

Streamlining Ticket Assignment for Efficient Support Operations

Team Id: NM2025TMID13794

Team Details:-

Team Leader: Madhusudan

Team Member 1 : Aaron M

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Problem Statement:

Manual ticket routing at ABC Corporation leads to delays, misallocation of issues, and reduced efficiency in support operations, creating the need for an automated ticket assignment system to ensure accurate and timely resolution.

Objective:

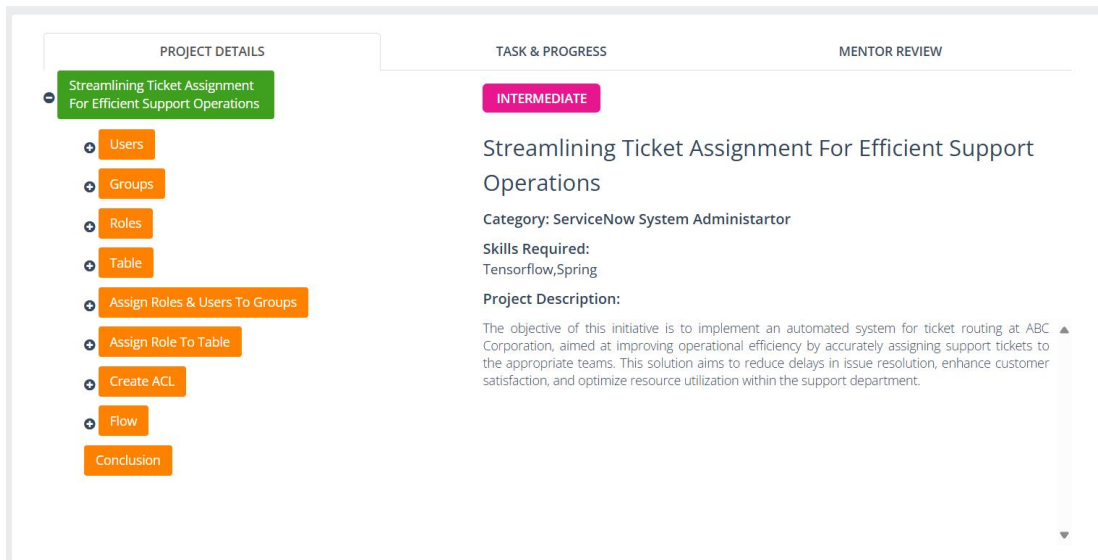
To implement an automated system for ticket routing at ABC Corporation that accurately assigns support tickets to the appropriate teams.

Skills:

1. TensorFlow
2. Spring

Project Structure

1. Users → Create and manage users in ServiceNow for ticket handling
2. Groups → Define groups responsible for handling specific issue categories
3. Roles → Assign roles to control access and responsibilities
4. Table → Create an “Operations Related” table with issue categories and assignment fields
5. Assign Roles & Users to Groups → Map users to their groups and assign relevant roles
6. Assign Role to Table → Provide table-level access permissions for groups and roles
7. Create ACL → Define Access Control Lists for security and field-level access
8. Flow → Automate ticket assignment using ServiceNow Flow Designer
9. Conclusion → Summarize the project outcomes and benefits



The screenshot displays a project management interface with three main tabs: PROJECT DETAILS, TASK & PROGRESS, and MENTOR REVIEW. The PROJECT DETAILS tab is active, showing a list of project tasks as orange buttons: Users, Groups, Roles, Table, Assign Roles & Users To Groups, Assign Role To Table, Create ACL, Flow, and Conclusion. The TASK & PROGRESS tab is also visible, showing the project title, category, skills required, and a detailed project description.

