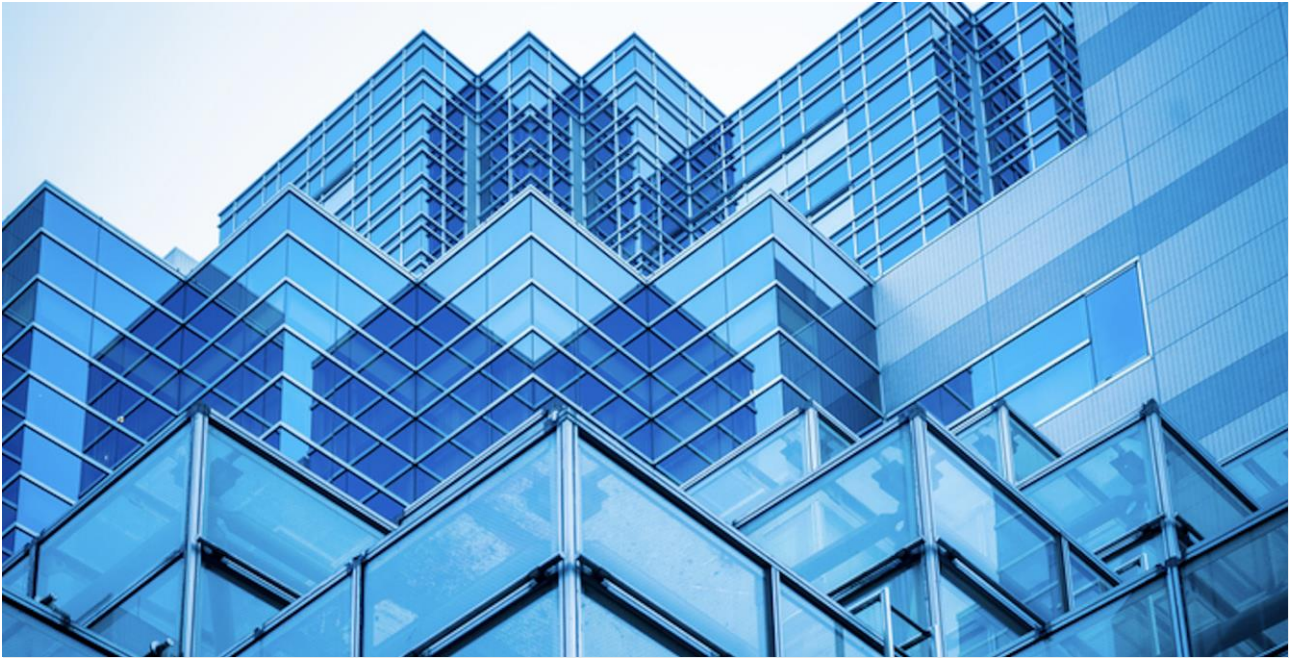




PUBLIC

SAP Build Process Automation

Service Cloud Case Assignment to Processors Configuration & User Guide

Contents

Change Log	3
Overview	4
Prerequisites.....	6
Other Prerequisites.....	6
Configuration Guide.....	6
Setup SAP Business Technology Platform Cockpit.....	6
Destination Configuration	6
User Roles Configuration	8
Setup SAP Build Process Automation Content.....	8
Import Content	8
Configuration & Modification	8
Configure Automations.....	8
Configure Email	9
Release and Deploy Process.....	10
Configure Automation Trigger	11
User Guide	12
Automations	13
Action Projects:	14

Change Log

Version	Date	Description
1.0.0	August 5 th , 2024	Document created

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, what are 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) Import and configure the template using SAP Build Process Automation design studio and (c) 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.

Notes:

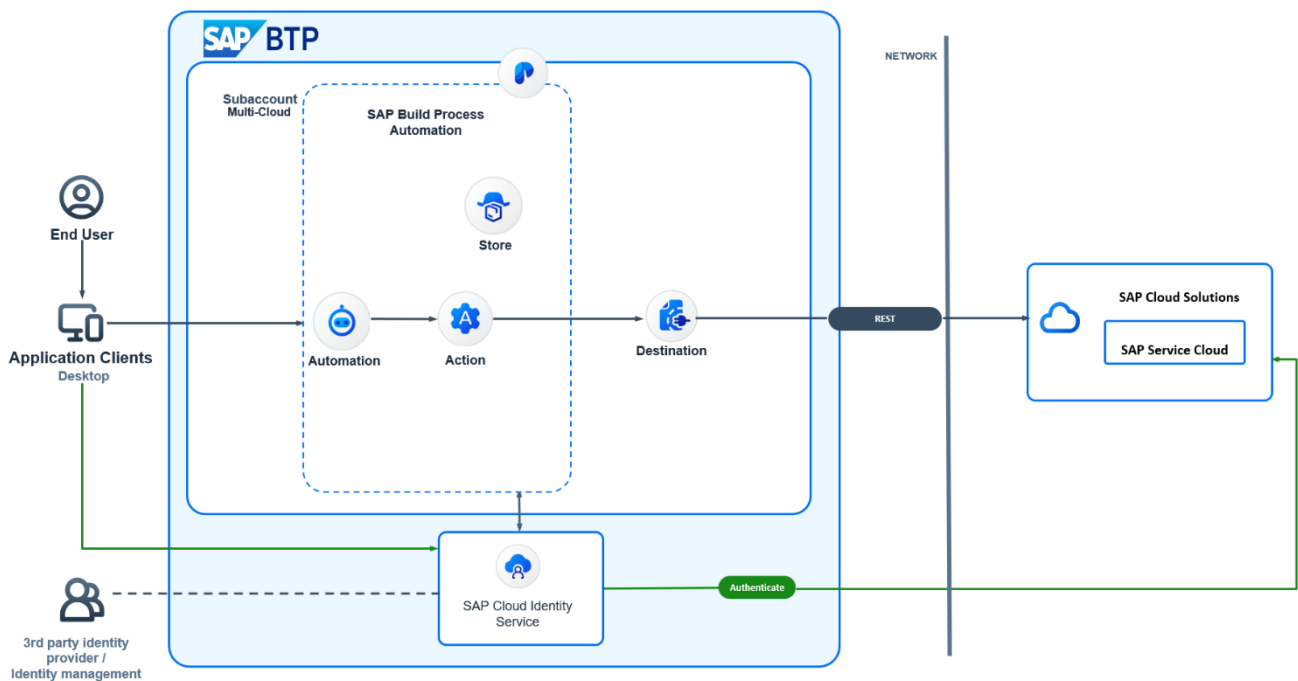
- This documentation is not a detailed guide to setup SAP BTP services. It assumes that IT admin who is setting the content is skilled with SAP BTP environment. Configuration section must be mandatorily followed to import and configure the template.
- This template content is to accelerate your solution development. You can 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 and its capabilities.

Overview

In **SAP Enterprise Support, cloud edition for SAP Cloud for Customer**, there are various methods to create a case for a service. These cases get created in several case categories and based on the pre-defined rule sets in the backend system, processor assignment is done. However, there are certain cases which do not match any rule and hence remains without any processor.

Using this 'Service Cloud Case Assignment to Processors' SAP Build Process Automation pre-built content package a service manager/ responsible can schedule to fetch unassigned cases from SAP Service Cloud system periodically and assign it to a service processor. This reduces the time and effort for a service manager that they spend to assign the cases manually.

Solution Diagram:



The following steps are included as a part of template: 'Service Cloud Case Assignment to Processors'

- This package provides automation for fetching the cases from SAP Service Cloud system based on the following criteria:
 - Cases should be in status: 'Open' or 'In Process'.
 - 'Processor' for the case should be empty.
 - 'Service Team' for the case should not be empty.
- The automation can also be set for scheduled execution which means the service manager need not trigger the process explicitly every time. The scheduled trigger ensures to check the unassigned cases periodically and assign them to the service processors.
- Once the required cases are retrieved from the SAP Service Cloud system, the automation, **"Employee Assignment to Cases"** in the package performs the following operations:
 - Fetches the service organizations for all the created cases.
 - Reads the employees in each of the service organizations fetched.
 - Filters the employees of a Service Organization to keep only employees with the role '219' in the list. This filters out any managers or employees with other roles from the assignment list.
 - Reads the count(number)of cases already assigned to each of the employees.
 - Sorts the employee list based on the count of cases in ascending order.
 - This will ensure that the employee with least number of cases is put first in the list and is ready to take up newer cases.
 - Uses the 'PATCH' method of whitelisted 'Case Service' API <provide the link from Accelerator Hub> to assign the case to the employee/service processor.

