

Streamlining Ticket Assignment for Efficient Support Operations

Team Id: NM2025TMID20204

Team Members: 4

Team Leader: Harini R

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.

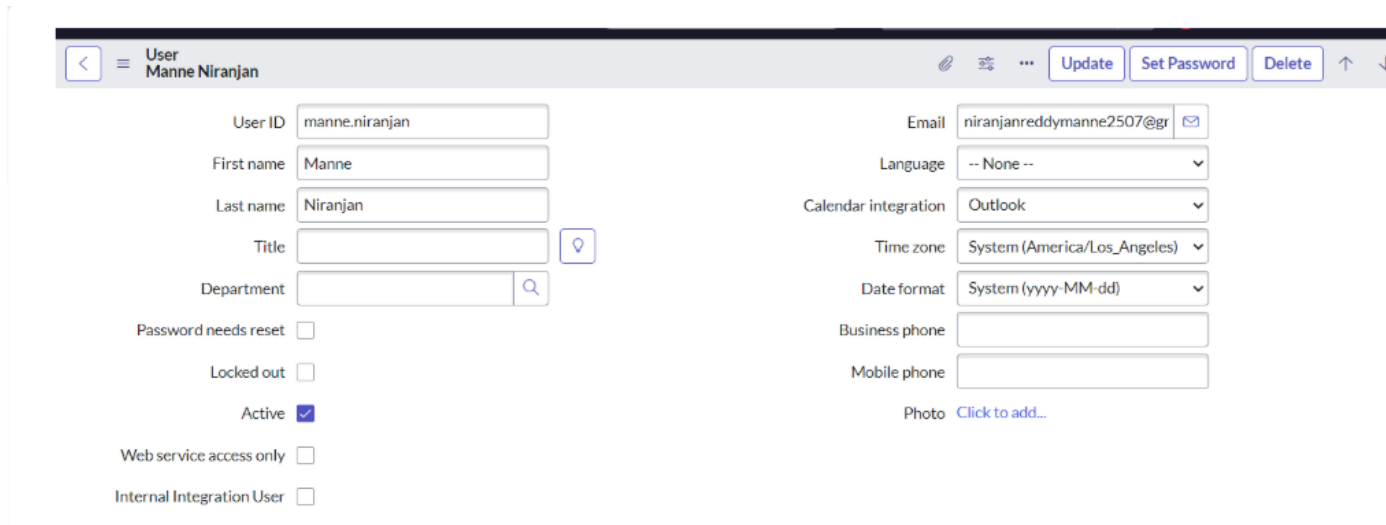
Skills: Proficiency in Python, machine learning, and NLP for intelligent ticket processing, along with basic web development and database management for building the dashboard and backend.

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



User Manne Niranjan

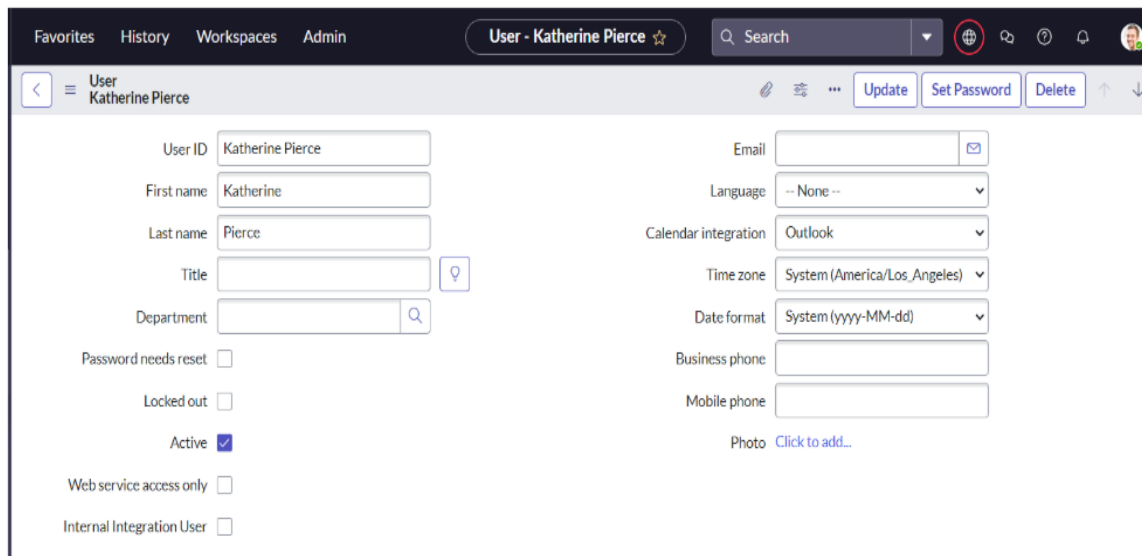
User ID: manne.niranjan
 First name: Manne
 Last name: Niranjan
 Title:
 Department:
 Email: niranjanreddymanne2507@gr
 Language: -- None --
 Calendar integration: Outlook
 Time zone: System (America/Los_Angeles)
 Date format: System (yyyy-MM-dd)
 Business phone:
 Mobile phone:
 Photo: [Click to add...](#)

