

## Project Design Phase

### Solution Architecture

Date	02-11-2025
Team ID	NM2025TMID04283
Project Name	Streamlining Ticket Assignment for Efficient Support Operations
Maximum Marks	4 Marks

### Solution Architecture:

#### Goals of the Architecture:

- Automate ticket assignment and ensure faster issue resolution.
- Maintain balanced workload distribution among support agents.
- Reduce manual monitoring and eliminate assignment delays.
- Improve visibility and performance tracking of agents and tickets.

#### Key Components:

- **Ticket Table:** Stores all incoming support tickets with category, priority, and requester details.
- **Agent Table:** Maintains agent profiles, skill levels, and workload status.
- **Assignment Rules:** Logic that automatically matches tickets to agents based on criteria.
- **Business Rules & Workflows:** Automate routing, escalation, and workload balancing.
- **Performance Dashboard:** Monitors assignment accuracy, SLA compliance, and ticket resolution metrics.

#### Development Phases:

1. Create sample tickets with various categories and priorities.
2. Build agent records with defined skills and workloads.
3. Implement automated assignment logic (rule-based workflow).

4. Test ticket routing, escalation, and resolution under different conditions.
5. Validate performance metrics and workflow accuracy.

### Solution Architecture Description:

The solution architecture is designed to enhance support efficiency through intelligent automation within the ServiceNow platform.

It integrates **rule-based assignment**, **escalation logic**, and **real-time tracking** to streamline the end-to-end ticket management process.

When a ticket is created, the system checks the ticket's type, urgency, and required skill level. It then automatically assigns the task to the best-suited agent based on availability and workload. Escalation workflows handle high-priority tickets to ensure timely responses.

All data interactions occur between the **ticket table** and the **agent table** using predefined rules and workflows. Dashboards provide visual insights into ticket trends, agent performance, and workload balance.

This architecture significantly reduces manual intervention, improves customer satisfaction, and ensures a transparent, high-performance support system.

### Example - Solution Architecture Diagram:

