

STREAMLINING TICKET ASSIGNMENT FOR EFFICIENT SUPPORT OPERATIONS

Submitted by

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In partial fulfilment for the award of the degree

BACHELOR OF ENGINEERING

in

COMPUTER SCIENCE AND ENGINEERING

NAAN MUDHALVAN LAB



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NOVEMBER 2025

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BONAFIDE CERTIFICATE

This is to certify that the project report titled "**STREAMLINING TICKET ASSIGNMENT FOR EFFICIENT SUPPORT OPERATIONS**" is the Bonafide work of **MAHESHKUMAR R (910022104302), AMUTHA A (910022104003), HARRIS J (910022104701)** who carried out the project work under my supervision in the Naan Mudhalvan Lab.

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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.

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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.

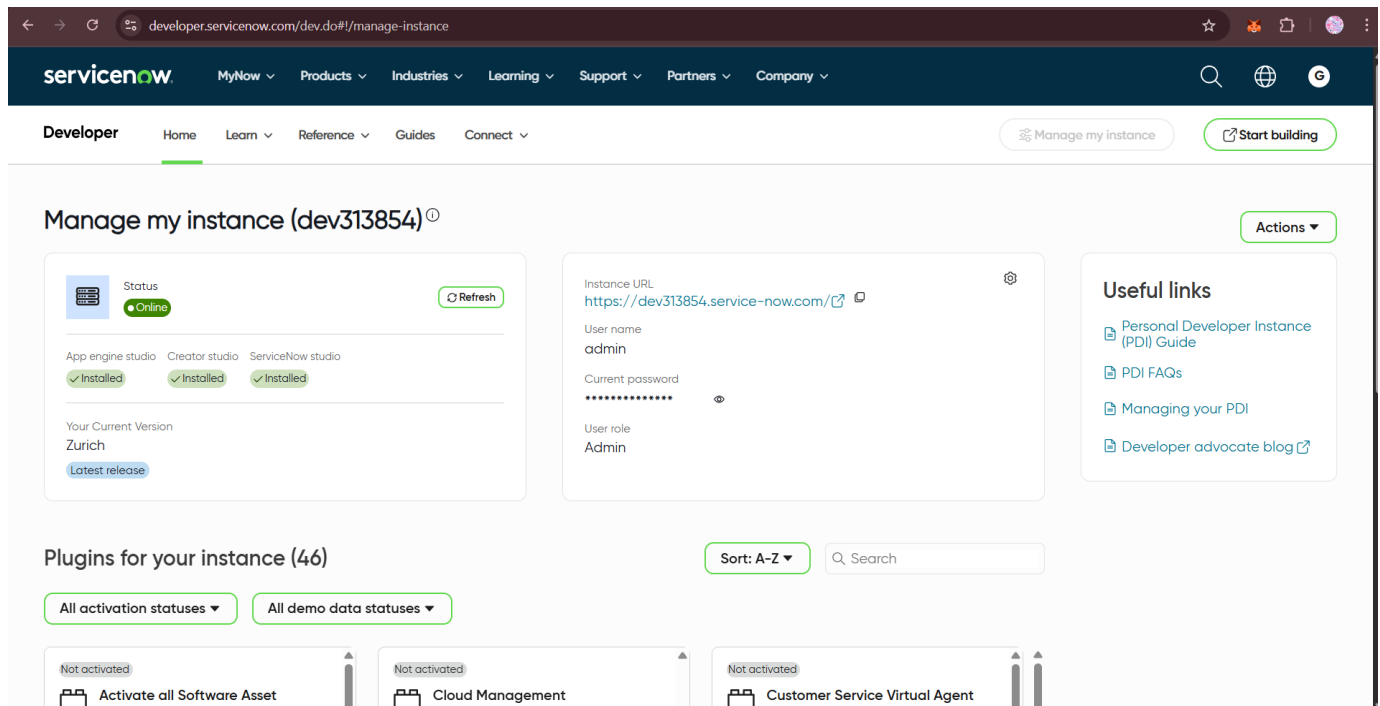
Skills:

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.