PROJECT DETAILS

Streamlining Ticket Assignment For Efficient Support Operations

- Users
- Groups
- Roles
- Table
- Assign Roles & Users To Groups
- Assign Role To Table
- Create ACL
- Flow
- Conclusion

TASK & PROGRESS

INTERMEDIATE

Streamlining Ticket Assignment For Efficient Support Operations

Category: ServiceNow System Administrator

Skills Required:
Tensorflow, Spring

Project Description:

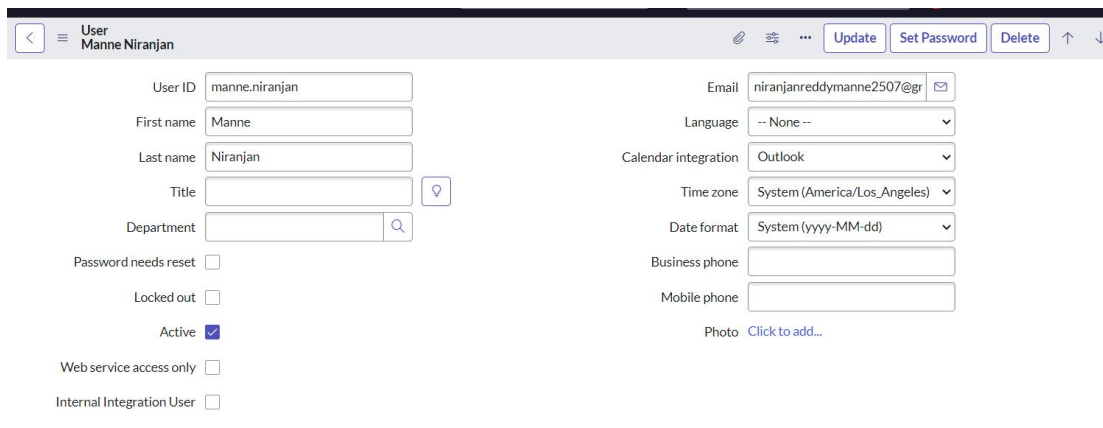
The objective of this initiative is to implement an automated system for ticket routing at ABC Corporation, aimed at improving operational efficiency by accurately assigning support tickets to the appropriate teams. This solution aims to reduce delays in issue resolution, enhance customer satisfaction, and optimize resource utilization within the support department.

TASK INITIATION

Milestone 1 : Users

Activity 1: Create Users

1. Open ServiceNow.
2. Click on All → search for Users.
3. Select Users under system security.
4. Click on New.
5. Fill in the required details to create a new user.

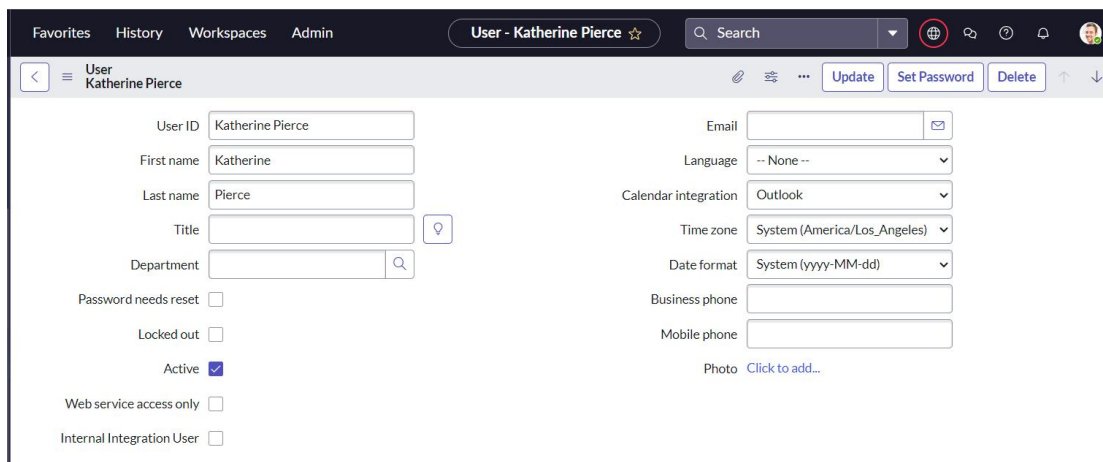


The screenshot shows the 'User - Manne Niranjan' form in ServiceNow. The form is divided into two main sections: 'Basic Information' on the left and 'Advanced Information' on the right. The 'Basic Information' section includes fields for User ID (manne.niranjan), First name (Manne), Last name (Niranjan), 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 'Advanced Information' section includes fields for Email (niranjanreddymanne2507@gr), Language (None), Calendar integration (Outlook), Time zone (System (America/Los_Angeles)), Date format (System (yyyy-MM-dd)), Business phone, and Mobile phone. There is also a 'Photo' field with a 'Click to add...' link. At the top right, there are buttons for 'Update', 'Set Password', and 'Delete'.

