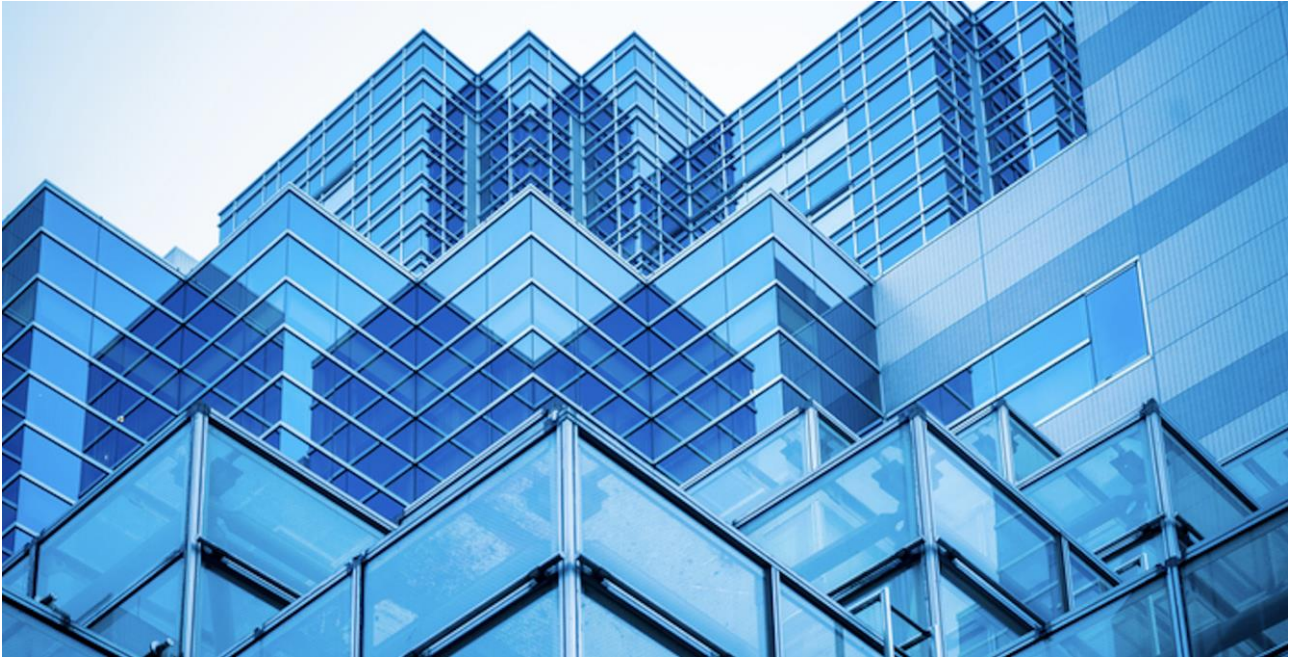




PUBLIC

SAP Build Process Automation

Mass Create and Update of Location Master Data in SAP S/4HANA

Configuration and User Guide

Contents

- Overview 3
- Procedure..... 5
- Configuration Guide..... 5
 - User Roles Configuration 6
 - SAP Build Process Automation 6
 - Configure Automation.....6
 - Import Content 7
 - Release and Deploy the Process.....7
- User Guide 8
- Capabilities 8
- Steps to Execute the Automation 9
- Support 10

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 application *using SAP Build Process Automation* design studio.
3. **User Guide:** This section provides details about different artifacts that are used in this template like process definition, action group etc. to better understand how different capabilities are used in this template.

Note: Learning contents are published only for demo and reference purposes. We do not provide any support to learning / sample content.

