LAPTOP REQUEST CATALOG ITEM

Submitted by

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In partial fulfilment for the award of the degree

BACHELOR OF ENGINEERING

in

COMPUTER SCIENCE AND ENGINEERING

NAAN MUDHALVAN LAB

ANNA UNIVERSITY REGIONAL CAMPUS MADURAI-625-019

ANNA UNIVERSITY: CHENNAI 600 025

NOVEMBER 2025

Supervised by

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BONAFIDE CERTIFICATE

This is to certify that the project report titled **" Laptop Request Catalog Item"** is the Bonafide work of **SELVENDRAN T (910022104025), GOWTHAM KUMAR V (910022104010), JAYA HARINI T (910022104014)** who carried out the project work under my supervision in the Naan Mudhalvan Lab.

30/10/25

SIGNATURE

HEAD OF THE DEPARTMENT

30/10/25

SIGNATURE

FACULTY

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I extend my sincere thanks to all teaching and non-teaching staff of the Department of Computer Science and Engineering and my peers for their support and encouragement.

Finally, I thank my family and friends, whose encouragement and patience motivated me to complete this project successfully.

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ABSTRACT

The Laptop Request Catalog Item developed on the ServiceNow platform is designed to streamline and simplify the process of requesting laptops for employees within an organization. This system enables users to submit requests for laptops based on their specific needs, whether it be for a new hire, an upgrade, or a replacement. The catalog item provides a user-friendly interface where employees can select their preferred laptop specifications, such as model, operating system, and additional accessories.

Through ServiceNow's automation and workflow features, the system ensures that all requests are routed for appropriate approval, inventory checks, and procurement. It allows for seamless integration with inventory management systems, enabling real-time tracking of laptop availability and status. Once approved, the system triggers the necessary steps for procurement or allocation, ensuring efficient and timely delivery of the requested device.

A personalized dashboard displays the status of requests, helping employees track their submission from initial request to fulfillment. Additionally, IT administrators and procurement teams have access to detailed reports that provide insights into usage trends, laptop allocations, and budget tracking for hardware procurement.

This Laptop Request Catalog Item ensures a smooth and efficient process for requesting and distributing laptops within an organization, improving overall productivity and employee satisfaction. It also fosters transparency, reduces administrative overhead, and promotes cost-effective management of hardware assets across the company. By utilizing ServiceNow’s robust features, the system is scalable and adaptable, making it suitable for organizations of various sizes and structures.

Project Overview:

The **Laptop Request Catalog Item** streamlines the process of requesting laptops within an organization using ServiceNow. Employees can easily select laptop models, specifications, and accessories from a catalog, with requests automatically routed for approval, inventory checks, and fulfilment.

The system integrates with inventory management for real-time tracking and automates ticket assignments for IT teams, ensuring quick and efficient laptop allocation. Reporting tools help administrators monitor usage trends and manage hardware budgets.

This project simplifies laptop requests, reduces manual effort, and improves operational efficiency, providing a seamless experience for both employees and IT departments.

Objectives:

- To design and implement an efficient and user-friendly laptop request system within ServiceNow.
- To allow employees to easily select and request laptops with customizable specifications, such as model, operating system, and accessories.
- To automate the approval, inventory validation, and ticket assignment process to ensure timely and accurate fulfillment of laptop requests.
- To integrate the request system with inventory management for real-time tracking of laptop availability and allocation.
- To provide detailed reporting and analytics on laptop requests, usage trends, and hardware procurement, optimizing budget management and asset allocation.
- To ensure that the laptop request process is seamless, transparent, and aligned with organizational needs and resource management standards.

Student Outcomes:

- Understand and implement the end-to-end laptop request process using ServiceNow's Catalog and Workflow automation.
- Gain hands-on experience in configuring catalog items, setting up approval workflows, and automating ticket assignments.
- Learn how to manage inventory integration, ensuring real-time tracking of laptop availability and fulfillment.
- Develop problem-solving and process optimization skills related to IT asset management and hardware allocation.

- Strengthen collaboration and documentation skills by designing and implementing a scalable solution for managing laptop requests in real-world enterprise environments.

System Requirements:

Hardware Requirements

- Computer with minimum 8 GB RAM, Intel i5 Processor or above
- Stable internet connection
- Modern web browser (Google Chrome / Edge)

Software Requirements

- **ServiceNow Developer Instance (Personal Instance)**
- **ServiceNow Catalog Item Designer**
- **Flow Designer** for automating workflows and approval processes
- **Inventory Management Integration** (for real-time laptop tracking)
- **Role and Group Management Modules** for defining user access and permissions
- **Visual Diagram Tools** (for workflow and catalog design diagrams)
- **Reporting and Analytics Tools** for monitoring laptop request trends and usage
- **Notification and Email Configuration** for automated communication with users and IT teams

Skills Required

- **ServiceNow Platform Administration**
- **Catalog Item Configuration and Management**
- **Workflow Automation using Flow Designer**
- **Inventory Management Integration**
- **Role and Group Management** for defining user permissions and access levels
- **Email Notifications and Communication Configuration**
- **Reporting and Analytics for Asset Management**
- **Basic Scripting in ServiceNow** (optional, for advanced customization)
- **Documentation and Process Mapping** for creating clear, detailed workflows and catalog setup

Project Phase Overview:

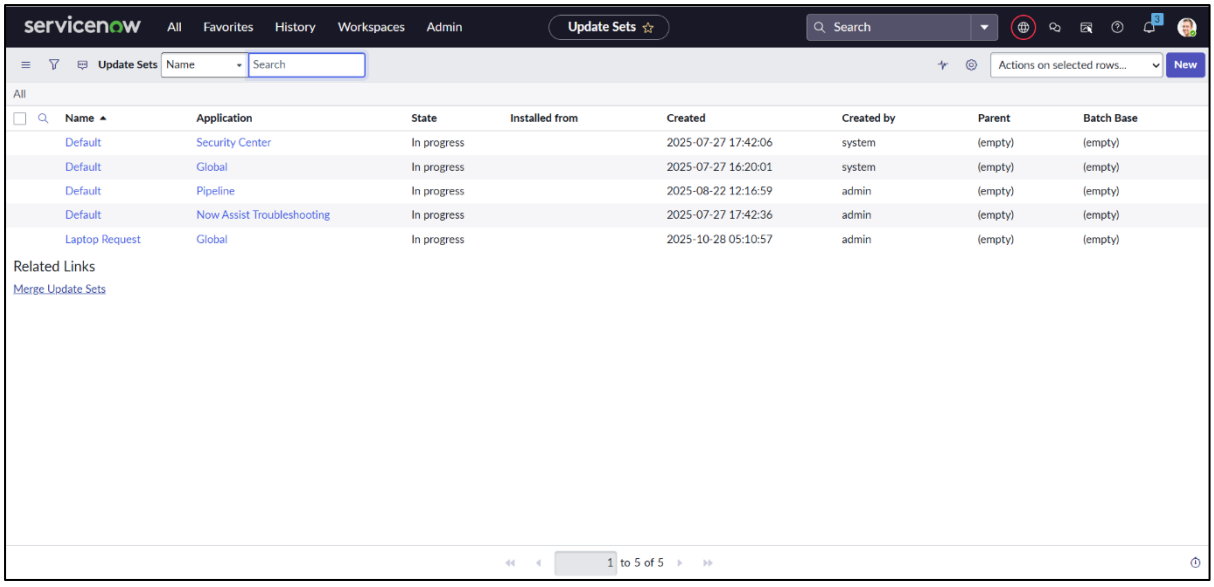
Phase No	Phase Name	Description	Page No
1	Update set	Create a Local Update Set in ServiceNow by navigating to System Update Sets > Local Update Sets, clicking New, and entering a name and description.	8
2	Service Catalog Item	Create a Service Catalog Item in ServiceNow by navigating to Service Catalog > Catalog Definitions > Maintain Items, then clicking New to define the item's details.	9
3	Add variables	Add variables to a Service Catalog Item by navigating to the item's form, clicking Add Variable, and defining the variable type, question, and options.	11
4	UI Policy	Create Catalog UI Policies in ServiceNow by navigating to Service Catalog > Catalog UI Policies, then clicking New to define conditions and actions for the catalog item.	12
5	UI Action	Create a UI Action in ServiceNow by navigating to System Definition > UI Actions, clicking New, and configuring the action's name, table, and script.	16
6	Export Update set	Export changes to another instance in ServiceNow by selecting the Update Set in System Update Sets, clicking Export to XML, and importing the file into the target instance.	18
7	Login to another Instance	Retrieve an update set in ServiceNow by navigating to System Update Sets > Retrieved Update Sets, clicking New, and importing the XML file from the source instance.	20
8	Testing	Test a Catalog Item in ServiceNow by navigating to the Service Catalog, selecting the item, and verifying the form, variables, and workflow functionality in the end-user interface.	24

Update set:

Create Local Update set

Skill Tags:

1. Open service now.
2. Click on All >> search for update sets
3. Select local update sets under system update sets
4. Click on new
5. Fill the following details to create a update set as: “Laptop Request”
6. Click on submit and make current
7. By clicking on the button it activates the update set .



