

# 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

## 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 screenshot shows a web browser window with the ServiceNow interface. The title bar says "Catalog Items | ServiceNow". The main content is a table titled "Catalog Items" with columns: Name, Short description, Active, Roles, Catalogs, Category, Price, Type, and Updated. There are 189 rows of data. The first row is highlighted. The table includes rows for various network-related tasks like "Add network switch to datacenter cabinet", "Reboot Windows Server", and "Decommission local office Domain Controller". The last few rows show items like "Service Category Request" and "Item Designer Category Request". At the bottom of the table, there are buttons for "Activate" and "Deactivate". The status bar at the bottom of the screen shows "Hot days ahead 32°C", the date "05-09-2025", and the time "15:58".

	Name	Short description	Active	Roles	Catalogs	Category	Price	Type	Updated
1	Network Request	Network request Management	true		Service Catalog	Network and connectivity	\$0.00	Item	2025-09-03 07:50:17
2	Add network switch to datacenter cabinet	This standard change template describes ...	true		Service Catalog	Network Standard Changes	\$0.00	Item	2025-08-25 03:19:09
3	Reboot Windows Server	Reboot a Windows Server (after patching ...)	true		Service Catalog	Server Standard Changes	\$0.00	Item	2025-08-25 03:19:09
4	Decommission local office Domain Controller	Decommission a server from use including...	true		Service Catalog	Server Standard Changes	\$0.00	Item	2025-08-25 03:19:09
5	Change VLAN on a Cisco switchport	Change the port of a Cisco switch to a n...	true		Service Catalog	Network Standard Changes	\$0.00	Item	2025-08-25 03:19:09
6	Clear BGP sessions on a Cisco router	Resend the complete BGP table to neighbor...	true		Service Catalog	Network Standard Changes	\$0.00	Item	2025-08-25 03:19:09
7	Service Category Request	Start managing your own service requests	true		Service Catalog	Departmental Services	\$0.00	Item	2025-06-25 23:45:12
8	Item Designer Category Request	Request a category that you can use to c...	true		Service Catalog	Can We Help You?	\$0.00	Item	2025-06-25 23:45:12
9	Create a new Export Set	Create a new Export Set to export data f...	true		Service Catalog	(empty)	\$0.00	Item	2025-06-25 23:45:12
10	New LDAP Server	Create a new LDAP server record	true		Service Catalog	(empty)	\$0.00	Item	2025-06-25 23:45:11
11		Register a new business application			Service	Business Application Lifecycle			2025-06-25

## 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.

Screenshot of ServiceNow Catalog Item 'Network Request' configuration:

**Catalog Item: Network Request**

**Variables (10)**

Type	Question	Order
Container Start	Service details	200
Multiple Choice	is this a new request connection or a re...	300
Single Line Text	if this is a relocation,please provide	310
Single Line Text	if this is relocation,please provide	320
Container Start	Location & Device Type	400
Single Line Text	Please provide address here	410
Multiple Choice	Types of devices	420
Single Line Text	Provide device details	430
Container Start	Additional Information	500
Single Line Text	if any ,please write here	510

**Variable: Please provide address here**

**Question**

Specify the Question that explains the options available to the end user when ordering the item

\* Question: Please provide address here

\* Name: please\_provide\_address\_here

Conversational label:

Tooltip:

Example Text: Please provide address here

**Buttons:** Copy, Update, Delete

**Related Links:** Item Diagnostic, Show VA render type, Run Point Scan

# 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

The screenshot shows the ServiceNow Catalog Item screen for a 'Network Request' catalog item. The top navigation bar includes tabs for 'Student - Skill Wallet', 'ServiceNow Developers', 'ServiceNow', and 'Network Request | Catalog Item'. Below the navigation is a breadcrumb trail: Catalog Item > Network Request. Action buttons include Copy, Try It, Update, Edit in Catalog Builder, and Delete.

Related Links include Item Diagnostic, Show VA render type, and Run Point Scan.

Below the links, there are tabs for Variables (10), Variable Sets (1), Catalog UI Policies (1), Catalog Client Scripts, Available For, Not Available For, Categories (1), Catalogs (1), Catalog Data Lookup Definitions, and Related Articles. The 'Variables (10)' tab is selected.

A search bar and a 'New' button are visible above the list of variables.

Type	Question	Order
Container Start	Service details	200
Multiple Choice	is this a new request connection or a re...	300
Single Line Text	if this is a relocation,please provide	310
Single Line Text	if this is relocation,please provide	320
Container Start	Location & Device Type	400
Single Line Text	Please provide address here	410
Multiple Choice	Types of devices	420
Single Line Text	Provide device details	430
Container Start	Additonal Information	500
Single Line Text	if any ,please write here	510

The bottom of the screen shows the Windows taskbar with various pinned icons and system status indicators.

# Variable Set Configuration

## 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

Screenshot of ServiceNow Catalog Item - Network Request page:

**Meta** field (empty)

**Related Links**: Item Diagnostic, Show VA render type, Run Point Scan

**Variable Sets (1)** tab selected.

Variable Set	Order
Requester Information	100

Requester Information details:

- Title: Requester Information
- Internal name: requester\_information
- Order: 100
- Type: Single Row
- Description: (empty)

**Variables (5)** tab selected.

Name	Type	Question	Order
opened_on_behalf_of	Reference	Opened on behalf of	100
email_id	Single Line Text	Email Id	200
user_name	Single Line Text	User name	300
proof_of_document	Attachment	Proof of Document	400
phone_number	Single Line Text	Phone Number	500

The screenshot shows the ServiceNow Requester Information Variable Set configuration page. At the top, there are tabs for 'Variable Set' and 'Requester Information'. Below the tabs, there is a 'Type' dropdown set to 'Single Row' and a 'Description' input field. At the bottom of the main area, there are 'Update' and 'Delete' buttons. Below the main content, there is a navigation bar with tabs for 'Variables (5)', 'Catalog UI Policies', 'Catalog Client Scripts', 'Included In (1)', and 'Catalog Data Lookup Definitions'. The 'Variables' tab is selected. A search bar and a 'New' button are also present. The variable list table has columns for 'Name', 'Type', 'Question', and 'Order'. The variables listed are:

Name	Type	Question	Order
opened_on_behalf_of	Reference	Opened on behalf of	100
email_id	Single Line Text	Email Id	200
user_name	Single Line Text	User name	300
proof_of_document	Attachment	Proof of Document	400
phone_number	Single Line Text	Phone Number	500

## 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.

Screenshot of ServiceNow Catalog Item - Network Request screen:

**Meta**: 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.

**Related Links**:

- Item Diagnostic
- Show VA render type
- Run Point Scan

**Variables (10)** | **Variable Sets (1)** | **Catalog UI Policies (1)** | Catalog Client Scripts | Available For | Not Available For | Categories (1) | Catalogs (1) | Catalog Data Lookup Definitions | Related Articles

