LAPTOP REQUEST CATALOG ITEM

INTRODUCTION:

- This project focuses on designing and implementing a **Laptop Request Service Catalog Item in ServiceNow** to automate and standardize the hardware request process within the organization.
- It aims to eliminate manual email-based laptop requests and replace them with a structured, digital request form.
- The system ensures that all required details such as laptop model, business justification, and accessory requirements are captured accurately before submission.
- Dynamic form behavior is implemented using **Catalog UI Policies**, ensuring that additional accessory details are displayed and made mandatory only when needed.
- A client-side **UI Action (Reset Button)** is developed using the g_form API to allow users to clear the form instantly if required.
- ServiceNow **Update Sets** are used to track configuration changes and enable controlled migration across instances (Development → Test → Production).
- Backend tables such as sc_request, sc_req_item, and sc_item_option are used to store request and variable data systematically.
- Overall, the solution improves request accuracy, enhances user experience, reduces manual errors, and strengthens governance through proper change management.

Purpose:

- The main purpose of this project is to streamline and automate the laptop request process within the organization using ServiceNow Service Catalog.
- It ensures that employees can request laptops quickly through a guided and structured form interface.
- The project minimizes incomplete or incorrect submissions by implementing dynamic validations and mandatory field enforcement.
- It reduces administrative workload by automatically generating Request (REQ) and Requested Item (RITM) records.
- The automation improves transparency and tracking of hardware requests throughout their lifecycle.
- Update Set implementation ensures controlled deployment and proper configuration management.
- The solution enhances operational efficiency by providing a standardized and scalable request management system.
- It provides a strong foundation for future enhancements such as approval workflows, task automation, SLA tracking, and asset management integration.

IDEATION PHASE

Problem Statement:

Employees in the organization need a quick and efficient way to request laptops for work. The current process is manual and prone to delays, with no dynamic form behaviour to guide users or ensure accurate data collection. To address this, a Service Catalog item needs to be created, allowing users to easily request a laptop, with dynamic fields, clear instructions, and additional functionality like resetting the form if needed. The solution should also ensure all changes are tracked for governance and deployment.

REQUIREMENT ANALYSIS

Solution Requirement:

- The system should provide a structured **Service Catalog Item** that allows employees to request laptops digitally instead of using manual communication methods.
- The form must capture essential details such as Laptop Model, Business Justification, and Additional Accessories requirements.
- Dynamic form behavior must be implemented so that the "Accessories Details" field is displayed and made mandatory only when the "Additional Accessories" checkbox is selected.
- A client-side **UI Action (Reset Button)** should be implemented to allow users to clear entered values easily.
- The system must automatically generate Request (REQ) and Requested Item (RITM) records upon submission.

Technology Stack:

- **ServiceNow Platform** – Used for designing and managing the Service Catalog Item and related configurations.
- **Service Catalog Module** – Provides the framework for creating and managing the Laptop Request form.
- **Catalog Variables** – Used to capture structured input such as laptop model, justification, and accessory details.
- **Catalog UI Policies** – Implement dynamic field visibility and mandatory validation logic
- **Client-side JavaScript (g_form API)** – Used in the UI Action to implement the Reset Form functionality.
  Update Sets – Used for configuration tracking and migration across instances.
  ServiceNow User Interface – Provides the portal and administrative modules for request submission and configuration management.

PROJECT DESIGN

Problem Solution Fit:

- The solution eliminates manual and email-based laptop request handling by introducing a structured Service Catalog Item.
- Dynamic UI Policies ensure complete and accurate data collection before submission.
- Automatic generation of REQ and RITM records improves tracking and transparency.
- The Reset UI Action enhances user experience by allowing easy correction of form inputs.
- Update Sets enable controlled deployment and governance across ServiceNow instances.

Proposed Solution:

- A structured ServiceNow Service Catalog Item is developed to digitally manage laptop requests in a centralized and efficient manner.
- Well-defined variables such as Laptop Model, Justification, Additional Accessories, and Accessories Details are configured to capture complete request information of the Laptop Request Catalog.
- Catalog UI Policies are implemented to dynamically control field visibility and mandatory behavior based on user selections.
- A client-side UI Action using the g_form API is created to provide Reset functionality, improving usability and flexibility.
- The solution leverages ServiceNow's backend tables (sc_request, sc_req_item, sc_item_option) for systematic data storage and supports scalable future enhancements like approval workflows and SLA tracking.

