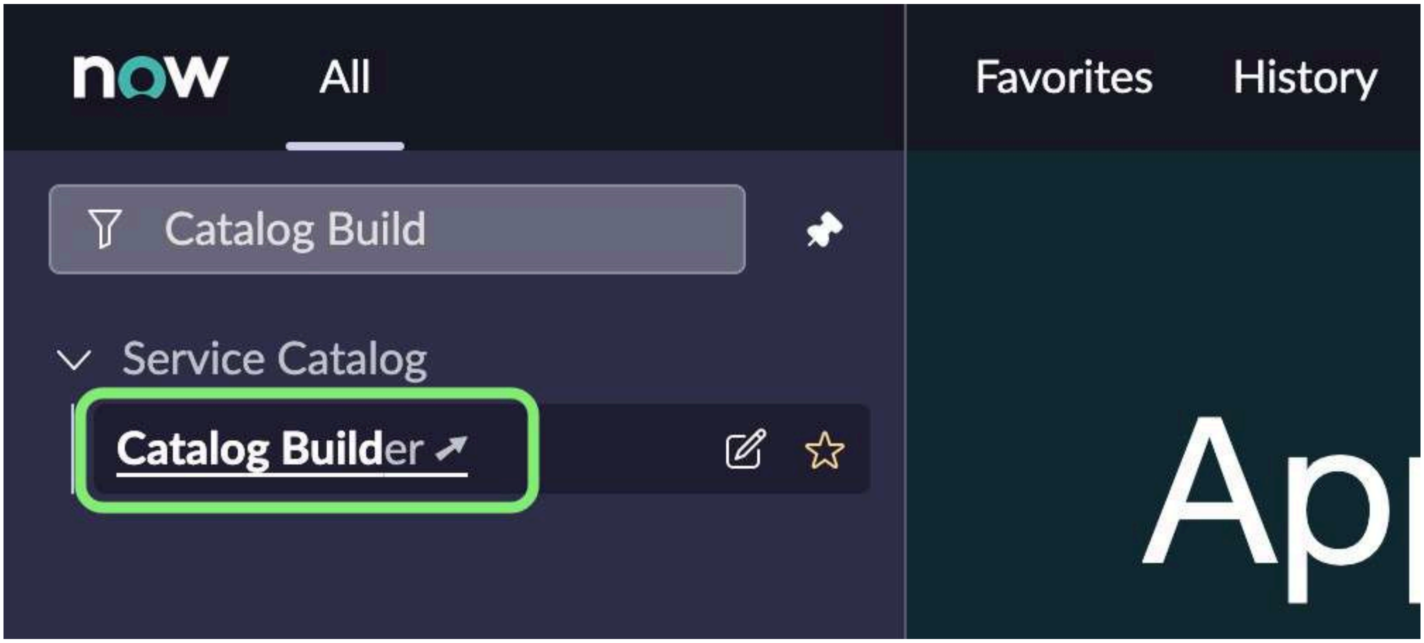
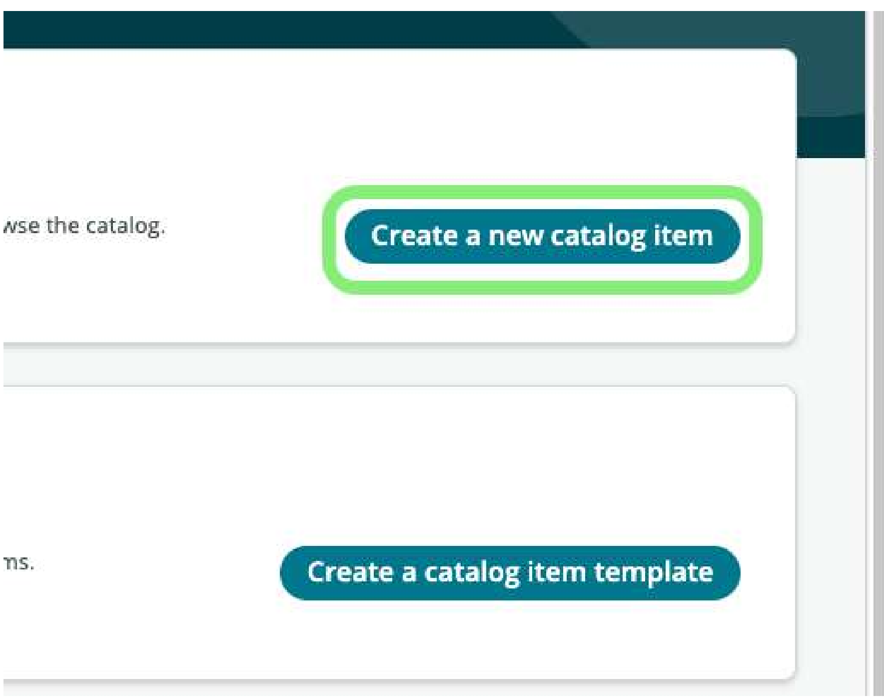
Exercise 1: Create a Catalog Item

1. Navigate to Service Catalog > Catalog Builder

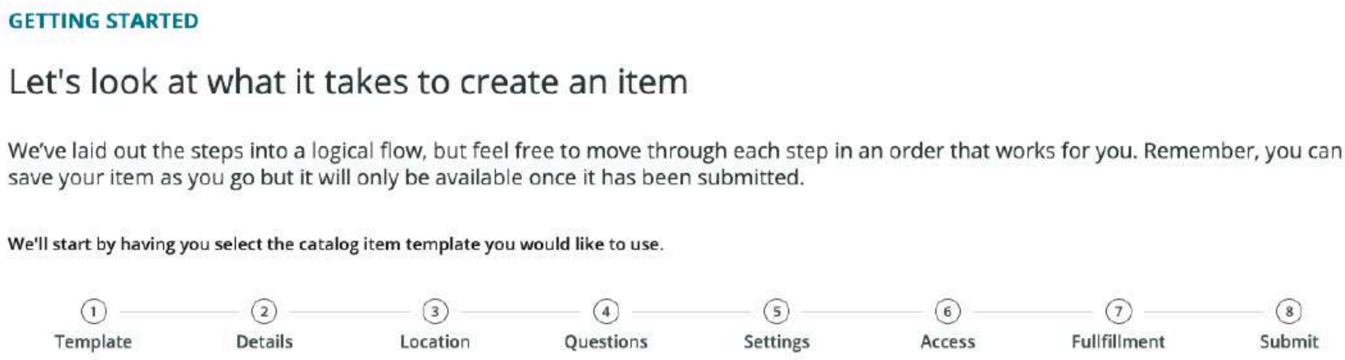


2. Click Create new catalog item

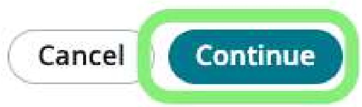
NOTE: Notice the ability to create a Catalog Item Template. Creating Templates assists with scaling up new Catalog Items and provide a consistent user experience to end-users.



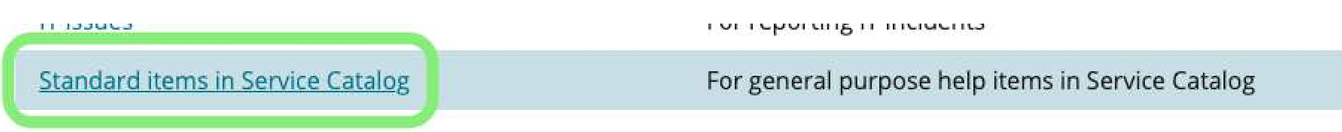
3. Review the steps required to create a Catalog Item.



4. Click Continue.



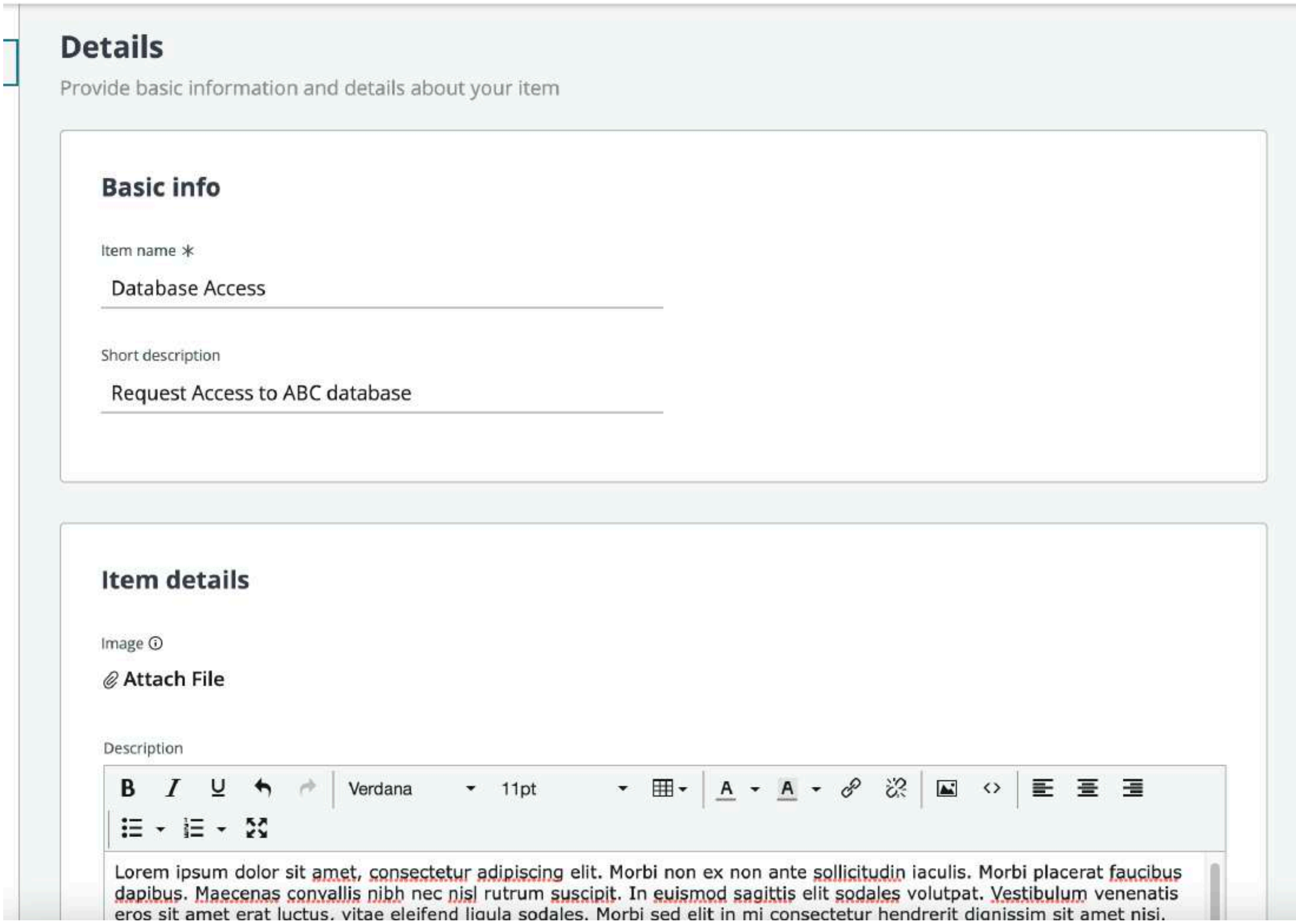
5. Select the "Standard items in the Service Catalog Template"



6. Click Use this Item template.

7. Fill out the Basic info and Item details.

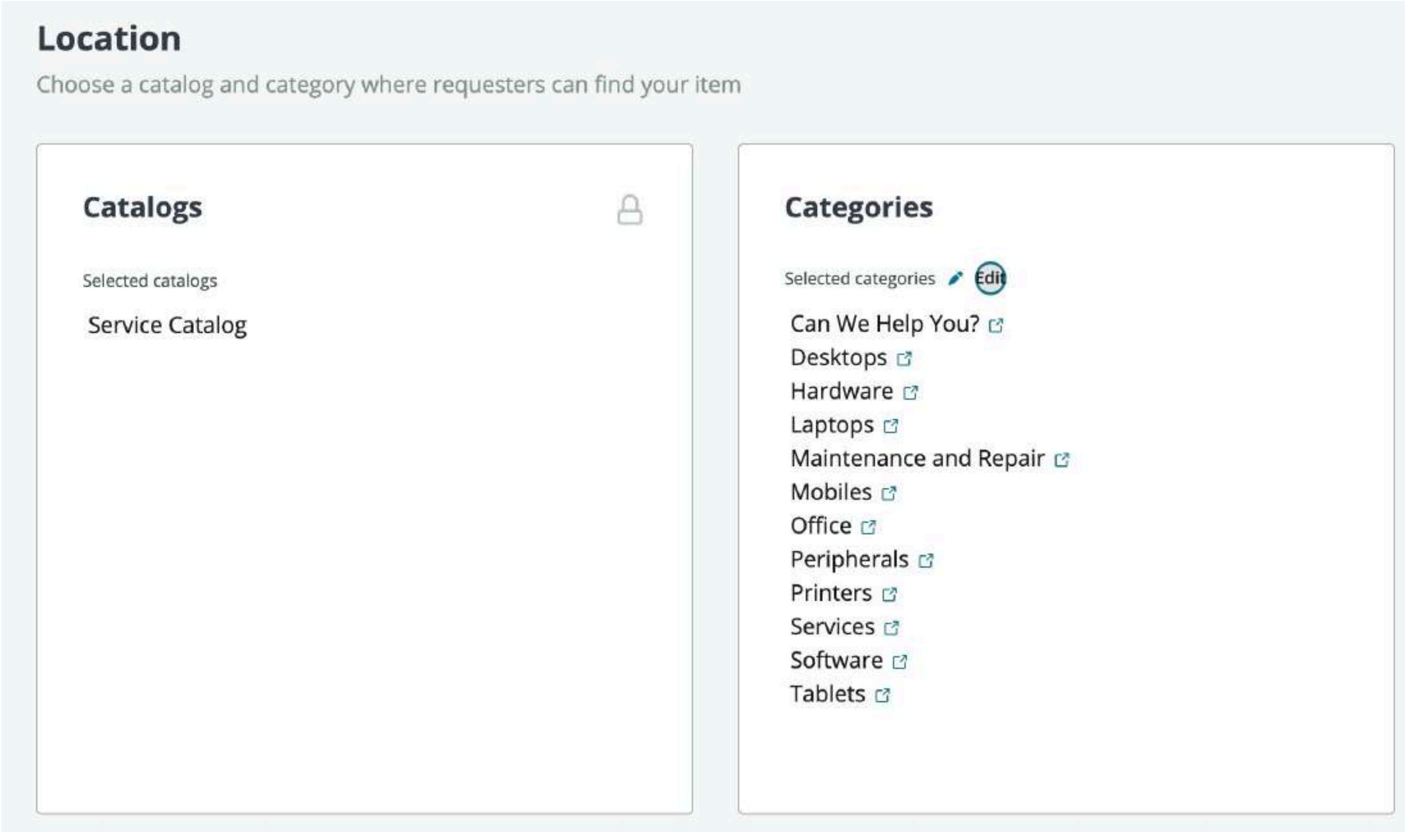
Optional: Attach an image



8. Click Location tab on the left menu or click Continue to Location at the bottom of the form.

9. The “Standard items in the Service Catalog" Template has all baseline Categories selected by default. A Catalog Item may appear in more than one Service Catalog and Category.

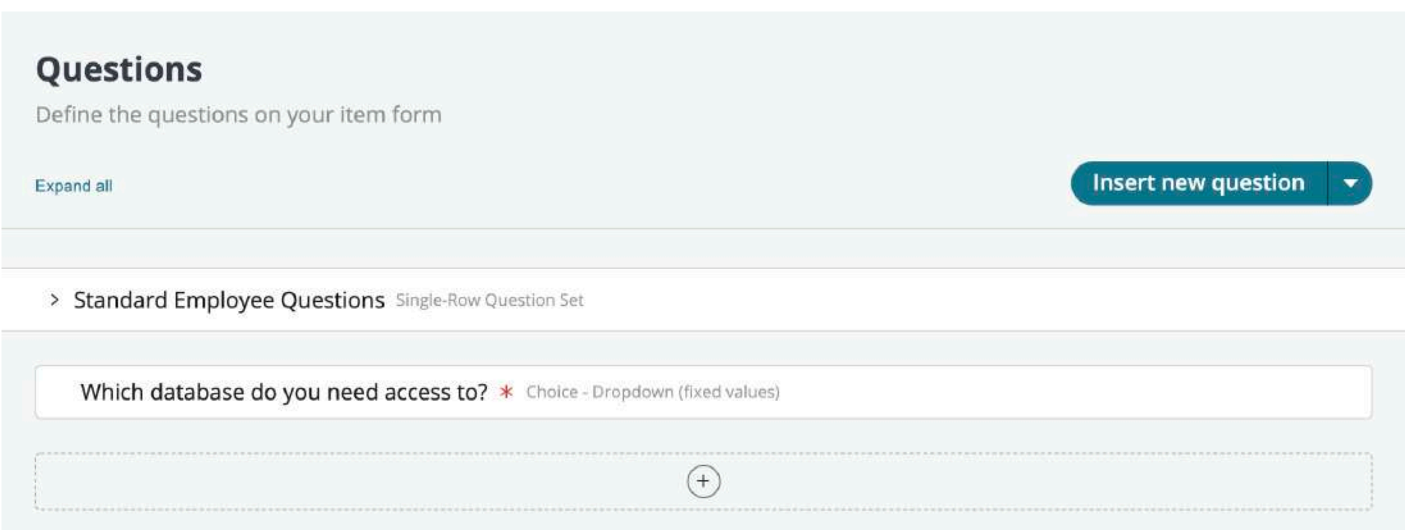
Optional: Click the Edit link on Categories and deselect some of the default Categories.



10. Click Questions tab on the left menu or click Continue to Questions at the bottom of the form.

11. By default, this item template includes the Standard Employee Questions Variable set for Requested for and Due date.

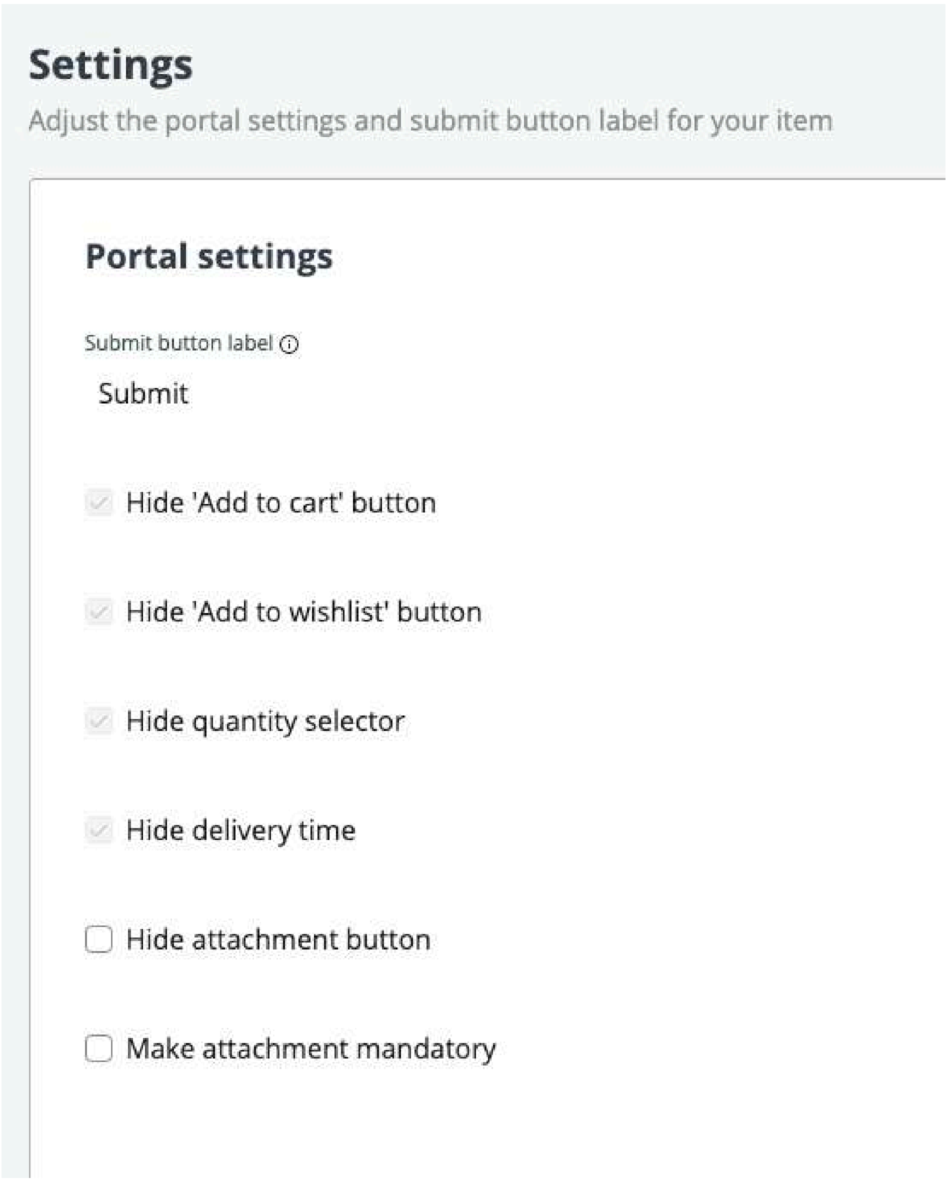
Optional: Add a few variables if desired.



12. Click Settings tab on the left menu or click Continue to Settings at the bottom of the form.

13. On the Settings page, set basic configurations for the Catalog Item. Some of these may be read-only due to the Catalog Item Template configuration.

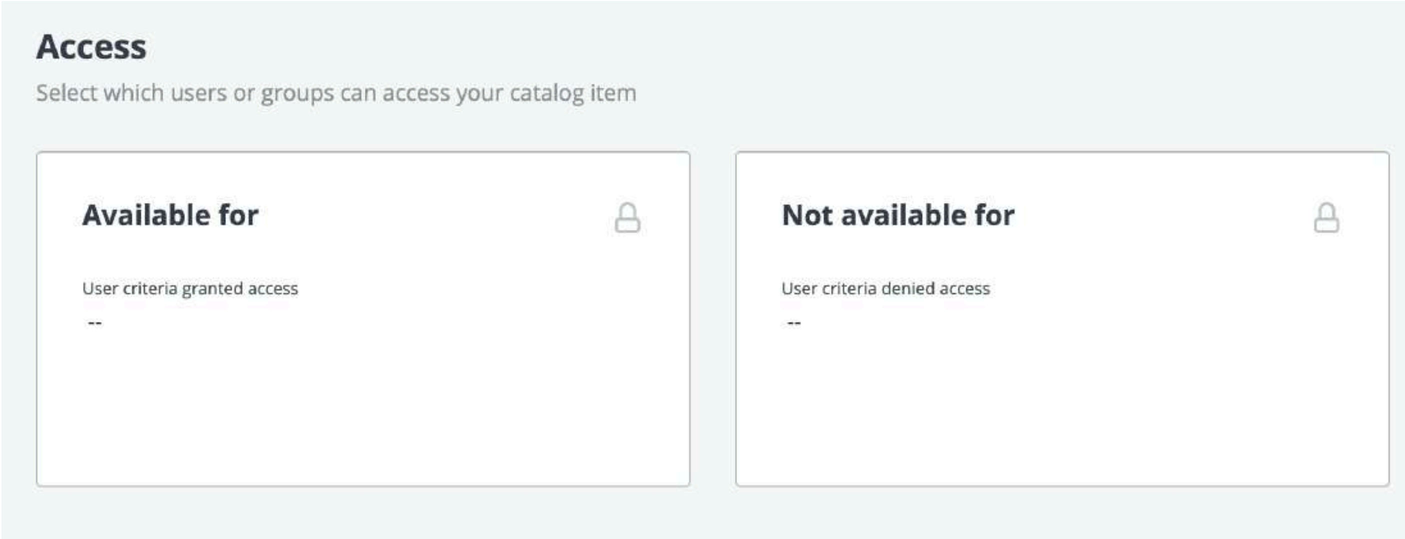
Optional: Configure additional settings for the Catalog Item.



14. Click Access tab on the left menu or click Continue to Access at the bottom of the form.

15. On the Access tab, define who is allowed (or not allowed) to see this item on the Access page.

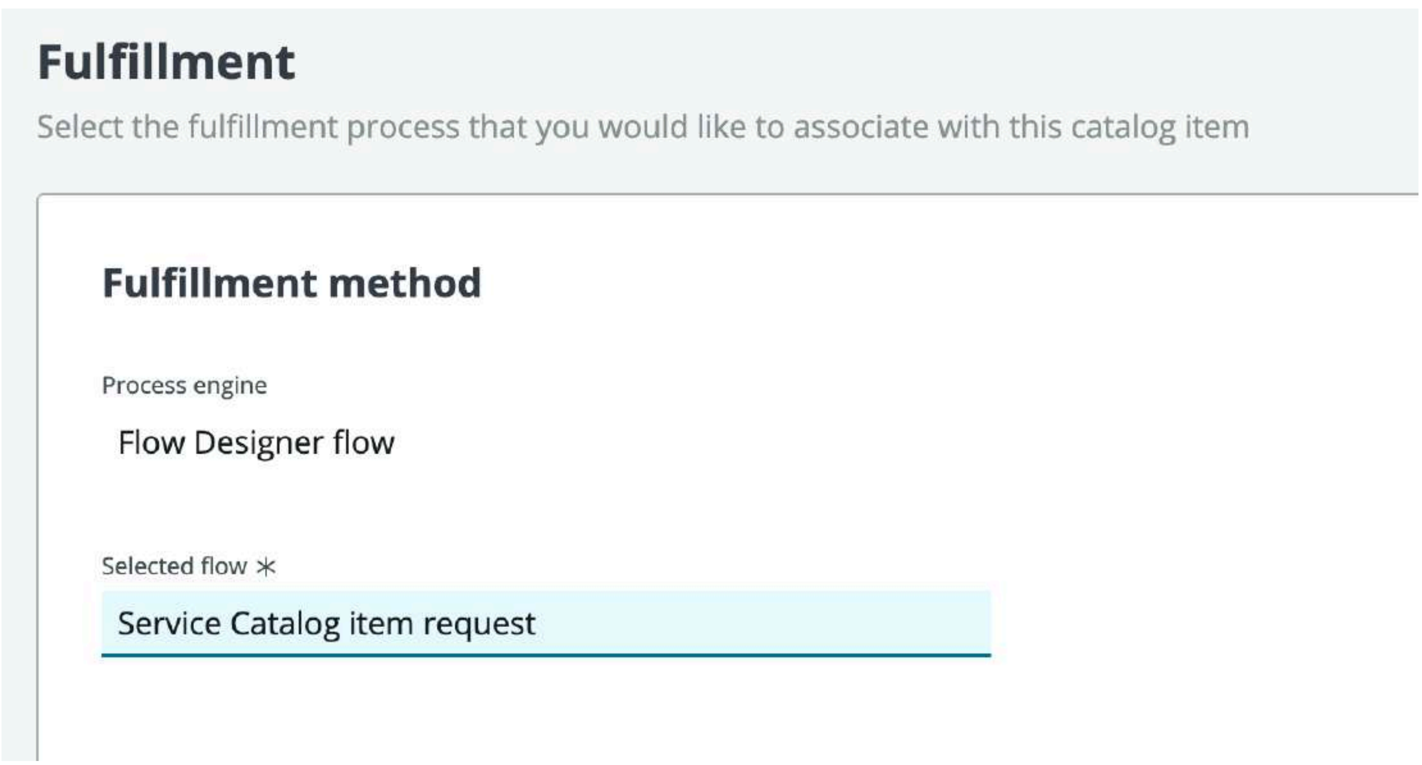
The Catalog and Categories were configured on the Location tab, and may have existing User Criteria security rules. The Access configurations allow us to further restrict the visibility of this item. By default, this template doesn’t allow the configuration of Access.



16. Click Fulfillment tab on the left menu or click Continue to Fulfillment at the bottom of the form.

17. On the Fulfillment page, select the process engine that facilitates the fulfillment of the request. Select “Service Catalog item request”

Our template restricts the selection only to Flow Designer Flows. For now, select “Service Catalog item request” as a placeholder until the new Flow is created in Exercise 3.



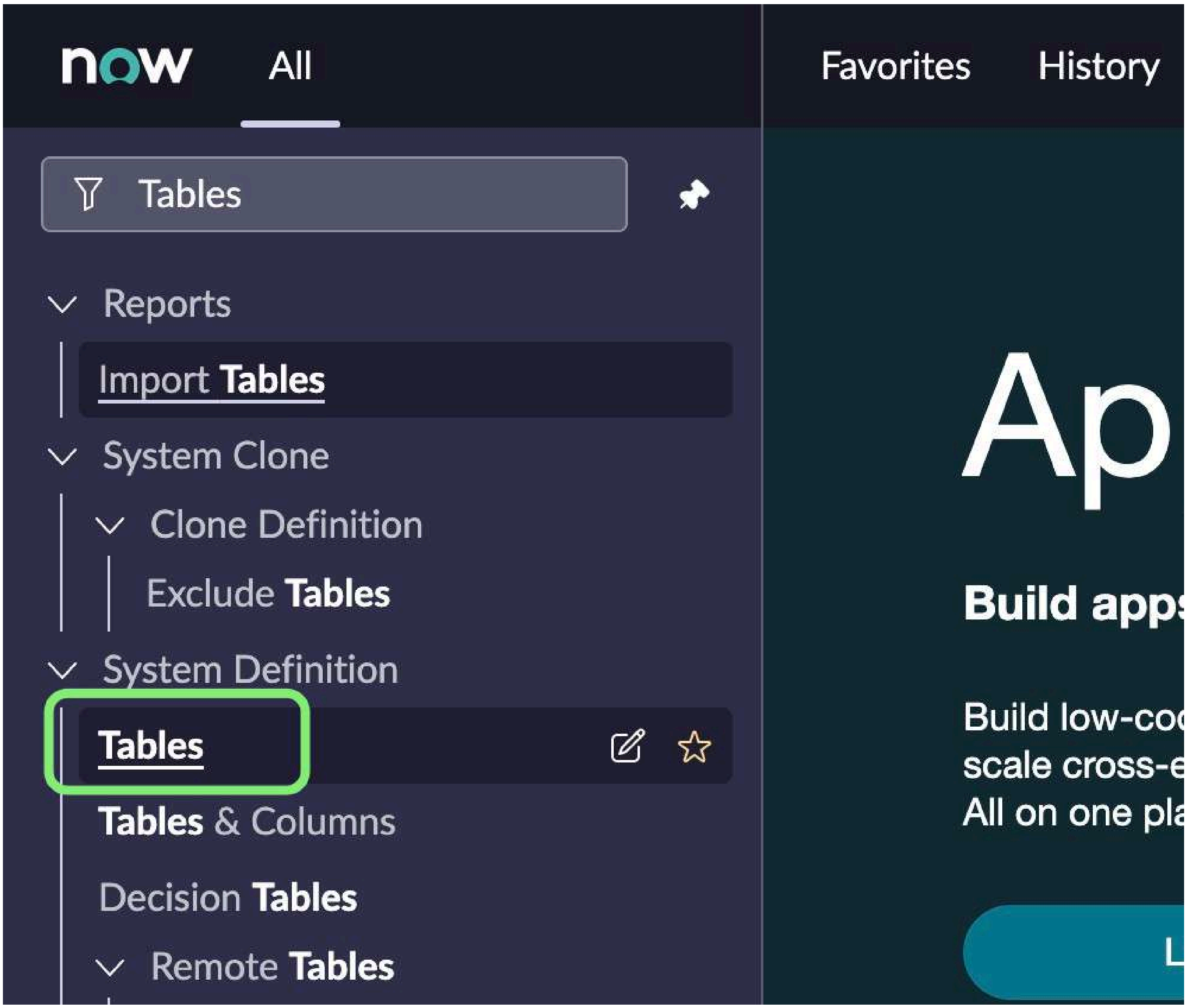
18. Click Review and Submit tab on the left menu or click Continue to Review and Submit at the bottom of the form.

19. Review the Catalog Item configurations and click Submit when done

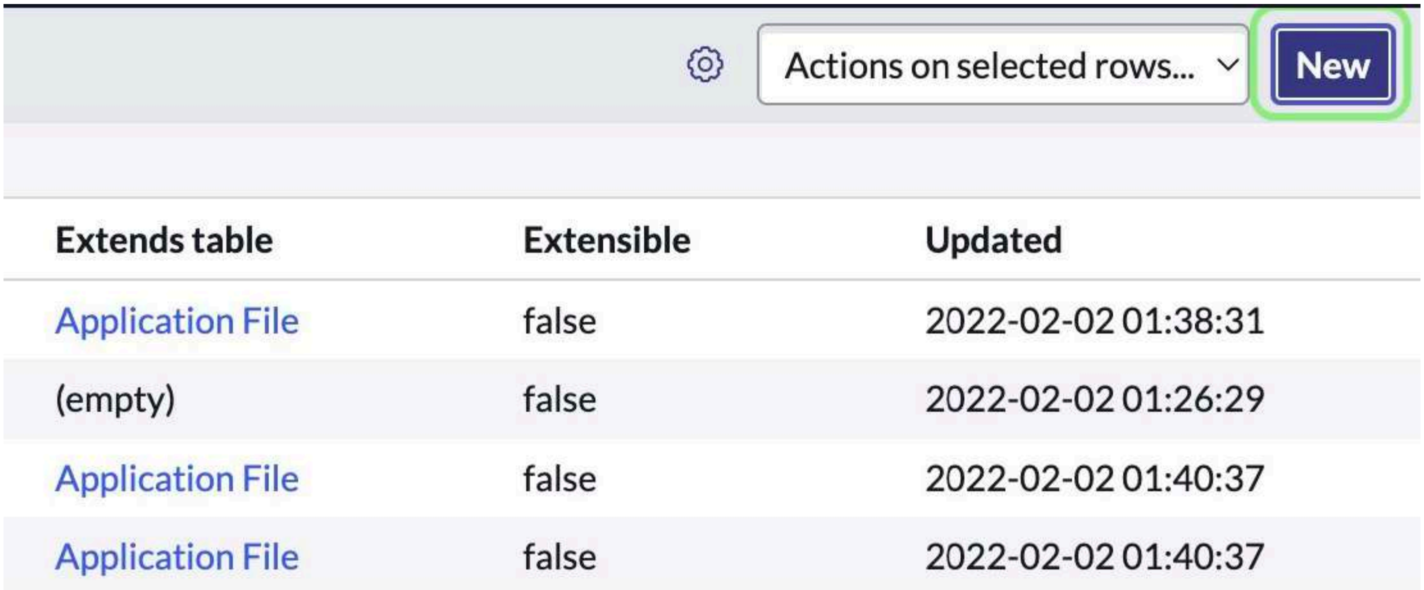
20. Check point: Navigate to the Service Catalog and order the newly created Catalog Item

