

Hands-on Lab: Processing Documents from the Shop Floor with SAP Build & Document AI

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<https://vasscompany.com>

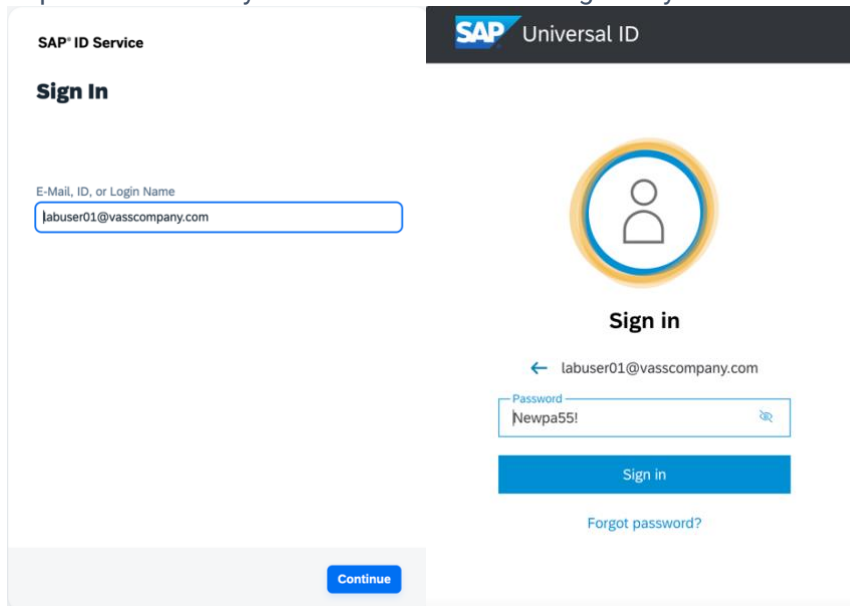
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Environment Information

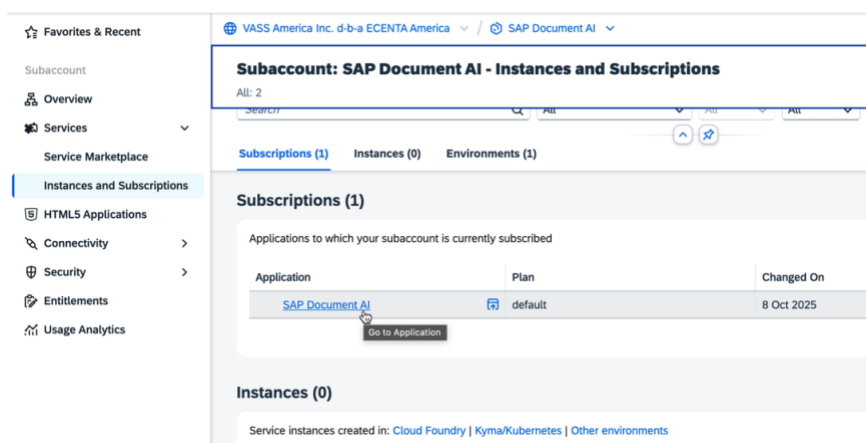
- Please use GOOGLE CHROME as your browser
- SAP BTP URLs:
 - [Global Account Direct Link](#)
 - [SAP Build Sub Account Link](#)
 - [SAP Document AI Sub Account Link](#)
- SAP Build App URLs
 - [SAP Build Apps](#)
 - [SAP Document AI Link](#)
- Lab User Information
 - User: **labuser<##>@vasscompany.com**
 - Password: Newpa55!
- Replace <##> with your Lab User Number assigned by the instructors



The image shows the SAP ID Service 'Sign In' interface. At the top, it says 'SAP ID Service' and 'SAP Universal ID'. The main heading is 'Sign In'. Below this, there is a text input field for 'E-Mail, ID, or Login Name' containing 'labuser01@vasscompany.com'. To the right of this field is a circular icon with a person silhouette. Below the icon is the text 'Sign in'. Underneath that is a text input field for 'Password' containing 'Newpa55!'. Below the password field is a blue 'Sign in' button. Below the button is a link for 'Forgot password?'. At the bottom left, there is a 'Continue' button.

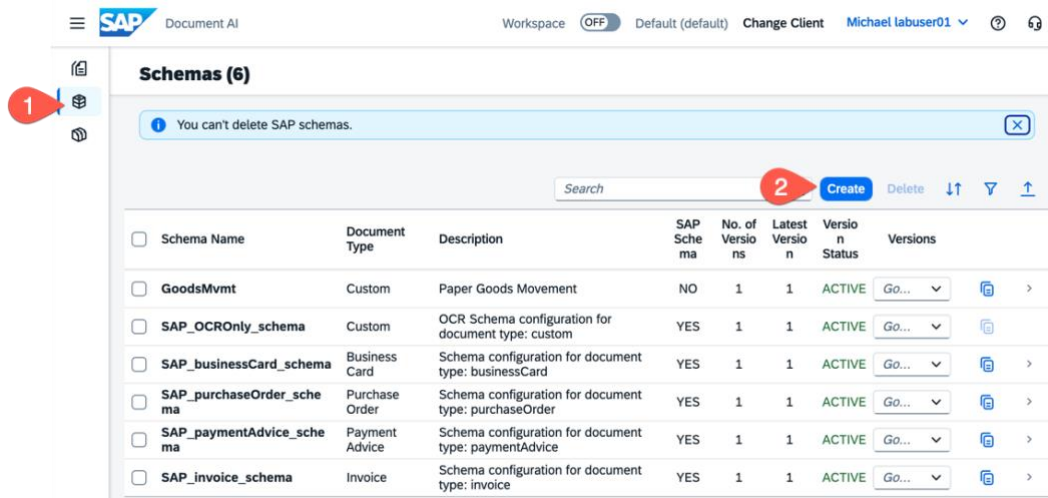
Configure SAP Document AI

1. Open an Incognito Browser and navigate to the SAP BTP Cockpit
 - a. <https://amer.cockpit.btp.cloud.sap/cockpit>
2. Navigate to the 'SAP Document AI' Subaccount
3. Navigate to *Instances and Subscriptions* > *SAP Document AI*
4. Click on the hyperlink to access the application



The image is a screenshot of the SAP BTP Cockpit interface. The left sidebar shows a navigation menu with 'Favorites & Recent' at the top, followed by 'Subaccount', 'Overview', 'Services', 'Service Marketplace', 'Instances and Subscriptions' (which is highlighted), 'HTMLS Applications', 'Connectivity', 'Security', 'Entitlements', and 'Usage Analytics'. The main content area shows the 'Subaccount: SAP Document AI - Instances and Subscriptions' page. It has a search bar and filters. Below this, there are three tabs: 'Subscriptions (1)', 'Instances (0)', and 'Environments (1)'. The 'Subscriptions (1)' tab is active, showing a table of subscriptions. The table has columns for 'Application', 'Plan', and 'Changed On'. There is one subscription listed: 'SAP Document AI' with plan 'default' and changed on '8 Oct 2025'. Below the table, there is a 'Go to Application' button. At the bottom, there is a section for 'Instances (0)' with a note: 'Service instances created in: Cloud Foundry | Kyma/Kubernetes | Other environments'.

5. If prompted, enter your Lab UserID and Password
6. Next, we're going to create a new custom schema to configure that data elements we want Document AI to extract from the documents we upload
7. Click on Schema Configuration from the left navigation
8. Then select Create



9. On the New Schema prompt enter the following data
 - a. Name: labuser##_gm
 - b. Description: Labuser## Goods Movement
 - c. Document Type: Custom
 - d. OCR Engine Type: Document
10. Click Create

Create New Schema

Name: *

Description:

Document Type: *

OCR Engine Type: *

11. Next, click Add within the Header Fields section. Enter the data below
 - a. Name: Source_Bin
 - b. Label: Source Bin
 - c. Description: Source Bin
 - d. Data Type: String
 - e. Setup Type: Auto
12. Click Save. And repeat for the following fields

Name:	Label:	Description	Data Type	Setup Type
Target_Bin	Target Bin	Target Bin	String	Auto
Product	Product	Product	String	Auto
Quantity	Qty	Quantity	String	Auto
Notes	Notes	Notes	String	Auto
UoM	UoM	UoM	String	Auto

13. After you have entered all fields, click Activate.

Schemas (7)

You can't delete SAP schemas.

Search

labuser01_gm (1)

Document Type: Custom
SAP Schema: NO
Version Status: INACTIVE
Versions: Go to Version

GoodsMvmt

Document Type: Custom
SAP Schema: NO
Version Status: ACTIVE
Versions: Go to Version

SAP_OCROnly_schema

Document Type: Custom
SAP Schema: YES
Version Status: ACTIVE
Versions: Go to Version

labuser01_gm

Version: 1
Description: Labuser01 Goods Movement
Document Type: Custom
Creation Date: October 19, 2025
Status: DRAFT

Workspace OFF Default (default) Change Client Michael labuser01

Create 3 Activate Edit Copy Export Delete

Header Fields

Line Item Fields

Header Fields

2 Add

Name	Label	Description	Data Type	Action
Source_Bin	Source Bin	Source Bin	string	
Target_Bin	Target Bin	Target Bin	string	
Product	Product	Product	string	
Quantity	Qty	Quantity	string	
Notes	Notes	Notes	string	
UoM	UoM	Unit of Measure	string	

Line Item Fields

14. Next, we're going to upload a document to process as a test scenario.

15. Click on Documents in the Left Navigation.

16. The click the + symbol to Upload a Document.

Documents (8)

Search Documents by Name

2 + Delete

Document Name	Upload Date	Status
RM013 Transfer.pdf Custom	October 19, 2025	PENDING
RM013 Transfer.pdf Custom	October 19, 2025	DONE
RM013 Transfer.pdf Custom	October 19, 2025	CONFIRMED
sample-invoice-1.pdf Invoice	October 15, 2025	DONE
Bin_Bin1.pdf Custom	October 15, 2025	DONE
sample-invoice-2.pdf Invoice	October 15, 2025	CONFIRMED
Bin_Bin1.pdf Custom	October 14, 2025	DONE
Bin_Bin1.pdf Custom	October 13, 2025	DONE

Workspace OFF Default (default) Change Client Michael labuser01

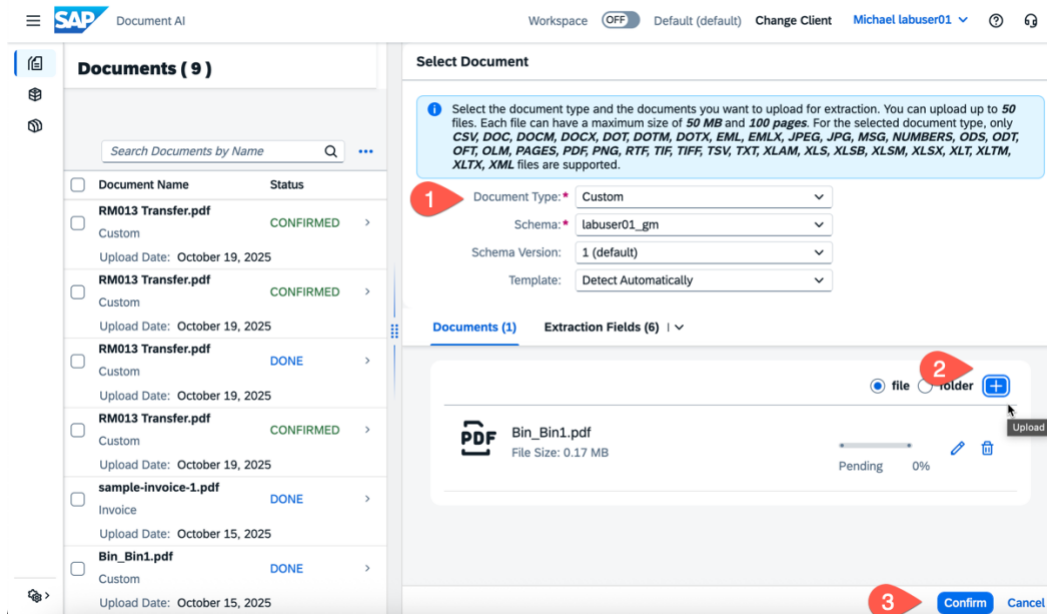
17. Select the following values from the Drop Down Displayed

