

# Automated Network Request Management in ServiceNow

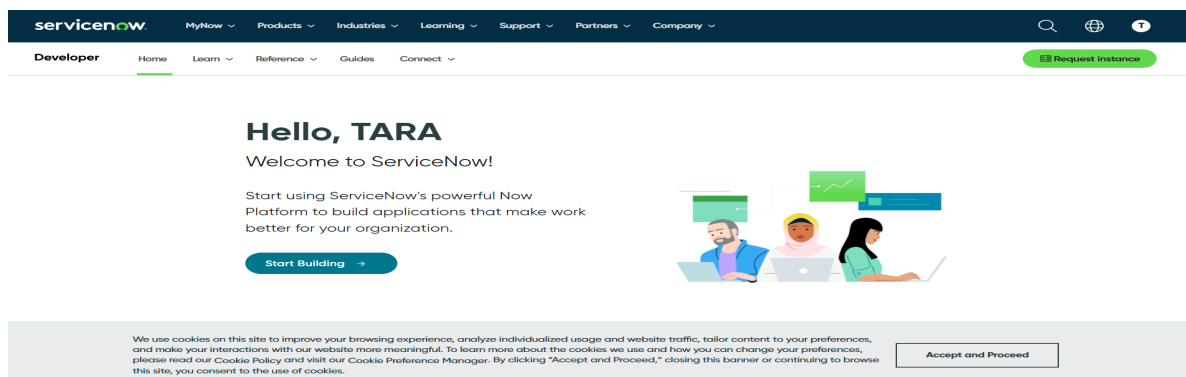
## Project Description:

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.

## 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
- **Access the Developer Site**
- Go to **<https://developer.servicenow.com/>** and sign in with your developer account
- After a successful sign-in, the landing page shows as below:



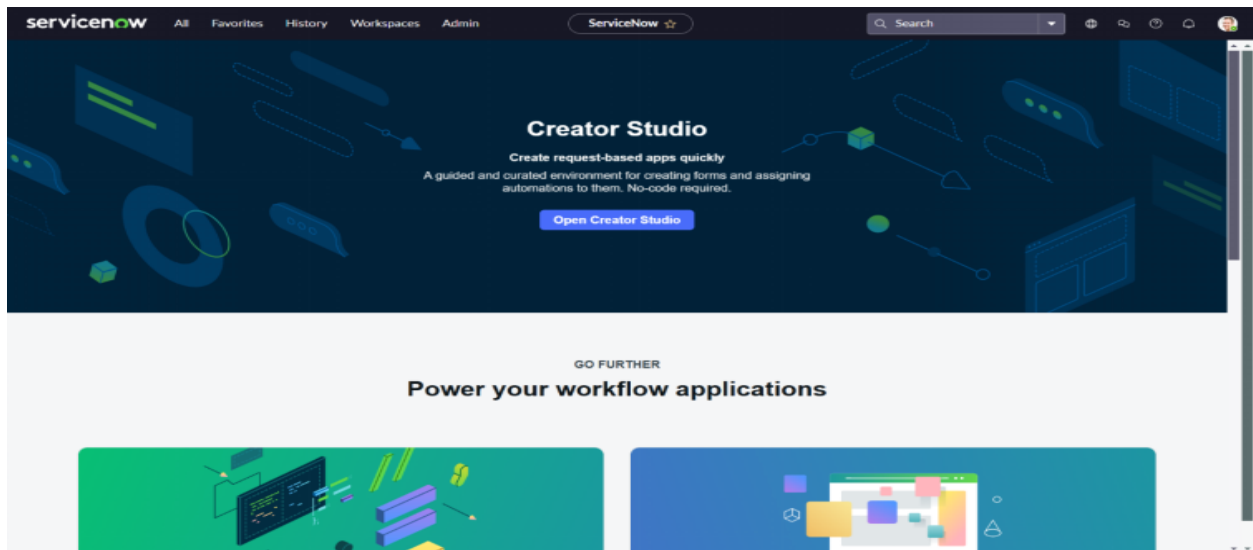
## Start Building an Instance

On the welcome page, click **Start Building**.

Choose an **Instance location** if prompted (for example: Zurich, Yokohama, or the region closest to you).

Click **Request Instance** or **Start Building** again.

Wait while ServiceNow provisions your **personal developer instance** (this may take a minute or two).



## Service Catalog Creation

### 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.

The image shows two screenshots of the ServiceNow interface. The top screenshot is the 'Creator Studio' dashboard, which has a dark blue header with navigation links: All, Favorites, History, Workspaces, Admin, and a ServiceNow logo. A search bar is on the right. A sidebar on the left shows a search for 'maintain items' with no results, and a list of favorites including 'Service Catalog', 'Catalog Definitions', and 'Maintain Items'. The main area has a 'Creator Studio' heading and a button to 'Open Creator Studio'. Below this is a section titled 'GO FURTHER Power your workflow applications' with two colorful illustrations.

The bottom screenshot is the 'Catalog Item - Network Request' form. It has a light blue header with the same navigation links. The form fields are as follows:

- Name: Network Request
- Application: Global
- Catalogs: Service Catalog
- Category: Network and Connectivity
- Active: ☒
- Fulfillment automation level: Unspecified
- State: -- None --
- Checked out: -- None --
- Owner: System Administrator

Below the form fields are tabs for 'Item Details', 'Process Engine', 'Picture', 'Pricing', and 'Portal Settings'. The 'Item Details' tab is active, showing a 'Short description' field with the text 'Network Services Request' and a 'Description' field with a rich text editor toolbar.

**Variable Configuration:**

**Go to the Variables Tab:**

1. Open the catalog item you just created (Service Catalog → Catalog Definitions → Maintain Items).
2. Click the Variables related list at the bottom of the form.
3. Click New to create a variable.

