STREAMLINING TICKET ASSIGNMENT FOR EFFICIENT SUPPORT OPERATIONS

Submitted by

Team Leader

NISHA M (910022104018)

Team Members

INITHA A (910022104013)

SUGUNA S (910022104031)

In partial fulfilment for the award of the degree

BACHELOR OF ENGINEERING

in

COMPUTER SCIENCE AND ENGINEERING

NAAN MUDHALVAN LAB

ANNA UNIVERSITY REGIONAL CAMPUS MADURAI-625-019

ANNA UNIVERSITY: CHENNAI 600 025

NOVEMBER 2025

Supervised by

Dr. Srie Vidhya Janani, M.E., Ph.D.,

BONAFIDE CERTIFICATE

This is to certify that the project report titled **"STREAMLINING TICKET ASSIGNMENT FOR EFFICIENT SUPPORT OPERATIONS"** is the Bonafide work of **NISHA M (910022104018), INITHA A (910022104013) ,SUGUNA S (910022104031)** who carried out the project work under my supervision in the Naan Mudhalvan Lab.

30/10/25

SIGNATURE

FACULTY

30/10/25

HEAD OF THE DEPARTMENT

Department of Computer Science and Engineering,

Anna University Regional Campus Madurai-625-019

ACKNOWLEDGEMENT

I extend my heartfelt gratitude to **Dr. Srie Vidhya Janani**, **M.E., Ph.D.,** Faculty Incharge of Naan Mudhalvan Lab, for her guidance and support throughout this project. I also thank my peers and family for their encouragement, without which this project would not have been possible.

I am deeply grateful to **Dr. V. Sasikala, M.E., Ph.D.,** Head of the Department, for her constant support and guidance.

I extend my sincere thanks to all teaching and non-teaching staff of the Department of Computer Science and Engineering and my peers for their support and encouragement.

Finally, I thank my family and friends, whose encouragement and patience motivated me to complete this project successfully.

Team Leader

NISHA M (910022104018)

Team Members

INITHA A (910022104013)

SUGUNA S (910022104031)

ABSTRACT

This project focuses on enhancing the efficiency of IT support operations in ServiceNow by automating the ticket assignment process. In traditional systems, tickets were manually assigned to support teams by administrators or agents, which often caused delays, misrouting, and uneven workload distribution.

To overcome these challenges, the project involves creating users, groups, and roles, along with configuring access control lists (ACLs) to maintain secure and organized access to records. Using **ServiceNow Flow Designer**, automated workflows are developed to intelligently assign tickets to the appropriate support groups, such as the *Certificate Group* and *Platform Group*, based on predefined rules and conditions.

This automation ensures that every incoming ticket is routed to the right team instantly, reducing manual intervention and improving response times. The result is a more efficient, accurate, and secure ticket management system that strengthens overall IT service delivery and operational performance.

PROBLEM STATEMENT

In many organizations, ticket assignment to support teams is still done manually, causing delays, errors, and uneven workload distribution that reduce efficiency and customer satisfaction. Without proper access control, there is also a risk of unauthorized ticket handling. As support requests increase, manual management becomes time-consuming and less effective. To address this, an automated ticket assignment system in ServiceNow is needed to route tickets intelligently to the correct groups—such as Certificate and Platform Groups—based on predefined rules. This will enhance accuracy, security, and overall IT service efficiency. focusing on lack of transparency and tracking in manual ticket handling.

OBJECTIVES

The main objective of this project is to develop a Ticket Assignment Automation System on the ServiceNow platform that streamlines support operations by automatically routing tickets to the appropriate teams. The specific objectives are as follows:

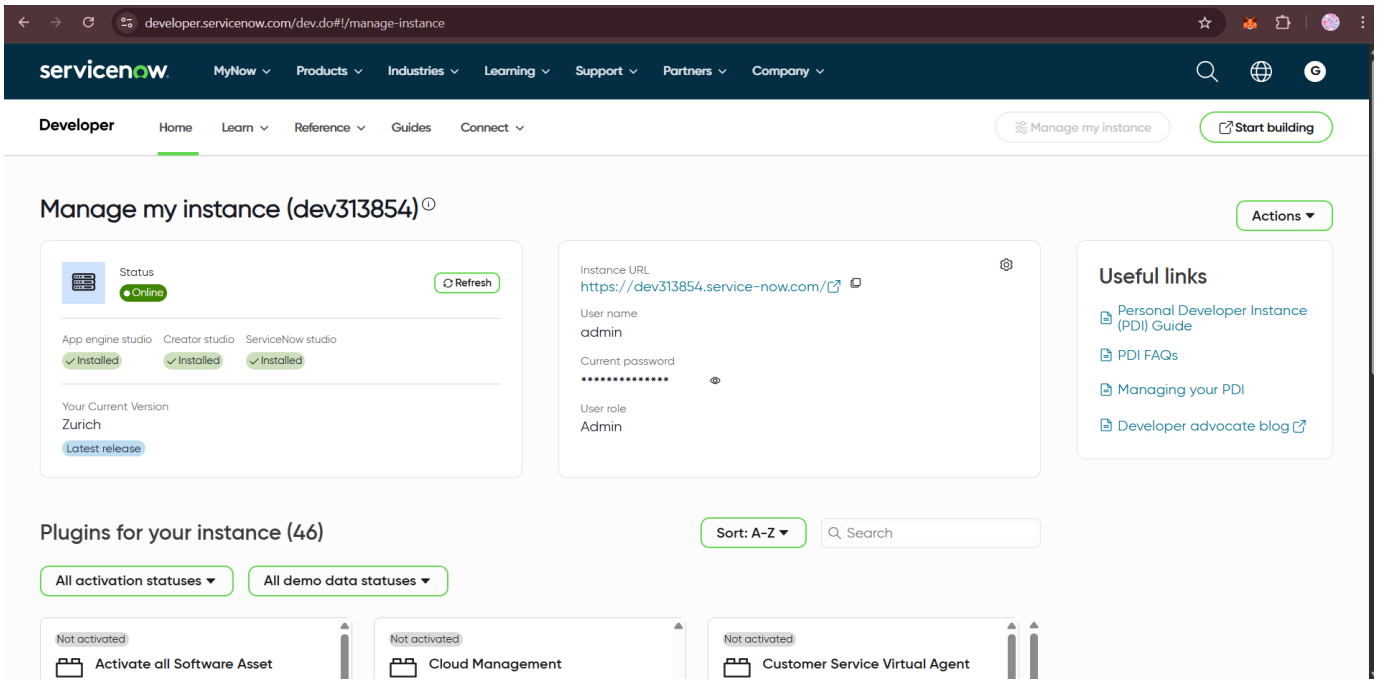
- Automate the process of assigning tickets to appropriate support groups.
- Reduce manual intervention in ticket management.
- Ensure role-based access and secure group-level operations.
- Improve efficiency and productivity in IT service management.
- Enhance accuracy and consistency in ticket routing to ensure that issues reach the right team on time.
- Promote accountability and transparency by assigning clear ownership of tickets to specific support groups.

TASK INITIATION

Milestone 1: Setting up ServiceNow Instance

Activity: Setting up ServiceNow Instance

1. Sign up for a developer account on the ServiceNow Developer site "https://developer.servicenow.com".
2. Once logged in, navigate to the "Personal Developer Instance" section.
3. Click on "Request Instance" to create a new ServiceNow instance.
4. Fill out the required information and submit the request.
5. You'll receive an email with the instance details once it's ready.
6. Log in to your ServiceNow instance using the provided credentials.