**Related Catalog Items** | Assigned Topics

**Order** | Search | Actions on selected rows... | New

**Catalog item = Network Request**

Short description	Variable set	Conditions	Reverse if false	On load	Inherit	Updated	Order
Types of devices is others	(empty)		true	true	false	2025-08-25 08:13:15	100

1 to 1 of 1

**Air: Satisfactory Tomorrow** | **Search** | **ENG IN** | **16:01** | **05-09-2025**

Screenshot of ServiceNow Catalog UI Policy screen:

**Catalog UI Policy** | **Types of devices is others**

**Applies to**: A Catalog Item | **Application**: Global | **Active**:

**\* Catalog item**: Network Request

**\* Short description**: Types of devices is others

**When to Apply** | Script

Catalog UI policy actions are applied only if all the following conditions are met:

1. The catalog UI policy is Active
2. The items in the Conditions field evaluate to true
3. The field specified in the catalog UI policy is present on the specified catalog item

**Catalog Conditions** | **Add Filter Condition** | **Add OR Clause**

types\_of\_devices | Is | Others | **AND** | **OR** | **X**

**Applies on a Catalog Item view**:  | **Applies on Catalog Tasks**:  | **Applies on Requested Items**:

**Apply the catalog UI policy actions when the form is loaded or when the user changes values on the form**

**On load**:

**Reverse the effects of the catalog UI policy actions when the Conditions evaluate to false**

**Reverse if false**:

**Air: Satisfactory Tomorrow** | **Search** | **ENG IN** | **16:02** | **05-09-2025**

The screenshot shows two ServiceNow browser windows side-by-side.

**Top Window: Catalog UI Policy**

- Condition:** types\_of\_devices is Others
- Applies on:** Catalog Item view (checked), Catalog Tasks (unchecked), Requested Items (unchecked)
- Actions:**
  - On load (checked): Apply the catalog UI policy actions when the form is loaded or when the user changes values on the form.
  - Reverse if false (checked): Reverse the effects of the catalog UI policy actions when the Conditions evaluate to false.
- Buttons:** Update, Delete

**Bottom Window: Catalog UI Policy Actions**

Name	Read only	Mandatory	Visible	Order
provide_device_details	Leave alone	Leave alone	True	100

**Second Window: Catalog UI Policy Action**

UI policy = Types of devices is others

Catalog Item	Network Request	Application
Variable name	provide_device_details	Global
Order	100	Mandatory
		Visible
		Read only
		Value action
		Field message type

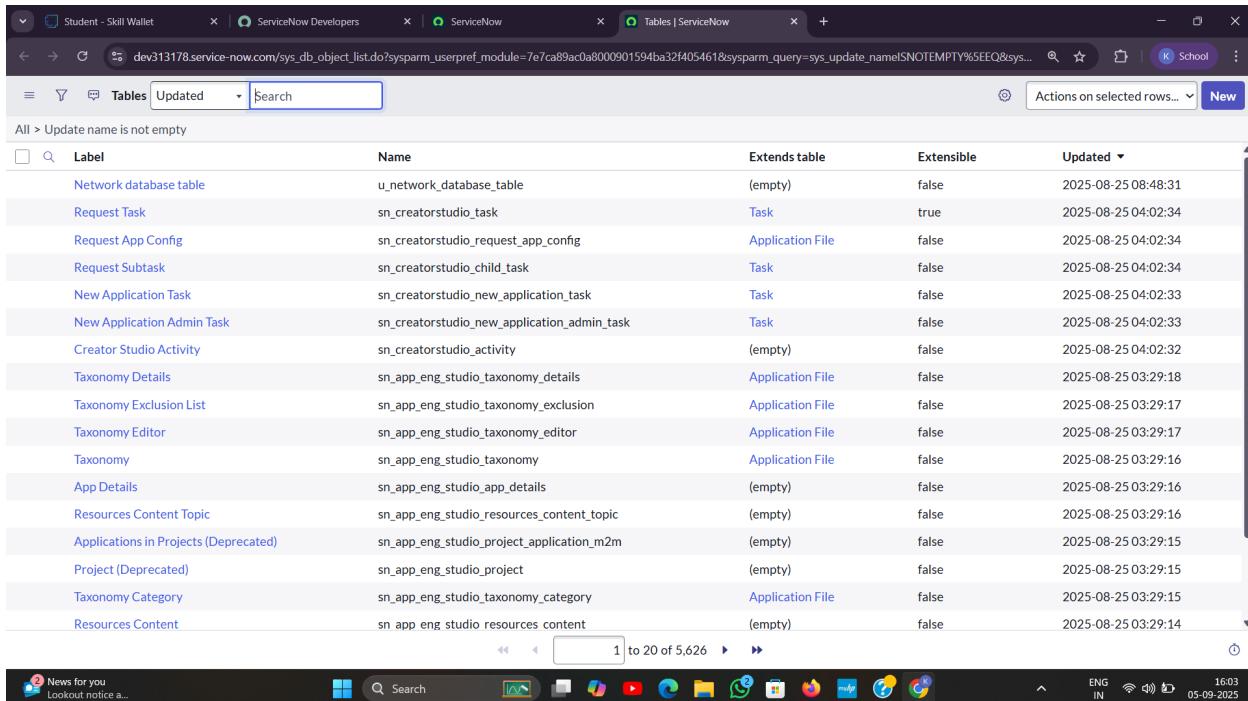
**System Status Bar:** Air: Satisfactory Tomorrow, ENG IN, 16:02, 05-09-2025

## Creation of Table

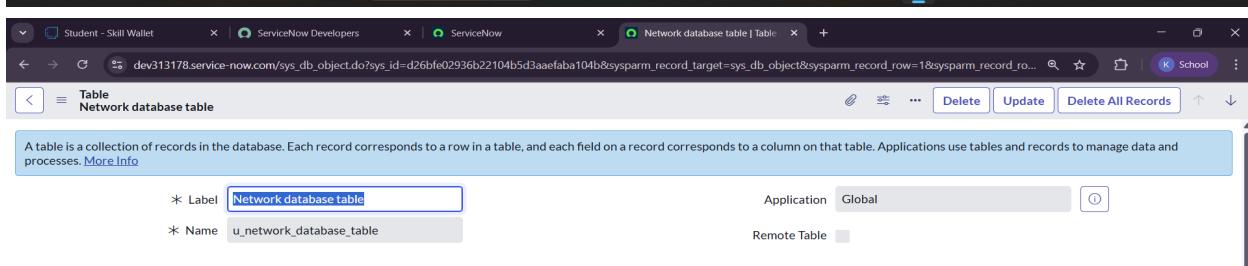
### Creation of Table

Navigate to: System Definition > Tables.

