

AUTOMATED NETWORK REQUEST MANAGEMENT IN SERVICENOW

Project Description:

This project focuses on the design and implementation of a streamlined, automated solution for managing network-related service requests in ServiceNow.

By utilizing ServiceNow's workflow engine, service catalog, and approval processes, end users can submit requests through a user-friendly self-service portal. The system ensures requests are captured, validated, routed, and, when possible, fulfilled automatically with minimal manual intervention.

Objectives

- To provide an **efficient and automated** method for handling network requests.
- To reduce **manual workload** by integrating with automation tools and scripts.
- To improve **request tracking, transparency, and SLA adherence**.
- To enable **real-time status updates and notifications** for requesters and technicians.

System Features

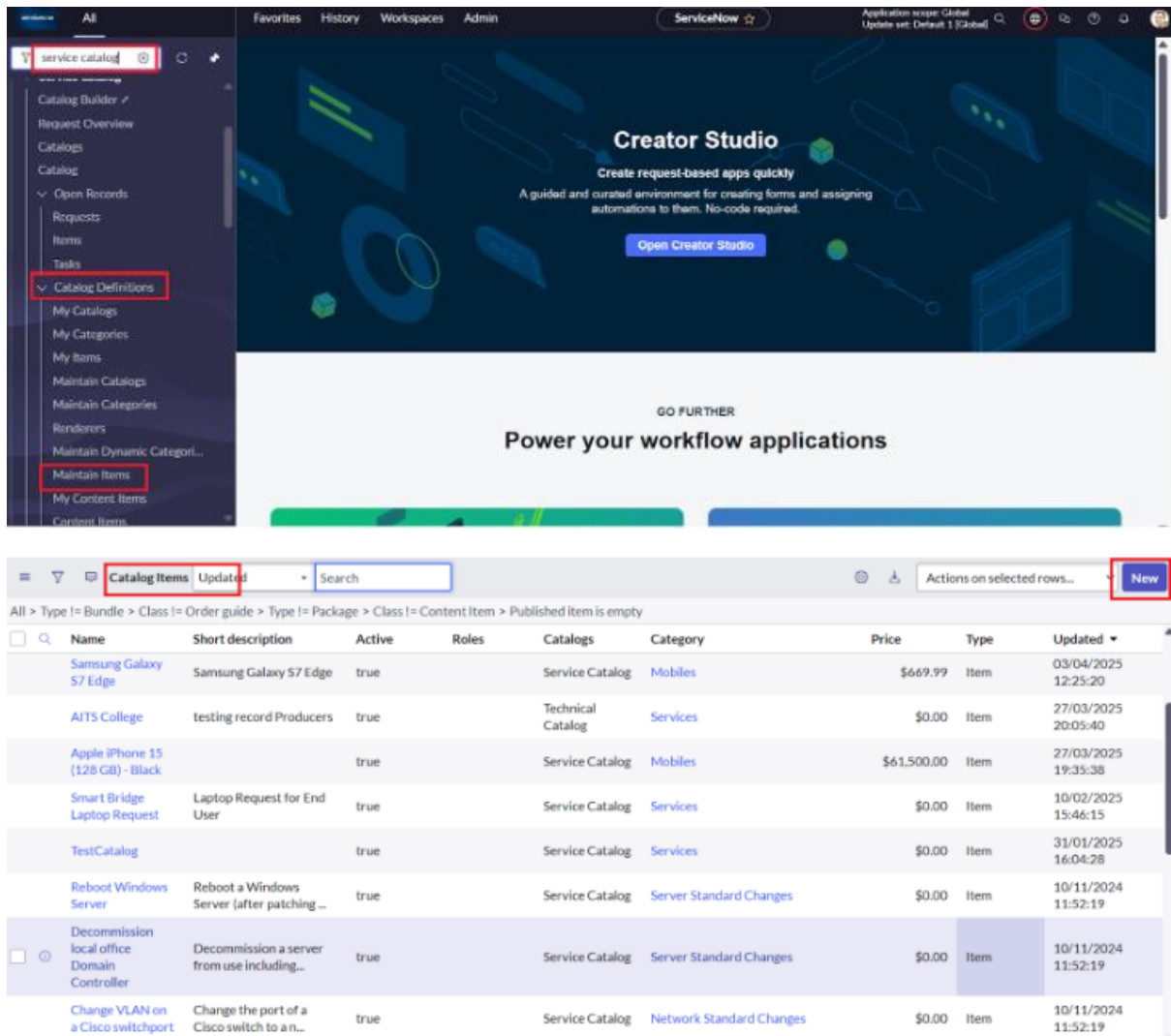
- **Custom Service Catalog** for common network requests.
- **Dynamic forms** to capture relevant request details.
- **Automated approval workflows** based on request type and sensitivity.
- **Integration with infrastructure management/orchestration tools** (optional).
- **Real-time notifications** and request tracking.
- **Reporting & analytics** for performance metrics.

Implementation Steps

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 displays the ServiceNow interface. The left sidebar shows the navigation menu with 'Catalog Builder' expanded, and 'Maintain Items' highlighted. The main area shows the 'Creator Studio' header and a list of catalog items.

Navigation Path: Catalog Builder > Open Records > Catalog Definitions > Maintain Items

Table: Catalog Items

Name	Short description	Active	Roles	Catalogs	Category	Price	Type	Updated
Samsung Galaxy S7 Edge	Samsung Galaxy S7 Edge	true		Service Catalog	Mobiles	\$669.99	Item	03/04/2025 12:25:20
AITS College	testing record Producers	true		Technical Catalog	Services	\$0.00	Item	27/03/2025 20:05:40
Apple iPhone 15 (128 GB) - Black		true		Service Catalog	Mobiles	\$61,500.00	Item	27/03/2025 19:35:38
Smart Bridge Laptop Request	Laptop Request for End User	true		Service Catalog	Services	\$0.00	Item	10/02/2025 15:46:15
TestCatalog		true		Service Catalog	Services	\$0.00	Item	31/01/2025 16:04:28
Reboot Windows Server	Reboot a Windows Server (after patching ...	true		Service Catalog	Server Standard Changes	\$0.00	Item	10/11/2024 11:52:19
Decommission local office Domain Controller	Decommission a server from use including...	true		Service Catalog	Server Standard Changes	\$0.00	Item	10/11/2024 11:52:19
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	10/11/2024 11:52:19

Catalog Item
Network Request

Catalog items are goods or services available to order from the service catalog. Items can be anything from hardware, like tablets and phones, to software applications, to furniture and office supplies.

- Enter a Name and Short description to display for the item.
- Enter a Price, approvals, variables, and other information as needed.

Name:

Application:

Catalogs:

Category:

State:

Checked out:

Owner:

Active: ☒

Fulfillment automation level:

Item Details | Process Engine | Picture | Pricing | Portal Settings

Short description:

Description:

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.

