Project Title

Automated Network Request Management in ServiceNow

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Project overview

The **Automated Network Request Management in ServiceNow** project focuses on simplifying and accelerating the handling of network-related service requests. By leveraging ServiceNow's service catalog, workflows, and automation capabilities, the solution eliminates manual bottlenecks and ensures requests are processed efficiently. End users can easily submit requests through a self-service portal, while automated routing, approvals, and task assignments streamline fulfillment. Where possible, integration with network automation tools enables end-to-end execution without human intervention. This results in faster turnaround, improved SLA compliance, and enhanced transparency for both users and IT teams.

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1. Introduction

Modern enterprises rely heavily on robust and efficient network services to support day-to-day business operations. As organizations grow, the demand for network-related requests—such as access provisioning, configuration changes, and connectivity support—also increases. Traditional manual request handling often leads to delays, errors, and limited visibility, impacting both productivity and user satisfaction.

To address these challenges, the **Automated Network Request Management in ServiceNow** project introduces a streamlined solution that leverages ServiceNow's workflow engine, service catalog, and automation features. By enabling end users to submit requests through a self-service portal and automating approvals, task assignments, and notifications, the system ensures faster, more accurate, and transparent request management.

This initiative not only enhances the user experience but also empowers IT teams by reducing repetitive tasks, improving SLA compliance, and allowing focus on strategic, high-value activities.

2. Project Objective

This project aims to design and implement a streamlined, automated solution for managing network-related service requests within ServiceNow. It enables end users to submit requests for network services through a user-friendly self-service portal.

The system leverages ServiceNow's workflow engine, catalog items, and approval processes to ensure requests are properly captured, validated, and routed for fulfillment. Upon submission, requests trigger automated notifications, task assignments, and—where applicable—integration with network automation tools or scripts to fulfill standard requests without manual intervention.

3. Key Features

- Custom service catalog for common network requests
- Dynamic forms to capture relevant request details
- Automated approval workflows based on request type and sensitivity
- Integration with infrastructure management or orchestration tools (optional)
- Real-time status updates and notifications to requesters and technicians

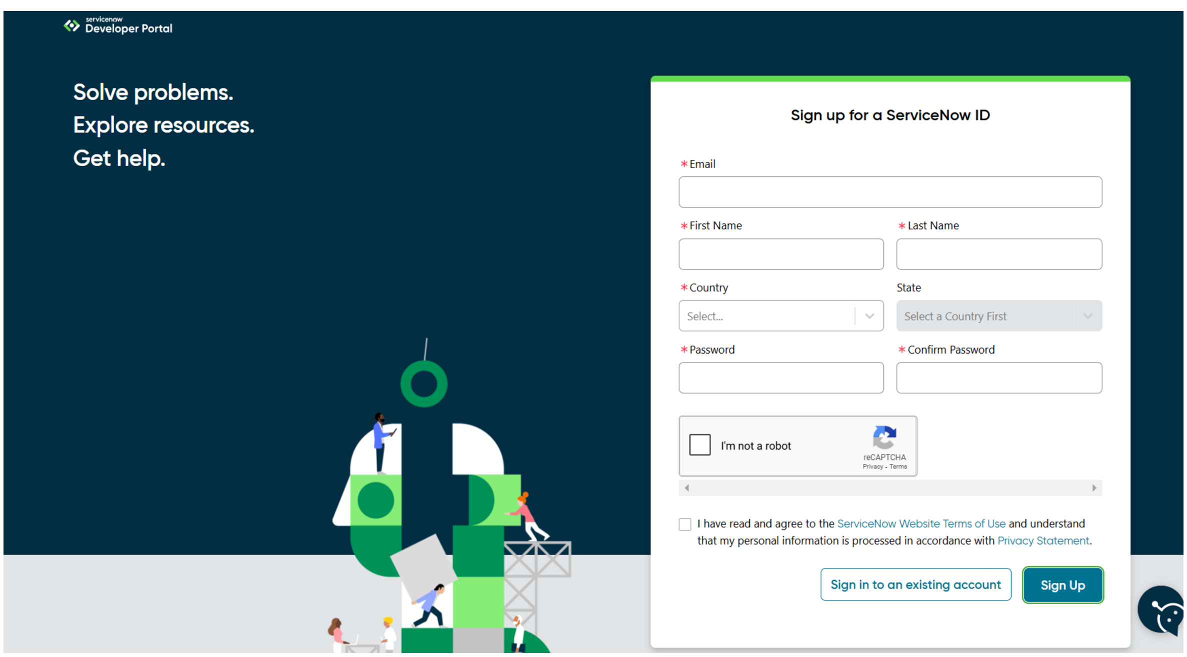
Reporting and analytics on request volume, resolution time, and SLA adherence

4. ServiceNow Developer Setup:

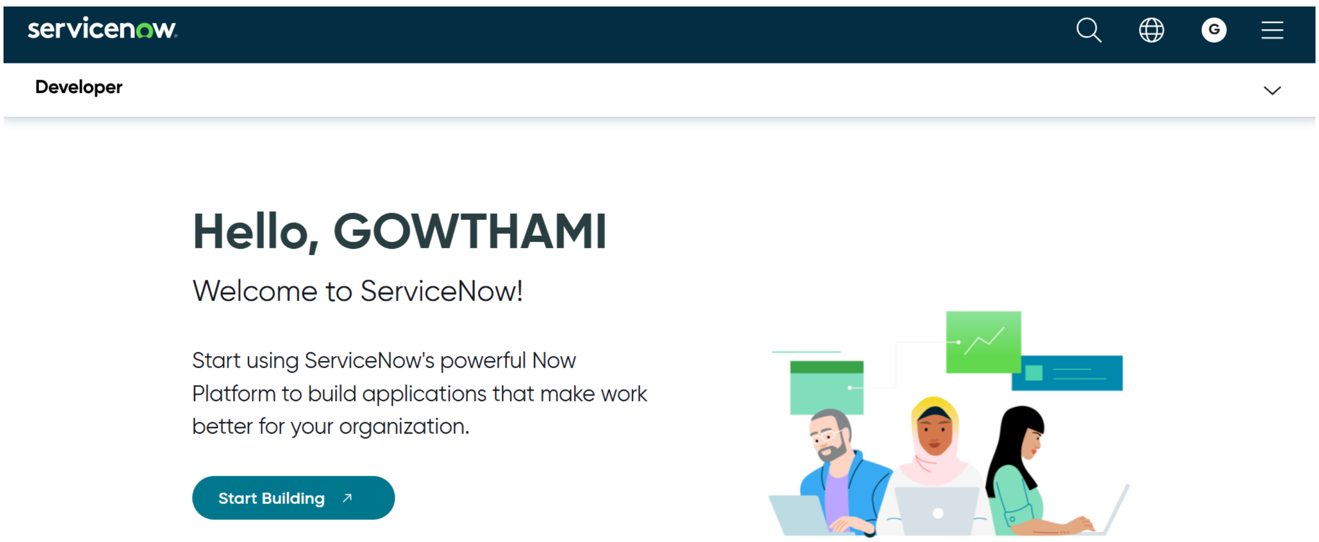
Create a Developer Account

1. Go to ServiceNow Developer Portal(https://developer.servicenow.com/dev.do).

Sign up for a free developer account and fill out the following details.