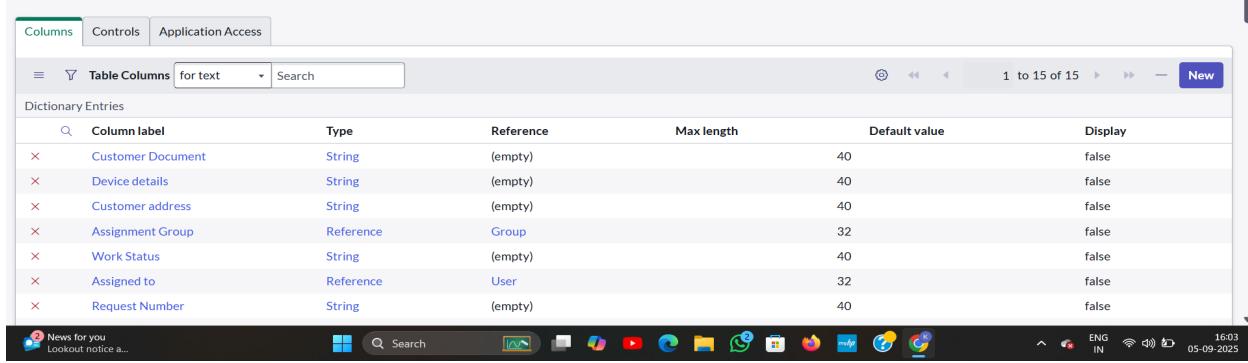
- Click New to create a new table.
- Fill in Table Information: · ·
- Name: Name of the table -----  
Label: Backend name of the table-----  
Auto-generate schema: Leave it checked if you'd like ServiceNow to auto-generate schema fields. · Click Submit to create the table.



The screenshot shows the ServiceNow 'Tables' list view. The table has columns: Label, Name, Extends table, Extensible, and Updated. The 'Label' column lists various ServiceNow objects like 'Network database table', 'Request Task', etc. The 'Name' column lists their corresponding backend names. The 'Extends table' column shows values like '(empty)', 'Task', 'Application File', etc. The 'Extensible' column has mostly 'false' values. The 'Updated' column shows dates from August 2025. A search bar at the top is empty. A message 'All > Update name is not empty' is displayed above the table. At the bottom, there's a navigation bar with icons and a status bar showing '1 to 20 of 5,626'.



The screenshot shows the 'Table' creation form for 'Network database table'. It includes fields for 'Label' (set to 'Network database table') and 'Name' (set to 'u\_network\_database\_table'). There are tabs for 'Application' (Global), 'Remote Table', and a 'More' button. A note at the top says '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.' with a 'More Info' link.



The screenshot shows the 'Table Columns' configuration view for 'Network database table'. It lists 15 columns with the following details:

Column label	Type	Reference	Max length	Default value	Display
Customer Document	String	(empty)	40		false
Device details	String	(empty)	40		false
Customer address	String	(empty)	40		false
Assignment Group	Reference	Group	32		false
Work Status	String	(empty)	40		false
Assigned to	Reference	User	32		false
Request Number	String	(empty)	40		false

A note at the top says 'Dictionary Entries' with a 'More Info' link. A status bar at the bottom shows '1 to 15 of 15'.

## 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.

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.

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)
  - . 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:

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

## Define Field Properties

Fill in the following details for your new field:

1. Column Label (Field Label) · · Description: This is the name that will be displayed on the forms, lists, and records.

Example: Customer Name

2. Column Name · · ·

Description: This is the internal name of the field and is auto-generated based on the column label. It should be unique for each field. Do not manually edit this unless necessary.

Example: customer\_name

Description: The type of field determines the kind of data it will store. You need to choose the correct type based on the data you want to store (e.g., text, number, date, etc.). Some of the most common types include:

String: For short text values (e.g., name, description).

Integer: For numbers without decimals (e.g., age, number of items).

Choice: A dropdown list of options.

Reference: A field that links to another table (e.g., linking to a User table). Boolean: A true/false checkbox.

Date: For a date picker field.

Date/Time: For both date and time.

Example: String, Choice, Reference

3. Max Length (Optional) ·

Description: If you are creating a string-type field, you can specify the maximum length of the text allowed.

Example: 255 characters (default length for a string field).

#### 4. Mandatory ·

Description: Check this box if the field should be required when creating or updating records. ·

Example: For a "Customer Name" field, this might be required.

5. Default Value (Optional) · · Description: You can set a default value for the field if desired. This value will appear automatically when creating a new record.

Example: Set the default value to "New Customer" for a "Customer Name" field.

#### 6. Read-Only ·

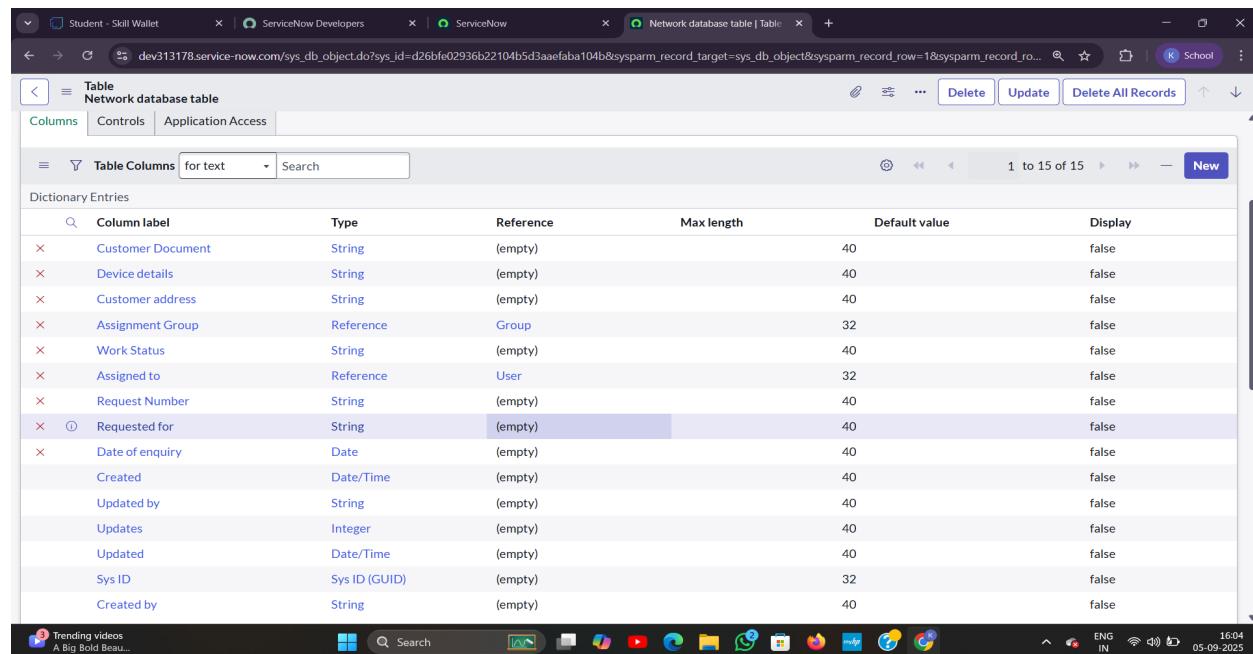
Description: Check this box if the field should be read-only (users cannot modify its value). This is commonly used for calculated or system-generated fields.