Solution Architecture:

- Users access the **ServiceNow Service Portal** and submit a Laptop Request through the Service Catalog interface, entering details such as laptop model, justification, and accessory requirements.
- Catalog UI Policies dynamically evaluate user input — specifically the "Additional Accessories" checkbox — to control field visibility and mandatory validation for the Accessories Details field.
- A client-side UI Action using the g_form API enables form reset functionality, improving user interaction without requiring page reload.
- The system maintains complete traceability of request creation, submission time, and associated variable data, ensuring governance and structured hardware request management.
- Update Sets capture all configuration changes, allowing controlled migration of the catalog item from Development to Test and Production environments.
- The submitted data is processed by the Service Catalog engine and stored in backend tables including option (Variable values).

- The solution architecture is modular and scalable, enabling future integration with Flow Designer approvals, automated fullfillment tasks, performance dashboards

PROJECT PLANNING & SCHEDULING

- The project was planned with the objective of automating and standardizing the laptop request process within the organization using ServiceNow Service Catalog.
- The first step involved identifying problems in the existing manual email-based request system and defining how a structured catalog solution could improve efficiency and data accuracy.
- A clear implementation plan was designed to create a Service Catalog Item that captures essential request details such as laptop model, business justification, and accessory requirements.
- The ServiceNow instance was configured in the Global application scope, and a Local Update Set was created to track all configuration changes systematically.
- The Laptop Request Catalog Item was planned with properly ordered variables to ensure structured and user-friendly data entry.
- Dynamic validation logic was planned using Catalog UI Policies to display and enforce mandatory fields only when required (e.g., Accessories Details when Additional Accessories is selected).
- A client-side UI Action (Reset Button) was included in the design phase to enhance user experience by allowing form reset functionality using the g_form API in the Ui action of the step.
- Backend data handling was planned to ensure automatic generation of Request (sc_request) and Requested Item (sc_req_item) records upon submission.
- A deployment strategy was defined using Update Sets to enable migration from Development to Test and Production environments.
- Testing activities were scheduled to validate variable behavior, UI Policy conditions, Reset functionality, request generation, and backend data storage. And the main goal is to log into another instance.
- The overall project schedule was divided into the following phases:
  Requirement Analysis → Design → Configuration & Development → Testing → Update Set Migration → Documentation & Deployment.
- A clear implementation plan was designed to create a Service Catalog Item that captures essential request details such as laptop model, business justification, and accessory requirements.
- The ServiceNow instance was configured in the Global application scope, and a Local Update Set was created to track all configuration changes systematically.
- The Laptop Request Catalog Item was planned with properly ordered variables to ensure structured and user-friendly data entry.

FUNCTIONAL AND PERFORMANCE TESTING

Performance Testing:

- Performance testing was conducted to ensure that the Laptop Request Service Catalog Item functions efficiently under different usage scenarios within the ServiceNow environment.
- The system was tested to verify that laptop requests are successfully submitted and that Request (sc_request) and Requested Item (sc_req_item) records are generated without delays.
- Response time was monitored to confirm that Catalog UI Policies execute instantly when the "Additional Accessories" checkbox is selected or deselected.
- The client-side Reset Button functionality was tested to ensure that form fields are cleared immediately without requiring page refresh or causing script errors.
- Structured test cases were created to validate variable behavior, mandatory field enforcement, and correct storage of variable data in the sc_item_option table.
- The solution was evaluated for usability and scalability to ensure smooth performance even when multiple users submit requests simultaneously.
- Backend data integrity was verified to confirm accurate record creation and proper linkage between REQ and RITM records.
- Overall, the testing results confirmed that the system provides reliable performance, accurate data handling, improved user experience, and efficient hardware request management within the organization.