Service Catalog Item:

Create Service Catalog Item

Duration: 1 Hrs

Skill Tags:

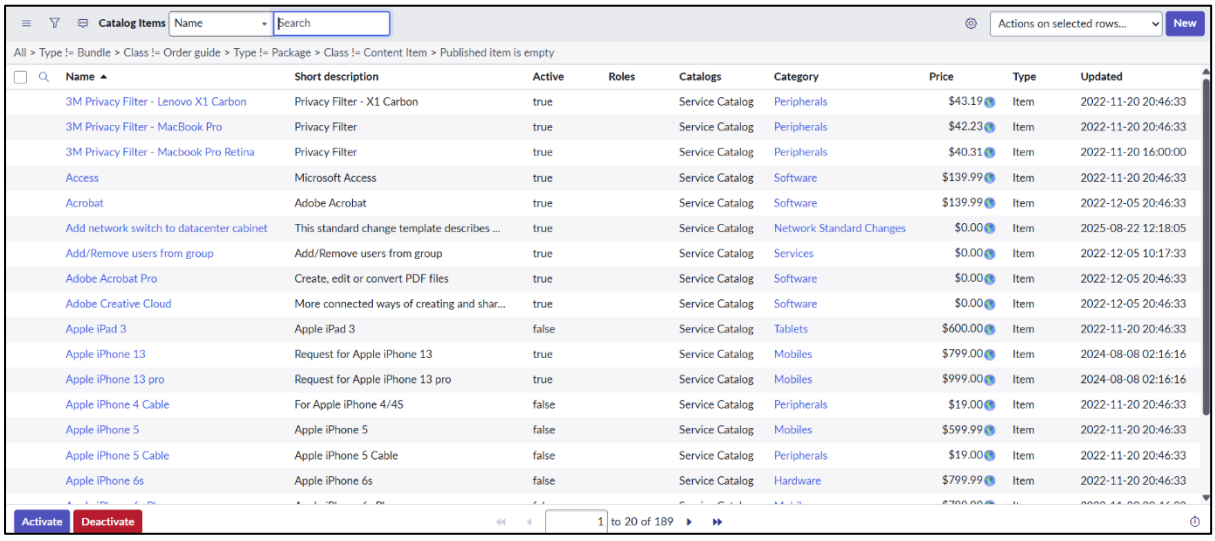
1. Open service now.
2. Click on All >> service catalog
3. Select maintain items under catalog definitions
4. Click on New.
5. Fill the following details to create a new catalog item

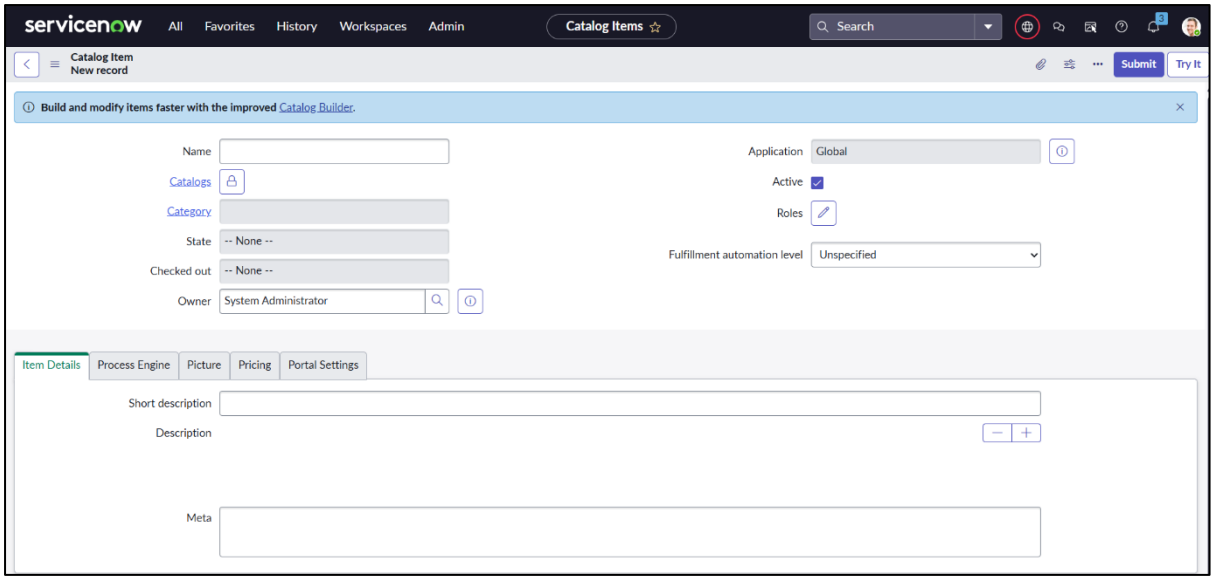
   Name: Laptop Request

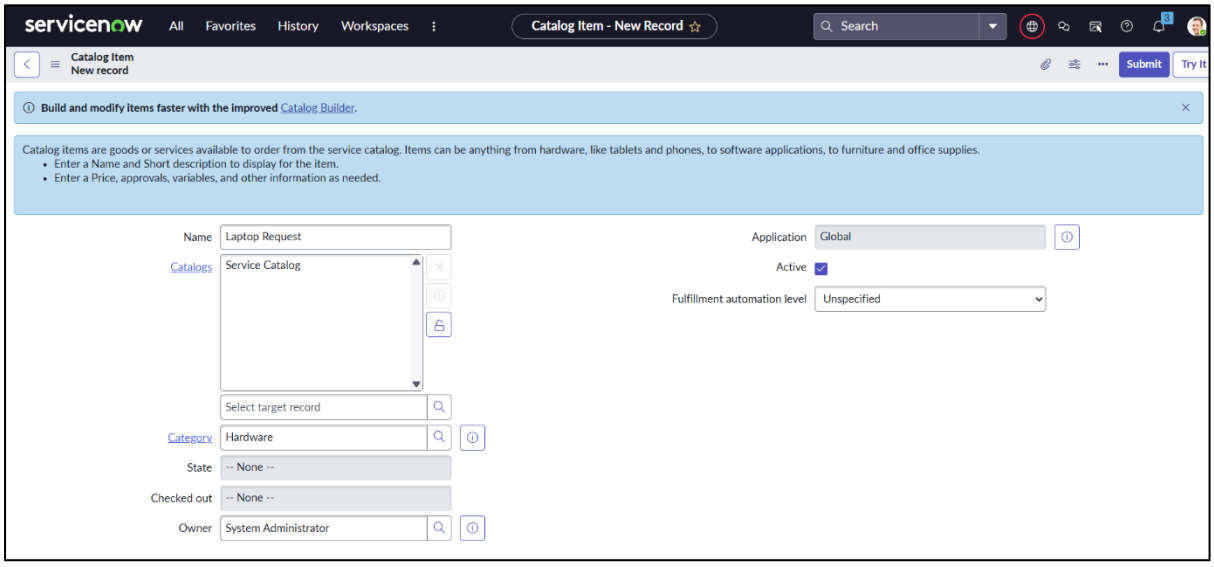
   Catalog: service Catalog

   Category: Hardware

   Short Description: Use this item to request a new laptop
6. Click on 'SAVE'




servicenow
All
Favorites
History
Workspaces
Admin
Catalog Items
Search
Catalog Item
New record
Submit
Try It
Build and modify items faster with the improved Catalog Builder.
Name
Catalogs
Category
State
-- None --
Checked out
-- None --
Owner
System Administrator
Application
Global
Active
Roles
Fulfillment automation level
Unspecified
Item Details
Process Engine
Picture
Pricing
Portal Settings
Short description
Description
Meta


servicenow
All
Favorites
History
Workspaces
Catalog Item - New Record
Search
Catalog Item
New record
Submit
Try It
Build and modify items faster with the improved Catalog Builder.
Catalog items are goods or services available to order from the service catalog. Items can be anything from hardware, like tablets and phones, to software applications, to furniture and office supplies.
Enter a Name and Short description to display for the item.
Enter a Price, approvals, variables, and other information as needed.
Name
Laptop Request
Catalogs
Service Catalog
Select target record
Category
Hardware
State
-- None --
Checked out
-- None --
Owner
System Administrator
Application
Global
Active
Fulfillment automation level
Unspecified

Add variables:

Duration: 1 Hrs

Skill Tags:

Step1:

1. After saving the catalog item form scroll down and click on variable(related list)
2. Click on new and enter the details as below