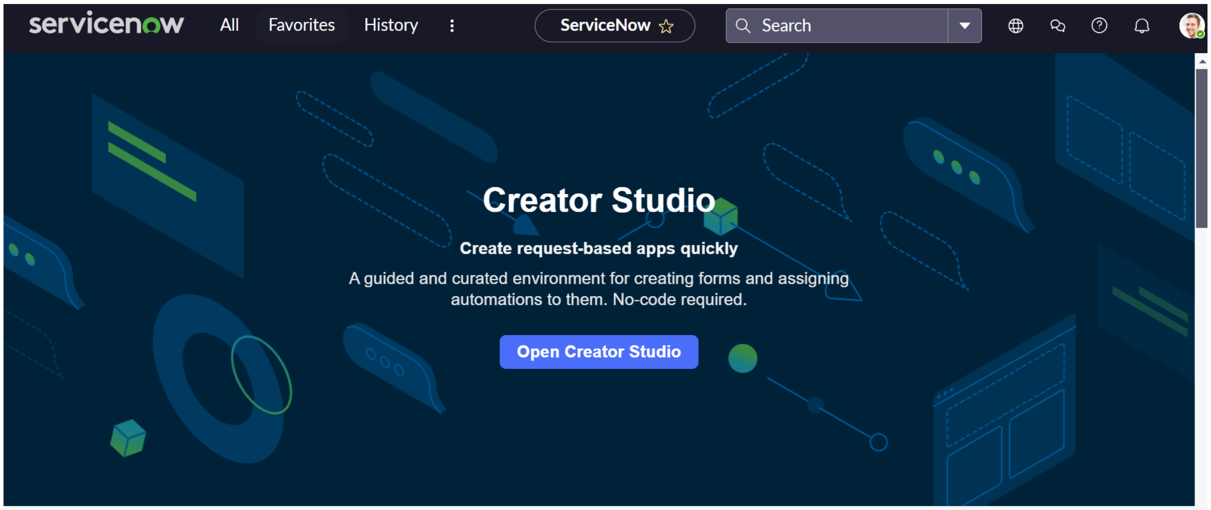
2. After signing up, you will get a verification mail to your provided email id. After the verification your ServiceNow Developer Portal Home Page will appear
3. Now click on start building it will take you to the section where you can **request a Personal Developer Instance (PDI)** or start using **App Engine Studio** and other tools.
4. **Profile Icon (Top Right Corner)** → Manage your account, request instances, and check your developer profile.



5. Project Implementation in ServiceNow:

After the instance building is completed, the page will be directed to your creator studio.

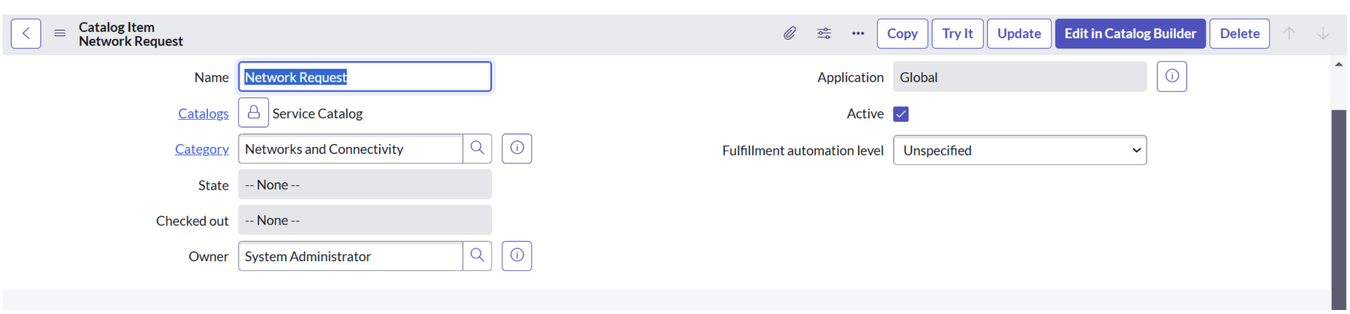
Creator Studio in ServiceNow provides a **guided, no-code environment** to build applications quickly. It is especially useful for creating **request-based applications** by defining forms, setting up tables, and automating workflows.



a. Service Catalog Creation

i. Creation of Service Catalog

1. Navigate to Application navigator
2. Click on All >> search for Service Catalog
3. Under Service Catalog>> Maintain items
4. Click on New
5. Fill the details >> Name– Network Request
6. Select Catalog>> Service Catalog
7. Select Category>> Network
8. Fill the Short Description as Network request Management
9. Click on Save.

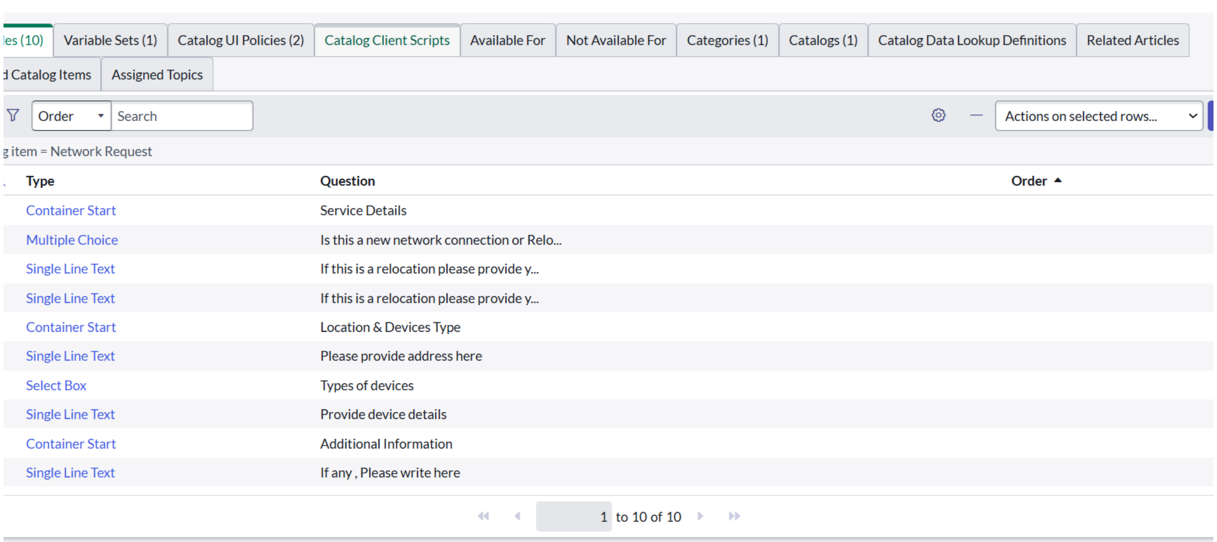


ii. Variables Configuration

Open the catalog item just created.