- Document Type: Custom
- Schema: labuser##_gm
 - Replace ## with your labuser number from above
- Schema Version: 1 (default)
- Template: Detect Automatically

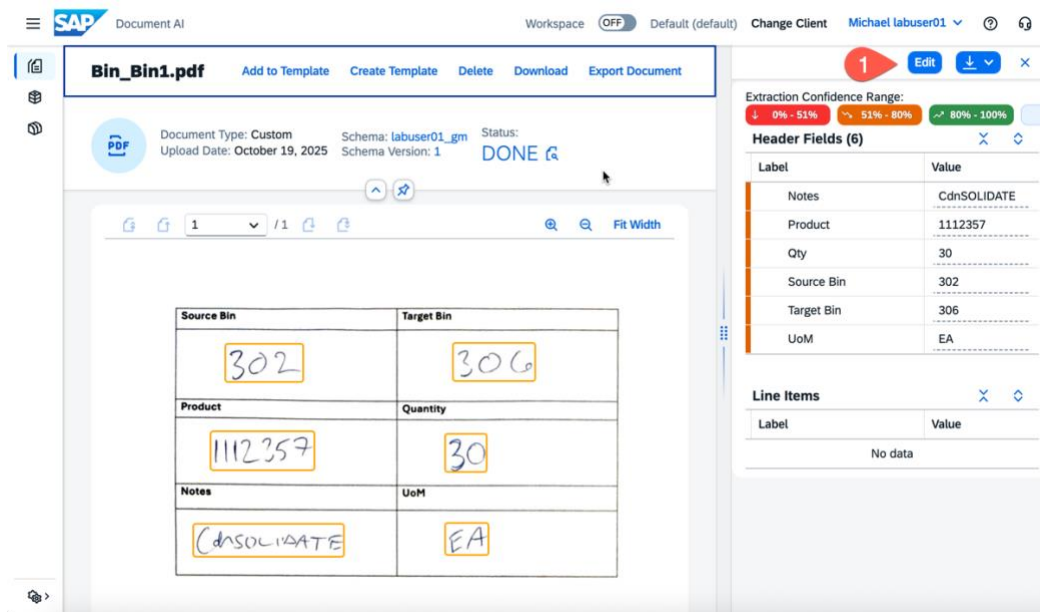
18. Click the + symbol again to select a document stored locally

- The instructors will provide files to you before the lab

19. Once you've selected a document, click the Confirm Button



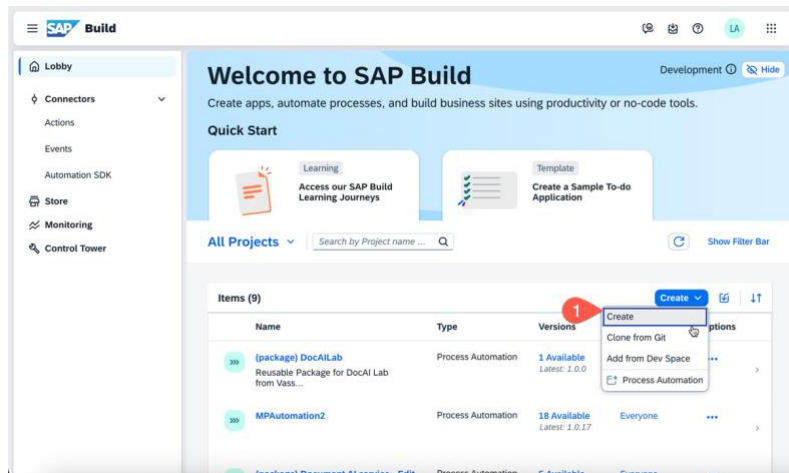
20. The **Status** will be displayed as **PENDING** initially. Wait 30-60 seconds and the status should update to **DONE**
21. Select your Document Line to view the results.
22. Select the Edit button to confirm or updated any results



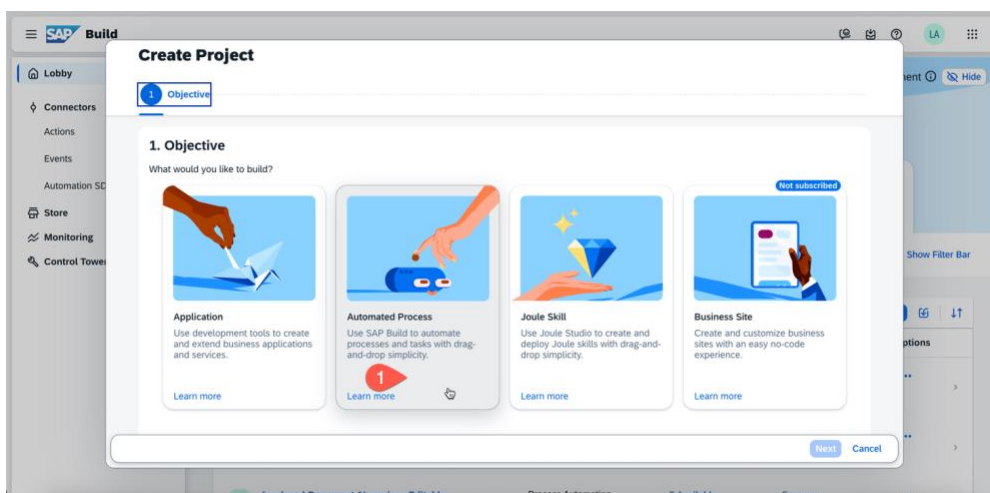
23. Congratulations! You've successfully defined a document schema for SAP Document AI to process! Documents upload via the Document AI API can be processed asynchronously and the resulting extracted output can be used in other processes.

Create an Automation with SAP Build

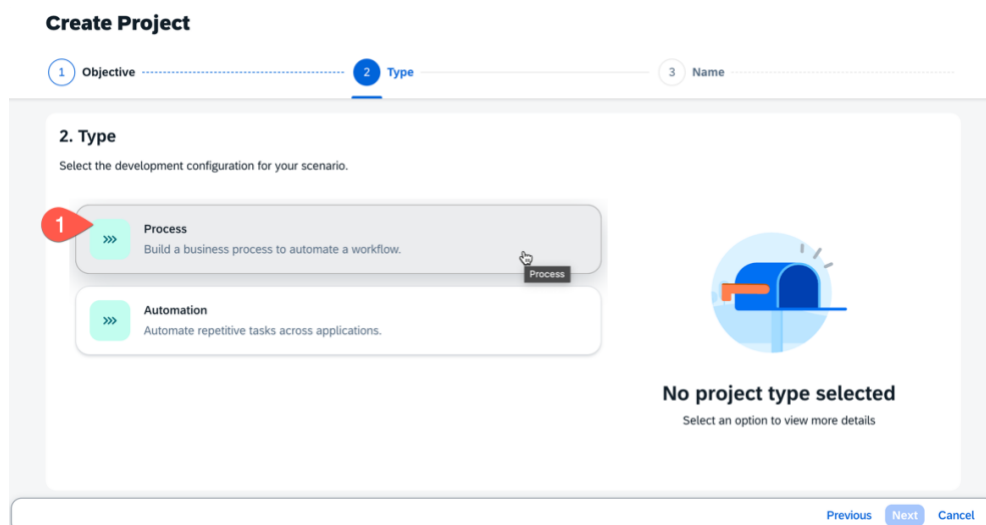
1. Logon to SAP Build by directly clicking the link below
 - a. [SAP Build Apps](#)
 - b. or by navigating to <https://amer.cockpit.btp.cloud.sap/> > Sub Account > SAP Build TDD > Instances & Subscriptions > Subscriptions > SAP Build Apps
2. If prompted, login with the Lab UserID information provided earlier
3. From the Lobby, click Create > Create



4. Select Automation Process



5. Select Process



6. Enter the data below

- Name: Labuser##_DocAI
- Description: Labuser##_ Document AI

Create Project

1 Objective 2 Type 3 Name

3. Name

Give your project a name.

Name: *

LABUSER01_DocAI

Description:

Labuser01 Document AI

Previous Review Cancel

7. Click Review
8. Click Create
9. A new browser tab will open
10. Click 'Accept' if shown a disclaimer
11. Enter the following on the prompt to *Create Process*
 - a. Name: Labuser##_Process
 - b. Identifier: Labuser##_Process
 - c. Description: Labuser##_ Process Documents

Create Process

Name: *

Labuser01_Process


Identifier: *

labuser01_Process

Description:

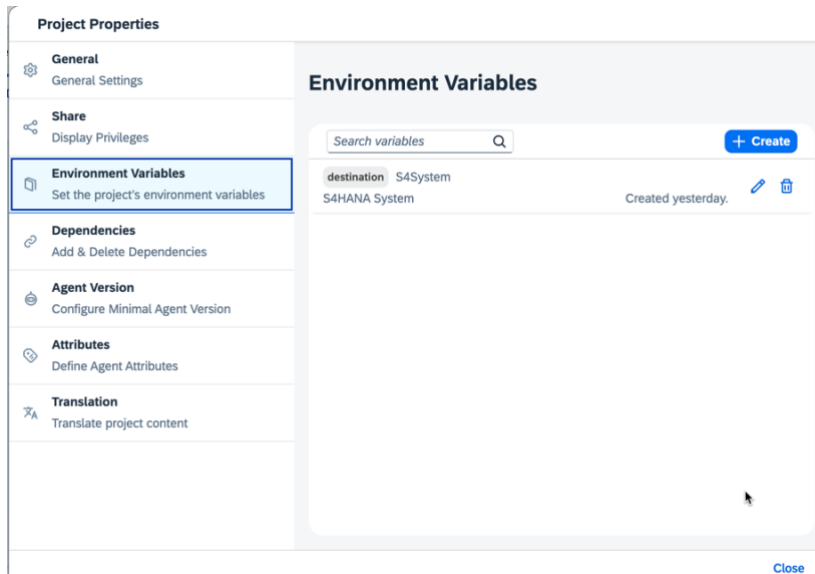
Labuser01 Process Documents

Create Cancel

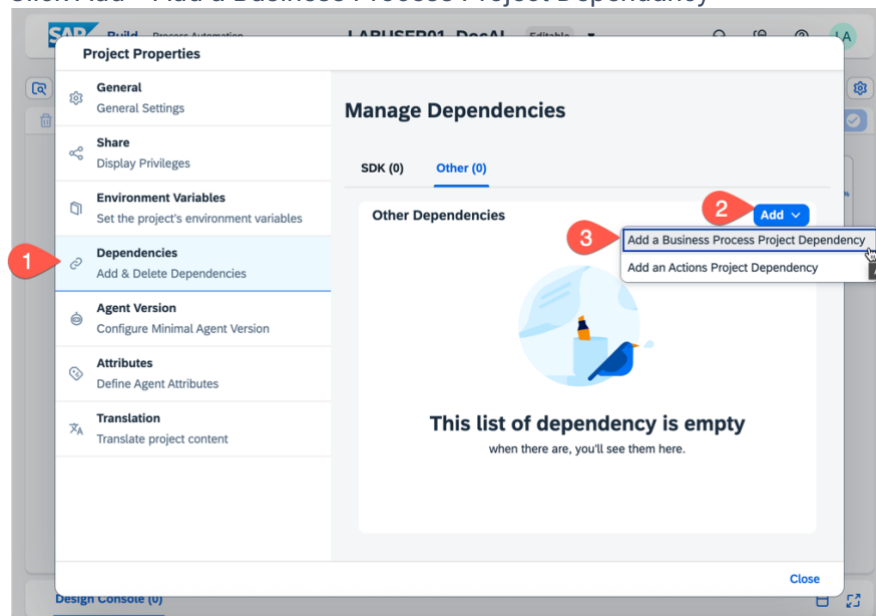
12. Before we add automations and processes we need to configure some additional settings.
13. Click the Settings  icon in the upper right
14. Navigate to *Environment Variables* and Click *Create*
15. Add the following Variables