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

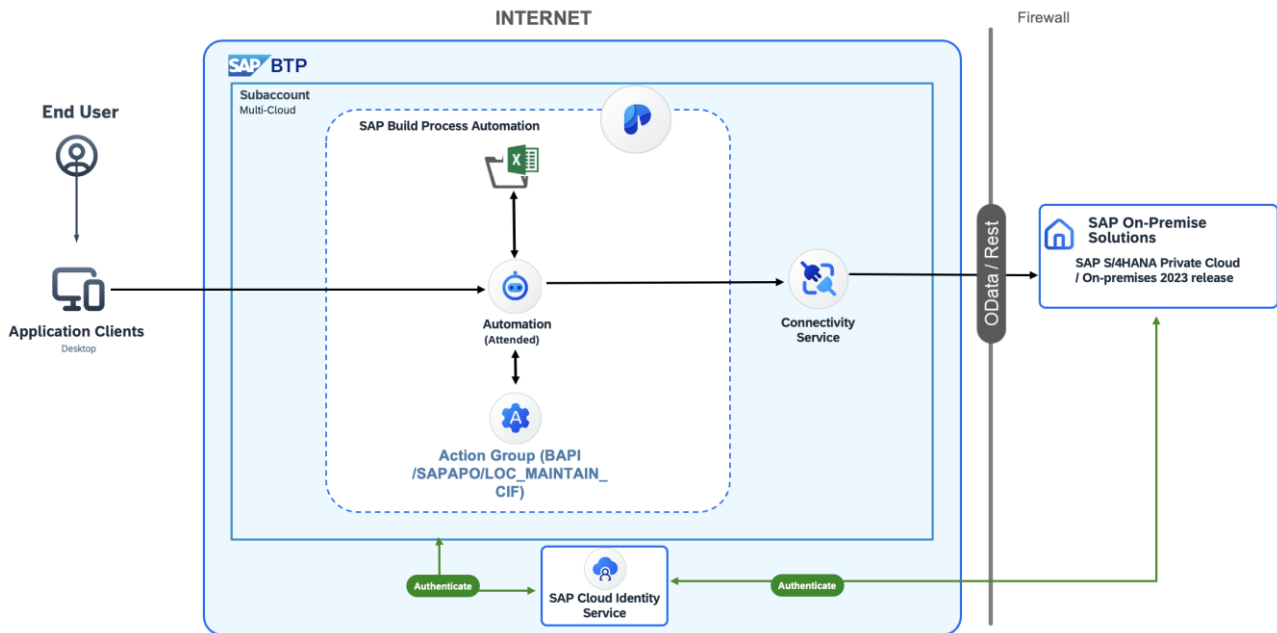
This SAP Build Process Automation package is designed to streamline the mass creation and updating of Location Master Data in **SAP S/4HANA Private Cloud / On-premises 2023 release**. Users provide input via a predefined Excel template, including details such as Location ID, Location Type, and Address Information. The automation reads the data from the Excel file and leverages a BAPI through an Action Group to efficiently process and transfer the information to the SAP S/4HANA Private Cloud / On-premises 2023 release system. This approach ensures accurate data management while significantly reducing manual effort.

The process includes preparing input data, running the automation, and executing the BAPI to create or update Location Master records. Once the process is complete, the automation updates the Excel file with results, indicating success or error details, and moves it to the "Processed" folder for review. This end-to-end solution ensures data consistency and minimizes errors within the SAP landscape.

Features

- Predefined Excel template for standardized data input, including Location ID, Location Type, and Address Information.
- Automation reads data from Excel and processes it using a BAPI through an Action Group.
- Enables mass creation and updating of Location Master Data in SAP S/4HANA Private Cloud / On-premises 2023 release.
- Updates Excel file with success or error details for each record.
- Automatically moves processed files to a "Processed" folder for review.
- Streamlines the end-to-end process by minimizing manual effort and errors.
- Supports SAP S/4HANA Private Cloud / On-premises 2023 release system.
- Enhances data accuracy, consistency, and overall process efficiency.
- Scalable and flexible to adapt to future business requirements.

Process Flow Diagram



The following steps are part of the **Mass Create and Update of Location master data in SAP S/4HANA** template and offer a brief overview of the process flow and features:

- This package enables the capture and upload of Location Data into the SAP S/4HANA Private Cloud / On-premises 2023 release system.
- It includes an automation that extracts inputs from the Location Master template Excel and connects to the BAPI **/SAPAPO/LOC_MAINTAIN_CIF** via an action group. Using this standard BAPI, the extracted data is uploaded to the SAP S/4HANA Private Cloud / On-premises 2023 release system.

Process Flow:

- Initiate the automation process.
- Upload the excel template and select the worksheet containing Location Master Data, including fields such as Location ID, Location Type, and Address Details, through the User Task screen.
- The project status updates to "Running."
- Upon successful execution, a notification is displayed to the user.
- The completed Excel file is moved to the "Processed" folder.
- The BAPI results (ET_RETURN) are recorded in the Excel sheet.