Scroll down to the **Variables** related list and click **New** to create form fields.

1. Select Variables type as Single, Multi line text, reference, choices etc as per requirement
2. Catalog item– Network Request
3. Order–100,200,300,,,,
4. Question– provide the variable label
5. Name–provide the variables name(used for scripting)
6. Tooltip– this will appear when cursor overed on the field
7. Example text – this will suggest what we need to enter on the field.
8. Mandatory, Read-Only– need to configure on demand
9. Auto populate– need to select dependent variable, apply dot walking to get selected value.
10. Click on Save or Submit.



Type	Question	Order
Container Start	Service Details	
Multiple Choice	Is this a new network connection or Relo...	
Single Line Text	If this is a relocation please provide y...	
Single Line Text	If this is a relocation please provide y...	
Container Start	Location & Devices Type	
Single Line Text	Please provide address here	
Select Box	Types of devices	
Single Line Text	Provide device details	
Container Start	Additional Information	
Single Line Text	If any , Please write here	

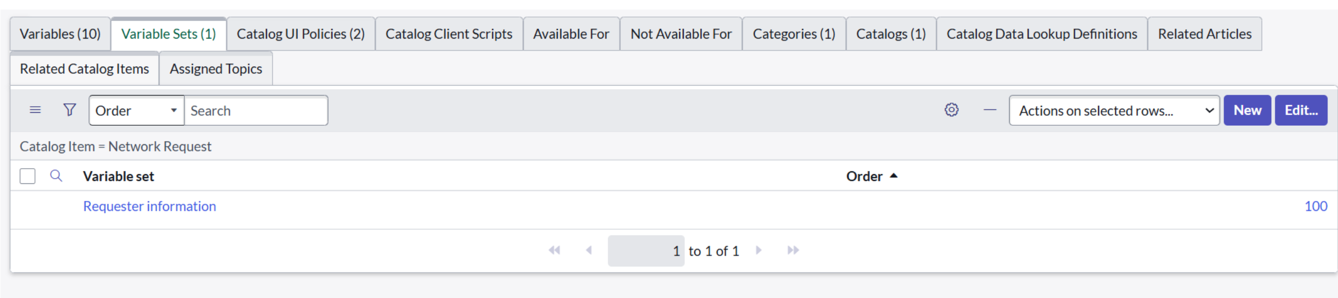
iii. Variables Types

1. Is this a New connection or Relocation? >> **Choice** >> **New/ Relocation/None**
2. If this is a relocation, Please provide your relocated address here>>**String**
3. Types of devices>> **Choice**>> **Laptop/Mobiles/Others**
4. Please provide address here**>>String**
5. Provide device details here>> **String**
6. If anything else, please specify>> **String**

iv. Variable Set Configuration

To enhance form usability:

- Navigate to the **Variable Sets** (optional).
- Follow the same procedure as we used for Variables Creation, for the variable set as well.
- Apply variable sets to the catalog item.

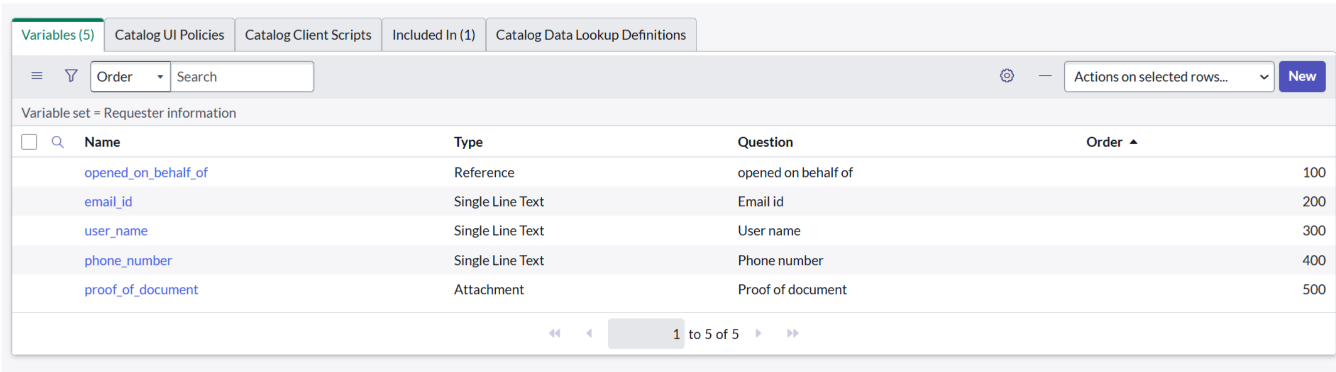


Variables Types

1. Opened on behalf of >> Reference>> reference to user table
2. Email Id >> Single line text >> Auto populate by Opened on behalf of variable.
3. User name >>Single line text >> Auto populate by Opened on behalf of variable.
4. Phone Number >>Single line text >> Auto populate by Opened on behalf of

variable.

5. Proof of Document >> Attachment



v. Catalog UI Policy Configuration

Scenario: If user selects types of devices is **Others,** then Please specify field should populate.

Procedure:

1. Navigate to catalog items
2. Open Network Request item
3. In related list, we have Catalog UI policy
4. Click on New button to configure New UI policy
5. Select Applies to as Catalog item
6. Select catalog item as Network Request
7. Provide short description, if required
8. Apply condition>> **types of devices** is **others**
9. Click on save, after saving the form will get UI policy actions in the related list
10. Click on New button to configure new UI Policy action, and Select the variable which we want to display on condition
11. Make Visible True as per our requirement
12. Update the UI Policy and Test the same on Catalog form

b. Creation of Table

i. Creation of Table

1. **Navigate to**: System Definition > **Tables**.

   a. Click **New** to create a new table.

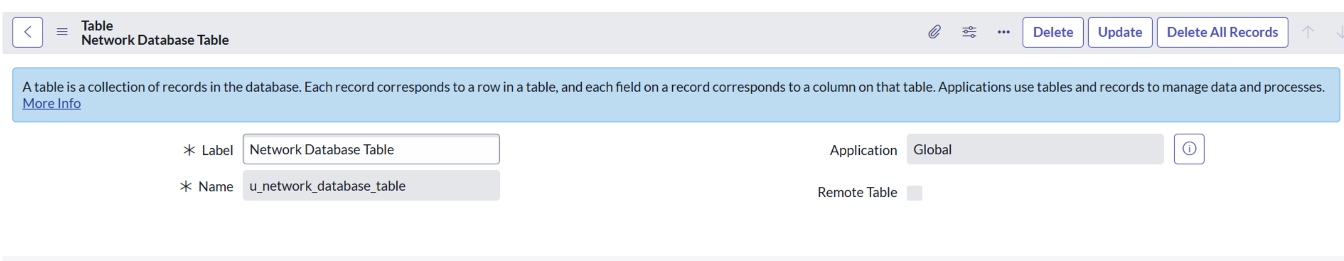
   b. Fill **in Table Information**:

      i. **Name**: Name of the table ------

      ii. **Label**: Backend name of the table------

      iii. **Auto-generate schema**: Leave it checked if you'd like ServiceNow to auto-generate schema fields.

   c. Click **Submit** to create the table.



ii. Creation of fields

In ServiceNow, fields are created at the **table** level. To create a field, you first need to identify the table where the field will reside.

