

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

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Environment Information

- Please use GOOGLE CHROME as your browser
- 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

SAP ID Service

Universal ID

Sign In

E-Mail, ID, or Login Name

labuser01@vasscompany.com

Sign in

← labuser01@vasscompany.com

Password

Newpa55!

Sign in

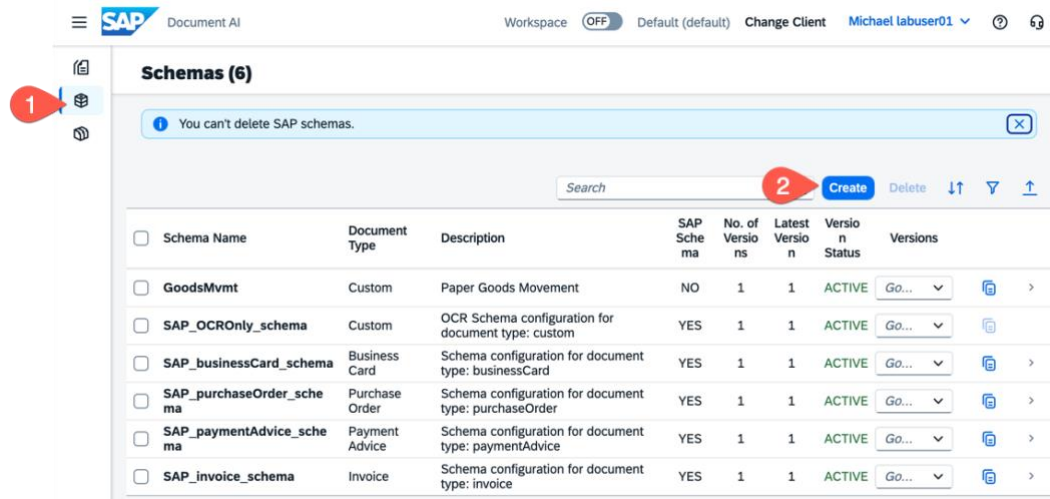
Forgot password?

Continue

Configure SAP Document AI

Our first step is to create a new custom schema to configure the data elements we want SAP Document AI to extract from the documents we upload.

1. Open an Incognito Browser and navigate to the [SAP Document AI](https://amer.cockpit.btp.cloud.sap/cockpit)
a. <https://amer.cockpit.btp.cloud.sap/cockpit>
2. Enter your Lab UserID and Password
3. Click on Schema Configuration from the left navigation
4. Then select Create



5. 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
6. Click Create

Create New Schema

Name: *

Description:

Document Type: *

OCR Engine Type: *

7. Next, click Add within the Header Fields section. Enter the data below
NOTE: you should not change the values provided
a. Name: Source_Bin
b. Label: Source Bin
c. Description: Source Bin
d. Data Type: String
e. Setup Type: Auto
8. 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

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

The screenshot shows the SAP Document AI interface. On the left, under 'Schemas (7)', the 'labuser01_gm' schema is selected, indicated by a red circle '1'. The schema details on the right show 'labuser01_gm' with a status of 'DRAFT'. The 'Header Fields' table has an 'Add' button highlighted with a red circle '2'. At the top of the schema details, the 'Activate' button is highlighted with a red circle '3'.

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

11. Click on Documents in the Left Navigation.

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

The screenshot shows the SAP Document AI interface with the 'Documents (8)' view selected. A red circle '1' highlights the 'Documents (8)' header in the left navigation. A red circle '2' highlights the '+' button in the top right corner of the document list, used for uploading a new document.

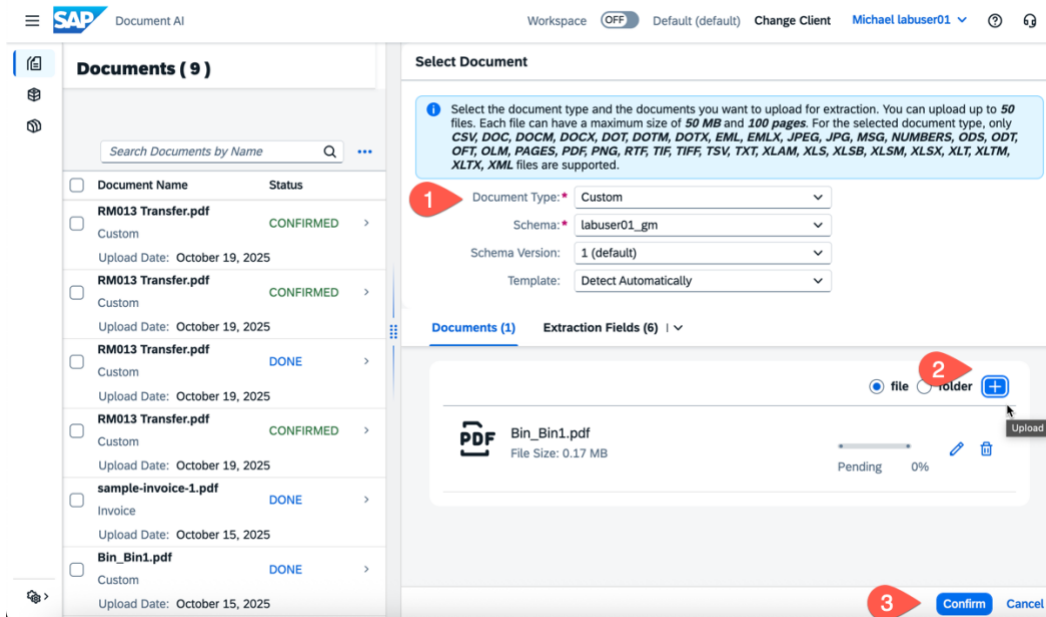
13. Select the following values from the Drop Down Displayed

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

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

- The instructors will provide files to you before the lab

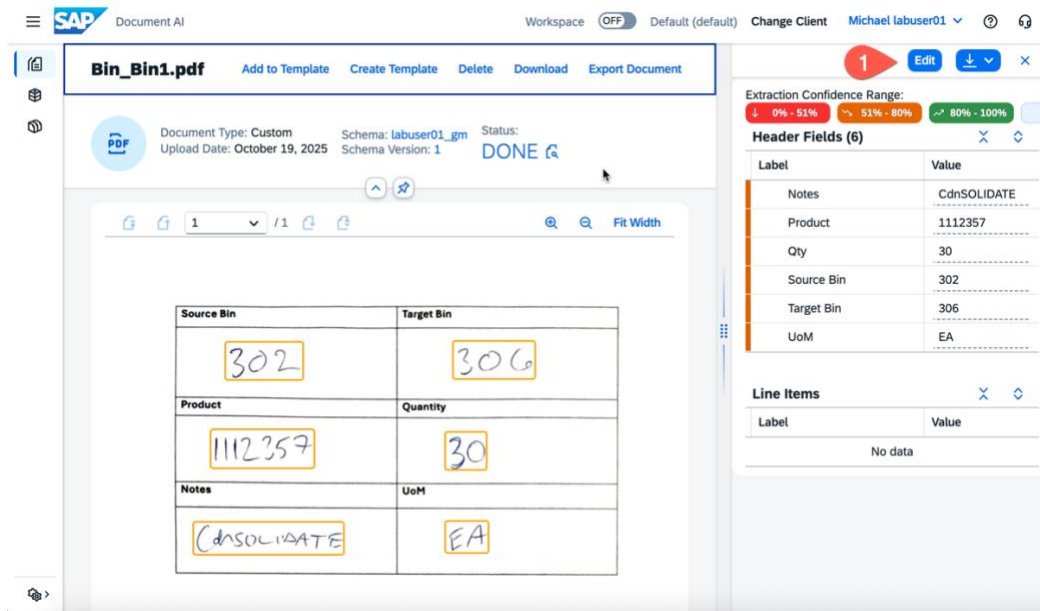
15. Once you've selected a document, click the Confirm Button



16. The *Status* will be displayed as PENDING initially. Wait 30-60 seconds and the status should update to DONE

17. Select your Document Line to view the results.

18. Select the Edit button to confirm or updated any results

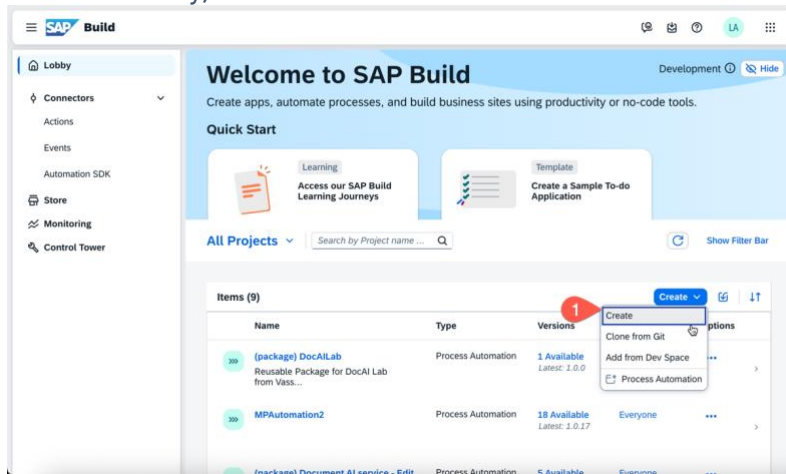


19. Congratulations! You've successfully defined a document schema for SAP Document AI to process! Documents upload via the Document AI API can be processed asynchronously and the resulting extracted output can be used in other processes.

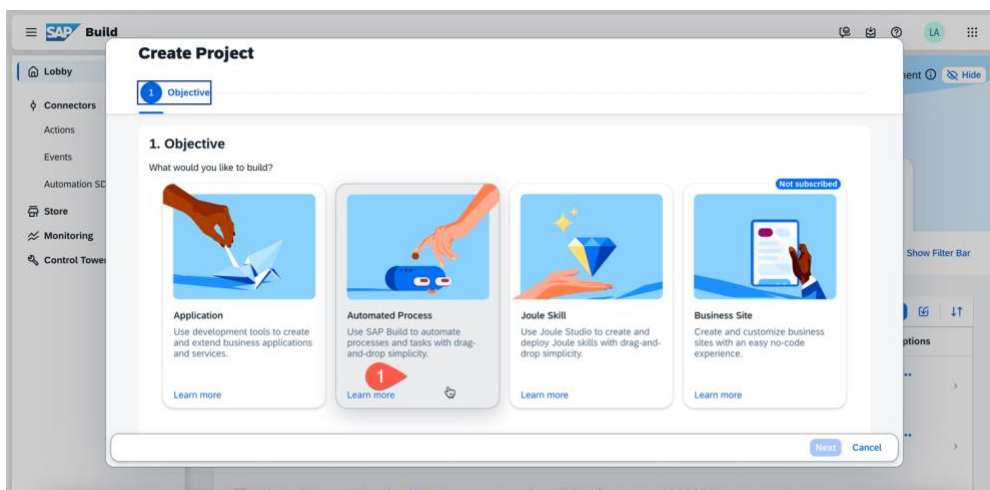
Create an Automation with SAP Build

We Will now créate an automated proceed that will allow users via a form load a file, process the file via SAP Document AI to extract the necessary information and the process to create a Good Movement in the SAP S/4HANA System.