ADVANTAGES & DISADVANTAGES

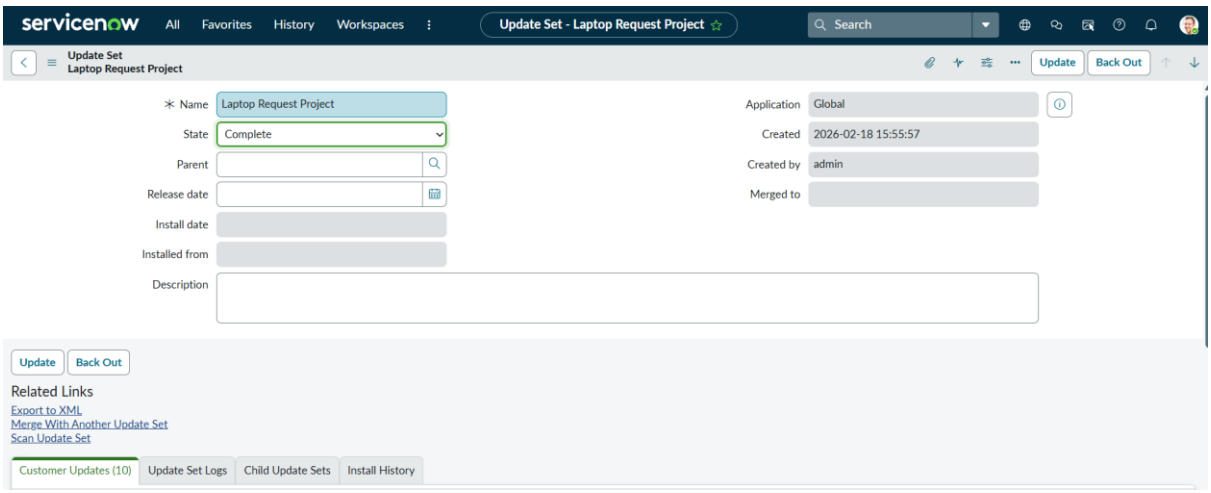
Advantages:

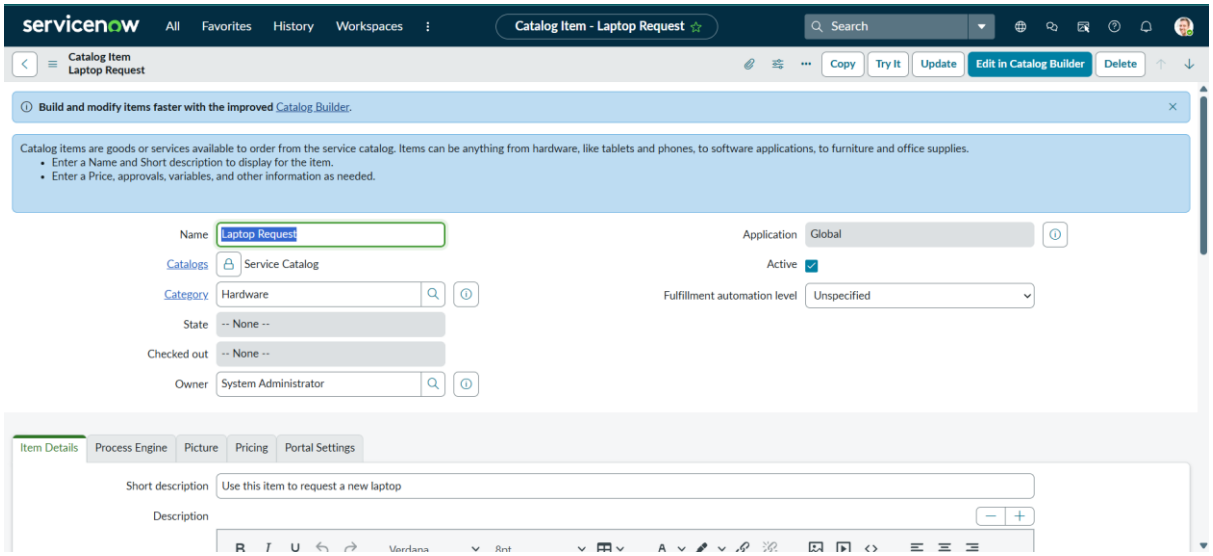
- The automated Service Catalog Item eliminates manual email-based laptop requests, reducing administrative effort and processing time.
- Structured data collection ensures complete and accurate information submission, minimizing back-and-forth communication.
- Dynamic UI Policies improve user experience by displaying and enforcing mandatory fields only when required.
- Automatic generation of REQ and RITM records enhances request tracking and transparency.
- The Reset Button functionality improves usability by allowing users to quickly clear and re-enter form data.
- Update Set implementation ensures controlled configuration management and smooth deployment across multiple environments.
- The solution is scalable and can be easily extended with approval workflows, automated task assignment, SLA tracking, and asset management integration.

