

Exercise 2: Explore Client-Side Document Generation

Requirements

“As a Sales Rep, I’d like to generate quote documents with a click of a button from a quote record page and have a Word Document and PDF version attached in the Notes section of the quote record page.”

Customize the sample client-side OmniScript. Add a button to the quote record page that launches the OmniScript.

Prerequisites

- Create Document Templates


Tasks

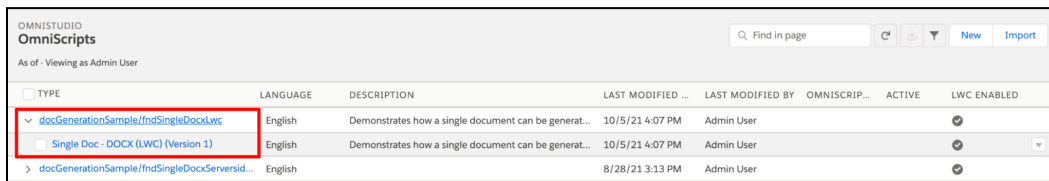
1. Review the sample Client-side OmniScript.
2. Version and edit the sample client-side OmniScript.
3. Edit the Generate Document button on the quote record page to launch the OmniScript.

Time

- 30 minutes
-

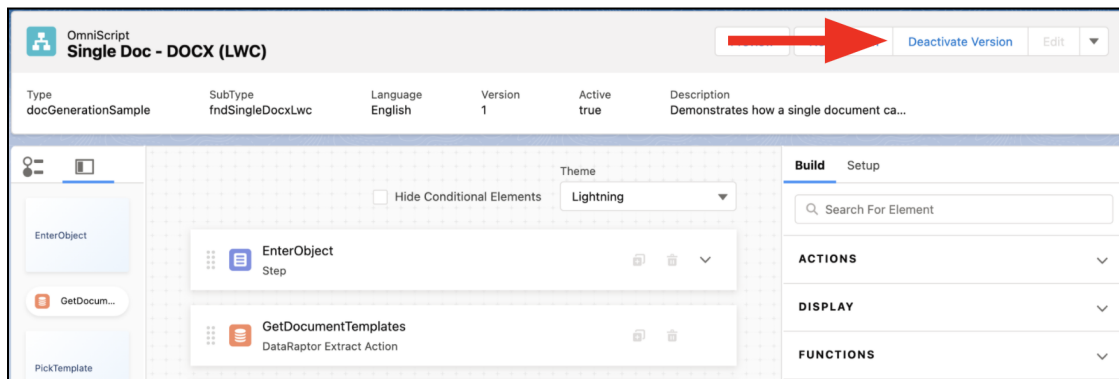
Task 1: Investigate the Sample Client-Side OmniScript

1. Using the Lightning App Launcher,  type `OmniStudio Document Generation` in the search box. Click **OmniStudio Document Generation**.
2. In the Lightning Navigation Bar, click the **OmniScript** tab.
3. Click `docGenerationSample/fndSingleDocxLwc`, then click **Single Doc - DOCX (LWC) (Version 1)** to open the client-side sample OmniScript.



TYPE	LANGUAGE	DESCRIPTION	LAST MODIFIED ...	LAST MODIFIED BY	OMNISCRIPT...	ACTIVE	LWC ENABLED
docGenerationSample/fndSingleDocxLwc	English	Demonstrates how a single document can be generat...	10/5/21 4:07 PM	Admin User		☑	
Single Doc - DOCX (LWC) (Version 1)	English	Demonstrates how a single document can be generat...	10/5/21 4:07 PM	Admin User		☑	
docGenerationSample/fndSingleDocxServersid...	English		8/28/21 3:13 PM	Admin User		☑	

4. Click **Deactivate Version** to deactivate the OmniScript.



OmniScript
Single Doc - DOCX (LWC)

Type: docGenerationSample | SubType: fndSingleDocxLwc | Language: English | Version: 1 | Active: true | Description: Demonstrates how a single document ca...

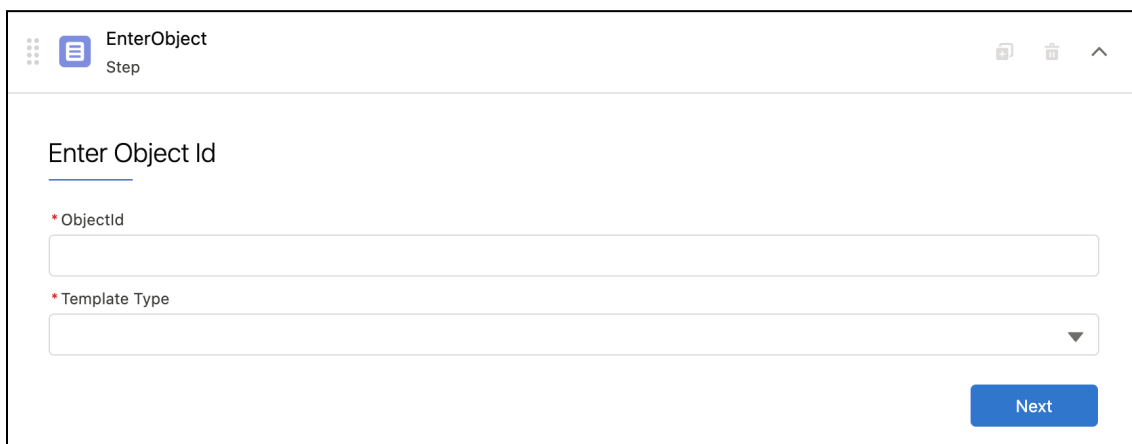
Buttons: Deactivate Version, Edit

Build Setup

EnterObject Step

GetDocumentTemplates DataRaptor Extract Action

5. Click **Done**.
6. Click on **EnterObject** step element. Notice the fields.



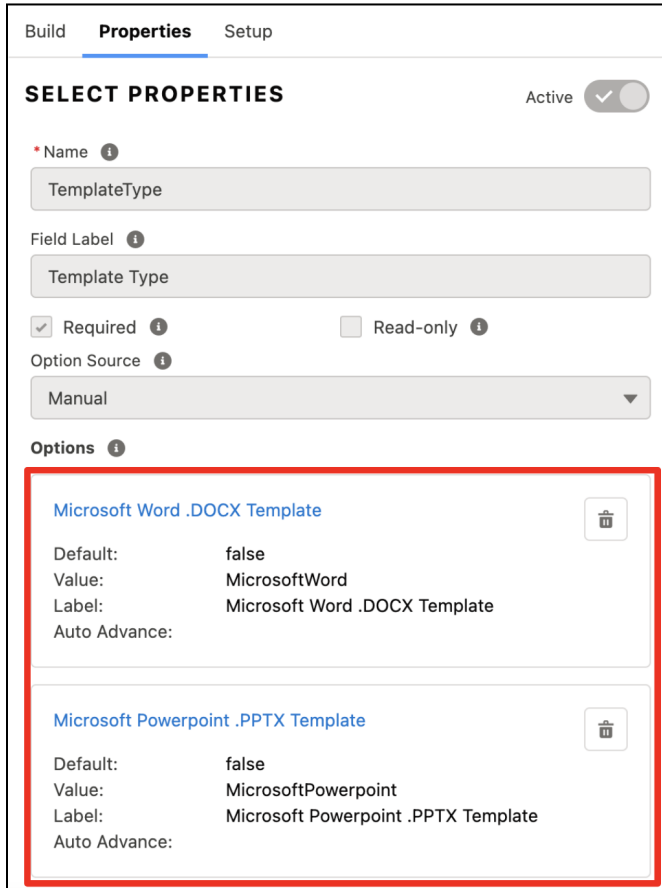
EnterObject Step

Enter Object Id

* Object Id

* Template Type

- Click the **Template Type** select field and notice the select options in the right panel under the **Properties** tab. The user has the option to select between Microsoft Word and Powerpoint templates.



Build **Properties** Setup

SELECT PROPERTIES Active

* Name ⓘ
TemplateType

Field Label ⓘ
Template Type

Required ⓘ Read-only ⓘ

Option Source ⓘ
Manual


Options ⓘ

Microsoft Word .DOCX Template ⓘ

Default: false
Value: MicrosoftWord
Label: Microsoft Word .DOCX Template
Auto Advance:

Microsoft Powerpoint .PPTX Template ⓘ

Default: false
Value: MicrosoftPowerpoint
Label: Microsoft Powerpoint .PPTX Template
Auto Advance:

- Click the **GetDocumentTemplates** DataRaptor Extract Action element. In the right panel under Properties, click the  icon to open the DataRaptor Extract in a new browser tab.