1. Logon to SAP Build by directly clicking the link below
 - a. [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

Create Project

1 Objective 2 Type 3 Name

2. Type
Select the development configuration for your scenario.

1 »» **Process**
Build a business process to automate a workflow.

»» **Automation**
Automate repetitive tasks across applications.

No project type selected
Select an option to view more details

Previous Next Cancel

6. Enter the data below
 - a. Name: Labuser##_DocAI
 - b. Description: Labuser## Document AI

Create Project

1 Objective 2 Type 3 Name

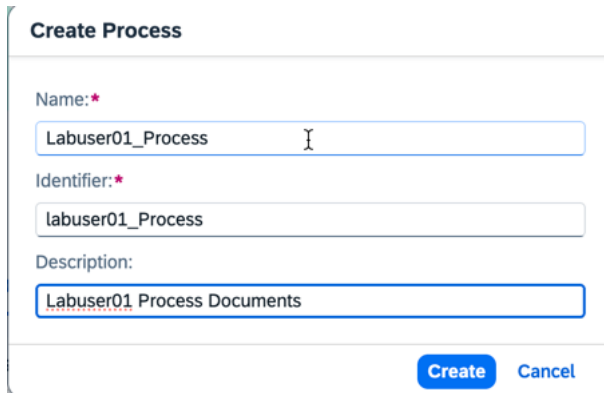
3. Name
Give your project a name.

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: *

Identifier: *

Description:

Create **Cancel**

12. Before we add automations and processes we need to configure some additional settings.

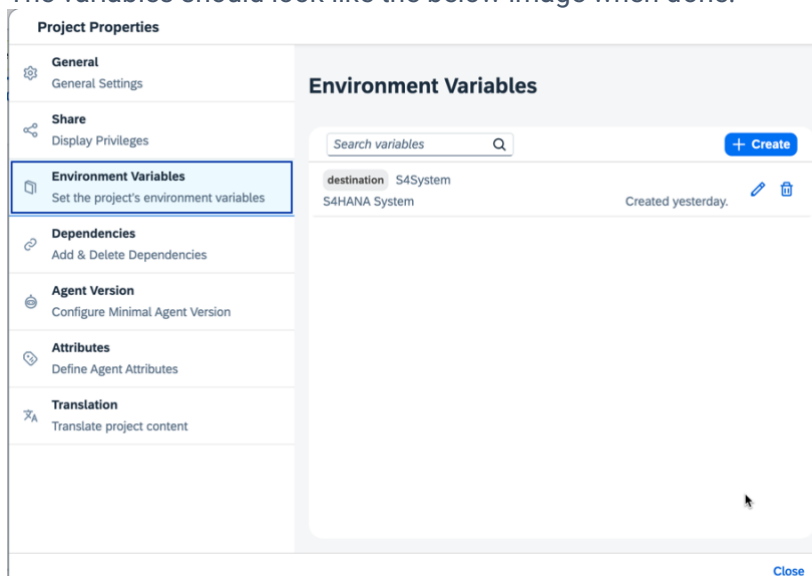
13. Click the Settings  icon in the upper right

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.





Project Properties

- General**
General Settings
- Share**
Display Privileges
- Environment Variables**
Set the project's environment variables
- Dependencies**
Add & Delete Dependencies
- Agent Version**
Configure Minimal Agent Version
- Attributes**
Define Agent Attributes
- Translation**
Translate project content

Environment Variables

Search variables

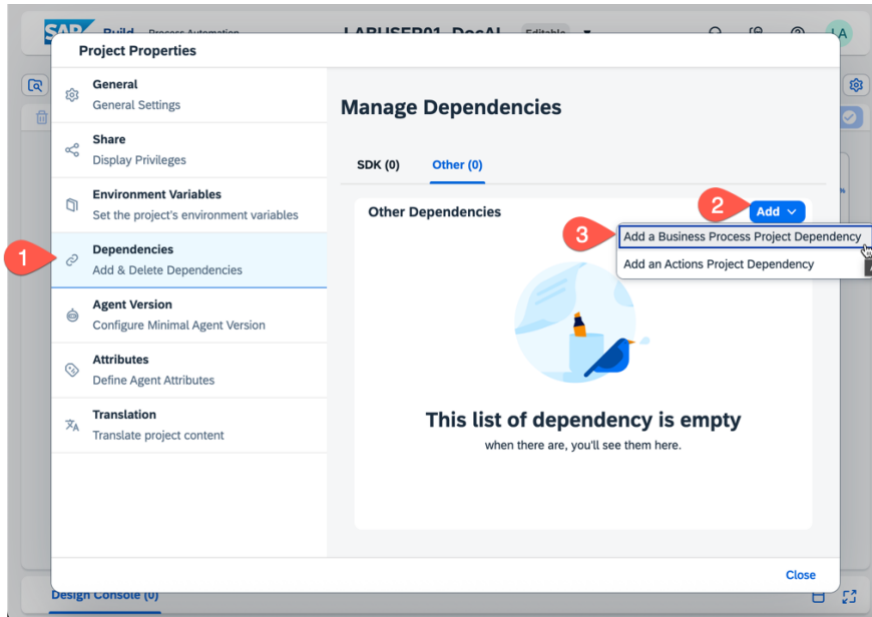
+ Create

destination	S4System	S4HANA System	Created yesterday.		

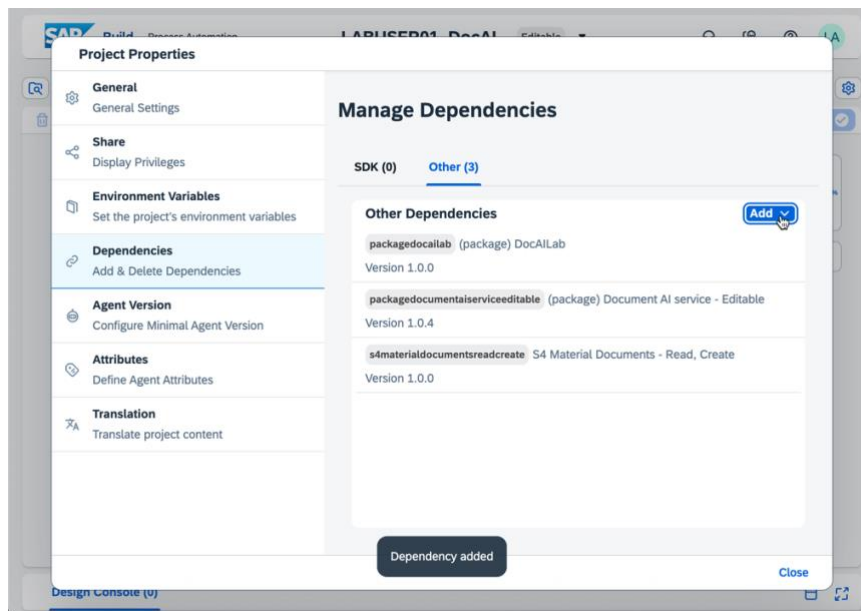
Close

17. Next, navigate to *Dependencies* in Project Properties

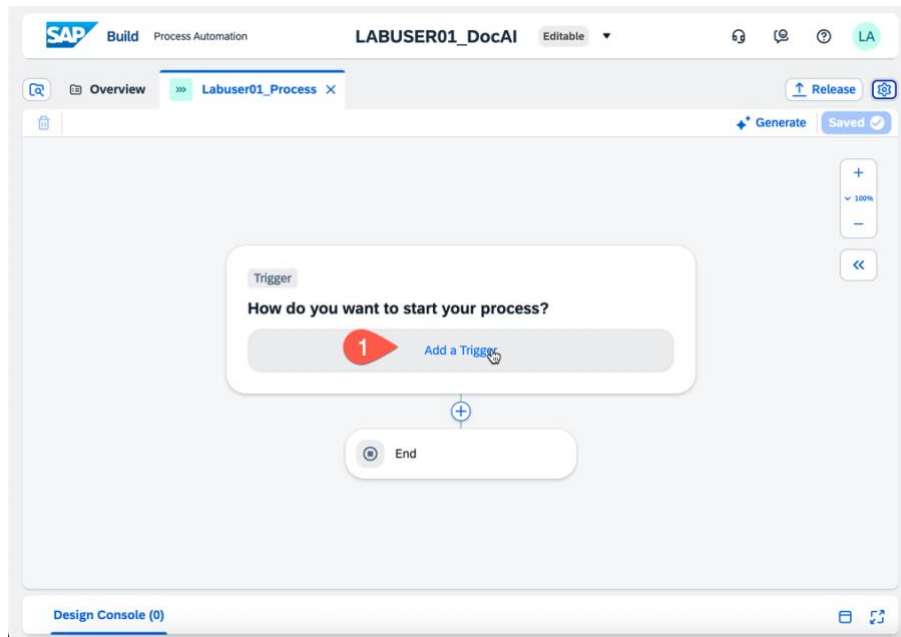
18. Click Add > Add a Business Process Project Dependency



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.