Type	Question	Order
Container Start	service details	200
Multiple Choice	Is this a new network connection or a re...	300
Single Line Text	If this is a relocation, please provide	310
Single Line Text	If this is a relocation, Please provide a	320
Container Start	Location & Devices Type	400
Single Line Text	Please provide address here	410
Select Box	Type of devices	420
Single Line Text	Provide device details	430
Container Start	Additional information	500
Single Line Text	If any, Please write here	510

### 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

Text	Value	Order	Inactive
New	N	100	false
Relocation	R	200	false
None	No	300	false

Question Choices

Order

Search

Actions on selected rows...

New

Question = Types of devices

<input type="checkbox"/>	Text	Value	Order	Inactive
<input type="checkbox"/>	Laptop	LA	100	false
<input type="checkbox"/>	Mobile	MO	200	false
<input type="checkbox"/>	Others	Ot	300	false

1 to 3 of 3

### Variable Set Configuration:

Variable Sets allow you to reuse common variables across multiple catalog items.

Navigate to Service Catalog → Catalog Variables → Variable Sets.

Create a set, add variables to it, then associate the set with multiple items.

Create Title as Requester Information ,Type as Single Row and Layout as 2 Columns Wide,one side then the other

Variable Set  
Requester Information

\* Title

Requester Information

\* Internal name

requester\_information

Order

100

Type

Single Row

Description

Application

Global

Display title

☐

Layout

2 Columns Wide, one side, then the other

Update

Delete

### Variable Types In Variable Set:

Opened on behalf of >> Reference>> reference to user table

Variable opened on behalf of

Application: Global

Type: Reference

Order:

Variable set: Requester Information

Active: ☒

Mandatory: ☐

Read only: ☐

Hidden: ☐

Disable automatic slot fill based on user context: ☐

Question Annotation Type Specifications Default Value Auto-populate Permission Availability

Values specific to this variable Type

Variable Width: System Default Width (50) %

Not honored in 2 column container

\* Reference: User [sys\_user]

Use reference qualifier: Simple

Reference qualifier condition: Add Filter Condition Add OR Clause

-- choose field -- -- oper -- -- value --

Email Id >> Single line text >> Auto populate by Opened on behalf of variable.

servicenow All Favorites History Workspaces Admin Variable - Email Id

Variable Email Id

Application: Global

Type: Single Line Text

Order:

Variable set: Requester Information

Active: ☒

Mandatory: ☐

Read only: ☐

Hidden: ☐

Disable automatic slot fill based on user context: ☐

Question Annotation Type Specifications Default Value Auto-populate Permission Availability

Dependent question: opened on behalf of

Reference: User [sys\_user]

Dot walk path: Click to select...

Copy Update Delete

Related Links

Run Print Scan

As mentioned in the above figures, all other variables are followed in the same process:

User name >>Single line text >> Auto populate by Opened on behalf of variable.

Phone Number >>Single line text >> Auto populate by Opened on behalf of variable.

Proof of Document >> Attachment

Name	Type	Question	Order
email_id	Single Line Text	Email Id	
opened_on_behalf_of	Reference	opened on behalf of	
proof_of_document	Attachment	Proof of Document	
user_name	Single Line Text	User Name	
phone_number	Single Line Text	Phone Number	

## 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**

Short description	Variable set	Conditions	Reverse if false	On load	Inherit	Updated	Order
Types of devices is others	(empty)	true	true	true	false	2025-08-31 23:41:11	100
Relocation fields hiding	(empty)	true	true	true	false	2025-08-31 23:47:07	100

Click on save, after saving the form will get UI policy actions in the related list

Click on New button to configure new UI Policy action, and Select the variable which we want to display on condition

Make Visible True as per our requirement

Update the UI Policy and Test the same on Catalog form.

ServiceNow Catalog UI Policy configuration page. The form shows the following settings:

- Applies on a Catalog Item view: ☒
- Applies on Catalog Tasks: ☒
- Applies on Requested Items: ☒
- On load: ☒
- Reverse if false: ☒

Buttons: Update, Delete

Related Links: [Run Point Scan](#)

Table: Catalog UI Policy Actions

Name	Read only	Mandatory	Visible	Order
<a href="#">provide_device_details</a>	Leave alone	Leave alone	True	100

### Creation of Table:

#### Create the Network database Table

- Navigate to **System Definition** → **Tables**.
- Click **New** to create a new table.
- Fill in **Table Information**:
  - **Name:** Network database
  - **Label:** Network database (backend name of the table).
  - **Auto-generate schema:** Leave it checked if you want ServiceNow to auto-generate schema fields.
- Click **Submit** to create the table.



**servicenow** All Favorites History Table - Network database Table

A table is a collection of records in the database. Each record corresponds to a row in a table, and each field on a record corresponds to a column on that table. Applications use tables and records to manage data and processes. [More Info](#)

\* Label Network database Table Application Global

\* Name u\_network\_database\_table Remote Table

## Creation of Fields:

We had created the columns as mentioned in the below figure:

**servicenow** All Favorites History Table - Network database Table

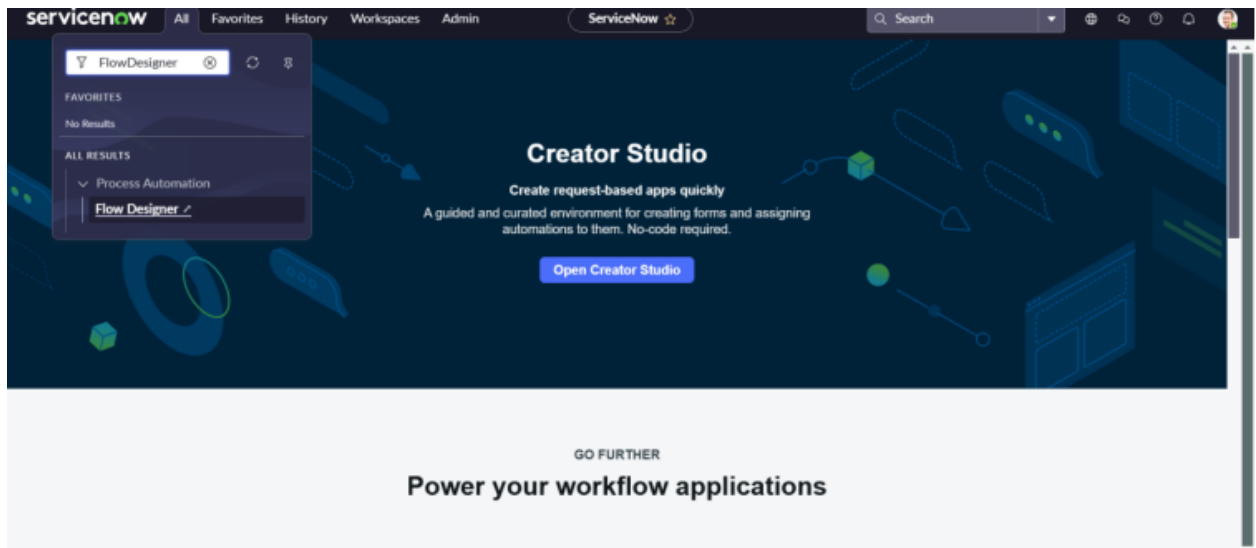
Columns Controls Application Access

Table Columns for text Search 1 to 15 of 15 New

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

## Navigating to Flow Designer:

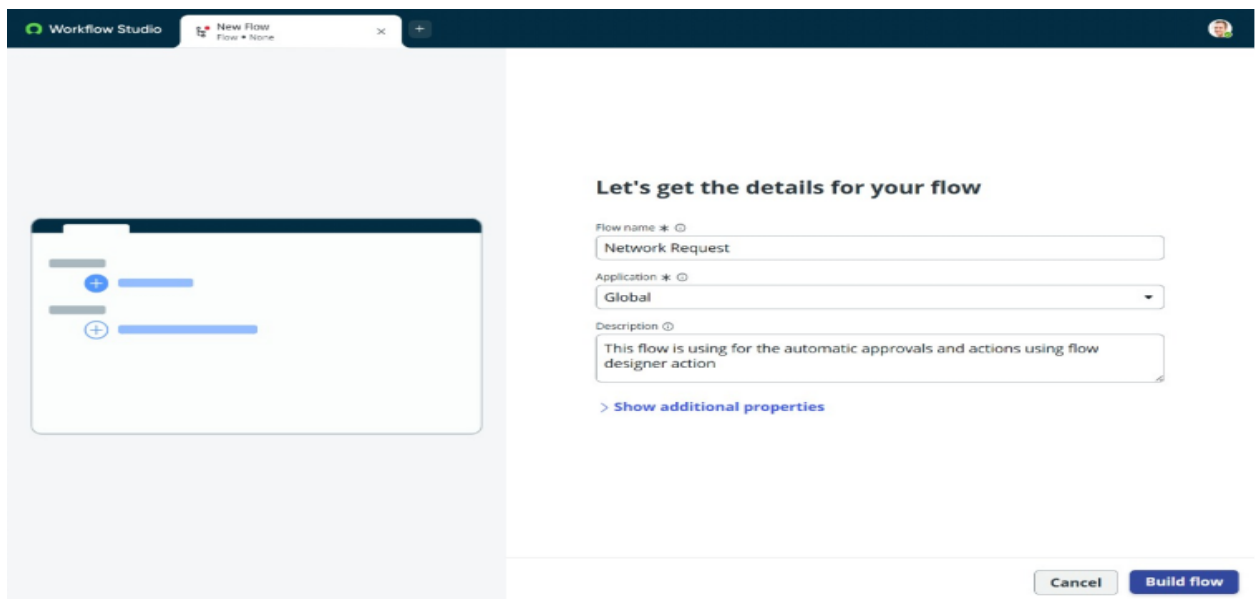
Go to Flow Designer by typing Flow Designer in the left-hand application navigator, or navigate through All > Flow Designer.



## Creation Of Flow

After clicking flow designer, it redirects to a new page .

- 1.Click on New
- 2.Flow Name >Network Request and give the description
- 3.Click on Build flow