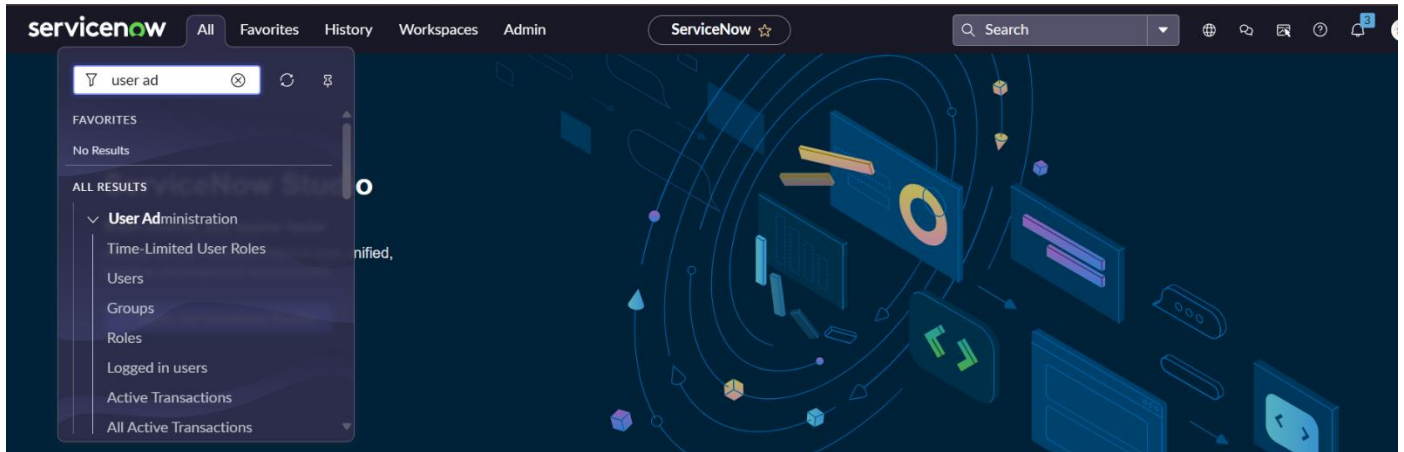


7. Now you will navigate to the ServiceNow.

Milestone 2: Creation of Users

Activity: User Creation

1. Navigate to User Administration → Users → New



1. Enter the Details as:
User ID: Manne Niranjana
User ID: Katherine pierce
2. Then click on Submit and Make current

A screenshot of the 'User - New Record' form in ServiceNow. The form is titled 'User - New Record' and has a 'Submit' button. A message at the top says: 'To set up the User's password, save the record and then click Set Password.' The form fields are organized into two columns. The left column contains: 'User ID' (manne.niranjana), 'First name' (Manne), 'Last name' (Niranjana), 'Title' (empty), 'Department' (empty), 'Password needs reset' (checkbox), 'Locked out' (checkbox), 'Active' (checkbox, checked), and 'Internal Integration User' (checkbox). The right column contains: 'Email' (manneniranjana@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), 'Mobile phone' (empty), and 'Photo' (Click to add...). Below the form, there's a 'Submit' button and a 'Related Links' section with links to 'View linked accounts' and 'View Subscriptions'.A screenshot of the 'User - New Record' form in ServiceNow, similar to the previous one but with details for Katherine Pierce. The form is titled 'User - New Record' and has a 'Submit' button. The left column contains: 'User ID' (Katherine Pierce), 'First name' (Katherine), 'Last name' (Pierce), 'Title' (empty), 'Department' (empty), 'Password needs reset' (checkbox), 'Locked out' (checkbox), 'Active' (checkbox, checked), and 'Internal Integration User' (checkbox). The right column contains: 'Email' (katherinepierce@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), 'Mobile phone' (empty), and 'Photo' (Click to add...). Below the form, there's a 'Submit' button and a 'Related Links' section with links to 'View linked accounts' and 'View Subscriptions'.

Milestone 3: Creation of Groups

Activity: Group Configuration

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

The screenshot shows the ServiceNow 'Group - certificates' configuration page. The top navigation bar includes 'servicenow', 'All', 'Favorites', 'History', 'Workspaces', 'Admin', and a search bar. The breadcrumb trail is 'Group - certificates'. The main form contains fields for 'Name' (certificates), 'Manager' (Katherine Pierce), 'Group email', and 'Parent'. Below the form are 'Update' and 'Delete' buttons. The 'Roles' tab is selected, showing a table with columns 'Created', 'Role', 'Granted by', and 'Inherits'. The table is empty, displaying 'No records to display'.

- Platform Group

The screenshot shows the ServiceNow 'Group - Platform' configuration page. The top navigation bar includes 'servicenow', 'All', 'Favorites', 'History', 'Workspaces', 'Admin', and a search bar. The breadcrumb trail is 'Group - Platform'. The main form contains fields for 'Name' (Platform), 'Manager' (Manne Niranjana), 'Group email', and 'Parent'. Below the form are 'Update' and 'Delete' buttons. The 'Group Members (1)' tab is selected, showing a table with columns 'User' and 'Search'. The table contains one row with the user 'Manne Niranjana'. The table footer shows '1 to 1 of 1'.

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

The screenshot displays the ServiceNow interface for creating a new role. The top navigation bar includes 'servicenow', 'All', 'Favorites', 'History', 'Workspaces', and 'Admin'. The breadcrumb trail shows 'Role - Certification_role'. The form fields are as follows:

- Name:** Certification_role
- Application:** Global
- Elevated privilege:** ☐
- Description:** Can deal with certificate issues

Below the form, there are 'Update' and 'Delete' buttons. The 'Related Links' section includes a link to 'Run Point Scan'. The 'Modules with Role' section is active, showing a table with the following columns: Title, Table, Active, Filter, Order, Link type, Application menu, Roles, and Updated. The table is currently empty, displaying '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 - Create Platform_role ☆

< ≡ 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 All Favorites History Workspaces Admin Table - New Record ☆