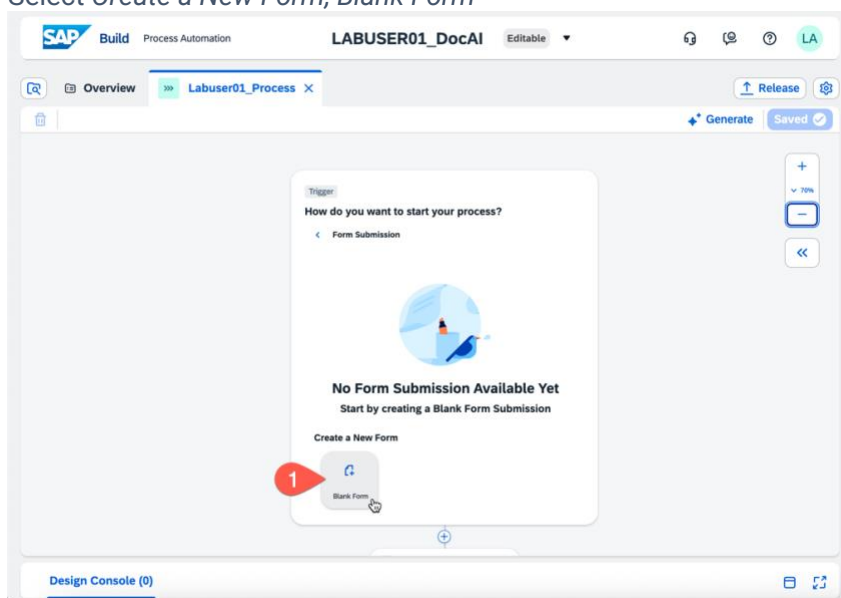


22. After adding your Environment Variables and Dependencies click *Close*
23. Select the button 'Add a Trigger'

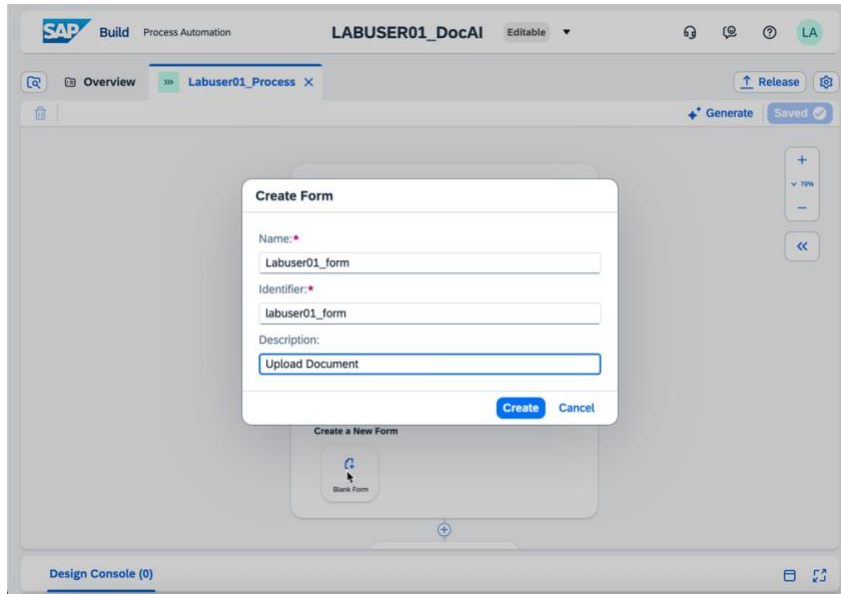


24. Select *Submit a Form*, on the next screen

25. Select *Create a New Form, Blank Form*

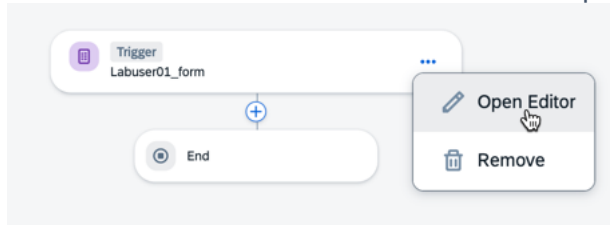


26. Enter a Name for the form in the format below
a. Name: Labuser##_form

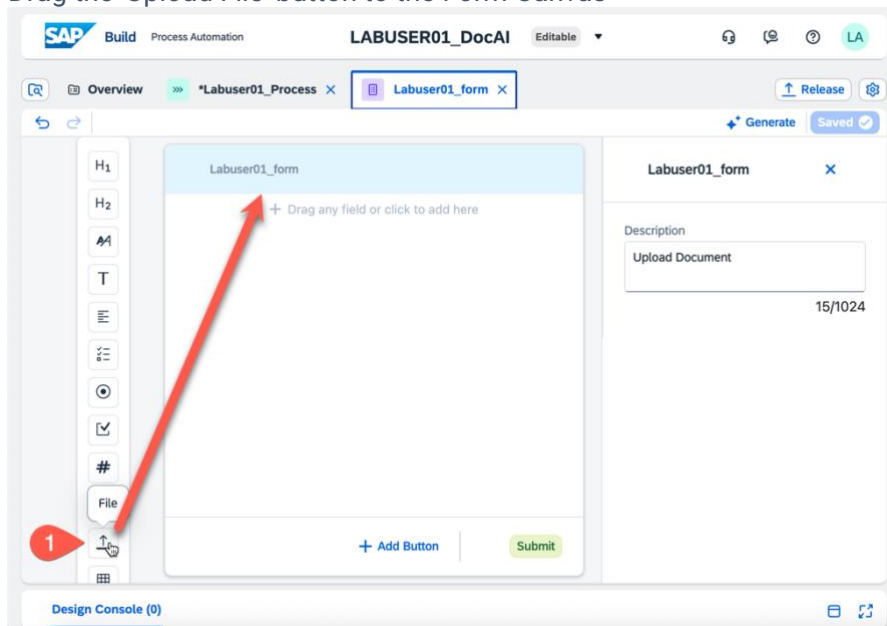


27. Click Create

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



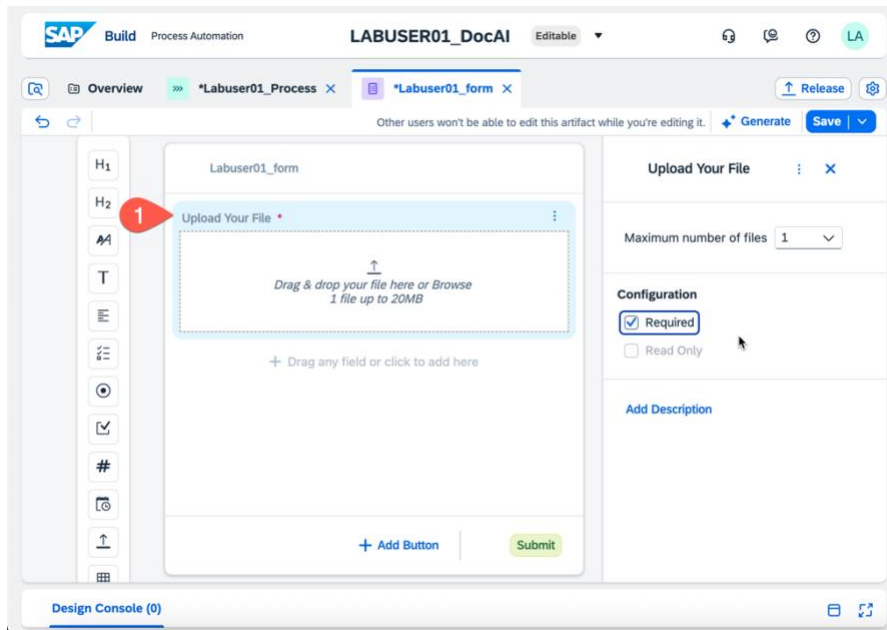
29. Drag the 'Upload File' button to the Form Canvas



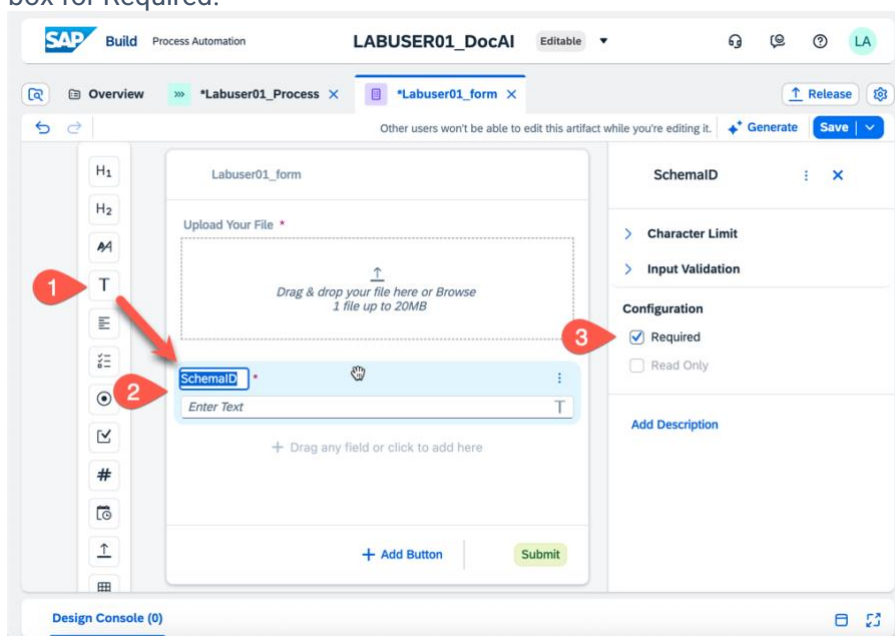
30. Enter a Field Header Text; for example 'Upload Your File'

