

STREAMLINING TICKET ASSIGNMENT FOR EFFICIENT SUPPORT OPERATIONS

Submitted by

Team Leader

NISHA M (910022104018)

Team Members

INITHA A (910022104013)

SUGUNA S (910022104031)

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CAMPUS MADURAI-625-019

ANNA UNIVERSITY: CHENNAI 600 025

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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.

V. S. S. S.
30/10/25

HEAD OF THE DEPARTMENT

K. S. S. S.
30/10/25

SIGNATURE

FACULTY

Department of Computer Science and Engineering,
Anna University Regional Campus Madurai-625-019

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NISHA M (910022104018)

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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.

The screenshot shows the 'Manage my instance' page for a ServiceNow developer instance (dev313854). The page is divided into several sections:

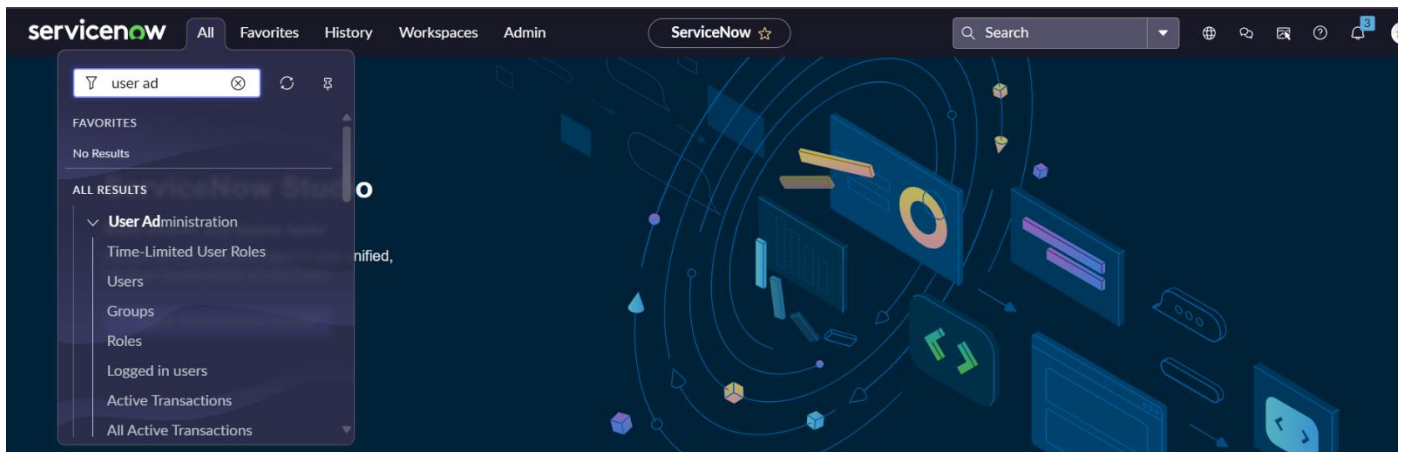
- Instance Status:** Shows the instance is 'Online' with a 'Refresh' button. Below this, it lists installed components: App engine studio, Creator studio, and ServiceNow studio, all marked as 'Installed'. It also shows the current version as 'Zurich' with a 'Latest release' link.
- Instance Details:** Displays the Instance URL (https://dev313854.service-now.com/), User name (admin), Current password (masked), and User role (Admin).
- Useful links:** A sidebar with links to the Personal Developer Instance (PDI) Guide, PDI FAQs, Managing your PDI, and the Developer advocate blog.
- Plugins for your instance (46):** A section with a search bar and filters. It shows three plugins: 'Activate all Software Asset', 'Cloud Management', and 'Customer Service Virtual Agent', all of which are 'Not activated'.

