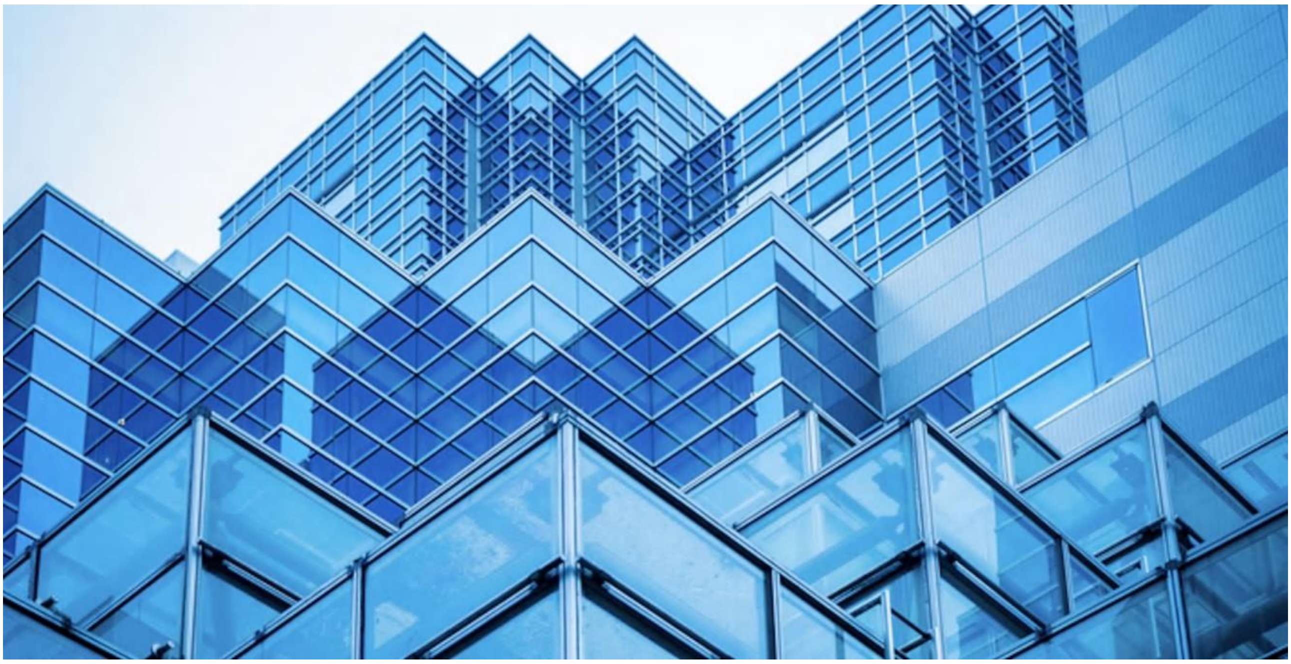

PUBLIC

SAP Build Process Automation
Merge Users in Learning Management System (LMS)

Configuration & User Guide

Table of Contents

THE BEST RUN

Change Log

Version	Date	Description
1.0.0	September 28th, 2023	Document created

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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, what are high-level components used and how the template works in nutshell. Prerequisite section provides information of different services of SAP Business Technology Platform (BTP) that are required to use this template.
2. Configuration Guide: It contains sections which will guide you to setup your
   (a) SAP Business Technology Platform Account with destination.
   (b) Import and configure the template using SAP Build Process Automation design studio.
3. User Guide: This section provides details about different artefacts that are used in this template like process definition, automations, forms, email notifications etc. to better understand how different capabilities are used in this template.

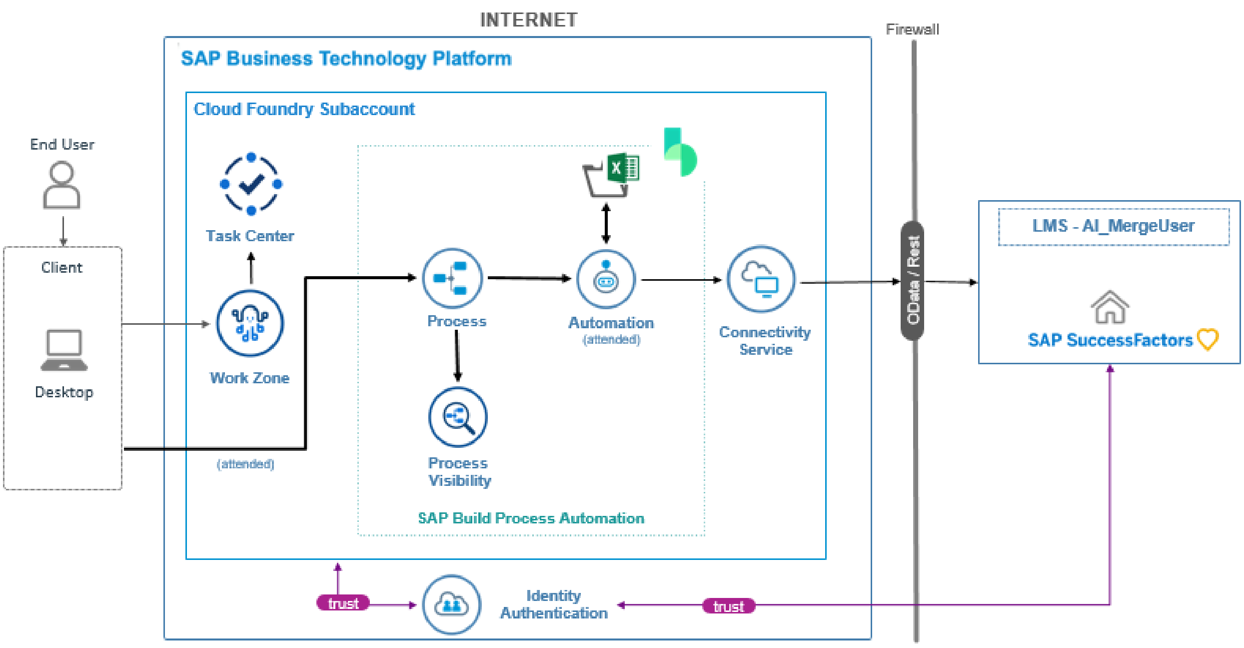
Note:

- This documentation is not a detailed guide to setup SAP Business Technology Platform services. It assumes that IT admin who is setting the content is skilled with SAP Business Technology Platform environment. The Configuration section must be mandatorily followed to import and configure the template.
- 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 **Merge Users in Learning Management System (LMS)** template will combine learning history, learning assignments assigned and completed learnings from the old user ID to the new user ID in SuccessFactors LMS system. It is more time-efficient for the users to upload an excel template with the necessary data, instead of merging the user's learning history individually in SuccessFactors system.

Solution Diagram:



The following steps are included as a part of **Merge Users in Learning Management System (LMS)** template**:**

- The template uses **OAuth Token API** and **AI_mergeUser API.**
    - More information on generating OAuth token can be found in [Obtaining OAuth Token]
    - More information on Merge User's Learning history can be found in [Learning ODATA API's].

- User must fill the pre-defined excel template file with the User ID details.
    - Folder can contain any number of files with the predefined template.
    - Folder name and File name can be named any, but the excel should contain the pre-defined format.

- Start Process – User must fill in the requestor email ID and the folder path in the trigger form to start the process.

- Fetch operation – This automation fetches the file(s) from the folder. It can handle multiple files in the folder.
    - The fetched file is read, User ID details are used for merging the learning history using the APIs.
    - Once the record is processed, the status off the record is updated in the file in the respective columns.

- Once the file(s) have been processed and it is moved to the 'Processed' folder in the same folder path and renamed to '<FileName_TimeStamp>'.
    - Processed folder will be created if not present already.

- Email Notification: Email notifications will be sent after completion of the process or if any error during the process execution.

Note: This API has calling limit. When you exceed a limit in one of your calls, API return an error to help you stay within the limit. For more details please refer [Learning ODATA API's].

Prerequisites

The following SAP Business Technology Platform services are required to consume the content package of Merge Users in Learning Management System (LMS):
:

- SAP Build Process Automation to orchestrate the process.
- SAP SuccessFactors API
- SAP Business Technology Platform

Other Prerequisites

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

- SAP Desktop Agent 3.19.00 or higher
- Outlook mailbox configured on the system where the automations will run to send mails.
- SAP Success Factor Technical user must have the **LMS Admin** role.
- Keep the LMS Client Secret handy – In SuccessFactors LMS, go to Learning Administration -> System Administration -> Configuration -> OAuth Token Server, click on 'Generate a new Client Secret'. Use the 'Newly generated client secret' and not the 'Client Secret Hash Value'.

Important Note –

- Template structures are fixed; no changes should be made to them for the entire process to work.

- There is no validation done in the bot to verify that the from and to user IDs refer to the same person. The requestor should do a careful pre-validation of the user sets provided to the bot as the merge action is irreversible.

Process Flow

1) The requestor triggers the **Merge Users in Learning Management System (LMS)** process with the form by entering their email Id and the folder path in which the files are saved.
2) '**Fetch User Details To Merge'** automation fetches the data from the excel template and trigger the sub automation "**Merge Users API"** to Merge users details in SuccessFactors LMS.
3) Column **D and E** in the input excel file is filled with the status of each record after **"Merge Users API"** is completed.
4) The Input file is then moved to the 'Processed' folder once all the record in the file is processed.
5) Email Notification is sent to the requestor after processing all files in the folder.

Note:

- Since the old User ID gets inactive after it gets merged with new User ID. It's more important to check on the user IDs that is being passed as input excel file.
- The process stops processing the next records if it encounters 2 API fails consecutively.

Configuration Guide

The **Merge Users in Learning Management System (LMS)** process template requires SAP Build Process Automation subscription. Follow the setup and configuration section setup and configuration setup.

Setup SAP Business Technology Platform Cockpit

Configure SAP Build Process Automation Email Destination

Mail notifications are used in this template to send notifications to requestor various stages of the process. Follow the instructions to set up mail destination in your SAP Business Technology Platform Account.

Configuring destination, see Configure a SMTP Mail Destination.
For more information refer to Create HTTP Destinations

IMPORTANT NOTE: This template content is to accelerate your solution development. You can modify this template according to your own requirements to achieve your business goals. To use this template content, you need to have basic knowledge and understanding of SAP Build Process Automation and its capabilities.

Setup SAP Build Process Automation Content

Import Content

This template can be downloaded from the Store:

1) Navigate to the **Store** in your SAP Build Process Automation application.
2) Select the Project Type filter as "**Process Automation**."
3) In the Search bar type "**Merge Users in Learning Management System (LMS)**"
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 "**Merge Users in Learning Management System (LMS)**" project available for use.

Caution: Be sure to select the **Project Type as "Process Automation" in the filters.**

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.