Identifier	Description	Type
S4System	S4HANA System	Destination

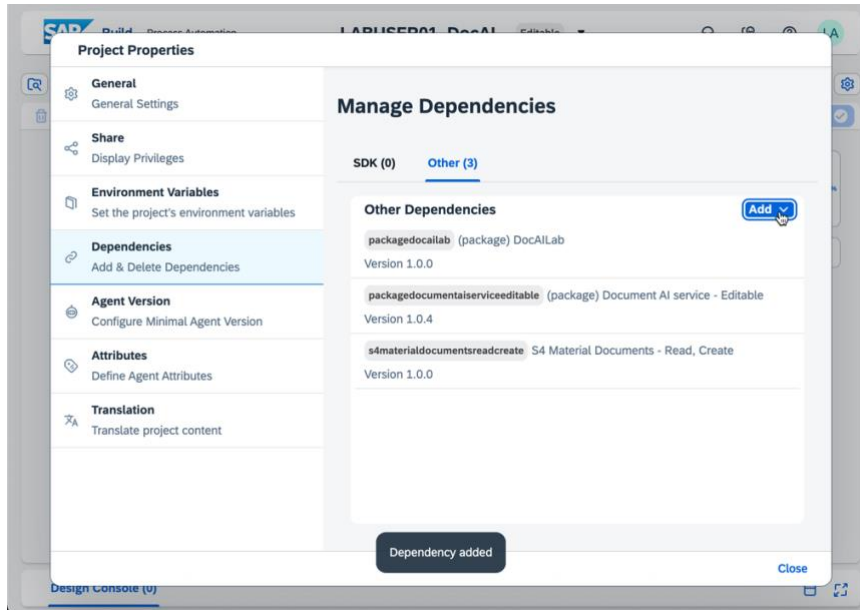
16. The variables should look like the below image when done.



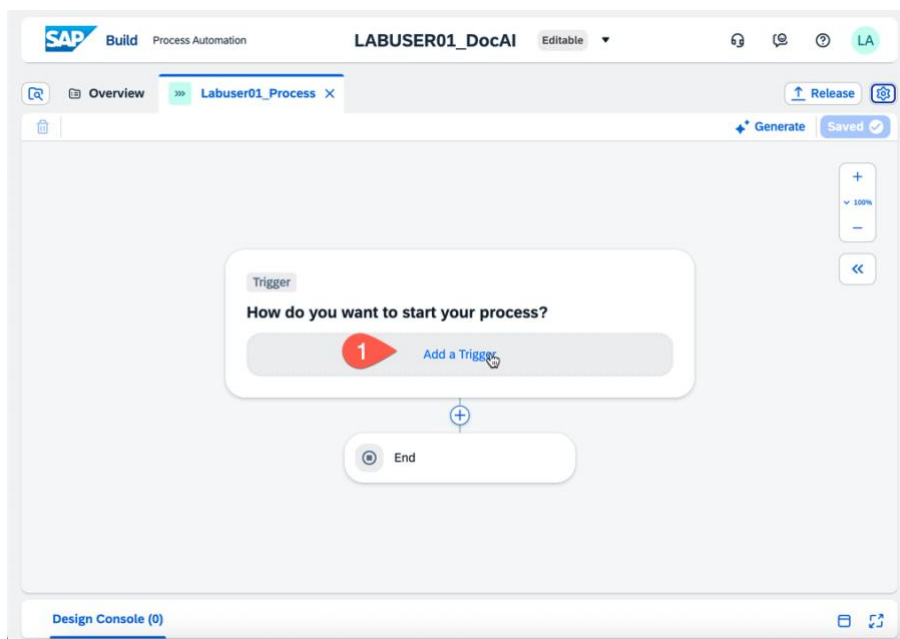
17. Next, navigate to *Dependencies* in Project Properties
18. Click Add > Add a Business Process Project Dependency



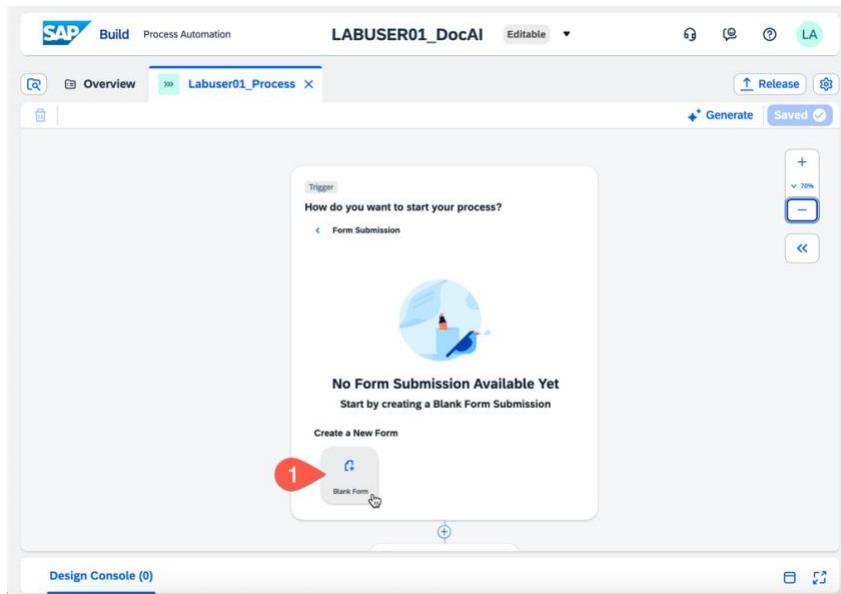
19. Add a dependency for the following packages
 - a. (package) DocAILab {latest version}
 - b. (package) Document AI service – Editable
20. Next, select Add an Actions Project Dependency and select the following
 - a. Creates a material document / Project: S4 Material Documents - Read, Create
21. Your Project Settings Dependencies should look like the following screenshot.



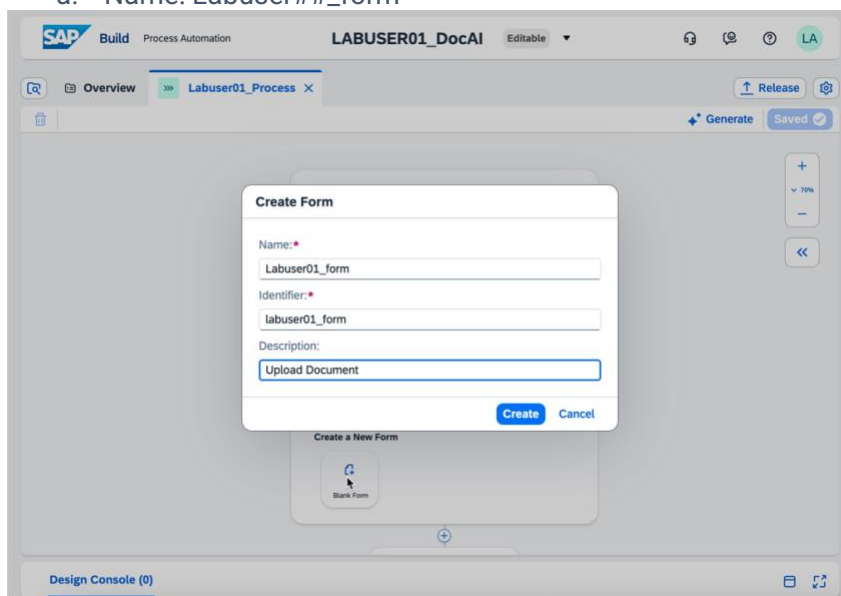
22. After adding your Environment Variables and Dependencies click *Close*
23. Select the button 'Add a Trigger'



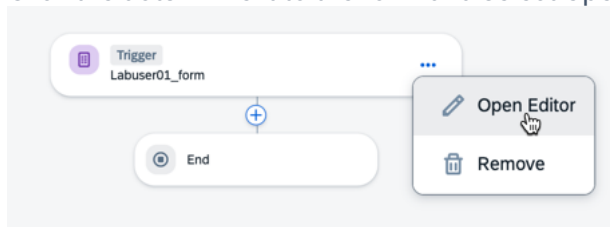
24. Select *Submit a Form*, on the next screen
25. Select *Create a New Form, Blank Form*



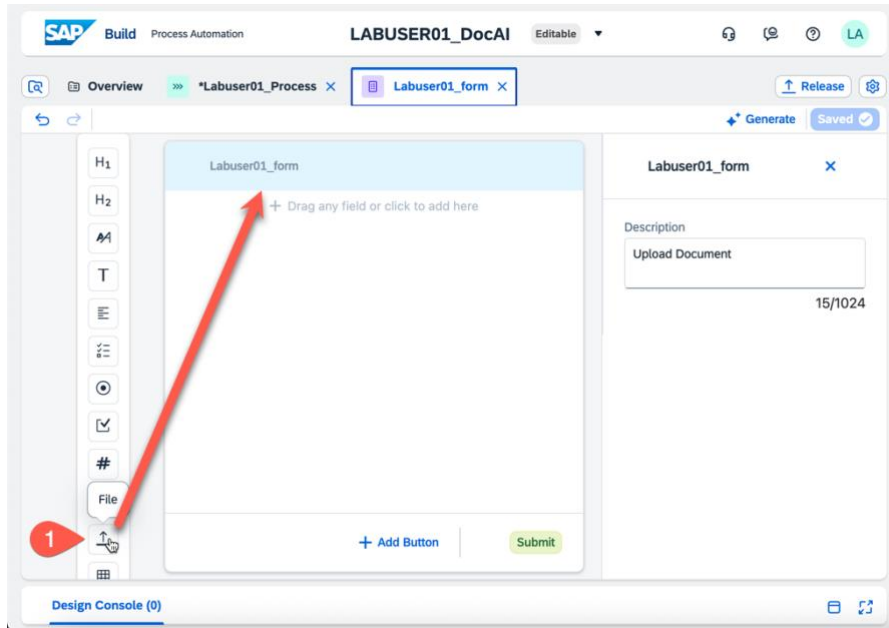
26. Enter a Name for the form in the format below
a. Name: Labuser##_form



