

Project Design Phase

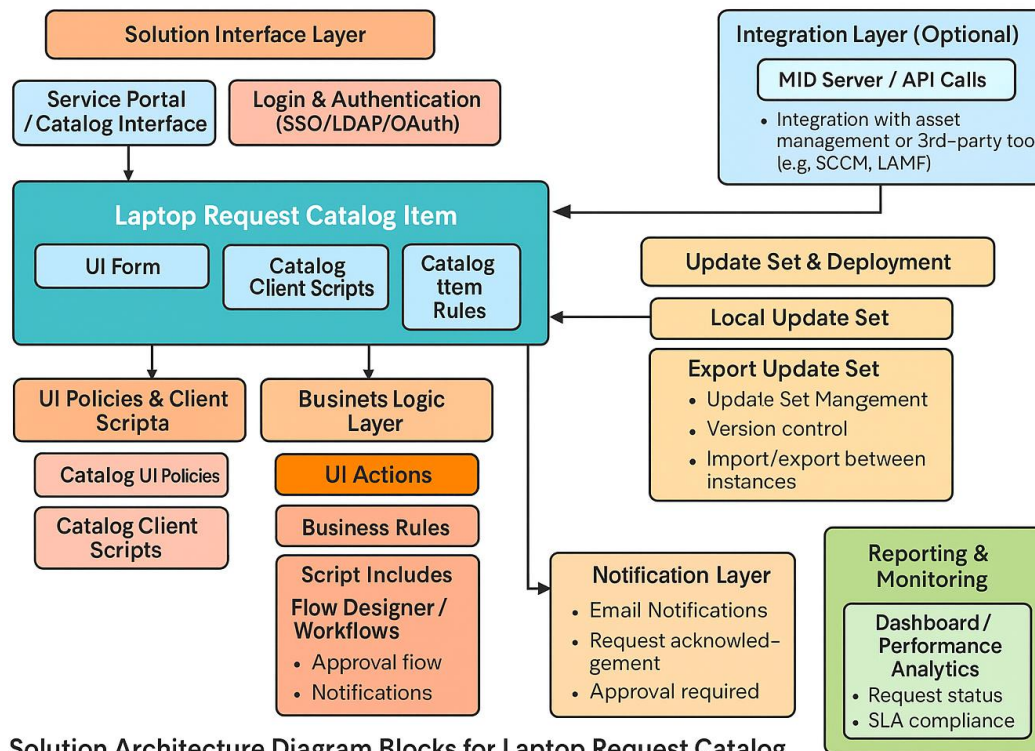
Solution Architecture

Date	15 February 2025
Team ID	LTVIP2025TMID30301
Project Name	Laptop Request Catalog Item
Maximum Marks	4 Marks

Solution Architecture:

The solution architecture for the Laptop Request Catalog Item is designed to provide a streamlined, secure, and automated workflow for handling laptop requests within an enterprise IT service management system such as ServiceNow. The process begins with the Solution Interface Layer, which includes the Service Portal or Catalog Interface where users interact with the catalog item, and the Login & Authentication component that supports SSO, LDAP, or OAuth-based access control. At the core lies the Laptop Request Catalog Item, consisting of a user-friendly UI form enhanced by client-side scripts and item rules to manage form behavior and validations. Supporting this are UI Policies and Client Scripts, which dynamically control form field visibility, mandatory settings, and interactivity. The Business Logic Layer handles the backend processing using UI Actions (such as submit buttons), Business Rules for automation, Script Includes for reusable logic, and Flow Designer workflows to manage approval routing, task assignments, and notifications. For development and deployment, the architecture includes an Update Set & Deployment mechanism, where changes are tracked using Local Update Sets and migrated between environments via Export Update Sets that support versioning and change management. An optional Integration Layer facilitates external connectivity through MID Server or API calls, enabling integration with asset management platforms like SCCM or JAMF for provisioning and inventory updates. The Notification Layer ensures stakeholders are informed at each stage with email notifications for request acknowledgements, approvals, and completions. Finally, the Reporting & Monitoring component offers dashboards and analytics to track request volumes, SLA compliance, and overall efficiency. Together, these components deliver a comprehensive, scalable, and user-centric solution for managing laptop requests within an organization.

Example - Solution Architecture Diagram:



Solution Architecture Diagram Blocks for Laptop Request Catalog