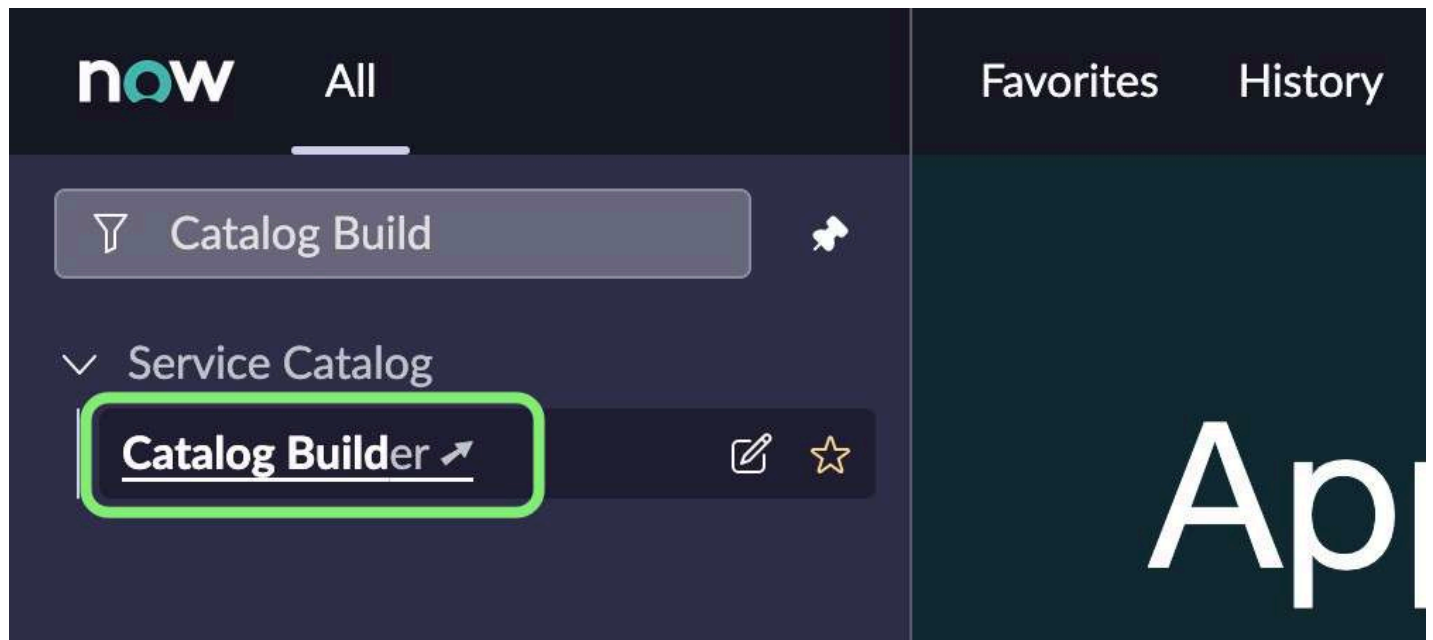


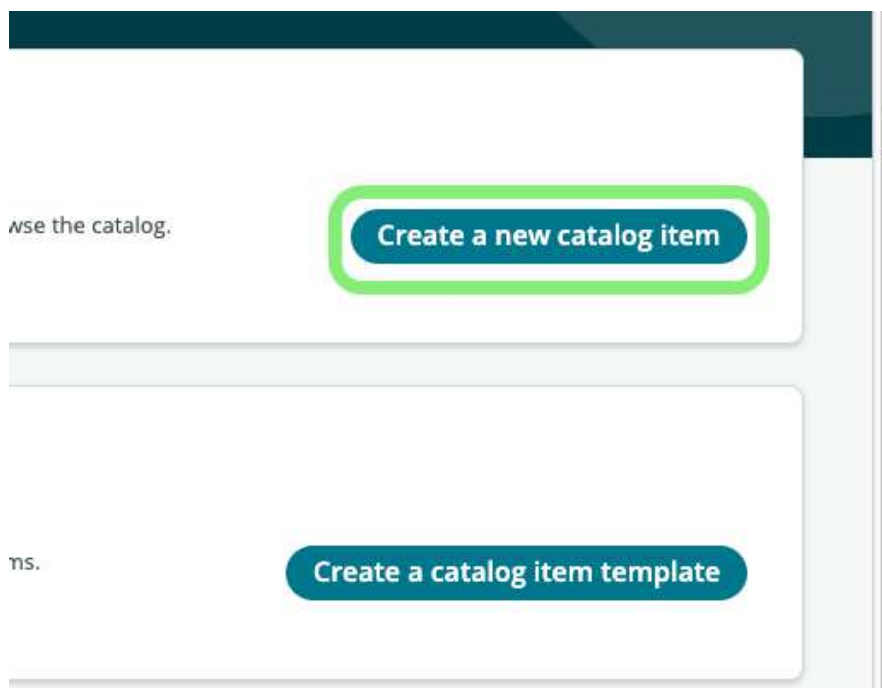
# Exercise 1: Create a Catalog Item

## 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.

#### GETTING STARTED

Let's look at what it takes to create an item

We've laid out the steps into a logical flow, but feel free to move through each step in an order that works for you. Remember, you can save your item as you go but it will only be available once it has been submitted.

We'll start by having you select the catalog item template you would like to use.



### 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

## Details

Provide basic information and details about your item

### Basic info

Item name \*

Database Access

Short description

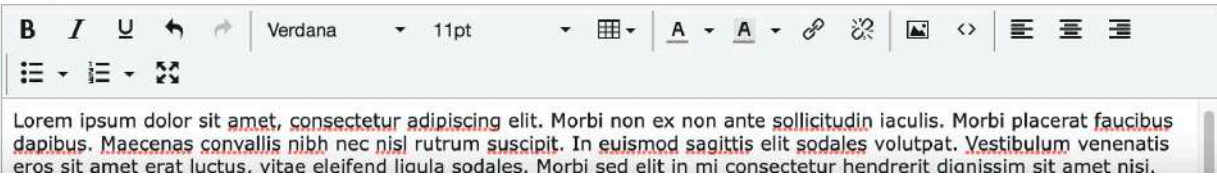
Request Access to ABC database

### Item details

Image 

 Attach File

Description



The image shows a rich text editor toolbar with various icons for bold, italic, underline, undo, redo, font color, background color, link, unlink, image, and list. Below the toolbar is a text area containing placeholder text: "Lorem ipsum dolor sit amet, consectetur adipiscing elit. Morbi non ex non ante sollicitudin iaculis. Morbi placerat faucibus dapibus. Maecenas convallis nibh nec nisi rutrum suscipit. In euismod sagittis elit sodales volutpat. Vestibulum venenatis eros sit amet erat luctus. vitae eleifend lioula sodales. Morbi sed elit in mi consectetur hendrerit dianissim sit amet nisi."

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.

## Location

Choose a catalog and category where requesters can find your item

### Catalogs



Selected catalogs

Service Catalog

### Categories

Selected categories Edit

Can We Help You?

Desktops

Hardware

Laptops

Maintenance and Repair

Mobiles

Office

Peripherals

Printers

Services

Software

Tablets

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.

## Questions

Define the questions on your item form

Expand all

Insert new question

> Standard Employee Questions Single-Row Question Set

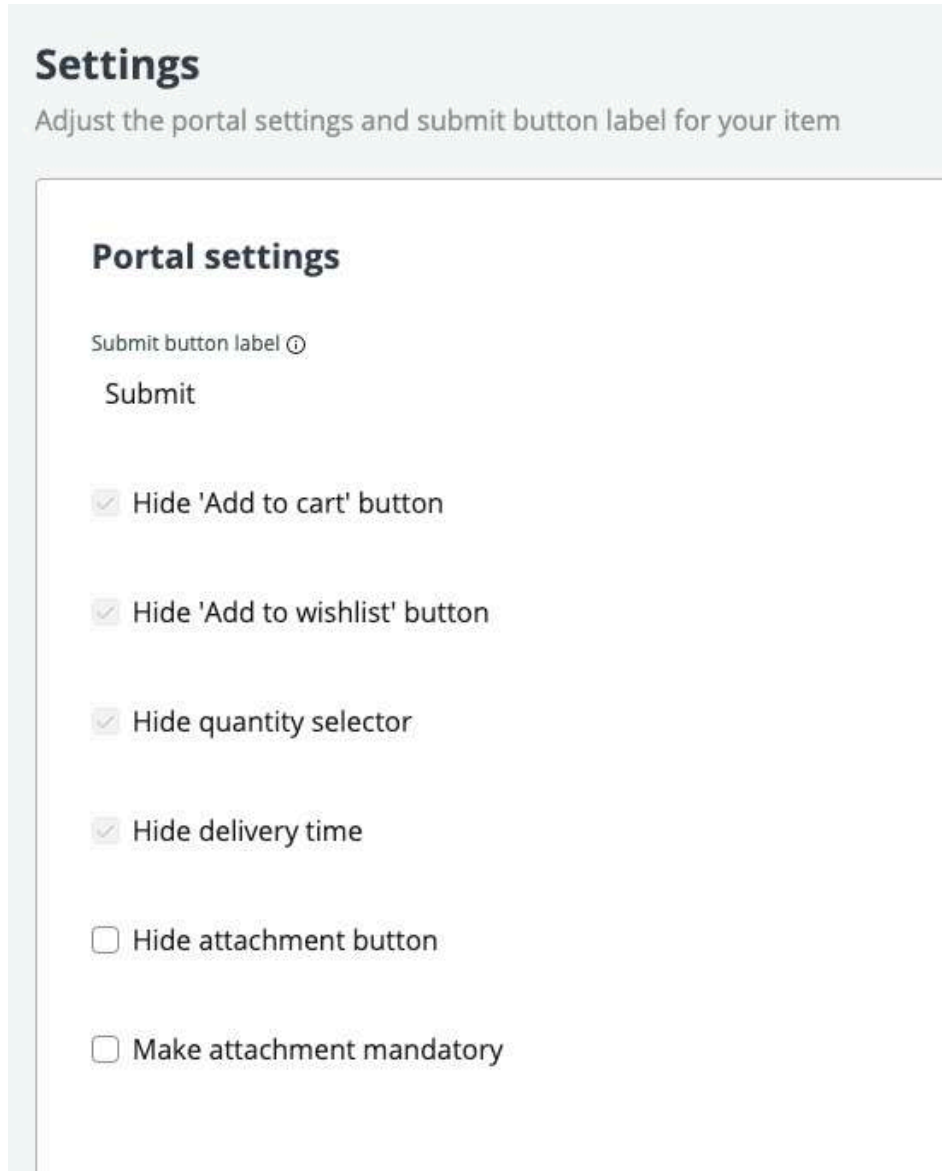
Which database do you need access to? \* Choice - Dropdown (fixed values)



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.



**Settings**

Adjust the portal settings and submit button label for your item

**Portal settings**

Submit button label ⓘ

Submit

Hide 'Add to cart' button

Hide 'Add to wishlist' button

Hide quantity selector

Hide delivery time

Hide attachment button

Make attachment mandatory

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.

## Access

Select which users or groups can access your catalog item

### Available for



User criteria granted access

--

### Not available for



User criteria denied 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.

## Fulfillment

Select the fulfillment process that you would like to associate with this catalog item

### Fulfillment method

Process engine

Flow Designer flow

Selected flow \*

Service Catalog item request

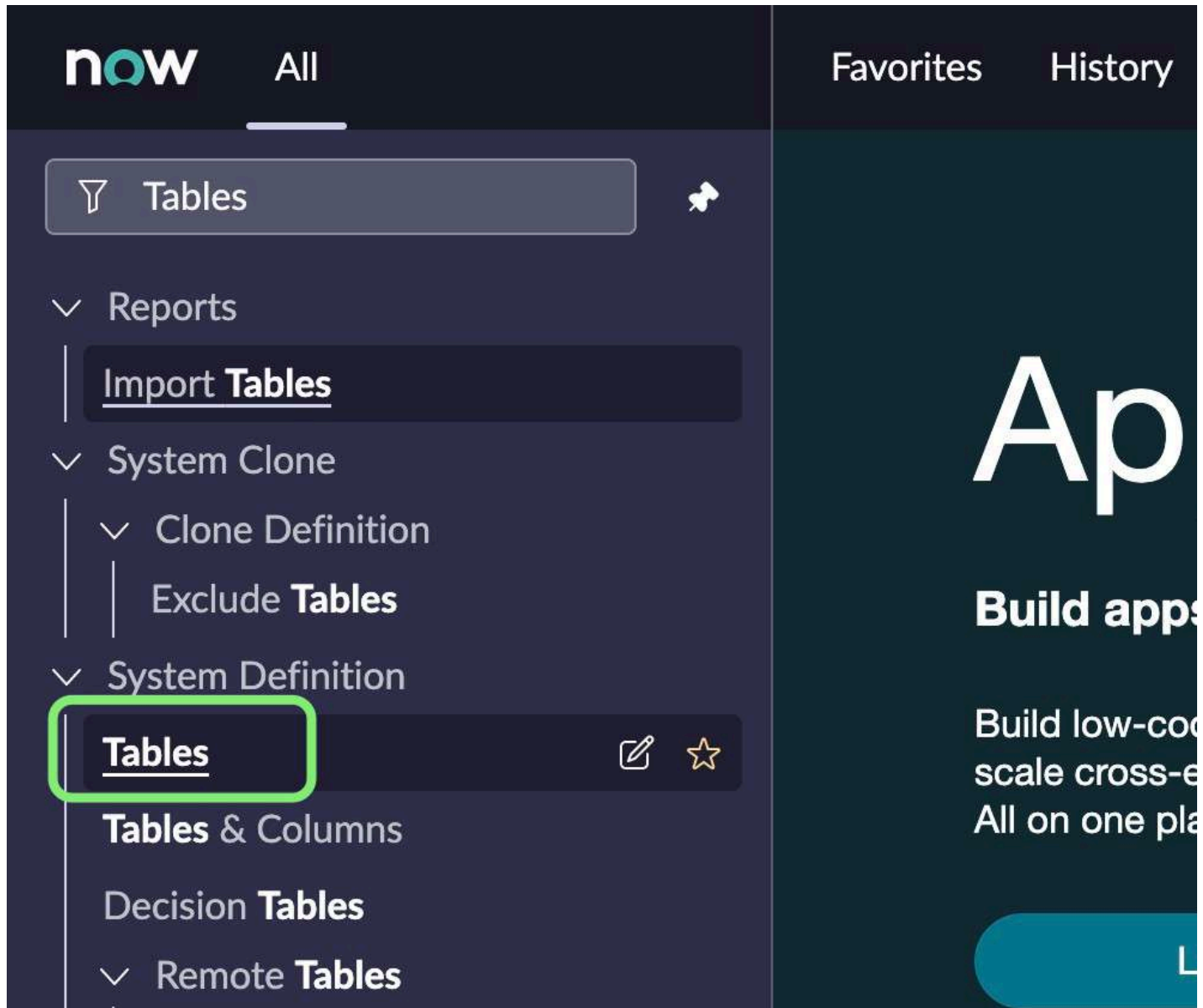
18. Click Review and Submit tab on the left menu or click Continue to Review and Submit at the bottom of the form.

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

Extends table	Extensible	Updated
<a href="#">Application File</a>	false	2022-02-02 01:38:31
(empty)	false	2022-02-02 01:26:29
<a href="#">Application File</a>	false	2022-02-02 01:40:37
<a href="#">Application File</a>	false	2022-02-02 01:40:37

## 3. Label the Table "Flow Router Activity"

Name: (This value is automatically populated)

A table is a collection of records in the database. Each record corresponds to a row in a table, and each field on a record processes. [More Info](#)

\* Label

\* Name

Extends table

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

A table is a collection of records in the database. Each record corresponds to a row in a table, and each field processes. [More Info](#)

\* Label

\* Name

Extends table



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

le, and each field on a record corresponds to a column on that table. Applications use tables and records to manage data and

Application Global



Create module

Create mobile module

Add module to menu

New menu name

service ca

Service Catalog



6. On the Controls tab, replace the new user role with catalog\_builder\_editor

Columns **Controls** Application Access

Extensible

Live feed

Use auto-numbering to define a sequential identifying code made up of a

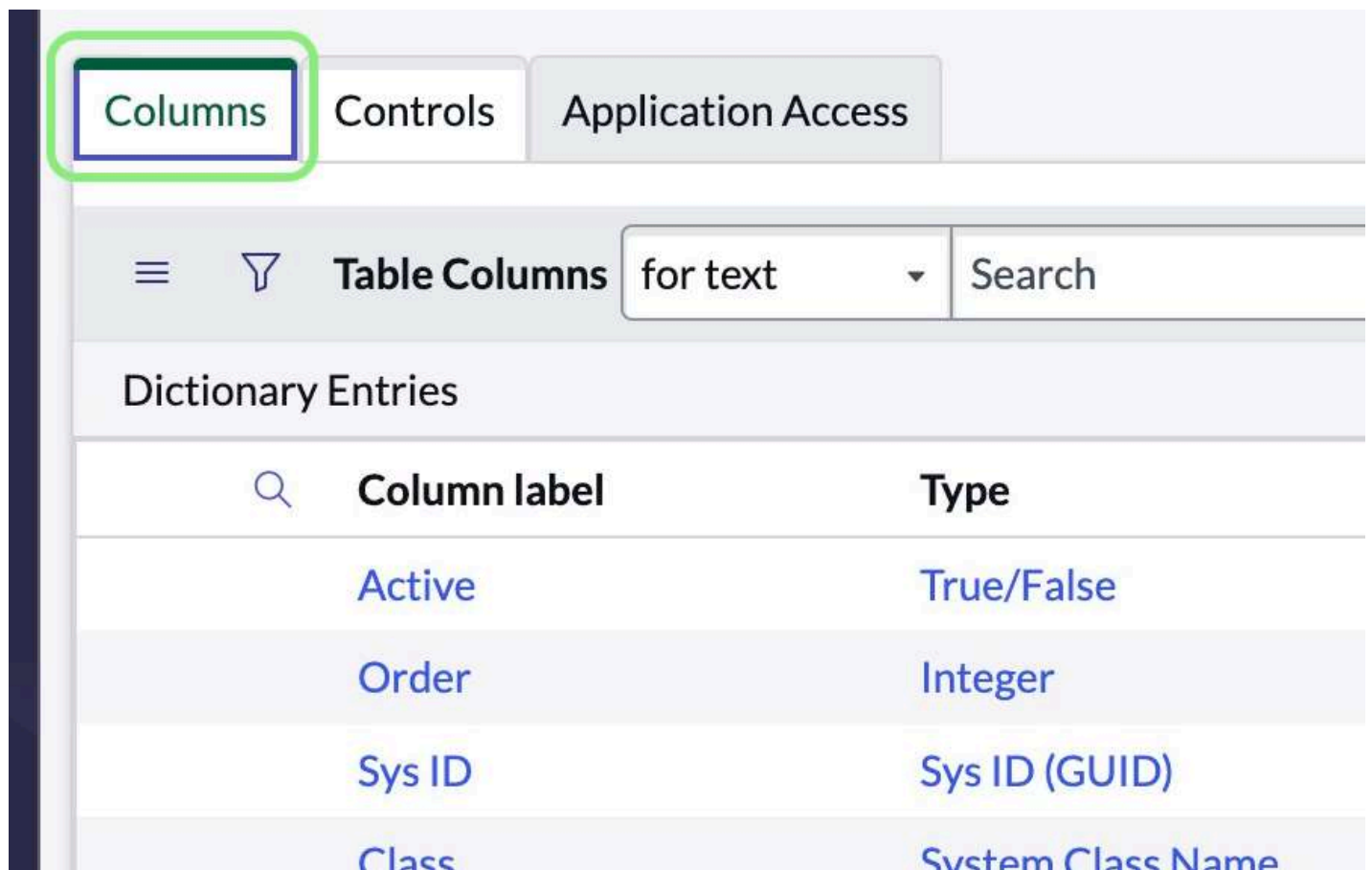
Auto-number

Security Rules (ACLs) are required if anyone other than an administrator

Create access controls

\* User role

7. Click the Columns tab



Columns Controls Application Access

Table Columns for text Search

Dictionary Entries

Column label	Type
Active	True/False
Order	Integer
Sys ID	Sys ID (GUID)
Class	System Class Name

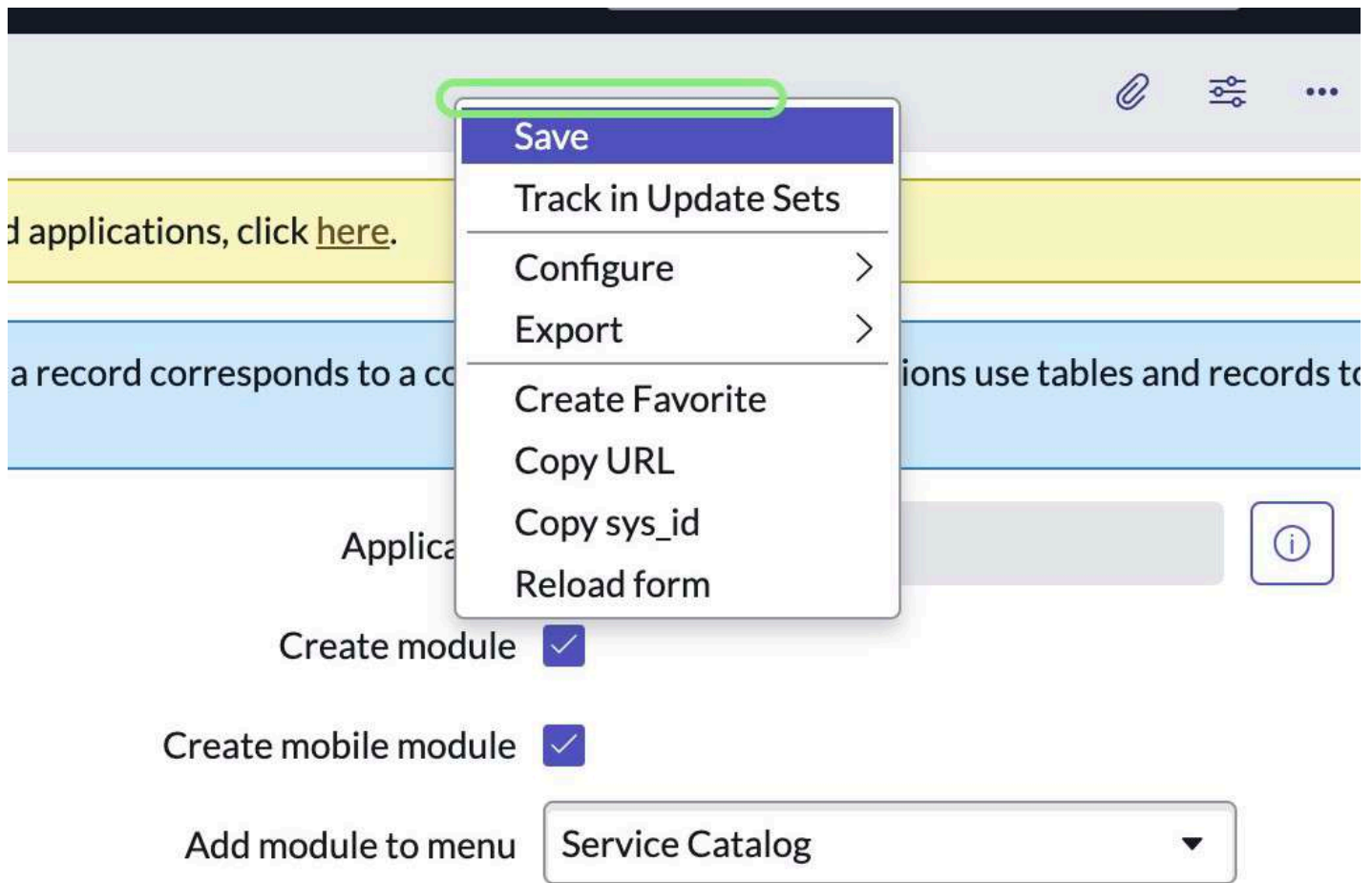
## 8. In the embedded list below add fields to the table.