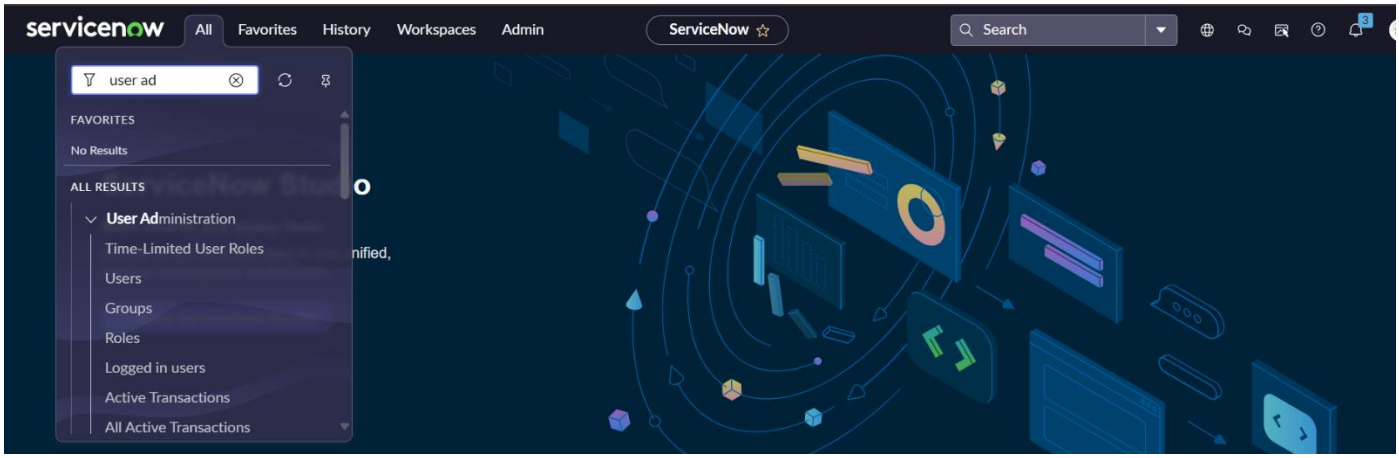


7. Now you will navigate to the ServiceNow.

Milestone 2: Creation of Users

Activity: User Creation

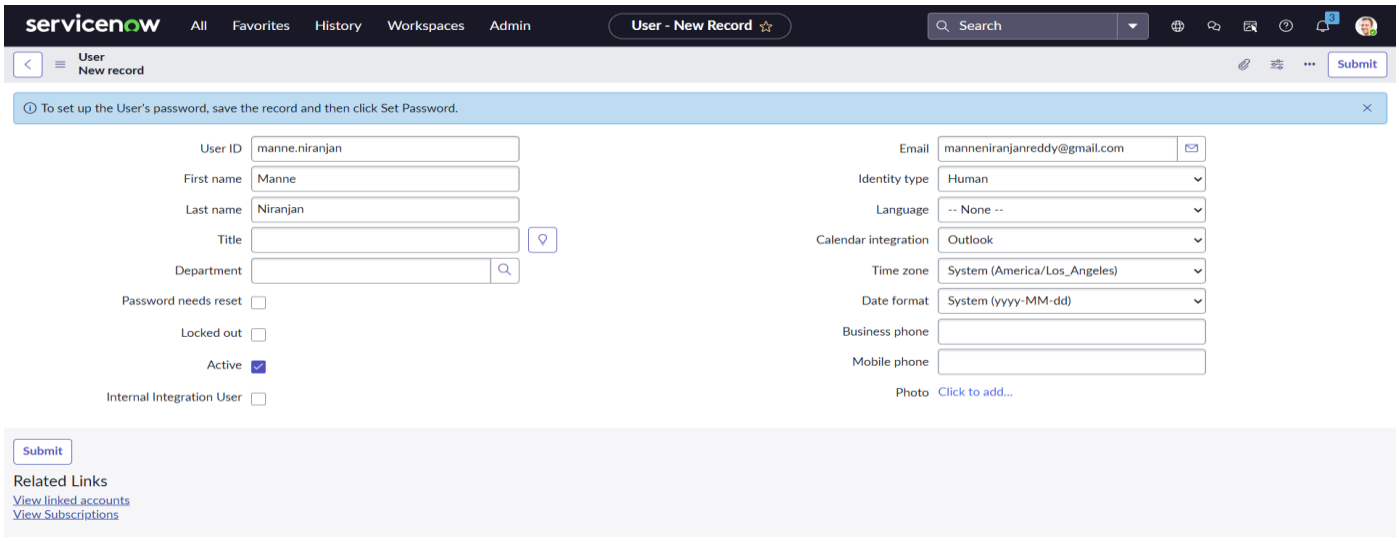
1. Navigate to User Administration → Users → New

