



ULTRA COLLEGE OF ENGINEERING AND TECHNOLOGY

Department of Computer Science and Engineering

Completed a Project on

Streamlining Ticket Assignment for Efficient Support Operations

Submitted by

Team ID : NM2025TMID00105

- 1. Team Leader : Santhiya M (912922104033)**
- 2. Team Member : Logeswari K (912922104022)**
- 3. Team Member : Naga Navaneetha S (912922104026)**
- 4. Team Member : Akshaya Sree S (912922104004)**

Streamlining Ticket Assignment for Efficient Support Operations

Problem Statement :

The objective of this initiative is to implement an automated system for ticket routing at ABC Corporation, aimed at improving operational efficiency by accurately assigning support tickets to the appropriate teams. This solution aims to reduce delays in issue resolution, enhance customer satisfaction, and optimize resource utilization within the support department.

User

Create User

1. Open service now.
2. Click on All >> search for users
3. Select Users under system security
4. Click on new
5. Fill the following details to create a new user

User - Santhiya Murugesan

User ID: santhiya murugesan

First name: Santhiya

Last name: Murugesan

Title:

Department:

Password needs reset:

Locked out:

Active:

Email: 22cse33ucet@gmail.com

Identity type: Human

Language: -- None --

Calendar integration: Outlook

Time zone: System (America/Los_Angeles)

Date format: System (yyyy-MM-dd)

Business phone:

Mobile phone:

Photo: Click to add...

Internal Integration User:

Buttons: Update, Set Password, Delete

Related Links: View linked accounts, View Subscriptions, Reset a password

Entitled Custom Tables: Roles (1), Groups (1), Delegates, Subscriptions, User Client Certificates

6. Click on submit

Create one more user:

7. Create another user with the following details

User - Nila Subashini

User ID: nila subashini

First name: Nila

Last name: Subashini

Title:

Department:

Password needs reset:

Locked out:

Active:

Email: 22cse28ucet@gmail.com

Identity type: Human

Language: -- None --

Calendar integration: Outlook

Time zone: System (America/Los_Angeles)

Date format: System (yyyy-MM-dd)

Business phone:

Mobile phone:

Photo: Click to add...

Internal Integration User:

Buttons: Update, Set Password, Delete

Related Links: View linked accounts, View Subscriptions, Reset a password

Entitled Custom Tables: Roles, Groups, Delegates, Subscriptions, User Client Certificates

8. Click on submit

Groups

Create Groups

1. Open service now.
2. Click on All >> search for groups
3. Select groups under system security
4. Click on new
5. Fill the following details to create a new group

The screenshot shows the ServiceNow interface for creating a new group named 'certificates'. The left sidebar navigation bar is visible, showing categories like User, System Security, and Users and Groups. The main workspace displays the 'Group - certificates' creation form. The 'Name' field is populated with 'certificates'. The 'Manager' field is populated with 'Santhiya Murugesan'. The 'Description' field is empty. Below the form, a table lists group members, with one entry for 'Group = certificates'.

6. Click on submit

Create one more group:

1. Create another group with the following details

The screenshot shows the ServiceNow interface for creating a new group named 'Platform'. The left sidebar navigation bar is visible, showing categories like User, System Security, and Users and Groups. The main workspace displays the 'Group - Platform' creation form. The 'Name' field is populated with 'Platform'. The 'Manager' field is populated with 'Nila Subashini'. The 'Description' field is empty. Below the form, a table lists group members, with one entry for 'Group = Platform'.

2. Click on submit

Roles

Create Roles

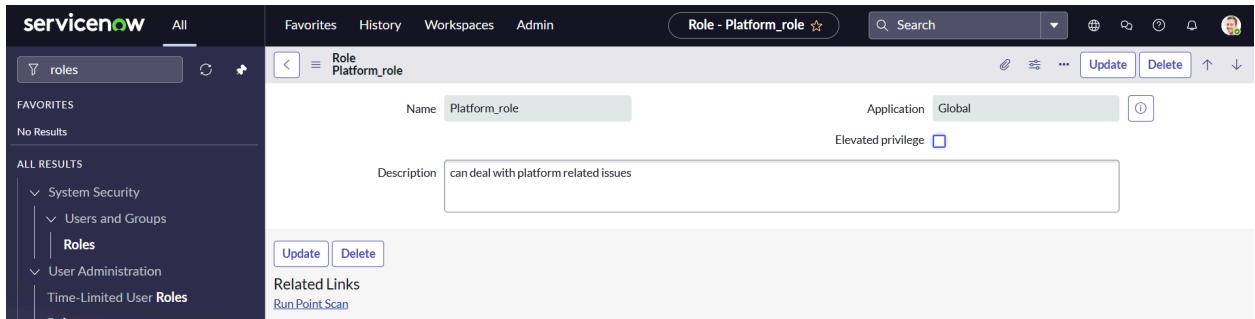
1. Open service now.
2. Click on All >> search for roles
3. Select roles under system security
4. Click on new
5. Fill the following details to create a new role