Exercise 2: Create a Data Lookup table

1. Navigate to System Definition > Tables

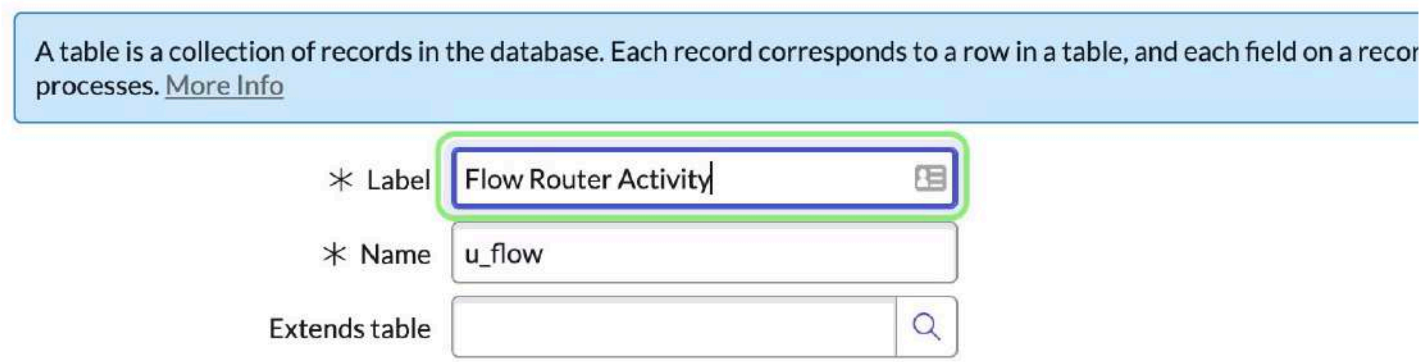


2. Click New

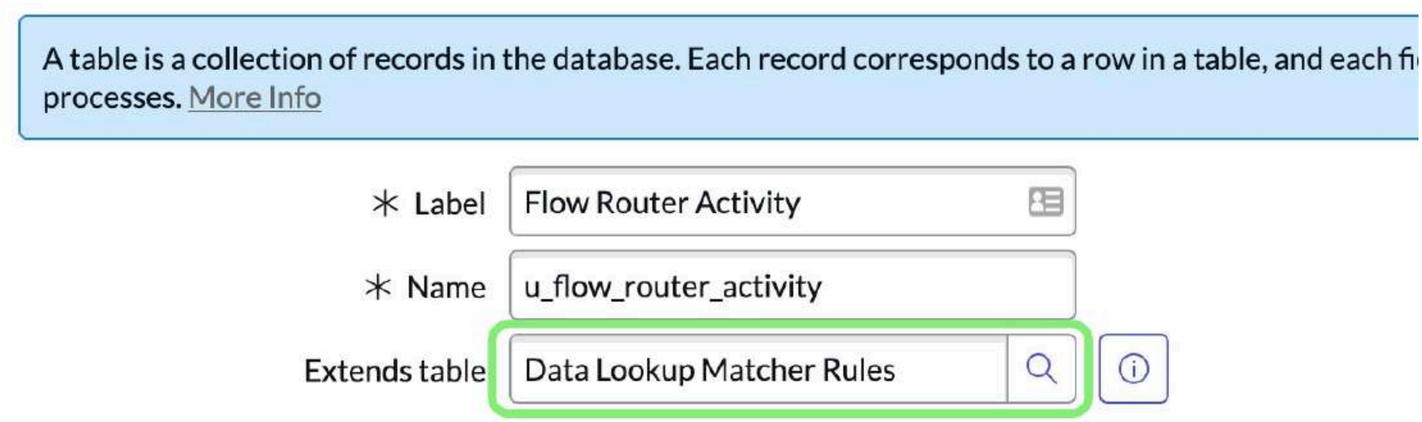


3. Label the Table "Flow Router Activity"

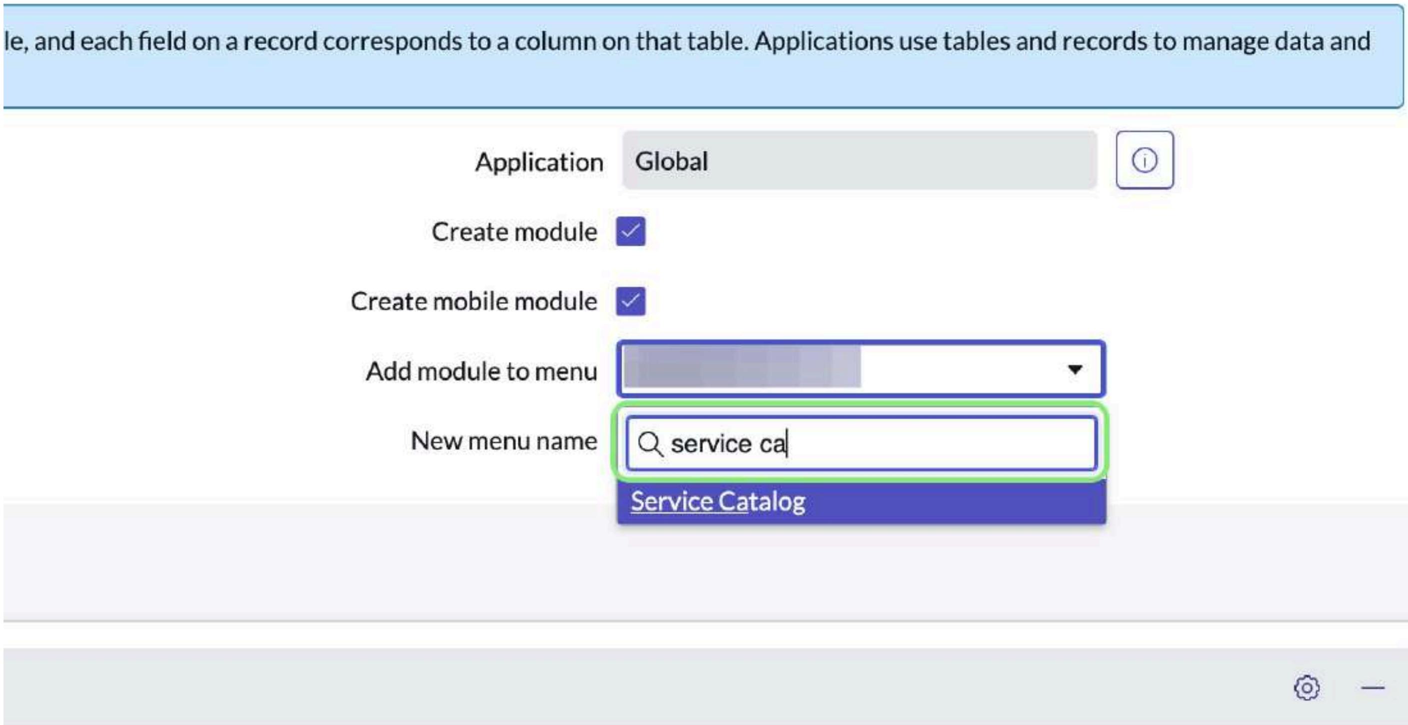
Name: **(This value is automatically populated)**



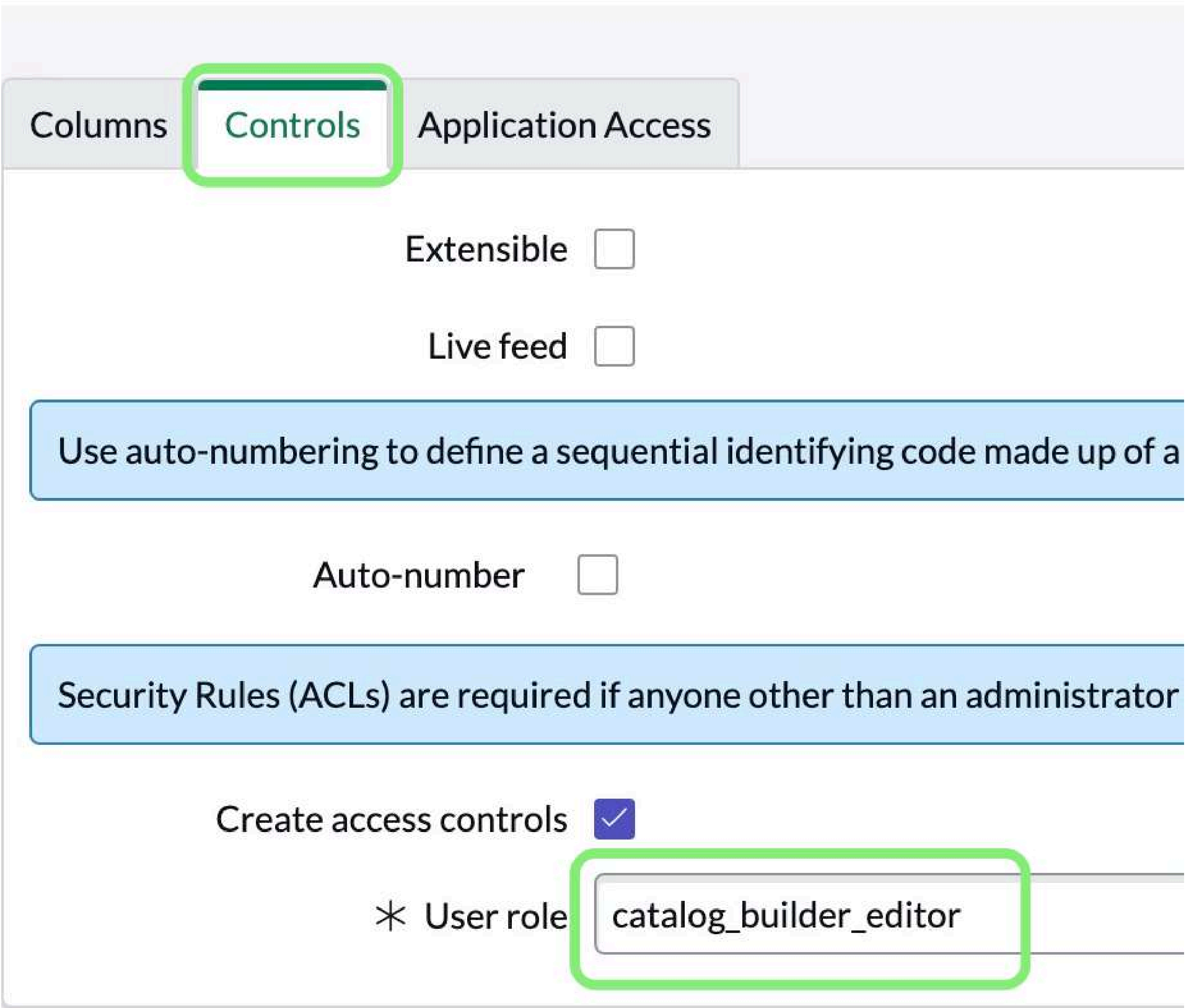
4. Select Data Lookup Matcher Rules for the Extends Table field



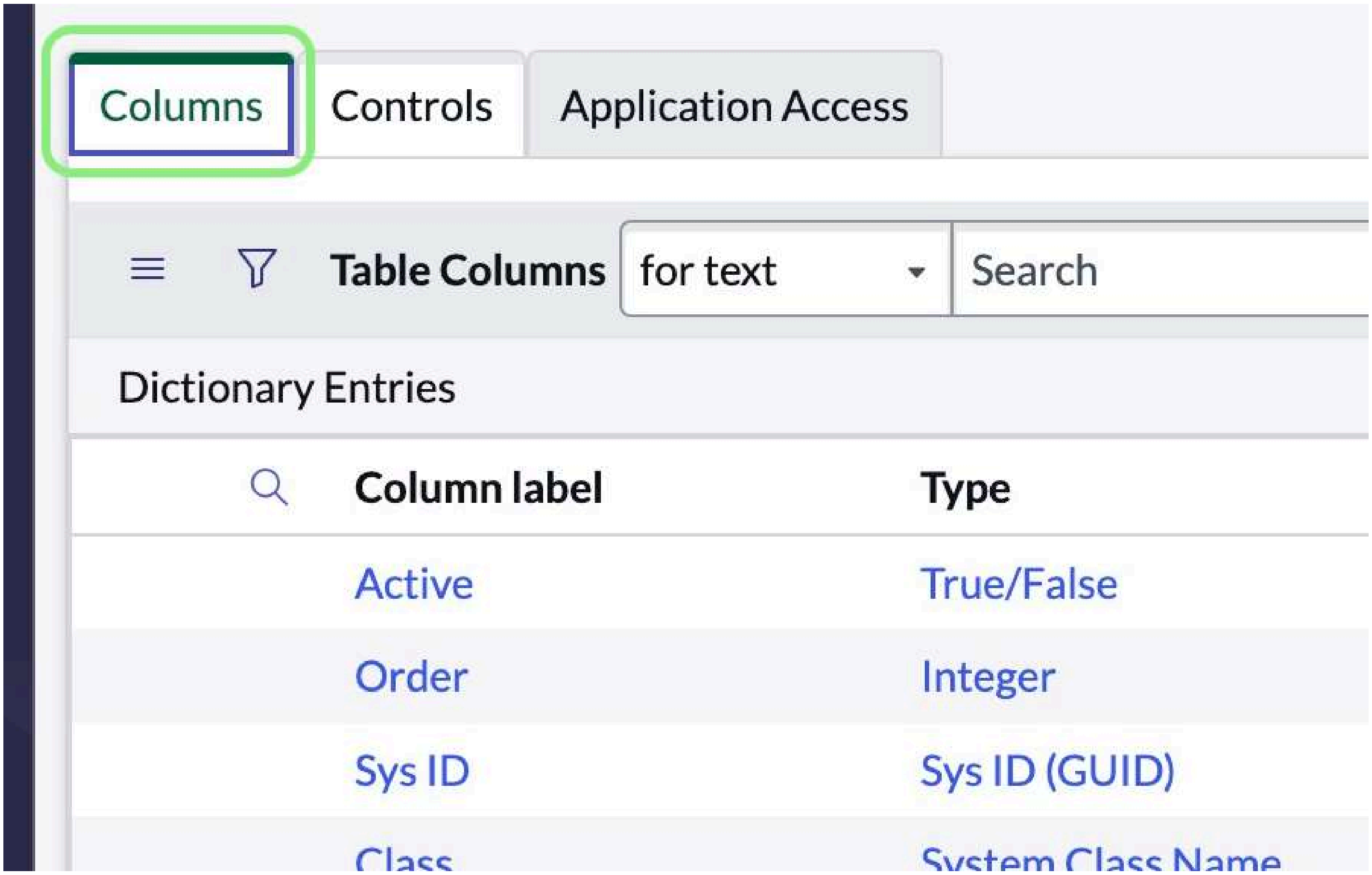
5. Click Service Catalog for the Add module to menu field



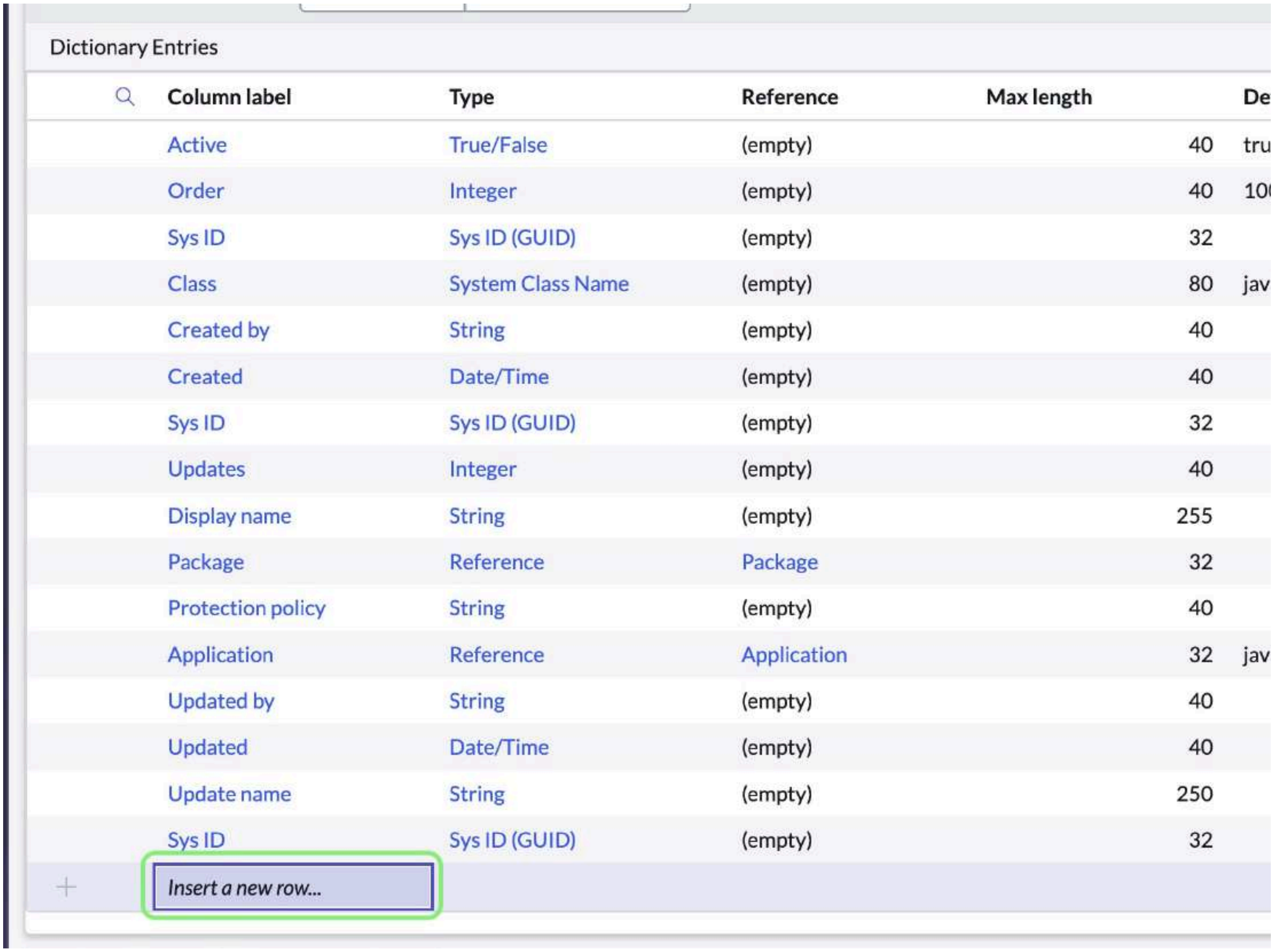
6. On the Controls tab, replace the new user role with catalog_builder_editor



7. Click the Columns tab



8. In the embedded list below add fields to the table.



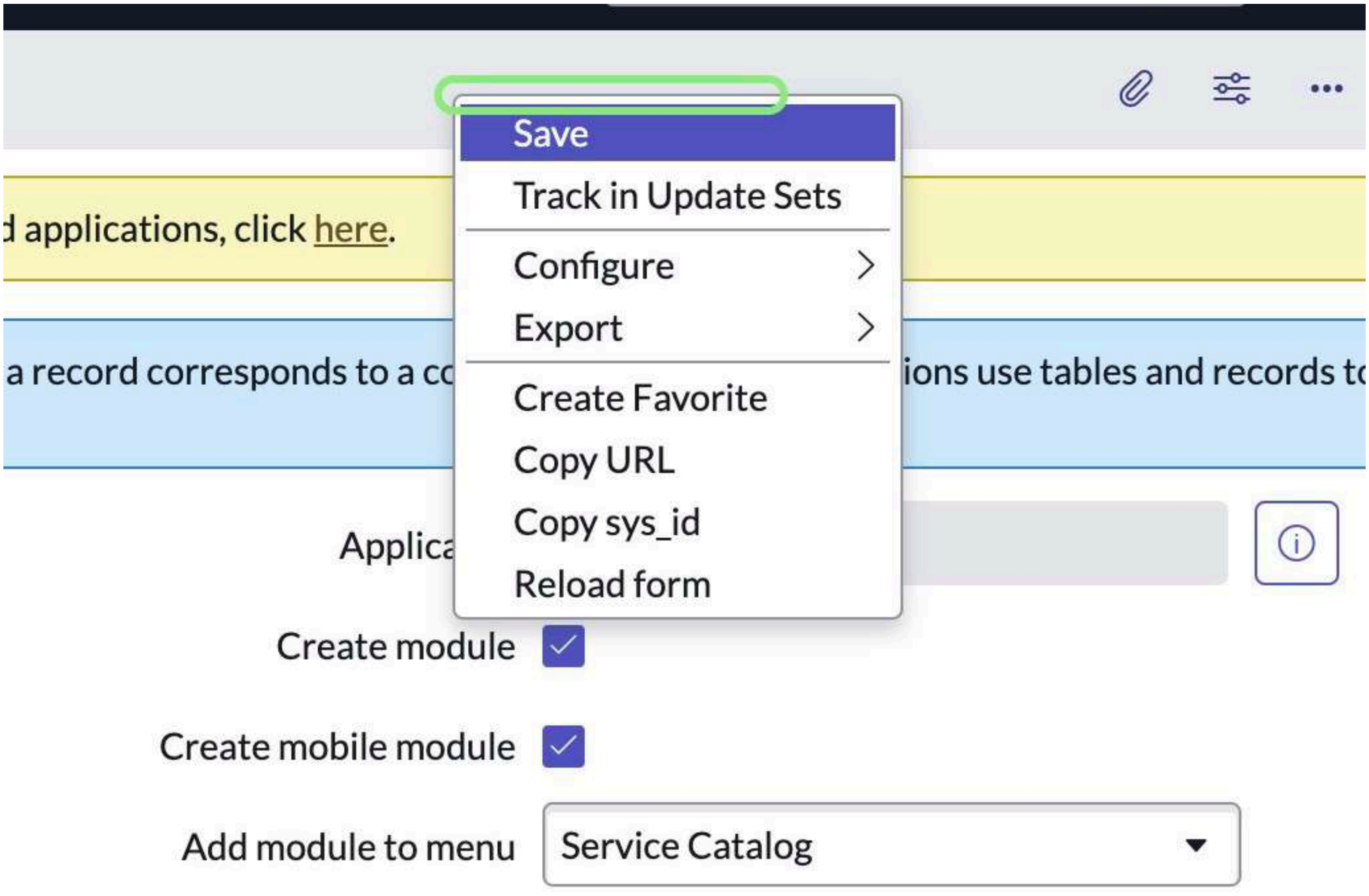
Dictionary Entries

Column label	Type	Reference	Max length	De
Active	True/False	(empty)	40	tru
Order	Integer	(empty)	40	10(
Sys ID	Sys ID (GUID)	(empty)	32	
Class	System Class Name	(empty)	80	jav
Created by	String	(empty)	40	
Created	Date/Time	(empty)	40	
Sys ID	Sys ID (GUID)	(empty)	32	
Updates	Integer	(empty)	40	
Display name	String	(empty)	255	
Package	Reference	Package	32	
Protection policy	String	(empty)	40	
Application	Reference	Application	32	jav
Updated by	String	(empty)	40	
Updated	Date/Time	(empty)	40	
Update name	String	(empty)	250	
Sys ID	Sys ID (GUID)	(empty)	32	
Insert a new row...				

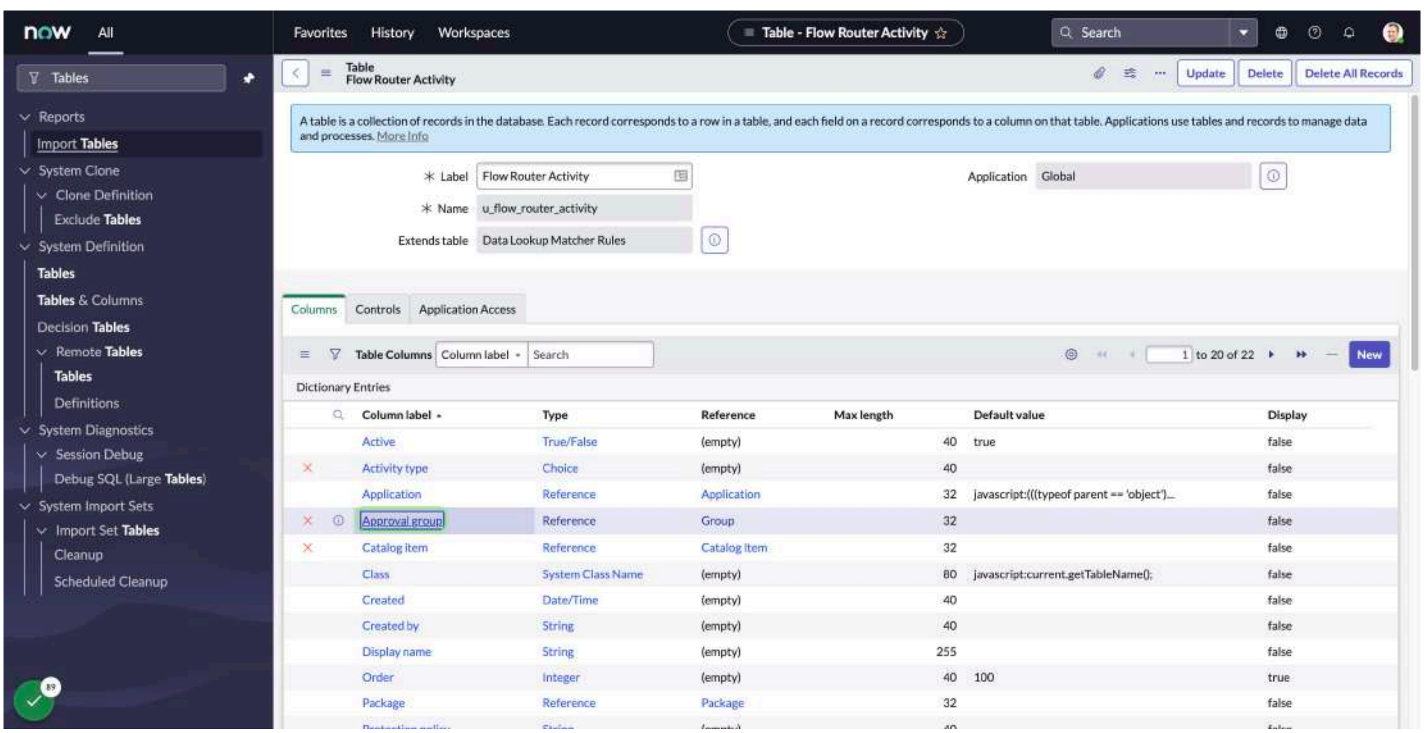
9. Add fields to the Table

Field name	Type	Other Attributes
Catalog item	Reference	Reference: Catalog Item [sc_cat_item]
Activity type	Choice	
Approval group	Reference	Reference: Group [sys_user_group]
Task short description	String	Max length: 160
Task description	String	Max length: 4000
Task assignment group	Reference	Reference: Group [sys_user_group]

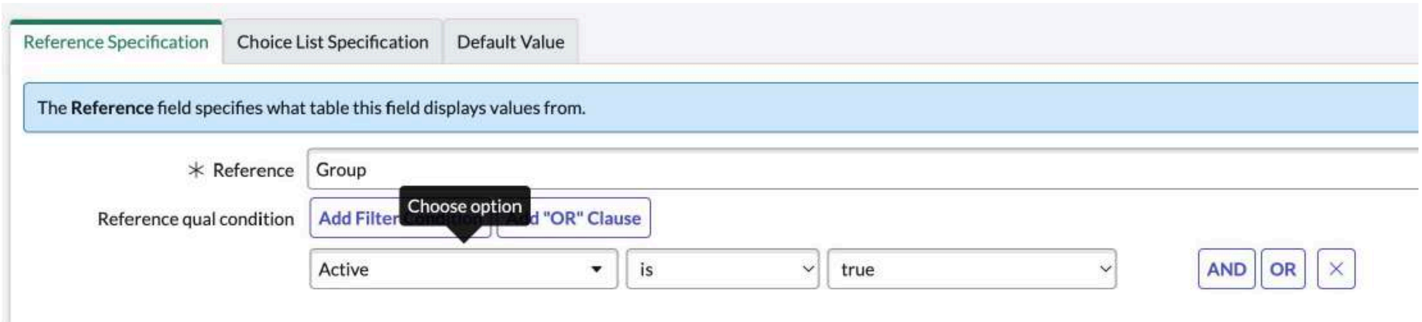
10. Right click the form header and click Save



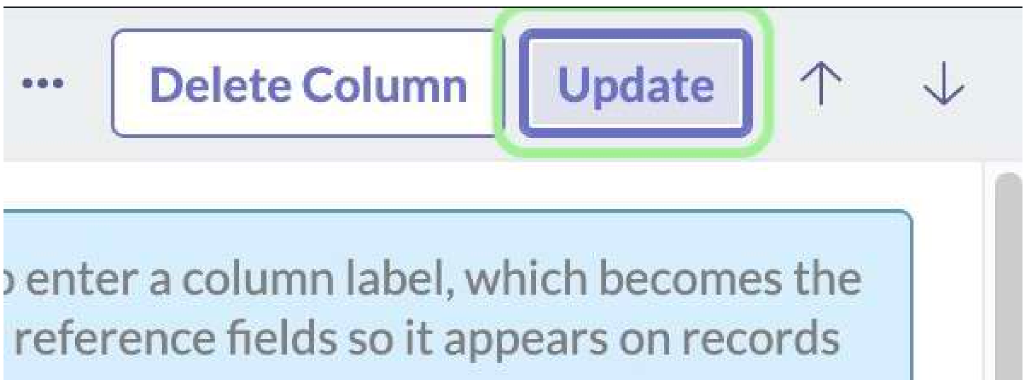
11. Click Approval group



12. Set the Reference qual condition to Active is true

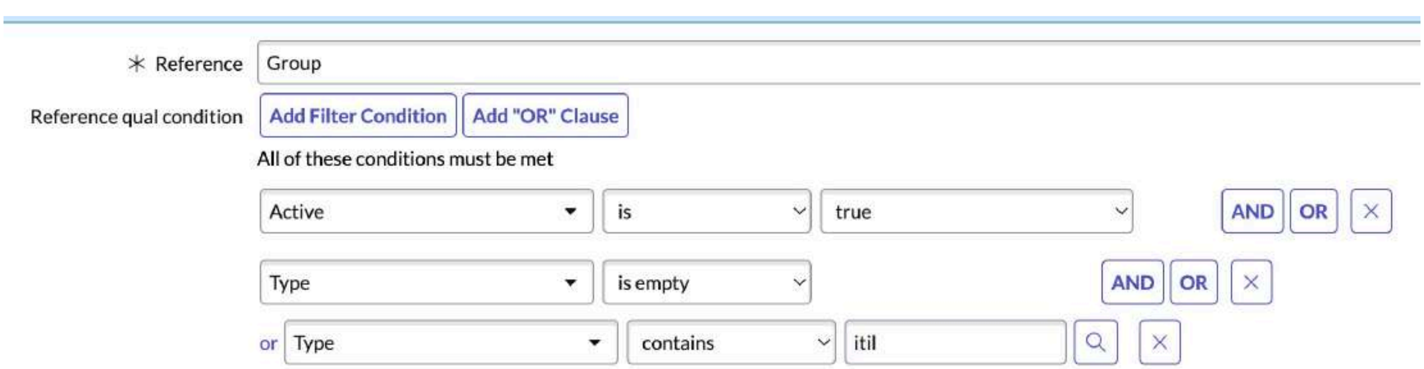


13. Click Update

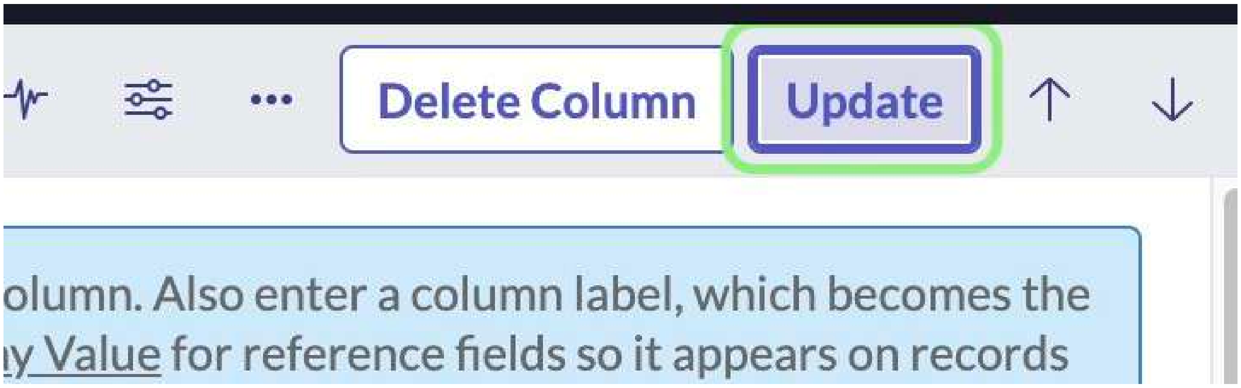


14. Click Task assignment group

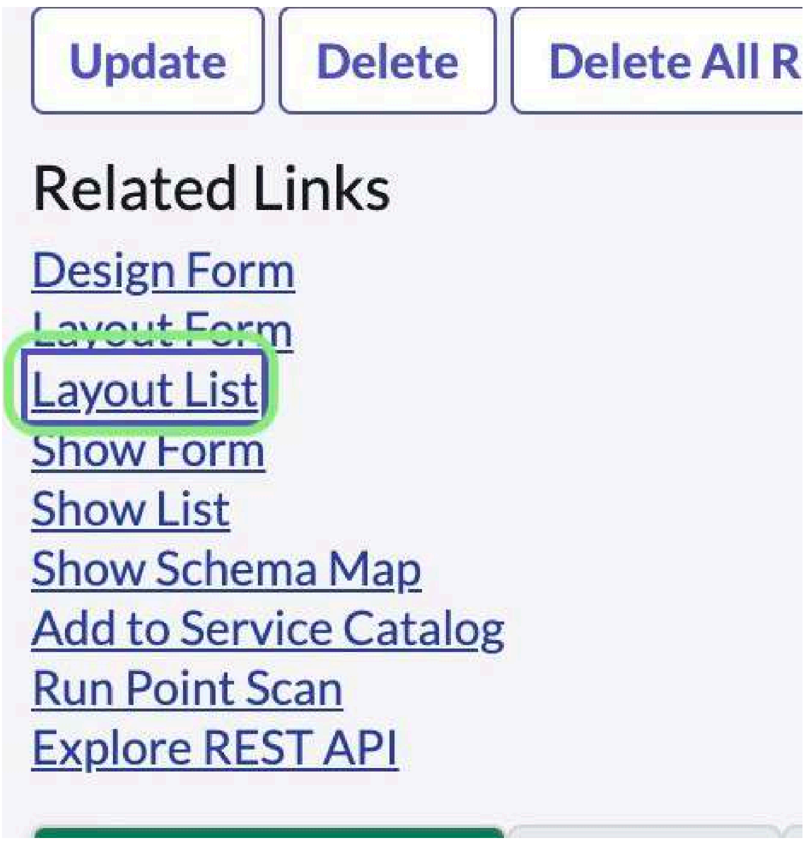
15. Set the Reference qual condition to Active is true and Type is empty or Type contains itil



16. Click Update



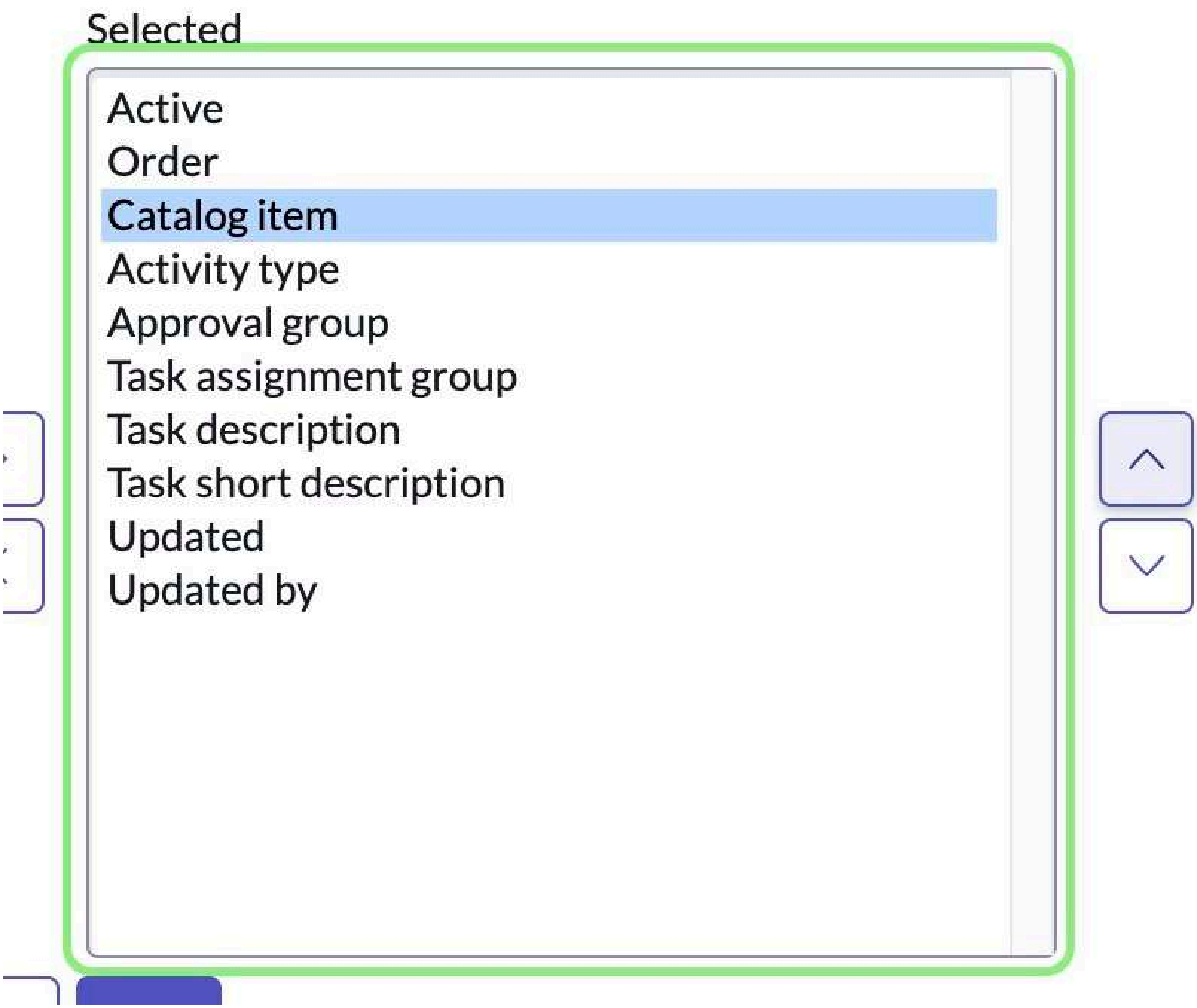
17. Click Layout List



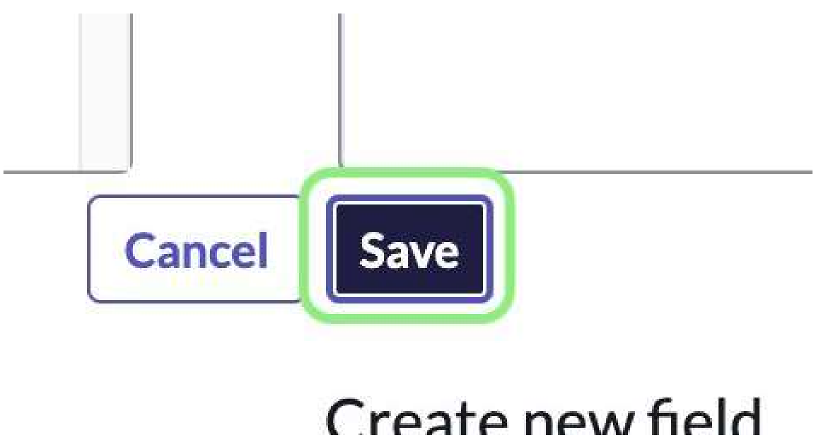
18. Edit the list to include the following fields at a minimum:

- Active
- Order
- Activity type
- Catalog item
- Updated
- Updated by

NOTE: It is important that a non-reference field (like Active or Activity type) is the first element in the list, instead of something like Catalog item, otherwise list navigation is confusing.