Variable
Please provide address here

Application: Global

Type: Single Line Text

Catalog Item: Network Request

Order: 410

Active ☒

Mandatory ☐

Read only ☐

Hidden ☐

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

Variables (10) | Variable Sets (1) | Catalog UI Policies (2) | Catalog Client Scripts | Available For | Not Available For | Categories (1) | Catalogs (1) | Catalog Data Lookup Definitions

Related Articles | Related Catalog Items | Assigned Topics

for text - Search

Actions on selected rows... New

Catalog Item = Network Request

Type	Read only	Question	Name	Order	Created
Container Start	false	Service Details	service_details	200	16/05/2025 10:18:39
Multiple Choice	false	Is this a new network connection or a re...	is_this_a_new_network_connection_or_a_re...	300	16/05/2025 10:20:58
Single Line Text	false	If this is a relocation, Please provide ...	if_this_is_a_relocation_please_provide_y...	310	16/05/2025 10:30:16
Single Line Text	false	If this is a relocation, Please provide ...	if_this_is_a_relocation_please_provide_y...	320	16/05/2025 10:32:30
Container Start	false	Location & Devices Type	location_devices_type	400	16/05/2025 10:44:43
Single Line Text	false	Please provide address here	please_provide_address_here	410	16/05/2025 10:45:42
Select Box	false	Type of devices	type_of_devices	420	16/05/2025 12:04:43
Single Line Text	false	Provide device details	provide_device_details	430	16/05/2025 12:09:16
Container Start	false	Additional Information	additional_information	500	16/05/2025 12:26:49
Single Line Text	false	If any, Please write here	if_any_please_write_here	510	16/05/2025 12:28:09

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

Variable Set Configuration

- To enhance form usability:
 - o Navigate to the Variable Sets (optional).
 - o Follow the same procedure as we used for Variables Creation, for the variable set as well.
 - o Apply variable sets to the catalog item.

Variables Types

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

The screenshot displays the system's variable configuration interface. At the top, a navigation bar includes tabs for 'Variables (10)', 'Variable Sets (1)', 'Catalog UI Policies (2)', 'Catalog Client Scripts', 'Available For', 'Not Available For', 'Categories (1)', 'Catalogs (1)', and 'Catalog Data Lookup Definitions'. Below this, a search bar and a 'New' button are visible. The main content area is titled 'Catalog Item - Network Request' and contains a table of variables.

Type	Read only	Question	Name	Order	Created
Container Start	false	Service Details	service_details	200	16/05/2025 10:18:39
Multiple Choice	false	Is this a new network connection or a re...	is_this_a_new_network_connection_or_a_re...	300	16/05/2025 10:20:58
Single Line Text	false	If this is a relocation, Please provide ...	if_this_is_a_relocation_please_provide_y...	310	16/05/2025 10:30:16
Single Line Text	false	If this is a relocation, Please provide ...	if_this_is_a_relocation_please_provide_y...	320	16/05/2025 10:32:30
Container Start	false	Location & Devices Type	location_devices_type	400	16/05/2025 10:44:43
Single Line Text	false	Please provide address here	please_provide_address_here	410	16/05/2025 10:45:42
Select Box	false	Type of devices	type_of_devices	420	16/05/2025 12:04:43
Single Line Text	false	Provide device details	provide_device_details	430	16/05/2025 12:09:16
Container Start	false	Additional Information	additional_information	500	16/05/2025 12:26:49
Single Line Text	false	If any, Please write here	if_any_please_write_here	510	16/05/2025 12:28:09

Below the table, the 'Variable Set' configuration for 'Requester information' is shown. It includes fields for 'Title' (Requester information), 'Internal name' (requester_information), 'Order' (100), 'Type' (Single Row), 'Application' (Global), 'Display title' (checked), and 'Layout' (2 Columns Wide, one side, then the other). The 'Description' field is empty. 'Update' and 'Delete' buttons are present.

At the bottom, the 'Variable set = Requester information' section shows a table of variables:

Name	Type	Question	Order
opened_on_behalf_of	Reference	Opened on behalf of	100

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.

Related Links

[Item Diagnostic](#)
[Show VA render type](#)
[Run Point Scan](#)
[\[SN Utils\] Versions \(35\)](#)

Variables (10) Variable Sets (1) **Catalog UI Policies (2)** 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	Catalog Conditions	Conditions	Reverse if false	On load	Inherit	Updated	Order
Types of devices is others	IO:684b7ca183ad6a5022f7e630cead3b4=4*EQ		true	true	false	16/05/2025 12:12:05	100
Relocation fields hiding	IO:a153aced832d6a5022f7e630cead3fd=2*EQ		true	true	false	16/05/2025 10:38:49	100

Catalog UI Policy
Types of devices is others

Applies to: A Catalog Item
 * Catalog item: Network Request
 * Short description: Types of devices is others

Application: Global
 Active: ☒

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

type_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 ☒

[Catalog UI Policy Actions](#)
Order
Search
Actions on selected rows...
[New](#)

UI policy = Types of devices is others

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

1 to 1 of 1

Catalog UI Policy Action
provide_device_details
Update
Delete

policy actions specify exactly what actions to take on a specified field. The conditions specified in the UI policy determine when these actions are triggered. [More Info](#)

Catalog Item
Network Request
Variable name
provide_device_details
Order
100

Application
Global
Mandatory
Leave alone
Visible
True
Read only
Leave alone
Value action
Leave alone
Field message type
None

update
Delete

[\[Link\] Versions \(1\)](#)

Creation of Table

1. **Navigate to:** System Definition > **Tables**.
2. Click **New** to create a new table.
3. 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.
4. Click **Submit** to create the table.

The screenshot displays the ServiceNow Creator Studio interface. In the left sidebar, the 'Tables' option is selected under the 'System Definition' category. The main panel shows a list of tables with the following columns: Label, Name, Application, Extends table, Extensible, and Updated. Below this list, the 'Table Columns' view is shown for the 'Network DataBase Table'. This view includes a search bar and a table of dictionary entries with columns: Column label, Column name, Type, Reference, Max length, Default value, and Display.

Column label	Column name	Type	Reference	Max length	Default value	Display
Request Number	u_request_number	String	(empty)	40		false
Assignment Group	u_assignment_group	Reference	Group	32		false
Created	sys_created_on	Date/Time	(empty)	40		false
Created by	sys_created_by	String	(empty)	40		false
Customer Document	u_customer_document	String	(empty)	40		false
Customer ID	cus_id	String (V3 ID)	(empty)	32		false

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:

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

- In the **Columns** tab, click the **New** button located at the top-right corner of the page to create a new field.
- 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	Column name	Type	Reference	Max length	Default value	Display
Request Number	u_request_number	String	(empty)	40		false
Assignment Group	u_assignment_group	Reference	Group	32		false
Created	sys_created_on	Date/Time	(empty)	40		false
Created by	sys_created_by	String	(empty)	40		false
Customer Document	u_customer_document	String	(empty)	40		false
Sys ID	sys_id	Sys ID (GUID)	(empty)	32		false
Updates	sys_mod_count	Integer	(empty)	40		false
Assigned to	u_assigned_to	Reference	User	32		false
Device Details	u_device_details	String	(empty)	40		false
Date of Enquiry	u_date_of_enquiry	Date	(empty)	40		false
Customer Address	u_customer_address	String	(empty)	40		false
Updated by	sys_updated_by	String	(empty)	40		false
Work Status	u_approval_state	String	(empty)	40		false
Requested For	u_requested_for	String	(empty)	40		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:

- o **String:** For short text values (e.g., name, description).
- o **Integer:** For numbers without decimals (e.g., age, number of items).
- o **Choice:** A dropdown list of options.
- o **Reference:** A field that links to another table (e.g., linking to a User table).
- o **Boolean:** A true/false checkbox.
- o **Date:** For a date picker field.
- o **Date/Time:** For both date and time.

