Streamlining Ticket Assignment for Efficient Support Operations

Team Id: NM2025TMID20204

Team Members: 4

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Team Member 1: Sujithra U

Team Member 2: Parkavi M

Team Member 3: Sandhya R

Problem Statement: Manual or rule-based ticket assignment in support operations often leads to delays, misrouting, and uneven workloads among support agents. This reduces efficiency and customer satisfaction. The goal is to build a smart, automated ticket assignment system that uses factors like agent skills, workload, and ticket priority to ensure faster and more accurate resolution.

Objective: To develop an intelligent ticket assignment system that automatically analyzes incoming support tickets and assigns them to the most suitable agent based on skills, availability, workload, and ticket priority — improving response time, operational efficiency, and customer satisfaction.

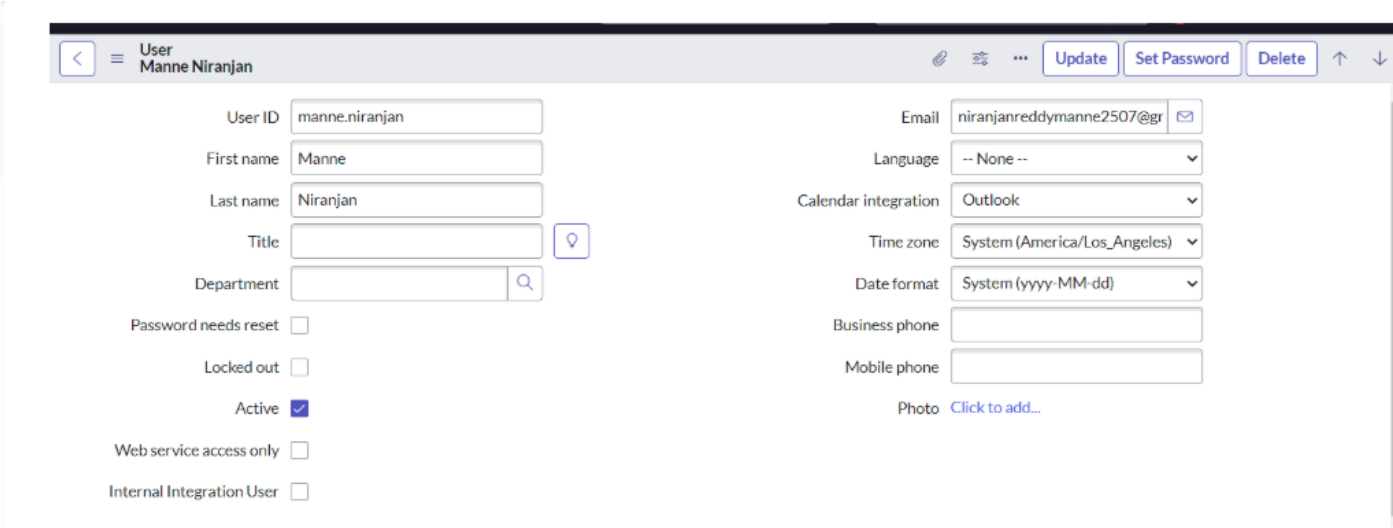
Skills: Proficiency in Python, machine learning, and NLP for intelligent ticket processing, along with basic web development and database management for building the dashboard and backend.

