

INTRODUCTION

PROJECT: “STREAMLINING TICKET ASSIGNMENT FOR EFFICIENT SUPPORT OPERATION”

In today’s fast-paced digital environments, organizations handle a large volume of support tickets across departments like **IT, HR, and Finance**. Delays in ticket assignment often lead to inefficiencies, increased resolution time, and reduced user satisfaction. This project focuses on **streamlining the ticket assignment process** using **ServiceNow**, aiming to improve support operations through automation, intelligent workflows, and optimized resource allocation.

Project Overview:

This project focuses on **automating and optimizing the ticket assignment process** within ServiceNow, a cloud-based IT service management platform. In many organizations, tickets (like incidents, service requests, etc.) are assigned manually, which leads to **delays, errors, and uneven workload distribution**.

By implementing this project, we use **Service Now’s automation tools** (like assignment rules, workflows, and assignment groups) to ensure that **each ticket is automatically routed to the right team or agent** based on specific criteria such as category, priority, location, or availability.

Benefits of the Project:

- Faster and more accurate ticket handling
- Reduced manual workload for support teams
- Better workload balancing across agents
- Improved user satisfaction and service deliver

IDEATION PHASE

Problem statement: ABC corporation a leading technology company was face in challenges with efficiently assigning support tickets to the appropriate teams. With a vast array of products and services, the support team found it increasingly difficult to manually route ticket to the right group leading to delay issue resolution and customer dissatisfaction

Challenges : The project to streamline ticket assignment is facing setbacks due to a mix of technical, operational, and organizational challenges. These issues are affecting the implementation and effectiveness of automated support workflows.

Key Challenges:

- Lack of defined goals, rules, and workflows.
- Difficulty connecting with CRM, helpdesk, or communication tools.
- Inconsistent or missing rules for ticket urgency and routing.
- Limited budget, time, or technical expertise.
- Support staff reluctant to adopt automation.
- Incomplete, messy, or unstructured ticket data
- Poor coordination, unclear ownership, or shifting priorities.

Object: 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

REQUIREMENT ANALYSIS

Solution Requirements:

Team ID	LTVIP2025TMID30596
Project Name	Streamlining ticket assignment for efficient support operation

Functional requirements:

Following are the functional requirements are the proposed solutions

Fr.No	Functional requirements (epic)	Sub,requirements story/sub-task
FR.1	Users	Create Users, add user ID ,and some fields like Last name, first name
FR.2	Groups	Create Groups, add name and manage
FR.3	Roles	Create Roles add name and description
FR.4	Tables	Create Tables,(Operations related) and new rows.
FR.5	Assign roles & user to Groups	<ul style="list-style-type: none">Assign roles & users to certificate group,assign roles & users to platform group.
FR.6	Assign roles to table	Assign roles to table , elevate role and add group members and roles.
FR.7	Create ACL	Create ACL , insert new roles in read and write. And give table name
FR.8	Flow	<ul style="list-style-type: none">Create a flow to assign operations ticket to groupCreate a flow to assign operations ticket to platform group.
FR.9	Conclusion	Streamlining ticket assignment in ServiceNow improves support efficiency by enabling automated routing, proper

		access control, and organized team structures—leading to faster resolutions and better service delivery.
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Non-Functional requirements:

Following are the non-functional requirements of the proposed solutions

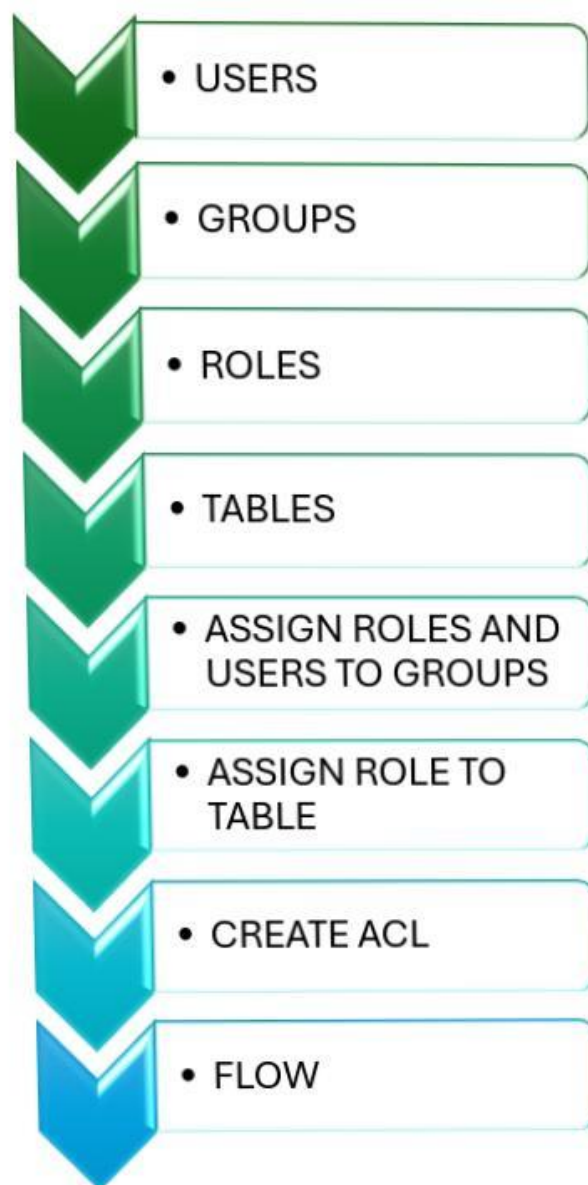
Fr. No	Non-functional requirements	Description
NFR-1	Usability	Ensures a user-friendly interface for quick ticket handling and faster resolution.
NFR-2	Security	Secures data through role-based access for authorized users only
NFR-3	Reliability	Ensures consistent ticket assignment using rules and automation.
NFR-4	Performance	Enables fast processing and real-time updates at scale.
NFR-5	Availability	Ensures uptime and uninterrupted ticket assignment for 24/7 support.
NFR-6	Scalability	Scales to support more tickets, users, and services without performance loss.

Data Flow Diagram : A Data Flow Diagram (DFD) is a simple visual tool that shows how data moves through a system. It outlines the input, processing, storage, and output of data, helping to understand and improve system workflows.