Note: The above operations of filtering the employees, sorting, and assigning them to a specific case in the service organization is repeated until all the retrieved cases are assigned

to the processors.

- Once all the cases are assigned to the processors, a log report in MS Excel format is generated to keep track of the count of cases that had a successful assignment. The log file also has a detailed sheet where:
 - if a case gets assigned to a processor, then the details are captured in the columns:
 - Case Number,
 - Service Organization: to which the case belongs to,
 - Employee display id: to whom the case was assigned to
 - Employee name: to whom the case was assigned to.

This template uses the following whitelisted APIs published in SAP Business Accelerator Hub:

API Description	API Link
Case Service	Link
Organizational Unit Service	Link

Prerequisites

The following SAP Business Technology Platform services are required to consume the content package:

- SAP Build Process Automation to orchestrate the process.
- SAP Cloud Identity Services - Identity Authentication
- SAP Enterprise Support, cloud edition for SAP Cloud for Customer
- SAP Business Technology Platform, Cloud Foundry runtime

Other Prerequisites

For this template to run successfully the following other prerequisites are needed:

- SAP Desktop Agent 3.30.56 or higher
- Outlook mailbox configured on the system where the automations will run to send mails.
- A folder should be created in the 'C:/' drive where the logs for execution can be placed once the automation has been successfully executed.

Configuration Guide

The '**Service Cloud Case Assignment to Processors**' template requires SAP Build Process Automation subscription or CPEA contract. Follow the [setup and configuration section](#).

Setup SAP Business Technology Platform Cockpit

Destination Configuration

Destinations are used in the template to connect to different system & services. This sub-section guides you to create various destinations in the SAP BTP Cockpit.

SAP Service Cloud Version 2

To access the SAP Service Cloud V2 for read and update operations, a HTTP destination is required in the SAP BTP account where the SAP Build Process Automation is subscribed.

- Create a destination with Basic Authentication.
- This destination will be used to connect SAP Service Cloud system to access APIs via concept of Action Project in SAP Build Process Automation.

Destination with Basic Authentication

Name	<name> Example: sap_servicecloudv2
Type	HTTP
Proxy Type	Internet
Authentication	Basic Authentication
URL	<C/4HANA – endpoint> Example: https://<c4system-name>-.cxm-servicecloud.com OR https://<c4system-name>-.crm.cloud.sap
Username	Business User ID
Password	Business User Password

Additional Properties for destination

Add the following properties in the destination:

sap.applicationdevelopment.actions.enabled	true
sap.processautomation.enabled	true

Destination Configuration

Name: **sap_servicecloudv2**

Type: HTTP

Description:

URL: **https://<c4system-name>-.crm.cloud.sap**

Proxy Type: Internet

Authentication: BasicAuthentication

User: **BOTSBPA**

Password: *********

Additional Properties

sap.applicatio...true

sap.processa...true

☒ Use default JDK truststore

IMPORTANT NOTE: This template content is a learning content and can be used as an example to build the business content. You can modify this template according to your own requirements to achieve your business goals.

User Roles Configuration

To access this template, the business user will need these following roles in SAP Business Technology Platform.

For more information about SAP Build Process Automation roles, see [Authorizations](#)

Role Name	Purpose
ProcessAutomationDeveloper	To fully use this content package, you need to have an active user entitled to this role to use SAP Build Process Automation.
ProcessAutomationParticipant	To execute (like accessing MyInbox, running the automations, etc.) this content package, you need to have this role assigned to the respective user.
ProcessAutomationAdmin	To perform process admin activities like accessing monitoring application etc., you need to have this role assigned to the respective user.

Setup SAP Build Process Automation Content

Import Content

To download this content from Store, do the following:

- Navigate to the **Store** in your SAP Build Process Automation Lobby application.
- Select the Project Type filter as **'Process' → 'Business Process'**.
 - 1) In the Search bar type **"Service Cloud Case Assignment to Processors"**
 - 2) Select the "Create from Template" button to add the template into your lobby.
 - 3) After successfully adding the template, navigate back to the lobby to find the **"Service Cloud Case Assignment to Processors"** project available for use.

Configuration & Modification

Once you have added the content to your lobby, you will find the project in your project list. Configure or modify the content wherever necessary, as explained below.