31. Maximum Number of Files is '1'

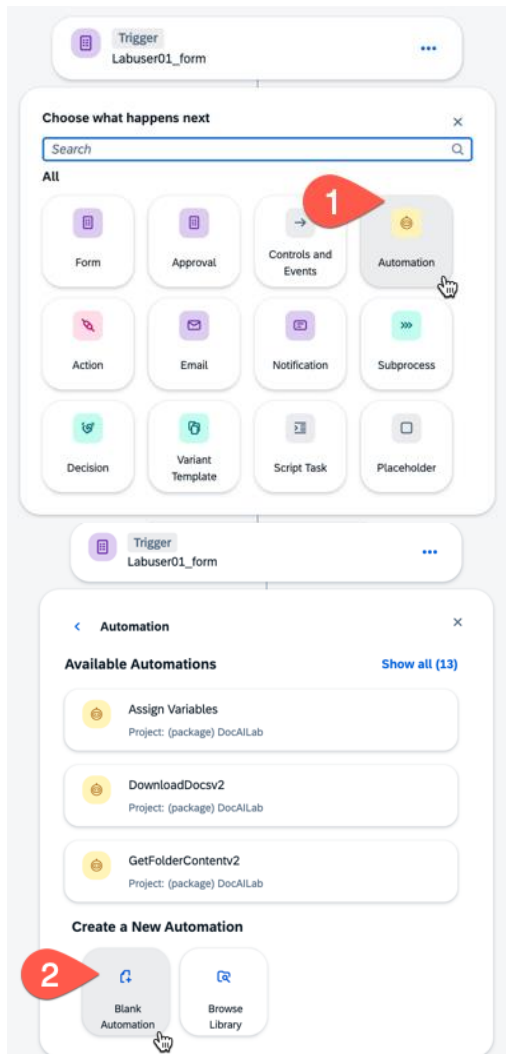
32. Required is Checked



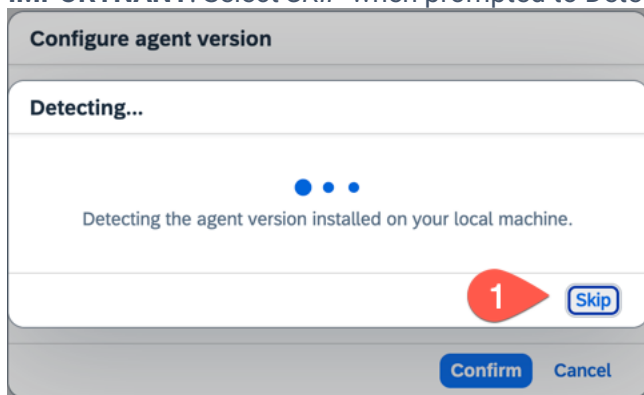
33. Next, we're going to add a field to input a *SchemaID*. This is not something we would ask an enter user to select. We've added to the demo to show how we can add input fields to a form.
34. Select the *Text* icon and drag to the canvas. Enter *SchemaID* as the field header, check the box for *Required*.



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*

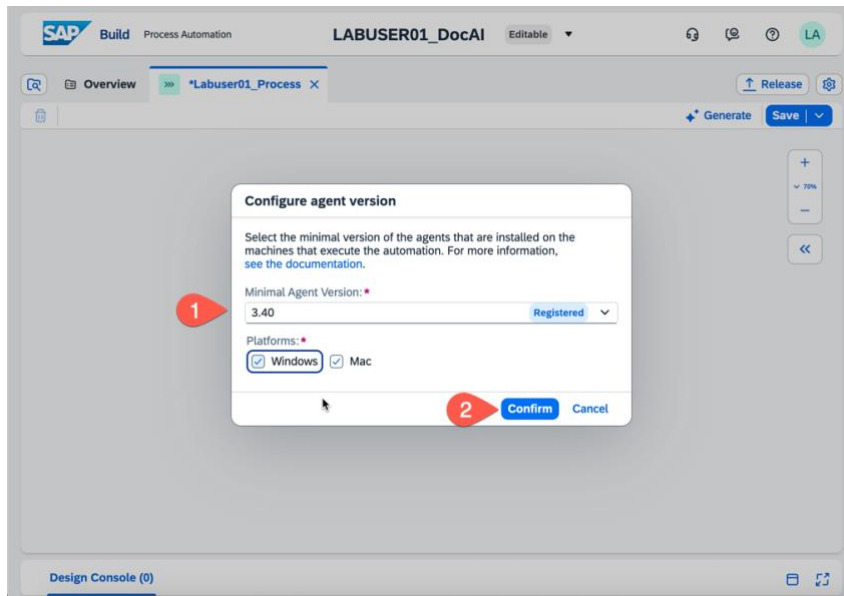


38. **IMPORTANT:** Select *SKIP* when prompted to Detect Agent Version



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
- Name: Labuser##_Automation

Create Automation

Name: *

Labuser01_Automation

Identifier: *

labuser01_Automation

Description:

Labuser01 Process Documents

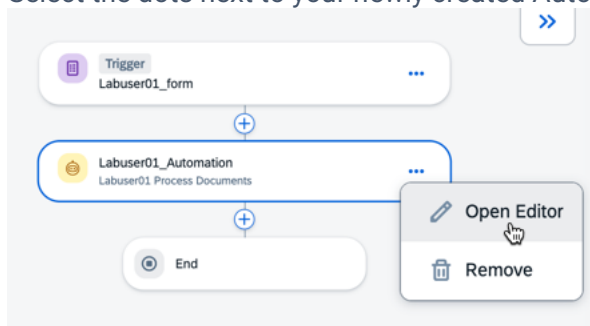
Can only be started from another automation

☐ ?

Create **Cancel**

42. Click Create

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



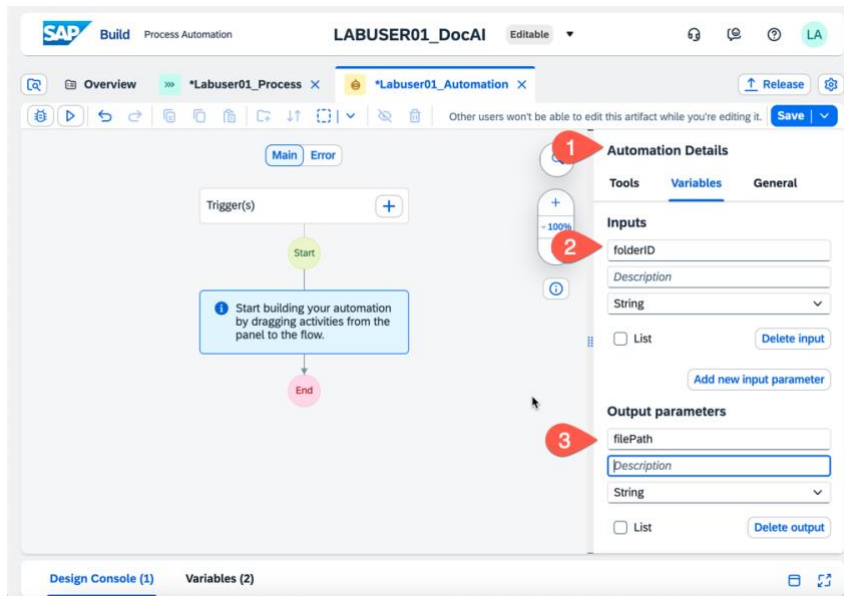
44. Before clicking on anything, select *Variables* under Automation Details on the right.

45. Add an Input Variable

- Name: folderID
- Type: String

46. Add an Output Variable

- Name: filePath
- Type: String

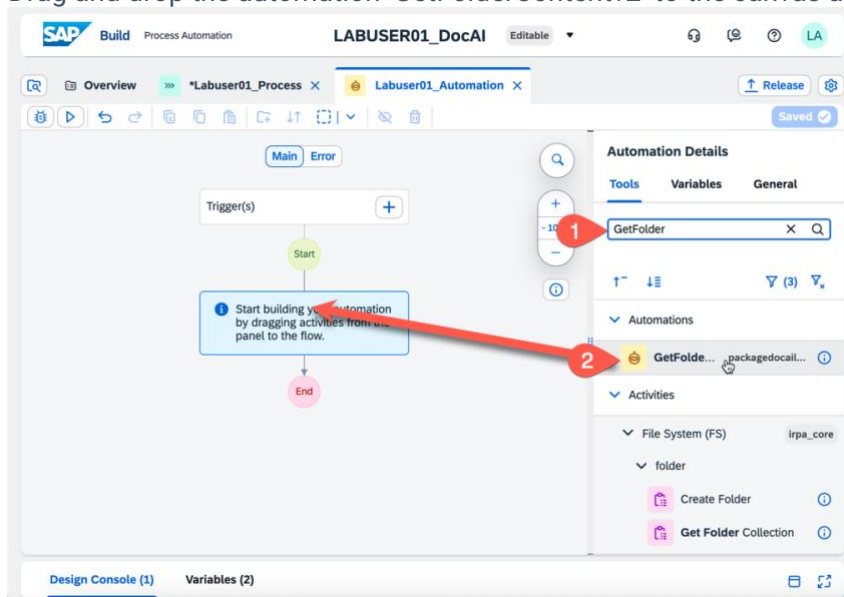


47. Click Save

48. Select Tools under Automation Details then expand Automations

49. Type 'GetFolder' in the Search box

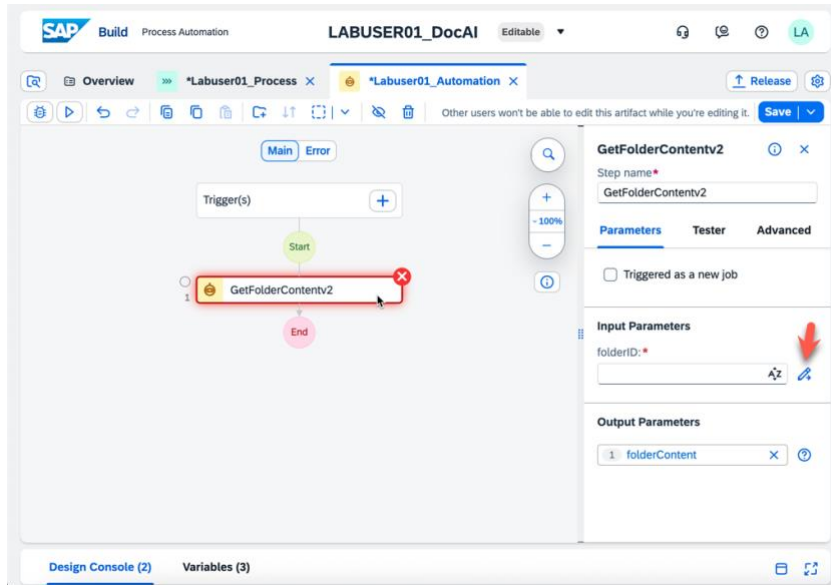
50. Drag and drop the automation 'GetFolderContentv2' to the canvas after Start



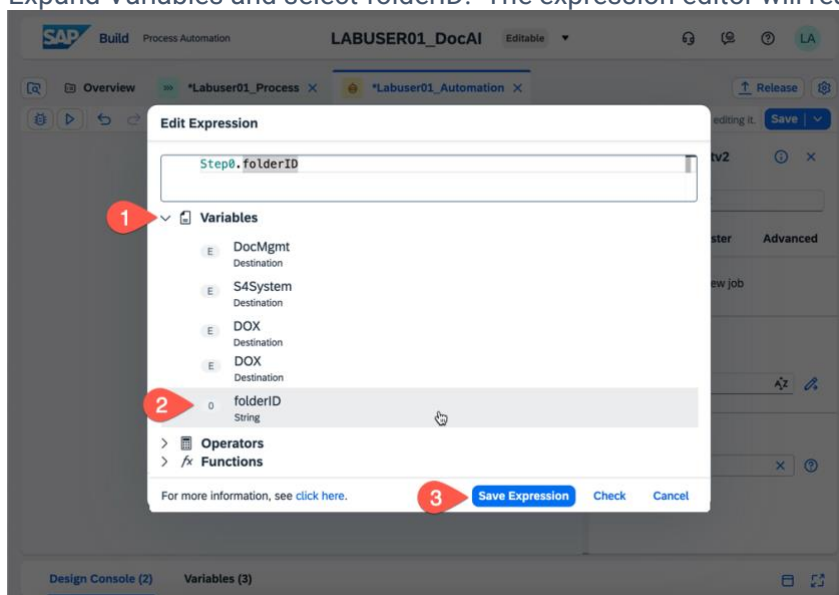
51. There will be a red X on the automation you just added.