- Where data comes from (external sources)
- Where it goes (processes and storage)
- How it's transformed along the way

Uses:

- Show how data moves through a system from input communication output
- Break down complex processes into simpler, understandable components
- Enhance communication between technical teams and business stakeholders
- Aid in system design and development by mapping data processes clearly



Technology Stack: The image shows how data flows from a third-party system into the ServiceNow app, gets processed through import mechanisms, and ends up in the Incident Table, where it can trigger further actions or updates.

Third Party → REST API → ServiceNow

- Data is sent from a third-party system via REST API.

REST API → Scheduled Import

API data is captured by a scheduled import job.

Scheduled Import → Import Sets

- Data is loaded into temporary import tables.

Import Sets → Transform Map

- Data is transformed to match the format of the target tables.

Transform Map → Incident Table

- Transformed data is saved as incidents in ServiceNow.

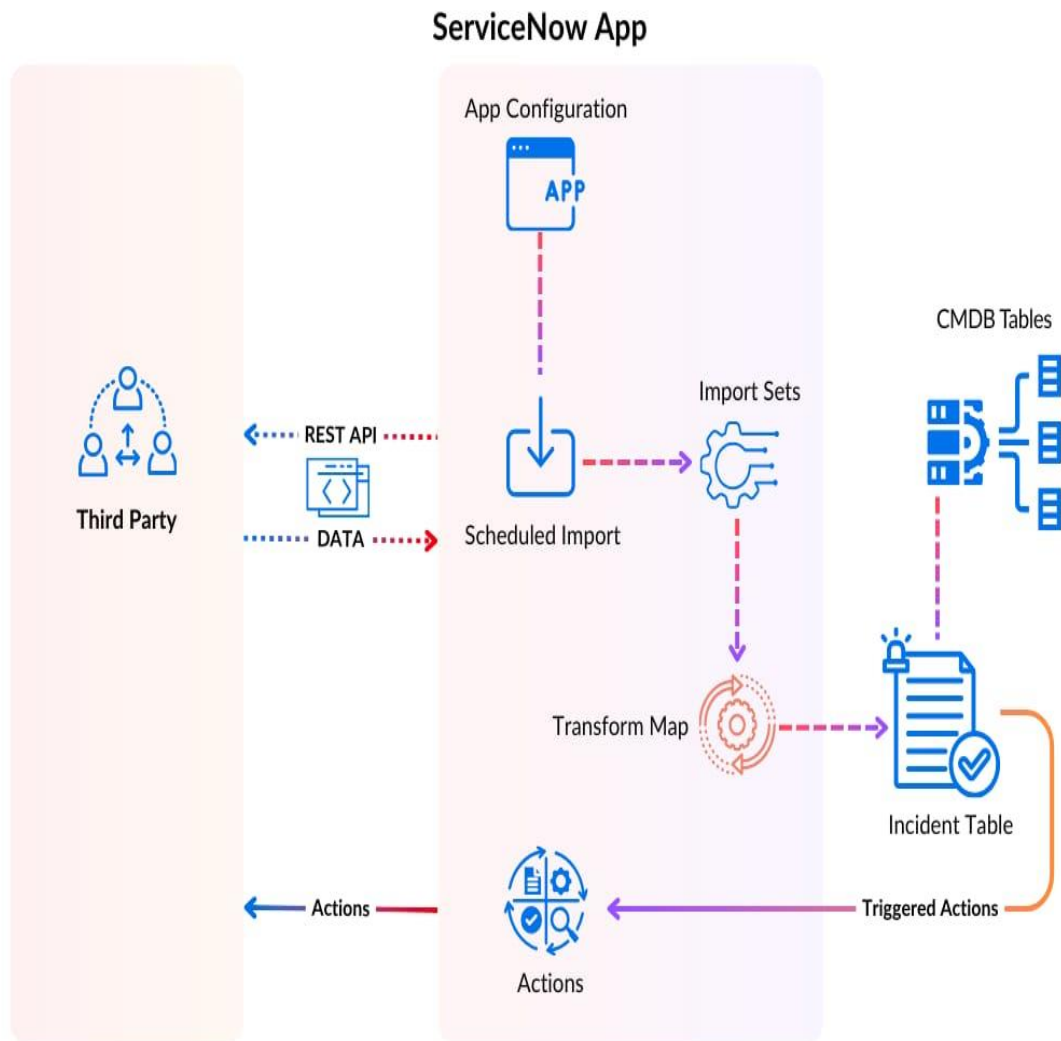
Incident Table → Triggered Actions

- Actions (like alerts, updates) are automatically triggered.

Incident Table ↔ CMDB Tables

- Incidents are linked to Configuration Items (Cis) from the CMDB.

Service now Architecture :



S.no	Parameters	Description
1.	Problem statement (problem to be solved)	Manual ticket assignment leads to delays, misrouting, and inefficient support operations. A streamlined, automated system is needed to improve accuracy and response time.
2.	Idea/solutions description	Implement an automated ticket assignment system in ServiceNow using roles, groups, and workflows to ensure accurate routing, faster resolution, and improved support efficiency.
3.	Novelty/uniqueness	Uses intelligent routing, role-based access, and automation in ServiceNow to optimize support with minimal manual effort.
4.	Social impact/customer satisfaction	Faster, accurate support boosts user satisfaction and builds trust through timely issue resolution.
5.	Business model (revenue model)	Improves operational efficiency, reducing support costs and downtime, while enhancing service quality—leading to higher customer retention and potential subscription growth.
6.	Scalability of the solution	Easily handles increasing tickets, users, and services without affecting performance, making it suitable for growing organizations.