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



Applications, click [here](#).

a record corresponds to a co

ions use tables and records to

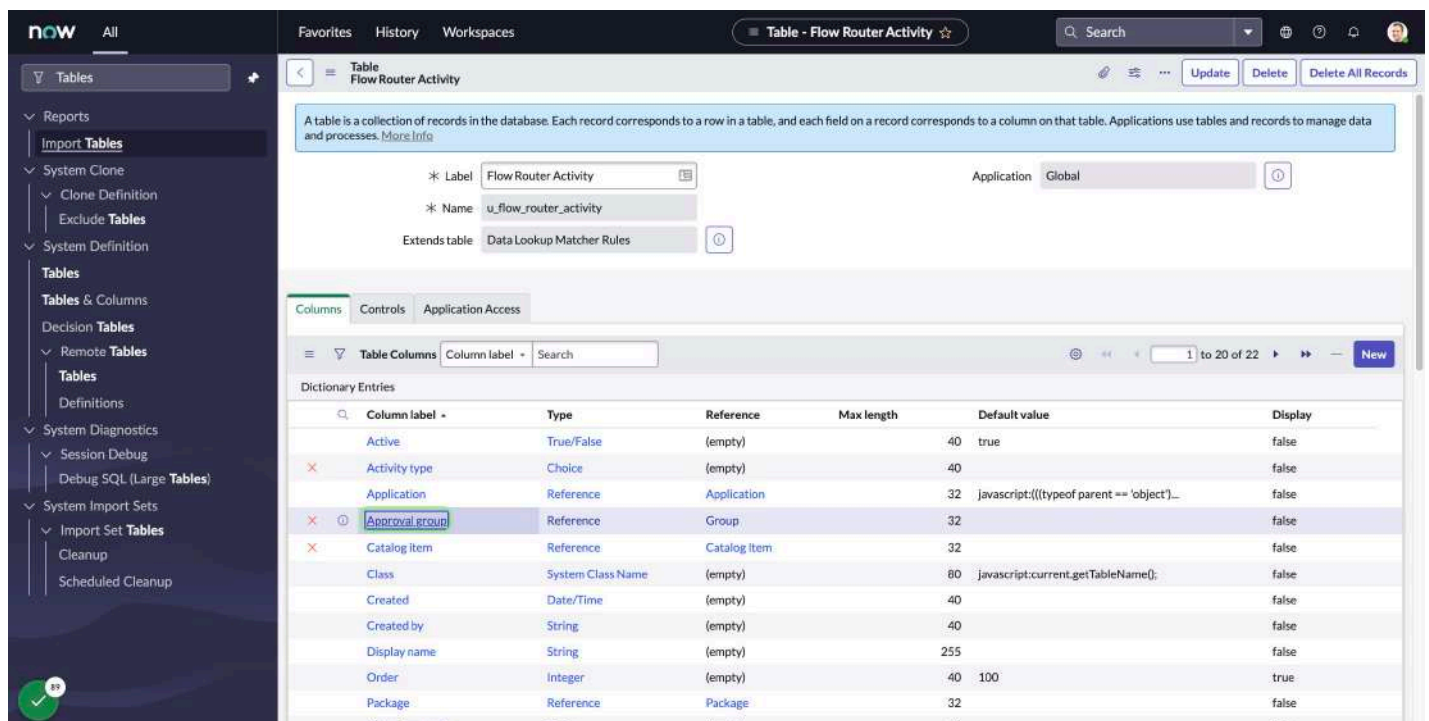
Applica

Create module

Create mobile module

Add module to menu

## 11. Click Approval group



now All

Favorites History Workspaces

Table - Flow Router Activity

Search

Update Delete Delete All Records

Table Flow Router Activity

A table is a collection of records in the database. Each record corresponds to a row in a table, and each field on a record corresponds to a column on that table. Applications use tables and records to manage data and processes. [More Info](#)

\* Label Flow Router Activity Application Global

\* Name u\_flow\_router\_activity

Extends table Data Lookup Matcher Rules

Columns Controls Application Access

Table Columns Column label Search

1 to 20 of 22 New

Column label	Type	Reference	Max length	Default value	Display
Active	True/False	(empty)	40	true	false
Activity type	Choice	(empty)	40		false
Application	Reference	Application	32	javascript:((typeof parent == 'object')...	false
Approval group	Reference	Group	32		false
Catalog item	Reference	Catalog Item	32		false
Class	System Class Name	(empty)	80	javascript:current.getTableName();	false
Created	Date/Time	(empty)	40		false
Created by	String	(empty)	40		false
Display name	String	(empty)	255		false
Order	Integer	(empty)	40	100	true
Package	Reference	Package	32		false

## 12. Set the Reference qual condition to Active is true

Reference Specification   Choice List Specification   Default Value

The Reference field specifies what table this field displays values from.

\* Reference Group

Reference qual condition   Add Filter   Choose option   Add "OR" Clause

Active   is   true   AND   OR   X

## 13. Click Update

...   Delete Column   Update   ↑   ↓

enter a column label, which becomes the reference fields so it appears on records

## 14. Click Task assignment group

	sys ID	sys ID (GUID)
	Sys ID	Sys ID (GUID)
X   (i)	<u>Task assignment group</u>	Reference
X	Task description	String

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

\* Reference Group

Reference qual condition   Add Filter Condition   Add "OR" Clause

All of these conditions must be met

Active   is   true   AND   OR   X

Type   is empty   AND   OR   X

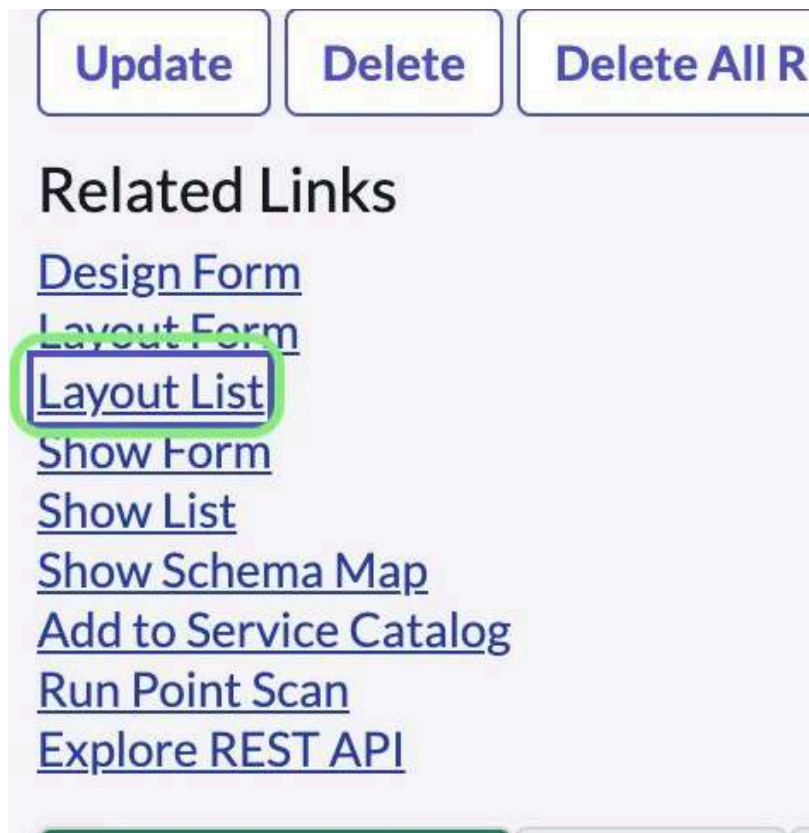
or Type   contains   itil   🔍   X

## 16. Click Update



column. Also enter a column label, which becomes the Value for reference fields so it appears on records

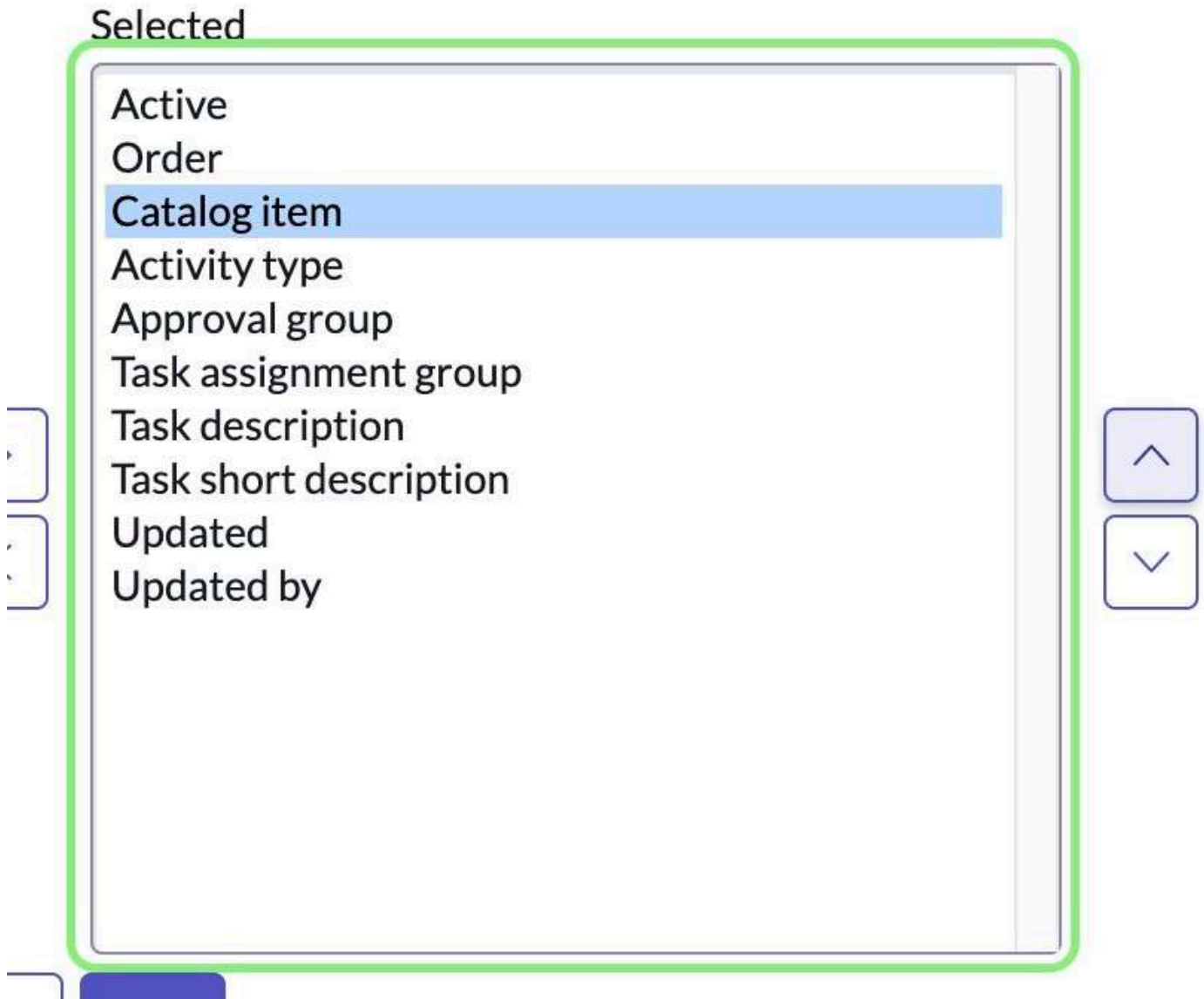
## 17. Click Layout List



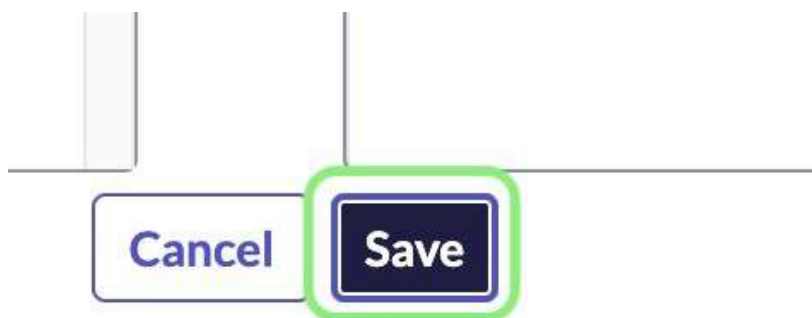
## 18. Edit the list to include the following fields at a minimum:

- 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



Create new field



## 20. Click Design form



## 21. Adjust the layout of the form.

Main section, 2 Columns

Column 1

- Catalog item
- Activity type

Column 2

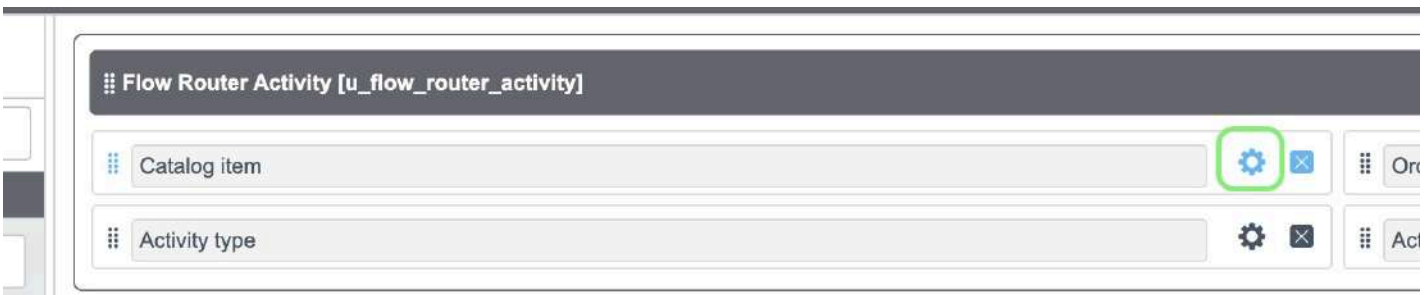
- Order
- Active

Section 2, 1 Column

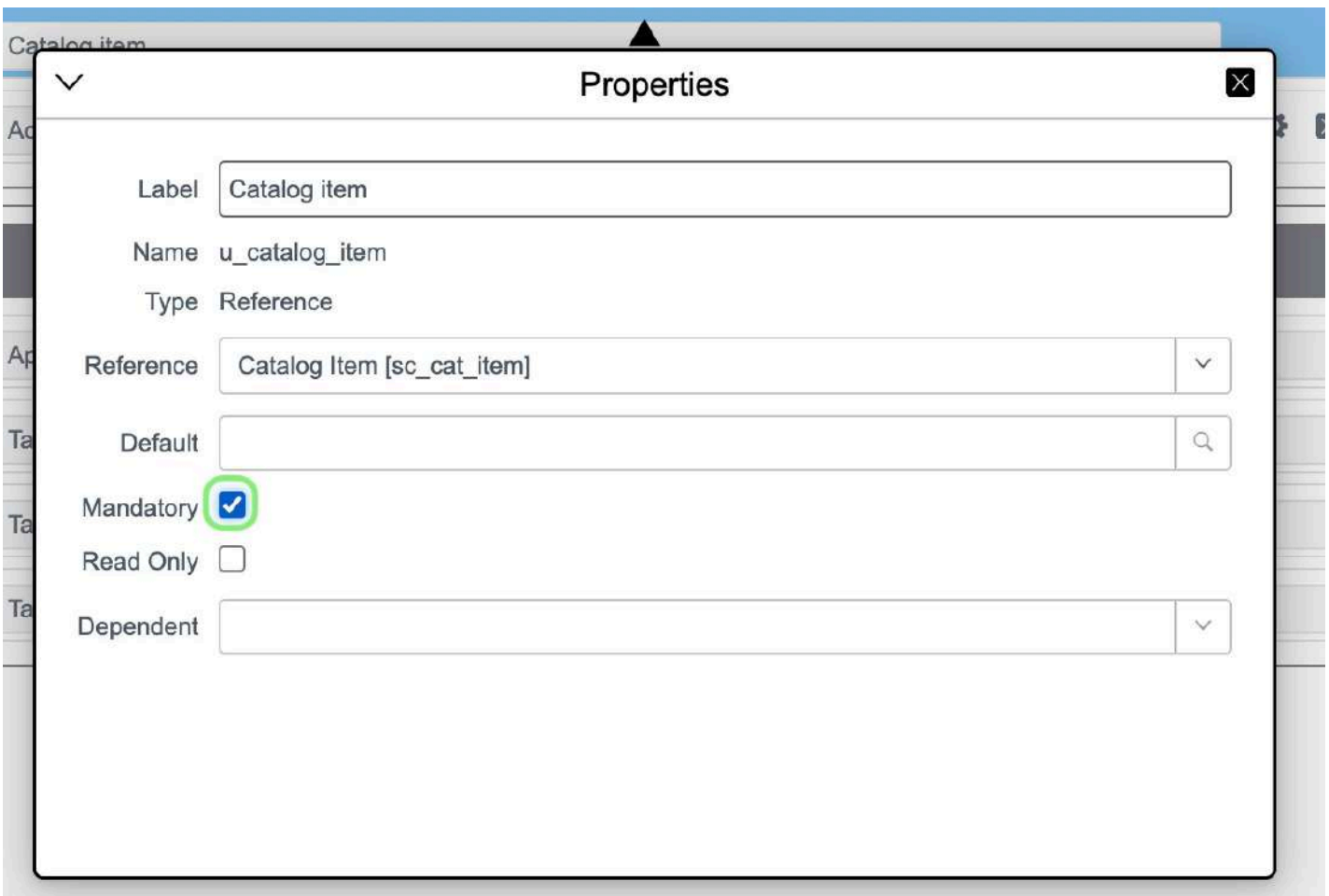
- Approval Group
- Task short description
- Task assignment group
- Task description



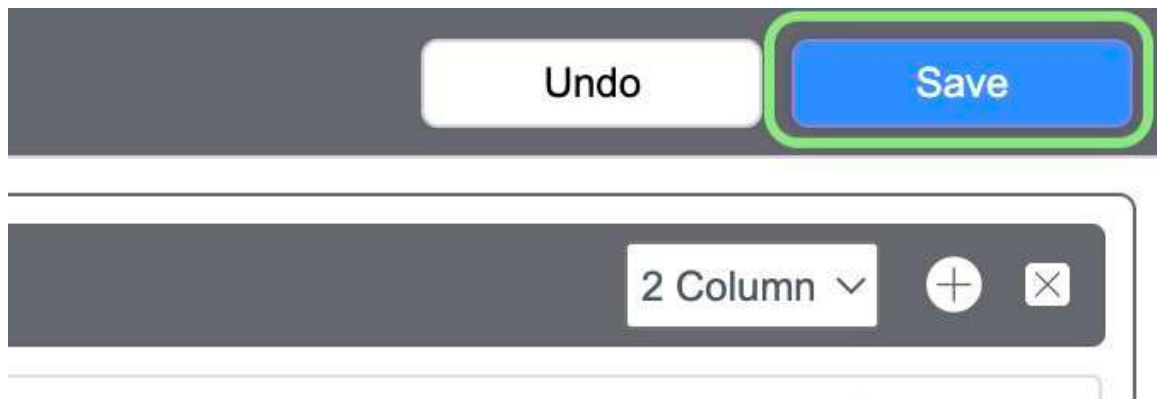
22. Click the gear icon for the Catalog item field