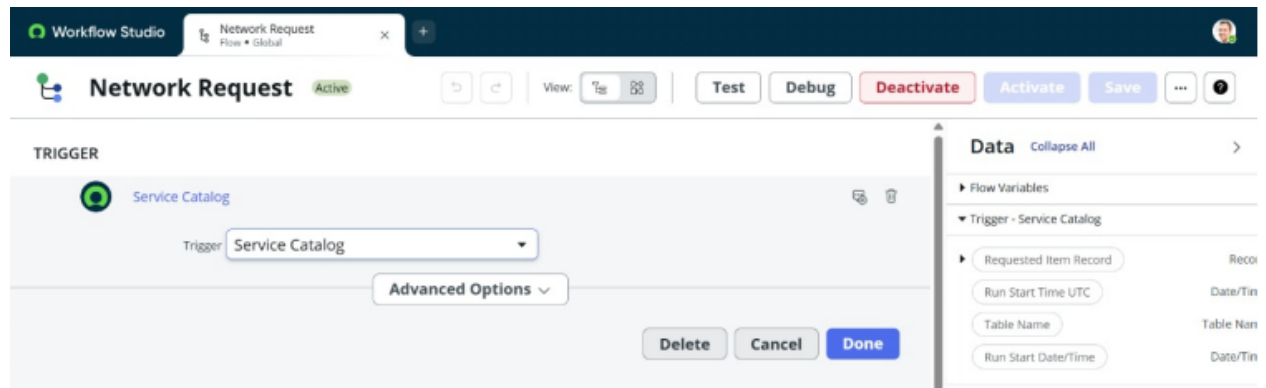


## 2.Configuring Trigger

- 1.Click on (+) Icon to Configure the Trigger

2. Select Trigger as Application >> Service catalog

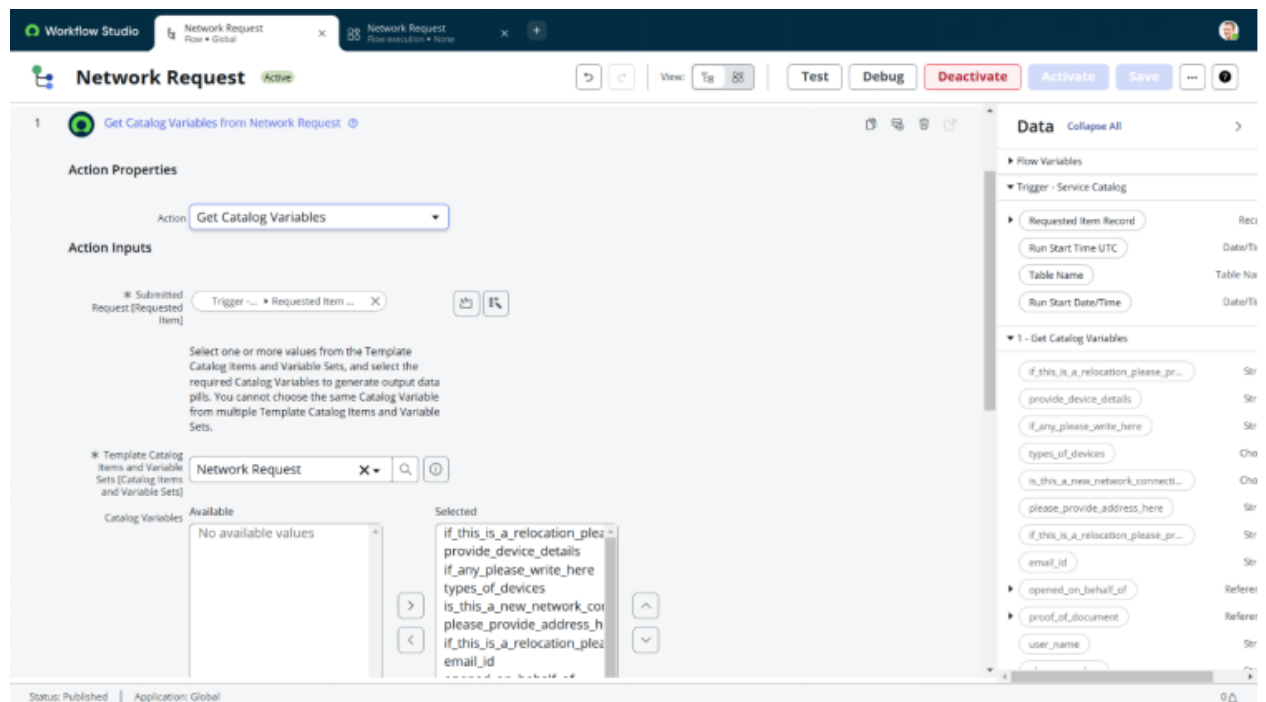
3. Click on Done.



Configuring Action:

We are creating multiple actions to create a Flow.

Step 1: We created an Action :Get catalog Variables with several Action inputs.



Step 2: We created an Action :Create Record

Workflow Studio Network Request Flow Global

Network Request Active

2 Create Network database Table Record

Action Properties

Action: Create Record

Action Inputs

\* Table: Network database Table [u\_netw...

\* Fields:

- Requested For: Trigger - Servi... → First na...
- Date of Enquiry: Trigger - S... → Run Start Date...
- Device Details: 1 - Get Catalo... → type\_of\_dev...
- Customer Document: 1 - G... → please\_provide\_addr...
- Assignment Group: Network

+ Add field value

Delete Cancel Done

Data Collapse All

Flow Variables

Trigger - Service Catalog

Requested Item Record

- Run Start Time UTC: Date/Tin
- Table Name: Table Nam
- Run Start Date/Time: Date/Tin

1 - Get Catalog Variables

proof\_of\_document: Referensi

- user\_name: Strir
- email\_id: Strir

opened\_on\_behalf\_of: Referensi

- phone\_number: Strir
- is\_this\_a\_new\_network\_connect...: Choi
- if\_this\_is\_a\_relocation\_please\_p...: Strir
- if\_this\_is\_a\_relocation\_please\_p...: Strir

Step 3: We created an Action :Ask For Approval

Workflow Studio Network Request Flow Global

Network Request Active

3 Ask For Approval

Action Properties

Action: Ask For Approval

Action Inputs

\* Record: 2 - ... → Network database Tab...

Table: Network database Table [u\_netw...

Approval Reason:

Approval Field: Select a field

Journal Field: Select a field

\* Rules

Approve When:

Anyone approves Abel Tuter X

OR AND

Due Date: Approve if pending by Actual date Drop date/time pill here

Add another OR rule set

Delete Cancel Done

Status: Published Application: Global

Data Collapse All

Flow Variables

Trigger - Service Catalog

Requested Item Record

- Run Start Time UTC: Date/Tin
- Table Name: Table Nam
- Run Start Date/Time: Date/Tin

