

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

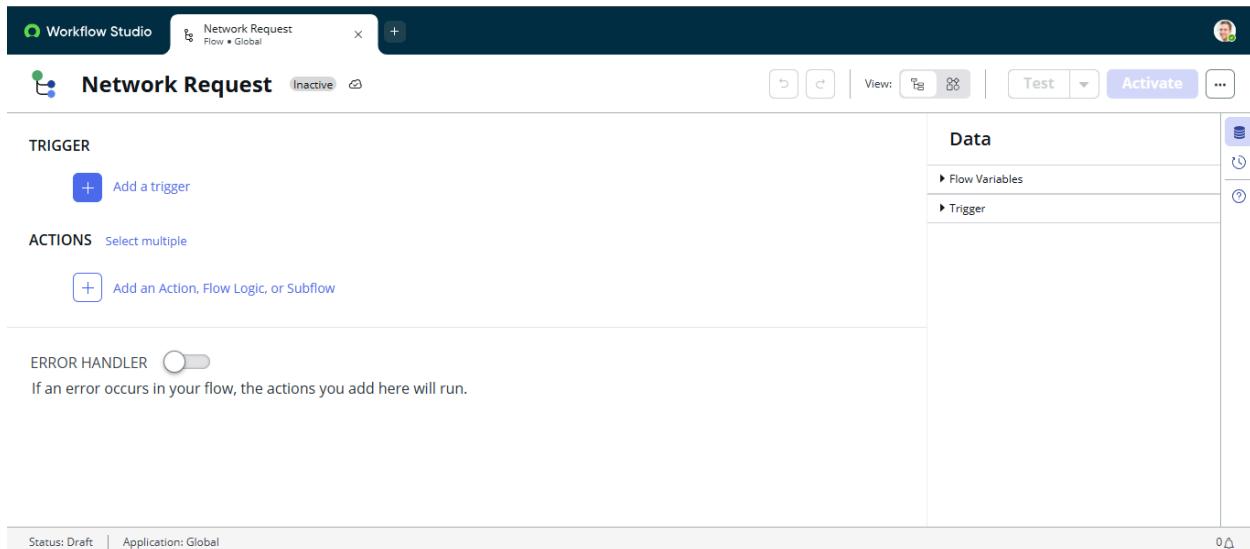
This activity focuses on creating a new flow in ServiceNow Flow Designer to automate network request handling.

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

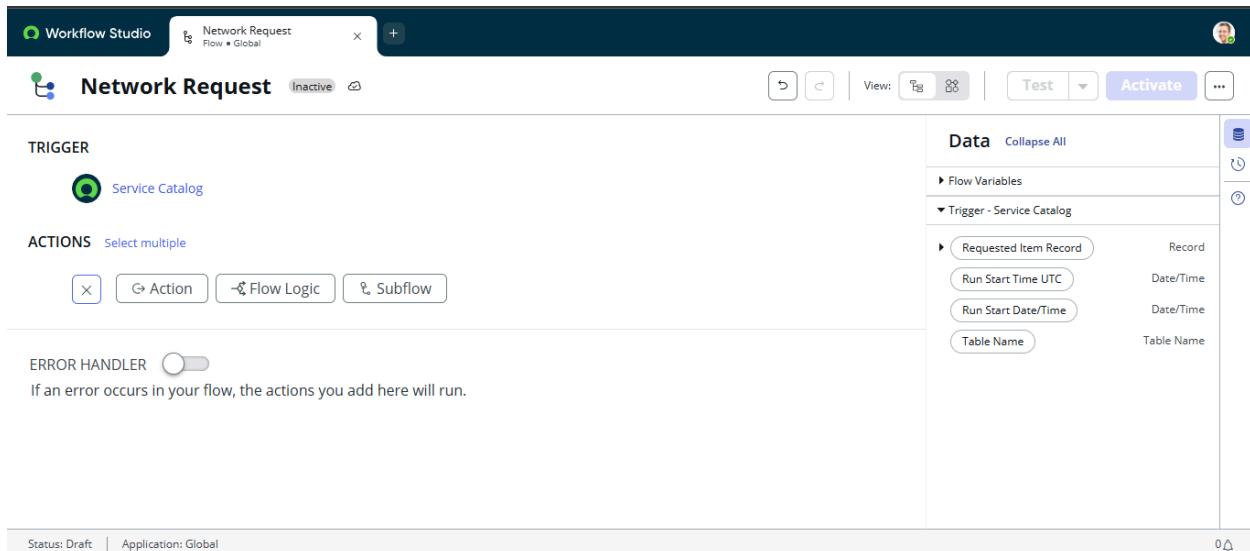
The trigger determines when the automation flow is executed.

