

Ordering a Wi-Fi Router via ServiceNow Service Catalog

1. Project Overview:

This project is focused on **Wi-Fi Router Service Catalog Implementation** within **ServiceNow**, designed to address the challenge of streamlining and automating the process for employees to request IT equipment, specifically Wi-Fi routers. The goal is to deliver a comprehensive solution by leveraging **ServiceNow's Service Catalog** and **Workflow Automation** capabilities. Through this project, we aim to enhance **operational efficiency**, **user experience**, and **inventory management**, while supporting the long-term goals of improving IT service delivery and reducing manual interventions for the IT department.

2. Objectives:

- **Automate the Request Process:** Simplify and automate the process for requesting Wi-Fi routers across departments.
- **Improve Approval Workflows:** Create a seamless approval process that reduces delays and ensures compliance with business rules.
- **Enhance Inventory Management:** Integrate real-time inventory tracking and procurement processes to avoid stock outs and ensure timely deliver.
- **Self-Service Portal:** Develop a user-friendly Service Portal where employees can request Wi-Fi routers.
- **Approval and Task Automation:** Implement approval workflows and automated task creation for inventory checks and router delivery.
- **Real-Time Inventory Integration:** Ensure stock levels are automatically checked before requests are submitted and tasks are created for procurement when needed.

3. Key Features and Concepts Utilized:

- **Service Now Service Catalog:** Used for creating and managing Wi-Fi router catalog items that employees can request.
- **Workflow Automation:** Automated workflows for routing approvals, creating tasks, and managing inventory.
- **Real-Time Inventory Integration:** Integration with external inventory management systems to ensure accurate stock information.
- **Role-Based Access Control (RBAC):** Configuring user roles to control access to the service catalog and approval workflows.
- **Email Notifications:** Automated emails sent to users and approvers at different stages (request submitted, approval/rejection, and fulfillment).
- **Reporting and Analytics:** Dashboards to track request volumes, approval times, task progress, and inventory levels.

4. Detailed Steps to Solution Design:

- **Data Models:** Design of data tables to store router request information, approval statuses, inventory details, and task assignments.
- **User Interface Designs:** Customization of the **Service Portal** to include a simple and intuitive catalog item for Wi-Fi routers, with variables such as router model, quantity, and delivery address. □ **Business Logic:** □ Approval workflows to route requests to the appropriate manager or IT approver.
- Task automation to create inventory checks and fulfillment actions.
- Integration logic to check router stock in real-time and trigger procurement processes if necessary.

Step 1 : Sign in to ServiceNow.

Step 2 : Sign up for a developer account on the ServiceNow Developer site
“<https://developer.servicenow.com>”.

Step 3 : Once logged in, navigate to the "Personal Developer Instance" section.

Click on "Request Instance" to create a new ServiceNow instance.

Step 4 : Fill out the required information and submit the request.