TASK INITIATION

Milestone 1 : Create Users

Activity 1: Create New User

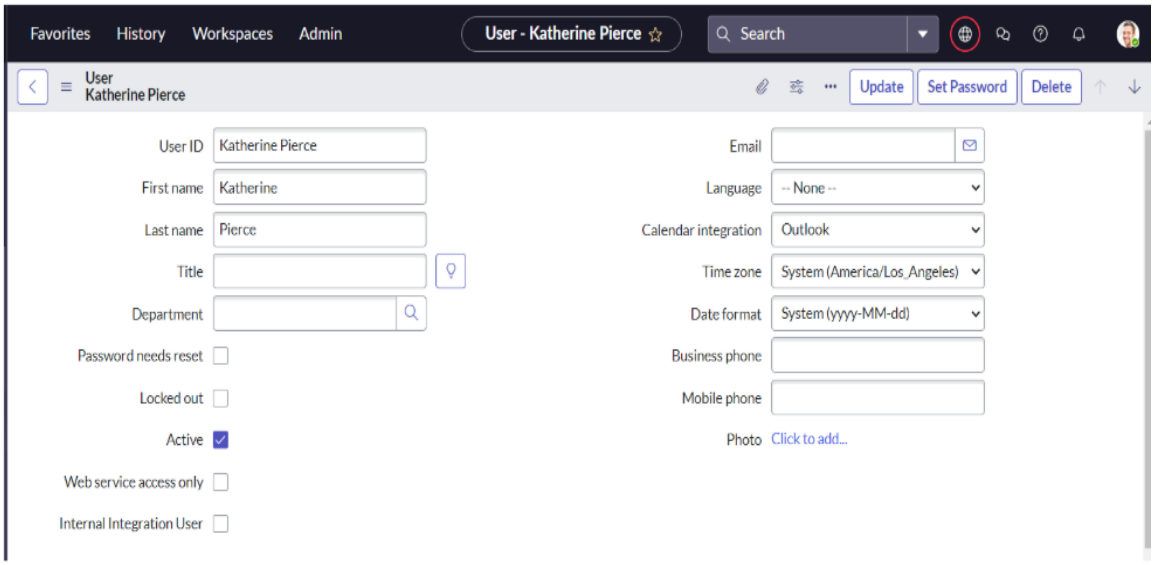
1. Open service now.
2. Click on All >> search for users
3. Select Users under system security
4. Click on new
5. Fill the following details to create a new user



6. Click on submit

Create one more user:

7.Create another user with the following details

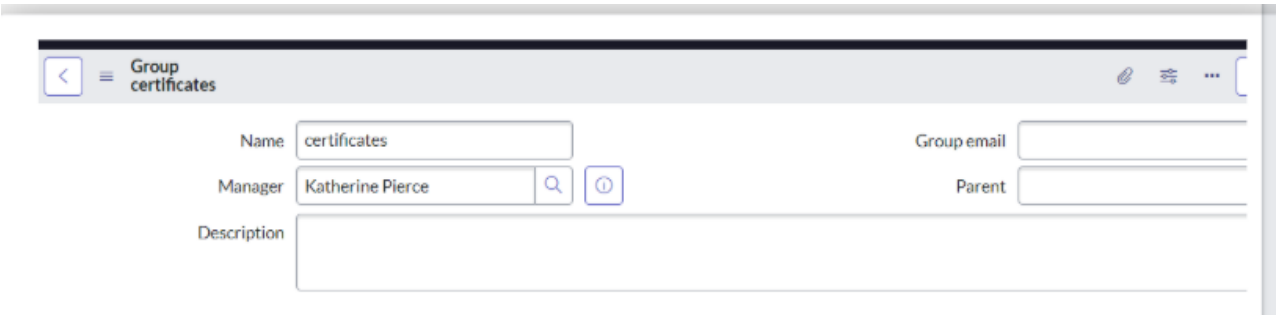


8. Click on submit

Milestone 2 : Create Group

Activity 1 : Create New Group

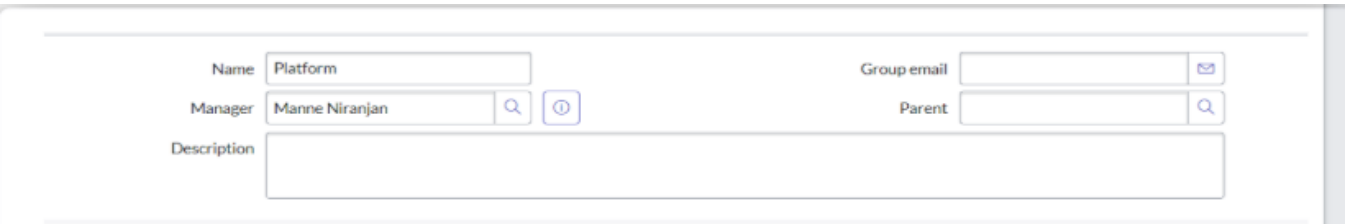
1. Open service now.
2. Click on All >> search for groups
3. Select groups under system security
4. Click on new
5. Fill the following details to create a new group



6.Click on submit

Create one more group:

1. Create another group with the following details

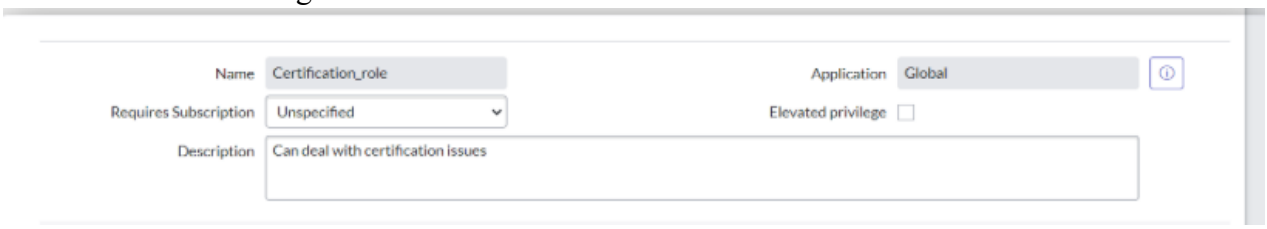


2. Click on submit

Milestone 3 : Create Roles

Activity 1: Create New Roles

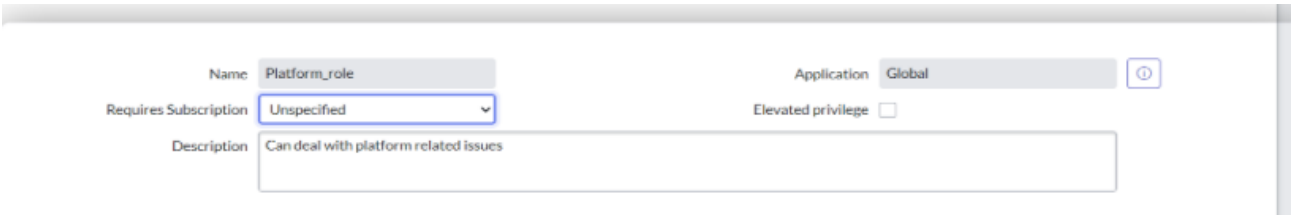
1. Open service now.
2. Click on All >> search for roles
3. Select roles under system security
4. Click on new
5. Fill the following details to create a new role



6. Click on submit

Create one more role:

Create another role with the following details



Click on submit

Milestone 4 : Create Table

Activity 1: Create New Table

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
   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

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 the issue filed by using form design
Choices are

- unable to login to platform
- 404 error
- regarding certificates
- regarding user expired

Milestone 5 : Assign roles & users to groups

Activity 1: Assign roles & users to certificate group

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

Milestone 5 : Assign roles & users to groups

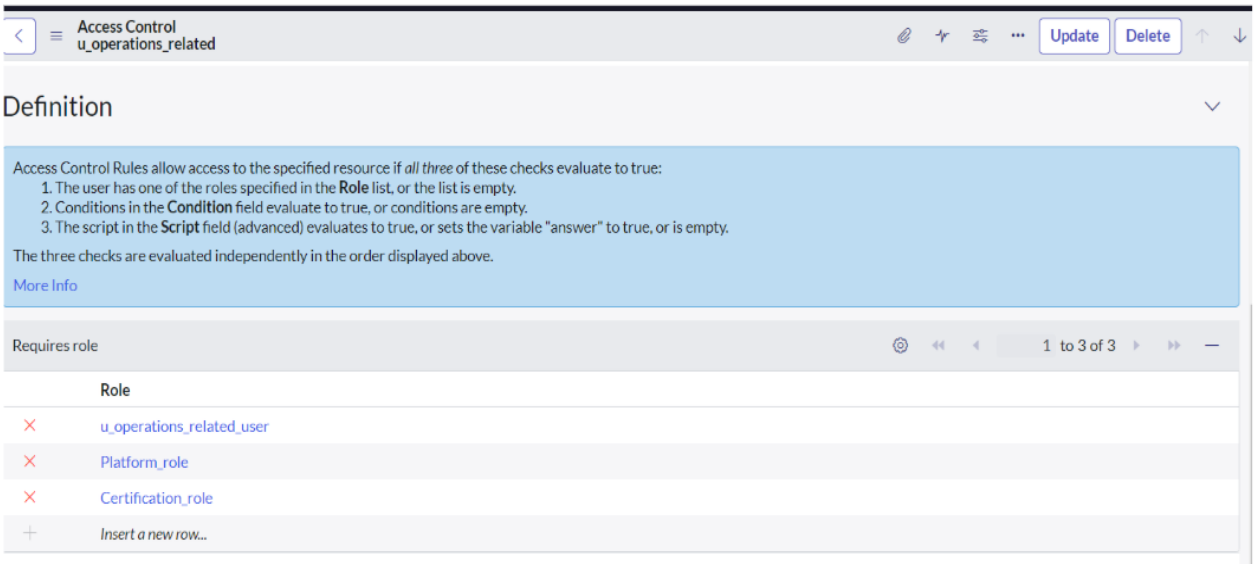
Activity 2 : Assign roles & users to platform group

