

Streamlining Ticket Assignment for Efficient Support Operations

Team ID	LTVIP2025TMID30524
Project Name	Streamlining Ticket Assignment for Efficient Support Operations
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College Name	Kallam Haranadhareddy Institute of Technology

1. Introduction

1.1 Project Overview

This project, “**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.

1.2 Purpose

The purpose of this project is to build a streamlined system that automatically assigns tickets to the appropriate support team based on criteria such as category, priority, and expertise. The solution will:

- Automatically categorize and assign incidents and requests
- Reduce delays caused by manual triaging
- Improve operational efficiency
- Increase customer satisfaction through faster resolution

2. Ideation Phase

2.1 Problem Statement

Manual ticket assignment often leads to delays, misrouting, and increased workload on service desk teams. This project addresses these challenges by creating an automated assignment system using ServiceNow, enabling faster, more accurate, and consistent ticket handling.

2.2 Empathy Map Canvas Entities

1. Ticket: Represents a support request or incident
 - Attributes: ID, Category, Priority, Description, Requester
2. Support Group: Represents a team that handles specific ticket types
 - Attributes: Name, Expertise, Capacity
3. Assignment Rules: Define logic for assigning tickets
 - Attributes: Conditions, Actions

Map Canvas

- Tickets are linked to support groups based on predefined assignment rules.
- Assignment rules consider ticket attributes (category, priority, urgency) to determine routing.
- Support groups receive tickets in their queue automatically, ensuring workload balance and faster response.

3. Requirement Phase

3.1 Journey Map

Phases

1. Discovery: Identify ticket assignment challenges and requirements.
2. Planning: Define automation scope and objectives.
3. Design: Configure ServiceNow to enable automated assignment.
4. Implementation: Build, test, and refine assignment logic.
5. Adoption: Train support teams on using automated workflows.
6. Review: Continuously optimize assignment logic and rules.

3.2 Solution Requirements

Functional Requirements

1. Automated ticket categorization and assignment
2. Dynamic reassignment in case of changes (e.g., escalation)
3. Real-time monitoring dashboards for ticket flow
4. Notifications to relevant support teams

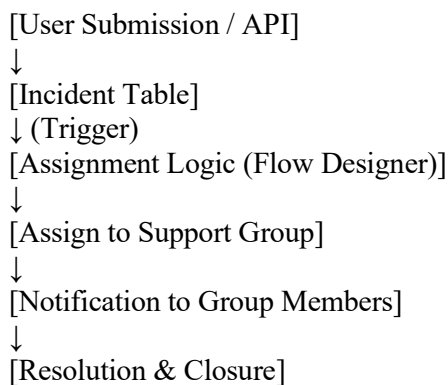
Non-Functional Requirements

1. High reliability and accuracy in assignments
2. Secure access to sensitive ticket data
3. Scalable to support different departments

Technical Requirements

1. Utilize ServiceNow's Flow Designer and business rules
2. Design custom tables for assignment logic tracking
3. Configure user roles and access permissions

3.3 Data Flow Diagram



3.4 Technology Stack

- Platform: ServiceNow
- Language: JavaScript (for scripting logic)
- Tools: Flow Designer, Business Rules, Notifications, Reports

4. Project Design

4.1 Problem-Solution Fit

- Low-Code Platform: Enables rapid configuration without deep coding.
- Automation: Reduces manual errors and improves efficiency.
- Transparency: Clear visibility of ticket flow and status.
- Scalability: Easily extendable to additional services or support groups.

4.2 Proposed Solution

A rule-based, automated assignment system in ServiceNow that evaluates incoming tickets and directs them to the appropriate support group. The system uses category and priority filters, and can be adjusted dynamically as per business needs.