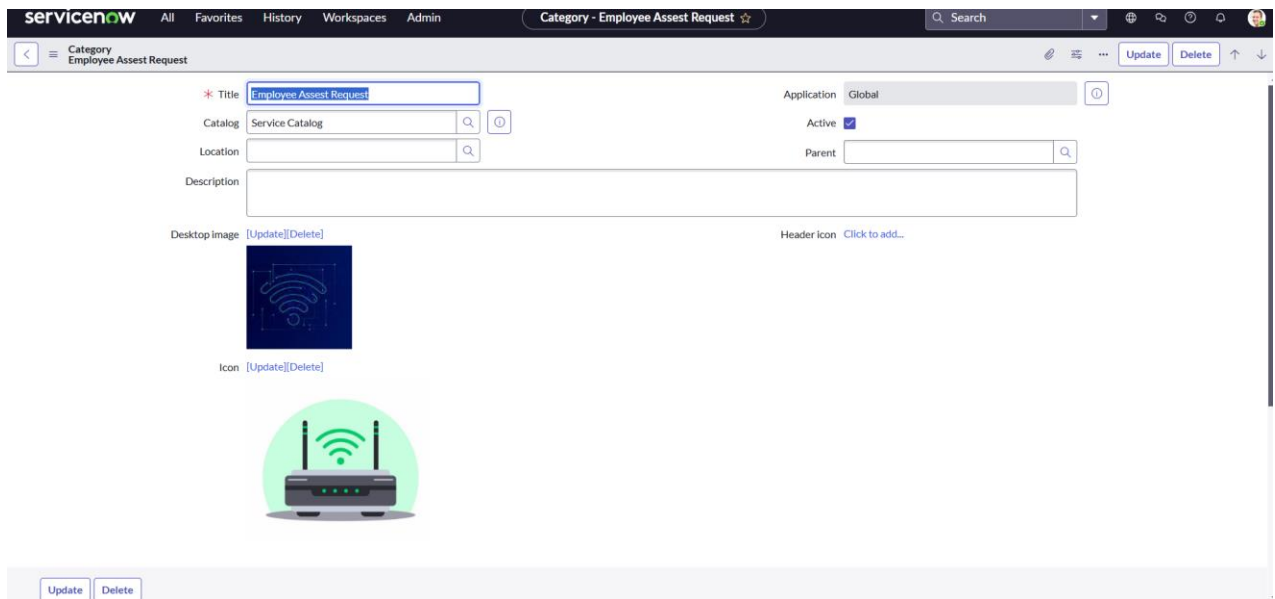
Step 5 : You'll receive an email with the instance details once it's ready.

Step 6 : Log in to your ServiceNow instance using the provided credentials.

Now you will navigate to the ServiceNow.

Step 7 : Open “Maintain categories” >> New

Step 8 : Fill the details as below



Step 9 : To add a new Service Catalog item in ServiceNow, follow these steps to enter a title for the category, select the catalog, and upload the images. Here's a step-by-step guide:

1. Enter a Title for Category
2. Select the Catalog in Which You Are Going to Add
3. Upload the Desktop Image
4. Upload the Icon Image
5. Save

Step 10 : Open “Maintain Items” >> New

Step 11 : Fill the details as below

< ≡ Catalog Item
Wifi Router with 2 Antenna

Update Edit in Catalog Builder Cancel checkout Delete

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 Wifi Router with 2 Antenna Application Global ⓘ

Catalogs Service Catalog Active ☒

Category Employee Assest Request Fulfillment automation level Unspecified

State Published

Checked out true

Owner System Administrator

Item Details Process Engine Picture Pricing Portal Settings

Request method Request

Hide 'Add to Cart' ☒

Hide Quantity ☒

Hide Delivery time ☐

Hide 'Save as Draft' ☐

Hide Attachment ☐

Mandatory Attachment ☐

Update Edit in Catalog Builder Cancel checkout Delete

Related Links
[Item Diagnostic](#)

Step 12 : Steps to Add a New Service Catalog Item in ServiceNow

1. Give a Name for the Catalog Item
2. Select the Catalog
3. Select the Category
4. Save the Item
- 5.Go to Portal Settings and select the Request