1. Open service now.
2. Click on All >> search for tables
3. Select tables under system definition
4. Select the platform group
5. Under group members
6. Click on edit
7. Select Manne Niranjan and save
8. Click on roles
9. Select Platform_role and save

Milestone 6 : Assign role to table

Activity 1 : Assign New role to table

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

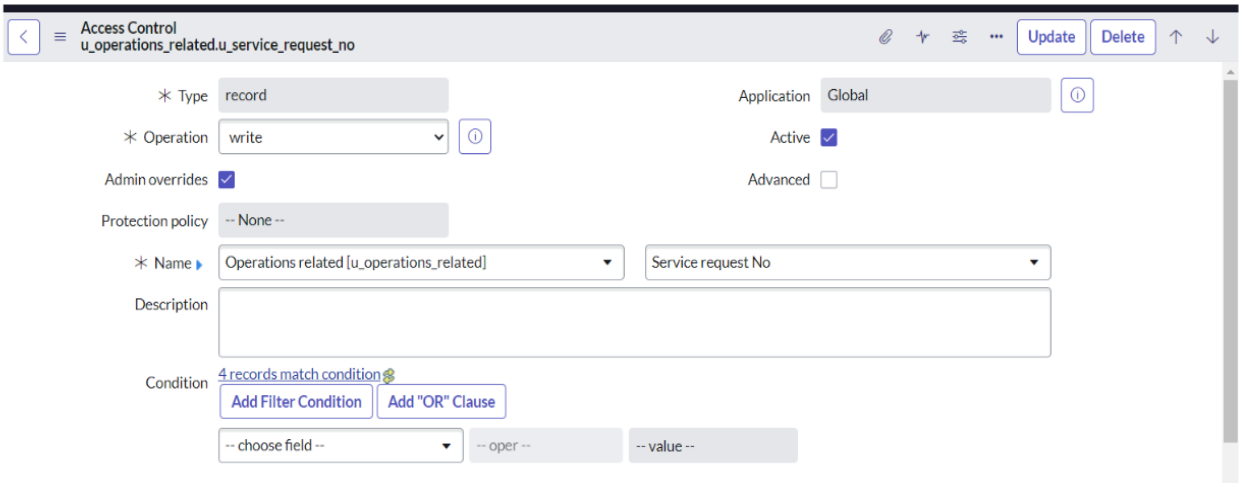


14. Click on u_operations_related write operation
15. Under Requires role
16. Double click on insert a new row
17. Give platform role
18. And add certificate role

