

Project Design Phase
Solution Architecture

Date	28 OCT 2025
Team ID	NM2025TMID05124
Project Name	Laptop Request Catalog Item

Solution Architecture:

Goals of the Architecture:

- Ensure proper validation and approval before laptop requests are submitted.
- Maintain data integrity across user request and asset assignment records.
- Reduce manual intervention by automating validation and dynamic form behavior

Key Components:

- Catalog Item: Laptop Request
- Tables Involved: sc_request, sc_req_item, and cmdb_ci_computer (for asset tracking)
- Catalog Client Script / UI Policy: For dynamic field behavior
- Business Rule: To validate requests and prevent submission with incomplete data

Development Phases:

1. Create Test Users (e.g., Ajay, Kiran)
2. Submit Laptop Request through the Service Catalog
3. Implement Client Scripts and Business Rules to control form behavior and data validation
4. Test Scenarios:

Submitting a valid request with required details

Submitting an incomplete or duplicate request

□ Solution Architecture Description:

The solution architecture ensures efficient and accurate laptop provisioning within the ServiceNow platform by implementing a dynamic and rule-driven Laptop Request Catalog Item.

The architecture enforces data integrity between user requests and IT asset records by using Business Rules and Client Scripts to validate inputs before submission. A “before submit” Business Rule ensures all mandatory information—such as laptop type, justification, and manager approval—is properly captured before the request is processed.

Dynamic form behaviors are achieved using Catalog Client Scripts and UI Policies, which adjust fields (like enabling/disabling options or resetting form inputs) based on user selections. The overall workflow automates validation, reduces manual monitoring, and ensures only eligible and complete requests proceed to fulfillment.

This design enhances user experience, minimizes errors, and promotes a seamless and accountable laptop request process within the IT Service Management environment.

Example - Solution Architecture Diagram:

