

Streamlining Ticket Assignment for Efficient Support Operations

Category: ServiceNow Application Developer

Submitted by: Gurralla Jhansi

Roll Number: 22341A1243

Course/Batch: Information Technology

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1.Introduction

Efficient support operations are essential for ensuring quick resolution of incidents and maintaining customer satisfaction. In manual ticket assignment, agents or administrators need to manually review tickets and assign them to the appropriate support group. This often causes delays, misrouting of issues, and a lack of accountability.

To overcome these challenges, ServiceNow's automation capabilities can be leveraged. By using **Flow Designer**, **User & Group Management**, and **Access Control Lists (ACLs)**, we can design an automated ticket assignment process that ensures incidents are assigned to the right group in real-time.

2.Skills & Tools Used

ServiceNow Platform

- User and Group Management
- Flow Designer
- Access Control Lists (ACLs)

3.Problem Statement

Current manual ticket assignment delays resolution, leads to inefficiency and dissatisfaction.
Need for automation.

Manual ticket assignment leads to:

- Delay in resolving incidents.
- Misallocation of tickets to the wrong groups.
- Increased dissatisfaction among users and support teams.

There is a need for an **automated ticket routing mechanism** that assigns tickets to the correct group without human intervention.

4. Proposed Solution

Automated ticket routing system in ServiceNow using Flow Designer. Proper ACLs to secure ticket data. Role-based access for support teams.

- ❓ Create **users, groups, and roles** in ServiceNow to represent the support structure.
- ❓ Design an **automated flow** in Flow Designer that routes tickets to groups based on ticket category.
- ❓ Implement **ACLs** to secure ticket data and ensure that only authorized users have access.
- ❓ Test the flows thoroughly with real-time scenarios to validate the automation

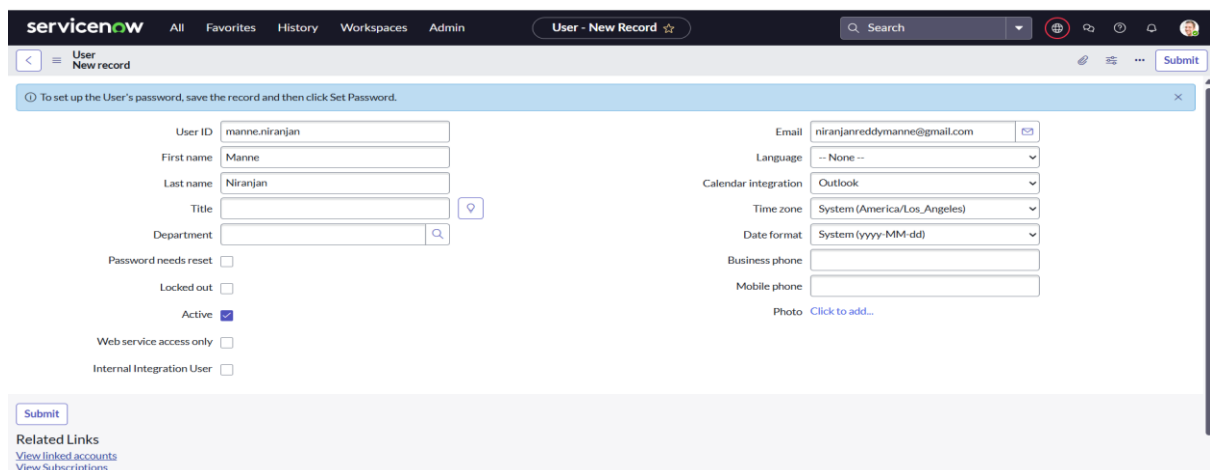
5. Implementation Steps

Step 1: User Creation

New users are created in ServiceNow to represent support agents

- Create new users in ServiceNow to represent support agents.
- Example:
 - **User 1**
 - **User 2**
- Each user will have unique login credentials and contact details in the system.