Milestone 7 : Create ACL

Activity 1: Create New ACL

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



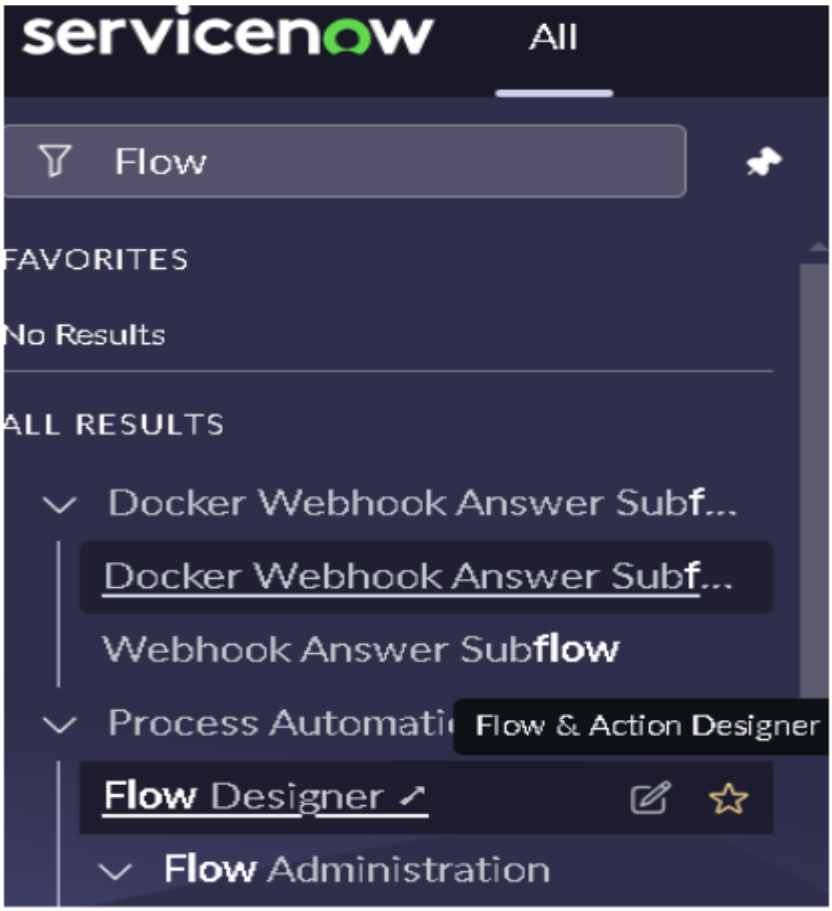
6. Scroll down under requires role
7. Double click on insert a new row
8. Give admin role
9. Click on submit
10. Similarly create 4 acl for the following fields

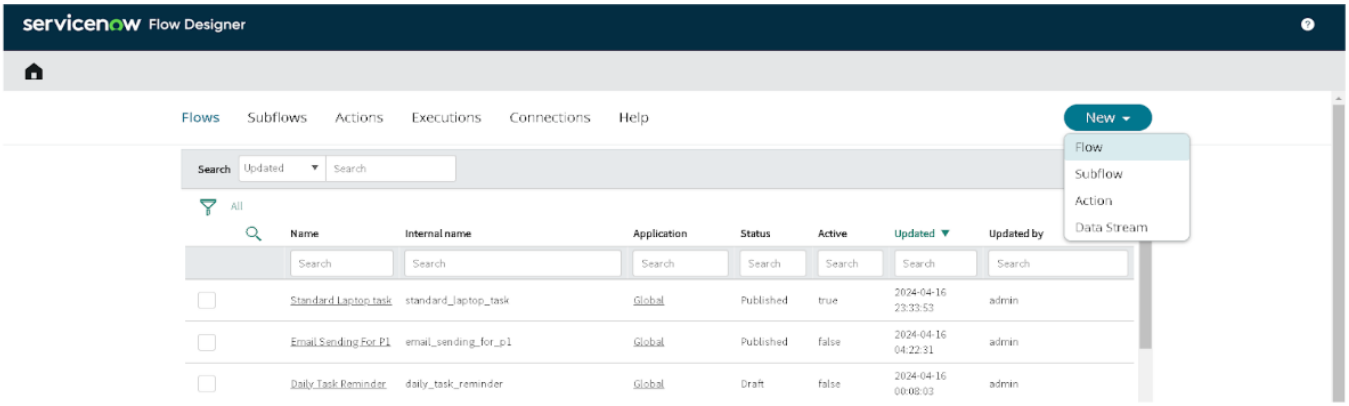
u_operations_related.u_priority	write	record	true	admin	2024-04-16 22:32:12
u_operations_related.u_ticket_raised_date	write	record	true	admin	2024-04-16 22:30:22
u_operations_related.u_name	write	record	true	admin	2024-04-16 22:29:00
u_operations_related.u_issue	write	record	true	admin	2024-04-16 22:23:31
u_operations_related.u_service_request_no	write	record	true	admin	2024-04-16 22:17:14