The screenshot shows the ServiceNow interface for creating a new role. On the left, there's a sidebar with a search bar containing 'roles'. Below it, under 'FAVORITES', it says 'No Results'. Under 'ALL RESULTS', there's a tree view with 'System Security' expanded, showing 'Users and Groups' and 'Roles' (which is selected). Other collapsed categories include 'User Administration' and 'Time-Limited User Roles'. The main content area has a title 'Role - Certification_role'. It shows the 'Name' field as 'Certification_role', 'Application' as 'Global', and 'Elevated privilege' as 'unchecked'. The 'Description' field contains the text 'can deal with certification issues'. At the bottom of this panel are 'Update' and 'Delete' buttons. Above the main content area, there's a navigation bar with tabs for 'Favorites', 'History', 'Workspaces', and 'Admin'. To the right of the title, there's a search bar and several small icons. The top right corner has a user profile icon.

6. Click on submit

Create one more role:

7. Create another role with the following details



8. Click on submit

Table

Create Table

1. Open service now.
2. Click on All >> search for tables
3. Select tables under system definition
4. Click on new
5. Fill the following details to create a new table

Label : Operations related

Check the boxes Create module & Create mobile module

6. Under new menu name : Operations related
7. Under table columns give the columns

Column label	Type	Reference	Max length	Default value	Display
Updates	Integer	(empty)	40		false
<input checked="" type="radio"/> name	String	(empty)	40		false
<input checked="" type="radio"/> ticket raised data	Date/Time	(empty)	40		false
<input checked="" type="radio"/> assigned to user	Reference	User	32		false
<input checked="" type="radio"/> comment	String	(empty)	40		false
Sys ID	Sys ID (GUID)	(empty)	32		false
<input checked="" type="radio"/> priority	String	(empty)	40		false
<input checked="" type="radio"/> Created by	String	(empty)	40		false
<input checked="" type="radio"/> issue	String	(empty)	40		false
<input checked="" type="radio"/> Updated by	String	(empty)	40		false
<input checked="" type="radio"/> service request number	String	(empty)	40	javascript:getNextObjNumberPadded();	false
<input checked="" type="radio"/> assigned to group	Reference	Group	32		false
<input checked="" type="radio"/> Updated	Date/Time	(empty)	40		false
<input checked="" type="radio"/> Created	Date/Time	(empty)	40		false
Insert a new row...					

8. Click on submit

Create choices for the issue filed by using form design

Choices are

- unable to login to platform
- 404 error
- regarding certificates
- regarding user expired

The screenshot shows the ServiceNow interface for managing dictionary entries. The left sidebar is collapsed, showing various system categories like System Classic Mobile UI, System Clone, and System Definition. The main content area is titled "Dictionary Entry - issue". A tooltip explains that this page displays a list of suggested values in a Choice list. Below it, a dropdown menu labeled "Choice" is set to "-- None --". There are "Delete Column" and "Update" buttons. A "Related Links" section includes "ShowTable", "Run Point Scan", and "Advanced view". The "Choices" tab is selected in a navigation bar. A search bar is present above a table titled "Choices". The table has columns: Q, Label, Value, Language, Sequence, Inactive, and Updated. It lists four rows:

Q	Label	Value	Language	Sequence	Inactive	Updated
①	unable to login to platform	en			false	2025-10-30 11:47:46
①	404 error	en			false	2025-10-30 11:47:59
①	regarding certificates	en			false	2025-10-30 11:48:31
①	regarding user expired	en			false	2025-10-30 11:49:30

An "Insert a new row..." button is at the bottom of the table.

Assign Roles & Users To Groups

Assign roles & users to certificate group

1. Open service now.
2. Click on All >> search for tables
3. Select tables under system definition
4. Select the certificates group
5. Under group members
6. Click on edit
7. Select Santhiya Mueugesan and save
8. Click on roles
9. Select Certification_role and save

The screenshot shows the ServiceNow interface for managing dictionary entries. The left sidebar has a search bar with 'table' typed in. The main content area is titled 'Dictionary Entry - issue'. It displays a message about suggested values for a Choice list. Below this is a dropdown menu labeled 'Choice' with the option '-- None --'. There are 'Delete Column' and 'Update' buttons. A 'Related Links' section includes 'ShowTable', 'Run Point Scan', and 'Advanced view'. At the bottom, there's a table titled 'Choices' with columns: Q, Label, Value, Language, Sequence, Inactive, and Updated. The table contains five rows:

Q	Label	Value	Language	Sequence	Inactive	Updated
①	unable to login to platform	en			false	2025-10-30 11:47:46
①	404 error	en			false	2025-10-30 11:47:59
①	regarding certificates	en			false	2025-10-30 11:48:31
①	regarding user expired	en			false	2025-10-30 11:49:30
Insert a new row...						