1 - Get Catalog Variables

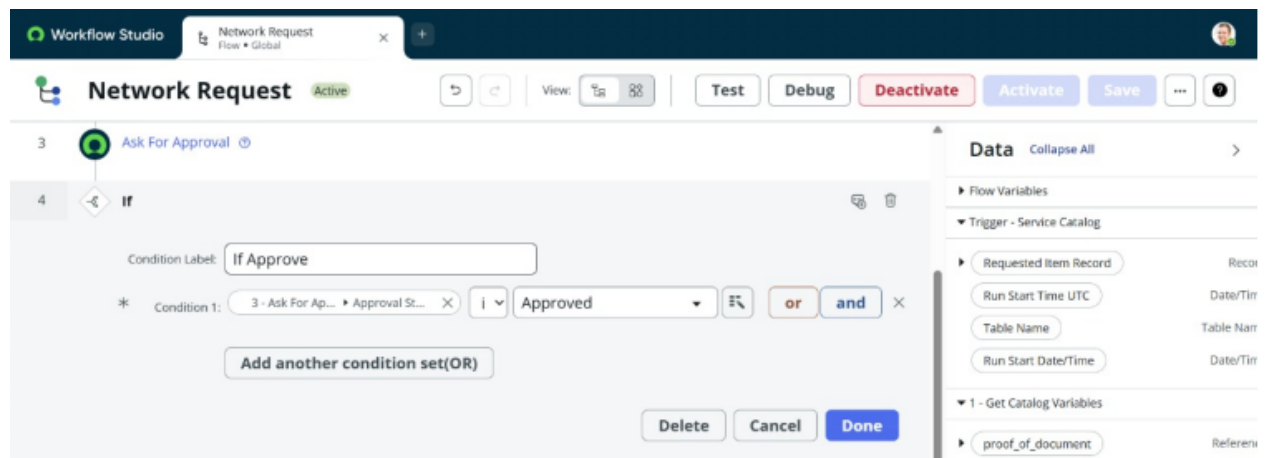
proof\_of\_document: Referensi

- user\_name: Strir
- email\_id: Strir

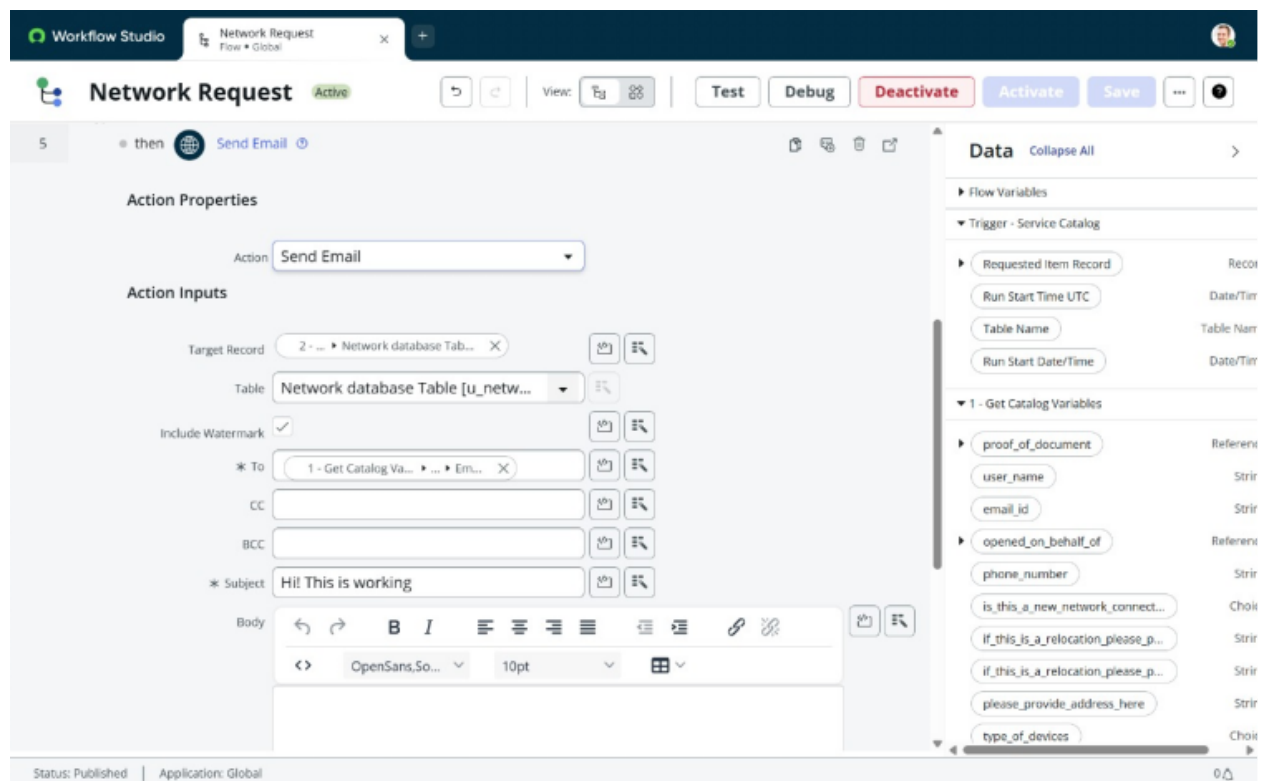
opened\_on\_behalf\_of: Referensi

- phone\_number: Strir
- is\_this\_a\_new\_network\_connect...: Choi
- if\_this\_is\_a\_relocation\_please\_p...: Strir
- if\_this\_is\_a\_relocation\_please\_p...: Strir
- please\_provide\_address\_here: Strir
- type\_of\_devices: Choi