PROJECT DESIGN

Proposed solutions template

Milestone 1: Users

Purpose:

- Assign tickets to right users
- Automate ticket routing
- Track user accountability

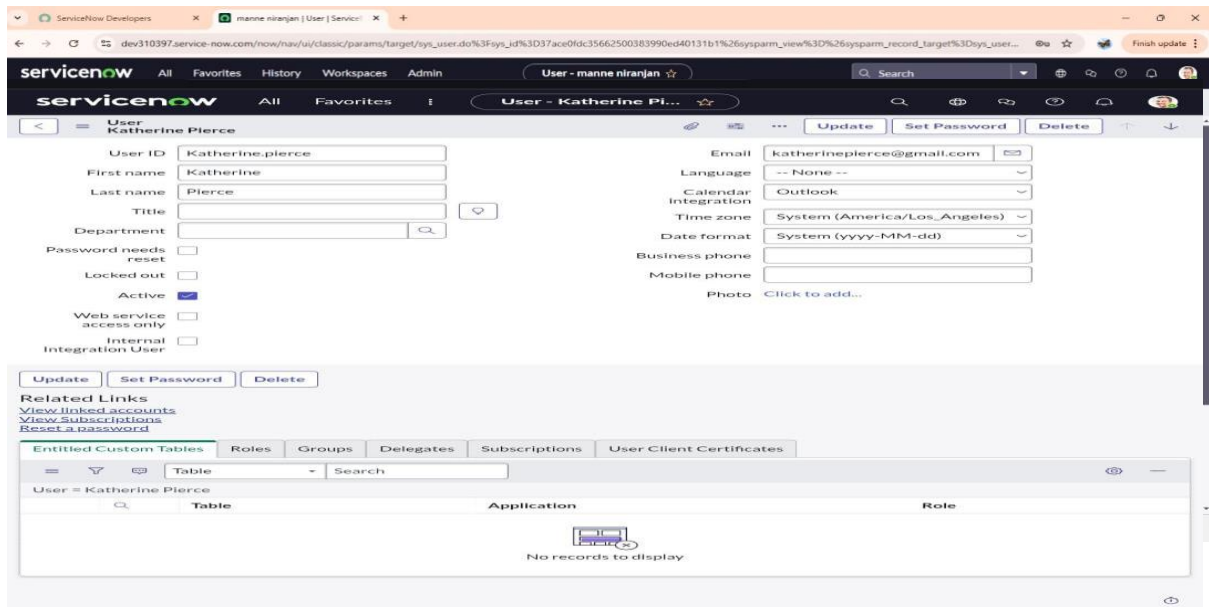
Uses:

- Enhances response and resolution time
- Simplifies workload distribution
- Restricts access based on user roles

Activity1: Create user:

Steps:

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
6. Click on submit
7. Create one more user:
8. Create another user with the following details



Milestone 2: Groups

Purpose:

- Support automated routing to specific teams
- Improve collaboration within support teams
- Ensure backup support through group members

Uses:

- Assign tickets to support teams instead of individuals
- Distribute workload evenly among group members
- Improve collaboration and communications

Activity 2: Group creation

Steps:

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
6. Click on submit
7. Create one more group
8. Create another group with the following details
9. Click on submit

ServiceNow Developers | Platform | Group | ServiceNow

dev310397.service-now.com/now/nav/ui/classic/params/target/sys_user_group.do%3Fsys_id%3D4f97a60cc3d66a100383990ed4013118%26sysparm_view%3D%26sysparm_record_target%3Dsys...

Group - Platform

Name: Platform

Manager: Manne Niranja

Group email:

Parent:

Description:

Update Delete

Roles Group Members Groups

Created Search

Group - Platform

Created	Role	Granted by	Inherits
No records to display			

Response Time(m): 17157, Network: 1, Server: 16981, Browser: 175

4 cm of rain Tuesday

ServiceNow Developers | Certificates | Group | ServiceNow

dev310397.service-now.com/now/nav/ui/classic/params/target/sys_user_group.do%3Fsys_id%3D2c23ed81c312ae100383990ed4013104%26sysparm_record_target%3Dsys_user_group%26syspa...

Group - Certificates

Name: Certificates

Manager: Katherine Pierce

Group email:

Parent:

Description:

Update Delete

Roles Group Members Groups

Created Search

Group - Certificates

Created	Role	Granted by	Inherits
No records to display			

4 cm of rain Tuesday

Milestone 3: Roles

Purpose:

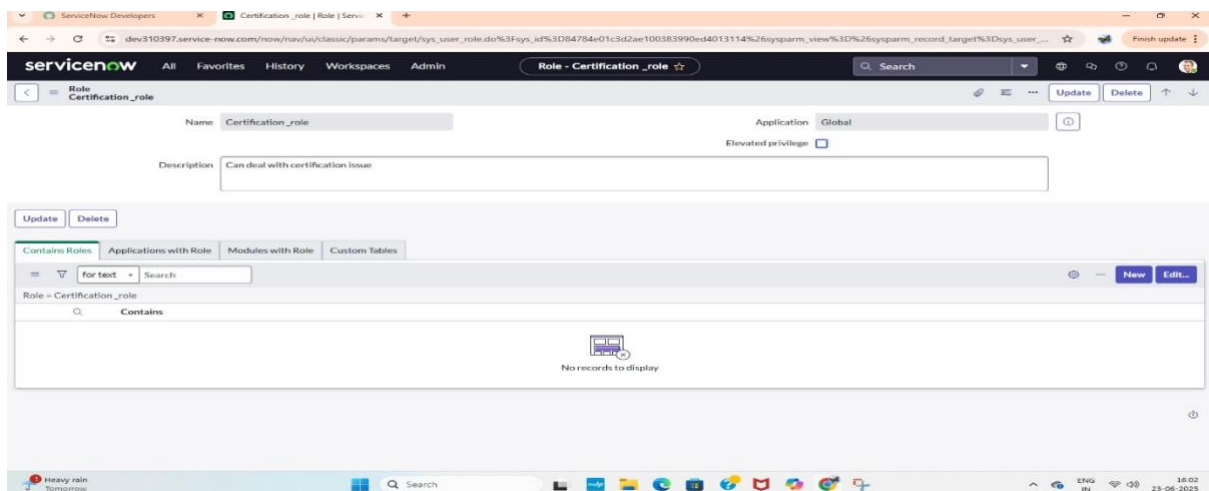
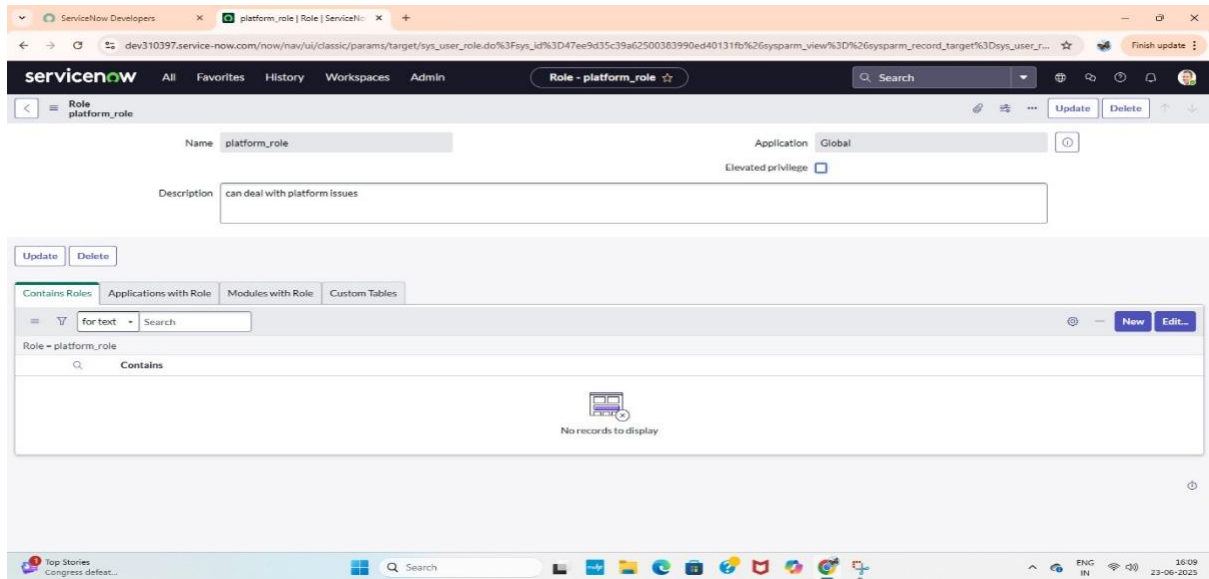
- Control access and permissions based on job responsibilities
- Ensure secure and appropriate handling of tickets
- Support automated workflows by role type
- Simplify user management and task assignment

