

Project Design Phase

Solution Architecture

Date	24 June 2025
Team ID	LTVIP2025TMID20421
Project Name	Streamlining Ticket Assignment For Efficient Support Operations
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Maximum Marks	4 Marks

Solution Architecture:

The Streamlining Ticket Assignment project bridges the gap between the operational inefficiencies in manual support ticket management and the powerful automation capabilities of the ServiceNow platform. The solution architecture defines how ServiceNow components are configured and orchestrated to deliver a robust, automated, and scalable ticket assignment mechanism.

Purpose of the Solution Architecture

- Identify the most effective configuration within the ServiceNow platform to solve the problem of manual, inconsistent ticket routing.
- Describe the system's structure to stakeholders, highlighting how tables, roles, flows, and logic collaborate to achieve automation.
- Define system features, development phases, and technical requirements to guide the end-to-end implementation.
- Provide clear specifications that ensure the solution is maintainable, secure, and extensible in future enterprise environments.

Solution Structure

◆ Core Table:

- Operations Related: Custom table to log tickets/issues raised by users for different support concerns (e.g., login issues, certificate errors, 404 errors).

◆ Routing Relationships:

- Each issue is linked to a support group (Platform or Certificates) based on its type.
- This enables automated assignment and queue-based ticket management.

◆ **Automation Components:**

- **Flow Designer:**

- Triggered when a new record is created or updated.
- Evaluates the “issue” field and assigns the record to the appropriate support group.

- **Business Rules (optional):**

- Additional validation or logging rules for ticket lifecycle events.

- **Criteria Logic:**

- Multiple matching conditions (e.g., “Unable to login”, “404 Error”, “User expired”) used to trigger group assignment.

◆ **User Interface Elements:**

- **Custom Form:**

- Simplified ticket form for operations-related issues.
- Field grouping for easier input and reading.

- **Related Lists (optional):**

- Future enhancement to show comments, attachments, or resolution status.

◆ **Configuration Management:**

- **Update Sets:**

- Used to track changes to flows, tables, and configurations.
- Ensures the solution can be migrated or packaged for other environments.

Phases of Development

1. PDI Setup & Update Set Creation

- Set up Personal Developer Instance (PDI)
- Create and make current an update set for tracking changes

2. Foundation Setup

- Create users, groups, roles
- Design and configure the Operations Related table

3. Access & Security

- Configure ACLs and role-based permissions
- Ensure secure access to tables and fields

4. Automation Development

- Design Flow(s) in Flow Designer
- Define criteria for ticket assignment based on issue types
- Test record assignment to “Platform” or “Certificates” groups

5. Testing & Validation

- Generate sample tickets and validate assignment logic
- Ensure no manual intervention is needed post-creation

6. Finalization & Documentation

- Export update set
- Prepare user guide and technical documentation

Specifications

- Built using ServiceNow’s low-code/no-code tools such as Flow Designer and table builder
- Rule-based, scalable logic designed to handle expanding ticket types and support teams
- Conforms to ServiceNow best practices for automation, security, and maintainability
- Can be extended to include SLA tracking, escalation logic, email notifications, and dashboards