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.



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.

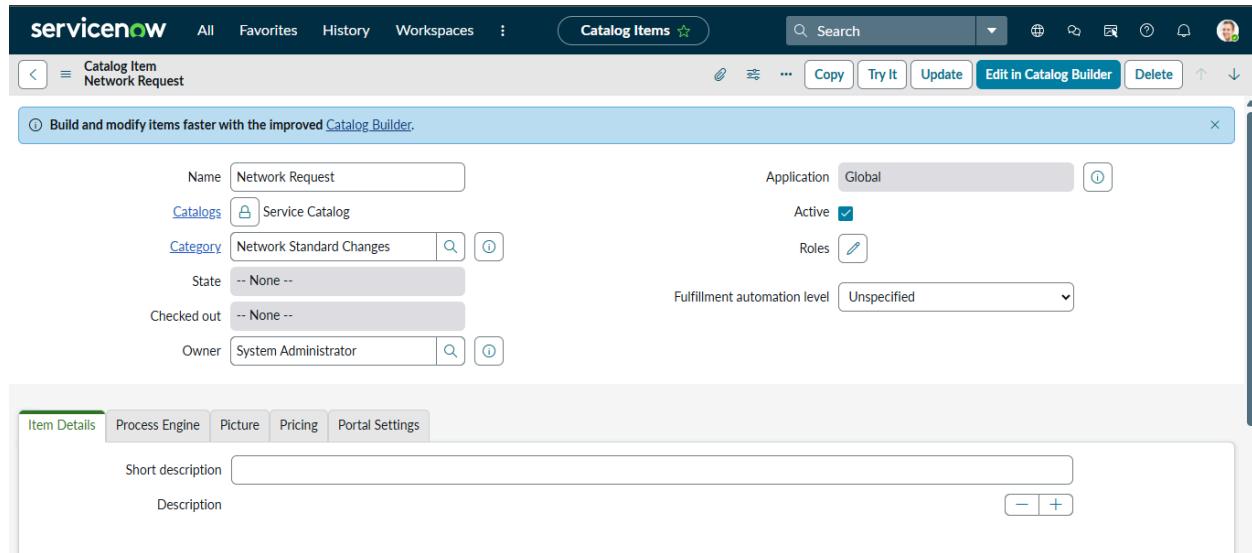
Implementation Steps

- 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 shows the ServiceNow Catalog Items interface. The top navigation bar includes 'All', 'Favorites', 'History', 'Workspaces', 'Catalog Items', 'Search', and various system icons. A banner at the top right says 'Build and modify items faster with the improved Catalog Builder.' The main area displays the 'Network Request' catalog item details. Fields include:

- Name: Network Request
- Catalogs: Service Catalog
- Category: Network Standard Changes
- State: -- None --
 - Checked out: -- None --
- Owner: System Administrator
- Application: Global
- Active: checked
- Roles: (empty)
- Fulfillment automation level: Unspecified

Below the main details, there's a tabbed section for 'Item Details' (selected), 'Process Engine', 'Picture', 'Pricing', and 'Portal Settings'. Under 'Item Details', there are 'Short description' and 'Description' fields, each with a minus and plus button for expansion.