Assign roles & users to platform group

1. Open service now.
2. Click on All >> search for tables
3. Select tables under system definition
4. Select the platform group
5. Under group members
6. Click on edit
7. Select Nila Subashini and save
8. Click on roles
9. Select Platform_role and save

Assign role to table

1. Open service now.
2. Click on All >> search for tables
3. Select operations related table
4. Click on the Application Access
5. Click on u_operations_related read operation
6. Click on the profile on top right side
7. Click on elevate role
8. Click on security admin and click on update
9. Under Requires role
10. Double click on insert a new row
11. Give platform role

12. And add certificate role

13. Click on update

The screenshot shows the ServiceNow interface for managing Access Control Rules. The left sidebar contains various service categories like Self-Service, Business Applications, Dashboards, etc. The main content area is titled 'Access Control - u_operations_related'. It displays a single rule named 'Operations related [u_operations_related]' with a description 'Default access control on u_operations_related'. The 'Applies To' section shows 'No.of records matching the condition: 0'. Below this, there's a 'Conditions' section with a note about decision types (Allow Access vs Deny Access) and a 'More Info' link. The 'Requires role' section lists three roles: 'u_operations_related_user', 'Platform_role', and 'Certification_role'. The 'Certification_role' entry is highlighted with a blue background.

14. Click on u_operations_related write operation

15. Under Requires role

16. Double click on insert a new row

17. Give platform role

18. And add certificate role

Create ACL

1. Open service now.

2. Click on All >> search for ACL

3. Select Access Control(ACL) under system security

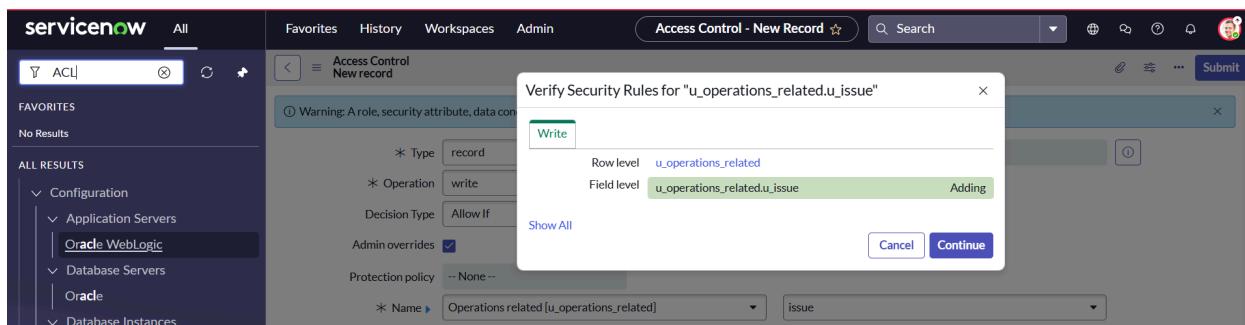
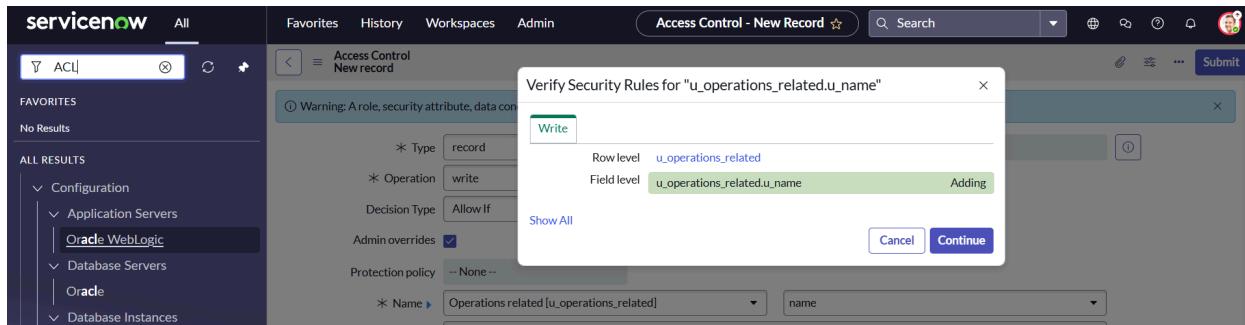
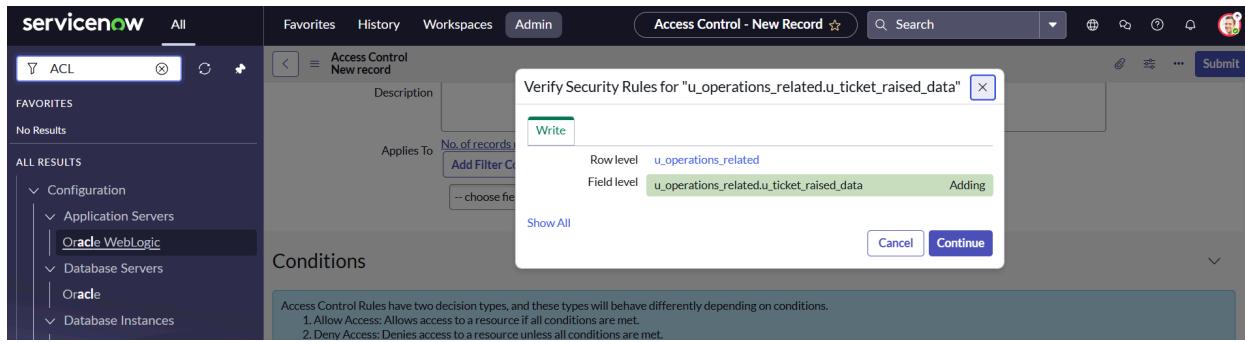
4. Click on new