- **Example:** String, Choice, Reference

3. Maximum 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.

Column label	Column name	Type	Reference	Max length	Default value	Display
Request Number	u_request_number	String	(empty)	40		false
Assignment Group	u_assignment_group	Reference	Group	32		false
Created	sys_created_on	Date/Time	(empty)	40		false
Created by	sys_created_by	String	(empty)	40		false
Customer Document	u_customer_document	String	(empty)	40		false
Sys ID	sys_id	Sys ID (GUID)	(empty)	32		false
Updates	sys_mod_count	Integer	(empty)	40		false
Assigned to	u_assigned_to	Reference	User	32		false
Device Details	u_device_details	String	(empty)	40		false
Date of Enquiry	u_date_of_enquiry	Date	(empty)	40		false
Customer Address	u_customer_address	String	(empty)	40		false
Updated by	sys_updated_by	String	(empty)	40		false
Work Status	u_approval_state	String	(empty)	40		false
Requested For	u_requested_for	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.

Network Task Table
New record

Task Number: NTT0001035

Database Number:

Request Number:

Description:

Work Notes:

Save

- Configure
- Export
- Create Favorite
- Copy URL
- Copy sys_id
- Reload form
- Form Builder
- Form Design
- Form Layout
- Related Lists
- All
- Table
- Security Rules
- Business Rules
- Client Scripts
- UI Policies
- Data Policies
- UI Actions
- Notifications
- Dictionary

Configuring Network Task Table form

Available

- Assigned to [+]
- Assignment Group [+]
- Created
- Created by
- Updated
- Updated by
- Updates
- Task Number
- Database Number
- Request Number
- Requested For
- Approval Status
- Work Status
- Assigned to
- Description
- Work Notes
- Activities (filtered)
- Contextual Search Results

Selected

- Task Number
- Database Number
- Request Number
- Requested For
- Approval Status
- Work Status
- Assigned to
- Description
- Work Notes
- Activities (filtered)
- Contextual Search Results

Cancel Save

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.

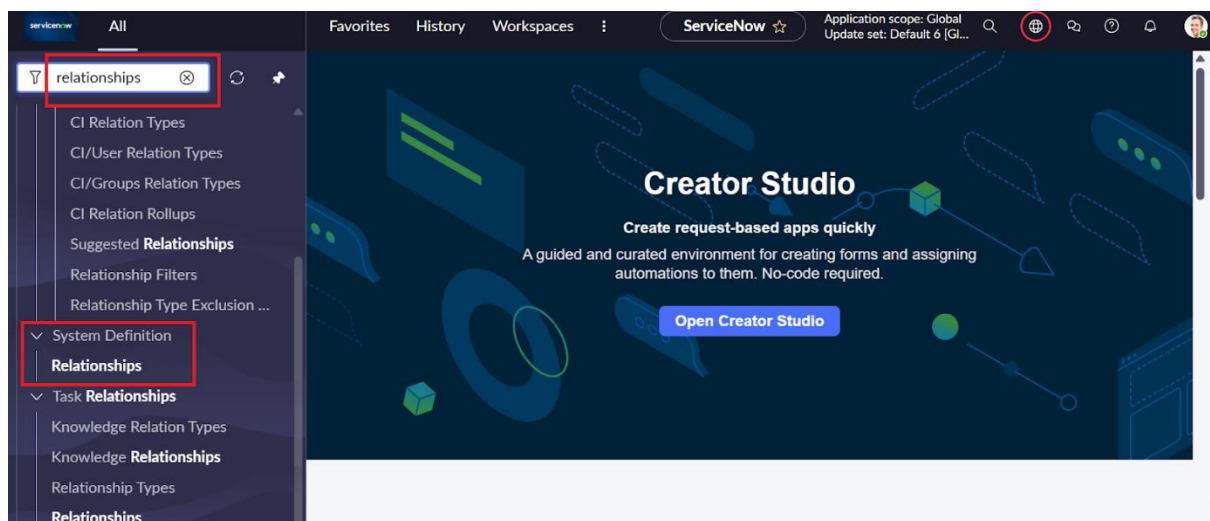
Additional Tips:

- **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.

Creation of Related List

Navigate to **System Definition > Relationships**.

- Click **New** to create a new relationship.
- Fill in the following details:
 - o **Name:** Approval Request
 - o **Applies to Table :** Network Database table.
 - o **Queries from Table :** Sysapprovals table.
 - o **Active:** Make sure it's set to **True**.
- Save the relationship.



Relationships

Updated

Search

Actions on selected rows...

New

All

	Name	Advanced	Apply to	Applies to table	Queries from table	Insert callback	Query from	Query w
<input type="checkbox"/>	Inactive MIF Trust Profile Items	false		Application Trust Profiles [sn_mif_application_trust_profile]	Trust Profile Item [sn_mif_trust_profile_item]			(function refineQu parent) {}
<input type="checkbox"/>	Active MIF Trust Profile Items	false		Application Trust Profiles [sn_mif_application_trust_profile]	Trust Profile Item [sn_mif_trust_profile_item]			(function refineQu parent) {}
<input type="checkbox"/>	Translated Messages	false		Process Definition [sys_pd_process_definition]	Message [sys_ui_message]			(function refineQu parent) {}
<input type="checkbox"/>	Descriptive elements for Input	false		Input [sys_sg_input]	Descriptive element [sys_sg_descriptive_element]			(function refineQu parent) {}
<input type="checkbox"/>	Descriptive elements for Section	false		Input Form Section [sys_sg_parameter_section]	Descriptive element [sys_sg_descriptive_element]			(function refineQu parent) {}
<input type="checkbox"/>	Access Controls	false		Script Include [sys_script_include]	Access Control [sys_security_acl]			(function refineQu parent) {}

Relationship Request Approvals

Name Request Approvals

Advanced ☐

Application Global

Applies to table Network DataBase Table [u_use...

Queries from table Approval [sysapproval_approver]

Update

Delete

↑

↓

ipt 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 [extended form of the script](#).

Query with

Turn on ECMAScript 2021 (ES12) mode

1

2

3

4

5

6

7

8

```

(function refineQuery(current, parent) {
  // Add your code here, such as current.addQuery(field, value);
  current.addQuery('source_table', parent.getTable_name());
  current.addQuery('document_id', parent.sys_id);
  // current.addQuery('state', '!=', 'not_required');
} )(current, parent);

```

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

Network DataBase Table
NET0001043

Database Number: NET0001043

Request Number: REQ0010042

Created: 23/05/2025 12:05:06

Requested For: Abraham Lincoln

Date of Enquiry: 23/05/2025

Customer Address: gf

Special Instructions: Special Instructions

Work Status: New

Assignment Group: Network

Activities: 1 System Administrator

Field changes • 23/05/2025 12:05:06

Save
Insert
Insert and Stay
Analyze Access
Configure
Export
View
Create Favorite
Copy URL
Copy sys_id
Show XML
History
Reload form

Form Builder
Form Design
Form Layout
Related Lists
All
Table
Security Rules
Business Rules
Client Scripts
UI Policies
Data Policies
UI Actions
Notifications
Dictionary