Example: "Created Date" or "Record Number".

#### 7: Save the Field

· Once you've configured all the necessary field properties, click Submit or Save to create the field.

· After saving, ServiceNow will create the new field and add it to the list of columns for the selected table.



The screenshot shows the ServiceNow interface for managing a network database table. The top navigation bar includes tabs for 'Student - Skill Wallet', 'ServiceNow Developers', 'ServiceNow', and 'Network database table | Table'. Below the navigation is a toolbar with 'Delete', 'Update', and 'Delete All Records' buttons. The main area is titled 'Table' and 'Network database table'. It displays a list of columns with the following data:

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

## Add the Field to a Form (Optional)

After creating the field, you may want to add it to a form so that users can view or update it. 1

. To do this, navigate to System UI > Forms in the application navigator.

2. Select the form you want to modify (e.g., Incident form).

3. Open the Form Designer (click on the "Design" icon).
4. From the Field Navigator on the left side, search for the new field you created.
5. Drag the field onto the form layout where you want it to appear.
6. Click Save or Publish to apply the changes.

The screenshot shows the ServiceNow Form Designer interface. At the top, there are four tabs: 'Student - Skill Wallet', 'ServiceNow Developers', 'ServiceNow', and another 'ServiceNow' tab. The current page title is 'Configuring Network database table form'. On the left, there's a 'Related Links' bar with icons for Home, Search, and other applications. The main area has two panes: 'Available' on the left and 'Selected' on the right. The 'Available' pane contains fields like 'Assigned to', 'Assignment Group', 'Created by', etc. The 'Selected' pane contains fields like 'Request Number', 'Created', 'Assignment Group', etc. Below these panes are 'Cancel' and 'Save' buttons. Underneath, there are sections for 'Form view and section' (View name: Default view, Section: Network database table) and 'Create new field' (Name: [empty], Type: String, Field length: Small (40)). A large 'Add' button is located between these sections. At the bottom of the designer, there's a 'Submit' button.

The screenshot shows the 'Network database table' form. The top navigation bar includes 'Student - Skill Wallet', 'ServiceNow Developers', 'ServiceNow', and a 'Create Created | Network data...' tab. The form itself has several input fields: 'Request Number' (with a blue border indicating it's selected), 'Created', 'Assignment Group', 'Customer Document', 'Assigned to', and 'Device details'. To the right, there are four more fields: 'Date of enquiry', 'Customer address', 'Work Status', and 'Requested for'. At the bottom of the form is a 'Submit' button. The status bar at the bottom of the screen shows the date as 05-09-2025 and the time as 16:07.

### Test the New Field

Go to a record in the table where the field was added (e.g., create a new incident or record). Check if the new field appears on the form.

Verify the field behaves as expected (e.g., required, read-only, etc.).

Key Field Types in ServiceNow:

String: Short text input (e.g., a name, description).

Integer: Whole numbers.

Choice: Dropdown list with predefined options.

Reference: A reference field to another table (e.g., referencing an User table).

Date: A date picker.

Date/Time: A combination of date and time.

Boolean: Checkbox (True/False).

Currency: Currency field with monetary values.

Additional Tips:

Field Data Types: Make sure you choose the correct field type based on the type of data you want to store (e.g., Text, Integer, Date).

UI Policies/Client Scripts: These can be used to make fields visible, read-only, or mandatory based on certain conditions.

Naming Conventions: Follow proper naming conventions for field labels and column names to maintain consistency.

## Request Approvals Creation(Related List)

### Creation of Related List

Navigate to System Definition > Relationships.

Click New to create a new relationship.

Fill in the following details:

Name: Approval Request

Applies to Table : Network Database table.

Queries from Table : Sysapprovals table. · o

Active: Make sure it's set to True.

Save the relationship.

The screenshot shows a list of relationships in the ServiceNow Relationships list view. The columns include Name, Advanced, Apply to, Applies to table, Queries from table, Insert callback, Query from, Query with, and Updated. The list includes entries like Request Approvals, Installs, Applied Experiences, Inactive MIF Trust Profile Items, Active MIF Trust Profile Items, Translated Messages, Descriptive elements for Input, and Descriptive.

Name	Advanced	Apply to	Applies to table	Queries from table	Insert callback	Query from	Query with	Updated
Request Approvals	false		Network database table [u_network_database_table]	Approval [sysapproval_approver]			(function refineQuery(current, parent) { ... })	2023-09-01 10:00
Installs	false		Update Set [sys_update_set]	Upgrade Plan Item [sys_upgrade_plan_item]			(function refineQuery(current, parent) { ... })	2023-09-01 13:00
Applied Experiences	false		Bundle Extension [sys_ux_bundle_extension]	UX App Configuration [sys_ux_app_config]			(function refineQuery(current, parent) { ... })	2023-09-01 11:00
Inactive MIF Trust Profile Items	false		Application Trust Profiles [sn_mif_application_trust_profile]	Trust Profile Item [sn_mif_trust_profile_item]			(function refineQuery(current, parent) { ... })	2023-09-01 18:00
Active MIF Trust Profile Items	false		Application Trust Profiles [sn_mif_application_trust_profile]	Trust Profile Item [sn_mif_trust_profile_item]			(function refineQuery(current, parent) { ... })	2023-09-01 18:00
Translated Messages	false		Process Definition [sys_pd_process_definition]	Message [sys_ui_message]			(function refineQuery(current, parent) { ... })	2023-09-01 02:00
Descriptive elements for Input	false		Input [sys_sg_input]	Descriptive element [sys_sg_descriptive_element]			(function refineQuery(current, parent) { ... })	2023-09-01 02:00
Descriptive							(function refineQuery(current, parent) { ... })	2023-09-01 02:00

The screenshot shows the Request Approvals relationship form editor. It includes fields for Name (Request Approvals), Application (Global), Advanced (unchecked), Applies to table (Network database table [u\_network\_database\_table]), and Queries from table (Approval [sysapproval\_approver]). A note at the bottom says: "This script refines the query in current that will populate the related list. For more information about it, its parameters and control variables, see [the documentation](#). See also the article about the [recommended form of the script](#)."

Query with: Turn on ECMAScript 2021 (ES12) mode

```

1 (function refineQuery(current, parent) {
2
3     // Add your code here, such as current.addQuery(field, value);
4     current.addQuery('source_table', parent.getTableName());
5     current.addQuery('document_id', parent.sys_id);
6
7 })(current, parent);

```

Buttons: Update, Delete

Related Links: Run Point Scan

## Adding Related List to the Table

You can create a Related List on a form to display the related records. This helps in easily viewing the relationships between records.

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

## Select the Related List you want to show

The screenshot shows the 'Configuring related lists on Network database table form' page. It displays two lists: 'Available' (Attachments) and 'Selected' (Request Approvals). There are buttons for moving items between these lists (right arrow for Available to Selected, left arrow for Selected to Available, up arrow for Selected, down arrow for Available). At the bottom, there are 'Cancel' and 'Save' buttons, and a dropdown for 'View name' set to 'Default view'.