5. Fill the following details to create a new ACL

The screenshot shows the ServiceNow interface for creating a new Access Control (ACL) record. The left sidebar shows a tree view of Configuration items, with 'Oracle WebLogic' selected. The main area is titled 'Access Control - New Record'. A modal window titled 'Verify Security Rules for "u_operations_related.u_service_request_number"' is open. Inside the modal, the 'Type' is set to 'record' and 'Operation' to 'write'. The 'Decision Type' is 'Allow If'. Under 'Protection policy', there is a dropdown menu set to 'Operations related [u_operations_related]'. The 'Field level' is set to 'u_operations_related.u_service_request_number' with the status 'Adding'. The 'Name' field contains 'Operations related [u_operations_related]' and the 'Description' field is empty. The 'Applies To' section shows 'No. of records matching the condition: 0'. Buttons for 'Cancel' and 'Continue' are at the bottom right of the modal.

6. Scroll down under requires role
7. Double click on insert a new row
8. Give admin role
9. Click on submit
10. Similarly create 4 acl for the following fields

This screenshot is identical to the previous one, showing the configuration of a new ACL for the field 'u_operations_related.u_priority'. The modal window has the same settings: Type 'record', Operation 'write', Decision Type 'Allow If', Protection policy 'Operations related [u_operations_related]', Field level 'u_operations_related.u_priority', and Name 'Operations related [u_operations_related]'. The 'Description' field is empty, and the 'Applies To' section shows 'No. of records matching the condition: 0'. The 'Continue' button is visible at the bottom right of the modal.

