Project Design Phase

Solution Architecture

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Team ID	01 November 2025
Project Name	NM2025TMID08447
Maximum Marks	4 Marks

Goals of the Architecture:

- Provide an automated and user-friendly system for submitting laptop requests.
- Ensure data accuracy and consistency through dynamic Service Catalog behavior.
- Streamline approval workflows and reduce manual data entry errors.
- Maintain governance and traceability through update set management.

Key Components:

- **Service Catalog Item:** *Laptop Request* (core form for end-user submission).
- **Variables:** Fields like *Laptop Model*, *Additional Accessories*, and *Accessory Details*.

- **Catalog UI Policy:** Controls the visibility and mandatory state of fields dynamically.
- **UI Action (Reset Form):** Allows users to clear all form entries instantly.
- **Local Update Set:** Captures and manages all project-related configurations for deployment.

Development Phases:

1. Create a **Local Update Set** named *Laptop Request*.
2. Build a **Service Catalog Item** under the *Hardware* category.
3. Add variables for *Laptop Model*, *Additional Accessories*, and *Accessory Details*.
4. Implement **Catalog UI Policies** to dynamically display accessory fields.
5. Create a **UI Action (Reset Form)** using client-side scripting.
6. Export and import the **Update Set** to test cross-instance migration.
7. Validate and test the entire workflow for accuracy and usability.

Solution Architecture Description:

The solution architecture is designed to automate and simplify the **laptop request process** within the ServiceNow platform. It provides employees with a centralized, digital interface to request laptops, replacing traditional manual methods that caused inefficiencies.

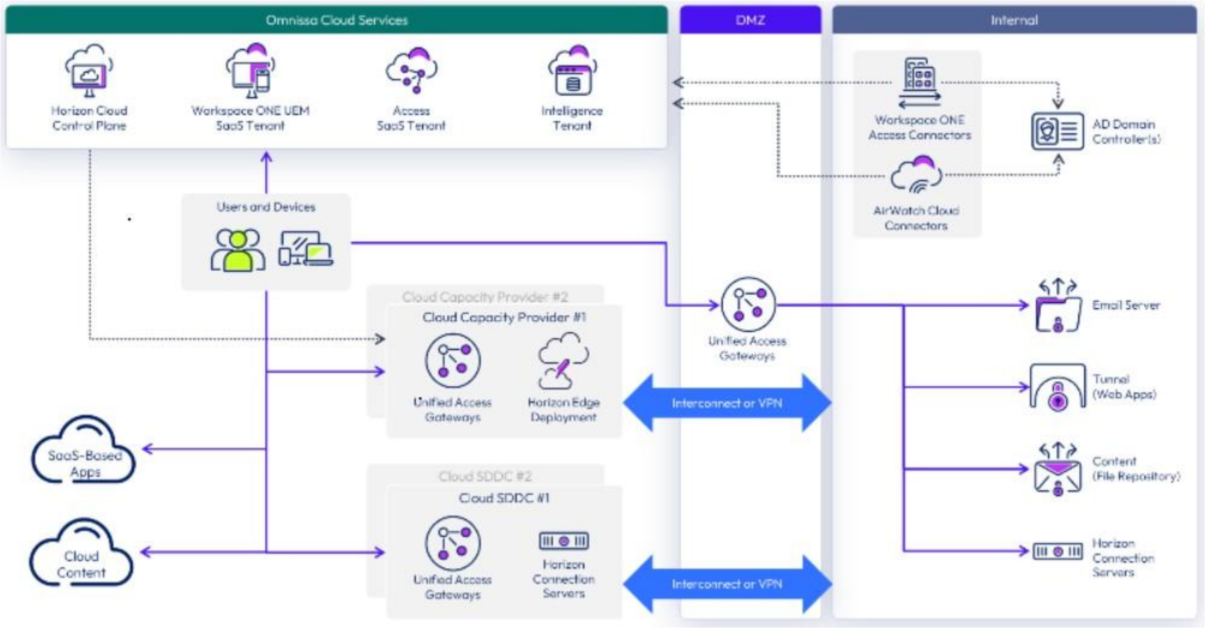
At its core, the architecture integrates several ServiceNow components — **Service Catalog Items, Variables, UI Policies, UI Actions,** and **Update Sets** to create an intelligent and dynamic request workflow.

When a user opens the *Laptop Request* form, they can select a laptop model and optionally check *Additional Accessories*. Upon selection, a **Catalog UI Policy** triggers, revealing the *Accessory Details* field and marking it as mandatory. This ensures all necessary data is captured before submission.

Additionally, a **UI Action** adds a *Reset Form* button that clears all entered data, enhancing usability. The use of **Local Update Sets** ensures all configurations are properly tracked, exported, and imported between instances, maintaining consistency and version control.

This architecture improves operational efficiency, minimizes manual errors, and ensures a transparent, traceable request process. It supports both IT administrators and end-users by providing a seamless, interactive, and reliable system for hardware requests.

Example – Solution Architecture Diagram:


Omnissa Cloud Services
DMZ
Internal
Horizon Cloud Control Plane
Workspace ONE UEM SaaS Tenant
Access SaaS Tenant
Intelligence Tenant
Workspace ONE Access Connectors
AD Domain Controller(s)
AirWatch Cloud Connectors
Users and Devices
Cloud Capacity Provider #2
Cloud Capacity Provider #1
Unified Access Gateways
Horizon Edge Deployment
Unified Access Gateways
Email Server
Tunnel (Web Apps)
Interconnect or VPN
SaaS-Based Apps
Content (File Repository)
Cloud SDDC #2
Cloud SDDC #1
Unified Access Gateways
Horizon Connection Servers
Cloud Content
Interconnect or VPN
Horizon Connection Servers