Benefits:

- Faster ticket resolution
- Reduced workload for service desk agents
- Improved service quality
- Enhanced tracking and reporting

4.3 Solution Architecture

- Setup ServiceNow instance
- Create/update assignment tables
- Configure assignment rules
- Set up notifications
- Monitor and refine performance

5. Project Planning & Scheduling

Phase	Estimated Time
Instance Setup	1 hour
Table Creation	2 hours
Rule Configuration	2 hours
Testing & Validation	1.5 hours
Training & Adoption	1 hour
Final Review	1 hour

6. Functional and Performance Testing

6.1 Performance Testing

- Verified automatic assignment accuracy
- Tested group capacity balancing
- Validated notification timing and delivery
- Monitored assignment logs and escalation triggers

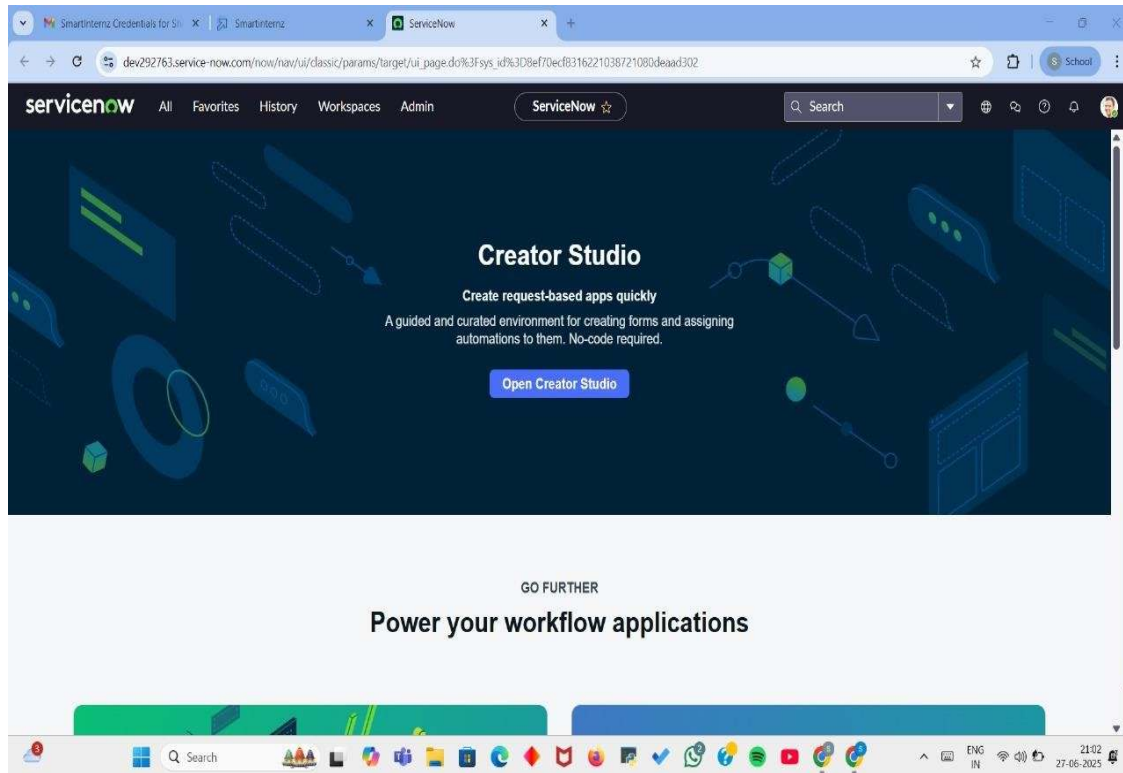
7. Results

7.1 Output Screenshots

- ServiceNow instance setup
- Ticket assignment flow configurations

- Assignment rule definitions
- Group notification setups
- Test case results (automated assignments)

Setting up ServiceNow Instance



Create of New Update User in System Security

dev303338.service-now.com/now/nav/ui/classic/params/target/sys_user.do%3Fsys_id%3D4af250147e222107052dbe4116d4378%26sysparm_record_target%3Dsys_user%26sysparm_rec...

servicenow All Favorites History Workspaces User - Rakesh Thamisetty Search

User Rakesh Thamisetty Update Set Password Delete

User ID: Thamisetty Rakesh

First name: Rakesh

Last name: Thamisetty

Title:

Department:

Password needs reset: ☐

Locked out: ☐

Active: ☒

Web service access only: ☐

Internal Integration User: ☐

Email: 228x1a4562@khitguntur.ac.in

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...