19. Click Save



20. Click Design form

21. Adjust the layout of the form.

Main section, 2 Columns

Column 1

- Catalog item
- Activity type

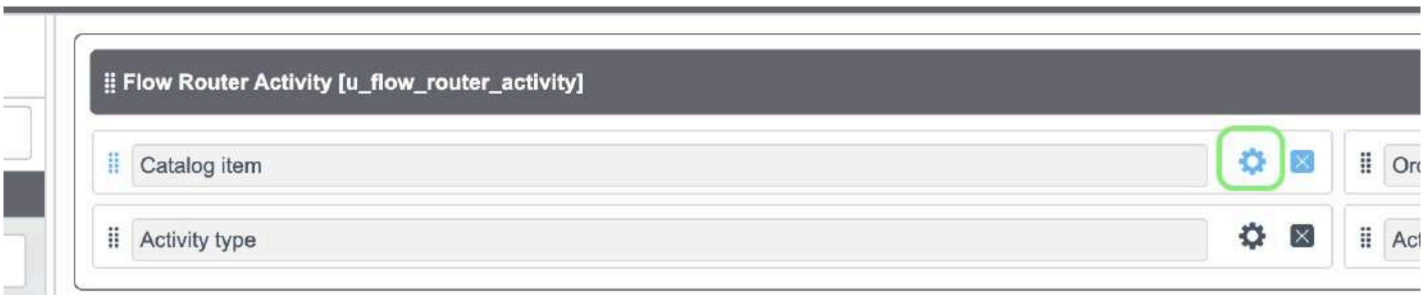
Column 2

- Order
- Active

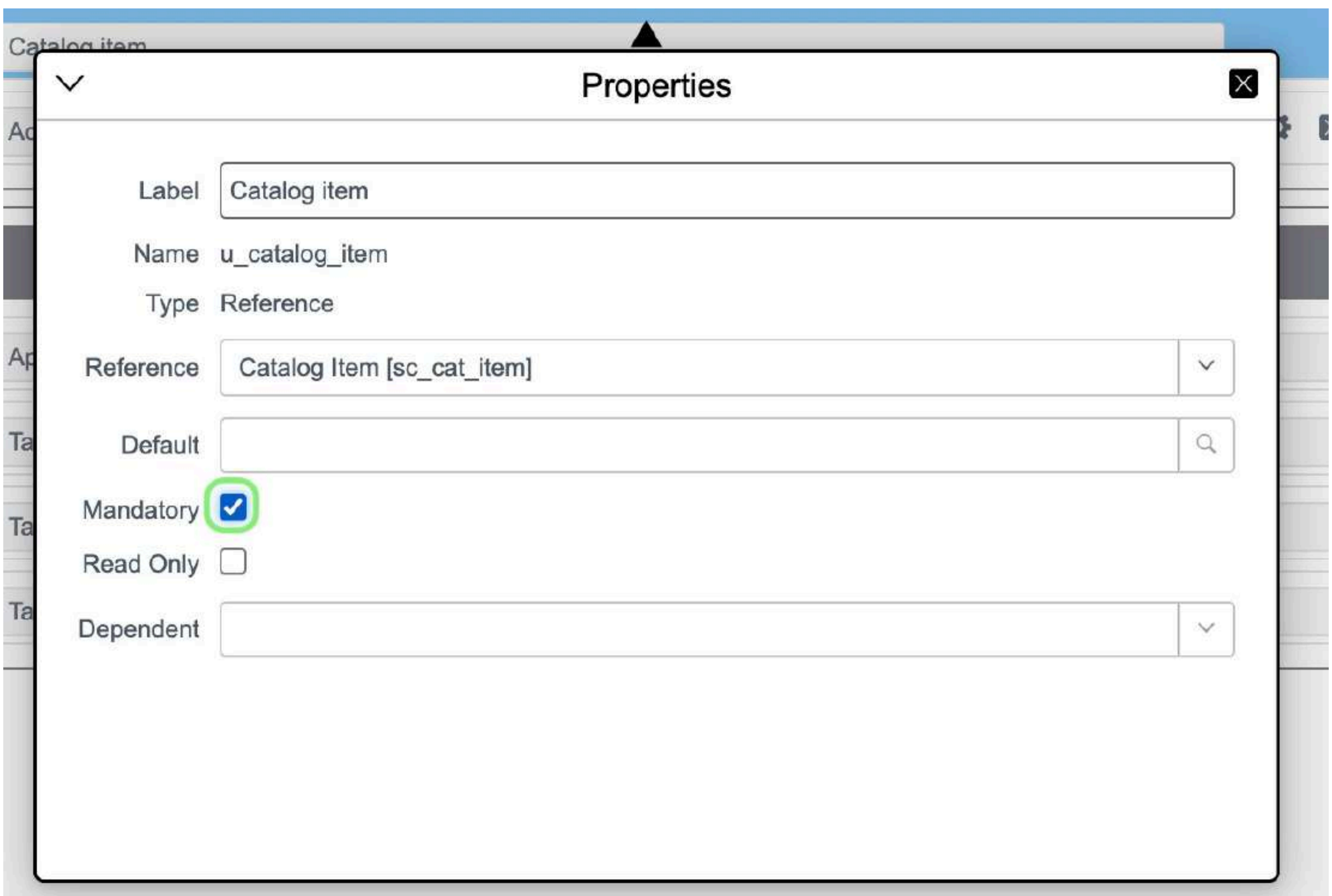
Section 2, 1 Column

- Approval Group
- Task short description
- Task assignment group
- Task description

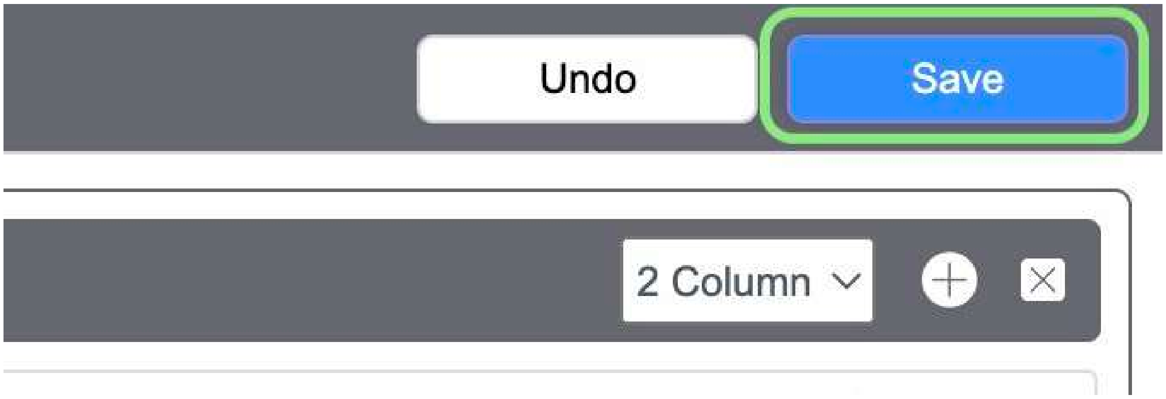
22. Click the gear icon for the Catalog item field



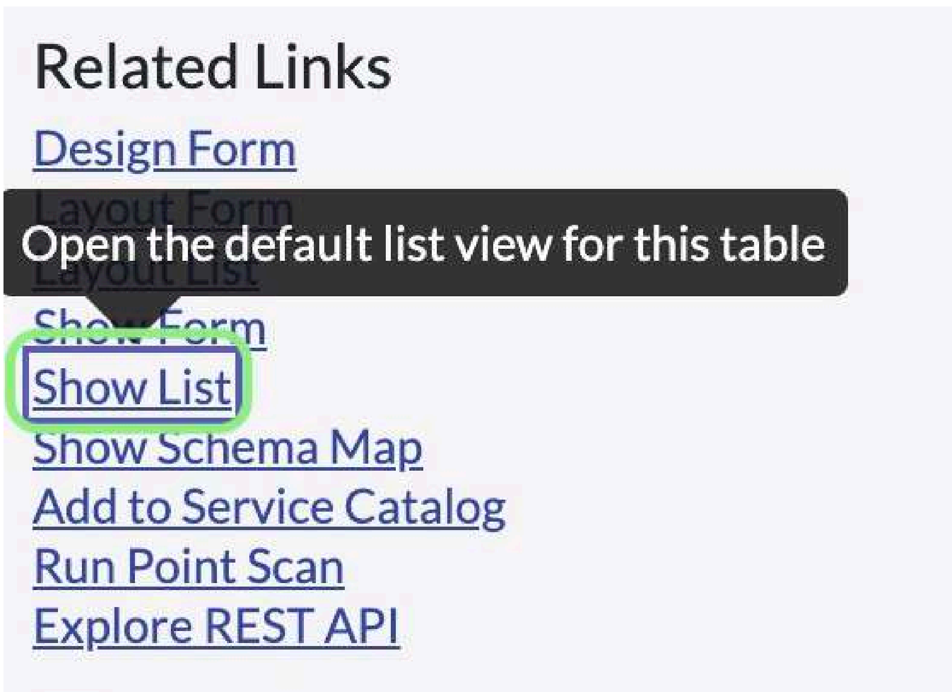
23. Check Mandatory and close the field properties



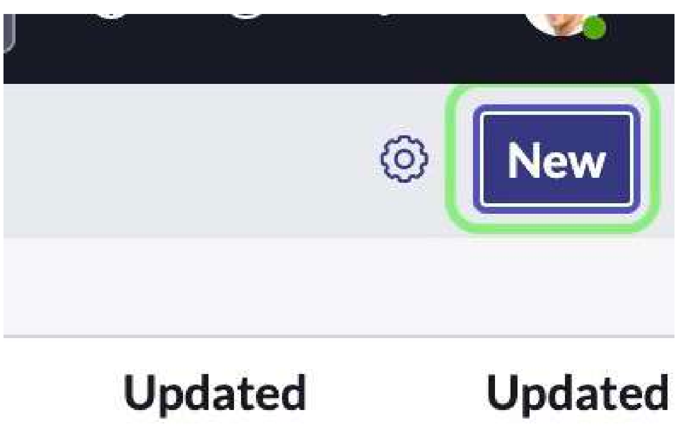
24. Click Save



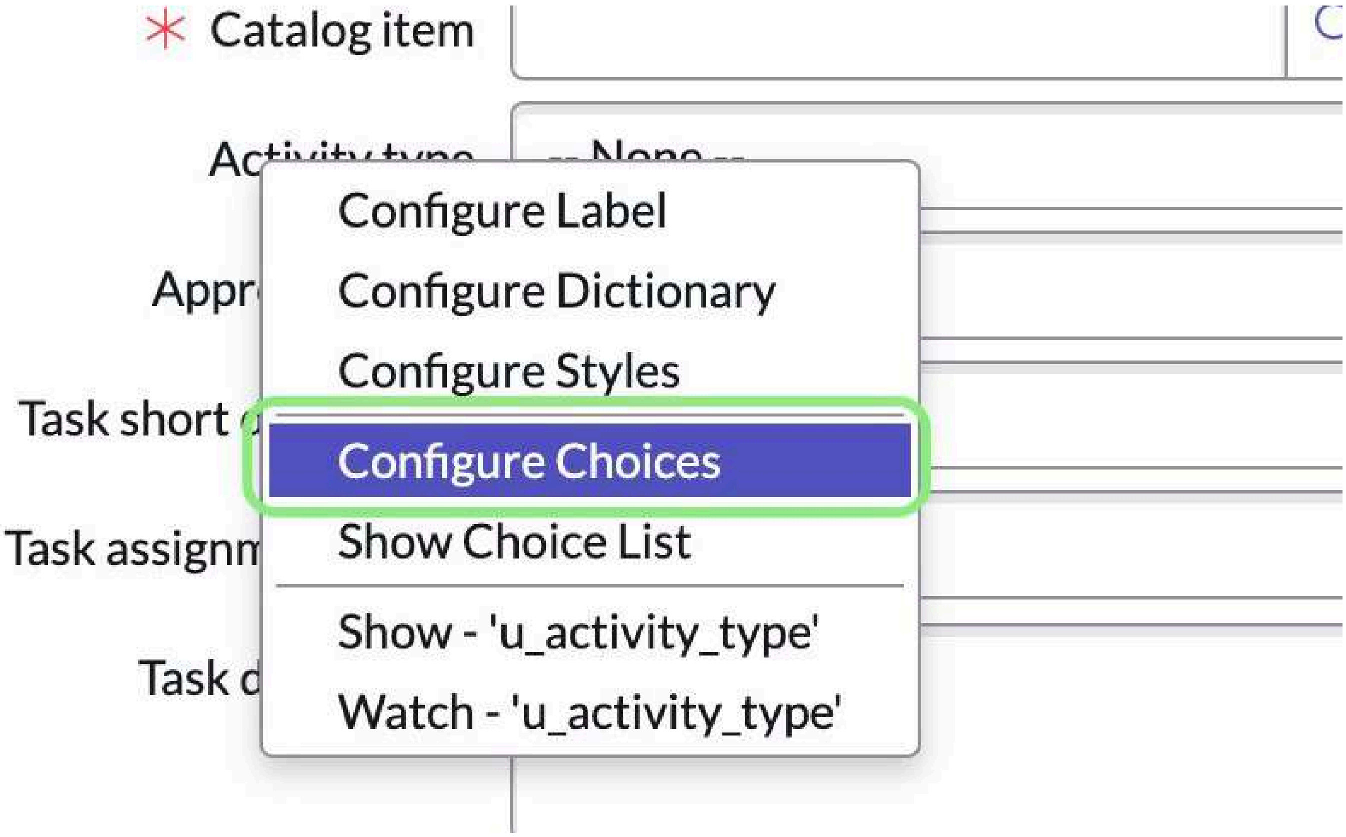
25. Click Show List



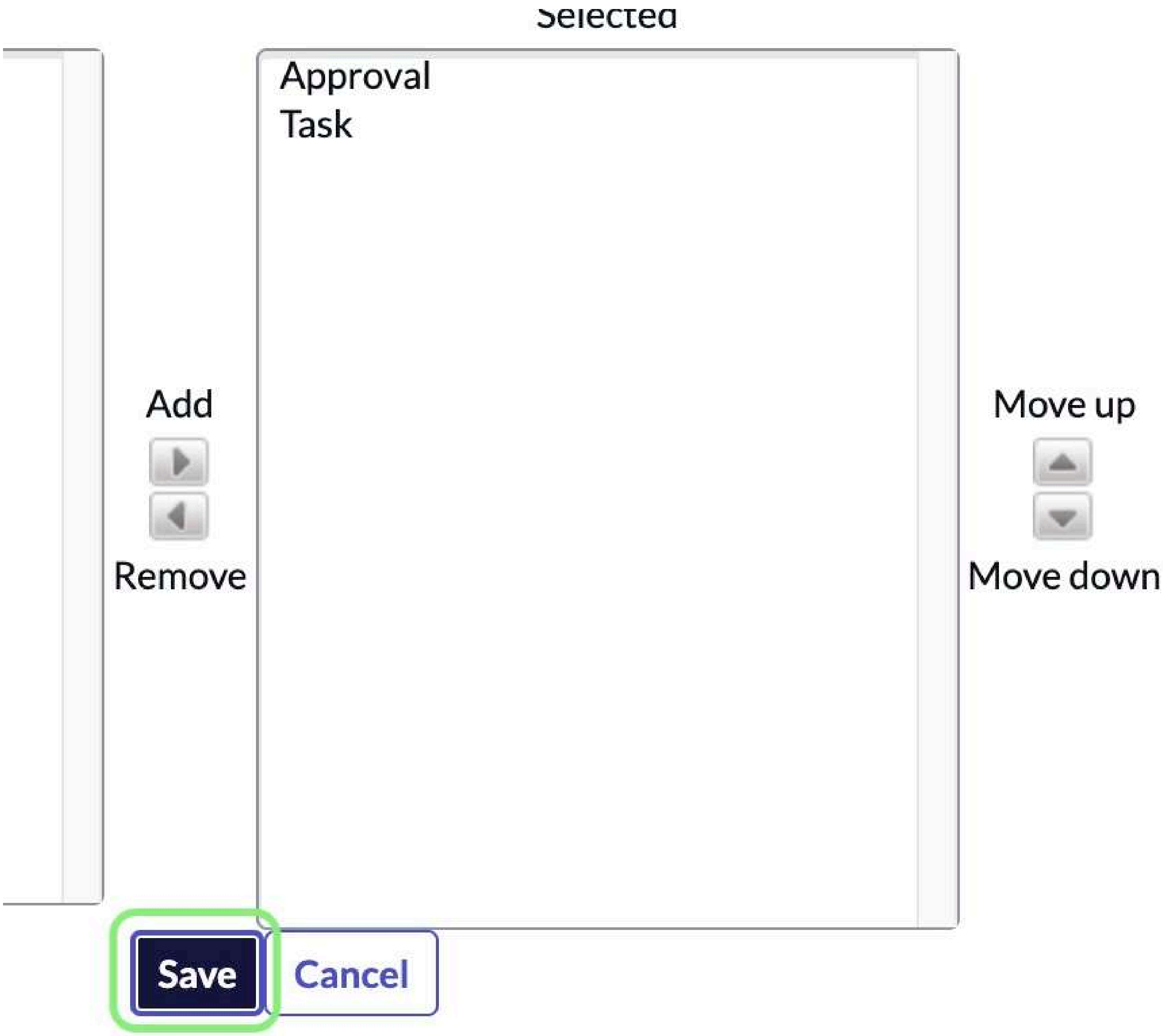
26. Click New



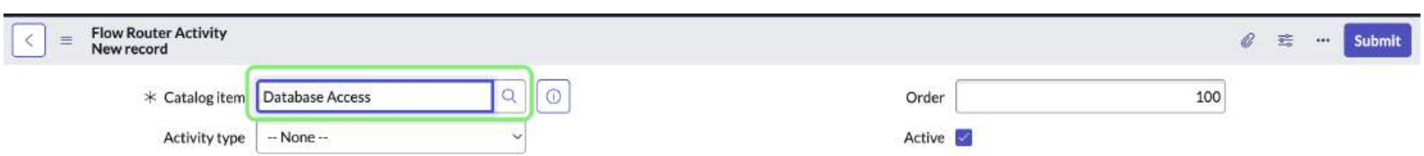
27. Right click Activity type and click Configure Choices



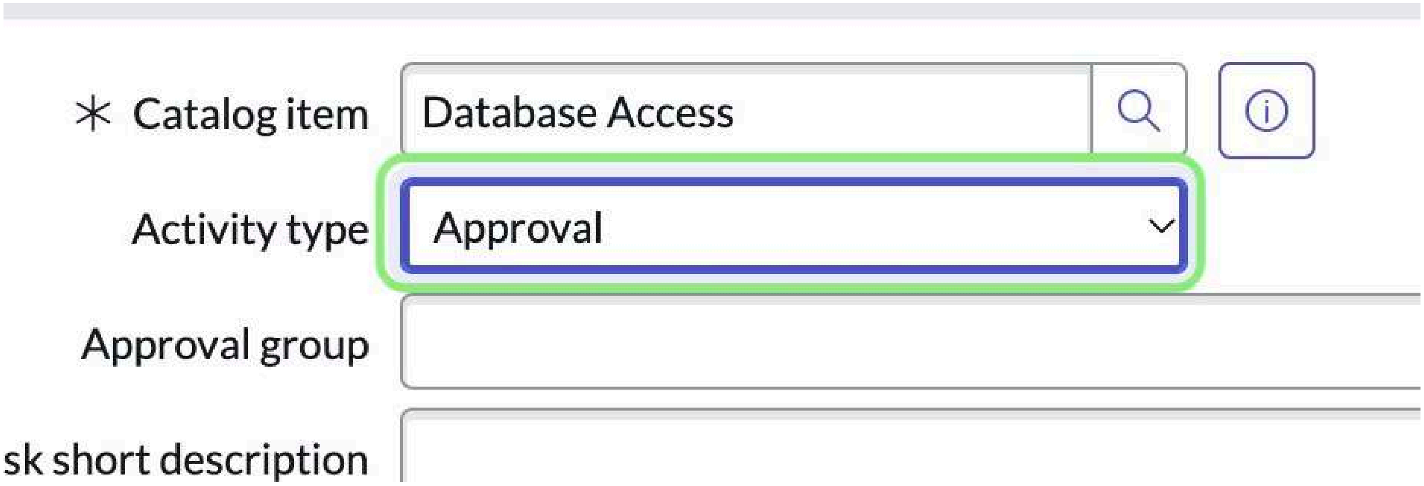
28. Add Approval and Task as options. Click Save



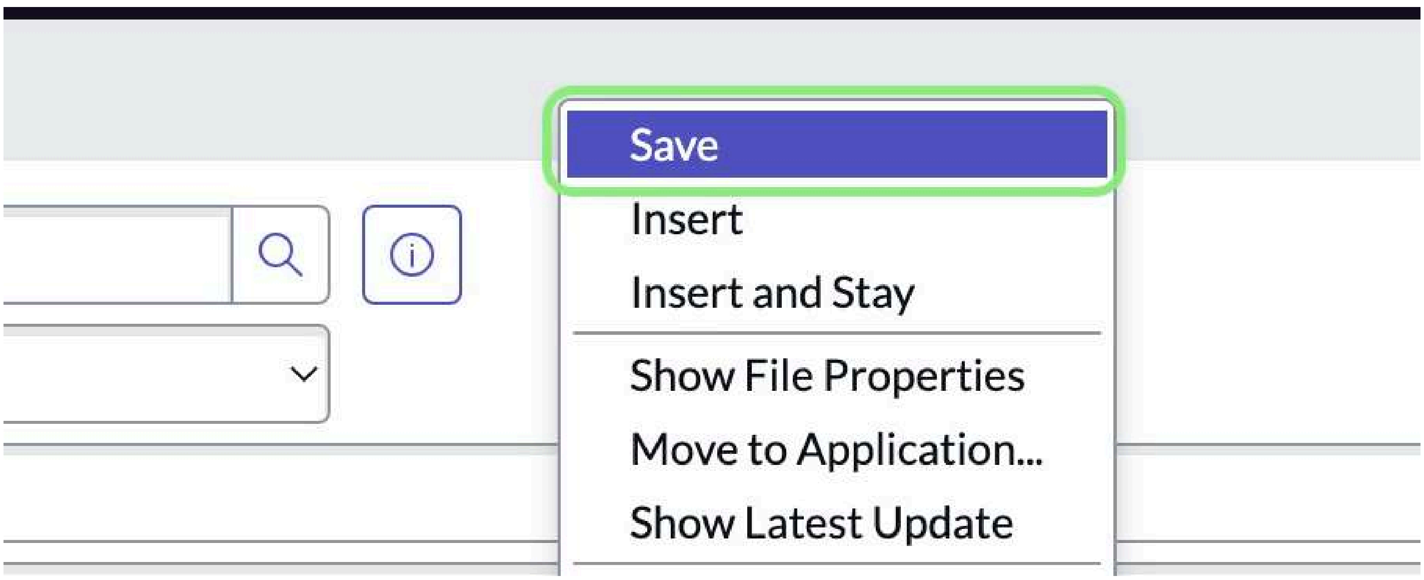
29. Enter the Catalog Item created in Exercise 1



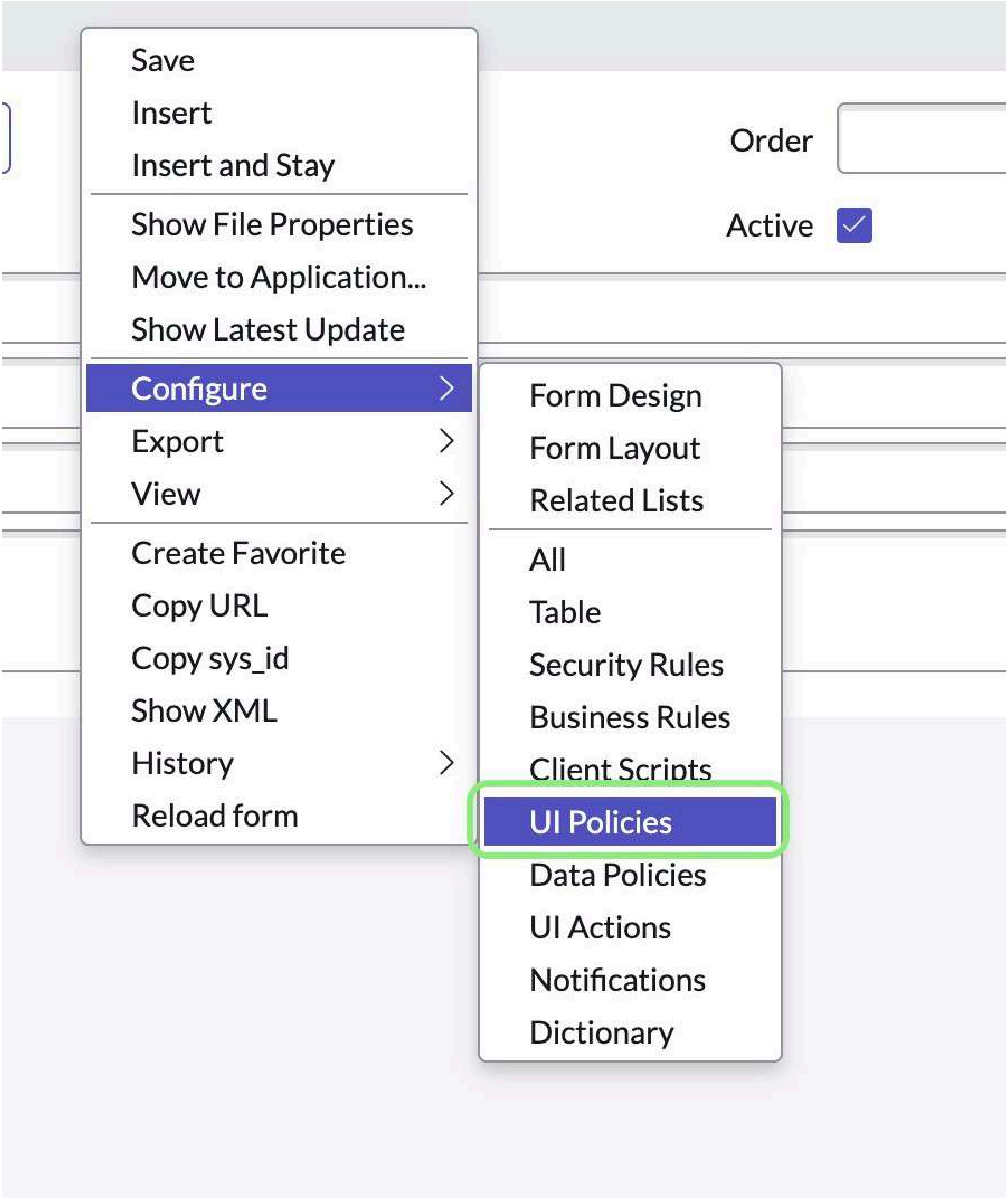
30. Select Approval from Activity type



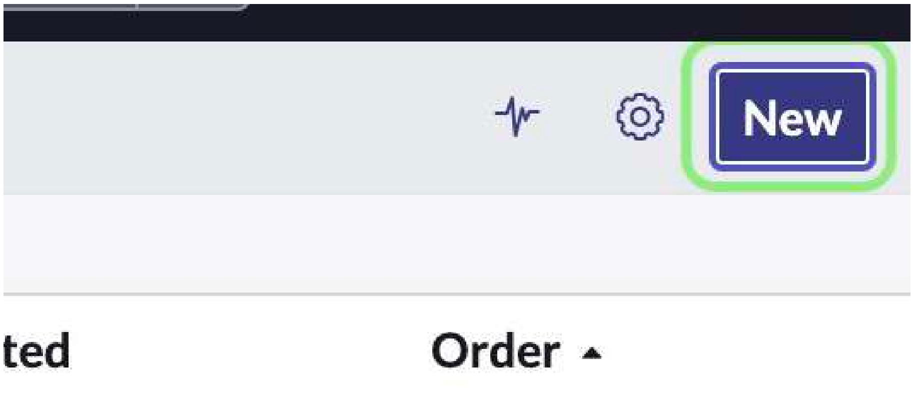
31. Right click the form header and click Save



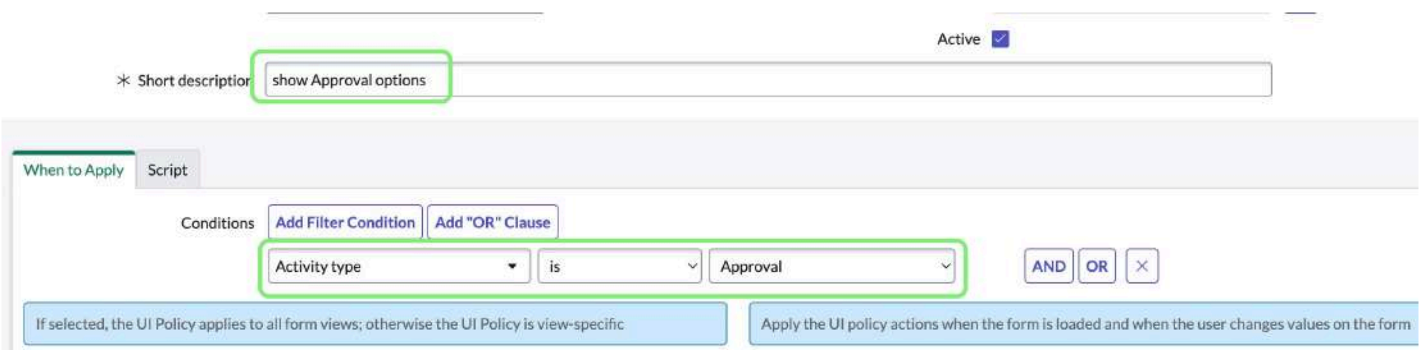
32. Right click the form header and click Configure > UI Policies



33. Click New



34. Set the Short description and Condition



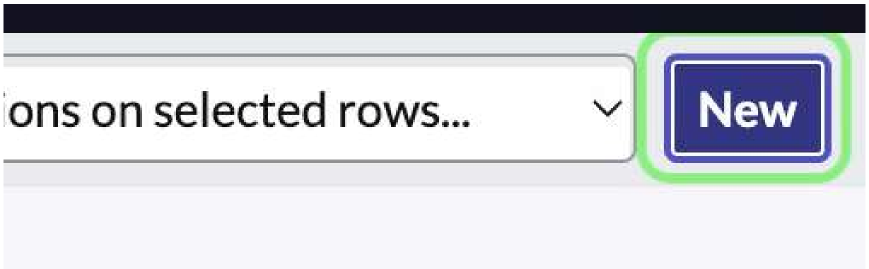
35. Right click the form header and click Save

36. Add a UI Policy Action for Approval Group

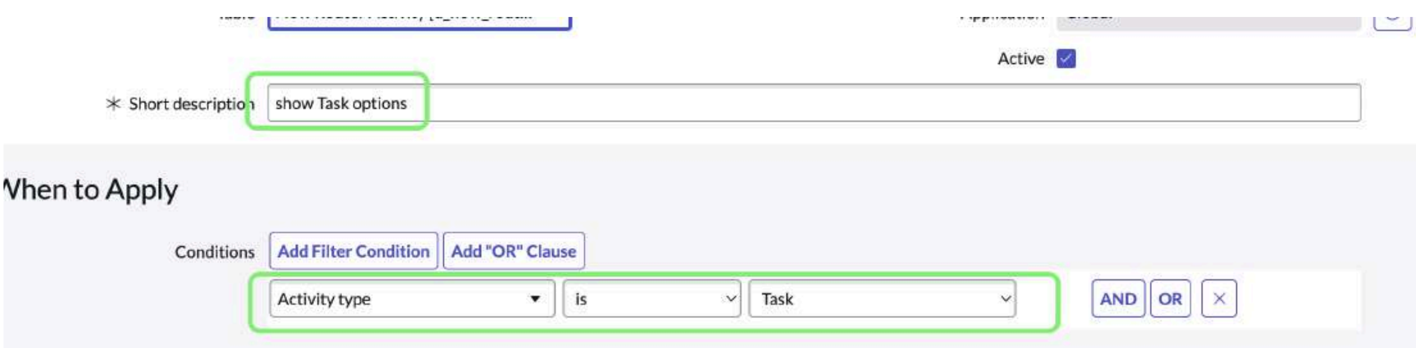
Mandatory: true

Visible: true

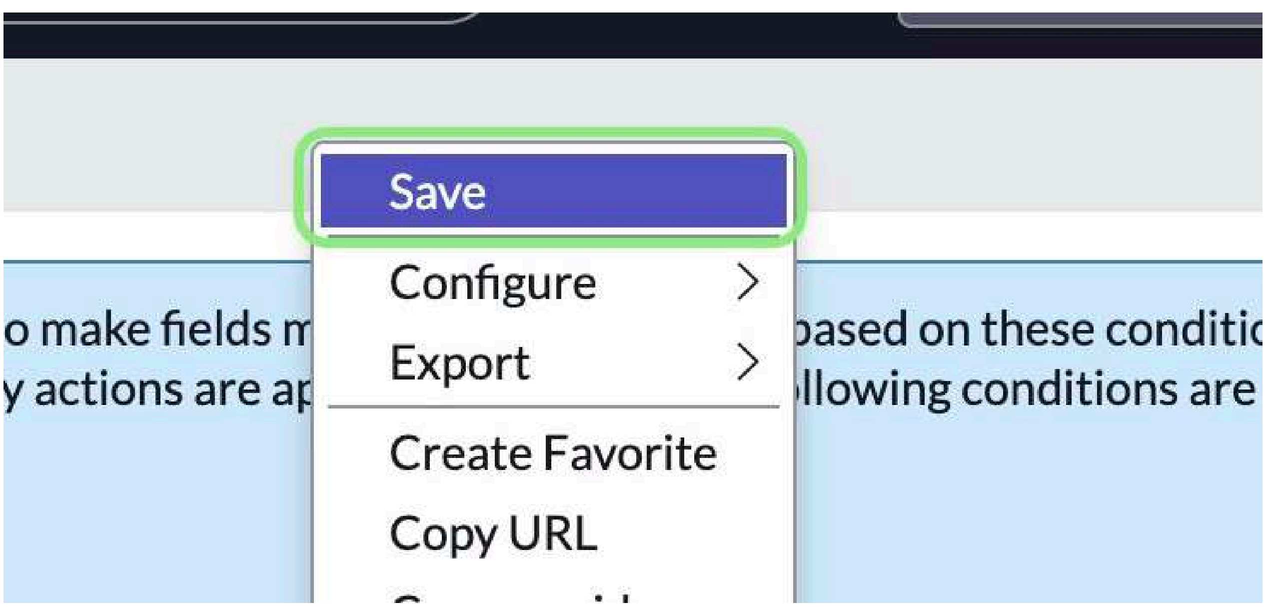
37. Navigate back to the list of UI Policies and click New



38. Set the Short description and Condition



39. Right click the form header and click Save

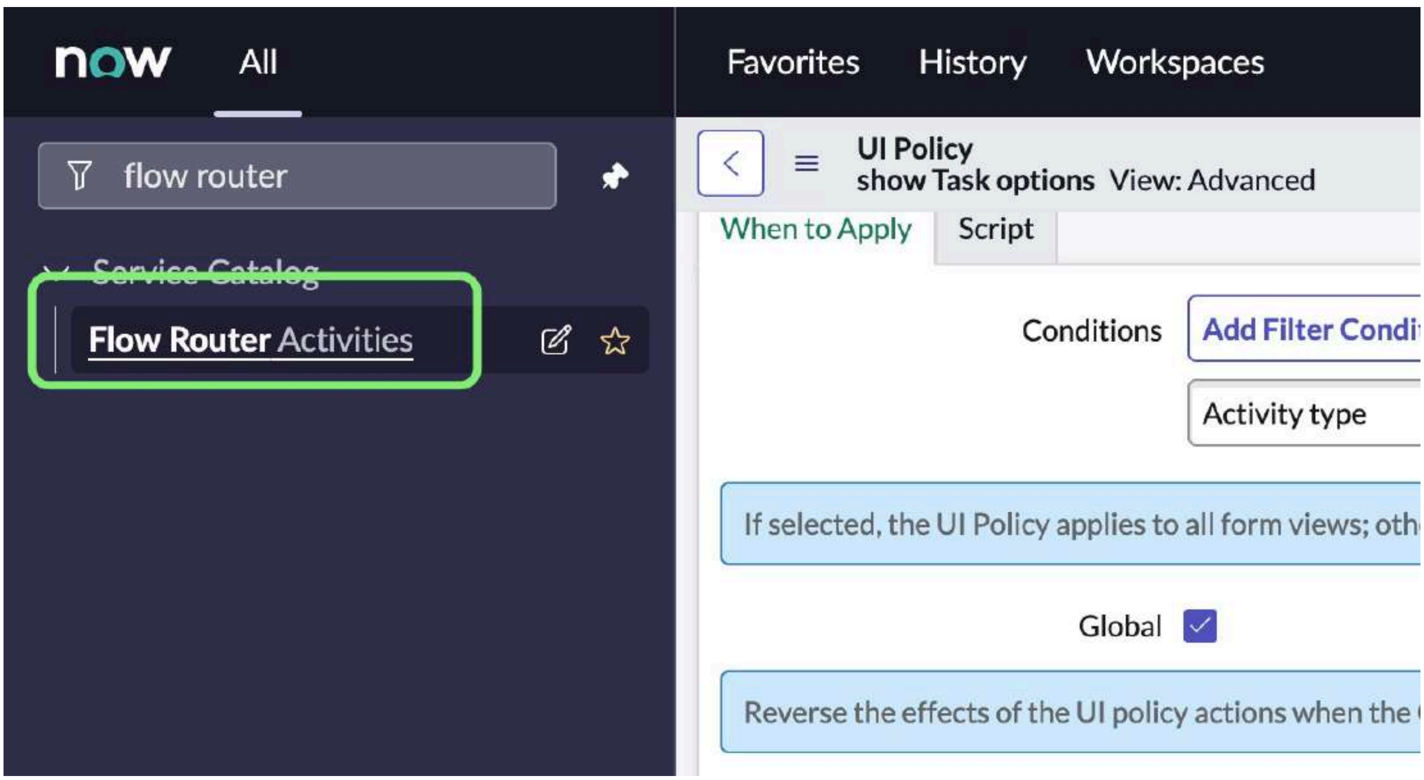


40. Add UI Policy Actions for the Task fields

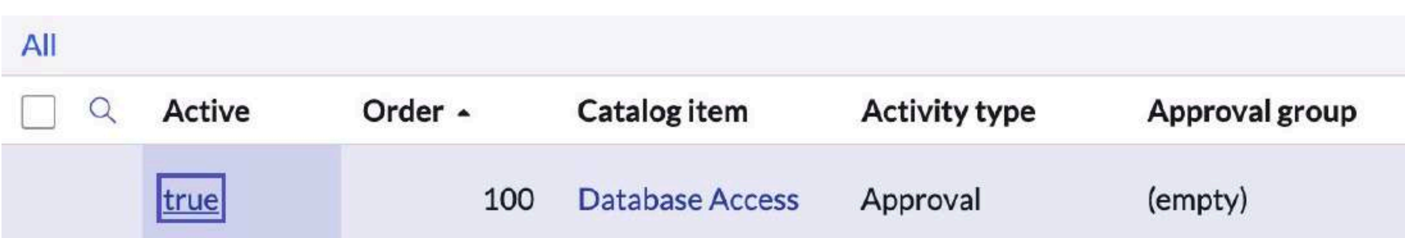
Mandatory: true

Visible: true

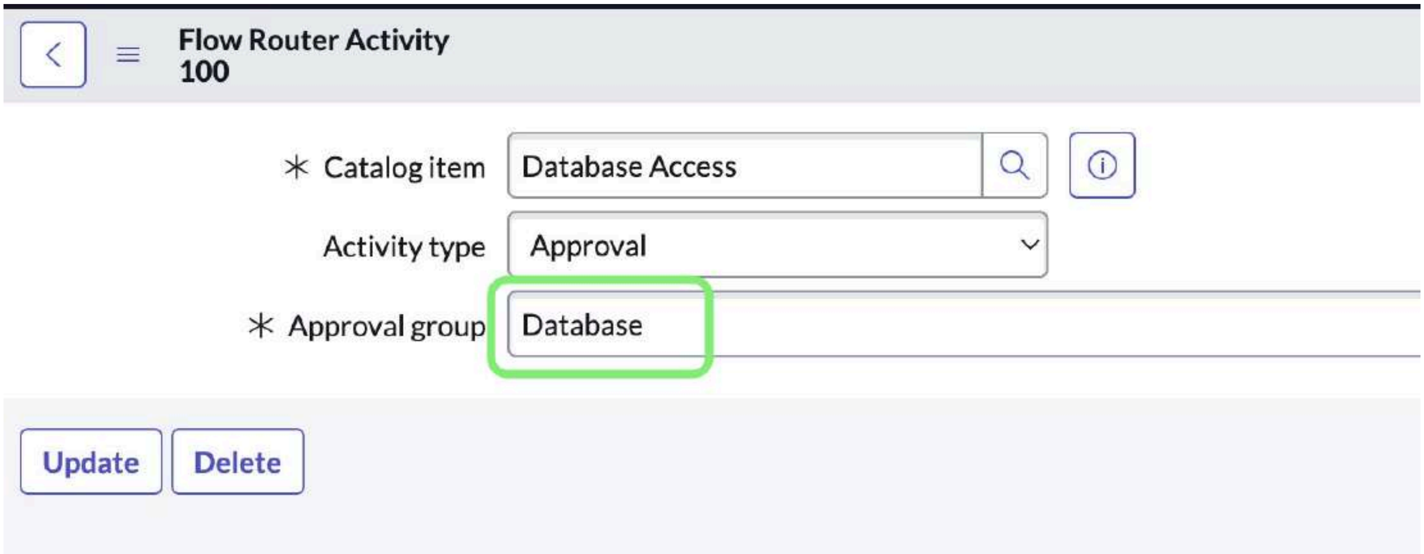
41. Navigate back to the Flow Router Activity table