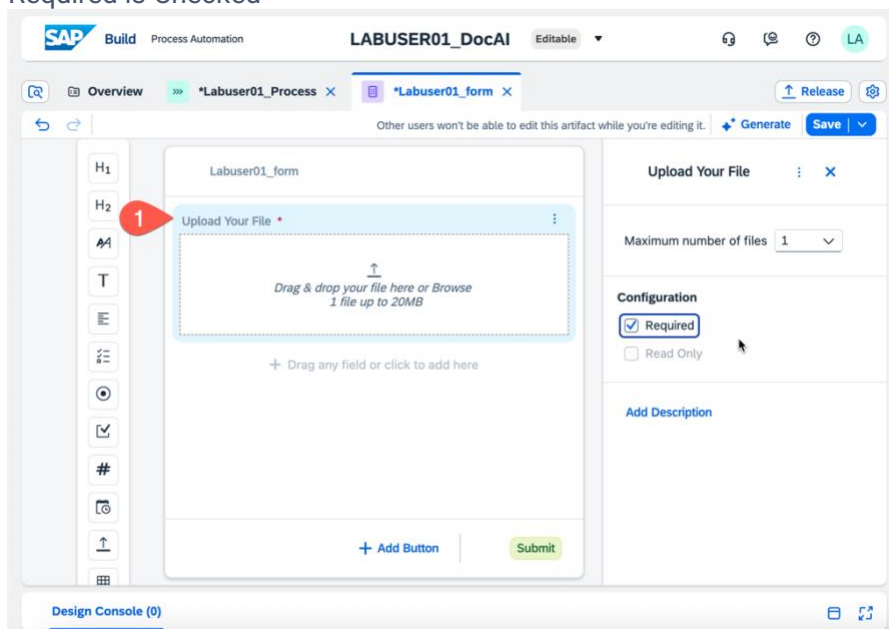
27. Click Create
28. Click the dots (...) next to the form and select Open Editor



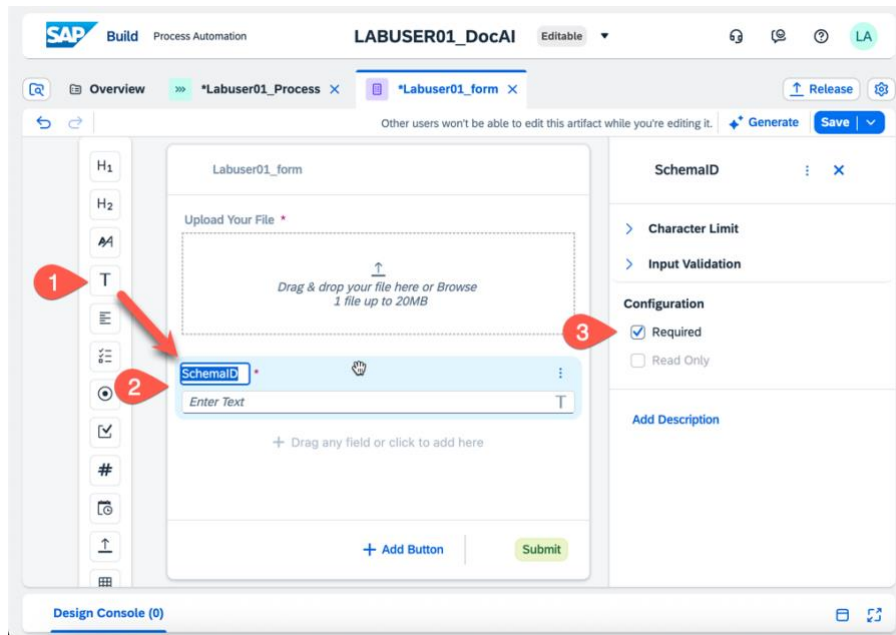
29. Drag the 'Upload File' button to the Form Canvas



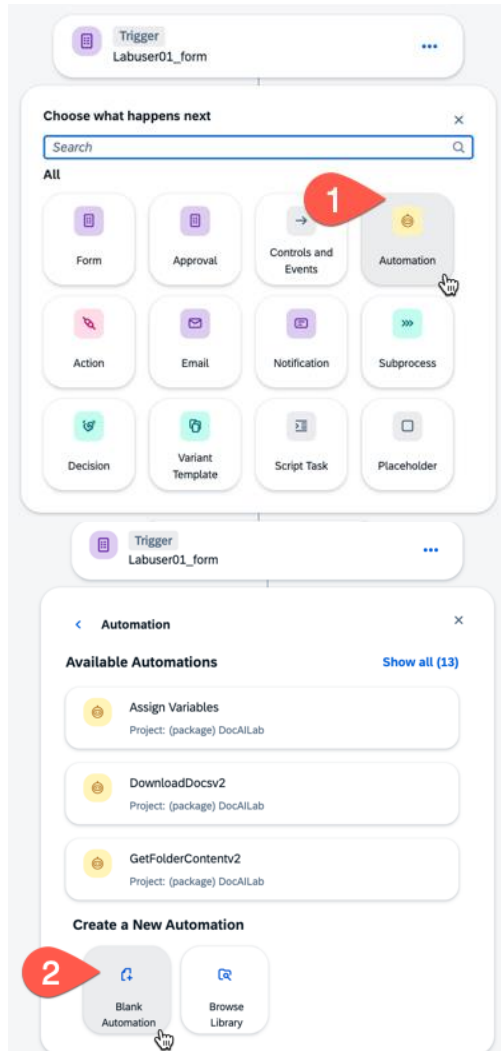
30. Enter a Field Header Text; for example 'Upload Your File'
31. Maximum Number of Files is '1'
32. Required is Checked



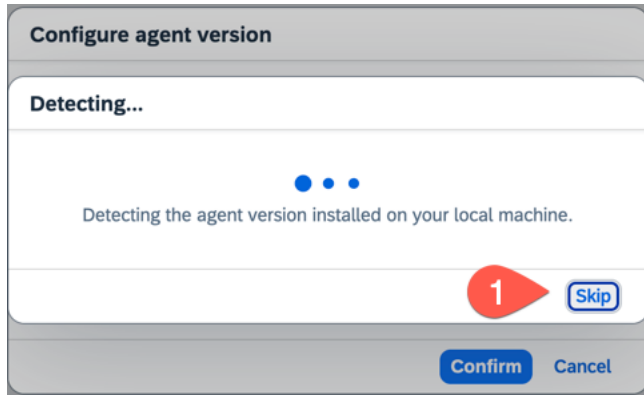
33. Next, we're going to add a field to input a *SchemaID*. This is not something we would ask an enter user to select. We've added to the demo to show how we can add input fields to a form.
34. Select the *Text* icon and drag to the canvas. Enter *SchemaID* as the field header, check the box for Required.



35. Click Save and then close the form tab within the SAP Build UI by clicking the blue ✕
36. You're now viewing your Process. Click the ⊕ icon below your Form
37. Select Automation then Blank Automation

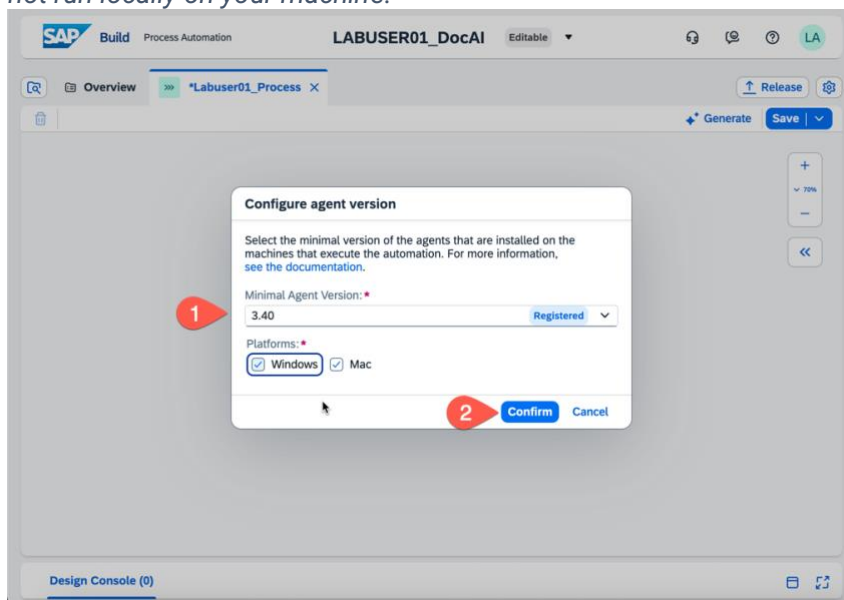


38. **IMPORTANT:** Select SKIP when prompted to Detect Agent Version



39. When prompted, select Agent Version 3.40 and **check the boxes for Windows and Mac**

40. Note: The Agent is running on a central machine with MacOS for the lab. The automation does not run locally on your machine.

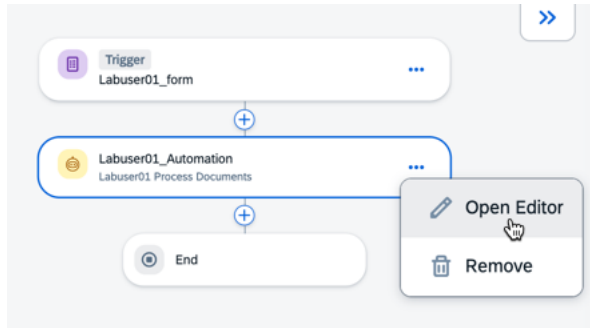


41. Enter the following value when prompted for Create Automation

a. Name: Labuser##_Automation

42. Click Create

43. Select the dots next to your newly created Automation and select Open Editor



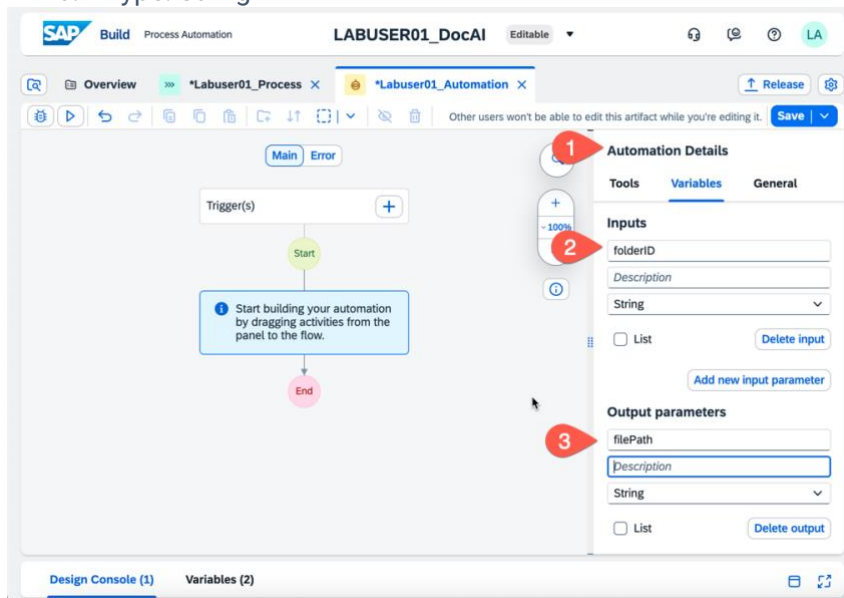
44. Before clicking on anything, select **Variables** under Automation Details on the right.

