

Phase – 2: Backend Development & Configurations

Automation Logic

Description

The Automation Logic for the Automated Network Request Management solution is implemented using ServiceNow Flow Designer. The flow is designed to automate the end-to-end processing of network service requests triggered through the Service Catalog. It captures catalog inputs, creates backend records, manages approvals, sends email notifications, and updates request status automatically, ensuring consistency, accuracy, and reduced manual effort.

Activity 1: Creation of Flow

Description

This activity focuses on creating a new flow in ServiceNow Flow Designer to automate network request handling.

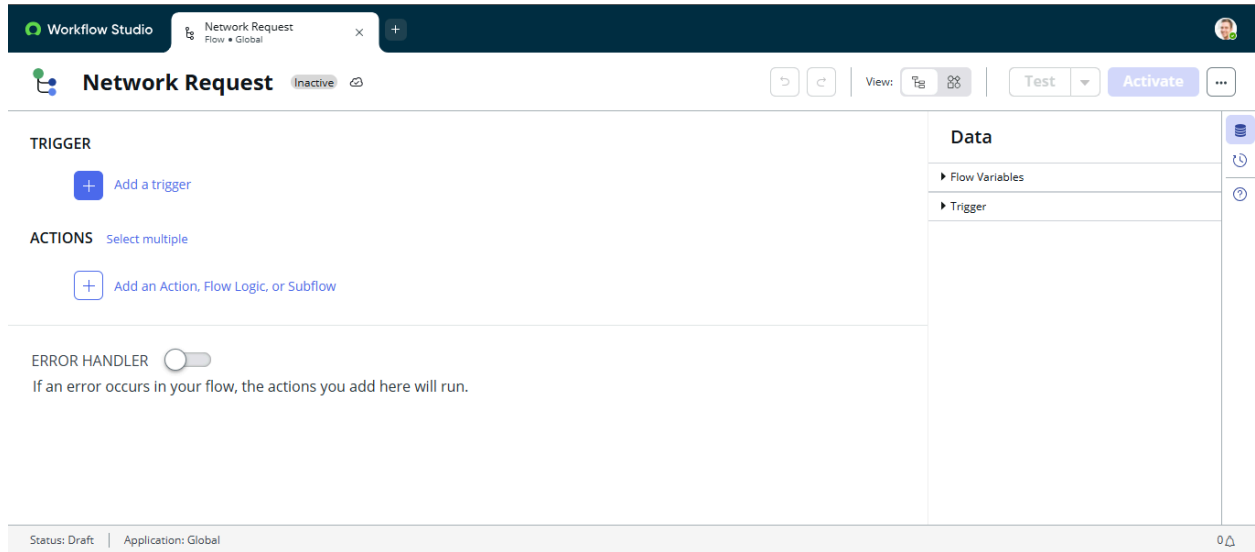
Implementation Steps

- Navigated to **Flow Designer** from the Application Navigator
- Clicked on **New** → **Flow**
- Provided the Flow Name as **Network Request**
- Entered a descriptive summary explaining the purpose of the flow
- Clicked **Build Flow** to proceed with flow configuration



Screenshot Evidence:

Screenshot showing successful creation of the “Network Request” flow in Flow Designer.



Outcome

A new automation flow was successfully created and is ready for trigger and action configuration.

Activity 2: Configuring Trigger

Description

The trigger determines when the automation flow is executed.

Implementation Steps

- Clicked on the (+) **Add Trigger** option
- Selected **Application** → **Service Catalog** as the trigger type
- Configured the trigger to execute on **catalog item submission**
- Saved the trigger configuration by clicking **Done**



Screenshot Evidence:

Screenshot displaying the Service Catalog trigger configured for the Network Request flow.

Workflow Studio

Network Request
Flow • Global

Network Request Inactive

TRIGGER

Service Catalog

ACTIONS Select multiple

✕ ⚙️ Action ⚙️ Flow Logic 📁 Subflow

ERROR HANDLER ☐

If an error occurs in your flow, the actions you add here will run.

