

Streamlining Ticket Assignment for Efficient Support Operations

OBJECTIVE:

The objective of this project is to implement an automated system for ticket routing in ServiceNow at ABC Corporation. The system ensures tickets are automatically assigned to the correct support teams, reducing manual work, improving issue resolution speed, and enhancing customer satisfaction.

INTRODUCTION:

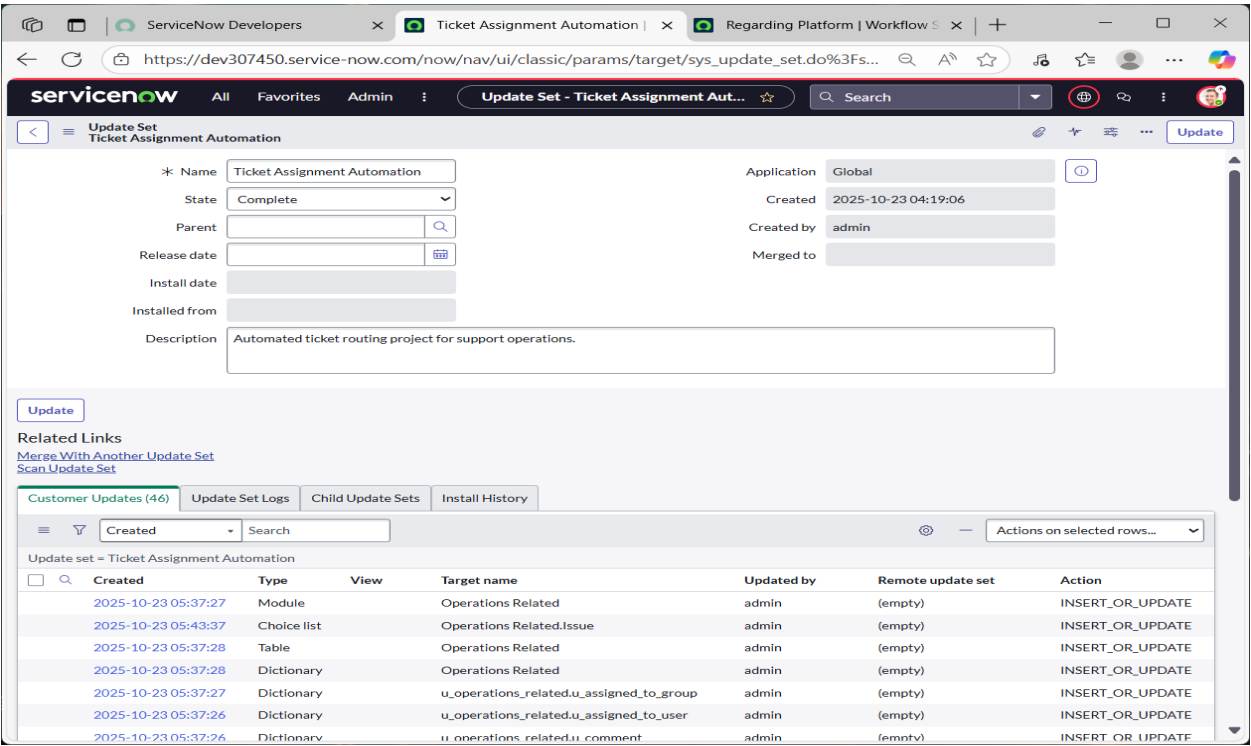
In traditional support operations, assigning tickets manually can be slow and error-prone. To overcome this, ServiceNow provides automation tools such as Flow Designer, Access Controls, and Custom Tables. This project demonstrates how automation can streamline ticket management by automatically routing tickets based on issue type.