 **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.*

The screenshot shows the ServiceNow Catalog Item - Network Request page. At the top, there are tabs for All, Favorites, History, Workspaces, and Admin. The main title is Catalog Item - Network Request. Below the title, there is a search bar and several action buttons: Copy, Try It, Update, Edit in Catalog Builder, and Delete. A note says "Add relevant tags to the Meta Field using comma-separated list of tags. These tags will be used while searching the item. Not applicable if AI Search is configured." There is a "Meta" field with a placeholder "D". Below the notes, there is a "Related Links" section with links to Item Diagnostic and Run Point Scan. The main content area shows a table of catalog variables:

Type	Question	Order
Multi Line Text	Customer Address	
Attachment	Customer Document	
Single Line Text	Device Details	

At the bottom of the table, it says "1 to 3 of 3".

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 shows the ServiceNow Workflow Studio interface. The title bar says "Workflow Studio" and "Network Request Flow • Global". The main area shows a workflow step titled "1 Get Catalog Variables from Network Request". The "Action Properties" section shows the "Action" dropdown set to "Get Catalog Variables". The "Action Inputs" section has a "Submitted Request [Requested Item]" field with a "Trigger ... > Requested Item ..." button. The "Template Catalog Items and Variable Sets [Catalog Items and Variable Sets]" dropdown is set to "Network Request". The "Available" catalog variables list is empty ("No available values"). The "Selected" catalog variables list contains "customer_address", "customer_document", and "device_details". On the right side, there is a "Data" panel showing "Flow Variables" and "Trigger - Service Catalog" sections, and a "1 - Get Catalog Variables" section with three selected variables: "customer_address" (Multiple Line Text), "customer_document" (Reference), and "device_details" (String). The bottom of the screen shows a script editor with the code "javascript:void(0)" and a status bar indicating "Global".

2. Create Record

Description

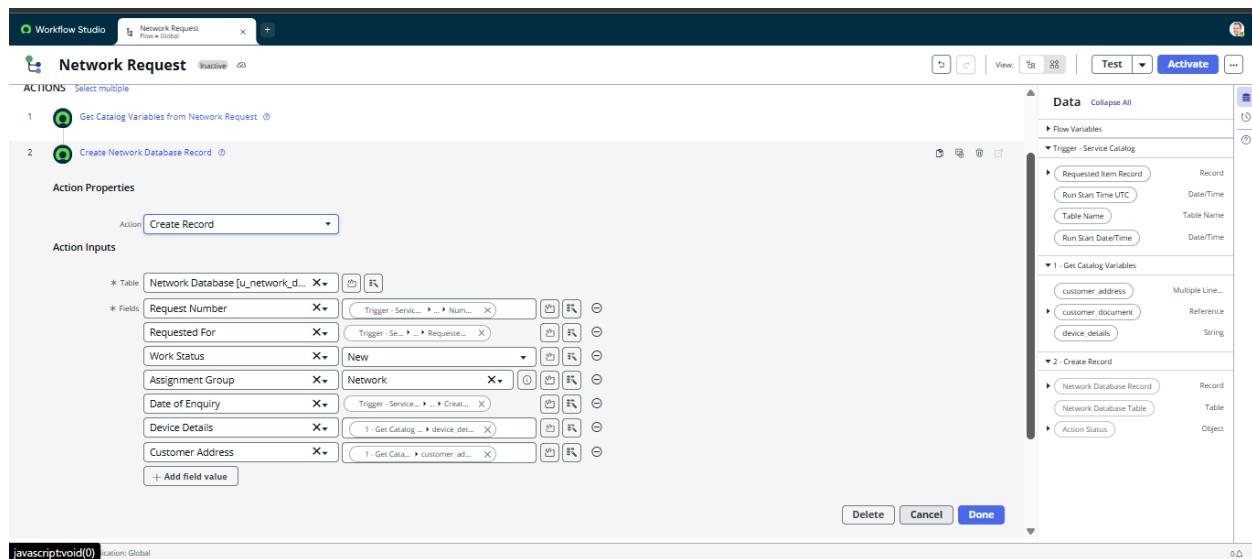
Creates a backend record in the Network Database table using catalog inputs.

