

PUBLIC

SAP Build Process Automation

Contract Workspace Push to External System Configuration & User Guide



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This document contains 3 sections. Each section covers different information about this template content package.

1. **Overview:** In this section, you will get quick overview of the use case, the high-level components used and how the template works in nutshell. Prerequisite section provides information of different services of SAP BTP that are required to use this template.
2. **Configuration Guide:** It contains sections which will guide you to setup your (a) *SAP BTP Account* with destination, cloud connector, user roles etc, (b) *Integration Content* via SAP Integration Suite, (c) *SAPUI5 application* via SAP Business Application Studio and (c) Import and configure the template *using SAP Build Process Automation* design studio and (d) *SAP Work Zone* to access the MyInbox or Task Center and other applications.
3. **User Guide:** This section provides details about different artefacts that are used in this template like process definition, decision diagram, action project details, forms, email notifications etc. to better understand how different capabilities are used in this template.

Note: This documentation is not a detailed guide to setup SAP BTP services. It assumes that IT admin who is setting the content is skilled with SAP BTP environment. **Configuration section must be followed.**

Note: This template content is to accelerate your solution development. You must modify this template according to your requirements to achieve the desired business goal. To use this template content, you need to have basic knowledge and understanding of SAP Build Process Automation, SAP Integration Suite, and its capabilities.

Overview

This document provides information about setting up the SAP Business Technology Platform account to consume the SAP Build Process Automation **Contract Workspace Push to External System**. The main audience of this document are technical IT/system administrators.

During Amendment Scenarios, any updates performed by Buyer, will not be integrated to ERP, if the manual action of "Push to External System" is not performed and thus any Price\Quantity updates performed in Ariba will not be reflected in ECC and the consumption continue to happen with outdated terms. **Contract Workspace Integration Flow** would facilitate to generate a report of CW which are published but pending to push to ECC/External system. Please refer to the link from the Business Accelerator https://api.sap.com/integrationflow/External_Sync_Contract_template_creation

Identify Contracts to Integrate

Use Ariba Operation Reporting API to Extract Contract Data from Ariba.

Define the Query template for the API with Required Data.

Schedule Extraction Process

Define Integration Suite flow to extract the relevant data periodically.

Integration suite is used for data processing to generate csv files for Build Process Automation inputs.

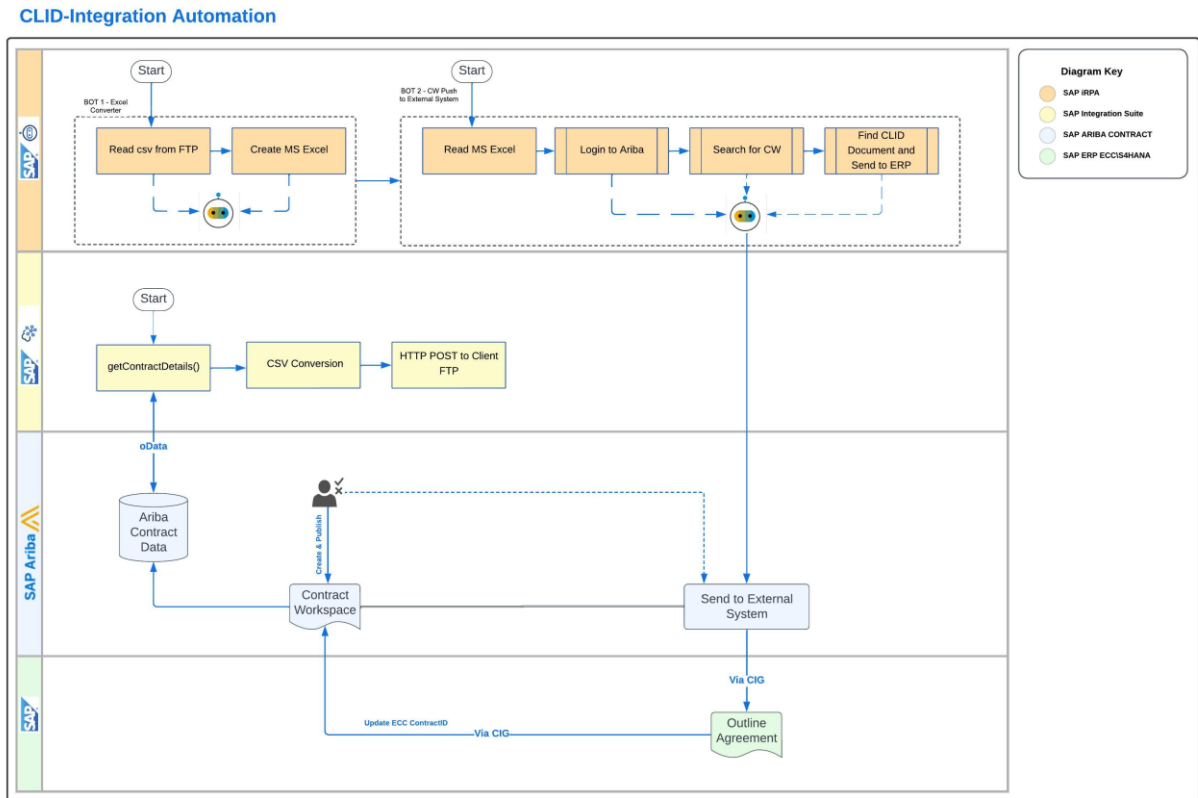
Generated csv Files are sent to an FTP Server.