SOFTWARE & TOOLS USED:

- ServiceNow Developer Instance
- Flow Designer
- Access Control Lists (ACLs)
- Update Sets (XML Export)
- GitHub (for repository)
- Screen recorder for demo video

IMPLEMENTATION STEPS:

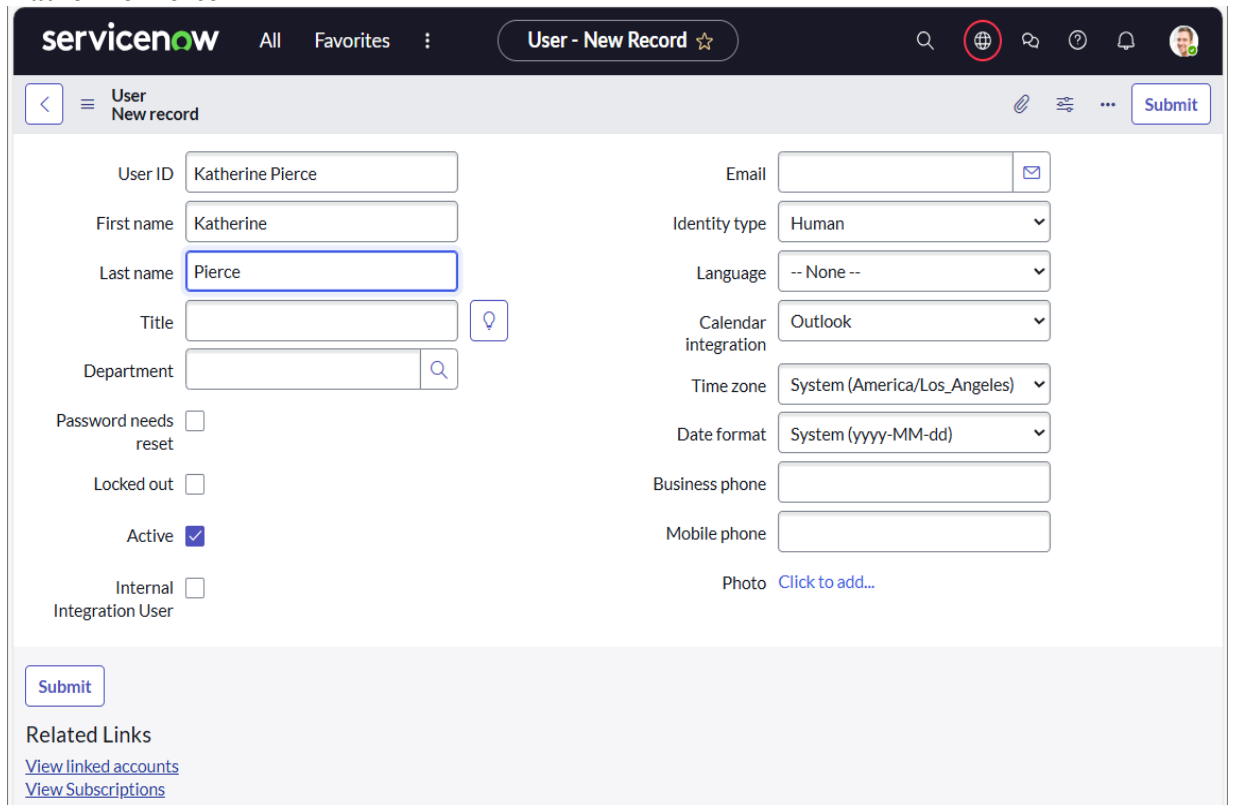
1. Create Update Set: *Created a new update set named Ticket_Assignment_Automation to capture all configurations.*



2. Create Users

Two users were created for managing tickets:

- **Manne Niranjan**
- **Katherine Pierce**



The screenshot shows the ServiceNow 'User - New Record' form for Katherine Pierce. The form is divided into two columns. The left column contains fields for User ID (Katherine Pierce), First name (Katherine), Last name (Pierce), Title, Department, Password needs reset, Locked out, Active (checked), and Internal Integration User. The right column contains fields for Email, Identity type (Human), Language (-- None --), Calendar integration (Outlook), Time zone (System (America/Los_Angeles)), Date format (System (yyyy-MM-dd)), Business phone, and Mobile phone. A 'Photo' link with 'Click to add...' text is also present. A 'Submit' button is at the bottom right. Below the form, there are 'Related Links' for 'View linked accounts' and 'View Subscriptions'.

servicenow All Favorites : User - New Record ☆

User New record

Submit

User ID: Katherine Pierce

First name: Katherine

Last name: Pierce

Title:

Department:

Password needs reset: ☐

Locked out: ☐

Active: ☒

Internal Integration User: ☐

Email:

Identity type: Human

Language: -- None --

Calendar integration: Outlook

Time zone: System (America/Los_Angeles)

Date format: System (yyyy-MM-dd)

Business phone:

Mobile phone:

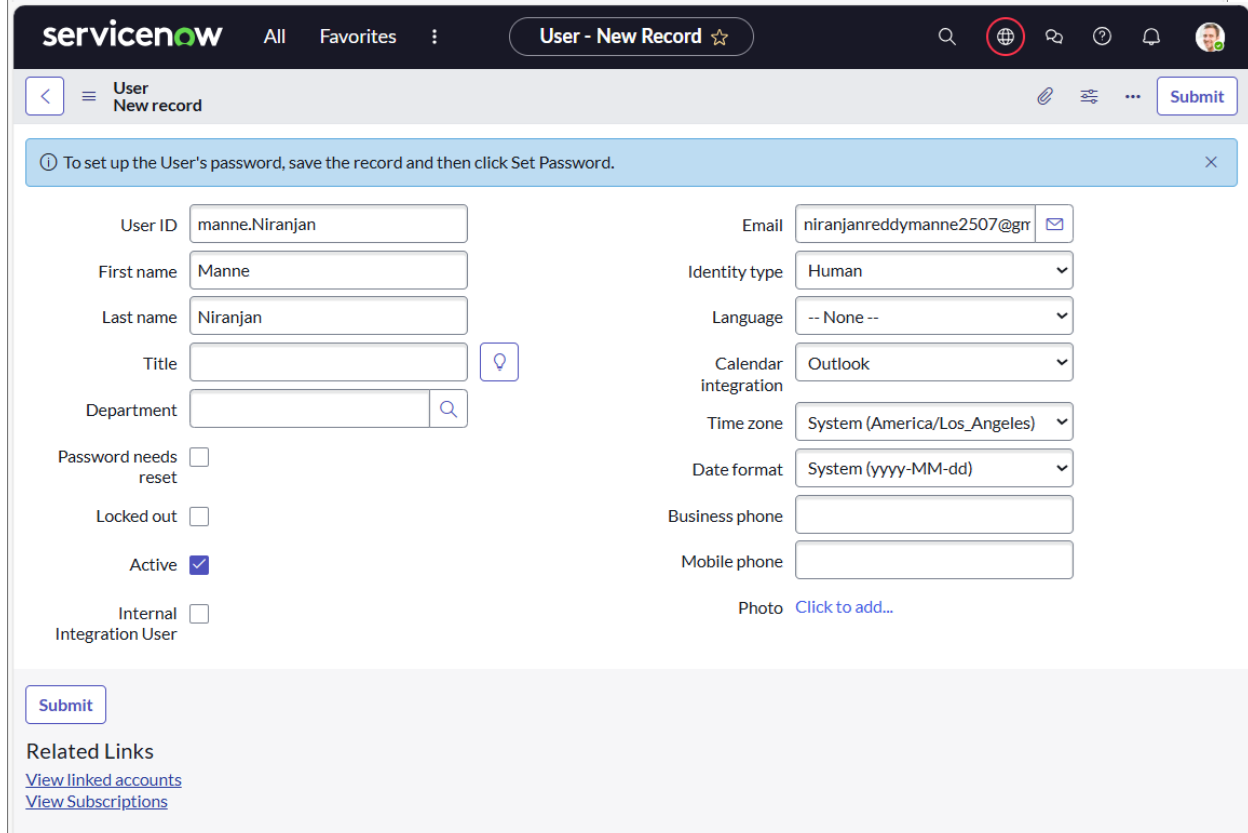
Photo: [Click to add...](#)

Submit

Related Links

[View linked accounts](#)

[View Subscriptions](#)