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

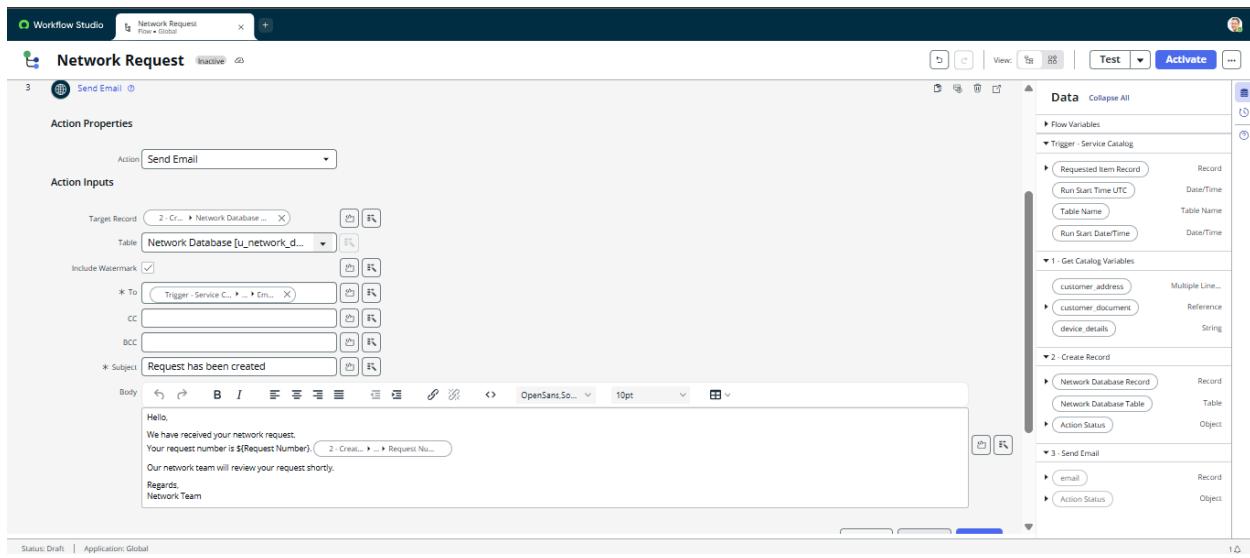
Sends automated email notifications during request processing.

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.

