

Automated Ticket Routing System

Problem Statement:

ABC Corporation, a leading technology company, was facing challenges with efficiently assigning support tickets to the appropriate teams. With a vast array of products and services, the support team found it increasingly difficult to manually route tickets to the right groups, leading to delays in issue resolution and customer dissatisfaction.

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.

Following are the implementation steps :

1. Create two users as shown below :

The image displays two screenshots of the ServiceNow User Administration interface, specifically the 'New record' form for creating users. Both screenshots show a sidebar with navigation options like 'Password Reset', 'Blocked Users', 'Organization', 'Users', 'System Security', 'Users and Groups', 'Groups', 'Roles', 'Access Role Detail View', 'Reports', and 'User Administration'. The main form area contains fields for user details and a 'Submit' button.

Top Screenshot (User: Jhon Smith):

- User ID:** jhon.smith
- First name:** Jhon
- Last name:** Smith
- Title:** (empty)
- Department:** (empty)
- Email:** jhonsmith@gmail.com
- Identity type:** Human
- Language:** -- None --
- Calendar integration:** Outlook
- Time zone:** System (America/Los_Angeles)
- Date format:** System (yyyy-MM-dd)
- Business phone:** (empty)
- Mobile phone:** (empty)
- Photo:** Click to add...
- Active:** ☒
- Internal Integration User:** ☐
- Password needs reset:** ☐
- Locked out:** ☐

Bottom Screenshot (User: David Clark):

- User ID:** david.clark
- First name:** david
- Last name:** clark
- Title:** (empty)
- Department:** (empty)
- Email:** (empty)
- Identity type:** Human
- Language:** -- None --
- Calendar integration:** Outlook
- Time zone:** System (America/Los_Angeles)
- Date format:** System (yyyy-MM-dd)
- Business phone:** (empty)
- Mobile phone:** (empty)
- Photo:** Click to add...
- Active:** ☒
- Internal Integration User:** ☐
- Password needs reset:** ☐
- Locked out:** ☐

2. Create two groups as shown below :

The first screenshot shows the 'Group' form with the following fields filled: Name: Certificates, Manager: david clark. The second screenshot shows the 'Group' form with the following fields filled: Name: Platform, Manager: Jhon Smith. Both screenshots show the 'Submit' button and the 'Group email' and 'Parent' fields are empty.

Group 1: Certificates

- Name: Certificates
- Manager: david clark
- Group email:
- Parent:
- Description:

Group 2: Platform

- Name: Platform
- Manager: Jhon Smith
- Group email:
- Parent:
- Description:

3. Create two roles for that groups:

The screenshot shows the 'Role' form with the following fields filled: Name: Certification_role, Application: Global, Description: Can deal with certification issues. The 'Elevated privilege' checkbox is unchecked. The 'Submit' button is highlighted in green.

Role: Certification_role

- Name: Certification_role
- Application: Global
- Elevated privilege: ☐
- Description: Can deal with certification issues.

servicenow Service Management

roles

System Security

Users and Groups

Roles

User Administration

Time-Limited User Roles

Roles

Role Delegation

Delegate Roles in Group

User Roles

Group Roles

Role record

Name: Platform_role

Application: Global

Elevated privilege: ☐

Description: Can deal with platform related issues

Submit

4. Create a new table with name Operations related :

servicenow Service Management

tables

System Definition

Tables

Tables & Columns

Decision Tables

Remote Tables

Tables

Definitions

System Diagnostics

Session Debug

Debug SQL (Large Tables)

System Import Sets

Import Set Tables

Cleanup

Table

New record

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_operations_related

Extends table:

Application: Global

Create module: ☒

Create mobile module: ☒

Add module to menu: -- Create new --

New menu name: Operations related

Remote Table: ☐

Columns Controls Application Access

Table Columns Search for text Search

Dictionary Entries

Column label	Type	Reference	Max length	Default value	Display
Insert a new row...					

Submit Cancel

5. Create custom fields for the above table :

servicenow Service Management

tables

System Definition

Tables

Tables & Columns

Decision Tables

Remote Tables

Tables

Definitions

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Session Debug

Debug SQL (Large Tables)

System Import Sets

Import Set Tables

Cleanup

Table

Operations related

Created Date/Time (empty) 40 false

X	Assigned to group	Reference	Group	40		false
X	Assigned to user	Reference	User	32		false
X	Comment	String		40		false
X	Issue	String		40		false
X	Name	String		40		false
X	Priority	String		40		false
X	Service request No	String		40	javascript.getNextObjNumberPadded();	false
X	Ticket raised Date	Date/Time		40		false
Insert a new row...						

Delete Update Delete All Records

Related Links

Form Builder

Design Form

6. Create choices for the issue field :

ChoicesNewSearchTableSearch

All > Table in u_operations_related > Element = u_issue

	Table	Element	Language	Value	Label	Inactive	Sequence	Updated
	Search	=u_issue	Search	Search	Search	Search	Search	Search
<input type="checkbox"/>	u_operations_related	u_issue	en	1	Unable to login to platform	false		0 2025-09-29 07:35:11
<input type="checkbox"/>	u_operations_related	u_issue	en	3	regarding certificates	false		2 2025-09-29 07:35:11
<input type="checkbox"/>	u_operations_related	u_issue	en	2	404 error	false		1 2025-09-29 07:35:11
<input type="checkbox"/>	u_operations_related	u_issue	en	4	regarding user expired	false		3 2025-09-29 07:35:11

☐ Actions on selected rows...