1. In the **Application Navigator** (left-side panel), type **Tables** in the search bar.

2. Under **System Definition**, click **Tables**. This will take you to a list of all tables in the system.

a. Select the Table to Add the Field

- From the list of tables, search for and select the **table** you want to add a field to. For example, if you want to add a field to the **Network database** table:

    1. Type "**Network database**" in the search box or scroll through the list.

    2. Click on the **Network database** table name. You'll now see a list of all fields (columns) associated with the **Network database** table.

b. Open the Table's Columns

- After selecting the table, you'll be brought to a view that lists all the columns (fields) that currently exist on that table.

- To create a new field (column), go to the **Columns** tab (this is where all fields for the selected table are listed).

c. Create a New Field

1. In the **Columns** tab, click the **New** button located at the top-right corner of the page to create a new field.

2. You'll now be prompted with a form where you need to define the new field. The following fields need to be filled out

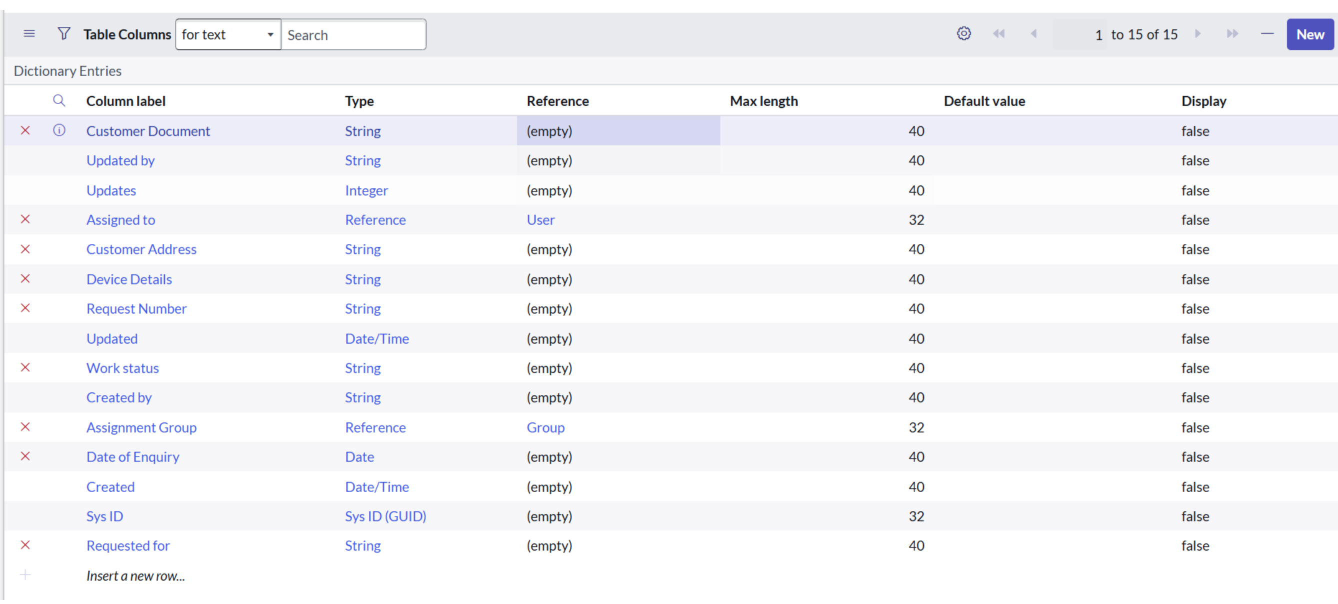


Table Columns | for text | Search | 1 to 15 of 15 | New

Dictionary Entries

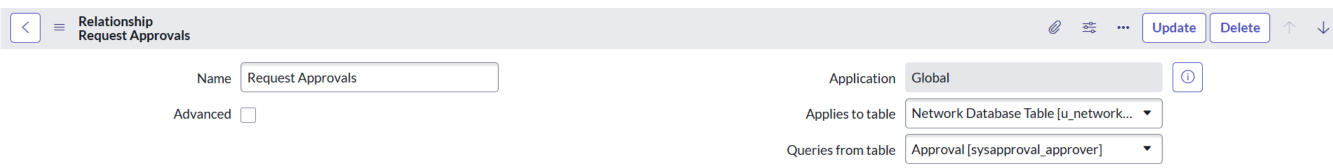
Column label	Type	Reference	Max length	Default value	Display
Customer Document	String	(empty)	40		false
Updated by	String	(empty)	40		false
Updates	Integer	(empty)	40		false
Assigned to	Reference	User	32		false
Customer Address	String	(empty)	40		false
Device Details	String	(empty)	40		false
Request Number	String	(empty)	40		false
Updated	Date/Time	(empty)	40		false
Work status	String	(empty)	40		false
Created by	String	(empty)	40		false
Assignment Group	Reference	Group	32		false
Date of Enquiry	Date	(empty)	40		false
Created	Date/Time	(empty)	40		false
Sys ID	Sys ID (GUID)	(empty)	32		false
Requested for	String	(empty)	40		false

Insert a new row...

c. Request Approvals Creation(Related List)

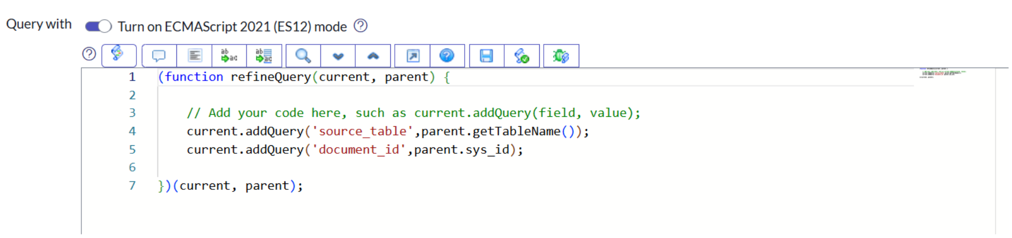
i. Creation of Related List

1. Navigate to **System Definition > Relationships**.
2. Click **New** to create a new relationship.
3. Fill in the following details:
   - **Name**: Approval Request
   - **Applies to Table** : Network Database table.
   - **Queries from Table** : Sysapprovals table.
   - **Active**: Make sure it's set to **True**.
4. Save the relationship.



ii. Adding Related List to the Table

1. Navigate to **Form Designer** for the table where you want to show related records.
2. Add a **Related List** widget to the form.
3. Select the **Related List** you want to show.