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

A screenshot of the 'User - New Record' form in the ServiceNow Admin console. The form is divided into two main sections. The left section contains fields for 'User ID' (manne.niranjan), 'First name' (Manne), 'Last name' (Niranjan), 'Title' (empty), and 'Department' (empty with a search icon). Below these are checkboxes for 'Password needs reset' (unchecked), 'Locked out' (unchecked), 'Active' (checked), and 'Internal Integration User' (unchecked). The right section contains fields for 'Email' (manneniranjanreddy@gmail.com), 'Identity type' (Human), 'Language' (-- None --), 'Calendar integration' (Outlook), 'Time zone' (System (America/Los_Angeles)), 'Date format' (System (yyyy-MM-dd)), 'Business phone' (empty), and 'Mobile phone' (empty). There is a 'Photo' field with a 'Click to add...' link. At the bottom left, there is a 'Submit' button and a 'Related Links' section with links to 'View linked accounts' and 'View Subscriptions'. A blue banner at the top of the form area states: 'To set up the User's password, save the record and then click Set Password.'

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AllFavoritesHistoryWorkspacesAdmin

User - New Record

Search

Submit

UserNew record

Submit

User IDKatherine Pierce

First nameKatherine

Last namePierce

Title

Department

Password needs reset

Locked out

Active

Internal Integration User

Emailkatherinepierce@gmail.com

Identity typeHuman

Language-- None --

Calendar integrationOutlook

Time zoneSystem (America/Los_Angeles)

Date formatSystem (yyyy-MM-dd)

Business phone

Mobile phone

PhotoClick to add...

Submit

Related Links

[View linked accounts](#)

[View Subscriptions](#)

Milestone 3: Creation of Groups

Activity: Group Configuration

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

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AllFavoritesHistoryWorkspacesAdmin

Group - certificates

Search

Groupcertificates

UpdateDelete

Namecertificates

Group email

ManagerKatherine Pierce

Parent

Description

UpdateDelete

RolesGroup MembersGroups

CreatedSearch

Edit...

Group = certificates

CreatedRoleGranted byInherits

No records to display

- Platform Group

The screenshot shows the ServiceNow interface for the 'Group - Platform' form. The form includes fields for Name (Platform), Manager (Manne Niranjana), Group email, Parent, and Description. Below the form, there is a table with one member, Manne Niranjana. The table has columns for Roles (1), Group Members (1), and Groups. The table is currently showing 1 to 1 of 1 member.

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

servicenow All Favorites History Workspaces Admin Role - Certification_role Search

Role: Certification_role

Name: Certification_role Application: Global

Elevated privilege: ☐

Description: Can deal with certification issues

Update Delete

Related Links
Run Point Scan

Contains Roles Applications with Role Modules with Role Custom Tables

Order Search

| Modules | Title | Table | Active | Filter | Order | Link type | Application menu | Roles | Updated |
|-----------------------|-------|-------|--------|--------|-------|-----------|------------------|-------|---------|
| No records to display | | | | | | | | | |

- **Platform Role**

Enter the Details:

Name : Platform_role

Description: Can deal with platform related issues

servicenow All Favorites History Workspaces Role - Create Platform_role Search

Role: New record

* Name: Platform_role Application: Global

Elevated privilege: ☐

Description: can deal with platform related issues

Submit

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

ServiceNow recommends creating custom tables in scoped applications. To learn more about creating scoped applications, click [here](#).

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: Operations related
* Name: u_operations_related
Extends table:

Application: Global
Create module: ☒
Create mobile module: ☒
Add module to menu: -- Create new --
New menu name: Operations related
Remote Table: ☐

Columns | Controls | Application Access

Table Columns for text Search

Dictionary Entries

| Column label | Type | Reference | Max length | Default value | Display |
|---------------------|------|-----------|------------|---------------|---------|
| Insert a new row... | | | | | |

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)

servicenow All Favorites History Workspaces Admin Table - Operations related Search

Table Operations related Delete Update Delete All Records

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 Operations related Application Global