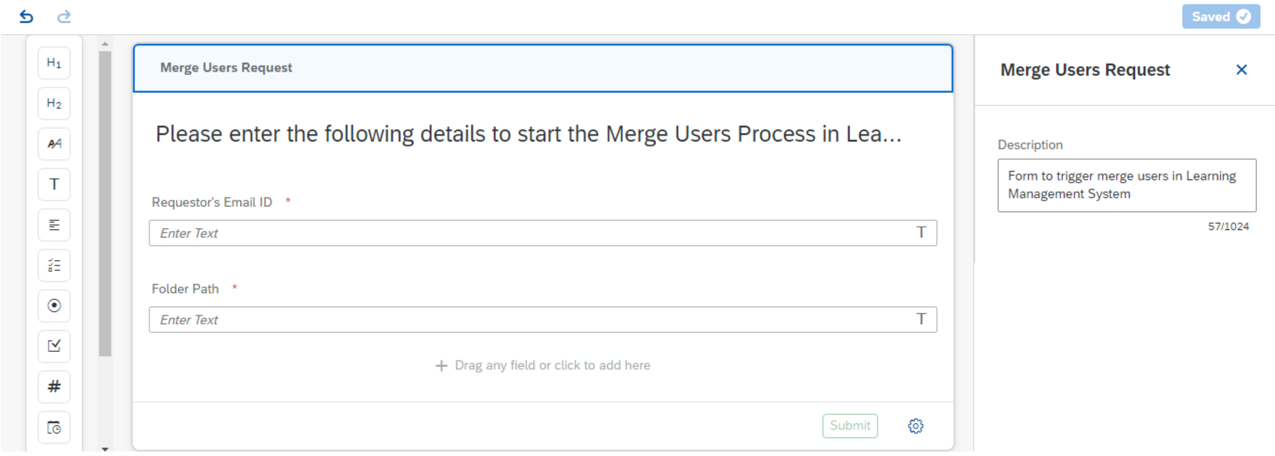
Configure Process

There is no configuration needed in the process, but you extend it based on your requirements.

Configure Forms (Optional)

You can update or extend the forms based on your requirements. To edit the form:

- Double click the form to open the Form Editor
- You can configure existing fields or add new layout or input fields to the form by simply dragging-and-dropping them from the side menu.