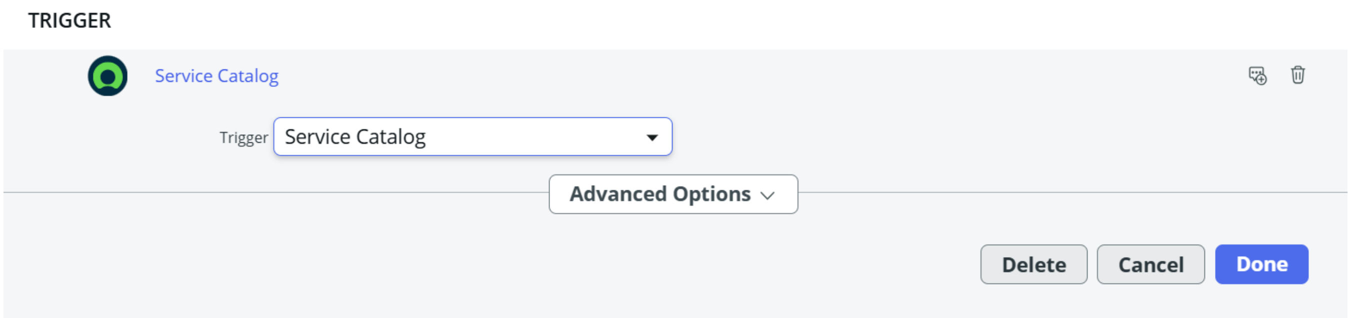
d. Creation & Implementation of flows, Actions in Flow Designer

i. Creation of Flow

1. Navigate to Flow designer home page
2. Click on New to create a new flow
3. Provide flow name as **Network Request**
4. Provide description of flow
5. Click on Build flow.

ii. Configuring Trigger

1. Click on (+) Icon to Configure the Trigger
2. Select Trigger as Application >> Service catalog
3. Click on **Done.**

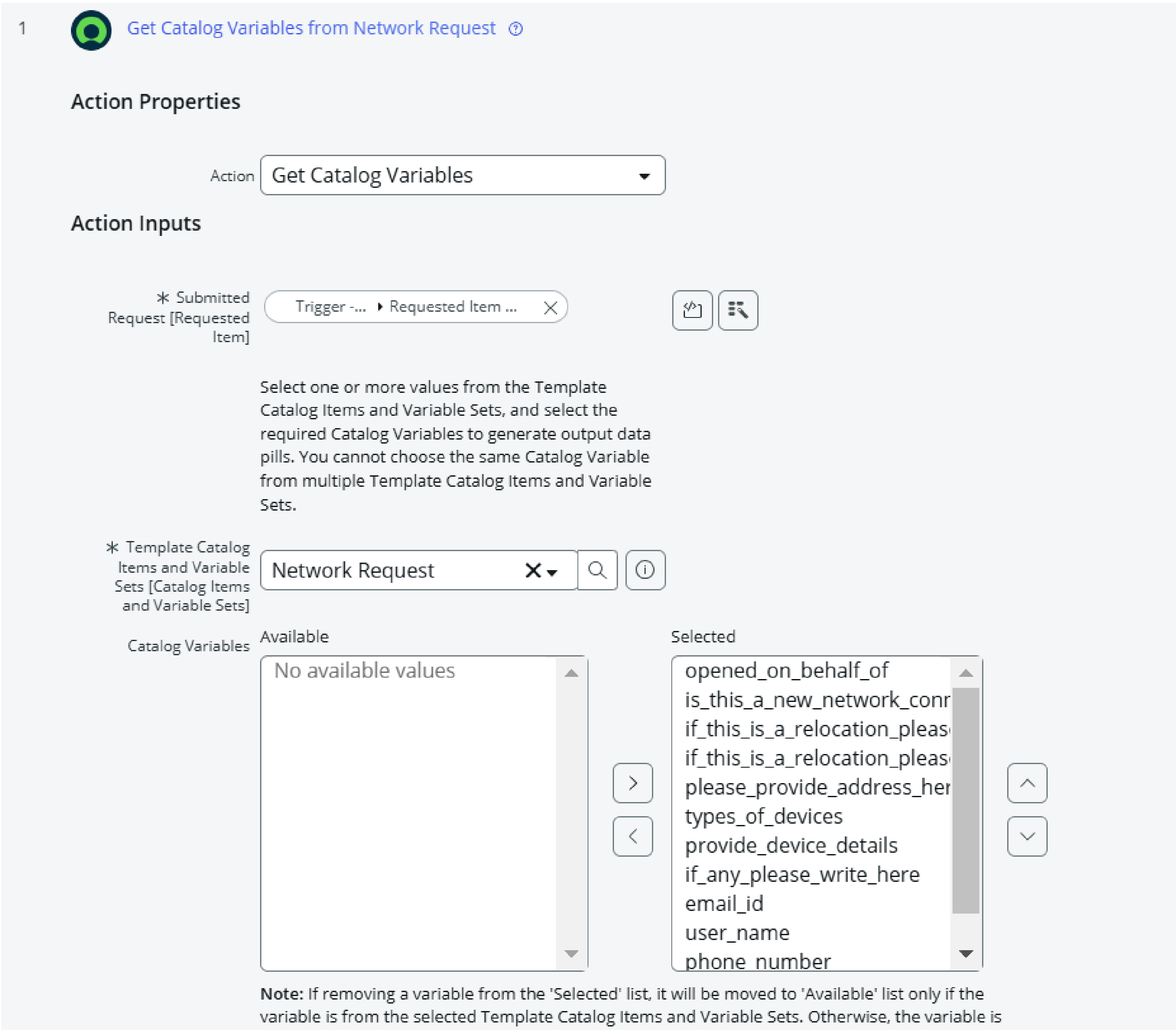


iii. Configuring Actions

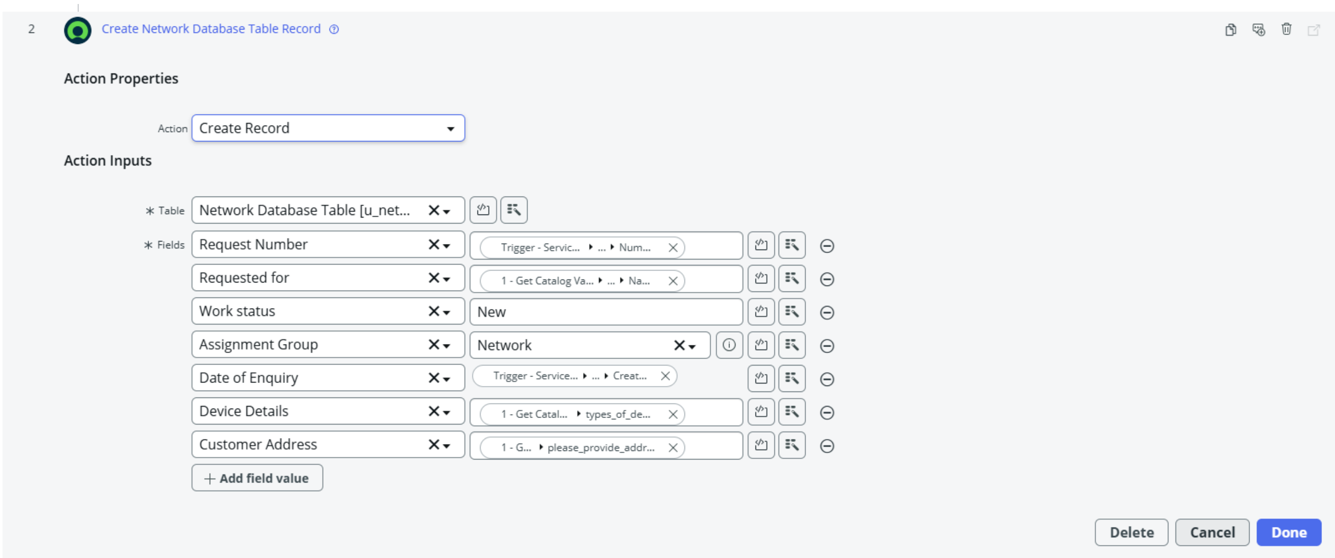
Click on Actions button to configure new action