23. Check Mandatory and close the field properties



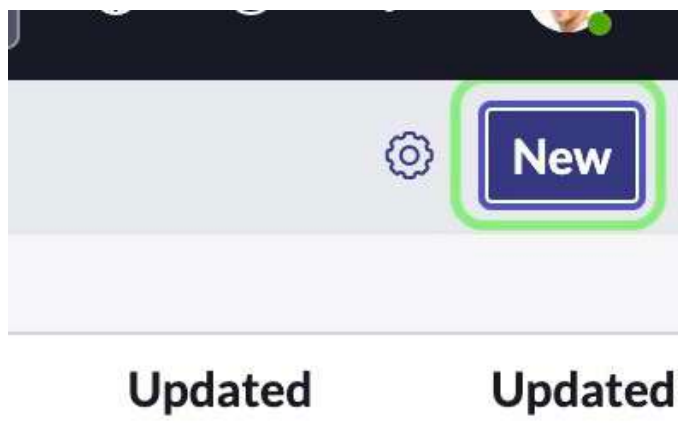
24. Click Save



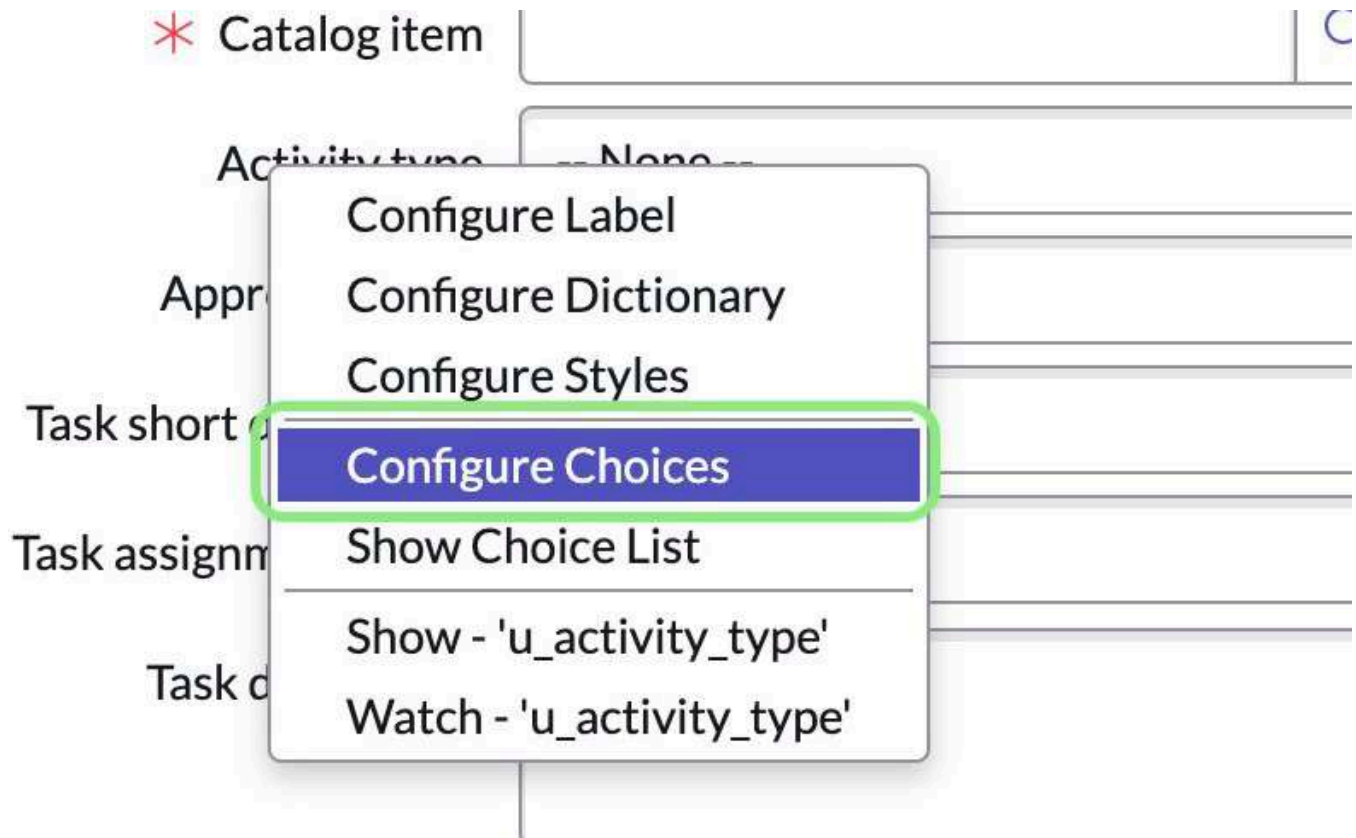
25. Click Show List



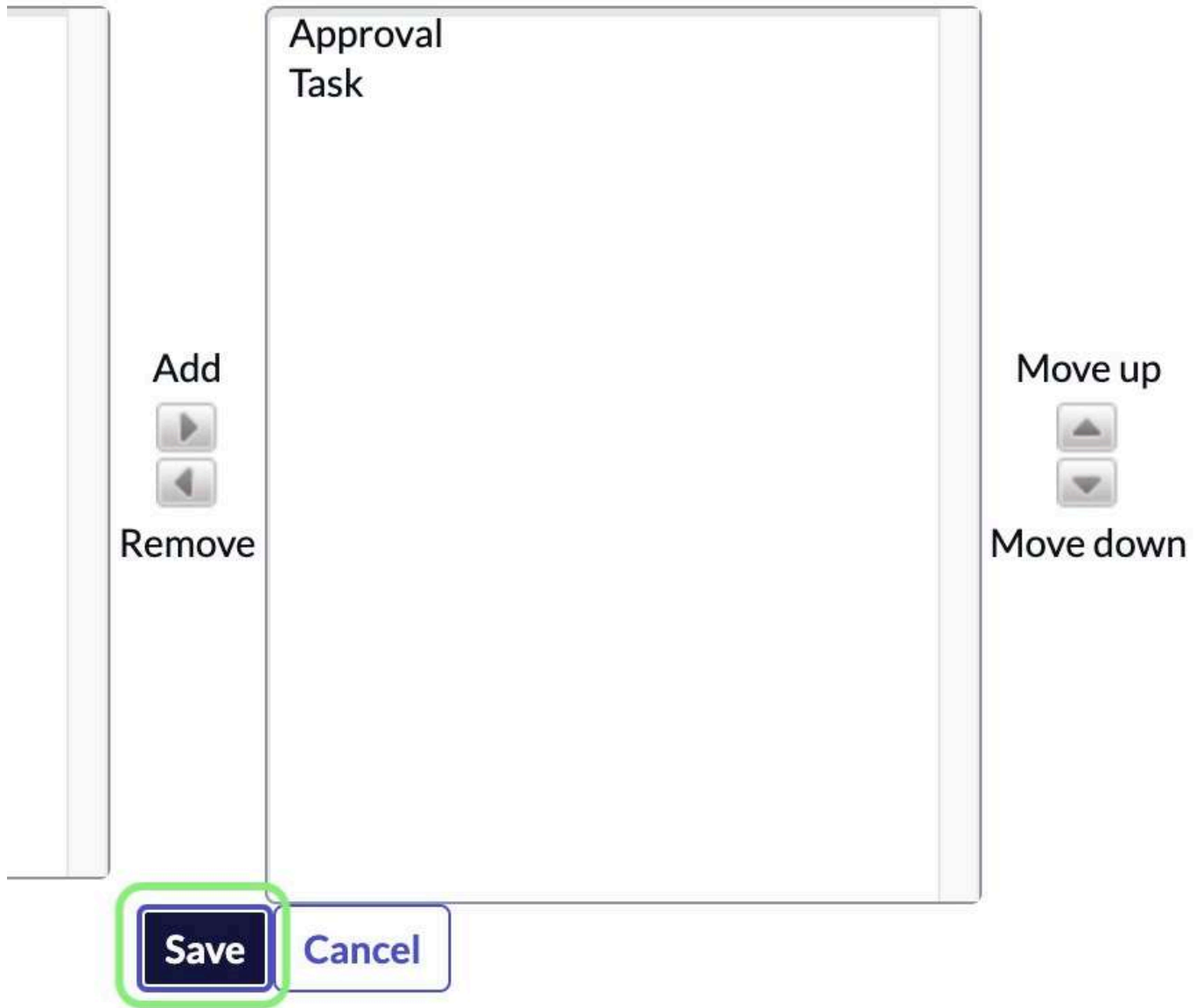
26. Click New



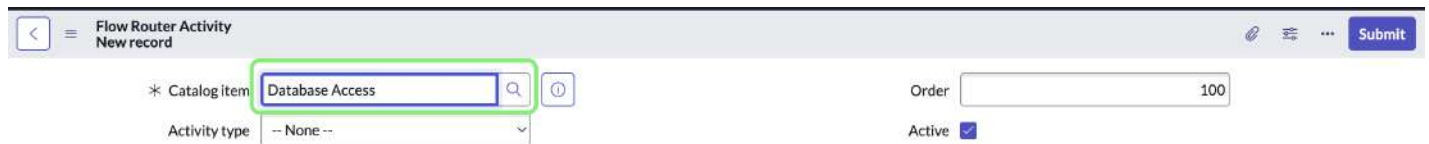
27. Right click Activity type and click Configure Choices



28. Add Approval and Task as options. Click Save  
Selected

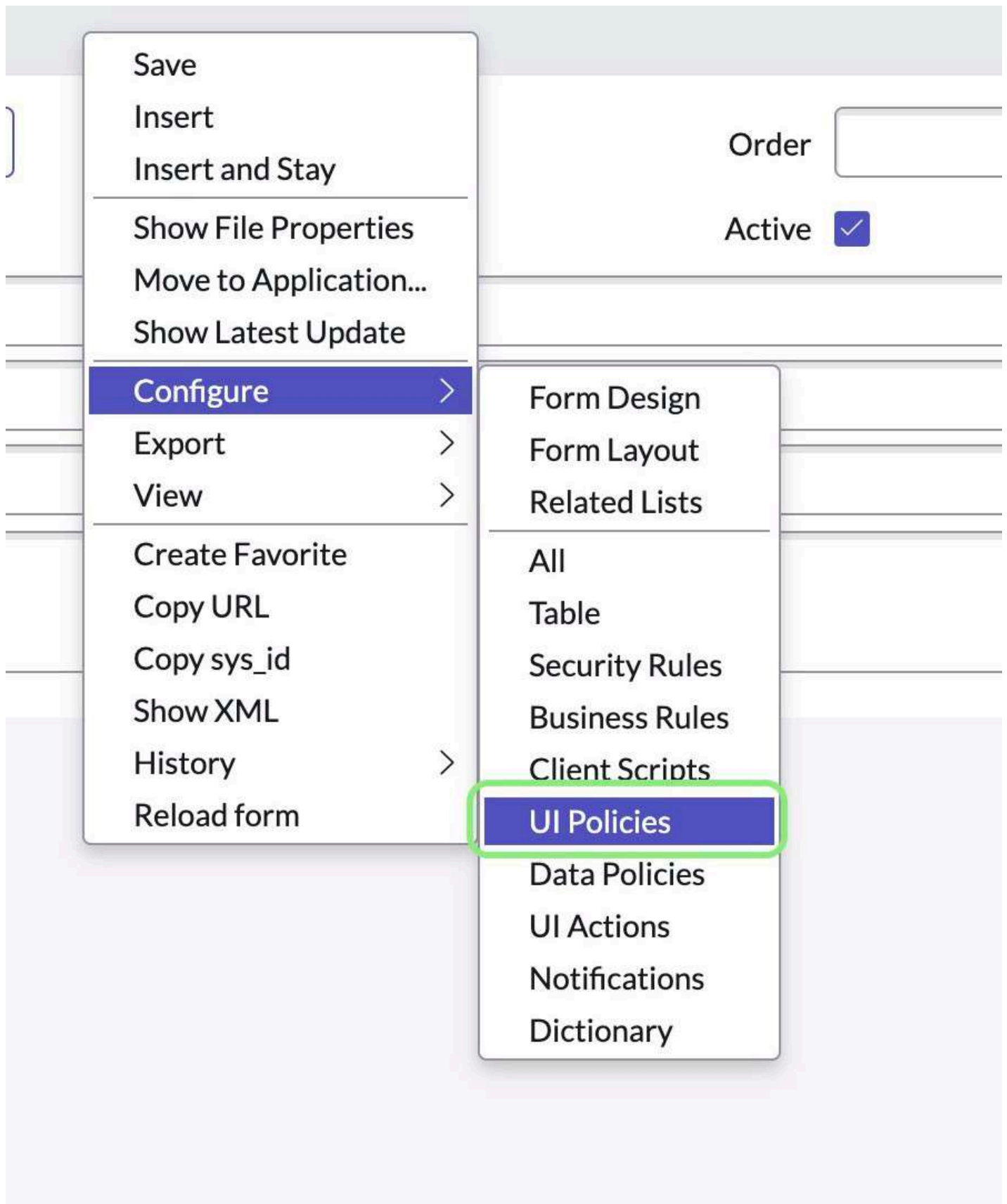


29. Enter the Catalog Item created in Exercise 1

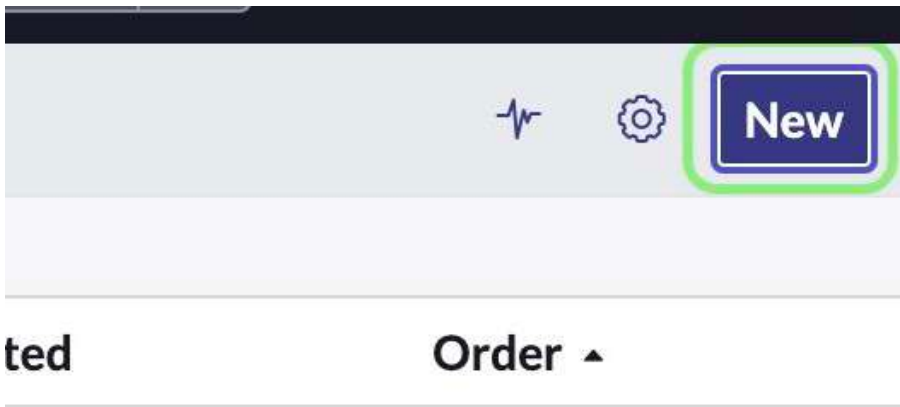




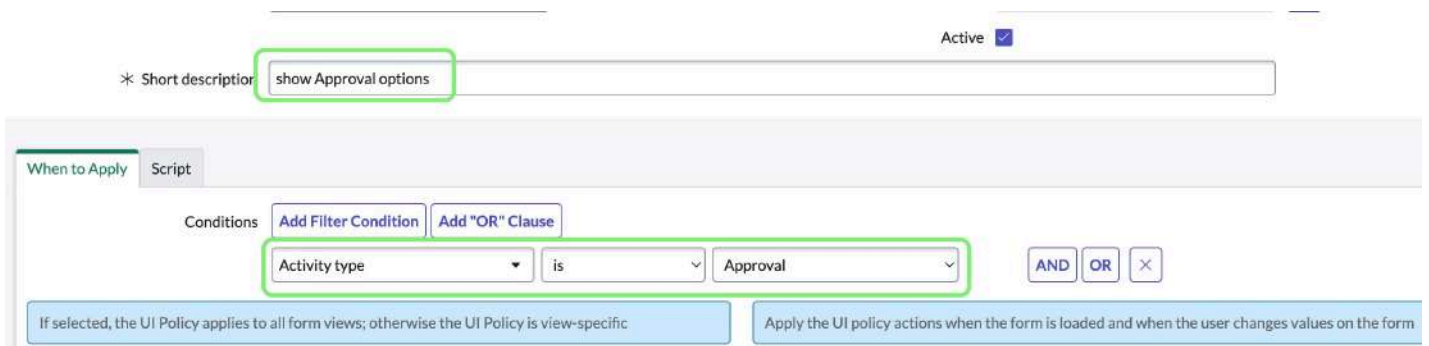
32. Right click the form header and click Configure > UI Policies



