Project Report

Title:

Streamlining Ticket Assignment for Efficient Support Operations

Organization:

ABC Corporation

Submitted by:

HARINI M S
B.Tech Computer Science and Business Systems

1. Abstract

In modern IT service management, efficient handling of support tickets is essential for ensuring customer satisfaction and maintaining operational excellence. At ABC Corporation, manual ticket assignment was causing significant challenges, including delayed responses, incorrect routing, and unbalanced workloads among support teams.

This project focuses on designing and implementing an **automated ticket routing system** using the ServiceNow platform to streamline ticket management operations. By creating structured user roles, access controls, and automated flows, the solution ensures that tickets are automatically routed to the appropriate team — either the **Certificate Group** or **Platform Group** — based on predefined conditions. The implementation aims to enhance response time, reduce manual intervention, and improve the overall efficiency of the support department.

3. Problem Statement

At ABC Corporation, the current process of manually assigning support tickets to teams leads to delays, misrouting, and uneven workload distribution. This inefficiency hampers timely issue resolution, decreases customer satisfaction, and results in suboptimal utilization of support resources.

To address these challenges, there is a need to develop and implement an **automated ticket routing system** that intelligently categorizes and assigns tickets to the appropriate teams. The system should minimize manual effort, ensure accurate routing, and maintain secure access through proper user roles and permissions.

4. Objectives

The main objectives of this project are as follows:

- To automate ticket routing and minimize manual assignment errors.
- To improve ticket resolution time and customer satisfaction.
- To ensure proper role-based access and group segregation.
- To optimize workload distribution between support teams.
- To enhance overall operational efficiency through ServiceNow automation.

5. System Design and Implementation

The project was implemented in the **ServiceNow Developer Instance**, following these steps:

Step 1: Create Users

Different users were created in the system to represent support agents and team members. These users simulate real-world agents responsible for handling tickets under specific domains.

Step 2: Create Groups

Two main groups were created:

- **Certificate Group:** Handles certificate-related support issues.
- **Platform Group:** Handles platform-related technical problems.

These groups help segregate responsibilities and enable focused issue resolution.

Step 3: Create Roles

Custom roles were defined to control access and responsibilities. Examples include:

- **cert_admin:** For managing certificate-related tasks.
- **platform_admin:** For platform support operations.
- **itil_user:** For general support access.

Roles were linked to users and groups to ensure proper security and permissions.

Step 4: Create Table

A custom table (e.g., **u_operations_ticket**) was created to store all support ticket data. This table includes fields such as:

- Ticket Number
- Short Description
- Category

- Assigned Group
- Assigned To
- Status

The table acts as the foundation for the automated routing process.

Step 5: Assign Roles and Users to Certificate and Platform Groups

Users and roles were mapped appropriately:

- Users with certificate-related responsibilities were assigned to the **Certificate Group**.
- Users with platform-related responsibilities were assigned to the **Platform Group**.

This ensured clear segregation of duties and accountability.

Step 6: Assign Role to Table

Access to the operations ticket table was restricted to users with specific roles. This prevents unauthorized access and ensures data confidentiality.

Step 7: Create ACL (Access Control List)

ACLs were implemented to control CRUD (Create, Read, Update, Delete) permissions on the custom table. Example:

- Only certificate_admins can view and update certificate tickets.
- Only platform_admins can access platform tickets.

This enhances data integrity and prevents accidental modifications.

Step 8: Create a Flow to Assign Tickets to Certificate Group

Using **ServiceNow Flow Designer**, a flow was created to automatically route tickets categorized as “Certificate” to the **Certificate Group**.

Logic Example:

If *Category = Certificate*, then *Assign to Certificate Group*.

This flow triggers immediately when a new ticket is created or updated.

Step 9: Create a Flow to Assign Tickets to Platform Group

Similarly, another flow was created for **Platform Group** routing.

Logic Example:

If *Category = Platform*, then *Assign to Platform Group*.

This ensures correct and automatic assignment for all platform-related issues.

6. Results and Discussion

After implementing the automated ticket routing system, the following outcomes were observed:

- **Reduced Assignment Time:** The manual step of routing tickets was eliminated, resulting in faster response initiation.
- **Improved Accuracy:** Tickets were consistently assigned to the right teams, reducing back-and-forth reassignments.
- **Enhanced Security:** Proper role and ACL implementation ensured that only authorized personnel could access or modify tickets.
- **Better Resource Utilization:** Workload was evenly distributed across teams, improving overall productivity.
- **Customer Satisfaction:** Faster resolution times led to positive feedback and higher customer satisfaction scores.

7. Conclusion

The automation of ticket routing at ABC Corporation through ServiceNow successfully addressed the inefficiencies of manual ticket management. By combining **user role management**, **ACL security**, and **Flow Designer automation**, the organization achieved significant improvements in operational speed, accuracy, and support quality.

This project demonstrates how **intelligent automation** can streamline IT service management processes, reduce human errors, and enhance end-user experience.