Configure Automations

This package contains the main automation **"Employee Assignment to Cases"** and it does not need to be explicitly configured. It can be directly utilized after successful deployment of the project.

The automation reads the cases with status 'Open' (status code 01) and 'In process' (status code 02). However, this can be modified based on the user need. In order to modify the filter, click on the action step, 'Read data - All cases based on the filter from backend system' in the automation, Employee Assignment to Cases. On the right panel, click on the 'edit' icon for the field, '\$filter'.

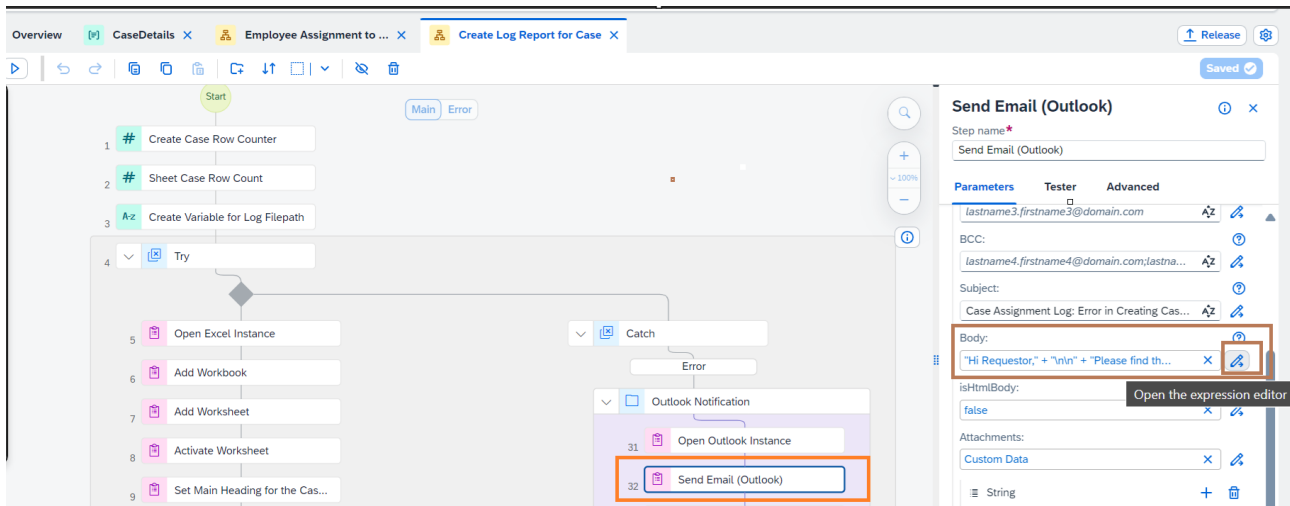
Here, the query can be changed to include other status codes.

Configure Email

Email notifications are sent to requestor at different places during automation execution. All the email artifacts in the automation have default template body which can be changed.

To update the email body content, do the following:

- Select the mail artifact in the automation.
- From the **Settings** in the right-side panel, check the **To** field (or email recipients). This is an input field where recipient's email id can be provided.
- Check the **Subject**. You can adjust the subject, if needed.
- You may also add someone in **CC**.
- In the field, Body, when you click on the 'pencil' icon, the details of the email body gets opened. This can be adjusted/changed as required.



For more information on email configuration, refer to the below link:
[Email Configuration](#)

Configure Destination Settings

Actual destinations that are created in SAP BTP cockpit will be required when you deploy the process. This destination will be mapped to the destination environment variables during deployment.

For this package following destination needs to be configured in the SAP BTP cockpit:

- **sap_servicecloudv2:** To provide API access to the SAP Service Cloud Version 2

Note: Above destination names have been configured in BTP but can be named as per the project requirement.