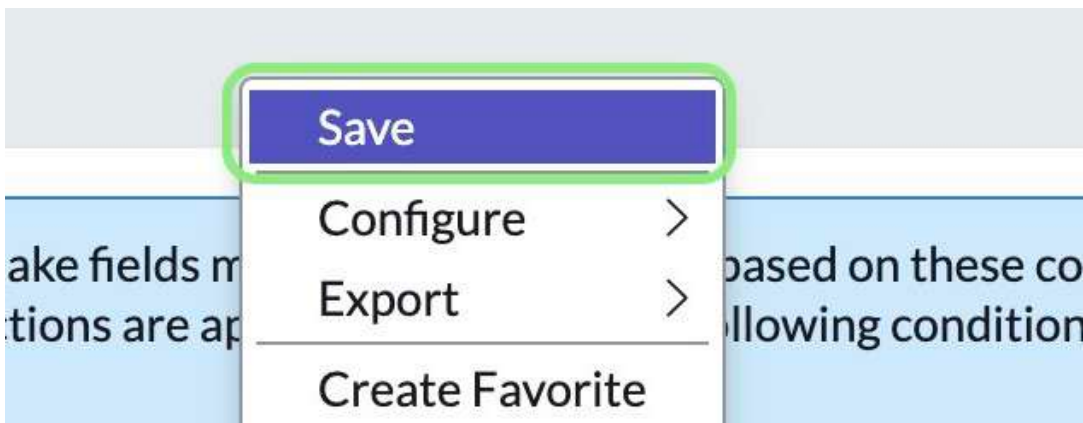
### 33. Click New



### 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



Field name	Mandatory	Visible	Read only
u_approval_group	True	True	Leave alone

UI Policy Actions (1) UI Policy Related List Actions

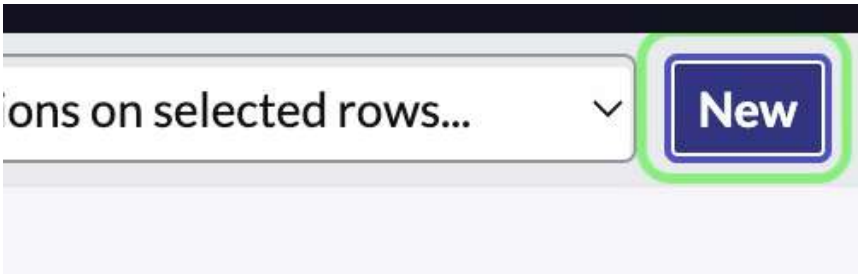
for text Search

Actions on selected rows... New

UI policy = show Approval options

1 to 1 of 1

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



38. Set the Short description and Condition

Active

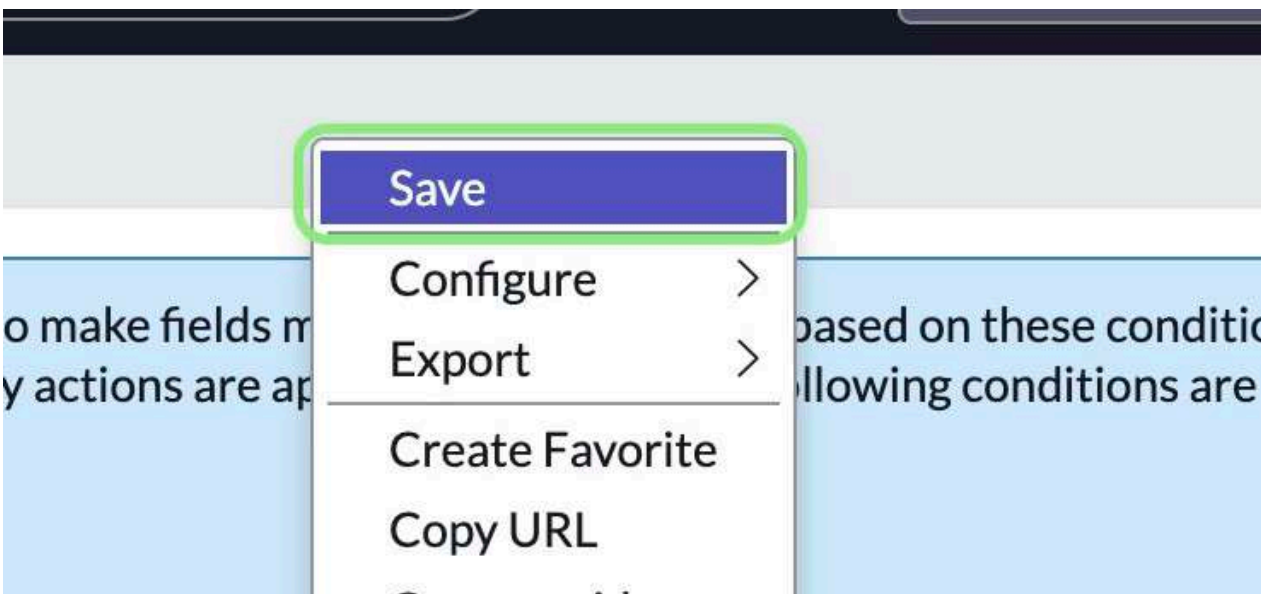
\* Short description show Task options

When to Apply

Conditions Add Filter Condition Add "OR" Clause

Activity type is Task AND OR X

39. Right click the form header and click Save



## 40. Add UI Policy Actions for the Task fields

Mandatory: true

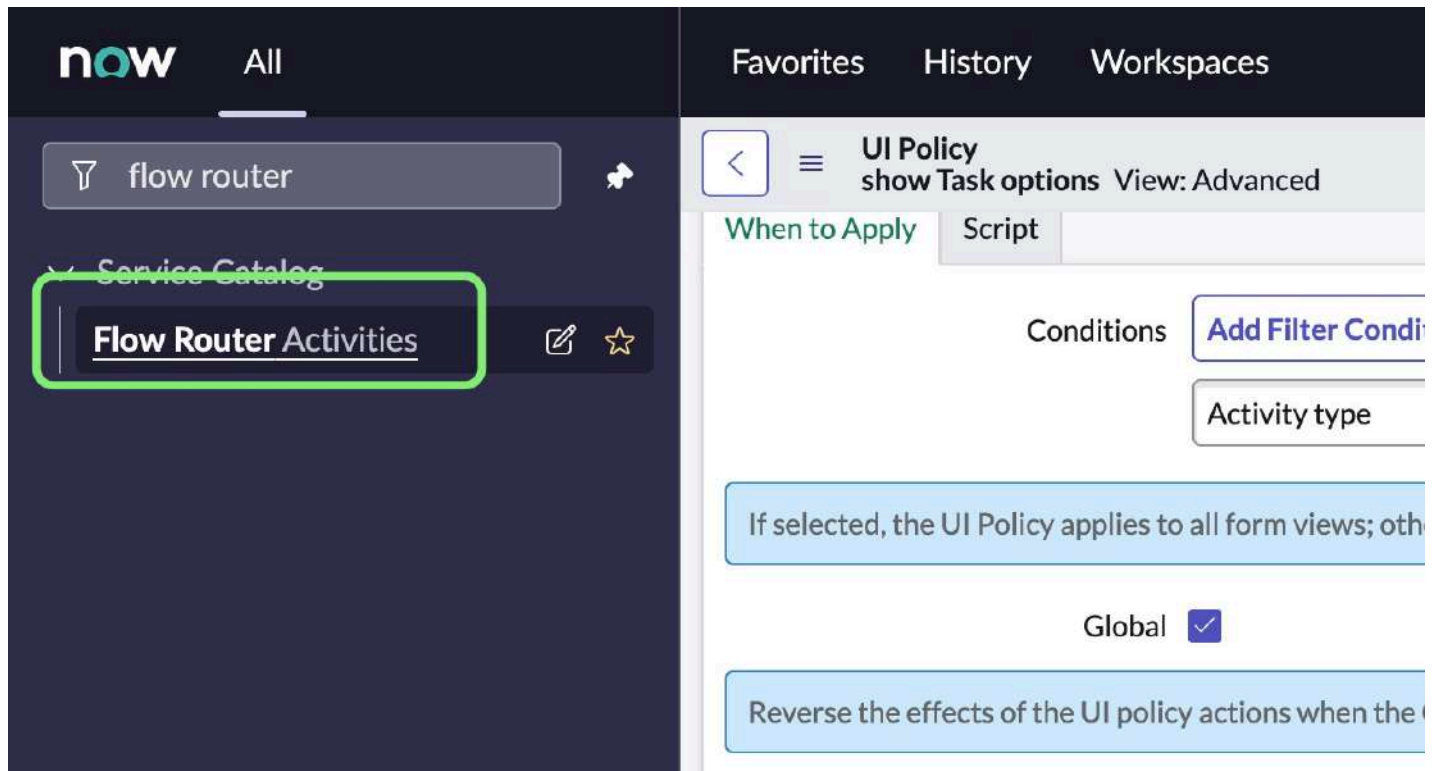
Visible: true



The screenshot shows a table titled "UI Policy Actions (3)" with columns for "Field name", "Mandatory", "Visible", and "Read only". The table contains three rows of data. Below the table, there is a pagination control showing "1 to 3 of 3".

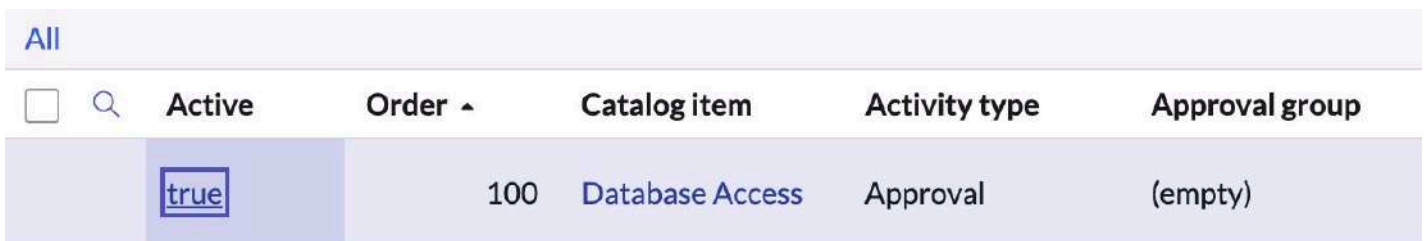
Field name	Mandatory	Visible	Read only
u_task_description	True	True	Leave alone
u_task_assignment_group	True	True	Leave alone
u_task_short_description	True	True	Leave alone

## 41. Navigate back to the Flow Router Activity table



The screenshot shows the "Flow Router Activities" configuration page. The left sidebar has a search bar with "flow router" and a list of items including "Service Catalog" and "Flow Router Activities" (highlighted with a green box). The main content area shows the "UI Policy" configuration for "show Task options" in "View: Advanced" mode. The "When to Apply" tab is active, showing "Conditions" and "Activity type" sections. A blue box highlights the text: "If selected, the UI Policy applies to all form views; otherwise...". A "Global" checkbox is checked. Another blue box highlights the text: "Reverse the effects of the UI policy actions when the...".

## 42. Open the record in the list



The screenshot shows a table with columns: "Active", "Order", "Catalog item", "Activity type", and "Approval group". The "Active" column has a value of "true" highlighted with a blue box. The "Order" column has a value of "100". The "Catalog item" column has a value of "Database Access". The "Activity type" column has a value of "Approval". The "Approval group" column has a value of "(empty)".

Active	Order	Catalog item	Activity type	Approval group
true	100	Database Access	Approval	(empty)

### 43. Select a group for Approval

Flow Router Activity  
100

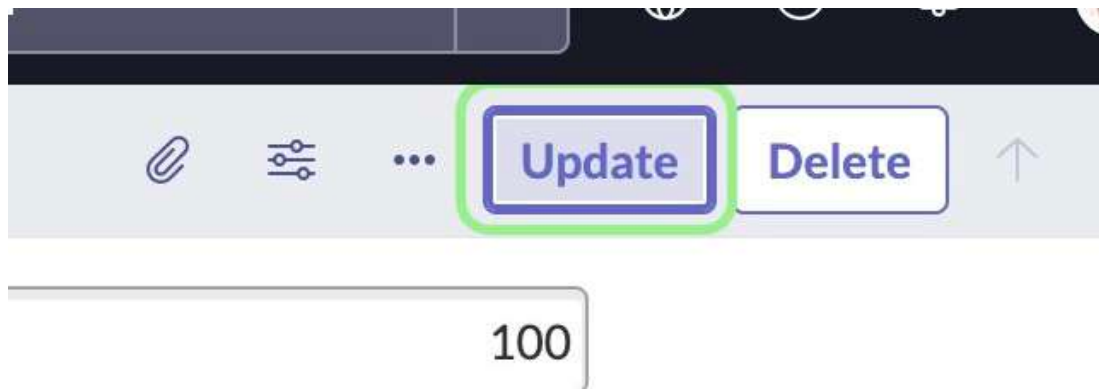
\* Catalog item Database Access

Activity type Approval

\* Approval group Database

Update Delete

### 44. Click Update



### 45. Add two additional Flow Router Activities

Activity type: Task

Ensure the order is incremented for each new step.

Flow Router Activity  
200

\* Catalog item Database Access

Activity type Task

\* Task short description Configure Access

\* Task assignment group Database

\* Task description Step 1  
Step 2  
Step 3

Order 200

Active

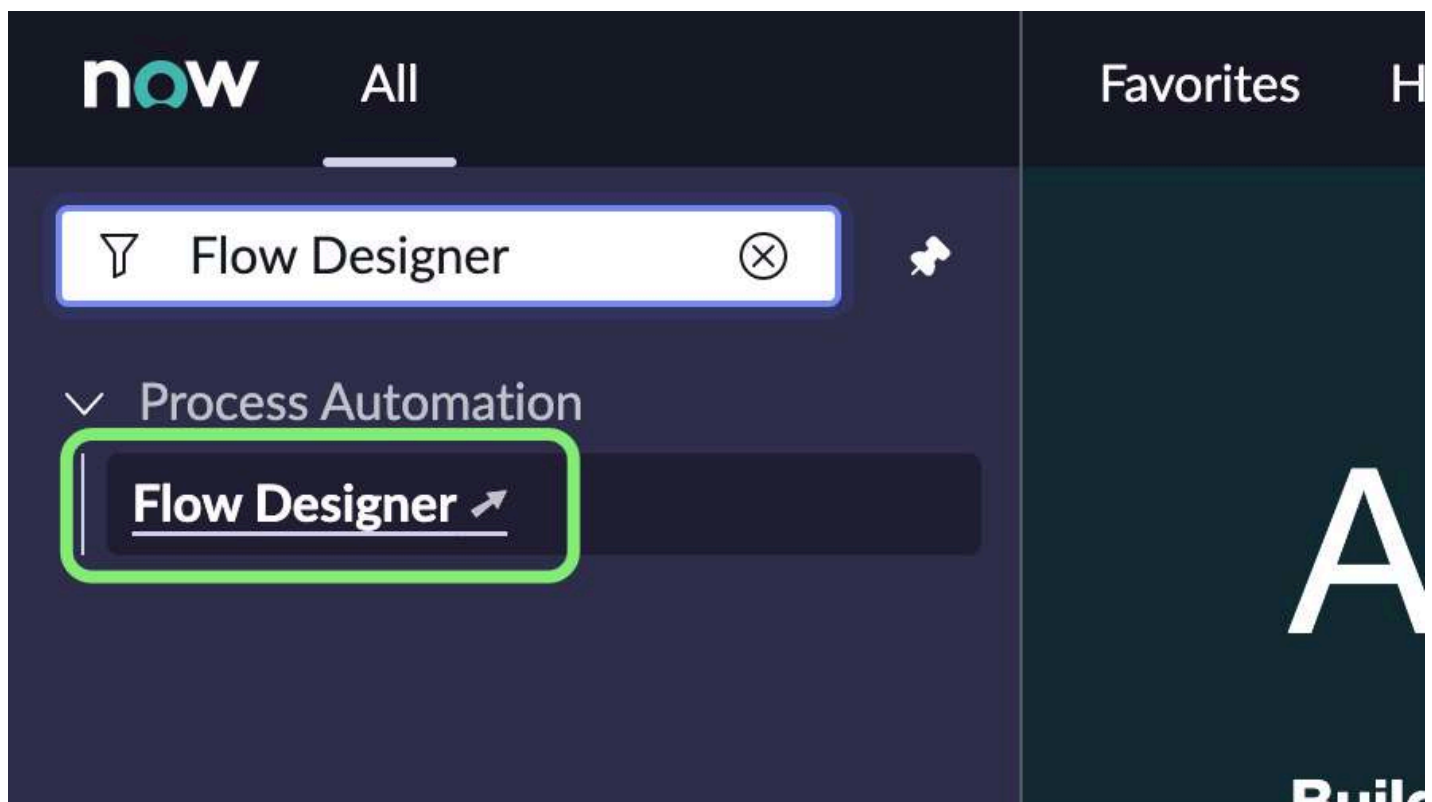
Update Delete

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

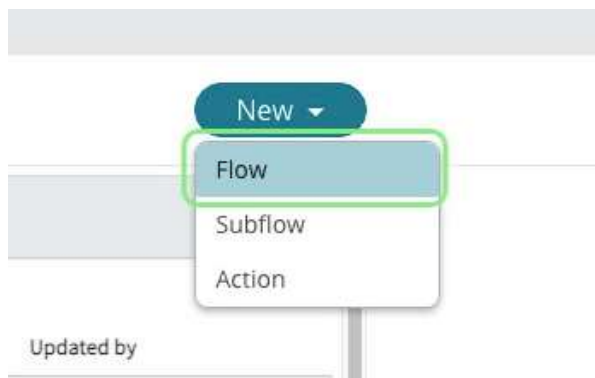
Active	Order	Catalog item	Activity type	Approval group	Task assignment group	Task description	Task short description	Updated	Upd:
true	100	Database Access	Approval	Database	(empty)			2022-04-28 18:43:12	admi
true	200	Database Access	Task	(empty)	Database	Step 1 Step 2 Step 3	Configure Access	2022-04-28 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

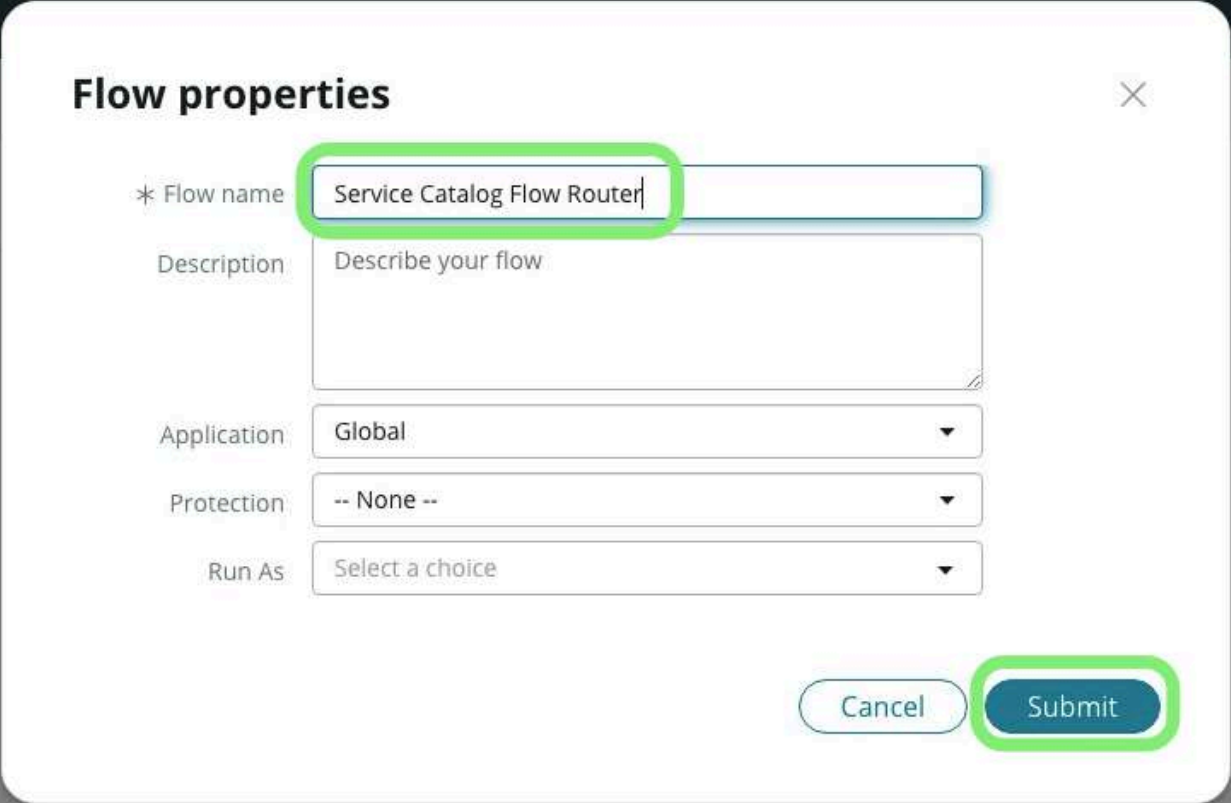


2. Click New > Flow



### 3. Name the Flow. Click Submit.

Suggestion: "Service Catalog Flow Router"



The image shows a 'Flow properties' dialog box with a close button (X) in the top right corner. The dialog contains the following fields:

- \* Flow name:** A text input field containing 'Service Catalog Flow Router', which is highlighted with a green rounded rectangle.
- Description:** A text area with the placeholder text 'Describe your flow'.
- Application:** A dropdown menu with 'Global' selected.
- Protection:** A dropdown menu with '-- None --' selected.
- Run As:** A dropdown menu with 'Select a choice' selected.

At the bottom right of the dialog, there are two buttons: 'Cancel' and 'Submit'. The 'Submit' button is highlighted with a green rounded rectangle.

### 4. Click Add a trigger

TRIGGER



A light blue horizontal button with a dark blue circle containing a white plus sign on the left and the text 'Add a trigger' to its right. The plus sign is highlighted with a green rounded rectangle.

ACTIONS

## 5. Click Service Catalog

The screenshot shows a configuration window for a trigger. At the top left, there is a close button and the text "Abort trigger creation". Below this, a "Trigger" dropdown menu is set to "Select a Trigger". A search bar contains the text "service catalog". Below the search bar, a list of application triggers is shown, with "Service Catalog" highlighted in blue and a green border. To the right of the list, a detailed description for the "Service Catalog" trigger is displayed. The description states: "Trigger initiates from a ServiceNow Service Catalog Item Request. By using the Service Catalog trigger, the flow can be configured on a Service Catalog item form and started by a Service Catalog item request." A note follows: "Note: Stages are available for all parent Flows. When a Flow is associated with a Service Catalog Item with the Workflow field, the flow stages display when the item is requested. Only stages from the parent flow display. As the Flow progresses, stages on paths that the flow did not take are skipped or removed from the display."

Trigger

Select a Trigger

service catalog

Service Catalog

Service Catalog

Trigger initiates from a ServiceNow Service Catalog Item Request. By using the Service Catalog trigger, the flow can be configured on a Service Catalog item form and started by a Service Catalog item request.

Note: Stages are available for all parent Flows. When a Flow is associated with a Service Catalog Item with the Workflow field, the flow stages display when the item is requested. Only stages from the parent flow display. As the Flow progresses, stages on paths that the flow did not take are skipped or removed from the display.

## 6. Click Done

The screenshot shows a row of three buttons: "Delete", "Cancel", and "Done". The "Done" button is highlighted with a green border.

Delete Cancel Done

## 7. Click More Actions menu

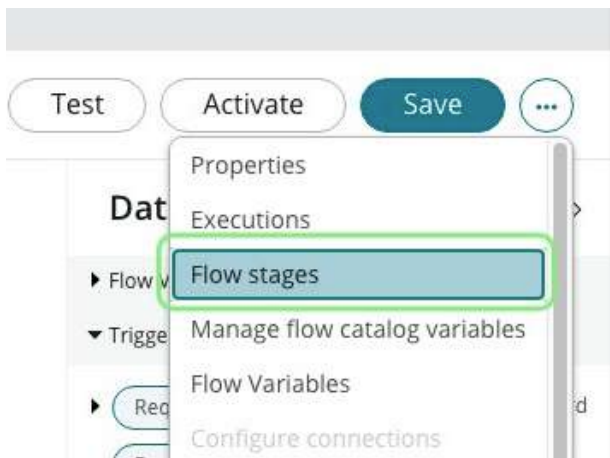
The screenshot shows a configuration window with three buttons: "Test", "Activate", and "More Actions menu". The "More Actions menu" button is highlighted with a green border. Below the buttons, a "Data" section is visible, containing a list of variables. The "Requested Item Record" variable is highlighted with a green border. The "Run Start Time UTC" variable is also visible.