The screenshot shows a record detail view for a 'Network database table' created on 06-09-2025 at 01:17:52. The record has a Request Number of 'REQ0010009'. It includes fields for Date of enquiry (2025-09-06), Customer address, Work Status (New), and Requested for (System). Below the main form is a 'Request Approvals' list table:

State	Approver	Comments	Approval for	Created
Requested	System Administrator	(empty)		2025-09-06 01:17:52

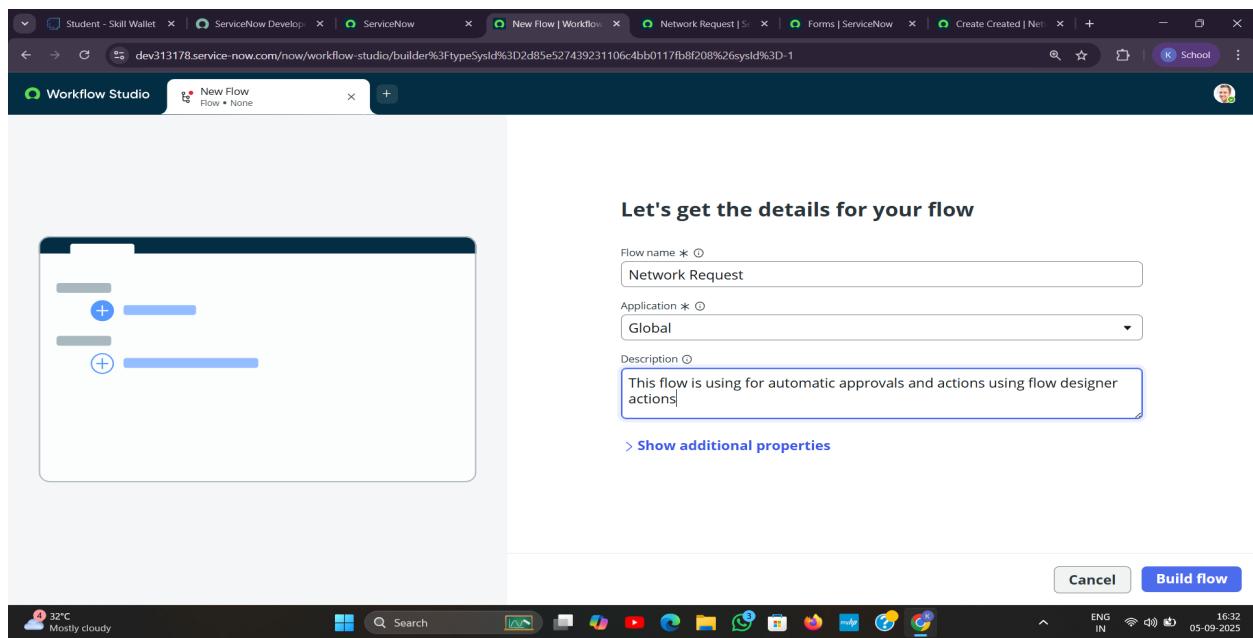
At the bottom, there are 'Update' and 'Delete' buttons, and a search bar for the approvals list.

## Creation & Implementation of flows, Actions in Flow

# Designer

## 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.



## Configuring Trigger

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

The screenshot shows the ServiceNow Workflow Studio interface. At the top, there are several tabs including "Student - Skill Wallet", "ServiceNow Develop", "ServiceNow", "Network Request", "Network Request", "Forms | ServiceNow", and "Create Created | Net...". The main window displays a "Network Request" flow titled "Network Request" (Inactive). The flow has a single trigger: "Service Catalog". Under "ACTIONS", there is a button to "Add an Action, Flow Logic, or Subflow". On the right side, there is a "Data" panel with sections for "Flow Variables" and "Trigger - Service Catalog". The "Trigger - Service Catalog" section contains fields for "Requested Item Record", "Run Start Time UTC", "Run Start Date/Time", and "Table Name". Below the flow configuration, the Windows taskbar is visible, showing the date as 05-09-2025.

## 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

**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

Get Catalog Variables

Available

Selected

Note: If removing a variable from the 'Selected' list, it will be moved to 'Available' list only if the variable is from the selected Template Catalog Items and Variable Sets. Otherwise, the variable is removed from both 'Available' and 'Selected' lists.

Deactivate Activate Save

Data

Flow Variables

Trigger - Service Catalog

Requested Item Record Record

Run Start Time UTC Date/Time

Table Name Table Name

Run Start Date/Time Date/Time

1 - Get Catalog Variables

opened\_on\_behalf\_of Reference

email\_id String

user\_name String

proof\_of\_document Reference

phone\_number String

is this a new request con... Choice

javascript:void(0)

Application: Global

32°C Mostly sunny

Search

ENG IN 14:28 06-09-2025

### 3. Send Email

Select action as Send Email

Select target record >> Create record>> network database table

Table will be selected automatically

Configure 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

The screenshot shows the ServiceNow Workflow Studio interface with two workflow steps displayed:

**Step 2: Create Network database table Record**

- Action Properties:** Action is set to "Create Record".
- Action Inputs:** Table is "Network database table [u\_network\_request]". Fields include:
  - Requested for: Trigger - Service Catalog > First name
  - Request Number: Trigger - Service Catalog > Num.
  - Work Status: New
  - Assignment Group: Network
  - Date of enquiry: Trigger - Service Catalog > Run Start Time
  - Device details: 1 - Get Catalog Variables > types\_of\_device
  - Customer address: 1 - Get Catalog Variables > please provide address

**Step 3: Send Email**

- Action Properties:** Action is set to "Send Email".
- Action Inputs:** Target Record is "2 -> Network database table [u\_network\_request]". Includes Watermark is checked. To field contains "1 - Get Catalog Variables > Email". CC and BCC fields are empty. Subject is "Request has been created".

The right side of the interface shows the Data panel with various flow variables and triggers defined.

The screenshot shows two instances of the ServiceNow Workflow Studio interface. The top instance displays the 'Network Request' flow logic, which includes a 'Subject' field set to 'Request has been created' and a body containing a message about a request being received. The bottom instance shows the 'Action Properties' for the 'Ask For Approval' action, detailing the record, table, approval reason, and field settings.

**Network Request Flow Logic:**

- CC: [Input Field]
- Enter a Subject: [Input Field]
- \* Subject: Request has been created
- Body:
  - Text: Hello
  - Message: We have been received you request with request number 2 - Create Request Number.
  - Text: Sorry for the inconvenience and your request will be resolved with in 2 Business working days.
  - Text: Thanks for contacting us.
  - Text: Network team.