The screenshot shows the ServiceNow 'User - New Record' form for Manne Niranjan. The form is divided into two columns. The left column contains fields for User ID (manne.Niranjan), First name (Manne), Last name (Niranjan), Title, Department, Password needs reset, Locked out, Active (checked), and Internal Integration User. The right column contains fields for Email (niranjanreddymanne2507@gr), Identity type (Human), Language (-- None --), Calendar integration (Outlook), Time zone (System (America/Los_Angeles)), Date format (System (yyyy-MM-dd)), Business phone, and Mobile phone. A 'Photo' link with 'Click to add...' text is also present. A 'Submit' button is at the bottom right. Below the form, there are 'Related Links' for 'View linked accounts' and 'View Subscriptions'. A blue banner at the top of the form area states: 'To set up the User's password, save the record and then click Set Password.'

servicenow All Favorites : User - New Record ☆

User New record

Submit

To set up the User's password, save the record and then click Set Password.

User ID: manne.Niranjan

First name: Manne

Last name: Niranjan

Title:

Department:

Password needs reset: ☐

Locked out: ☐

Active: ☒

Internal Integration User: ☐

Email: niranjanreddymanne2507@gr

Identity type: Human

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...](#)

Submit

Related Links

[View linked accounts](#)

[View Subscriptions](#)

3. Create Groups

Groups were created to segregate issue types:

- **Platform** — Handles platform-related issues

This screenshot shows the 'Group - New Record' form in ServiceNow. The browser address bar indicates the URL: https://dev307450.service-now.com/now/nav/ui/classic/params/target/sys_user_group.do.... The ServiceNow header is visible with the 'Group - New Record' title. The form fields are as follows:

Field	Value
Name	platform
Group email	
Manager	Manne Niranjana
Parent	
Description	Handles platform-related issues.

A 'Submit' button is located at the bottom left of the form.

- **Certificates** — Handles certificate-related issues

This screenshot shows the 'Group - New Record' form in ServiceNow for a group named 'certificates'. The browser address bar shows the same URL as the previous screenshot. The form fields are as follows:

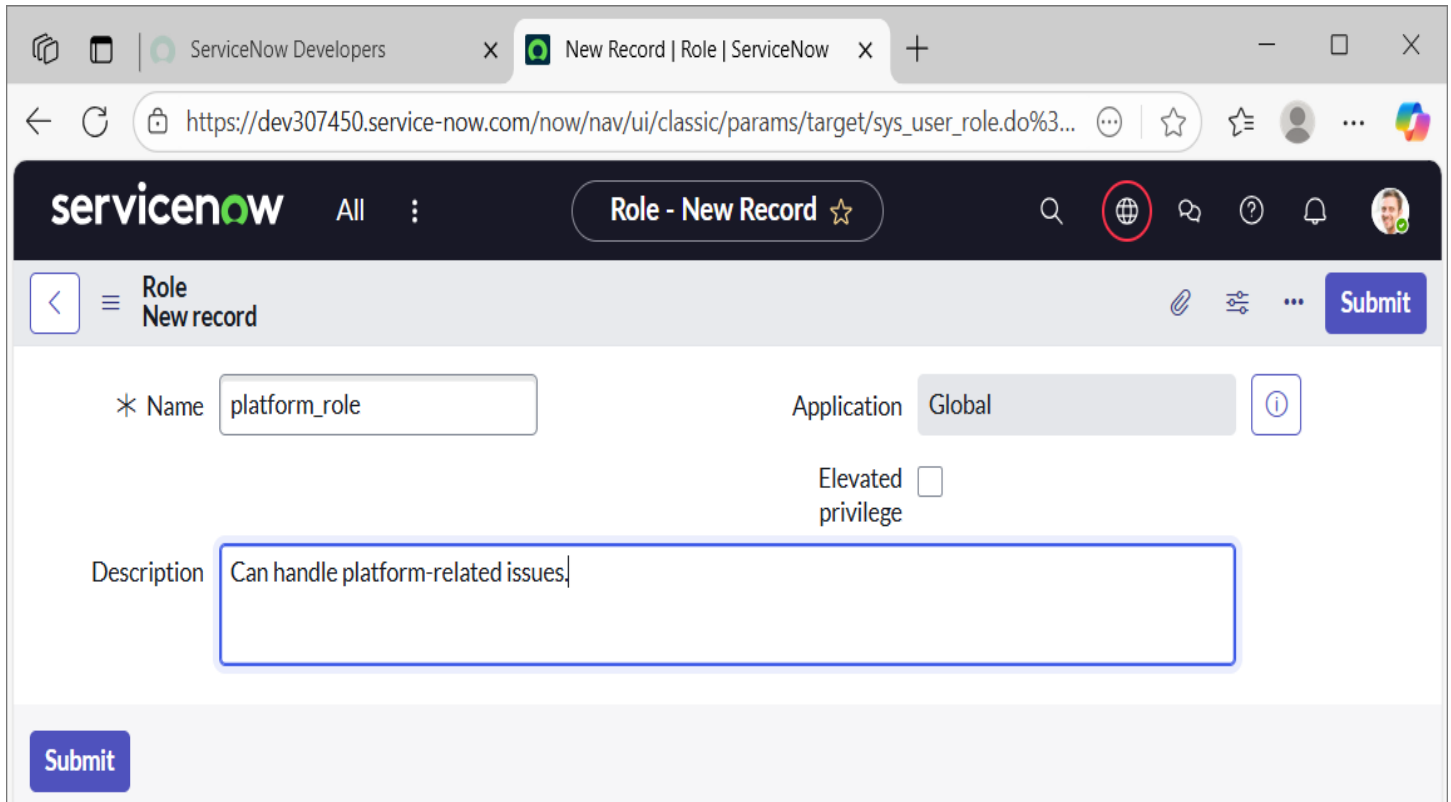
Field	Value
Name	certificates
Group email	
Manager	Katherine Pierce
Parent	
Description	Handles certificate-related issues.