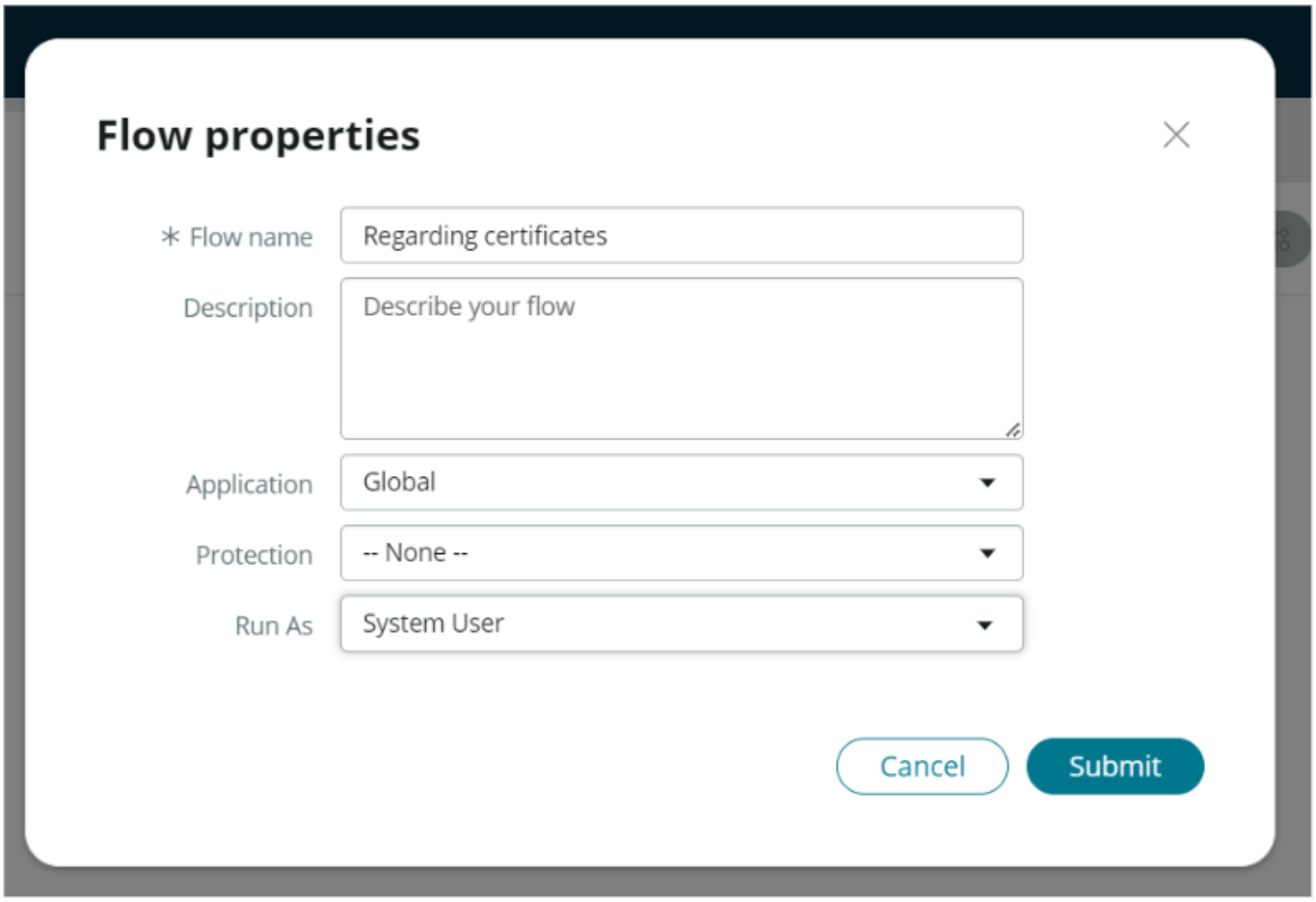
Milestone 8 : Flow

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

1. Open service now.
2. Click on All >> search for Flow Designer
3. Click on Flow Designer under Process Automation.
4. After opening Flow Designer Click on new and select Flow.
5. Under Flow properties Give Flow Name as “ Regarding Certificate”.
6. Application should be Global.
7. Select Run user as “ System user ” from that choice.
8. Click on Submit.