To configure destination,

- click on **Settings**.
- Select **Destinations** from the left panel.
- Click **New Destination**

Select these destinations to be added (Created in the above section). For more information and screen shots, please refer to the below link:

[Manage Destinations](#)

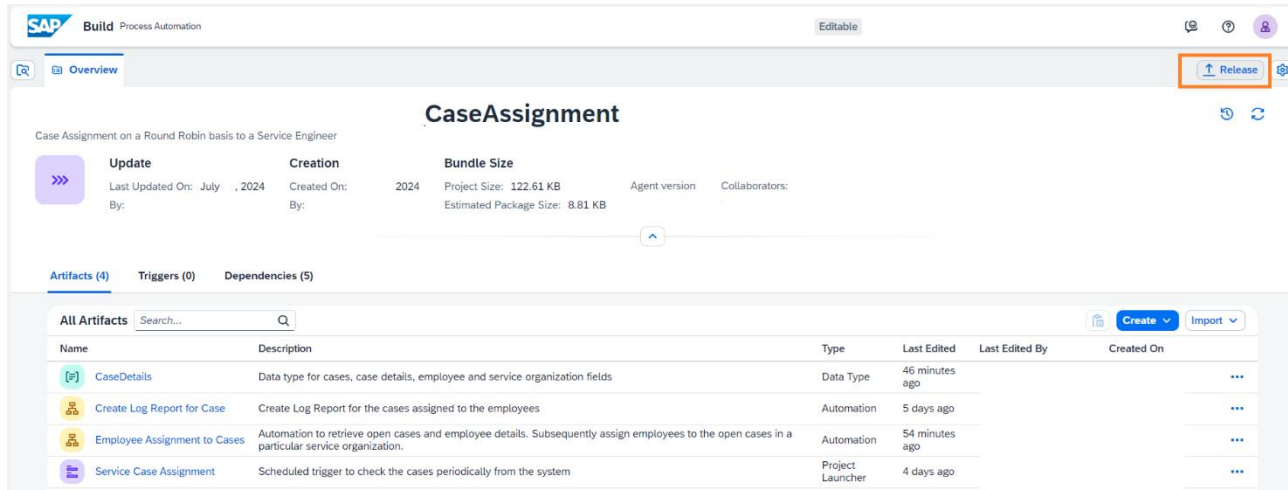
Release and Deploy Process

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

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

To release a version of your project,

- First ensure that the status is listed as **'Editable'**.
- Then click **'Release'**:



The screenshot shows the SAP Build Process Automation interface for a project named 'CaseAssignment'. The status is 'Editable'. A 'Release' button is highlighted with an orange box. Below the project details, there is a table of artifacts.

Name	Description	Type	Last Edited	Last Edited By	Created On
CaseDetails	Data type for cases, case details, employee and service organization fields	Data Type	46 minutes ago		
Create Log Report for Case	Create Log Report for the cases assigned to the employees	Automation	5 days ago		
Employee Assignment to Cases	Automation to retrieve open cases and employee details. Subsequently assign employees to the open cases in a particular service organization.	Automation	54 minutes ago		
Service Case Assignment	Scheduled trigger to check the cases periodically from the system	Project Launcher	4 days ago		

If this is the first time you've 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 project and enables it to be actively run and monitored.

To deploy a released version of your process,

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

For more details on deployment, refer to the below link:

[Deploy Project](#)

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 artifact, please read the [documentation](#).

Configure Automation Trigger

Once the package is deployed, you will need to configure the automation triggers from SAP Build Process Automation Control Tower.

This package works in both the below modes:

- **Unattended mode:**

In this mode, a scheduled trigger has to be added to execute the automation periodically. To know the details on how to add the trigger, click [here](#)

Once the scheduled trigger is added, there are 3 fields that must be filled.

- Requestor Email: email id of the requestor or the responsible who intends to receive the automation update emails.
- Threshold Value: Number of cases per service processor, beyond which the automation will not assign the cases to the processor of a service organization.
- LogFilepath: Path where the log file should be saved. This can be a folder inside any drive. For example, 'C' drive.

Edit Scheduled Trigger

Name: * Service Case Assignment

Description: e.g. A scheduled trigger

Execute: * Employee Assignment to Cases

Priority: * Low

Schedule **Input Parameter** Distribution

RequestorEmail: * .com

ThresholdValue: * -

LogFilepath: * C:

Update Cancel

Once the input values are provided, click on update button to schedule the trigger.

- **Attended mode:**
To run the automation in attended mode, follow the instructions mentioned [here](#)

User Guide

Capabilities

This learning content template contains the following elements as key artifacts (detailed explanation also provided in later section of the document):

For detailed information about different artifacts, please refer [help documentation](#).