Update Delete

Post

Configuring related lists on Network DataBase Table form

Cancel Save

Available

- Attachments
- Audit History
- Audit Records

Selected

- Request Approvals

Cancel Save

View name: Default view

Related Links

Network DataBase Table
NET0001043

Activities: 1 System Administrator

Field changes • 23/05/2025 12:05:06

Assignment Group: Network
Database Number: NET0001043
Date of Enquiry: 23/05/2025
Request Number: REQ0010042
Requested For: Abraham Lincoln
Work Status: New

Update Delete

Request Approvals State Search

Actions on selected rows... New

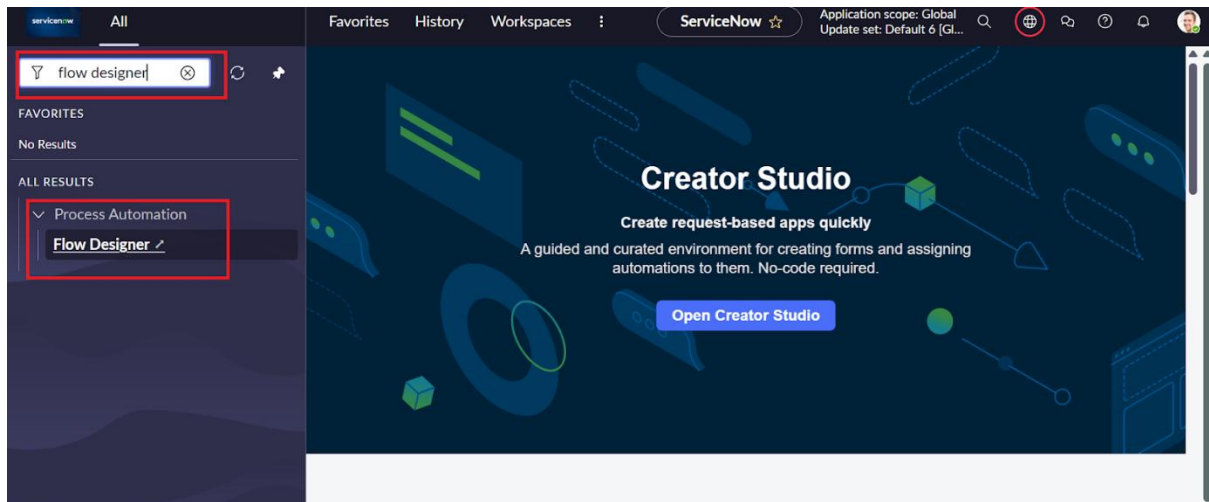
Approvals

State	Approver	Comments	Approval for	Created
Requested	Bow Ruggeri		(empty)	23/05/2025 12:05:06

Navigating to Flow Designer

To access **Flow Designer**:

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



Flow Designer Components

Key Components in Flow Designer:

1. Triggers:

- o **Record Trigger:** Runs when a record is created, updated, or deleted in a specific table.
- o **Scheduled Trigger:** Runs at a specific time interval or on a schedule.
- o **Custom Event:** Triggered by custom events.

2. Actions:

- o Actions define what happens when the flow is triggered. Common actions include:

§ **Create Record:** Create a new record in a table.

§ **Update Record:** Modify an existing record.

§ **Send Notification:** Send an email, SMS, or other notifications.

§ **Run Script:** Execute custom scripts for advanced logic.

3. Data Pills:

- o These are dynamic references to data from records or previous steps in the flow. They are used to populate action inputs.

4. Conditions & Decisions:

- o Conditions help in making decisions in a flow based on data, which can control the flow's behavior (e.g., send an approval notification if a specific condition is met).

5. Flow Logic:

- o Includes decision points, loops, and waits for conditions to add complex logic to the flow.

Creating a Flow in Flow Designer

Steps to Create a Flow:

1. Open Flow Designer:

- o Go to **Flow Designer > Flows**.

2. Click on New:

- o This will start the process of creating a new flow.

3. Define Flow Properties:

- o **Name:** Provide a name for your flow - Network Request.
- o **Table/Application:** Choose the target table/application for the flow –Application–Service Catalog.
- o **Trigger:** Define when this flow should run when a request is created.
- o **Description:** Optional but helpful for understanding the purpose of the flow.

4. Set a Trigger:

- o The **Trigger** defines when the flow is initiated. Common triggers include:

§ **Record Created:** When a record is created in a specific table.

§ **Record Updated:** When a record is updated.

§ **Scheduled:** When a flow should run on a schedule.

§ **Custom Event:** Triggered by a custom event (e.g., a certain event happening in the system).

- o Select the relevant trigger for your flow (when a **Request** record is created).

Adding Actions

- o After defining the trigger, you can add **actions** that will be executed when the flow is triggered. Some common actions include:

1. Get Catalog Variables:

- In ServiceNow Flow Designer, the "Get Catalog Variables" action is used to retrieve values from a catalog item or record producer request. This action is especially helpful when you need to use user-inputted variables (from a catalog item) within a flow

• How to Use "Get Catalog Variables" in Flow Designer

1. Open Flow Designer

2. Navigate to: Flow Designer ? Create or open a flow.

3. Ensure the Trigger is Catalog-Based
4. Choose a trigger like Catalog Item Requested or Catalog Task Created.
5. Add Action ? Get Catalog Variables
6. Click + under your trigger or previous action.
7. Choose Action ? **"Get Catalog Variables"**.
8. Select the record input (Requested Item [sc_req_item]) from the Data pill.
9. Set the Catalog item– Network Request
10. You'll typically input the Requested Item Record from the trigger.

Use Output Variables

The output will include all the catalog variables submitted with the request.

2. Create Record:

- In ServiceNow Flow Designer, the "Create Record" action is used to create a new record in any table (e.g., Incident, Task, Custom Table, etc.) during the execution of a flow.
- This is one of the most powerful and commonly used actions in Flow Designer, allowing you to automate the creation of tasks, incidents, change requests, approvals, and more.

How to Use "Create Record" in Flow Designer

1. **Open or Create a Flow**
 - Go to **Flow Designer** (Flow Designer > Designer)
 - Open an existing flow or click **New**.
2. **Add a Trigger (if needed)**
 - e.g., **Record Created, Catalog Item Requested**, etc.
3. **Add Action ? "Create Record"**
 - Click the "+" under the trigger or another action.
 - Select **Action ? Search for "Create Record"**.
4. **Configure the Action:**
 - **Table:** Select the table where you want the new record created (Network database table).

- **Fields:** Set the field values you want on the new record using static values, data pills, or dynamic inputs.

3. Send Email Action:

- The "**Send Email**" action in ServiceNow Flow Designer allows you to send customized emails as part of an automated flow. It's commonly used to notify users, groups, or stakeholders based on triggers like catalog submissions, record changes, task updates, and more.

How to Use "Send Email" in Flow Designer

1. Open or Create a Flow

- Go to **Flow Designer** (Flow Designer > Designer)
- Open an existing flow or click **New**.

2. Add a Trigger

- Examples: **Catalog Item Requested**, **Record Updated**, **Incident Created**, etc.

3. Add Action ? "Send Email"

- Click the "+" button under the trigger or previous action.
- Select **Action ?** Search for and select "**Send Email**".