**Action Properties for Ask For Approval:**

- Action: Ask For Approval
- Action Inputs:
  - \* Record: 2 - Network database table
  - Table: Network database table [u\_network]
  - Approval Reason: Waiting for approval
  - Approval Field: Select a field
  - Journal Field: Select a field
- \* Rules:
  - Approve

## 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

**Workflow Studio - Network Request (Flow • Global)**

**Network Request** (Active)

```

graph TD
    1[Send Email] --> 2[Ask For Approval]
    2 --> 3{If}
    3 -- "Condition Label: Request is approved" --> 4[Approval Status]
    4 -- "is Approved" --> 5{If}
    5 -- "Add another condition set(OR)" --> 6[Update Network database table Record]
    6 --> 7[...]

```

**Data** (Collapse All) >

- Flow Variables
- Trigger - Service Catalog
  - Requested Item Record
  - Run Start Time UTC
  - Table Name
  - Run Start Date/Time
- 1 - Get Catalog Variables
  - opened\_on\_behalf\_of
  - email\_id
  - user\_name
  - proof\_of\_document
  - phone\_number
  - is this a new request conn...

Status: Modified | Application: Global

32°C Mostly sunny

Workflow Studio - Network Request (Flow • Global)

**Network Request** (Active)

**Action Properties**

Action: **Update Record**

Action Inputs

- \* Record: Network database table
- \* Table: Network database table [u\_network\_requests]
- \* Fields:
  - Assigned to: First name
  - Work Status: Work in progress
- + Add field value