1 to 4 of 4

7. Assign roles and users to Certificate group :

Edit Members

CancelSave

Add FilterRun filter?

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

Collection

Q cer

certification
certification_admin
certification_filter_admin

Roles List

Certificates

Certification_role

><

CancelSave

Name Certification_role

< Edit Members

Cancel Save

Add FilterRun filter ?

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

Collection

Q david

David Dan
David Loo
David Miller

Group Members List

Certificates

david clark

>
<

Cancel Save

Name david clark
First name david

8. Assign roles and users to Platform group :

< Edit Members

Cancel Save

Add FilterRun filter ?

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

Collection

Q platform

platform_analytics_admin
platform_ml_create
platform_ml_read
platform_ml_write

Roles List

Platform

Platform_role

>
<

Cancel Save

Name Platform_role

servicenow Service Management System Administrator

access con Access Control New record Submit

ⓘ 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 Application: Global

* Operation: write Active: ☒

Decision Type: Allow If Advanced: ☐

Admin overrides: ☒

Protection policy: -- None --

* Name: Operations related [u_operations_related] Service request No

Description:

Applies To: No. of records matching the condition: 0

Add Filter Condition Add OR Clause

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

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.

11. Create a flow designer :

Workflow Studio Home Operations Integrations

Playbooks **Flows** Subflows Triggers Actions Decision tables

Flows 70 Last refreshed just now.

Name	Application	Status	Active	Updated
Application Intake Request Flow (Deprecated)	Application Intake	Published	false	2025-09-05 12:35:03
Application Intake Request V2	Application Intake	Published	true	2025-09-05 12:34:57
Benchmark Recommendation Evaluator	Benchmarks Spoke	Published	true	2025-06-04 22:39:35
Business process approval flow	Global	Published	true	2020-09-27 22:06:13
Change - Cloud Infrastructure - Authorize	Global	Published	true	2020-11-11 07:08:05
Change - Emergency - Authorize	Global	Published	true	2020-10-06 05:39:49
Change - Emergency - Implement	Global	Published	true	2020-09-23 05:06:26
Change - Emergency - Review	Global	Published	true	2020-10-27 04:18:08
Change - Normal - Assess	Global	Published	true	2020-10-06 05:37:05
Change - Normal - Authorize	Global	Published	true	2020-10-06 05:38:35

New Pick up where you left off

- Playbook
- Flow**
- Subflow
- Trigger
- Action
- Decision table

Latest updates

- System Administrator modified Upgrade management guided setup a year ago
- System Administrator modified Steps a year ago
- System Administrator modified Steps a year ago
- System Administrator modified Steps a year ago

Let's get the details for your flow

Flow name *

Application *

Description

Hide additional properties

Protection

Run as

Flow priority default:

Cancel Build flow

12. Add the trigger condition as shown in the image :

Workflow Studio Regarding Certificate Flow • Global

Regarding Certificate Inactive

View: [Icon] [Icon] Test Debug Activate Save ...

TRIGGER

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

Trigger: Created or Updated

* Table: Operations related [u_operation... X]

Condition: All of these conditions must be met

Issue is regarding certificates

OR AND

New Criteria

Run Trigger: Once

Advanced Options

Delete Cancel Done

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

13. Then add action to it :

ACTIONS Select multiple

ACTIONS Select multiple

1 Update Operations related Record

Action Properties

Action: Update Record

Action Inputs

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

* Table: Operations related [u_operation... X]

* Fields: Assigned to group X Certificates X

+ Add field value

Delete Cancel Done

14. Create another flow designer with the following details :

Workflow Studio Regarding Certificate Flow • Global New Flow Flow • None

Let's get the details for your flow

Flow name *: Regarding Platform

Application *: Global

Description: Describe your flow.

Hide additional properties

Protection: -- None --

Run as: System user

Flow priority default: Medium (default)

Cancel Build flow

Workflow Studio Regarding Certificate Flow + Global Regarding Platform Flow + Global

Regarding Platform Inactive View: Test Debug Activate Save

Click or hit enter to Collapse ServiceNow Core Record Trigger for Operations related Created or Updated where (Issue is Unable to login to platform; Issue is 404 error; Issue is regarding user expired)

Operations related Created or Updated where (Issue is Unable to login to platform; Issue is 404 error; Issue is regarding user expired)

Trigger: Created or Updated

* Table: Operations related [u_operation... X]

Condition: All of these conditions must be met

Issue is Unable to login to platform OR AND

or

All of these conditions must be met

Issue is 404 error OR AND

or

All of these conditions must be met

Issue is regarding user expired OR AND

New Criteria

Run Trigger: Once

Advanced Options

Status: Modified Application: Global

ACTIONS Select multiple

1 Update Operations related Record

Action Properties

Action: Update Record

Action Inputs

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

* Table: Operations related [u_operation... X]

* Fields: Assigned to group X Platform X

+ Add field value

Delete Cancel Done

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

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.