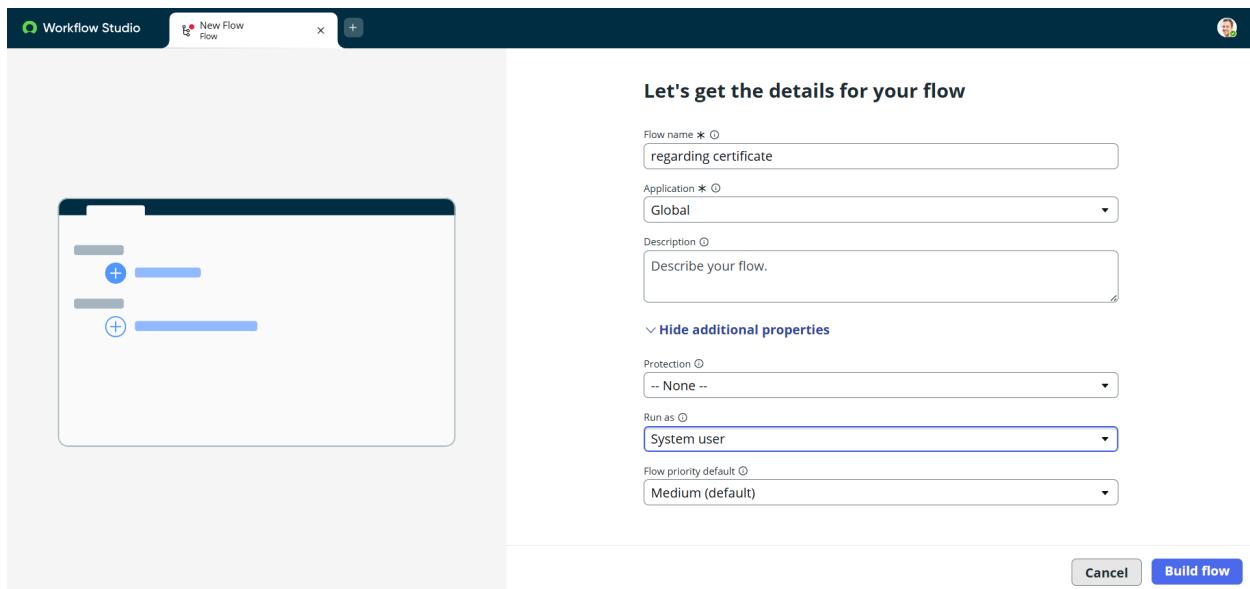


Name	Decision Type	Operation	Type	Active	Updated by	Updated
u_operation	Search	Search	Search	Search	Search	Search
u_operations_related	Allow If	delete	record	true	admin	2025-10-29 08:40:39
u_operations_related	Allow If	write	record	true	admin	2025-10-29 08:40:39
u_operations_related	Allow If	read	record	true	admin	2025-10-29 08:40:39
u_operations_related	Allow If	create	record	true	admin	2025-10-29 08:40:39
u_operations_related.u_issue	Allow If	write	record	true	admin	2025-10-30 12:43:21
u_operations_related.u_name	Allow If	write	record	true	admin	2025-10-30 12:42:00
u_operations_related.u.priority	Allow If	write	record	true	admin	2025-10-30 12:39:21
u_operations_related.u_service_request_n...	Allow If	write	record	true	admin	2025-10-30 12:37:26
u_operations_related.u_ticket_raised_data	Allow If	write	record	true	admin	2025-10-30 12:40:26

Flow

Create a Flow to Assign operations ticket to group

1. Open service now.
2. Click on All >> search for Flow Designer
3. Click on Flow Designer under Process Automation.
4. After opening Flow Designer Click on new and select Flow.
5. Under Flow properties Give Flow Name as “ Regarding Certificate”.
6. Application should be Global.
7. Select Run user as “ System user ” from that choice.
8. Click on Submit.



1. Click on Add a trigger
2. Select the trigger in that Search for “create or update a record” and select that.
3. Give the table name as “ Operations related ”.

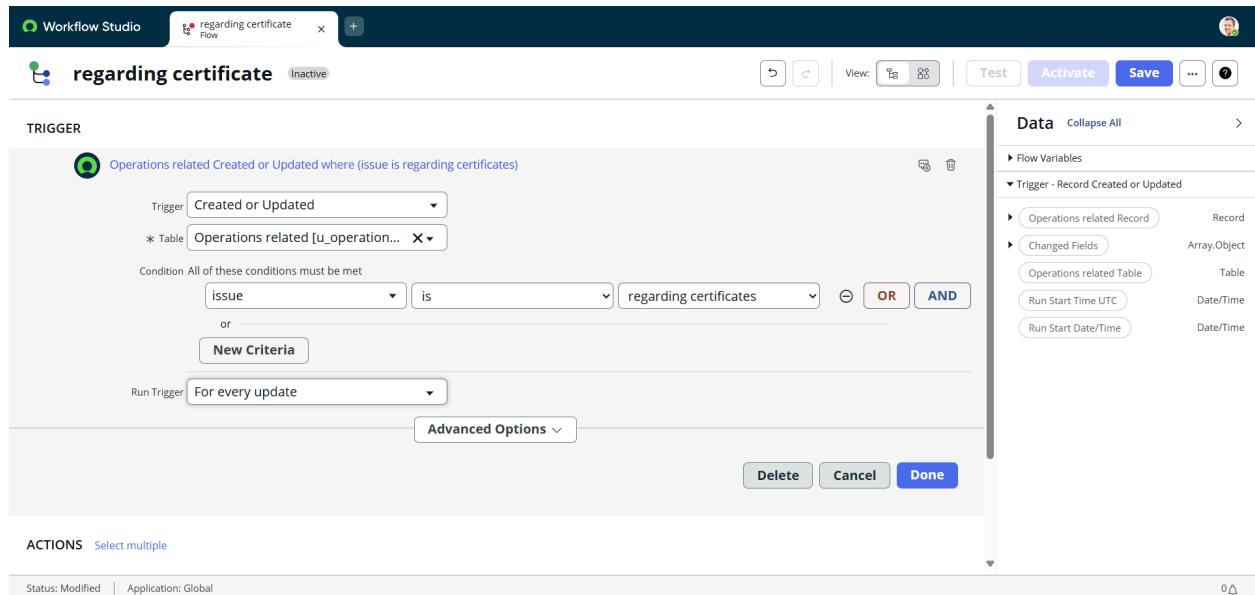
4. Give the Condition as

Field : issue

Operator : is

Value : Regrading Certificates

5. After that click on Done.



6. Now under Actions.

7. Click on Add an action.

8. Select action in that search for "Update Record".

9. In Record field drag the fields from the data navigation from left side

10. Table will be auto assigned after that

11. Give the field as "Assigned to group"

12. Give value as "Certificates"

13. Click on Done.

14. Click on Save to save the Flow.

15. Click on Activate.

Workflow Studio regarding certificate Flow Inactive

regarding certificate Inactive

TRIGGER

Operations related Created or Updated where (issue is regarding certificates)

ACTIONS Select multiple

1 Update Operations related Record

Action: Update Record

* Record: Trigger ... Operations relate... Delete

* Table: Operations related [u_operation... Delete

* Fields: assigned to group Delete certificates Delete

+ Add field value

Data Collapse All

- ▶ Flow Variables
- ▼ Trigger - Record Created or Updated
 - ▶ Operations related Record Record
 - ▶ Changed Fields Array.Object
 - ▶ Operations related Table Table
 - ▶ Run Start Time UTC Date/Time
 - ▶ Run Start Date/Time Date/Time
- ▼ 1 - Update Record
 - ▶ Operations related Record Record
 - ▶ Operations related Table Table
 - ▶ Action Status Object

Delete **Cancel** **Done**

Status: Modified | Application: Global

Workflow Studio regarding certificate Flow Active

regarding certificate Active

TRIGGER

Operations related Created or Updated where (issue is regarding certificates)

ACTIONS Select multiple

1 Update Operations related Record

+ Add an Action, Flow Logic, or Subflow

ERROR HANDLER Toggle

If an error occurs in your flow, the actions you add here will run.

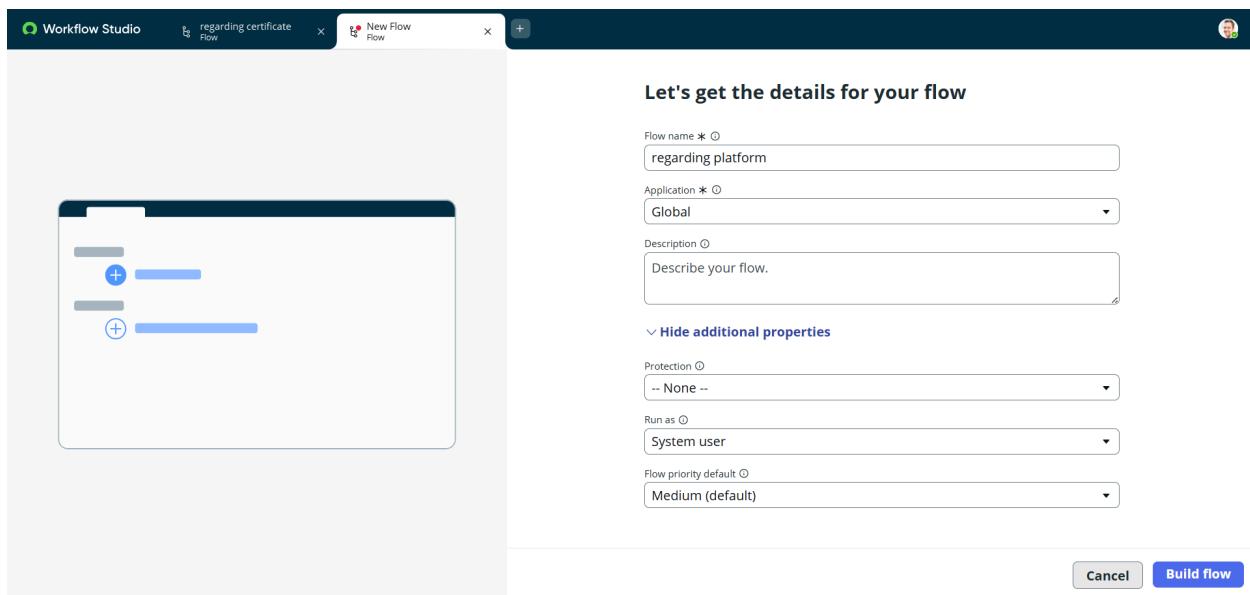
Data Collapse All

- ▶ Flow Variables
- ▼ Trigger - Record Created or Updated
 - ▶ Operations related Record Record
 - ▶ Changed Fields Array.Object
 - ▶ Operations related Table Table
 - ▶ Run Start Time UTC Date/Time
 - ▶ Run Start Date/Time Date/Time
- ▼ 1 - Update Record
 - ▶ Operations related Record Record
 - ▶ Operations related Table Table
 - ▶ Action Status Object

Status: Published | Application: Global

Create a Flow to Assign operations ticket to Platform group

1. Open service now.
2. Click on All >> search for Flow Designer
3. Click on Flow Designer under Process Automation.
4. After opening Flow Designer Click on new and select Flow.
5. Under Flow properties Give Flow Name as “ Regarding Platform ”.
6. Application should be Global.
7. Select Run user as “ System user ” from that choice.
8. Click on Submit.



1. Click on Add a trigger
2. Select the trigger in that Search for “create or update a record” and select that.
3. Give the table name as “ Operations related ”.