6. Click on Submit.

Create one more user:

7. Create another user with the given details.



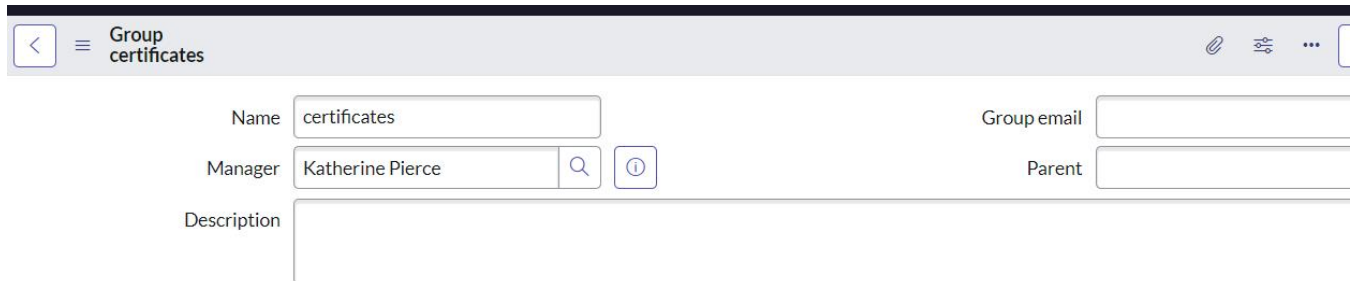
The screenshot shows the 'User - Katherine Pierce' form in ServiceNow. The form is divided into two main sections: 'Basic Information' on the left and 'Advanced Information' on the right. The 'Basic Information' section includes fields for User ID (Katherine Pierce), First name (Katherine), Last name (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 'Advanced Information' section includes fields for Email (empty), Language (None), Calendar integration (Outlook), Time zone (System (America/Los_Angeles)), Date format (System (yyyy-MM-dd)), Business phone, and Mobile phone. There is also a 'Photo' field with a 'Click to add...' link. At the top right, there are buttons for 'Update', 'Set Password', and 'Delete'.

8. Click on Submit.

Milestone 2 : Groups

Activity 1: Create Groups

1. Open ServiceNow.
2. Click on All → search for Groups.
3. Select Groups under system security.
4. Click on New.
5. Fill in the required details to create a new group.

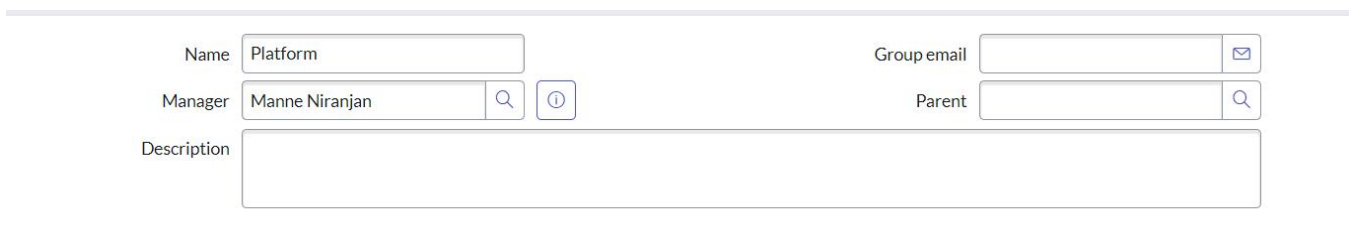


The screenshot shows the 'Group certificates' form in ServiceNow. The form has a header bar with a back arrow, a menu icon, the title 'Group certificates', and action icons (edit, delete, etc.). The form fields are: 'Name' with the value 'certificates', 'Manager' with the value 'Katherine Pierce' and a search icon, 'Group email' (empty), 'Parent' (empty), and 'Description' (empty text area).