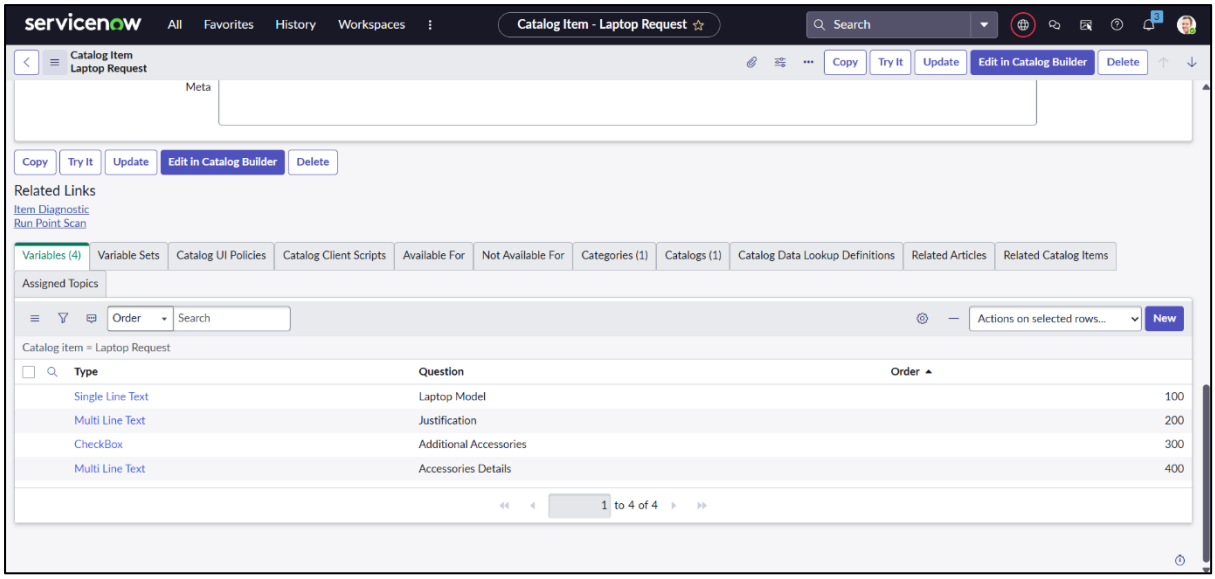
Variable 1:Laptop Model

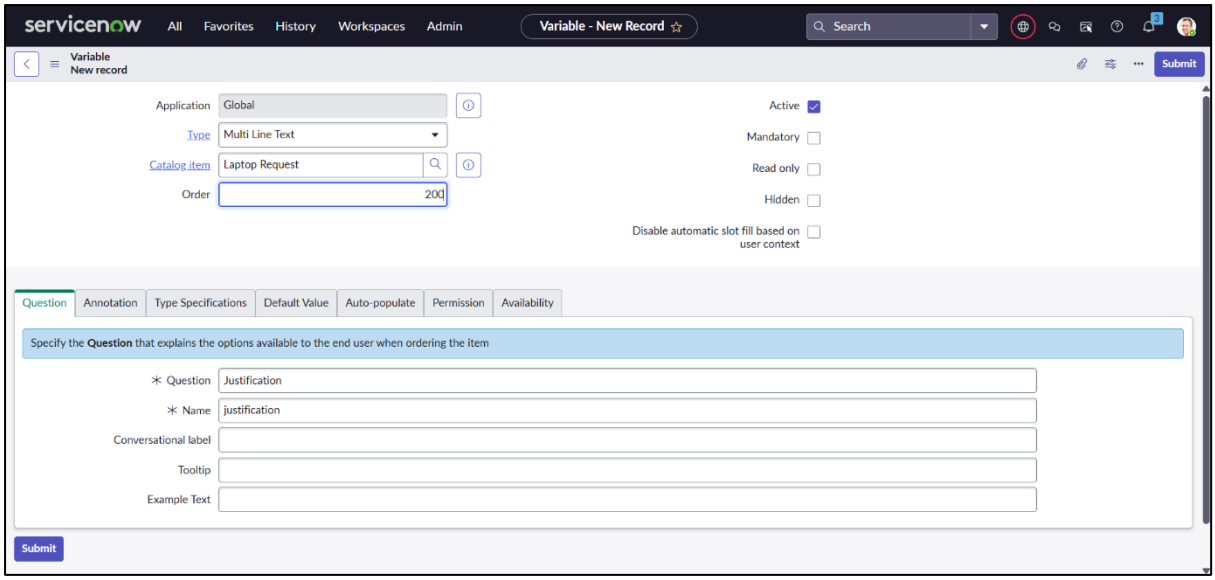
Type: Single line text

Name: laptop_model

Order:100

3. Click on submit
4. Again, click on new and add Remaining variables in the above process





Variable 2:Justification

Type: Multi line text

Name: justification

Order:200

Variable 3:Additional Accessories

Type: Checkbox

Name: additional_accessories

Order:300

Variable 4: Accessories Details

Type: Multi line text

Name:accessories_details

Order:400

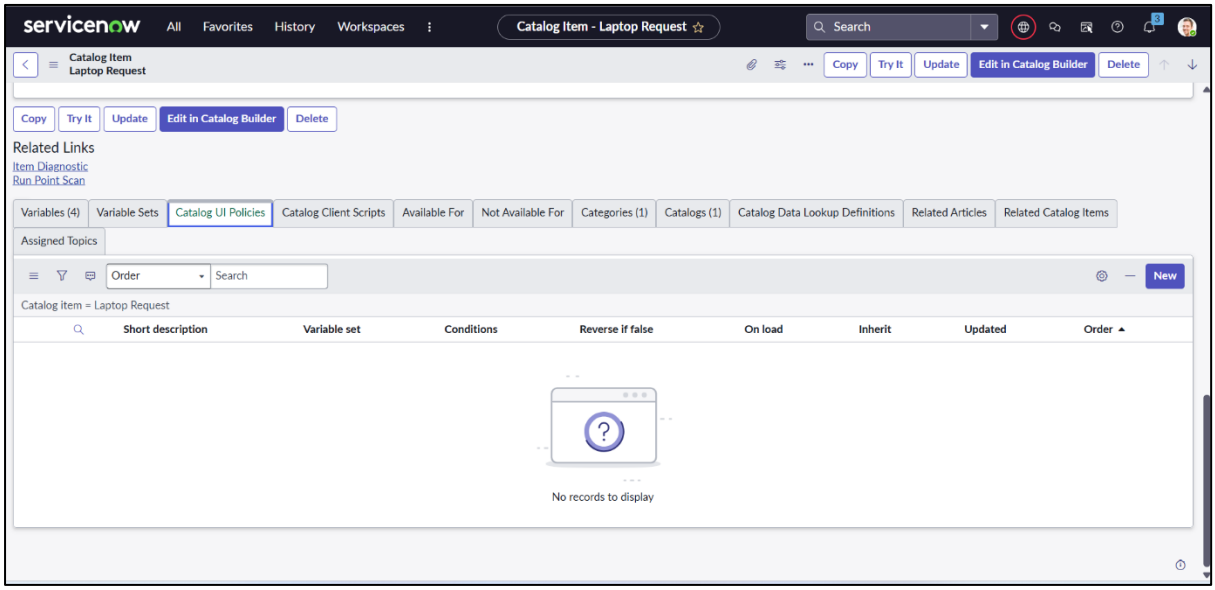
UI Policy:

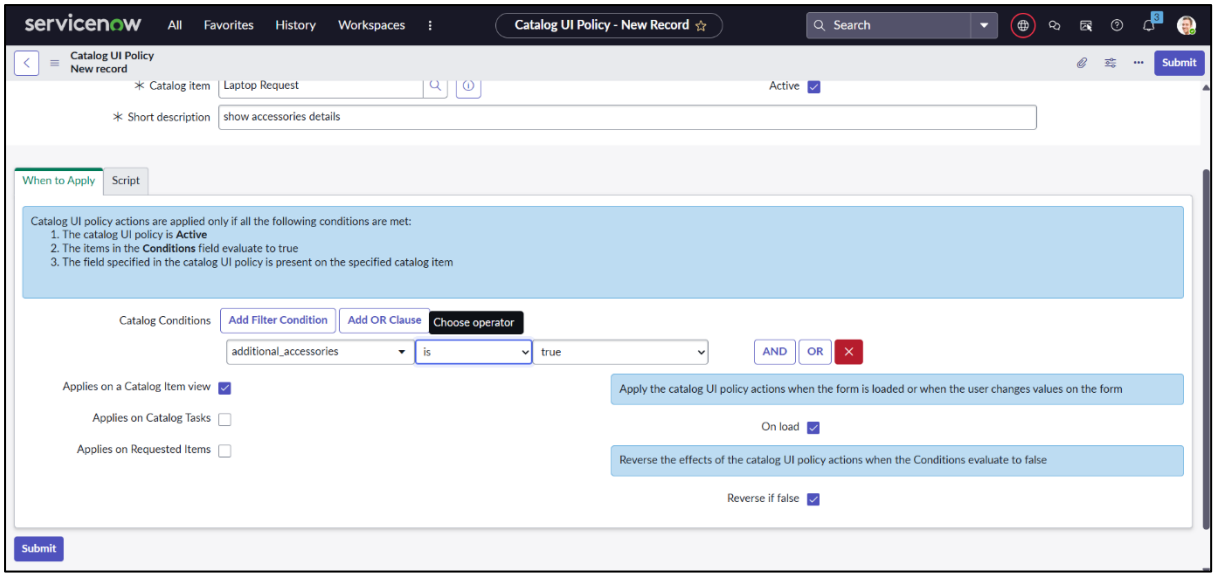
Create Catalog Ui policies

Skill Tags:

1. Click on all>> search for service catalog

2. Select maintain item under catalog definition
3. Search for ‘laptop request’ which is created before
4. Select ‘laptop request’ and scroll down click on “Catalog Ui policies”
5. In the catalog ui policies related list tab click on new
6. Give short description as: show accessories details
7. Set the Catalog Condition in the related list tab ‘when to apply’





8. Scroll down and select ‘catalog ui action’

9. Then click on new button

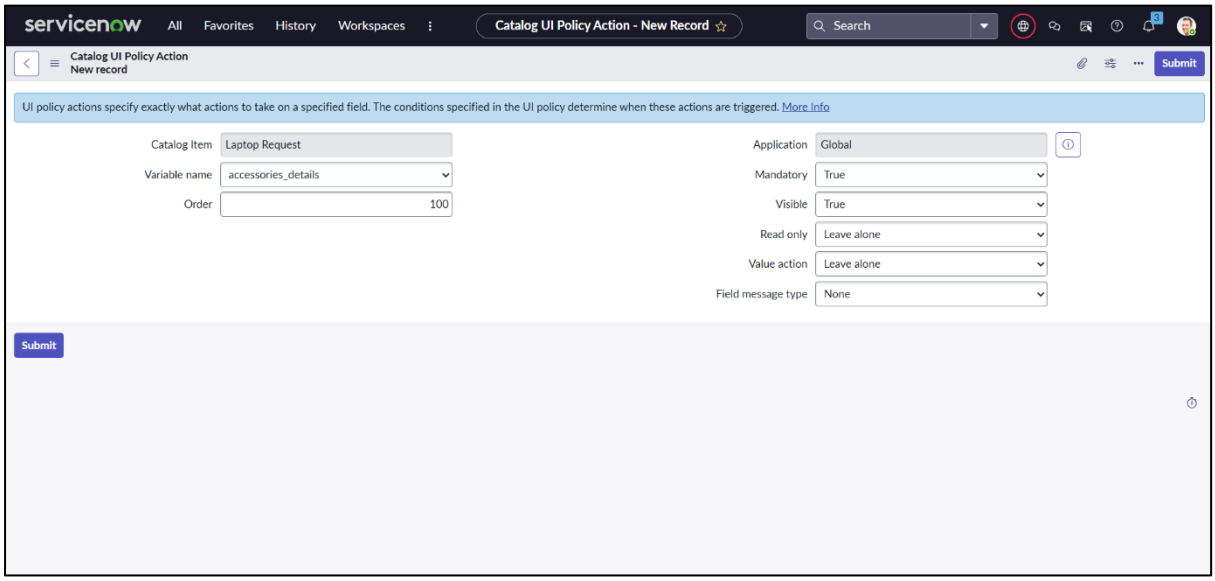
10. Select variable name as: accessories_details