Icon	Type	Name	Description
	Automation	Employee Assignment to Cases	The automation fetches cases from the SAP Service Cloud system that are unassigned to processors but assigned to service organizations. After organizing data, the employees of the service organization are fetched and assigned to the cases, in which it was created.
	Automation	Create Log Report for Case	Automation collects data from the main automation, 'Employee Assignment to Cases' about cases that are assigned to employees and creates log report in a specific folder. This also provides the count of cases that are assigned to processors.
	Data Type	CaseDetails	The data type is used to store all the case details that is fetched from SAP Enterprise Support, cloud edition for SAP Cloud for Customer.
	Scheduled Trigger	Service Case Assignment	A scheduled trigger that can be scheduled for a required period of time so that automation is performed automatically without manual intervention.

Automations

Employee Assignment to Cases:

This is the main automation and can be triggered via scheduled or unscheduled trigger.

On successful trigger, the automation fetches all the cases in the SAP Enterprise Support, cloud edition for SAP Cloud for Customer system. The cases which are assigned to service organizations but not assigned to any processor gets fetched via the 'GET' method of the 'Case Service' API.

For each of the case fetched, corresponding 'Service Organization' is determined.

Then for each service organization, employees in the organization are fetched via the 'GET' method of the 'organizational-unit-service' API. From the retrieved employees, only employees with the role '219' are selected and added to a list so that they can be used for case assignment.

For each employee retrieved, number of cases that they might be already assigned is checked via the 'GET' method of the 'Case Service' API. The count of cases is considered so that employees can be sorted according to ascending order and the employee with the least number of cases is arranged first in the list of 'sorted employees' array. This will help to pick up the first employee in the array and assign the case to the processor.

Once the sorted list is ready, the case that was initially picked to determine the service organization, is assigned to the employee.

In this way, each case is assigned to an employee of the particular service organization, it is created in.

Once all the cases are assigned, a log report is generated for the case numbers, service organization name and employee name assigned to the case.

In certain situations, case might not get assigned to an employee and the reasons are listed below:

- 1: Due to dependencies between service organizations or any other condition.
- 2: Service organization does not have any employee assigned or assigned employees in a service organization are not in the role '219'.

In such a state, case will not get assigned to employee and number of such cases are tracked in the log report – sheet 'Case Number Log'.

Create Log Report for Case:

This automation creates log file for the case details.

Below are the sheets and information that gets created in the log file:

1. Case Number Log: This sheet records the case count details in 2 columns:
 - a. **Successful Case Assignments** and
 - b. **Unsuccessful Case Assignments to Employee.**

This gives the count of cases that are either successfully assigned to employees or unsuccessful in assignment to the employees.

2. Case Details: This sheet records only the case details for the cases that got assigned to employees/processors in below columns:
 - a. **Case Number:** Case id which got assigned to the processor.
 - b. **Service Organization Name:** Service organization name where the case was reported.
 - c. **Processor Display ID:** Employee display ID to whom the case was assigned to.
 - d. **Processor Name Assigned to Case:** Employee name to whom the case was assigned to.

Action Projects:

The Action projects that have been used in this content package template are: 'Case Service' and 'SAP Service Cloud Organizational Unit Service'. These action projects connects to SAP Service Cloud system via APIs.

Below are the APIs from the action projects that are used in the current learning content.

Action Project: 'Case Service' ([Link to the API](#))

GET */auth/token* – To retrieve Auth token.

GET */sap/c4c/api/v1/case-service/cases/{id}* - Query the system for a specific case using the case ID.

GET */sap/c4c/api/v1/case-service/cases* – Specify query parameters to return desired case records from the system.

POST */sap/c4c/api/v1/case-service/cases* - Send case information to the system to create a new case entity.

PUT */sap/c4c/api/v1/case-service/cases/{id}* – Add attributes to a specific case by ID.

PATCH */sap/c4c/api/v1/case-service/cases/{id}* - Update case attributes in the system.

Action Project: 'SAP Service Cloud Organizational Unit Service' ([Link to API](#))

GET */sap/c4c/api/v1/organizational-unit-service/organizationalUnits* - Query organizational units.

GET */sap/c4c/api/v1/organizational-unit-service/organizationalUnits/{id}* – Read organizational unit.

POST */sap/c4c/api/v1/organizational-unit-service/organizationalUnits* - Create organizational unit.

PUT */sap/c4c/api/v1/organizational-unit-service/organizationalUnits/{id}* – Create or update organizational unit.