



**DEPARTMENT OF ARTIFICIAL  
INTELLIGENCE AND DATA SCIENCE**

**TITLE : Streamlining Ticket Assignment for Efficient  
Support Operations**

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# Streamlining Ticket Assignment for Efficient Support Operations

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.

## Users

### 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

User - Manne Niranjan

|                           |                                     |                      |                              |
|---------------------------|-------------------------------------|----------------------|------------------------------|
| User ID                   | manne.niranjan                      | Email                | niranjanreddymanne2507@gr    |
| First name                | Manne                               | Language             | -- None --                   |
| Last name                 | Niranjan                            | Calendar integration | Outlook                      |
| Title                     |                                     | Time zone            | System (America/Los_Angeles) |
| Department                |                                     | Date format          | System (yyyy-MM-dd)          |
| Password needs reset      | <input type="checkbox"/>            | Business phone       |                              |
| Locked out                | <input type="checkbox"/>            | Mobile phone         |                              |
| Active                    | <input checked="" type="checkbox"/> | Photo                | Click to add...              |
| Web service access only   | <input type="checkbox"/>            |                      |                              |
| Internal Integration User | <input type="checkbox"/>            |                      |                              |

1. Click on submitCreate one more user:
2. Create another user with the following details

User - Katherine Pierce

|                           |                                     |                      |                              |
|---------------------------|-------------------------------------|----------------------|------------------------------|
| User ID                   | Katherine.Pierce                    | Email                |                              |
| First name                | Katherine                           | Language             | -- None --                   |
| Last name                 | Pierce                              | Calendar integration | Outlook                      |
| Title                     |                                     | Time zone            | System (America/Los_Angeles) |
| Department                |                                     | Date format          | System (yyyy-MM-dd)          |
| Password needs reset      | <input type="checkbox"/>            | Business phone       |                              |
| Locked out                | <input type="checkbox"/>            | Mobile phone         |                              |
| Active                    | <input checked="" type="checkbox"/> | Photo                | Click to add...              |
| Web service access only   | <input type="checkbox"/>            |                      |                              |
| Internal Integration User | <input type="checkbox"/>            |                      |                              |

1. Click on submit

## Groups

### Create Groups

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

The screenshot shows a form titled "Group certificates". It has fields for Name (containing "certificates"), Manager (containing "Katherine Pierce"), Group email (empty), and Parent (empty). There are also fields for Description and other metadata.

- 1.
2. Click on submit

Create one more group:

1. Create another group with the following details

The screenshot shows a form titled "Platform". It has fields for Name (containing "Platform"), Manager (containing "Manne Niranjan"), Group email (empty), and Parent (empty). There are also fields for Description and other metadata.

- 1.
2. Click on submit

## Roles

### 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

The screenshot shows a form titled "Certification\_role". It has fields for Name (containing "Certification\_role"), Application (containing "Global"), Requires Subscription (containing "Unspecified"), Elevated privilege (unchecked), and Description (containing "Can deal with certification issues").

- 1.
2. 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

## Tables:

### 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 tableLabel : Operations relatedCheck 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... |               |           |            |                                      |         |

- 1.
2. Click on submit

Create choices for the issue filed by using form designChoices are

- unable to login to platform
- 404 error

- regarding certificates
- regarding user expired

## Assign roles & users to certificate group

### 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 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 Nirajan and save
8. Click on roles
9. Select Platform\_role and save

## 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

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                      |
|---------------|---------------------------|
| x             | u_operations_related_user |
| x             | Platform_role             |
| x             | Certification_role        |
| +             | Insert a new row...       |

1 to 3 of 3

- 1.
2. Click on u\_operations\_related write operation
3. Under Requires role
4. Double click on insert a new row
5. Give platform role

## Create ACL

### 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

Access Control  
u\_operations\_related.u\_service\_request\_no

|                   |  |                    |                                     |
|-------------------|--|--------------------|-------------------------------------|
| * Type            | record   | Application        | Global                              |
| * Operation       | write  | Active             | <input checked="" type="checkbox"/> |
| Admin overrides   | <input checked="" type="checkbox"/>                                  | Advanced           | <input type="checkbox"/>            |
| Protection policy | --None--   |                    |                                     |
| * Name            | Operations related[u_operations_related]                             | Service request No |                                     |
| Description       |  |                    |                                     |
| Condition         | 4 records match condition @  |                    |                                     |
|                   | <a href="#">Add Filter Condition</a> <a href="#">Add "OR" Clause</a> |                    |                                     |
|                   | -- choose field --   | -- oper --         | -- value --                         |

- 1.
2. Scroll down under requires role
3. Double click on insert a new row
4. Give admin role
5. Click on submit
6. Similarly create 4 acl for the following fields

|                          |                                  |   |       |        |      |       |                     |
|--------------------------|----------------------------------|---|-------|--------|------|-------|---------------------|
| <input type="checkbox"/> | <input checked="" type="radio"/> | 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 |

1.