42. Open the record in the list



43. Select a group for Approval

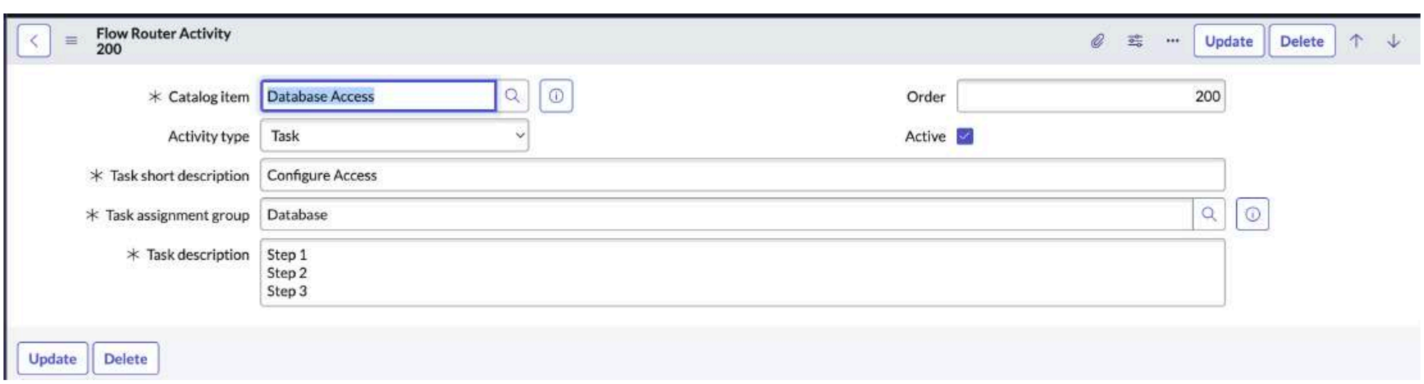


44. Click Update

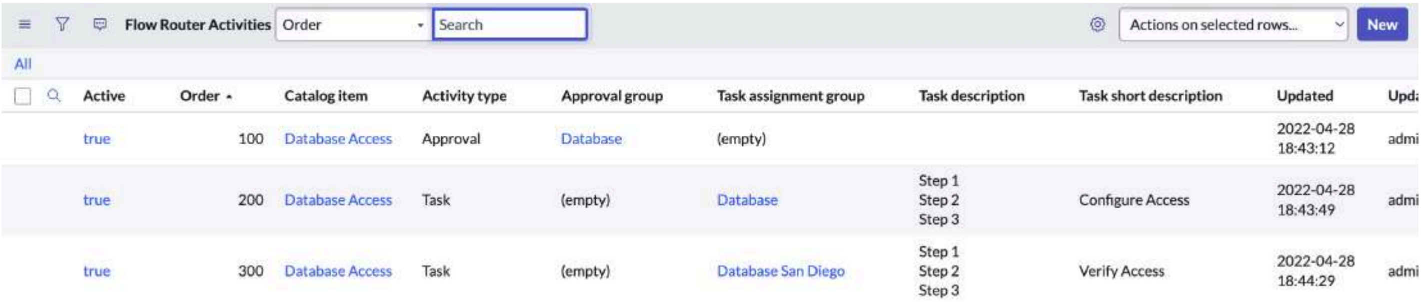
45. Add two additional Flow Router Activities

Activity type: Task

Ensure the order is incremented for each new step.



46. Check point: There are now three activities in the Flow Router Activity table.



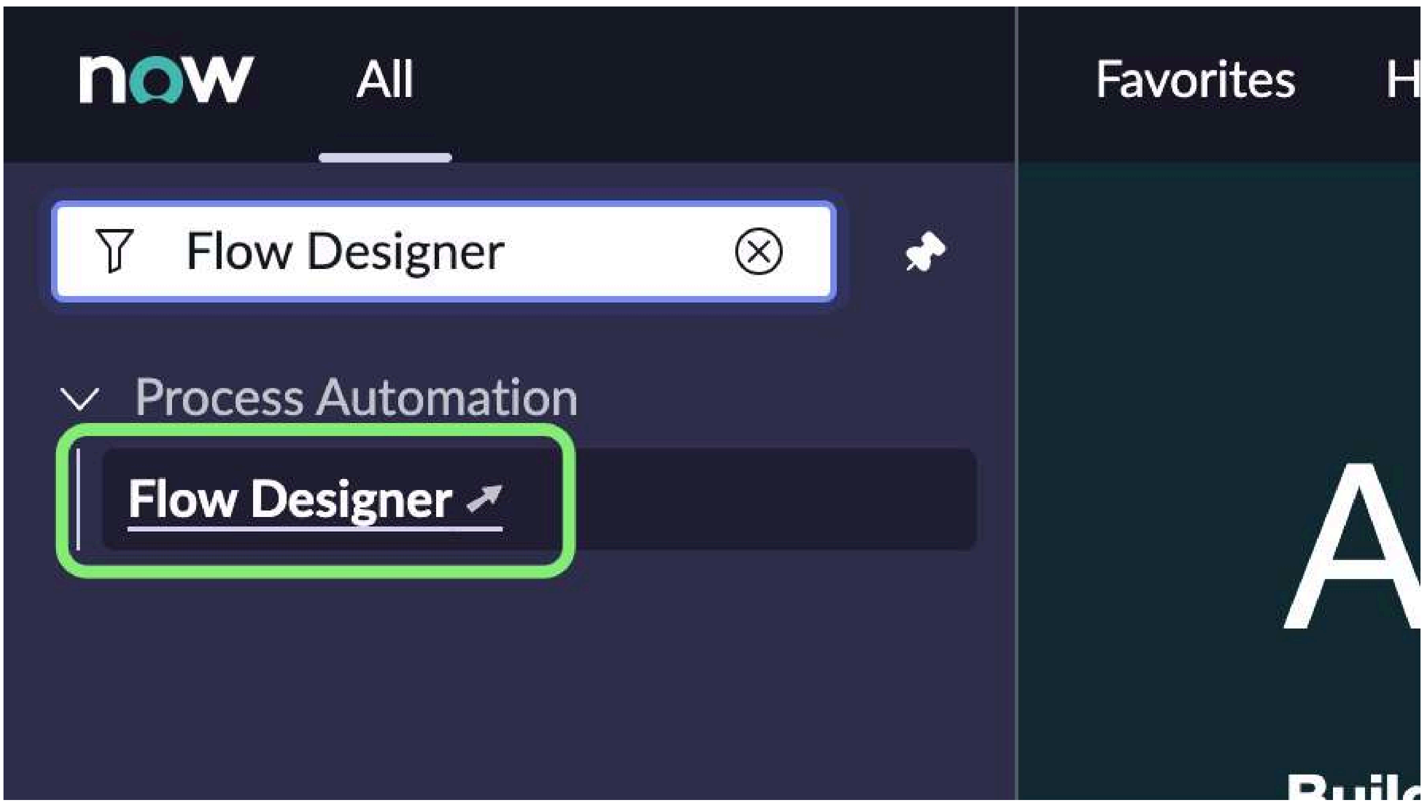
Flow Router Activities | Order | Search | Actions on selected rows... | New

All

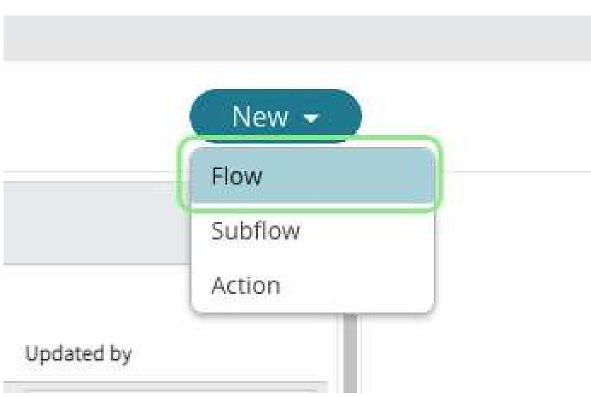
Active	Order	Catalog item	Activity type	Approval group	Task assignment group	Task description	Task short description	Updated	Upda
true	100	Database Access	Approval	Database	(empty)			2022-04-28 18:43:12	admi
true	200	Database Access	Task	(empty)	Database	Step 1 Step 2 Step 3	Configure Access	2022-04-28 18:43:49	admi
true	300	Database Access	Task	(empty)	Database San Diego	Step 1 Step 2 Step 3	Verify Access	2022-04-28 18:44:29	admi

Exercise 3: Create a Dynamic Data-Driven Flow

1. Navigate to Process Automation > Flow Designer

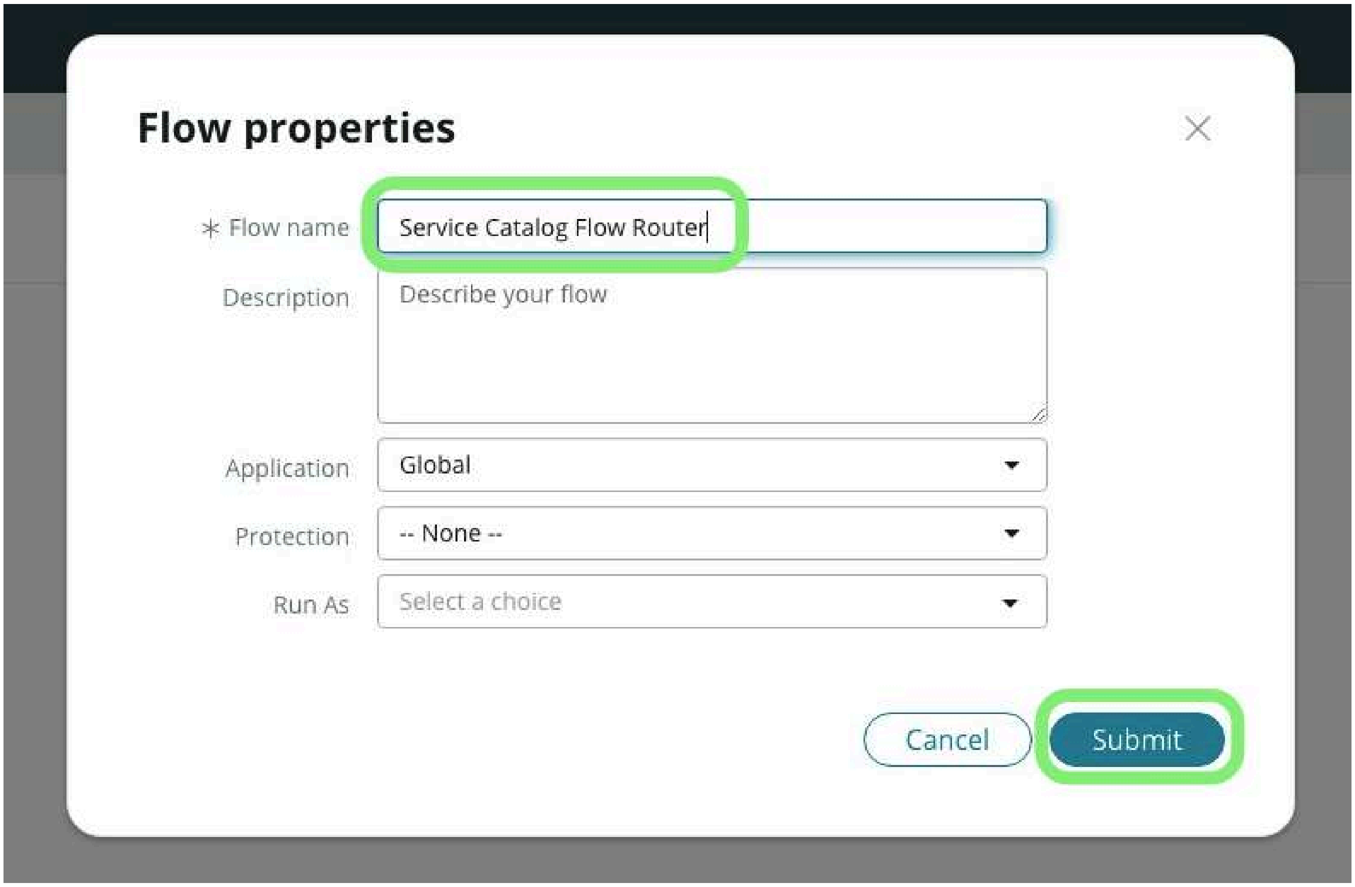


2. Click New > Flow



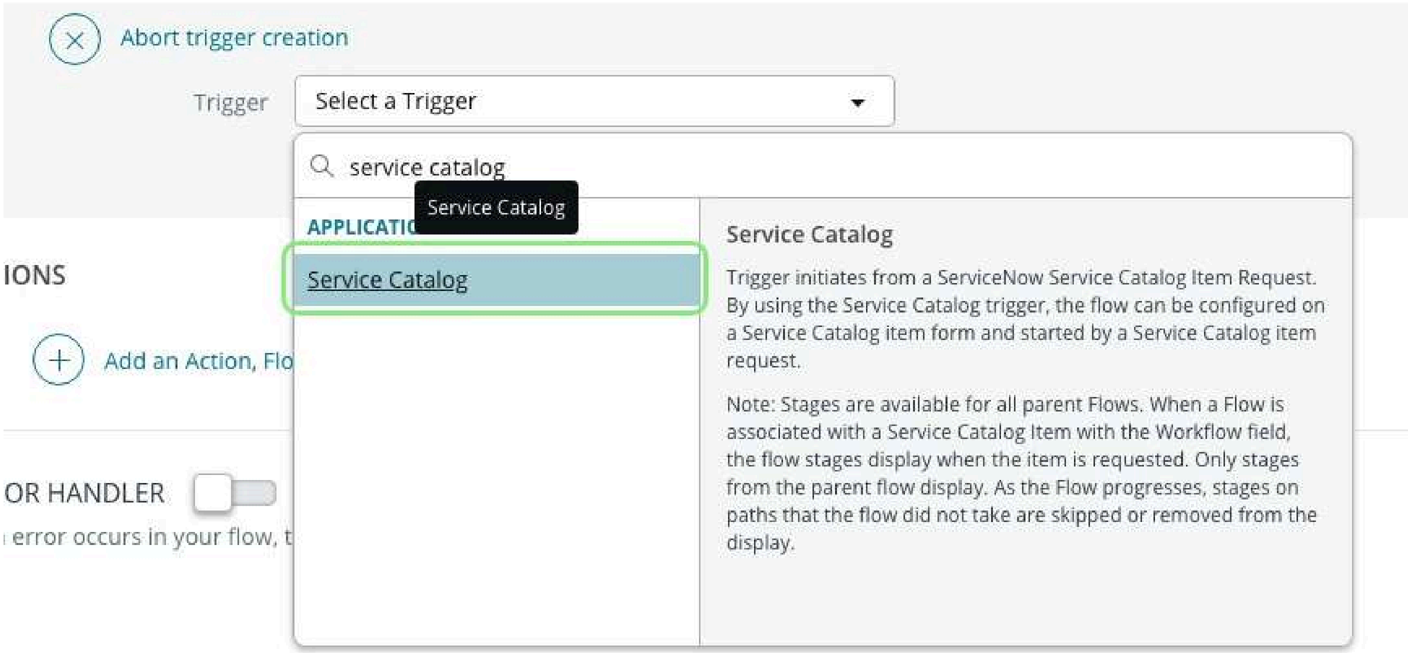
3. Name the Flow. Click Submit.

Suggestion: "Service Catalog Flow Router"

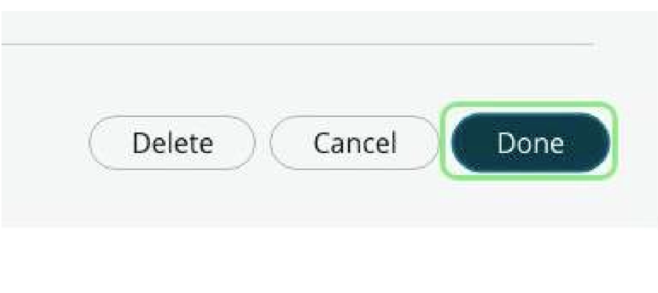


4. Click Add a trigger

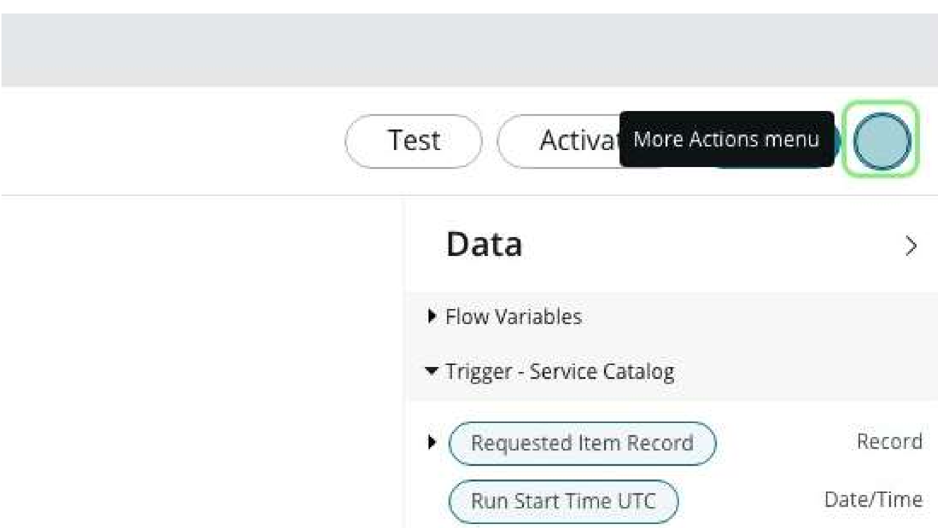
5. Click Service Catalog



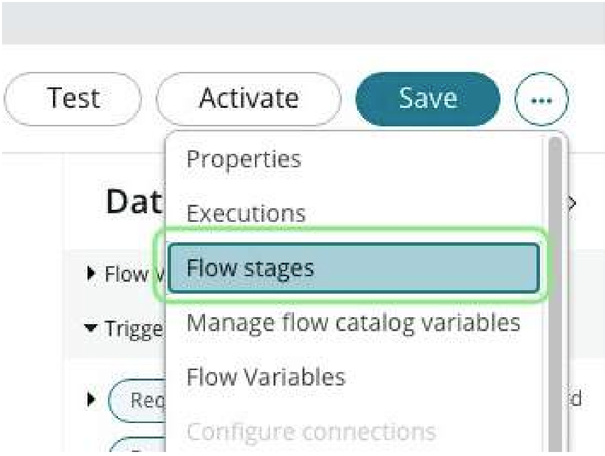
6. Click Done



7. Click More Actions menu

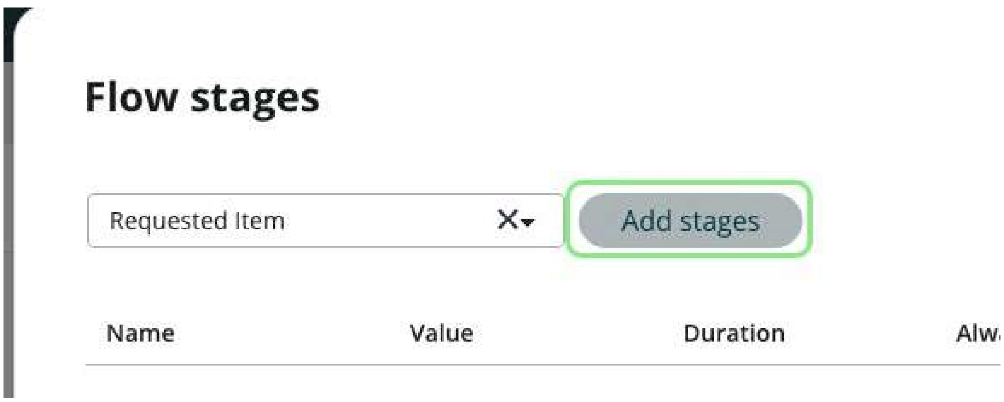


8. Click Flow stages



9. Click Requested Item and click Add stages.

This action copies the common RITM Flow stages to this Flow.

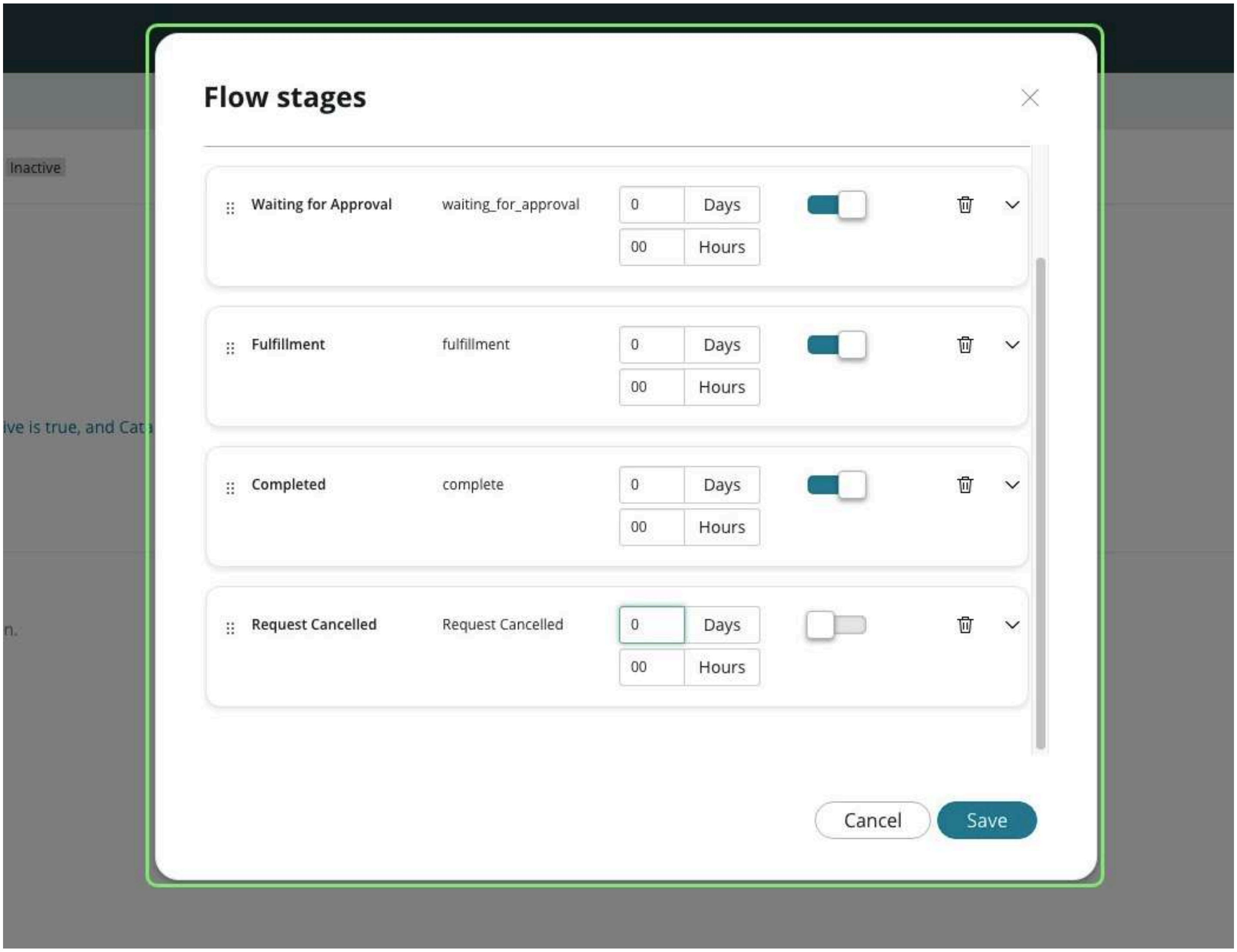


10. The system displays the Stages to the end user in the order that the records are displayed on this screen.

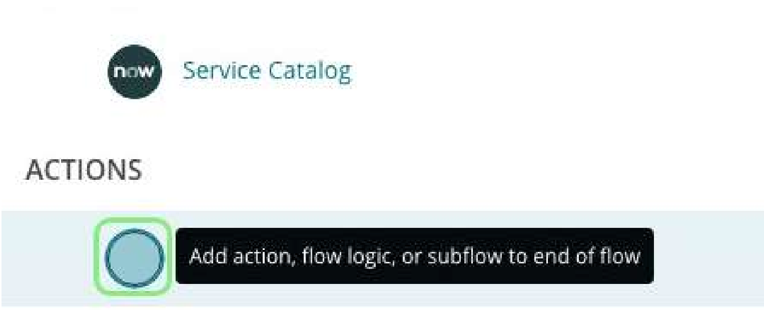
This flow uses the Waiting for Approval, Fulfillment, Completed, and Request Cancelled stages. Adjust the following:

- Drag and drop the stage order to be more logical.
- Default the Days value to 0.
- Turn off "Always show" for the Request Cancelled stage.
- Delete the Request Approved and Delivery stages.

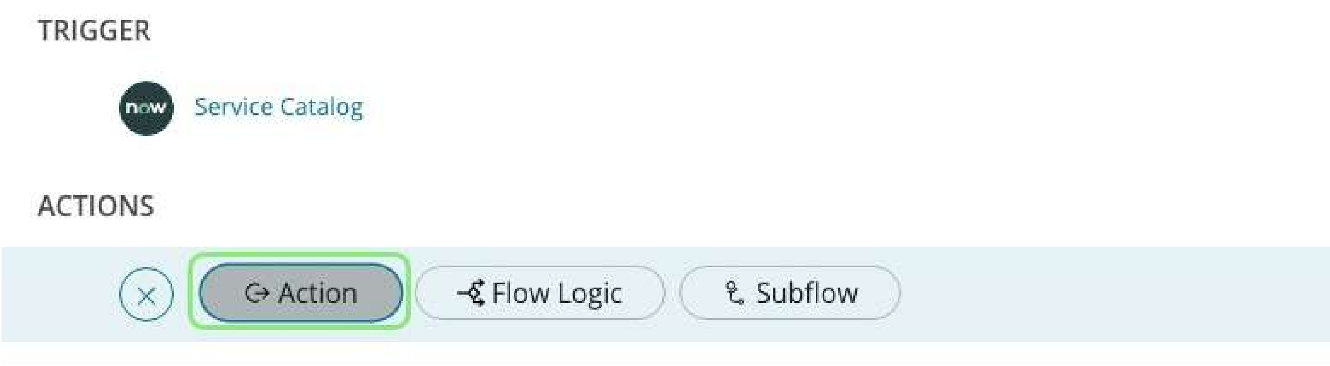
11. Click Save



12. Click Add action, flow logic, or subflow to end of flow.

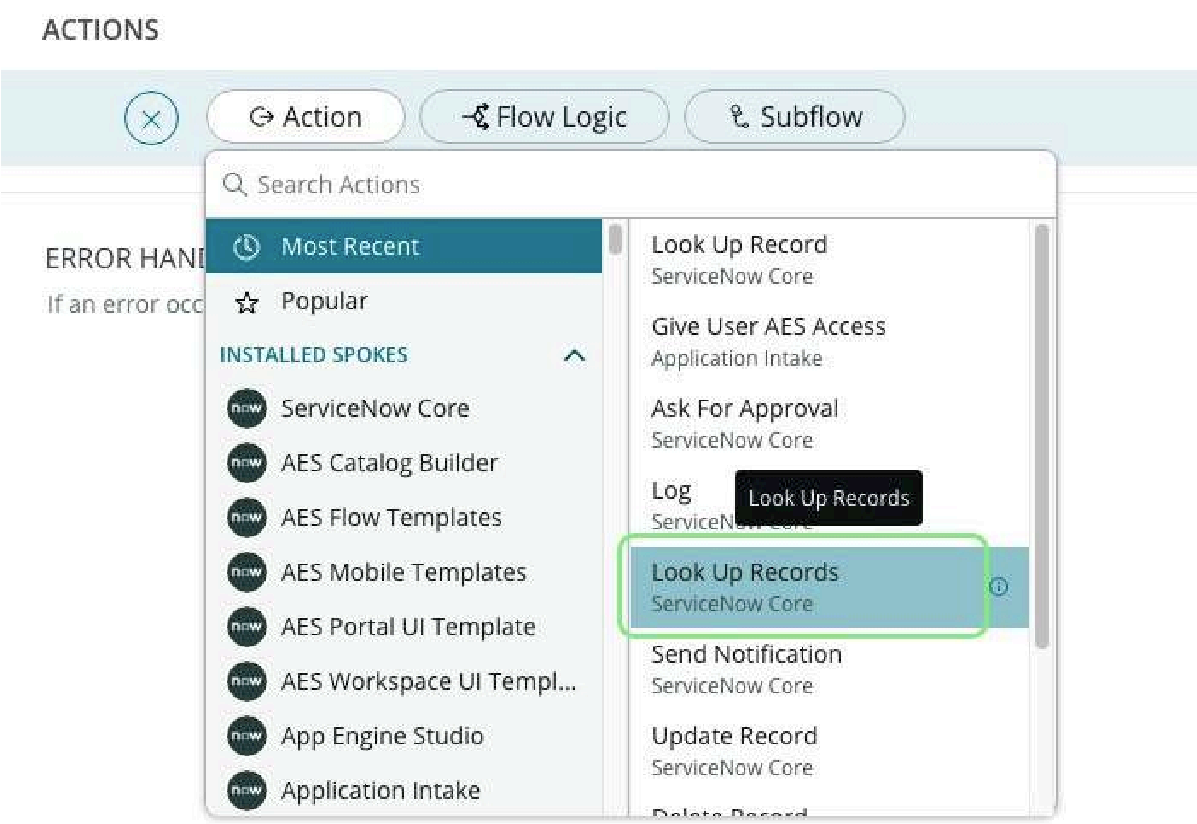


13. Click Action

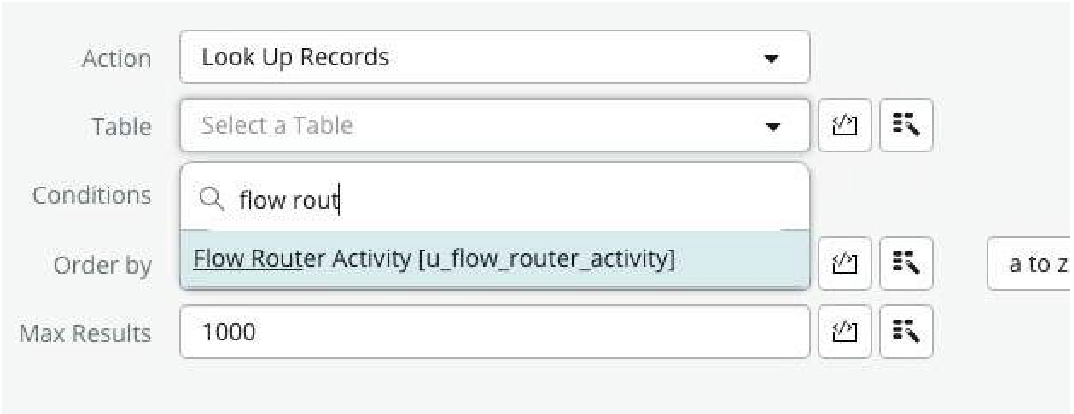


14. Click Look Up Records...

NOTE: There are two Look up Actions, select the plural action that looks up multiple records.