4. Configure Email Details

- **To:** Choose one or more recipients (Users, Groups, Emails). You can use:
 - Data Pills —>Requested For.Caller.email)
 - Static email addresses
- **Subject:** Write a subject line. Your Request has been Created
- **Body:** Enter the message body using:
 - Plain text
 - HTML formatting
 - Dynamic data pills (like variables, record fields)

5. (Optional) Add CC or BCC

- Available in the action settings if needed.

6. Save and Test the Flow

4. Ask for Approval

- In ServiceNow Flow Designer, the “**Ask for Approval**” action is used to request approval from one or more users or groups as part of an automated process. It's commonly used in flows for change requests, catalog items, onboarding, and custom workflows where decisions are required.

How to Use “Ask for Approval” in Flow Designer

1. Open a Flow

- Go to: **Flow Designer** ? Open or create a flow.

2. Add Action ? Ask for Approval

- Click + and select **Action**.
- Search for and select “**Ask for Approval**”.
- Select Table/Record– Network Database table.

3. Configure the Approval

A. Who Needs to Approve?

- **Users:** Select specific users (static or from data pills like Requested For, Manager, etc.)
- **Groups:** Assign to a group. The first responder usually determines the outcome unless changed. I.e group manager.

B. Approval Record

- You must associate the approval with a record, typically the trigger record like:
 - Custom Table Record

C. Approval Details

- **Short Description:** The approvers will see the request."

4. Use the Outcome

- The action outputs an **Approval State** will be like approved, rejected, or skipped.

5. Flow Logics:

- In **ServiceNow Flow Designer**, **Flow Logic** actions are used to **control the flow's path** based on conditions, iterations, or specific structure. They help you make decisions, loop through data, wait for conditions, and handle errors.

Using of If Condition:

- Click the "+" below your previous step (like the approval).
- Choose "Flow Logic" ? "If".

1. Set the Condition in the If block:

- i. Click "Add Condition"
- ii. Choose a data pill (such as Approval State, variables.reason, or any field).
- iii. Set your condition.

2. Add Actions Inside the If Block

- iv. Inside the **If (true)** block, add actions like:
- v. Create a New table record/Update an existing record

3. Save and Test:

- vi. After configuring the flow, click **Save** and then **Test** the flow to ensure it behaves as expected.
- vii. You can test the flow using sample data or by triggering it manually.

4. Activate the Flow:

- viii. Once you've tested the flow and everything looks good, you can **activate** the flow so that it starts running based on the defined trigger.

Testing and Debugging Flows

Steps to Test and Debug a flow:

1. Testing:

After creating a flow, you can test it by triggering the flow manually or creating a test record that matches your trigger conditions.

2. Debugging:

Use the **Flow Execution Logs** to debug and track the flow's execution.

Go to **Flow Designer > Flows**, select the flow, and review execution logs to identify any issues.

Best Practices for Flow Designer

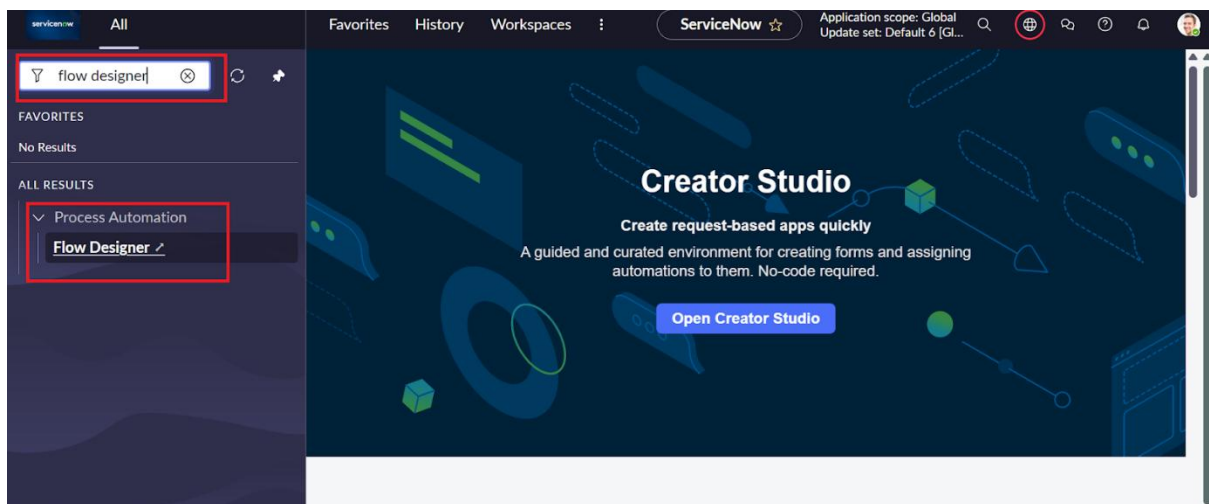
- **Use Subflows:** For reusable processes, you can create subflows that are called from other flows. This reduces duplication.
- **Keep Flows Simple:** Avoid overly complex flows. Break up large processes into smaller, more manageable subflows.
- **Error Handling:** Make sure your flows are capable of handling errors gracefully.

- **Naming Conventions:** Use clear, consistent naming conventions for flows, actions, and subflows.
- **Testing:** Always test your flow thoroughly before activating it in a production environment.

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 a description of flow
5. Click on Build flow.



Workflow Studio +

Homepage Operations Integrations

Playbooks Flows Subflows Triggers Actions Decision tables



Decision tables 14
Last refreshed just now

Refresh Settings Share Filter 1

New ▾

- Playbook
- Flow
- Subflow
- Trigger
- Action
- Decision table

<input type="checkbox"/>	Name ▲	Application	Active	Updated
	Allow Access Policy	Global	true	07/08/2020
	Allow access pre-auth policy	Global	true	30/12/2020
	Callback Topic Policy	Global	true	16/03/2022
	Demo Post Auth policy	Global	true	02/09/2024 12:52:50
	Demo Pre Auth policy	Global	true	02/09/2024 12:52:35
	Deny Access Policy	Global	true	07/08/2020 19:29:58
	Deployment Environment Type Flow	Deployment Pipeline	true	03/06/2024 21:43:30

Late:  

Let's get the details for your flow

Flow name * ⓘ

Network Request

Application * ⓘ

Global

Description ⓘ

This flow is using for the automatic approvals and actions using flow designer action

> Show additional properties

Cancel

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 'Network Request' flow editor. The 'TRIGGER' section is highlighted with a red box, containing a '+ Add a trigger' button. Below it, the 'ACTIONS' section is highlighted with a red box, containing a '+ Add an Action, Flow Logic, or Subflow' button. The 'ERROR HANDLER' section is visible at the bottom, with a toggle switch and the text 'If an error occurs in your flow, the actions you add here will run.' On the right side, the 'Data' panel is visible, showing 'Flow Variables' and 'Trigger' sections.