4. Give the Condition as

Field : issue

Operator : is

Value : Unable to login to platform

5. Click on New Criteria

Field : issue

Operator : is

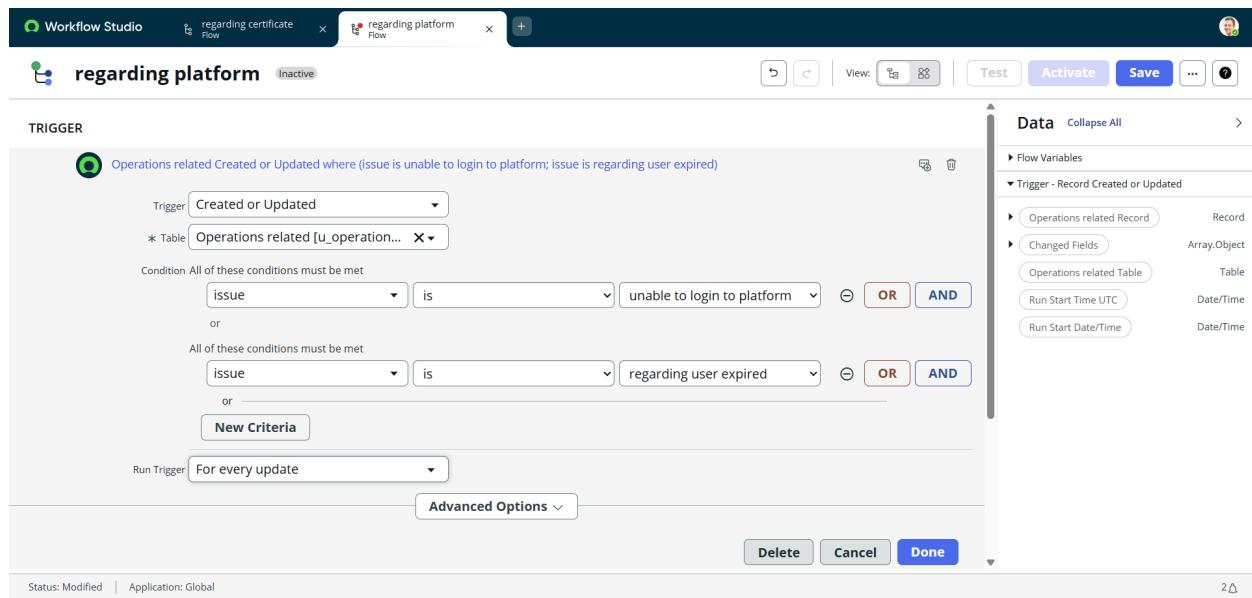
Value : 404 Error

6. Click on New Criteria

Field : issue

Operator : is

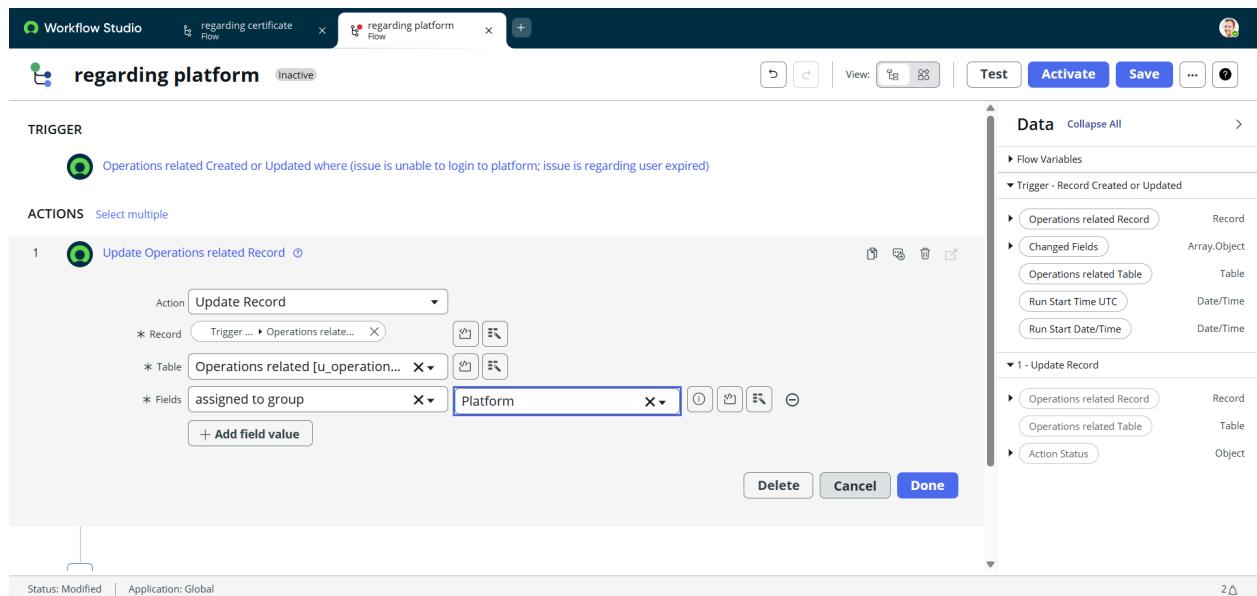
Value : Regarding User expired

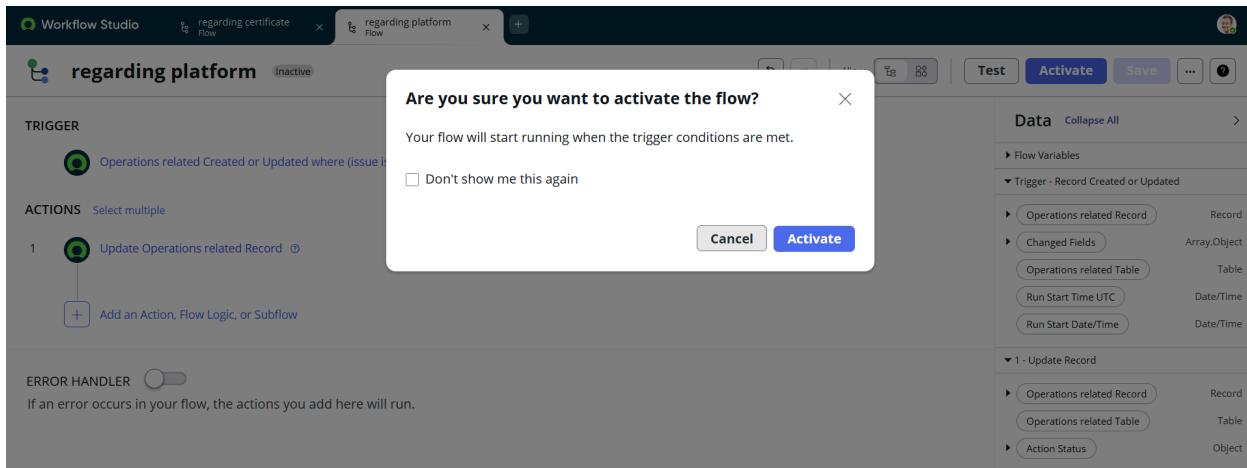


7. After that click on Done.

8. Now under Actions.

9. Click on Add an action.
10. Select action in that search for “ Update Record ”.
11. In Record field drag the fields from the data navigation from left side
12. Table will be auto assigned after that
13. Give the field as “ Assigned to group ”.
14. Give value as “ Platform ”.
15. Click on Done.
16. Click on Save to save the Flow.
17. Click on Activate.





servicenow All Favorites History Workspaces : Operations related - New Record star

[Operations related](#) [New record](#)

service request number	<input type="text"/>	assigned to user	<input type="text"/>
name	<input type="text"/> abc	comment	<input type="text"/> not working properly
assigned to group	<input type="text"/>	priority	<input type="text"/>
ticket raised date	<input type="text"/>	issue	<input type="text"/> regarding certificates

[Submit](#)

servicenow All Favorites History Workspaces : Operations related - hello world star

[Operations related](#) [hello world](#)

service request number	<input type="text"/>	assigned to user	<input type="text"/>
name	<input type="text"/> hello world	comment	<input type="text"/>