52. Click on the Automation

53. Click the Pencil next to the Input Parameter *folderID*



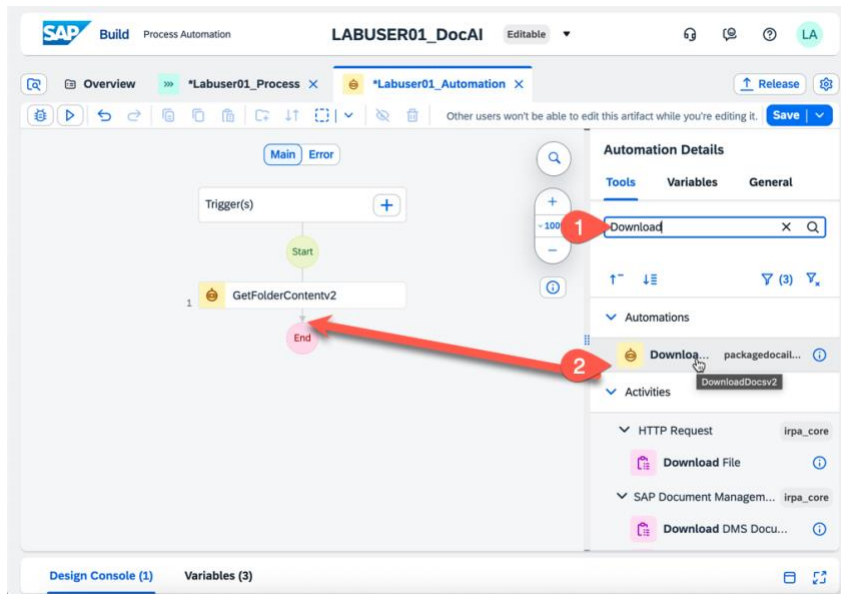
54. Expand Variables and select folderID. The expression editor will read Step0.folderID



55. Click Save Expression

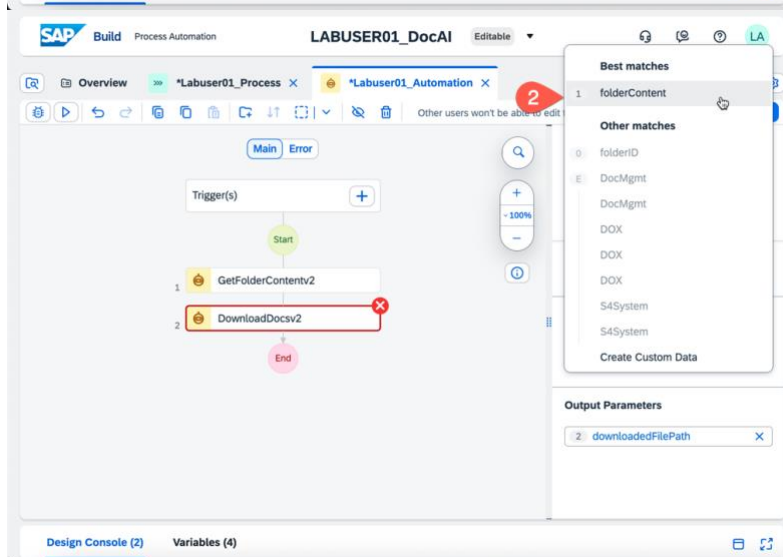
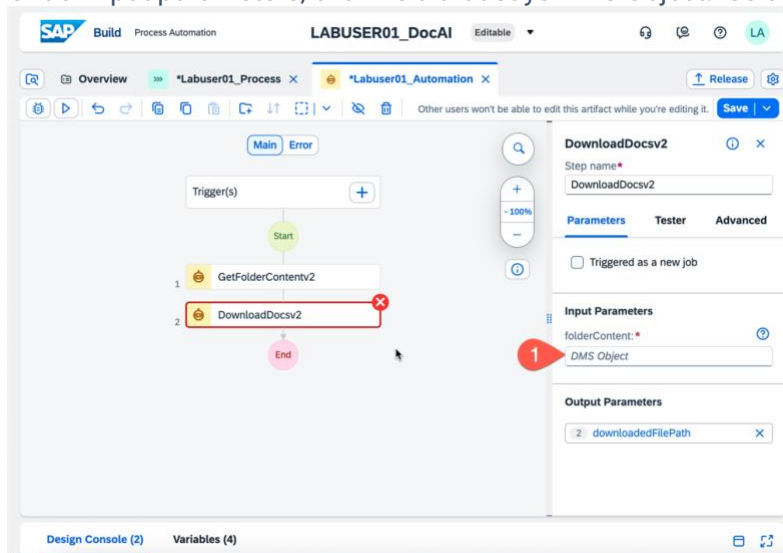
56. Next, click any blank grey part of the canvas to remove the focus on the automation you just added.

57. Under Tools, Search 'Download' and select the Automation 'DownloadDocsv2'. Drag the automation to the canvas just after the previous automation.

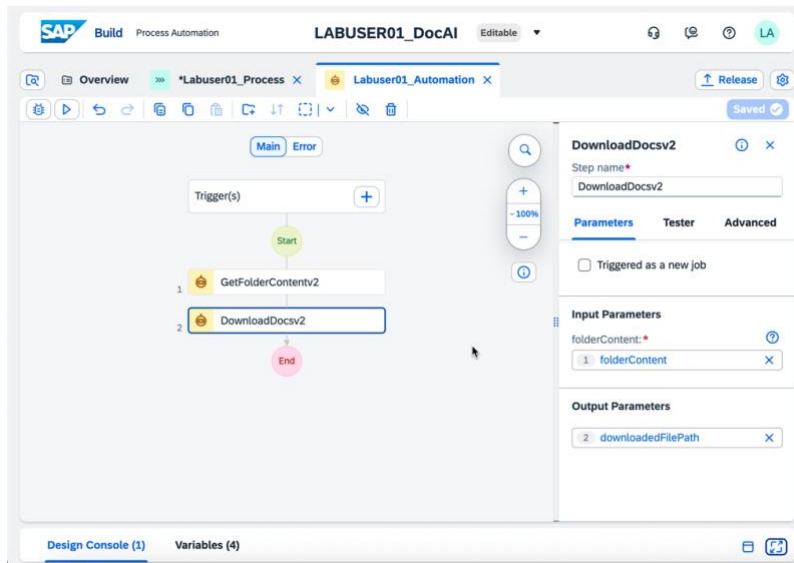


58. Your newly added automation will have a red X. Select the Automation

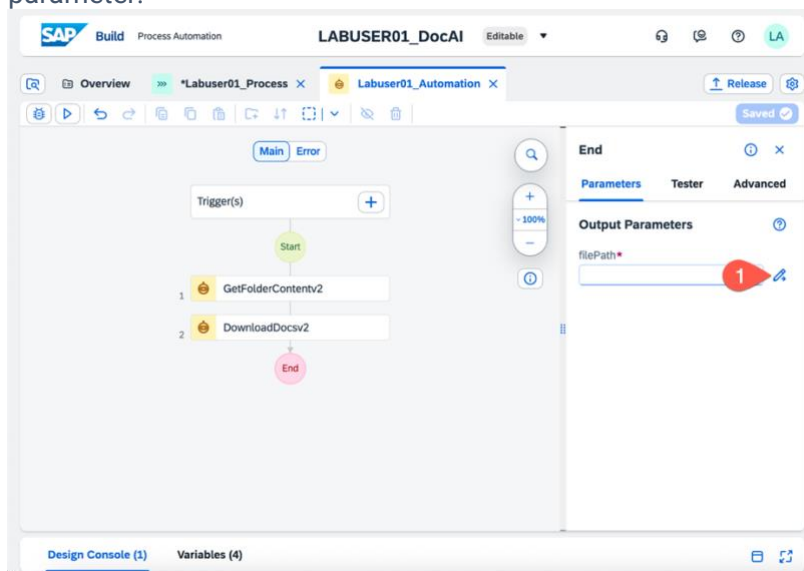
59. Under input parameters, click field that says DMS Object. Select the variable Folder Content



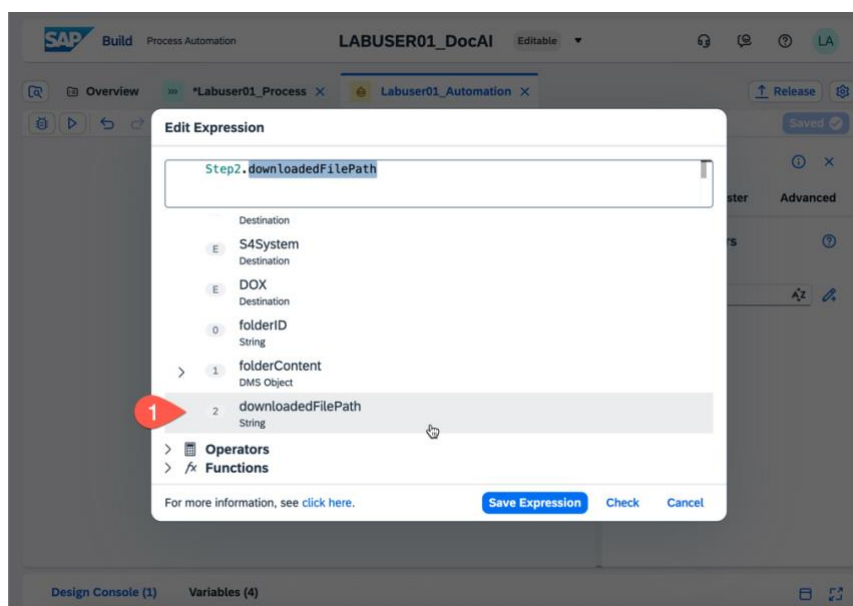
60. Once you select the correct variable the red x will disappear. See below.