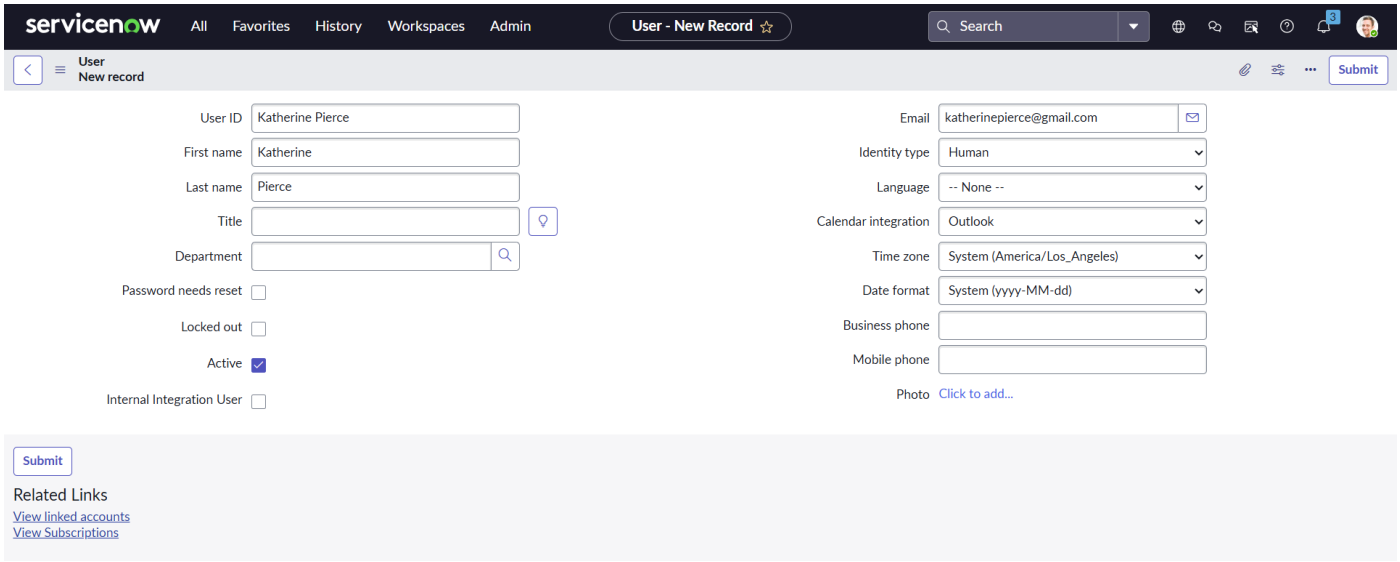


1. Enter the Details as:

   User ID: Manne Niranjan

   User ID: Katherine pierce
2. Then click on Submit and Make current

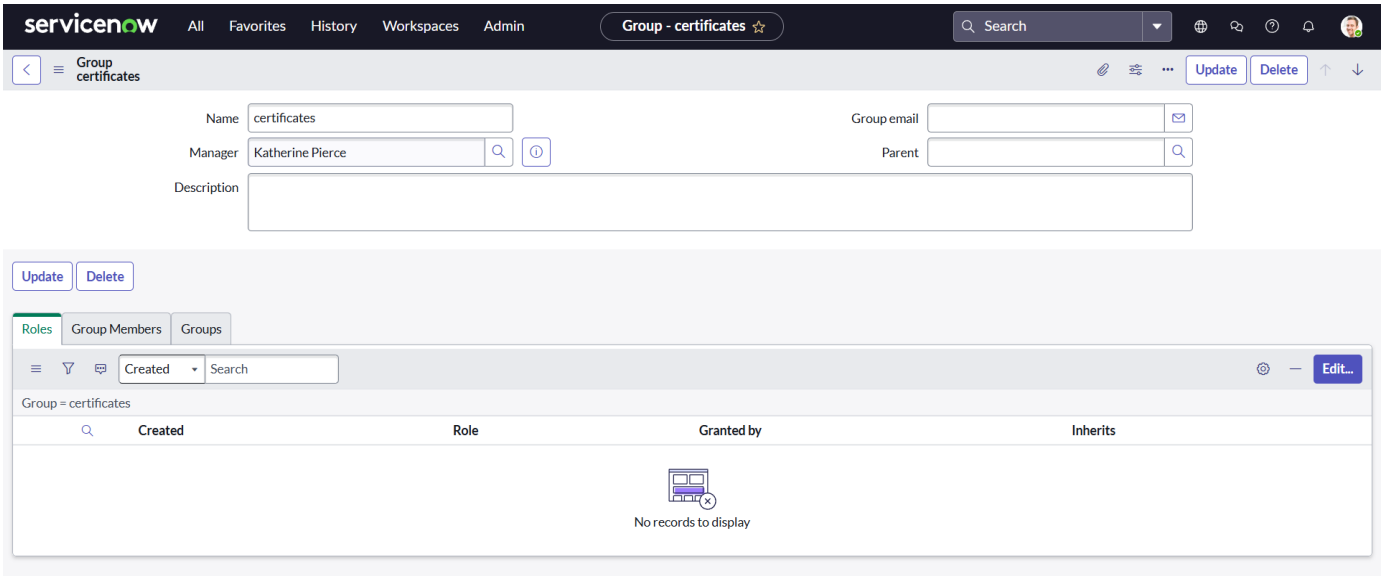




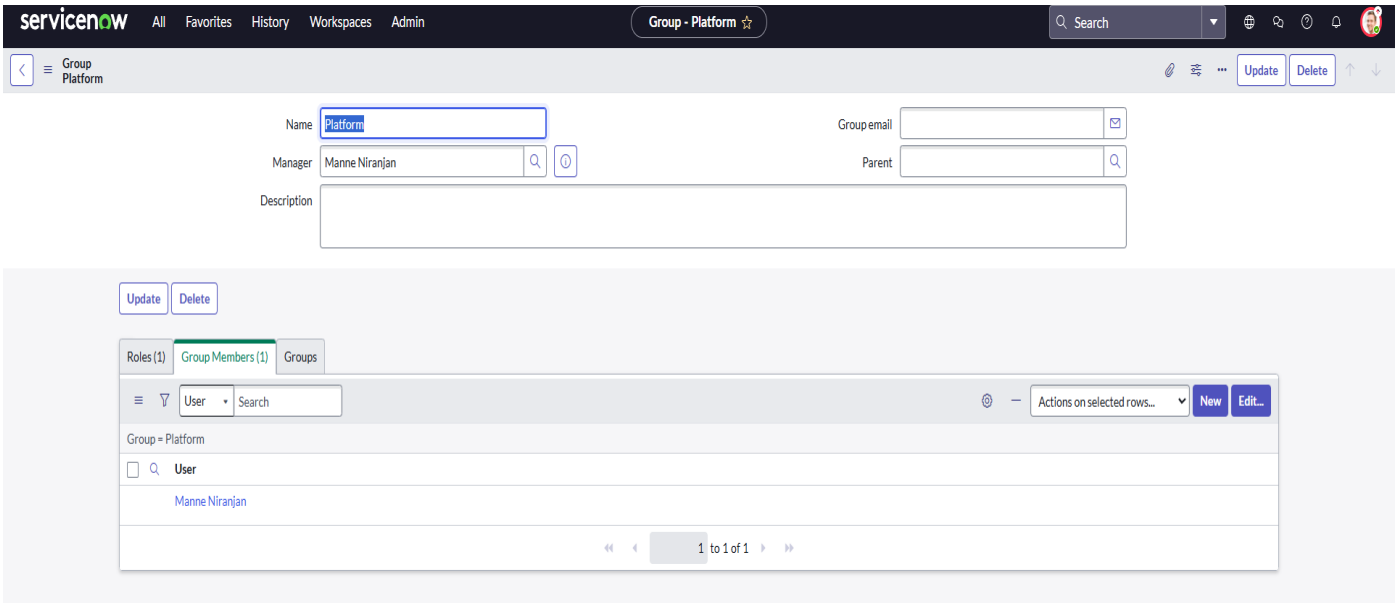
Milestone 3: Creation of Groups

Activity: Group Configuration

1. Navigate to User Administration → Groups → New
2. Create the following groups:
    - Certificate Group



- Platform Group



3.Then click on Submit and Make current.

Milestone 4: Creation of Roles

Activity : Role Definition

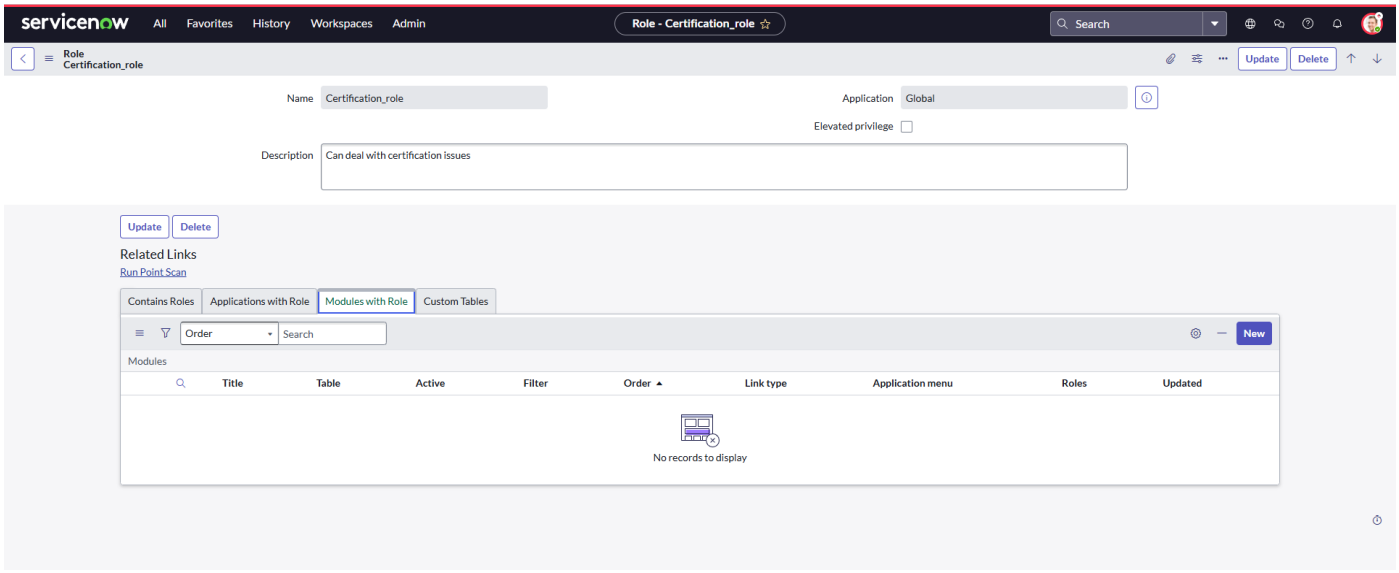
1. Go to User Administration → Roles → New
2. Create roles for specific responsibilities:

- **Certificate Role**

  Enter the Details:

  Name : Certification_role

  Description: Can deal with certificate issues

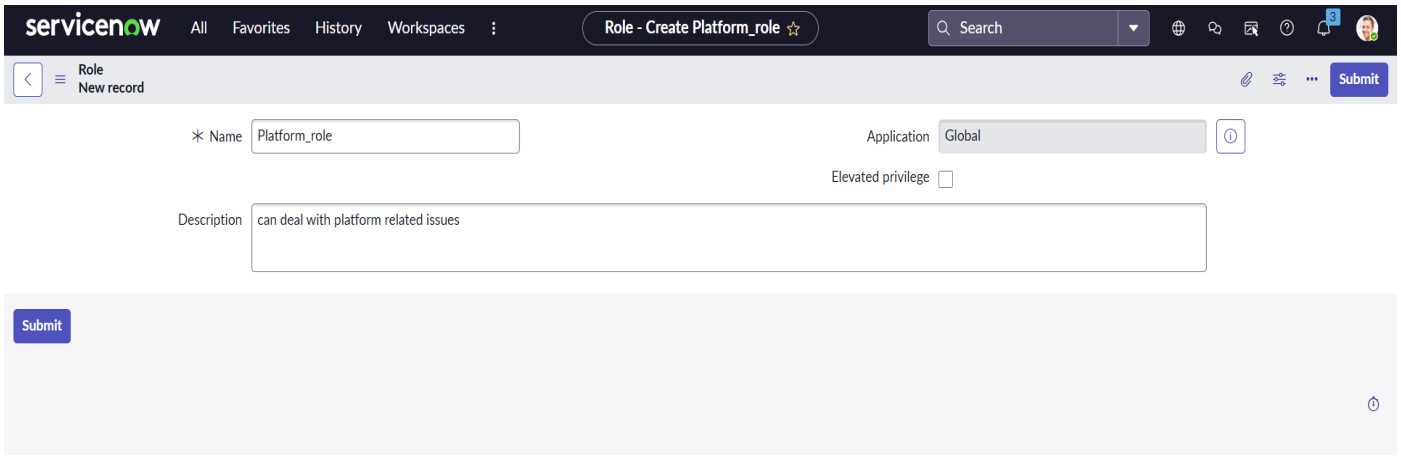


- **Platform Role**

  Enter the Details:

  Name : Platform_role

  Description: Can deal with platform related issues

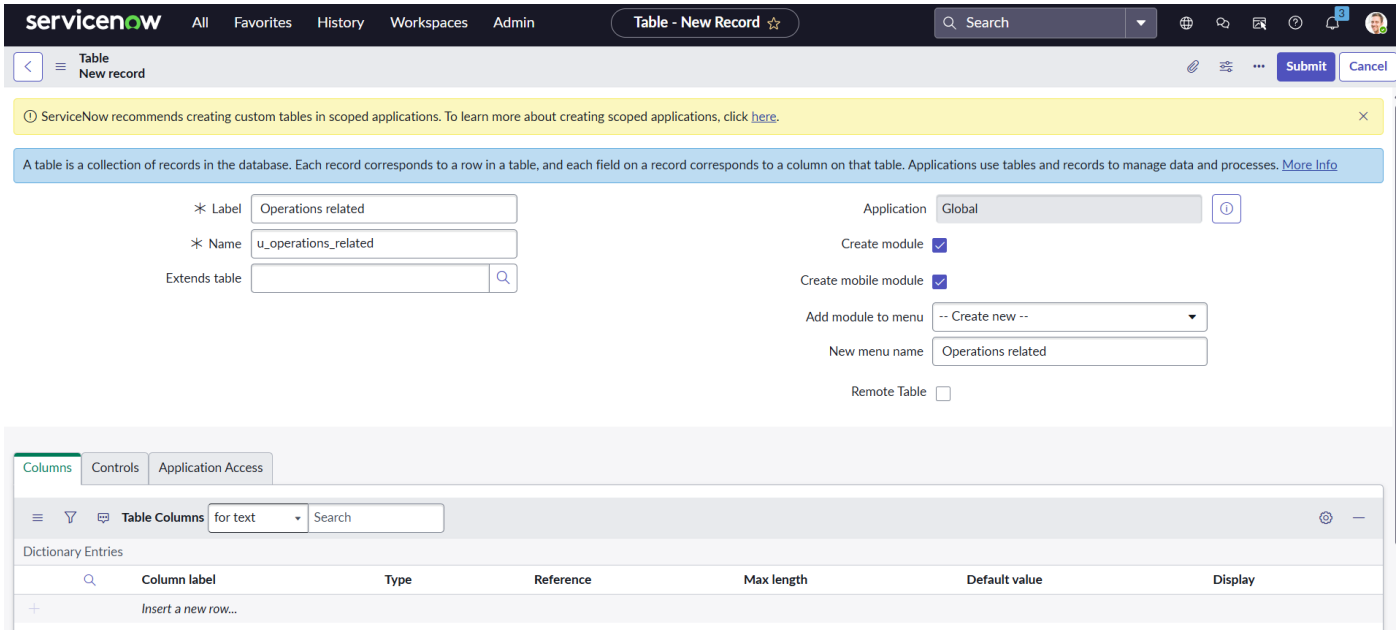


Milestone 5: Creation of Table (Daily Expenses)

Activity : Table Creation

1. Navigate to System Definition → Tables → New

2. Create a custom table named Operations Tickets



1. Enter the Details:

2. Add columns such as:

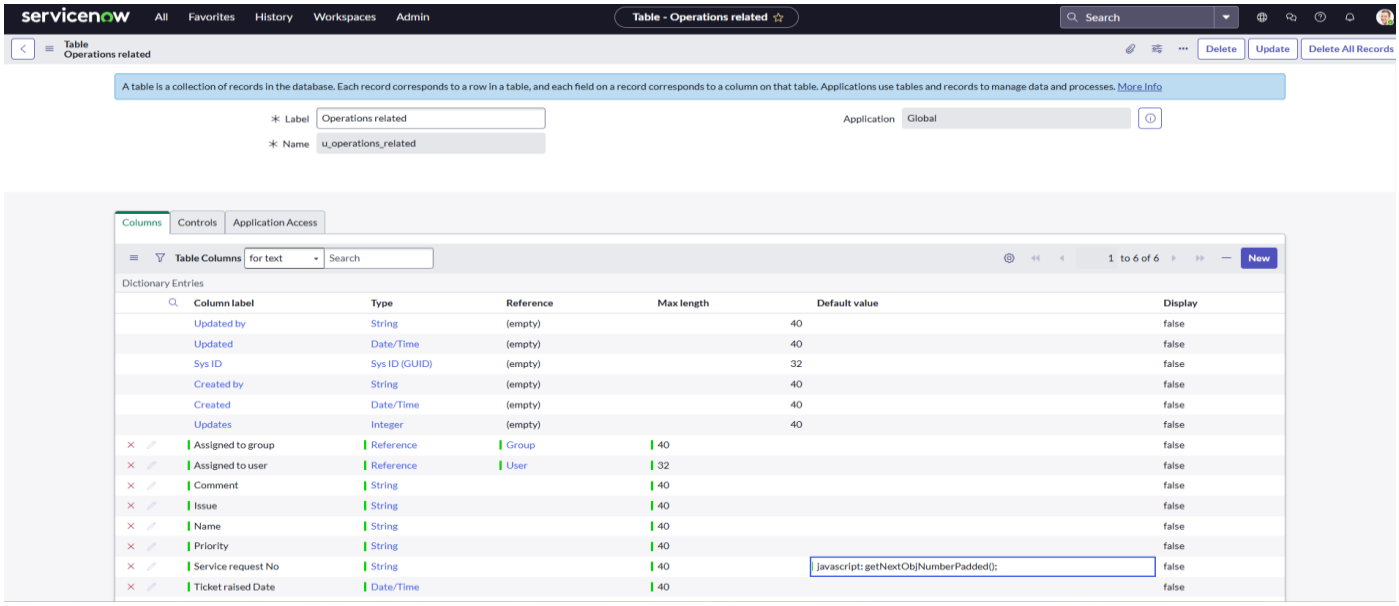
   Ticket Number (String, Auto-Number)