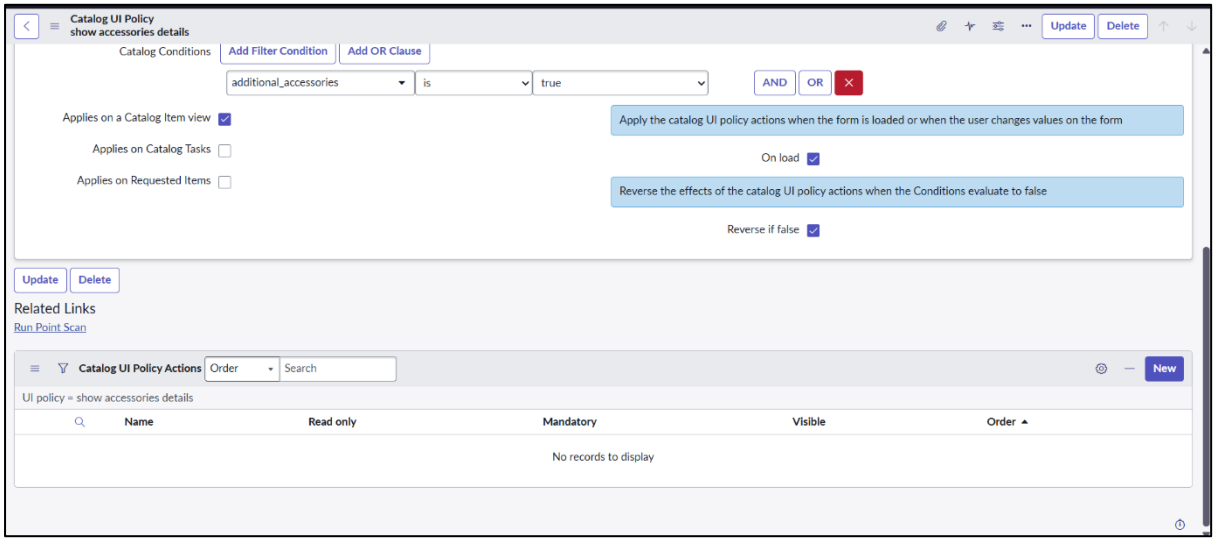
Order:100

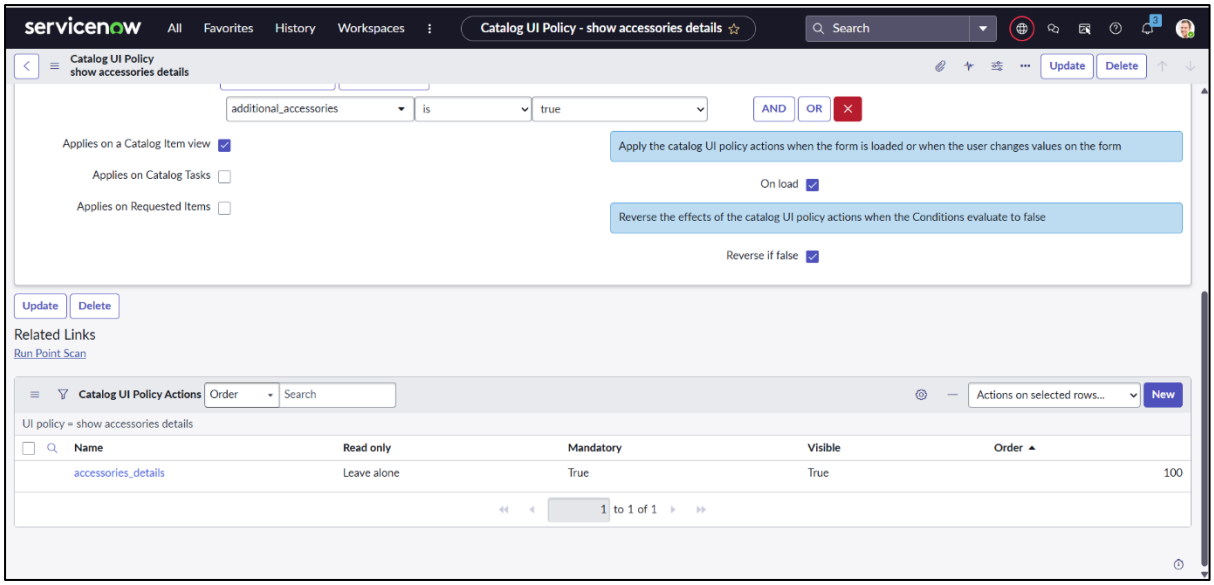
Mandatory: True

Visible : True

11. Click on save and again click save button of the catalog ui policy form


servicenow
All
Favorites
History
Workspaces
Catalog UI Policy Action - New Record
Search
Catalog UI Policy Action
New record
Submit
UI policy actions specify exactly what actions to take on a specified field. The conditions specified in the UI policy determine when these actions are triggered. More Info
Catalog Item
Laptop Request
Variable name
accessories_details
Order
100
Application
Global
Mandatory
True
Visible
True
Read only
Leave alone
Value action
Leave alone
Field message type
None
Submit


Catalog UI Policy
show accessories details
Update
Delete
Catalog Conditions
Add Filter Condition
Add OR Clause
additional_accessories
is
true
AND
OR
Applies on a Catalog Item view
Applies on Catalog Tasks
Applies on Requested Items
Apply the catalog UI policy actions when the form is loaded or when the user changes values on the form
On load
Reverse the effects of the catalog UI policy actions when the Conditions evaluate to false
Reverse if false
Update
Delete
Related Links
Run Point Scan
Catalog UI Policy Actions
Order
Search
New
UI policy = show accessories details
Name
Read only
Mandatory
Visible
Order
No records to display



UI Action:

Create ui action

Duration: 1 Hrs

Skill Tags:

1. Open service now.
2. Click on All >> search for ui action
3. Select ui actions under system definition
4. Click on new
5. Fill the following details to create ui action

   Table: shopping cart(sc_cart)

   Order:100

   Action name: Reset form

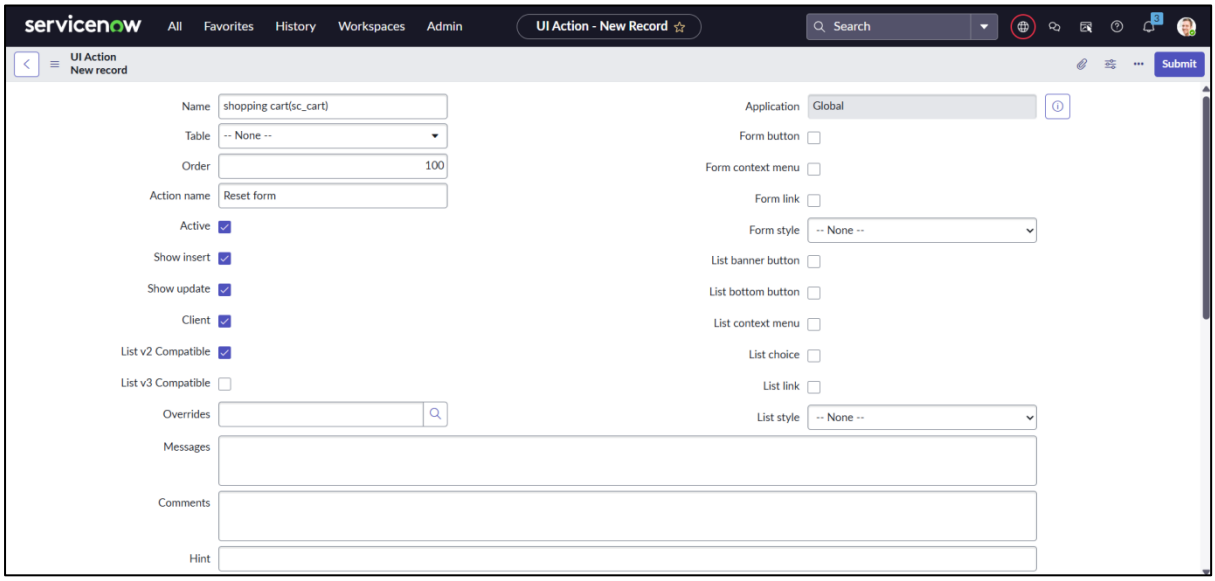
   Client : checked

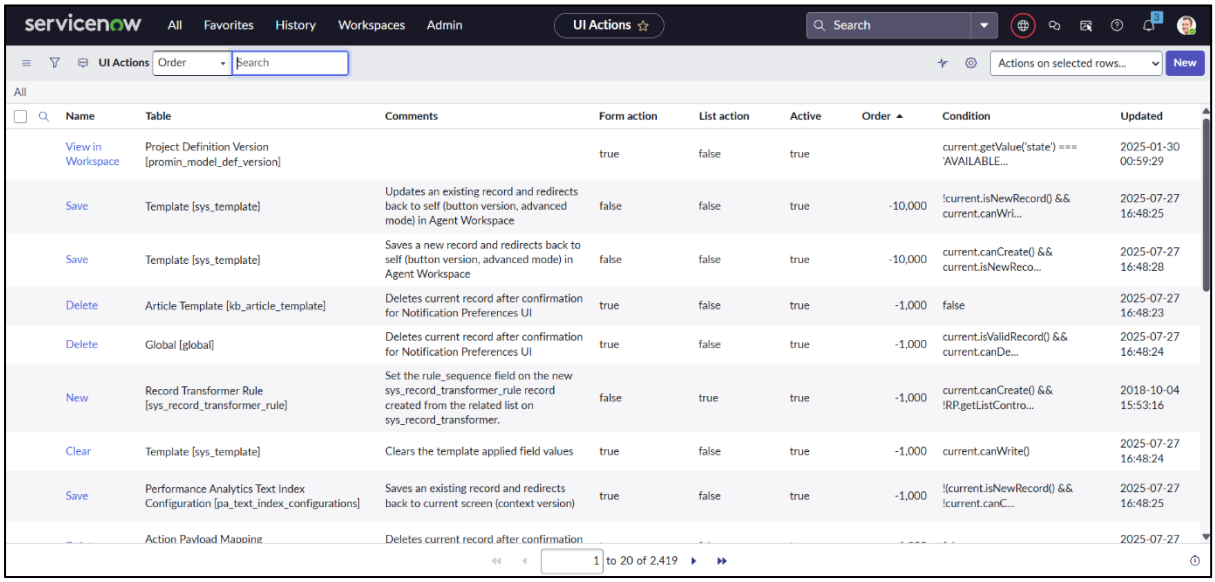
Script:

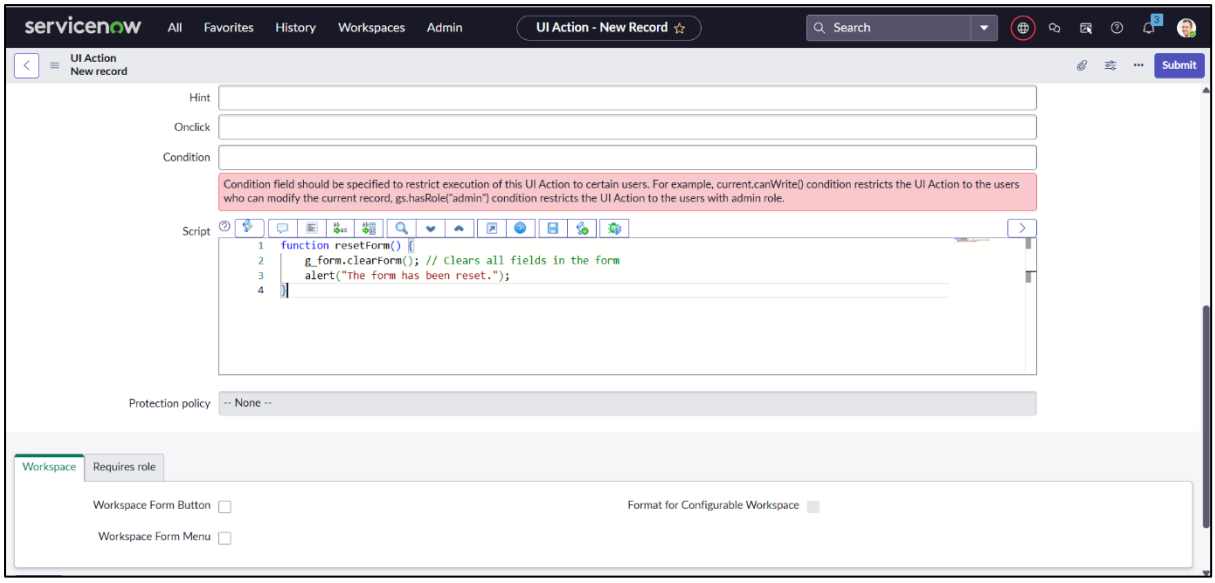
```
function resetForm() {
g_form.clearForm(); // Clears all fields in the form
alert("The form has been reset.");
```