User 1:



The screenshot shows the 'User - New Record' form in ServiceNow. The form is divided into two main sections: 'User Information' on the left and 'Contact Information' on the right. The 'User Information' section includes fields for User ID (manne.niranjan), First name (Manne), Last name (Niranjan), Title, and Department. There are also checkboxes for 'Password needs reset', 'Locked out', 'Active' (checked), 'Web service access only', and 'Internal Integration User'. The 'Contact Information' section includes fields for Email (niranjanreddymanne@gmail.com), Language (None), Calendar integration (Outlook), Time zone (System (America/Los Angeles)), Date format (System (yyyy-MM-dd)), Business phone, Mobile phone, and Photo (Click to add...). A 'Submit' button is located at the bottom left. 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.'

User 2:

The screenshot shows the ServiceNow user management interface for a user named Katherine Pierce. The top navigation bar includes 'servicenow', 'All', 'Favorites', 'History', 'Workspaces', 'Admin', and a search bar. The breadcrumb trail shows 'User - Katherine Pierce'. The form is divided into two main sections. The left section contains fields for 'User ID' (Katherine.Pierce), 'First name' (Katherine), 'Last name' (Pierce), 'Title' (empty), and 'Department' (empty). Below these are checkboxes for 'Password needs reset', 'Locked out', 'Active' (checked), 'Web service access only', and 'Internal Integration User'. The right section contains fields for 'Email' (katherine.pierce@gmail.com), 'Language' (None), 'Calendar integration' (Outlook), 'Time zone' (System (America/Los Angeles)), 'Date format' (System (yyyy-MM-dd)), 'Business phone', 'Mobile phone', and a 'Photo' link. At the bottom left, there are buttons for 'Update', 'Set Password', and 'Delete'. Below these buttons are 'Related Links' for 'View linked accounts', 'View Subscriptions', and 'Reset a password'.

User ID: Katherine.Pierce

First name: Katherine

Last name: Pierce

Title:

Department:

Password needs reset: ☐

Locked out: ☐

Active: ☒

Web service access only: ☐

Internal Integration User: ☐

Email: katherine.pierce@gmail.com

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...](#)

Update Set Password Delete

Related Links

[View linked accounts](#)

[View Subscriptions](#)

[Reset a password](#)

Step 2: Group Creation

Groups are defined to organize users into specialized teams for ticket handling.

2 One groups to organize users into specialized support teams.

2 Example:

- **Group 1:** Operations Support Group (handles operations-related issues)
- **Group 2:** Platform Support Group (handles platform-related issues)

2 Each group can contain one or more users.

Group 1:

The screenshot shows the ServiceNow group management interface for a group named 'certificates'. The top navigation bar is the same as the previous screenshot. The breadcrumb trail shows 'Group - certificates'. The form has fields for 'Name' (certificates), 'Manager' (Katherine Pierce), 'Group email' (empty), and 'Parent' (empty). There is a large 'Description' field which is currently empty. At the bottom left, there are buttons for 'Update' and 'Delete'.

Name: certificates

Manager: Katherine Pierce

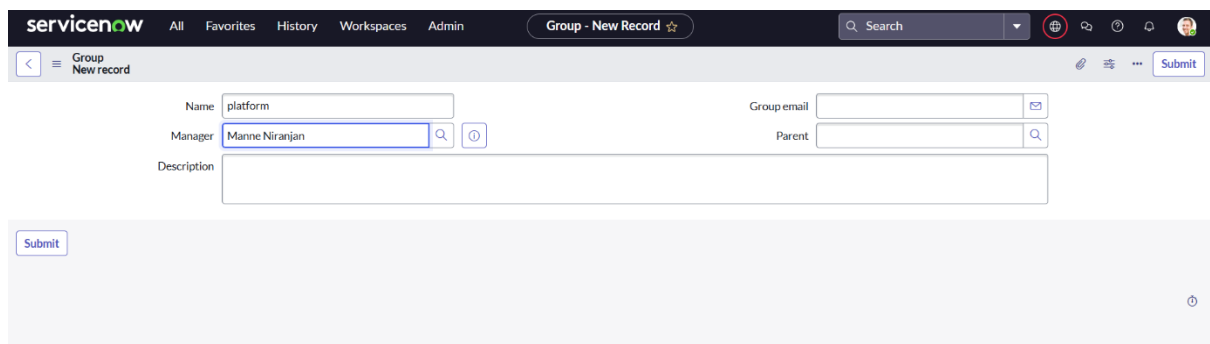
Group email:

Parent:

Description:

Update Delete

Group 2:

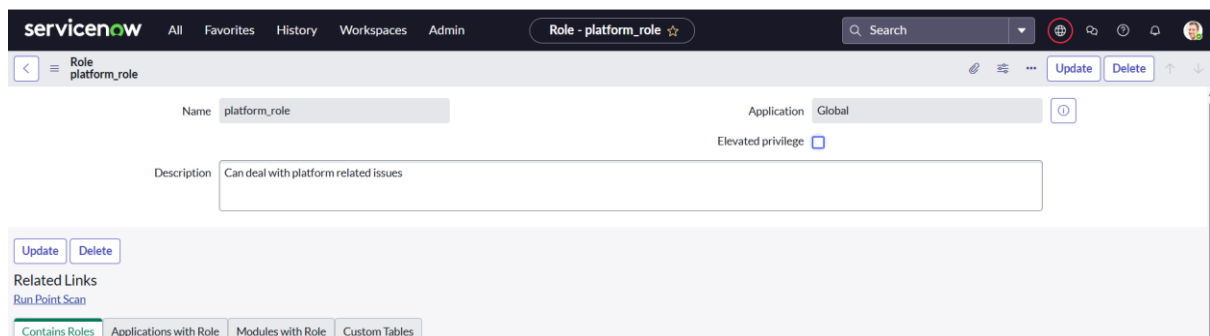


The screenshot shows the 'Group - New Record' form in ServiceNow. The form has a dark header with the 'servicenow' logo and navigation tabs: All, Favorites, History, Workspaces, and Admin. A search bar is on the right. Below the header, the form fields are: Name (platform), Manager (Manne Niranjan), Group email, Parent, and Description. A 'Submit' button is at the bottom right.

Step 3: Role Creation

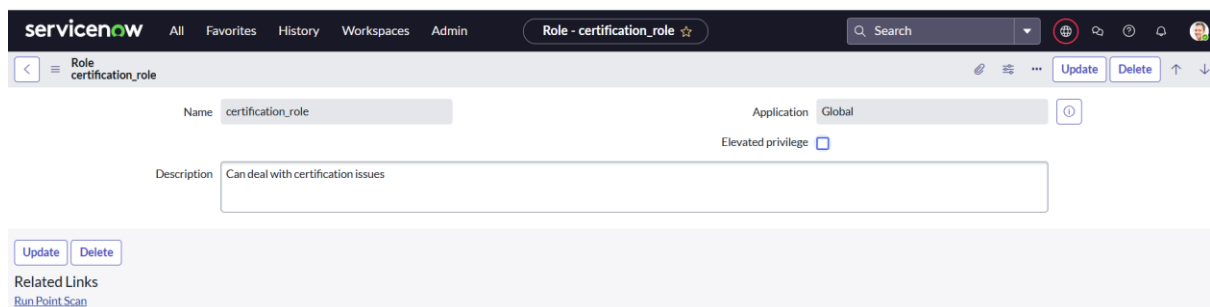
- Define roles to manage access and permissions.
- Example:
 - **Role 1:** Operations_Role – allows access to operations tickets.
 - **Role 2:** Platform_Role – allows access to platform-related tickets.

Role 1:



The screenshot shows the 'Role - platform_role' form in ServiceNow. The form has a dark header with the 'servicenow' logo and navigation tabs: All, Favorites, History, Workspaces, and Admin. A search bar is on the right. Below the header, the form fields are: Name (platform_role), Application (Global), Elevated privilege (checkbox), and Description (Can deal with platform related issues). There are 'Update' and 'Delete' buttons at the bottom left. Below the buttons, there is a 'Related Links' section with a link to 'Run Point Scan'.

Role 2:



The screenshot shows the 'Role - certification_role' form in ServiceNow. The form has a dark header with the 'servicenow' logo and navigation tabs: All, Favorites, History, Workspaces, and Admin. A search bar is on the right. Below the header, the form fields are: Name (certification_role), Application (Global), Elevated privilege (checkbox), and Description (Can deal with certification issues). There are 'Update' and 'Delete' buttons at the bottom left. Below the buttons, there is a 'Related Links' section with a link to 'Run Point Scan'.

Step 4: Tables Creation

- Create custom tables to represent ticket-related data.

- Example: **Operations_Tickets Table** to log operational issues.

Table – Operations related

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

Columns Controls Application Access

Step 5: Assigning roles to users & groups

- Assign roles to ensure users have the correct level of access.
- Example:
 - Assign **Operations_Role** to User 1 and Operations Support Group.
 - Assign **Platform_Role** to User 2 and Platform Support Group.

Assigning role and user to Certificate group

Group Membership

Add Filter Run filter

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

Collection
Q kathe

--None--

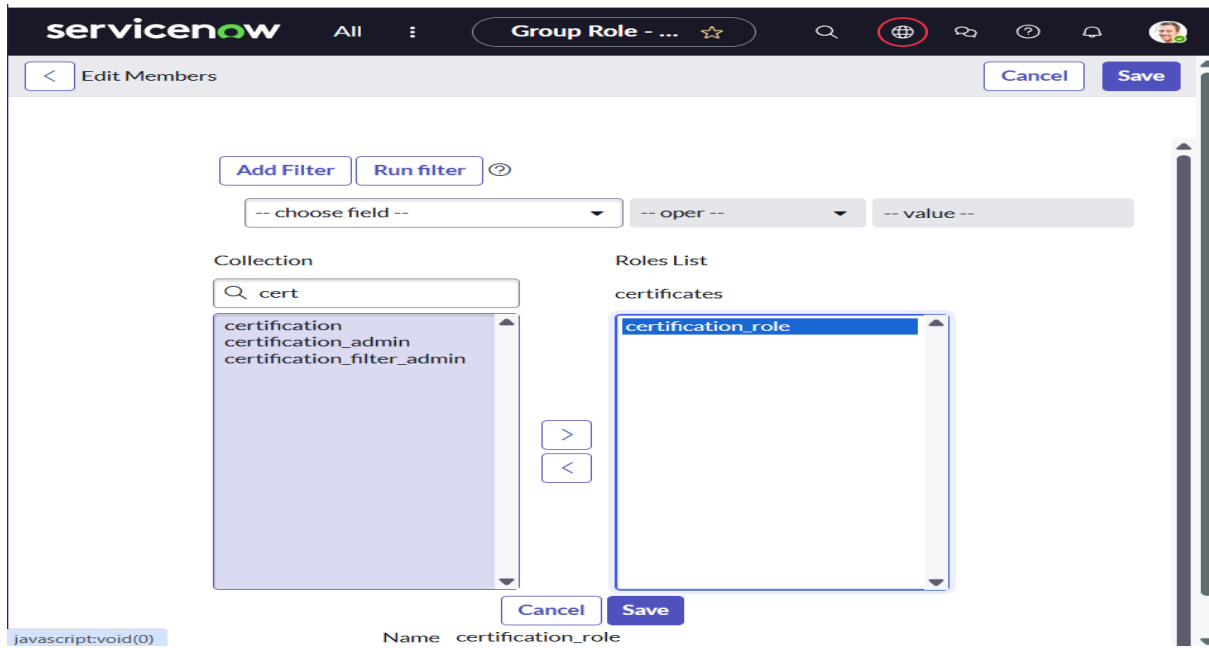
Group Members List
certificates

Katherine Pierce

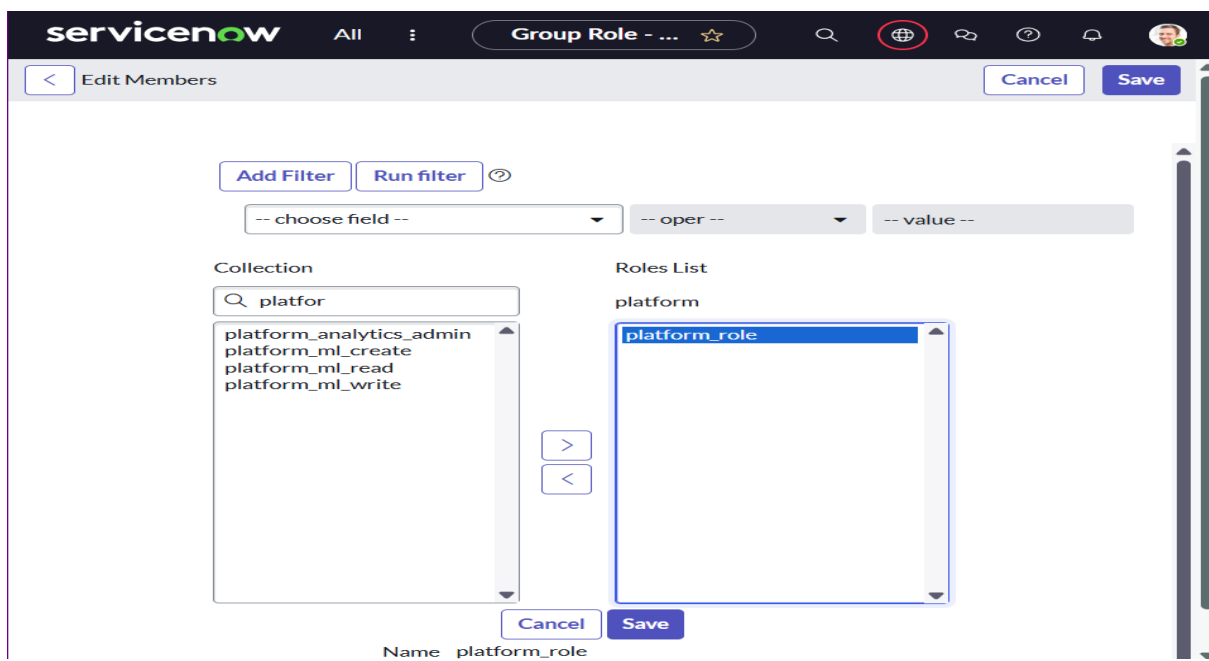
> <

Cancel Save

Name Katherine Pierce



Assigning role and user to Platform group



Edit Members

Collection: manne

Group Members List: platform

Manne Niranjana

Name: Manne Niranjana
First name: Manne
Last name: Niranjana

Step 6: Assign role to table

Ensure that only authorized roles can access the new tables.

Example: Operations_Role can view/edit Operations_Tickets, while Platform_Role can view/edit Platform_Tickets.

Access Control
u_operations_related

Definition

Access Control Rules allow access to the specified resource if *all three* of these checks evaluate to true:

1. The user has one of the roles specified in the **Role** list, or the list is empty.
2. Conditions in the **Condition** field evaluate to true, or conditions are empty.
3. The script in the **Script** field (advanced) evaluates to true, or sets the variable "answer" to true, or is empty.

The three checks are evaluated independently in the order displayed above.

More Info

Requires role

Role
u_operations_related_user
Platform_role
Certification_role
Insert a new row...

Step 7: Creation of ACL

Configure **Access Control Lists (ACLs)** to restrict data access.

Example:

- Only Operations Support Group can read/write Operations_Tickets.

- Only Platform Support Group can access Platform_Tickets.

ServiceNow Access Control configuration for **u_operations_related**.

Conditions

Requires role

Role
<input checked="" type="checkbox"/> u_operations_related_user
<input checked="" type="checkbox"/> platform_role
<input checked="" type="checkbox"/> certification_role

Security Attribute Condition

Local or Existing
☐ Existing ☒ Local

Security Attribute:

Condition:

Step 8: Create a Flow to Assign operations ticket to group

Step 9: Flow Creation – Operations Tickets

- Using **Flow Designer**, create a flow:
 - Trigger: When a new ticket is created with category = Operations.
 - Action: Automatically assign the ticket to **Operations Support Group**.

