

Project Design Phase

Problem – Solution Fit Template

Date	27 December 2025
Team ID	
Project Name	An employee requests installation of licensed software through the Service Catalog
Maximum Marks	2 Marks

Problem Statement

In many organizations, software installation requests are handled manually through emails, calls, or informal messages. This traditional approach creates multiple operational challenges for employees, IT teams, and management.

Identified Problems

1. Manual Request Handling

- Employees raise software requests through emails or verbal communication.
- IT teams manually track requests, leading to confusion and delays.

2. Delayed Approvals

- Approval requests are not routed automatically to the right managers or security teams.
- Follow-ups are required, increasing turnaround time.

3. Lack of Standardization

- Requests often miss critical information such as software name, version, or justification.
- No consistent format for capturing business needs.

4. Poor Visibility & Tracking

- Requesters have no real-time visibility into approval or installation status.
- IT teams struggle to monitor request progress and workloads.

5. Compliance & Licensing Risks

- Software may be installed without proper license validation.

- Difficulty enforcing IT governance and security policies.

6. High Dependency on IT Support

- IT teams spend excessive time on repetitive administrative tasks.
- Reduced focus on high-priority or strategic IT activities.

Solution Overview

To address these challenges, **Software Installation Request Automation** is implemented using **ServiceNow Service Catalog, Workflow Editor, Flow Designer, Business Rules, and Update Sets**.

This solution automates the **end-to-end lifecycle** of software installation requests—from submission to approval, fulfillment, and closure—within a centralized platform.

Proposed Solution

1. Centralized Service Catalog Request

- A dedicated **Software Installation Catalog Item** is created in ServiceNow.
- Users submit requests via **Service Portal** using structured variables:
 - Software Name
 - Version Required
 - License Justification
 - Urgency Level

Ensures standardized and complete request intake.

2. Automated Approval Workflow

- Requests automatically trigger an approval workflow.
- Approvals are routed to:
 - Reporting Manager
 - Software / Security Admin (if required)
- Approval logic is dynamic based on urgency and software type.

Eliminates manual follow-ups and approval delays.

3. Automated Task Creation & Assignment

- Once approved:
 - Catalog Tasks (SCTASK) are automatically generated.

- Tasks are assigned to the **Software Support / IT Fulfillment Team**.
- Task states follow a defined lifecycle:
 - Open → Work in Progress → Completed

Reduces manual coordination and ensures accountability.

4. Business Rules for Exception Handling

- Business Rules monitor request states.
- If a request is put **On Hold** (e.g., license unavailable):
 - An Incident is auto-created.
 - Assigned to Software Support Team.
 - Requester is notified.

Improves exception management and transparency.

5. Data Integrity & Validation

- Mandatory field enforcement using:
 - UI Policies
 - Business Rules
- Auto-population of:
 - Requested For
 - Department
 - Location

Prevents incomplete or invalid requests.

6. End-to-End Tracking & Notifications

- Request lifecycle tracked across:
 - sc_request (REQ)
 - sc_req_item (RITM)
 - sc_task (SCTASK)
- Automated email notifications sent for:
 - Submission
 - Approval / Rejection

- Task Completion

Enhances user experience and communication.

7. Deployment Using Update Sets

- All configurations captured in Update Sets.
- Migrated from:
 - Development → Test → Production
- Verified using Preview & Commit Update Set.

Ensures controlled deployment and rollback capability.

Problem – Solution Mapping Table

Problem Identified	Implemented Solution
Manual software requests	Service Catalog-based request submission
Approval delays	Automated approval workflow
Missing request details	Mandatory catalog variables
No request tracking	REQ → RITM → SCTASK lifecycle tracking
License compliance risks	Approval rules & validation logic
High IT workload	Automated task creation and assignment
Deployment challenges	Update Sets for migration