* Name u_operations_related

Columns Controls Application Access

Table Columns for text Search 1 to 6 of 6 New

| Column label | Type | Reference | Max length | Default value | Display |
|--------------------|---------------|-----------|------------|---------------------------------------|---------|
| Updated by | String | (empty) | 40 | | false |
| Updated | Date/Time | (empty) | 40 | | false |
| Sys ID | Sys ID (GUID) | (empty) | 32 | | false |
| Created by | String | (empty) | 40 | | false |
| Created | Date/Time | (empty) | 40 | | false |
| Updates | Integer | (empty) | 40 | | false |
| Assigned to group | Reference | Group | 40 | | false |
| Assigned to user | Reference | User | 32 | | false |
| Comment | String | | 40 | | false |
| Issue | String | | 40 | | false |
| Name | String | | 40 | | false |
| Priority | String | | 40 | | false |
| Service request No | String | | 40 | javascript: getNextObj(NumberPadded); | false |
| Ticket raised Date | Date/Time | | 40 | | false |

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

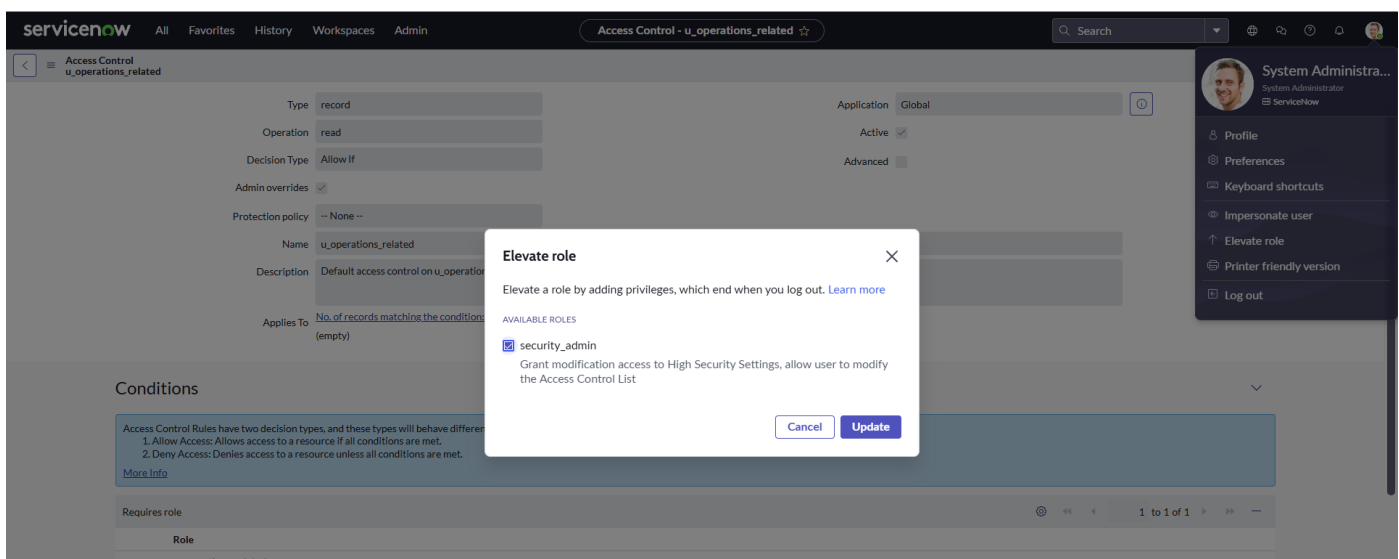
Activity2: Assign Roles and Users to Platform Groups

- 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 Niranjana 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*.

servicenow All Favorites History Workspaces Admin Access Control - u_operations_related

Search

Access Control u_operations_related

-- choose field -- -- oper -- -- value --

Conditions

Access Control Rules have two decision types, and these types will behave differently depending on conditions.
 1. Allow Access: Allows access to a resource if all conditions are met.
 2. Deny Access: Denies access to a resource unless all conditions are met.
[More Info](#)

Requires role 1 to 1 of 1

| Role |
|---------------------------|
| u_operations_related_user |
| Platform_role |
| Certification_role |
| Insert a new row... |

Security Attribute Condition

Local or Existing Existing Local

Condition All of these conditions must be met

-- choose field --

OR AND

New Criteria

Data Condition

Condition No. of records matching the condition: 0

Add Filter Condition Add "OR" Clause

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

servicenow All Favorites History Workspaces Admin Access Control - u_operations_related