Update Set Password Delete

Related Links

[View linked accounts](#)

[View Subscriptions](#)

[Reset a password](#)

Entitled Custom Tables Roles (3) Groups (2) Delegates Subscriptions User Client Certificates

Table Search

User - Rakesh Thamisetty

Windows taskbar: Search, WhatsApp, Rakesh Thamisetty, project Markup.docx, Top 10 most equal cou...

Create another User in System Security

dev303338.service-now.com/now/nav/ui/classic/params/target/sys_user.do%3Fsys_id%3D02518bef475a22107052dbe4116d43fa%26sysparm_record_target%3Dsys_user%26sysparm_rec...

servicenow All Favorites History Workspaces User - muni sekhar Uppalapati Search

User muni sekhar Uppalapati Update Set Password Delete

User ID Email

First name Language -- None --

Last name Calendar integration Outlook

Title Time zone System (America/Los_Angeles)

Department Date format System (yyyy-MM-dd)

Password needs reset ☐ Business phone

Locked out ☐ Mobile phone

Active ☒ Photo [Click to add...](#)

Web service access only ☐

Internal Integration User ☐

Update Set Password Delete

Related Links

[View linked accounts](#)

[View Subscriptions](#)

[Reset a password](#)

Entitled Custom Tables Roles Groups Delegates Subscriptions User Client Certificates

Table Search

User = muni sekhar Uppalapati

Creation of groups with different names

dev303338.service-now.com/now/nav/ui/classic/params/target/sys_user.do%3Fsys_id%3D02518bef475a22107052dbe4116d43fa

servicenow All Favorites History Workspaces User - muni sekhar Uppalapati Search

User muni sekhar Uppalapati Update Set Password Delete

User ID Email

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Password needs reset ☐ Business phone

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Table Search

User = muni sekhar Uppalapati

dev303338.service-now.com/now/nav/ui/classic/params/target/sys_user.do%3Fsys_id%3D5b047ab471e22107052dbe4116d430d

servicenow All Favorites History Workspaces User - ThammiSETTY Rakesh Search

User - ThammiSETTY Rakesh Update Set Password Delete

User ID Email

First name Language -- None --

Last name Calendar integration

Title Time zone

Department Date format

Password needs reset ☐ Business phone

Locked out ☐ Mobile phone

Active ☒ Photo [Click to add...](#)

Web service access only ☐

Internal integration user ☐

Update Set Password Delete

Related Links

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[View Subscriptions](#)

[Reset a password](#)

Entitled Custom Tables Roles Groups Delegates Subscriptions User Client Certificates

Table Search

User = ThammiSETTY Rakesh

Creation of Roles

dev303338.service-now.com/now/nav/ui/classic/params/target/sys_user_role.do%3Fsys_id%3D8f440baf471e22107052dbe4116d4308%26sysparm_record_target%3Dsys_user_role%26sys...

servicenow All Favorites History Workspaces Role - certification_role Search

Role certification_role Update Delete

Name Application

Elevated privilege ☐

Description

Update Delete

Related Links

[Run Point Scan](#)

Contains Roles Applications with Role Modules with Role Custom Tables

for text Search New Edit...

Role = certification_role

Contains

No records to display

dev303338.service-now.com/now/ui/classic/params/target/sys_user_role.do%3Fsys_id%3D6c4567ef471e22107052dbe4116d437%26sysparm_record_target%3Dsys_user_role%26sys...

servicenowAllFavoritesHistoryWorkspacesRole - platform_roleSearch

Roleplatform_role

UpdateDelete

Nameplatform_role

ApplicationGlobal

Elevated privilege

Descriptioncan deal with platform related issues

UpdateDelete

Related Links

[Run Print Scan](#)

Contains RolesApplications with RoleModules with RoleCustom Tables

for textSearch

NewEdit

Role - platform_role

Contains

No records to display

Creation of Tables

dev303338.service-now.com/now/nav/ui/classic/params/target/sys_db_object.do%3Fsys_id%3De57783a3475e22107052dbe4116d4367%26sysparm_record_target%3Dsys_db_object...

servicenow All Favorites History Workspaces Admin Table - Operations related Check the boxes Create module & Create ...

