

Project Design Phase-II
Technology Stack (Architecture & Stack)

Date	20 February 2026
Team ID	LTVIP2026TMID574504
Project Name	Streamlining Ticket Assignment for Efficient Support Operations
Maximum Marks	4 Marks

Technical Architecture:

The system is developed on the ServiceNow cloud platform to automate the ticket assignment process. Users interact with the system through the ServiceNow User Interface to create, view, and manage support tickets. The application logic uses Flow Designer, Business Rules, and Role-based configurations to automatically assign tickets to the appropriate support groups and users based on predefined conditions. All ticket, user, role, and group data are stored securely in the ServiceNow database. Access Control Lists (ACL) ensure that only authorized users can access or modify data. The system runs on ServiceNow cloud infrastructure, providing high availability, scalability, and secure operations. Notifications are automatically sent to assigned users to ensure faster response and efficient support management.

The architecture follows a cloud-based model where all components operate within the ServiceNow environment. The system separates the user interface, application logic, and data storage to ensure better performance and scalability. Automated workflows handle ticket routing, assignment, and notifications without manual intervention. Integration capabilities allow the system to connect with external services if required. This architecture improves efficiency, reduces assignment errors, ensures faster ticket resolution, and enhances overall support team productivity.

Example: Streamlining Ticket Assignment for Efficient Support Operations

Guidelines:

- Include all the processes (As an application logic / Technology block)
- Provide infrastructural demarcation (Local / Cloud)
- Indicate external interfaces (third party APIs etc.)
- Indicate Data Storage components / services
- Indicate interface to machine learning models (if applicable)

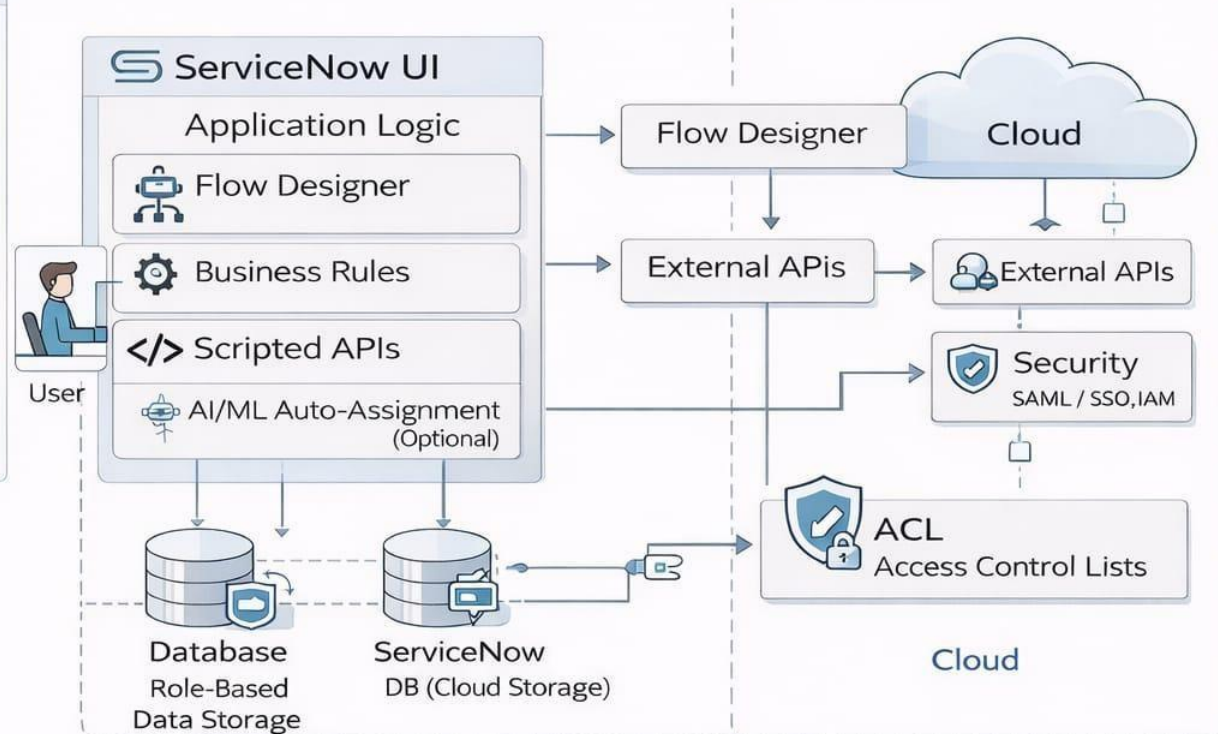


Table-1: Components & Technologies
Streamlining Ticket Assignment for Efficient Support Operations

S.No	Component	Description	Technology
1	User Interface	Allows users to create and view support tickets.	ServiceNow UI
2	Application Logic-1	Automatically assigns tickets to the correct group.	Flow Designer
3	Application Logic-2	Manages roles and group assignment.	Business Rules
4	Application Logic-3	Controls access and security.	ACL
5	Database	Stores ticket and user data.	ServiceNow Database
6	Cloud Database	Stores data in cloud environment.	ServiceNow Cloud
7	File Storage	Stores ticket attachments.	ServiceNow Storage
8	External API-1	Supports system integration.	REST API
9	External API-2	Sends notifications to users.	ServiceNow Notifications
10	Machine Learning Model	Supports predictive assignment.	Predictive Intelligence
11	Infrastructure	Hosts application in cloud.	ServiceNow Cloud Platform

Table-2: Application Characteristics
Streamlining Ticket Assignment for Efficient Support Operations

S.No	Characteristics	Description	Technology
1	Open-Source Frameworks	Platform used to develop and manage the application.	ServiceNow Platform
2	Security Implementations	Provides secure access using roles and permissions.	ACL, Role-Based Access Control
3	Scalable Architecture	Supports multiple users and large number of tickets.	ServiceNow Cloud Architecture
4	Availability	Ensures system is available anytime for users.	ServiceNow Cloud Infrastructure
5	Performance	Provides fast ticket assignment using workflows.	Flow Designer