   Issue Description (String)

   Assigned to Group (Reference → Group)

   Priority (Choice)

   Assigned to User (Reference → User)



Click on Submit.

Milestone 6: Creation of Assign Roles and Users to Groups

Activity1: Assign Roles and Users to Certification Groups

- Open service now.
- Click on All >> search for tables
- Select tables under system definition
- Select the certificates group
- Under group members
- Click on edit
- Select Katherine Pierce and save
- Click on roles
- Select Certification_role and save

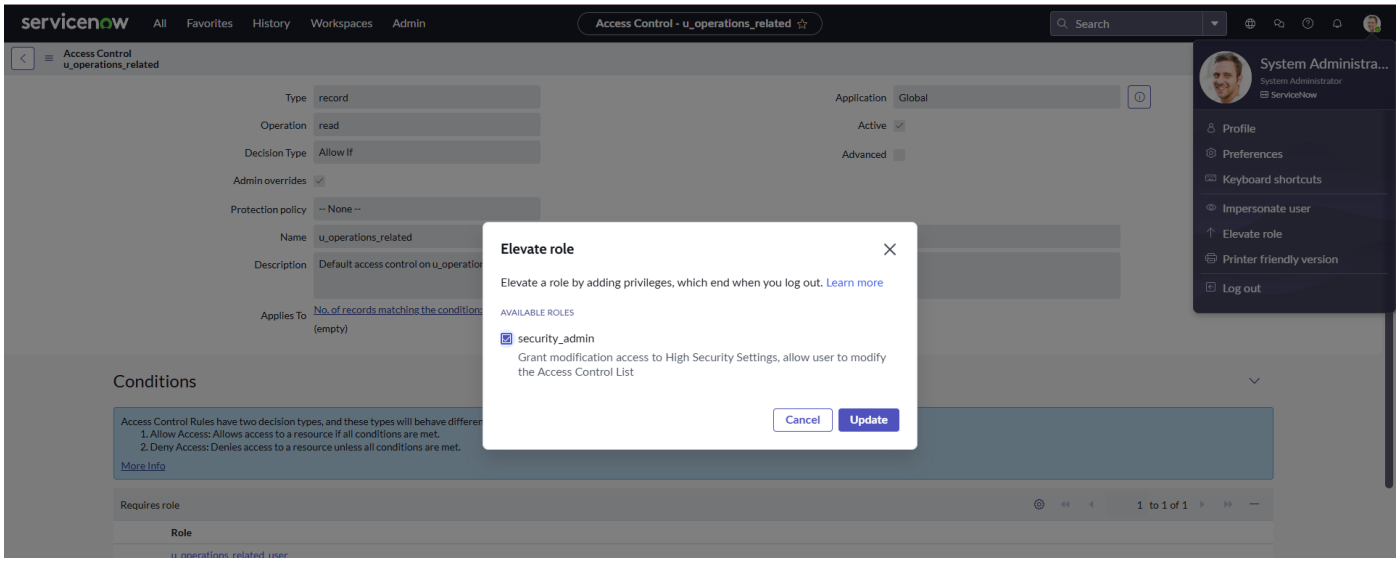
Activity2: Assign Roles and Users to Platform Groups

- Open service now.
- Click on All >> search for tables
- Select tables under system definition
- Select the platform group
- Under group members
- Click on edit
- Select Manne Niranjan and save
- Click on roles
- Select Platform_role and save.

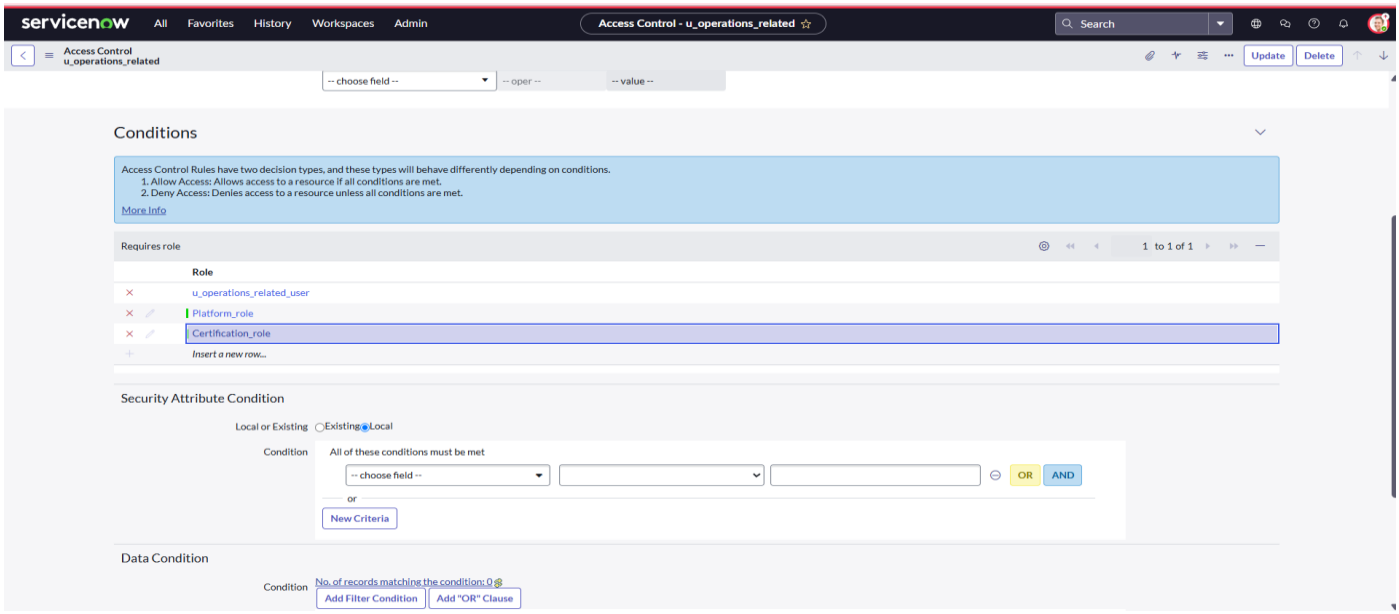
Milestone 7: Creation of Assign Role to Table