Configuring Actions

Click on Actions button to configure new action

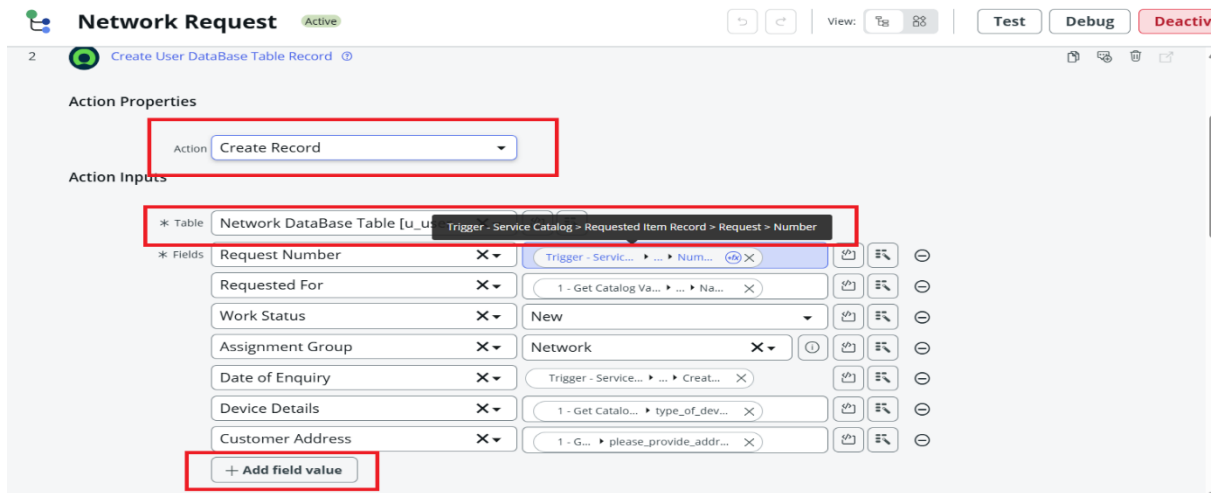
1. **Get Catalog Variables**

- 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

The screenshot shows the 'Network Request' flow editor with the 'Get Catalog Variables from Network Request' action selected. The 'Action Properties' section is highlighted with a red box, showing the 'Action' dropdown set to 'Get Catalog Variables'. The 'Action Inputs' section is highlighted with a red box, showing the 'Submitted Request (Requested Item)' input set to 'Trigger -> Requested Item ...'. Below this, the 'Template Catalog Items and Variable Sets' section is highlighted with a red box, showing the 'Network Request' template selected. At the bottom, the 'Catalog Variables' section is highlighted with a red box, showing the 'Available' list with 'email_id', 'user_name', and 'phone_number', and the 'Selected' list with 'opened_on_behalf_of', 'please_provide_address_her', and 'type_of_devices'.

1. **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



1. 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

Send Email

Action Properties

Action: Send Email

Action Inputs

Target Record: 2 - C... > User DataBase Table...

Table: Network DataBase Table [u_user...

Include Variables: 1 - Get Catalog Variables > opened_on_behalf_of > Email

* To: 1 - Get Catalog Va... > ... > Em...

CC: 2 - Create Record > ... > Email

Network Request Active Test Debug Deactivate

* Subject: Request has been Created

Body:

Hello 2 - Create ... > ... > Requested ...

We have been received your request with request number: 2 - Creat... > ... > Request NU...

Sorry for the Inconvenience and Your request will resolved with in 2 Business working days.

Thanks for contacting us.

Network Team.

1. 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

Network Request Active View: [Icons] Test Debug Deactivate

Action: **Ask For Approval**

Action Inputs

* Record: 2 - C... ▶ User DataBase Table... X

Table: **Network DataBase Table [u_user...**

Approval Reason: **Waiting for approval**

Approval Field: Select a field

Journal Field: Select a field

* Rules

Approve When: Anyone approves 2 - Create Rec... ▶ ... ▶ Manag... X

Add another OR

1. 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

5 **If**

Condition Label: If Request is Approved

* Condition 1: 4 - Ask For Ap... ▶ Approval St... X i Approved or and X

Add another condition set(OR)

Delete Cancel **Done**

1. 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

Action: **Update Record**

Action Inputs

- * Record: 2 - C... > User DataBase Table... X
- * Table: Network DataBase Table [u_user... X
- * Fields:
 - Assigned to X Adam Ringle X
 - Work Status X Work In Progress
 - + Add field value

Buttons: Delete, Cancel, Done

Note: Configure the other actions and Logics as shown in the flow chart.

Flow Chart

Workflow Studio

Network Request
Flow * Global

+

Network Request

Active

View:

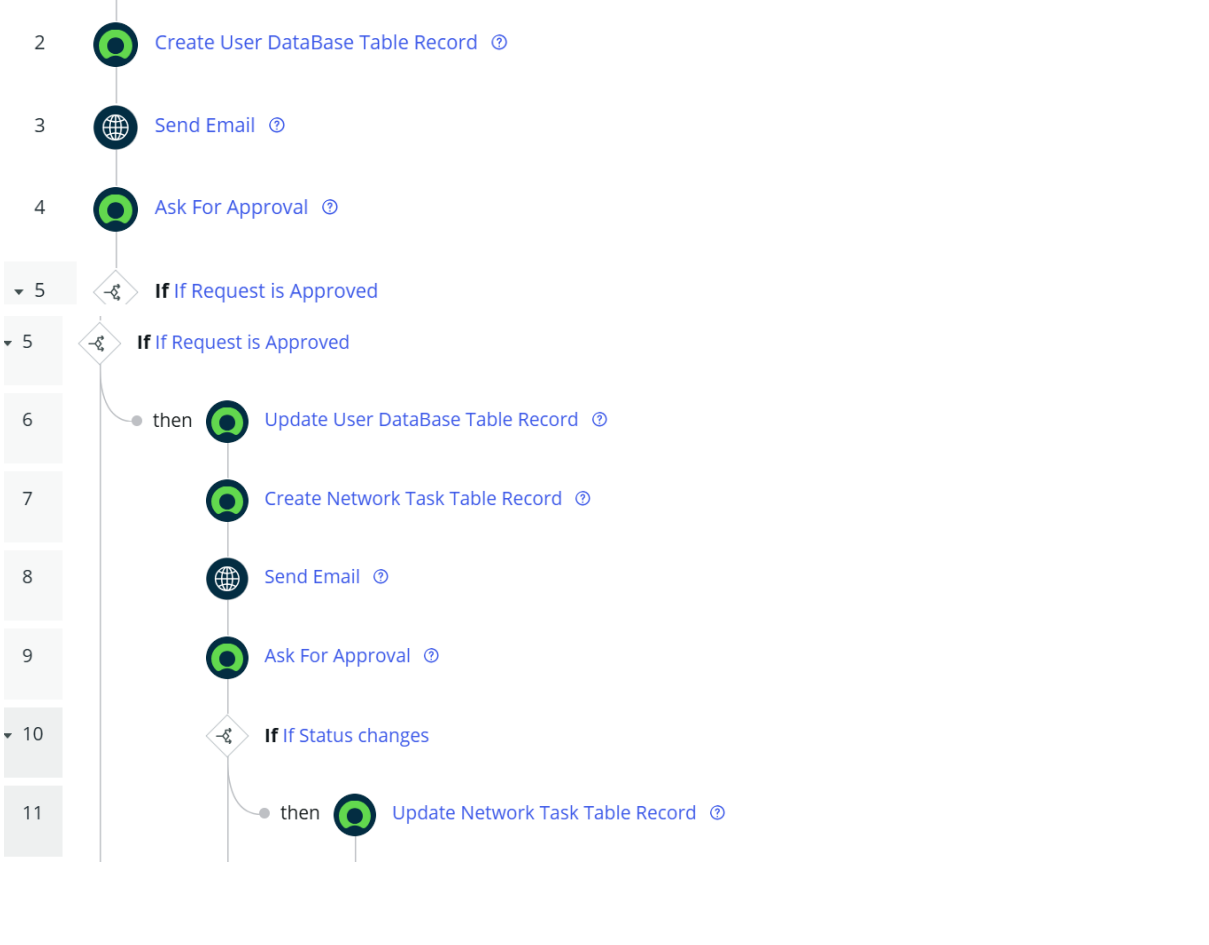
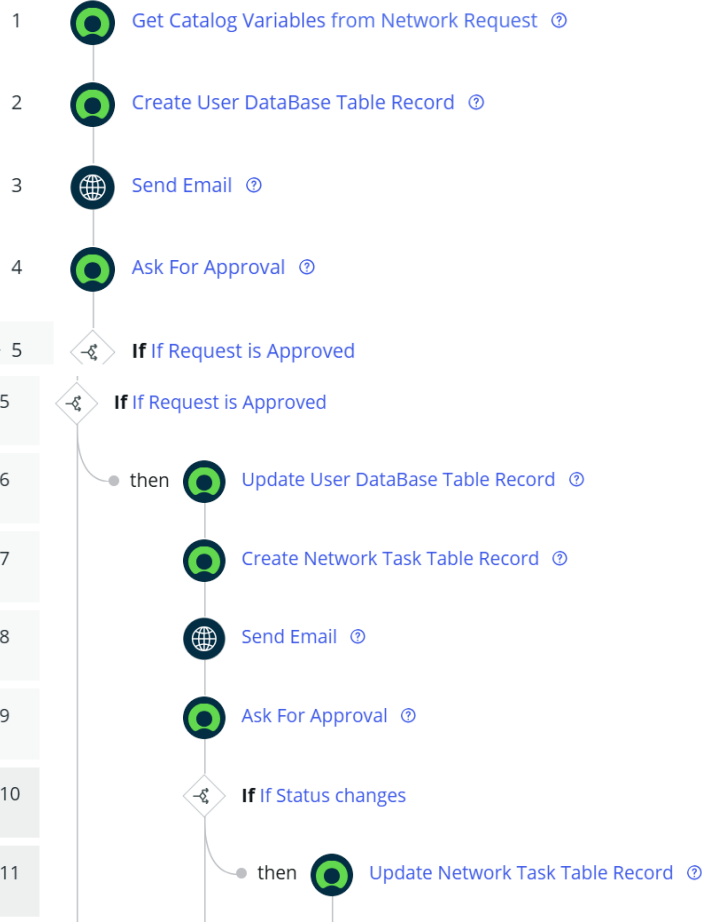
Test