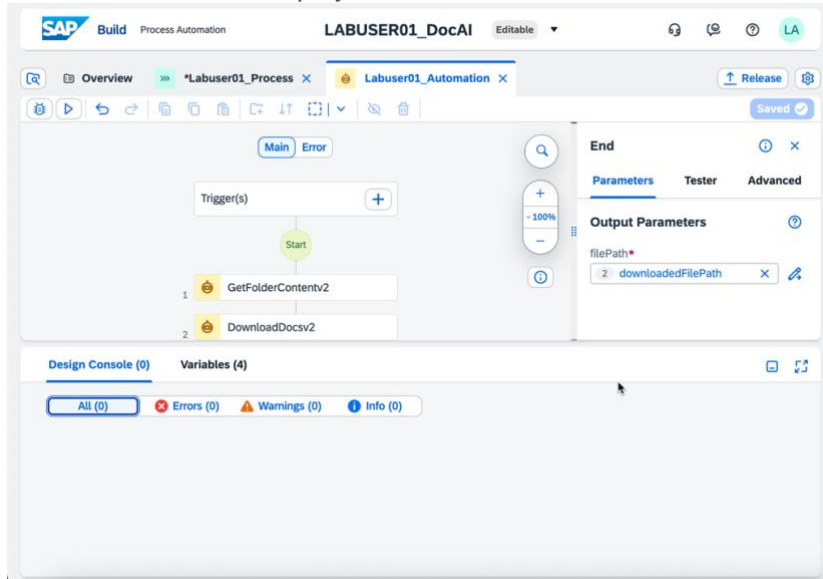
61. Next, select the 'End' red circle. The Output Parameter is empty. Click the pencil next to the parameter.




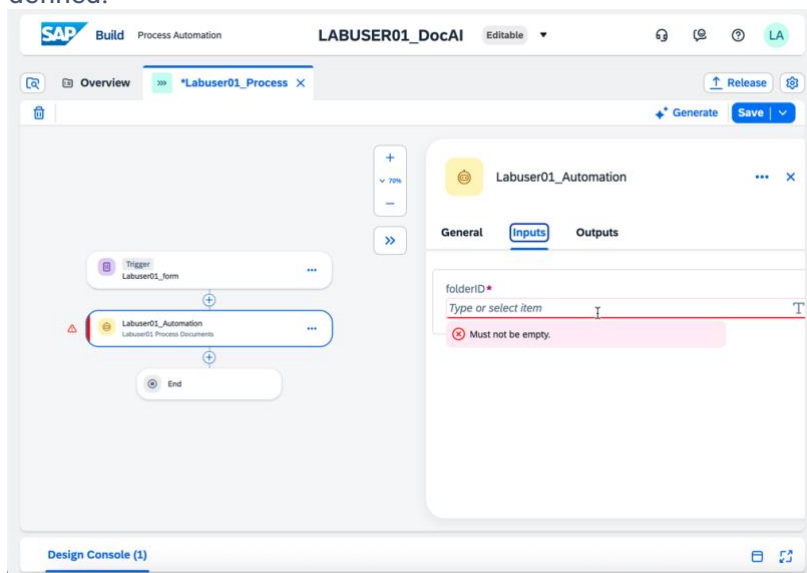
62. Select the variable downloadedFilePath and click Save Expression



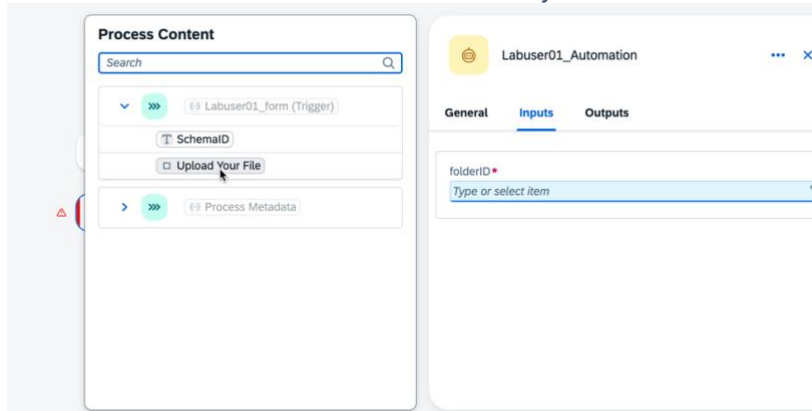
63. Click Save in the upper right to save the Automation
64. Next, click the expand button  in the lower right to view the Design Console
65. No errors should be displayed



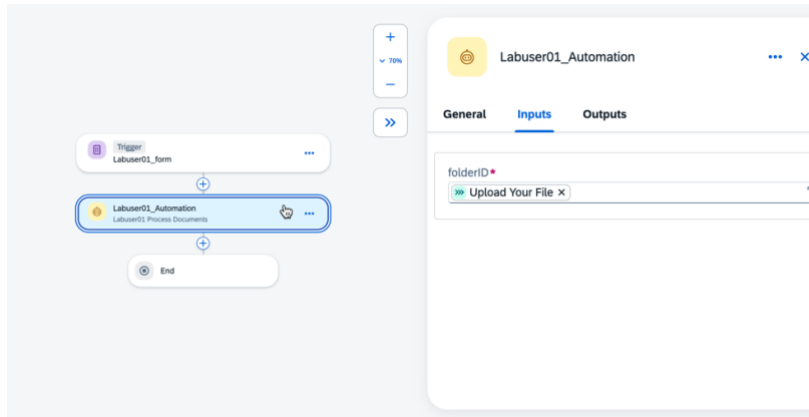
66. Close the automation by clicking the X on the tab within the developer UI
67. Minimize the Design Console by clicking the  button in the lower right
68. When we return to our process, we can see the Automation needs an Input Parameter defined.



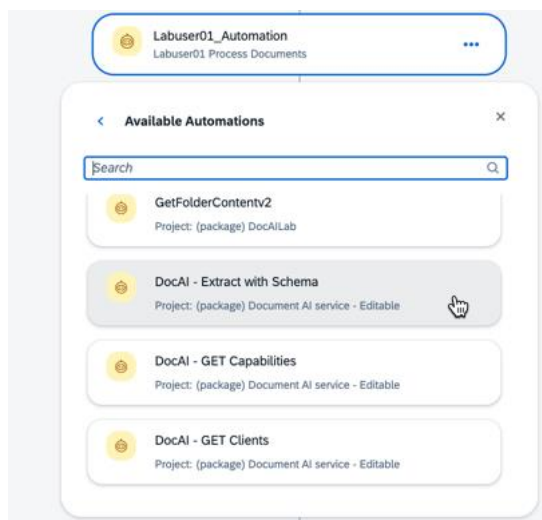
69. Click on the field and select the Form Field you created in the Form above.



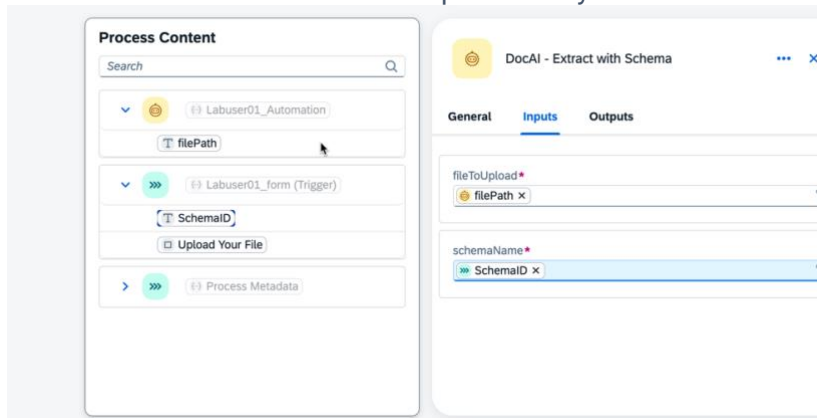
70. Click Save and the error is removed.



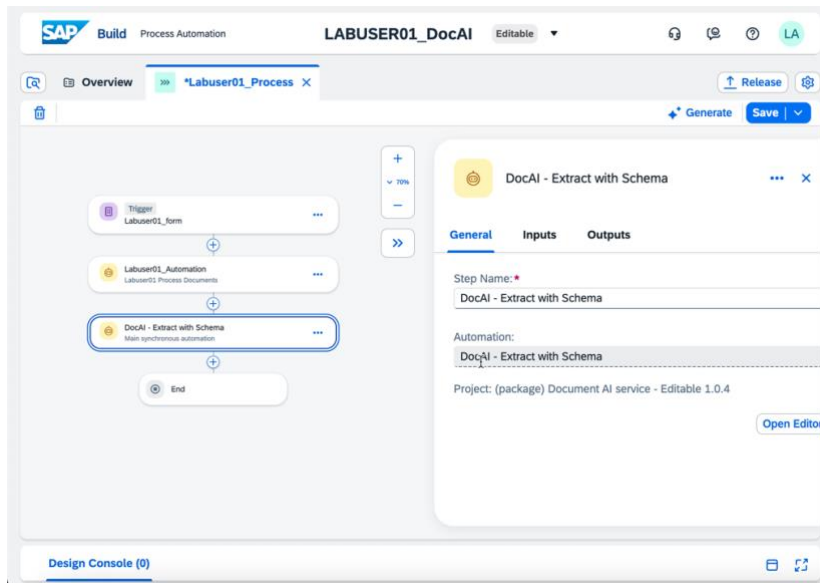
71. Click the **Add Step** button under the automation we just added.
72. This time we're going to select Automation > Show More
73. Scroll Down until you see *DocAI - Extract with Schema*