6. Click on Submit.

Create one more group:

1. Create another group with the following details




The screenshot shows the 'Group Platform' form in ServiceNow. The form has a header bar with a back arrow, a menu icon, the title 'Group Platform', and action icons (edit, delete, etc.). The form fields are: 'Name' with the value 'Platform', 'Manager' with the value 'Manne Niranjana' and a search icon, 'Group email' (empty) with an email icon, 'Parent' (empty) with a search icon, and 'Description' (empty text area).

2. Click on submit

Milestone 3 : Roles

Activity 1: Create Roles

1. Open ServiceNow.
2. Click on All → search for Roles.
3. Select Roles under system security.
4. Click on New.
5. Fill in the required details to create a new role.

Name	<input type="text" value="Certification_role"/>	Application	<input type="text" value="Global"/>	
Requires Subscription	<input type="text" value="Unspecified"/>	Elevated privilege	<input type="checkbox"/>	
Description	<input type="text" value="Can deal with certification issues"/>			

6. Click on Submit.

Create one more role:

7. Create another role with the given details.

Name	<input type="text" value="Platform_role"/>	Application	<input type="text" value="Global"/>	
Requires Subscription	<input type="text" value="Unspecified"/>	Elevated privilege	<input type="checkbox"/>	
Description	<input type="text" value="Can deal with platform related issues"/>			

8. Click on Submit.

Milestone 4 : Table

Activity 1: Create Table

1. Open ServiceNow.
2. Click on All → search for Tables.
3. Select Tables under system definition.
4. Click on New.
5. Fill in the details to create a new table.
 - Label: Operations Related
 - Check the boxes Create module & Create mobile module
6. Under New Menu Name: Operations Related
7. Under table columns give the columns

Q	Column label	Type	Reference	Max length	Default value	Display
	Created by	String	(empty)	40		false
	Created	Date/Time	(empty)	40		false
	Sys ID	Sys ID (GUID)	(empty)	32		false
	Updates	Integer	(empty)	40		false
	Updated by	String	(empty)	40		false
	Updated	Date/Time	(empty)	40		false
×	Assigned to group	Reference	Group	40		false
×	Assigned to user	Reference	User	32		false
×	Comment	String	(empty)	40		false
×	Issue	String	(empty)	40		false
×	Name	String	(empty)	40		false
×	Priority	String	(empty)	40		false
×	Service request No	String	(empty)	40	javascript:getNextObjNumberPadded();	false
×	Ticket raised Date	Date/Time	(empty)	40		false
+	Insert a new row...					

8. Click on Submit.

Create Choices for Issues:

- Unable to login to platform
- 404 Error
- Regarding Certificates
- Regarding User Expired

Milestone 5 : Assign Roles & Users to Groups

Activity 1: Assign to Certificates Group

1. Open ServiceNow.
2. Go to Tables under system definition.
3. Select the Certificates Group.
4. Under Group Members, click on Edit.
5. Add Katherine Pierce and save.
6. Under Roles, add Certification_role and save.

Activity 2: Assign to Platform Group

1. Open ServiceNow.
2. Go to Tables under system definition.
3. Select the Platform Group.
4. Under Group Members, click on Edit.
5. Add Manne Niranjana and save.
6. Under Roles, add Platform_role and save.

Milestone 6 : Assign Roles to Table

Activity 1: Provide Table Access

1. Open ServiceNow.
2. Go to Tables under system definition.
3. Select Operations Related Table.
4. Open Application Access.
5. Click on u_operations_related (Read Operation).
6. Elevate role → Security Admin → Update.
7. Under Requires Role, insert Platform Role and Certificate Role.
8. Update.