Test Activate More Actions menu

Data

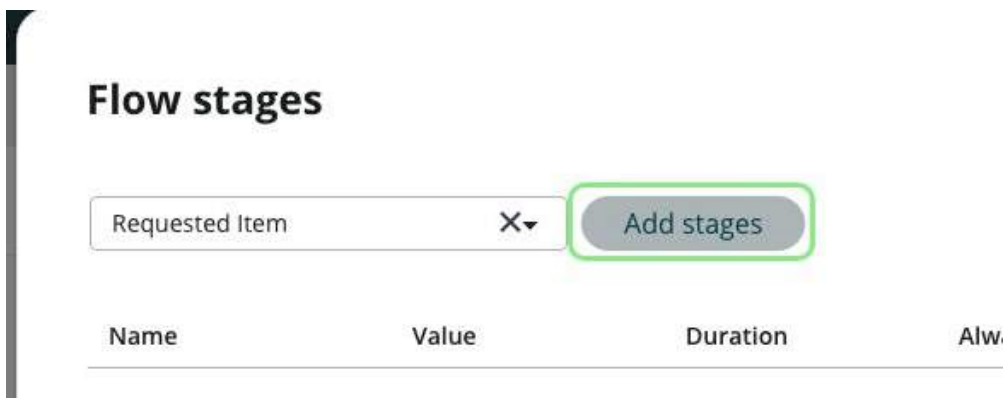
- Flow Variables
- Trigger - Service Catalog
  - Requested Item Record Record
  - Run Start Time UTC Date/Time

## 8. Click Flow stages



## 9. Click Requested Item and click Add stages.

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

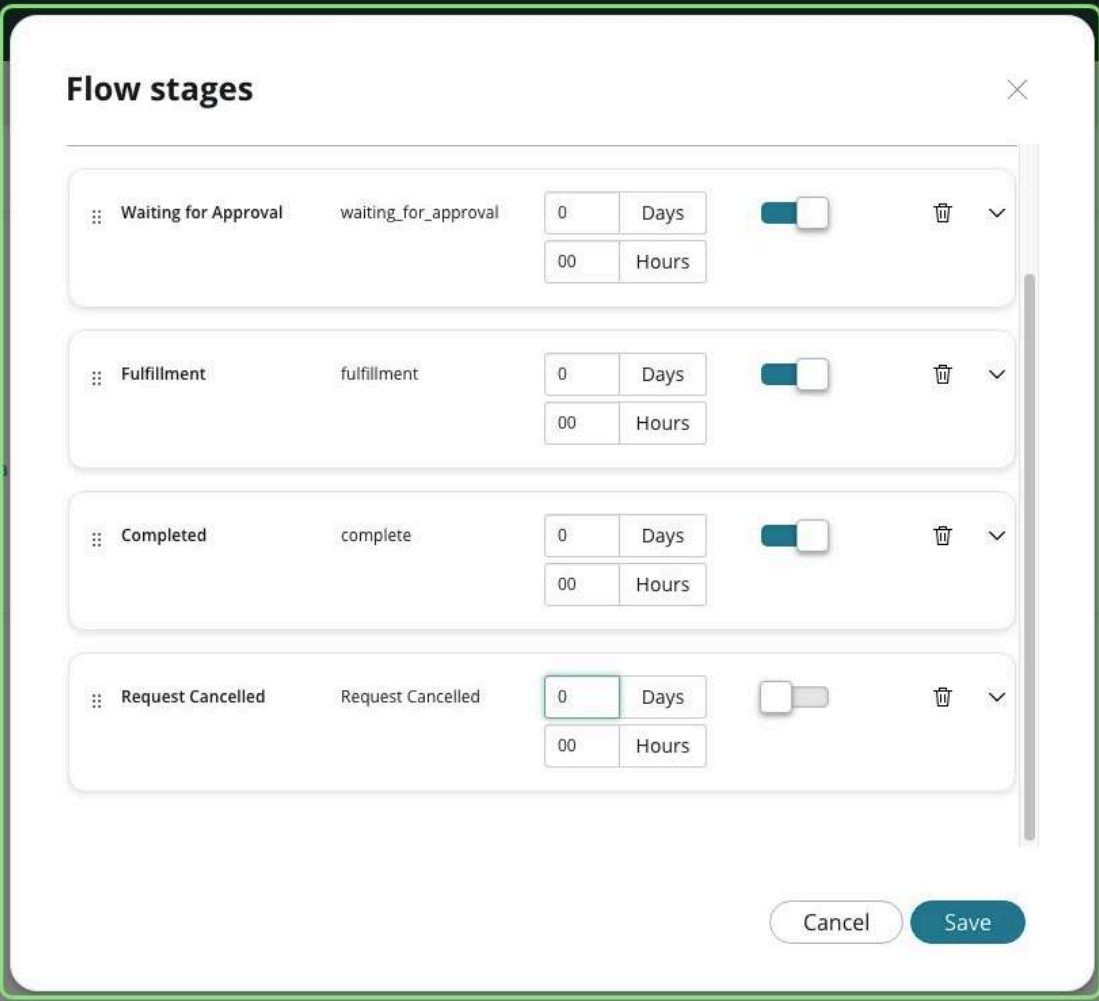


## 10. The system displays the Stages to the end user in the order that the records are displayed on this screen.

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

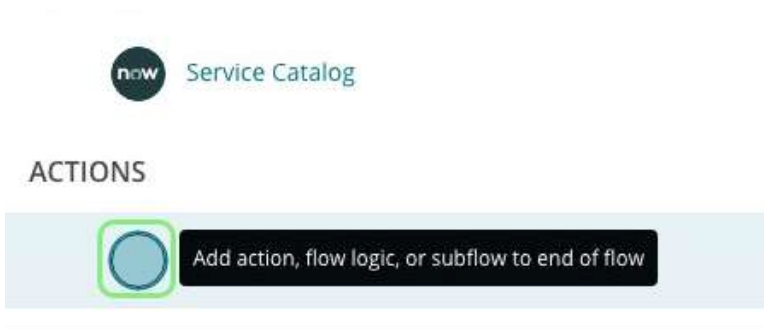


The screenshot shows a 'Flow stages' configuration dialog box with a close button (X) in the top right corner. The dialog contains four stage entries, each with a name, a key, duration settings, a toggle switch, and a delete icon:

Stage Name	Key	Days	Hours	Toggle	Delete
Waiting for Approval	waiting_for_approval	0	00	On	Yes
Fulfillment	fulfillment	0	00	On	Yes
Completed	complete	0	00	On	Yes
Request Cancelled	Request Cancelled	0	00	Off	Yes

At the bottom right of the dialog are 'Cancel' and 'Save' buttons. The 'Save' button is highlighted in blue.

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



The screenshot shows the 'Service Catalog' interface. At the top left is the 'now' logo and the text 'Service Catalog'. Below this is the 'ACTIONS' section, which contains a button with a blue circular icon and the text 'Add action, flow logic, or subflow to end of flow'. The button is highlighted with a green border.



## 13. Click Action

### TRIGGER



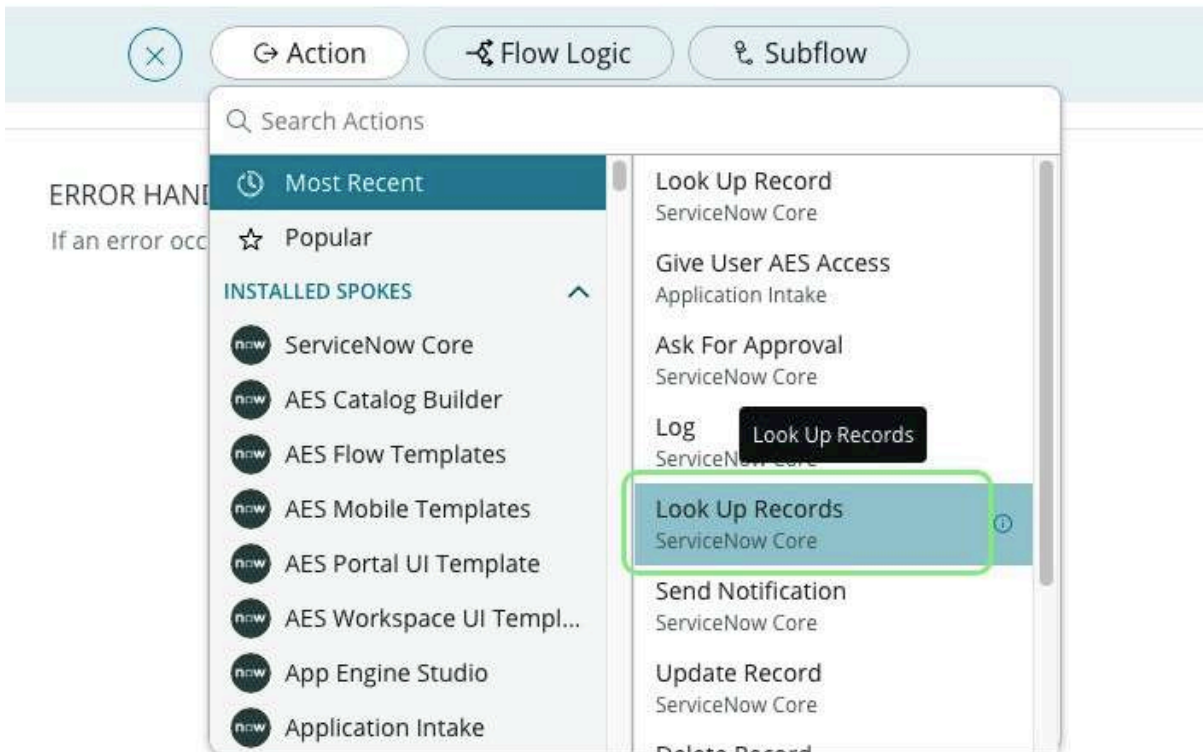
### ACTIONS



## 14. Click Look Up Records...

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

### ACTIONS



## 15. Click Flow Router Activity as the table

The screenshot shows a search configuration interface with the following fields:

- Action: Look Up Records
- Table: Select a Table (dropdown menu)
- Conditions: flow rout
- Order by: Flow Router Activity [u\_flow\_router\_activity] (dropdown menu)
- Max Results: 1000

There are also icons for adding and removing items, and a 'a to z' button.

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

## 17. Set Active is true

The screenshot shows the search configuration interface with the following fields:

- Action: Look Up Records
- Table: Flow Router Activity [u\_flow\_router\_activity]
- Conditions: All of these conditions must be met

The 'Conditions' section has a dropdown menu with the text "-- choose field --". The dropdown menu is open, and the "Active" option is highlighted with a green box.

## 18. Click AND

The screenshot shows the search configuration interface with the following fields:

- Conditions: All of these conditions must be met

The 'Conditions' section has a dropdown menu with the text "-- choose field --". The dropdown menu is open, and the "Active" option is highlighted with a green box. Below the dropdown menu, there are buttons for "OR" and "AND". The "AND" button is highlighted with a green box.

## 19. Click Catalog Item

Look Up Flow Router Activity Records ⓘ

Action: Look Up Records

Table: Flow Router Activity [u\_flow\_router\_activity]

Conditions: All of these conditions must be met

AND

- Active is
- choose field --

Search: catalog item

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.

Trigger - Service Catalog > Requested Item Record > Item

Trigger - Service Catalog	Requested Item Re...	Record	Configuration item ...	Reference
Run Start Time UTC	Date/Time		Configuration item ...	Reference
Table Name	Table Name		Item	Reference
Run Start Date/Time	Date/Time			

Conditions: All of these conditions must be met

AND

- Active is
- Catalog item is

Trigger - Service C... > ... > Ite... X

OR AND

## 21. Click AND

Logic Builder Buttons: OR AND

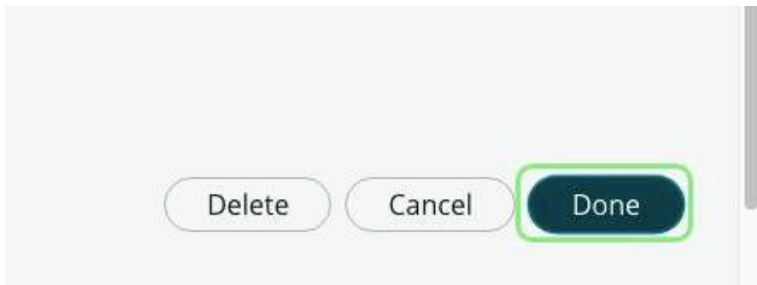
## 22. Set Activity Type is Approval

The screenshot shows the configuration for a flow router activity. The 'Action' is set to 'Look Up Records'. The 'Table' is 'Flow Router Activity [u\_flow\_router\_activity]'. The 'Conditions' section is set to 'All of these conditions must be met' and includes three conditions: 'Active is', 'Catalog item is', and 'Activity type is'. A dropdown menu is open for the 'Activity type' field, showing a list of options: Active, Activity type (highlighted), Application, Approval groups, Catalog item, Class, and Created. The 'Order by' field is currently empty, and the 'Max Results' is set to 1.

## 23. In the Order field, click Order.

This close-up screenshot shows the 'Order by' field configuration. The 'Activity Type' condition is visible above. The 'Order by' dropdown menu is open, showing a search bar with 'order' entered and the 'Order' option highlighted. The 'Max Results' is set to 1000.

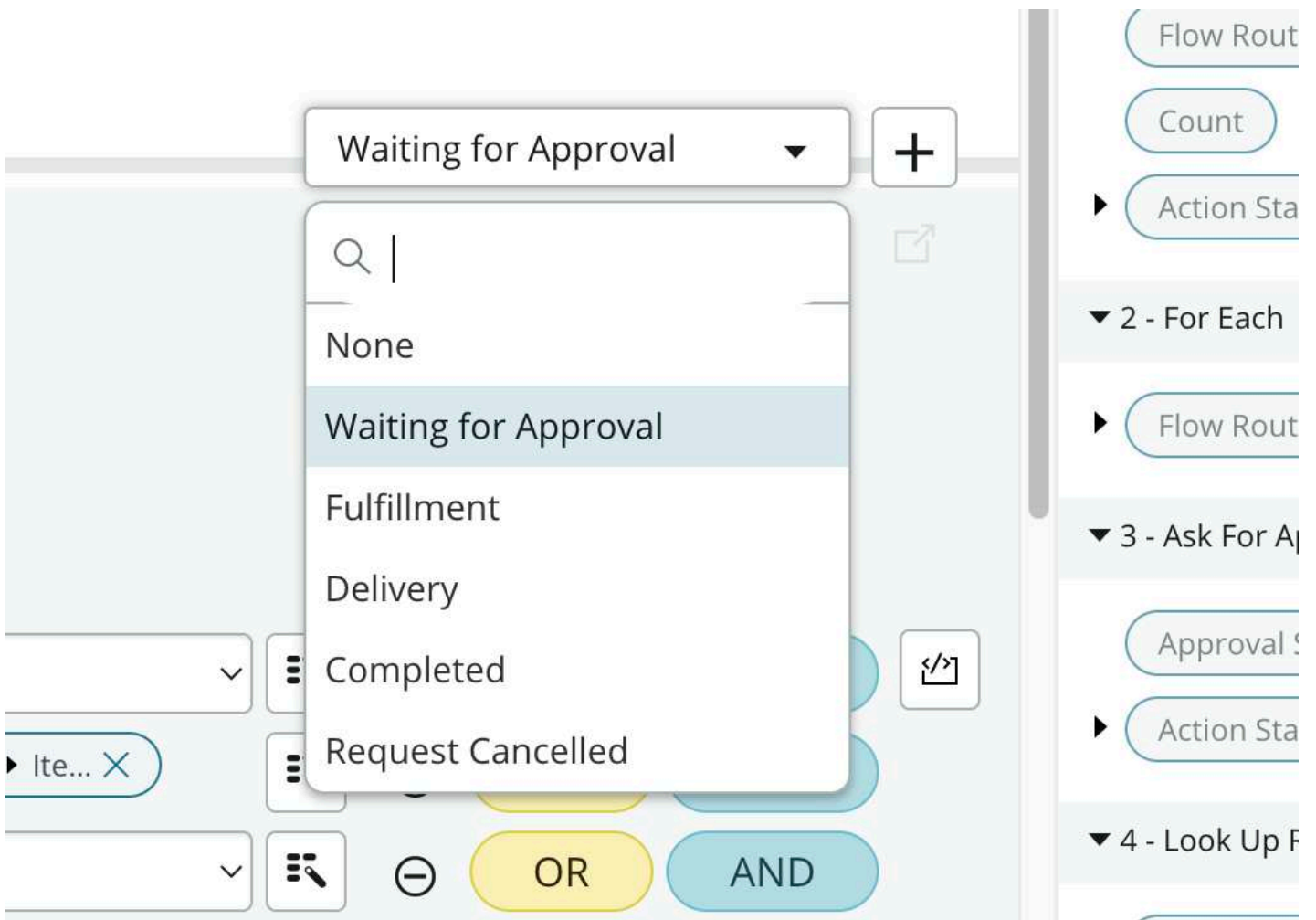
## 24. Click Done



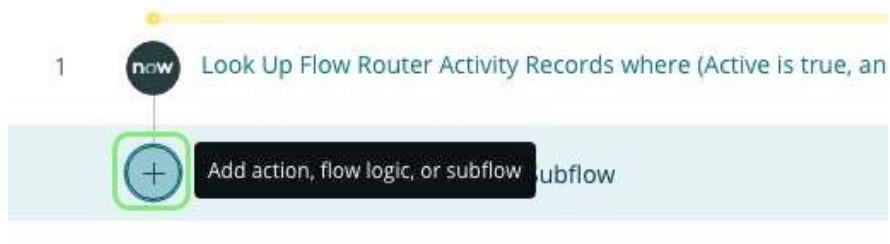
## 25. Hover just over the Look Up Records Action until an "Add a stage" line appears.



## 26. Click Waiting for Approval



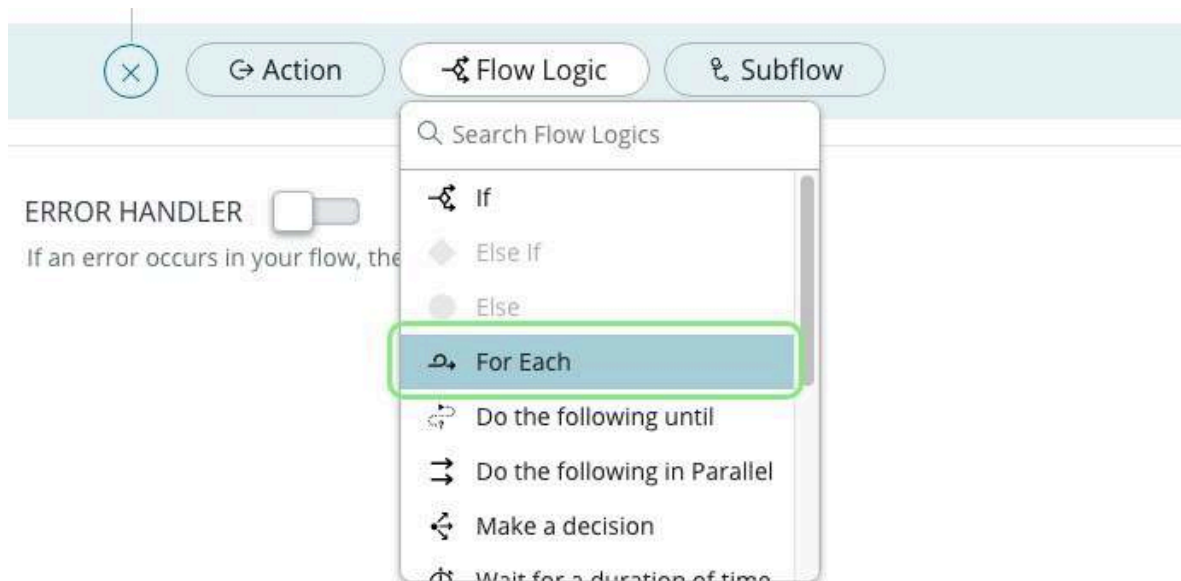
## 27. Click Add action, flow logic, or subflow



## 28. Click Flow Logic



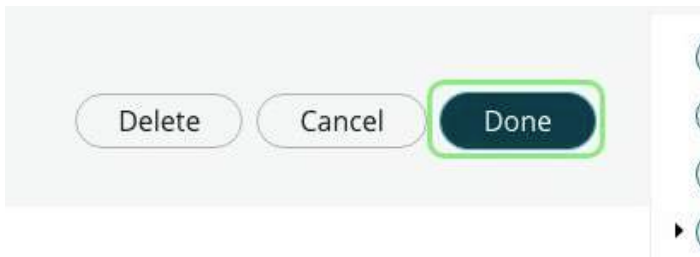
## 29. Click For Each



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

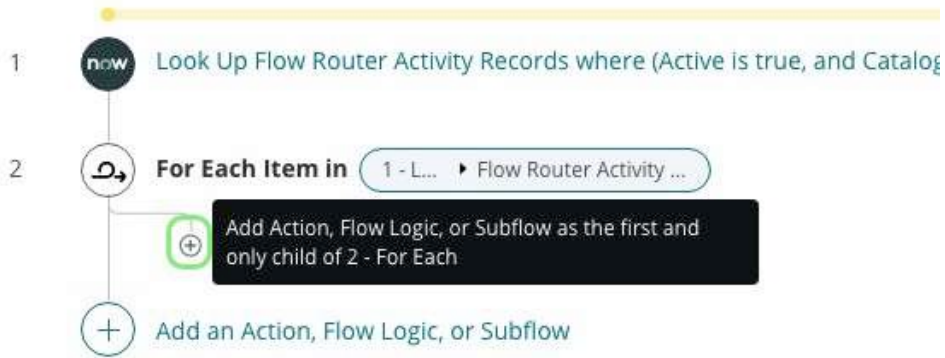


### 31. Click Done



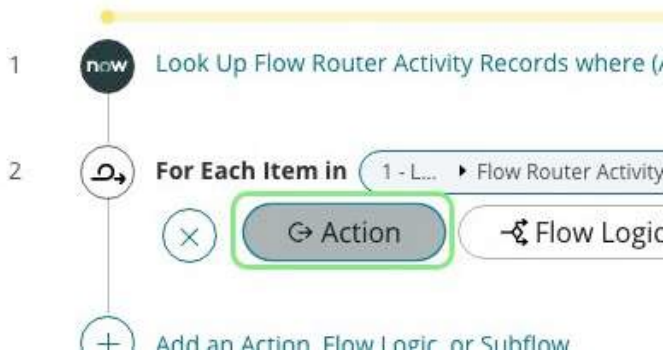
### 32. Click Add Action, Flow Logic, or Subflow as a subpath of 2 - For Each

