



# MANGAYARKARASI COLLEGE OF ENGINEERING

## Department Of Computer Science Engineering

Completed a project on

## LAPTOP REQUEST CATALOG ITEM

Submitted By

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# LAPTOP REQUEST CATALOG ITEM

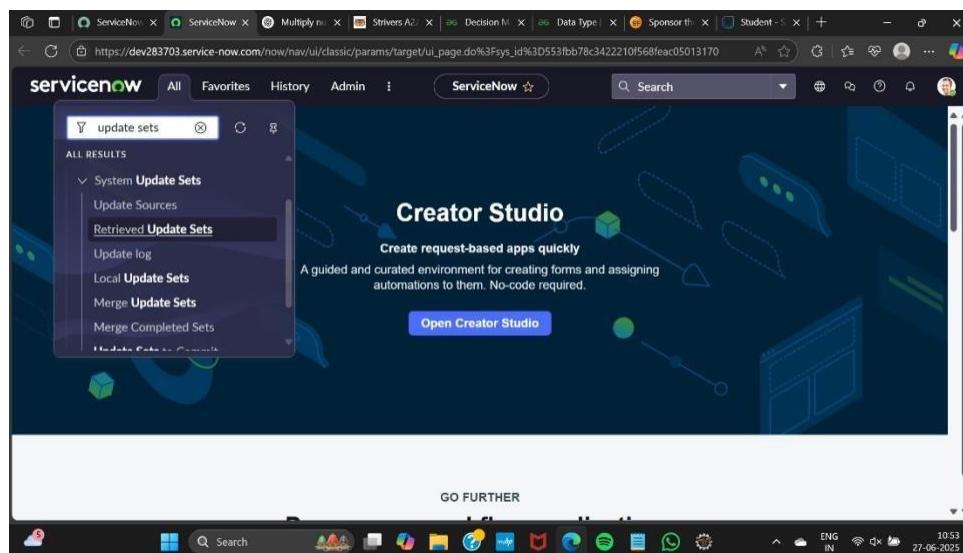
## Problem Statement:

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 behavior 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.

## Update set

### Create Local Up dateset

1. Open service now.
2. Click on All>>search for update set.
3. Select local up date sets under system update sets.



4. Click on new.

The screenshot shows a ServiceNow browser window with the title "Update Sets". The URL is https://dev283703.service-now.com/nav/uiclassic/params/target/sys\_update\_set.list.do?sysparm\_userpref\_module=3D50047e06... The page displays a table of update sets with columns: Name, Application, State, Installed from, Created, Created by, Parent, and Batch Base. There are two entries:

Name	Application	State	Installed from	Created	Created by	Parent	Batch Base
Default	Security Center	In progress		2025-04-03 13:58:52	system	(empty)	(empty)
Default	Global	In progress		2025-04-03 12:20:22	system	(empty)	(empty)

Below the table, there is a section titled "Related Links" with a link to "Merge Update Sets". The bottom of the screen shows the Windows taskbar with various pinned icons and the date/time as 27-06-2025.

5. Fill the following details to create a update set as:“Laptop Request”

The screenshot shows a ServiceNow browser window with the title "Catalog Item - New Record". The URL is https://dev283703.service-now.com/nav/uiclassic/params/target/sc\_cat\_item.do?sys\_id=3D-1%26sys\_is\_list%3Dtrue%26sys\_target... The form has fields for Name, Application, Active status, and fulfillment automation level. The Name field is filled with "Laptop Request". The Application field is set to "Global". The Active checkbox is checked. The Fulfillment automation level dropdown is set to "Unspecified". Other fields include Catalogs (Service Catalog), Category (Hardware), State (-- None --), and Checked out (-- None --). The bottom right shows the Windows taskbar with the date/time as 27-06-2025.

6. Click on submit and make current.

- By click in on the button it activates the update set.

