected GR Inspection Lots are identified, and a workflow will be triggered to send a notification to the My Inbox of Procurement team user.
- This extension will enable us to send rejected inspection lot details to procurement team and post the material document in SAP S/4HANA system based on the user decision in SAP Build Process Automation or SAP Workflow Management.



## Required SAP Business Technology Platform Services

The workflow content package “**SAP S/4HANA Integration with SAP Build Process Automation for Manage Inspection Lots**” is intended to be used for SAP S/4HANA (cloud) and requires the following services in SAP BTP:

- SAP Build Process Automation or SAP Workflow Management to orchestrate the process.
- SAP Integration Suite for data activities with Manage Inspection Lots.
- SAP Launchpad service to access the apps that are involved in the process.
- SAP Business Application Studio to modify/deploy the SAPUI5 applications.
- SAP BTP, Cloud Foundry runtime.

## Setup and Configuration

This section will explain how to set up the integration content that is required for the workflow content packages **SAP S/4HANA Integration with SAP Build Process Automation for Manage Inspection Lots**.

### Configure SAP S/4HANA Communication User

Communication User is setup, which is required for the flows between SAP Build Process Automation or SAP Workflow Management and SAP S/4HANA Cloud.

- In SAP S/4HANA cloud, Search for the section “Communication management” and select the tile “Maintain Communication users”.
- Click “New Button” and enter the below information

Name	<User Name>
Description	<Enter desired description for the system/user>
Password	<Password>

## Configure SAP S/4HANA Communication system

Communication system is setup which is required for the flows between SAP Build Process Automation or SAP Workflow Management and SAP S/4HANA Cloud.

- In SAP S/4HANA cloud, Search for the section “Communication management” and select the tile “Maintain Communication users”.
- Click “New Button” and enter the below Information

<b>New Communication system</b>	
System ID	<System ID>
System Name	<System name>
<b>General</b>	
Host Name	<Host Name of System>
Logical System	<Enter Desired logical system name>
Port	443
Users for Inbound Communication	
User Name	<Select the user created in the previous step using ‘+’ Icon>
Authentication Method	User Name and Password
<b>Users for Outbound Communication</b>	
Authentication Method	User Name and Password
User Name	<Mention the iFlow user to connect to cloud iFlow>
Password	<Enter Password of user of connect to Cloud iFlow>

## Configure SAP S/4HANA Communication Arrangement

Configure SAP S/4HANA communication arrangement that combines the system and user created in the above steps. Below is an arrangement configured in SAP S/4HANA cloud.

Note: This destination is required by Cloud Integration (Suite).

- In SAP S/4HANA cloud, Search for the section “Communication management” and select the tile “Maintain Communication users”.
- Click “New Button” and enter the below Information

<b>New Communication Arrangement</b>	
Scenario	SAP_COM_0108 - Material Document Integration
Arrangement Name	SAP_COM_0108 <Automatically populates on selecting Scenario>
<b>Common data</b>	
Communication System	<Select communication system from previous step>
<b>Inbound Communication</b>	
User Name	< Automatically populates on selecting communication system >
Authentication Method	< Automatically populates on selecting communication system >

Inbound Service	
Service	<Inbound Services automatically populate>
<b>Outbound Communication</b>	
User Name	<Automatically populates on selecting communication system>
Authentication Method	<Automatically populates on selecting communication system>
<b>Outbound Services - Not requires Since the scenario is synchronous</b>	
Service status	NA
Path	NA
Port	NA

## Import, configure and deploy cloud Integration content

The workflow content requires cloud integration to process Rejected Inspection Lot details from SAP S/4HANA. The integration content package **SAP S/4HANA Integration with SAP Build Process Automation for Manage Inspection Lots** is available in SAP API Business hub to integrate SAP Build Process Automation or SAP Workflow Management with SAP S/4HANA.

1. Get Rejected Lots
2. Get Supplier Email Address
3. Material Document Create and Confirmation

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.

## Import pre-packaged Integration content in SAP Integration Suite

- Access your SAP Integration Suite tenant management node (<https://<integrationtenant>/itspaces>).
- View all pre-packaged integration flow under Discover->Integration. (<https://<integrationtenant>/itspaces/shell/discover>)
- Search content package “**SAP S/4HANA Integration with SAP Build Process Automation for Manage Inspection Lots**”.
- Click on the package SAP S/4HANA Integration with SAP Build Process Automation for Manage Inspection Lots.
- Click Copy to import the Integration content package to your workspace

- Navigate to the Monitor view ([https://< integrationtenant >/itspaces/shell/monitoring](https://<integrationtenant>/itspaces/shell/monitoring)) to setup the security materials required for the package.
- Deploy the following credentials using the Security Material app.
- In Integration Suite, open Operations view, then click on Security Material to create and deploy security materials.
- S4HANA – (User Credentials) To call Rejected Inspection lot API in SAP S/4HANA. Make sure the user has the relevant communication scenarios as mentioned in section Configure Communication Scenarios in SAP S/4HANA.