Search

Access Control u_operations_related

* Type record

* Operation write

Decision Type Allow If

Admin overrides

Protection policy -- None --

* Name Operations related [u_operations_related]

Description Default access control on u_operations_related

Applies To No. of records matching the condition: 0

Add Filter Condition Add "OR" Clause

-- choose field -- -- oper -- -- value --

Conditions

Access Control Rules have two decision types, and these types will behave differently depending on conditions.
 1. Allow Access: Allows access to a resource if all conditions are met.
 2. Deny Access: Denies access to a resource unless all conditions are met.
[More Info](#)

Requires role 1 to 3 of 3

| Role |
|---------------------------|
| Certification_role |
| u_operations_related_user |
| Platform_role |
| Insert a new row... |

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.

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All Favorites History Workspaces Admin

Access Control - u_operations_related.u_service_request_no

Search

Update Delete

Access Control

u_operations_related.u_service_request_no

* Type record

* Operation write

Decision Type Allow If

Admin overrides ☒

Protection policy --None--

* Name Operations related [u_operations_related]

Service request No

Description

Applies To No. of records matching the condition: 0

Add Filter Condition Add "OR" Clause

-- choose field -- -- oper -- -- value --

Conditions

Access Control Rules have two decision types, and these types will behave differently depending on conditions.
1. Allow Access: Allows access to a resource if all conditions are met.
2. Deny Access: Denies access to a resource unless all conditions are met.
[More Info](#)

Requires role

Role

admin

Insert a new row...

Security Attribute Condition

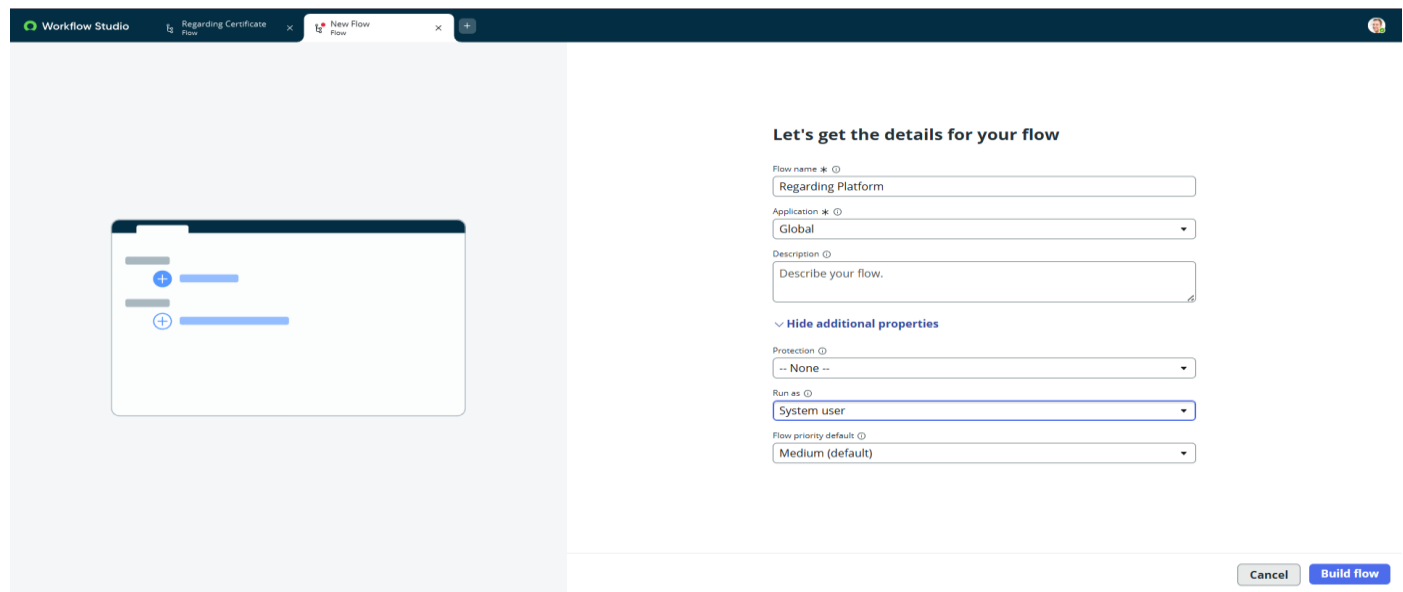
- Define read, write, and create permissions based on assigned roles:
- Certificate group users can view and update their tickets.
- Platform group users can access platform-related tickets only.
- Test ACL functionality by logging in as different users.