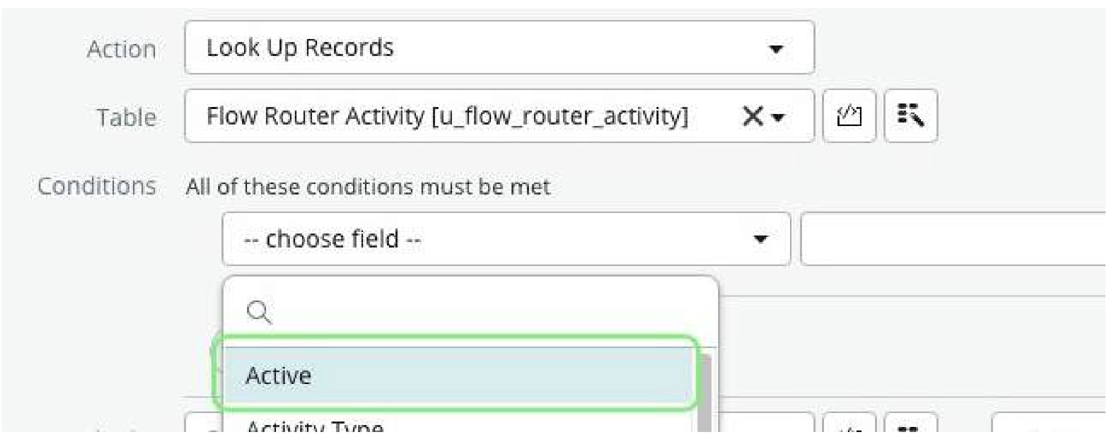


15. Click Flow Router Activity as the table

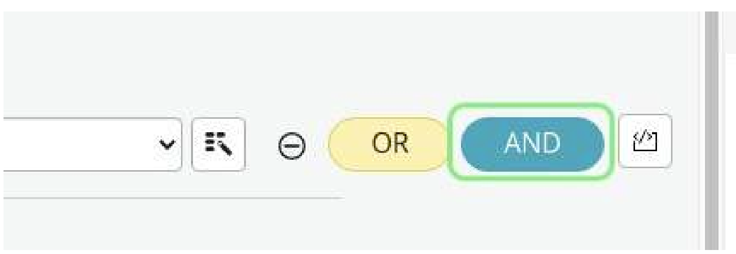


16. Add conditions to filter the search to the relevant Flow Router records

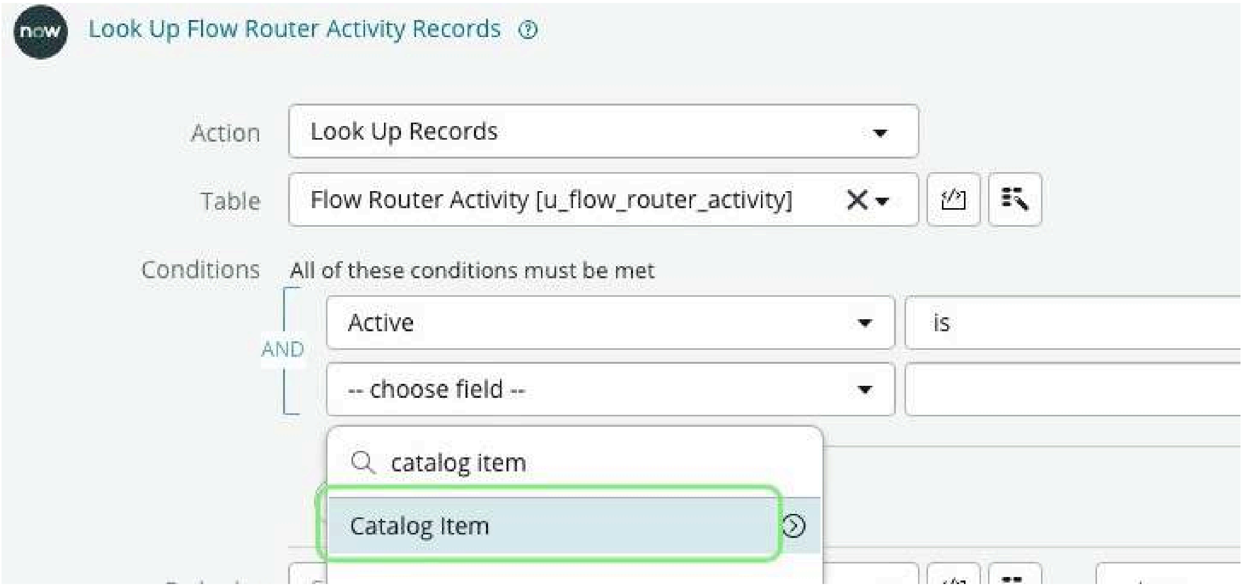
17. Set Active is true



18. Click AND

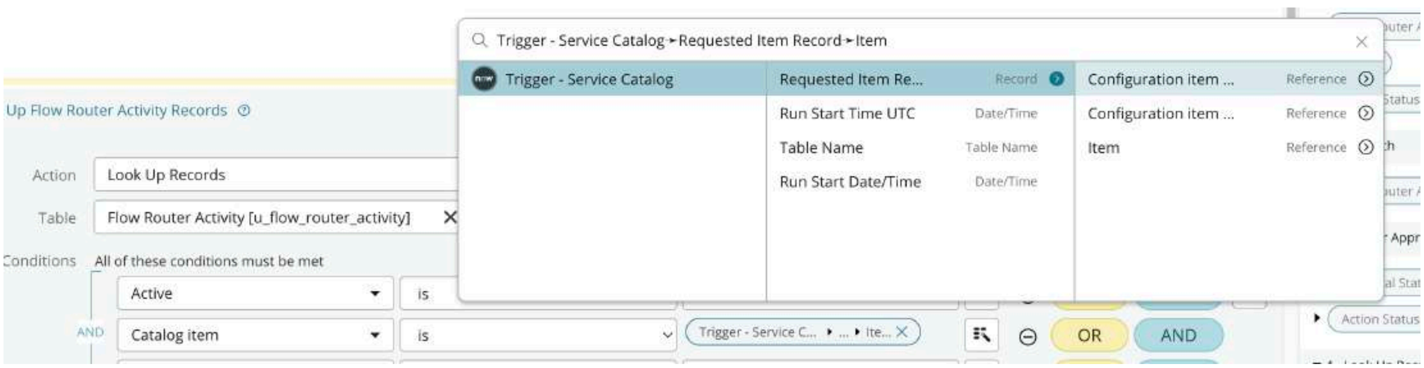


19. Click Catalog Item

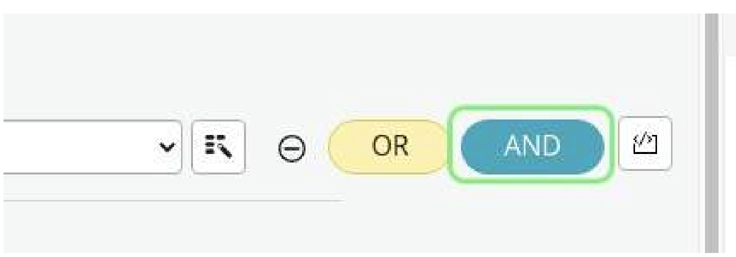


20. Drag the Trigger - Service Catalog > Requested Item Record > Item from the Data pane

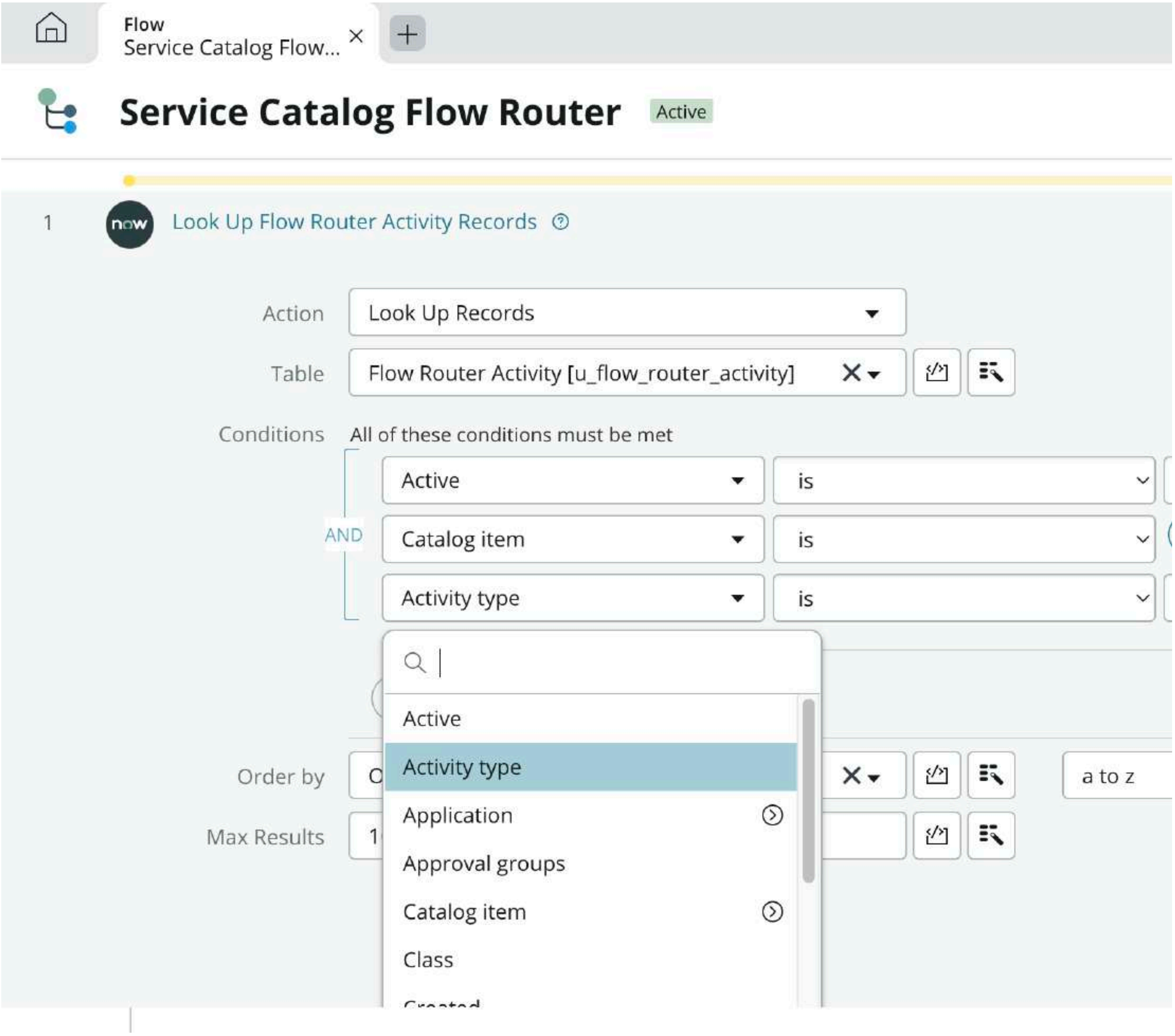
Alternatively, access data pills by clicking on the wand icon to the left of the condition. This displays a filter-like interface with multiple panes for referential data.



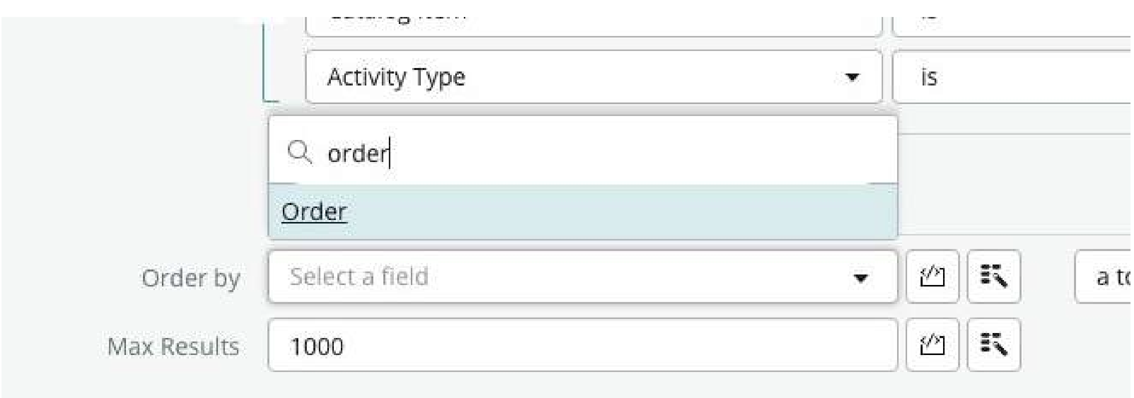
21. Click AND



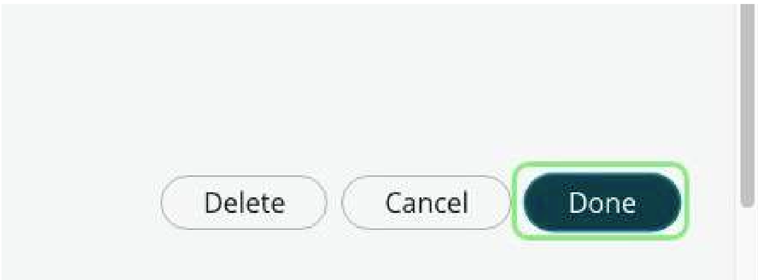
22. Set Activity Type is Approval



23. In the Order field, click Order.

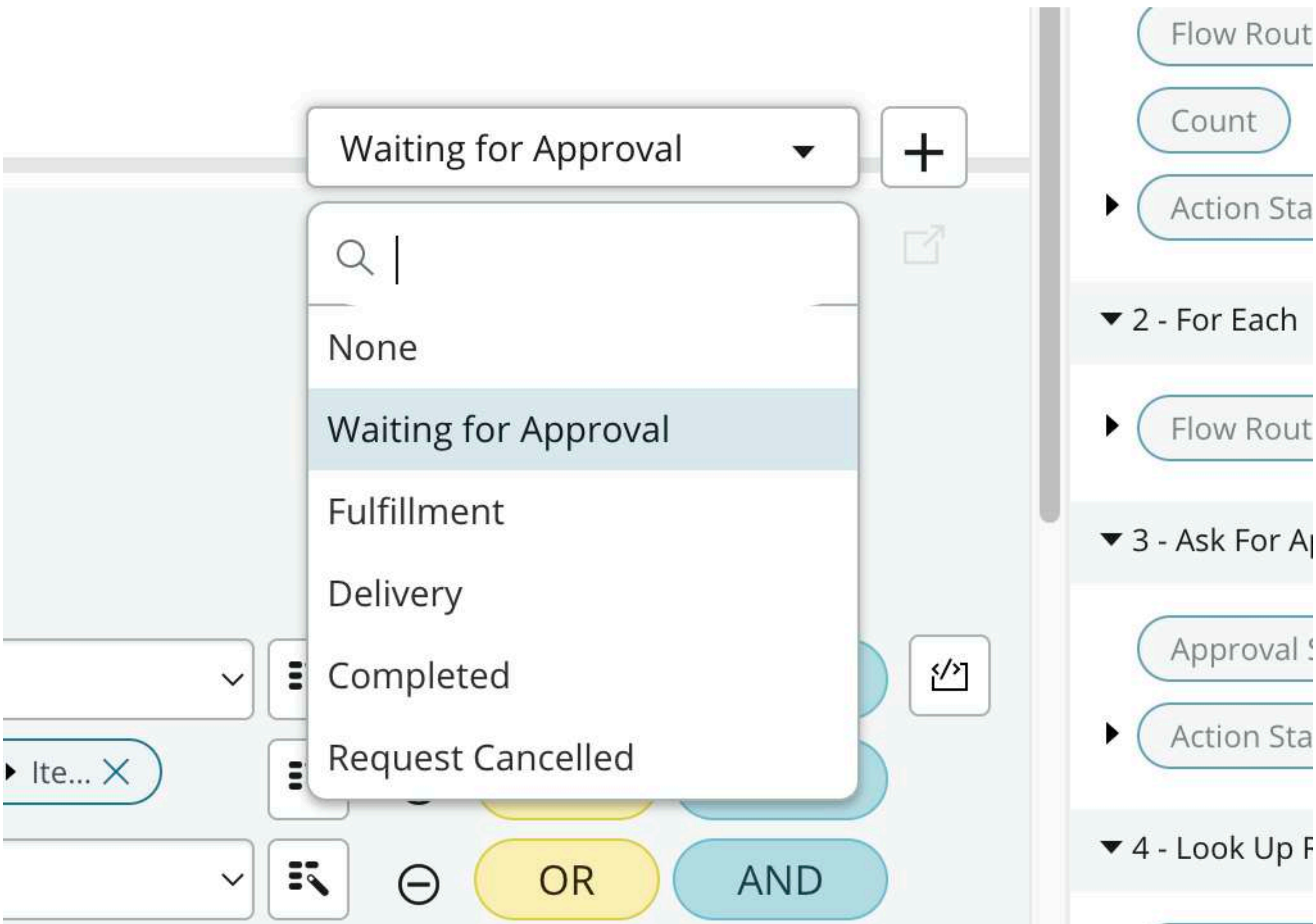


24. Click Done

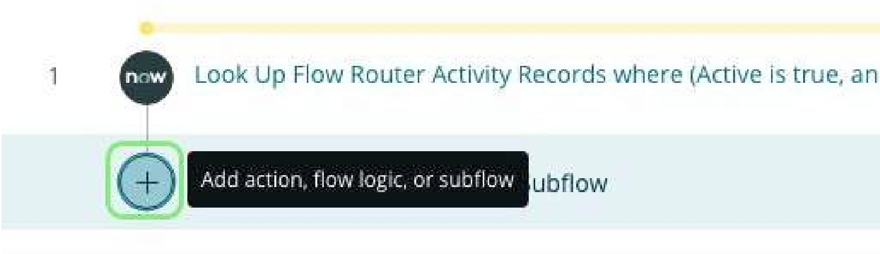


25. Hover just over the Look Up Records Action until an "Add a stage" line appears.

26. Click Waiting for Approval

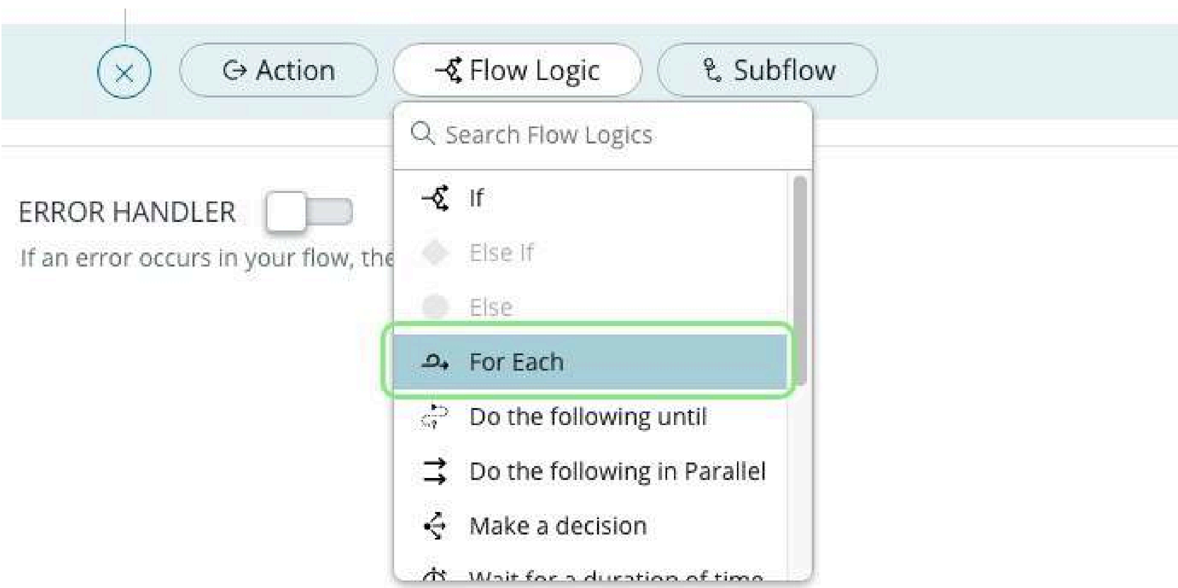


27. Click Add action, flow logic, or subflow



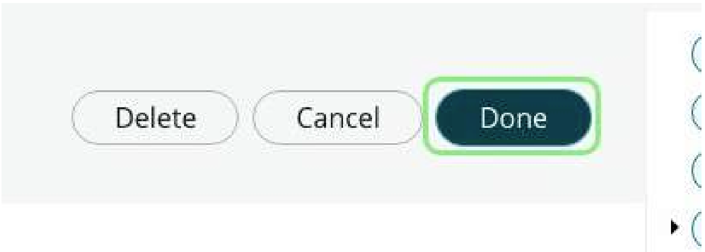
28. Click Flow Logic

29. Click For Each

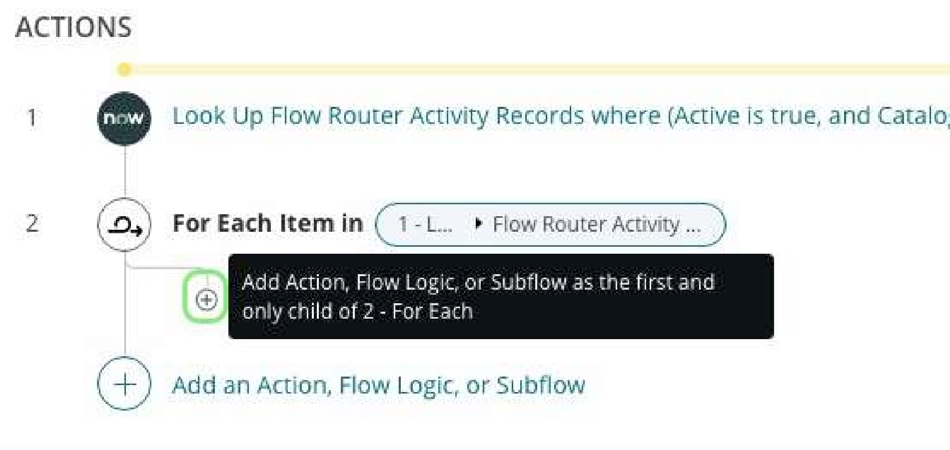


30. Drag Step 1 > Flow Router Activity Records to the Items.

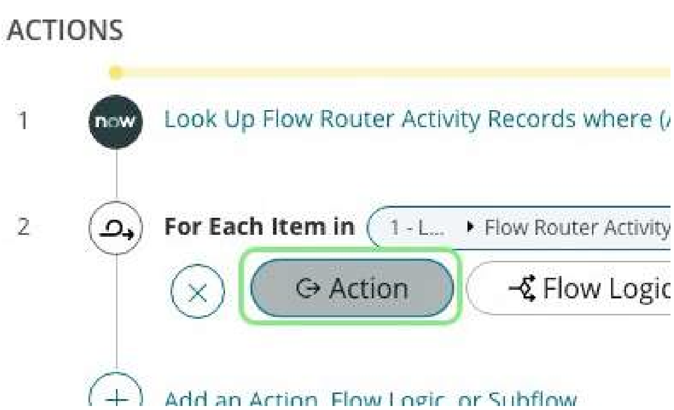
31. Click Done



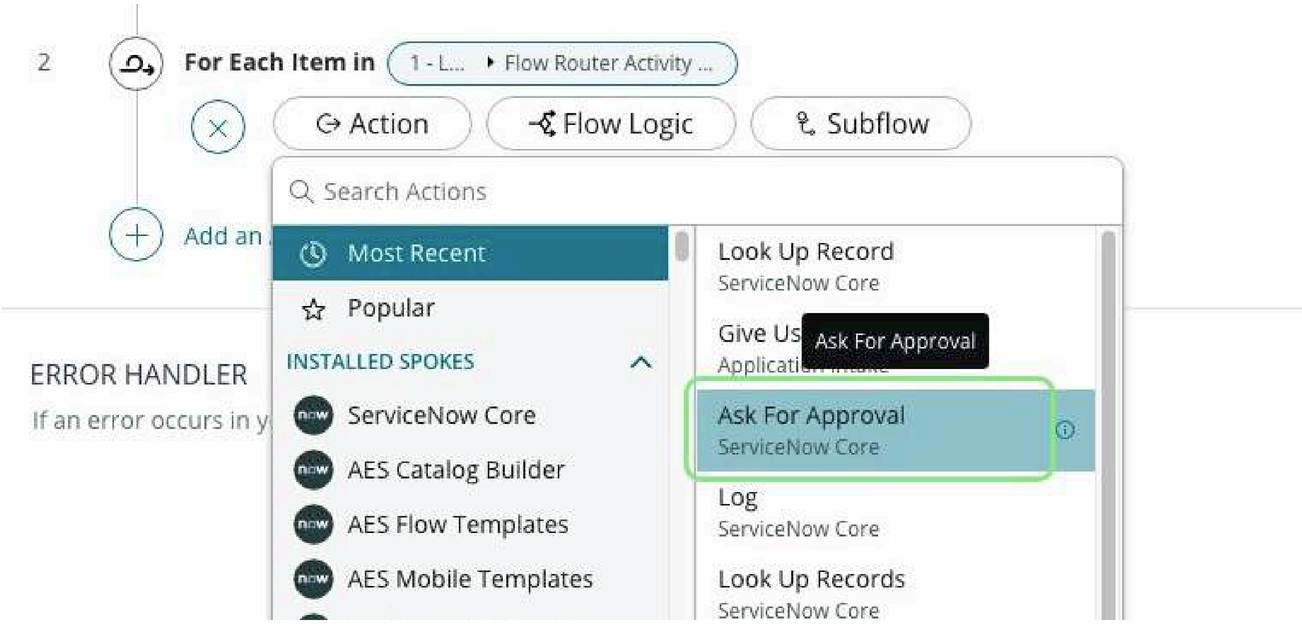
32. Click Add Action, Flow Logic, or Subflow as a subpath of 2 - For Each



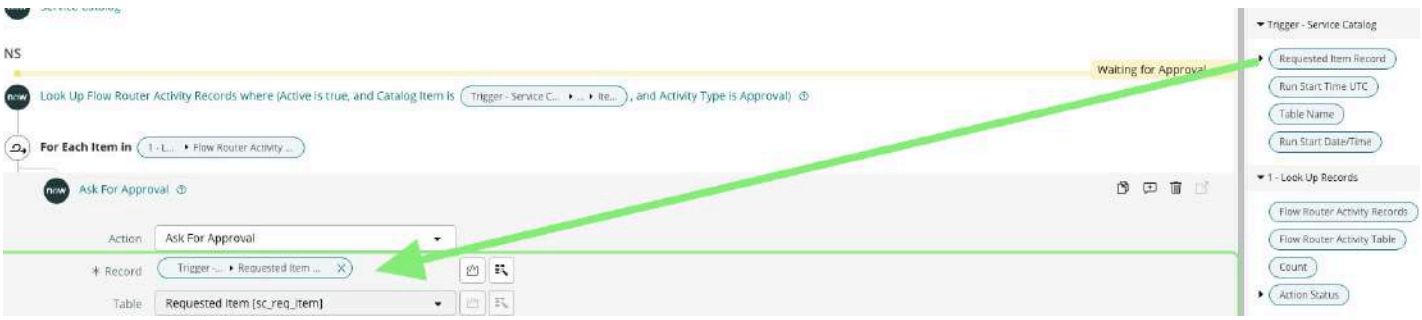
33. Click Action



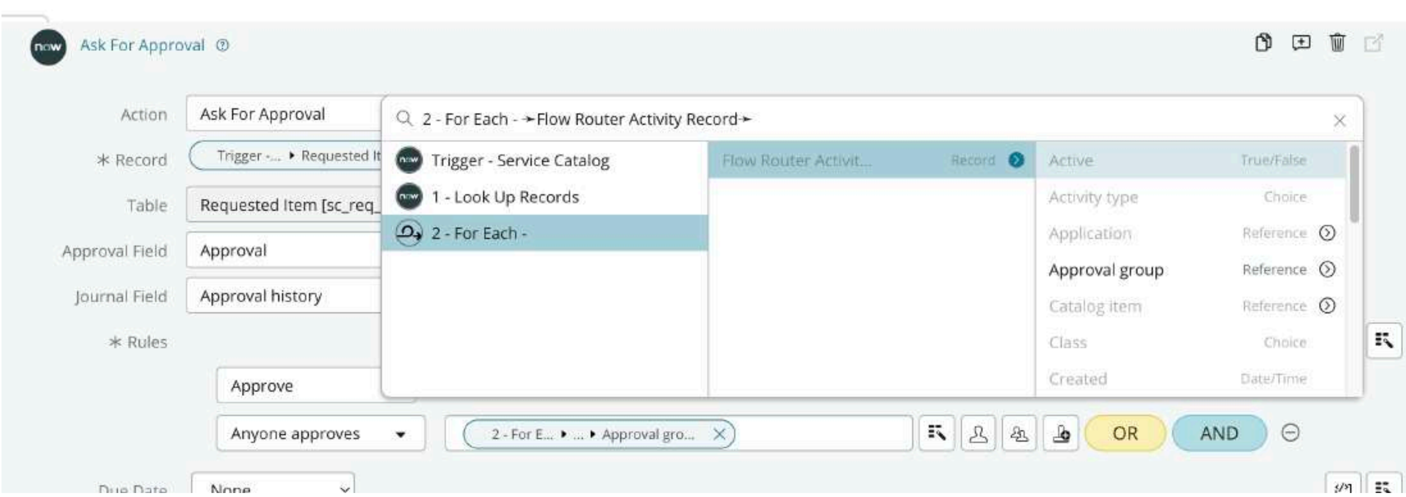
34. Click Ask For Approval



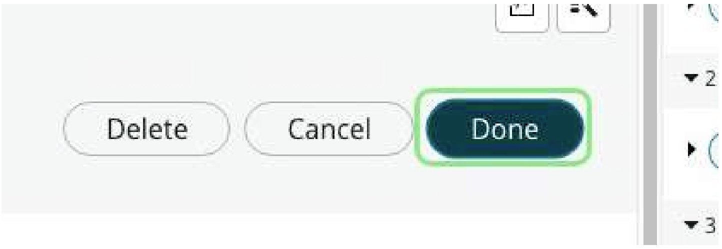
35. Drag the Trigger - Service Catalog > Requested Item Record > Item from the Data pane into the Record field



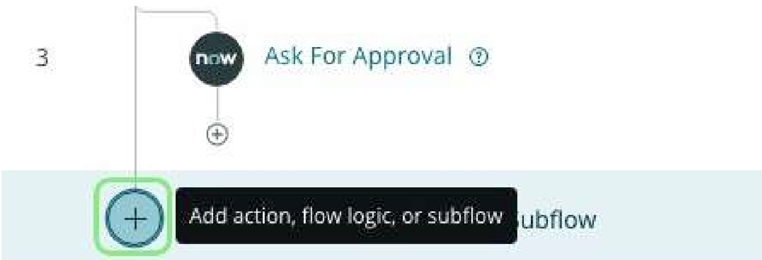
36. Drag 2 - For Each - Flow Router Activity Record > Approval group into the value for Anyone approves.



37. Click Done

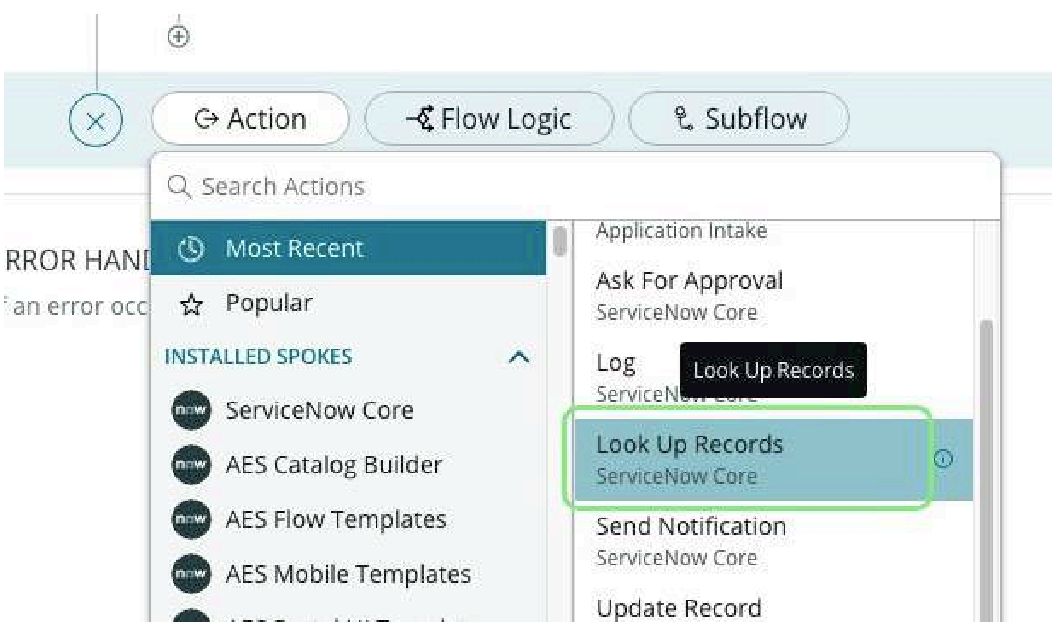


38. Click Add action, flow logic, or subflow

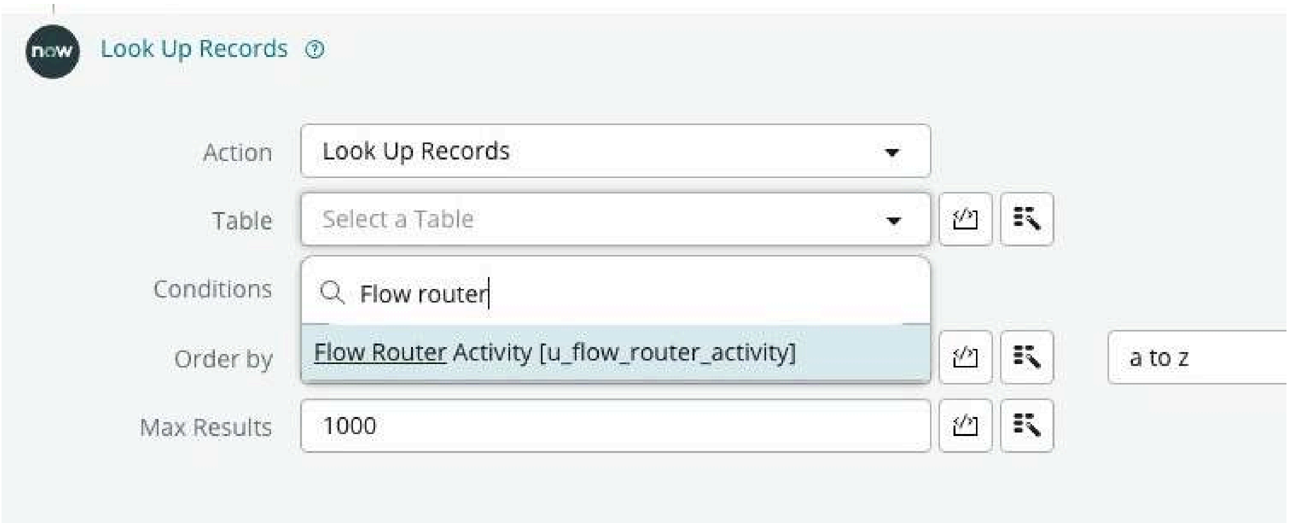


39. Click Action

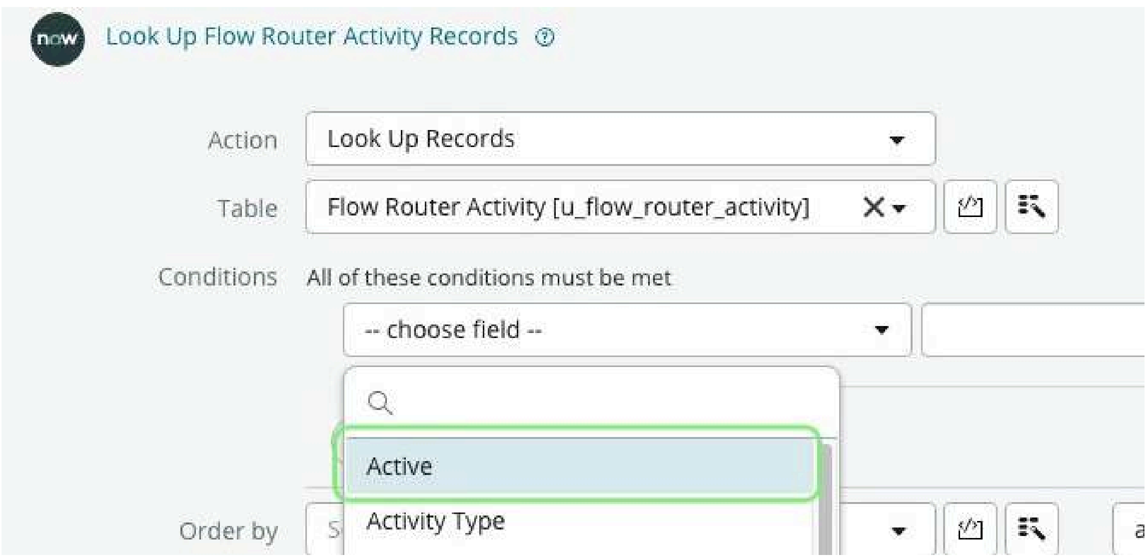
40. Click Look Up Records...