☐ Password needs reset
☐ Locked out
☒ Active
☐ Web service access only
☐ Internal Integration User

6. Click on submit

Create one more user:

7. Create another user with the following details



User Katherine Pierce

User ID: Katherine Pierce
 First name: Katherine
 Last name: Pierce
 Title:
 Department:
 Email:
 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...](#)

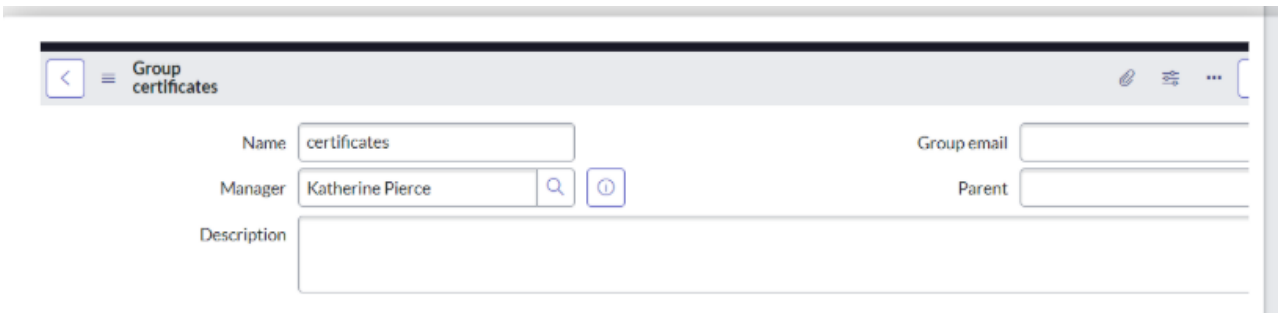
☐ Password needs reset
☐ Locked out
☒ Active
☐ Web service access only
☐ Internal Integration User

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



Group certificates

Name: certificates

Manager: Katherine Pierce

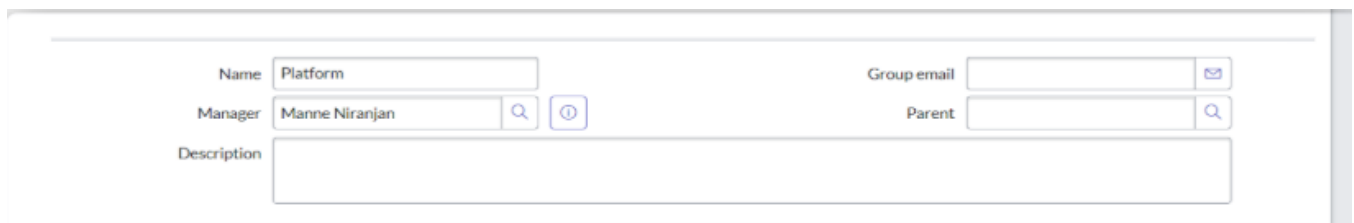
Group email:

Parent:

Description:

6. Click on submit
Create one more group:

1. Create another group with the following details



Platform

Manager: Manne Niranjan

Group email:

Parent:

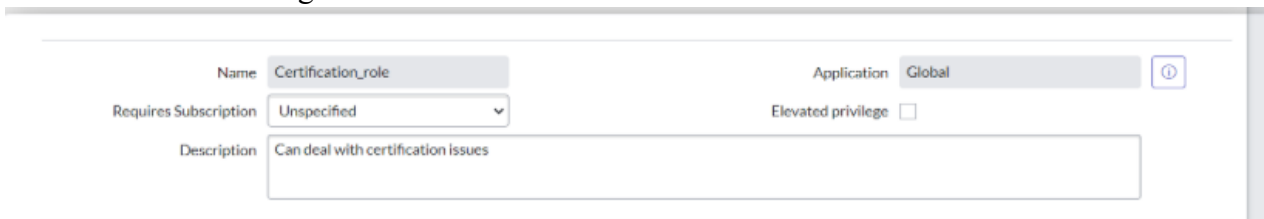
Description:

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



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

6. Click on submit

Create one more role:

Create another role with the following details



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

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 Niranjana 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

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...