A 'Submit' button is located at the bottom left of the form.

4. Create Roles

Custom roles created:

- **platform_role**



This screenshot shows the 'Role - New Record' form in ServiceNow. The browser tabs include 'ServiceNow Developers' and 'New Record | Role | ServiceNow'. The URL is 'https://dev307450.service-now.com/now/nav/ui/classic/params/target/sys_user_role.do%3...'. The ServiceNow header is visible with the logo, 'All' filter, and 'Role - New Record' title. The form fields are: 'Name' (platform_role), 'Application' (Global), 'Elevated privilege' (unchecked), and 'Description' (Can handle platform-related issues). A 'Submit' button is at the bottom left.

ServiceNow Developers x New Record | Role | ServiceNow x

https://dev307450.service-now.com/now/nav/ui/classic/params/target/sys_user_role.do%3...

servicenow All Role - New Record

< Role New record Submit

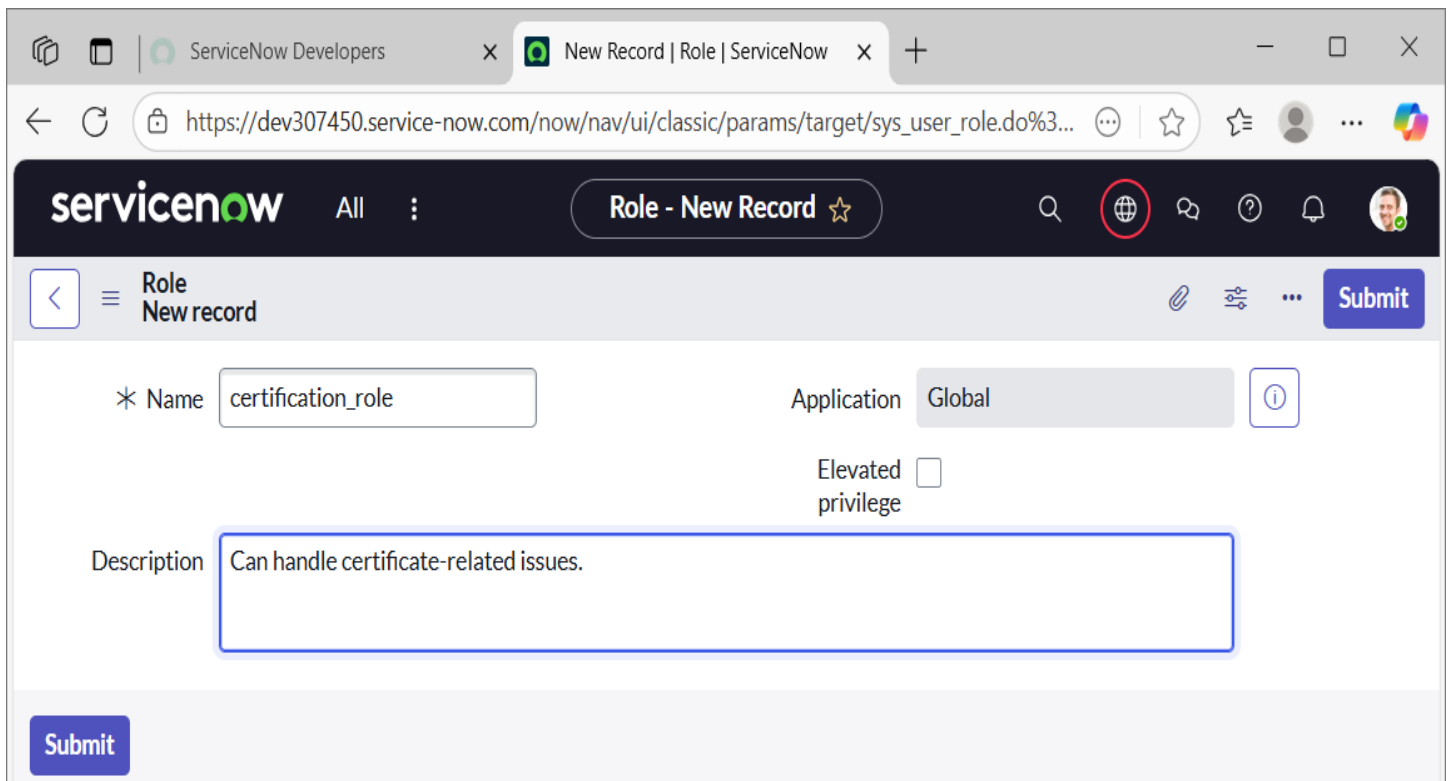
* Name platform_role Application Global

Elevated privilege ☐

Description Can handle platform-related issues

Submit

- **certification_role**



This screenshot shows the 'Role - New Record' form in ServiceNow for a certification role. The browser tabs and URL are the same as the previous screenshot. The form fields are: 'Name' (certification_role), 'Application' (Global), 'Elevated privilege' (unchecked), and 'Description' (Can handle certificate-related issues). A 'Submit' button is at the bottom left.

ServiceNow Developers x New Record | Role | ServiceNow x