0 ▲

javascript:void(0) | Application: Global

32°C Mostly sunny

## 6.Update Record

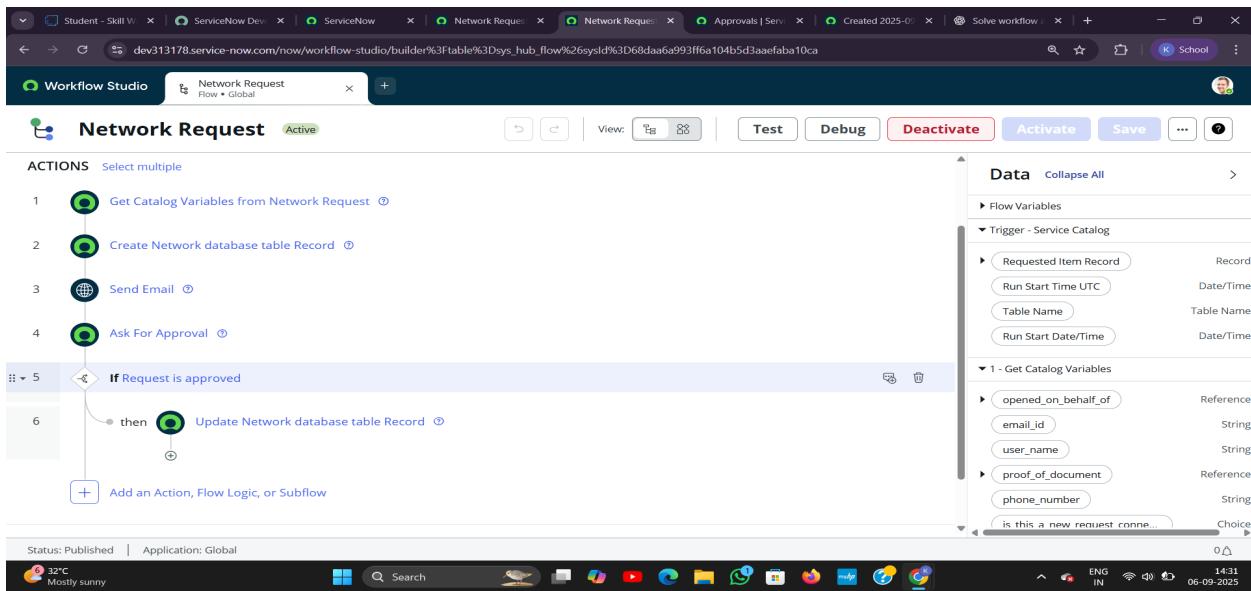
Select action as Update Record

Select record as >> create record>> network database

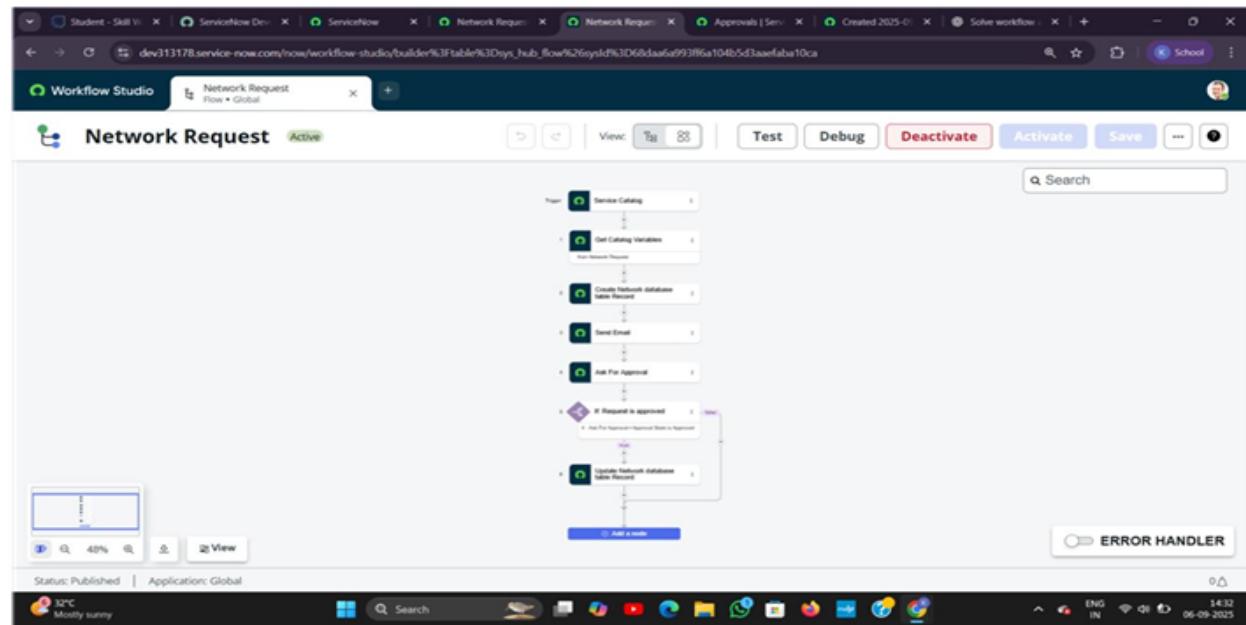
Table will be selected automatically

Configure the fields as per requirement, as shown in below

Click on done

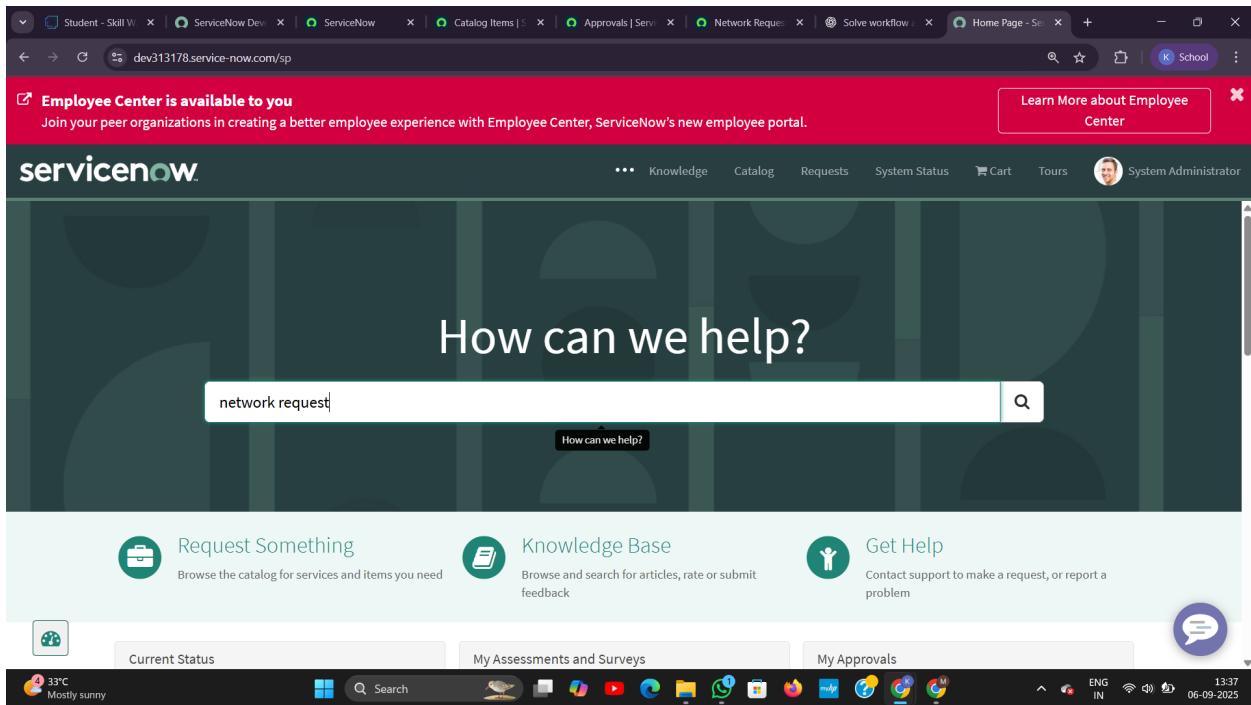


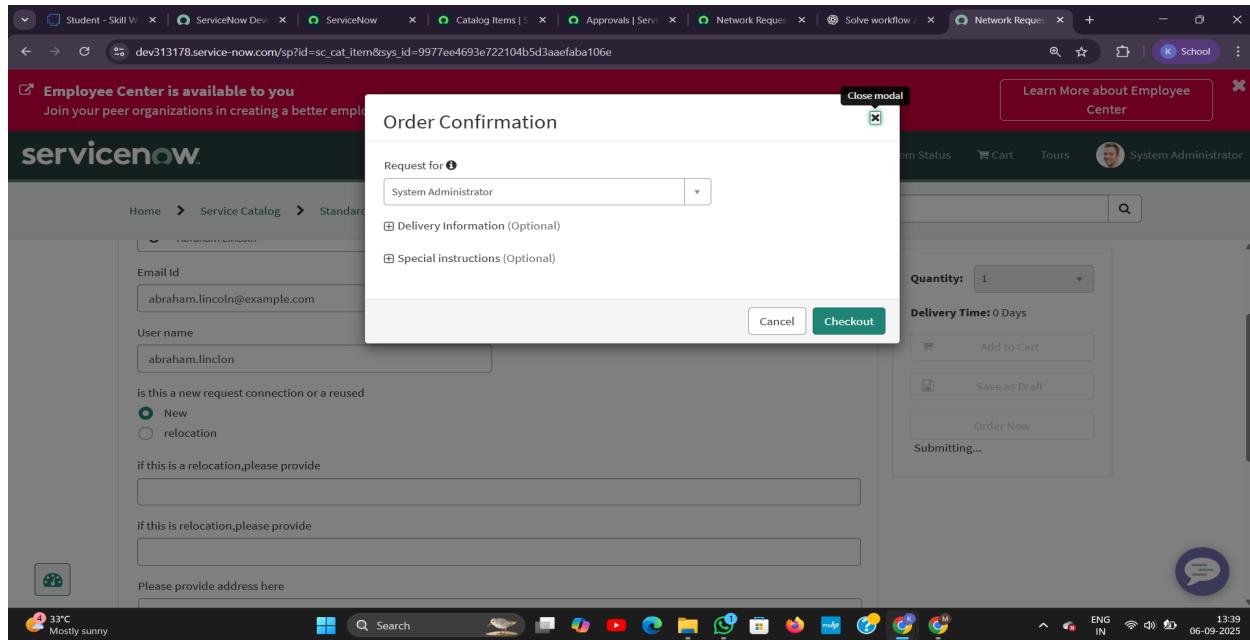
## Flow Chart



# Final Testing in End User portal & Instance

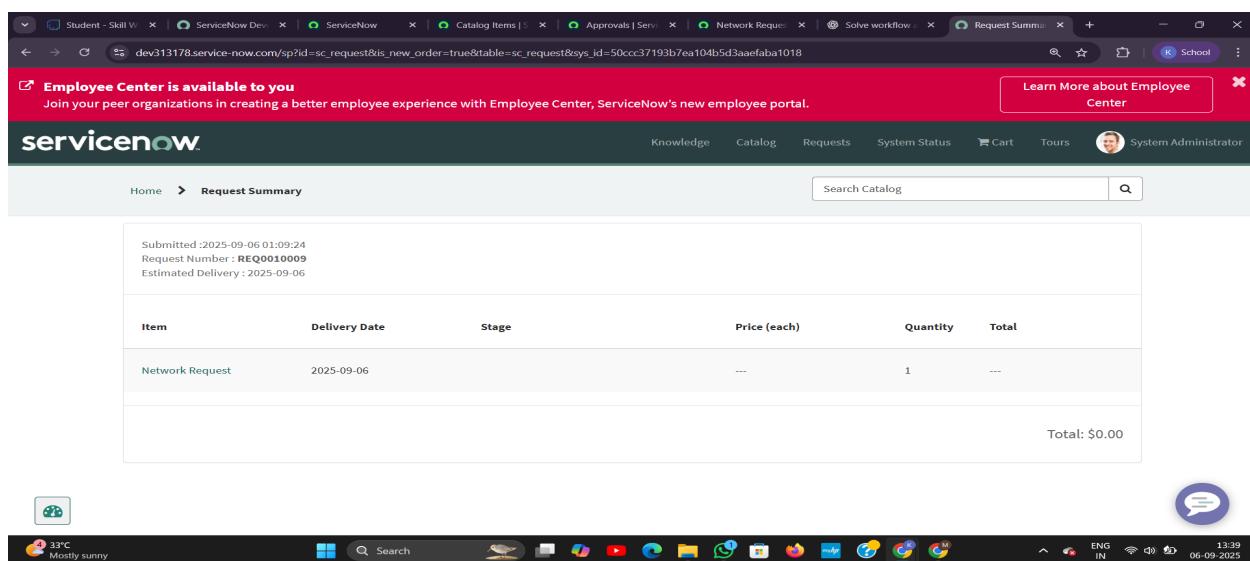
## Testing in Service Portal(End User)





### Procedure:

1. Login to ServiceNow PDI
2. Copy the Instance domain ex: <https://dev190678.service-now.com>.
3. Paste the URL in the Next tab and add Prefix SP to the URL. <https://dev190678.service-now.com/sp>.
4. Search for Network Requests.
5. Fill the required details and click on submit
6. New Requests will be generated with request numbers and users will get particular emails on the same.

