

Project Design Phase

Solution Architecture

Date	01 November 2025
Team ID	NM2025TMID07096
Project Name	Streamlining Ticket Assignment for Efficient Support Operations
Maximum Marks	4 Marks

Solution Architecture

Goal of the Architecture

- Automate the ticket assignment process for support operations using ServiceNow.
- Ensure accuracy and transparency by leveraging Flow Designer, Business Rules, and Assignment Workbench.
- Maintain governance and traceability through Update Sets and audit logs.
- Enable seamless deployment and validation across multiple ServiceNow instances.
- Deliver a smooth and user-friendly experience for both support agents and requesters.

Key Components

- **Incident Form / Ticket Record:** Captures user issue details such as category, priority, and description.
- **Assignment Workbench:** Automatically assigns tickets to the most suitable agent or team based on skill, workload, and availability.
- **Flow Designer:** Handles ticket routing logic, approvals, and automated notifications.
- **Business Rules:** Enforce assignment logic and trigger updates when new tickets are created or reassigned.
- **Update Set:** Records all configuration changes to ensure traceability and controlled migration.
- **Testing Instance:** Used for importing, validating, and testing the automation before production deployment.

Development Phase

Update Set

Create a local Update Set to capture all configurations and customization changes.

1. **Incident / Ticket Configuration**
 - Create or customize the Incident form for capturing issue details.
 - Add necessary fields such as Category, Priority, and Assigned To.
2. **Flow Designer Setup**
 - Design a workflow to automatically assign tickets based on predefined conditions like category or urgency.
 - Configure notification triggers for both assigned agents and requesters.
3. **Business Rules**
 - Implement Business Rules to run assignment logic upon ticket creation or update.
 - Ensure tickets are assigned only once per workflow trigger.
4. **Export Update Set**
 - Export the Update Set to move the configuration to another ServiceNow instance.
5. **Import & Preview in Another Instance**
 - Retrieve and validate the Update Set in a separate instance for testing and verification.
6. **Testing**
 - Test automatic assignment across different categories and agents.
 - Validate that notifications are triggered correctly and tickets are routed efficiently.

Solution Architecture Description

The **Streamlining Ticket Assignment for Efficient Support Operations** architecture is designed to automate and optimize how support tickets are assigned within an organization using ServiceNow. The system intelligently routes tickets to the right agent or department based on issue category, urgency, and workload capacity, minimizing manual intervention and delays.

By leveraging **Flow Designer** and **Assignment Workbench**, the architecture ensures smart ticket distribution and balanced workload management. **Business Rules** support the automation by enforcing consistency and accuracy in ticket routing. All configuration activities are tracked in **Update Sets**, ensuring full governance and easy deployment across instances.

This architecture enhances efficiency, ensures accountability, and delivers faster resolution times. It provides a scalable foundation for enterprise-wide automation of service operations, improving both agent productivity and end-user satisfaction.

Example –Solution Architecture Diagram:

Streamlining Ticket Assignment for Efficient Support Operations

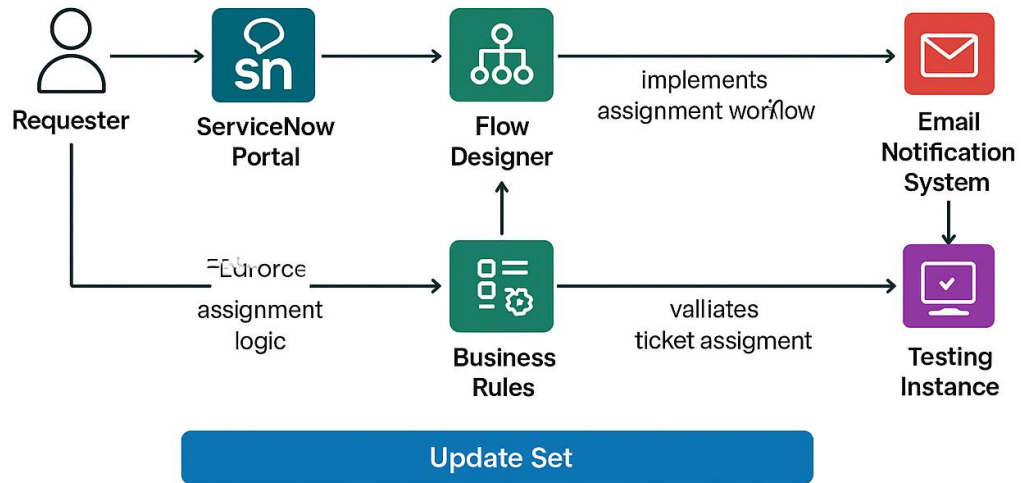


Figure 1: Architecture and data flow of the voice patient diary sample application