

## Project Design Phase

### Solution Architecture

Date	01 November 2025
Team ID	NM2025TMID05341
Project Name	Laptop Request Catalog Item
Maximum Marks	4 Marks

### Solution Architecture:

#### Goal of the Architecture:

- Digitize and streamline the laptop request workflow for employees through a custom ServiceNow Catalog item.
- Improve form accuracy and responsiveness by implementing dynamic behavior using UI Policies, Client Scripts, and UI Actions.
- Ensure configuration governance by capturing and managing all modifications through Update Sets.
- Support efficient deployment and validation across multiple ServiceNow instances to maintain system consistency.
- Enhance user experience with a guided, easy-to-use form, including a reset option and clear submission instructions.

#### Key Components:

- **Service Catalog Item:** A custom “Laptop Request” form allowing employees to submit laptop requirements through predefined input fields.
- **Form Variables:** Capture key information such as employee details, laptop model preferences, business justification, and approval data.
- **UI Policies:** Control form behavior by showing or hiding fields dynamically based on user selections (e.g., request type or purpose).
- **UI Actions:** Include a “Reset Form” button to allow users to clear entries and start fresh when needed.
- **Update Sets:** Maintain configuration records to support version tracking and migration between ServiceNow environments.
- **Testing Environment:** Utilize a test instance to import, verify, and validate the catalog item before production deployment.

### Development Phase:

#### Update Set

Create a Local Update Set to capture all configurations and changes.

## **1. Service Catalog Item**

Create a new Catalog Item within the Service Catalog module.

Configure input variables to capture employee details, laptop specifications, and justification information.

## **2. UI Policy**

Develop Catalog UI Policies to automatically adjust field visibility and mandatory settings based on user inputs.

## **3. UI Action**

Add a custom UI Action button (e.g., “*Reset Form*”) that allows users to clear all entered data for re-entry.

## **4. Export Update Set**

Package and export the Update Set to transfer the configured components to another ServiceNow environment.

## **5. Login to Another Instance**

Import and preview the Update Set in a different instance to validate configurations and dependencies.

## **6. Testing**

Perform end-to-end testing by submitting sample requests, verifying form behavior, and ensuring the reset function works as intended.

## **Solution Architecture Description:**

The Laptop Request Catalog Item architecture is built to simplify and automate the laptop request process within an organization using ServiceNow’s Service Catalog module. It provides employees with an intuitive, dynamic catalog form that allows them to request laptops quickly and accurately.

Through the use of Catalog UI Policies, the form dynamically adapts based on user inputs—showing or hiding fields as needed to maintain accuracy and reduce user confusion. The inclusion of a UI Action (Reset Form) enhances user convenience by enabling a complete form reset, ensuring flexibility during data entry.

All configurations are managed within a Local Update Set, ensuring proper version control, governance, and traceability. The solution also supports migration across multiple ServiceNow instances through exporting and importing update sets, maintaining configuration consistency and compliance.

Overall, this architecture delivers greater operational efficiency, reduces manual dependency, and aligns with organizational governance standards, resulting in a faster, transparent, and more reliable laptop provisioning process.

## Example –Solution Architecture Diagram:

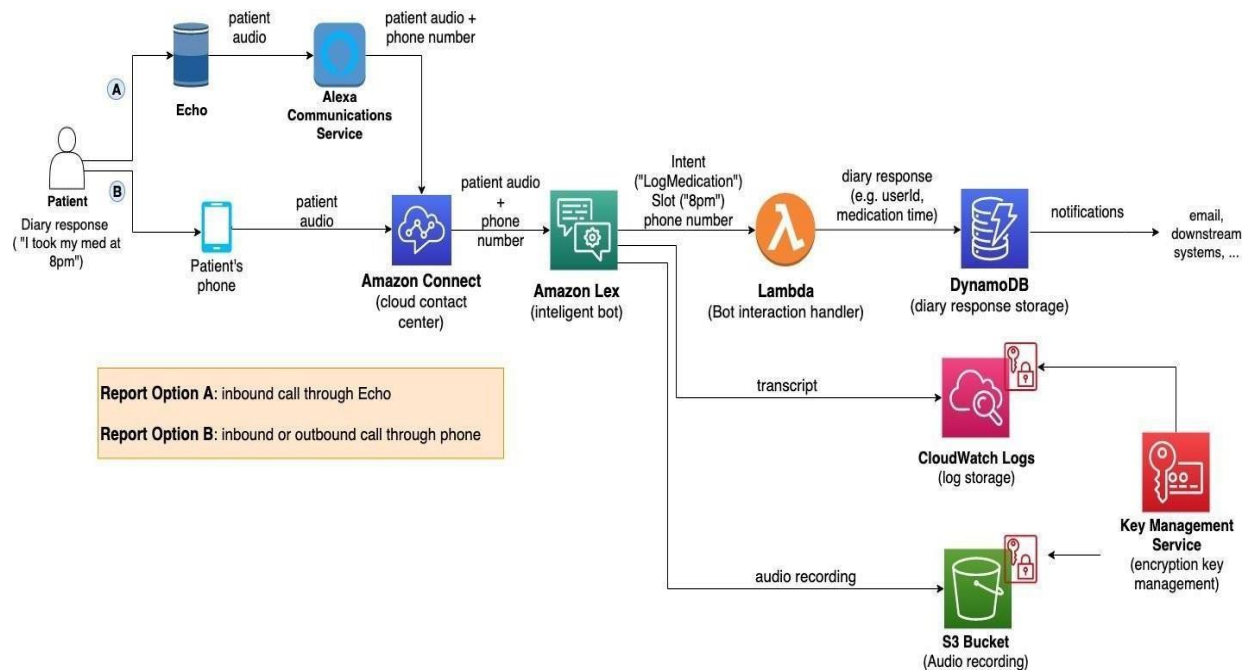


Figure 1: Architecture and data flow of the voice patient diary sample application