Table Operations related Check the boxes Create module & Create mobile module

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 Check the boxes Create modu Application Global

* Name u_operations_related_check_the_boxes_create_m

Columns Controls Application Access

Table Columns Type Search

Dictionary Entries

Column label	Type	Reference	Max length	Default value	Display
Ticket raised Date	Date/Time	Empty State	40		false
updated	Date/Time	Empty State	40		false
Created	Date/Time	(empty)	40		false
Updated	Date/Time	(empty)	40		false
Created	Date/Time	Empty State	40		false
Updates	Integer	(empty)	40		false
updates	Integer	Empty State	40		false
Assigned to user	Reference	User	32		false
Assigned to group	Reference	Group	32		false
Created by	String	Empty State	40		false
priority	String	Empty State	40		false
comment	String	Empty State	40		false
Name	String	Empty State	40		false
Issue	String	Empty State	40		false
Created by	String	(empty)	40		false
Updated by	String	(empty)	40		false
Service request No	String	Empty State	40	javascript.getNextObjectNumberPadded();	false
Sys ID	String	Empty State	32		false

Create ACL

Access Control u_operations_related.u_service_request_no

* Type record Application Global

* Operation write Active ☒

Admin overrides ☒ Advanced ☐

Protection policy -- None --

* Name Operations related [u_operations_related] Service request No

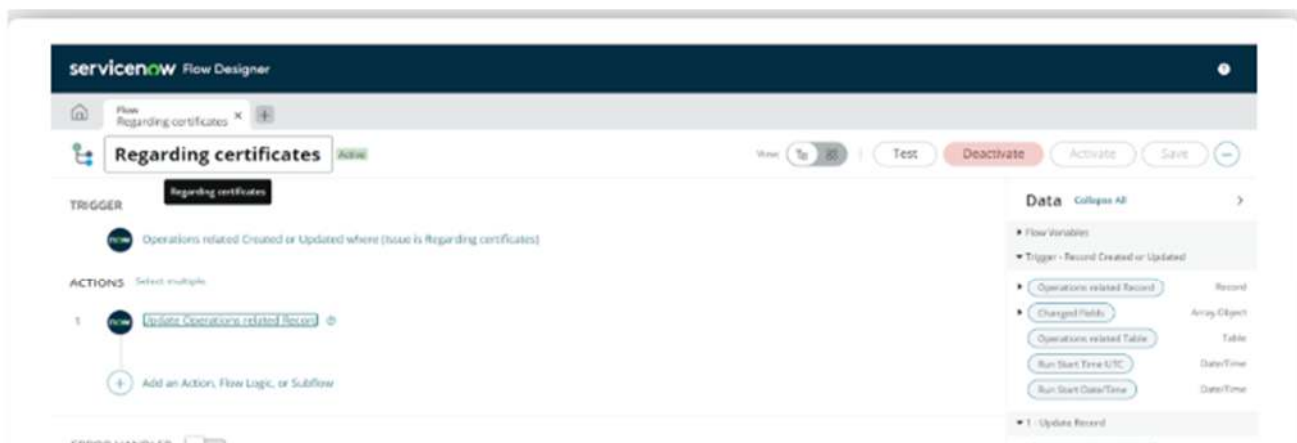
Description

Condition 4 records match condition

Add Filter Condition Add "OR" Clause

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

Flow Chart



8. Advantages & Disadvantages



Advantages

- Reduced manual errors and delays
- Improved operational efficiency
- Scalability across departments
- Enhanced transparency and accountability
- Better resource utilization
- Faster incident resolution



Disadvantages

- Initial setup complexity
- Requires ongoing maintenance and updates
- May need frequent tuning as organizational needs change
- Dependence on ServiceNow licensing

9. Conclusion

Automating ticket assignment through ServiceNow dramatically improves support operations by ensuring requests are routed to the right teams faster and more accurately. This reduces resolution times, improves user satisfaction, and optimizes resource usage.

10. Future Scope

- Integrate AI for predictive ticket routing
- Add workload analytics dashboards
- Expand to include problem and change tickets
- Introduce mobile notifications for field engineers

11. Appendix

- Source Code: Not applicable (configured within ServiceNow)