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

Access Control
u_operations_related.u_service_request_no

* Type: record Application: Global

* Operation: write Active: ☒

Admin overrides: ☒ Advanced: ☐

Protection policy: -- None --

* Name: Operations related [u_operations_related] Service request No

Description:

Condition: 4 records match condition

Add Filter Condition Add "OR" Clause

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

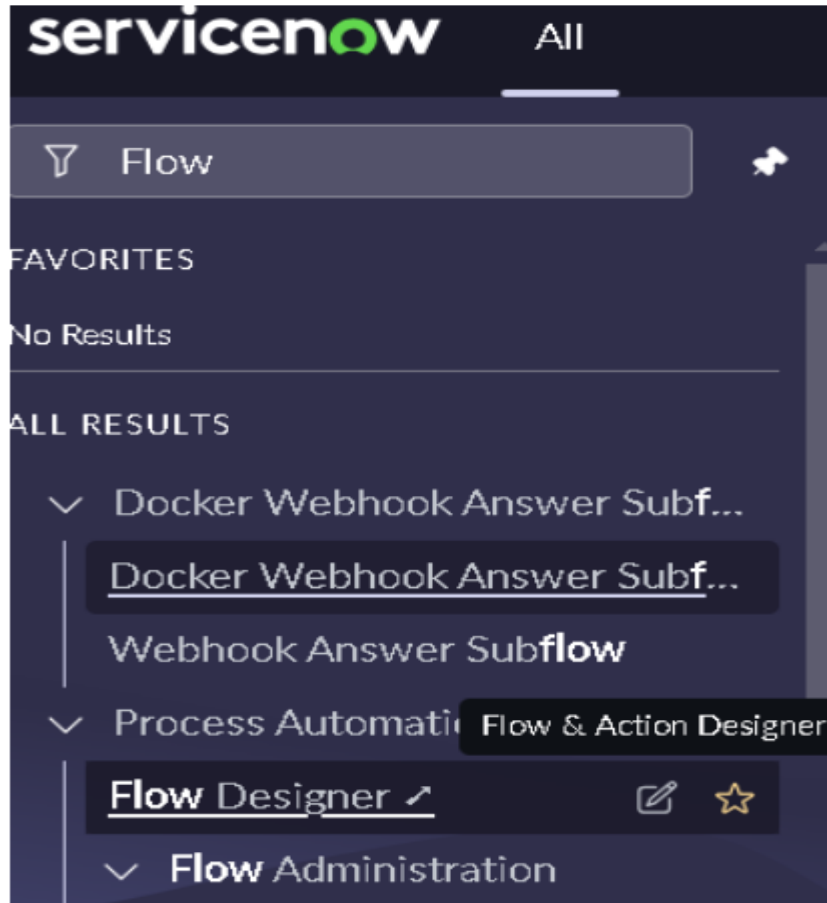
6. Scroll down under requires role
7. Double click on insert a new row
8. Give admin role
9. Click on submit
10. Similarly create 4 acl for the following fields

<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

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 Flow Designer

Flows Subflows Actions Executions Connections Help

New ▾

Flow
Subflow
Action
Data Stream

	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 PL	email_sending_for_pl	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 00:02:03	admin

Flow properties ×

* Flow name

Description

Application

Protection

Run As

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.

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

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.

ACTIONS Select multiple

1 **now** Update Operations related Record

Action: Update Record

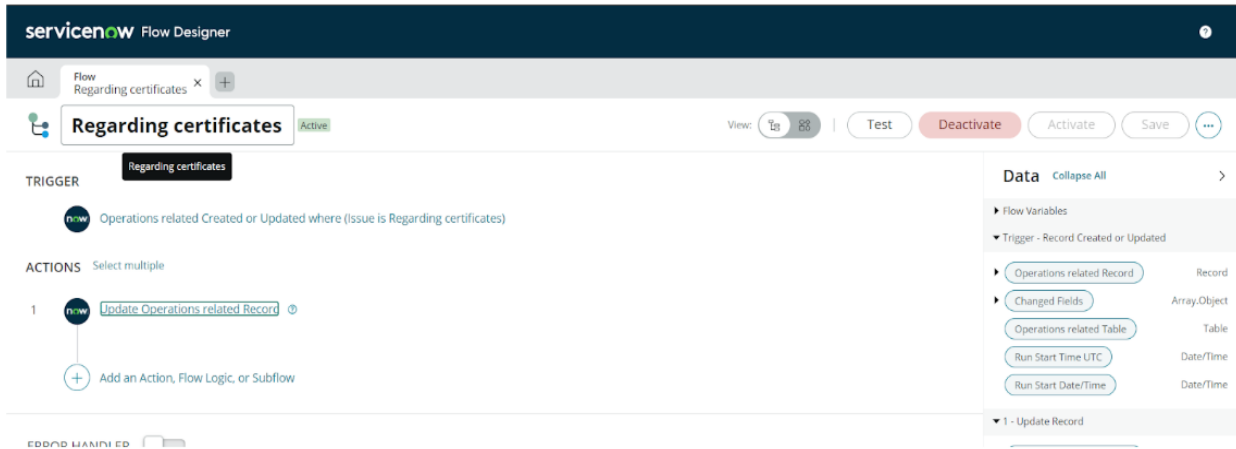
* Record: Trigger ... Operations relate...

* Table: Operations related [u_operations_related]

* Fields: Assigned to group certificates

+ Add field value

Delete Cancel Done



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.