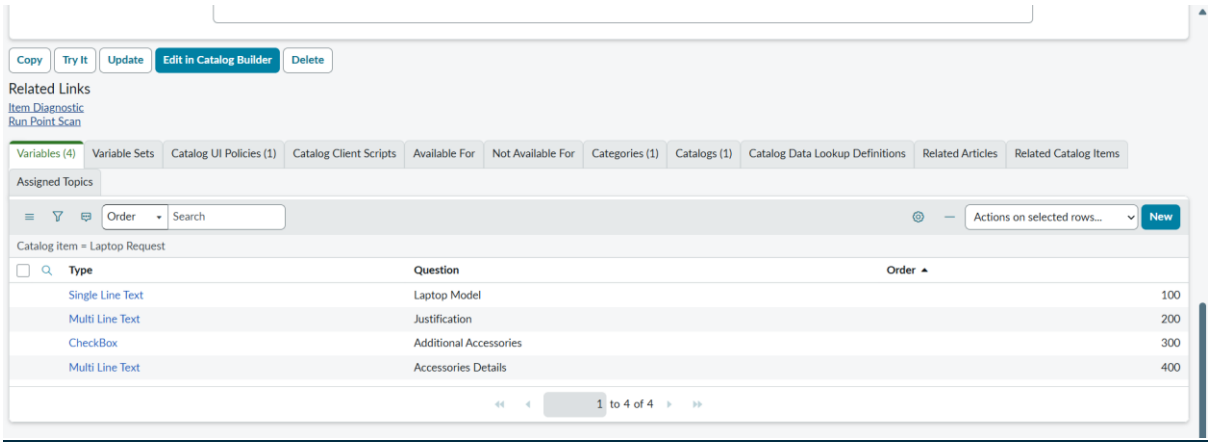
Disadvantages:

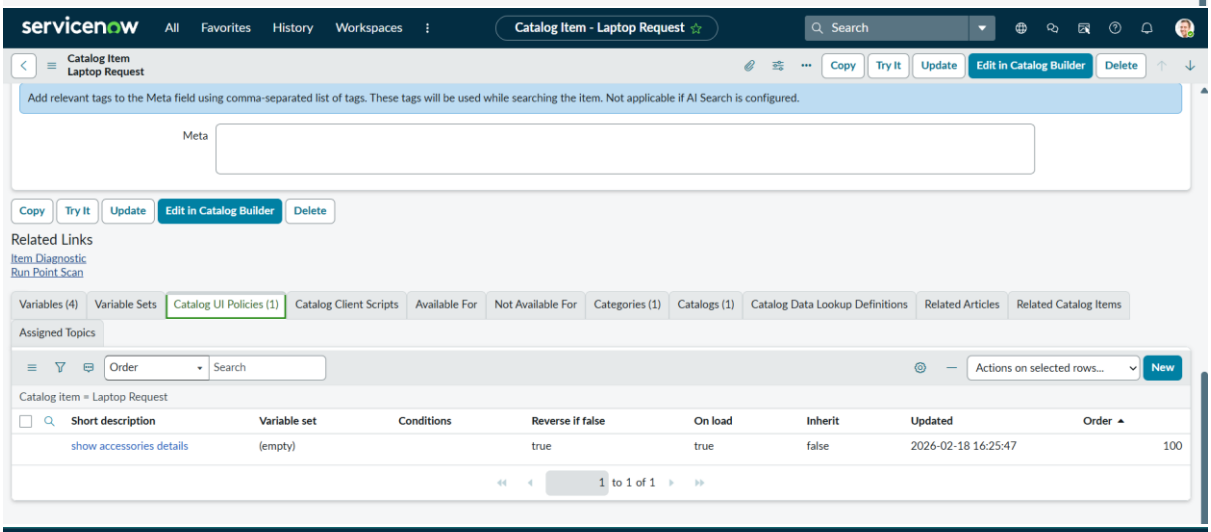
- Initial configuration of the Service Catalog Item, variables, UI Policies, and Update Sets requires careful setup to avoid errors or inconsistent behavior.
- Incorrect configuration of Catalog UI Policies may lead to improper field visibility or validation issues during form submission.
- The system depends on users entering accurate information (such as laptop model and justification); incorrect input may delay request processing.
- Additional customization, such as approval workflows or automated task assignments, requires further configuration effort.
- Improper Update Set management may cause deployment conflicts when migrating between Development, Test, and Production environments.
- Ongoing maintenance is required if hardware request policies, variable requirements, or organizational procedures change.