https://dev307450.service-now.com/now/nav/ui/classic/params/target/sys_user_role.do%3...

servicenow All Role - New Record

< Role New record Submit

* Name certification_role Application Global

Elevated privilege ☐

Description Can handle certificate-related issues

Submit

5. Assign Roles and Users to Groups

Users and roles were assigned appropriately:

- Platform group → Manne Niranjana → platform_role

servicenow All Admin : Group - platform ☆

Group platform

Job to add or remove role(s) from user(s) of group has been queued

Name: platform Group email: [] Manager: Manne Niranjana Parent: [] Description: Handles platform-related issues.

Update Delete

Roles (1) Group Members (1) Groups

Created Search Actions on selected rows... Edit...

Created	Role	Granted by	Inherits
2025-10-23 05:21:53	platform_role	(empty)	true

1 to 1 of 1

servicenow All Admin : Group - platform ☆

Group platform

Job to add or remove role(s) from user(s) of group has been queued

Name: platform Group email: [] Manager: Manne Niranjana Parent: [] Description: Handles platform-related issues.

Update Delete

Roles (1) Group Members (1) Groups

User Search Actions on selected rows... New Edit...

User
Manne Niranjana

1 to 1 of 1

- Certificates group → Katherine Pierce → certification_role

servicenow

All

Group - certificates

<

≡

Group certificates

UpdateDelete

↑↓

ⓘ

Job to add or remove role(s) from user(s) of group has been queued

×

Name

certificates

Group email

ⓧ

Manager

Katherine Pierce

🔍

ⓘ

Parent

🔍

Description

Handles certificate-related issues.