1. **Get Catalog Variables**
    - Click on Action, search for Get Catalog Variables
    - Select Get Catalog Variables
    - Action Inputs>> Trigger>>service catalog>>Requested Item
    - Template catalog items >> Select table >> Network Request

- Select the Required Variables and Move to the selected area.
- Click on done

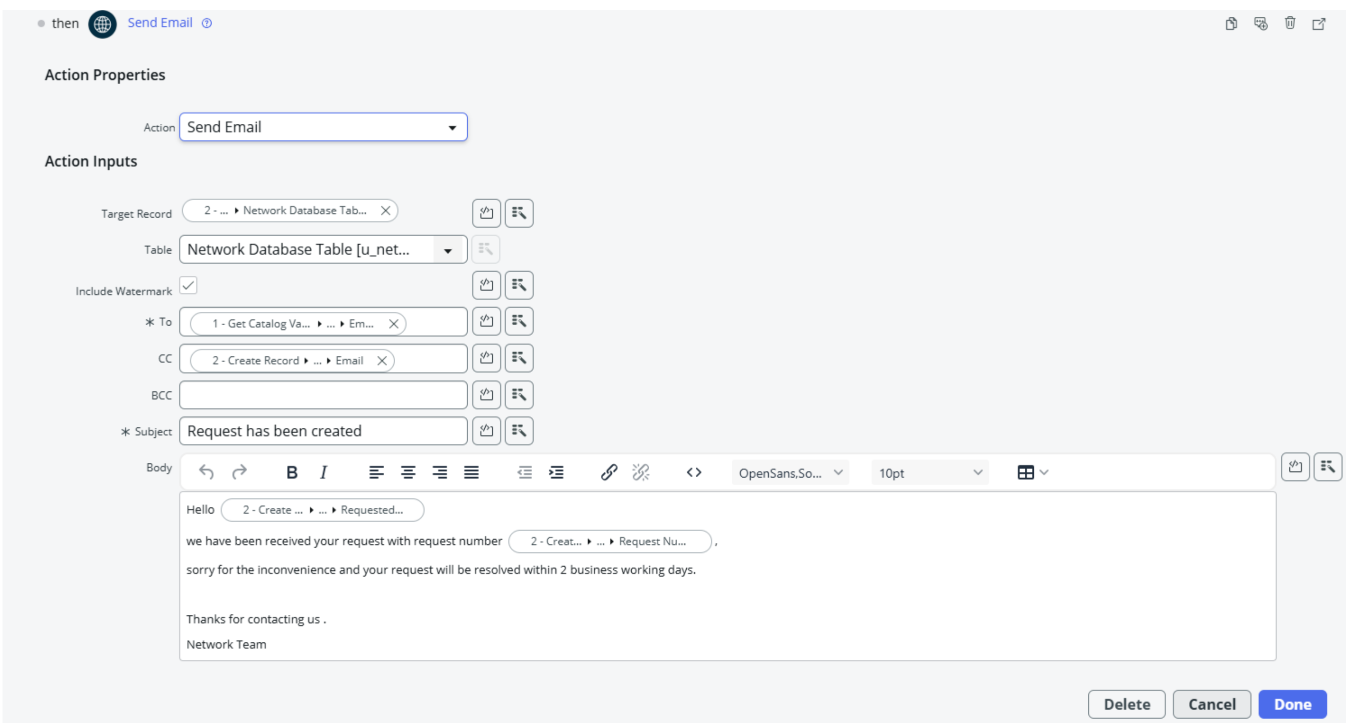


2. **Create Record**
    - Select action as Create Record
    - Select table as Network Database
    - Click on Add fields button to configure the fields
    - Configure the Required fields as shown in the below picture
    - Click on done



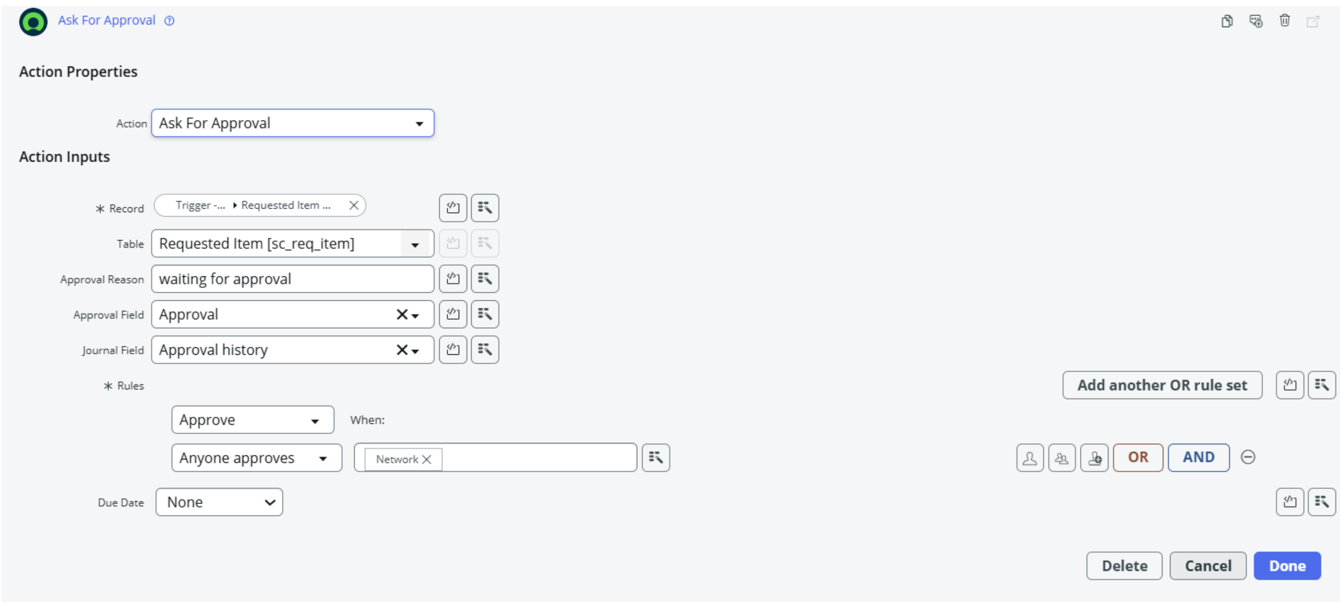
3. **Send Email**

- Select action as Send Email
- Select target record >> Create record>> network database table
- Table will be selected automatically
- Cofigure To, CC, BCC as per our requirements(select static/dynamic)
- Provide Subject & Body as shown in the below picture
- Click on done



