Setup Guide
Manage Credit Block on Sales Order 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 **Manage Credit Block on Sales Order**. The main audience of this document are technical IT/system administrators.

The Manage Credit Block on Sales Order content package enables SAP S/4HANA customers to automate the process of Releasing the credit block in Sales Order using SAP Workflow Management or SAP Build Process Automation without additional development in SAP S/4HANA. Salient features of this content package are:

- Plug and Play with SAP S/4HANA or SAP S/4HANA Cloud 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 releasing or rejecting the credit block on a sales order in SAP S/4HANA.

- Agent/approver determination using Business Rules or external service.

- Flexibility in determining process variants based on business conditions.

- Perform additional business validation of Sales Orders using business rules capability of SAP Workflow Management or SAP Build Process Automation.

- Pre-built integration content to push Sales Order lifecycle events on to Process Visibility Service through the Event Mesh configuration.

- Out-of-the-box visibility into key process performance indicators.
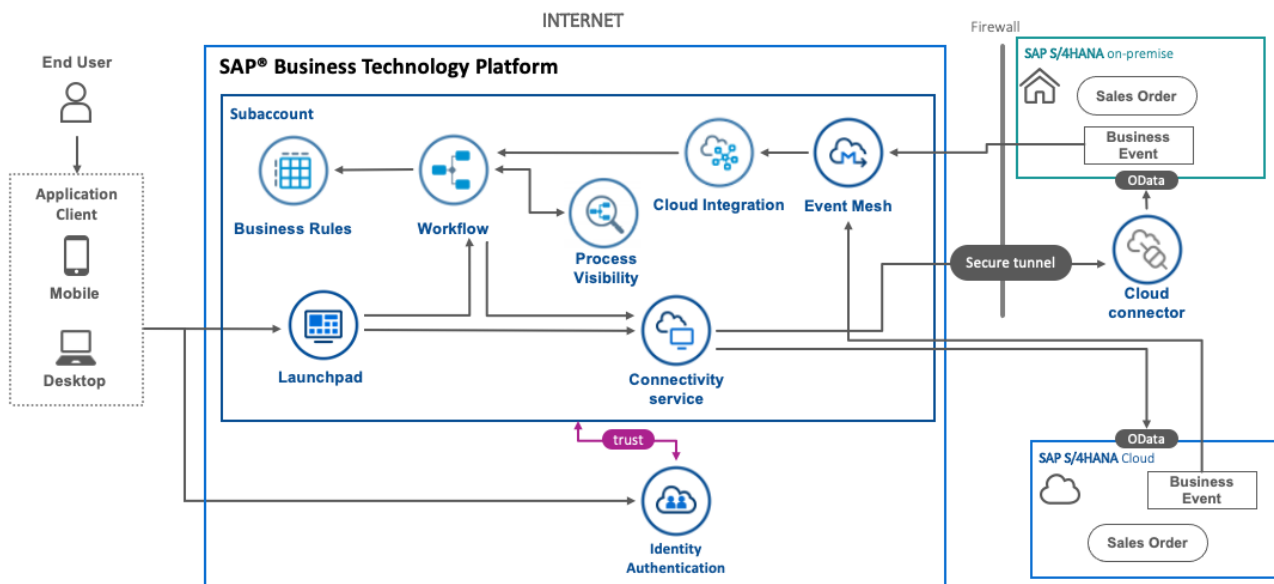
Required SAP BTP Services

The workflow content package **Manage Credit Block on Sales Order** is intended to be used for SAP S/4HANA or SAP S/4HANA Cloud 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 push Sales Order lifecycle events on to Process Visibility Service. Sales Order lifecycle events are pushed from SAP S/4HANA to Business Technology Platform through the Event Mesh configuration
- SAP Connectivity service (cloud connector) to establish access to SAP S/4HANA on-premise.
- 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

Manage Credit Block on Sales Order 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.

Configure SAP Workflow Management

Manage Credit Block on Sales Order 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 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:

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.

WebIDEEnabled	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 or SAP S/4HANA Cloud to use the Manage Credit Block on Sales Order content package.

SAP_COM_0109

Inbound Services consumed:

/sap/opu/odata/sap/API_SALES_ORDER_SRV

SAP_COM_0087

Inbound Services consumed:

/sap/opu/odata/sap/API_DIVISION_SRV

/sap/opu/odata/sap/API_DISTRIBUTIONCHANNEL_SRV

/sap/opu/odata/sap/API_SALESORGANIZATION_SRV

SAP_COM_0325

Inbound Services consumed:

/sap/opu/odata/sap/API_SLS_DOC_WITH_CREDIT_BLOCK

SAP_COM_0564

Inbound Services consumed:

/sap/opu/odata/sap/API_SALES_DOCUMENT_REASON_SRV

Follow the documentation on how to [Create Communication Arrangement](#) for Communication Scenario SAP_COM_0109.

Configure SAP S/4HANA 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	S4HANA
Type	HTTP
Proxy Type	Internet
User	<COMMUNICATION_ USER>
Password	<COMMUNICATION_PASSWORD>
Authentication	BasicAuthentication
URL	<OData base URL of SAP S/4HANA cloud>
Additional Properties	sap-client: <client number> [Optionally, if you want to provide the client number]

Configure Cloud Connector

For SAP S/4HANA on-premise landscape, configure cloud connector to enable secure tunnel to SAP BTP tenant. Please refer the help documentation to configure Cloud Connector.