Workflow Studio: New Flow

Let's get the details for your flow

Flow name *

Application *

Description

▼ **Hide additional properties**

Protection

Run as

Flow priority default

TRIGGER

Operations related Created or Updated (Trigger: Created or Updated regarding certificates)

Trigger: Created or Updated

* Table: Operations related [u_operations_related]

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

Workflow Studio Regarding Certificate". Flow

Regarding Certificate". Inactive

TRIGGER

Operations related Created or Updated where (Issue is Regrading Certificates)

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.

Step 10: Flow Creation – Platform Tickets

- Create another flow:
 - Trigger: When a new ticket is created with category = Platform.
 - Action: Automatically assign the ticket to **Platform Support Group**.

Step 11: Flow Activation

- Activate both flows in Flow Designer so that they run automatically in real-time.

Workflow Studio

Regarding Certificate*. Flow

Regarding Certificate*. Active

Test Deactivate Activate Save

TRIGGER

Operations related Created or Updated where (Issue is Regrading Certificates)

ACTIONS Select multiple

1 Update Operations related Record

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

servicenow

All

Access Contr...

Access Control u_operations_related

Type record

Application Global

Operation Active

read

Decision T

Allow If

Admin ove

Protection

-- None --

Name u_operati

Description Default access control on u_operations_related

Applies To No. of records matching the condition: 0 (empty)

Conditions

System Administra...

System Administrator

ServiceNow

Profile

Elevate role

Elevate a role by adding privileges, which end when you log out. [Learn more](#)

AVAILABLE ROLES

☒ security_admin

Grant modification access to High Security Settings, allow user to modify the Access Control List

Cancel Update

Step 12: Testing the Flow

Once the flow was designed, it was tested by creating sample incidents/tickets in ServiceNow. The testing ensured that tickets were automatically assigned to the correct groups based on the issue category

Steps in Testing

1. Create a Test Ticket

- Example: Create an incident with category '*Unable to login to platform*'.
- Expected Result: The ticket should be auto-assigned to the *Platform Support Group*.

2. Check Assignment

- Verify that the ticket was routed to the correct support group automatically.

Testing ensures the automation works correctly.

Test Case 1 – Operations Ticket

- Action: Create a ticket with category = "Database issue (Operations)".
- Expected Result: The system auto-assigns the ticket to **Operations Support Group**.
- Verification: Check the "Assigned Group" field → should show Operations Support Group.

Test Case 2 – Platform Ticket

- Action: Create a ticket with category = "Unable to login to Platform".
- Expected Result: The system auto-assigns the ticket to **Platform Support Group**.
- Verification: Check the "Assigned Group" field → should show Platform Support Group.

Test Case 3 – Unauthorized Access

- Action: Try accessing Platform_Tickets with a user who only has Operations_Role.
- Expected Result: Access denied due to ACLs.
- Verification: User should not be able to view/edit platform tickets.

6. Results

- Tickets were successfully routed to the correct groups based on their category.
- No manual intervention was required.
- Unauthorized users were unable to access restricted tickets due to ACLs.

7. Benefits

- Faster ticket resolution.
- Reduced manual workload.
- Improved customer and user satisfaction.
- Clear accountability since tickets are assigned to the right group instantly.

8. Conclusion

The automation of ticket assignment in ServiceNow using Flow Designer significantly improved efficiency in support operations. It reduced delays, ensured correct routing, and enhanced security through ACLs.

9. Future Enhancements

- Add **priority-based routing** (e.g., high-priority tickets assigned to senior staff).
- Use **Machine Learning (ML)** to predict the best group for complex issues.
- Integrate with **Slack/Email notifications** for real-time updates to support staff.
- Implement **auto-escalation rules** if tickets remain unresolved beyond SLA.