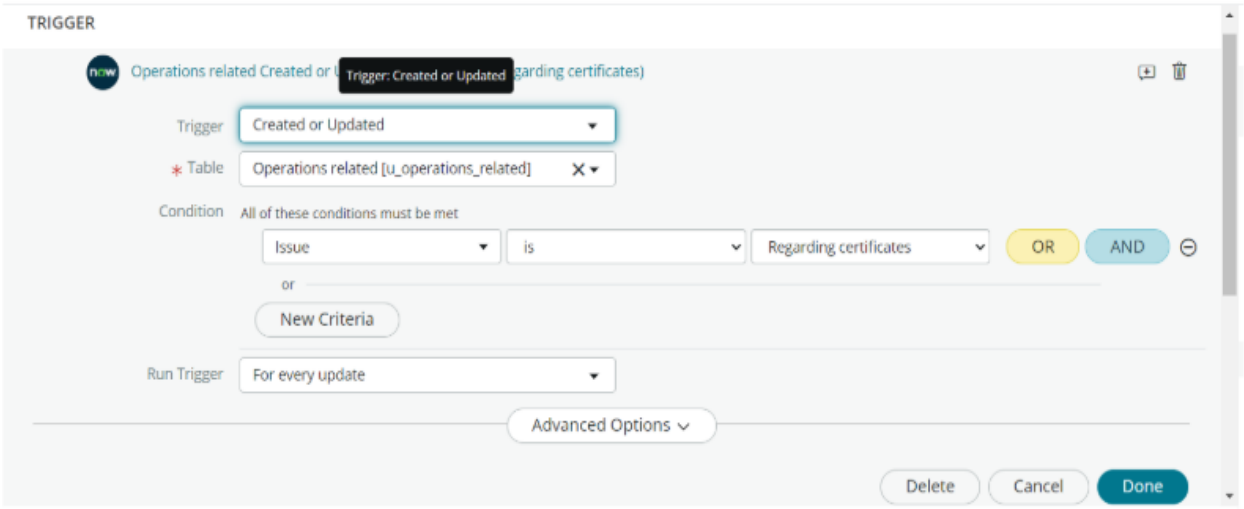

servicenow
All
Flow
FAVORITES
No Results
ALL RESULTS
Docker Webhook Answer Subf...
Docker Webhook Answer Subf...
Webhook Answer Subflow
Process Automati
Flow & Action Designer
Flow Designer
Flow Administration


servicenow Flow Designer
Flows
Subflows
Actions
Executions
Connections
Help
New
Flow
Subflow
Action
Data Stream
Search
Updated
All
Name
Internal name
Application
Status
Active
Updated
Updated by
Standard Laptop task
standard_laptop_task
Global
Published
true
2024-04-16 23:33:53
admin
Email Sending For P1
email_sending_for_p1
Global
Published
false
2024-04-16 04:22:31
admin
Daily Task Reminder
daily_task_reminder
Global
Draft
false
2024-04-16 00:08:03
admin