The screenshot shows the ServiceNow Update Sets list page. The URL is https://dev283703.service-now.com/nav/uiclassic/params/target/sys\_update\_set\_list.do. The page title is "Update Sets". A message at the top says "Your current update set has been changed to Laptop Request Project [Global]". The table has columns: Name, Application, State, Installed from, Created, Created by, Parent, and Batch Base. The "Name" column is sorted. There are three rows:

Name	Application	State	Installed from	Created	Created by	Parent	Batch Base
Default	Security Center	In progress		2025-04-03 13:58:52	system	(empty)	(empty)
Default	Global	In progress		2025-04-03 12:20:22	system	(empty)	(empty)
Laptop Request Project	Global	In progress		2025-06-26 22:25:04	admin	(empty)	(empty)

Related Links: Merge Update Sets

**NOTE: Perform allocations under this newly created up date set only.**

## Service Catalog Item

### Create Service Catalog Item

- Open service now.
- Click on All>>service catalog.
- Select maintain items under catalog definitions.
- Click on New.

The screenshot shows the ServiceNow Catalog Items list page. The URL is https://dev283703.service-now.com/nav/uiclassic/params/target/sc\_cat\_item\_list.do%3Dsysparm\_userpref\_module%3Dd420ccf0c611... The page title is "Catalog Items". A message at the top says "All > Type != Bundle > Class != Order guide > Type != Package > Class != Content Item > Published item is empty". The table has columns: Name, Short description, Active, Roles, Catalogs, Category, Price, Type, and Updated. The "Name" column is sorted. There are ten rows:

Name	Short description	Active	Roles	Catalogs	Category	Price	Type	Updated
3M Privacy Filter - Lenovo X1 Carbon	Privacy Filter - X1 Carbon	true		Service Catalog	Peripherals	\$43.19	Item	2022-11-20 20:46:33
3M Privacy Filter - MacBook Pro	Privacy Filter	true		Service Catalog	Peripherals	\$42.23	Item	2022-11-20 20:46:33
3M Privacy Filter - Macbook Pro Retina	Privacy Filter	true		Service Catalog	Peripherals	\$40.31	Item	2022-11-20 16:00:00
Access	Microsoft Access	true		Service Catalog	Software	\$139.99	Item	2022-11-20 20:46:33
Acrobat	Adobe Acrobat	true		Service Catalog	Software	\$139.99	Item	2022-12-05 20:46:33
Add network switch to datacenter cabinet	This standard change template describes...	true		Service Catalog	Network Standard Changes	\$0.00	Item	2025-06-08 01:49:00
Add/Remove users from group	Add/Remove users from group	true		Service Catalog	Services	\$0.00	Item	2022-12-05 10:17:33
Adobe Acrobat Pro	Create, edit or convert PDF files	true		Service Catalog	Software	\$0.00	Item	2022-12-05 20:46:33

Buttons: Activate, Deactivate

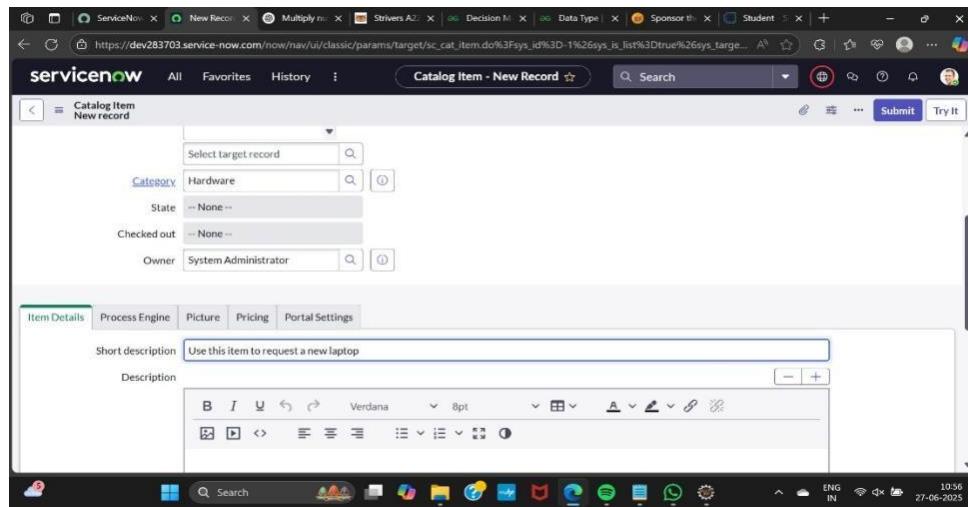
5. Fill the following details to create a new catalog