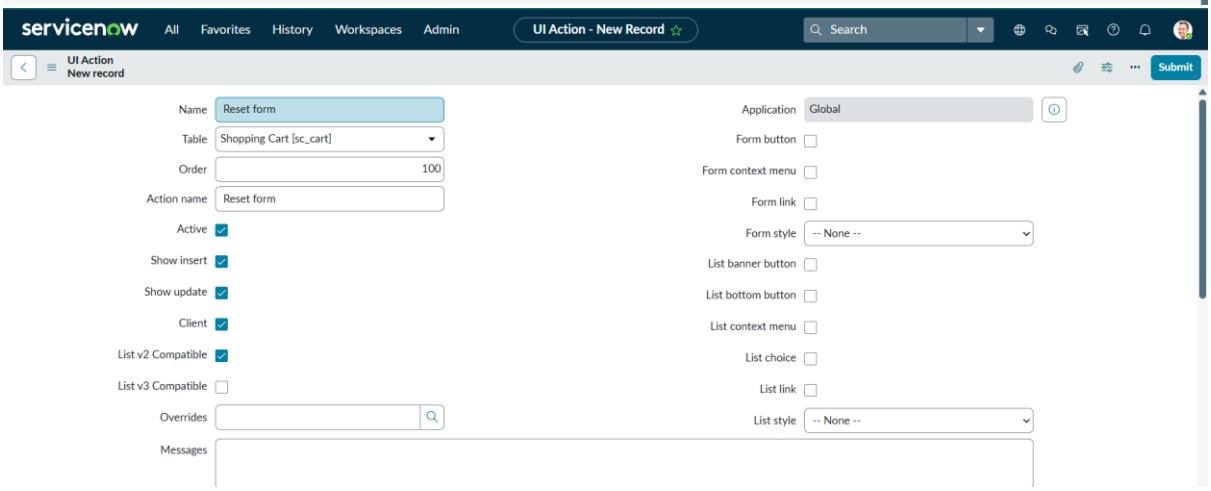
RESULTS






Copy
Try It
Update
Edit in Catalog Builder
Delete
Related Links
Item Diagnostic
Run Point Scan
Variables (4)
Variable Sets
Catalog UI Policies (1)
Catalog Client Scripts
Available For
Not Available For
Categories (1)
Catalogs (1)
Catalog Data Lookup Definitions
Related Articles
Related Catalog Items
Assigned Topics
Order
Search
Actions on selected rows...
New
Catalog item = Laptop Request
Type
Question
Order
Single Line Text
Laptop Model
100
Multi Line Text
Justification
200
CheckBox
Additional Accessories
300
Multi Line Text
Accessories Details
400
1 to 4 of 4


servicenow
All
Favorites
History
Workspaces
Catalog Item - Laptop Request
Search
Catalog Item
Laptop Request
Copy
Try It
Update
Edit in Catalog Builder
Delete
Add relevant tags to the Meta field using comma-separated list of tags. These tags will be used while searching the item. Not applicable if AI Search is configured.
Meta
Copy
Try It
Update
Edit in Catalog Builder
Delete
Related Links
Item Diagnostic
Run Point Scan
Variables (4)
Variable Sets
Catalog UI Policies (1)
Catalog Client Scripts
Available For
Not Available For
Categories (1)
Catalogs (1)
Catalog Data Lookup Definitions
Related Articles
Related Catalog Items
Assigned Topics
Order
Search
Actions on selected rows...
New
Catalog item = Laptop Request
Short description
Variable set
Conditions
Reverse if false
On load
Inherit
Updated
Order
show accessories details
(empty)
true
true
false
2026-02-18 16:25:47
100
1 to 1 of 1