Build **Properties** Setup

DATARAPTOR EXTRACT ACTION PROPERTIES Active

* Name i

Field Label i

* DataRaptor Interface i
 🔗

+ Create New Dataraptor

Ignore Cache

9. In the **EXTRACT** tab of the DataRaptor, notice the filter options.

OMNISTUDIO DATARAPTOR
DocGenSample-ExtractDocumentTemplatesLWC

Interface Type	Input Type	Output Type	Required Permission (Optional)	Description
Extract	JSON	JSON		

EXTRACT FORMULAS OUTPUT OPTIONS PREVIEW

1 - DocumentTemplate 🗑️

* Extract Output Path

Filter	Operator	Value
DocumentTemplate	=	'true'
AND TokenMappingType	=	'JSON'
AND Type	=	templateType

+ Add Extract Step

10. In the **OUTPUT** tab, notice the Extract and Output JSON paths.

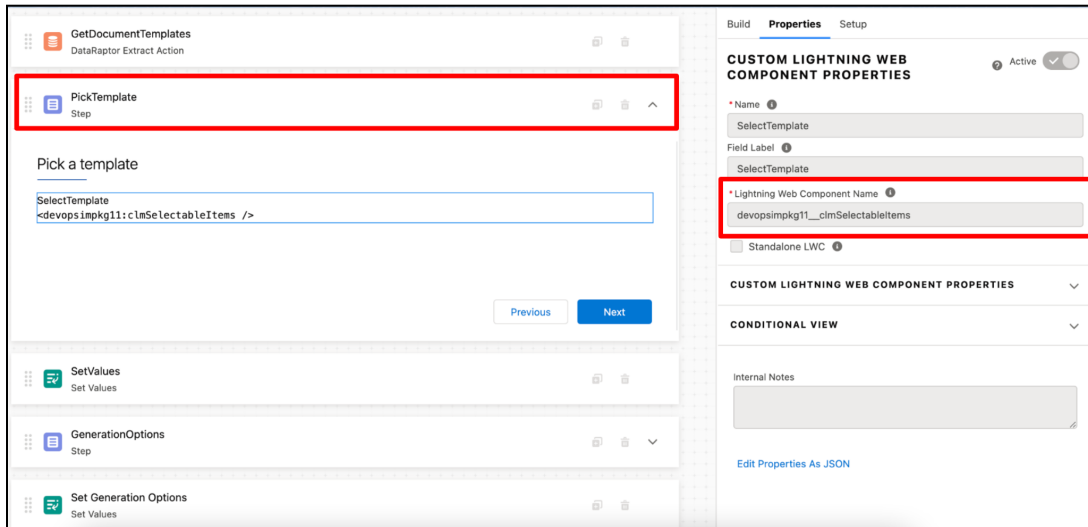
OMNISTUDIO DATARAPTOR
DocGenSample-ExtractDocumentTemplatesLWC

Interface Type	Input Type	Output Type	Required Permission (Optional)	Description
Extract	JSON	JSON		

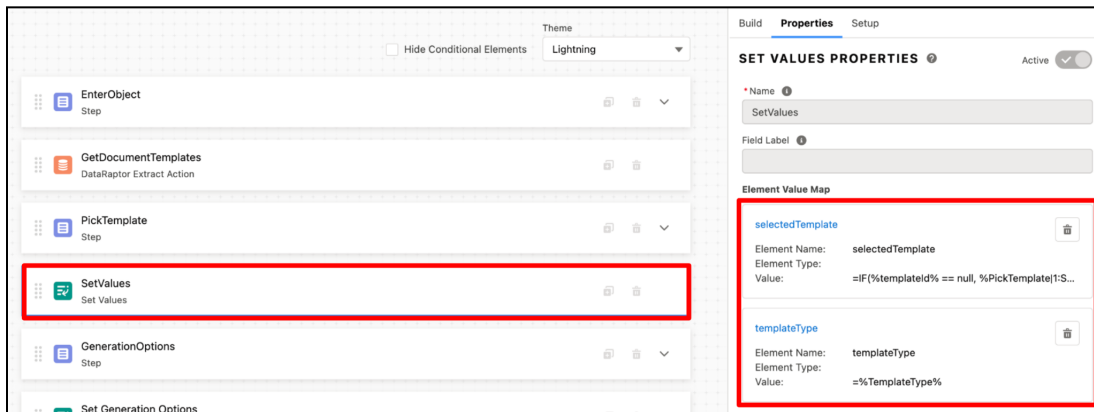
EXTRACT FORMULAS **OUTPUT** OPTIONS PREVIEW

EXTRACT JSON PATH 🔍	OUTPUT JSON PATH 🔍	
DocumentTemplate:DocumentGenerationMechanism	DocumentTemplate:DocumentGenerationMechanism	✎ 🗑️
DocumentTemplate:Id	DocumentTemplate:Id	✎ 🗑️
DocumentTemplate:Name	DocumentTemplate:Name	✎ 🗑️
DocumentTemplate:Type	DocumentTemplate:TemplateType	✎ 🗑️
DocumentTemplate:VersionNumber	DocumentTemplate:VersionNumber	✎ 🗑️

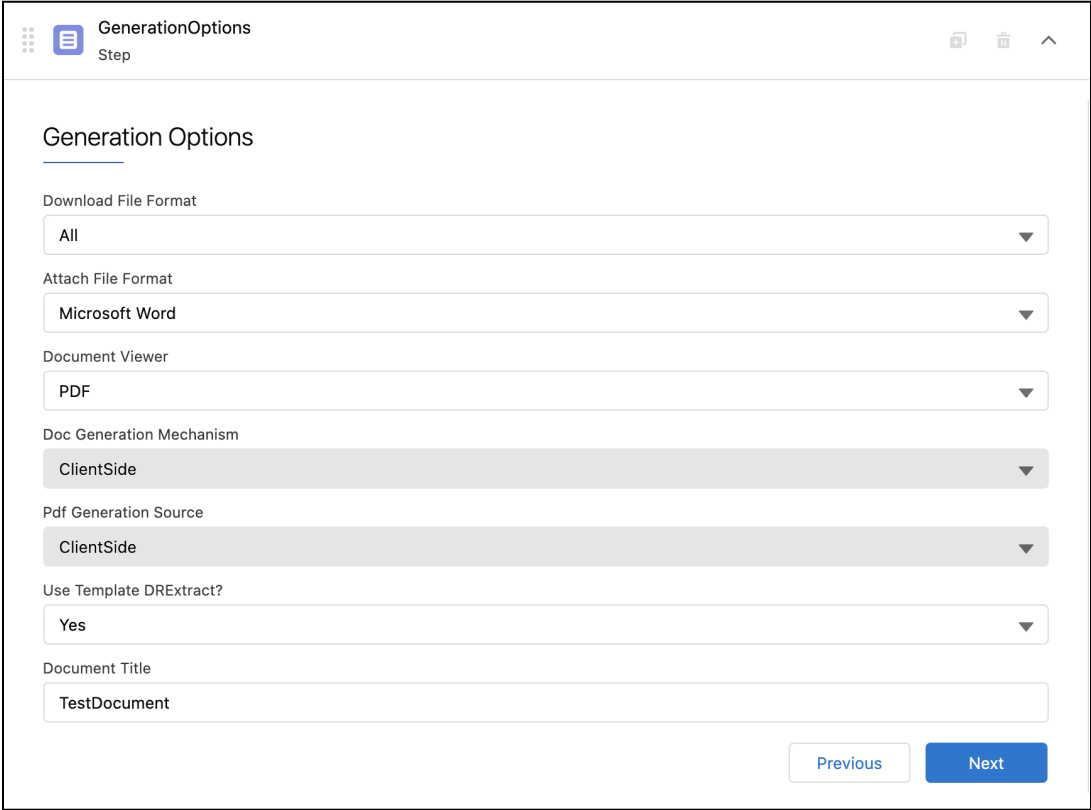
11. Close the DataRaptor browser tab.
12. Back in the OmniScript, click the **PickTemplate** step element. Click the **SelectTemplate** element inside the step. Notice the custom Lightning Web Component. It displays the template types in a list so we can select one.