item Name: Laptop Request

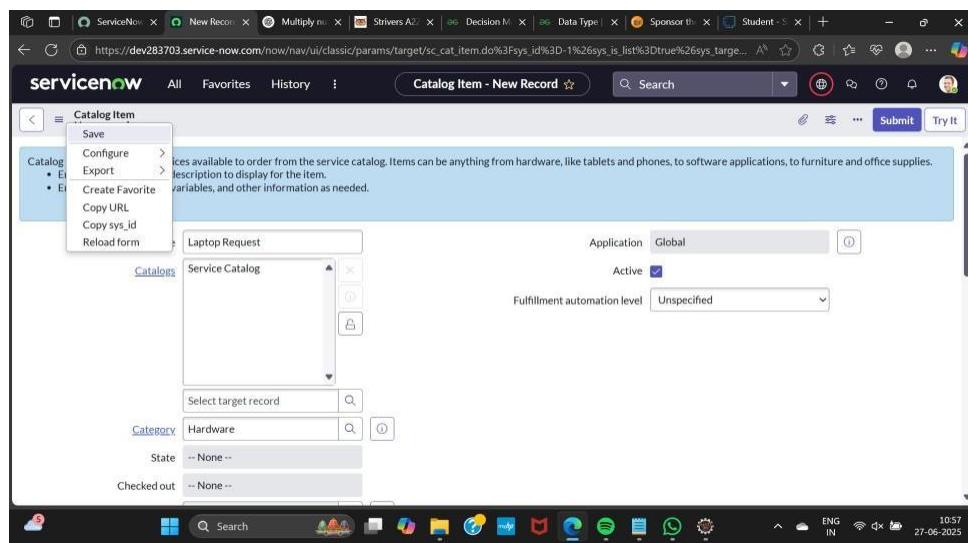
Catalog: service Catalog

Category: Hardware

Short Description: Use this item to request a new laptop



6. Click on 'SAVE'.



## Add variables

- After saving the catalog item form scroll down and click on variable(related list).

The screenshot shows the ServiceNow interface for creating a new catalog item. The top navigation bar includes tabs like All, Favorites, History, and a search bar. Below the header, there are buttons for Copy, Try It, Update, Edit in Catalog Builder, and Delete. A 'Related Links' section lists 'Item Diagnostic' and 'Run Point Scan'. The main area is titled 'Catalog Item - Laptop Request'. Under this, there are two sections: 'Variables' and 'Variable Sets'. The 'Variables' section has a search bar and a table with columns for Type, Question, and Order. A message 'No records to display' is shown. The 'Variable Sets' section also has a search bar and a table with a single row labeled 'Variable set'. The bottom of the screen shows the Windows taskbar with various pinned icons.

- Click on new and enter the details as below

### 1. Variable 1: Laptop

Model Type: Single line

text Name: laptop

model Order:100

The screenshot shows the 'Variable - New Record' form. At the top, it says 'Variable New record'. Below that, there are fields for Application (set to Global), Type (Single Line Text), Catalog Item (Laptop Request), and Order (100). To the right of these fields are checkboxes for Active (checked), Mandatory (unchecked), Read only (unchecked), and Hidden (unchecked). Below the form, there are tabs for Question, Annotation, Type Specifications, Default Value, Auto-populate, Permission, and Availability. The 'Question' tab is selected, showing fields for Question (Laptop Model), Name (laptop\_model), Conversational label, Tooltip, and Example Text. The bottom of the screen shows the Windows taskbar.

- Click on submit.
- Again click on new and add Remaining variables in the above process

The screenshot shows the ServiceNow interface for managing catalog items. The title bar says 'Catalog Item - Laptop Request'. Below it, there's a toolbar with 'Edit in Catalog Builder' and other buttons. A table lists a single variable: 'Laptop Model' (Type: Single Line Text, Order: 100). Other tabs like 'Variables (1)', 'Variable Sets', and 'Catalog UI Policies' are visible at the top.

