

Streamlining Ticket Assignment for Efficient Support Operations

Team Id : NM2025TMID13986

Team Members : 4

Team Leader : J Saiprakash

Team Member 1 : M Yogesh

Team Member 2 : K Jude Samuel

Team Member 3 : V Kamalesan

Problem Statement:

ABC Corporation currently experiences delays in resolving support tickets due to manual assignment processes. Tickets are often routed incorrectly or take longer to reach the appropriate teams, leading to inefficient use of resources and reduced customer satisfaction. This creates a need for an automated system that can assign tickets accurately and efficiently.

Objective:

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.

Skills:

Tensorflow, Spring

TASK INITIATION

Milestone 1 : Users

Activity 1: Create Users

Steps:

- 1) Open **ServiceNow** and log in.
- 2) Navigate to **All** → **System Security** → **Users**.
- 3) Click **New** to create a user.
- 4) Fill in the required details for the first user.
- 5) Click **Submit** to save the user account.
- 6) Repeat steps 3–5 to create a second user with the specified details

Using the steps above, two users were successfully created:
Manne Niranjan and **Katherine pierce**.

The screenshot shows the 'New record' form for a user in ServiceNow. The form is titled 'User' and 'New record'. It includes a navigation bar with a back arrow, a menu icon, and a 'Sub' button. A blue banner at the top contains the instruction: 'To set up the User's password, save the record and then click Set Password.' The form is divided into two main sections. The left section contains 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 right section contains fields for 'Email' (niranjanreddymanne2507@gmail.com), '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.

The screenshot shows the 'New record' form for a user in ServiceNow. The form is titled 'User' and 'New record'. It includes a navigation bar with a back arrow, a menu icon, and a 'Submit' button. A blue banner at the top contains the instruction: 'To set up the User's password, save the record and then click Set Password.' The form is divided into two main sections. The left section contains 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 right section contains fields for 'Email' (empty), '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.

Milestone 2 : Groups

Activity 1: Create Groups

Steps:

- 1) Open **ServiceNow** and log in.
- 2) Navigate to **All** → **System Security** → **Groups**.
- 3) Click **New** to create a group.
- 4) Fill in the required details for the first group.
- 5) Click **Submit** to save the group.
- 6) Repeat steps 3–5 to create a second group with the specified details.

Using the steps above, two groups were successfully created:
platform and **Certificates**

< ≡ Group
New record

Name certificates

Group email

Manager Katherine Pierce

Parent

Description

Submit

< ≡ Group
New record

Name Platform

Group email

Manager Manne Niranjan

Parent

Description

Submit

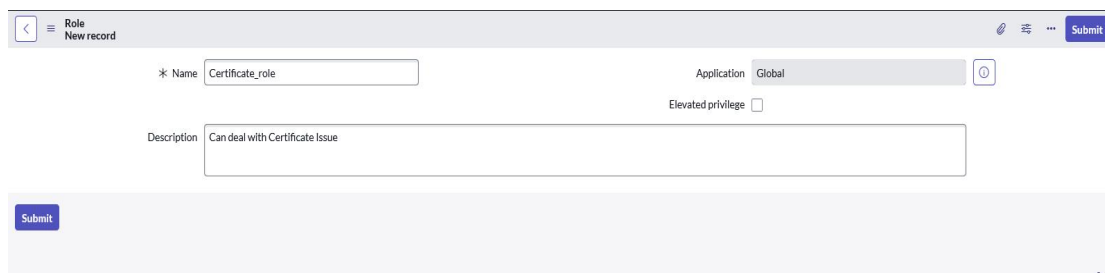
Milestone 3 : Roles

Activity 1: Create Roles

Steps:

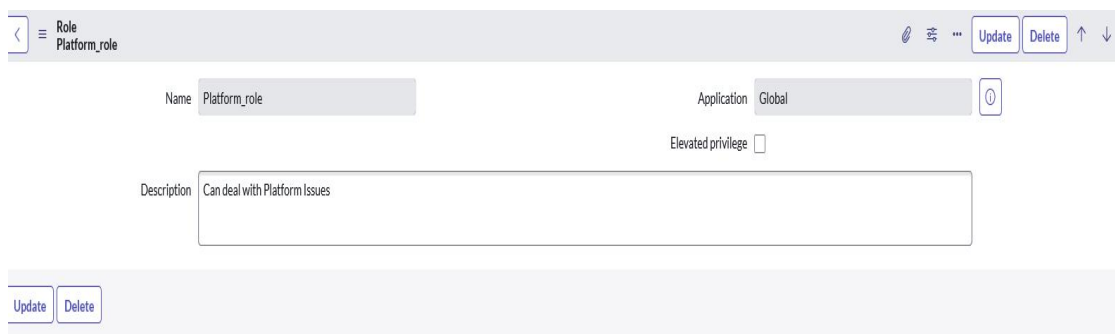
- 1) Open **ServiceNow** and log in.
- 2) Navigate to **All → System Security → Roles**.
- 3) Click **New** to create a role.
- 4) Fill in the required details for the first role.
- 5) Click **Submit** to save the role.
- 6) Repeat steps 3–5 to create a second role with the specified details.

Using the steps above, two roles were successfully created:
Certificate_role and **Platform_Role**.



This screenshot shows the 'New record' form for creating a role in ServiceNow. The form includes the following fields and controls:

- Name:** A text input field containing 'Certificate_role'.
- Application:** A dropdown menu set to 'Global'.
- Elevated privilege:** An unchecked checkbox.
- Description:** A text area containing 'Can deal with Certificate Issue'.
- Submit:** A blue button at the bottom left of the form.



This screenshot shows the 'Platform_role' record form in ServiceNow. The form includes the following fields and controls:

- Name:** A text input field containing 'Platform_role'.
- Application:** A dropdown menu set to 'Global'.
- Elevated privilege:** An unchecked checkbox.
- Description:** A text area containing 'Can deal with Platform Issues'.
- Update:** A button at the bottom left.
- Delete:** A button at the bottom left.

Milestone 4 : Table

Activity 1: Create Table

Steps:

- 1) Open **ServiceNow** and log in.
- 2) Navigate to **All** → **System Definition** → **Tables**.
- 3) Click **New** to create a table.
- 4) Fill in the following details:
 - a) **Label:** Operations related
 - b) Check the boxes **Create module** and **Create mobile module**
 - c) **New menu name:** Operations related

A table is a collection of records in the database. Each record corresponds to a row in a table, and each field on a record corresponds to a column on that table. Applications use tables and records to manage data and processes. [More Info](#)

* Label: Operations related

* Name: u_st_operations_related

Application: Global

Remote Table: ☒

Create module: ☒

Create mobile module: ☒

Add module to menu: -- Create new --

New menu name: Operations related

5) Under table columns give the columns

Column label	Type	Reference	Max length	Default value	Display
Created	Date/Time	(empty)	40		false
Ticket Raised Date	Date/Time	(empty)	40		false
Updated	Date/Time	(empty)	40		false
Assigned by user	Reference	User	32		false
Name	String	(empty)	40		false
Priority	String	(empty)	40		false
Comment	String	(empty)	40		false
Updates	Integer	(empty)	40		false
Issue	Choice	(empty)	40		false
Sys ID	Sys ID (GUID)	(empty)	32		false
Assigned by Group	Reference	Group	32		false
Service Request No	String	(empty)	40		false
Updated By	String	(empty)	40		false
Created By	String	(empty)	40		false
Insert a new row...					

6) Click **Submit** to save the table.