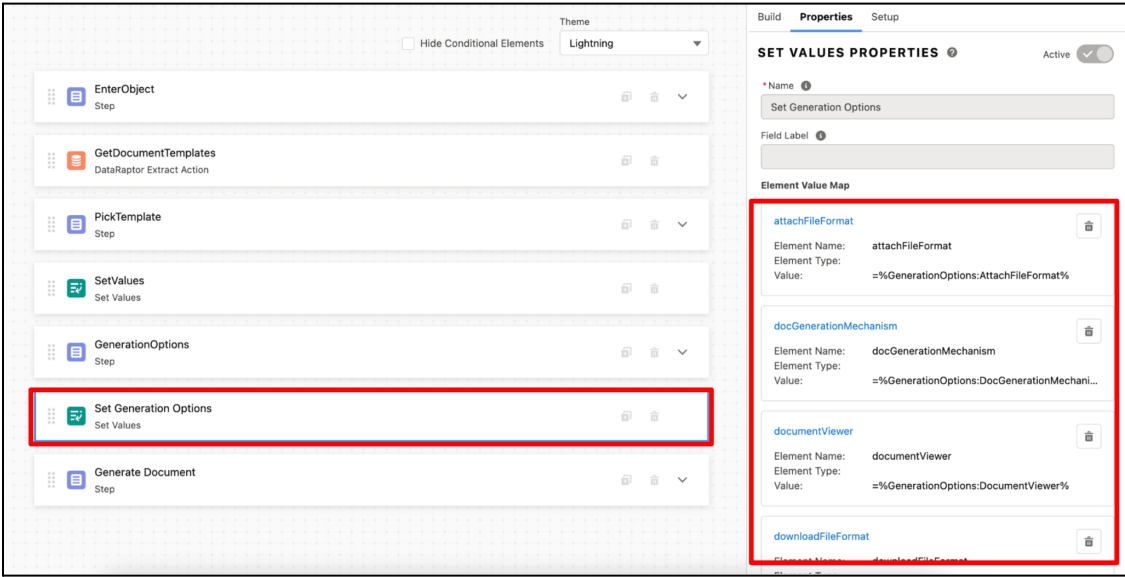
13. Click the **SetValues** element. Notice the **selectedTemplate** and **templateType** values. These values are passed to the **GenerationOptions** step.



14. Click the **GenerationOptions** step element. Examine the fields.



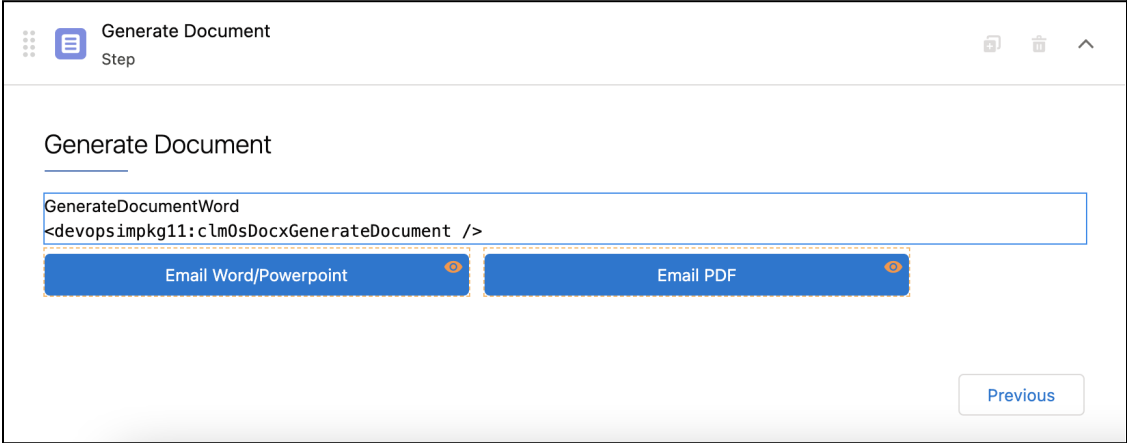
15. Click the **Set Generation Option** Set Values element. Notice the values in the **Properties** panel on the right. The element sets these values and passes them to the **Generate Document** step.



Element Name	Element Type	Value
attachFileFormat	attachFileFormat	=%GenerationOptions:AttachFileFormat%
docGenerationMechanism	docGenerationMechanism	=%GenerationOptions:DocGenerationMechani...
documentViewer	documentViewer	=%GenerationOptions:DocumentViewer%
downloadFileFormat	downloadFileFormat	

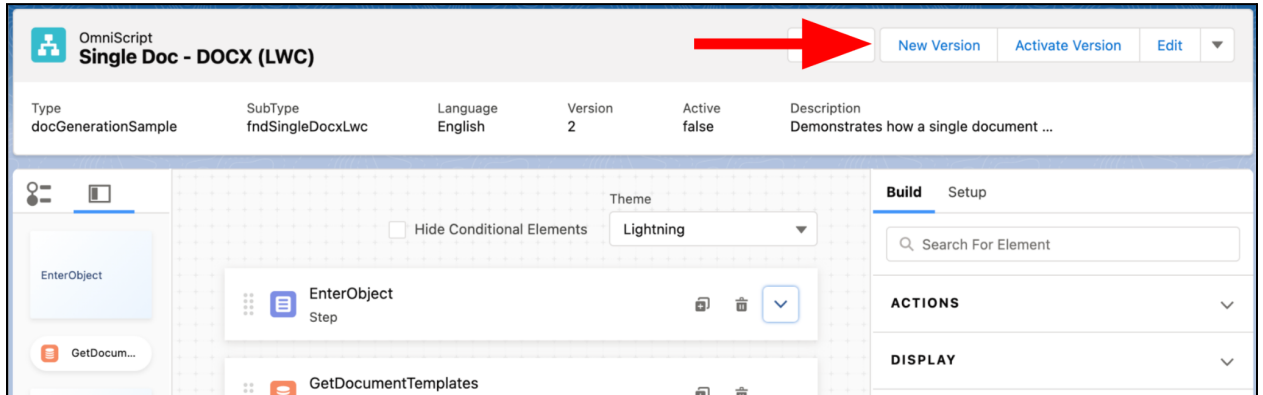


16. Click the **Generate Document** step element. Notice the custom Lightning Web Component and Email Action elements.



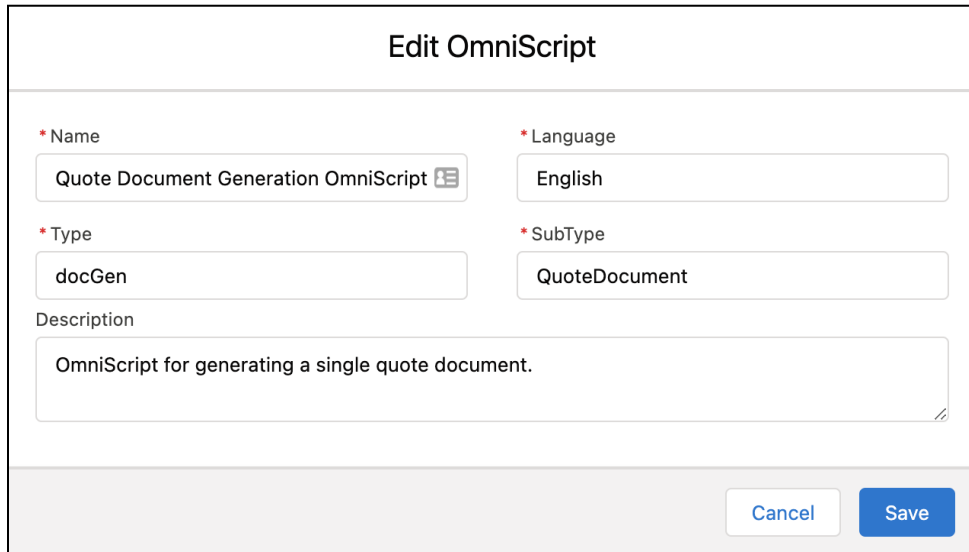
Task 2: Version and Edit the Sample Client-Side OmniScript

1. Click **New Version** to create a new version of the OmniScript. It is recommended that you create a new version before making any changes to the sample OmniScript.

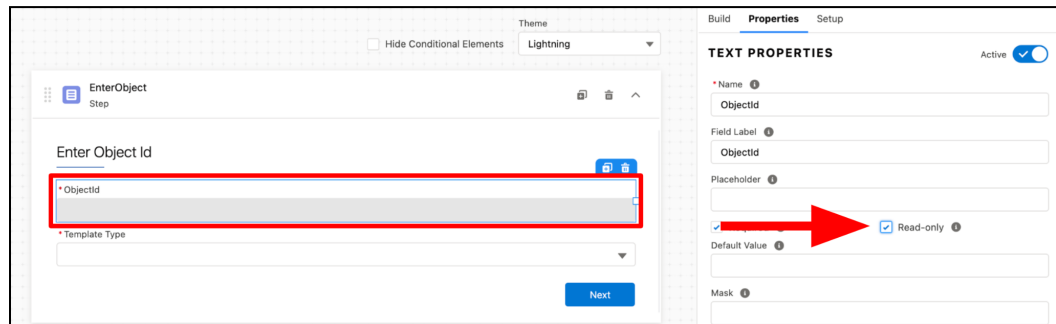


2. Click **Edit**.
3. Edit the fields as following:

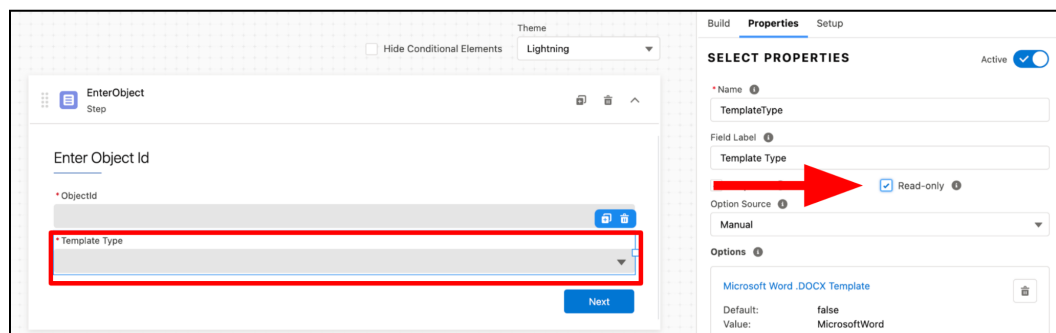
Field	Value
Name	Quote Document Generation OmniScript
Language	English
Type	docGen
Subtype	QuoteDocument
Description	OmniScript for generating a single quote document.