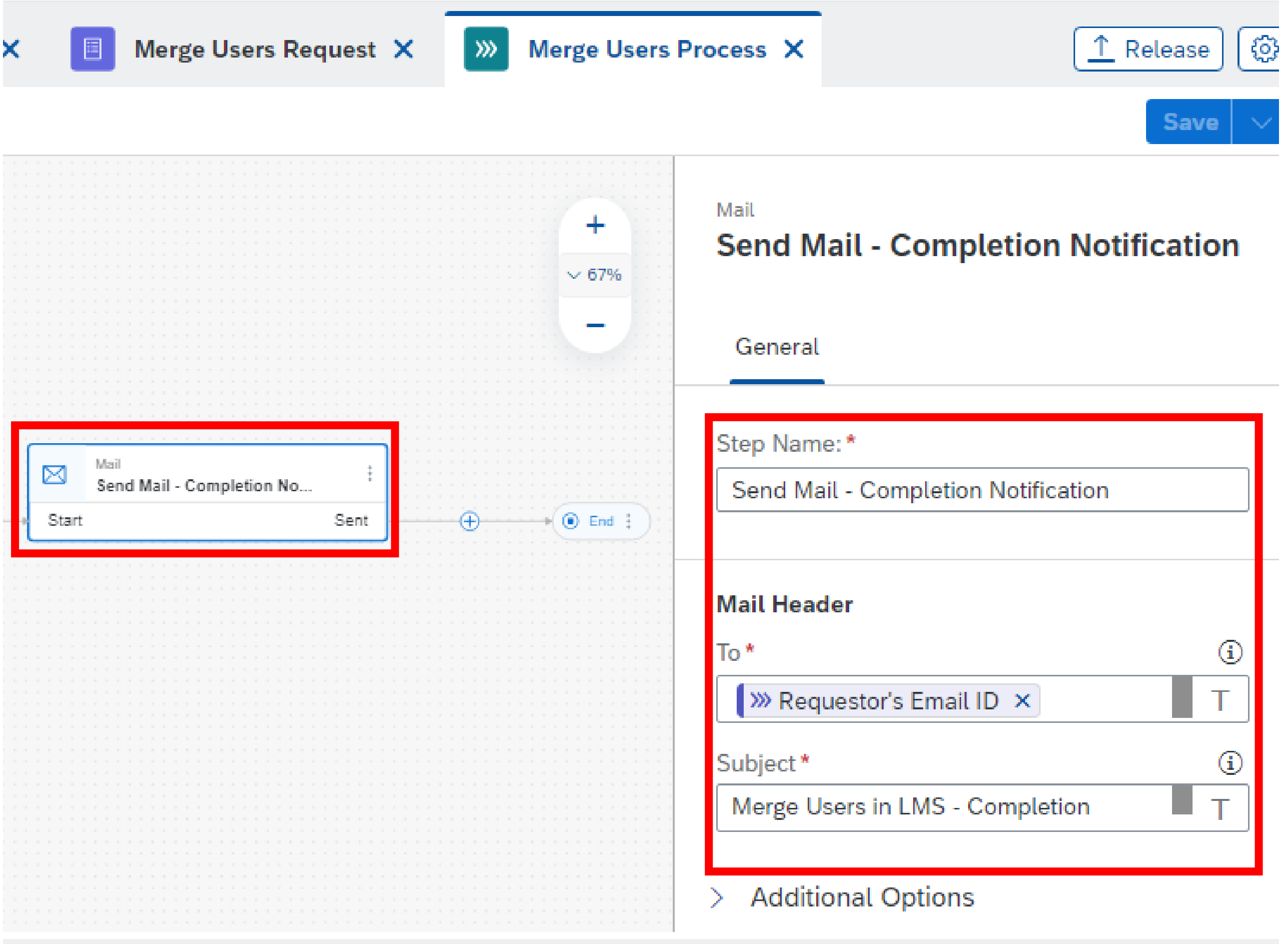


Configure Email

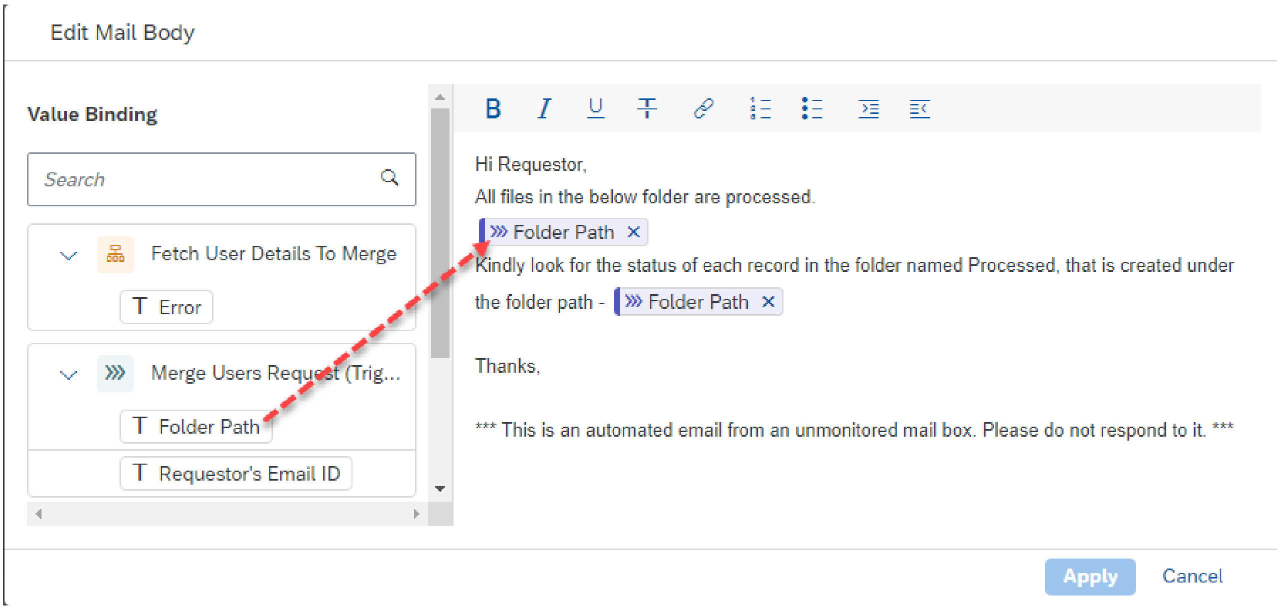
Email notifications are sent to requestors after task execution. All the email artefacts in the process have default template body which can be changed.

To update the email body content, do the following:

- Select the mail artefact in the process.
- From the Settings in the right-side panel, check the Mail Header to confirm the 'To' field (or email recipients) and the Subject. You can adjust the subject and recipient, if needed.
- You may also add someone in 'CC.'
- Click to 'Open Mail Body Editor'.



The mail editor allows you to write and adjust text according to your needs. You can also reuse information that has been collected during the process. If you want to use additional process context data, you can simply drag the fields from the left menu to the editor on the right.



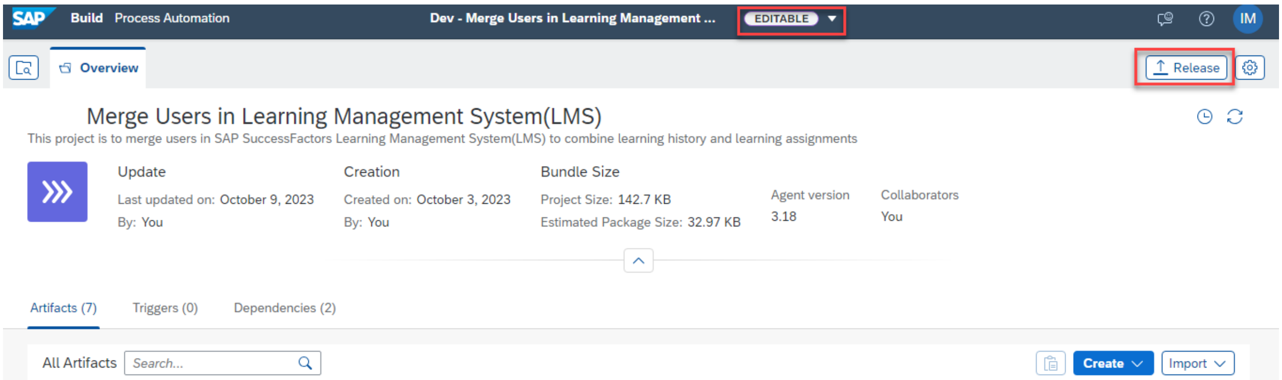
Release and Deploy Process

After configuring your process, it is time to publish, evaluate 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 cannot 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':