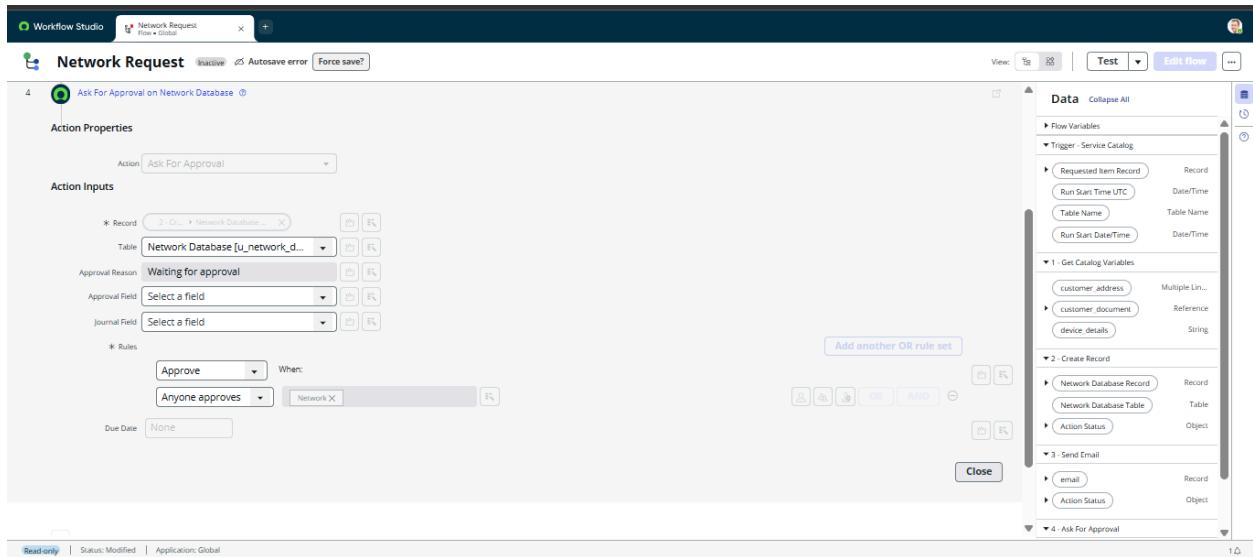
Implementation Steps

- 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.