Data Collapse All

Flow Variables

Trigger - Service Catalog

Requested Item Record Record

Run Start Time UTC Date/Time

Run Start Date/Time Date/Time

Table Name Table Name

Status: Draft | Application: Global

Outcome

The flow is now automatically triggered whenever a user submits a network request through the Service Catalog.

Activity 3: Configuring Actions

1. Get Catalog Variables

Description

This action retrieves user-entered values from the Service Catalog request.

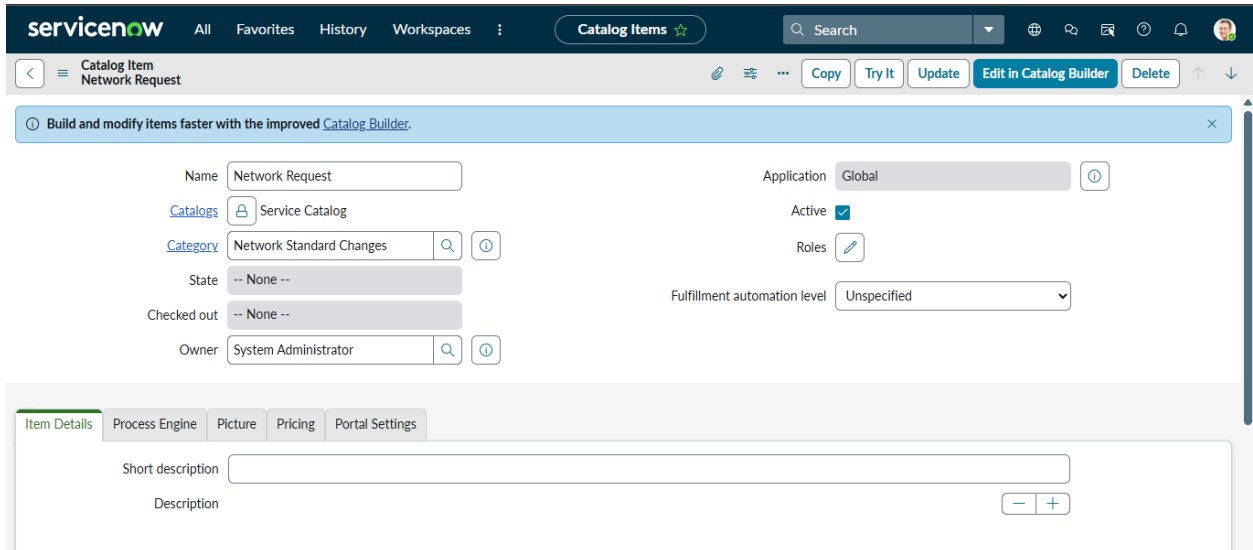
Implementation Steps

- Added an action and selected **Get Catalog Variables**
- Configured inputs:
 - Trigger → Service Catalog → Requested Item
 - Template Catalog Item → Network Request
- Selected required catalog variables

- Clicked **Done**

Screenshot Evidence:

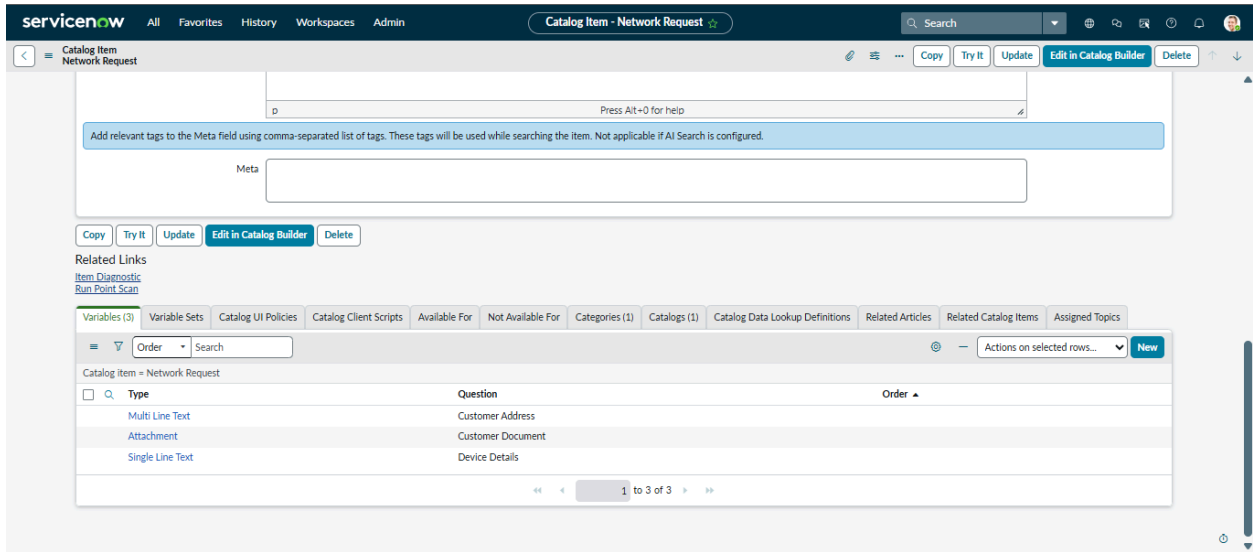
Screenshot showing the configuration of the Get Catalog Variables action for the Network Request catalog item, including submitted request mapping and selected catalog variables.



The screenshot displays the ServiceNow interface for configuring a catalog item. The top navigation bar includes the ServiceNow logo, tabs for All, Favorites, History, and Workspaces, and a 'Catalog Items' button. A search bar and utility icons are also present. The main header shows 'Catalog Item' and 'Network Request' with action buttons: Copy, Try It, Update, Edit in Catalog Builder, and Delete. A blue banner at the top states: 'Build and modify items faster with the improved Catalog Builder.' The configuration form includes fields for Name (Network Request), Application (Global), Service Catalog (Service Catalog), Category (Network Standard Changes), State (-- None --), Checked out (-- None --), and Owner (System Administrator). It also features checkboxes for Active and Roles, and a dropdown for Fulfillment automation level (Unspecified). Below the form is a tabbed interface with 'Item Details' selected, showing fields for Short description and Description.

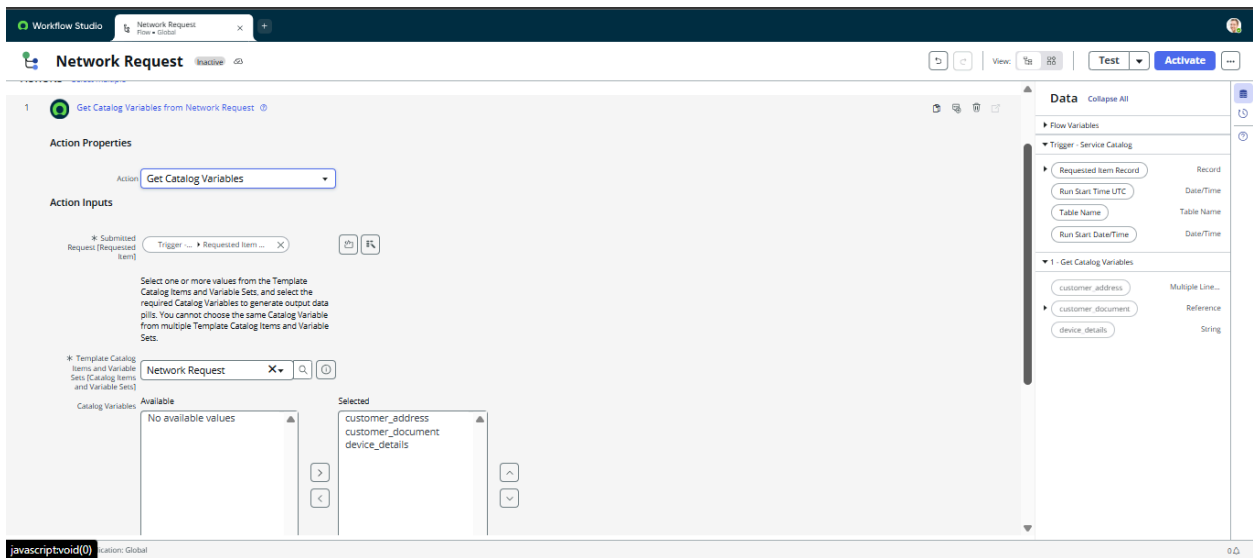
Screenshot Evidence:

*Screenshot showing the Network Request catalog item with configured catalog variables (Device Details, Customer Address, Customer Document), which are used as inputs for the **Get Catalog Variables** action in Flow Designer.*



Screenshot Evidence:

Screenshot showing the configuration of the Get Catalog Variables action for the Network Request catalog item, including submitted request mapping and selected catalog variables.



2. Create Record

Description

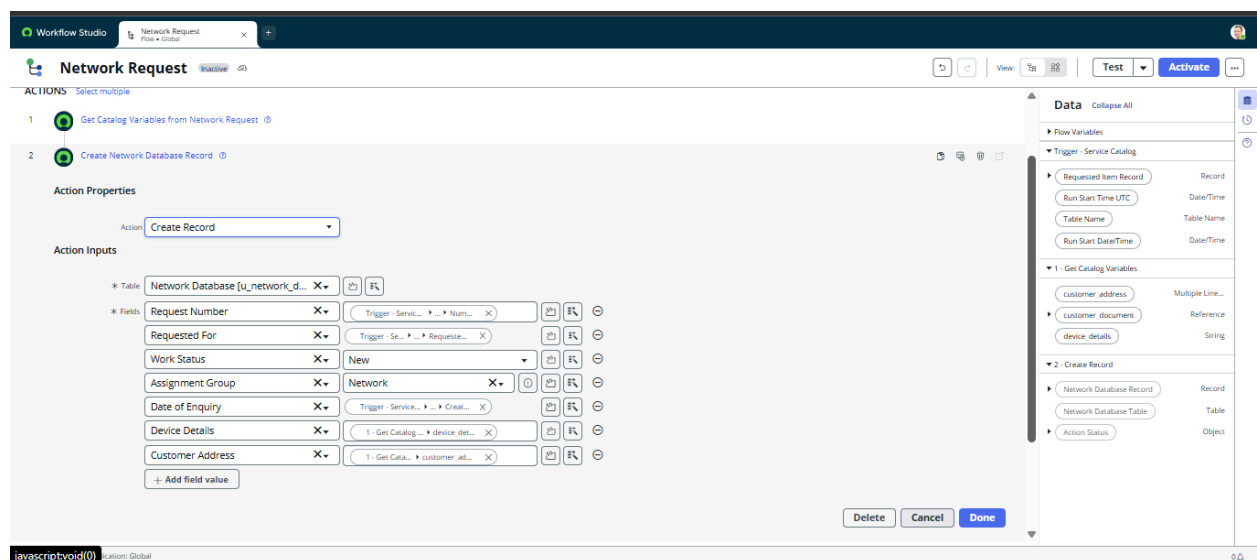
Creates a backend record in the Network Database table using catalog inputs.

Implementation Steps

- Added **Create Record** action
- Selected **Network Database** as the target table
- Mapped catalog variables to corresponding table fields
- Saved the configuration

Screenshot Evidence:

Screenshot showing Create Record action with mapped fields.