Uses:

- Define access levels and permissions
- Control visibility of tickets and data
- Ensure users perform only allowed actions

Activity 3: Role creation**Steps:**

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
6. Click on submit
7. Create one more role:
8. Create another role with the following details
9. Click on submit



Milestone 4: Tables

Purpose:

- Store and organize ticket-related data systematically
- Define structure for different types of records (e.g., incidents, requests)
- Enable relationships between users, groups, and tickets
- Support reporting, automation, and efficient data retrieval

Uses:

- Store tickets, users, groups, and related data in structured format
- Enable automated workflows and ticket routing
- Support data tracking, filtering, and reporting
- Allow customization for different support processes

Activity 4: Table Creation**Steps:**

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
6. Label : Operations related
7. Check the boxes Create module & Create mobile module
8. Under new menu name : Operations related
9. Under table columns give the columns
10. Click on submit
11. Create choices for the issue filed by using form design
12. Choices are
13. Unable to login to platform
14. 404 error
15. Regarding certificates
16. Regarding user expired

Column label	Type	Reference	Max length	Default value
service request no	String	(empty)	40	javascript:getNextObjNumberPadded();
Comment	String	(empty)	40	
assigned to user	Reference	User	32	
Issue	String	(empty)	40	
priority	String	(empty)	40	
name	String	(empty)	40	
ticket raised date	Date/Time	(empty)	40	
Updated by	String	(empty)	40	
Updated	Date/Time	(empty)	40	
Sys ID (GUID)	Sys ID (GUID)	(empty)	32	
Created by	String	(empty)	40	
Created	Date/Time	(empty)	40	
Updates	Integer	(empty)	40	
assigned to Group	Reference	Group	32	

Milestone 5: Assign roles & users to group

Activity 1 :Assign roles & users to certificate group

Purpose:

- Grant appropriate access and permissions to handle tickets
- Ensure only authorized users can manage certificate-related tasks
- Streamline ticket routing to the right group with correct roles
- Enhance accountability and efficient task execution within the group

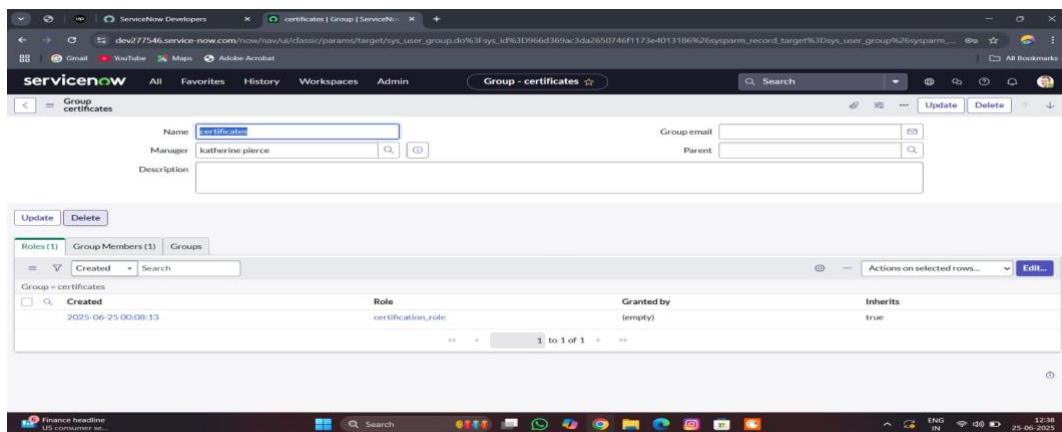
Uses:

- Allow group members to access and manage certificate-related tickets
- Enable role-based task execution within the group
- Support efficient ticket routing and handling
- Improve collaboration and accountability in certificate-related operations

Steps:

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 Katherine Pierce and save
8. Click on roles
9. Select Certification_role and save.



Activity 2:Assign roles & users to platform groups

Purpose.:

- Provide users with necessary permissions to perform platform-specific tasks
- Ensure efficient ticket routing to the appropriate platform support team
- Maintain security by limiting access based on roles
- Enable organized and role-based task execution within the group