7) Create choices for the issue filed by using form design

Choices are

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

Access Controls						
Choices (4) Attributes Labels (1)						
Label Search Actions on selected rows... New						
Choices						
<input type="checkbox"/>	Label	Value	Language	Sequence	Inactive	Updated
<input type="checkbox"/>	unable to login to platform	unable to login to platform	en		false	2025-09-08 03:39:37
	regarding certificates	regarding certificates	en		false	2025-09-08 03:39:56
	regarding user expired	regarding user expired	en		false	2025-09-08 03:40:04
	404 error	404 error	en		false	2025-09-08 03:39:48
+	Insert a new row...					

Milestone 5 : Assign roles & users to groups

Activity 1: Assign roles & users to certificate group

Steps:

- 1) Open **ServiceNow** and log in.
- 2) Go to **All → User Administration → Groups**.
- 3) Search and open the **Certificates** group.
- 4) In the **Group Members** related list, click **Edit**, add **Katherine Pierce**, and **Save**.

Group = certificates

☐ User

Katherine Pierce

1 to 1 of 1

- 5) In the **Roles** related list (still on the group form), click **Edit**, add **Certification_role**, and **Save**

< ≡ Group certificates Update Delete ↑ ↓

Name certificates Group email

Manager Katherine Pierce Parent

Description

Update Delete

Roles (1) Group Members (1) Groups

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

Group = certificates			
<input type="checkbox"/> Created	Role	Granted by	Inherits
2025-09-08 03:49:13	Certificate_role	(empty)	true

1 to 1 of 1

Activity 2: Assign roles & users to platform group

Steps:

- 1) Open **ServiceNow** and log in.
- 2) Go to **All** → **User Administration** → **Groups**.
- 3) Search and open the **Platform** group.
- 4) In the **Group Members** related list, click **Edit**, add **Manne Niranjan**, and **Save**.

The screenshot shows the 'Group Members' tab for the 'Platform' group. At the top, there are 'Update' and 'Delete' buttons. Below the tabs, there is a search bar with a dropdown menu set to 'User' and a search input field. The search results show a single entry for 'Manne Niranjan'.

Group	User
Platform	Manne Niranjan

- 5) In the **Roles** related list (still on the group form), click **Edit**, add **Certification_role**, and **Save**

The screenshot shows the 'Roles' tab for the 'Platform' group. It displays a table with columns: Created, Role, Granted by, and Inherits. The table contains one row for 'Platform_role'.

Created	Role	Granted by	Inherits
2025-09-08 03:56:54	Platform_role	(empty)	true

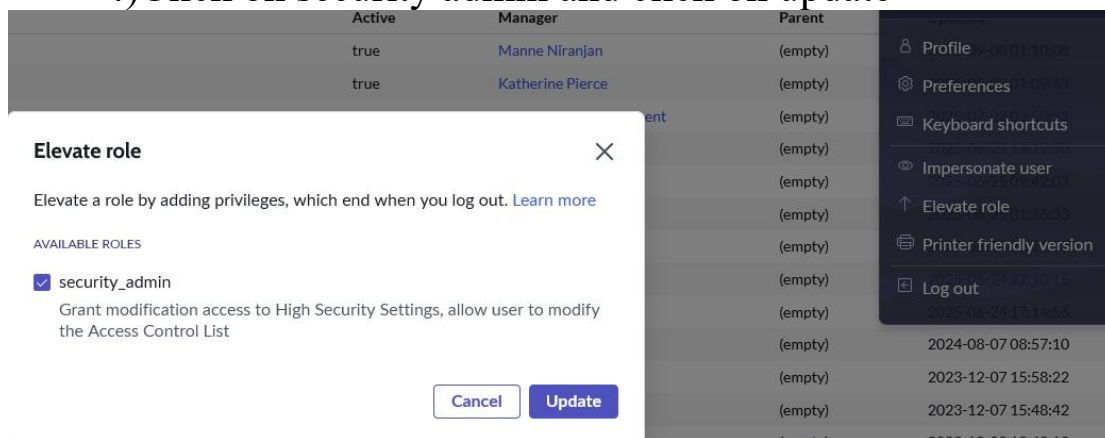
At the bottom, there is a pagination bar showing '1 to 1 of 1'.