3. Send Email

Description

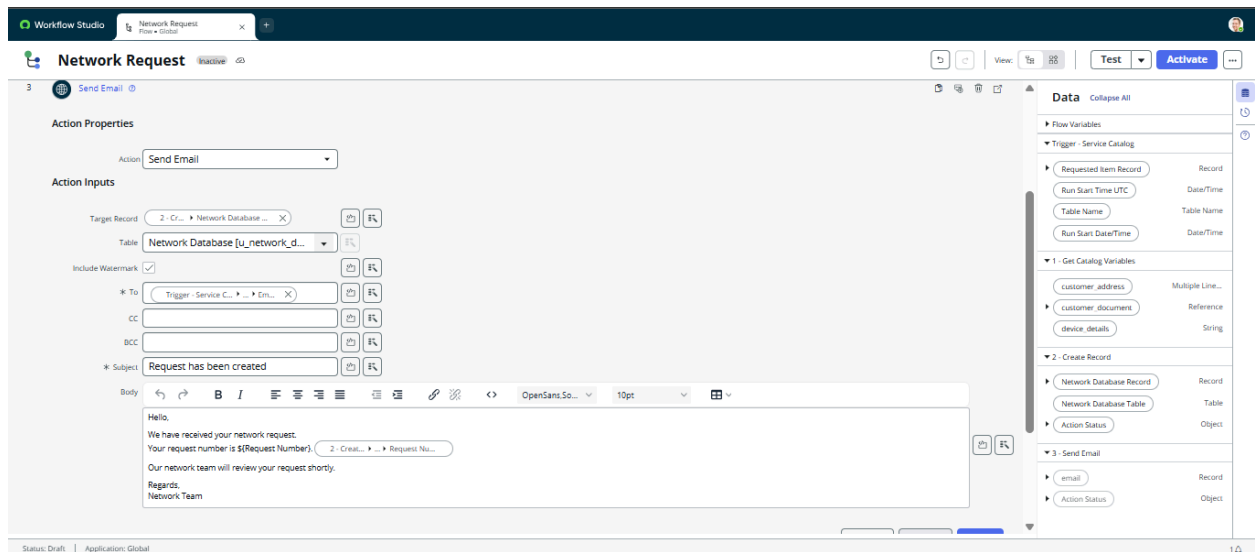
Sends automated email notifications during request processing.

Implementation Steps

- Added **Send Email** action
- Set Target Record as **Create Record** → **Network Database**
- Configured recipients (static/dynamic)
- Provided subject and email body content
- Clicked **Done**

Screenshot Evidence:

Screenshot showing Send Email action configuration.



4. Ask for Approval

Description

Routes the request for approval before fulfillment.

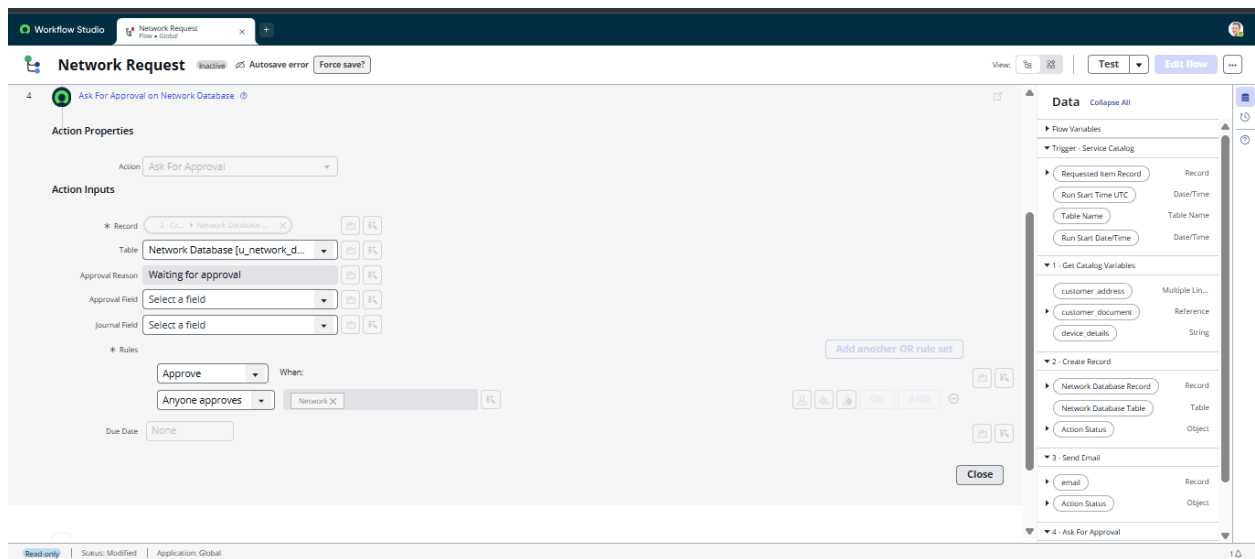
Implementation Steps

- Added **Ask for Approval** action
- Set Target Record as **Create Record** → **Network Database**

- Provided approval reason (e.g., Waiting for approval)
- Configured approval logic (Anyone Approves)
- Selected approvers (static/dynamic)
- Clicked **Done**

Screenshot Evidence:

Screenshot showing Ask for Approval configuration for the Network Database record, including approval reason, approval rules (Anyone approves), and Network assignment group.