## Flow

### 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.

The screenshot shows the ServiceNow interface with the following details:

- Header:** servicenow All
- Search Bar:** Flow
- FAVORITES:** No Results
- ALL RESULTS:**
  - Docker Webhook Answer Subflow (selected)
  - Webhook Answer Subflow
  - Process Automation Flow & Action Designer
  - Flow Designer (selected)
  - Flow Administration

servicenow Flow Designer

Flows Subflows Actions Executions Connections Help

New ▾

Flow Subflow Action Data Stream

| Name                  | Internal name         | Application | Status    | Active | Updated             | Updated by |
|-----------------------|-----------------------|-------------|-----------|--------|---------------------|------------|
| Standard License task | standard_license_task | Global      | Published | True   | 2024-04-16 23:33:52 | admin      |
| Email reminder for P1 | email_reminder_for_p1 | Global      | Published | False  | 2024-04-16 04:22:31 | admin      |
| Daily Task Reminder   | daily_task_reminder   | Global      | Draft     | False  | 2024-04-16 09:01:03 | admin      |

## Flow properties

\* Flow name: Regarding certificates

Description: Describe your flow

Application: Global

Protection: -- None --

Run As: System User

Cancel Submit

The screenshot shows the ServiceNow Flow Designer interface. At the top, there's a navigation bar with links for Flows, Subflows, Actions, Executions, Connections, and Help. A 'New' button with a dropdown menu is also present. The main area displays a list of flows with columns for Name, Internal name, Application, Status, Active, Updated, and Updated by. Three flows are listed: 'Standard License task', 'Email reminder for P1', and 'Daily Task Reminder'. Below this, a modal window titled 'Flow properties' is open, containing fields for Flow name (set to 'Regarding certificates'), Description (empty), Application (set to 'Global'), Protection (set to '-- None --'), and Run As (set to 'System User'). At the bottom of the modal are 'Cancel' and 'Submit' buttons.

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 asField : issue

Operator : is

Value : Regrading Certificates

5. After that click on 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 asField : issue

Operator : is

Value : Unable to login to platform

1. Click on New Criteria

Field : issue

Operator : is

Value : 404 Error

1. Click on New Criteria

Field : issue

Operator : is

Value : Regrading User expired

1. After that click on Done.
2. Now under Actions.
3. Click on Add an action.
4. Select action in that search for " Update Record ".
5. In Record field drag the fields from the data navigation from left side
6. Table will be auto assigned after that
7. Give the field as " Assigned to group ".
8. Give value as " Platform ".
9. Click on Done.
10. Click on Save to save the Flow.
11. Click on Activate.

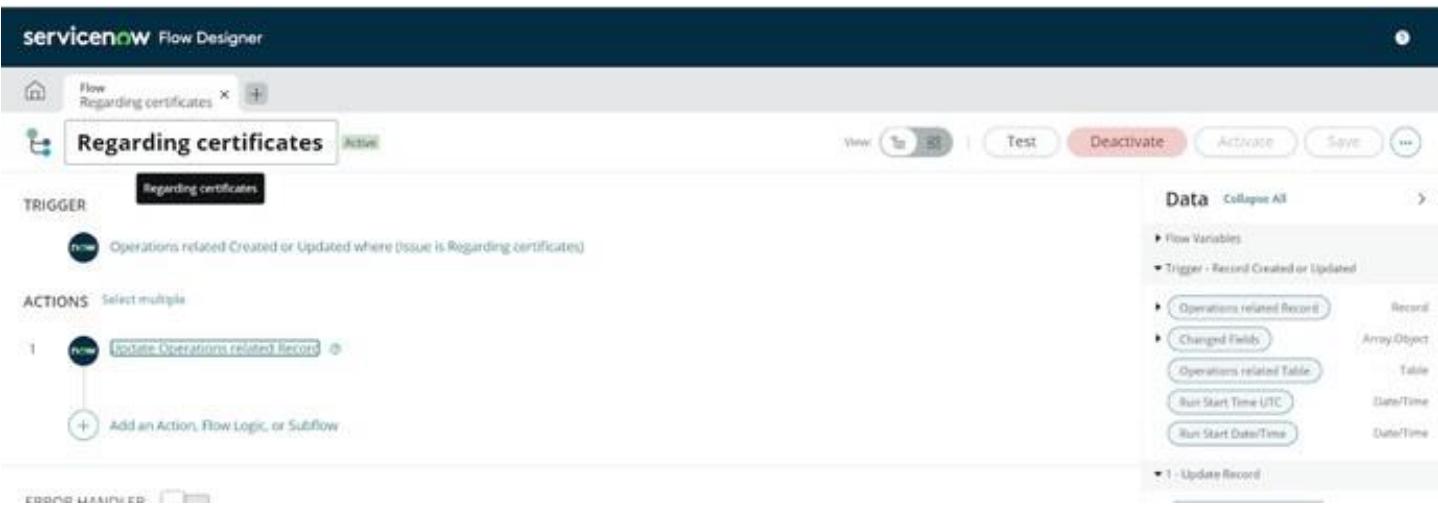
## TRIGGER

The screenshot shows the 'Trigger' configuration screen. At the top, it says 'Operations related Created or Trigger: Created or Updated (arding certificates)'. The 'Trigger' dropdown is set to 'Created or Updated'. The 'Table' dropdown is set to 'Operations related [u\_operations\_related]'. Below these, there's a 'Condition' section with a dropdown menu showing 'Issue is Regarding certificates'. There are 'OR' and 'AND' buttons, and a 'New Criteria' button. The 'Run Trigger' dropdown is set to 'For every update'. At the bottom right are 'Delete', 'Cancel', and 'Done' buttons.

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

## ACTIONS Select multiple

The screenshot shows the 'Actions' configuration screen. It lists one action: '1 Update Operations related Record'. The 'Action' dropdown is set to 'Update Record'. The 'Record' dropdown is set to 'Trigger ... ▶ Operations relate...'. The 'Table' dropdown is set to 'Operations related [u\_operations\_related]'. The 'Fields' dropdown shows 'Assigned to group' and 'certificates'. At the bottom right are 'Delete', 'Cancel', and 'Done' buttons.



## 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.