servicenow
All
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History
Workspaces
Admin
UI Action - New Record
Search
UI Action
New record
Submit
Name
Reset form
Table
Shopping Cart [sc_cart]
Order
100
Action name
Reset form
Active
Show insert
Show update
Client
List v2 Compatible
List v3 Compatible
Overrides
Messages
Application
Global
Form button
Form context menu
Form link
Form style
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List banner button
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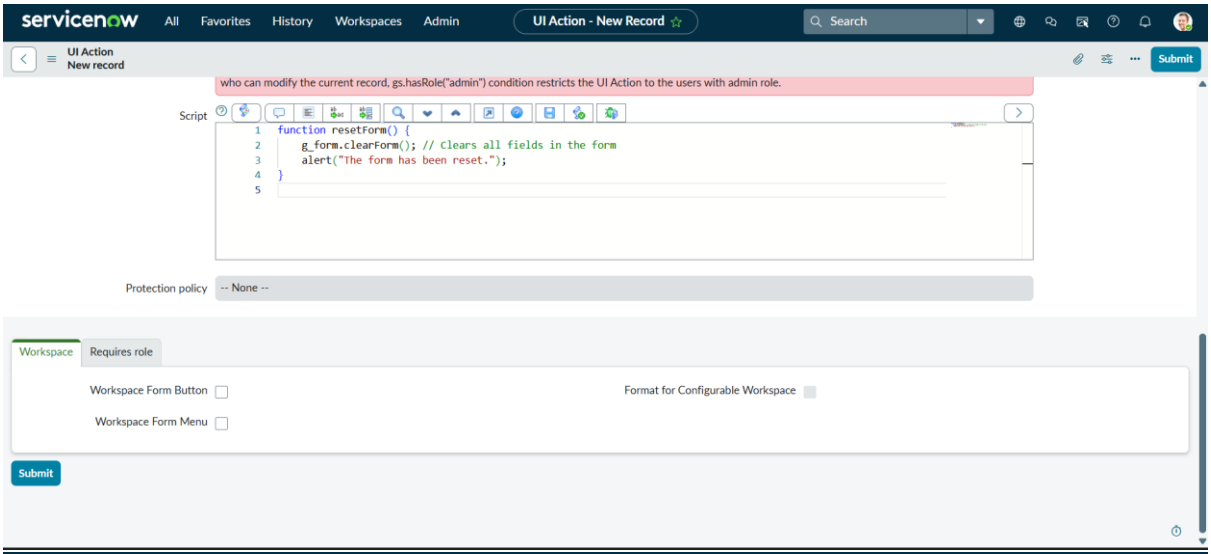
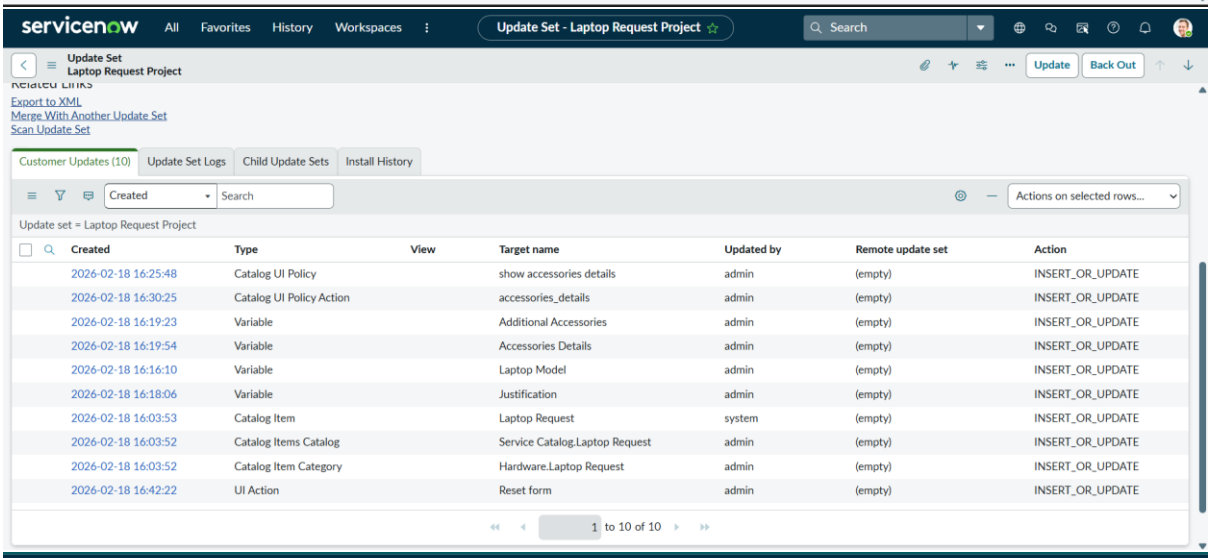