5. Flow Logic (Conditional Routing)

Description

Controls workflow execution based on approval outcome.

Implementation Steps

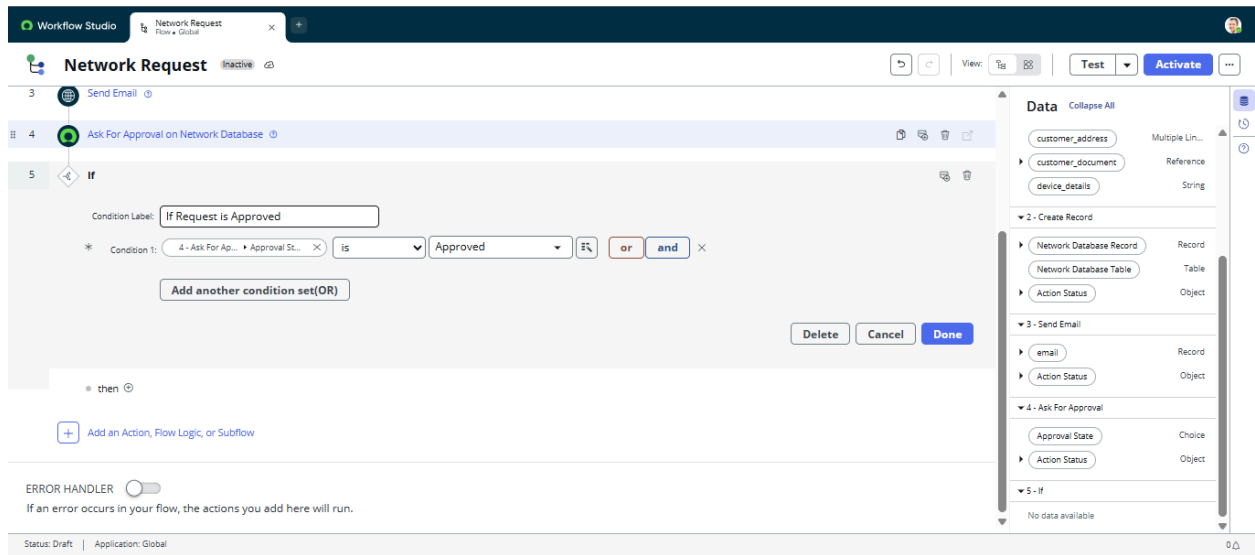
- Added **Flow Logic** → **If condition**
- Configured conditions based on approval state (Approved / Rejected)

- Defined subsequent actions accordingly
- Saved configuration



Screenshot Evidence:

Screenshot showing conditional flow logic.



6. Update Record

Description

Updates the Network Database record based on workflow execution.