}

Click on save







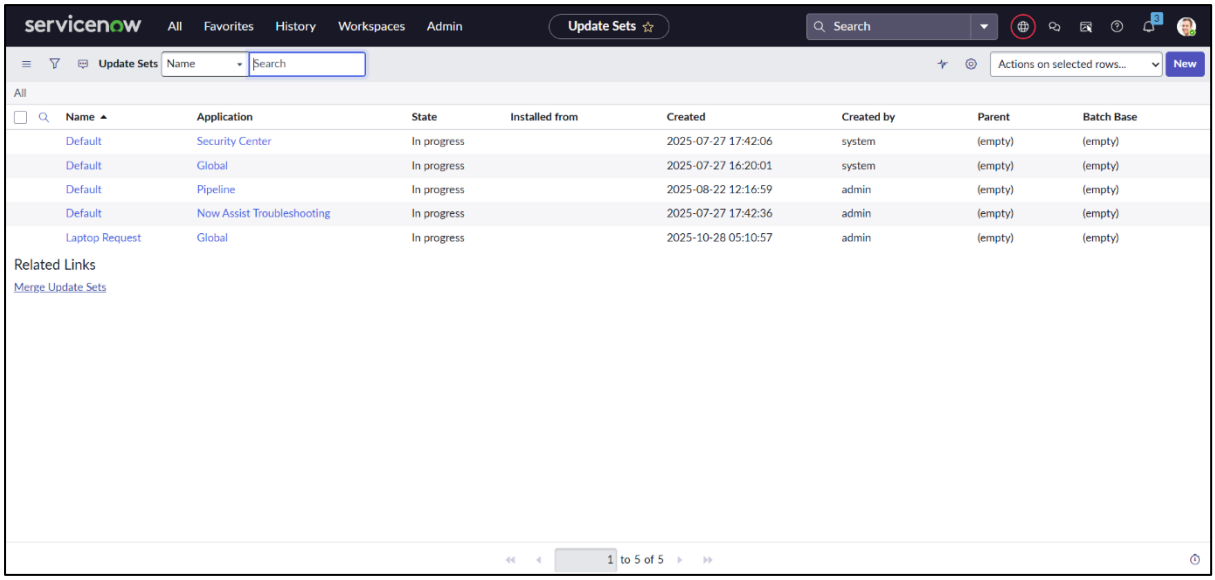
Export Update set:

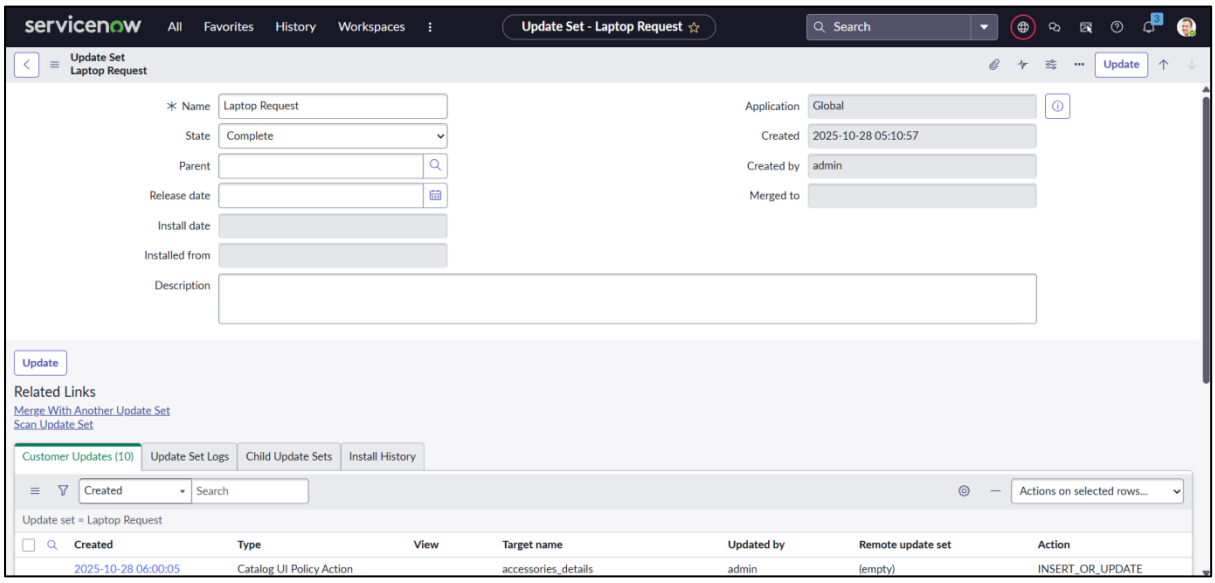
Exporting changes to another instances

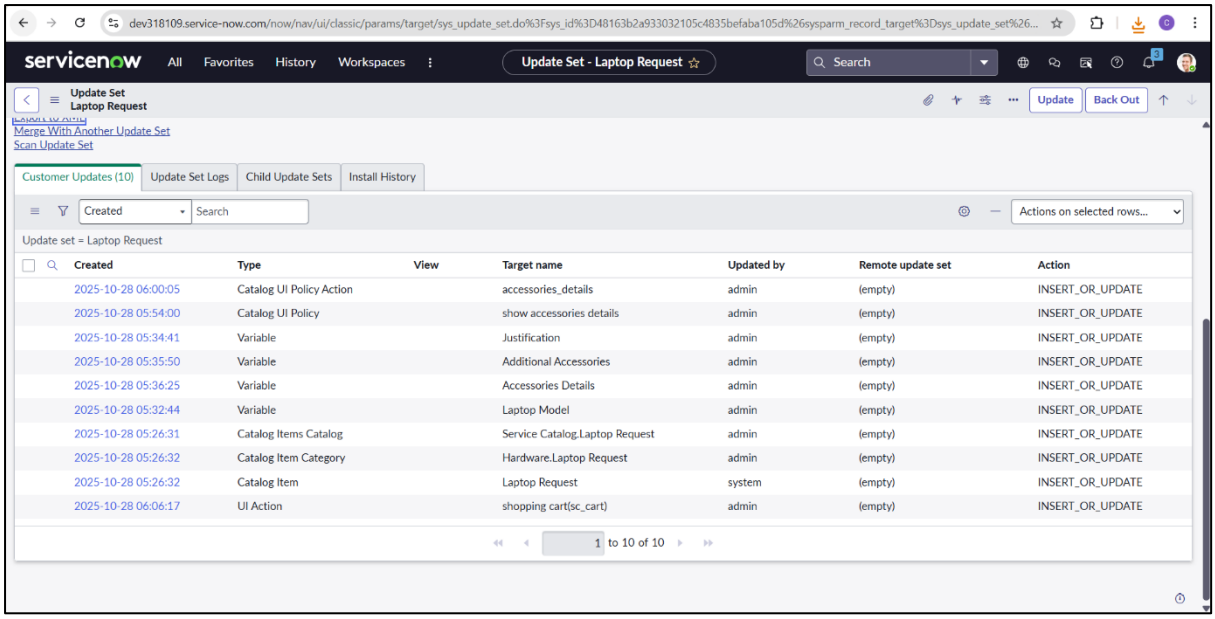
Duration: 1 Hrs

Skill Tags:

1. Click on All >> search for update sets
2. Select local update set
3. Select created update set i.e. ‘Laptop Request Project’
4. Set the state to ‘Complete’
5. In the related list Update tab, updates are visible which we perform under this update set.
6. Click on export to XML ,it download one file


servicenow
All
Favorites
History
Workspaces
Admin
Update Sets
Search
Update Sets
Name
Search
Actions on selected rows...
New
All
Name
Application
State
Installed from
Created
Created by
Parent
Batch Base
Default
Security Center
In progress
2025-07-27 17:42:06
system
(empty)
(empty)
Default
Global
In progress
2025-07-27 16:20:01
system
(empty)
(empty)
Default
Pipeline
In progress
2025-08-22 12:16:59
admin
(empty)
(empty)
Default
Now Assist Troubleshooting
In progress
2025-07-27 17:42:36
admin
(empty)
(empty)
Laptop Request
Global
In progress
2025-10-28 05:10:57
admin
(empty)
(empty)
Related Links
Merge Update Sets
1 to 5 of 5


servicenow
All
Favorites
History
Workspaces
Update Set - Laptop Request
Search
Update Set
Laptop Request
Update
Name
Laptop Request
State
Complete
Parent
Release date
Install date
Installed from
Description
Application
Global
Created
2025-10-28 05:10:57
Created by
admin
Merged to
Update
Related Links
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
Created
Type
View
Target name
Updated by
Remote update set
Action
2025-10-28 06:00:05
Catalog UI Policy Action
accessories_details
admin
(empty)
INSERT_OR_UPDATE



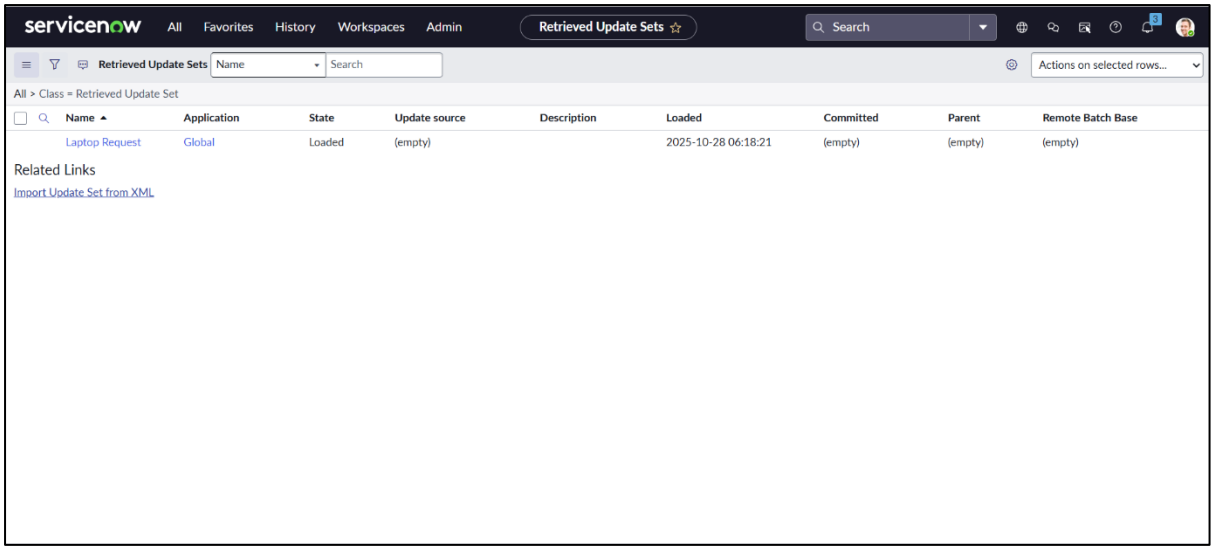
Login to another Instance:

Retrieving the update set

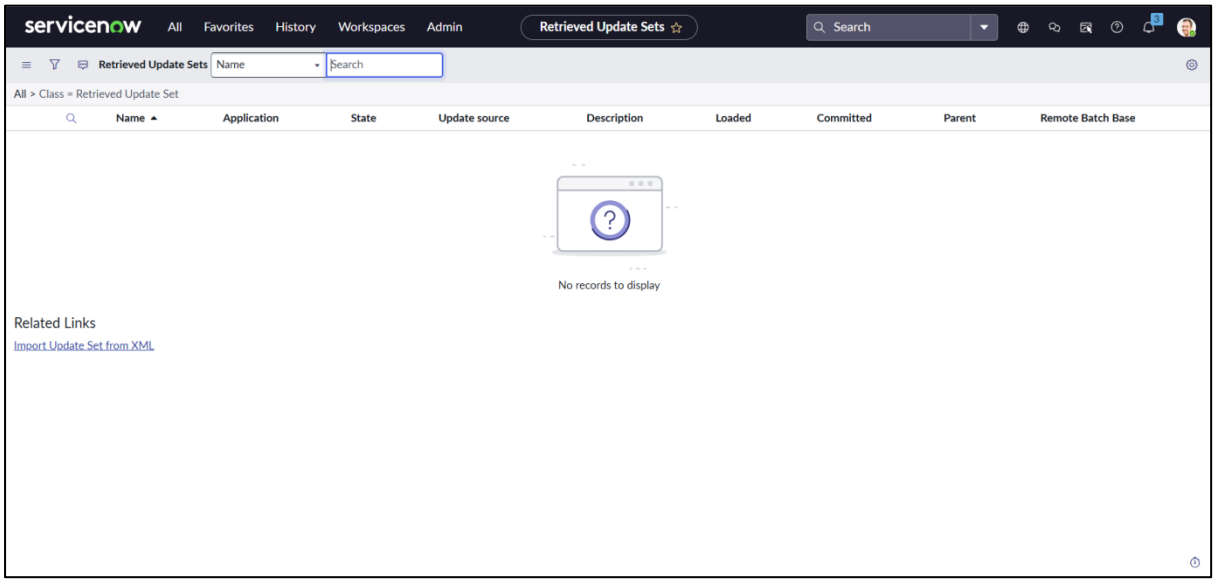
Duration: 1 Hrs

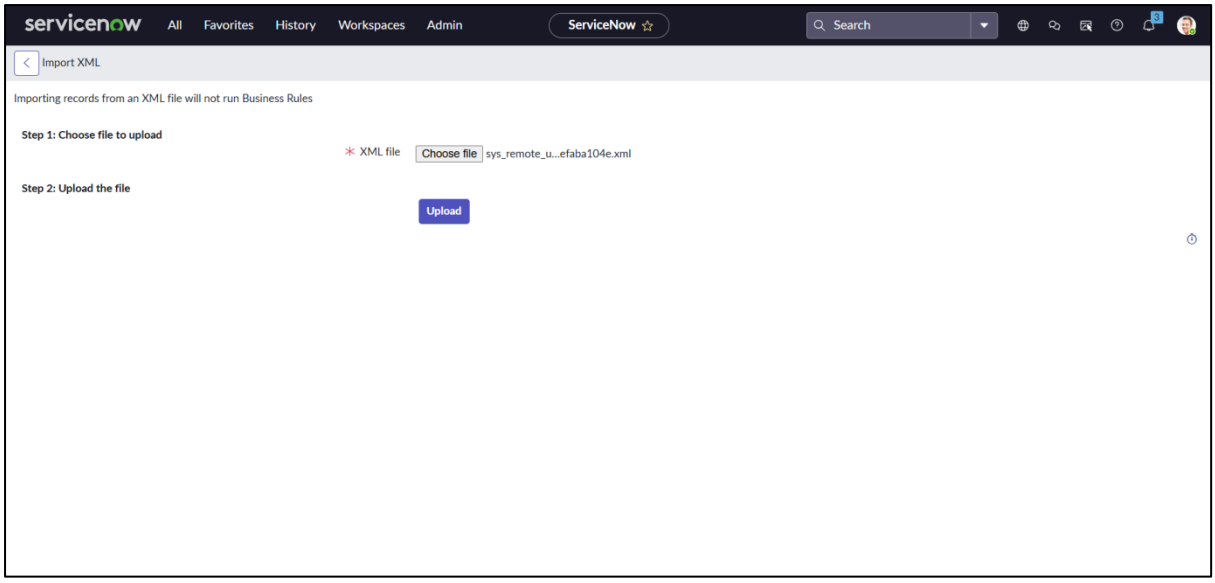
Skill Tags:

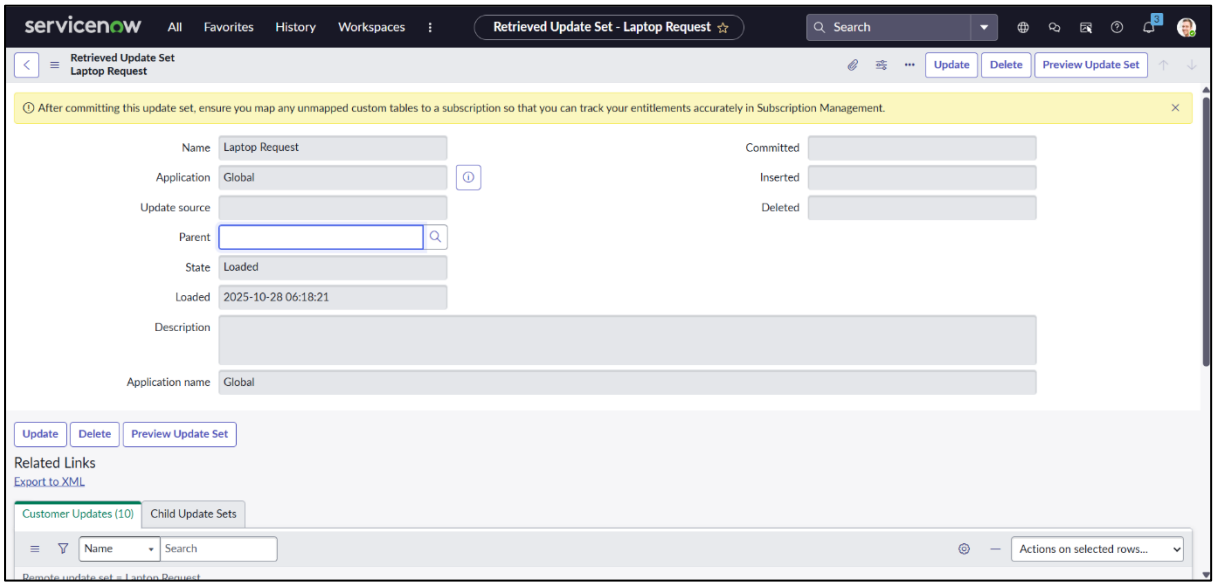
1. Open another instance in incognito window
2. Login with credentials
3. Click on all>> search for update sets
4. Select “Retrieved update set” under system update set
5. It open retrieved update set list and scroll down
6. Click on Import update set from XML
7. Upload the downloaded file in XML file
8. Click on Upload and it gets uploaded.

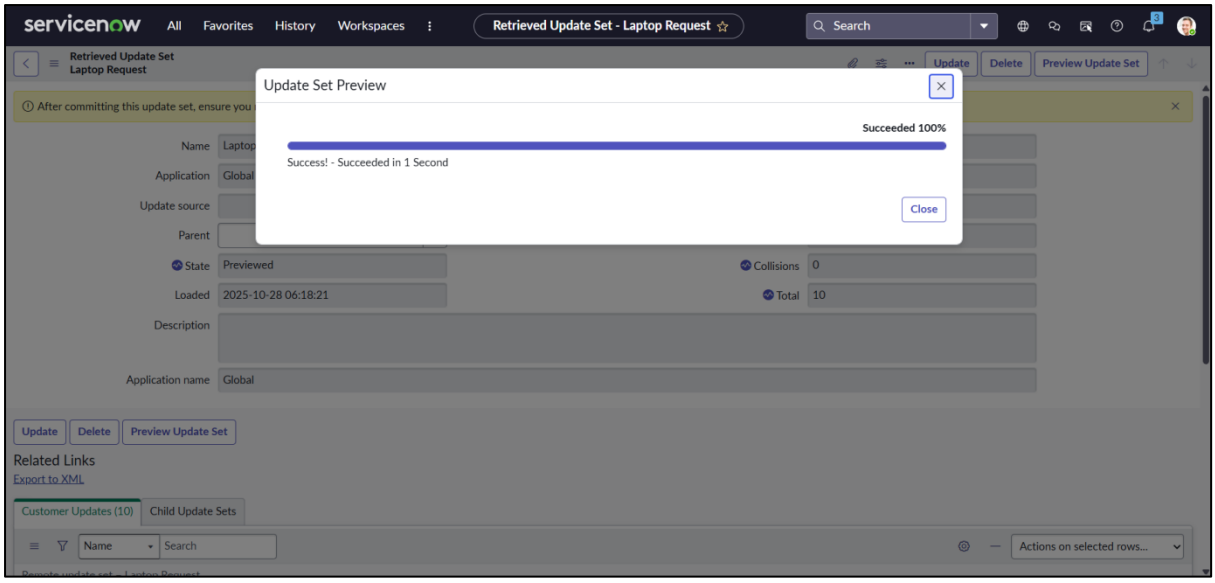


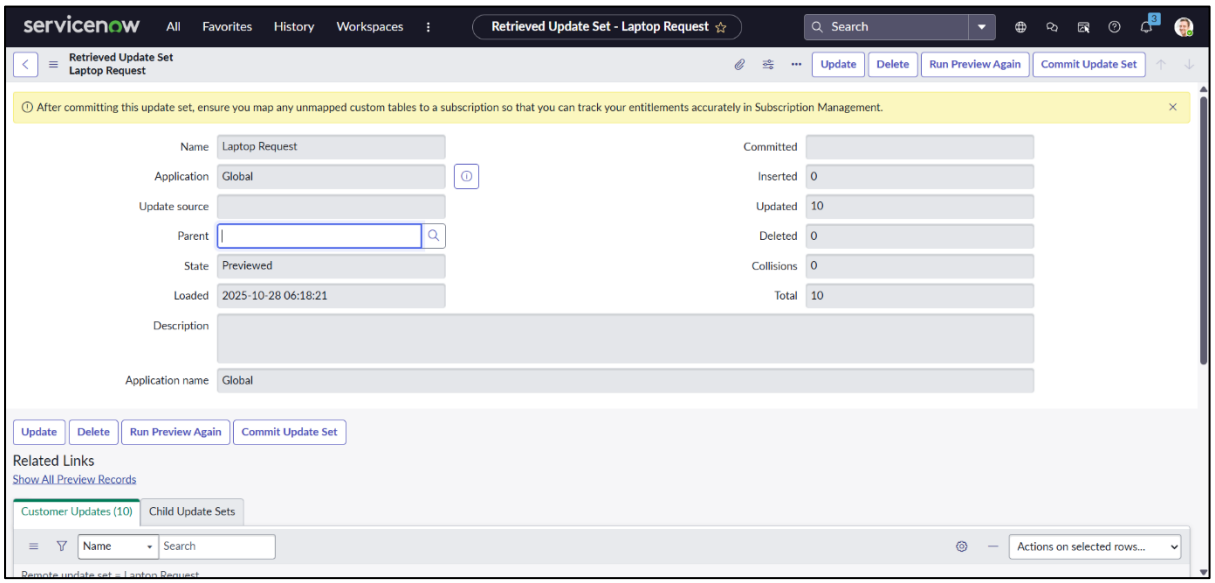
9. Open retrieved update set ‘laptop request project’
10. Click on preview update set
11. And click on commit update set
12. And also see the related tab updates
13. After commiting update set in this instance we get all updates which are done in the previous instance

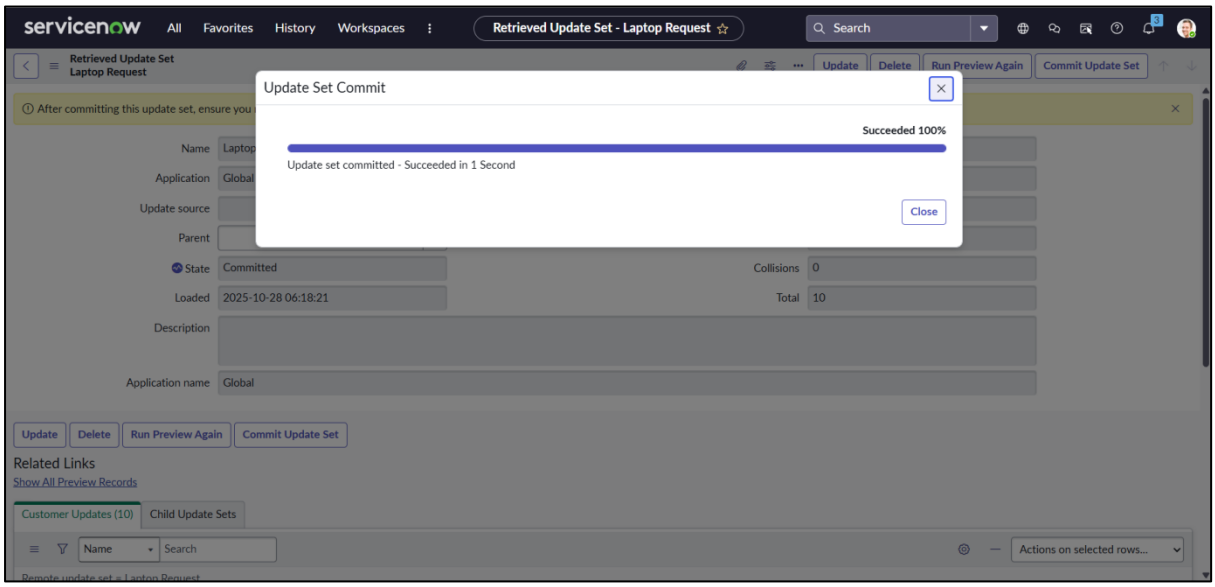


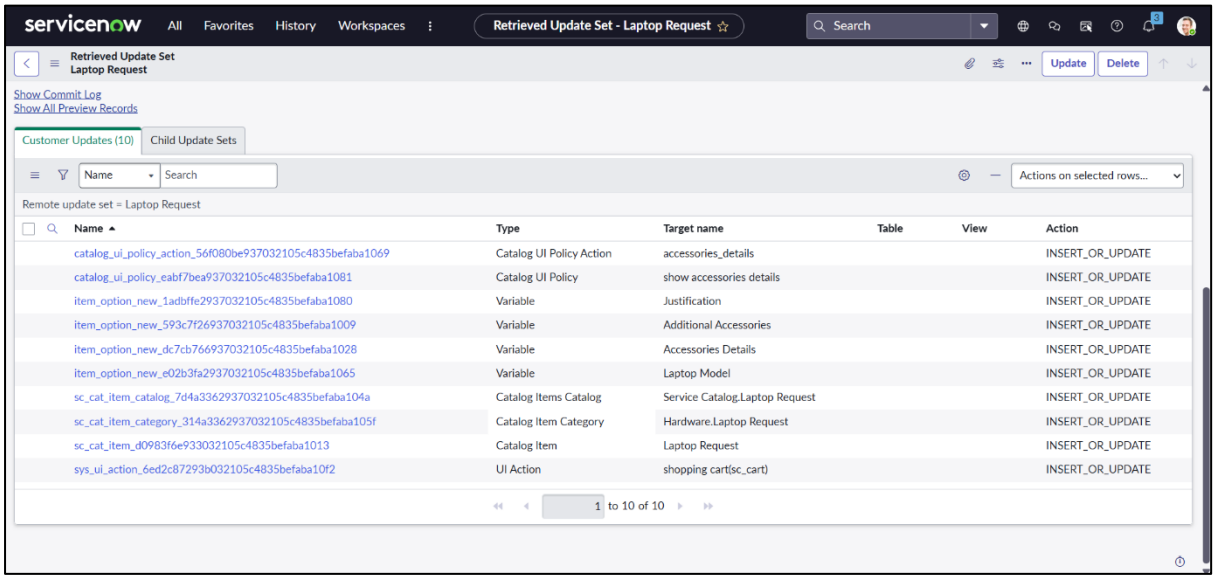

servicenow
All
Favorites
History
Workspaces
Admin
ServiceNow
Search
Import XML
Importing records from an XML file will not run Business Rules
Step 1: Choose file to upload
XML file
Choose file
sys_remote_u...efaba104e.xml
Step 2: Upload the file
Upload


servicenow
All
Favorites
History
Workspaces
Retrieved Update Set - Laptop Request
Search
Retrieved Update Set
Laptop Request
Update
Delete
Preview Update Set
After committing this update set, ensure you map any unmapped custom tables to a subscription so that you can track your entitlements accurately in Subscription Management.
Name
Laptop Request
Application
Global
Update source
Parent
State
Loaded
Loaded
2025-10-28 06:18:21
Description
Application name
Global
Committed
Inserted
Deleted
Update
Delete
Preview Update Set
Related Links
Export to XML
Customer Updates (10)
Child Update Sets
Name
Search
Actions on selected rows...


servicenow
All
Favorites
History
Workspaces
Retrieved Update Set - Laptop Request
Search
Retrieved Update Set
Laptop Request
Update
Delete
Preview Update Set
Update Set Preview
Succeeded 100%
Success! - Succeeded in 1 Second
Close
Name
Application
Update source
Parent
State
Previewed
Collisions
0
Loaded
2025-10-28 06:18:21
Total
10
Description
Application name
Global
Related Links
Export to XML
Customer Updates (10)
Child Update Sets
Actions on selected rows...


servicenow
All
Favorites
History
Workspaces
Retrieved Update Set - Laptop Request
Search
Retrieved Update Set
Laptop Request
Update
Delete
Run Preview Again
Commit Update Set
After committing this update set, ensure you map any unmapped custom tables to a subscription so that you can track your entitlements accurately in Subscription Management.
Name
Laptop Request
Application
Global
Update source
Parent
State
Previewed
Loaded
2025-10-28 06:18:21
Description
Application name
Global
Committed
Inserted
0
Updated
10
Deleted
0
Collisions
0
Total
10
Related Links
Show All Preview Records
Customer Updates (10)
Child Update Sets
Actions on selected rows...


servicenow
All
Favorites
History
Workspaces
Retrieved Update Set - Laptop Request
Search
Retrieved Update Set
Laptop Request
Update
Delete
Run Preview Again
Commit Update Set
Update Set Commit
Succeeded 100%
Update set committed - Succeeded in 1 Second
Close
Name
Application
Update source
Parent
State
Committed
Loaded
2025-10-28 06:18:21
Description
Application name
Global
Collisions
0
Total
10
Related Links
Show All Preview Records
Customer Updates (10)
Child Update Sets
Actions on selected rows...