Prerequisites

Following SAP Business Technology Platform services are required to consume **Mass Create and Update of Location master data in SAP S/4HANA**

- SAP Build Process Automation to orchestrate and automate the process.
- SAP Cloud Identity Services - Identity Authentication
- SAP S/4HANA Private Cloud / On-premises 2023 release with Transportation Management Module.
- SAP Desktop Agent 3.32.58 or higher
- Microsoft Excel to build the log report

Other Prerequisites

Prerequisites in SAP Transportation Management

In Customizing for SAP Transportation Management, under SCM Basis > Integration > Basic Settings for Creating the System Landscape, the necessary configurations should be completed in the following activities:

- Name Logical Systems
- Assign Logical Systems to a Client
- Maintain Business Systems Group
- Assign Logical System and Queue Type

Additionally:

- Business Partners associated with Locations must be created in SAP TM.
- Location types are predefined in the system. If custom location types are required beyond the standard ones, they should be defined based on business needs.
- The TM Master Data Specialist must have the necessary authorizations and user roles to create and update Location Master Data.

The Transportation Management Master Data Specialist must have the necessary authorizations and user roles to create and update Location Master Data in the SAP system. The following roles are required:

- SAP_BR_TRANSPORTATION_MANAGER
- SAP_BR_TRANSPORTATION_PLANNER

Procedure

The **Mass Create and Update of Locations master data in SAP S/4HANA** requires the SAP Build Process Automation subscription.

1. Follow the guide to set up SAP Build Process Automation: [Prerequisites | SAP Build Process Automation | Initial Setup](#)

Configuration Guide

This template contains a template file to input Location Master details for mass upload, the file captures following data.

A	B	C	D	E	F	G	H	I
Location ID	Location Type	Location Description	External Location	Business System Group	Business Partner	ASR Flag	Deletion Flag	Name
1170	Warehouse Jakarta	MILL_JK	DSC_200					Jakarta Plant
1100	Port of Rotterdam	NLRTMTST	DSC_200			1	X	Port of Rotterdam
1003	Shipping Point 171_Test	SP_A600	DSC_200		1000114	1		Shipping Point 1710 - A
	California Airport	AIR_US_CALL	DSC_200		1000121	1		California Airport

- Location ID
- Location Type
- Location Description
- External Location
- Business System Group
- Business Partner
- ASR Flag
- Deletion Flag

- Name
- Search Term1
- Search Term2
- House Number
- Street
- District
- Postal Code
- City
- Country
- Region
- Tax Jurisdiction
- Time Zone
- Telephone
- Fax
- Email
- Production Calendar
- Warehouse Calendar
- Shipping Calendar
- Receiving Calendar
- Display Calendar
- Resource Inbound
- Resource Outbound
- Storage Resource

NOTE: Do not make any changes to the structure of the template. Any changes made should be adapted in the process accordingly.

User Roles Configuration

- To access this template, the business user will need these roles:

Role Name	Purpose
ProcessAutomationDeveloper	Standard Business User, can model and publish processes.
ProcessAutomationParticipant	To execute (like 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 applications etc., you need to have this role assigned to the respective user.

For more information, please check following: [SAP Build Process Automation roles](#)

SAP Build Process Automation

In this section only describe the configuration of the artifacts.

Configure Automation

The automations in the project doesn't require any explicit configuration except setting up the configuration file and environment variables as discussed in the sections above.

Import Content

Standard automation packages released by SAP will be available at the store. To know more about the store visit [SAP Build Process Automation Store](#)

This template can be downloaded from the Store:

1. Navigate to the Store in your SAP Build Process Automation tenant.
2. Select the Project Type filter as "Business Process."
3. In the Search bar type **"Mass Create and Update of Location Master Data in SAP S/4HANA"**
4. Select the "Create from Template" button to add the template into your lobby.
5. After successfully adding the template, navigate back to the lobby to find the **"Mass Create and Update of Locations Master Sata in SAP S/4HANA"** template available for use.

Release and Deploy the Process

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'.