Step 13 : Add variables to the Item

Click on Variables >> New

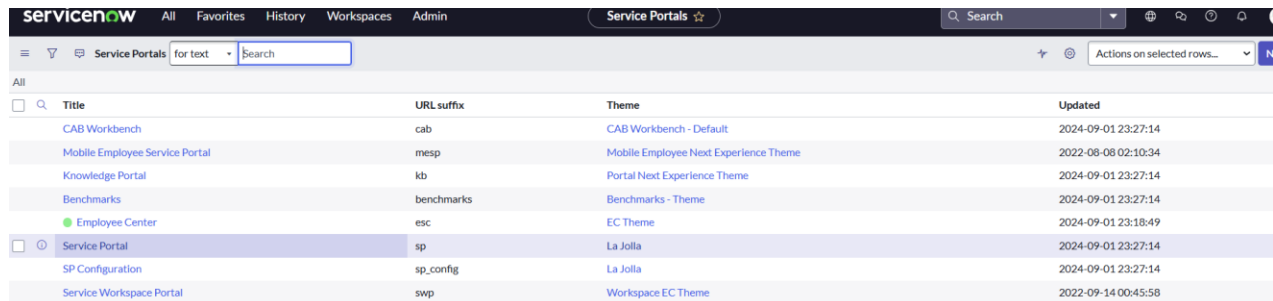
Step 14 : Fill the details as below

Step 15 : Steps to Add Variable for Catalog Item

1. Give a Question for Catalog Item
2. Name is Autopopulated
3. Save the variable

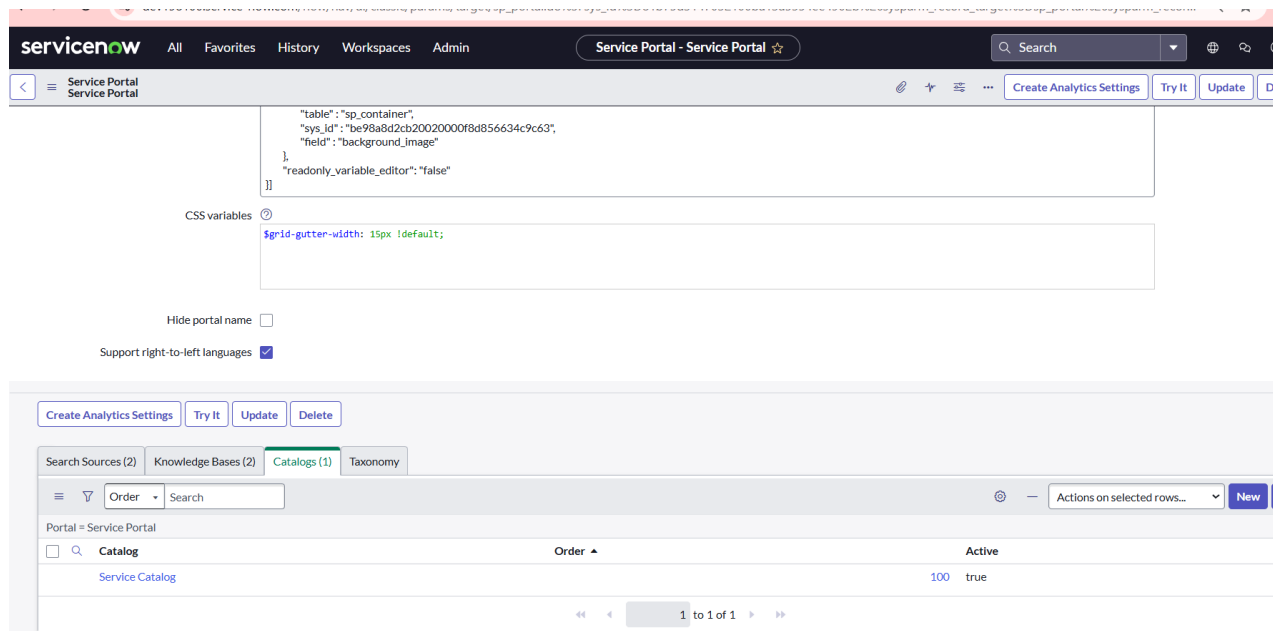
Step 16 : Open “Portals”

Step 17 : Select Service Portal



	Title	URL suffix	Theme	Updated
<input type="checkbox"/>	CAB Workbench	cab	CAB Workbench - Default	2024-09-01 23:27:14
<input type="checkbox"/>	Mobile Employee Service Portal	mesp	Mobile Employee Next Experience Theme	2022-08-08 02:10:34
<input type="checkbox"/>	Knowledge Portal	kb	Portal Next Experience Theme	2024-09-01 23:27:14
<input type="checkbox"/>	Benchmarks	benchmarks	Benchmarks - Theme	2024-09-01 23:27:14
<input type="checkbox"/>	Employee Center	esc	EC Theme	2024-09-01 23:18:49
<input checked="" type="checkbox"/>	Service Portal	sp	La Jolla	2024-09-01 23:27:14
<input type="checkbox"/>	SP Configuration	sp_config	La Jolla	2024-09-01 23:27:14
<input type="checkbox"/>	Service Workspace Portal	swp	Workspace EC Theme	2022-09-14 00:45:58