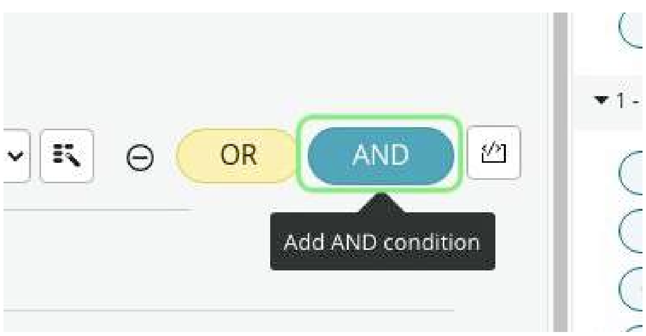
41. Click Flow Router Activity as the table



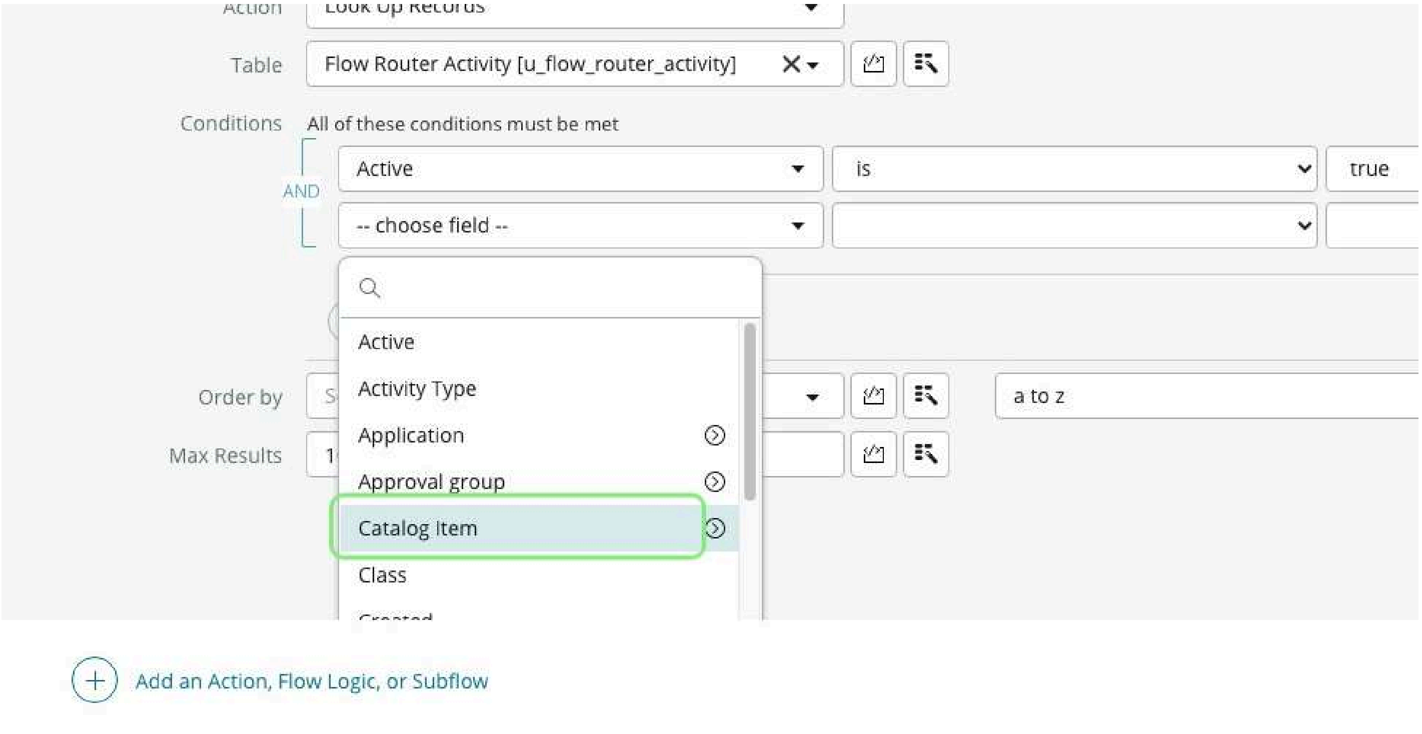
42. Set Active is true



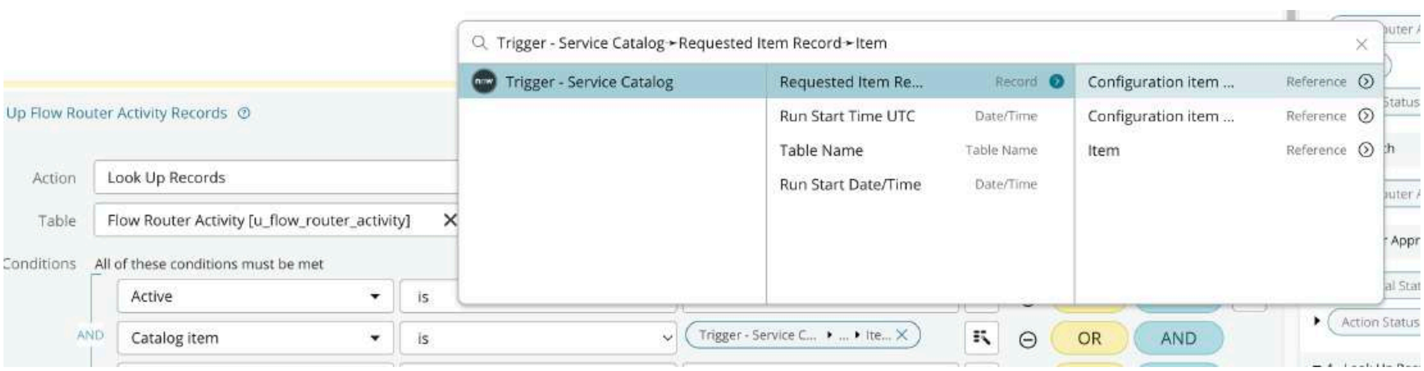
43. Click AND



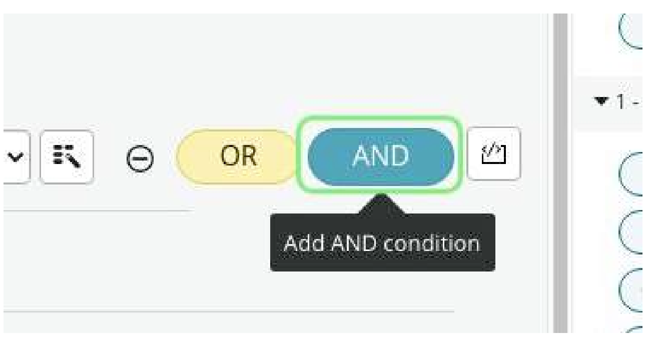
44. Click Catalog Item



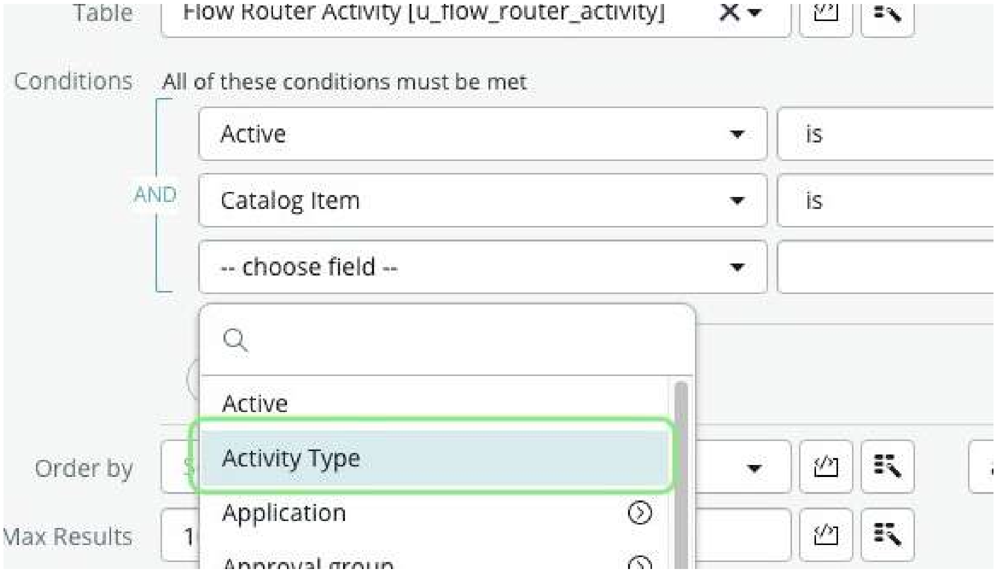
45. Drag the Trigger - Service Catalog > Requested Item Record > Item from the Data pane



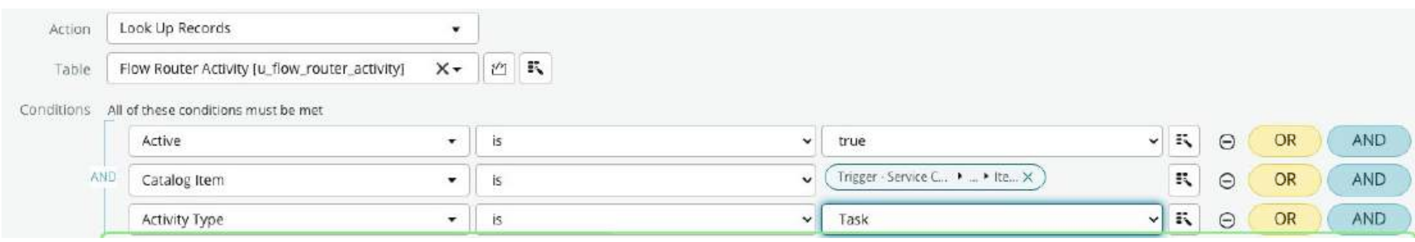
46. Click AND



47. Click Activity Type

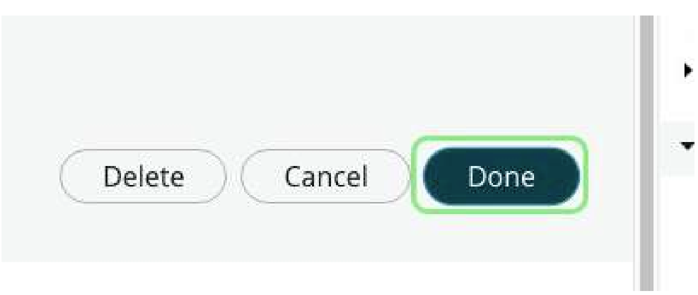


48. Click Task

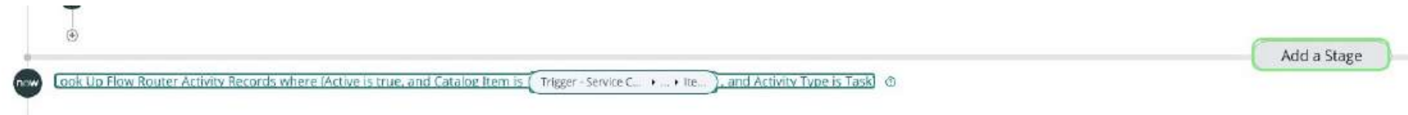


49. In the Order field, click Order.

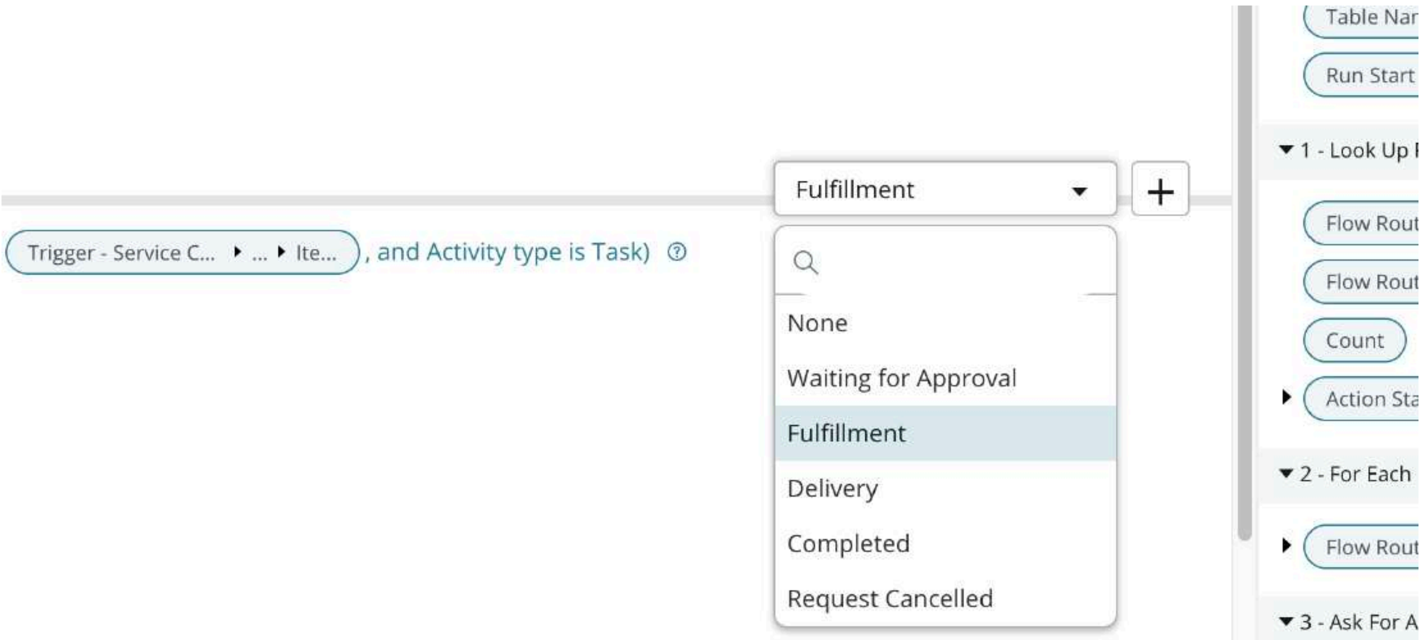
50. Click Done



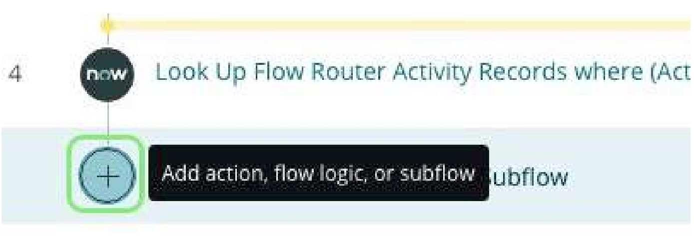
51. Click Add a Stage



52. Click Fulfillment

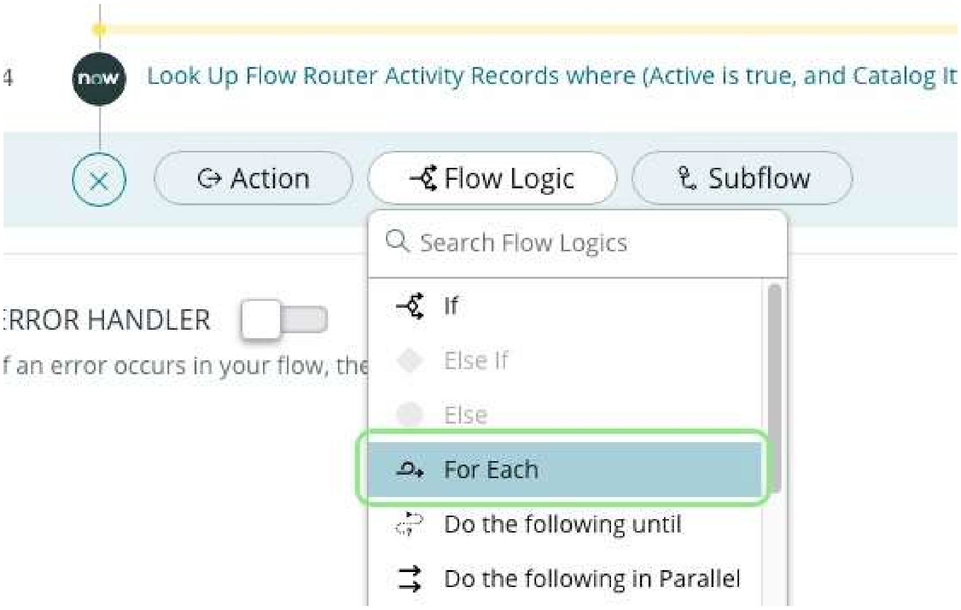


53. Click Add action, flow logic, or subflow



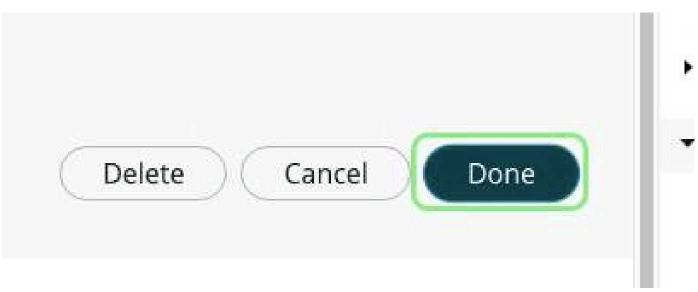
54. Click Flow Logic

55. Click For Each



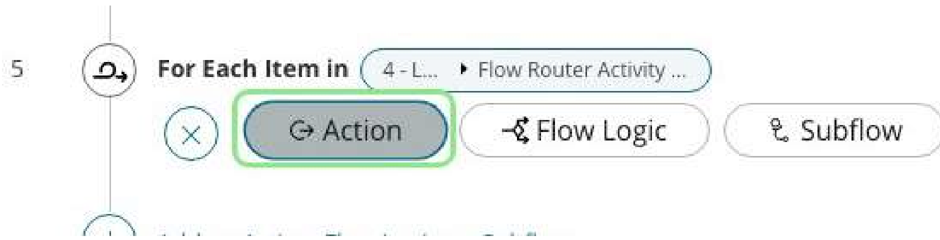
56. Drag Step 4 > Flow Router Activity Records to the Items.

57. Click Done



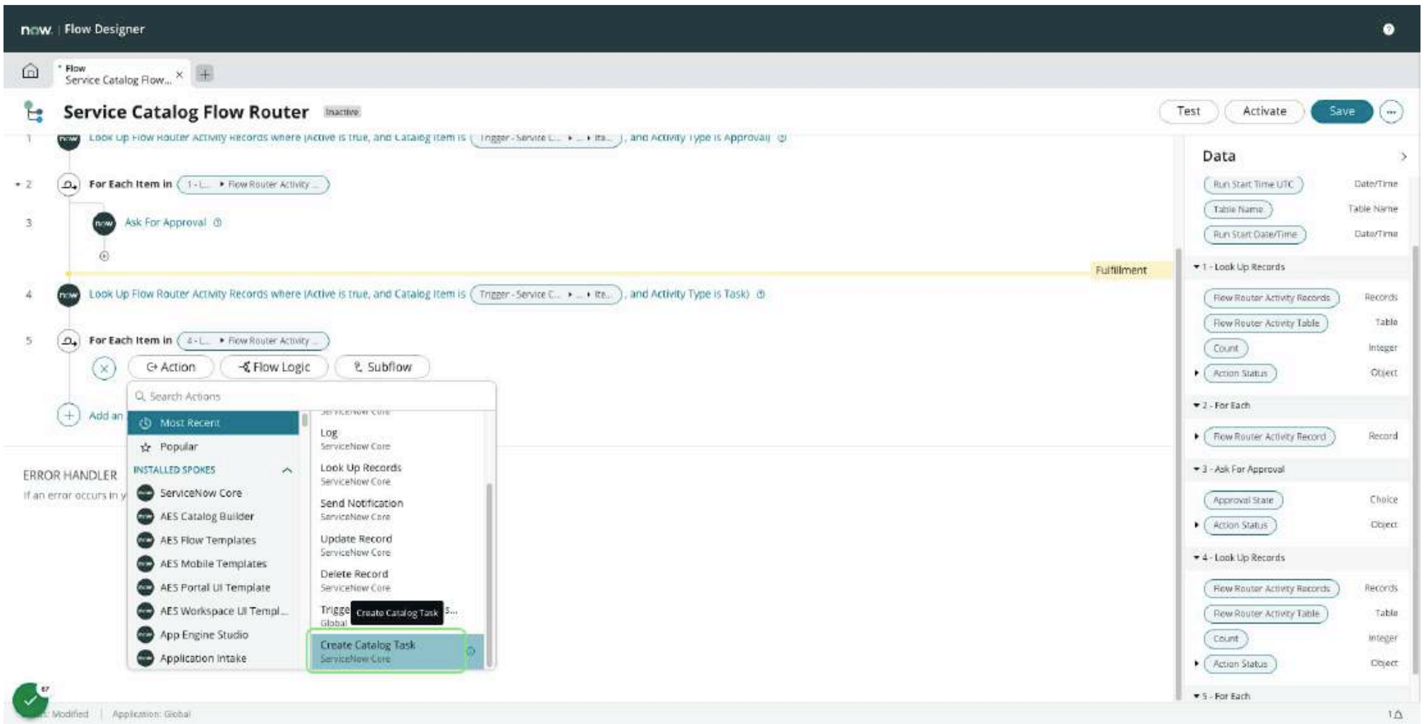
58. Click Add Action, Flow Logic, or Subflow as a subpath of 5 - For Each

59. Click Action

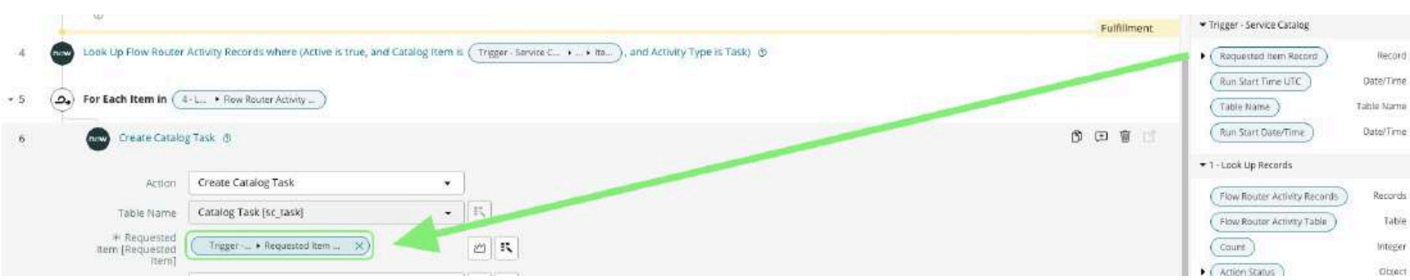


60. Click Create Catalog Task...

Flow Designer provides several actions that can be used to create a Catalog Task, such as Create Record or Create Task. While these options work to a degree, the Create Catalog Task action is best the tool for the job.



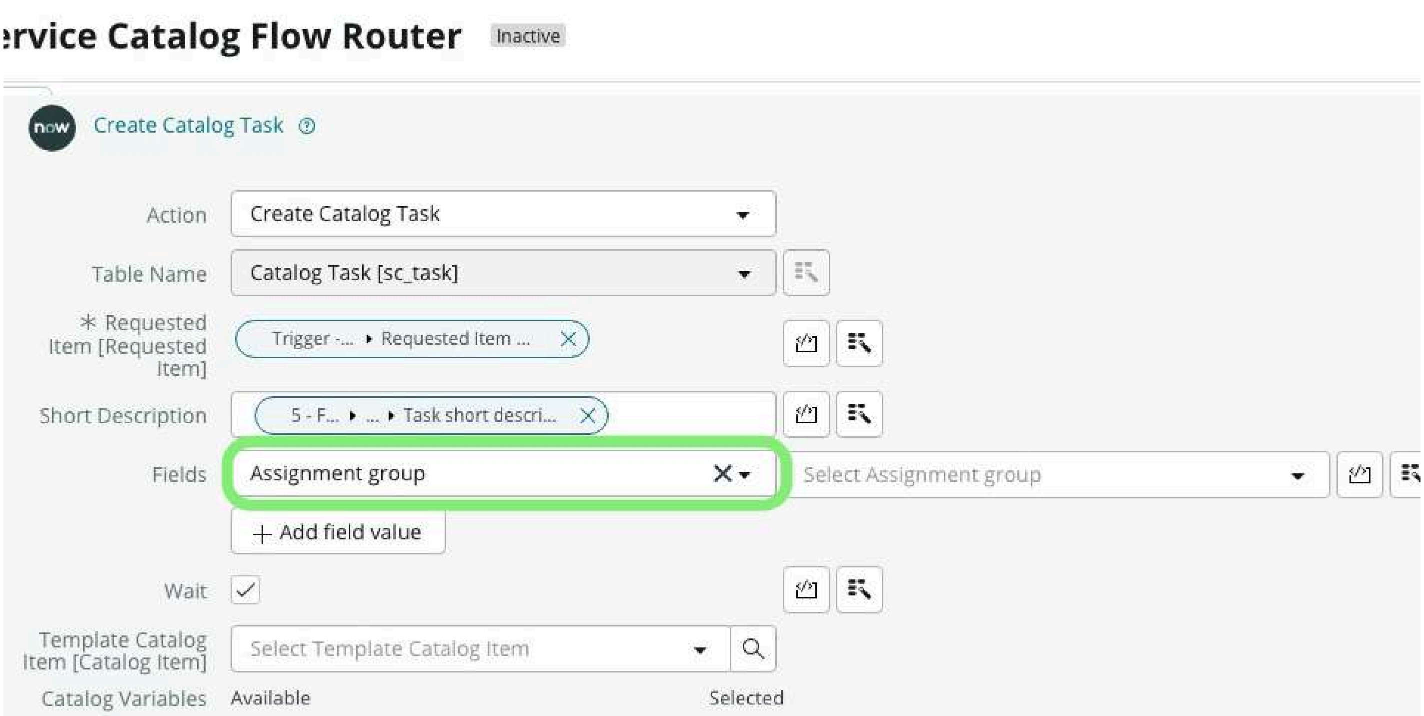
61. Drag the Trigger - Service Catalog > Requested Item Record > Item from the Data pane into the Requested Item field



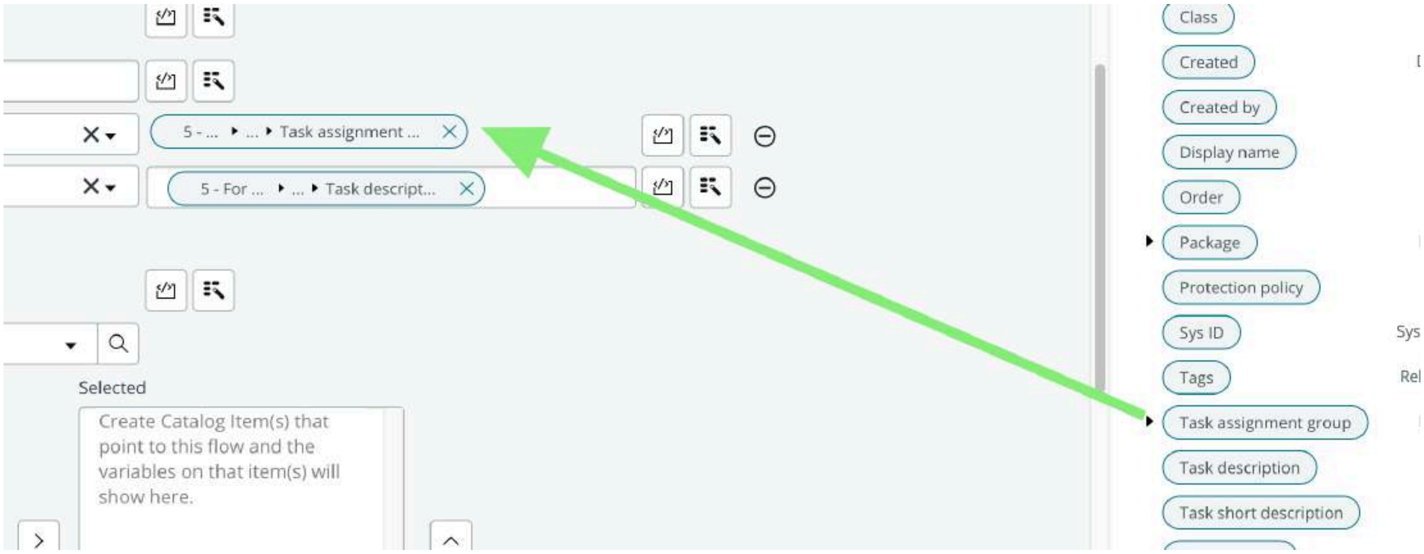
62. Drag 5 - For Each - Flow Router Activity Record > Task short description

63. Click Add field value

64. Click Assignment group

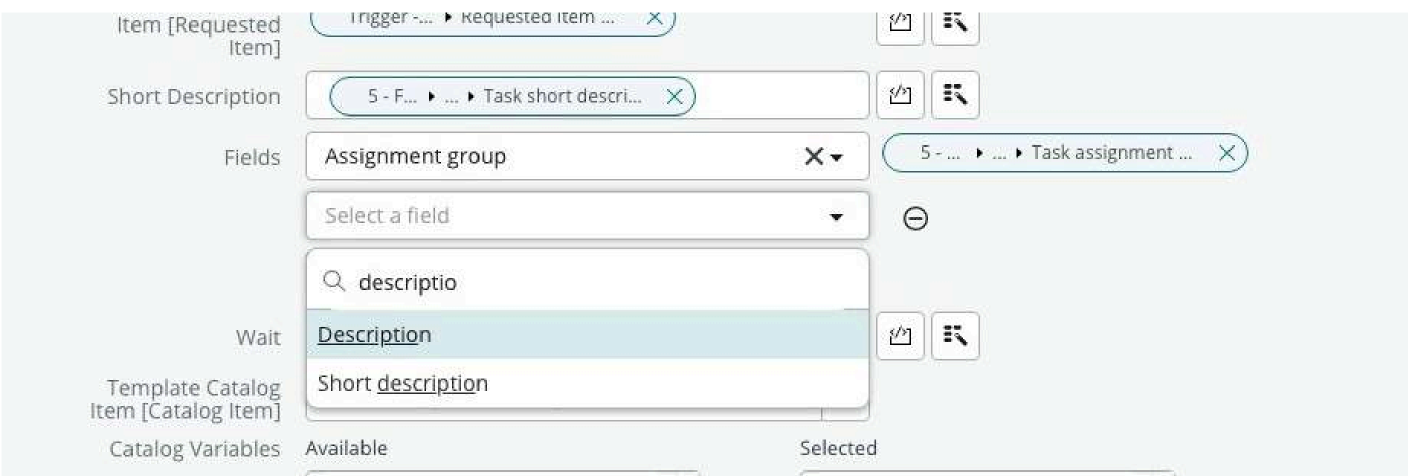


65. Drag 5 - For Each - Flow Router Activity Record > Task assignment group

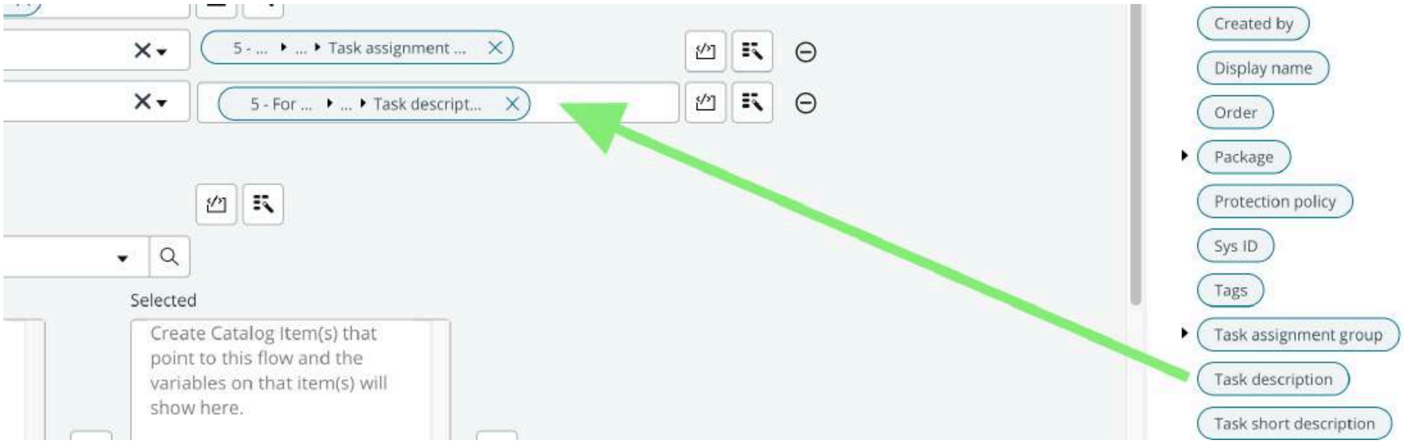


66. Click Add field value

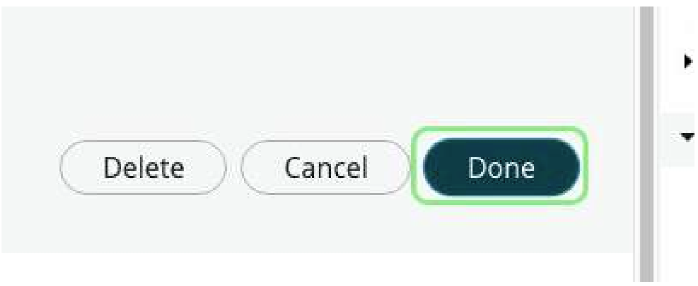
67. Click Description



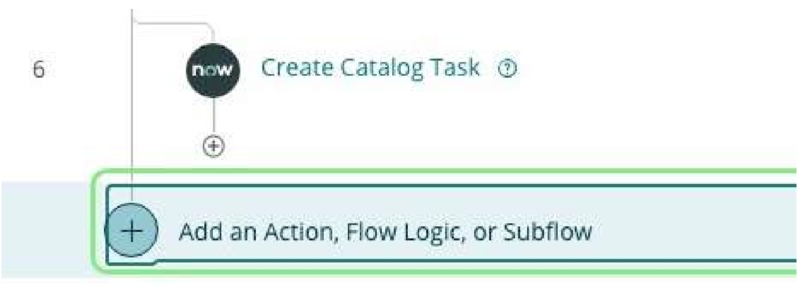
68. Drag 5 - For Each - Flow Router Activity Record > Task description



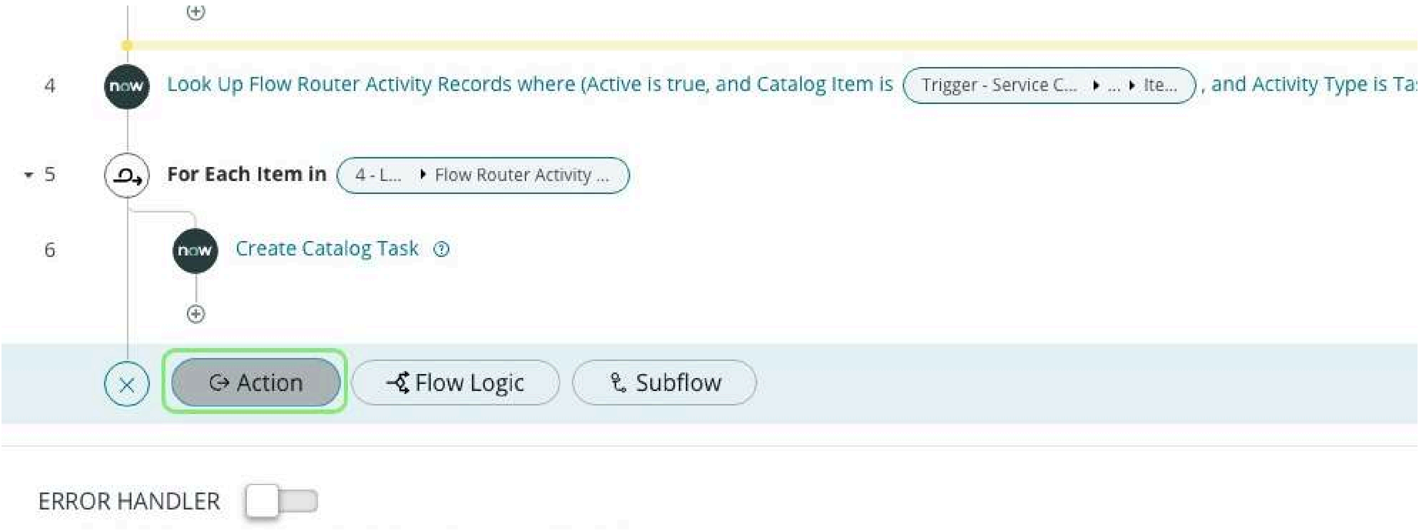
69. Click Done



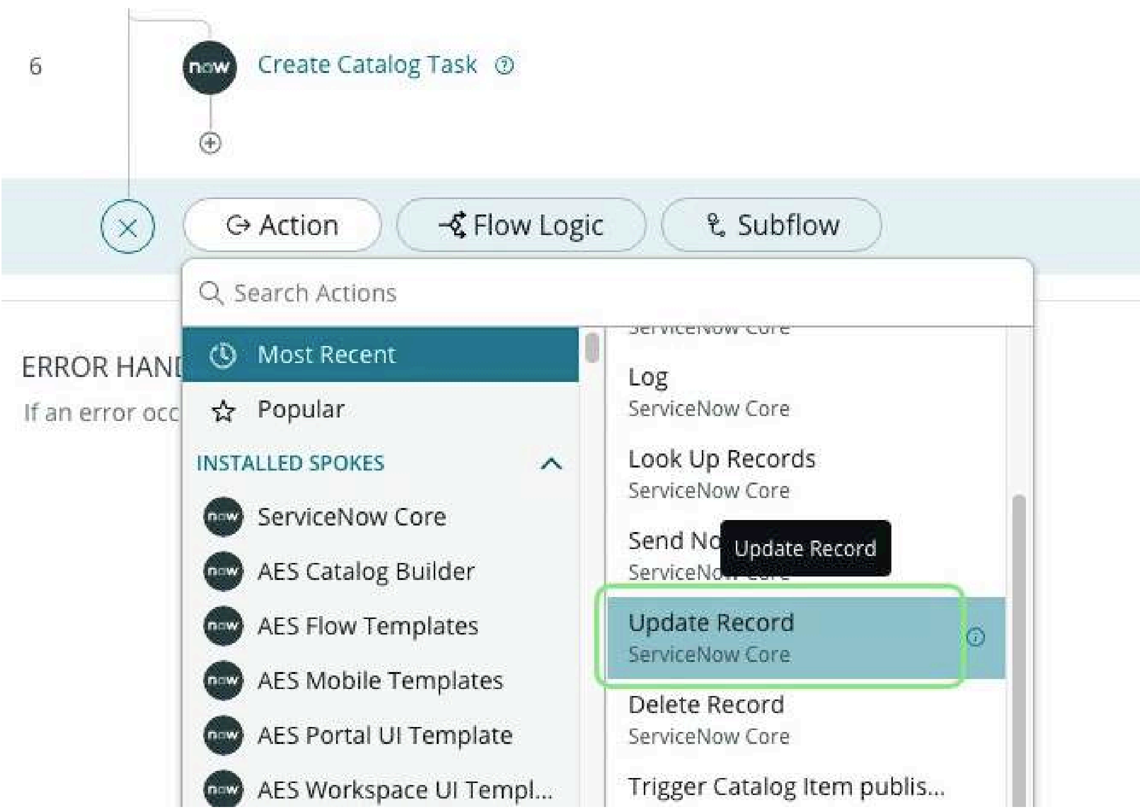
70. Click Add an Action, Flow Logic, or Subflow



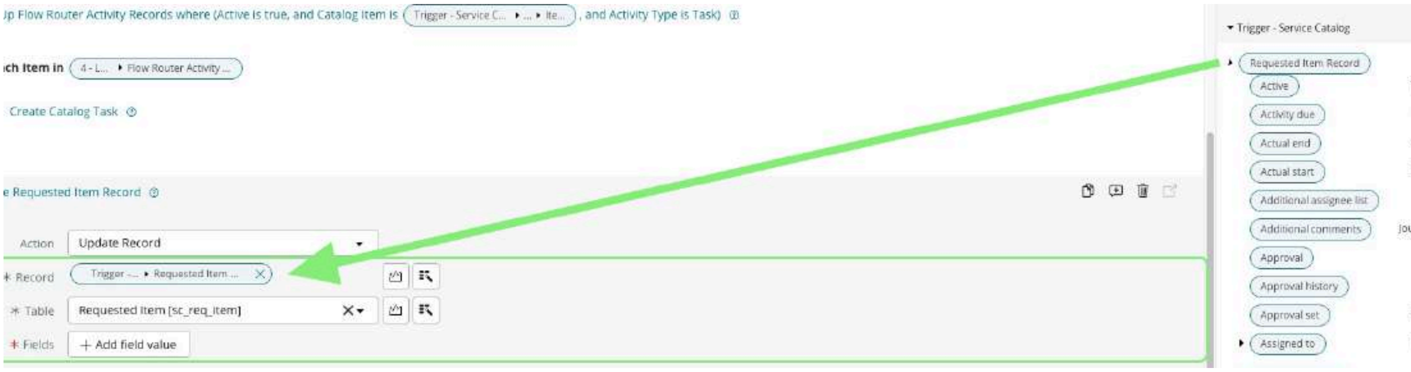
71. Click Action



72. Click Update Record...



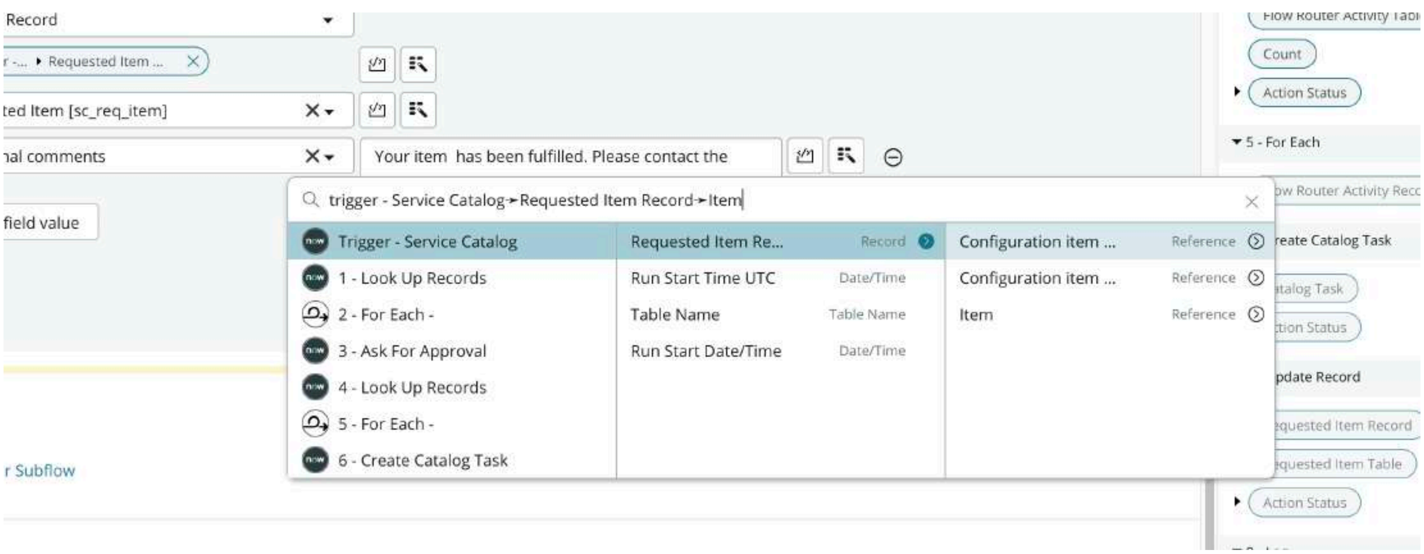
73. Drag highlighted link



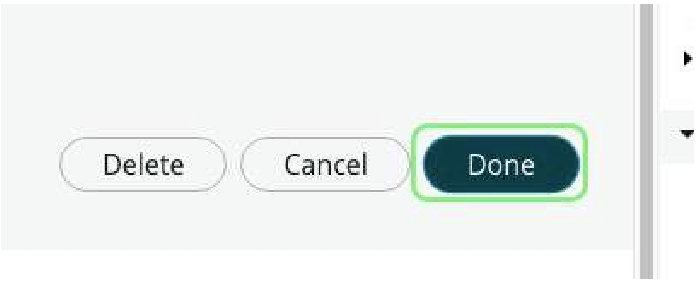
74. Click Add field value

75. Add a comment to send to the end user upon completion for the RITM. Use Data Pill values to make the comment dynamic.