4. Click **Save**.
5. Edit **EnterObject** step fields to read only.
 - a. Click the **EnterObject** step to expand it.
 - b. Click the **ObjectId** field.
 - c. In the **Properties** panel on the right, select **Read-only**.

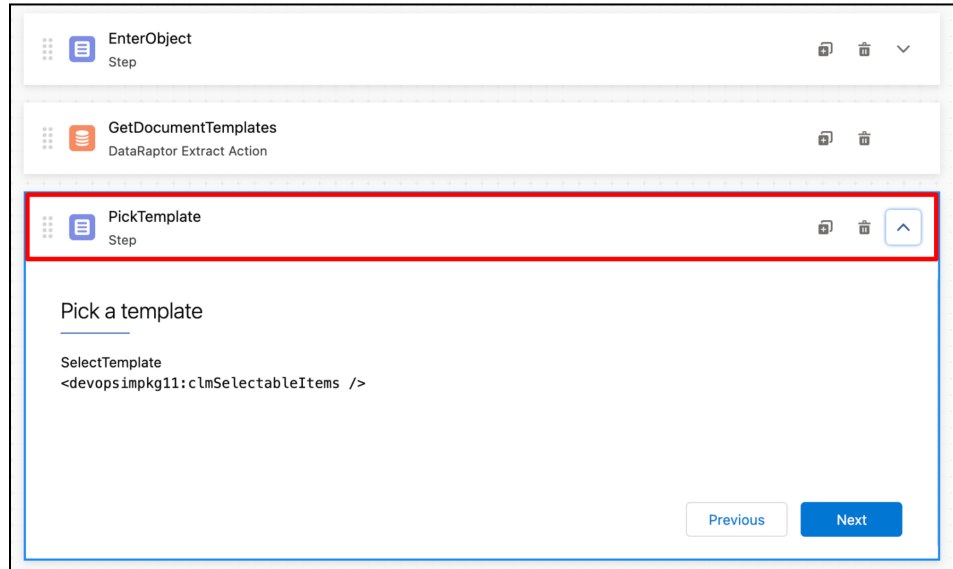


- d. Click the **Template Type** field.
- e. In the **Properties** panel on the right, select **Read-only**.

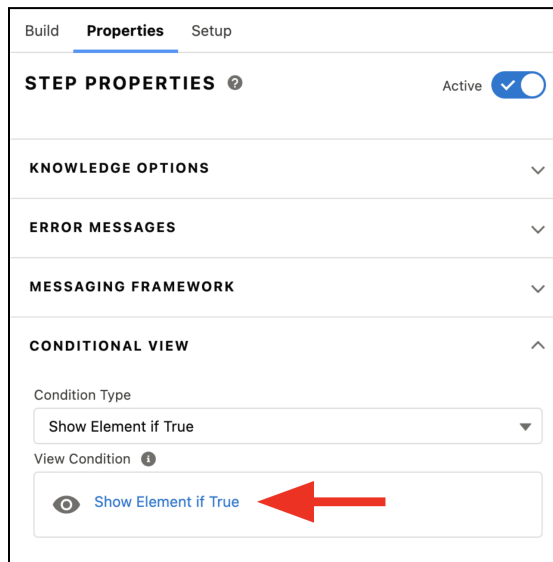


6. Edit the OmniScript to pre-select the template.

- a. Add a conditional view to hide the **PickTemplate** step if templateId is provided.
 - i. Click the **PickTemplate** step.



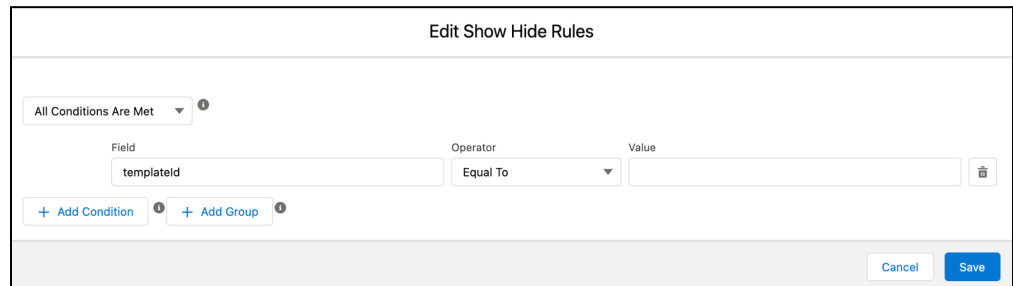
- ii. In the **Properties** panel on the right, expand **CONDITIONAL VIEW**.
- iii. Click **Show Element if True**.



- iv. Edit the following fields:

Field	Value
Field	templateId

Operator	Equal To
Value	[leave blank]




- v. Click **Save**.
- b. Edit **SetValues** element to add the pre-selected template.
 - i. Click the **SetValues** element. Make sure to click the element with the name **SetValues**, not the **Set Generation Options** element.




- ii. Click **Edit Properties As JSON** on the bottom of the Properties panel.

Build **Properties** Setup

SET VALUES PROPERTIES ? Active

selectedTemplate 

Element Name: selectedTemplate
Element Type:
Value: =IF(%templateId% == null, %PickTemplate|1:S...

templateType 

Element Name: templateType
Element Type:
Value: =%TemplateType%


[+ Add New Element Value](#)

MESSAGING FRAMEWORK ▼

CONDITIONAL VIEW ▼

LWC Component Override

Internal Notes

[Edit Properties As JSON](#) 

- iii. Replace the elementValueMap node with the value below.


```
"elementValueMap": {  
  "preSelectedTemplate": {  
    "Id": "=%templateId%",  
    "TemplateType": "=%TemplateType%"  
  },  
  "selectedTemplate": "=IF(%templateId% == null,  
%PickTemplate|1:SelectTemplate|1%,  
%preSelectedTemplate%)",  
  "templateType": "=%TemplateType%"  
},
```

Build **Properties** Setup

SET VALUES PROPERTIES ? Active

```
1 {
2   "controlWidth": 12,
3   "label": "",
4   "elementValueMap": {
5     "preSelectedTemplate": {
6       "Id": "=%templateId%",
7       "TemplateType": "=%TemplateType%"
8     },
9     "selectedTemplate": "=%IF(%templateId% == null
10    "templateType": "=%TemplateType%"
11  },
12  "showPersistentComponent": [
13    true,
14    false
15  ],
16  "show": null,
17  "HTMLTemplateId": "",
18  "wpm": false,
19  "ssm": false,
20  "message": {},
21  "pubsub": false
22 }
```

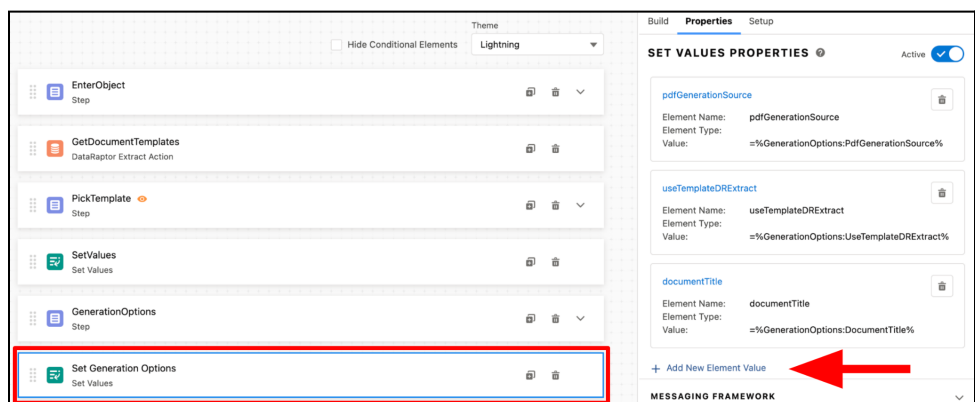
- iv. Click **Close JSON Editor**.



```
1 {
2   "controlWidth": 12,
3   "label": "",
4   "elementValueMap": {
5     "preSelectedTemplate": {
6       "Id": "%templateId%",
7       "TemplateType": "%TemplateType%"
8     },
9     "selectedTemplate": "IF(%templateId% == null
10    "templateType": "%TemplateType%"
11  },
12  "showPersistentComponent": [
13    true,
14    false
15  ],
16  "show": null,
17  "HTMLTemplateId": "",
18  "wpm": false,
19  "ssm": false,
20  "message": {},
21  "pubsub": false
22 }
```

Close JSON Editor

- c. Edit **Set Generation Options** element.
 - i. Click the **Set Generation Options** element.
 - ii. In the Properties panel on the right, click **+Add New Element Value**.