#### ACTIONS

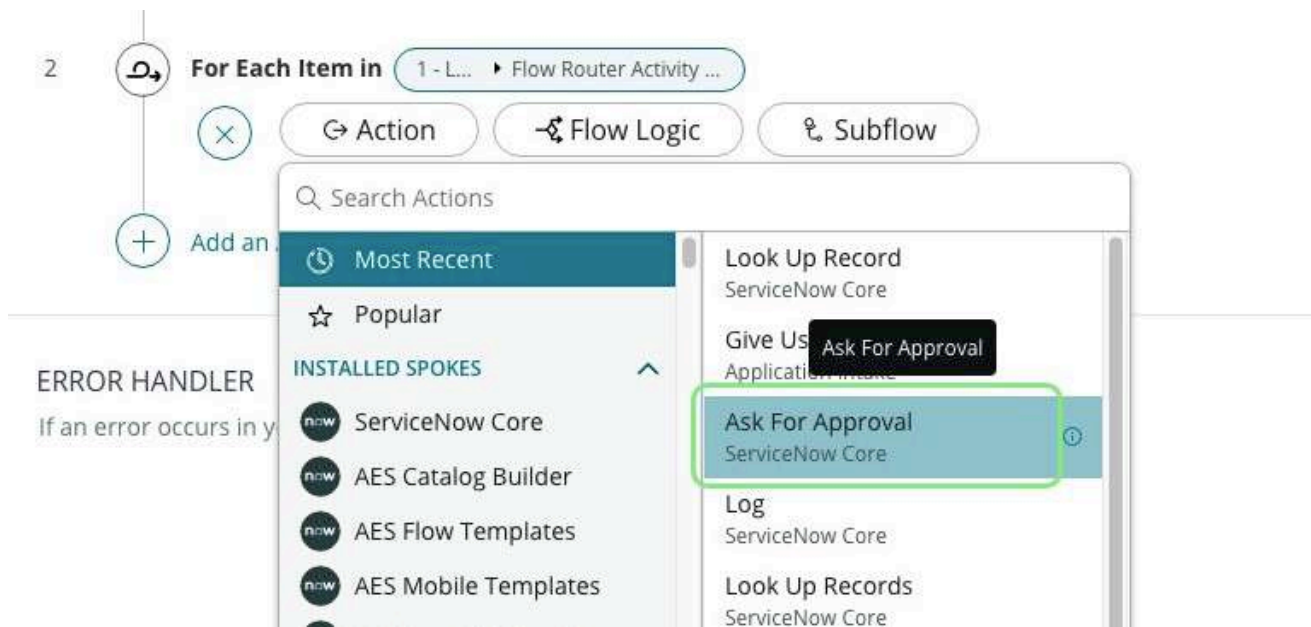


### 33. Click Action

#### ACTIONS



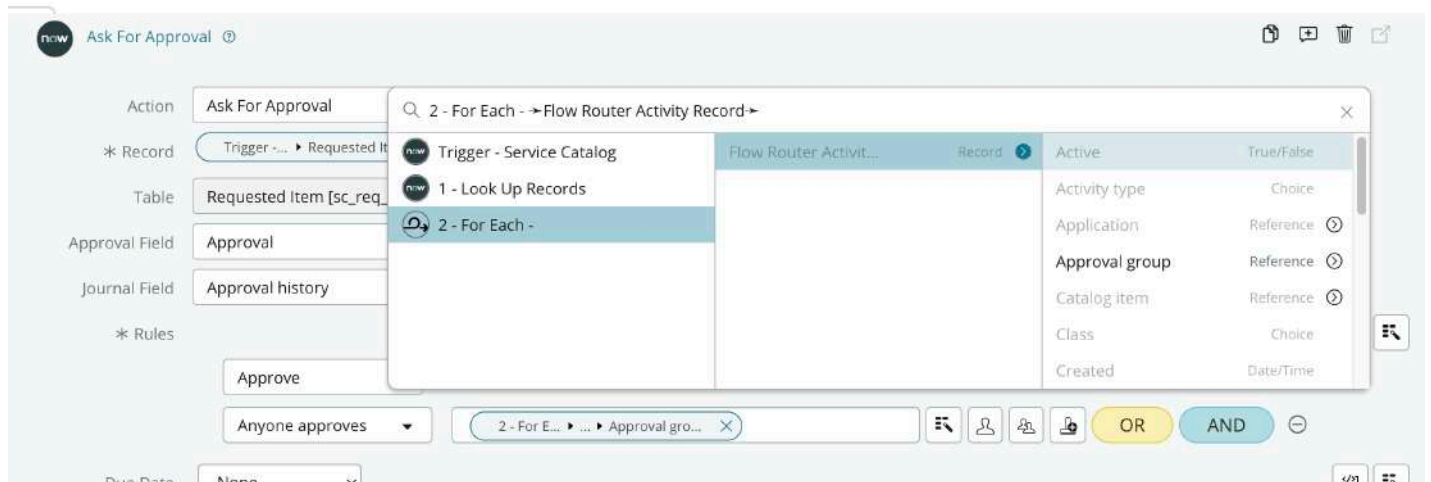
### 34. Click Ask For Approval



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

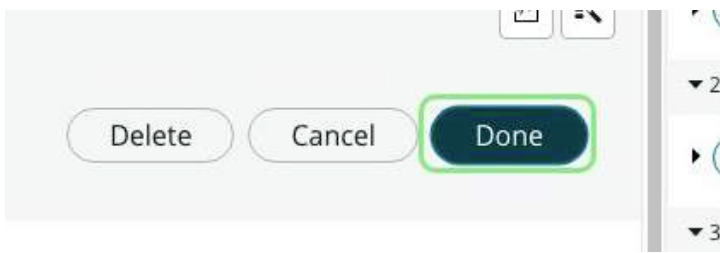


### 36. Drag 2 - For Each - Flow Router Activity Record > Approval group into the value for Anyone approves.

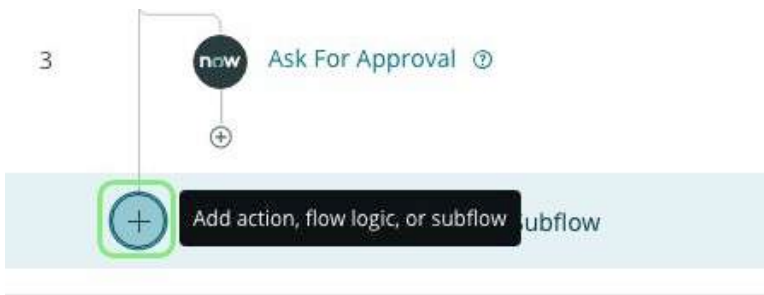




### 37. Click Done



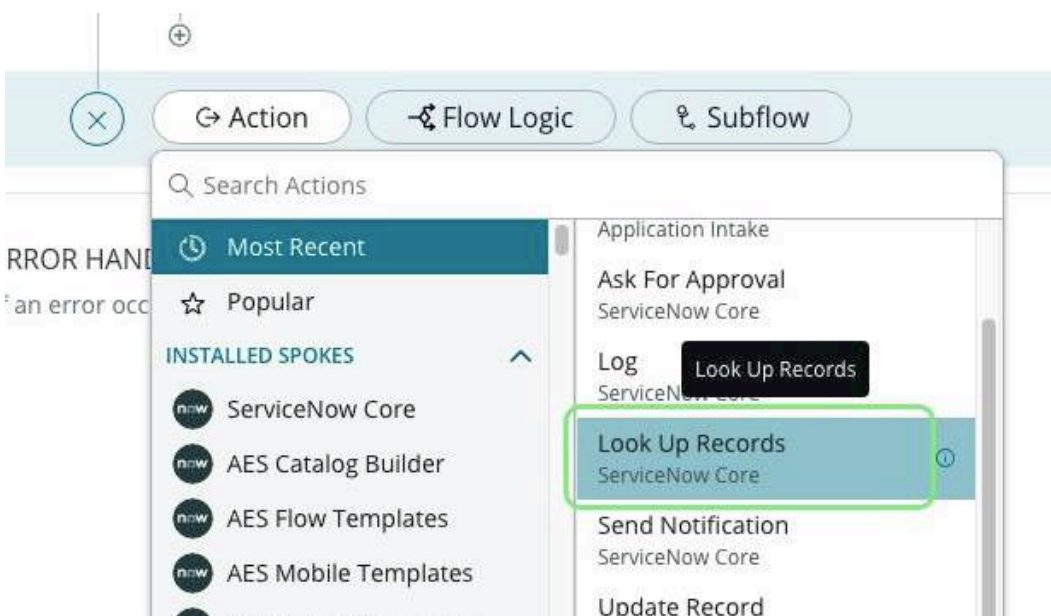
### 38. Click Add action, flow logic, or subflow



### 39. Click Action



### 40. Click Look Up Records...



## 41. Click Flow Router Activity as the table

now Look Up Records ?

Action Look Up Records

Table Select a Table

Conditions Flow router

Order by Flow Router Activity [u\_flow\_router\_activity]

Max Results 1000

a to z

## 42. Set Active is true

now Look Up Flow Router Activity Records ?

Action Look Up Records

Table Flow Router Activity [u\_flow\_router\_activity]

Conditions All of these conditions must be met

-- choose field --

Active

Order by Activity Type

## 43. Click AND

OR AND

Add AND condition

## 44. Click Catalog Item

The screenshot shows a configuration interface for a 'Look Up Records' action. The 'Table' is set to 'Flow Router Activity [u\_flow\_router\_activity]'. The 'Conditions' section is set to 'All of these conditions must be met' and contains two conditions: 'Active is true' and '-- choose field --'. A dropdown menu is open, showing a list of fields: Active, Activity Type, Application, Approval group, Catalog Item, Class, and Created. The 'Catalog Item' option is highlighted with a green box. Below the conditions, there are 'Order by' and 'Max Results' settings. At the bottom, there is a button with a plus sign and the text 'Add an Action, Flow Logic, or Subflow'.

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

The screenshot shows a configuration interface for a 'Look Up Records' action. The 'Table' is set to 'Flow Router Activity [u\_flow\_router\_activity]'. The 'Conditions' section is set to 'All of these conditions must be met' and contains two conditions: 'Active is true' and 'Catalog item is true'. A data pane is open, showing a table with the following fields:

Trigger - Service Catalog	Requested Item Re...	Record	Configuration item ...	Reference
Run Start Time UTC	Date/Time		Configuration item ...	Reference
Table Name	Table Name		Item	Reference
Run Start Date/Time	Date/Time			

Below the data pane, there are buttons for 'OR' and 'AND'.

## 46. Click AND

The screenshot shows a configuration interface for a 'Look Up Records' action. The 'Conditions' section is set to 'All of these conditions must be met' and contains two conditions: 'Active is true' and 'Catalog item is true'. The 'AND' button is highlighted with a green box, and a tooltip with the text 'Add AND condition' is visible below it.

## 47. Click Activity Type

Table: Flow Router Activity [u\_flow\_router\_activity]

Conditions: All of these conditions must be met

- Active is
- Catalog Item is
- choose field --

Order by: \$

Max Results: 1

Activity Type

## 48. Click Task

Action: Look Up Records

Table: Flow Router Activity [u\_flow\_router\_activity]

Conditions: All of these conditions must be met

- Active is true
- Catalog Item is Trigger - Service C... | ... | Ite... X
- Activity Type is Task

OR AND

## 49. In the Order field, click Order.

Order by: Select a field

Max Results: 1000

Order

a to z

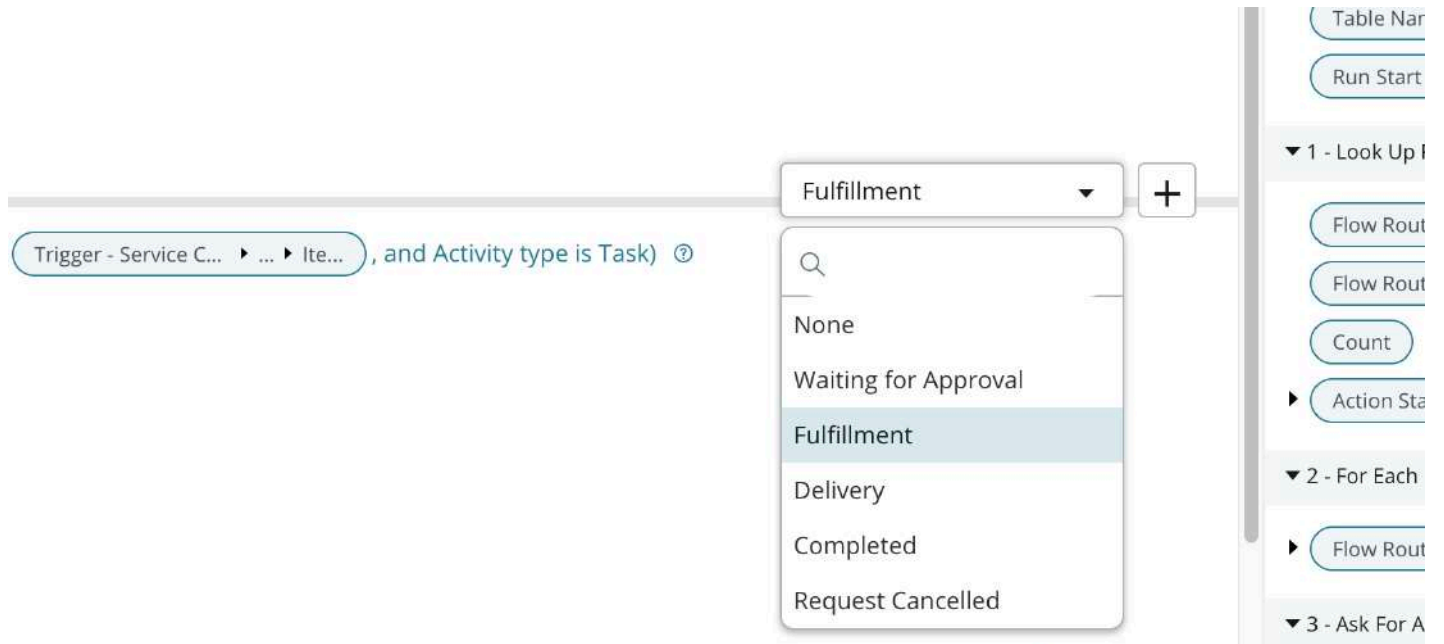
## 50. Click Done

Delete Cancel Done

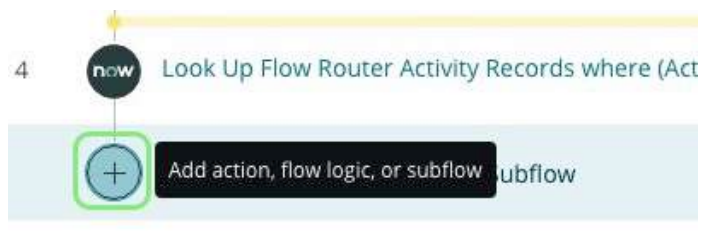
## 51. Click Add a Stage



## 52. Click Fulfillment



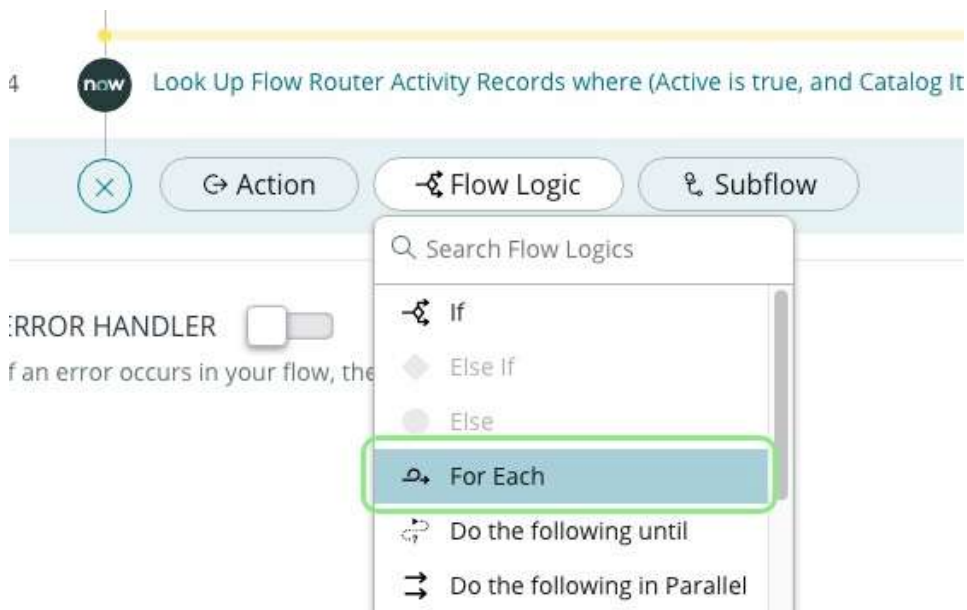
## 53. Click Add action, flow logic, or subflow



## 54. Click Flow Logic



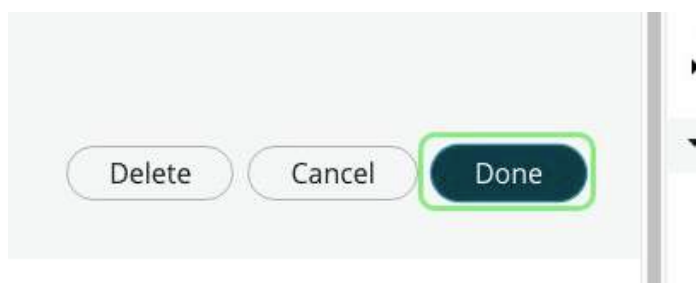
## 55. Click For Each



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



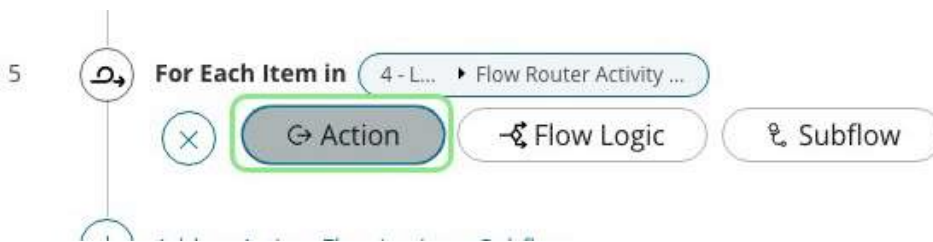
## 57. Click Done



## 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.

A screenshot of the Service Catalog Flow Router in Flow Designer. The flow includes several steps: a trigger, a 'For Each Item in' loop, an 'Ask For Approval' step, and another 'For Each Item in' loop. A search menu is open over the second 'For Each Item in' loop, showing a list of actions. The 'Create Catalog Task' action is highlighted in green. The right-hand side of the screen shows a 'Data' pane with various data fields like 'Run Start Time UTC', 'Table Name', and 'Run Start DateTime'.

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

A screenshot of the 'Create Catalog Task' action configuration in Flow Designer. The 'Action' is set to 'Create Catalog Task' and the 'Table Name' is 'Catalog Task [sc\_task]'. The 'Requested Item' field is currently empty. A green arrow points from the 'Requested Item Record' data field in the 'Data' pane on the right to the 'Requested Item' field in the configuration pane.

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

Item [Requested Item] Trigger -... > Requested Item ... X

Short Description 5 - F... > ... > Task short descri... X

Fields + Add field value

Wait

Template Catalog Item [Catalog Item] Select Template Catalog Item

Catalog Variables Available Selected

- Approval group
- Catalog item
- Class
- Created
- Created by
- Display name
- Order
- Package
- Protection policy
- Sys ID
- Tags
- Task assignment group
- Task description
- Task short description
- Update name

## 63. Click Add field value

\* Requested Item [Requested Item] Trigger -... > Requested Item ... X

Short Description 5 - F... > ... > Task short descri... X

Fields + Add field value

Wait

Template Catalog Item [Catalog Item] Select Template Catalog Item

Catalog Variables Available Selected

## 64. Click Assignment group

### Service Catalog Flow Router Inactive

now Create Catalog Task

Action Create Catalog Task

Table Name Catalog Task [sc\_task]