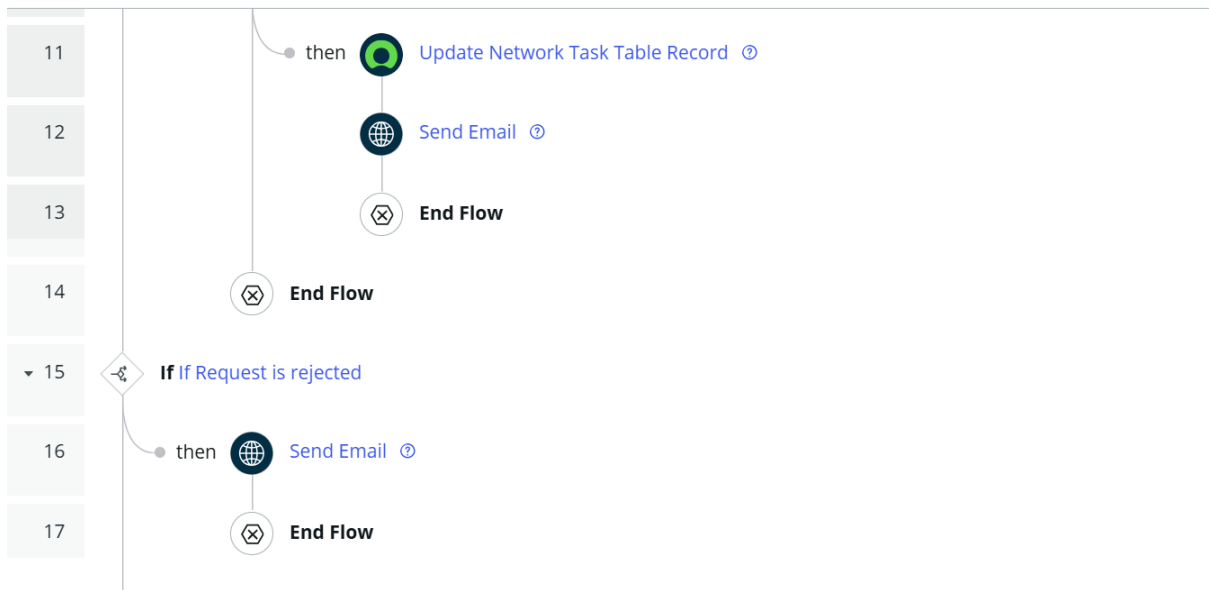
Debug

TRIGGER

Service Catalog

ACTIONS [Select multiple](#)



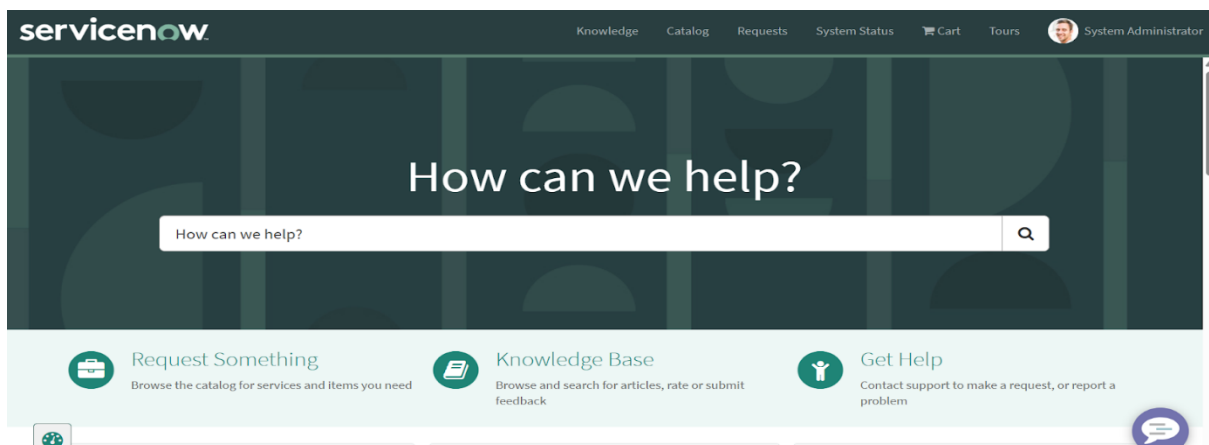


Final Testing in End User portal & Instance

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.
ex: <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.



servicenow Knowledge Catalog Requests System Status Cart Tours System Administrator

Home > All Catalogs > Service Catalog > Networks and Connectivity > **Network Request** Search Catalog

Network Request

Network Services Request

* Indicates required

Requester information

Opened on behalf of Abraham Lincoln x Phone Number 99999999

Email ID abraham.lincoln@example.com Proof of Document Upload

User Name abraham.lincoln

Service Details

* Is this a new network connection or a relocation?