EnterObject Step

GetDocumentTemplates DataRaptor Extract Action

PickTemplate Step

SetValues Set Values

GenerationOptions Step

Set Generation Options Set Values

pdfGenerationSource
Element Name: pdfGenerationSource
Element Type: pdfGenerationSource
Value: %GenerationOptions:PdfGenerationSource%

useTemplateDRExtract
Element Name: useTemplateDRExtract
Element Type: useTemplateDRExtract
Value: %GenerationOptions:UseTemplateDRExtract%

documentTitle
Element Name: documentTitle
Element Type: documentTitle
Value: %GenerationOptions:DocumentTitle%

+ Add New Element Value

- iii. Edit the following fields:



Element Name	selectedTemplate
Value	IF(%templateId%!=NULL, %preSelectedTemplate%, %selectedTemplate%)

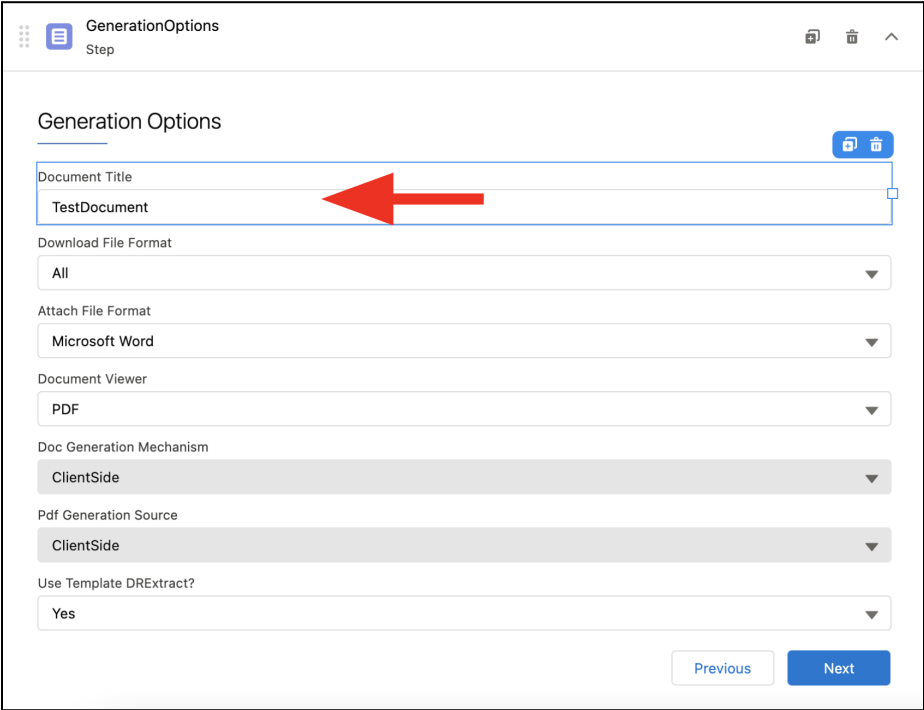
iv. Select the **Use Expression For Value** checkbox.

The screenshot shows a dialog box titled "Add New Element Value". It has two main sections: "Element Name" and "Expression". The "Element Name" field contains the text "selectedTemplate". The "Expression" field contains the code "IF(%templateId%!=NULL, %preSelectedTemplate%, %selectedTemplate%)". At the bottom left, there is a checkbox labeled "Use Expression For Value" which is checked. A red arrow points to this checkbox. At the bottom right, there are three buttons: "Cancel", "Save", and "Save & New".

v. Click **Save**.

- 7. Edit **Generation Options** step.
 - a. Click the **GenerationOptions** step.

- b. Click the **Document Title** field and move it right above the **Download File Format** field.



GenerationOptions
Step

Generation Options

Document Title
TestDocument

Download File Format
All

Attach File Format
Microsoft Word

Document Viewer
PDF

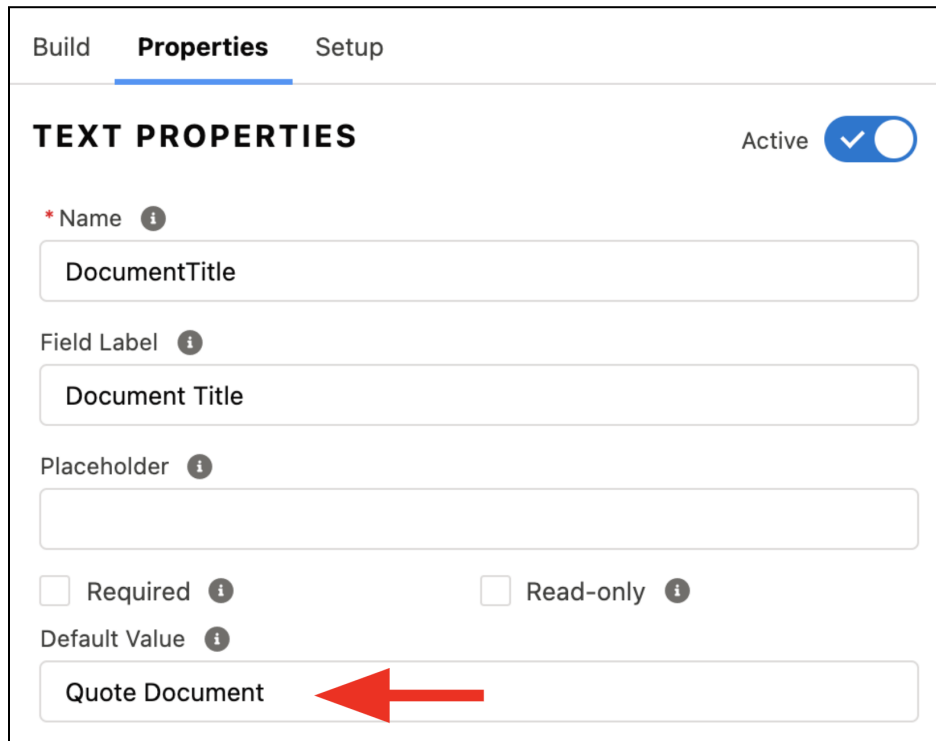
Doc Generation Mechanism
ClientSide

Pdf Generation Source
ClientSide

Use Template DRExtract?
Yes

Previous Next

- c. In the Properties panel, change the default value of the **Document Title** field to **Quote Document**.



Build **Properties** Setup

TEXT PROPERTIES Active

* Name ⓘ
DocumentTitle

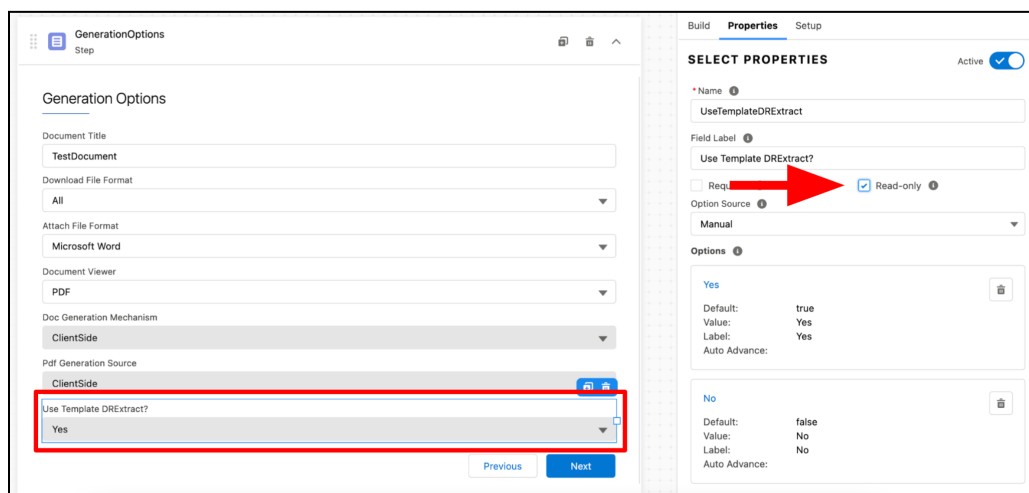
Field Label ⓘ
Document Title

Placeholder ⓘ

Required ⓘ Read-only ⓘ

Default Value ⓘ
Quote Document

- d. Click the **Use Template DRExtract?** field and in the **Properties** panel, check **Read-Only**.