## 2. Variable 2: Justification

Type: Multi linetext

Name: justification

Order: 200

The screenshot shows the 'Variable - New Record' page. It has fields for Application (Global), Type (Multi Line Text), Catalog Item (Laptop Request), and Order (200). The 'Active' checkbox is checked. The 'Question' tab is selected, showing the question 'Specify the Question that explains the options available to the end user when ordering the item' and the value 'Justification'. Other tabs include 'Annotation', 'Type Specifications', 'Default Value', 'Auto-populate', 'Permission', and 'Availability'.

## 3. Variable3: Additional Accessories

Type: Check box

Name: additional\_accessories

Order: 300

## 4. Variable4:AccessoriesDetails

Type: Multi linetext

Name: accessories\_details

Order: 400

The screenshot shows the ServiceNow Catalog Item - Laptop Request 3 page. At the top, there are buttons for Copy, Try It, Update, Edit in Catalog Builder, and Delete. Below this is a section for Related Links with options like Item Diagnostic and Run Point Scan. A navigation bar includes Variables (4), Variable Sets, Catalog UI Policies (1), Catalog Client Scripts, Available For, Not Available For, Categories (1), Catalogs (1), Catalog Data Lookup Definitions, and Related Articles. The main content area displays a table of variables:

Type	Question	Order	Name	Read only	Created
Single Line Text	Laptop Model	100	laptop_model	false	2025-09-17 05:46:09
Multi Line Text	Justification	200	justification	false	2025-09-17 05:47:03
CheckBox	Additional Accessories	300	additional_accessories	false	2025-09-17 05:47:45
Multi Line Text	Accessories Details	400	accessories_details	false	2025-09-17 05:48:40

- After adding above variable which are added to newly created catalog item
- Then save the catalog item.

The screenshot shows the same Catalog Item - Laptop Request 3 page. A context menu is open on the left side of the variable table, listing options like Save, Insert, Insert and Stay, Edit in Catalog Builder, and others. The table of variables is visible below the menu.

## UI Policy

### Create Catalog UI policies

- Click on all>>search for service catalog
- Select maintain item under catalog definition
- Search for 'laptop request' which is created before

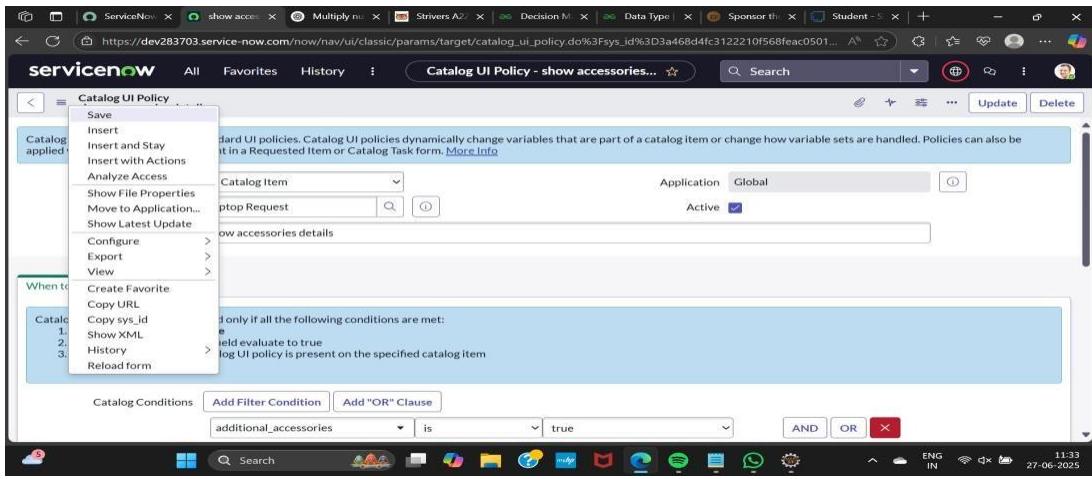
The screenshot shows a list of catalog items in ServiceNow. The columns include Name, Short description, Active, Roles, Catalogs, Category, Price, Type, and Updated. The list includes items such as 'Laptop Request', 'Lenovo ThinkPad Power Adapter - 135W', 'Lenovo Thinkpad Power Adapter - 90W', 'Lenovo USB Ethernet Adapter', 'Lenovo X1 Carbon Power Adapter', and 'Loaner Laptop'. The 'Laptop Request' item is selected.