Define Build Process Automation

Define the CLID Integration Steps in Build Process Automation.

The automation Reads the input Data from csv File and performs steps to click on Send to External System.

SAP Build Process Automation Flow



Prerequisites

This **Contract Workspace Push To External System** content is intended to be used for SAP Ariba CW Integration with ECC and requires the following services in SAP Business Technology Platform.

- SAP Build Process Automation to orchestrate the process.
- SAP Integration Suite to consume Operational reporting API of Sourcing

Configuration Guide

Contract Workspace Push To External System content requires SAP Build Process Automation subscription or CPEA contract. Follow the [setup and configuration section](#).

Setup Integration Content

Contract Workspace Push To External System

During Amendment Scenarios, any updates performed by Buyer, will not be integrated to ERP, if the manual action of “Push to External System” is not performed and thus any Price\Quantity updates performed in Ariba will not be reflected in ECC and the consumption continue to happen with outdated



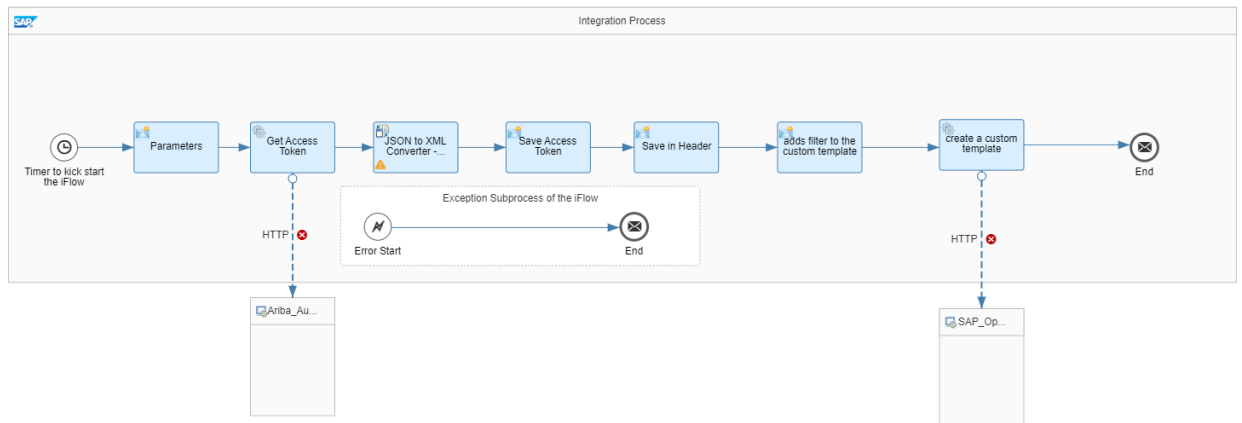
terms. Contract Workspace Integration flow would facilitate to generate a report of CW which are published but pending to push to ECC/External system.

The following integration models are available in this template.

Contract Workspace Integration with External System has two integration flow linked.