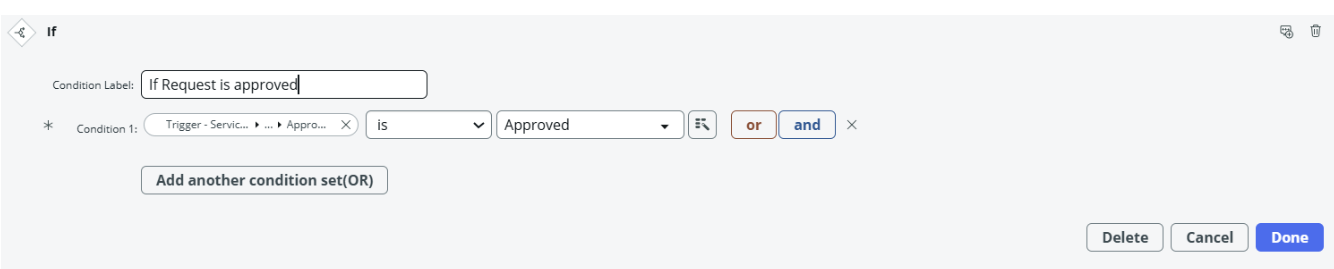
4. **Ask for approvals**

- Select action as Ask for Approval
- Select target record >> Create record>> network database table
- Provide Approval Reason>> Waiting for approval
- Configure approval rules>> Approve, reject, approve/reject
- Select approvals as Anyone approves, everyone approves etc.
- We can select approvals like static/dynamic as shown below
- Click on done



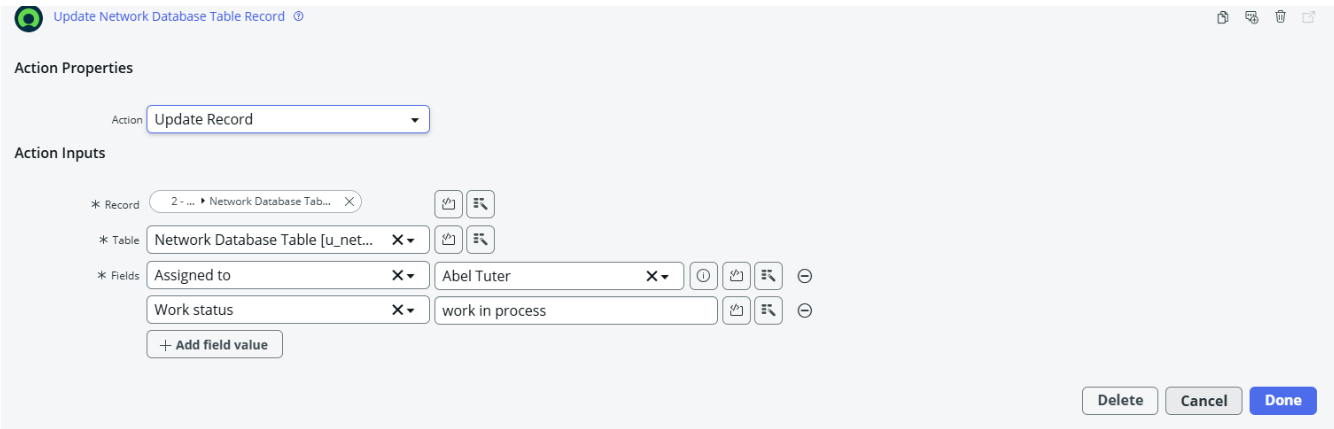
5. **Flow Logic**

- Select action as flow logic and Select If condition
- Apply condition >> Ask for approvals state is **Approved/Rejected** as per requirement
- Click on done

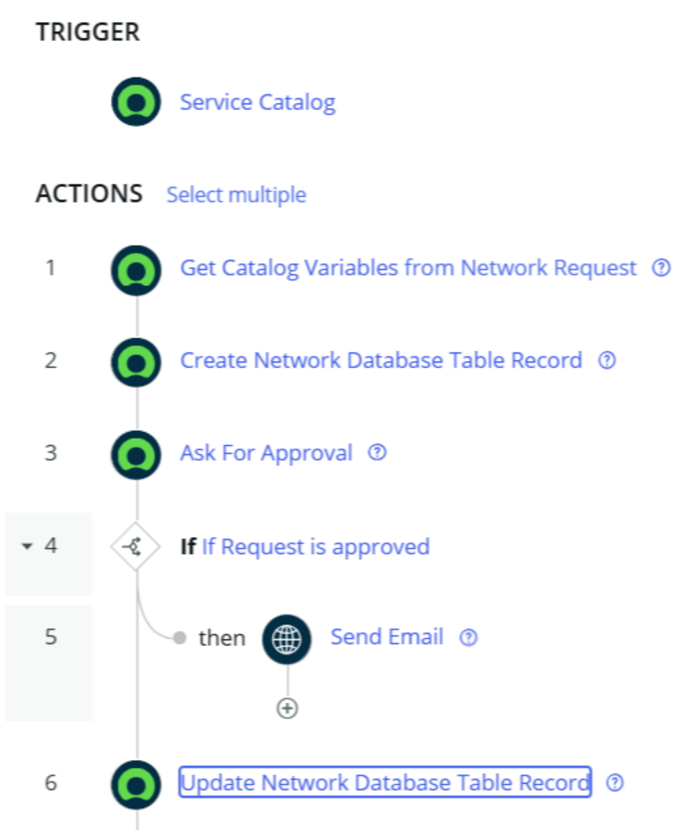


6. **Update Record**

- Select action as Update Record
- Select record as >> create record>> network database
- Table will be selected automatically
- Configure the fields as per requirement, as shown in below
- Click on done