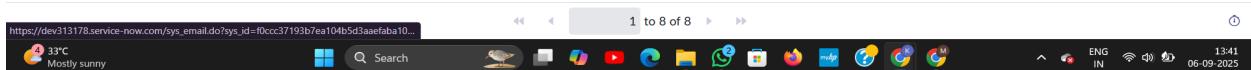


# Testing Emails

Procedure:

1. Login to ServiceNow PDI
2. System logs>> emails
3. Apply filter>> created on today
4. Search with To, BCC, CC, Subject to get to know what are the emails triggered on the particular request.

Created	Recipients	Subject	Type	Notification type	User ID	Updated
2025-09-06 01:09:30	admin@example.com	Request REQ0010009 was approved	send-ready	SMTP	(empty)	2025-09-06 01:09:30
2025-09-06 about 2 minutes ago	admin@example.com	Request REQ0010009 was created	send-ready	SMTP	(empty)	2025-09-06 01:09:30
2025-09-06 01:09:26	abraham.lincoln@example.com	Request has been created	send-ready	SMTP	(empty)	2025-09-06 01:09:26
2025-09-06 01:00:10	aileen.mottern@example.com	Restocking Request For Dell Inc. PowerEdge M710HD Blade Server	send-ready	SMTP	(empty)	2025-09-06 01:00:10
2025-09-06 01:00:10	aileen.mottern@example.com	Restocking Request For APC 42U 3100 SP2 NetShelter Rack	send-ready	SMTP	(empty)	2025-09-06 01:00:10
2025-09-06 01:00:10	aileen.mottern@example.com	Restocking Request For Fujitsu 1TB Hybrid Solid State Drive	send-ready	SMTP	(empty)	2025-09-06 01:00:10
2025-09-06 00:36:04	abraham.lincoln@example.com	Request has been created	send-ready	SMTP	(empty)	2025-09-06 00:36:04
2025-09-06 00:00:10	admin@example.com	Daily job to fetch Email Indicator Data and Email Notifications created completed with error	send-ready	SMTP	(empty)	2025-09-06 00:00:10



The screenshot shows two windows from the ServiceNow Platform Development Interface (PDI).

**Top Window:** A form titled "Email Request has been created". The "Type" field is set to "send-ready". The "Target" field is "Network database table: Created 20". The "User" field is empty. The "Notification type" is "SMTP". The "Subject" is "Request has been created" and the "Recipients" is "abraham.lincoln@example.com". The "Body" contains an HTML template message:

```

<html><head></head><body><p></p><p data-tinymce-rootblock=""><strong>Hello System</strong></p>
<p><strong>We have been received you request with request number REQ0010009</strong></p>
<p><strong>Sorry for the inconvenience and your request will be resolved with in 2 Business working days.</strong></p>
<p><strong>Thanks for contacting us.</strong></p>
<p><strong>Network team.</strong></p></div><div style="display:inline">Ref:MSG0000539_bFWI93ETtPEdw5MhgWPI</div>
</body></html>

```

The "Content type" is "text/html". The "Headers" field shows:

```

Message-ID:<263169393.11.1757146672155@app128067.ord191.service-now.com>
X-ServiceNow-Source:FlowDesigner-88becbf1b6b7ea10f0cf0f0046fa8925
X-ServiceNow-Generated:true

```

**Bottom Window:** A modal titled "Preview Email" displaying the content of the email:

**Hello System**  
**We have been received you request with request number REQ0010009**  
**Sorry for the inconvenience and your request will be resolved with in 2 Business working days.**  
**Thanks for contacting us.**  
**Network team.**  
Ref:MSG0000536\_8fAz6H4II7r8kBOIHjIH

The "Email Log" section below the preview shows a table with columns: Created, Level, Message, and Source. It displays the message "No records to display".

## Testing with Custom Tables

Procedure:

1. Login to ServiceNow PDI

## 2. System definition >> Tables>> Network database/Network Task

3. After request is generated, Database and task tables fields are automatically filled by the flow designer configurations

## 4. Observe the Approvals requests and Changing of States of tables carefully

	Request Number	Requested for	Work Status	Created by
	(empty)			admin
	REQ0010005	Abraham	New	admin
	REQ0010001	System	New	admin
	REQ0010005	Abraham	New	admin
<input type="checkbox"/>	REQ0010009	System	Work in progress	admin
	(empty)			admin
	REQ0010008	System	New	admin
	REQ0010008	System	New	admin
	REQ0010006	System	New	admin
	REQ0010009	System	New	admin
	REQ0010006	System	New	admin
	(empty)			admin
	REQ0010009	System	New	admin
	(empty)			admin
	REQ0010008	System	New	admin
	(empty)			admin

1 to 19 of 19

Request Number	REQ0010009	Date of enquiry	2025-09-06
Created	2025-09-06 01:24:55	Customer address	
Assignment Group	Network	Work Status	New
Customer Document		Requested for	System
Assigned to			
Device details	M		

Update Delete

	State	Approver	Comments	Approval for	Created
<input checked="" type="radio"/>	Requested	System Administrator	(empty)		2025-09-06 01:24:55

1 to 1 of 1

Approvals					
	State	Approver	Comments	Approval for	Created
All > Sys ID = NULL ,or. Approver = System Administrator					
<input type="checkbox"/>	Requested	System Administrator	(empty)		2025-09-06 01:17:52
<input type="checkbox"/>	Approved	System Administrator	(empty)		2025-09-06 01:09:26

1 to 2 of 2

Network database table					
Created 2025-09-06 01:09:26					
Request Number	REQ0010009				
Created	2025-09-06 01:09:26				
Assignment Group	Network				
Customer Document					
Assigned to					
Device details	M				
<input type="button" value="Update"/> <input type="button" value="Delete"/>					
Request Approvals					
Approvals					
	State	Approver	Comments	Approval for	Created
<input type="checkbox"/>	Approved	System Administrator	(empty)		2025-09-06 01:09:26

1 to 1 of 1