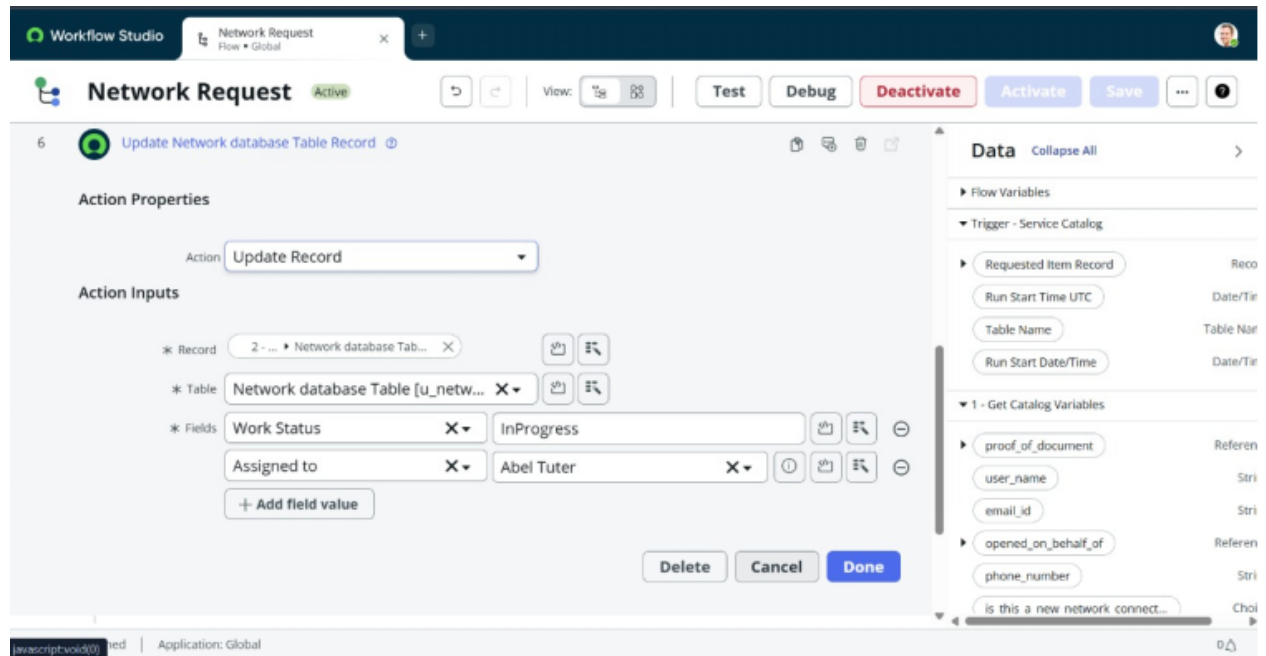
Step 4: We created a Flow Logic



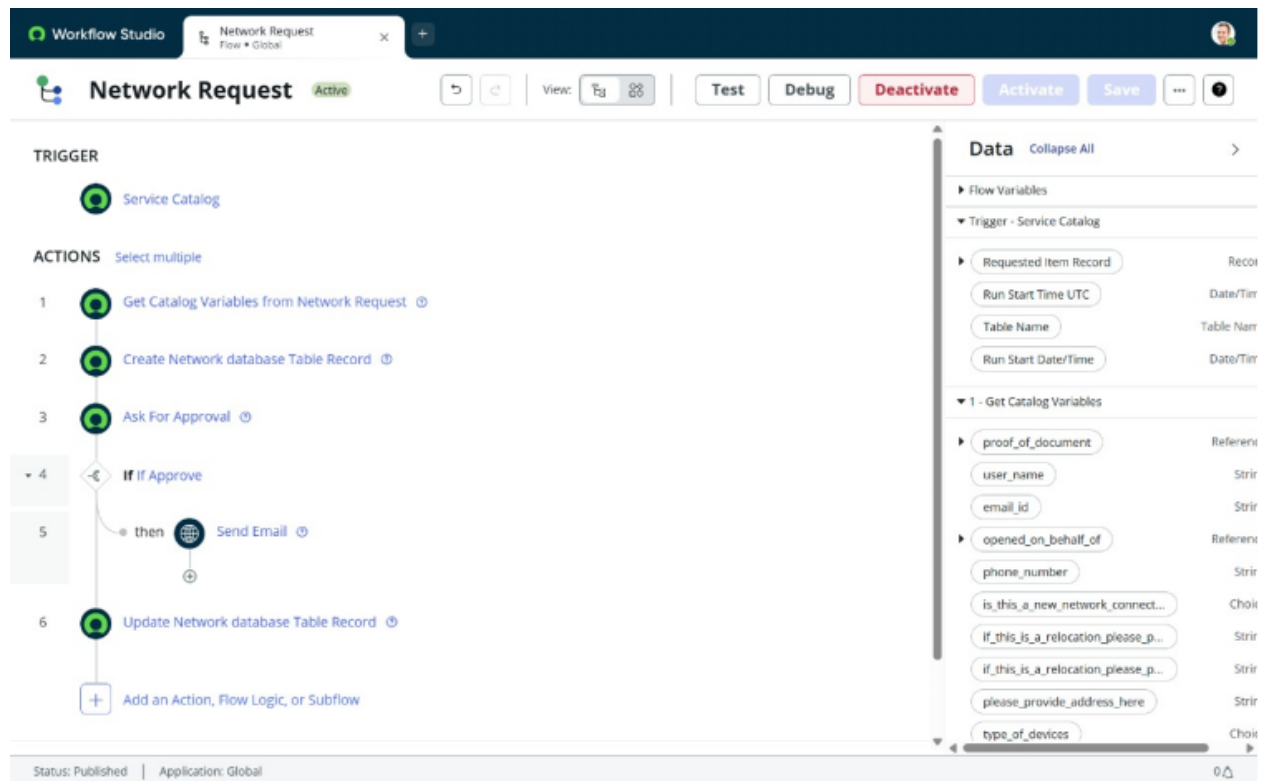
Step 5: We created an action: Send Email



Step 6: we created an action: Update Record

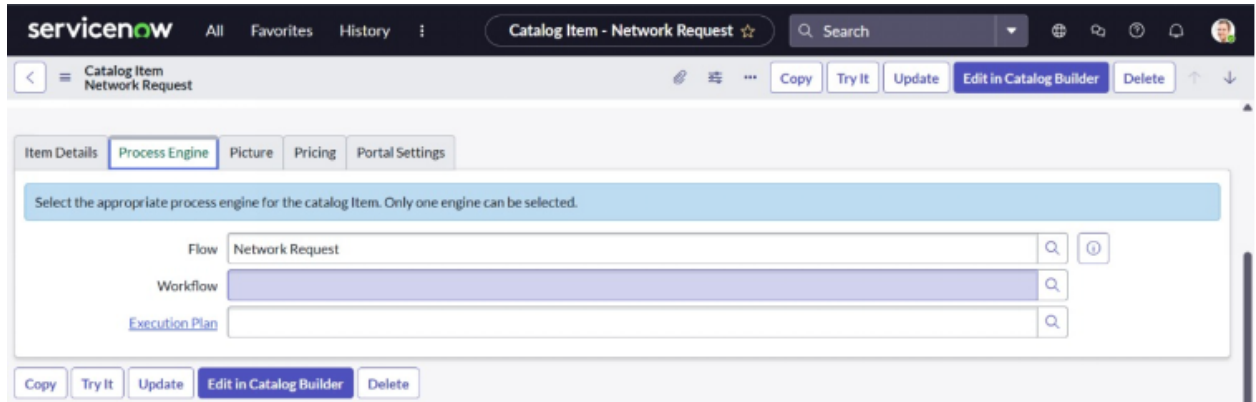


Flow chart:

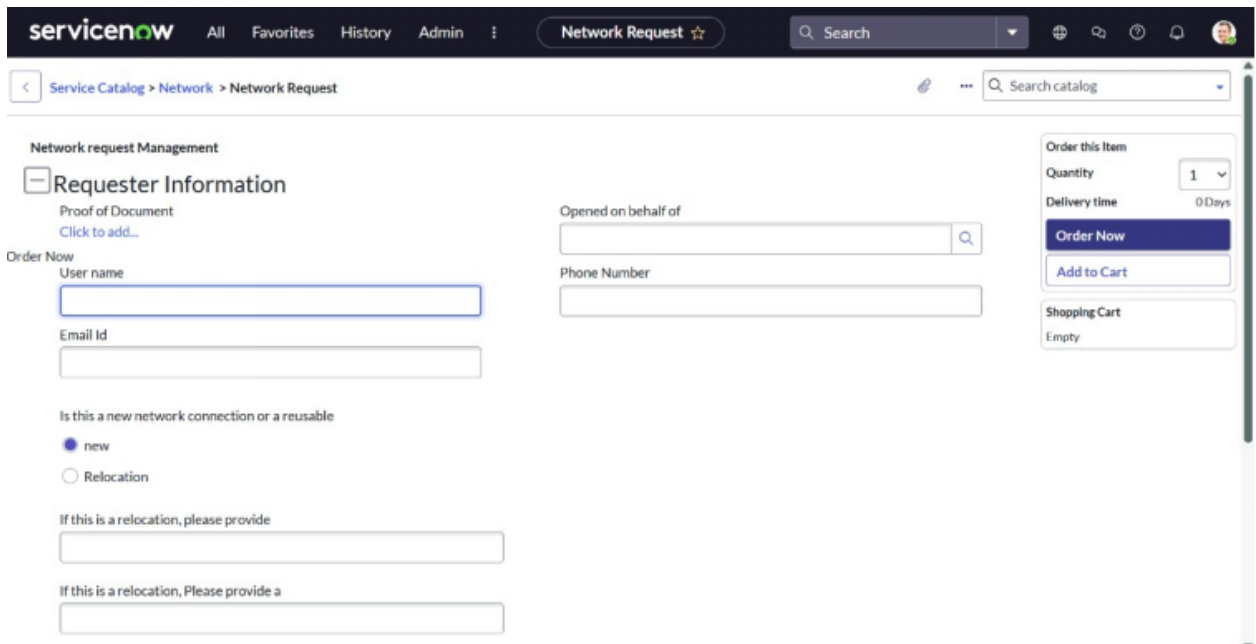


## Final Testing in End User portal & Instance

In the service catalog->Maintain Items->Network Request->Process Engine->Flow->Network Request



Then click on Try it and choose order now :



Then Request Number can generated after that Request item number can copied and test into flow .

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[All](#)
[Favorites](#)
[History](#)

Order Status: REQ0010003

Order Status

[Back to Catalog](#)
[Continue Shopping](#)
[Home](#)

Thank you, your request has been submitted

Order Placed: 2025-09-18 01:51:09

Request Number: [REQ0010003](#)

Estimated Delivery Date of Complete Order: 2025-09-18

Description	Delivery Date	Stage	Price (ea.)	Quantity	Total
<a href="#">Network request Management</a>	2025-09-18			1	
				Total	-

[Back to Catalog](#)
[Continue Shopping](#)

[Home](#)

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[All](#)
[Favorites](#)
[History](#)

Request - REQ0010003

[Request REQ0010003](#)

[Discuss](#)
[Follow](#)
[Update](#)
[Cancel Request](#)
[Copy](#)
[Delete](#)

Number

REQ0010003

Requested for

System Administrator

Location

Due date

2025-09-18 01:51:08

Price

\$0.00

Description

Short description

Special instructions

Opened

2025-09-18 01:51:09

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

Actions on selected rows...

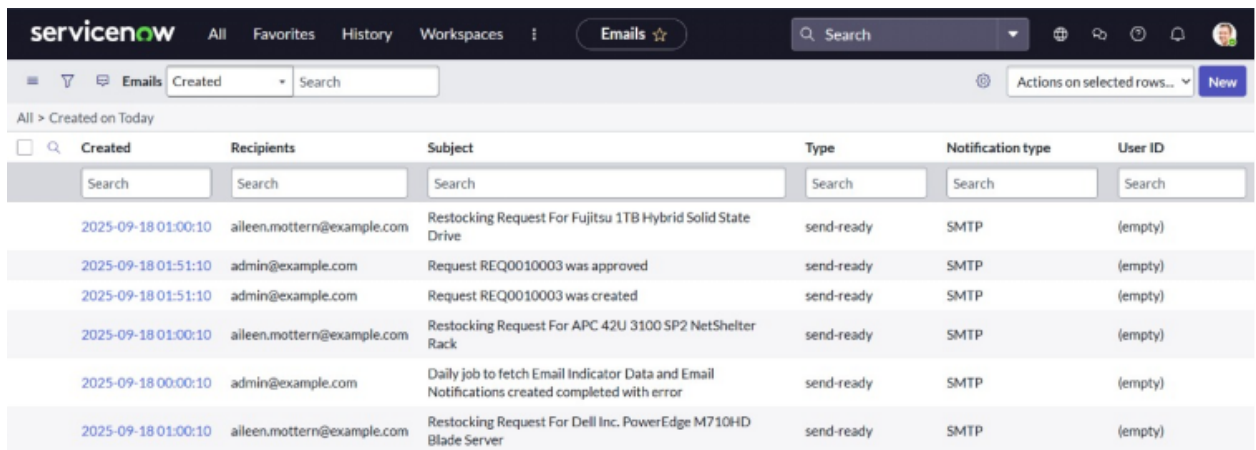
Request = REQ0010003	Number	Quantity	Catalog	Item	Due date	Price	Assigned to	Stage
	<a href="#">RITM0010003</a>	1	(empty)	<a href="#">Network Request</a>	2025-09-18 01:51:08	\$0.00	(empty)	