Name	Short description	Active	Roles	Catalogs	Category	Price	Type	Updated
Search	Search	Search	Search	Search	Search	Search	!Package	Search
Laptop Request	Use this item to request a new laptop	true		Service Catalog	Hardware	\$0.00	Item	2025-06-26 22:53:09
Lenovo ThinkPad Power Adapter - 135W	For Lenovo Thinkpad, AC Adapter, 135W	true		Service Catalog	Peripherals	\$99.99	Item	2022-11-20 20:46:33
Lenovo Thinkpad Power Adapter - 90W	For Lenovo Thinkpad, T-Series, 90W	true		Service Catalog	Peripherals	\$60.00	Item	2022-11-20 20:46:33
Lenovo USB Ethernet Adapter	For Lenovo X1 Carbon	false		Service Catalog	Peripherals	\$28.79	Item	2022-11-20 20:46:33
Lenovo X1 Carbon Power Adapter	For Lenovo X1 Carbon	true		Service Catalog	Peripherals	\$60.00	Item	2022-11-20 20:46:33
Loaner Laptop	Short term, while computer is repaired/I...	true		Service Catalog	Hardware	\$0.00	Item	2022-11-20 20:46:33

4. Select 'laptop request' and scroll down click on "Catalog Ui policies"
5. In the catalog ui policies related list tab click on new.

The screenshot shows the 'Catalog Item - Laptop Request' page. The 'Catalog UI Policies' tab is selected. The page includes tabs for Catalog UI Policies, Catalog Client Scripts, Available For, Not Available For, Categories (1), Catalogs (1), and Catalog Data Lookup Definitions. The Catalog UI Policies tab shows a table with columns: Order, Short description, Variable set, Conditions, Reverse if false, On load, Inherit, Updated, and Order. A note at the bottom states 'No records to display'.

6. Give short description as: show accessories details
7. Set the Catalog Condition in the related list tab 'when to apply'  
[field: additional\_accessories, operator: is, value: true]
8. Click on save(do not click on submit).
9. Scroll down and select 'catalog ui action'.
10. Then click on new button.
11. Select variable name as: accessories\_details  
Order:100  
Mandatory: True  
Visible : True
12. Click on save and again click save button of the catalog ui policy form



## UI Action

### Create ui action

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)