45. Add an Input Variable

- a. Name: folderID
- b. Type: String

46. Add an Output Variable

- a. Name: filePath
- b. Type: String

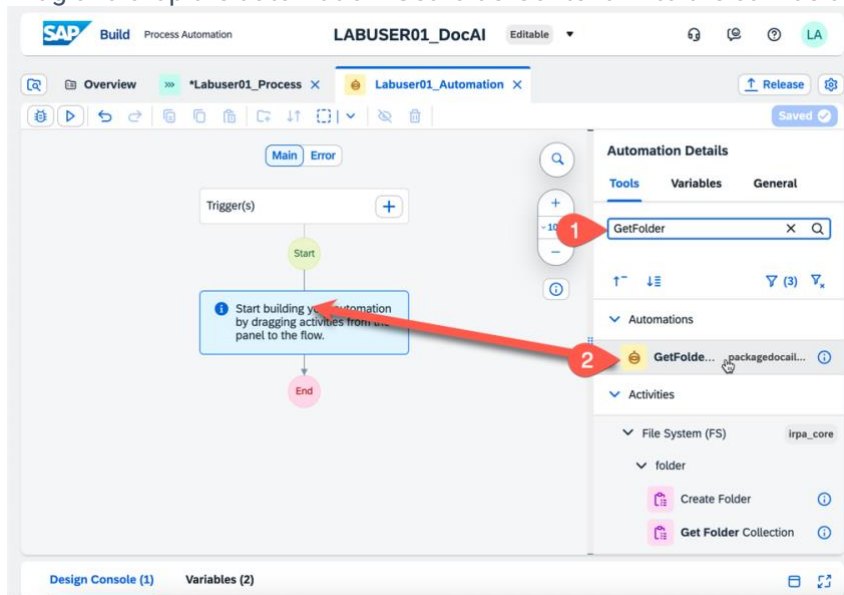


47. Click Save

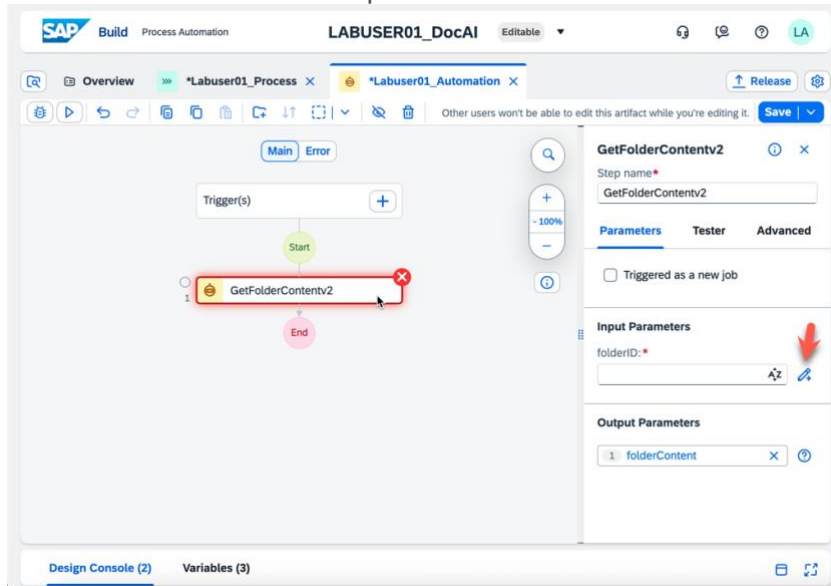
48. Select **Tools** under Automation Details then expand Automations

49. Type 'GetFolder' in the Search box

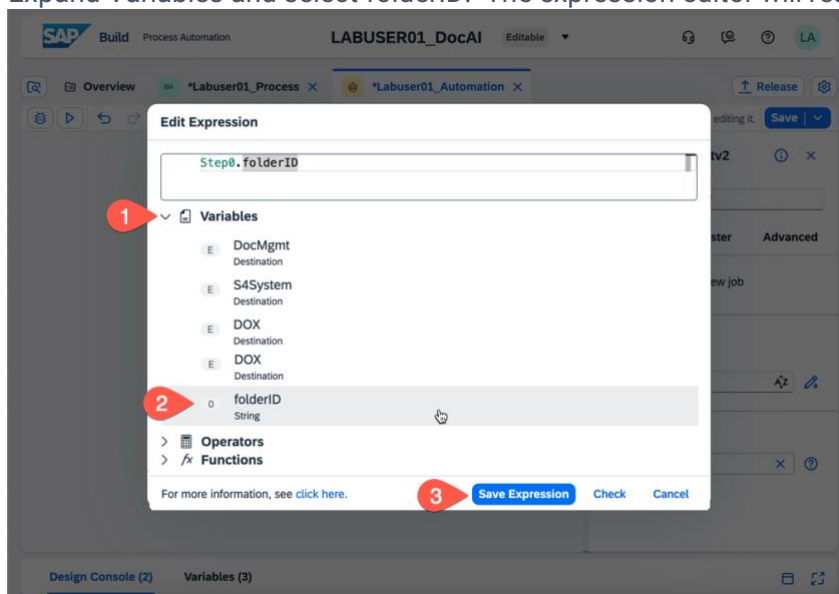
50. Drag and drop the automation 'GetFolderContentv2' to the canvas after Start



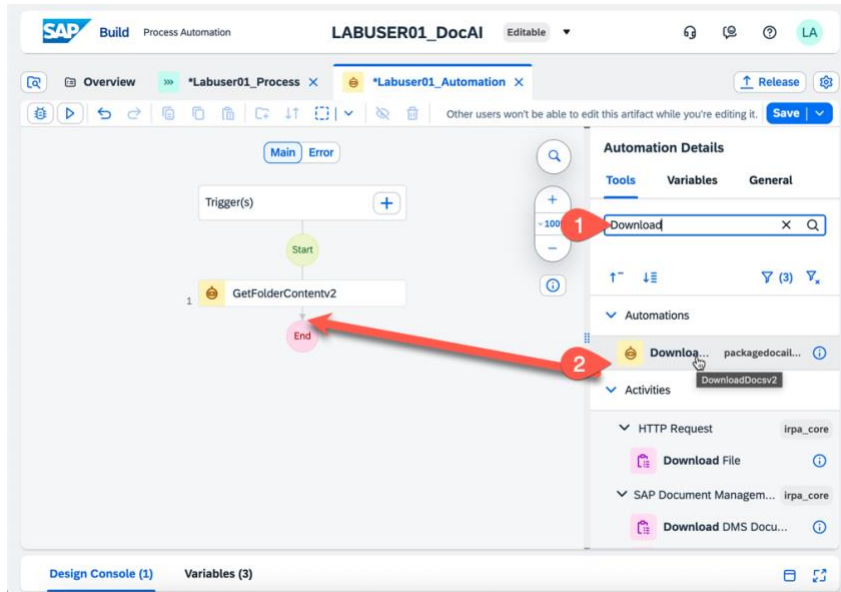
51. There will be a red X on the automation you just added.
52. Click on the Automation
53. Click the Pencil next to the Input Parameter *folderID*



54. Expand Variables and select folderID. The expression editor will read Step0.folderID

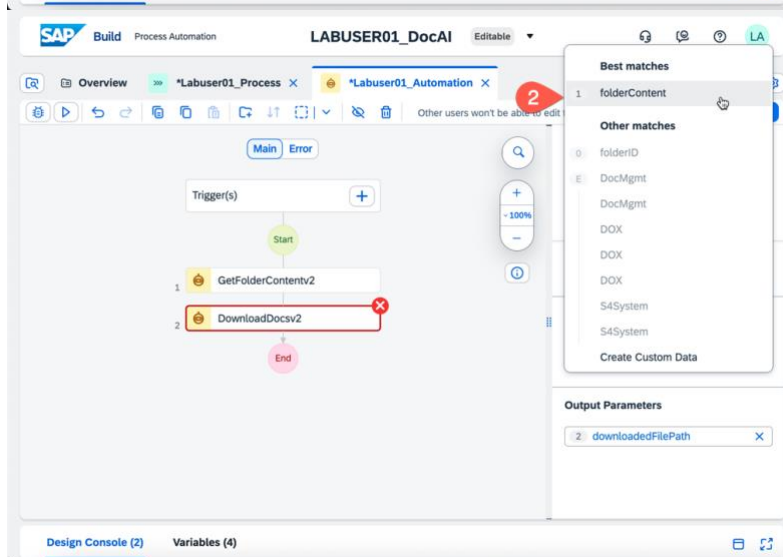
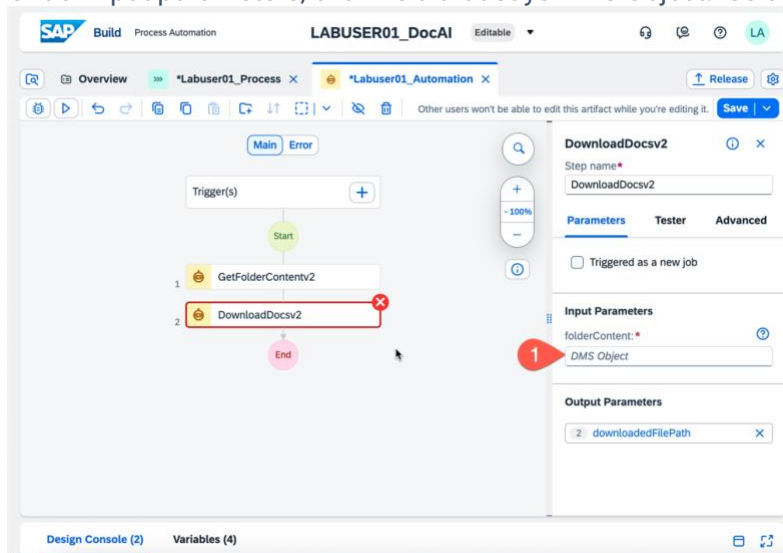


55. Click Save Expression
56. Next, click any blank grey part of the canvas to remove the focus on the automation you just added.
57. Under Tools, Search 'Download' and select the Automation 'DownloadDocsv2'. Drag the automation to the canvas just after the previous automation.

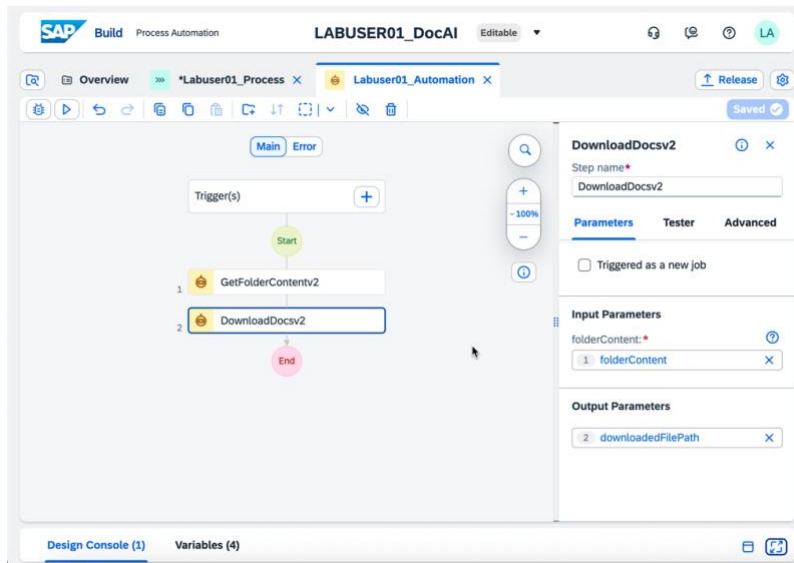


58. Your newly added automation will have a red X. Select the Automation

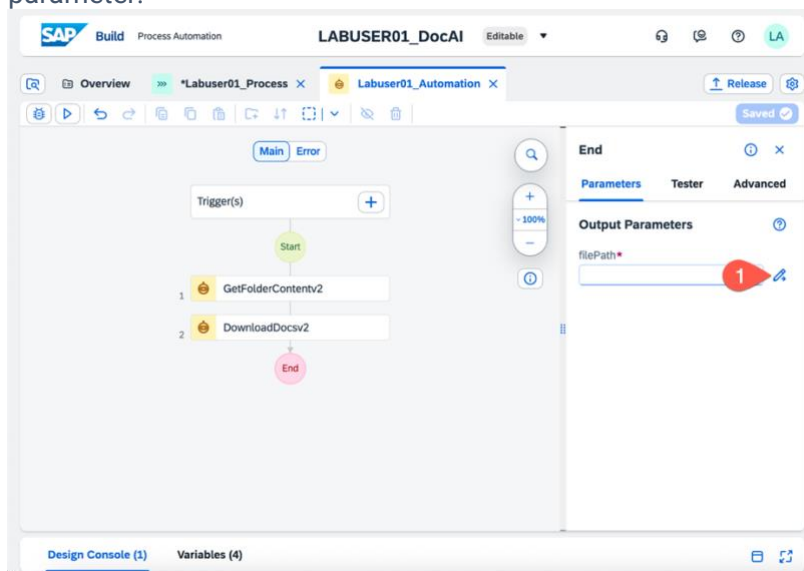
59. Under input parameters, click field that says DMS Object. Select the variable Folder Content