<
≡
Access Control
u_operations_related
🔗
✚
⚙️
⋮
Update
Delete
↑
↓

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
⚙️
⏪
⏩
1 to 3 of 3
⏪
⏩
—

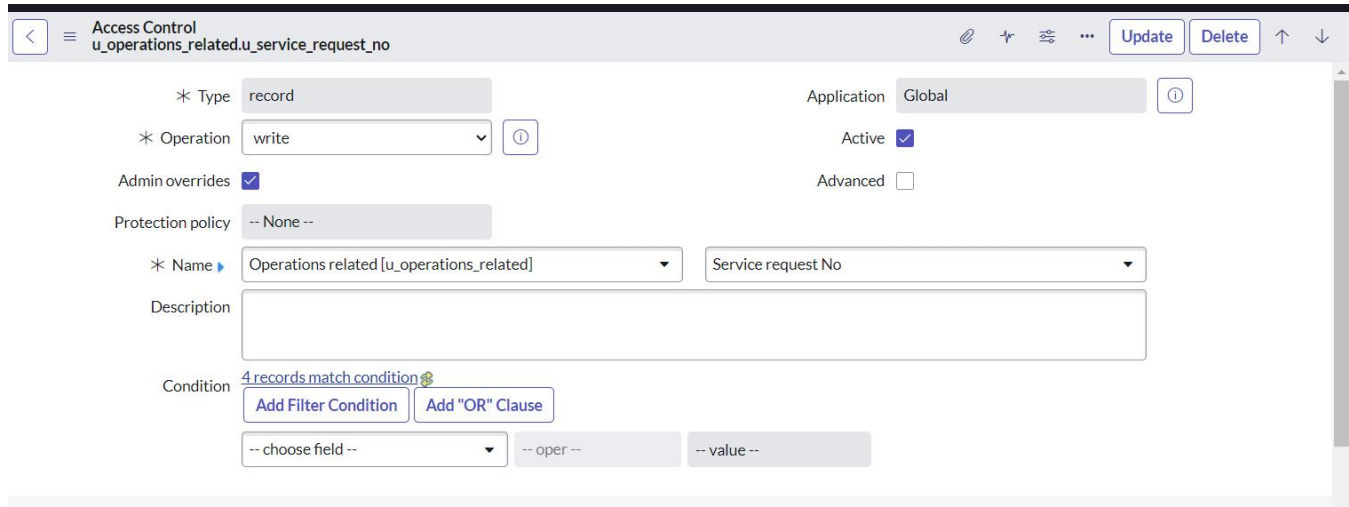
	Role
✖	u_operations_related_user
✖	Platform_role
✖	Certification_role
+	<i>Insert a new row...</i>

9. Repeat the same for Write Operation.

Milestone 7 : Access Control List (ACL)

Activity 1: Create ACL

1. Open ServiceNow.
2. Click on All → search for ACL.
3. Select Access Control (ACL) under system security.
4. Click on New.
5. Fill in details to create a new ACL.



The screenshot shows the 'Access Control' form in ServiceNow. The breadcrumb trail is 'Access Control > u_operations_related.u_service_request_no'. The form fields are as follows:

- * Type: record
- * Operation: write
- Application: Global
- Active: ☒
- Advanced: ☐
- Admin overrides: ☒
- Protection policy: -- None --
- * Name: Operations related [u_operations_related] (dropdown), Service request No (dropdown)
- Description: (empty text area)
- Condition: 4 records match condition (link), Add Filter Condition (button), Add "OR" Clause (button)
- choose field -- (dropdown), -- oper -- (dropdown), -- value -- (dropdown)

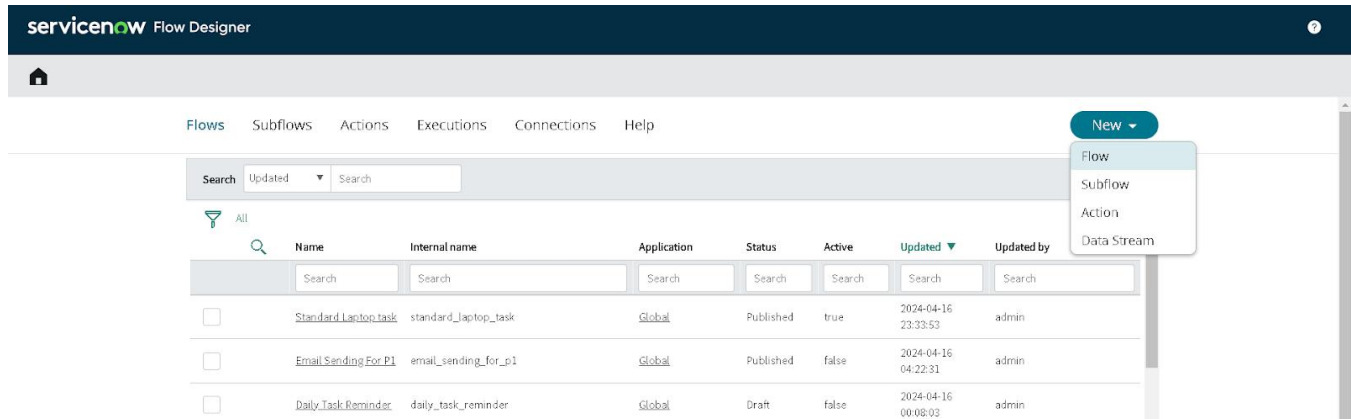
6. Under Requires Role, insert Admin Role.
7. Submit.
8. Similarly, create 4 ACLs for the required fields.