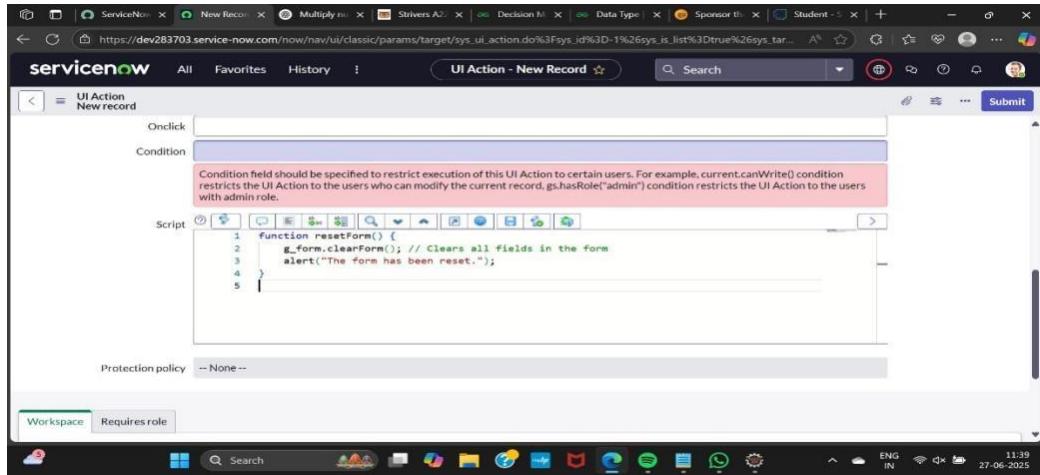
Order:100

Action name: Reset form

Client : checked

Script:

```
Function reset Form(){
g_form.clearForm(); //Clear all fields in the form
alert("The form has been reset.");
}
```



6. Click on save

## Export Up dateset

### Exporting changes to another instances

1. Click on All>>search for update sets
2. Select local up dateset
3. Select create up dateset i.e. ‘Laptop Request Project’
4. Set the state to ‘Complete’
5. In the related list Up date tab, updates are visible which we perform under this up dateset.

The screenshot shows the ServiceNow interface for managing update sets. The title bar says 'Update Set - Laptop Request Project'. Below it, there's a table titled 'Customer Updates (11)'. The columns are 'Created', 'Type', 'View', 'Target name', 'Updated by', 'Remote update set', and 'Action'. The table lists various entries such as Catalog UI Policy, Catalog UI Policy Action, Variable, Justification, Accessories Details, Additional Accessories, Catalog Item, Catalog Items Catalog, Catalog Item Category, UI Action, and another UI Action. Most entries have 'admin' as the updated by user and 'INSERT\_OR\_UPDATE' as the action.

6. Click on export to XML, it download one file

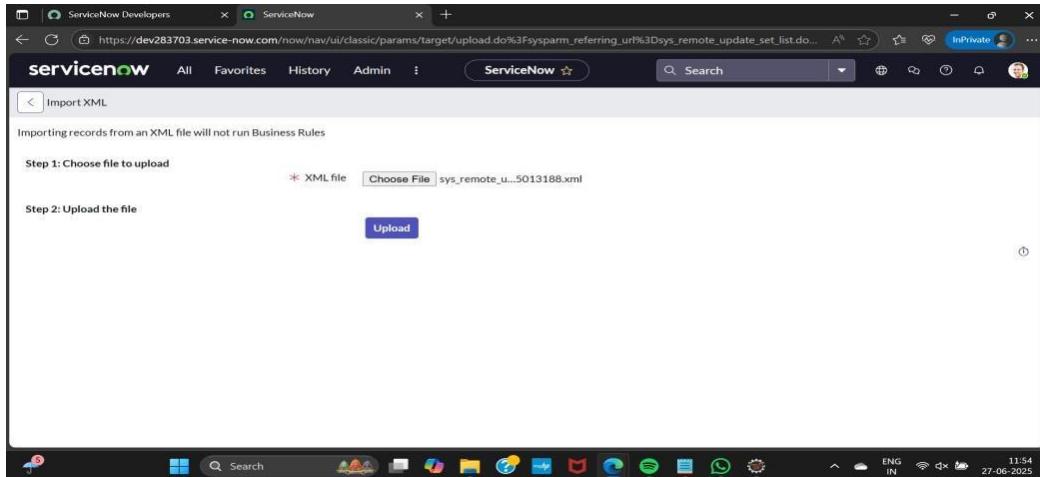
This screenshot shows the same ServiceNow page as above, but with a different focus. The 'Related Links' section at the bottom has 'Export to XML' highlighted with a red box. A context menu is open over the 'See more' button in the 'Downloads' sidebar, showing options like 'Open file' and 'Open file' for a file named 'sys\_remote\_update\_set\_d37a0d83c3522210f568feac05013188.xml'. The status bar at the bottom right shows '11:48 27-06-2025'.