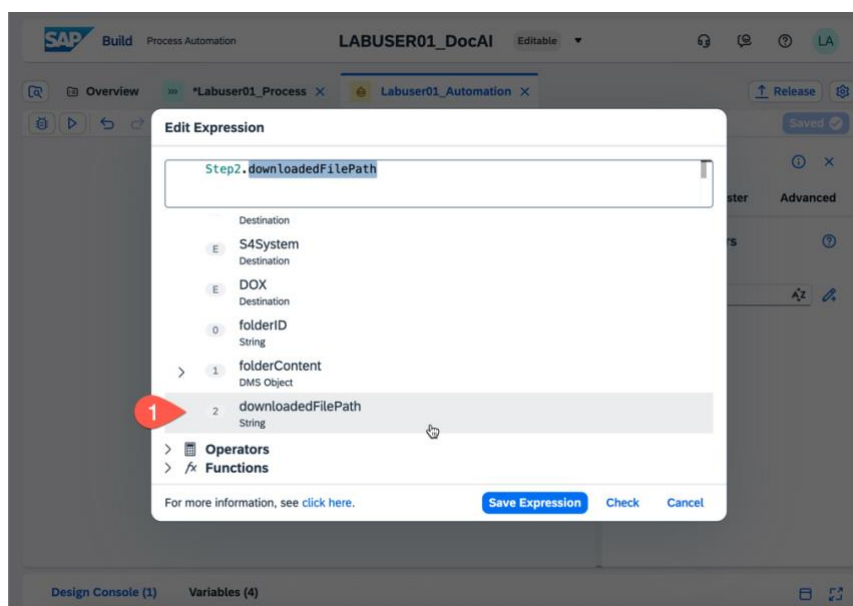
60. Once you select the correct variable the red x will disappear. See below.




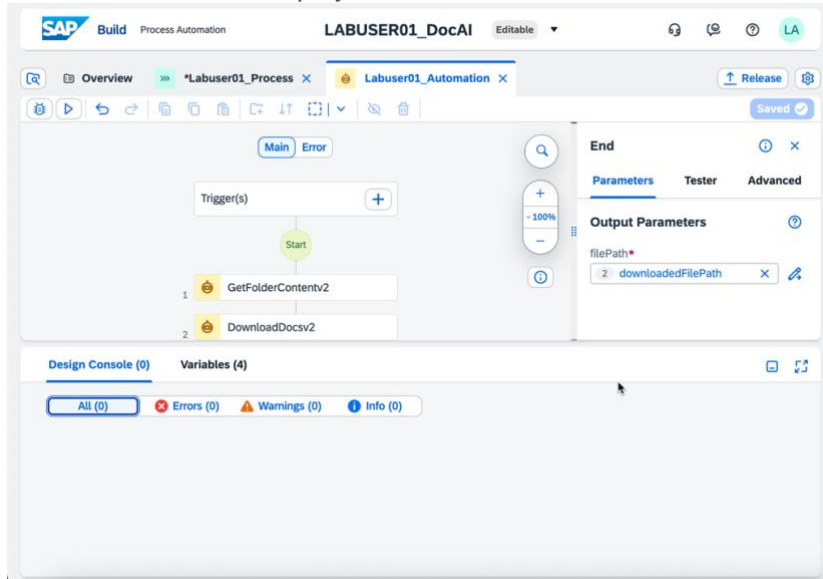
61. Next, select the 'End' red circle. The Output Parameter is empty. Click the pencil next to the parameter.




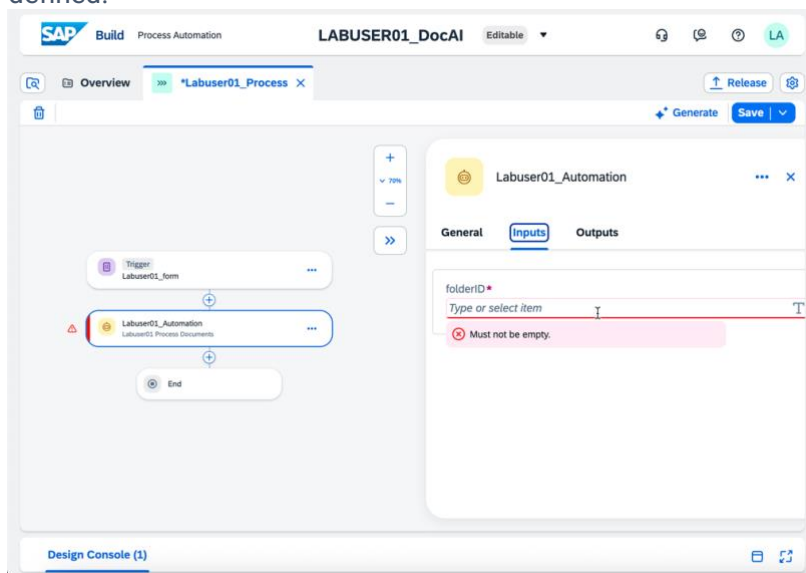
62. Select the variable downloadedFilePath and click Save Expression



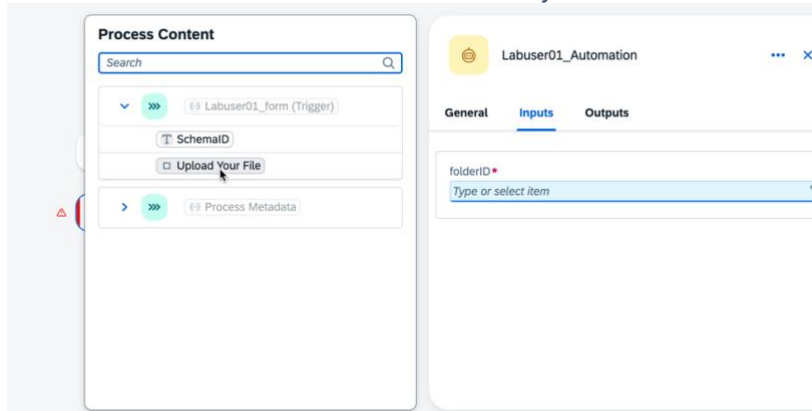
63. Click Save in the upper right to save the Automation
64. Next, click the expand button  in the lower right to view the Design Console
65. No errors should be displayed



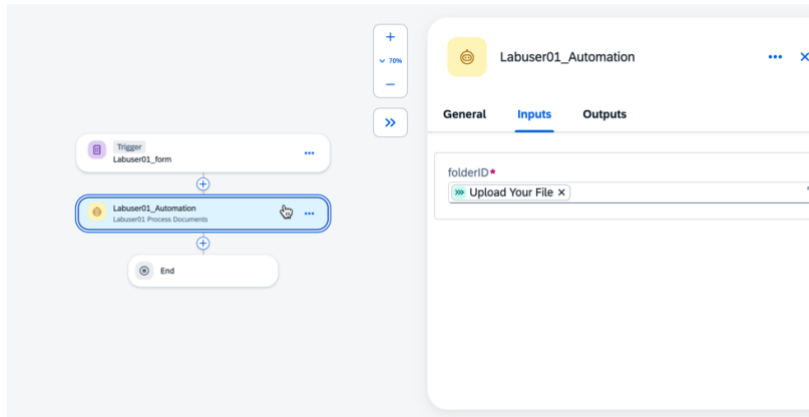
66. Close the automation by clicking the X on the tab within the developer UI
67. Minimize the Design Console by clicking the  button in the lower right
68. When we return to our process, we can see the Automation needs an Input Parameter defined.



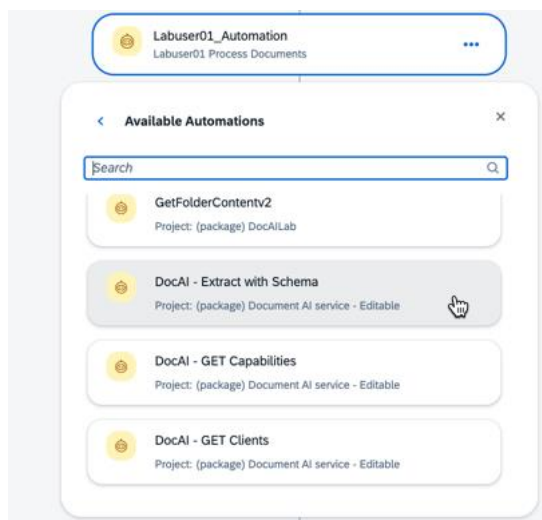
69. Click on the field and select the Form Field you created in the Form above.



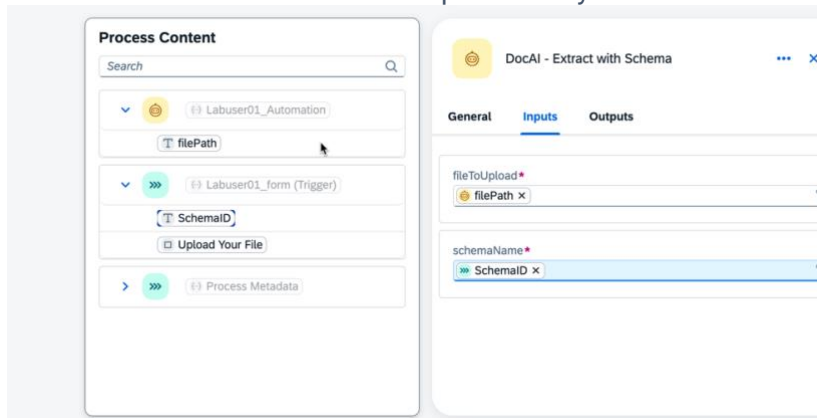
70. Click Save and the error is removed.



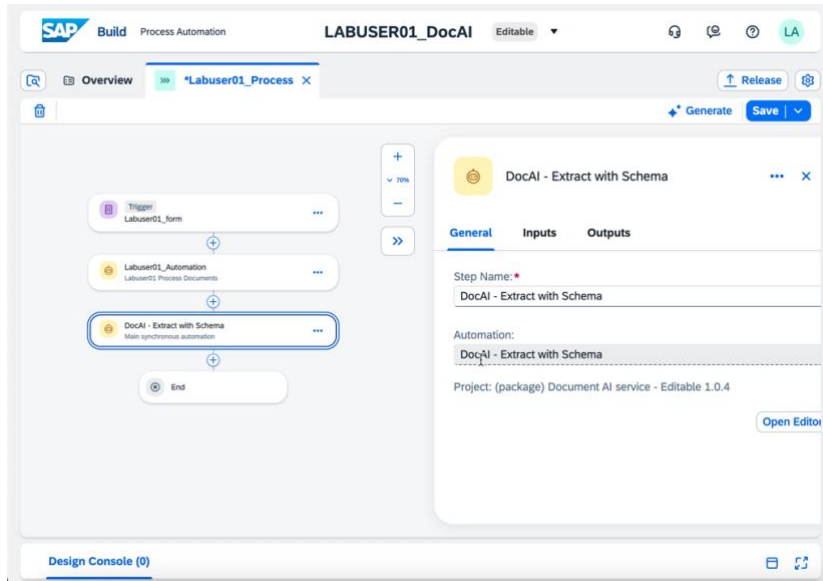
71. Click the **Add Step** button under the automation we just added.
72. This time we're going to select **Automation > Show More**
73. Scroll Down until you see **DocAI - Extract with Schema**



