

Streamlining Ticket Assignment for Efficient Support Operations

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Team Size : 4

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Problem Statement:

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.

Objective:

- To automate the routing and assignment of support tickets.
- To reduce ticket resolution time by ensuring quick allocation.
- To improve the accuracy of ticket categorization and assignment.
- To optimize workload distribution among support agents.
- To enhance customer satisfaction through faster responses.
- To enable data-driven decision-making with ticket analytics.
- To ensure scalability and adaptability of the support system.

Skills:

1. Oracle DB

TASK INITIATION:

Milestone 1

Create Users

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

This 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. A 'Photo' field with a 'Click to add...' link is also present. 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 following details

This 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, Language (-- None --), Calendar integration (Outlook), Time zone (System (America/Los_Angeles)), Date format (System (yyyy-MM-dd)), Business phone, and Mobile phone. A 'Photo' field with a 'Click to add...' link is also present. At the top right, there are buttons for 'Update', 'Set Password', and 'Delete'.

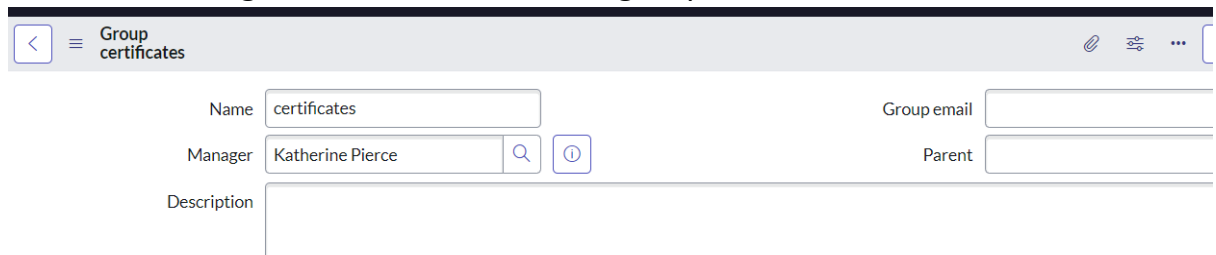
8. Click on submit

Milestone 2

Create Groups

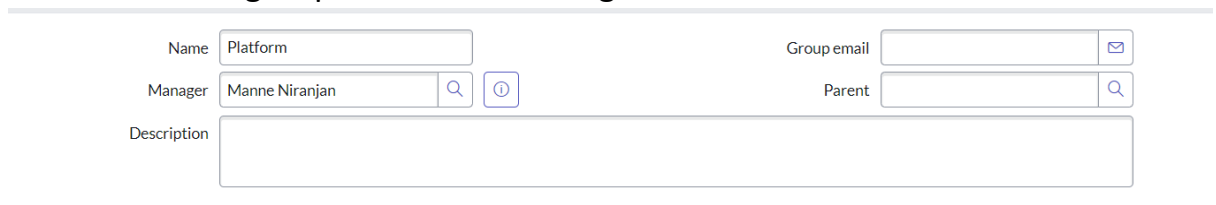
Open service now.

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



The screenshot shows a form titled 'Group certificates' with a header bar containing a back arrow, a menu icon, and the title. On the right of the header are icons for edit, share, and more options. The form fields are: 'Name' with the value 'certificates', 'Group email' (empty), 'Manager' with the value 'Katherine Pierce' and a search icon, 'Parent' (empty), and 'Description' (empty text area).

5. Click on submit
6. Create one more group:
7. Create another group with the following details



The screenshot shows a form titled 'Platform' with a header bar containing a back arrow, a menu icon, and the title. On the right of the header are icons for edit, share, and more options. The form fields are: 'Name' with the value 'Platform', 'Group email' (empty) with an email icon, 'Manager' with the value 'Manne Niranjana' and a search icon, 'Parent' (empty) with a search icon, and 'Description' (empty text area).