| Access Controls | | | | | | | |
|---|---------------|-----------|--------|--------|------------|---------------------|--|
| Updated | | | | | | | |
| Search | | | | | | | |
| 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 | |

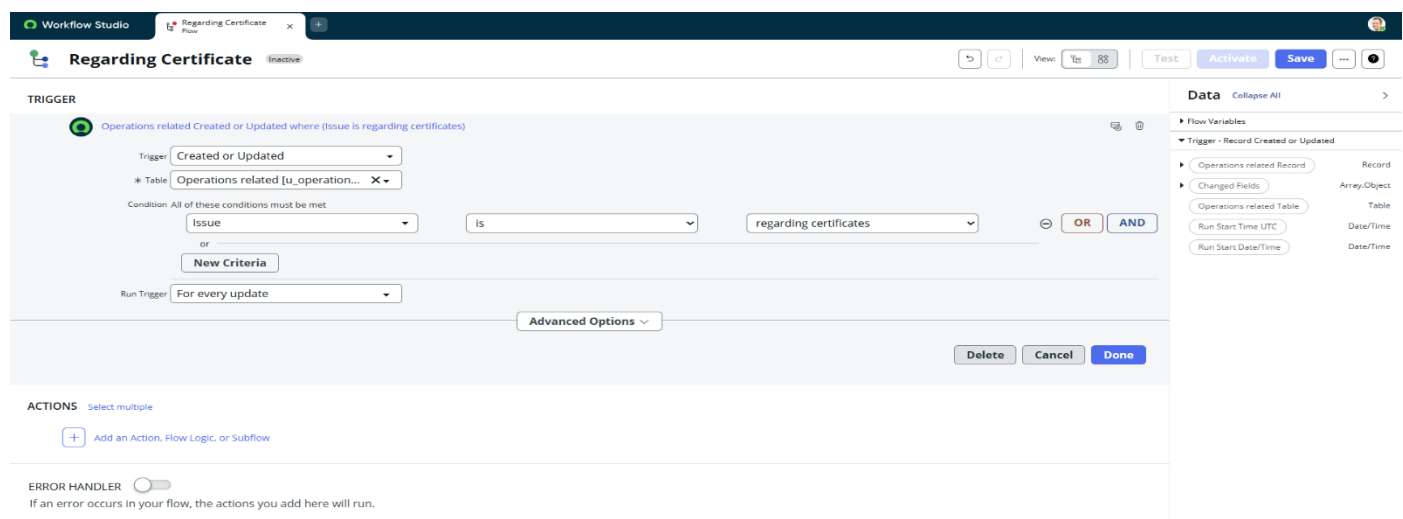
Milestone 9: Flow

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.

Workflow Studio

Regarding Certificate

Regarding Certificate

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...

* Table: Operations related [u_operation...]

* Fields: Assigned to group certificates

+ 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

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”.

Workflow Studio

Regarding Certificate

Regarding Platform

Regarding Platform

TRIGGER

Operations related Created or Updated where (Issue is unable to login to platform; Issue is 404 error; Issue is regarding user expired)

Trigger: Created or Updated

* Table: Operations related [u_operation...]

Condition All of these conditions must be met

Issue is unable to login to platform

or

All of these conditions must be met

Issue is 404 error

or

All of these conditions must be met

Issue is regarding user expired

New Criteria

Run Trigger: For every update

Advanced Options

Delete Cancel Done

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

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



Regarding Platform Active

▶ ◀

View: Table Form

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

Action

Update Record

* Record

Trigger ... • Operations relate... X

* Table

Operations related [u_operation... X

* Fields

Assigned to group X

Platform X

+ 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.