Activity: Assign Roles to "Operations Related" Table

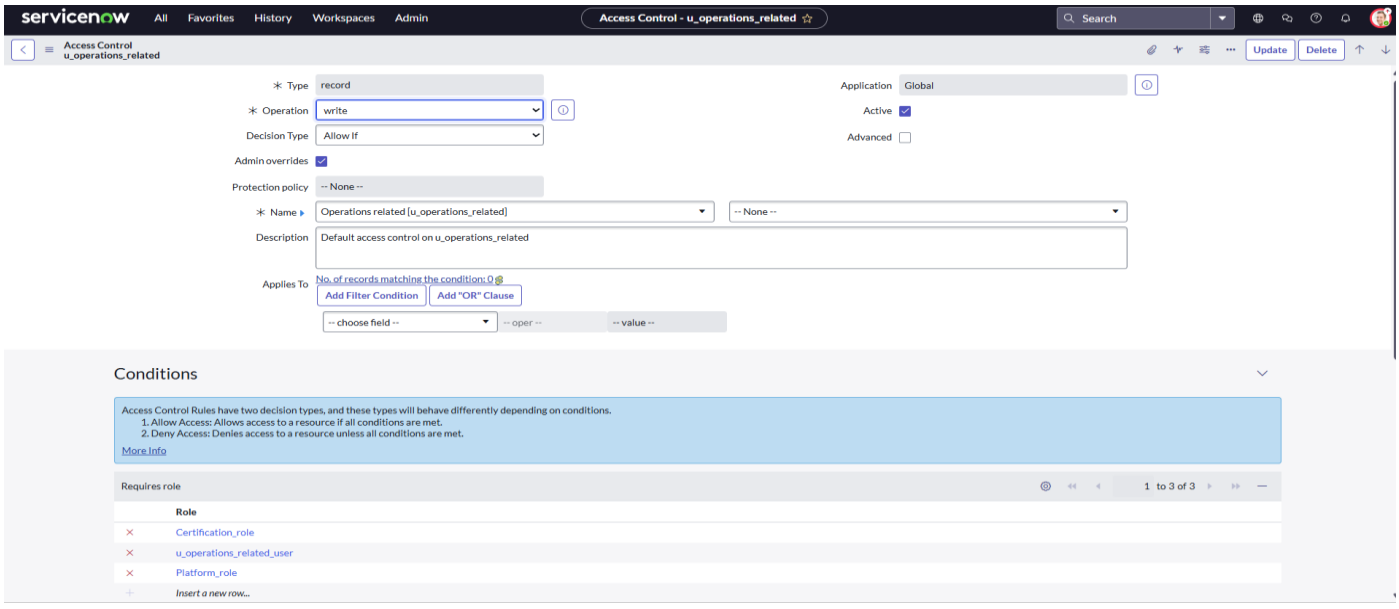
- Open ServiceNow → All → search *Tables* → select Operations Related.
- Go to Application Access.
- Click u_operations_related Read Operation.
- Click the Profile icon (top-right) → select Elevate Role → choose Security Admin → *Update*.



- Under Requires Role, double-click *Insert a new row*, add Platform Role and Certificate Role, then *Update*.



- Repeat the same steps for u_operations_related Write Operation → add Platform Role and Certificate Role → *Update*.

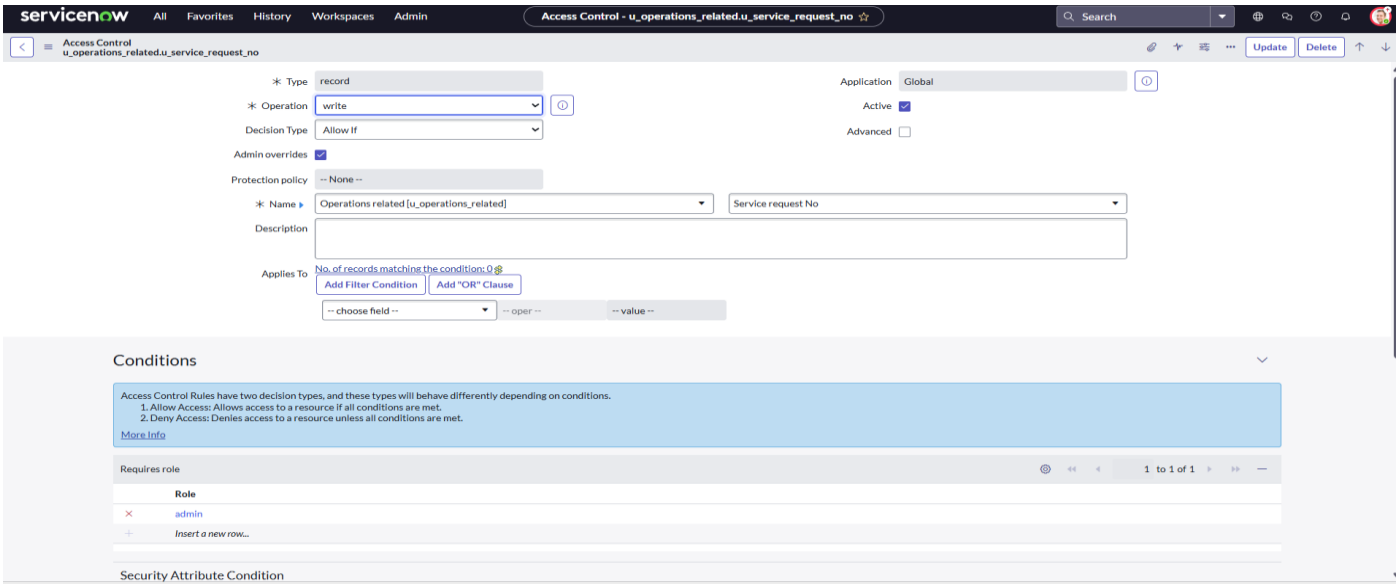


Click on Save

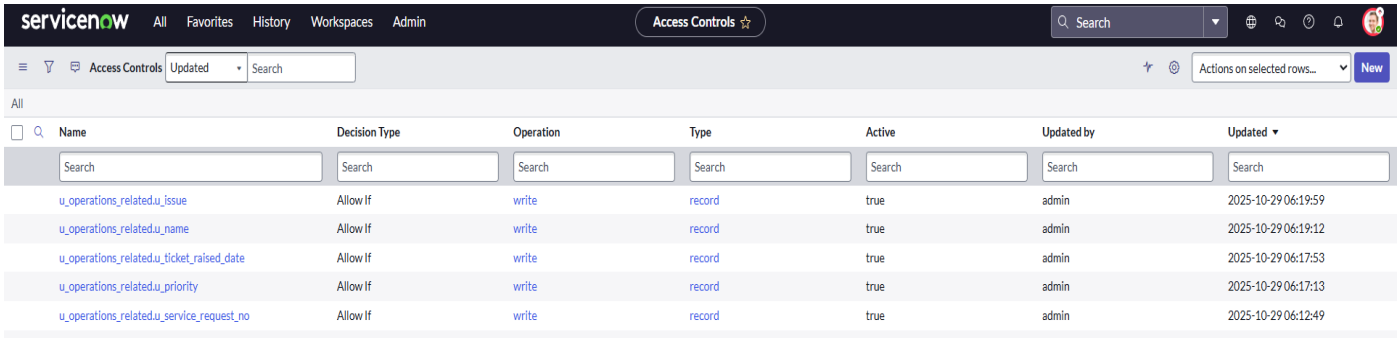
Milestone 8: Create ACL

Activity: Security and Permissions

- Navigate to System Security → Access Control (ACL).
- Create ACLs for the Operations Tickets table.



- Define read, write, and create permissions based on assigned roles:
- Certificate group users can view and update their tickets.
- Platform group users can access platform-related tickets only.
- Test ACL functionality by logging in as different users.