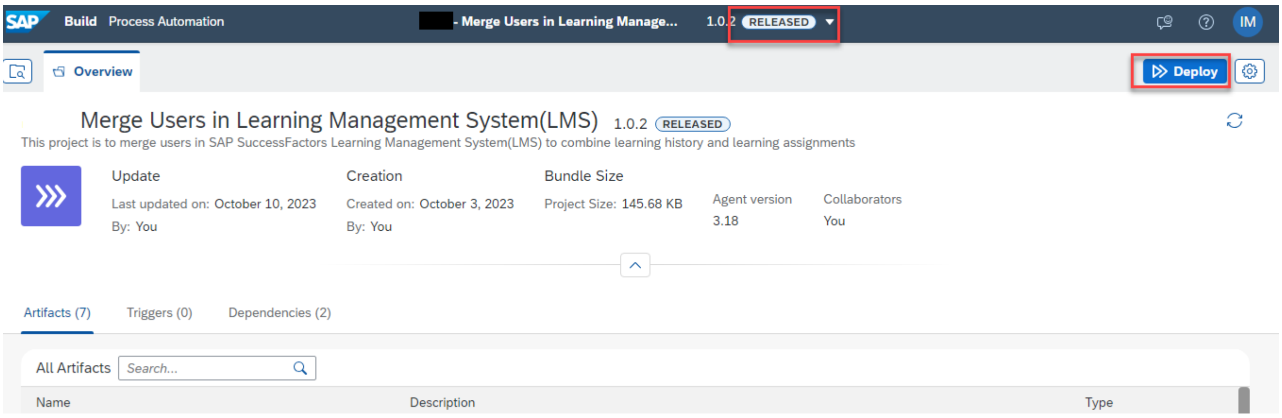


If this is the first time you have released the process, a version labelled 1.0.0 is released. For subsequent releases, you are prompted to select a version type before the process is released.

Deploy – This takes a released version of a process and enables it to be actively run and monitored. A deployed version of this process unlocks the request form, allowing to merge user's learning history in SuccessFactors and send out a successful email notification to requestor.

To deploy a released version of your process,

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



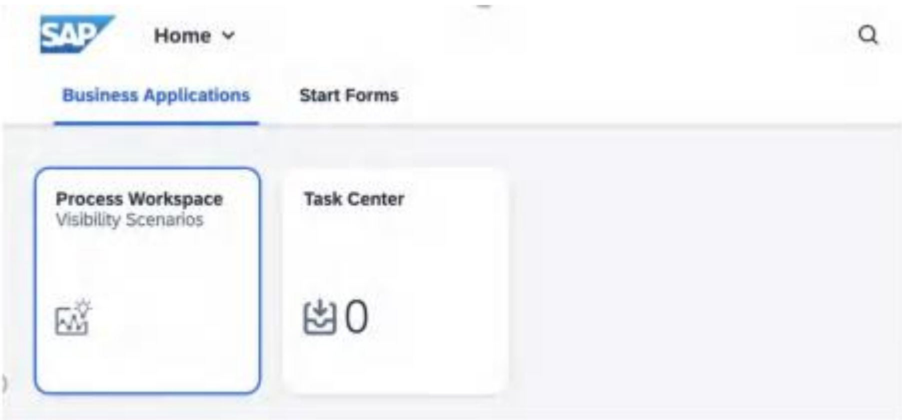
To deploy your project, you will be prompted to provide values in environment variable. Fill in the details of Technical User (Admin), Client Secret, Company ID. For getting the Client Secret, in SuccessFactors system, go to Learning Administration -> System Administration -> Configuration -> OAuth Token Server, click on 'Generate a new Client Secret'. Use the 'Newly generated client secret' and not the 'Client Secret Hash Value'.

Note: If you do not map your environment variable with actual values, then the process will enter Erroneous state when it tries to execute the process.

Configure SAP Work Zone

Now that the process is released and deployed, you can configure SAP Work Zone standard or advanced edition to give access to your business users to track the process and business KPIs using process visibility workspace.

To configure SAP Work Zone standard edition - add Process Workspace and Task Center tile in SAP Work Zone to access the visibility dashboard. Follow the tutorial to configure Work Zone with visibility tiles



User Guide

Capabilities

This template content contains the following key artifacts:
Please refer help documentation about these different artifacts.

Icon	Type	Name	Description
	Process	Merge Users Process	This process is to automate merge users details in Learning Management System
	Automation	Fetch User Details To merge	This automation is used to fetch input details from excel which will be fed into "Merge Users API" automation
	Automation	Merge Users API	This sub automation is used to merge the users learning history in SuccessFactors.

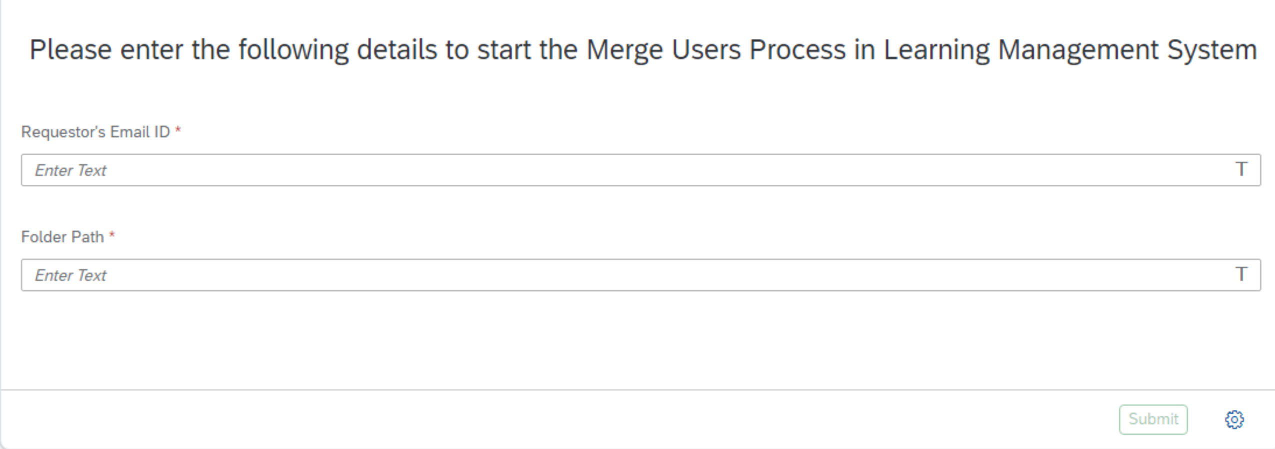
	Form	Merge Users Request	This form is used to trigger the process by taking the requestor email ID and folder path as inputs
	Mail	Send Mail - Completion Notification	This mail step sends a notification to the requestor that the files in folder have been processed
	Mail	Send Mail - Error Notification	This mail step sends a notification to requestor if any error occurs during the process

Forms

Merge Users Request

This is the form used to trigger the Merge User Process.