Search

Table - New Record ☆

< ≡ Table New record

ⓘ 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 Application Global ⓘ

* Name u_operations_related Create module ☒

Extends table ⓘ 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

1. 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

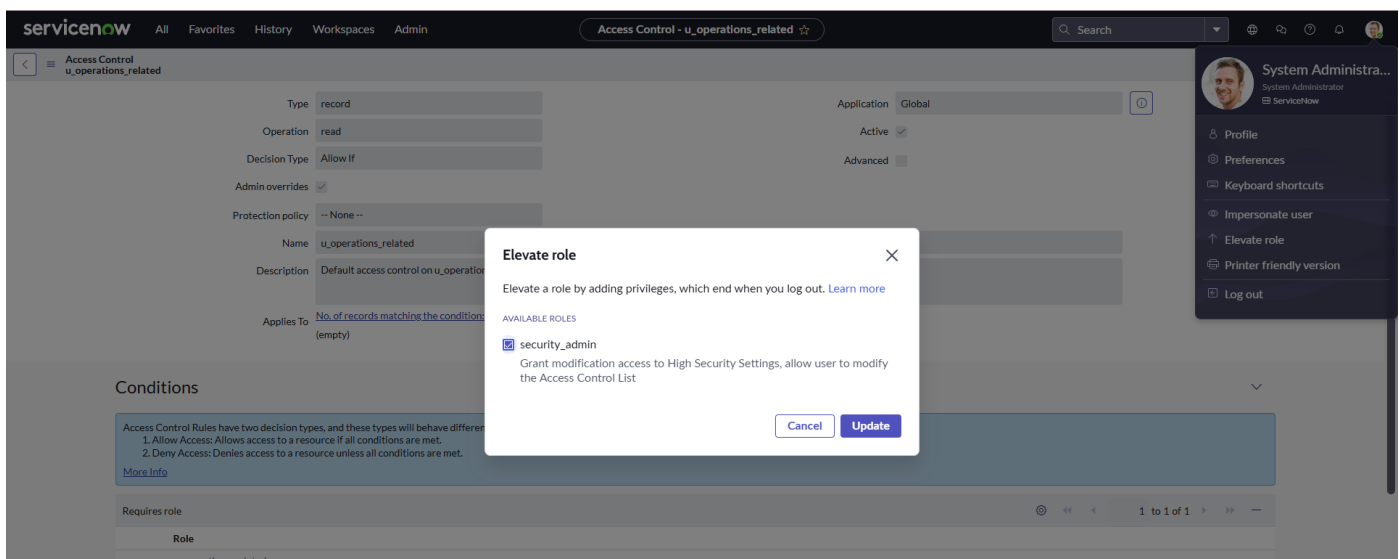
- Open service now.
- Click on All >> search for tables
- Select tables under system definition
- Select the platform group

- 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*.

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
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 -- -- value --

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*.

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
Certification_role
u_operations_related_user
Platform_role
Insert a new row...

Security Attribute Condition

Local or Existing ☐ Existing ☒ Local

Condition All of these conditions must be met

-- choose field -- -- value --

OR AND

New Criteria

Data Condition

Condition No. of records matching the condition: 0 @

Add Filter Condition Add "OR" Clause

1. 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.

The screenshot shows the ServiceNow interface for configuring an Access Control rule. The rule is named 'u_operations_related.u_service_request_no'. The configuration includes:

- Type:** record
- Operation:** write
- Decision Type:** Allow If
- Active:** checked
- Admin overrides:** checked
- Protection policy:** None
- Name:** Operations related [u_operations_related]
- Service request No:** Service request No
- Description:** (empty field)
- Applies To:** No. of records matching the condition: 0 @
- Conditions:** A blue box contains the text: "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:** admin
- Security Attribute Condition:** (empty field)

- 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.

Let's get the details for your flow

Flow name ⓘ
Regarding Platform

Application ⓘ
Global

Description ⓘ
Describe your flow.

▼ Hide additional properties

Protection ⓘ
-- None --

Run as ⓘ
System user

Flow priority default ⓘ
Medium (default)

Cancel Build flow

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

Regarding Certificate Inactive

View Test Test Activate Save

TRIGGER

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

Trigger: Created or Updated

* Table: Operations related [u_operation...]

Condition: All of these conditions must be met

Issue is regarding certificates

OR AND

New Criteria

Run Trigger: For every update

Advanced Options

Delete Cancel Done

ACTIONS Select multiple

+ 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

Changed Fields Array/Object

Operations related Table

Run Start Time UTC Date/Time

Run Start Date/Time Date/Time

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

Workflow Studio

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

Flow Variables

Trigger - Record Created or Updated

Operations related Record

Changed Fields

Operations related Table

Run Start Time UTC

Run Start Date/Time

1 - Update Record

Operations related Record

Operations related Table

Action Status

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

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

Issue is 404 error

or

Issue is regarding user expired

New Criteria

Run Trigger: For every update

Advanced Options

Delete Cancel Done

Data

Flow Variables

Trigger - Record Created or Updated

Operations related Record

Changed Fields

Operations related Table

Run Start Time UTC

Run Start Date/Time

1 - Update Record

Operations related Record

Operations related Table

Action Status

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

Workflow Studio

Regarding Certificate Flow

Regarding Platform Flow

Regarding Platform **Active**

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.