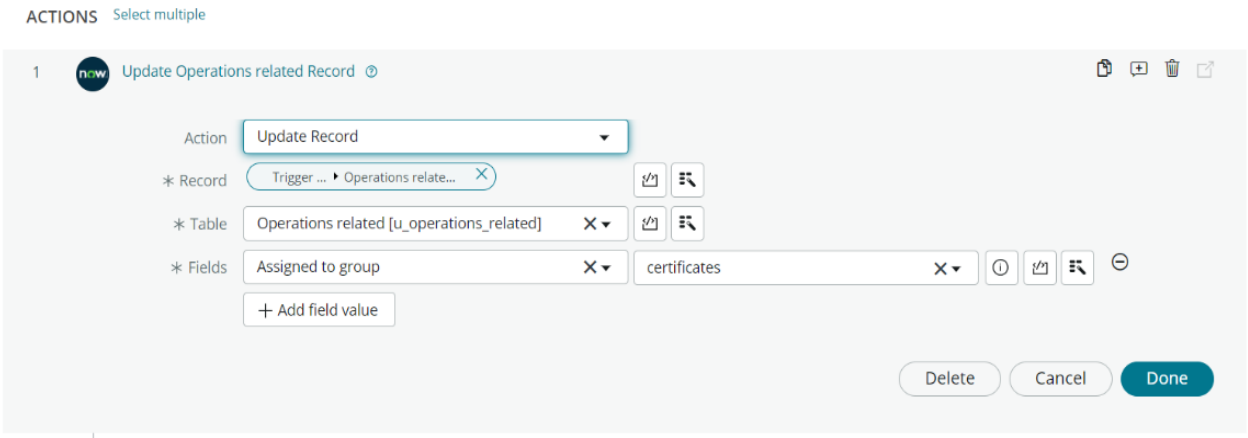


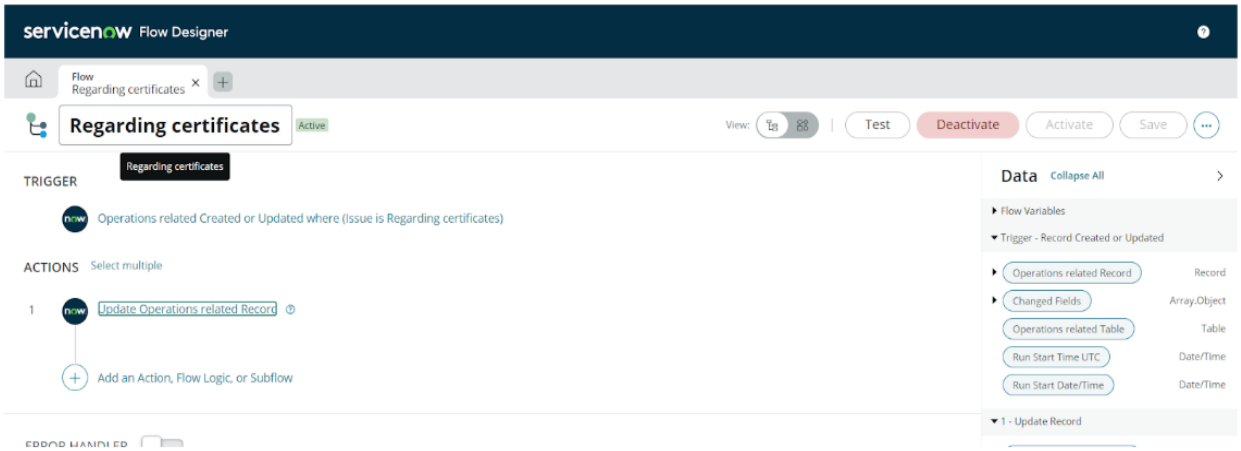
1. Click on Add a trigger
2. Select the trigger in that Search for “create or update a record” and select that.
3. Give the table name as “ Operations related ”.
4. Give the Condition as
   Field : issue
   Operator : is
   Value : Regrading Certificates

5.After that click on Done.



6. Now under Actions.
7. Click on Add an action.
8. Select action in that search for " Update Record ".
9. In Record field drag the fields from the data navigation from left side
10. Table will be auto assigned after that
11. Give the field as " Assigned to group "
12. Give value as " Certificates "
13. Click on Done.
14. Click on Save to save the Flow.
15. Click on Activate.





Milestone 8 : Flow

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

1. Open service now.
2. Click on All >> search for Flow Designer
3. Click on Flow Designer under Process Automation.
4. After opening Flow Designer Click on new and select Flow.
5. Under Flow properties Give Flow Name as " Regarding Platform ".
6. Application should be Global.
7. Select Run user as " System user " from that choice.
8. Click on Submit.

1. Click on Add a trigger
2. Select the trigger in that Search for "create or update a record" and select that.
3. Give the table name as " Operations related ".
4. Give the Condition as
   Field : issue

Operator : is

Value : Unable to login to platform

5.Click on New Criteria
Field : issue
Operator : is
Value : 404 Error

6.Click on New Criteria
Field : issue
Operator : is
Value : Regrading User expired

7. After that click on Done.
8. Now under Actions.
9. Click on Add an action.
10. Select action in that search for “ Update Record ”.
11. In Record field drag the fields from the data navigation from left side
12. Table will be auto assigned after that
13. Give the field as “ Assigned to group ”.
14. Give value as “ Platform ”.
15. Click on Done.
16. Click on Save to save the Flow.
17. Click on Activate.

Conclusion :

The implementation of the automated ticket routing system at ABC Corporation has been a significant success. By leveraging the capabilities of ServiceNow, we have streamlined the process of assigning support tickets to the appropriate teams, addressing the challenges of manual routing, and ensuring timely resolution of issues.