iv. Flow Chart



6. Screenshots of Output

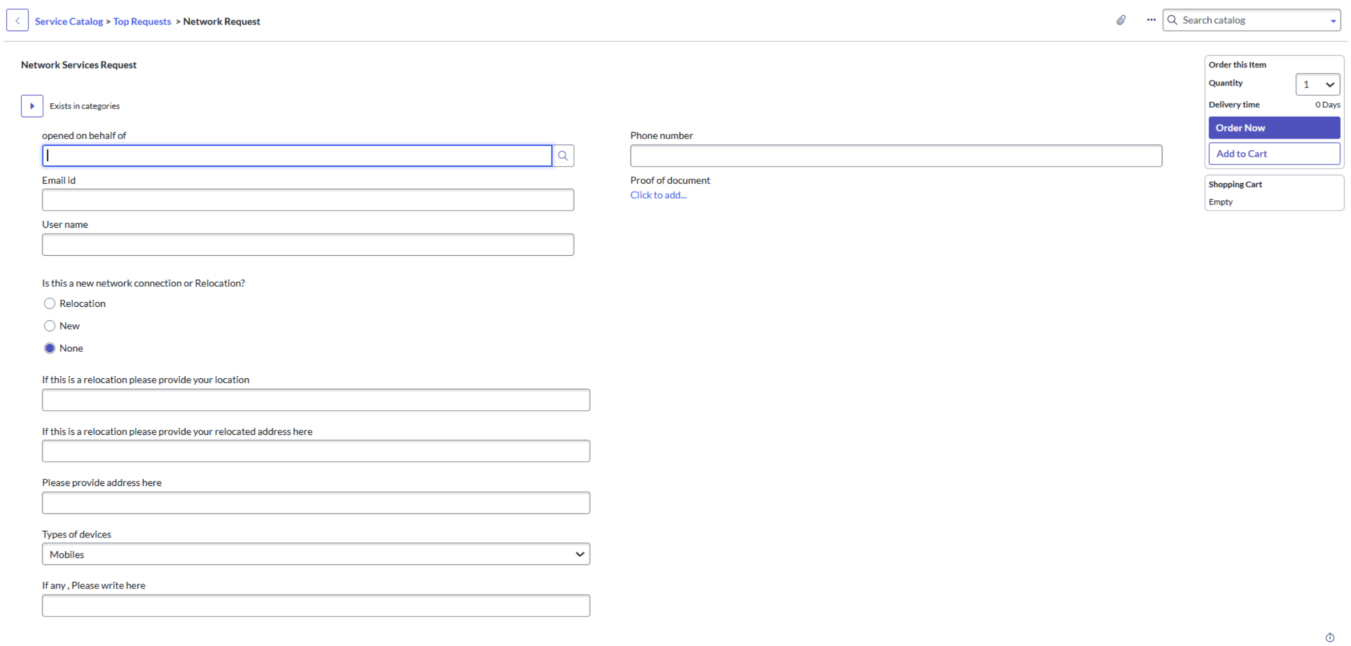


fig : creation of service catalog

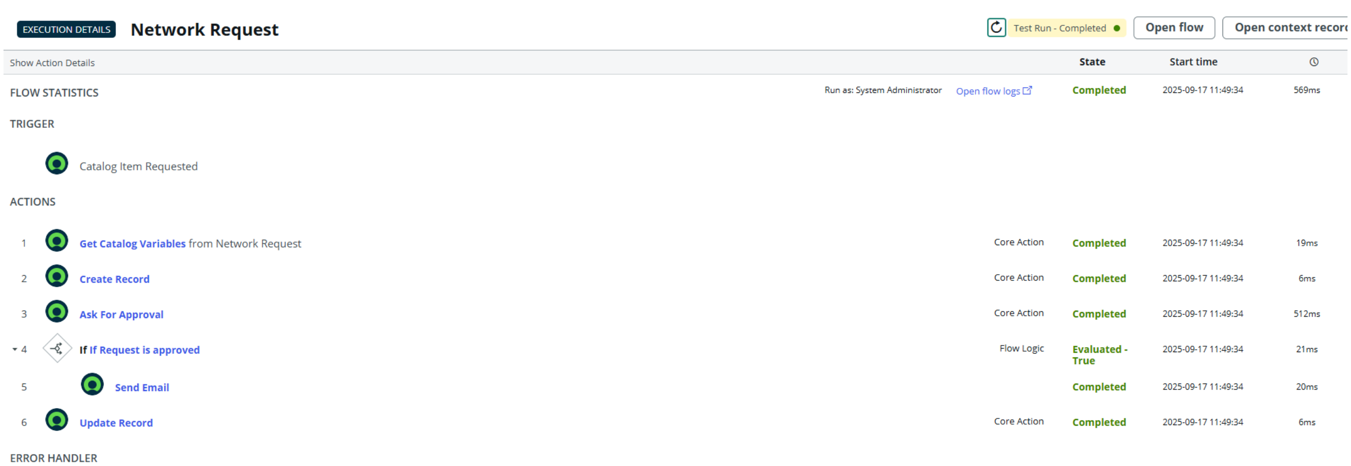


fig : test for flow execution

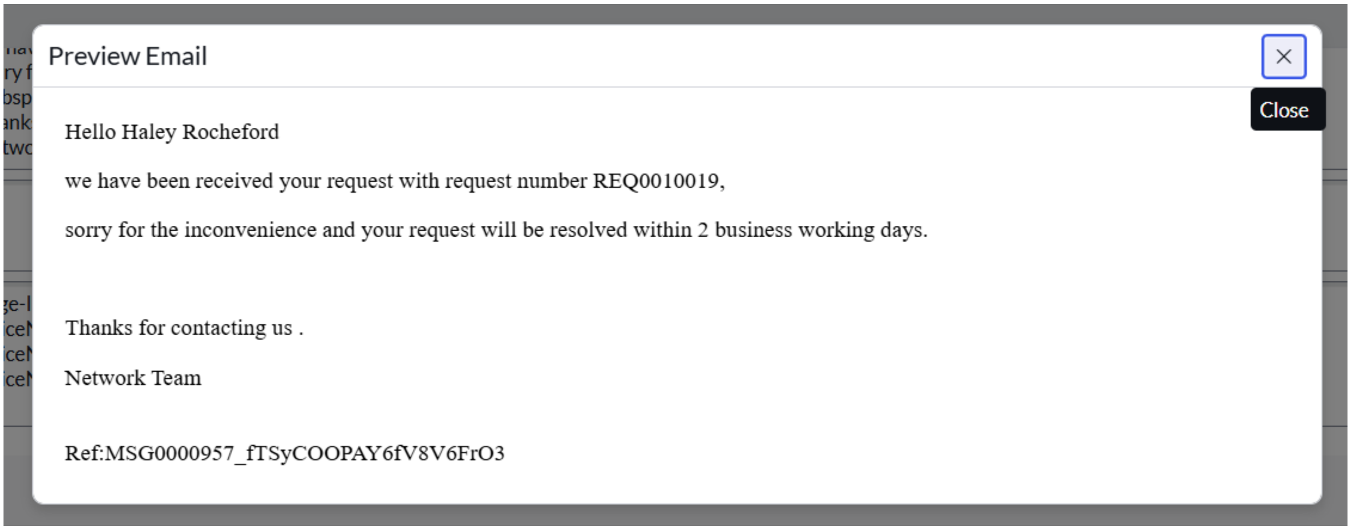


fig : email notification

7. Conclusion

The **Automated Network Request Management in ServiceNow** project provides a streamlined, reliable, and user-friendly solution for handling network-related service requests. By automating approvals, routing, and notifications, the system eliminates delays and errors associated with manual processes while offering transparency through real-time updates and reporting.

This initiative not only improves SLA compliance and user satisfaction but also optimizes IT operations by reducing repetitive workload and enabling faster fulfillment. Ultimately, it supports the organization's goal of delivering **efficient, high-quality, and responsive network services**, empowering both end users and IT teams.