servicenow
All
Favorites
History
Workspaces
Admin
UI Action - New Record
Search
UI Action
New record
Submit
who can modify the current record, gs.hasRole("admin") condition restricts the UI Action to the users with admin role.
Script
function resetForm() {
g_form.clearForm(); // Clears all fields in the form
alert("The form has been reset.");
}
Protection policy
-- None --
Workspace
Requires role
Workspace Form Button
Workspace Form Menu
Format for Configurable Workspace
Submit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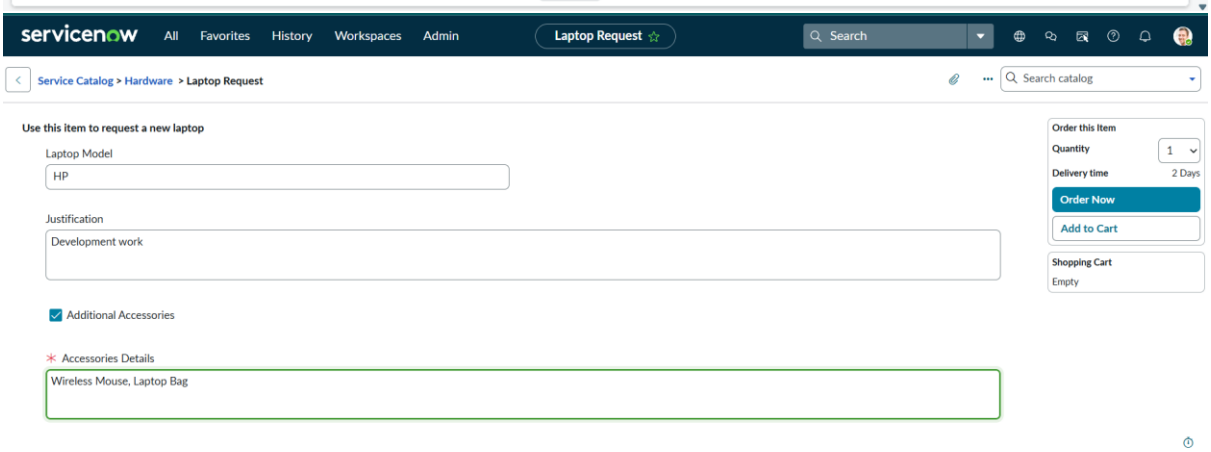
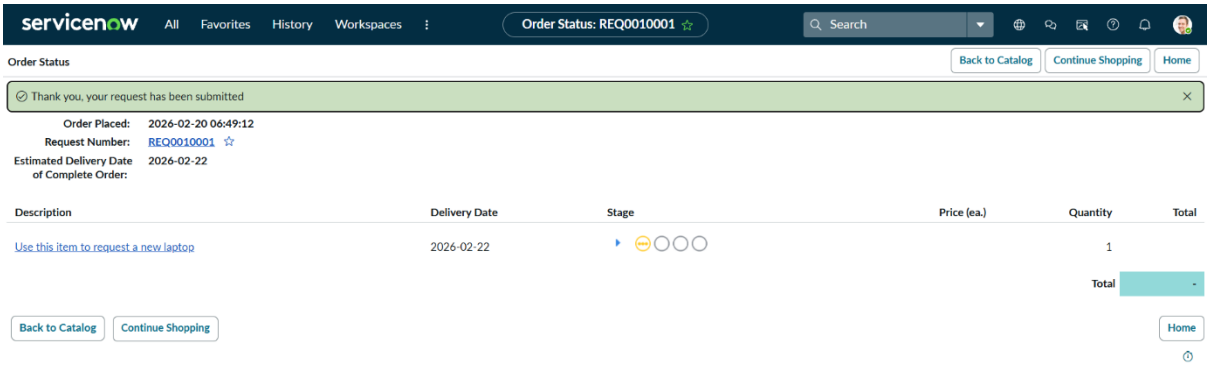
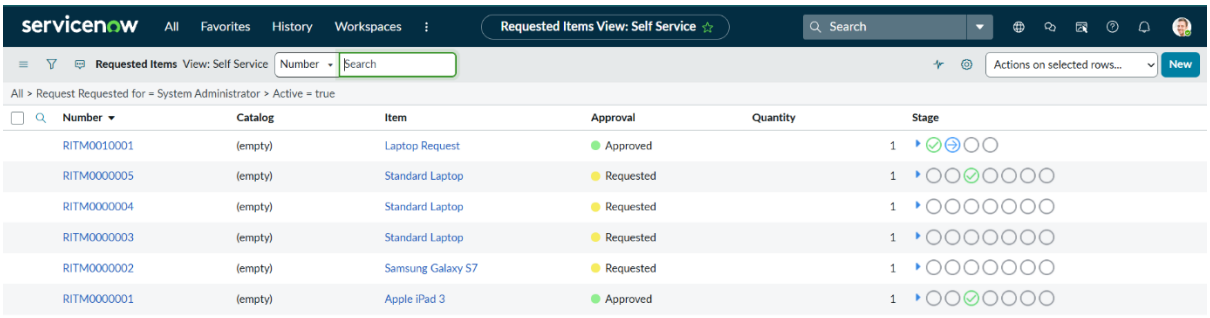
All
Favorites
History
Workspaces
Update Set - Laptop Request Project
Search
Update Set
Laptop Request Project
Update
Back Out
Export to XML
Merge With Another Update Set
Scan Update Set
Customer Updates (10)
Update Set Logs
Child Update Sets
Install History
Created
Search
Actions on selected rows...
Update set = Laptop Request Project
Created
Type
View
Target name
Updated by
Remote update set
Action
2026-02-18 16:25:48 Catalog UI Policy show accessories details admin (empty) INSERT_OR_UPDATE
2026-02-18 16:30:25 Catalog UI Policy Action accessories_details admin (empty) INSERT_OR_UPDATE
2026-02-18 16:19:23 Variable Additional Accessories admin (empty) INSERT_OR_UPDATE
2026-02-18 16:19:54 Variable Accessories Details admin (empty) INSERT_OR_UPDATE
2026-02-18 16:16:10 Variable Laptop Model admin (empty) INSERT_OR_UPDATE
2026-02-18 16:18:06 Variable Justification admin (empty) INSERT_OR_UPDATE
2026-02-18 16:03:53 Catalog Item Laptop Request system (empty) INSERT_OR_UPDATE
2026-02-18 16:03:52 Catalog Items Catalog Service Catalog.Laptop Request admin (empty) INSERT_OR_UPDATE
2026-02-18 16:03:52 Catalog Item Category Hardware.Laptop Request admin (empty) INSERT_OR_UPDATE
2026-02-18 16:42:22 UI Action Reset form admin (empty) INSERT_OR_UPDATE
1 to 10 of 10