Milestone 6 : Assign role to table

Activity 1 : Assign role to table

Steps:

- 1)Open service now.
- 2)Click on the profile on top right side
- 3)Click on elevate role
- 4)Click on security admin and click on update



- 5)Click on All >> search for ACL
- 6)Select on **u_operations_related read**
- 7)Under Requires role
- 8)Double click on insert a new row
- 9)Give platform role
- 10)And add certificate role
- 11)Click on update



- 12) Select on **u_operations_related write**
- 13) Under Requires role
- 14) Double click on insert a new row
- 15) Give platform role
- 16) And add certificate role
- 17) Click on update

Requires role	
Role	
	u_operations_related_user
 	Platform_role
 	Certificate_role
	Insert a new row...

Milestone 7 : Create ACL

Activity 1 : Create ACL

Steps:

- 1)Open service now.
- 2)Click on All >> search for ACL
- 3)Select Access Control(ACL) under system security
- 4)Click on new
- 5)create a new ACL by following details

Access Control
New record

Warning: A role, security attribute, data condition, script or ACL control via reference fields is required to properly secure access with this ACL.

* Type: record (0)
* Operation: write (0)
Decision Type: Allow If
Application: Global (0)
Active: ☒
Advanced: ☐
Admin overrides: ☒
Protection policy: -- None --
* Name: Operations related [u_st_operations_related] Priority:
Description:
Applies To: No. of records matching the condition: 0
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

Requires role

Role	
<input checked="" type="checkbox"/>	admin

+ Insert a new row...

Security Attribute Condition

- 9)Click on submit

10)Similarly create 4 acl for the following fields

<div><div></div><div></div></div> <div>Name</div>	Decision Type	Operation	Type	Active	Updated by	Updated ▾
u_st_operations_related.u_service_reques...	Allow If	write	record	true	admin	2025-09-08 04:42:29
u_st_operations_related.u_name	Allow If	write	record	true	admin	2025-09-08 04:41:18
u_st_operations_related.u_issue	Allow If	write	record	true	admin	2025-09-08 04:40:31
u_st_operations_related.u_ticket_raised_...	Allow If	write	record	true	admin	2025-09-08 04:39:31
u_st_operations_related.u_priority	Allow If	write	record	true	admin	2025-09-08 04:38:38

Milestone 7 : Flow

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

Steps:

- 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)should be Global.
- 7)Select Run user as “ System user ” from that choice.
- 8)Click on Submit.

Let's get the details for your flow

Flow name * ⓘ

Regarding Certificate

Application * ⓘ

Global

Description ⓘ

Describe your flow.

▼ Hide additional properties

Protection ⓘ

-- None --

Run as ⓘ

System user

Specify the priority that you want a background flow to have in relation to other flows waiting to be run.

Flow priority default ⓘ

Medium (default)

Cancel

Build flow

- 9) Click on Add a trigger
- 10) Select the trigger in that Search for “create or update a record” and select that.
- 11) Give the table name as “ Operations related ”.
- 12) Give the Condition as
Field : issue
Operator : is
Value : Regrading Certificates
- 13) After that click on Done.

TRIGGER

Operations related Created or Updated where (Issue is regarding certificates)