Each Field needs to be filled.


Please enter the following details to start the Merge Users Process in Learning Management System

Requestor's Email ID *

Enter Text

Folder Path *

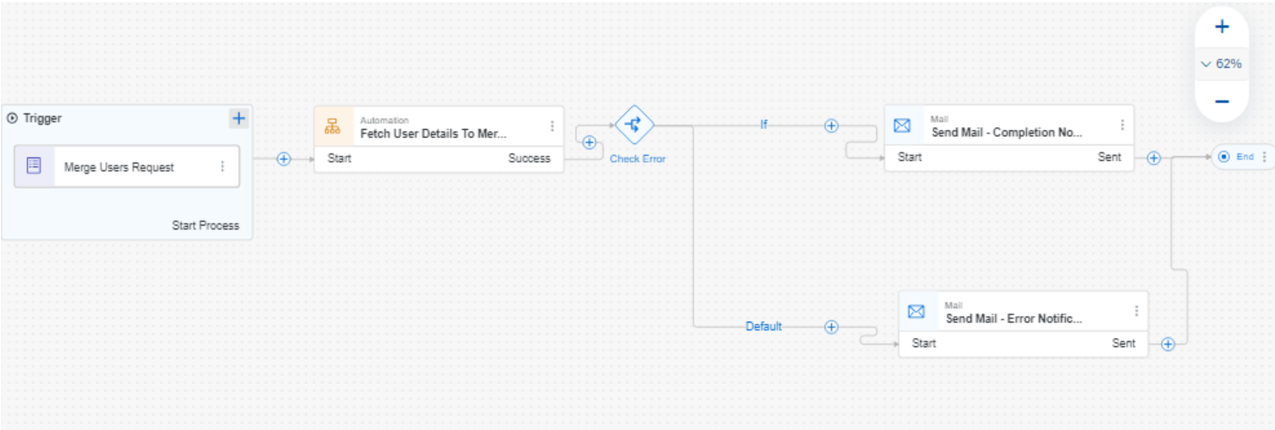
Enter Text

Submit