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



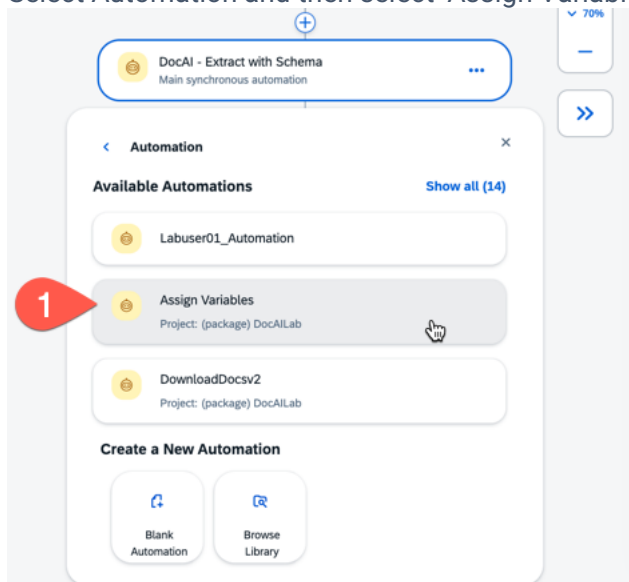
76. Click Save and the no errors or warnings are displayed



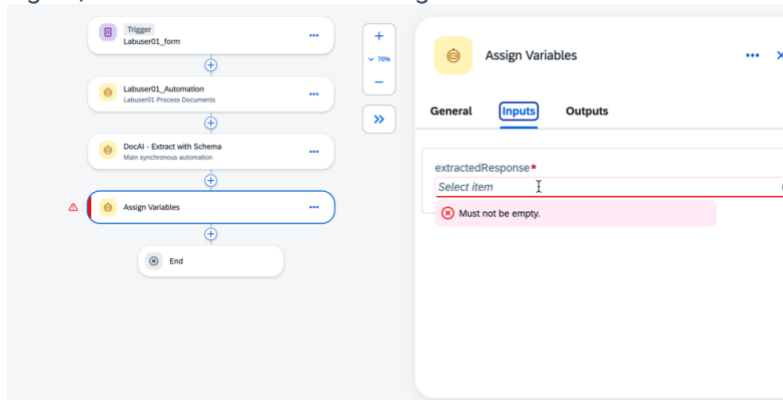
77. Next, we're going to add an automation to extract the variables from the SAP Document AI JSON response.

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

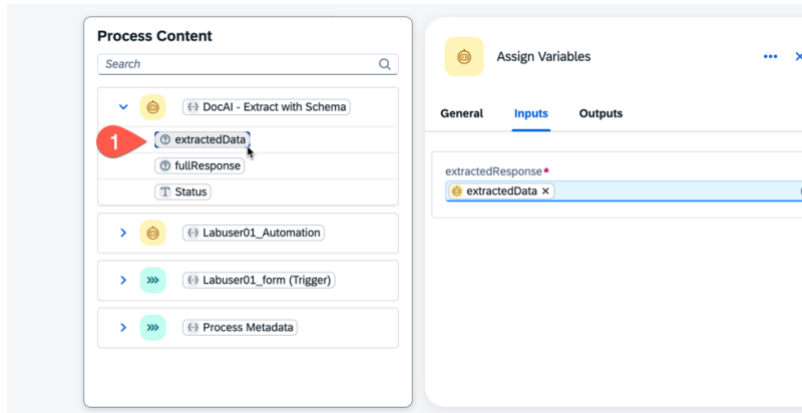
79. Select Automation and then select 'Assign Variable' from the DocAILab Package.



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




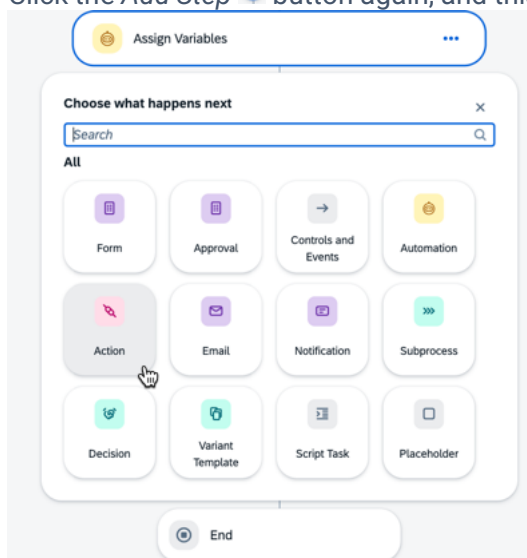
81. Select 'extractedData' as the value for extractedResponse



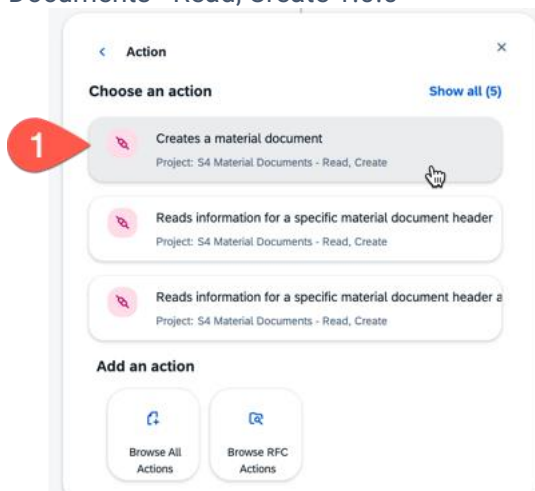
82. Click Save

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

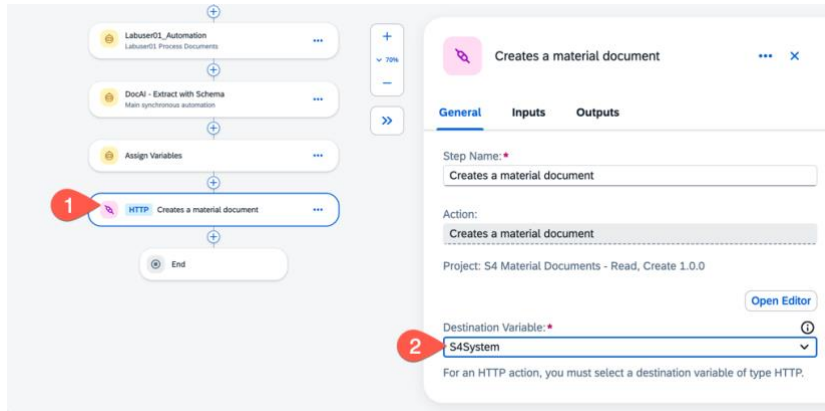
84. Click the **Add Step**  button again, and this time select Action



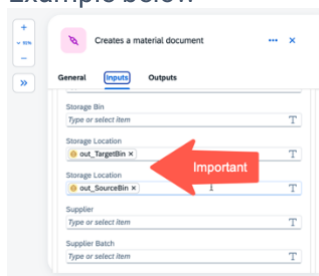
85. Select the Action *Creates a material document* from the Package Project: S4 Material Documents - Read, Create 1.0.0



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. GoodsMovementCode: 04
 - b. PostingDate: YYYY-MM-DDT00:00:00
 - i. For example: 2025-10-19T00:00:00
 - c. to_MaterialDocumentItem Select "Single Property" for to_MaterialDocumentItem
 - i. You will not see the values below unless you select "Single Properties"
 - d. results Select "Single Property" for results
 - i. You will not see the values below unless you select "Single Properties"
 - e. Material: variable out_Product
 - f. Movement Type: 311
 - g. Plant: 1710
 - h. Quantity in Entry Unit: variable out_Qty
 - i. Rec/Iss Plant: 1710
 - j. Storage Location #1: variable out_TargetBin
 - k. Storage Location #2: variable out_SourceBin
90. Example below