Generation Options Step

Generation Options

Document Title
TestDocument

Download File Format
All

Attach File Format
Microsoft Word

Document Viewer
PDF

Doc Generation Mechanism
ClientSide

Pdf Generation Source
ClientSide

Use Template DRExtract?
Yes

Previous Next

Build **Properties** Setup

SELECT PROPERTIES Active

* Name ⓘ
UseTemplateDRExtract

Field Label ⓘ
Use Template DRExtract?

Req. Read-only ⓘ

Option Source ⓘ
Manual

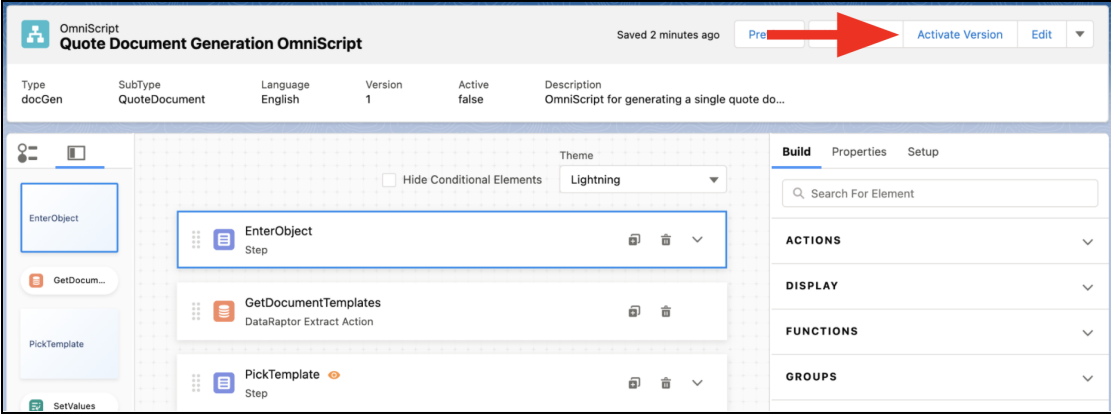
Options ⓘ

Yes
Default: true
Value: Yes
Label: Yes
Auto Advance:

No
Default: false
Value: No
Label: No
Auto Advance:




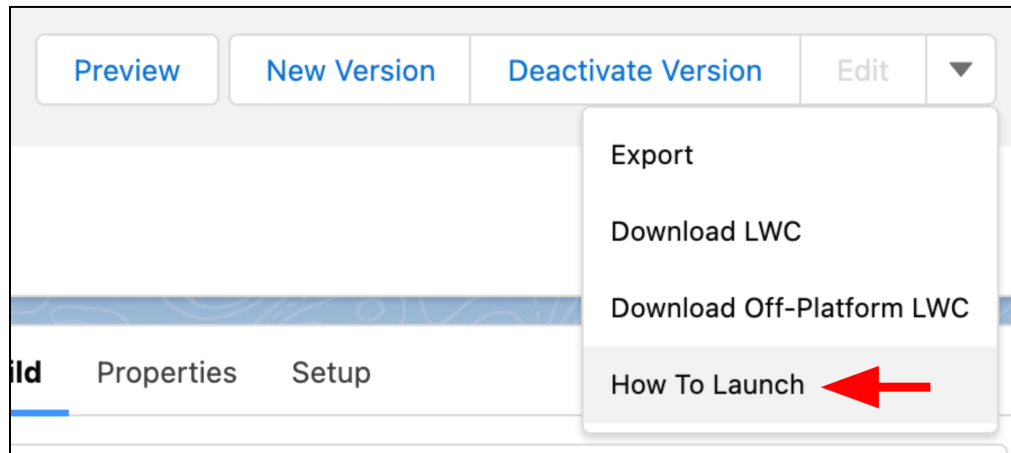
8. Click **Activate Version** to activate the OmniScript.



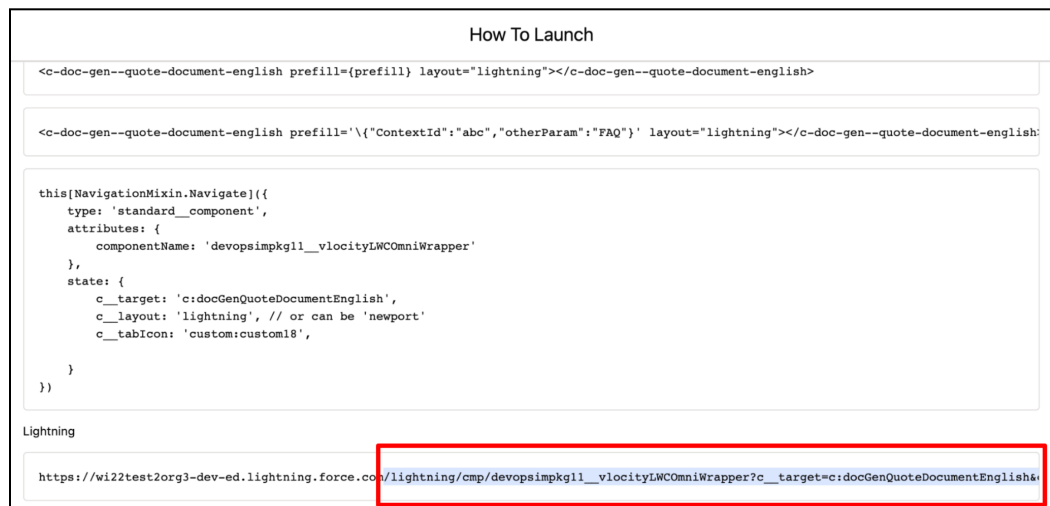
Task 3: Edit the Generate Document Button on the Quote Record Page to Launch the OmniScript

1. Retrieve Lightning Launch URL.

a. Click  and then click **How To Launch**.



b. Copy the **Lightning** Launch URL after **.com** till the end. Save it for later.

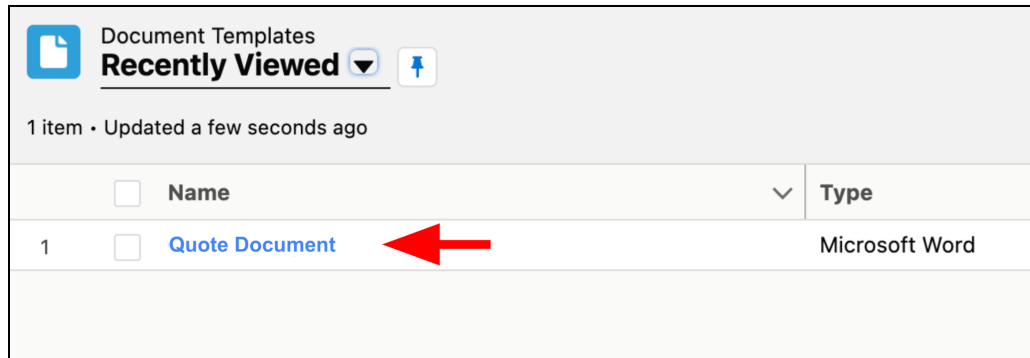


c. Click **Done**.

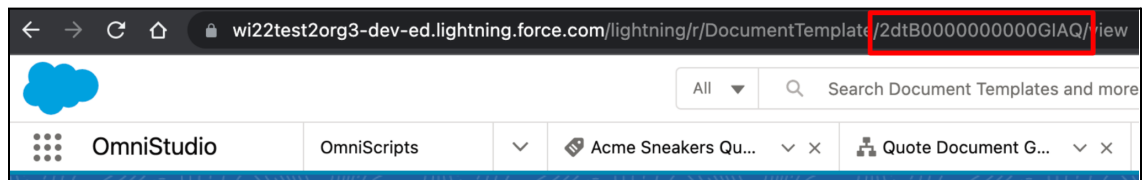
2. Retrieve the Template Id

a. In the Lightning Navigation Bar, click **Document Templates** tab.

- b. Click **Quote Document** to open the template information.