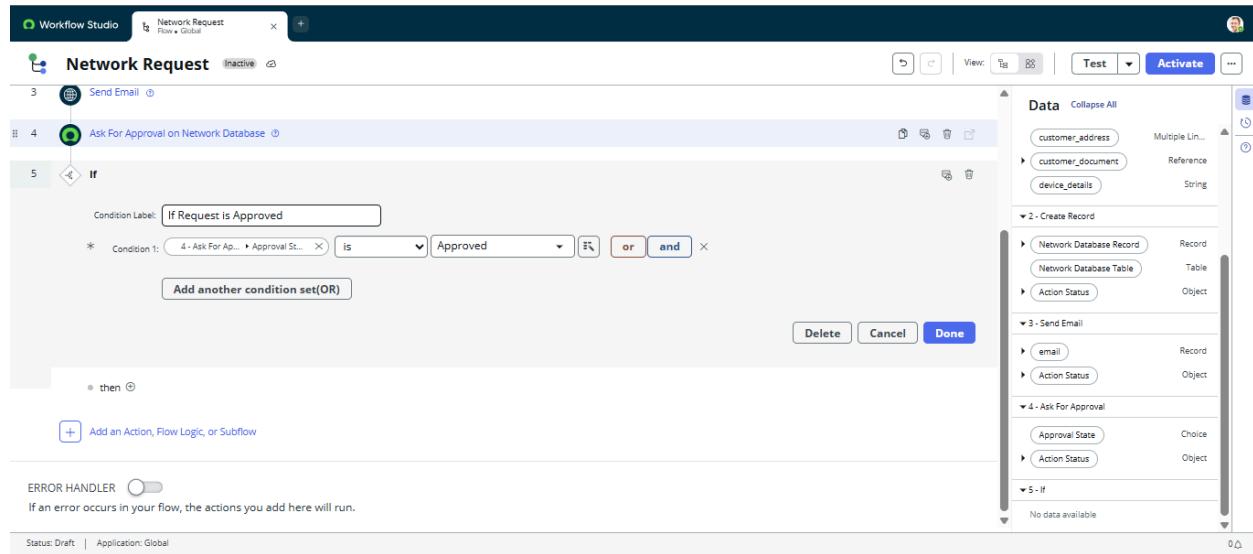
Implementation Steps

- 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

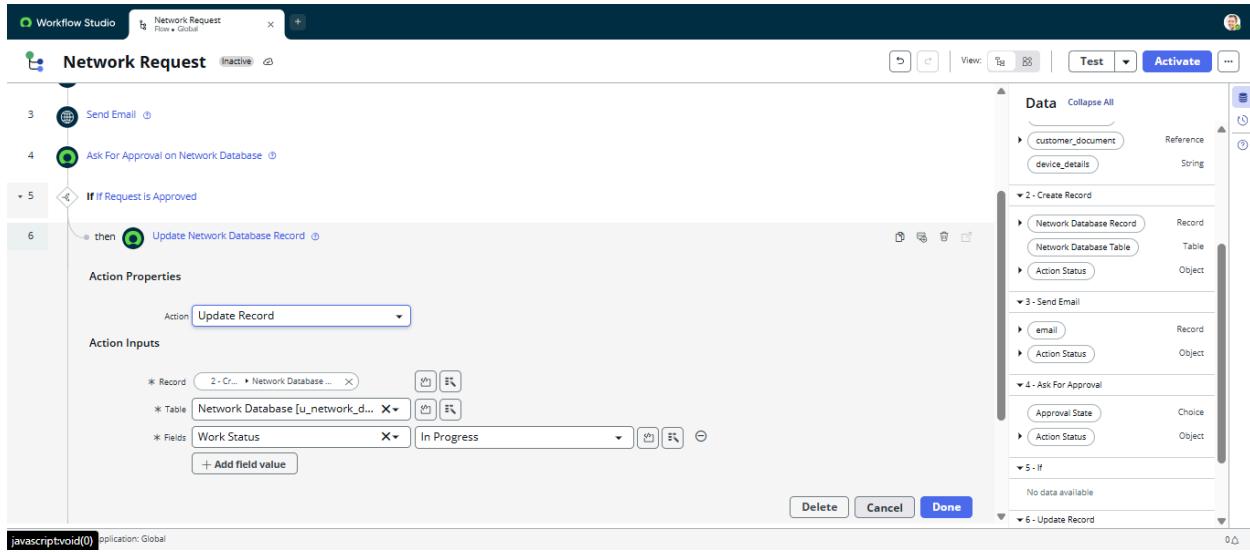
Updates the Network Database record based on workflow execution.

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

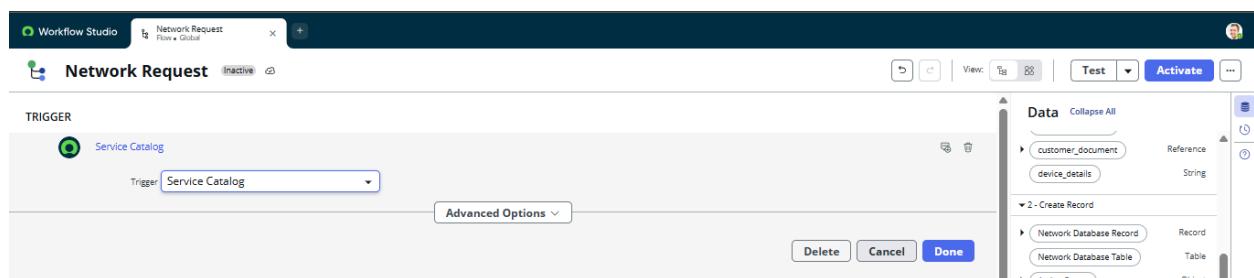
The flow completes execution after performing the required updates and notifications based on the approval outcome.

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

1 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 Items and Variable Sets]

Network Request

Catalog Variables	Available	Selected
No available values	customer_address customer_document device_details	

javascript:void(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

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

javascript:void(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

3 Send Email [?](#)

Action Properties

Action **Send Email**

Action Inputs

Target Record [2 - Create Record ...](#)

Table Network Data [Send Email \[work_d...\]](#)

Include Watermark

* To [Trigger - Service C... > ... > Em... \(X\)](#)

CC

BCC

* Subject Request has been created

Body OpenSans, 10pt

Hello,
We have received your network request.
Your request number is \${Request Number}. [2 - Create Record ... > Request Nu...](#)

javascript:void(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

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

Done

Data [Collapse All](#)

- 3 - Send Email
 - email Record
 - Action Status Object
- 4 - Ask For Approval

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 OR AND

Due Date: None

Data

- 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

Status: Draft | Application: Global

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)

Data

- 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 then 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

Data

- 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

ERROR HANDLER: javascript:void(0)

javascript:void(0) Application: Global

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.