Quantity: 1 Delivery Time: 0 Days

Add to Cart Save as Draft **Order Now**

Required information Is this a new network connection or a relocation?

servicenow Knowledge Catalog Requests System Status Cart Tours System Administrator

Home > **Request Summary** Search Catalog

Submitted : 27/05/2025 09:19:17
Request Number : **REQ0010043**
Estimated Delivery : 27/05/2025

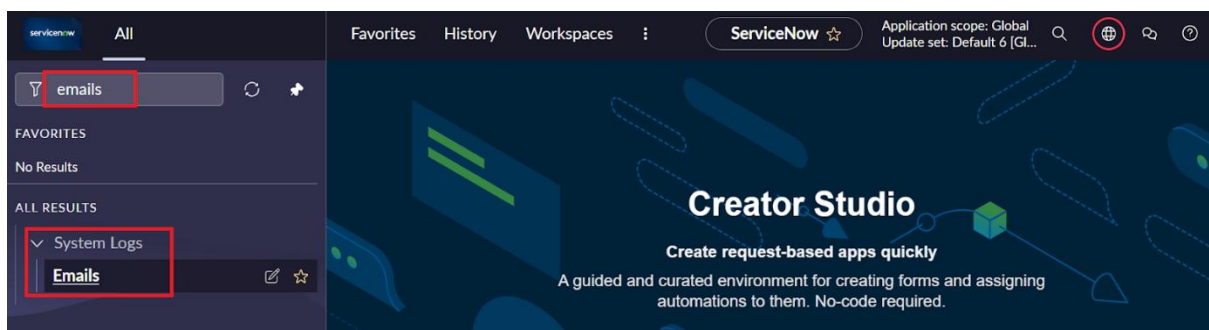
Item	Delivery Date	Stage	Price (each)	Quantity	Total
Network Request	27/05/2025		---	1	---

Total: \$0.00

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.



Emails

Subject

Search

Actions on selected rows...

All > Created on Today

Created	Recipients	Copied	Blind copied	Subject	Type	User ID
Search	Search	Search	Search	Search	Search	Search
27/05/2025 09:19:20	admin@example.com			Request REQ0010043 was approved	send-ready	(empty)
27/05/2025 09:19:20	abraham.lincoln@example.com	bow.ruggeri@example.com		Request has been Created	send-ready	(empty)
27/05/2025 09:19:20	admin@example.com			Request REQ0010043 was created	send-ready	(empty)

Preview Email

Hello Abraham Lincoln,

We have been received your request with request number: REQ0010043,

Sorry for the Inconvenience and Your request will resolved with in 2 Business working days.

Thanks for contacting us.

Network Team.

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

Network DataBase Tables

Created

Search

Actions on selected rows...

All

Request Number	Requested For	Work Status	Created
<div>Search</div>	<div>Search</div>	<div>Search</div>	<div>Search</div>
REQ0010043	Abraham Lincoln	New	27/05/2025 09:19:20
REQ0010042	Abraham Lincoln	New	23/05/2025 12:05:06
REQ0010026	Abraham Lincoln	approved	16/05/2025 17:19:41
REQ0010025	Adam Ringle	requested	16/05/2025 17:18:15
REQ0010024	Abel Tuter (architect)	New	16/05/2025 17:00:01
REQ0010023	0a3371ab8391225022f7e630ceaad33a	New	16/05/2025 16:58:47
REQ0010022	System Administrator	New	16/05/2025 16:52:33

Network DataBase Table
NET0001044

Database Number	NET0001044	Work Status	New
Request Number	REQ0010043	Assignment Group	Network
Created	27/05/2025 09:19:20	Assigned to	
Requested For	Abraham Lincoln	Device Details	Laptop
Date of Enquiry	27/05/2025		
Customer Address			
Special Instructions	Special Instructions		
<button>Post</button>			

Activities: 1

System Administrator

Field changes • 27/05/2025 09:19:20

Assignment Group	Network
Database Number	NET0001044
Date of Enquiry	27/05/2025
Request Number	REQ0010043
Requested For	Abraham Lincoln

Request Approvals State Search

Approvals

State	Approver	Comments	Approval for	Created
Requested	Bow Ruggeri		(empty)	27/05/2025 09:19:20

1 to 1 of 1

Network Task Tables Created Search

Task Number	Approval Status	Assigned to	Database Number	Request Number	Work Status	Created
Search	Search	Search	Search	Search	Search	Search
NTT0001037	Requested	Adam Ringle	NET0001044	REQ0010043	Work In Progress	27/05/2025 09:25:27
NTT0001034	Approved	Adam Ringle	NET0001040	REQ0000001	Completed	23/05/2025 08:54:13
NTT0001033	Approved	Adam Ringle	NET0001039	REQ0010041	Completed	22/05/2025 15:14:16
NTT0001032	Approved	Adam Ringle	NET0001038	REQ0010040	Completed	22/05/2025 14:51:19
NTT0001031	Approved	Adam Ringle	NET0001037	REQ0000001	Completed	22/05/2025 12:56:55

Network Task Table
NTT0001037

Task Number	NTT0001037	Requested For	Abraham Lincoln
Database Number	NET0001044	Approval Status	Requested
Request Number	REQ0010043	Work Status	Work In Progress
		Assigned to	Adam Ringle
Description			
Work Notes	Work Notes		
<button>Post</button>			

Activities: 1

System Administrator

Field changes • 27/05/2025 09:25:27

Approval Status	Requested
Assigned to	Adam Ringle
Database Number	NET0001044
Request Number	REQ0010043
Requested For	Abraham Lincoln
Task Number	NTT0001037
Work Status	Work In Progress

Network Task Table
NTT0001037

Approved Network Task Table: NTT0001037

Task Number: NTT0001037

Database Number: NET0001044

Request Number: REQ0010043

Requested For: Abraham Lincoln

Approval Status: Approved

Work Status: Completed

Assigned to: Adam Ringle

Description: Task has been complited Successfully

Work Notes: Work Notes

Post

Activities: 2

System Administrator

Approval Status: Approved was Requested

Work Status: Completed was Work In Progress

Field changes • 27/05/2025 09:27:26

Created	Recipients	Copied	Blind copied	Subject	Type	User ID
27/05/2025 09:19:20	admin@example.com			Request REQ0010043 was approved	send-ready	(empty)
27/05/2025 09:19:20	abraham.lincoln@example.com	bow.ruggeri@example.com		Request has been Created	send-ready	(empty)
27/05/2025 09:25:27	adam.ringle@acme.com		abraham.lincoln@example.com	Request has been processed	send-ready	(empty)
27/05/2025 09:27:26	abraham.lincoln@example.com	adam.ringle@acme.com		Request has been Resolved	send-ready	(empty)
27/05/2025 09:19:20	admin@example.com			Request REQ0010043 was created	send-ready	(empty)

Preview Email

Hello Abraham Lincoln,

Your ticket has been resolved, thanks for contacting us.

Thank you.

Conclusion:

The Network Request Management system in ServiceNow automates request intake, routing, and fulfillment. Through dynamic forms, role-based approvals, and email notifications, it ensures transparency and efficiency. Optional automation integration further reduces manual workload and risk, enabling faster and more reliable network operations.