servicenow
All
Favorites
History
Workspaces
Admin
Laptop Request
Search
Service Catalog > Hardware > Laptop Request
Search catalog
Use this item to request a new laptop
Laptop Model
HP
Justification
Development work
Additional Accessories
Accessories Details
Wireless Mouse, Laptop Bag
Order this Item
Quantity
1
Delivery time
2 Days
Order Now
Add to Cart
Shopping Cart
Empty


servicenow
All
Favorites
History
Workspaces
Order Status: REQ0010001
Search
Order Status
Back to Catalog
Continue Shopping
Home
Thank you, your request has been submitted
Order Placed: 2026-02-20 06:49:12
Request Number: REQ0010001
Estimated Delivery Date of Complete Order: 2026-02-22
Description
Delivery Date
Stage
Price (ea.)
Quantity
Total
Use this item to request a new laptop
2026-02-22
1
Total
-
Back to Catalog
Continue Shopping
Home


servicenow
All
Favorites
History
Workspaces
Requested Items View: Self Service
Search
Requested Items View: Self Service
Number
Search
Actions on selected rows...
New
All > Request Requested for = System Administrator > Active = true
Number
Catalog
Item
Approval
Quantity
Stage
RITM0010001 (empty) Laptop Request Approved 1
RITM0000005 (empty) Standard Laptop Requested 1
RITM0000004 (empty) Standard Laptop Requested 1
RITM0000003 (empty) Standard Laptop Requested 1
RITM0000002 (empty) Samsung Galaxy S7 Requested 1
RITM0000001 (empty) Apple iPad 3 Approved 1

CONCLUSION

- This project successfully implemented a structured and automated Laptop Request system using ServiceNow Service Catalog.
- The solution addressed inefficiencies of manual email-based hardware requests by introducing a centralized and guided digital request form.
- Dynamic behavior implemented through Catalog UI Policies ensured accurate data collection and minimized incomplete submissions.
- The client-side Reset functionality improved usability by allowing users to easily modify or clear entered information.
- Automatic generation of Request (sc_request) and Requested Item (sc_req_item) records enhanced tracking, transparency, and accountability.
- Update Set management ensured controlled configuration tracking and smooth migration across Development, Test, and Production environments.
- The project improved operational efficiency, reduced administrative workload, and enhanced the overall employee request experience within the organization.

FUTURE SCOPE

- Manager approval workflows can be integrated using Flow Designer to ensure proper authorization before laptop requests are processed.
- Automated task assignment can be implemented to route approved requests directly to the IT Hardware team for faster fulfillment.
- SLA (Service Level Agreement) tracking can be added to monitor request resolution time and improve service performance.
- Reporting dashboards can be developed to track request volumes, approval trends, and hardware distribution statistics.
- Integration with the Asset Management module can enable automatic asset allocation and inventory updates upon request approval.
- Email notifications and alerts can be configured to keep requesters and IT teams informed about request status updates.
- The Service Portal interface can be enhanced to provide a more modern and user-friendly experience for employees.
- The solution can be expanded to support additional hardware requests such as monitors, keyboards, and software access within the same catalog framework.