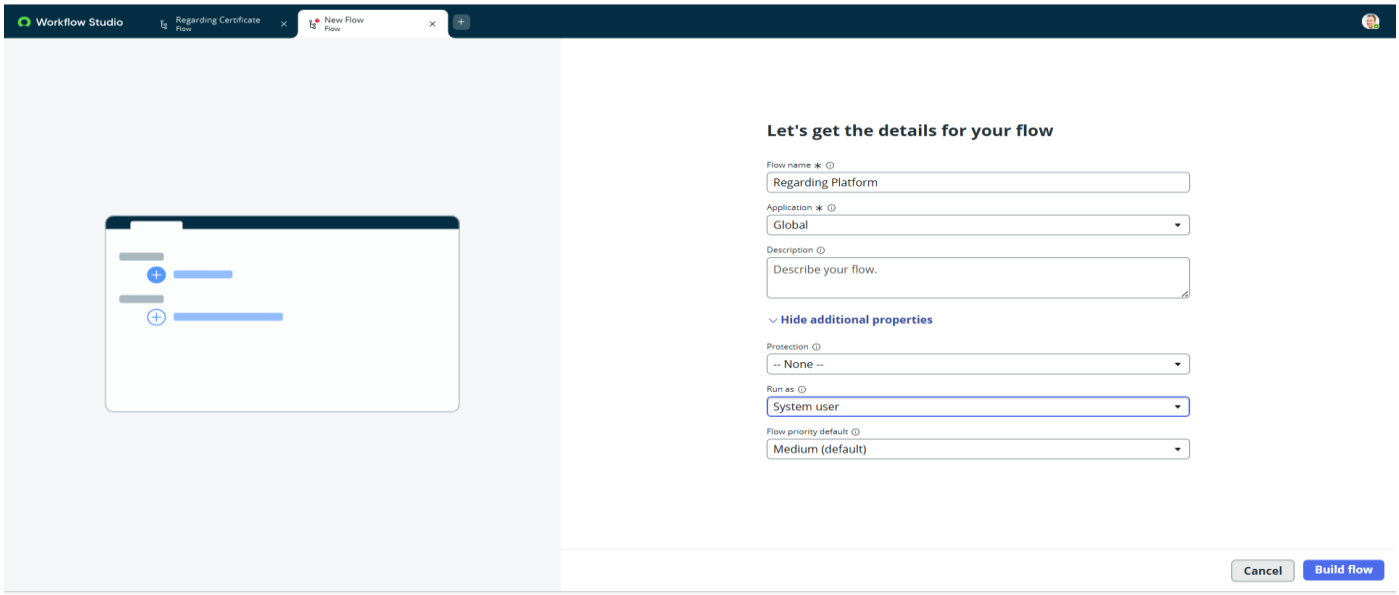


Name	Decision Type	Operation	Type	Active	Updated by	Updated
u_operations_related.u_issue	Allow If	write	record	true	admin	2025-10-29 06:19:59
u_operations_related.u_name	Allow If	write	record	true	admin	2025-10-29 06:19:12
u_operations_related.u_ticket_raised_date	Allow If	write	record	true	admin	2025-10-29 06:17:53
u_operations_related.u_priority	Allow If	write	record	true	admin	2025-10-29 06:17:13
u_operations_related.u_service_request_no	Allow If	write	record	true	admin	2025-10-29 06:12:49

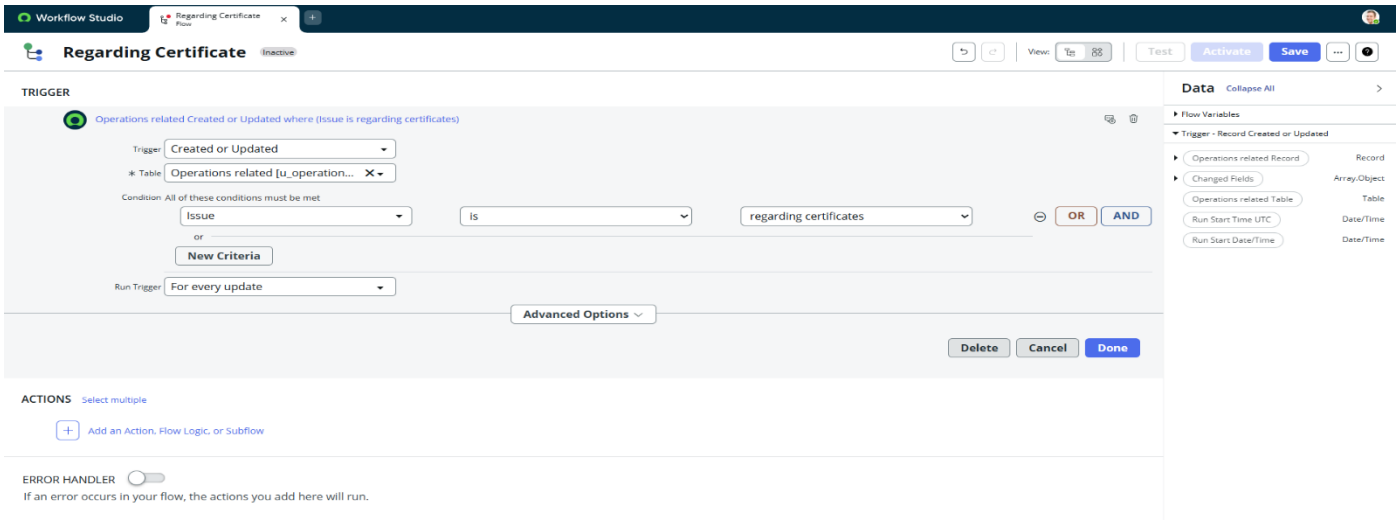
Milestone 9: Flow

Activity: Create a Flow to Assign operations ticket to group

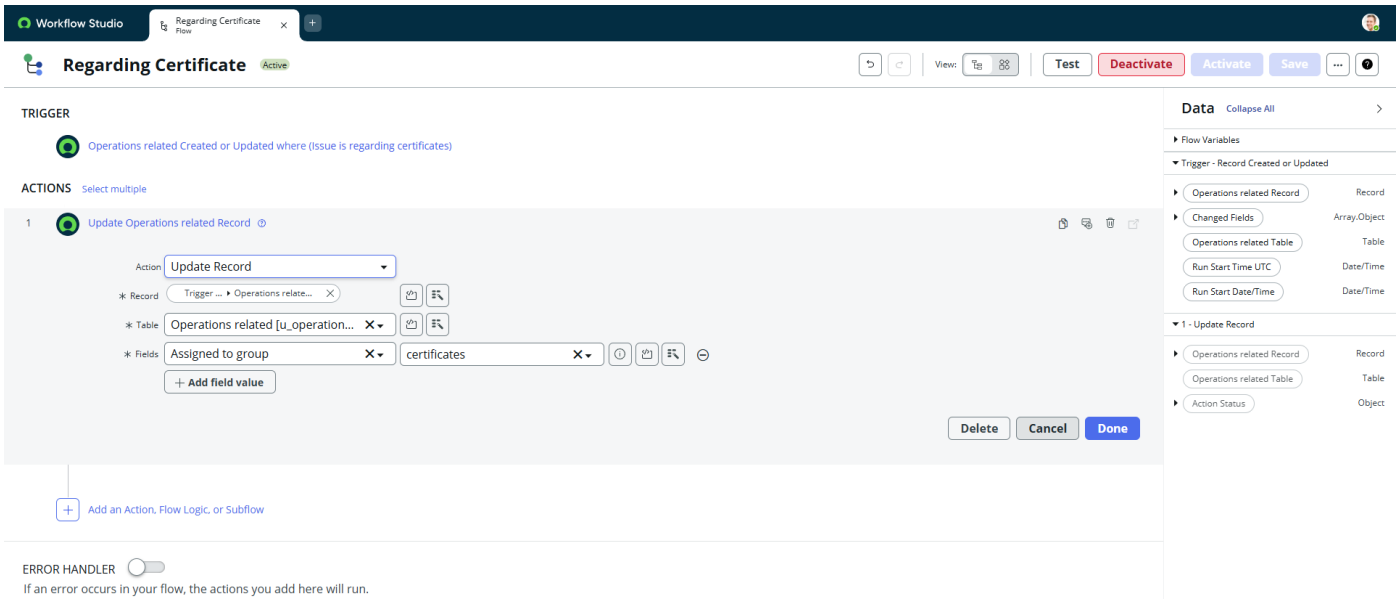
- Navigate to Flow Designer → New Flow.
- Name it Assign Operations Ticket – Certificate Group.