Click on submit

Milestone 3

Create 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

7. Create one more role:

8. 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

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 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

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 6

Assign 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

Assign 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

The screenshot shows the 'Access Control u_operations_related' form in a 'Definition' view. At the top, there are 'Update' and 'Delete' buttons. Below the title, a blue box contains the definition of Access Control Rules, stating they allow access if all three 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. Below this, a table titled 'Requires role' shows three roles: 'u_operations_related_user', 'Platform_role', and 'Certification_role', each with a red 'X' icon. At the bottom of the table is a button to 'Insert a new row...'.

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 8

Create 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

The screenshot shows the 'Access Control u_operations_related.u_service_request_no' form. It has a 'Type' field set to 'record' and an 'Operation' dropdown set to 'write'. The 'Application' is set to 'Global'. There are checkboxes for 'Active' (checked) and 'Advanced' (unchecked). The 'Protection policy' is set to '-- None --'. The 'Name' field has two dropdowns: 'Operations related [u_operations_related]' and 'Service request No'. The 'Description' field is empty. The 'Condition' section shows '4 records match condition' and buttons for 'Add Filter Condition' and 'Add "OR" Clause'. Below these are three dropdowns: '-- choose field --', '-- oper --', and '-- value --'.

* Type: record

* Operation: write

Application: Global

Active: ☒

Advanced: ☐

Admin overrides: ☒

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

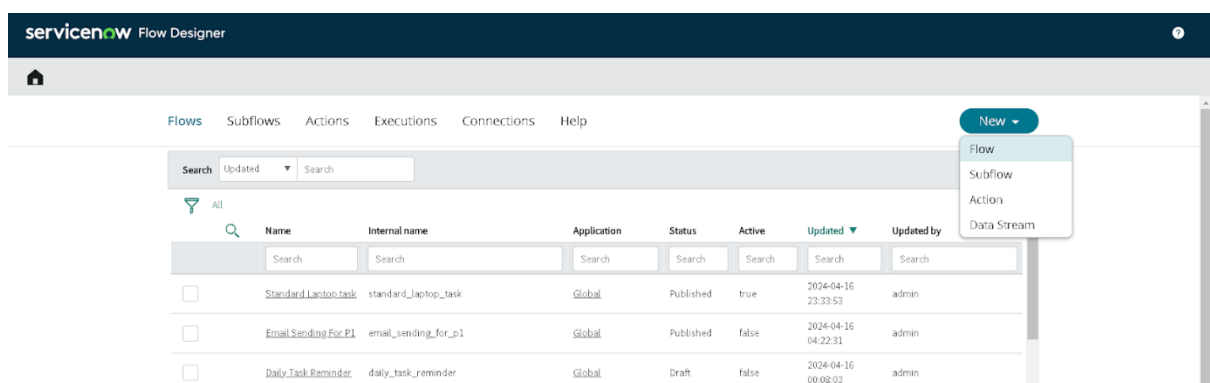
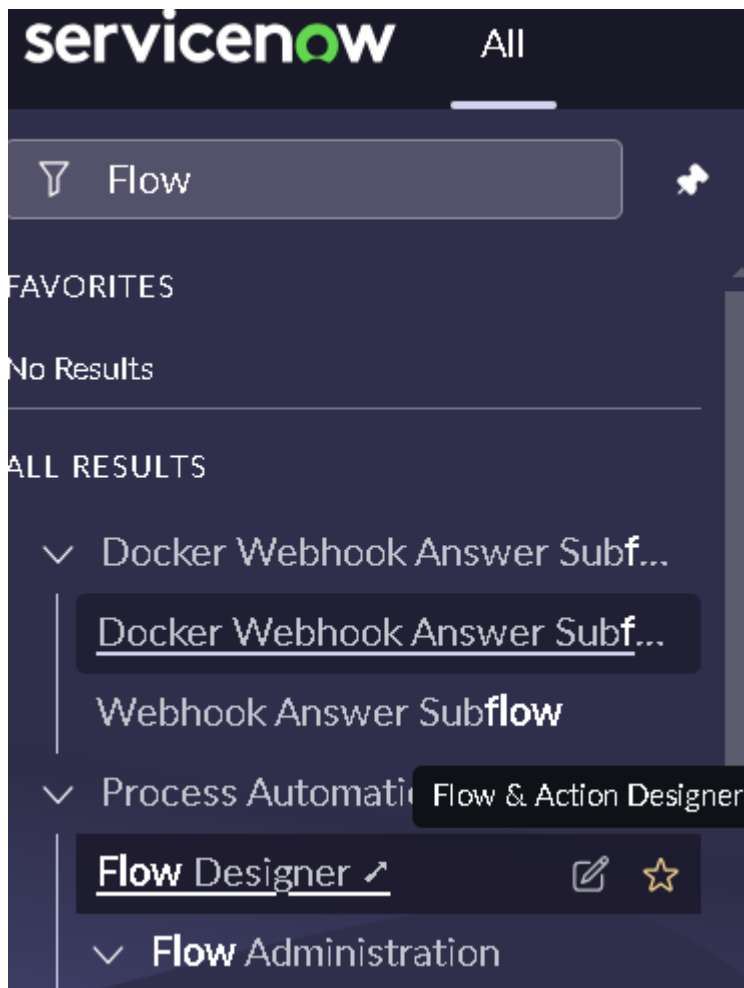
7. Double click on insert a new row
8. Give admin role
9. Click on submit
10. Similarly create 4 acl for the following fields