Trigger: Created or Updated

* Table: Operations related [u_st_operati... X

Condition: All of these conditions must be met

Issue is regarding certificates

or

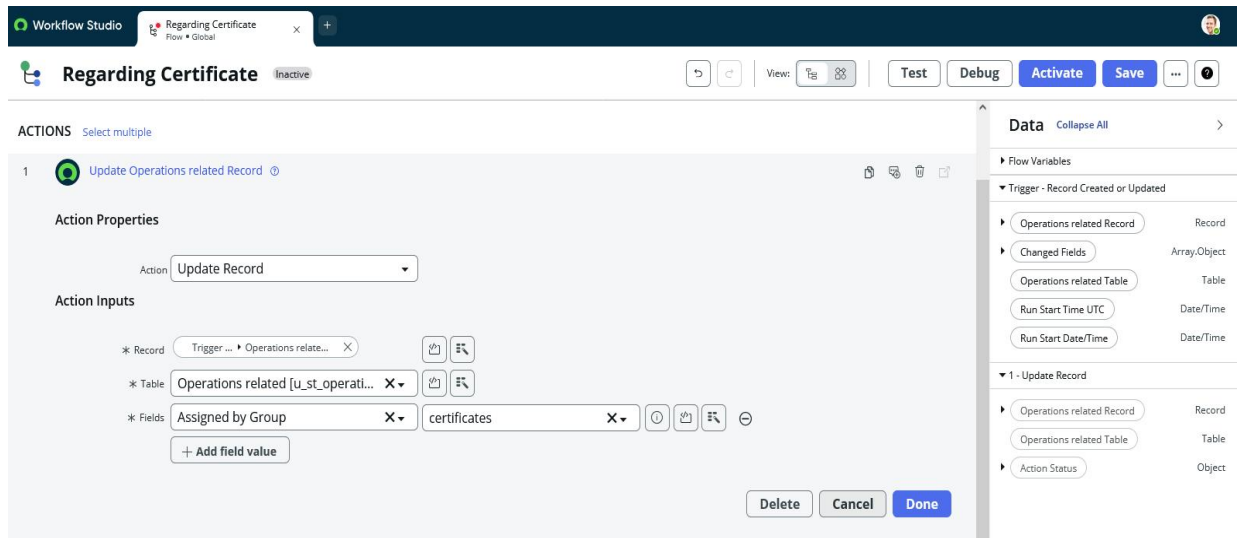
New Criteria

Run Trigger: For every update

Advanced Options

Delete Cancel Done

- 14) Now under Actions.
- 15) Click on Add an action.
- 16) Select action in that search for “ Update Record ”.
- 17) In Record field drag the fields from the data navigation from left side
- 18) Table will be auto assigned after that
- 19) Give the field as “ Assigned to group ”
- 20) Give value as “ Certificates ”



- 21) Click on Done.
- 22) Click on Save to save the Flow.
- 23) Click on Activate.

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

Steps:

- 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)should be Global.
- 7)Select Run user as “ System user ” from that choice.
- 8)Click on Submit.

Let's get the details for your flow

Flow name * ⓘ
Regarding Platform

Application * ⓘ
Global ▼

Description ⓘ
Describe your flow.

▼ Hide additional properties

Protection ⓘ
-- None --
Option that you can select to specify that the flow runs as a system user or the user who initiates the session.

Run as ⓘ
System user ▼

Flow priority default ⓘ
Medium (default) ▼

Cancel

Build flow

9)Click on Add a trigger

10)Select the trigger in that Search for “create or update a record” and select that.

11)Give the table name as “ Operations related ”.