- Trigger: When Ticket is Created.
- Condition: If category = "Certificate Issue".

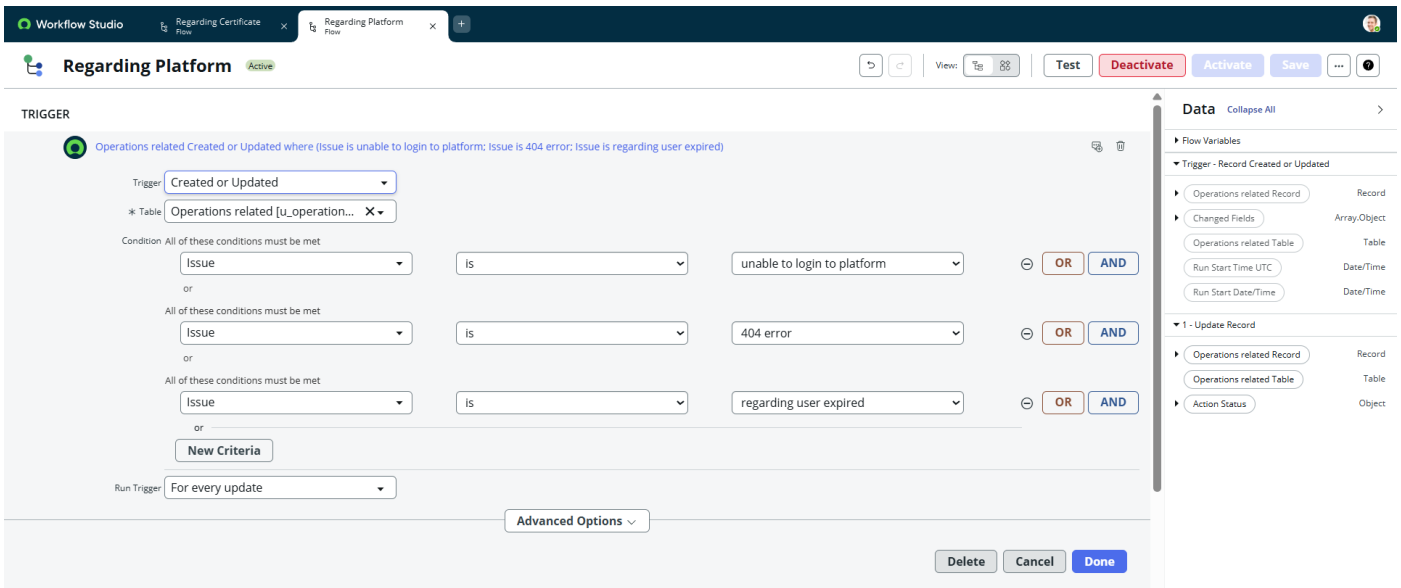


- Action: Assign ticket to Certificate Group.
- Save and activate the flow.

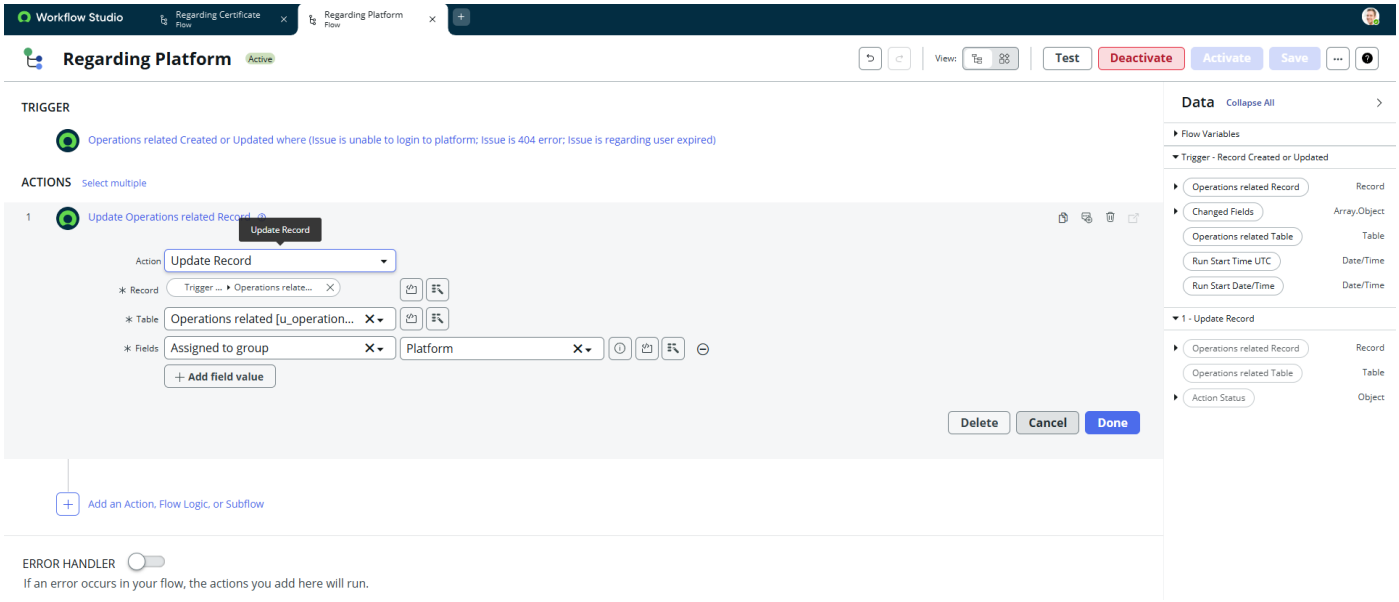


Activity: Create a Flow to Assign operations ticket to Platform group

- Create another flow named Assign Operations Ticket – Platform Group.
- Trigger: When Ticket is Created.
- Condition: If category = "Platform Issue".



- Action: Assign ticket to Platform Group.
- Save and activate.


Workflow Studio
Regarding Certificate Flow
Regarding Platform Flow
Regarding Platform
Active
View:
Test
Deactivate
Activate
Save
TRIGGER
Operations related Created or Updated where (Issue is unable to login to platform; Issue is 404 error; Issue is regarding user expired)
ACTIONS
Select multiple
1
Update Operations related Record
Update Record
Action
Update Record
Record
Trigger ... Operations relate...
Table
Operations related [u_operation...
Fields
Assigned to group
Platform
Add field value
Delete
Cancel
Done
Add an Action, Flow Logic, or Subflow
ERROR HANDLER
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

CONCLUSION

The project “Streamlining Ticket Assignment for Efficient Support Operations in ServiceNow” successfully demonstrates how automation can enhance IT service management. By integrating user, role, and group management with Flow Designer and ACLs, the system eliminates manual ticket routing, ensures secure access control, and improves service response times.This automated approach leads to greater efficiency, transparency, and accountability in support operations, showcasing ServiceNow’s ability to transform IT workflows into intelligent, data-driven processes.