Go to System logs->Email

And we can see our request number is created and got acknowledged as request

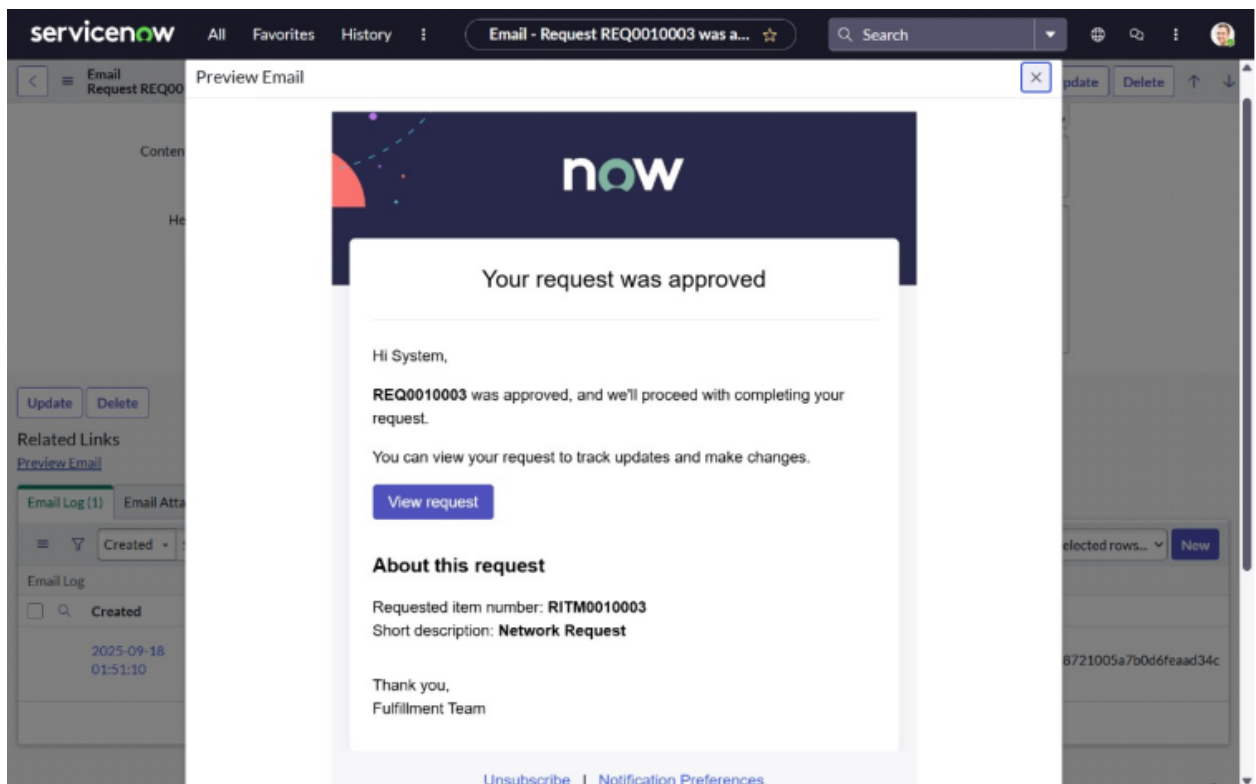


approved.



Created	Recipients	Subject	Type	Notification type	User ID
<input type="text" value="Search"/>	<input type="text" value="Search"/>	<input type="text" value="Search"/>	<input type="text" value="Search"/>	<input type="text" value="Search"/>	<input type="text" value="Search"/>
2025-09-18 01:00:10	aileen.mottern@example.com	Restocking Request For Fujitsu 1TB Hybrid Solid State Drive	send-ready	SMTP	(empty)
2025-09-18 01:51:10	admin@example.com	Request REQ0010003 was approved	send-ready	SMTP	(empty)
2025-09-18 01:51:10	admin@example.com	Request REQ0010003 was created	send-ready	SMTP	(empty)
2025-09-18 01:00:10	aileen.mottern@example.com	Restocking Request For APC 42U 3100 SP2 NetShelter Rack	send-ready	SMTP	(empty)
2025-09-18 00:00:10	admin@example.com	Daily job to fetch Email Indicator Data and Email Notifications created completed with error	send-ready	SMTP	(empty)
2025-09-18 01:00:10	aileen.mottern@example.com	Restocking Request For Dell Inc. PowerEdge M710HD Blade Server	send-ready	SMTP	(empty)

Now click on the Request approved. And choose preview Email. And we can see the request approval for our Order.



**now**

Your request was approved

Hi System,

**REQ0010003** was approved, and we'll proceed with completing your request.

You can view your request to track updates and make changes.

[View request](#)

**About this request**

Requested item number: **RITM0010003**  
Short description: **Network Request**

Thank you,  
Fulfillment Team

[Unsubscribe](#) | [Notification Preferences](#)

And if we click on view request we can see the summary of the Request.

The screenshot shows the ServiceNow user interface. At the top left is the 'servicenow' logo. Next to it is a search bar with the placeholder text 'Search' and a magnifying glass icon. To the right of the search bar are navigation links: 'My Tasks', 'My Requests', 'My Favorites', a user profile icon, and 'Tours'. Below these links is a 'Get support' button. The main content area has a breadcrumb trail: 'Home > Request Summary'. Below the breadcrumb, there is a white box containing the following information: 'Submitted :2025-09-18 01:51:09', 'Request Number : REQ0010003', and 'Estimated Delivery : 2025-09-18'. Below this box is a table with the following columns: 'Item', 'Delivery Date', 'Stage', 'Price (each)', 'Quantity', and 'Total'. The table has one data row: 'Network Request', '2025-09-18', '---', '---', '1', and '---'. At the bottom right of the table area, it says 'Total: \$0.00'. At the bottom left of the page is a help icon (a question mark in a circle). At the bottom right is a chat icon (a speech bubble in a circle).

servicenow

Search

My Tasks My Requests My Favorites Tours

Technology services ▾ Get support

Home > Request Summary

Submitted :2025-09-18 01:51:09  
Request Number : REQ0010003  
Estimated Delivery : 2025-09-18

Item	Delivery Date	Stage	Price (each)	Quantity	Total
Network Request	2025-09-18	---	---	1	---

Total: \$0.00