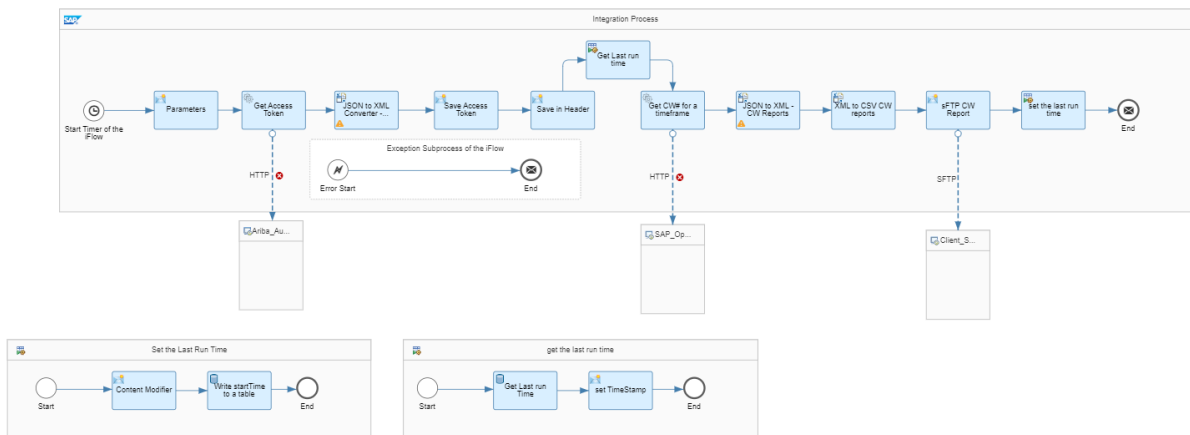
1. Step 1 - External Sync Contract Template Creation

This integration flow creates a custom template (*CW_Template*) to export report of Contract workspace created on a day timeframe which are pending to push to external system. This is a Pre-requisite one-time activity.



2. Step 2 - Contract Workspace Report

This integration flow uses the custom template created from step 1 and extract the report which has contract workspaces created on a particular day pending to push to external system. The date from when the transactional data will be exported during the first run is stored in the integration flow datastore. After successful export, the system creates a timestamp, and every other run will be a download from the latest timestamp.



Configure the timer of the integration flow according to the customer convenient schedule.

The image shows the 'Integration Process' flow and the 'Timer Start' configuration. The flow consists of the following steps: Start Timer on Flow, Parameters, Get Access Token, JSON to XML Converter, Save Access Token, Save in Header, Get Last run time, Get CIM for a timeframe, JSON to XML - CW Reports, XML to CSV/CW reports, SFTP CW Report, Set the last run time, and End. The scheduler is configured with the following settings:

- General: Scheduler
- Run Once:
- Schedule on Day:
- Schedule to Recur:
 - Schedule to Recur: Daily
 - On Time: 07:50 AM
 - Every: 5 min
 - Between: 00:00 and 24:00
 - Time Zone: (UTC 0:00) Greenwich Mean Time(Etc/GMT)
- Advanced:

Import the template to your SAP Integration Suite tenant. To be able to import and deploy integration flows, you need *PI_Integration_Developer* (in cloud foundry environment) assigned in your tenant.

- 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 “<Integration Package Name>”.
- Click on the package <integration package name>.
- Click Copy to import the Integration content package to your workspace.
- Navigate to the *Monitor* view (<https://your.integration.tenant/itspaces/shell/monitoring>) to setup the security materials required for the package.
- Deploy the following credentials using the *Security Material* app.
 - <NAME> – (<Credentials type>)
 - <screenshot>

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 HTTP adapter configuration. Configuration of “Contract Workspace Push to External System using Operational reporting API” has below sections.

1. Sender Adapter

Sender Adapter is responsible for Generating SAP Ariba Access token and consume the token ID to use it in Operational reporting Sourcing API to fetch Contract workspace which are pending to be pushed to the external system.

2. Receiver SFTP Adapter

Once Contract workspace report is generated, integration flow would SFTP the report to customer repository and the same will be consumed by SAP Build Process Automation to push it to external system.

Sender Adapter

SAP Ariba Access Token Generation Process

- Click Configure hyperlink in the integration Flow.
- Select Receiver to "Ariba_Authentication".
- Based on SAP Ariba realm Data center, please configure "Address" link as appropriate.
- Deploy the integration model.