assigned to group	<input type="text"/> Platform	priority	<input type="text"/>
ticket raised date	<input type="text"/>	issue	<input type="text"/> regarding user expired

[Update](#) [Delete](#)

The screenshot shows the ServiceNow ticket creation interface. The title bar says "Operations related - hello". The form fields include:

- service request number: (empty)
- name: hello
- assigned to group: certificates
- ticket raised data: (empty)
- assigned to user: (empty)
- comment: issue with certificate
- priority: (empty)
- issue: regarding certificates

Buttons at the bottom: Update, Delete.

The screenshot shows the ServiceNow search results for "Operations related". The search term "name" is entered. The results table has columns: name, assigned to group, assigned to user, comment, issue, priority, service request number, and ticket raised data. The results are:

	name	assigned to group	assigned to user	comment	issue	priority	service request number	ticket raised data
	hello	certificates	(empty)	issue with certificate	regarding certificates	(empty)		(empty)
	abc	certificates	(empty)	not working properly	regarding certificates	(empty)		(empty)
	hello world	Platform	(empty)		regarding user expired	(empty)		(empty)

Conclusion :

The implementation of the automated ticket routing system at ABC Corporation has been a significant success. By leveraging the capabilities of ServiceNow, we have streamlined the process of assigning support tickets to the appropriate teams, addressing the challenges of manual routing, and ensuring timely resolution of issues.