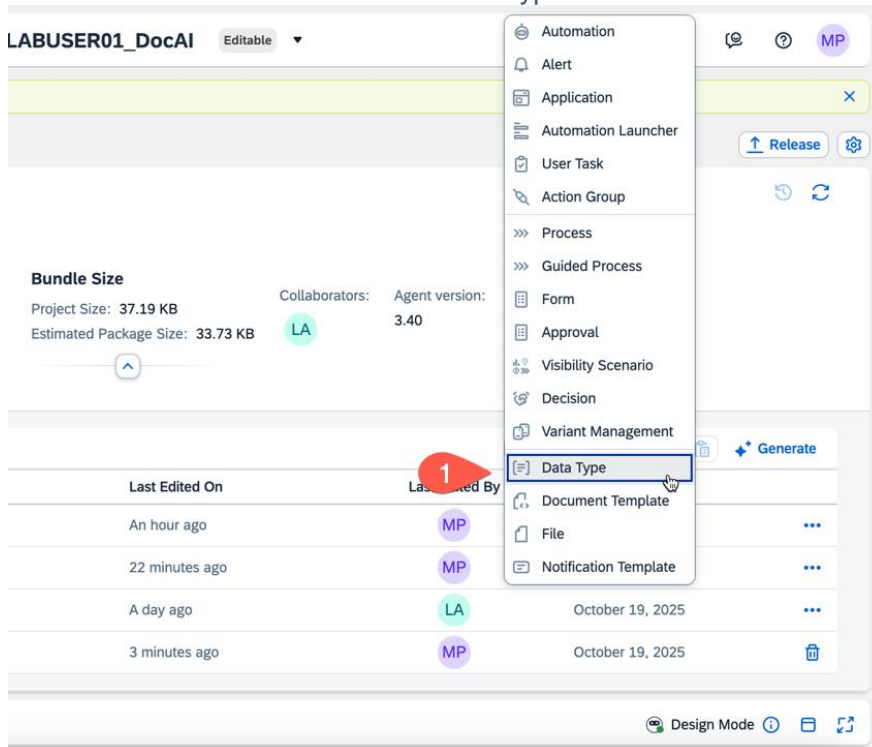


91. Click Save and close the Process in the developer UI

Add a Data Type

92. Next, we're going to return to the view of your artifacts.

93. Click the Create Button and Select Data Type

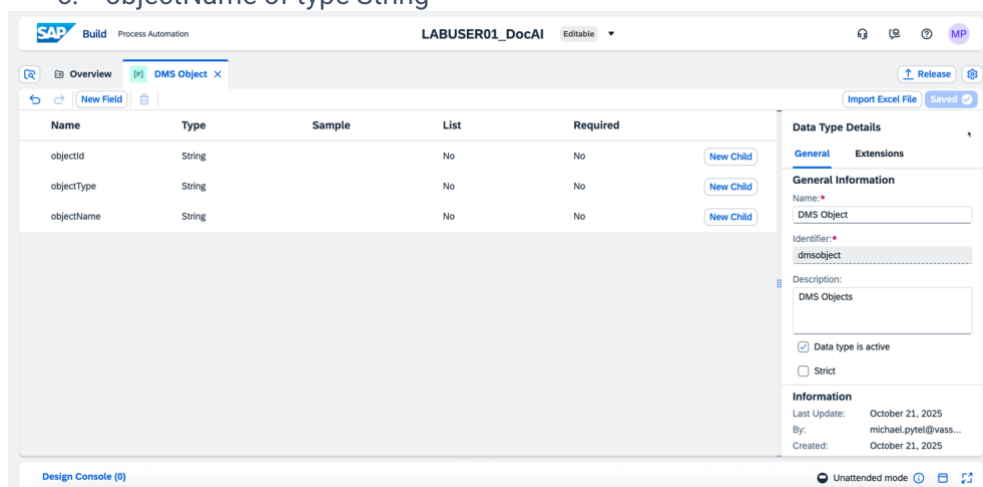


94. Give enter the details below

- Name: DMS Objects
- Identifier: dmsobjects
- Description: DMS Objects

95. When viewing your data type, create three Fields by clicking the New Field Button.

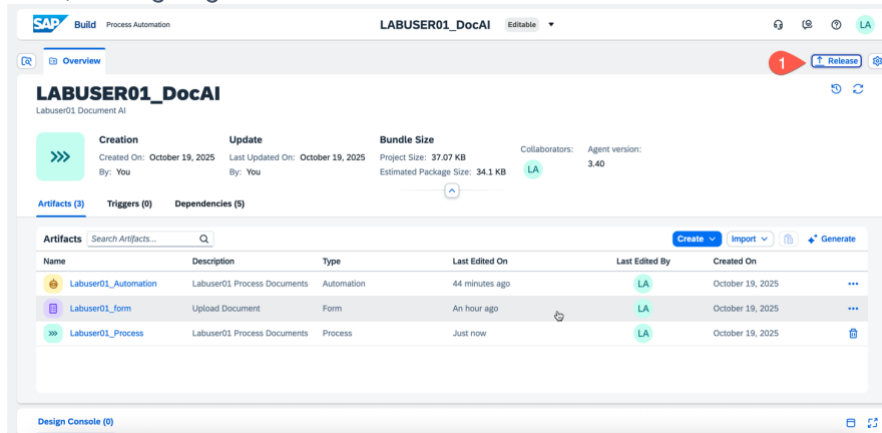
- objectId of type String
- objectType of type String
- objectName of type String



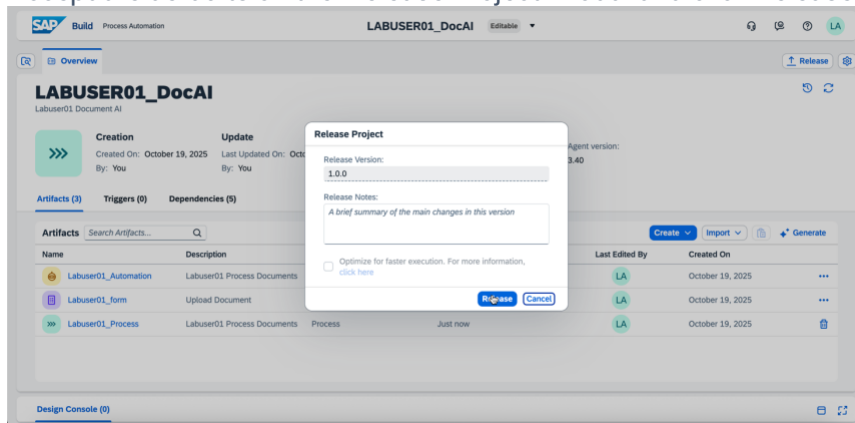
96. Click Save and close the DMS Object.

Deploying your Automation

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

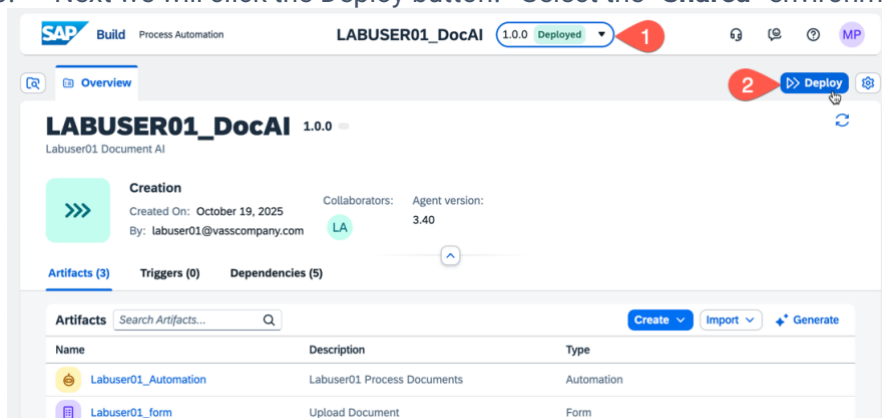


98. Accept the defaults on the 'Release Project' modal and click Release

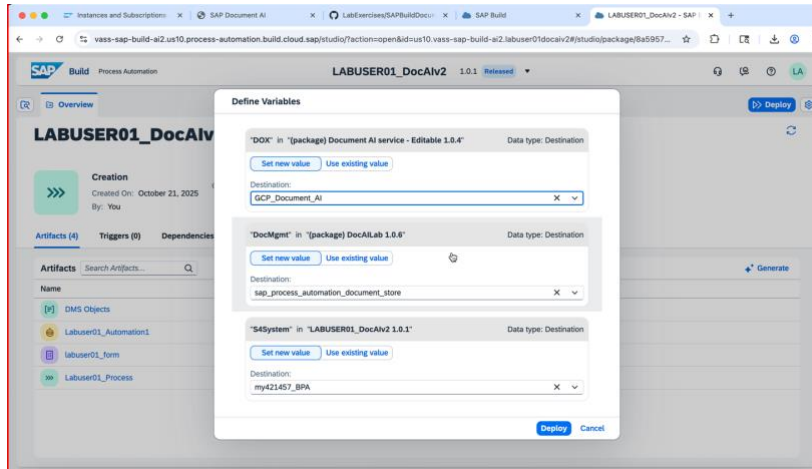


99. After releasing the project we will click the upper middle of the screen to select the newly released version of our project.

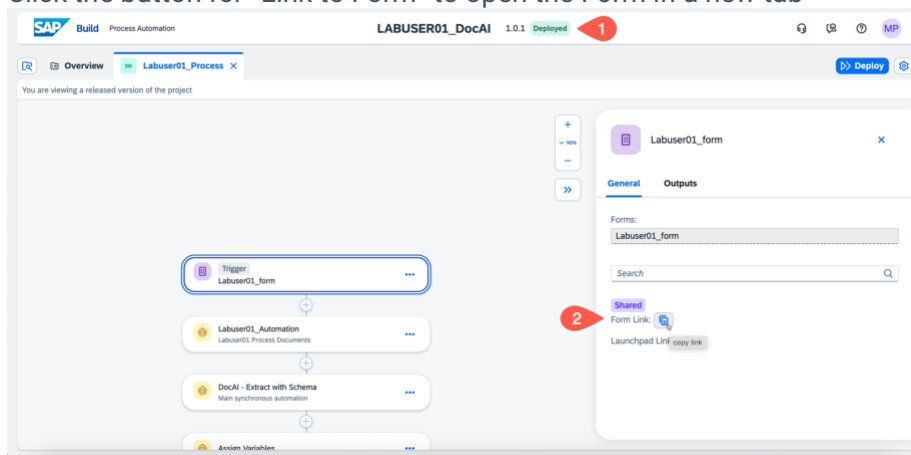
100. Next we will click the Deploy button. Select the "Shared" environment when prompted.



101. 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



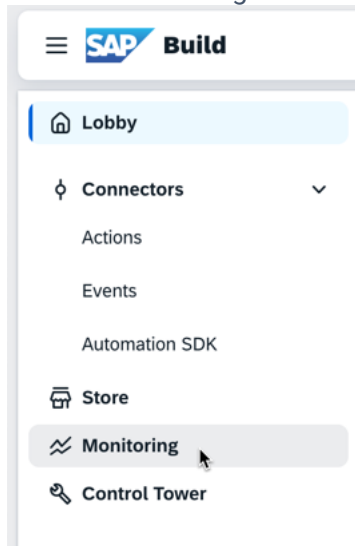
102. Once the deployment finishes we can test our form!
103. Select your deployed version, then select the process and then the form
104. Click the button for "Link to Form" to open the Form in a new tab



105. Upload your Labuser Goods Movement Form to process!
106. 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.

Monitor

- Process and Workflow Instances
- Automation Jobs (Failed today)
- Acquired Events
- Automation Overview

Automation Concurrent Quota Usage Today

Execution Type	Usage
Simultaneous execution Unattended	0/25
Simultaneous execution Attended	0/450

Automation Jobs

Monitoring / Automation Jobs

Items (4) Search... Hierarchical View Flat View Include Test Jobs Cancel Jobs

Date: Oct 15, 2025 - Oct 20, 2025 Automation: Search... Status: Completed x Project: Search...

Environment: Search... Trigger: Search...

	Automation	Status	Project and Version	Environmen	Machine / Alias	Login	Trigger	Last Updated On	Duration	T
<input type="checkbox"/>	Labu	Completed	LABUSER0:	Shared	Michaels-MacBook-Air-3.local	michaelpytr	us10.vass-sa12.labuserf	Oct 20, 07:36 AM	863 ms	
<input type="checkbox"/>	Assig Varia	Completed	MPAutomat	Shared	Michaels-MacBook-Air-3.local	michaelpytr	us10.vass-sa12.mpaufaut	Oct 15, 08:07 AM	216 ms	
<input type="checkbox"/>	DocA Extra with Sche	Completed	(package) Document, AI service - Editable	Shared	Michaels-MacBook-Air-3.local	michaelpytr	us10.vass-sa12.mpaufaut	Oct 15, 08:07 AM	13 s	
<input type="checkbox"/>	Proci Docu v2	Completed	MPAutomat	Shared	Michaels-MacBook-Air-3.local	michaelpytr	us10.vass-sa12.mpaufaut	Oct 15, 08:07 AM	2 s	

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!