The screenshot shows a form titled "Edit User Credentials". The fields are as follows:

- Name: \* S4HANA
- Description: |
- Type: \* User Credentials (dropdown menu)
- User: \* [Redacted]
- Password: [Empty field]
- Repeat Password: [Empty field]

At the bottom right, there are two buttons: "Deploy" and "Cancel".

- Workflow or ProcessAutomation – (Basic + Token) To send back the response confirmation to SAP Build Process Automation or SAP Workflow Management ([help documentation to determine the workflow service configuration parameters](#)). Make sure that the workflow service instance was created with the following scopes - WORKFLOW\_INSTANCE\_GET, WORKFLOW\_INSTANCE\_START, WORKFLOW\_INSTANCE\_CANCEL.

Note: The credential names can be different from what is mentioned above. Make sure that you configure the appropriate credential names in the integration flow's SOAP and HTTP adapter configurations.



## Get Rejected Lots

- Open the integration model Get Rejected Lots.
- Click Configure button, choose the appropriate Sender (SAP Build Process Automation or SAP Workflow Management) and receiver (SAP S/4HANA) and set their respective API endpoint and credential names.
- Configure cloud integration parameters to enable the End-to-end flow of business data. Navigate to the iFlow and Click on configure on the top right. Once all parameters are configured, Click on Deploy.

Edit **Configure** Deploy Delete

Get Rejected Lots	
<b>Odata Receiver Adapter ( SAP_S4HANA )</b>	
Address	<Mention host name>
Authentication	It is recommended to use Basic
Credential Name	<Select the corresponding credential name from security material>
Timeout	<Enter desired connection Timeout in min>
<b>HTTP Receiver Adapter ( SAP_SAPProcessAutomation_Token )</b>	
Address	<Mention host name>
Authentication	It is recommended to use Basic
Credential Name	<Select the corresponding credential name from security material>
Timeout	<Enter desired connection timeout in ms>
<b>HTTP Receiver Adapter ( SAP_WorkflowManagement )</b>	
Address	<Mention host name>
Timeout	<Enter desired connection timeout in ms>
<b>More</b>	
Default_Run_Start	<current date and time at the time of iFlow deployment in yyyy-mm-ddThh:mm:ssZ format>  Note: In the above format <b>T</b> and <b>Z</b> are constant values. Example value is <b>2021-11-19T01:00:00Z</b> recommended to use current date.

- Deploy the integration model.

## Get Supplier Email Address

- Open the integration model Get Supplier Email Address.
- Click Configure button, choose the appropriate Sender (SAP S/4HANA) and receivers (Authentication service and SAP Build Process Automation or SAP Workflow Management) and set their respective API endpoint and credential names.
- Configure cloud integration parameters to enable the End-to-end flow of business data. Navigate to the iFlow and Click on configure on the top right. Once all parameters are configured, Click on Deploy.

<b>Get Supplier Email address</b>	
<b>HTTPS Sender Adapter</b>	
Authorization	<Select desired authorization method>
User Role	<Select desired user role method>
<b>Odata Receiver Adapter ( SAPS4HANA )</b>	
Address	<Mention host name>
Authentication	It is recommended to use Basic
Credential Name	<Select the corresponding credential name from security material>
Timeout	<Enter desired connection timeout in min>

- Deploy the integration model.

## Material Document Create and Confirmation

- Open the integration model Material Document Create and Confirmation.
- Click Configure button, choose the appropriate Sender (SAP S/4HANA) and receivers (Authentication service and SAP Build Process Automation or SAP Workflow Management) and set their respective API endpoint and credential names.
- Configure cloud integration parameters to enable the End-to-end flow of business data. Navigate to the Iflow and Click on configure on the top right. Once all parameters are configured, Click on Deploy.

<b>Material Document Create and Confirmation Iflow</b>	
<b>HTTPS Sender Adapter ( SAP_WorkflowManagement )</b>	
Authorization	<Select desired authorization method>
User Role	<Select desired user role method>
Body Size (in MB)	<Select required body size>
<b>HTTP Receiver Adapter ( SAPS4HANA )</b>	
Address	<Mention host name with port number>
Authentication	It is recommended to use Basic
Credential Name	<Select the corresponding credential name from security material>
Timeout	<Enter desired connection timeout in ms>

- Deploy the integration model