Configure SAP S/4HANA to push Sales Order Events to SAP Event Mesh

SAP Event Mesh can receive events from SAP S/4HANA (on-premise/cloud). Use the following blogs to perform the necessary configuration.

SAP S/4HANA on-premise

https://blogs.sap.com/2019/09/16/sap-enterprise-messaging-for-s4hana-on-premises/

SAP S/4HANA cloud

https://blogs.sap.com/2020/08/19/sap-s-4hana-cloud-enterprise-event-enablement-whats-new-with-cloud-2008/

The following business events are required for the Sales Order packages:

1. /sap/s4/beh/salesorder/v1/SalesOrder/Created/v1

2. /sap/s4/beh/salesorder/v1/SalesOrder/Changed/v1

3. /sap/s4/beh/salesorder/v1/SalesOrder/Deleted/v1

Note: At the end of this configuration, you will have the sales order events from SAP S/4HANA (on-premise or cloud) available in the queue created using SAP Event Mesh. Make sure to have a separate queue for each of the events described above.

Also, make sure to create Webhooks for each of these events and point it to the Cloud Platform Integration iFlow endpoints correspondingly.

```
<cpi.runtime.url>/http/processSalesOrderCreatedEvent
<cpi.runtime.url>/http/processSalesOrderChangedEvent
<cpi.runtime.url>/http/processSalesOrderDeletedEvent
```

Use the following link to perform the necessary configuration for Webhooks

Manage Webhooks - SAP Help Portal

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 S/4HANA Integration with SAP Build Process Automation for Sales Order**".

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.

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.
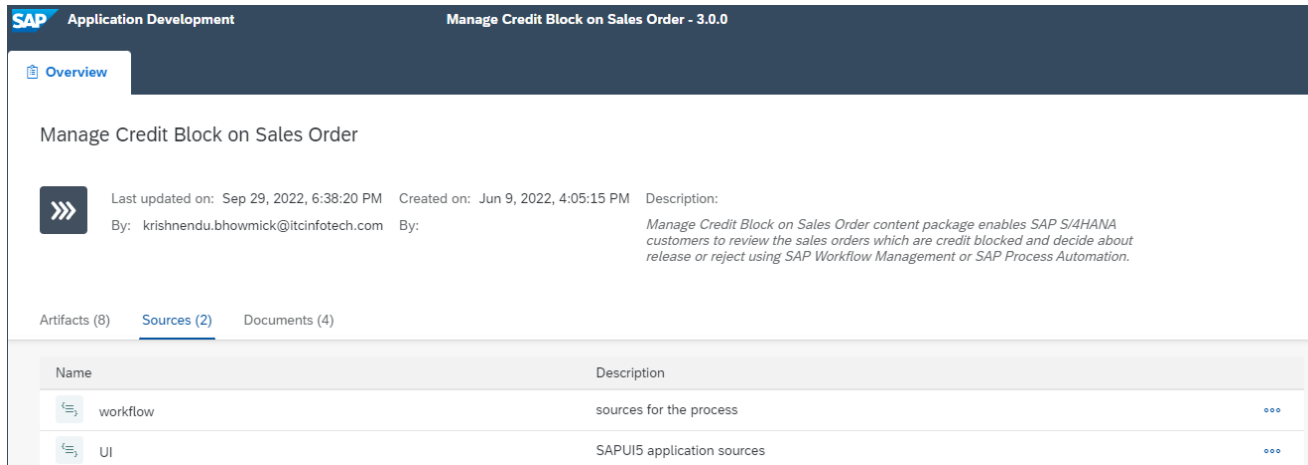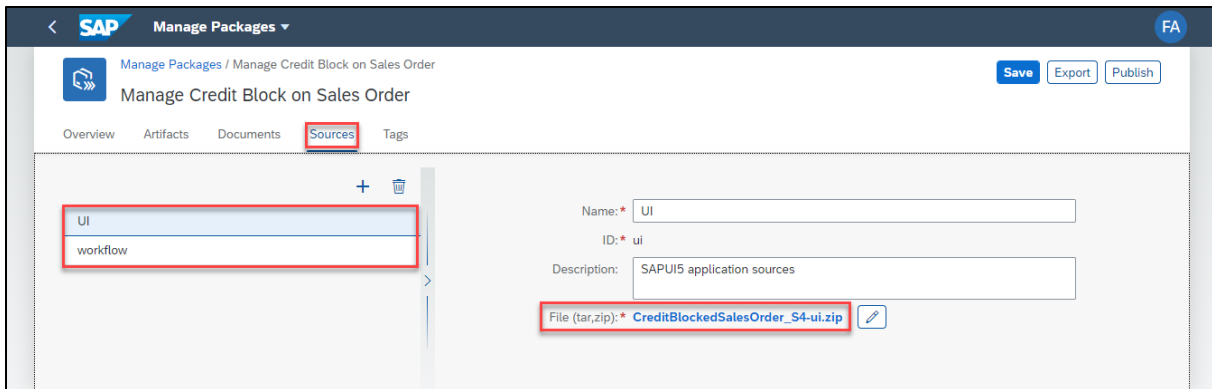

- In **Manage Package** app, select **Sources** tab

- 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.

- 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.