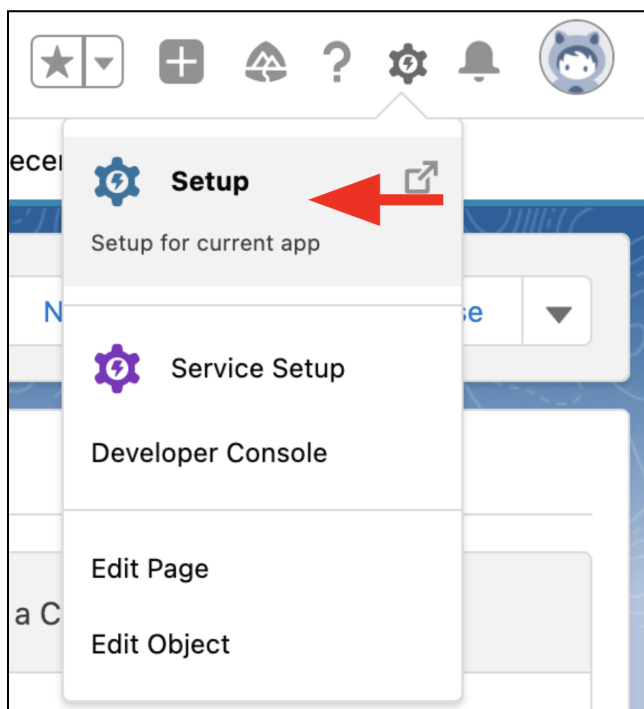


- c. Copy the alpha-numeric combination from the URL between **DocumentTemplate/** and **/view**. This is the Template Id. Save it for later.

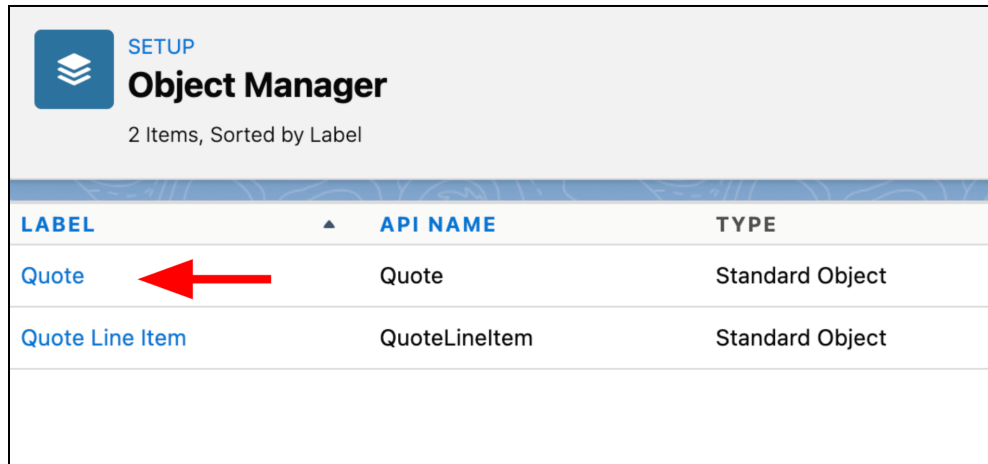


3. Edit Generate Document button.

- a. Click **Setup**.



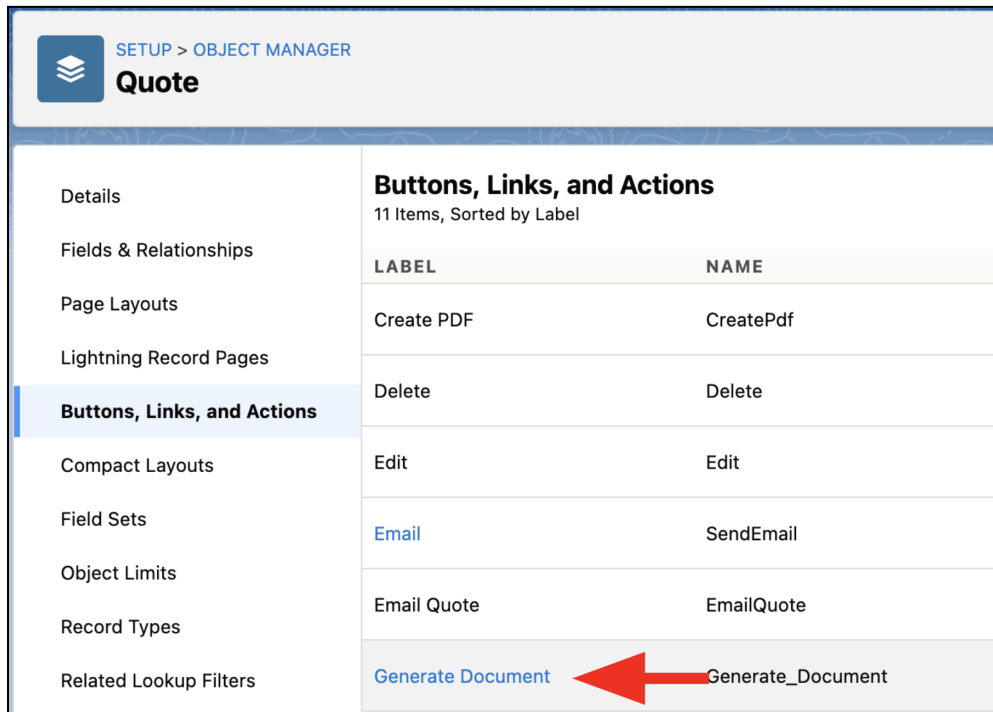
- b. Click **Object Manager** and open the **Quote** object.



SETUP
Object Manager
2 Items, Sorted by Label

LABEL	API NAME	TYPE
Quote	Quote	Standard Object
Quote Line Item	QuoteLineItem	Standard Object

- c. Click **Buttons, Links, and Actions**.
d. Click **Generate Document**. We pre-built this custom button for training purposes.



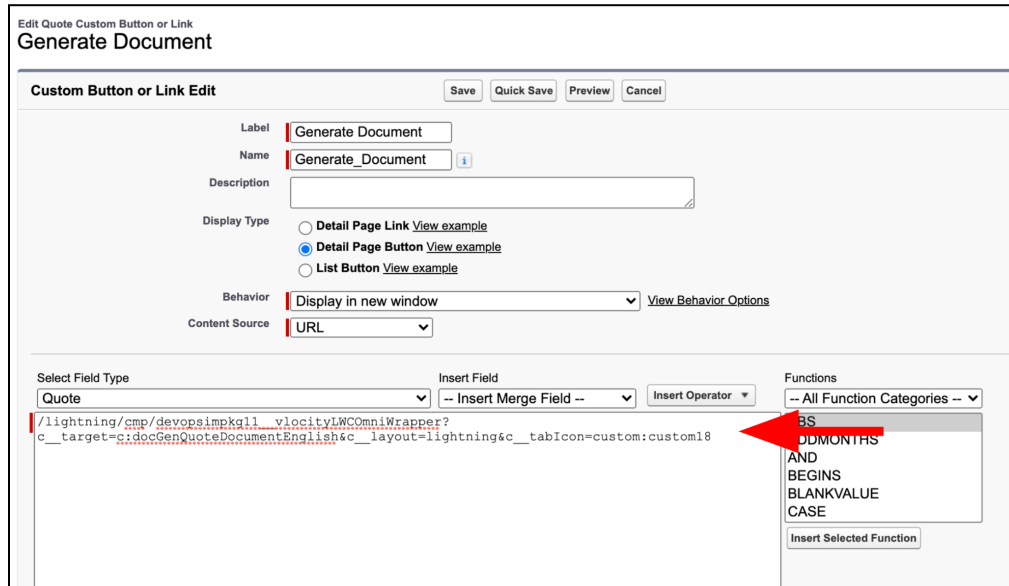
SETUP > OBJECT MANAGER
Quote

DETAILS	Buttons, Links, and Actions
Details	11 Items, Sorted by Label
Fields & Relationships	
Page Layouts	
Lightning Record Pages	
Buttons, Links, and Actions	
Compact Layouts	
Field Sets	
Object Limits	
Record Types	
Related Lookup Filters	

LABEL	NAME
Create PDF	CreatePdf
Delete	Delete
Edit	Edit
Email	SendEmail
Email Quote	EmailQuote
Generate Document	Generate_Document

- e. Click **Edit**.

- f. Delete whatever text may be here and paste the **Lightning Launch URL** from an earlier step into the formula field.