\* Requested Item [Requested Item] Trigger -... > Requested Item ... X

Short Description 5 - F... > ... > Task short descri... X

Fields Assignment group X Select Assignment group

+ Add field value

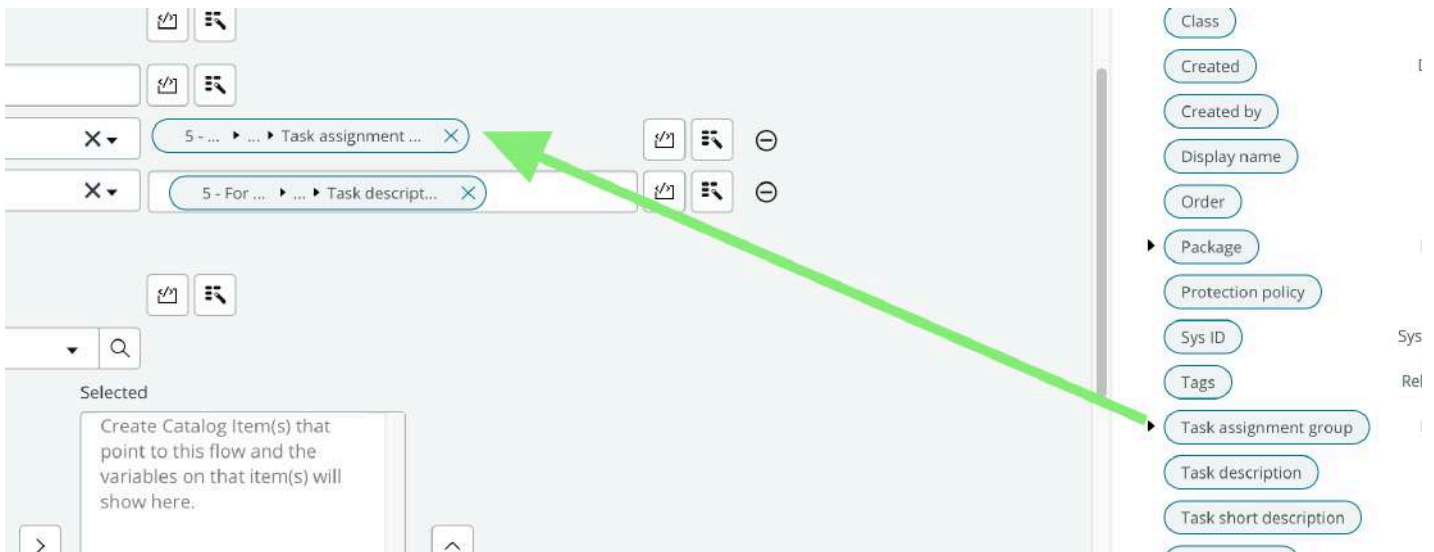
Wait

Template Catalog Item [Catalog Item] Select Template Catalog Item

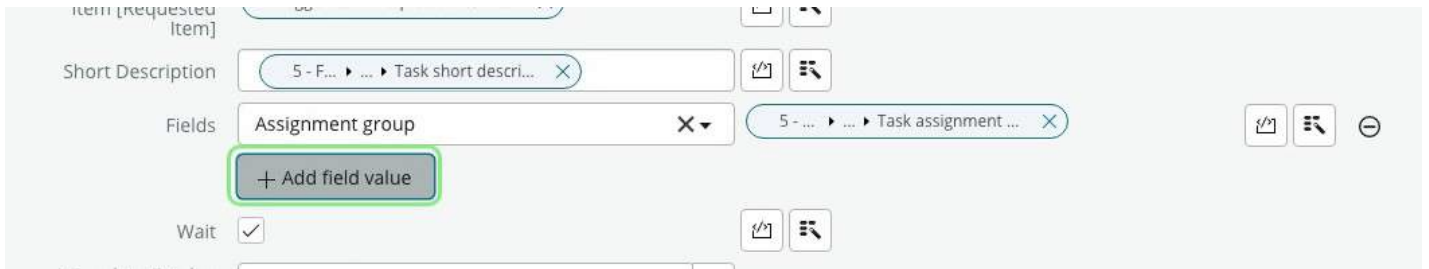
Catalog Variables Available Selected



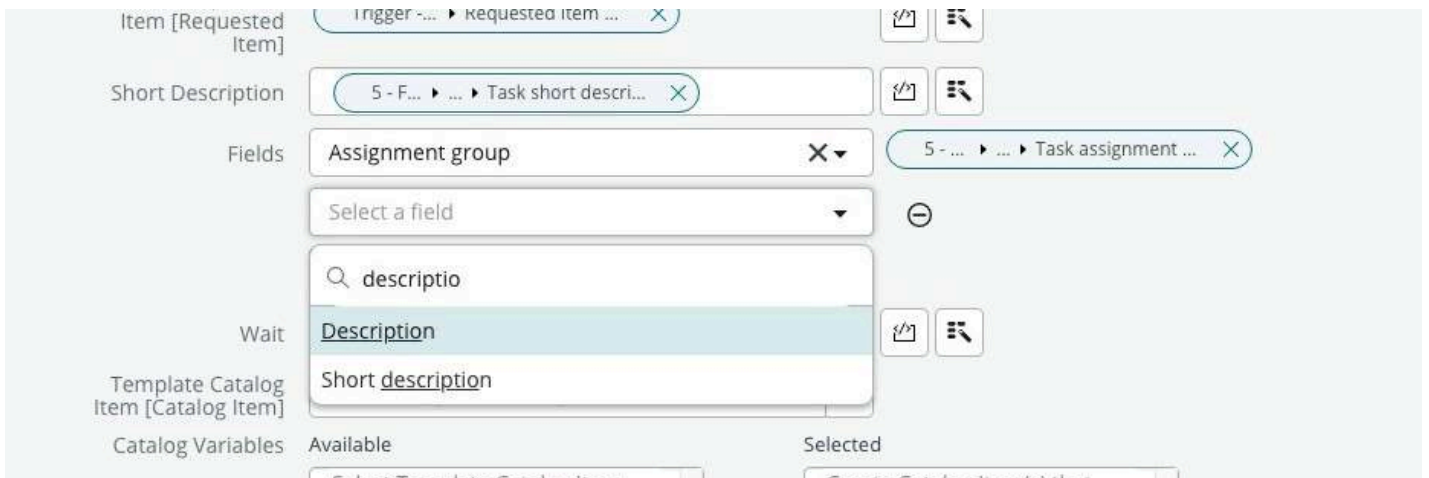
## 65. Drag 5 - For Each - Flow Router Activity Record > Task assignment group



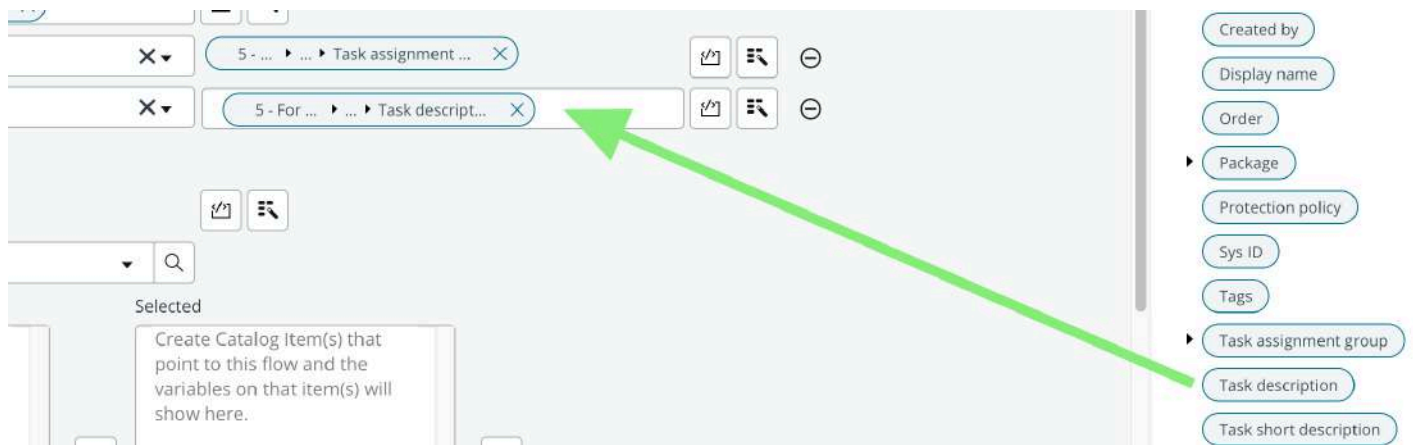
## 66. Click Add field value



## 67. Click Description



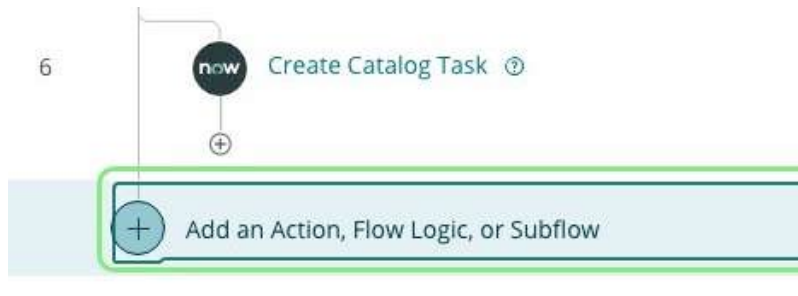
## 68. Drag 5 - For Each - Flow Router Activity Record > Task description



## 69. Click Done



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



## 71. Click Action

The screenshot shows a flow editor interface. At the top, a yellow horizontal bar is visible. Below it, a flow diagram consists of three steps:

- Step 4: A 'now' icon followed by the text "Look Up Flow Router Activity Records where (Active is true, and Catalog Item is Trigger - Service C... ▶ ... ▶ Ite...), and Activity Type is Ta".
- Step 5: A 'For Each Item in' loop icon followed by the text "4 - L... ▶ Flow Router Activity ...".
- Step 6: A 'now' icon followed by the text "Create Catalog Task ⓘ".

Below the flow diagram is a light blue palette with three buttons: "Action" (highlighted with a green border), "Flow Logic", and "Subflow".

At the bottom left, there is an "ERROR HANDLER" section with a toggle switch that is currently turned off.

## 72. Click Update Record...

The screenshot shows the same flow editor interface as in step 71, but with a search results dropdown menu open over the "Action" button in the palette.

The dropdown menu has a search bar at the top labeled "Search Actions". Below the search bar are three tabs: "Most Recent", "Popular", and "INSTALLED SPOKES".

Under the "INSTALLED SPOKES" tab, there is a list of installed actions:

- ServiceNow Core
- AES Catalog Builder
- AES Flow Templates
- AES Mobile Templates
- AES Portal UI Template
- AES Workspace UI Templ...

On the right side of the dropdown, there is a list of search results:

- Log ServiceNow Core
- Look Up Records ServiceNow Core
- Send No Update Record ServiceNow Core
- Update Record ServiceNow Core (highlighted with a green border)
- Delete Record ServiceNow Core
- Trigger Catalog Item publis...

The "Update Record" action is highlighted with a green border, and a black box with the text "Update Record" is overlaid on the search results list.

## 73. Drag highlighted link

Flow Router Activity Records where (Active is true, and Catalog Item IS (Trigger - Service Catalog > Item ...), and Activity Type is Task)

Record Item in 4 - L... > Flow Router Activity ...

Create Catalog Task

Requested Item Record

Action: Update Record

\* Record: Trigger -> Requested Item ...

\* Table: Requested Item [sc\_req\_item]

\* Fields: + Add field value

- Requested Item Record
- Active
- Activity due
- Actual end
- Actual start
- Additional assignee list
- Additional comments
- Approval
- Approval history
- Approval set
- Assigned to

## 74. Click Add field value

7 **now** Update Requested Item Record

Action: Update Record

\* Record: Trigger -> Requested Item ...

\* Table: Requested Item [sc\_req\_item]

\* Fields: + 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.

Record: Trigger -> Requested Item ...

Requested Item [sc\_req\_item]

Additional comments: Your item has been fulfilled. Please contact the

+ Add field value

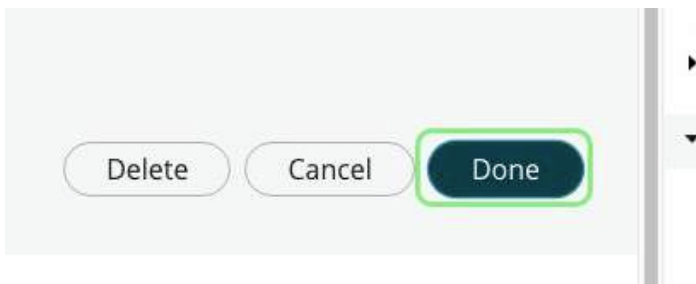
trigger - Service Catalog > Requested Item Record > Item

Item	Table Name	Field Name	Field Type	Field Value
Trigger - Service Catalog	Requested Item Re...	Configuration item ...	Reference	Configuration item ...
1 - Look Up Records		Run Start Time UTC	Date/Time	
2 - For Each -		Table Name	Table Name	
3 - Ask For Approval		Run Start Date/Time	Date/Time	
4 - Look Up Records				
5 - For Each -				
6 - Create Catalog Task				

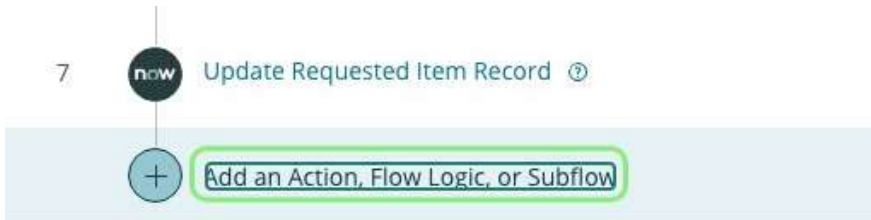
Flow Router Activity Records

- Count
- Action Status
- 5 - For Each
- Flow Router Activity Rec...
- Create Catalog Task
- atalog Task
- tion Status
- update Record
- Requested Item Record
- Requested Item Table
- Action Status

## 76. Click Done



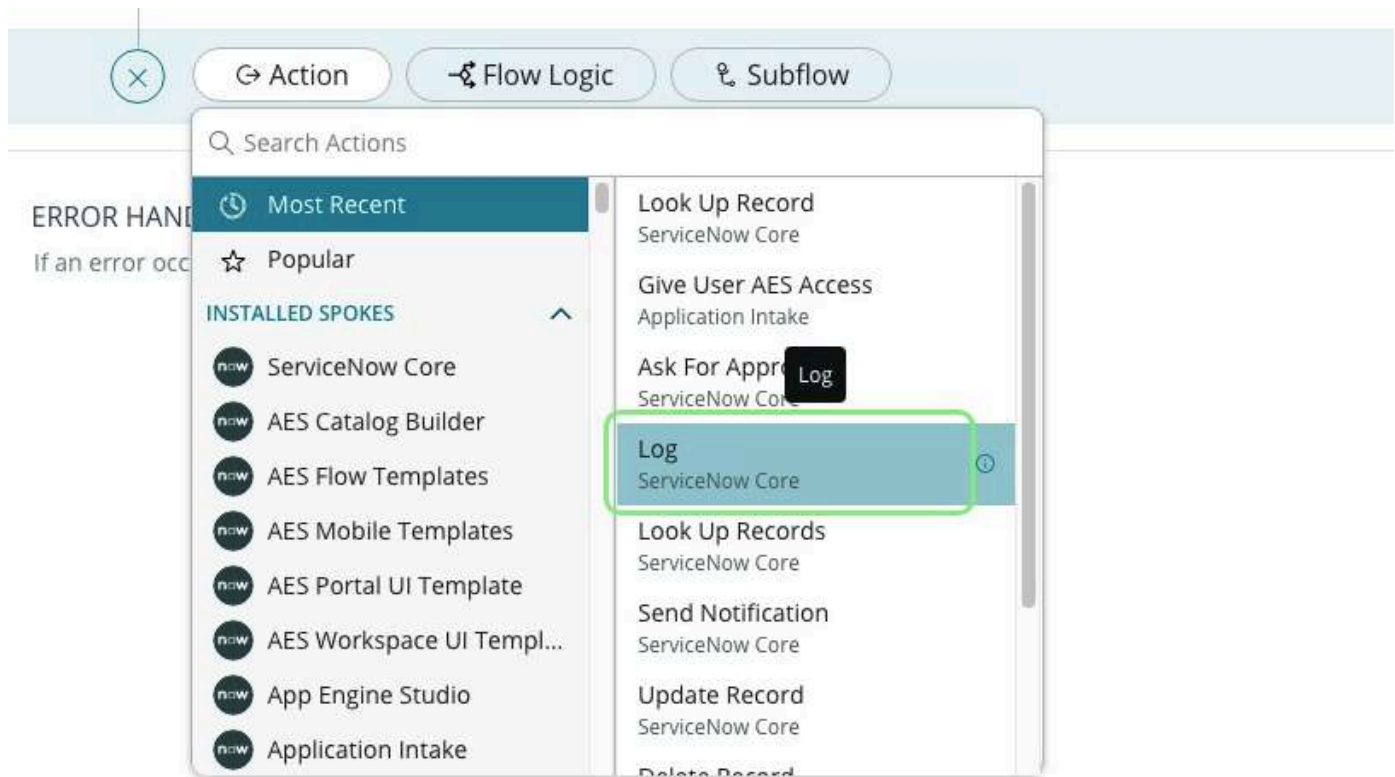
## 77. Click Add an Action, Flow Logic, or Subflow



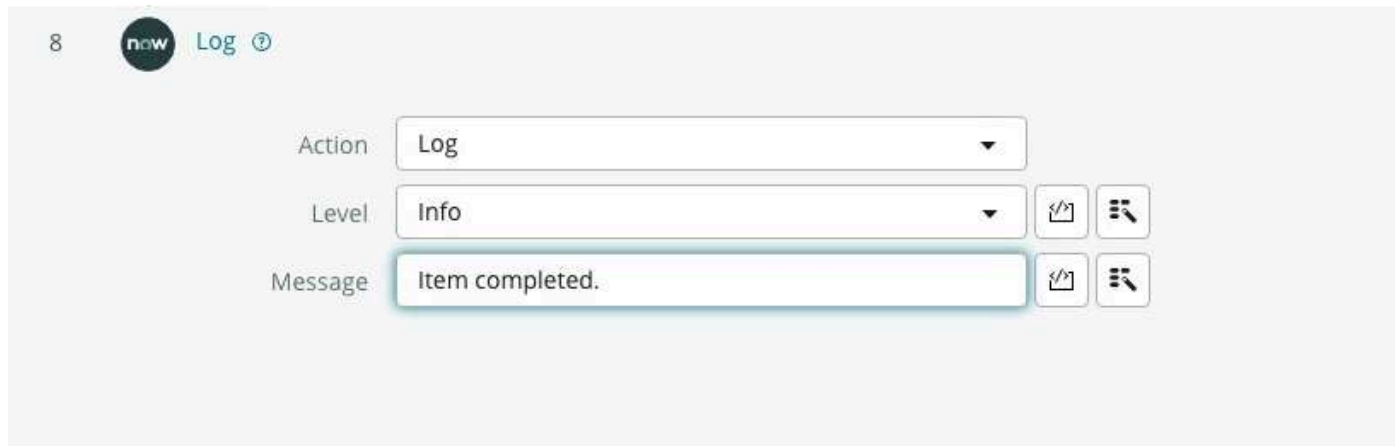
## 78. Click Action



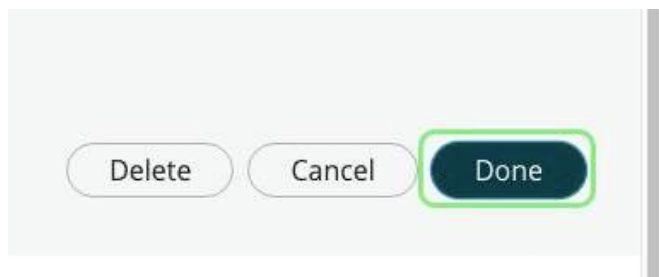
79. Add a Log action for a final "placeholder" to associate with the last Stage.



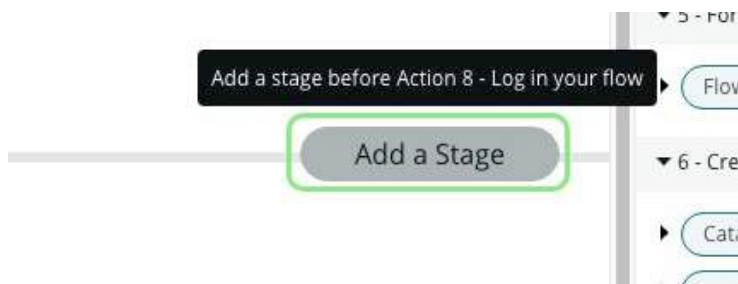
80. Add a message.



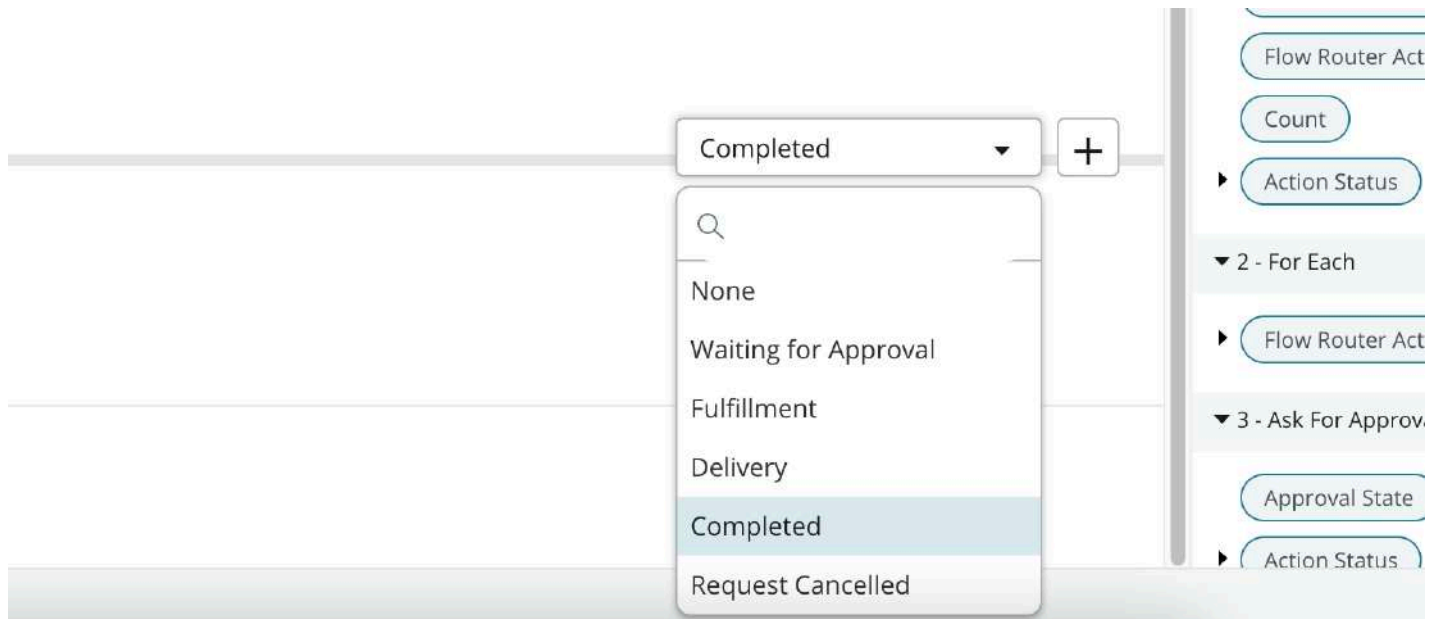
81. Click Done



## 82. Click Add a Stage above Step 8



## 83. Click Completed



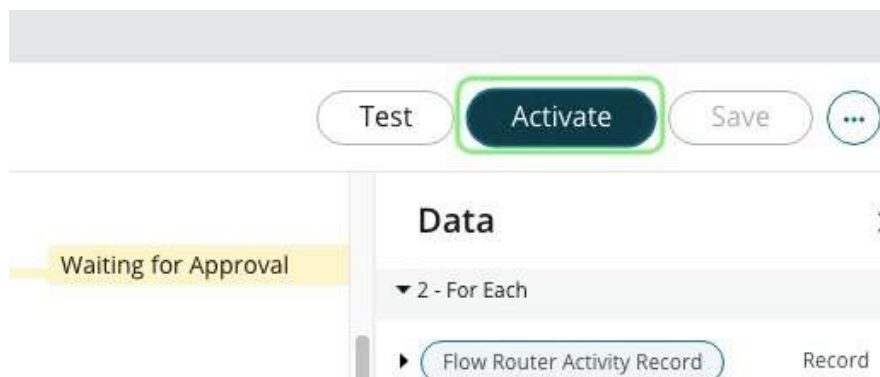
## 84. Testing on Catalog Flows can be performed several different ways.