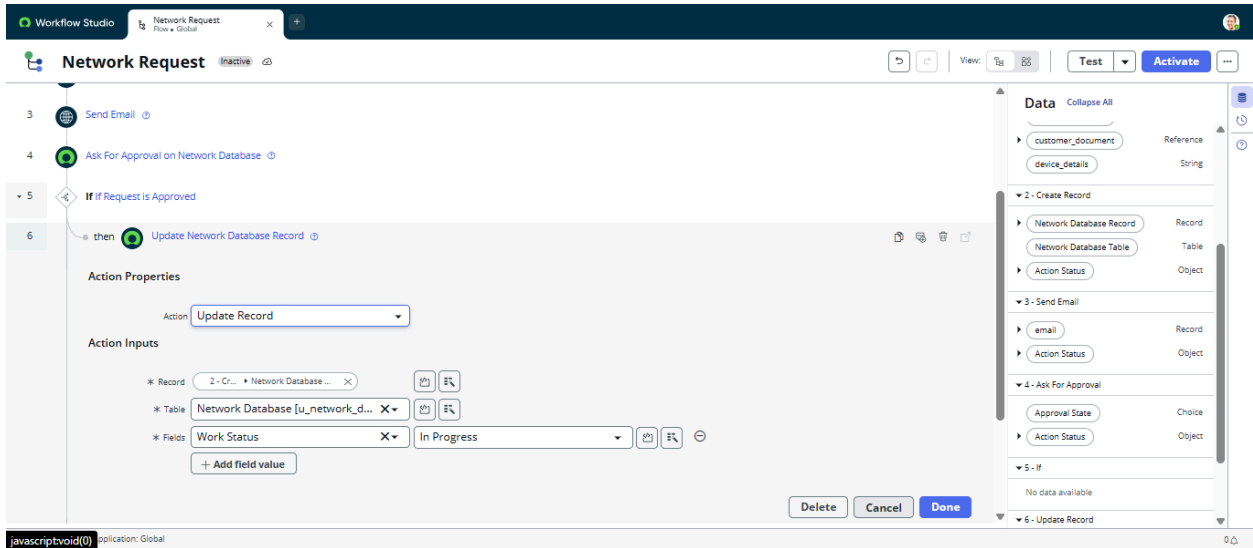
Implementation Steps

- Added **Update Record** action
- Selected Record → **Create Record** → **Network Database**
- Updated relevant fields such as Work Status
- Clicked **Done**



Screenshot Evidence:

Screenshot showing Update Record action configuration.



Activity 4: Flow Chart

Description

The flow chart represents the complete automation sequence of the **Network Request** process implemented using **ServiceNow Flow Designer**.

The flow starts when a **Service Catalog item (Network Request)** is submitted by the user. Once triggered, the automation performs the following steps:

1. Get Catalog Variables

The flow captures user-provided catalog variables such as device details, customer address, and supporting documents from the submitted Network Request.

2. Create Network Database Record

A new record is created in the **Network Database** table using the captured catalog variables. Initial values such as request number, requester, work status, and enquiry date are stored.

3. Send Email Notification

An acknowledgment email is sent to the requester confirming that the network request has been successfully created along with the request number.

4. Ask for Approval

The request is routed for approval to the configured approvers. The approval reason is set as "Waiting for approval".

5. Approval Decision (Flow Logic)

- If the request is **Approved**, the flow updates the Network Database record by changing the work status to **In Progress**.
- If the request is **Rejected**, a rejection notification email is sent to the requester.

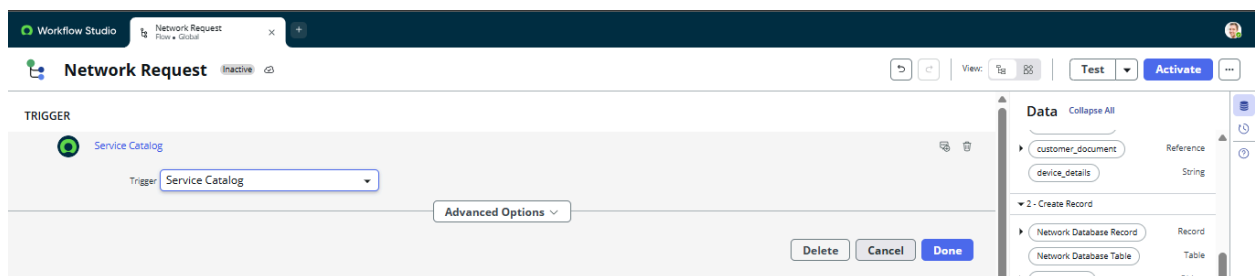
6. End Flow

The flow completes execution after performing the required updates and notifications based on the approval outcome.

This flow chart ensures a structured, automated, and transparent lifecycle for handling network service requests with minimal manual intervention.