<input type="checkbox"/>		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 9

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.



Flow properties

* Flow name

Regarding certificates

Description

Describe your flow

Application

Global

Protection

-- None --

Run As

System User

Cancel

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 : Regrading Certificates

5. After that click on Done.

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

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 Update Operations related Record

Action: Update Record

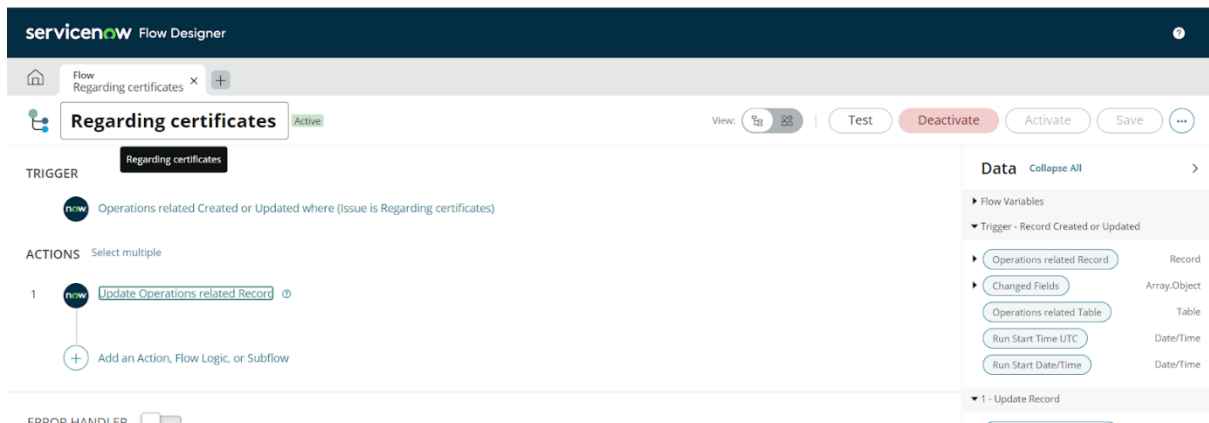
* Record: Trigger ... Operations relate...

* Table: Operations related [u_operations_related]

* Fields: Assigned to group certificates

+ Add field value

Delete Cancel Done



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

Click on New Criteria

Field : issue

Operator : is

Value : 404 Error

Click on New Criteria

Field : issue

Operator : is

Value : Regrading User expired

After that click on Done.

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