Generate Document

Custom Button or Link Edit

Save Quick Save Preview Cancel

Label: Generate Document

Name: Generate_Document

Description:

Display Type:

 Detail Page Link [View example](#)

 Detail Page Button [View example](#)

 List Button [View example](#)

Behavior: Display in new window [View Behavior Options](#)

Content Source: URL

Select Field Type: Quote

Insert Field: -- Insert Merge Field --

Insert Operator:

Functions:

-- All Function Categories --

ABS

ADDMONTHS

AND

BEGINS

BLANKVALUE

CASE

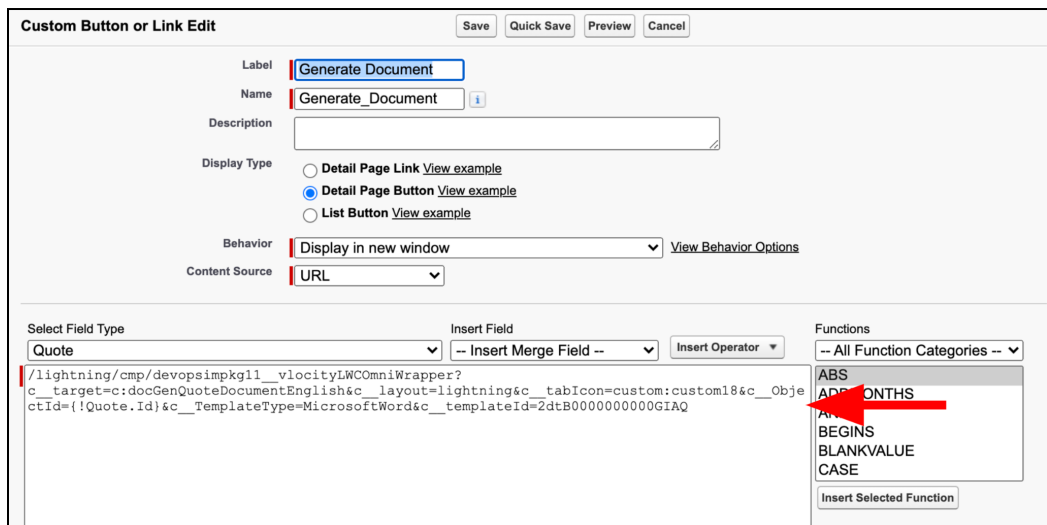
Insert Selected Function

Formula field content:

/lightning/cmp/devopsimpkg11_vlocityLWC OmniWrapper?

c_target=c:docGenQuoteDocumentEnglish&c_layout=lightning&c_tabIcon=custom:custom18

- g. Append `&c__ObjectId={!Quote.Id}&c__TemplateType=MicrosoftWord` at the end of the URL. This passes QuoteId from the record into the OmniScript and pre-selects the template type.
- h. Append `&c__templateId=`.
- i. Append template Id you saved in an earlier step at the end of the URL. This passes template Id to the OmniScript and pre-selects the template the OmniScript is going to use.



Generate Document

Custom Button or Link Edit

Save Quick Save Preview Cancel

Label: Generate Document

Name: Generate_Document

Description:

Display Type:

 Detail Page Link [View example](#)

 Detail Page Button [View example](#)

 List Button [View example](#)

Behavior: Display in new window [View Behavior Options](#)

Content Source: URL

Select Field Type: Quote

Insert Field: -- Insert Merge Field --

Insert Operator:

Functions:

-- All Function Categories --

ABS

ADDMONTHS

AND

BEGINS

BLANKVALUE

CASE

Insert Selected Function

Formula field content:

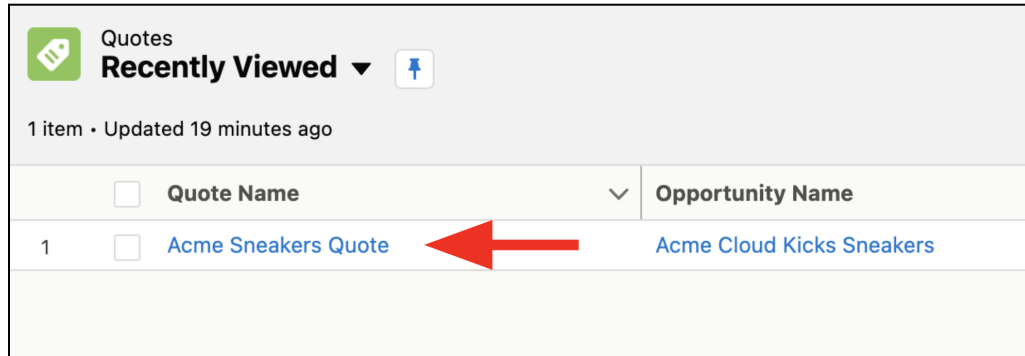
/lightning/cmp/devopsimpkg11_vlocityLWC OmniWrapper?

c_target=c:docGenQuoteDocumentEnglish&c_layout=lightning&c_tabIcon=custom:custom18&c__Obj

ctId={!Quote.Id}&c__TemplateType=MicrosoftWord&c__templateId=2dtB0000000000GIAQ

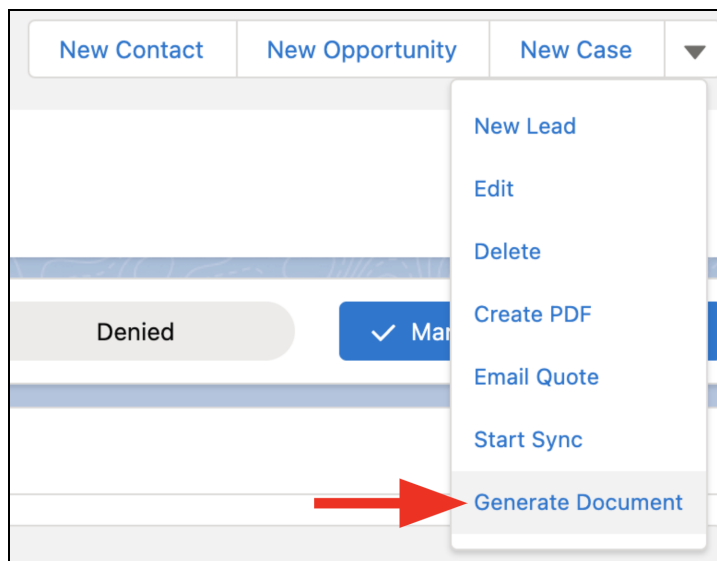
- j. Make sure there are no spaces in the URL.

- k. Click **Save**.
- 4. Test the Document Generation process.
 - a. In the Lightning Navigation Bar, click **Quotes** tab.
 - b. Click **Acme Sneakers Quote** to open the quote page.

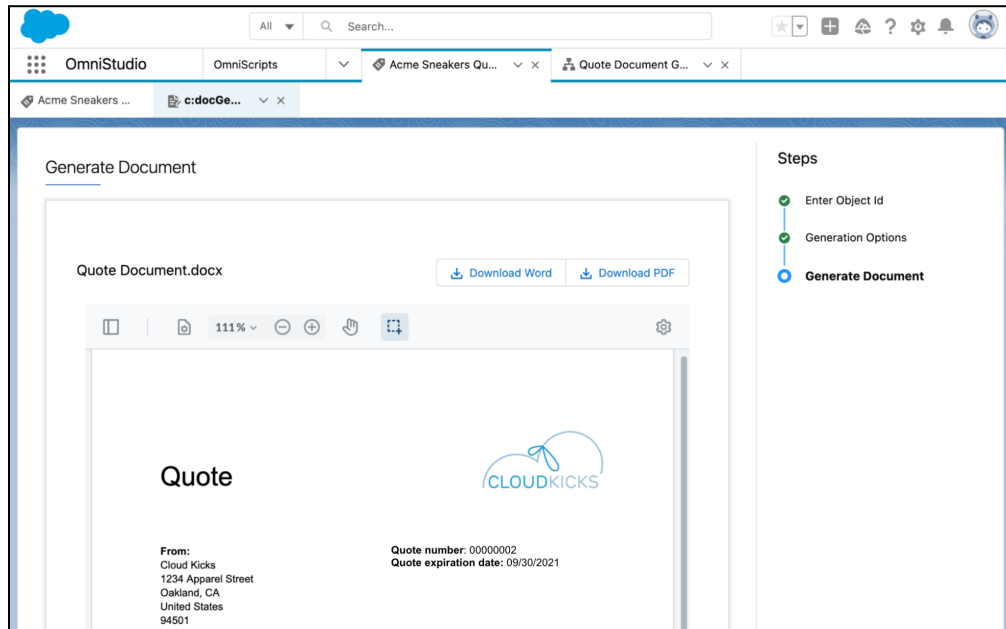


	Quote Name	Opportunity Name
1	Acme Sneakers Quote	Acme Cloud Kicks Sneakers

- c. Click and click **Generate Document**.



- d. The OmniScript opens in a separate tab. Go through the OmniScript Steps to generate the quote document.



- e. Close the Generate Document tab and go back to the **Acme Sneakers Quote** page.
f. Go to the **Notes and Attachment** related list and notice the quote document attached.