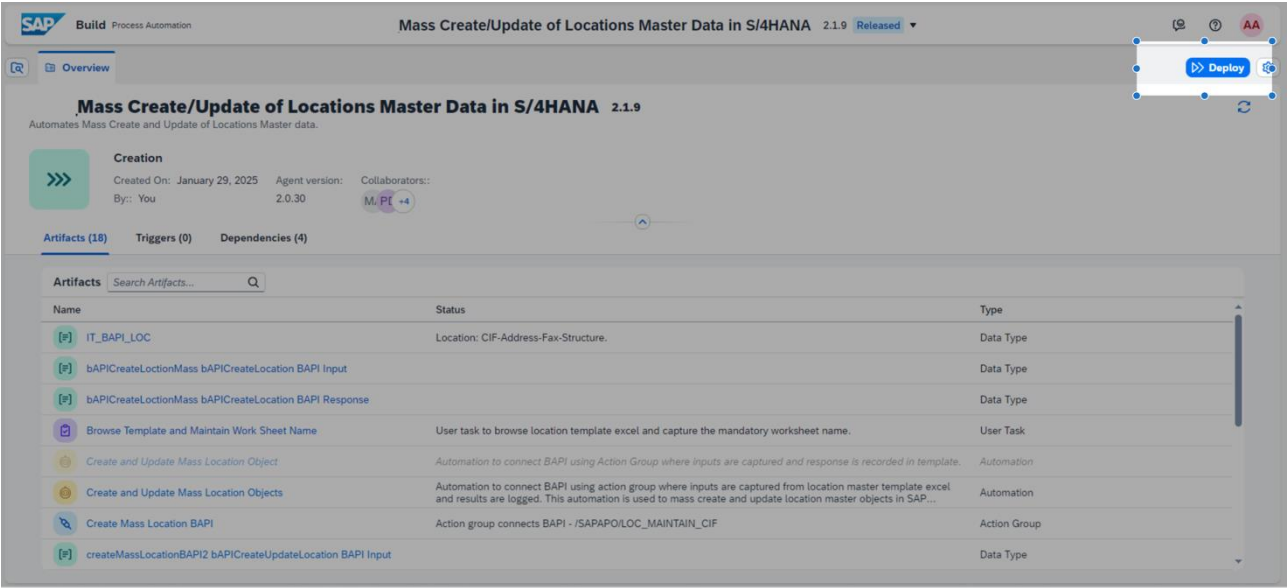
Name	Status	Type	Last Edited On	Last Edited By	Created On
IT_BAPI_LOC	Location: CIF-Address-Fax-Structure.	Data Type	Over a month ago	AA	December 26, 2024
bAPICreateLoctionMass bAPICreateLocat...		Data Type	Over a month ago	AA	December 10, 2024
bAPICreateLoctionMass bAPICreateLocat...		Data Type	Over a month ago	AA	December 10, 2024
Browse Template and Maintain Work She...	User task to browse location template excel and capture the mandatory worksheet name.	User Task	Over a month ago	AA	December 10, 2024
Create and Update Mass Location Object	Automation to connect BAPI using Action Group where inputs are captured and response is recorded in template.	Automation	Over a month ago	AA	December 10, 2024
Create and Update Mass Location Objects	Automation to connect BAPI using action group where inputs are captured from location master template excel and results are logged. T...	Automation	12 days ago	AN	December 18, 2024
Create Mass Location BAPI	Action group connects BAPI - /SAPAPO/LOC_MAINTAIN_CIF	Action Group	Over a month ago	AA	December 10, 2024

For more information please visit: [SAP Build Process Automation | Release a Project](#)

Note: 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 process 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’**. You can select the environment where the project to be deployed, then set the environmental variables. The following environment variables are required for this project.

Environment Variable	Type	Description
Client	String	Specifies the SAP client to connect to.
Instance	String	Defines the SAP instance for the connection.
MessageServer	String	Indicates the SAP message server address.
Password	Password	Stores the password securely for authentication
SystemID	String	Represents the unique identifier of the SAP system.
UserName	String	Contains the username for logging into the SAP system.



For more information on deployment please visit : [SAP Build Process Automation | Deploy a Project](#)

User Guide

Capabilities

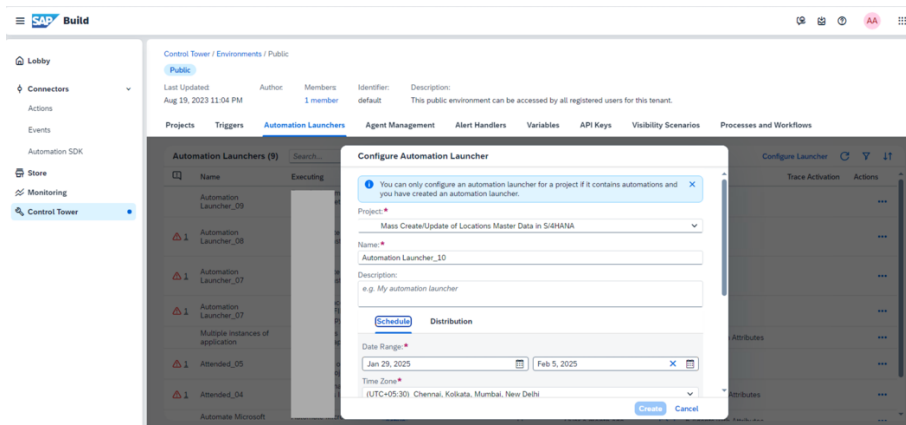
This template consists of following capabilities. Please refer [help documentation](#) about these different artifacts.