Data Center	Access Token Generation URL
US	https://api.ariba.com/v2/oauth/token
Prod3	https://api.ariba.com/v2/oauth/token
EU	https://api-eu.ariba.com/v2/oauth/token
KSA	https://api.mn2.ariba.com/v2/oauth/token
AUS	https://api.au.cloud.ariba.com/v2/oauth/token
CHN	https://api.sapariba.cn/v2/oauth/token
JPY	https://api.jp.cloud.ariba.com/v2/oauth/token
UAE	https://api.mn1.ariba.com/v2/oauth/token

Configure "Step 1 - External Sync Contract template Creation"

Receiver
More

Connection

Receiver:

Adapter Type:

Address:

Query:

SAP Ariba Operational Reporting Sourcing API Configuration Process

- Click Configure hyperlink in the integration flow.
- Select Receiver to "SAP_OperationalReportingAPI_Sourcing_System".
- Based on SAP Ariba realm Data center, please configure "Address" link as appropriate.
- Deploy the integration model.

Data Center	Operational Reporting CW URL
US	https://openapi.ariba.com/api/sourcing-reporting-view/v1/prod/viewTemplates/CW_iRPA_Template
Prod3	https://openapi.ariba.com/api/sourcing-reporting-view/v1/prod/viewTemplates/CW_iRPA_Template



EU	https://eu.openapi.ariba.com/api/sourcing-reporting-view/v1/prod/viewTemplates/CW_iRPA_Template
KSA	https://mn2.openapi.ariba.com/api/sourcing-reporting-view/v1/prod/viewTemplates/CW_iRPA_Template
AUS	https://openapi.au.cloud.ariba.com/api/sourcing-reporting-view/v1/prod/viewTemplates/CW_iRPA_Template
CHN	https://openapi.sapariba.cn/api/sourcing-reporting-view/v1/prod/viewTemplates/CW_iRPA_Template
JPY	https://openapi.jp.cloud.ariba.com/api/sourcing-reporting-view/v1/prod/viewTemplates/CW_iRPA_Template
UAE	https://mn1.openapi.ariba.com/api/sourcing-reporting-view/v1/prod/viewTemplates/CW_iRPA_Template

Configure "Step 1 - External Sync Contract template Creation"

Receiver More

Connection

Receiver: SAP_OperationalReportingAPI_Sourcing_System

Adapter Type: HTTP

Address: [Redacted]

SAP Ariba API Credentials Configuration Process

- Click Configure hyperlink in the integration flow and navigate to "More" tab.
- Configure API Key, Oauth secret and realm ID generated from developer portal.
- Deploy the integration model.

Configure "Step 1 - External Sync Contract template Creation"

Receiver **More**

Type: All Parameters

apiKey: [Redacted]

Authorization: [Redacted]

Realm: [Redacted]





The secret will be displayed only once and will be changed every time you regenerate secret. Select, copy and save this in your secure storage. Use this secret in your application.

Application Key:

[Redacted]

OAuth Client Id:

[Redacted]

OAuth Secret:

[Redacted]

Base64 Encoded Client and Secret:

[Redacted]

Copy to clipboard

Download

Close

Receiver SFTP Server

Configure "SAP Ariba Integration File Download Events - Buying"

Receiver More

Target	Receiver:	SFTPserver
	Adapter Type:	SFTP
	File Name:	{{realm}}_\${property.event}_\${header.timestamp}_\${property.SAP_RunId}.zip
	realm:	realm-T
	Address:	<<your SFTP server address>>
	Proxy Type:	Internet
	Authentication:	User Name/Password
	Credential Name:	<<name of your SFTP security credential>>
	Timeout (in ms):	10000
	Maximum Reconnect Attempts:	3
Reconnect Delay (in ms):	1000	

Setup SAP Build Process Automation

Import Content

This template can be downloaded from the Store:

- Navigate to the Store in your SAP Build Process Automation account.
- Select the Project Type filter as “Process Automation”.
- In the Search bar type “Contract Workspace Push To External System”
- Select the “Add” button to add the content into your lobby.
- After successfully adding the template, navigate back to the lobby to find the “Contract Workspace Push To External System” template available for use.