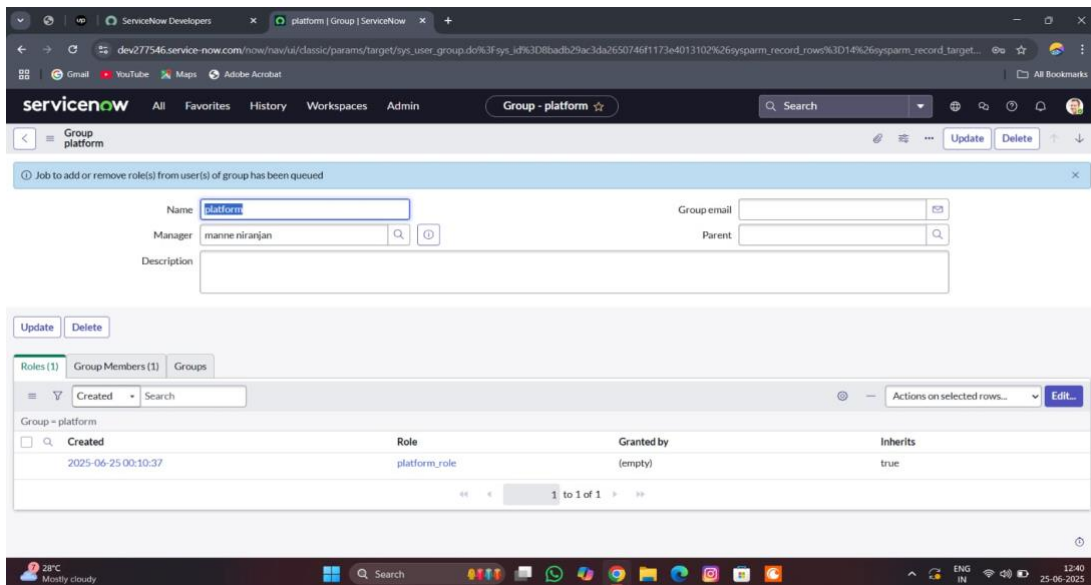
Uses:

- Allow platform group members to handle relevant support tickets
- Enable role-based access to platform-related features and data
- Facilitate efficient ticket resolution by specialized users
- Support collaboration and workload distribution within the group

Steps:

1. Open service now

2. Click on All >> search for tables
3. Select tables under system definitions'
4. Select the platform group
5. Under group members
6. Click on edit
7. Select Manne Niranjana and save
8. Click on roles
9. Select Platform_role and save.



The screenshot shows the ServiceNow interface for the 'Group - platform' page. The 'Roles' tab is active, displaying a table with the following data:

Created	Role	Granted by	Inherits
2025-06-25 00:10:37	platform_role	(empty)	true

The interface includes a search bar at the top, a 'Group - platform' breadcrumb, and a 'Job to add or remove role(s) from user(s) of group has been queued' message. The 'Roles' tab is selected, and the table shows one role named 'platform_role'.

Milestone 6:Assign role to table

Purpose:

- Control access to specific table data based on user roles
- Ensure only authorized users can create, read, update, or delete records
- Support secure and role-based ticket handling
- Enable customized workflows tied to role permissions on the table

Uses:

- Grant users appropriate access to view or manage ticket data
- Restrict unauthorized actions on sensitive records
- Support role-based automation and workflows
- Enable efficient and secure ticket processing within the system

Activity 1: Assign role to table

Steps:

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
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

Warning: A role, security attribute, data condition, script or ACL control via reference fields is required to properly secure access with this ACL.

* Type: record ⓘ

* Operation: write ⓘ

Decision Type: Allow If

Admin overrides: ☒

Protection policy: -- None --

* Name: ⓘ

Description: ⓘ

Applies To: Not a valid table name ⓘ
Add Filter Condition Add OR Clause

Application: Global ⓘ

Active: ☒

Advanced: ☐

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. Additional ACLs may grant access to records where this ACL has not granted access.
2. Deny Access: Denies access to a resource unless all conditions are met. Additional ACLs may not grant access to records where this ACL has denied access.
[More info](#)

Milestone 7 : Create ACL

Purpose:

- Control who can access or modify specific data in tables or field
- Ensure data security by enforcing role-based permission
- Prevent unauthorized access to sensitive ticket information
- Support compliance and governance in support operations

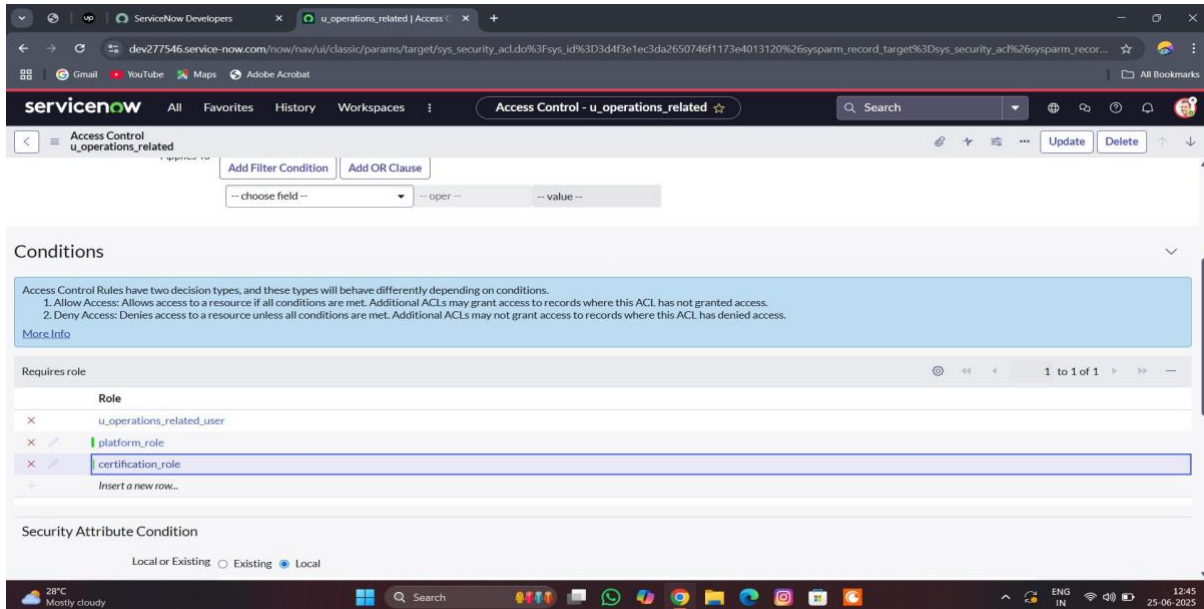
Uses:

Activity 1: Create ACL

Steps:

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
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



Milestone 8: Flow:

Purpose: Flow creation automates the ticket assignment process by defining step-by-step actions, ensuring tickets are routed quickly and accurately to the right team without manual intervention.

