

# Project Design Phase Solution Architecture

Date	31 October 2025
Team ID	NM2025TMID04866
Project Name	Laptop Request Catalog Item
Maximum Marks	4 Marks

## **Solution Architecture:**

### **Goals of the Architecture:**

- Provide a system safeguard using a Business Rule
- Maintain data integrity across incident-user relationships
- Reduce manual monitoring for user deletions

### **Key Components:**

- sys\_user table (where users exist)
- incident table (linked via assigned\_to)
- Business Rule (before Delete) on sys\_user
- Script logic that checks active incident assignments

### **Development Phases:**

1. Create test users (e.g., Ajay, Kiran)
2. Assign user to incident
3. Implement Business Rule
4. Attempt user deletion (test both assigned & unassigned cases)

### **Solution Architecture Description:**

The solution architecture is designed to safeguard user integrity within the ServiceNow platform by implementing a Business Rule that prevents deletion of users who are currently assigned to incidents. The architecture focuses on ensuring data consistency across the 'sys\_user' and incident tables, using a "before delete" Business Rule. This rule checks for any active associations between users and incidents through the 'assigned\_to' field. If an assignment exists, the deletion is blocked automatically. The development process involves creating test users, assigning them to incidents, applying the business rule, and

verifying the deletion behavior. This architecture reduces the need for manual monitoring, enhances system reliability, and promotes operational accountability in ITSM environments.

**Example - Solution Architecture Diagram:**

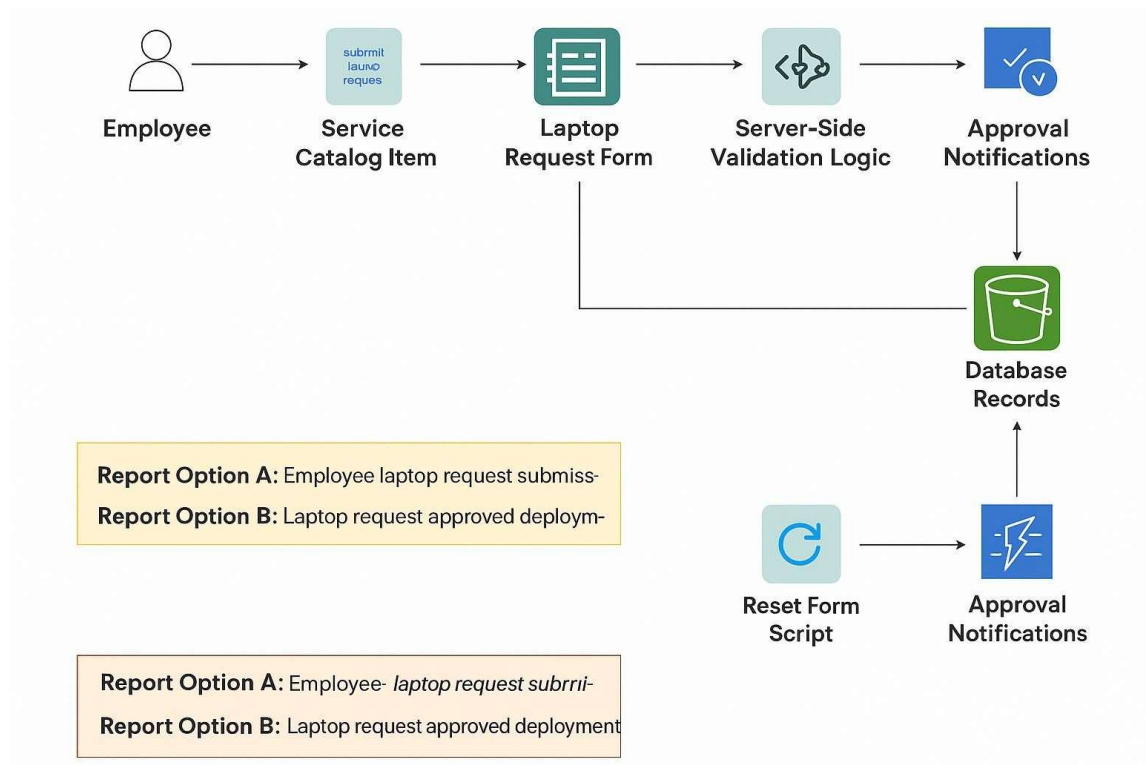


Figure 1: Solution Architecture of Laptop Request Catalog Item in ServiceNow