## Login to another Instance

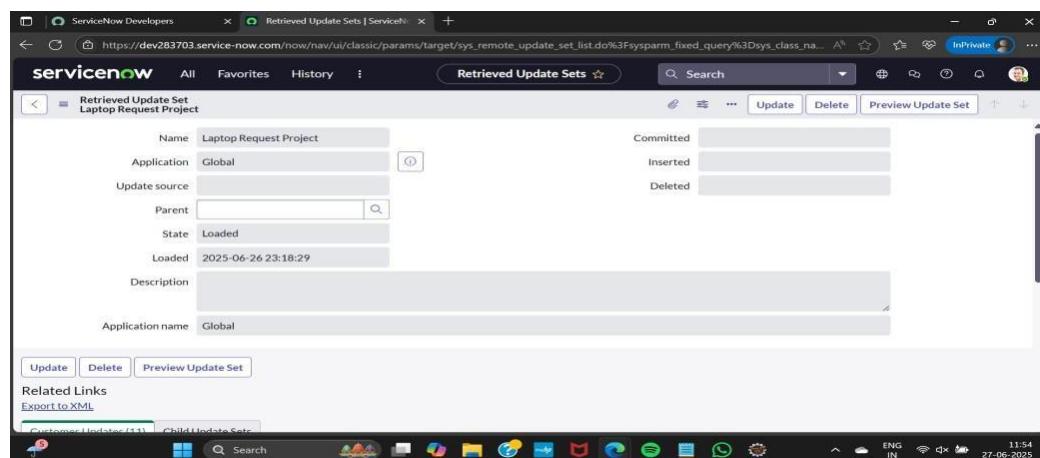
### Retrieving the up date set

1. Open another instance in incognito window
2. Login with credentials
3. Click on all>>search for up date sets
4. Select “Retrieve up date set” under system up date set
5. It open retrieve up dataset list and scroll down

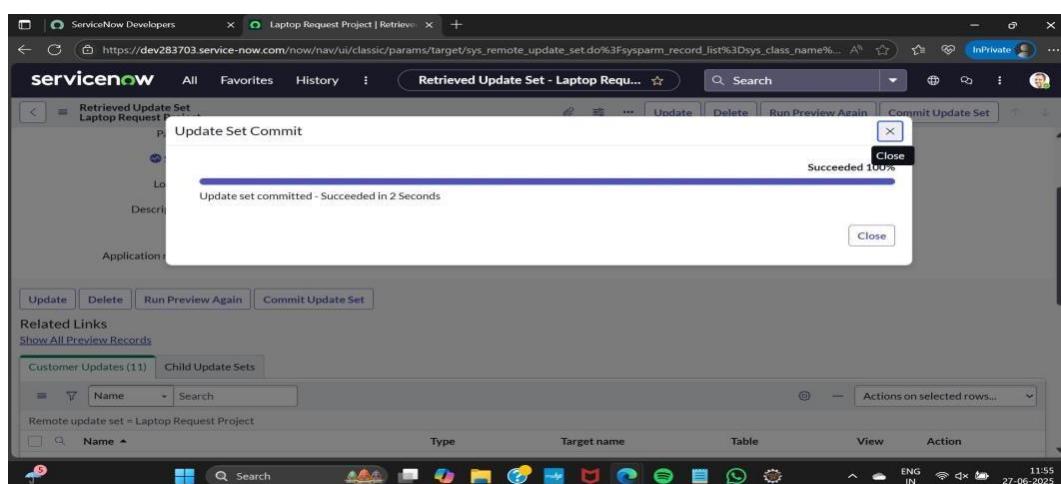
6. Click on Import update set from XML
7. Upload the downloaded file in XML file
8. Click on Upload and it gets uploaded.



9. Open retrieved up date set 'laptop request project'



10. Click on preview up dateset
11. And click on commit up dateset



12. And also see the related tab updates
13. After committing updateset in this instance we get all updates which are do in the previous instance.