Step 18 : Select Catalogs



Service Portal - Service Portal

JSON configuration:

```

{
  "table": "sp_container",
  "sys_id": "be98a8d2cb2002000f8d856634c9c63",
  "field": "background_image",
  "readonly_variable_editor": "false"
}

```

CSS variables:

```

$grid-gutter-width: 15px !default;

```

Hide portal name ☐

Support right-to-left languages ☒

Buttons: Create Analytics Settings, Try It, Update, Delete

Tabs: Search Sources (2), Knowledge Bases (2), Catalogs (1), Taxonomy

Portal = Service Portal

Order	Catalog	Active
100	Service Catalog	true

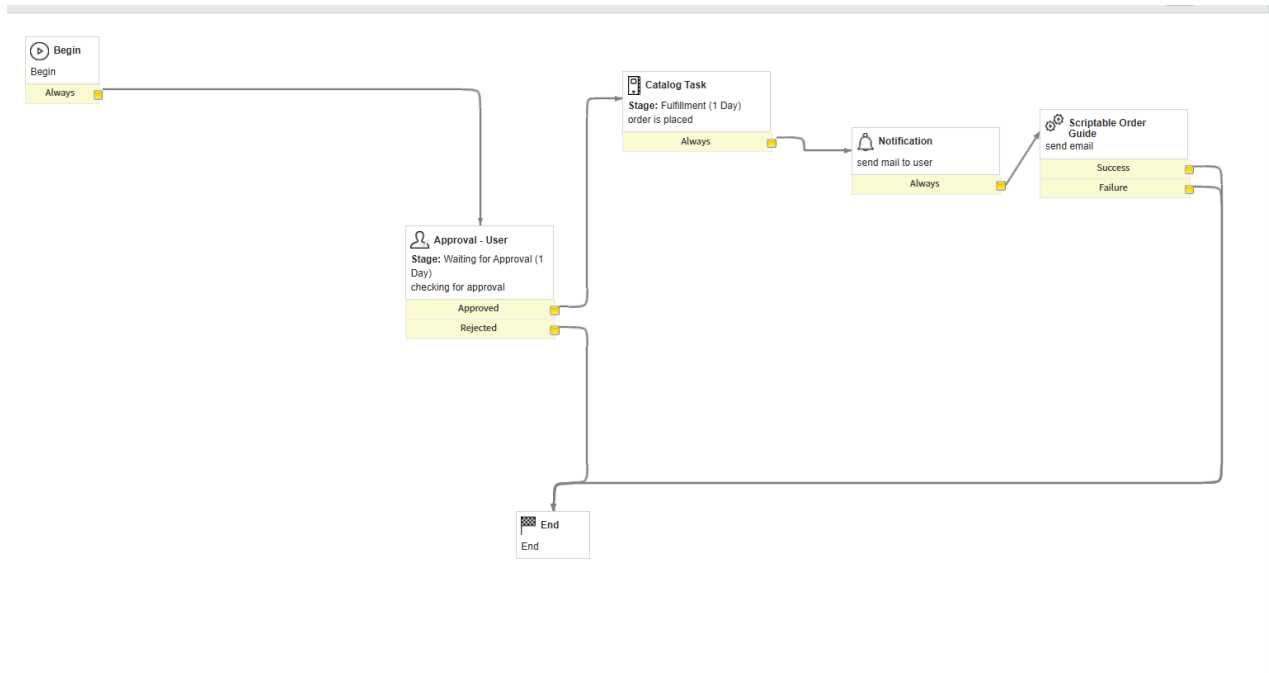
1 to 1 of 1

Step 19 : Select Edit

Select the Category and Add to Service Portal and Save

Step 20 : Search for Workflow Editor .

Step 21 : Open Workflow Editor >> New Workflow



Create a workflow for process Automation

Step-by-Step Implementation :

1. Item Request by User:

A user submits a request for an item through a form or a specific request interface.

2. Approval Workflow:

The request goes into a pending state, awaiting approval from an authorized user or admin.

Notifications can be sent to potential approvers to review the request.