74. When you add the Automation it will have a red warning symbol. We need to update the Automation Input Parameters
75. Select the field 'filePath' for 'filetoUpload' and your SchemaID variable for SchemaName



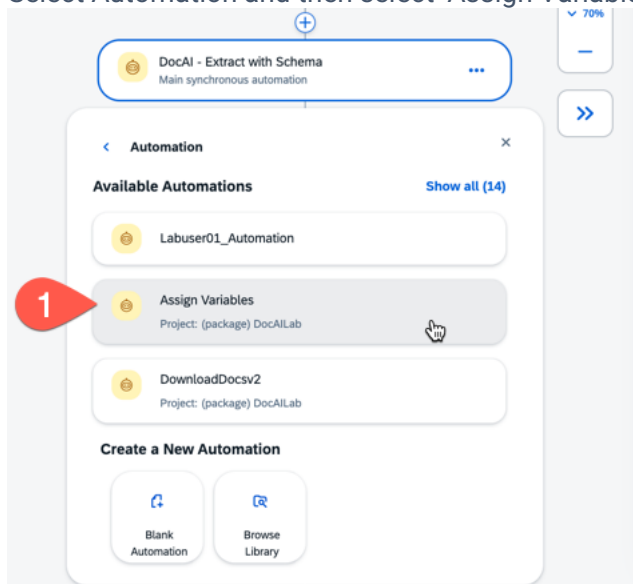
76. Click **Save** and the no errors or warnings are displayed



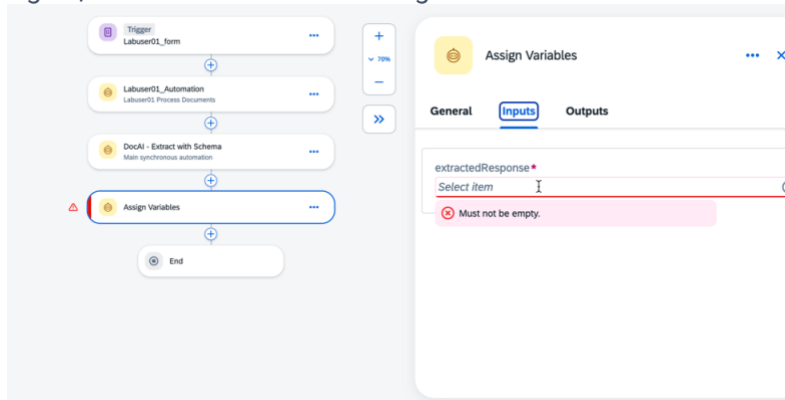
77. Next, we're going to add an automation to extract the variables from the SAP Document AI JSON response.

78. Click the **Add Step** (+) button under the 'DocAI – Extract with Schema' automation.

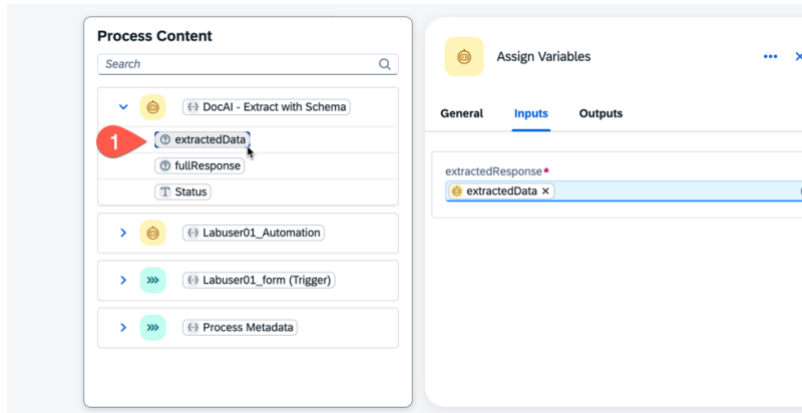
79. Select Automation and then select 'Assign Variable' from the DocAILab Package.



80. Again, we can see the red warning and we need to resolve the Inputs.



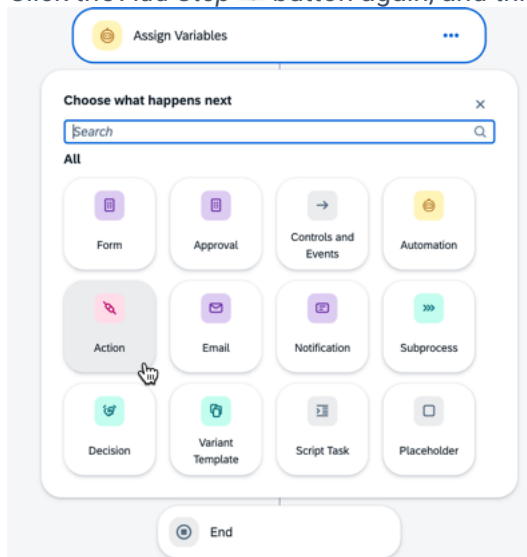
81. Select 'extractedData' as the value for extractedResponse



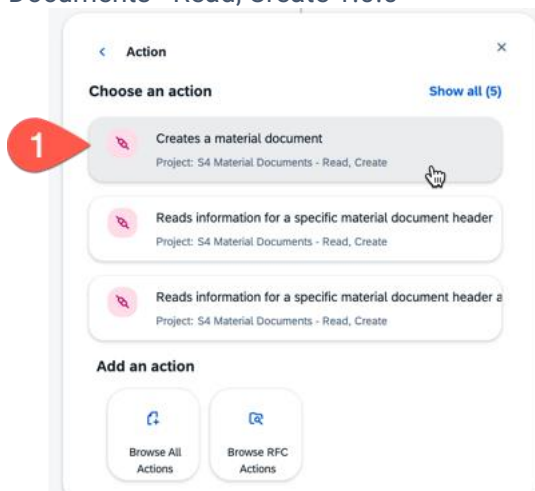
82. Click Save

83. And as a last step, we're going to add the API call to SAP S/4HANA.

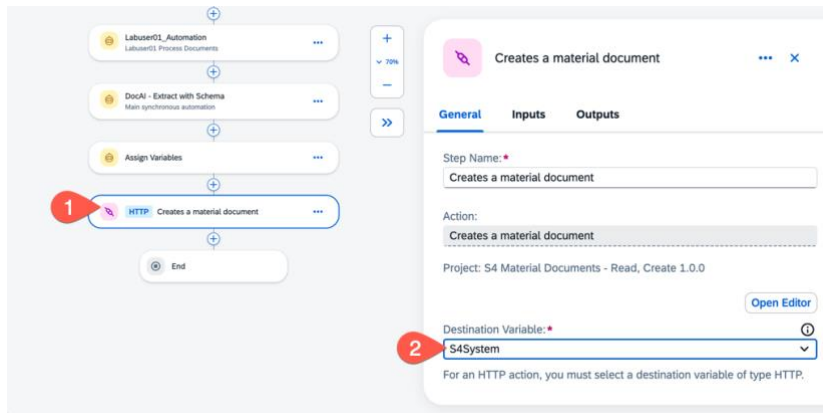
84. Click the **Add Step** button again, and this time select Action



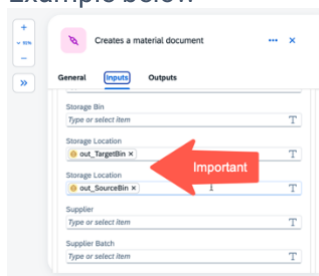
85. Select the Action *Creates a material document* from the Package Project: S4 Material Documents - Read, Create 1.0.0



86. Click on the Action and set the Destination to S4System



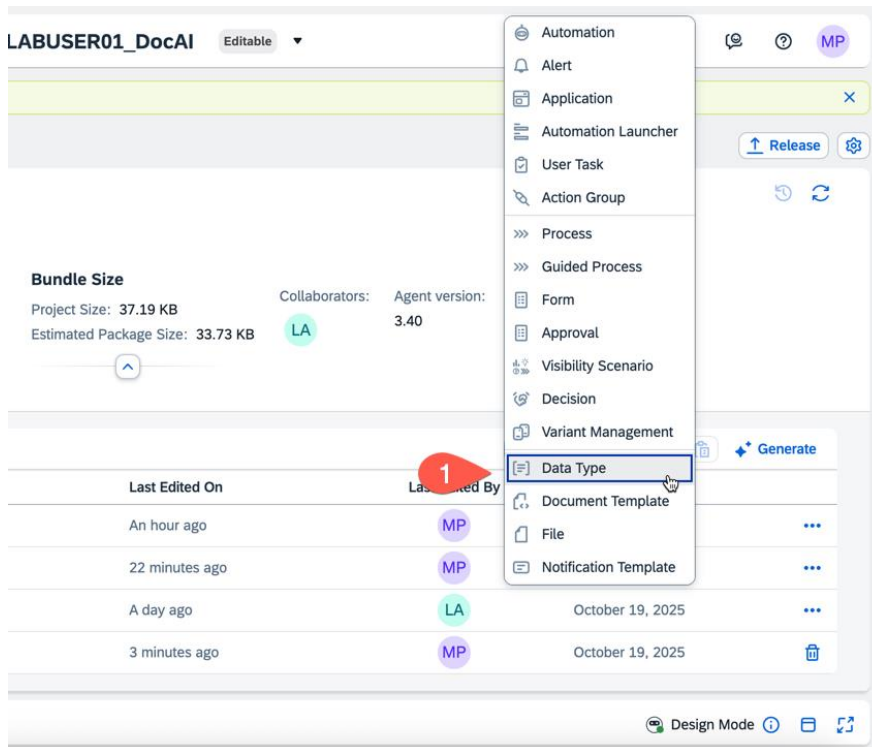
87. Click Save and then select the Input Tabs
88. We're going to hard code some variables in the spirit of completing the lab quickly. In a production scenario we would create and manage variables for Plant, Movement Code, Posting Date, and more.
89. Please update the following Inputs on the Action 'Creates a Material Document'
 - a. Select "Single Properties" for to_MaterialDocumentItem
 - b. You will not see the values below unless you select "Single Properties"
90. Values & Variables for Action
 - a. GoodsMovementCode: 04
 - b. PostingDate: YYYY-MM-DDT00:00:00
 - i. For example: 2025-10-19T00:00:00
 - c. Expand >Results
 - d. Material: variable out_Product
 - e. Movement Type: 311
 - f. Plant: 1710
 - g. Quantity in Entry Unit: variable out_Qty
 - h. Rec/Iss Plant: 1710
 - i. Storage Location #1: variable out_TargetBin
 - j. Storage Location #2: variable out_SourceBin
91. Example below



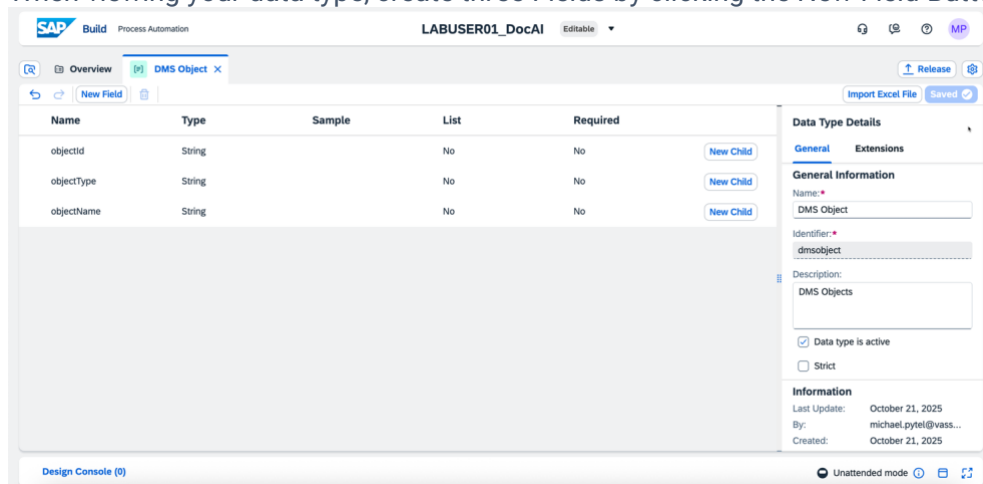
92. Click Save and close the Process in the developer UI