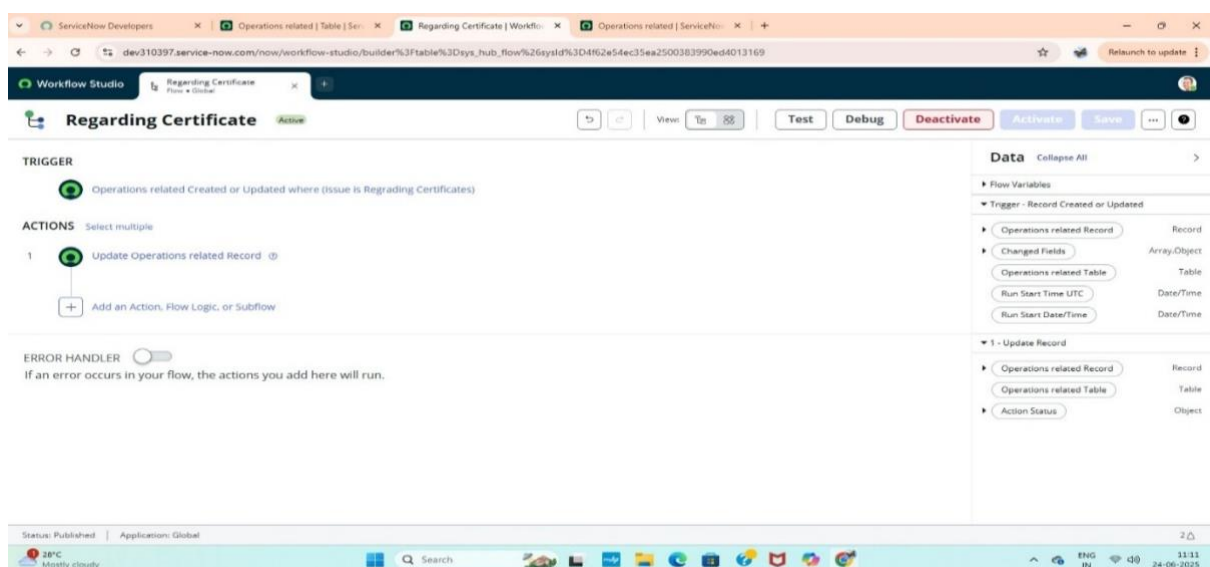
Uses :Flow creation automates ticket routing, triggers notifications, updates records, and ensures consistent handling—making the assignment process faster, error-free, and more efficient in ServiceNow.

Activity 1: Create a Flow to Assign operations ticket to group

Steps:

1. Go to All → Flow Designer under Process Automation
2. Click New → Flow, name it “Regarding Certificate”
3. Set Application as Global, and Run user as System user
4. Click Submit

5. Add Trigger: Create or update a record
6. Table: Operations related
7. Condition: issue is Regrading Certificates
8. Click Done
9. Add Action: Update Record
10. Drag record from Data panel
11. Set Assigned to group = Certificates
12. Click Done, Save, and Activate the flow up

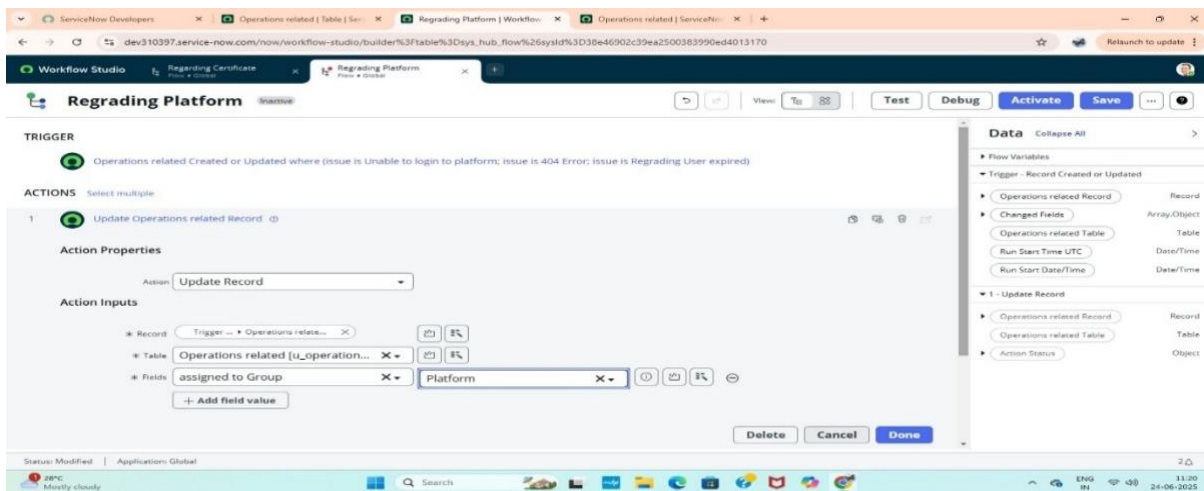


Activity 2: Create a Flow to Assign operations ticket to platform group:

Steps:

1. Open ServiceNow → All → Flow Designer under Process Automation
2. Click New → Flow, name it “Regarding Platform”
3. Set Application to Global, Run user to System user
4. Click Submit
5. Add Trigger: Create or update a record
6. Table: Operations related
7. Conditions (multiple criteria):
8. Issue is Unable to login to platform
9. Issue is 404 Error

10. Issue is Regrading User expired
11. Click Done
12. Add Action: Update Record
13. Drag record from Data panel
14. Set Assigned to group = Platform
15. Click Done, then Save and Activate the flow























Planning and Scheduling

Functional requirements	User story	No of activity	Team members
Uses	Key users include end users, support agents, group managers, and admins. User stories focus on submitting tickets, auto-assignment	1	Bala saraswathi.
Group	Support groups are created to handle specific ticket categories. This ensures tickets are automatically routed	1	B.Geethika
Roles	Roles control access and actions in ServiceNow, allowing users to perform tasks based on their responsibilities	1	B.Geethika
Tables	Tables store ticket and user data, enabling automated assignment and efficient tracking	1	B.Umarani
Assign roles to users to group	Assigning roles and users to groups ensures proper access and responsibility, enabling efficient ticket	2	Bala saraswathi.
Assign roles to table	Assigning roles to tables controls user access, ensuring secure and efficient handling of ticket data in ServiceNow.	1	B.Umarani
Create ACL	Creating ACLs ensures that only authorized users can view or modify specific ticket data.	1	B.Geethika
Flow	The flow ensures tickets are automatically assigned, resolved, and closed	2	B.Sireesha

Note: Request you to please click on "Tick mark  " after assigning the activities for each milestone.