Type	Name	Description
Automation	Create and Update Mass Location Objects	Automation to connect BAPI using an action group, capturing inputs from the location master template Excel and logging results. Used to mass create and update location master objects in SAP S/4HANA

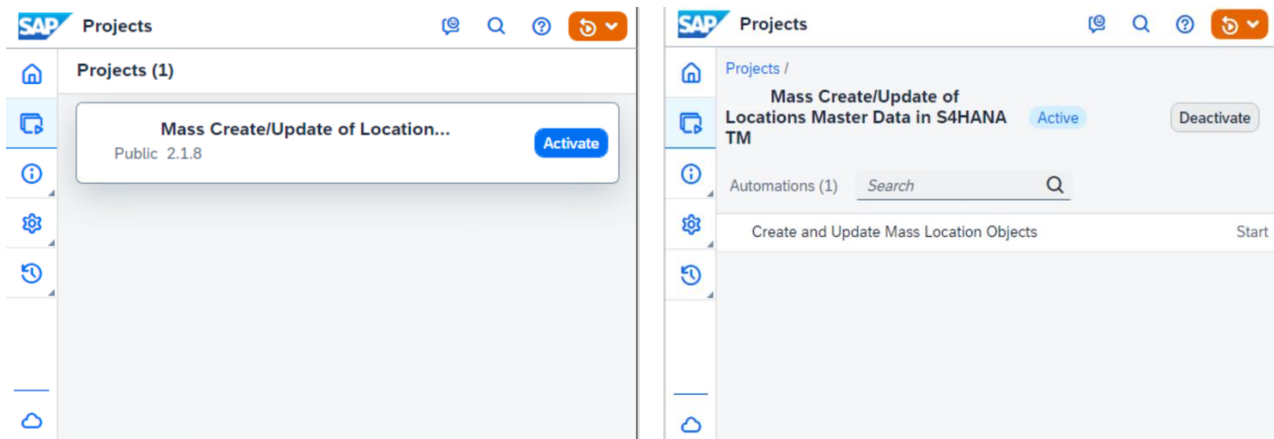
		Private Cloud / On-premises 2023 release system.
Action Group	Create Mass Location BAPI	Action group that connects to BAPI /SAPAPO/LOC_MAINTAIN_CIF for processing location master data.
User task	Browse Template and Maintain Work Sheet Name	User task to browse location template excel and capture the mandatory worksheet name.
Automation Launcher	Mass Create/Update Automation Launcher	Launcher for the "Create and Update Mass Location Objects" automation.
Data Type	Excel Data Input	Data type to capture the input parameters from the Excel template.
Data Type	ET_RETURN	Data type for capturing the BAPI return parameters, including messages and statuses.
Data Type	IT_BAPI_LOC	Location: CIF-Address-Fax-Structure.
Data Type	IT_CIF_ADFAX	Data type for Location: CIF-Address-Fax-Structure.
Data Type	IT_CIF_ADSMTTP	Data type for Location: CIF-Address-Email-Structure.
Data Type	IT_CIF_ADTEL	Data type for Location: CIF-Address-Telephone-Number Structure.
Data Type	IT_CIF_LOC	Data type for Location Table.
Data Type	IT_CIF_LOCADR	Data type for transferring location addresses.
Data Type	IT_CIF_LOCT	Data type for the inbound structure of location texts.
Data Type	bAPICreateLoctionMass bAPICreateLocation BAPI Input	This data type is automatically created from action group based on the field selection in BAPI.
Data Type	bAPICreateLoctionMass bAPICreateLocation BAPI Response	This data type is automatically created from action group based on the field selection in BAPI.

Steps to Execute the Automation

Via Control Tower, navigate to your environment where the package is deployed and go to the 'Automation Launchers' section. Configure the Automation Launcher : Add the project and configure the schedule for automation execution.



Launch the desktop agent, activate the project and Start the automation.



Support

There is no support available for template content. If you experience general issues with SAP Build Process Automation, please follow the links below:

- [Troubleshoot Support Guided Answer](#)
- [Test an Automation Help portal Article](#)
- [Test an Application Help portal Article](#)
- [Get traces Support Guided Answer](#)

If the issue persists, please raise an incident via SAP Support Portal on **BPI-PA-BPC** 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.