12)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

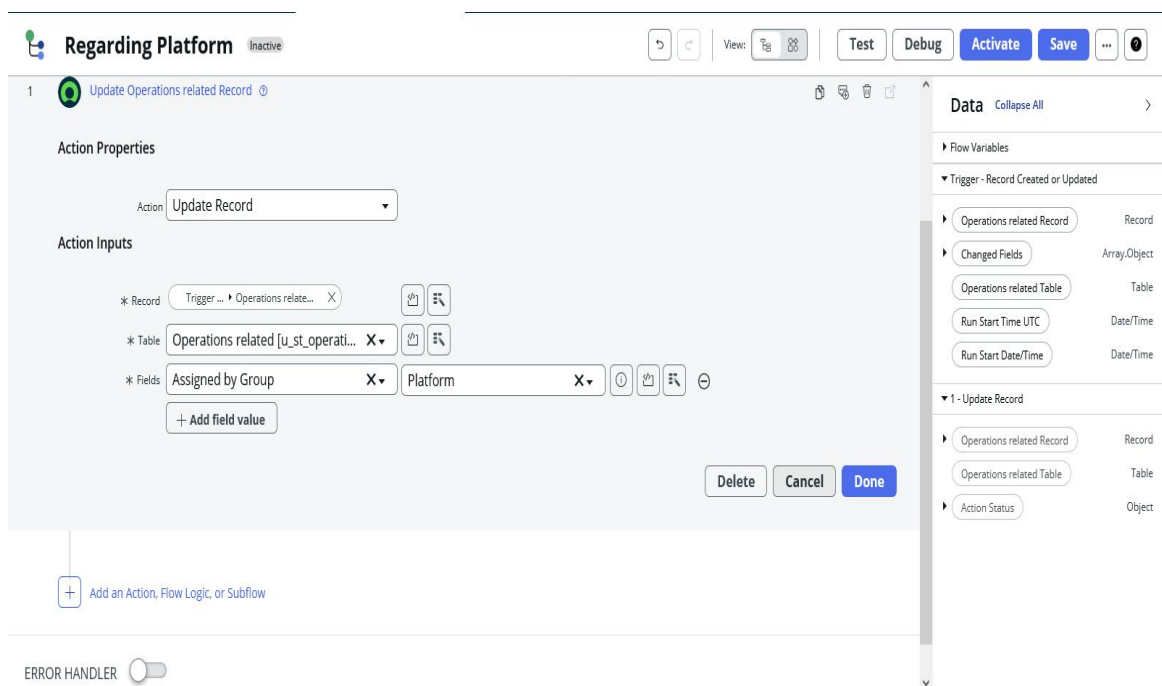
Value : Regrading User expired

13)After that click on Done.

The screenshot shows a trigger configuration window titled "Operations related Created or Updated where (Issue is unable to login to platform; Issue is 404 error; Issue is regarding user expired)". The interface includes the following elements:

- Trigger:** A dropdown menu set to "Created or Updated".
- * Table:** A dropdown menu set to "Operations related [u_st_operati... X▼".
- Condition:** A section titled "All of these conditions must be met" containing three rows of conditions, each with a "New Criteria" button below it:
 - Row 1: Field "Issue", Operator "is", Value "unable to login to platform", with "OR" and "AND" buttons.
 - Row 2: Field "Issue", Operator "is", Value "404 error", with "OR" and "AND" buttons.
 - Row 3: Field "Issue", Operator "is", Value "regarding user expired", with "OR" and "AND" buttons.
- Run Trigger:** A dropdown menu set to "For every update".
- Advanced Options:** A button with a downward arrow.
- Buttons:** "Delete", "Cancel", and "Done" buttons at the bottom right.

- 14) Now under Actions.
- 15) Click on Add an action.
- 16) Select action in that search for “ Update Record ”.
- 17) In Record field drag the fields from the data navigation from left side
- 18) Table will be auto assigned after that
- 19) Give the field as “ Assigned to group ”.
- 20) Give value as “ Platform ”.
- 21) Click on Done.
- 22) Click on Save to save the Flow.
- 23) Click on Activate.



Conclusion:

This document outlined the end-to-end process of streamlining ticket assignment in ServiceNow for ABC Corporation. The steps covered include creating users, groups, and roles; designing a custom operations table; applying access controls; and building flows for automated ticket routing.

By following these milestones, an automated ticket assignment framework was successfully implemented. This solution eliminates manual routing, ensures tickets are directed to the correct support groups, and reduces delays in issue resolution.

Key Outcomes:

Two user accounts and two groups were created to represent support teams.

Roles were defined and assigned to manage access rights.

A custom operations table was created with relevant issue categories.

ACLs were configured to enforce role-based security.

Automated flows were built to assign tickets to the correct groups based on issue type.