Add a Data Type

93. Next, we're going to return to the view of your artifacts.
94. Click the Create Button and Select Data Type



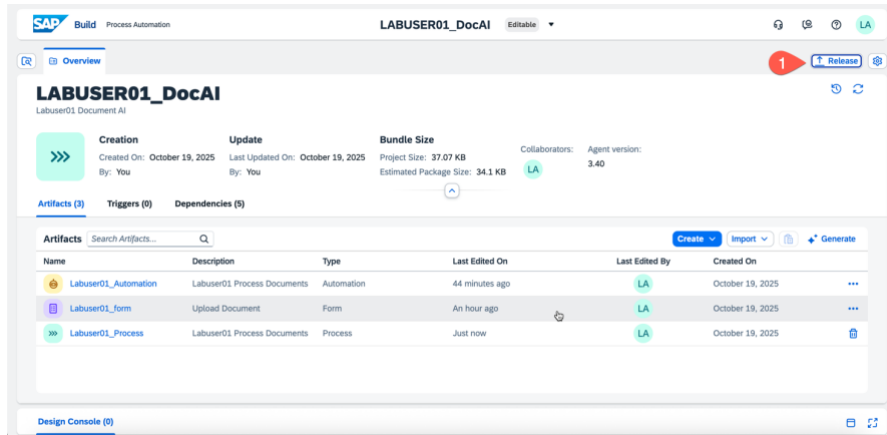
95. Give enter the details below
- Name: DMS Objects
 - Identifier: dmsobjects
 - Description: DMS Objects
96. When viewing your data type, create three Fields by clicking the New Field Button.



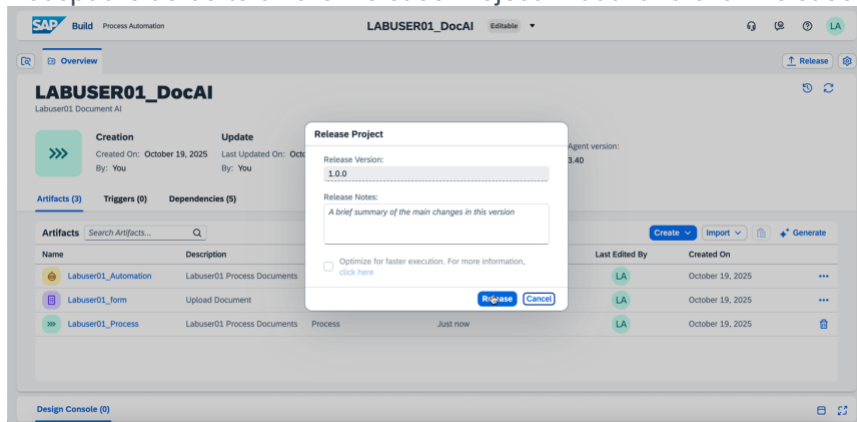
97. Click Save and close the DMS Object.

Deploying your Automation

98. Next, we're going to click the Release Button

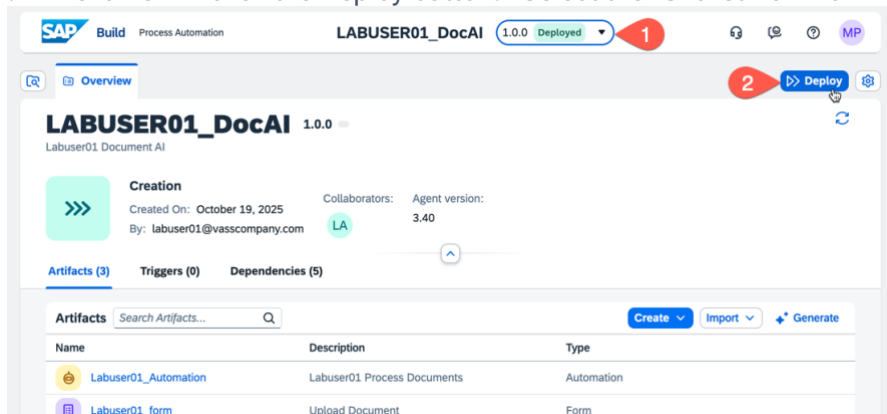


99. Accept the defaults on the 'Release Project' modal and click Release

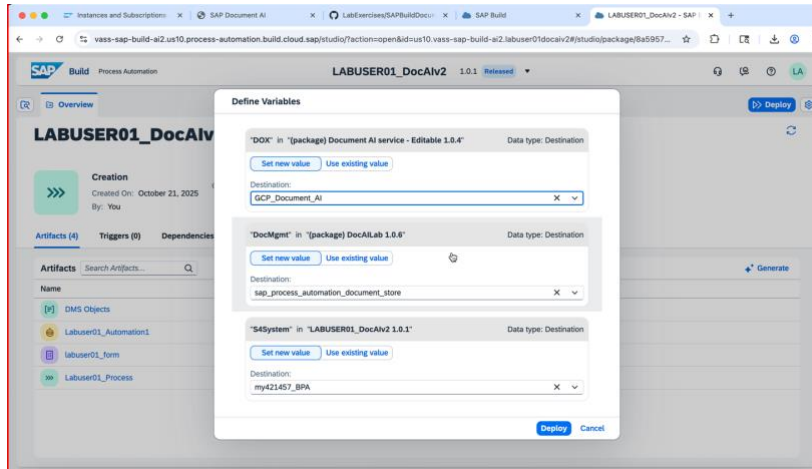


100. After releasing the project we will click the upper middle of the screen to select the newly released version of our project.

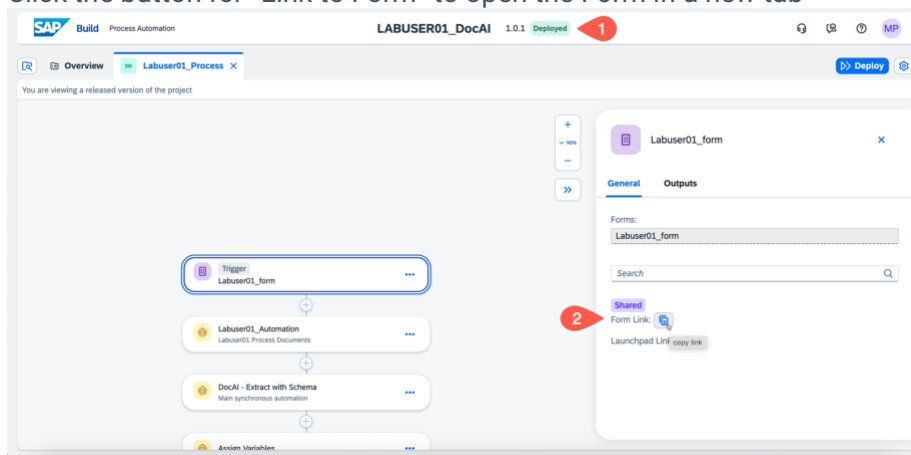
101. Next we will click the Deploy button. Select the "Shared" environment when prompted.



102. On Deploy, you will need to populate some Destinations (see image below)
- DOX: GCP_Document_AI
 - DocMgmt: sap_process_automation_document_store
 - S4System: my42157_BPA



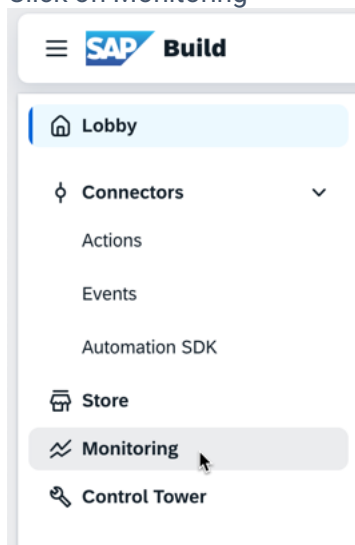
103. Once the deployment finishes we can test our form!
104. Select your deployed version, then select the process and then the form
105. Click the button for "Link to Form" to open the Form in a new tab



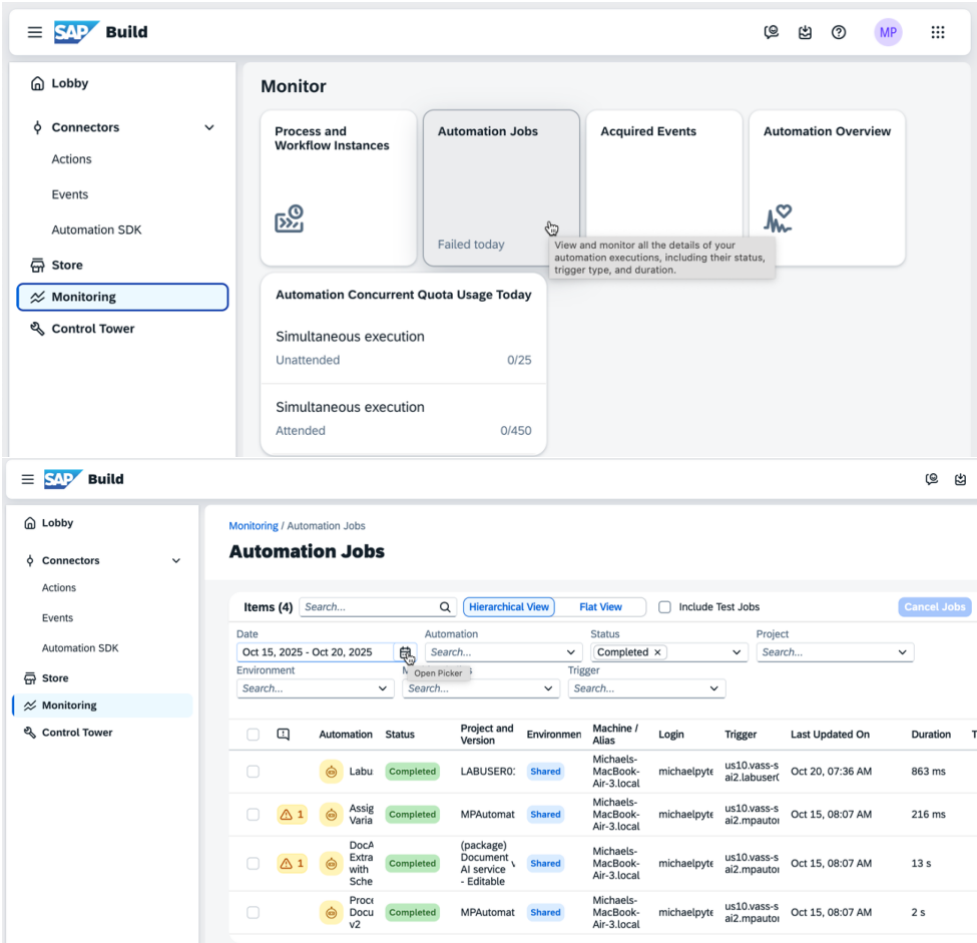
- 106.
107. Upload your Labuser Goods Movement Form to process!

Monitoring and Logging in SAP Build

1. From the SAP Build Lobby (<https://vass-sap-build-ai2.us10.build.cloud.sap/lobby>)
2. Click on Monitoring



3. Click the button for Automation Jobs, set your date filters to explore job logs.



4. In each log you can see the processing output and input variables between automations.

Thank you for completing our Hands-On Lab! Please email if you have any questions!