<input type="checkbox"/>	<input type="info"/>	u_operations_related.u_priority	write	record	true	admin	2024-04-16 22:32:12
		u_operations_related.u_ticket_raised_date	write	record	true	admin	2024-04-16 22:30:22
		u_operations_related.u_name	write	record	true	admin	2024-04-16 22:29:00
		u_operations_related.u_issue	write	record	true	admin	2024-04-16 22:23:31
		u_operations_related.u_service_request_no	write	record	true	admin	2024-04-16 22:17:14

Milestone 8 : Flow – Assign Operations Ticket

Activity 1: Flow for Certificate Issues

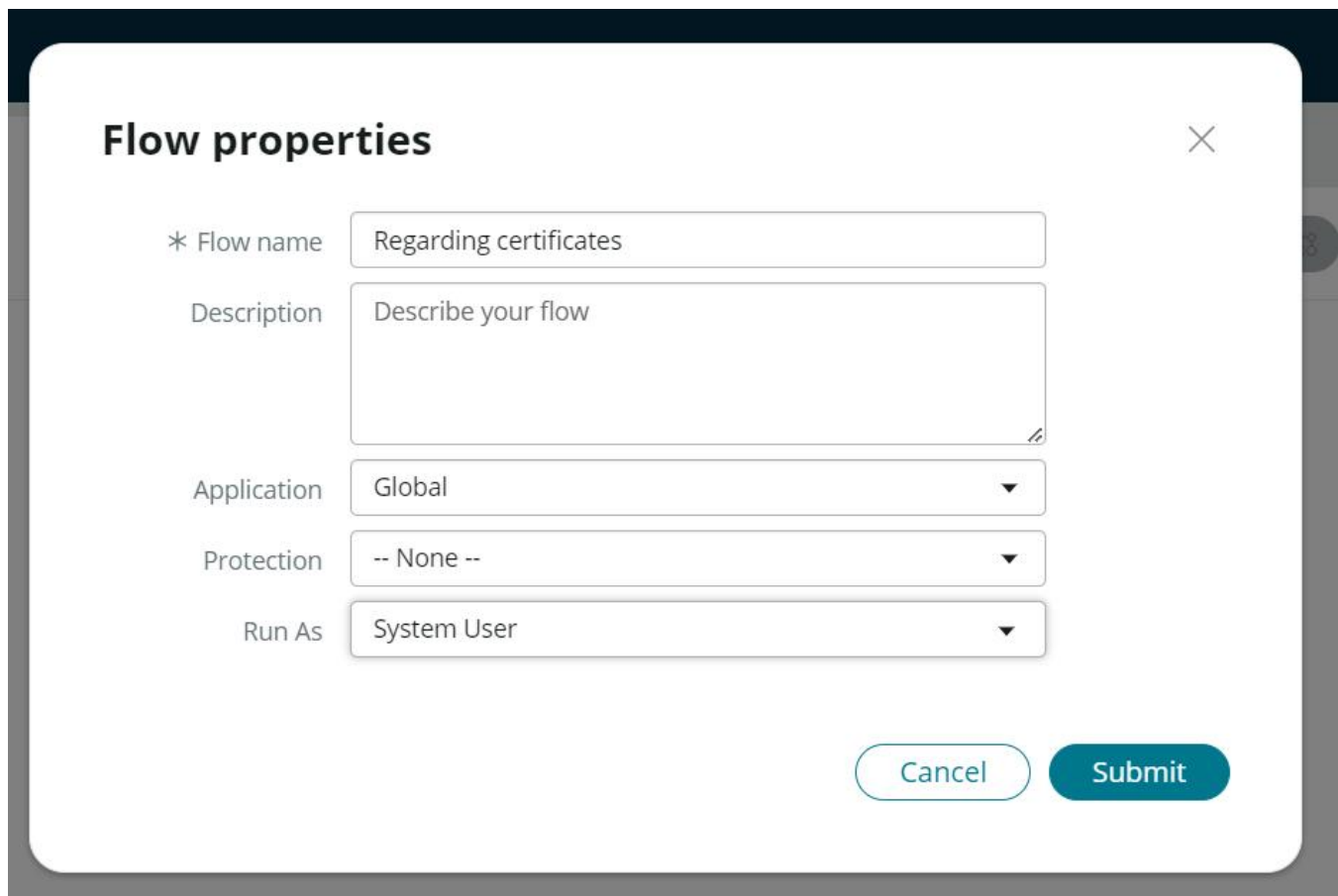
1. Open ServiceNow.
2. Go to Flow Designer.