Caution: Be sure to select the Project Type as “Process Automation” in the filters.

Contract Workspace Integration with External System is achieved through two build process automations.

1. Convert CSV to Excel for CLID Integration

This automation reads the csv file generated from Integration suite integration flow (Contract Workspace Integration with External System) from the local client FTP folder/ repository and converts it into an excel format which will be used as an input to automation “CW Integration – CW Push to External System”.

2. CW Push to External System

This automation performs below actions to push CW to External system,

- Login to Ariba as a ThirdPartyUser.
- Open CW_OperationalReporting_PendingToPushToExtSystem.xlsx Excel file.
- Get CW # from the excel and search the same in Ariba realm.
- Navigate to Documents tab of CW and look for "Push to External System" link.
- Click the link and traverse it to the next CW # defined in the excel. Action repeats.

Configuration & Modification

Once you have added the content to your lobby, you will find the project in your project list. Adapt the content template based on your requirements, and then release and deploy from the Lobby.

Configure Process

1. CW Push to External System

Have below directories created. In case if directories to be customer specific, please refer to Artifacts reference and Step to update the folder structure appropriately in the Build Process Automation.

Folder Structure	File Naming	Artifacts Reference	Reference Step
D:\Automation \CLID Integration\supportingFiles\	Credentials.xlsx	1. Login to Ariba Application	Automation 2 - Step 2 (Read Ariba login credentials)
D:\Automation \CLID Integration\	CW_OperationalReporting_PendingToPushToExtSystem.xlsx	2. Search for the	Automation 2 - Step 2(Read CW# to push to Ext System)

		Contract Workspace
D:\Automation \CLID Integration\supportingFiles\	ContractLineDocumentPath.xlsx	4. FINDEXTS YS - Traverse Document List to Push CLID to External System Automation 2 - Step 2 (Read Contract Line Item Document Link)

Credentials.xlsx Legends

Legend	Reference
User ID	create a Build Process Automation tech user as a ThirdPartyUser with privileges to search any Contract workspace document with the Ariba realm. <i>Note: Customers using Access Control, should include this user as part of a Project Group at template level.</i>
Password	User password to login to Ariba
URL	Customer Ariba Sourcing Third Party Login URL

ContractLineDocumentPath.xlsx Legends

Legend	Reference
Document Label	Mention the CLID reference hierarchy defined at the template level. i.e Hierarchy to traverse to the document link to reach CLID document link reference.

Sample File format based on a template of CLID document as below.

Contract Workspace EO1	
Contract Workspace (Procurement)	
Overview	Documents
Tasks	Team
Conditions	Advanced Options
History	
Contract Workspace EO1	
Name	Owner
Contract Documents	Project Owner
CL ID Document	Project Owner
CLID	Project Owner
Main Agreement	Project Owner

Document Label
Contract Documents
CL ID Document
CLID

Release and Deploy Process

After configuring your process, it's time to publish, test and run it. To run a process, you must first release and deploy it.



Release - This locks the version of your process, meaning that no further edits can be made to that version. At this stage, the process can't be run and isn't available to participants yet.

To release a version of your process,

- first ensure that the status is listed as 'Editable'.
- Then click 'Release'.

If this is the first time you have released the process, a version labelled 1.0.0 is released. For subsequent releases, you're prompted to select a version type before the process is released.

Deploy – This takes a released version of a process and enables it to be actively run and monitored. A deployed version of this approval process unlocks the request form, allowing participants to submit requests and the approvers to view items in their inbox.

To deploy a released version of your process,

- first ensure that the status is listed as 'Released'.
- Then click 'Deploy'.

In order to, deploy your project, you will be prompted to provide a Destination as an environment variable. Select the destination from the drop-down.

Note: If you do not map your destination environment variable with actual SAP BTP destination during deployment, then the process will enter Erroneous state when it tries to connect to the external system.

For more details about the Destination artefact, please read our [documentation](#).

Support

If you experience general issues with SAP Build Process Automation, raise an incident via SAP Support Portal on **BNS-ARI-SC-CW** component.

This template can be modified using SAP Process Automation. For example: add business rules to determine the approver based on a certain business logic or add an action to post collected information to backend SAP system. Refer [Help Portal](#) for more details.

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