Update

Delete

Roles

Group Members (1)

Groups

≡

🔍

💬

User

Search

⚙️

—

Actions on selected rows...

▼

New

Edit...

Group = certificates

☐

🔍

User

Katherine Pierce

⏪

⏩

1 to 1 of 1

⏪

⏩

servicenow

All

Group - certificates

<

≡

Group certificates

UpdateDelete

↑↓

ⓘ

Job to add or remove role(s) from user(s) of group has been queued

×

Name

certificates

Group email

ⓧ

Manager

Katherine Pierce

🔍

ⓘ

Parent

🔍

Description

Handles certificate-related issues.

Update

Delete

Roles (1)

Group Members (1)

Groups

≡

🔍

💬

Created

Search

⚙️

—

Actions on selected rows...

▼

Edit...

Group = certificates

☐

🔍

Created

Role

Granted by

Inherits

2025-10-23 05:18:32

certification_role

(empty)

true

⏪

⏩

1 to 1 of 1

⏪

⏩

6. Create Custom Table

A new table `u_operations_related` was created to manage ticket details. It includes fields such as ticket date, service request number, issue type, and assignment fields.

The screenshot shows the 'Table - New Record' form in ServiceNow. The form is for a table named 'Operations Related' with the name 'u_operations_related'. It is set to 'Global' application and 'Create module' and 'Create mobile module' are checked. The 'Add module to menu' dropdown is set to '-- Create new --' and the 'New menu name' is 'Operations Related'. The 'Remote Table' checkbox is unchecked.

The 'Columns' tab is selected, showing a list of dictionary entries for the table. The entries are as follows:

Column label	Type	Reference	Max length	Default value	Display
Ticket raised date	Date/Time				false
Service request No	String			javascript:getNextObjNumberPadded();	false
Priority	String				false
name	String				false
Issue	Choice				false
Comment	String				false
Assigned to user	Reference	User			false
Assigned to group	Reference	Group			false

The screenshot shows the 'Form Design' interface for the 'Operations Related' table. The form is titled 'Operations Related [u_operations_related]' and is set to '2 Column' layout. The form contains several fields: 'Service request No', 'Priority', 'Name', 'Assigned to user', 'Issue', and 'Assigned to group'. A 'Properties' dialog box is open, showing the 'Choices' section. The 'Choice type' is set to 'Dropdown with none'. The choices are as follows:

Choice	Display
unable to login to platform	unable to login to platform
404 error	404 error
regarding certificates	regarding certificates
regarding user expired	regarding user expired

7. Create Access Controls (ACL)

ACLs were configured to control access to the table and its fields.

Only users with admin, platform_role, or certification_role can modify records.

Access Control - New Record

* Type: record | Application: Global | Active: ☒ | Admin overrides: ☒

* Operation: write | Decision Type: Allow If | Protection policy: -- None --

Name: Operations Related [u_operations_related] | Service request No: | Description: | Applies To: No. of records matching the condition: 1

Conditions

Access Control Rules have two decision types, and these types will behave differently depending on conditions.

1. Allow Access: Allows access to a resource if all conditions are met. Additional ACLs may grant access to records where this ACL has not granted access.
2. Deny Access: Denies access to a resource unless all conditions are met. Additional ACLs may not grant access to records where this ACL has denied access.

Requires role

Role
admin

Security Attribute Condition

Name	Decision Type	Operation	Type	Active	Updated by	Updated
u_operation	Search	Search	Search	Search	Search	Search
u_operations_related.u_priority	Allow If	write	record	true	admin	2025-10-23 06:01:16
u_operations_related.u_ticket_raised_date	Allow If	write	record	true	admin	2025-10-23 06:00:16
u_operations_related.u_name	Allow If	write	record	true	admin	2025-10-23 05:59:11
u_operations_related.u_issue	Allow If	write	record	true	admin	2025-10-23 05:58:28
u_operations_related.u_service_request_no	Allow If	write	record	true	admin	2025-10-23 05:57:19
u_operations_related	Allow If	write	record	true	admin	2025-10-23 05:37:27
u_operations_related	Allow If	create	record	true	admin	2025-10-23 05:37:27
u_operations_related	Allow If	read	record	true	admin	2025-10-23 05:37:27
u_operations_related	Allow If	delete	record	true	admin	2025-10-23 05:37:27