The screenshot shows the ServiceNow Flow Designer interface. At the top, there's a navigation bar with 'servicenow Flow Designer' and a home icon. Below the navigation bar, there are tabs for 'Flows', 'Subflows', 'Actions', 'Executions', 'Connections', and 'Help'. A 'New' button is visible in the top right corner. Below the tabs, there's a search bar and a table of existing flows.

	Name	Internal name	Application	Status	Active	Updated	Updated by
<input type="checkbox"/>	Standard Laptop task	standard_laptop_task	Global	Published	true	2024-04-16 23:33:53	admin
<input type="checkbox"/>	Email Sending For P1	email_sending_for_p1	Global	Published	false	2024-04-16 04:22:31	admin
<input type="checkbox"/>	Daily Task Reminder	daily_task_reminder	Global	Draft	false	2024-04-16 00:08:03	admin

3. Create a new Flow → Name: Regarding Certificate.



The screenshot shows the 'Flow properties' dialog box. It has a title bar with a close button (X). The form contains the following fields:

- * Flow name: Regarding certificates
- Description: Describe your flow
- Application: Global
- Protection: -- None --
- Run As: System User

At the bottom right, there are two buttons: 'Cancel' and 'Submit'.

4. Application: Global | Run User: System User.
5. Add Trigger → Create or Update a Record.
6. Table: Operations Related
7. Condition: Issue = "Certificates"

TRIGGER

now 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

8. Add Action → Update Record.

ACTIONS Select multiple

1 **now** Update Operations related Record

Action: Update Record

* Record: Trigger ... Operations relate...

* Table: Operations related [u_operations_related]

* Fields: Assigned to group certificates

+ Add field value

Delete Cancel Done

9. Field: Assigned to Group → Certificates

10. Save & Activate.

servicenow Flow Designer

Flow: Regarding certificates

Regarding certificates Active

View: Test Deactivate Activate Save

TRIGGER

now Operations related Created or Updated where (Issue is Regarding certificates)

ACTIONS Select multiple

1 **now** Update Operations related Record

+ Add an Action, Flow Logic, or Subflow

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

Activity 2: Flow for Platform Issues

1. Open ServiceNow.
2. Create a new Flow → Name: Regarding Platform.
3. Application: Global | Run User: System User.
4. Add Trigger → Create or Update a Record.
 - Table: Operations Related
 - Conditions:
 - i. Issue = "Unable to login to platform"
 - ii. Issue = "404 Error"
 - iii. Issue = "User Expired"
5. Add Action → Update Record.
 - Field: Assigned to Group → Platform
6. Save & Activate.

Conclusion

The implementation of the automated ticket routing system at ABC Corporation proved to be highly effective. By leveraging ServiceNow functionalities such as user, group, and role management, table creation, ACLs, and flow automation, the process of assigning support tickets has been streamlined. This automation eliminated manual routing challenges, ensured tickets are directed to the right teams, reduced delays in resolution, and significantly improved both operational efficiency and customer satisfaction.