

# PROJECT DESIGN PHASE

## SOLUTION ARCHITECTURE

<b>Date:</b>	1 NOVEMBER 2025
<b>Team ID:</b>	NM2025TMID02509
<b>Project Name:</b>	<i>Streamlining Ticket Assignment for Efficient Support Operations</i>
<b>Maximum Marks:</b>	4 Marks

### 1. Goals

Goal	Description
<b>Automate Ticket Assignment</b>	Automatically route support tickets to the appropriate group based on issue type to reduce manual intervention.
<b>Improve Efficiency</b>	Reduce response time and ensure timely resolution by assigning tickets to the right team immediately.
<b>Balance Workload</b>	Distribute tickets evenly among support agents to prevent overload and improve performance.
<b>Enhance Visibility</b>	Provide real-time tracking of ticket status, assignments, and agent activity for better reporting.
<b>Ensure Security &amp; Access Control</b>	Restrict table access using roles and ACLs to maintain data security and compliance.
<b>Scalability</b>	Enable addition of new issue types, groups, or roles in the future without major redesign

### 2. Key Components

Component	Description
<b>Users</b>	Individual support agents who handle tickets (e.g., assigned to Certificates or Platform groups).
<b>Groups</b>	Collections of users, e.g., <b>Certificates group</b> and <b>Platform group</b> , to route tickets efficiently.
<b>Roles</b>	Define access privileges: Certification_role, Platform_role, and Admin.
<b>Operations Related Table</b>	Custom table storing ticket details, issue types, assigned group, and status.
<b>ACLs (Access Control Lists)</b>	Secure read/write permissions for tables and fields based on roles.

<b>Flows (Flow Designer)</b>	Automate ticket assignment to the correct group based on issue type.
<b>Issue Field Choices</b>	Standardized ticket issue types (Unable to login, 404 Error, Certificates, User Expired).

### 3. Development Phases

<b>Phase</b>	<b>Description</b>
<b>Phase 1: User, Group, and Role Setup</b>	Created users, groups (Certificates, Platform), and assigned roles (Certification_role, Platform_role) in ServiceNow.
<b>Phase 2: Table Creation</b>	Developed Operations related table with necessary columns for issue tracking and assignment.
<b>Phase 3: Access Control (ACL)</b>	Configured ACLs for read/write operations to ensure secure access based on roles.
<b>Phase 4: Flow Designer Implementation</b>	Built automated flows: <ul style="list-style-type: none"> <li>Assign certificate-related tickets to Certificates group</li> <li>Assign platform-related tickets to Platform group based on issue type.</li> </ul>
<b>Phase 5: Testing &amp; Validation</b>	Tested flows to verify tickets are assigned correctly and roles/ACLs enforce security.
<b>Phase 6: Deployment</b>	Activated flows and deployed the solution in the live ServiceNow environment.

#### Diagram Description:

- Users belong to **groups** and are assigned **roles**.
- Tickets are stored in the Operations related table.
- Flows automatically assign tickets to the correct group based on the issue type.
- ACLs and roles ensure only authorized users can view or modify tickets.

## Solution Architecture Diagram