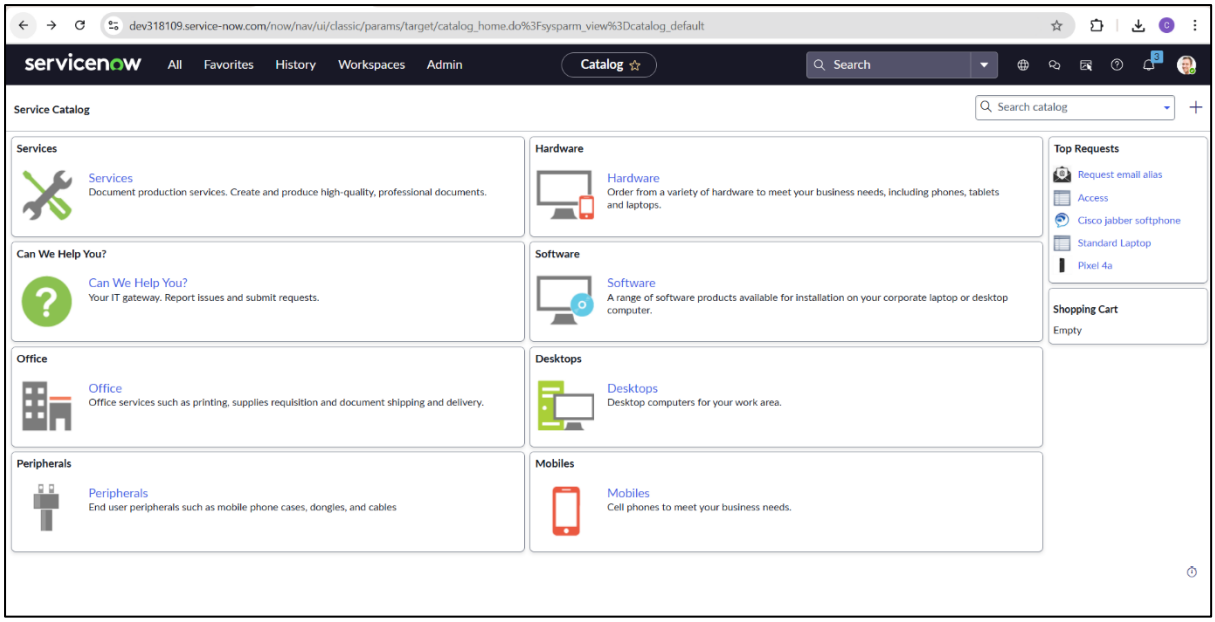
Testing:

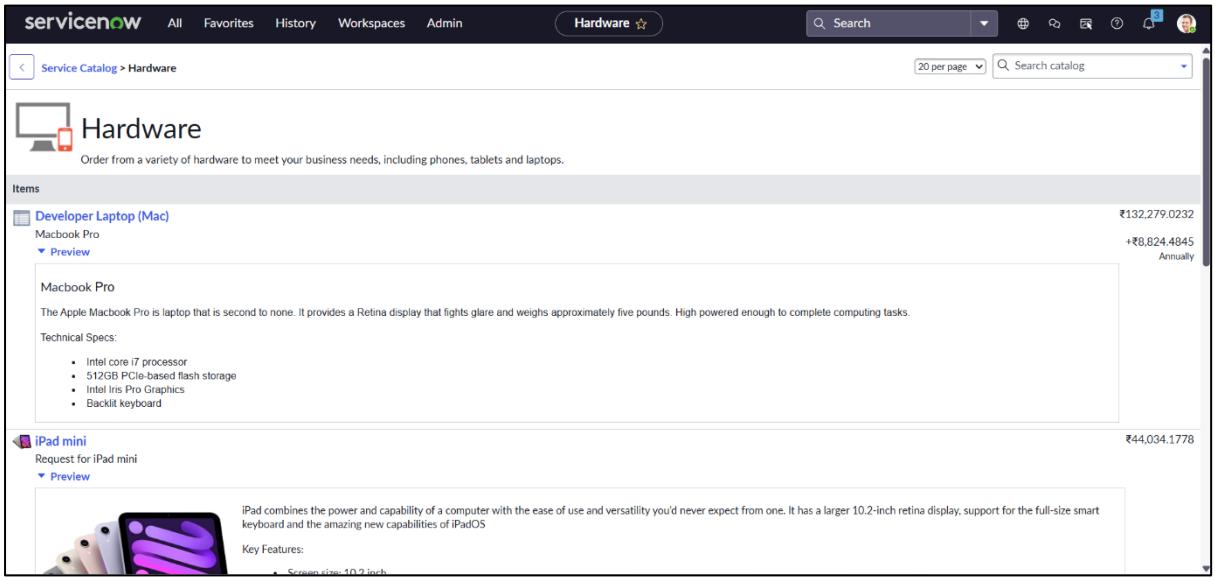
Test Catalog Item

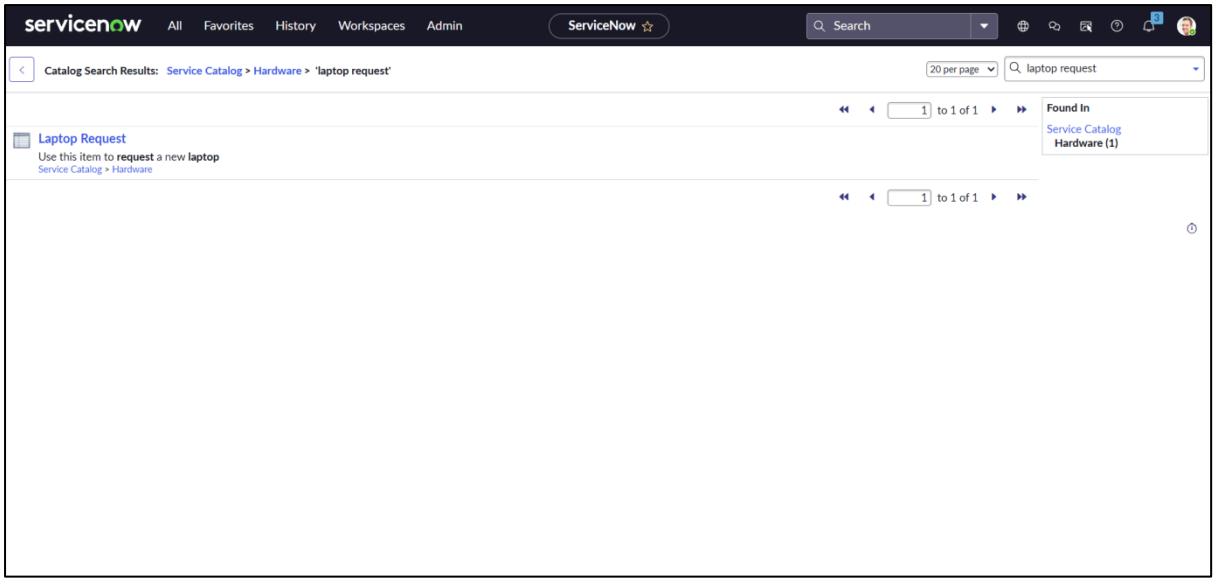
Duration: 1 Hrs

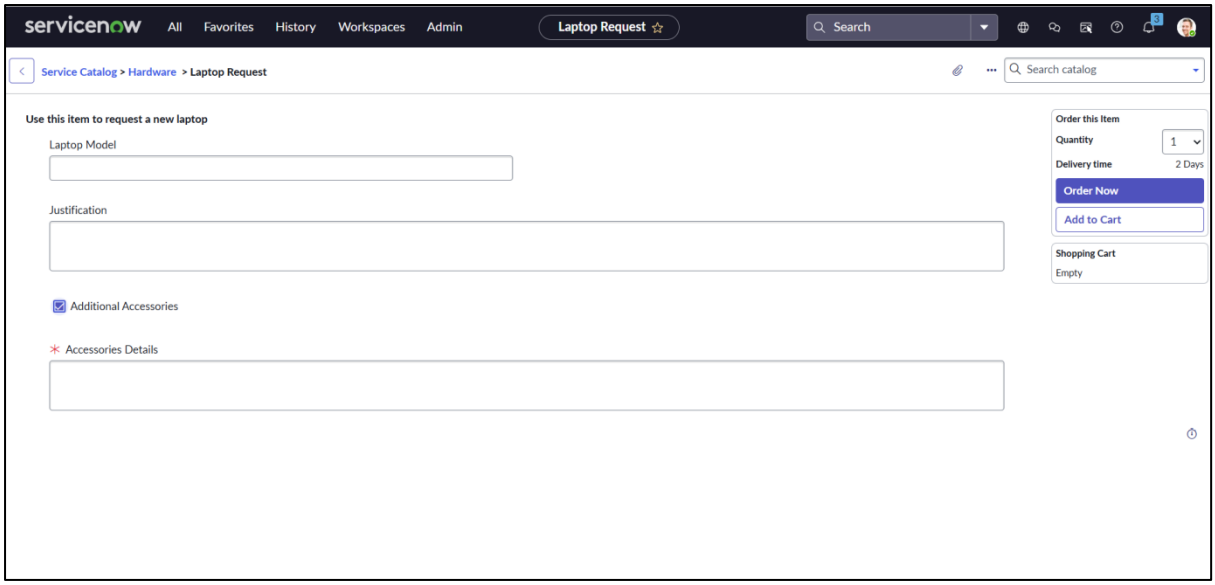
Skill Tags:

1. Search for service catalog in application navigator in target instance
2. Select catalog under service catalog
3. Select hardware category and search for ‘laptop request’ item
4. Select laptop request item and open it
5. It shows three variables only
6. As per our scenario, when we click on additional accessories checkbox then accessories details fields is visible and that should be mandatory
7. Now see the results,it fulfills our requirements.


dev318109.service-now.com/now/nav/ui/classic/params/target/catalog_home.do%3Fsysparm_view%3Dcatalog_default
servicenow
All
Favorites
History
Workspaces
Admin
Catalog
Search
Service Catalog
Search catalog
Services
Services
Document production services. Create and produce high-quality, professional documents.
Hardware
Hardware
Order from a variety of hardware to meet your business needs, including phones, tablets and laptops.
Top Requests
Request email alias
Access
Cisco jabber softphone
Standard Laptop
Pixel 4a
Can We Help You?
Can We Help You?
Your IT gateway. Report issues and submit requests.
Software
Software
A range of software products available for installation on your corporate laptop or desktop computer.
Shopping Cart
Empty
Office
Office
Office services such as printing, supplies requisition and document shipping and delivery.
Desktops
Desktops
Desktop computers for your work area.
Peripherals
Peripherals
End user peripherals such as mobile phone cases, dongles, and cables
Mobiles
Mobiles
Cell phones to meet your business needs.


servicenow
All
Favorites
History
Workspaces
Admin
Hardware
Search
Service Catalog > Hardware
20 per page
Search catalog
Hardware
Order from a variety of hardware to meet your business needs, including phones, tablets and laptops.
Items
Developer Laptop (Mac)
₹132,279.0232
Macbook Pro
+₹8,824.4845
Annually
Preview
Macbook Pro
The Apple Macbook Pro is laptop that is second to none. It provides a Retina display that fights glare and weighs approximately five pounds. High powered enough to complete computing tasks.
Technical Specs:
Intel core i7 processor
512GB PCIe-based flash storage
Intel Iris Pro Graphics
Backlit keyboard
iPad mini
₹44,034.1778
Request for iPad mini
Preview
iPad combines the power and capability of a computer with the ease of use and versatility you'd never expect from one. It has a larger 10.2-inch retina display, support for the full-size smart keyboard and the amazing new capabilities of iPadOS
Key Features:





Conclusion:

The Laptop Request Catalog Item project effectively simplifies the process of requesting laptops within the organization by utilizing ServiceNow's Service Catalog features. By creating a dynamic catalog item, the project provides users with an intuitive and easy-to-use interface, minimizing mistakes and boosting productivity. This initiative showcases how ServiceNow can transform manual, cumbersome workflows into automated, efficient, and user-friendly solutions. It enhances both service delivery and employee satisfaction by offering a modern, seamless laptop request experience.