3. Catalog Task Creation:

Upon approval, a task is created in the catalog or inventory system to process the request.

This task involves verifying item availability, preparing the item for delivery, etc.

4. Email Notification:

Once the catalog task is completed and the order is successfully placed, an email is sent to the user notifying them of the successful placement of their order.

Step 22 : Add the workflow to the item

servicenow All Favorites History Workspaces Admin Catalog Item - Wifi Router with 2 Antenna

Search

Update Edit in Catalog Builder Cancel checkout Delete

Catalog Item
Wifi Router with 2 Antenna

State Published

Checked out true

Owner System Administrator

Item Details Process Engine Picture Pricing Portal Settings

Select the appropriate process engine for the catalog item. Only one engine can be selected.

Flow

Workflow Item Request workflow

Execution Plan

Update Edit in Catalog Builder Cancel checkout Delete

Related Links

Item Diagnostic
Show VA render type
Edit checked out item in advanced view
Run Point Scan

Variables Variable Sets Catalog UI Policies Catalog Client Scripts Available For Not Available For Categories (1) Catalogs (1) Catalog Data Lookup Definitions Related Articles Related Catalog Items Assigned Topics

Step 23 : Open Service Portal and make a Request for item

servicenow Knowledge Catalog Requests System Status Wish List Cart Tours Susmitha Baira

How can we help?

wifi

Request Something Browse the catalog for services and items you need

Knowledge Base Browse and search for articles, rate or submit feedback

Get Help Contact support to make a request, or report a problem

Current Status

No system is reporting an issue

More information...

My Assessments and Surveys

No assessments or surveys for you at the moment

My Approvals

You have no pending approvals

Announcements

Employee Center is available to you

My Open Incidents

INC0010067 • 2h ago

Step 24 : Placing Request

cenow

Knowledge Catalog Requests System Status Cart Tours

Home > Request Summary

Submitted: 2024-11-20 01:35:41
Request Number: REQ0010004
Estimated Delivery: 2024-11-20

Item	Delivery Date	Stage	Price (each)	Quantity	Total
Wifi Router with 2 Antenna	2024-11-20	► Fulfillment	---	--	---
					Total: \$0.00

Step 25 : Open “My Requests”

Step 26 : Open Request Record

Step 27 : Open Request item

servicenow All Favorites History Workspaces Admin

Request - REQ0010004

Search

Request REQ0010004

Number: REQ0010004

Requested for: System Administrator

Location:

Due date: 2024-11-20 15:35:41

Price: \$0.00

Description:

Short description:

Special instructions:

Opened: 2024-11-20 01:35:41

Opened by: System Administrator

Approval: Approved

Request state: Approved

Update Cancel Request Copy Delete

Related Links

Show Workflow

Workflow Context

Requested Items (1) Approvers

Number Search

Request = REQ0010004

Number	Quantity	Catalog	Item	Due date	Price	Assigned to	Stage
REQ0010004	1	(empty)	Wifi Router with 2 Antenna	2024-11-20 15:35:41	\$0.00	(empty)	► Fulfillment

Step 28 : waiting for approval

Approval for = RITM0010023		
State	Approver	Created
Approved	Abel Tuter	2024-06-11 09:47:04

Then task is created

Step 29 : Open the Service Catalog Task

ServiceNow Catalog Task SCTASK0010004

Number: SCTASK0010004

Assigned to: [Search]

Configuration Item: [Search]

Active: ☒

Approval: Not Yet Requested

Priority: 4 - Low

State: Open

Request item: RITM0010004

Requested for: System Administrator

Short description: setting items

Description: [Text Area]

Work notes: [Text Area]