Screenshot Evidence

- Screenshot showing the complete Flow Designer canvas with:
 - Trigger :
 - Get Catalog Variables
 - Create Record
 - Send Email
 - Ask for Approval
 - If condition (Approved / Rejected paths)



ACTIONS Select multiple
Get Catalog Variables from Network Request

Action Properties

Action: Get Catalog Variables

Action Inputs

* Submitted Request [Requested Item]

Trigger ... → Requested Item ...

Select one or more values from the Template Catalog Items and Variable Sets, and select the required Catalog Variables to generate output data pills. You cannot choose the same Catalog Variable from multiple Template Catalog Items and Variable Sets.

* Template Catalog Items and Variable Sets [Catalog Item and Variable Sets]

Network Request X

Catalog Variables Available	Selected
No available values	customer_address customer_document device_details

Data Collapse All

- device_details String
- 2 - Create Record
 - Network Database Record Record
 - Network Database Table Table
 - Action Status Object
- 3 - Send Email
 - email Record
 - Action Status Object
- 4 - Ask For Approval
 - Approval State Choice
 - Action Status Object
- 5 - If
 - No data available
- 6 - Update Record
 - Network Database Record Record

2

Create Network Database Record

Action Properties

Action

Create Record

Action Inputs

* Table

Network Database [u_network_d...

⌵

⌵

* Fields

Request Number

Requested For

Work Status

Assignment Group

Date of Enquiry

Device Details

Customer Address

+ Add field value

Trigger - Service... → Num...

Trigger - Se... → Requeste...

New

Network

Trigger - Service... → Creat...

1 - Get Catalog... → device_det...

1 - Get Casa... → customer_ad...

⌵

⌵

⌵

⌵

⌵

⌵

⌵

Data

Collapse All

device_details

String

2 - Create Record

Network Database Record

Record

Network Database Table

Table

Action Status

Object

3 - Send Email

email

Record

Action Status

Object

4 - Ask For Approval

Approval State

Choice

Action Status

Object

5 - If

No data available

6 - Update Record

Record

Delete

Cancel

Done

[illegible]

Our network team will review your request shortly.
Regards,
Network Team

Delete

Cancel

Done

▼ 3 - Send Email

▶ email

Record

▶ Action Status

Object

▶ Action For Account

4 **Ask For Approval on Network Database**

Action Properties

Action: **Ask For Approval**

Action Inputs

* Record: 2 - Cr... Network Database ...

Table: Network Database [u_network_d...]

Approval Reason: Waiting for approval

Approval Field: Select a field

Journal Field: Select a field

* Rules

Approve When: Anyone approves Network X

Due Date: None

Add another OR rule set

OR AND

Delete Cancel Done

Status: Draft Application: Global

Data Collapse All

device_details String

2 - Create Record

Network Database Record Record

Network Database Table Table

Action Status Object

3 - Send Email

email Record

Action Status Object

4 - Ask For Approval

Approval State Choice

Action Status Object

5 - If

No data available

6 - Update Record

Network Database Record Record

4 **Ask For Approval on Network Database**

5 **If**

Condition Label: If Request is Approved

* Condition 1: 4 - Ask For Ap... Approval St... is Approved or and

Add another condition set(OR)

Delete Cancel Done

Data Collapse All

device_details String

2 - Create Record

Network Database Record Record

Network Database Table Table

Action Status Object

3 - Send Email

email Record

Action Status Object

4 - Ask For Approval

6 **Update Network Database Record**

Action Properties

Action: **Update Record**

Action Inputs

* Record: 2 - Cr... Network Database ...

* Table: Network Database [u_network_d...]

* Fields: Work Status In Progress

+ Add field value

Delete Cancel Done

+ Add an Action, Flow Logic, or Subflow

ERROR HANDLER

javascriptvoid(0) Application: Global

Data Collapse All

device_details String

2 - Create Record

Network Database Record Record

Network Database Table Table

Action Status Object

3 - Send Email

email Record

Action Status Object

4 - Ask For Approval

Approval State Choice

Action Status Object

5 - If

No data available

6 - Update Record

Network Database Record Record

Final Outcome

The Automation Logic successfully automates the complete lifecycle of network service requests, ensuring standardized processing, improved visibility, faster approvals, and reduced manual intervention.