Assign Roles & Responsibilities to Team

[→ Proceed to Workspace](#)

Users	▼	Create Users	▼	» Balasaraswathi Seepana		
Groups	▼	Create Groups	▼	» Bandi Geethika		
Roles	▼	Create roles	▼	» Bandi Geethika		
Table	▼	Create Table	▼	» Biddika Umarani		
Assign roles & usr	▼	Assign roles & usr	▼	» Balasaraswathi Seepana		
Assign roles & usr	▼	Assign roles & usr	▼	» Balasaraswathi Seepana		
Assign role to tab	▼	Assign role to tab	▼	» Biddika Umarani		
Create ACL	▼	Create ACL	▼	» Bandi Geethika		
Flow	▼	Create a Flow to /	▼	» Banda Sireesha		
Flow	▼	Create a Flow to /	▼	» Banda Sireesha		

[+ ADD](#)

FUNCTIONAL AND PERFORMANCE TESTING

Performance Testing

Milestone 8: Flow:

Purpose: Flow creation automates the ticket assignment process by defining step-by-step actions, ensuring tickets are routed quickly and accurately to the right team without manual intervention.

Uses :Flow creation automates ticket routing, triggers notifications, updates records, and ensures consistent handling—making the assignment process faster, error-free, and more efficient in ServiceNow.

Activity 1:Create a Flow to Assign operations ticket to group:

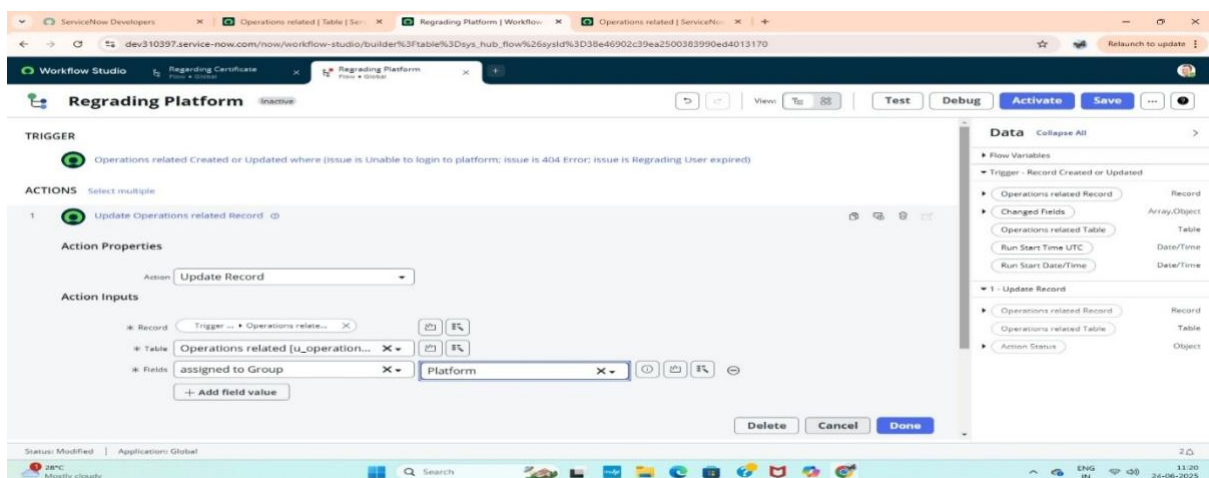
Steps:

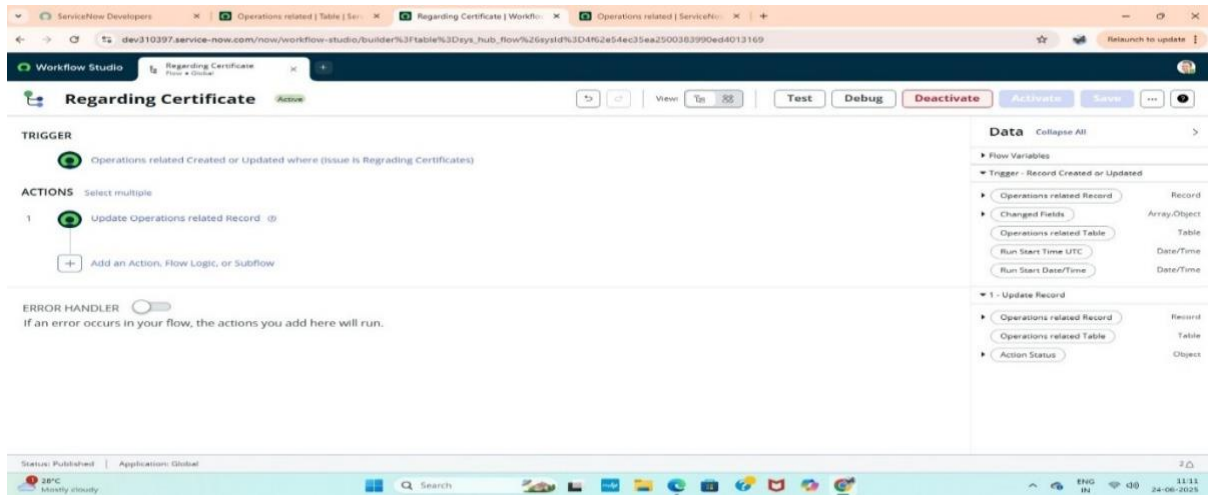
1. Go to **All** → Flow Designer under Process Automation
2. Click New → Flow, name it “**Regarding Certificate**”
3. Set Application as Global, and Run user as System user
4. Click Submit
5. **Add Trigger:** Create or update a record
6. **Table:** Operations related
7. **Condition:** issue is Regrading Certificates
8. Click Done
9. **Add Action:** Update Record
10. Drag record from Data panel
11. **Set Assigned to group** = Certificates
12. Click Done, Save, and Activate the flow

Activity 2:Create a Flow to Assign operations ticket to platform group:

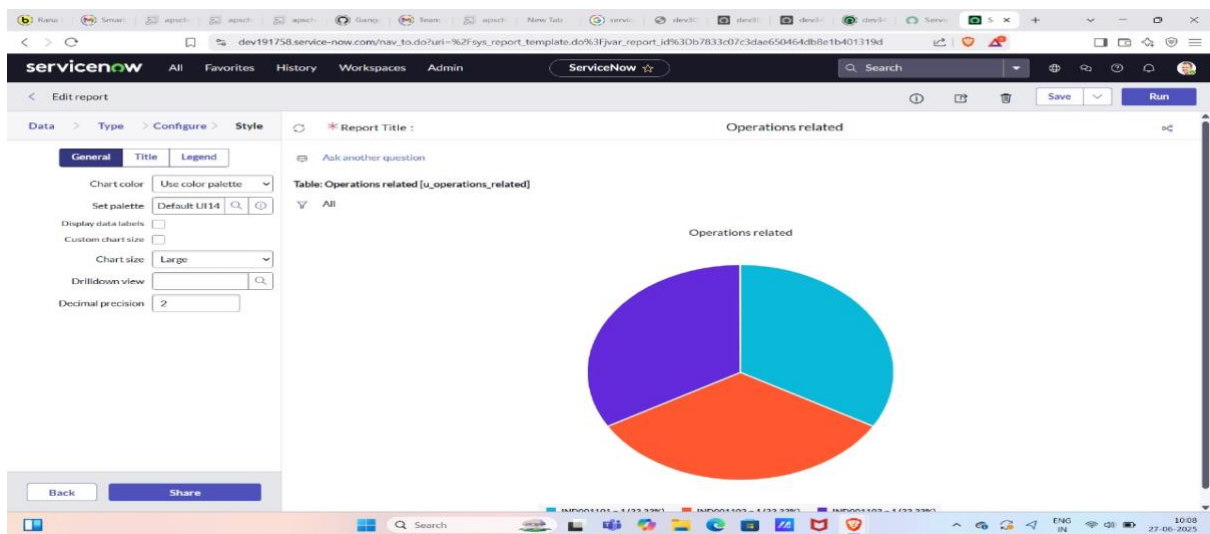
Steps:

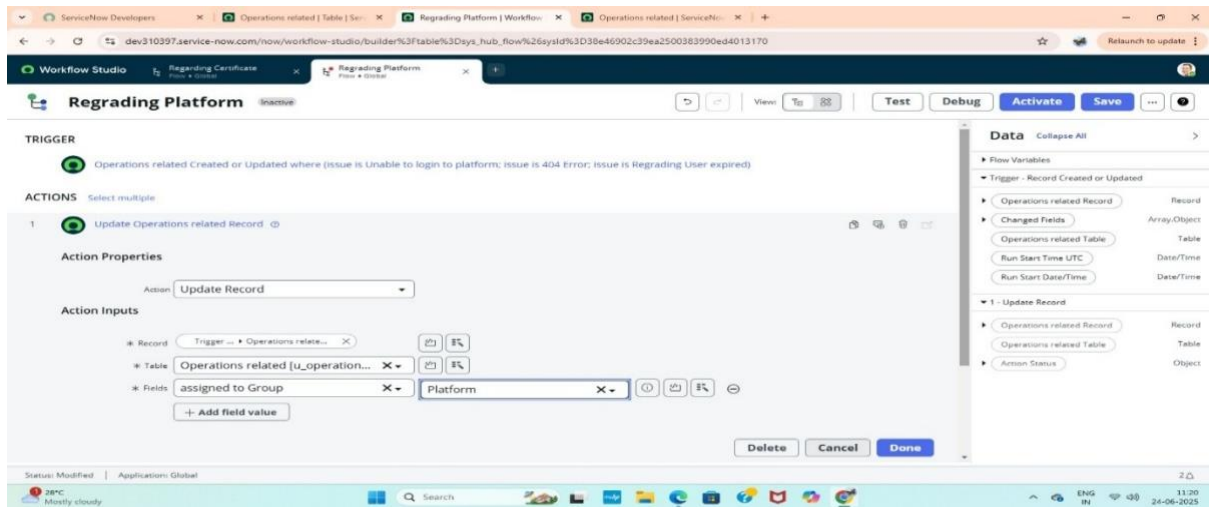
1. Open ServiceNow → **All** → Flow Designer under Process Automation
2. Click New → Flow, name it “Regarding Platform”
3. Set Application to Global, Run user to System user
4. Click Submit
5. **Add Trigger:** Create or update a record
6. **Table:** Operations related
7. **Conditions (multiple criteria):**
8. Issue is Unable to login to platform
9. Issue is 404 Error
10. Issue is Regrading User expired
11. Click Done
12. **Add Action:** Update Record
13. Drag record from Data panel
14. **Set Assigned to group = Platform**
15. Click Done, then Save and Activate the flow





Result





ADVANTAGES & DISADVANTAGES

Advantages:

- Automated assignment reduces delay in ticket handling.
- Speeds up ticket response and resolution times
- Ensures accurate routing to the right support group or user
- Balances workload across support teams
- Improves visibility into ticket status and team performance
- Enhances customer satisfaction through quicker service
- Scales easily with organizational growth

Disadvantages:

- Requires proper configuration of roles, rules, ACLs, and groups.
- Misconfigured categories or CMDB items can lead to misrouting.
- Complex initial setup and configuration
- Depends on accurate categorization and data inputs
- May lack flexibility for unique or unexpected case

Conclusion

The “Streamlining Ticket Assignment for Efficient Support Operation” project in ServiceNow significantly enhances the efficiency and reliability of IT support processes. By automating ticket routing based on roles, groups, and defined rules, the system ensures that issues are directed to the right teams without delay. This not only reduces response and resolution times but also improves accuracy and accountability within support operations. The approach supports scalability and provides better visibility for managers to monitor performance and workloads. Although it requires a well-planned setup and regular maintenance, the long-term benefits—such as improved service quality, ServiceNow Flow Designer in automating the ticket routing process. By configuring flows that assign tickets to the appropriate groups—such as “Certificates” and “Platform”—based on specific issue types, the need for manual intervention has been significantly reduced. This has resulted in faster response times, improved accuracy in ticket handling, and enhanced overall efficiency within the operations team.

Looking ahead, there is strong potential to expand this automation framework. More advanced routing logic can be developed by incorporating dynamic assignment rules and additional conditions. Integration with AI or machine learning models could further enhance the system’s ability to classify and route tickets intelligently. Regular monitoring and analysis of flow performance will help ensure continued effectiveness and allow for ongoing optimization. Additionally, user feedback can be used to refine existing flows and introduce new categories. Overall, this project lays a solid foundation for scalable, intelligent IT service automation in the future.