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.

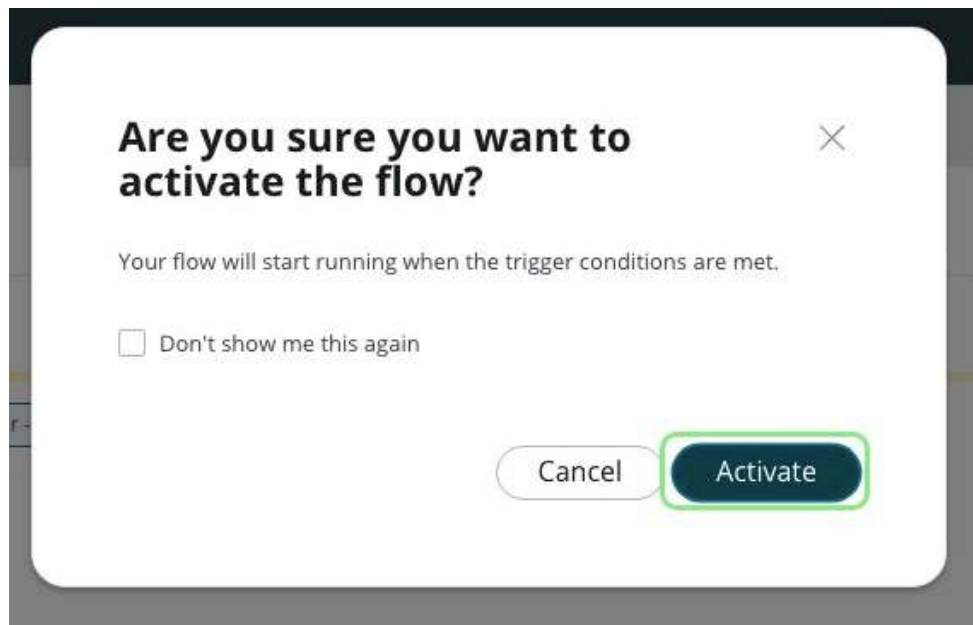
The built-in Flow Designer Test functionality is very powerful and records helpful data for troubleshooting. The system property to enable the logging of runtime data is turned off by default. Check out this [ServiceNow Docs](#) article for more information: [Activate flow reporting](#)

**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



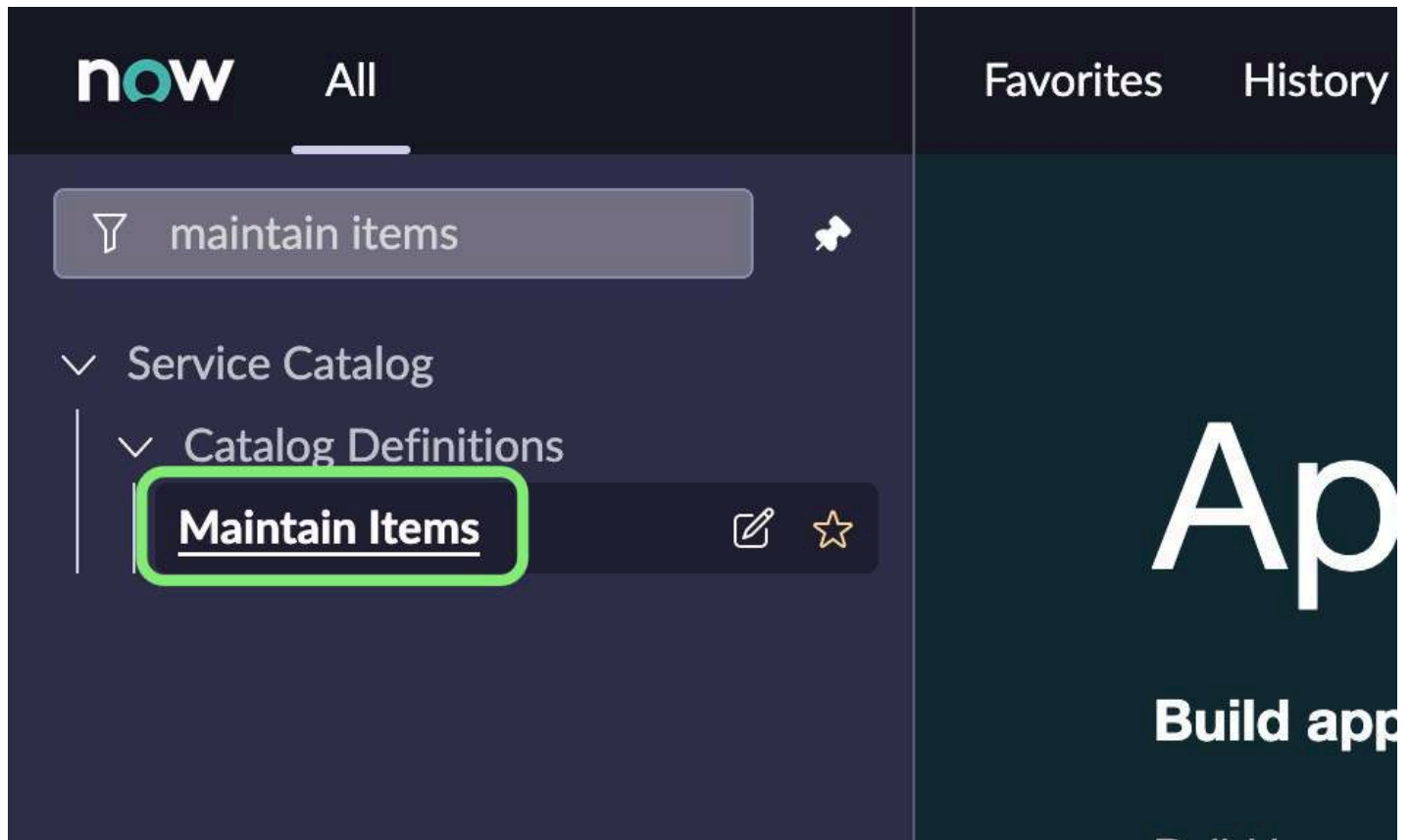
## 86. Click Activate





## 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.

The screenshot shows a table of Catalog Items. The table has columns for Name, Short description, Active, Roles, Catalogs, and Category. The first row is highlighted with a green box around the 'Database Access' item.

	Name	Short description	Active	Roles	Catalogs	Category
<input type="checkbox"/>	Database Access	Request Access to a ABC database	true		Service Catalog	Can We Help You?
	My Catalog		true		Service	Can We Help You?

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

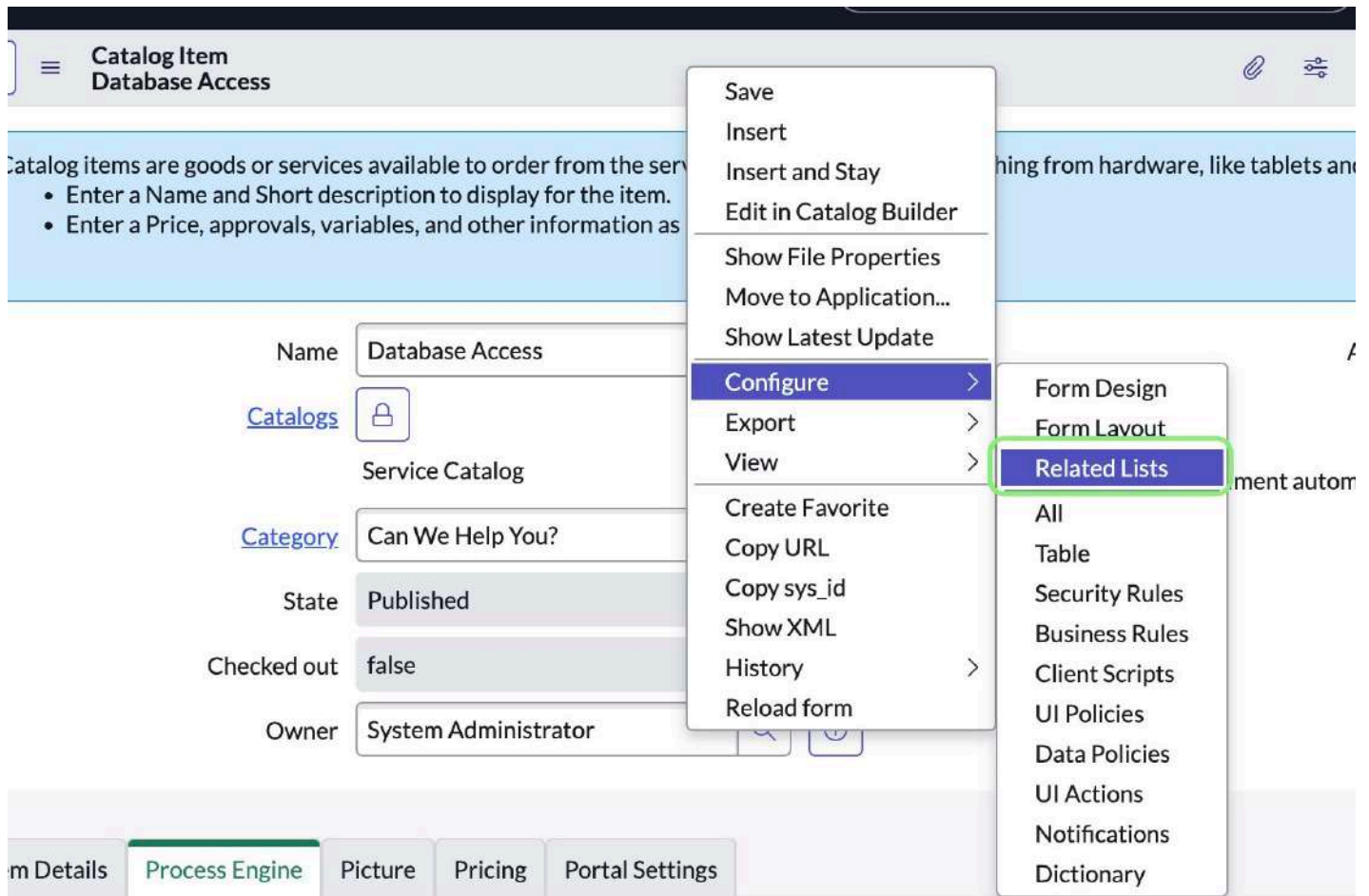
The screenshot shows the 'Process Engine' tab selected in a navigation bar. Below the navigation bar is a blue instruction box: 'Select the appropriate process engine for the catalog Item. Only one engine can be selected'. The 'Flow' field is set to 'Service Catalog Flow Router'. The 'Workflow' and 'Execution Plan' fields are empty. A green box highlights the 'Process Engine' tab and the 'Service Catalog Flow Router' value.

4. Right click the form header and click Save

The screenshot shows the 'Catalog Item Database Access' form header. A context menu is open over the header, with 'Save' highlighted. The menu options are: Save, Insert, Insert and Stay, Edit in Catalog Builder, Show File Properties, Move to Application..., Show Latest Update, Configure >, Export >, View >, Create Favorite, and Copy URL. The form fields below are: Name: Database Access; Catalogs: Service Catalog; Category: Can We Help You? A green box highlights the 'Save' option in the context menu.

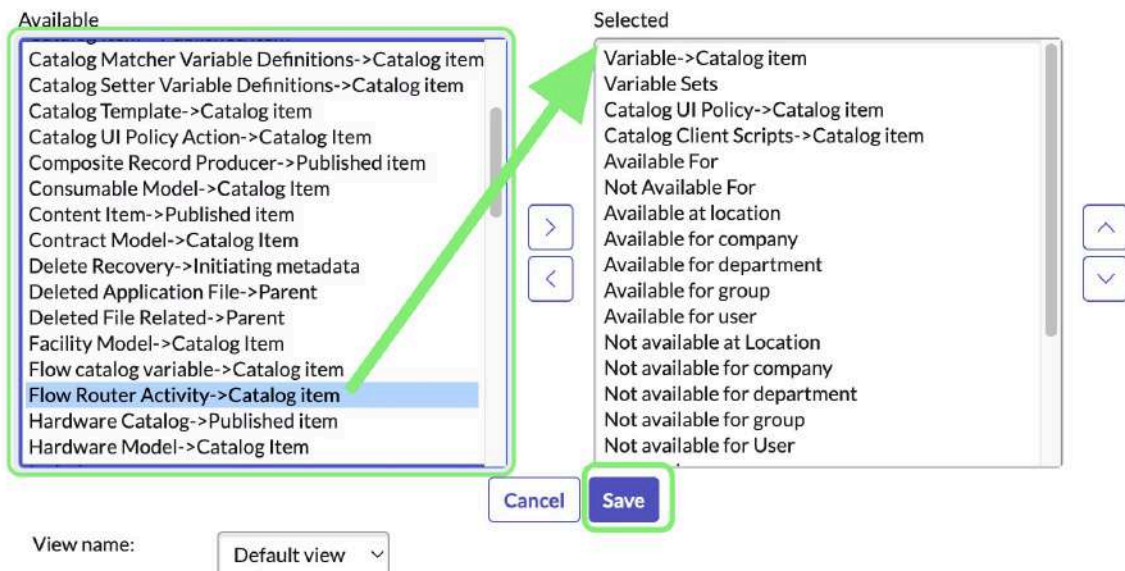
5. Right click the form header and click Configure > Related Lists

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.

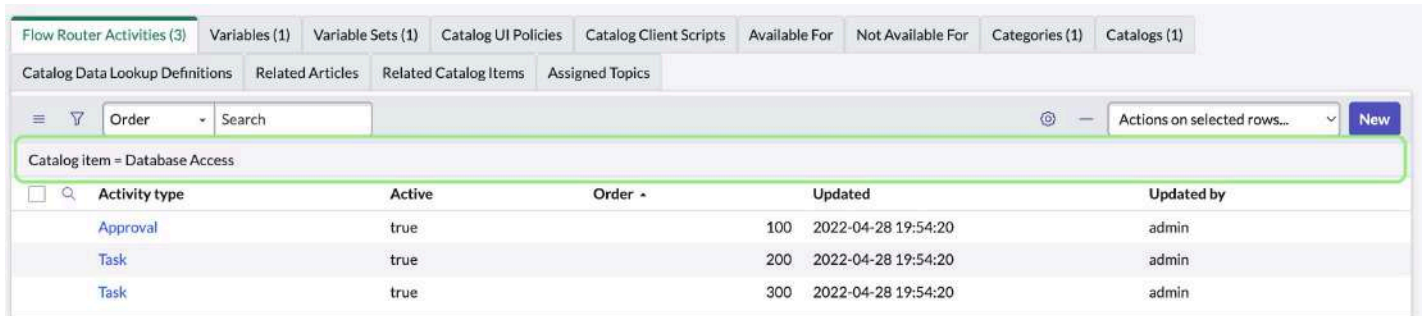
Selected lists on Catalog Item form



Selected Links

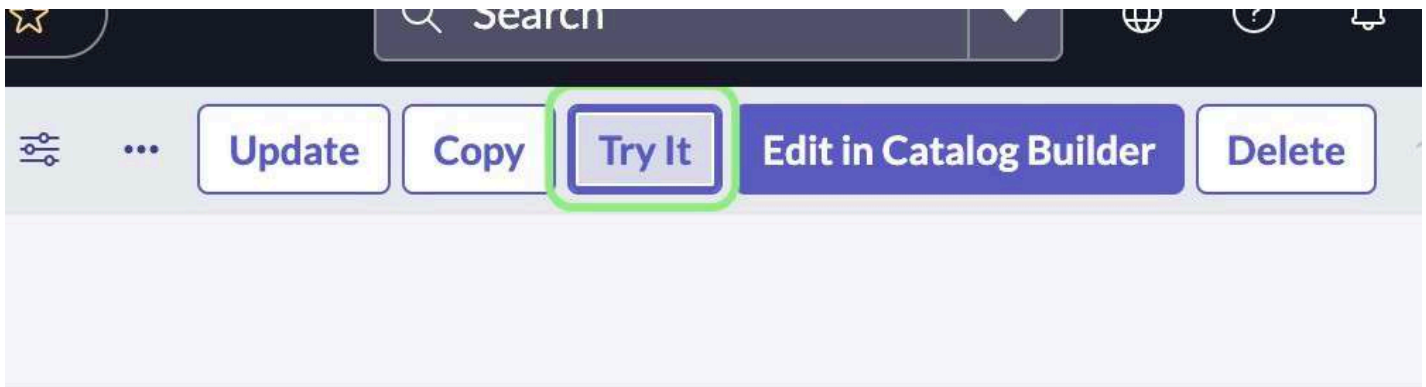
## 7. Check point: Are the Flow Router Activities created in Exercise 2 present in the related list?

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



Activity type	Active	Order	Updated	Updated by
Approval	true	100	2022-04-28 19:54:20	admin
Task	true	200	2022-04-28 19:54:20	admin
Task	true	300	2022-04-28 19:54:20	admin

## 8. Click Try It



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



Search catalog

icitudin iaculis.  
In euismod  
leifend ligula  
ibh diam, cursus  
am et accumsan

Order this Item

Quantity

Order Now

1



Delivery time

0 Days

Order Now

Add to Cart

Shopping Cart

Empty

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

Order Status

Thank you, your request has been submitted

Order Placed: 2022-04-28 19:58:57

Request Number: [REQ0010007](#) ☆

Estimated Delivery Date of Complete Order: 2022-04-28

Description	Delivery Date	Stage
<a href="#">Request Access to a ABC database</a>	2022-04-28	

[Back to Catalog](#)

[Continue Shopping](#)

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

Catalog Tasks **Approvers (3)** Group approvals (1)

Group Search

Approval for = RITM0010007

State	Approver	Comments
Requested		
Requested		
Requested		

- Show Matching
- Filter Out
- Copy URL to Clipboard
- Copy sys\_id
- Assign Tag >
- Approve**
- Reject

## 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.

<input type="checkbox"/>	<input type="text"/>	State	Approver
		Approved	Beth Anglin
		Requested	Fred Luddy
		Requested	ITIL User

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

RELATED LINKS

[Flow Context](#)

**Catalog Tasks** Approvers (3) Group approvals (1)

☰ ☹ Number ▾ Search

Request item = RITM0010007

<input type="checkbox"/>	Number ▾	Assignment group	Assigned to
--------------------------	----------	------------------	-------------

14. Open the task record.

**Catalog Tasks (1)** Approvers (3) Group approvals (1)

☰ ☹ Number ▾ Search

Request item = RITM0010007

<input type="checkbox"/>	Number ▾	Assignment group
<input type="checkbox"/>	<b>SCTASK0010006</b>	Database



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

Catalog Task SCTASK0010006

Number: SCTASK0010006

Assigned to: Fred Luddy

Configuration item: [Search]

Active:

Approval: Not Yet Requested

Priority: 4 - Low

State: Open

Request item: RITM0010007

Requested for: System Administrator

Short description: Configure Access

Description: Step 1, Step 2, Step 3

Work notes: Access configured!

Buttons: Update, Close Task, Delete, Post

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

Catalog Tasks (2) | Approvers (3) | Group approvals (1)

Number Search

Request item = RITM0010007

	Number	Assignment group	Assigned to
<input type="checkbox"/>	SCTASK0010007	Database Atlanta	(empty)
<input type="checkbox"/>	SCTASK0010006	Database	Fred Luddy

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

Catalog Task  
SCTASK0010007

Number: SCTASK0010007

Assigned to: Bow Ruggeri

Configuration item:

Active:

Approval: Not Yet Requested

Priority: 4 - Low

State: Open

Request item: RITM0010007

Requested for: System Administrator

Short description: Verify Access

Description: Step 1  
Step 2  
Step 3

Work notes: Access verified!

Buttons: Update, Close Task, Delete

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

Save

Add to Visual Task Board

Metrics Timeline

Configure >

Export >

View >

Create Favorite

Copy URL

Copy sys\_id

Show XML

History >

Reload form

Opened: 2022-04-28 19:58:57

Opened by: System Administrator

Stage: Fulfillment

State: Open

Quantity:

Order delivery:

Ordered:

Order Guide:

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

Requested Item  
RITM0010007

Number: RITM0010007

Item: Database Access

Request: REQ0010007

Requested for: System Administrator

Due date: 2022-04-28 19:58:56

Configuration item:

Watch list:

Opened: 2022-04-28 19:58:57

Opened by: System Administrator

Stage: Completed

State: Closed Complete

Quantity: 1

Estimated delivery:

Backordered:

Order Guide:

Variables

## 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.

Activities: 3

System  
State: Closed Complete was Open  
Field changes • 2022-04-28 20:01:52

System  
Your item Database Access has been fulfilled. Please contact the Service Desk for any questions.  
Additional comments • 2022-04-28 20:01:52

System Administrator  
Impact: 3 - Low  
Opened by: System Administrator  
Priority: 4 - Low  
State: Open  
Field changes • 2022-04-28 19:58:57

Update Delete

Related Links

## 21. Congrats! You are done!