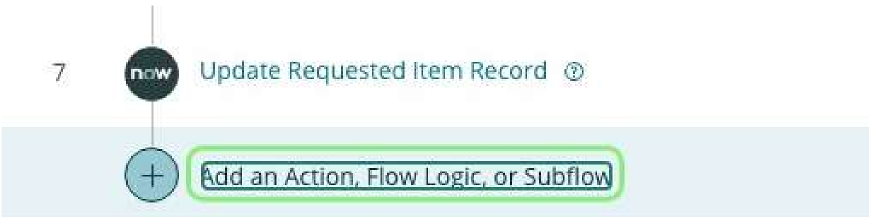
Example comment: Your Item (Data pill: Trigger - Service Catalog > Requested Item Record > Item) was fulfilled. Please contact the Service Desk for any questions.



76. Click Done

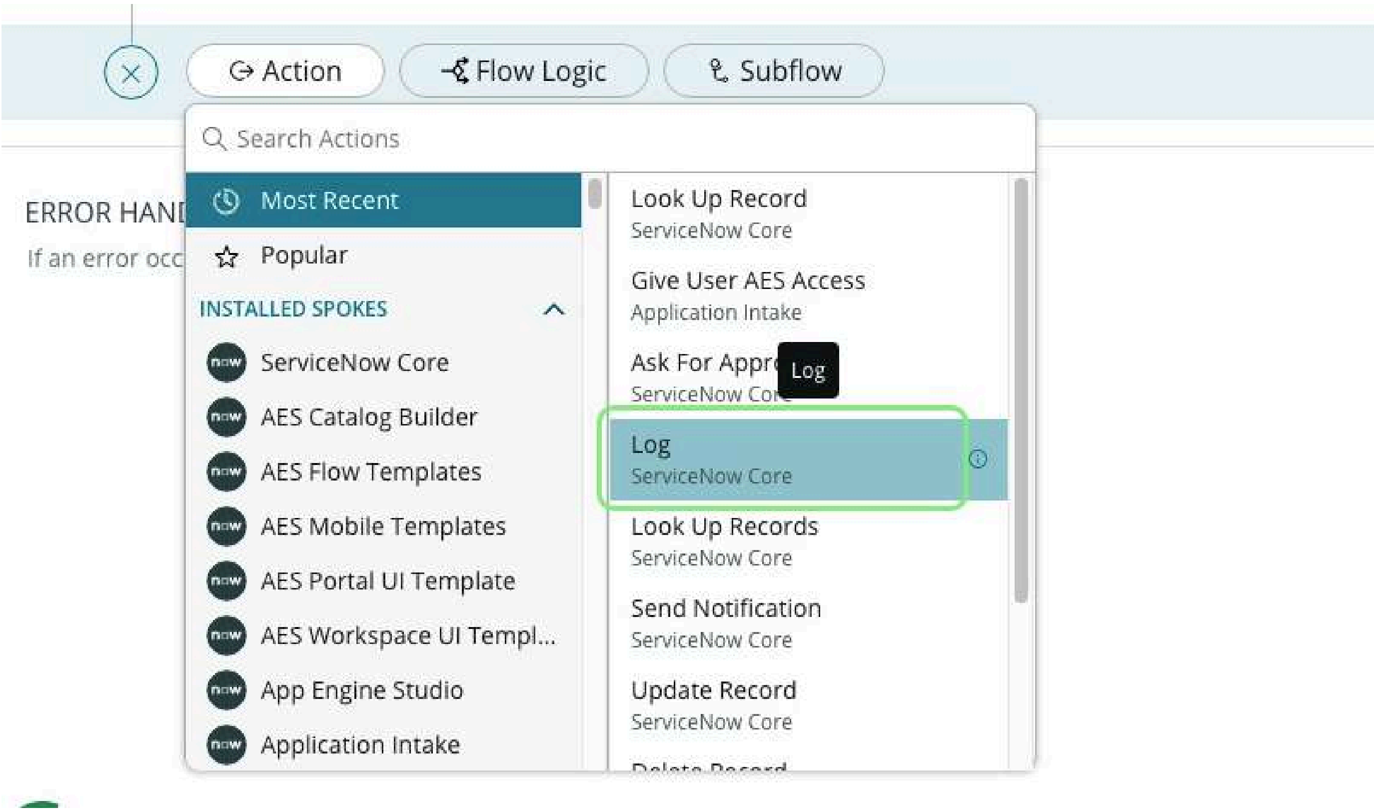


77. Click Add an Action, Flow Logic, or Subflow

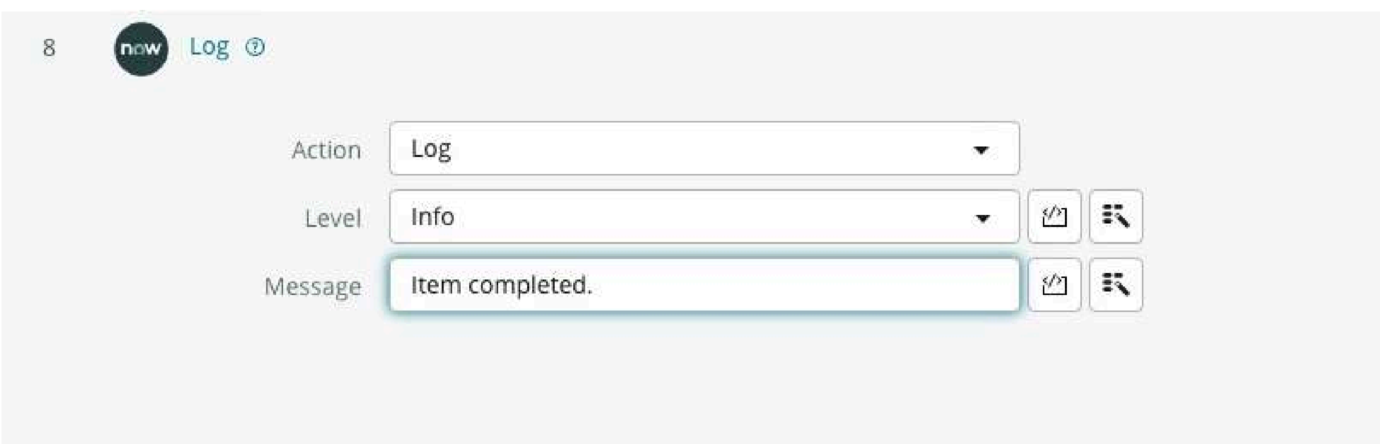


78. Click Action

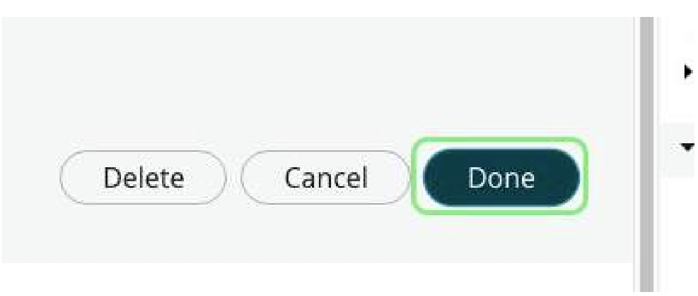
79. Add a Log action for a final "placeholder" to associate with the last Stage.



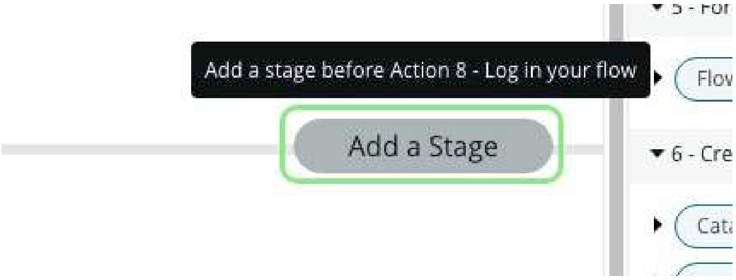
80. Add a message.



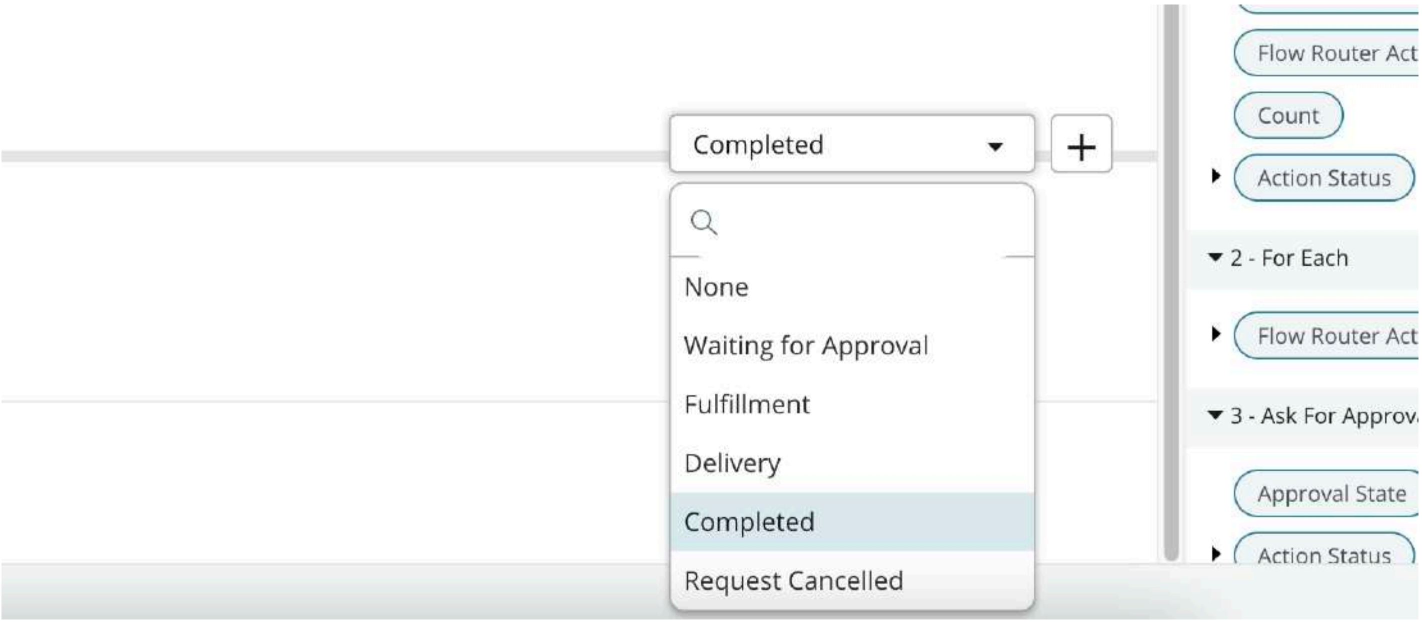
81. Click Done



82. Click Add a Stage above Step 8



83. Click Completed

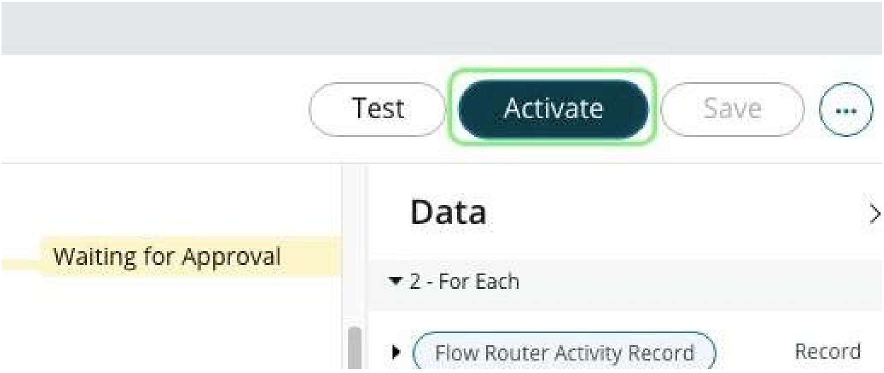


84. Testing on Catalog Flows can be performed several different ways.

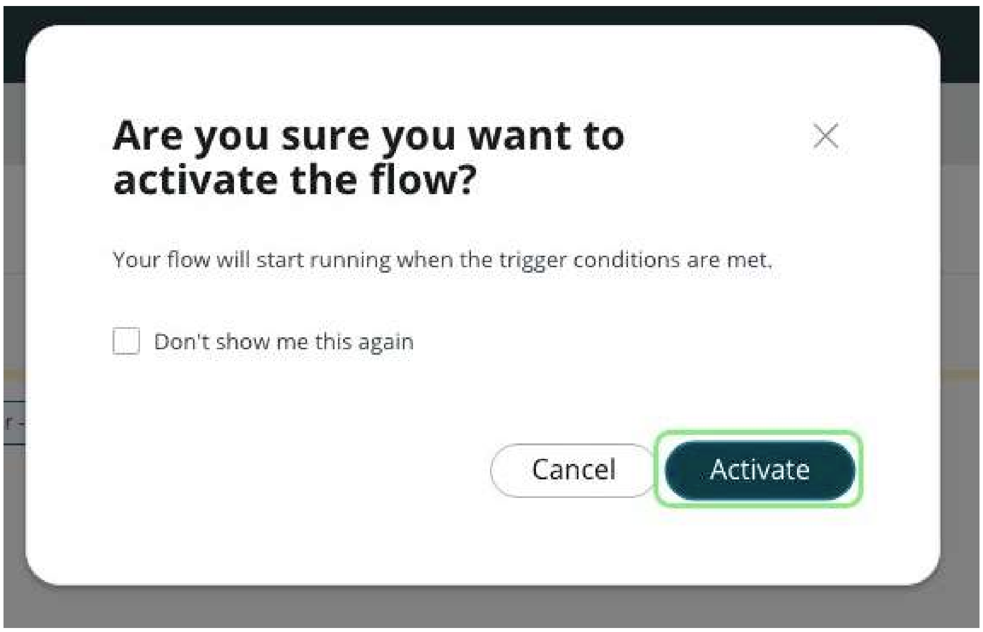
In the following Exercise, it is helpful to have a freshly submitted RITM every time a test is executed. The Flow must be active to apply when a new Catalog Item is ordered.

The built-in Flow Designer Test functionality is very powerful and records helpful data for troubleshooting. The system property to enable the logging of runtime data is turned off by default. Check out this ServiceNow Docs article for more information: Activate flow reporting
Important: To avoid performance issues in a production instance, activate and configure reporting on the non-production instance that is used for testing.

85. Click Activate

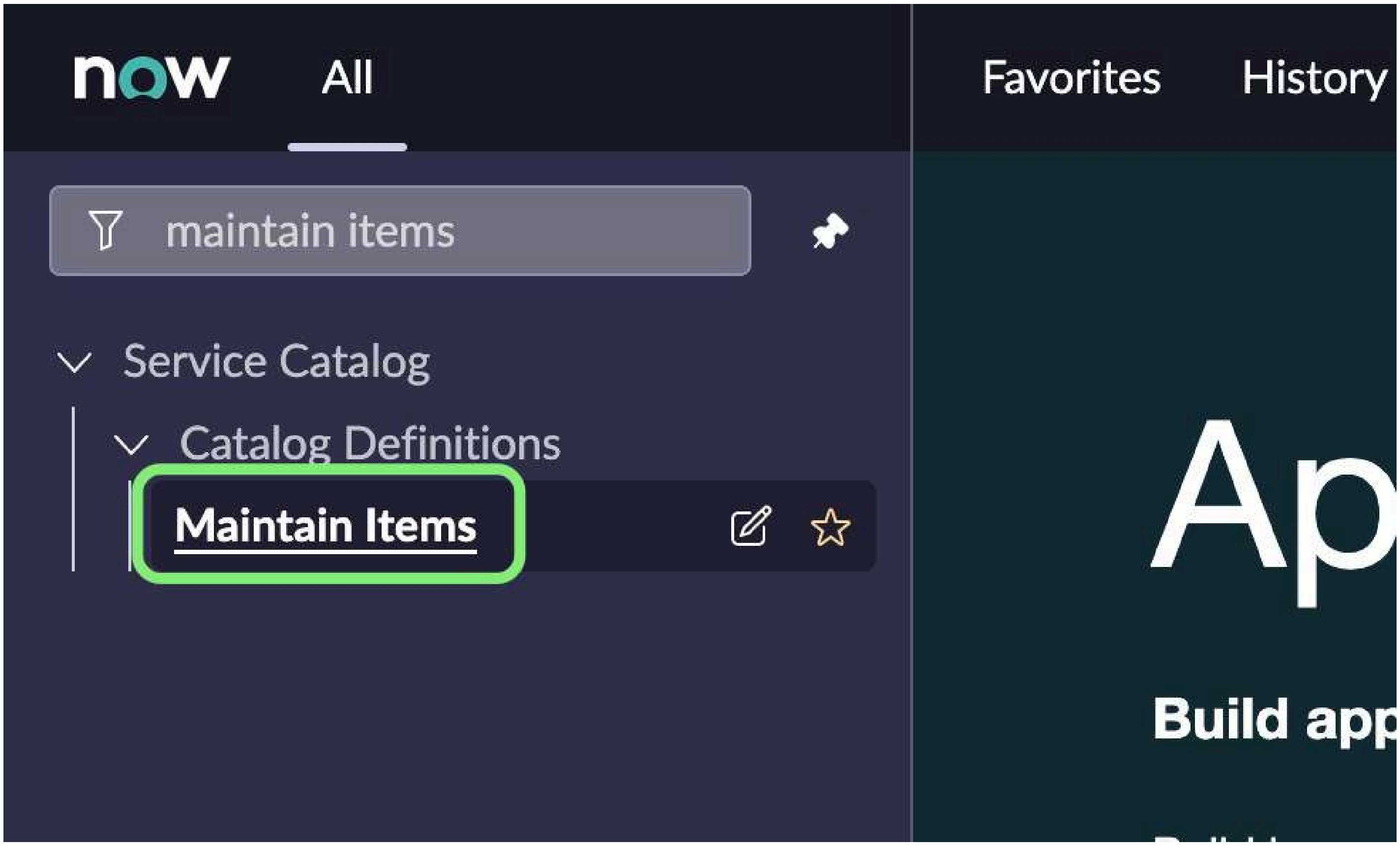


86. Click Activate



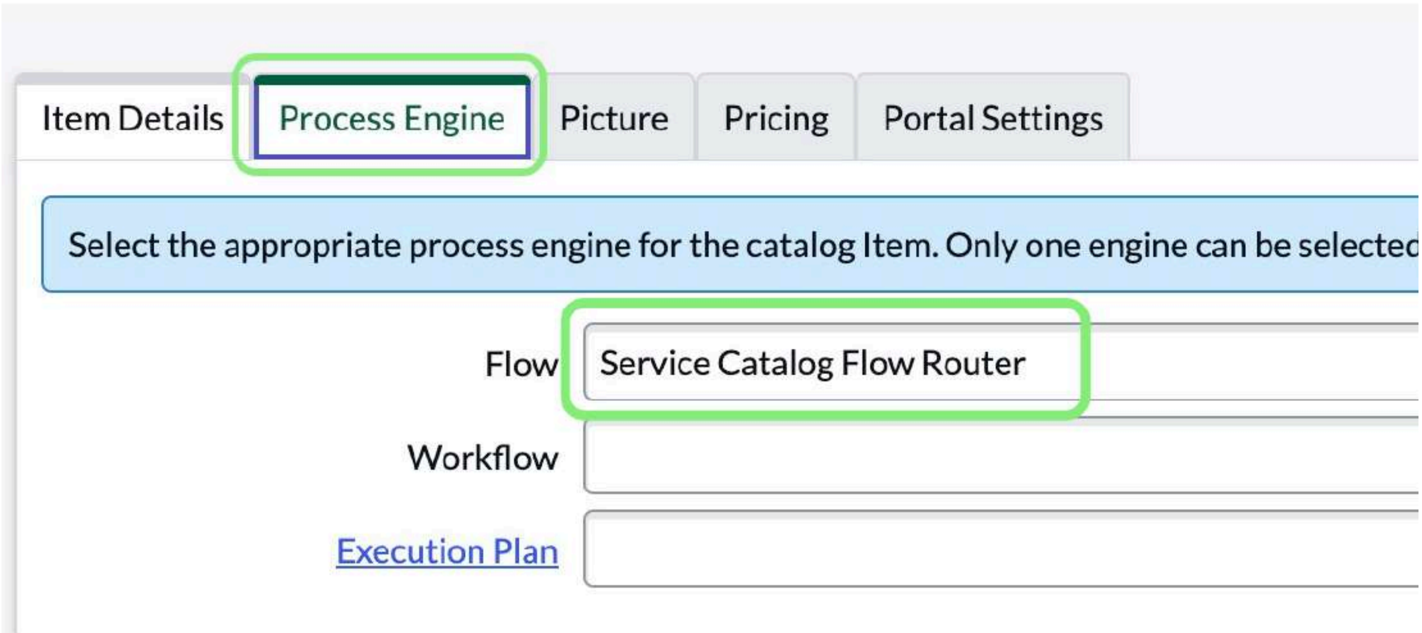
Exercise 4: Test the end-to-end process

1. Navigate to Service Catalog > Catalog Definitions > Maintain Items

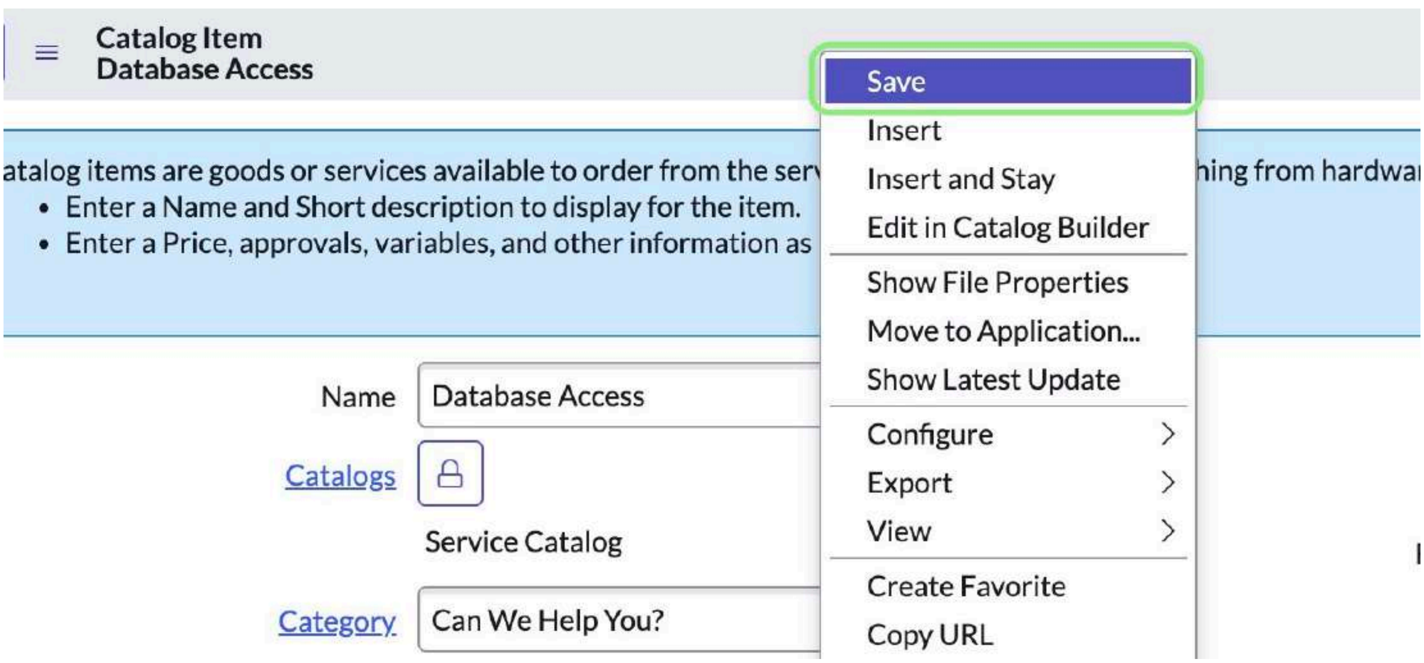


2. Open the Catalog Item created in Exercise 1.

3. On the Process Engine Tab, change the flow to the new Flow created in Exercise 3.

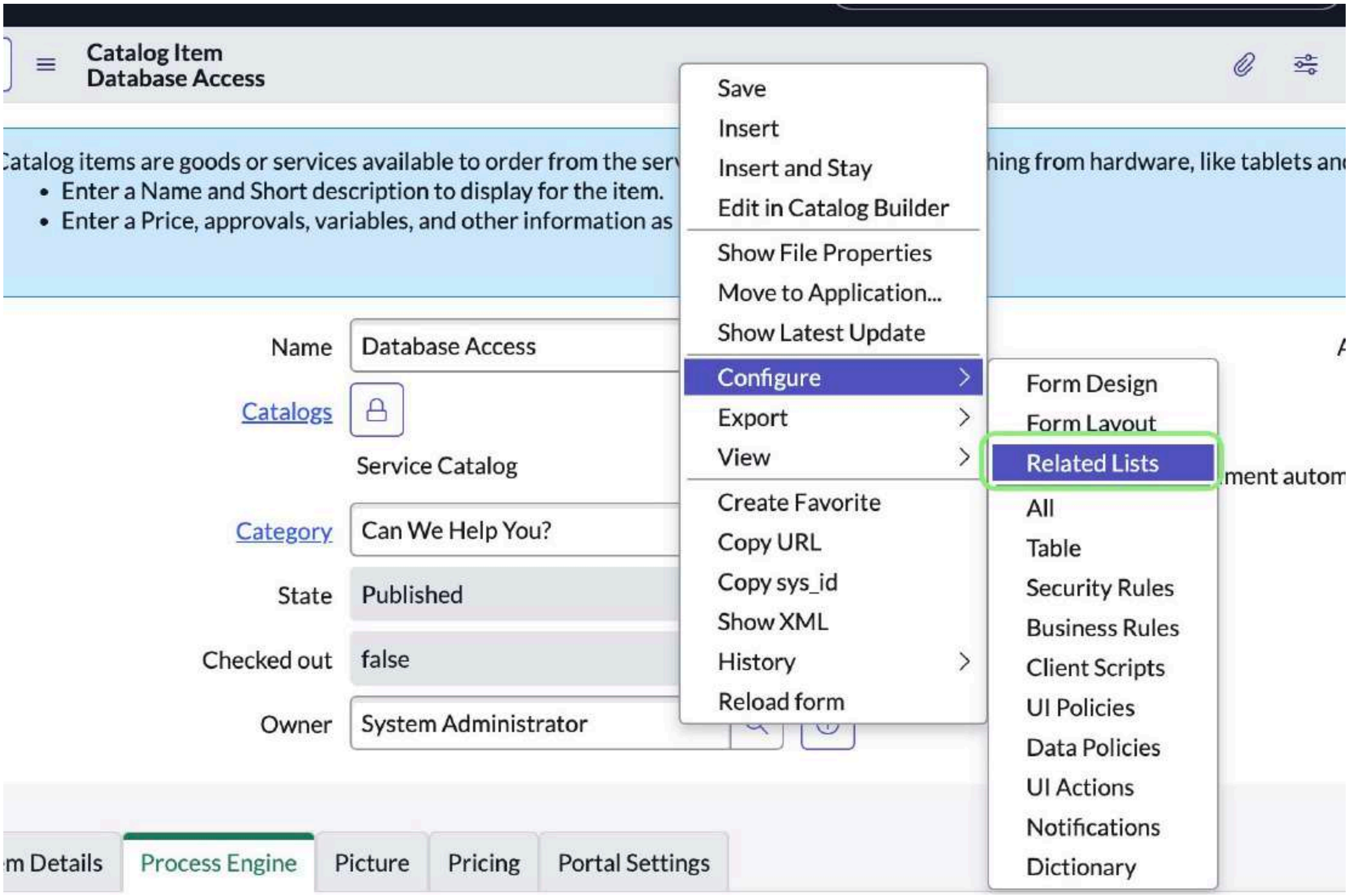


4. Right click the form header and click Save

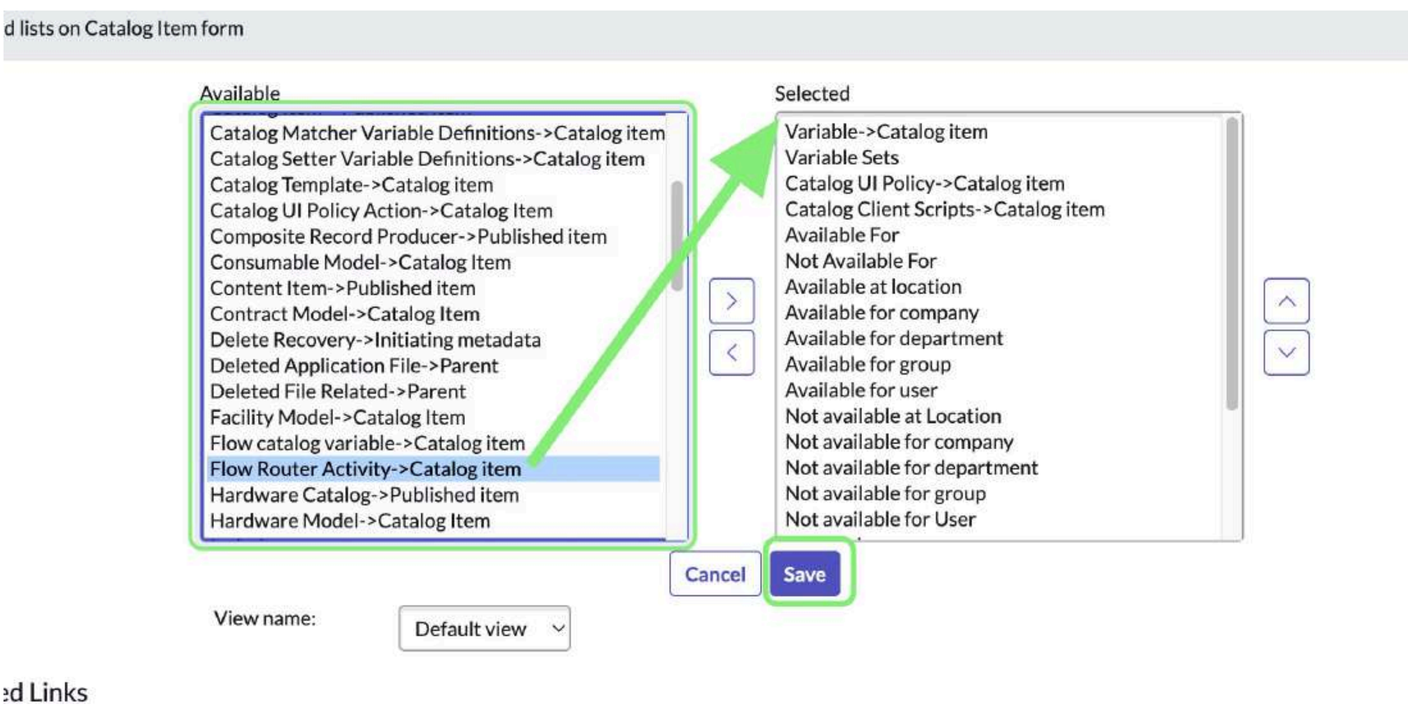


5. Right click the form header and click Configure > Related Lists

Add the related list of Flow Router Activities so that the activities specific to this Catalog Item can be shown in context.

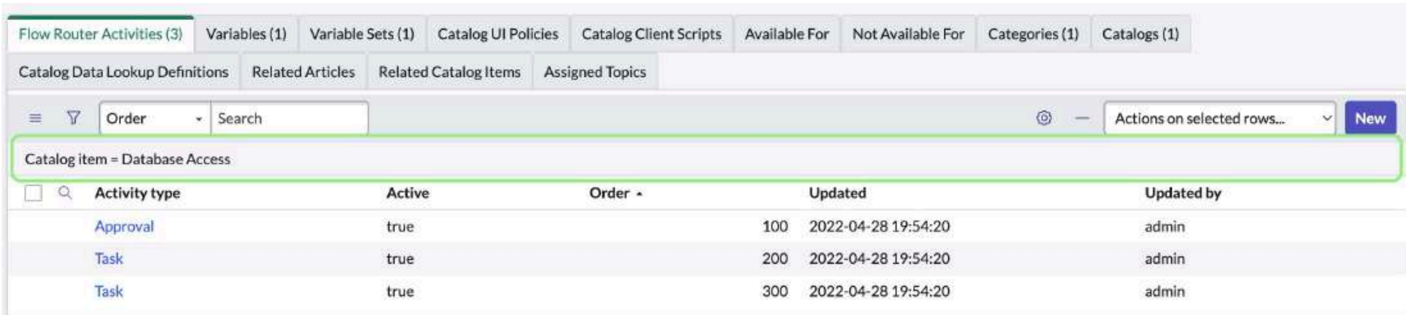


6. Locate the Flow Router Activity List, add it to the top of the Selected lists, and click Save.

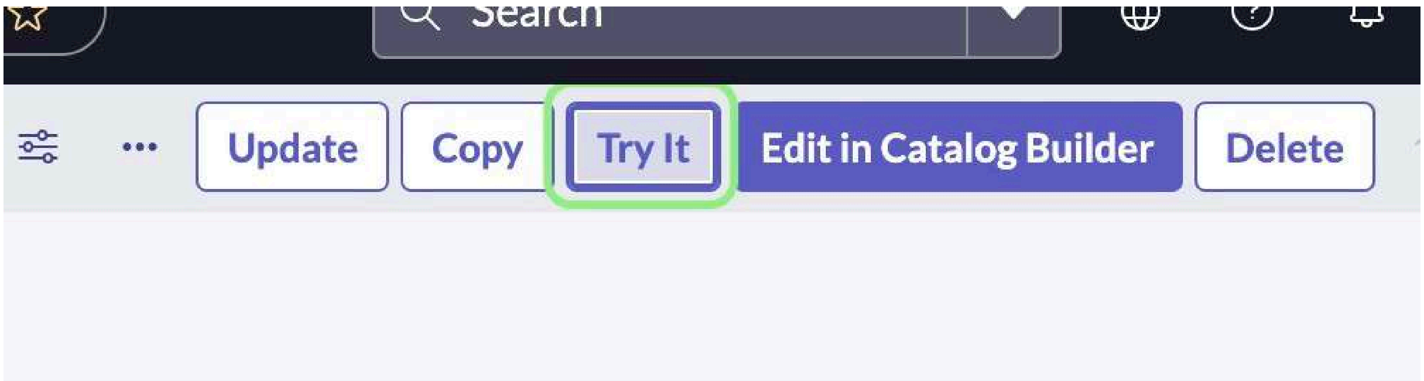


7. Check point: Are the Flow Router Activities created in Exercise 2 present in the related list?

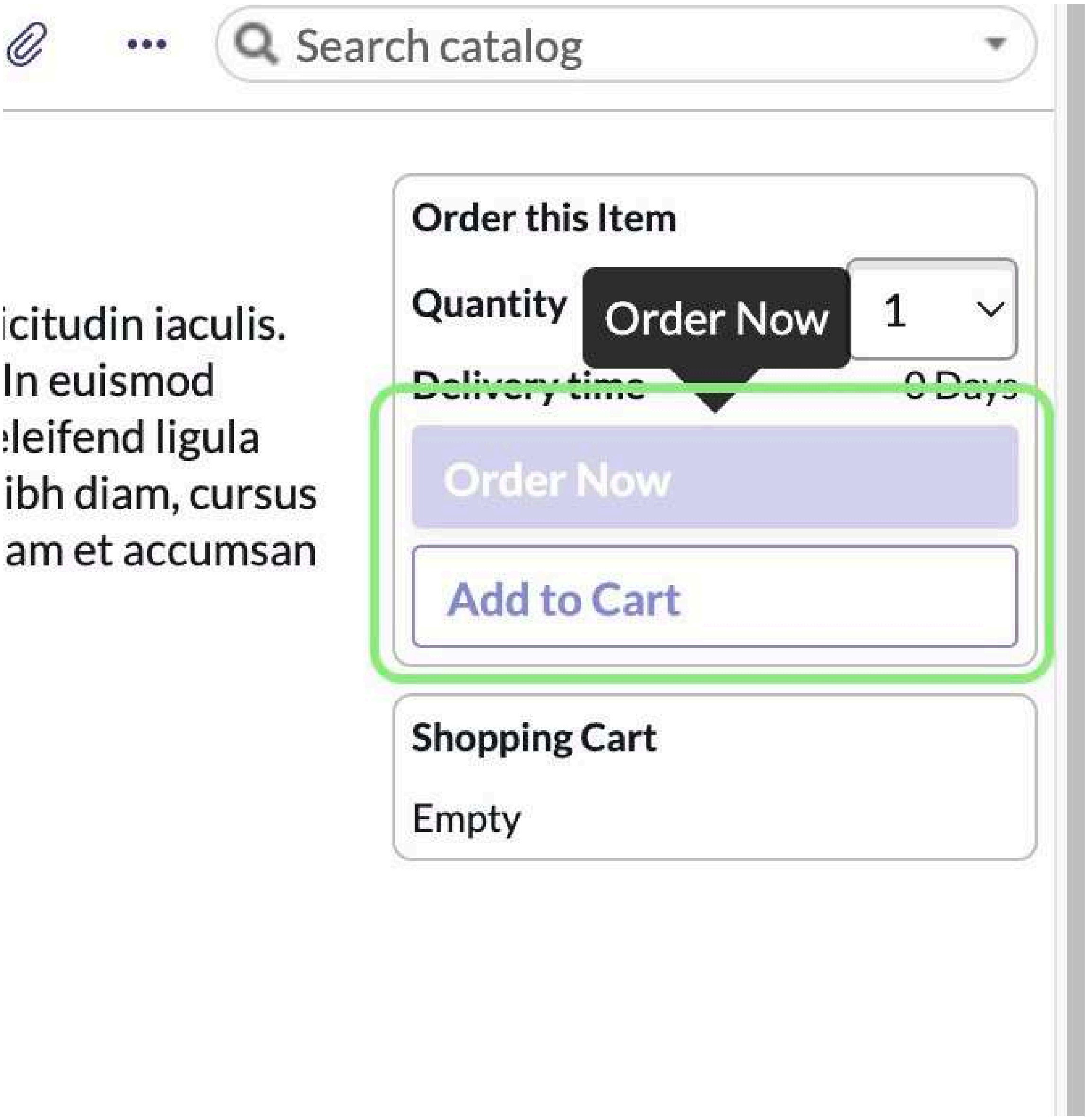
If not, navigate back to the Flow Router Activity table and ensure that the records are associated to the correct Catalog Item.