Post

Activities: 1

System Administrator

Impact: 3 - Low

Opened by: System Administrator

Priority: 4 - Low

State: Open

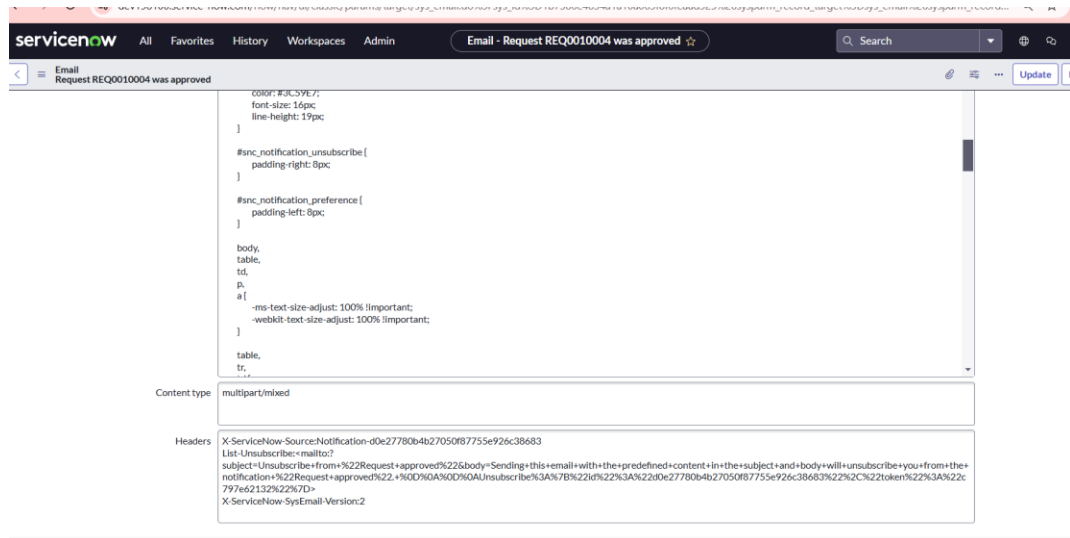
Field changes • 2024-11-20 01:35:42

Update Close Task Delete

Click on Close task

Result:

open emails



5. Testing and Validation:

The testing approach focuses on ensuring the solution functions as expected across all components and scenarios:

Unit Testing:

- Test individual components, such as catalog item creation, variables (e.g., router models), and task automation.

User Interface Testing:

- Ensure the **Service Portal** is user-friendly and intuitive, with responsive design for various devices.
- Validate that all catalog items and variables are correctly displayed and selectable. □ Test email notifications for correct content and delivery.

Integration Testing:

- Verify integration with external inventory systems to ensure accurate real-time stock checks.
- Test the approval workflow to ensure requests are routed and approved correctly.

End-to-End Testing:

- Simulate the entire process from request submission to task fulfillment and router delivery to ensure all workflows, notifications, and tasks function together seamlessly.

6. Key Scenarios Addressed by Service Now in the Implementation Project:

- **Self-Service Request Submission:** Employees can request Wi-Fi routers through an easy-to-use portal with the correct options for router models, quantities, and delivery preferences.
- **Automated Approval Workflow:** Requests are automatically routed to the appropriate approvers, ensuring that only authorized individuals can approve router requests.
- **Task Automation for Fulfillment:** Upon approval, tasks are created for IT and inventory teams to process the order, verify availability, and fulfill the request.
- **Real-Time Inventory Checks:** Ensures that only available routers are requested, and tasks are created for procurement when stock is insufficient.
- **Email Notifications:** Automated updates are sent to users and approvers at key stages of the request process.
- **Role-Based Access:** Configured roles determine which users can request routers, approve requests, and view inventory details.
- **Scalable Catalog Management:** The system can be easily extended to accommodate additional IT equipment in the future.

7. Conclusion:

- **Efficiency Gains:** The Service Now-based Wi-Fi Router Service Catalog automates the entire process, reducing manual intervention and speeding up request fulfillment.
- **Improved User Experience:** Employees now have a seamless and user-friendly interface to request IT equipment, improving overall satisfaction.
- **Better Inventory Management:** Real-time inventory checks and automated procurement tasks ensure that Wi-Fi routers are always in stock and ready for delivery.
- **Streamlined Approvals:** Automated approval workflows have reduced delays in processing router requests, enhancing the overall operational efficiency.
- **Scalable and Future-Proof Solution:** The system is easily scalable to support new catalog items or devices as the organization's needs evolve.