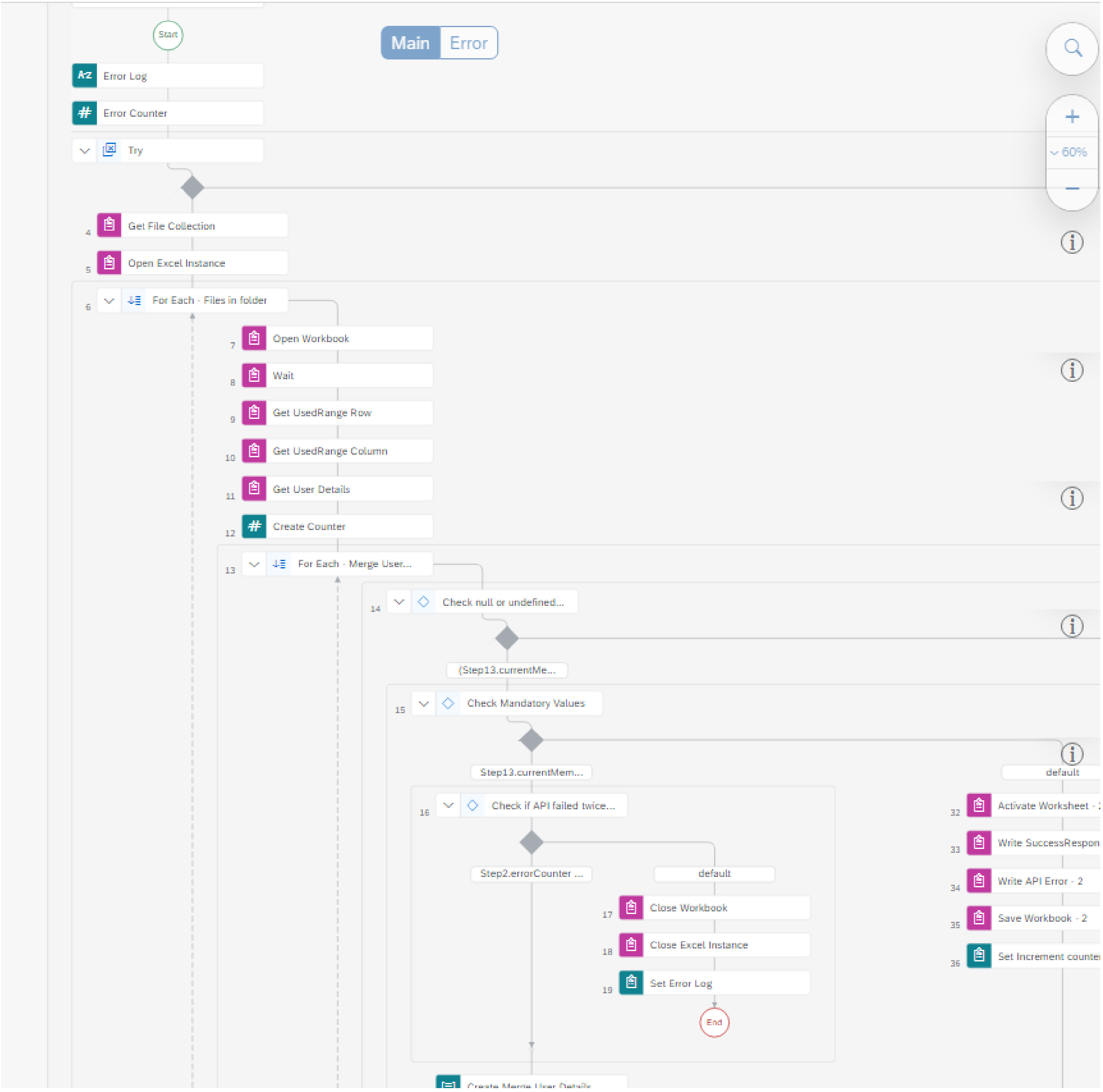
Process

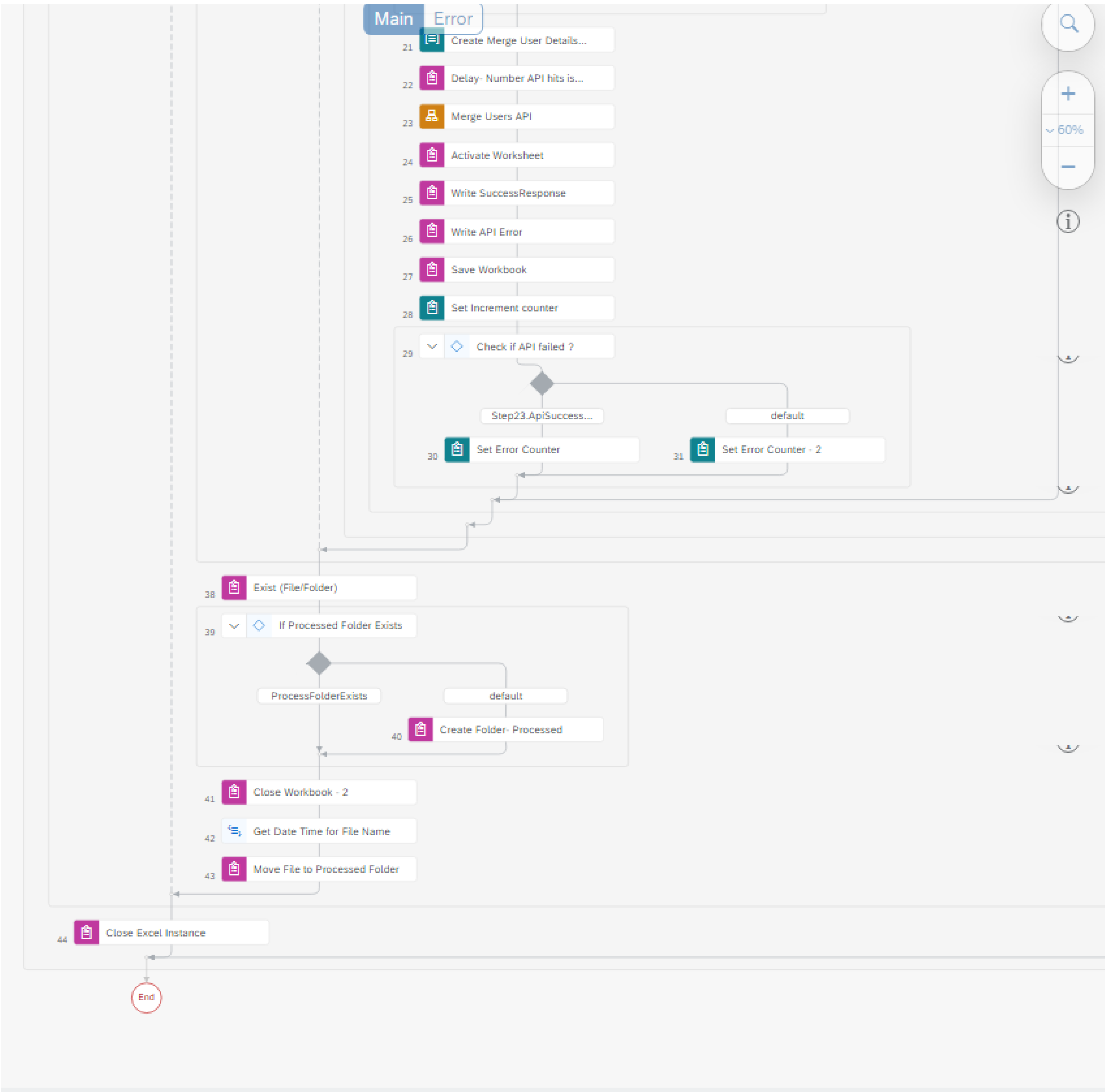
Merge User Process

This is the main process that initiates the trigger to start the process, fetch the user's details from excel and merge the learning history of user in SuccessFactors.