8. Create Flows (Automation)

Two automation flows were built in **Flow Designer**:

- *Regarding Certificates*: Assigns to Certificates group

Workflow Studio Regarding Certificate Flow • Global

Regarding Certificate Inactive

View: [Icons] [Test] [Debug] [Activate] [Save] [More] [Help]

TRIGGER

Operations Related Created or Updated where (issue is regarding certificates)

Trigger: Created or Updated

* Table: Operations Related [u_operation...]

Condition: All of these conditions must be met

Issue is regarding

or

New Criteria

Run Trigger: For every update

Advanced Options

Delete Cancel Done

ACTIONS Select multiple

1 Update Operations Related Record

+ Add an Action, Flow Logic, or Subflow

ERROR HANDLER If an error occurs in your flow, the actions you add here will run.

Status: Modified Application: Global

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

- Operations Related Record Record
- Operations Related Table Table
- Action Status Object

Workflow Studio Regarding Certificate Flow • Global

Regarding Certificate Inactive

View: [Icons] [Test] [Debug] [Activate] [Save] [More] [Help]

TRIGGER

Operations Related Created or Updated where (issue is regarding certificates)

ACTIONS Select multiple

1 Update Operations Related Record

Action Properties

Action: Update Record

Action Inputs

* Record: Trigger... > Operations Relate...

* Table: Operations Related [u_operation...]

* Fields: Assigned to group, certificates

+ Add field value

Delete Cancel Done

+ Add an Action, Flow Logic, or Subflow

ERROR HANDLER If an error occurs in your flow, the actions you add here will run.

Status: Modified Application: Global

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

- Operations Related Record Record
- Operations Related Table Table
- Action Status Object

- Regarding Platform: Assigns to Platform group

The screenshot shows the ServiceNow Workflow Studio interface. At the top, there are tabs for 'Workflow Studio', 'Regarding Certificate', and 'Regarding Platform'. The 'Regarding Platform' tab is active. Below the tabs, there are buttons for 'Test', 'Activate', 'Save', and a menu icon. The main workspace is divided into two sections: 'TRIGGER' and 'ACTIONS'.

TRIGGER: A single trigger is configured: 'Operations Related Created or Updated where (Issue is unable to login to platform; Issu...'. Below the trigger, there is a button to 'Add an Action, Flow Logic, or Subflow'.

ACTIONS: One action is configured: 'Update Operations Related Record'. Below the action, there is a button to 'Add an Action, Flow Logic, or Subflow'.

ERROR HANDLER: A toggle switch is turned off. The text below it says: 'If an error occurs in your flow, the actions you add here will run.'

Data: A section on the right side of the workspace shows the data structure. It includes a 'Data' header with a 'Collapse All' button. Below it, there are sections for 'Flow Variables', 'Trigger - Record Created or Updated', and '1 - Update Record'. Each section contains a list of variables and their types:

- Flow Variables:**
 - 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:**
 - Operations Related Record (Record)
 - Operations Related Table (Table)
 - Action Status (Object)

9. Testing

Tickets were created with different issue types:

- When “Regarding Certificates” → Assigned to Certificates group
- When “404 Error” or “Unable to login to platform” → Assigned to Platform group

The screenshot shows the ServiceNow 'Operations Related' form for creating a new record. The form is titled 'Operations Related' and has a 'New record' button. The form contains several input fields:

- Service request No:** 1
- Name:** Test user
- Issue:** regarding certificates
- Comment:** (empty)
- Priority:** (empty)
- Assigned to user:** (empty)
- Assigned to group:** (empty)
- Ticket raised date:** (empty)

At the bottom left, there is a 'Submit' button. At the top right, there is a 'Submit' button. The form is part of a larger interface with a header bar containing the ServiceNow logo and a search bar.