Name	Type	Target name	Table	View	Action
catalog_ui_policy_3a468ddfc3122210f568feac050131db	Catalog UI Policy	show accessories details			INSERT_OR_UPDATE
catalog_ui_policy_action_ead60903c3522210f568feac05013108	Catalog UI Policy Action	accessories_details			INSERT_OR_UPDATE
item_option_new_5e3305c7c3122210f568feac050131cf	Variable	Laptop Model			INSERT_OR_UPDATE
item_option_new_a2e30d0fc3122210f568feac05013137	Variable	Justification			INSERT_OR_UPDATE
item_option_new_a574d0dfc3122210f568feac05013170	Variable	Accessories Details			INSERT_OR_UPDATE
item_option_new_e93405c7c3122210f568feac050131d6	Variable	Additional Accessories			INSERT_OR_UPDATE
sc_cat_item_218ef887c3122210f568feac050131ec	Catalog Item	Laptop Request			INSERT_OR_UPDATE
sc_cat_item_catalog_07cef4c7c3122210f568feac050131f6	Catalog Items Catalog	Service Catalog.Laptop Request			INSERT_OR_UPDATE
<b>sc_cat_item_category_9fcefc4c7c3122210f568feac050131fa</b>	<b>Catalog Item Category</b>	<b>Hardware.Laptop Request</b>			<b>INSERT_OR_UPDATE</b>
sys_ui_action_39cfcc983c3522210f568feac05013149	UI Action	Shopping Cart [sc_cart]			INSERT_OR_UPDATE
sys_ui_action_3fd70d83c3522210f568feac05013112	UI Action	Shopping Cart [sc_cart]			INSERT_OR_UPDATE

## Testing

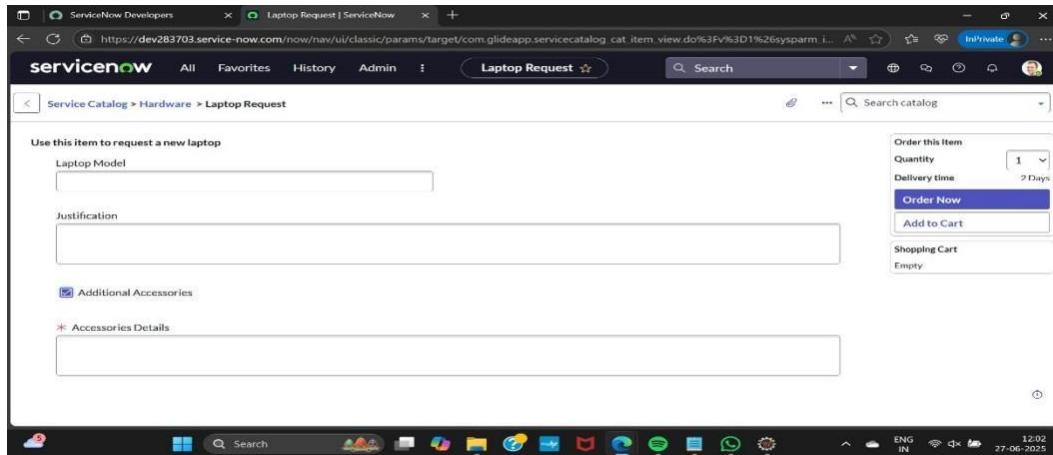
### Test CatalogItem

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.

Item	Description	Price
IPad pro	Request for iPad pro ► Preview	\$799.00 +\$30.00 Monthly
Laptop Request	Use this item to request a new laptop	\$1,100.00 +\$100.00 Annually
Sales Laptop	Acer Aspire NX ► Preview	\$1,100.00 +\$100.00 Annually
Standard Laptop	Lenovo - Carbon x1 ► Preview	\$1,100.00 +\$100.00 Annually
Apple Watch		\$349.99

5. It shows three variable sonly.

- As per our scenario, when we click on additional accessories check box then accessories details fields is visible and that should be mandatory.



- Now see the results, it fulfills our requirements.

## Conclusion

The Laptop Request Catalog Item project successfully streamlines the process of requesting laptops within the organization by leveraging ServiceNow's Service Catalog capabilities. Through the implementation of a dynamic catalog item, the project ensures that users have an intuitive and user-friendly interface, reducing errors and improving efficiency. This project demonstrates how Service Now can be used to replace manual, error-prone processes with automated, efficient, and user-centric solutions. It not only improves service delivery but also enhances employee satisfaction by providing a modern and streamlined request experience.