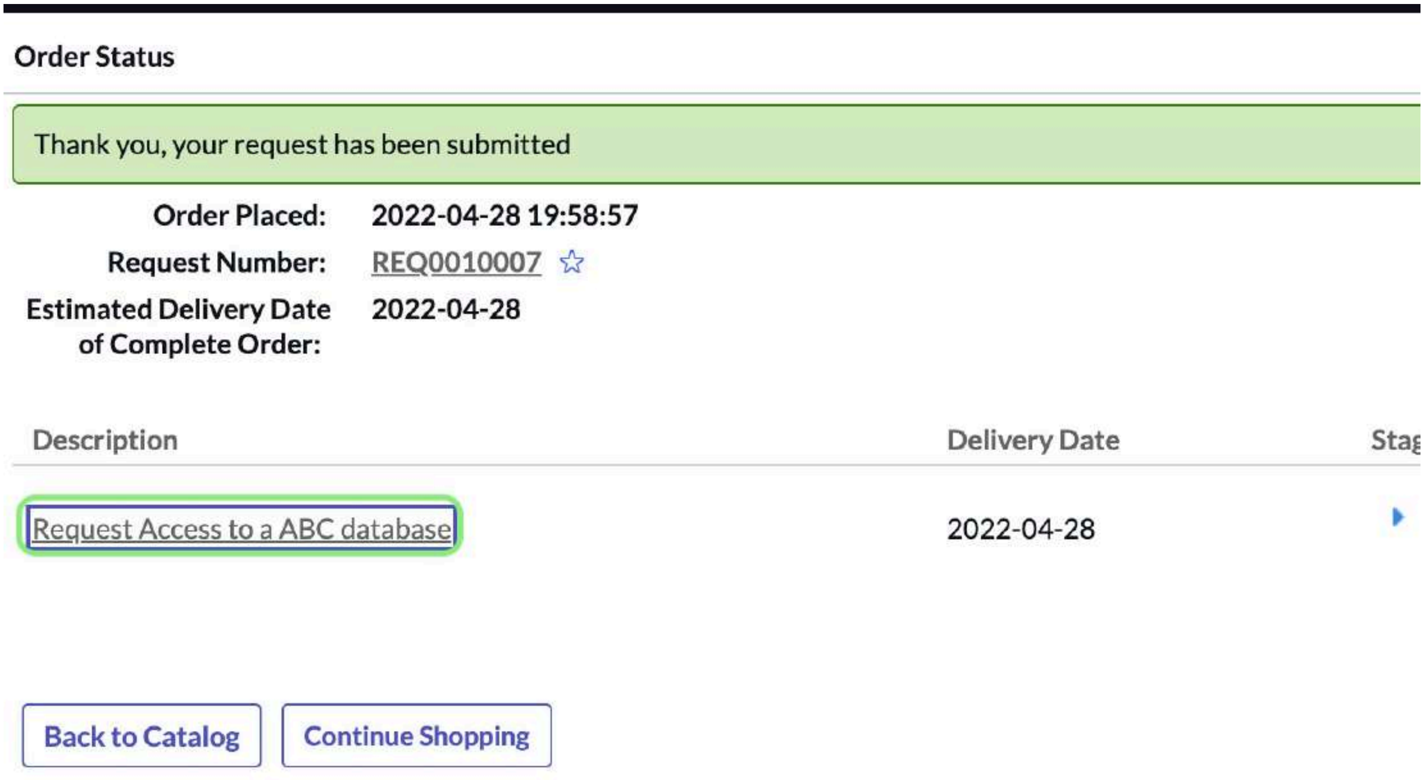
8. Click Try It



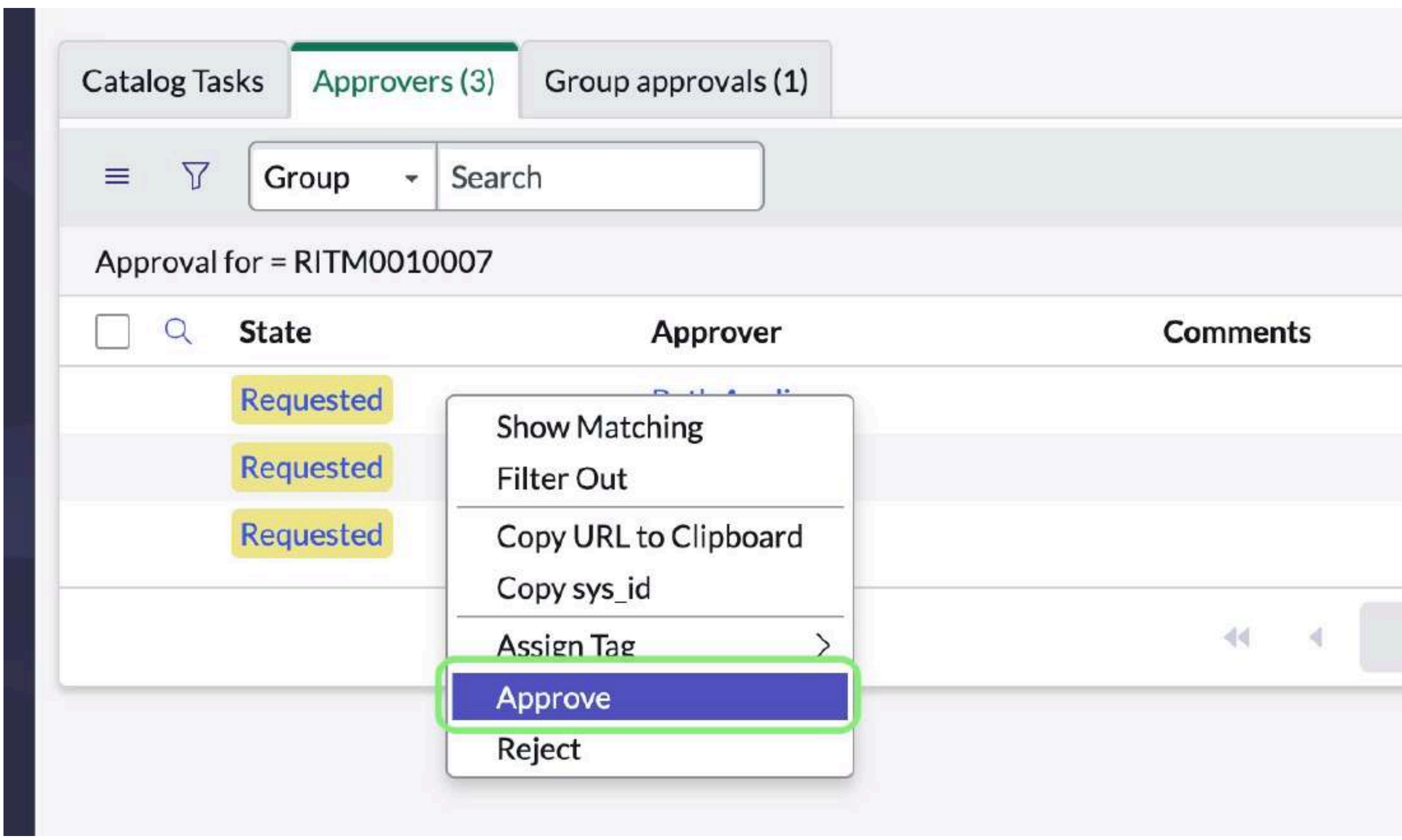
9. Fill out the appropriate variables and click Order Now...



10. From the Checkout screen, click the Requested Item.



11. On the Approvals related list, Approve on behalf of one of the Approvers.



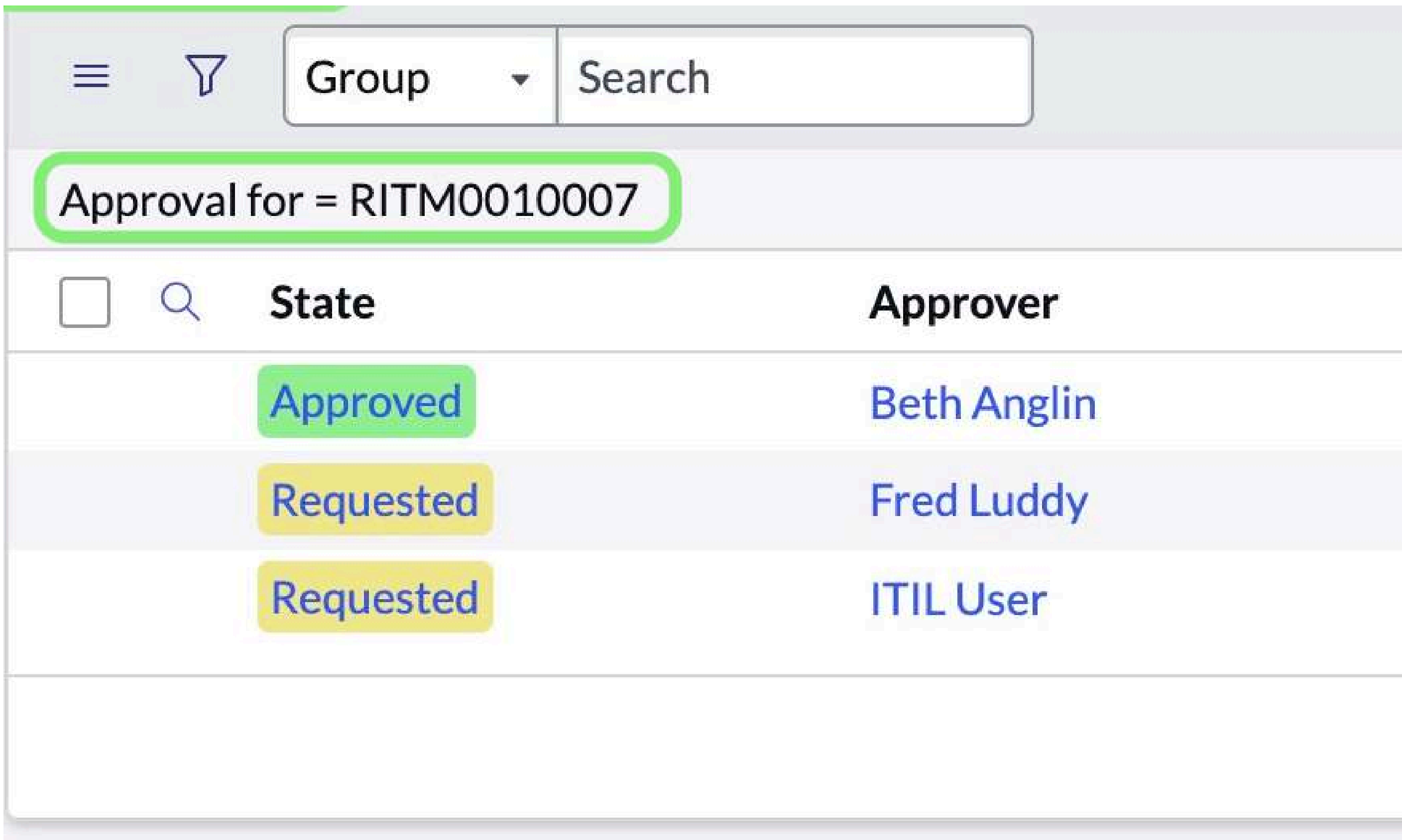
12. NOTE: Unlike legacy Workflows, Flows run asynchronously in the background

This means that actions are queued up and processed in the background without making the end-user wait for completion.

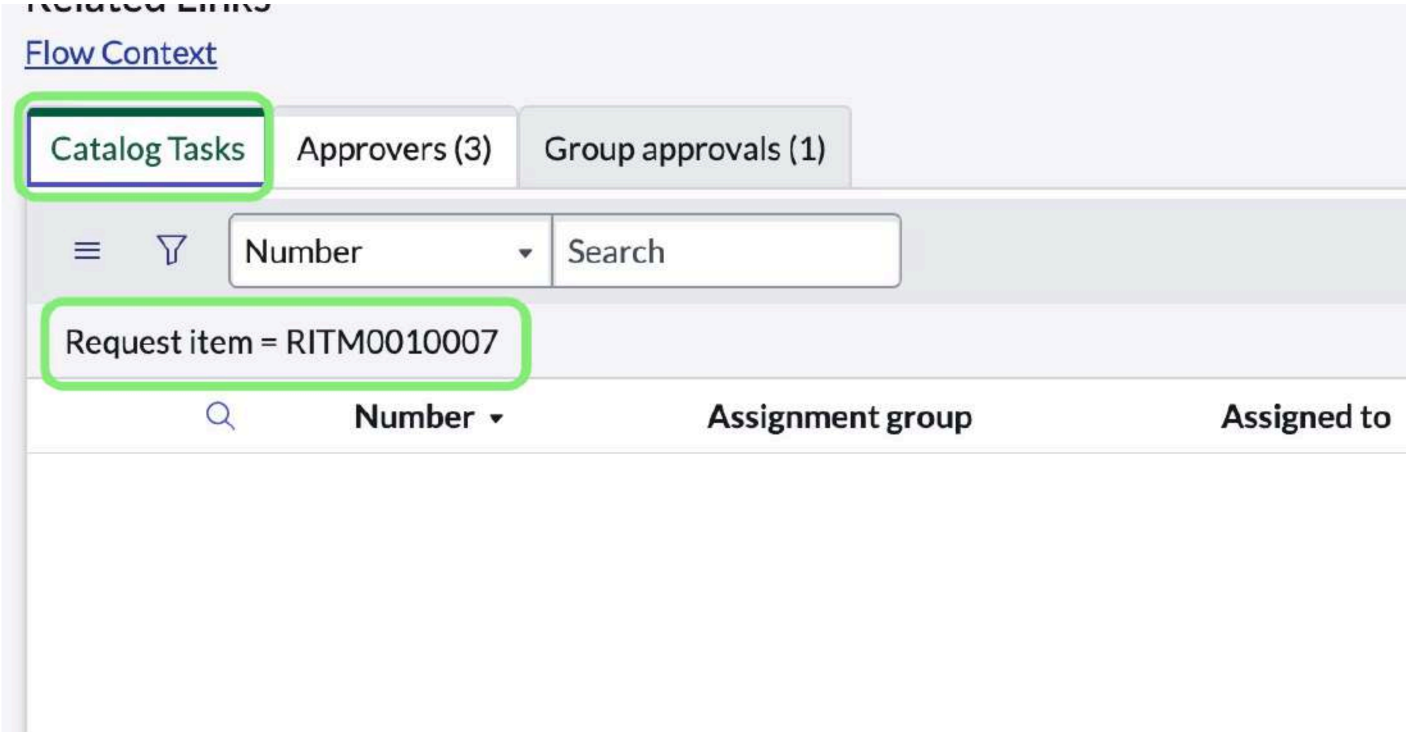
While testing, tasks are commonly completed in rapid succession. This may be a bit cumbersome for us today, this is almost always faster than in the practice. Processing work asynchronously helps the overall system performance.

If the tasks are completed faster than the system executes the flow, refresh the RITM to see the next step in the process.

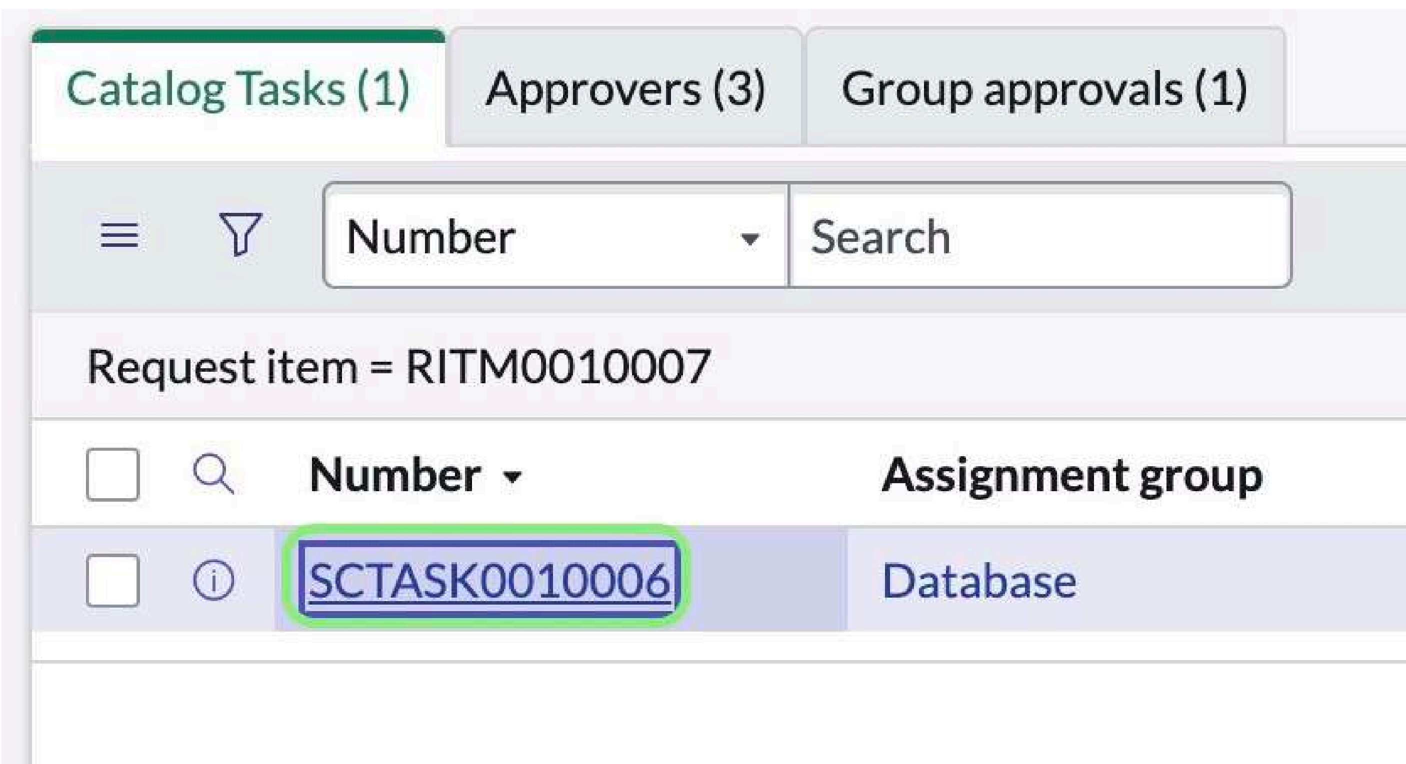
Beth Anglin's Approval is complete in the example below, but the system has not marked the other Approvals No Longer Required. Click the breadcrumb to refresh the related list to reveal if the other approvals have been updated.



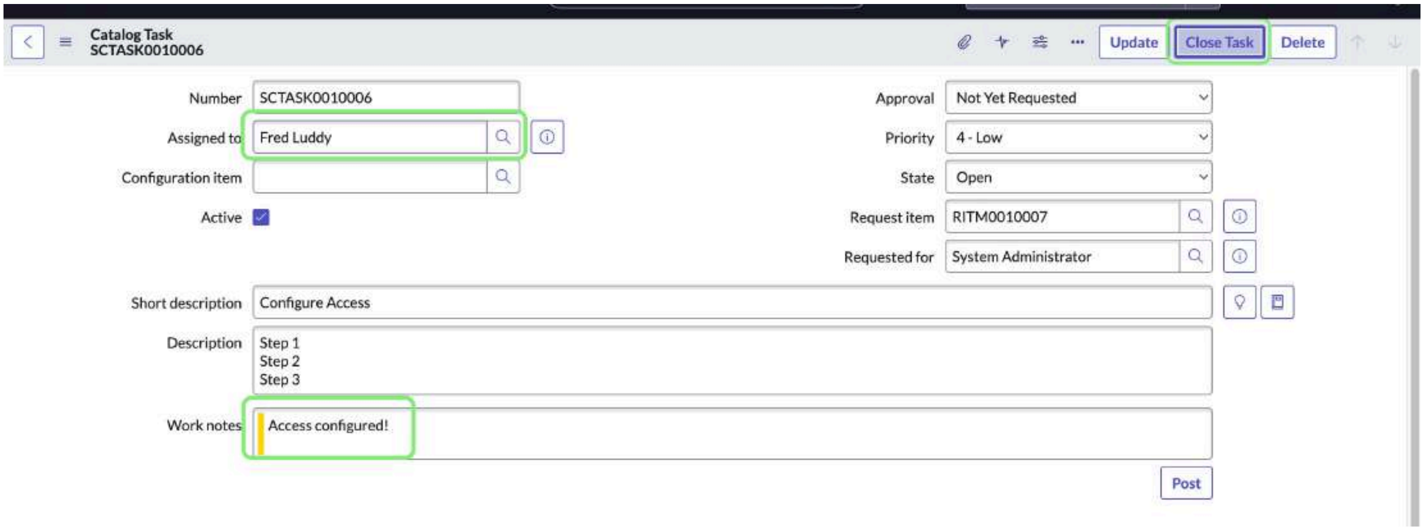
13. Click Catalog Tasks and click the breadcrumb to refresh the list.



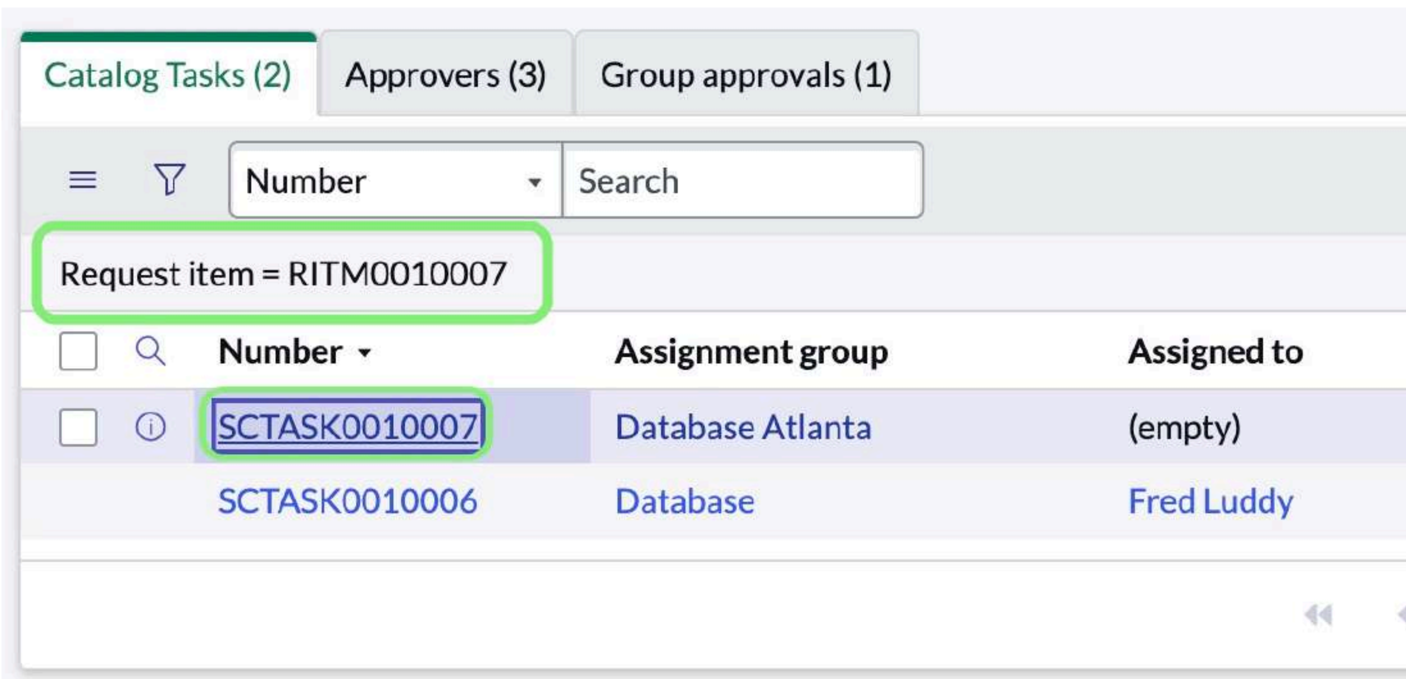
14. Open the task record.



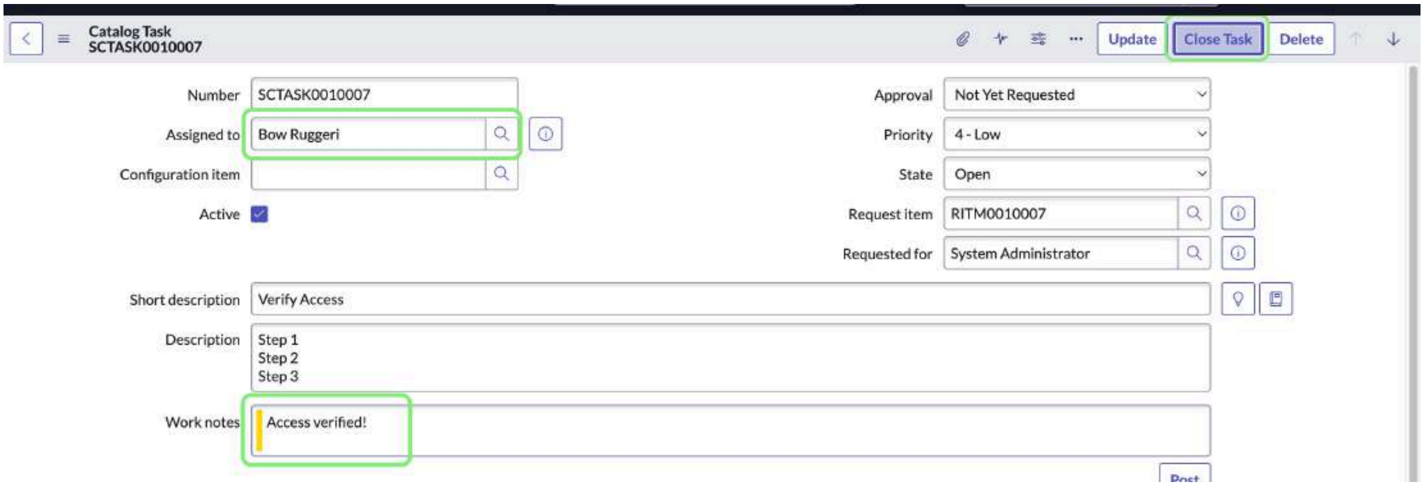
15. Assign the task, make a work note and click Close Task



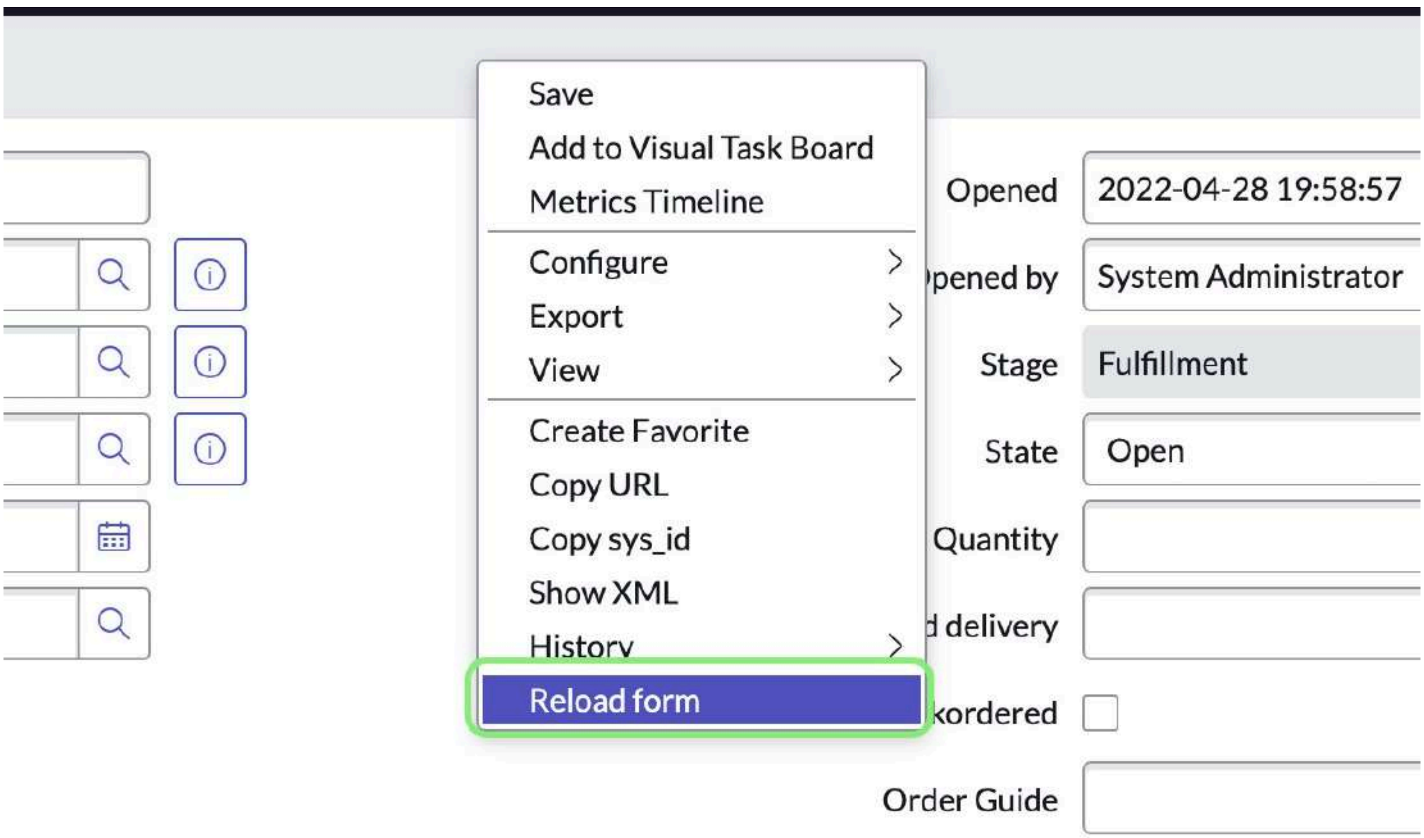
16. Click the breadcrumb to refresh the Catalog Task list. Open the second task record.



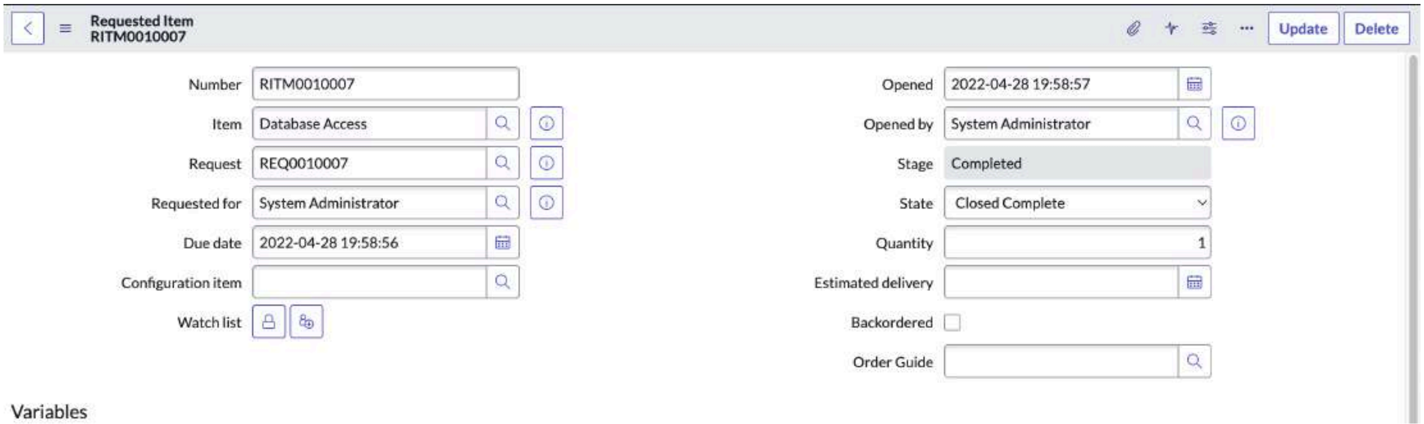
17. Assign the task, make a work note and click Close Task



18. Back on the RITM form, right click the form header and click Reload form

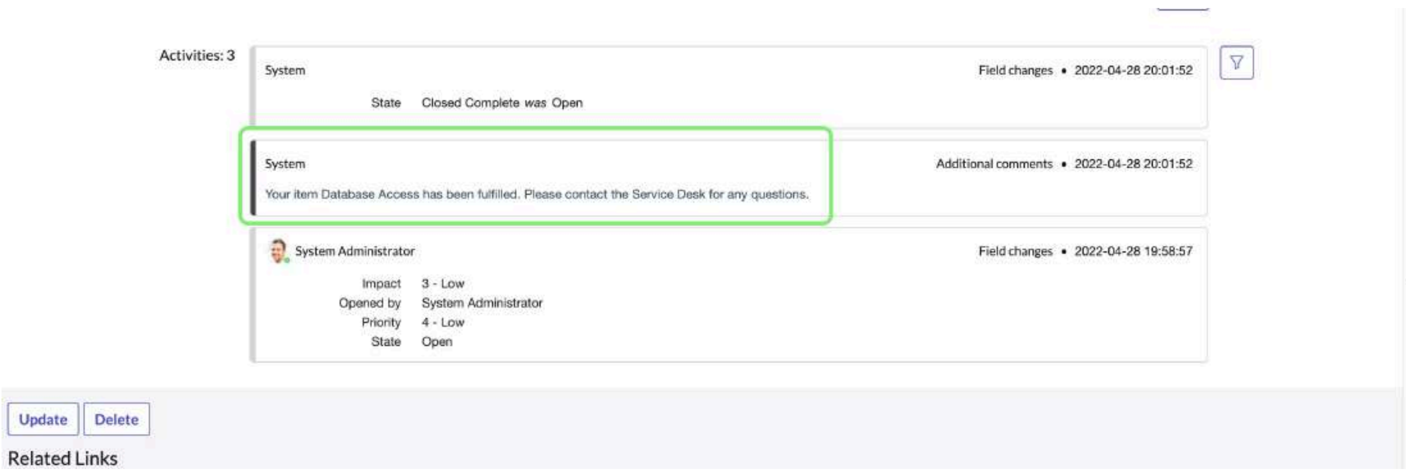


19. Notice the Stage has been set to Completed, the State to Close Conplete.



20. Check point: Does the Comment look like the one in the image?

Where was this comment configured in Exercise 3? What could be wrong? Take a stab at correcting it and order the Catalog Item again to see if you are correct.



21. Congrats! You are done!