

## Project Design Phase

### Solution Architecture

**Date:** OCT 2025

**Team ID:** NM2025TMID09193

**Project Name:** Streamlining Ticket Assignment for Efficient Support Operations

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#### Goals of the Architecture

- Automate the ticket routing process to minimize manual effort.
  - Assign tickets to the correct support teams based on priority and skill.
  - Improve ticket resolution time and enhance customer satisfaction.
  - Ensure balanced workload distribution across all agents.
  - Reduce operational delays and improve tracking transparency.
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#### Key Components

- **Ticket Table** – Stores details of all incoming support tickets.
  - **Assignment Rules** – Logic that determines ticket routing based on category and urgency.
  - **User (Agent) Table** – Maintains agent information such as skill level, team, and workload.
  - **Automation Script / Flow Designer** – Automatically assigns tickets to appropriate teams.
  - **Notification System** – Sends alerts for unassigned or delayed tickets.
  - **Dashboard** – Displays ticket distribution and team performance in real time.
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#### Development Phases

1. Create and configure the **ticket data structure** in ServiceNow.
  2. Define **assignment rules** based on ticket category, priority, and location.
  3. Implement **automation logic** using Flow Designer or Business Rules.
  4. Set up **notification triggers** for critical or unassigned tickets.
  5. Test scenarios for various routing cases and verify correct team assignment.
  6. Analyze results to ensure reduced handling time and improved efficiency.
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#### Solution Architecture Description

The **Solution Architecture** for this project focuses on building an **automated ticket routing system** to improve operational efficiency in ServiceNow.

The architecture enables dynamic routing of incoming support tickets to the right teams or agents based on pre-defined rules and conditions.

The system leverages **assignment rules**, **Flow Designer**, and **agent workload data** to automatically detect the most suitable team for each ticket.

It checks ticket parameters like category, impact, urgency, and available resources before assigning them.

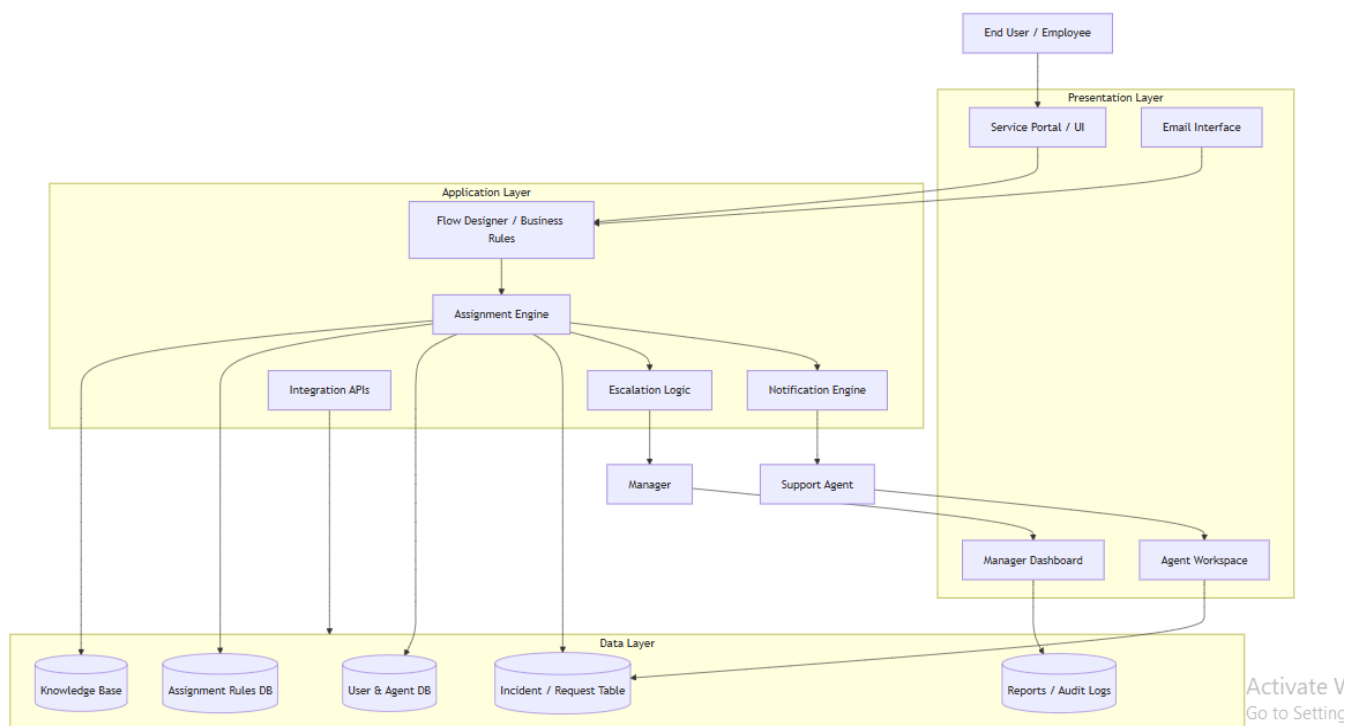
If a ticket remains unassigned or exceeds resolution thresholds, the notification system alerts the team manager to take corrective action.

A performance dashboard provides real-time insights into ticket flow, agent workload, and resolution timelines.

This architecture eliminates manual triage, reduces delays, and ensures faster resolution — ultimately improving customer satisfaction and optimizing team performance.

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### Example – Solution Architecture Diagram



**Figure 1:** Architecture and data flow of the automated ticket routing system.