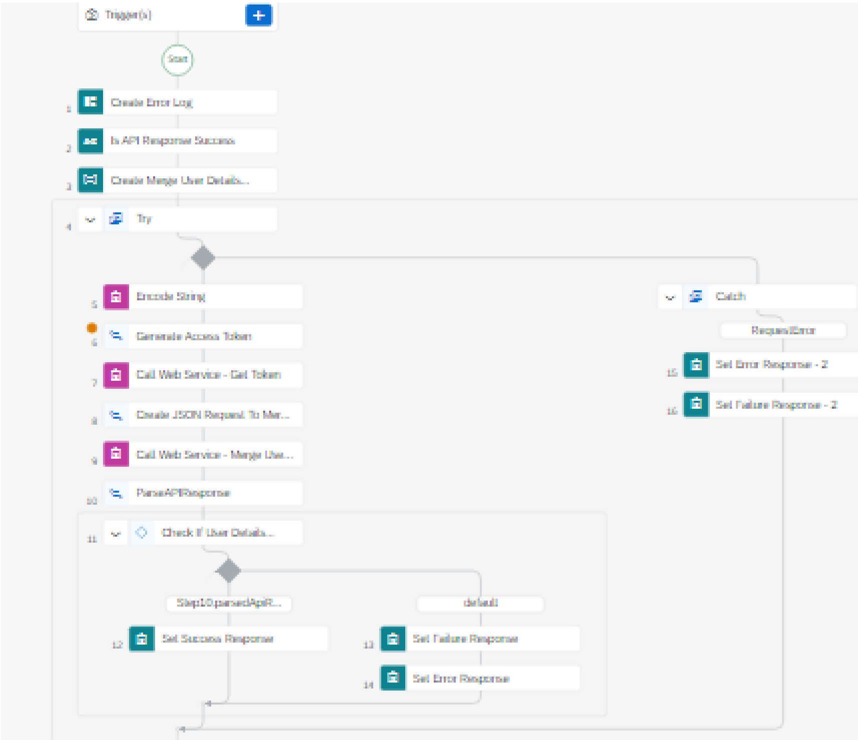
Fetch User Details To Merge





Step 1: Create error log variable.
Step 2: Create counter variable.
Step 3 to Step 11: Open excel and get all Users details.
Step 12: Create increment variable.
Step 13 to Step 21: Loop through each record in the file and trigger Merge Users API
Step 22 to 28: Based on the response from API, log the response in the file.
Step 29 to Step 36: Check if API failed to merge users ID.
Step 38: Check for “Processed” folder exists.
Step 39 to Step 43: If Processed folder exists then move the processed file to Folder, else create the folder named “Processed” and move the processed file to the folder.
Step 44: Close Instance

Merge Users API



Step 1: Create Error Log variable.
Step 2: Create API Response variable.
Step 3: Create Merge users Input variable.
Step 4 to Step 14: Call the success factors API by passing required API inputs to Merge Users ID and parse the response received either success or failure and store the response in the variable.

Email Notifications

The main process contains an email task to notify the requestor that merge users process has been completed.

Run an Automation in attended mode

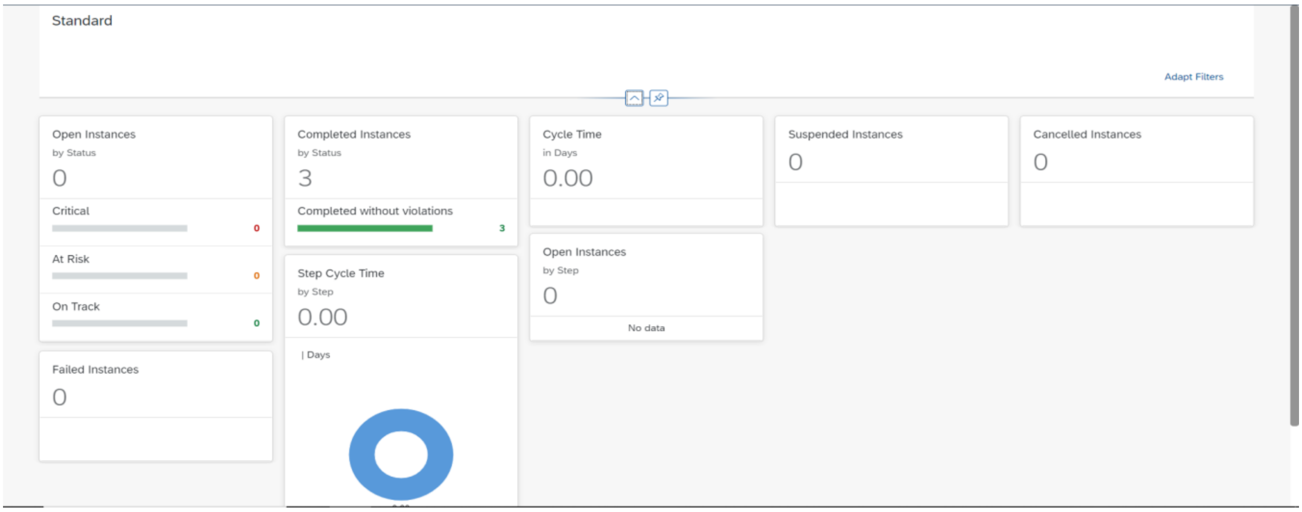
The following table provides steps to run the automation in attended mode.

Step	Instruction
Launch Desktop Agent	Launch Desktop Agent, make sure that the **unattended** mode is selected in the **Projects** tab of the Desktop Agent.
Open SAP Build Process Automation	Perform the following to release and deploy the task automation: • Navigate to the **Store** and search for the **Merge Users in Learning Management System (LMS)** package. • Click **Add** to add the package to the **Lobby**. • In the **Lobby**, click the project to open the **Overview** page. • Click **Release** and then click **Deploy**. For steps to release and deploy a project, see the [Managing Existing Projects](#) topic.

Trigger	Note: • Open deployed version of the package. • Click on the trigger form and copy the trigger link. • Open browser and paste the trigger link copied and click enter. • Form will appear. Enter Requestor E Mail Id and the Folder path where the excel template files are saved. • Click on Submit.
Monitor the Job	Open SAP Build Process Automation and click Monitor > Automation Jobs. You should see your job in the list. If not, adjust the date range on the Jobs page and refresh the page. For more details, refer the [Automation Jobs](#) topic.
Check for Report	After your job status is complete, verify that documents are moved to the ‘Processed’ folder and notification emails are sent to the requestor.

Process Visibility Scenario

The visibility scenario is a dashboard which allows business users to track relevant process KPIs and statuses. A default dashboard is provided with this template, and it can be customized by selecting attributes from your process which you want to track in the process dashboard. You can read more here



Support

There is no support available for the template content. If you experience general issues with SAP Build Process Automation, raise an incident via SAP Support Portal on **BPI-PA-BPC** component.
This template can be modified using SAP Process Automation. For example: add decision 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.