

Setup Guide

Automated Network Request Management – ServiceNow

1. Objective

This setup guide explains how to configure the Automated Network Request Management solution in a fresh ServiceNow Personal Developer Instance (PDI).

It walks through catalog creation, workflow automation, security setup, and testing steps required for successful implementation.

2. Prerequisites

Before starting the configuration, make sure the following requirements are met:

- A working ServiceNow Personal Developer Instance
- Administrator-level access
- Basic knowledge of:
 - Service Catalog
 - Flow Designer
 - Tables and Access Control Lists (ACLs)

3. Recommended Implementation Sequence

1. Create required custom tables
2. Configure the Service Catalog item

3. Add and configure variables
4. Build Flow Designer automation
5. Set up roles and access controls
6. Perform end-to-end testing

4. Custom Table Setup

4.1 Create Table: u_network_database

Navigation:

System Definition → Tables → New

Table Configuration:

- **Label:** Network Request Database
- **Name:** u_network_database
- **Extends Table:** None

Fields to Add:

- Request Type (Choice)
- Justification (String)
- Portal Details (String)
- Urgency (Choice)
- Requested For (Reference → User)
- Approval State (Choice)

- Status (Choice)

4.2 Create Table: u_network_task

Navigation:

System Definition → Tables → New

Table Configuration:

- **Label:** Network Task
- **Name:** u_network_task

Fields to Add:

- Parent Request (Reference → u_network_database)
- Assigned Group (Reference → Group)
- Task Status (Choice)
- Work Notes (String)

5. Service Catalog Configuration

5.1 Create a Catalog Item

Navigation:

Service Catalog → Catalog Definitions → Maintain Items → New

Item Details:

- **Name:** Network Request

- **Catalog:** Service Catalog
- **Category:** Network Services

6. Variable Setup

6.1 Add Catalog Variables

Navigation:

Catalog Item → Variables → New

Variable Name	Type	Mandatory
Request Type	Choice	Yes
Justification	Multi-line Text	Yes
Portal Details	Single-line Text	Yes
Urgency	Choice	Yes

6.2 Variable Settings

- Mark all required fields as mandatory
- Provide help text for better user clarity
- Apply UI Policies if conditional visibility is needed

7. Flow Designer Configuration

7.1 Create Flow

Navigation:

Flow Designer → New → Flow

Flow Name: Automated Network Request Flow

Trigger: Service Catalog → Catalog Item Requested

7.2 Configure Flow Actions

Flow execution steps:

1. Retrieve catalog variables
2. Insert record into **u_network_database**
3. Request approval
4. Check approval outcome
5. Create record in **u_network_task**
6. Send email notification
7. Update request status

7.3 Approval Rules

- **Manager Approval:** For standard requests
- **Security Approval:** For high-risk or sensitive requests
- **Group Approval:** For department-specific requests

8. Access Control and Security**8.1 Default ACL Behavior**

- System automatically generates ACLs for custom tables
- Admin role is used during configuration

8.2 Role Permissions

Role	Access Level
Admin	Full access
Network Team	Read / Update
End User	Create / Read

9. Test Execution

9.1 Sample Input Data

Field	Example Value
Request Type	VPN Access
Justification	Required for project work
Portal Details	HR Portal
Urgency	High

9.2 Testing Procedure

1. Log in to Service Portal (/sp)

2. Search for **Network Request**

3. Enter test information

4. Submit the request

5. Verify:

- Record creation
- Approval routing
- Email notifications
- Task generation
- Status updates

ServiceNow Developers | Classic | Unified Navigation | Network Request | Workflow | SkillWallet | Network Request - Service P

dev315321.service-now.com/sp?id=sc_cat_item&sys_id=04169a5b4731761028d113ff016d43cd

Order Confirmation

Request for **System Administrator**

Delivery Information (Optional)

Special Instructions (Optional)

Cancel Checkout

Network Request

Network Services Request

opened on behalf of

Abel Tutor

Email ID

abel.tutor@example.com

User name

abel.tutor

Is this a new network connection or a reserved network

☒ New

☐ Relocation

☐ None

If this is a relocation, Please provide your location

If this is a relocation, Please provide your location2

Quantity: 1

Delivery Time: 2 Days

Add to Cart

Save as Draft

Order Now

26°C Mostly cloudy 12:44 PM 26/12/2025

ServiceNow Developers | Classic | Unified Navigation | Network Request | Workflow | SkillWallet | Request Summary - REQ001

dev315321.service-now.com/sp?id=sc_request&is_new_order=true&table=sc_request&sys_id=a6b82e65470e7a1028d113ff016d43d3

Request Summary - REQ0010004

Submitted :2025-12-25 23:14:47
Request Number :REQ0010004
Estimated Delivery : 2025-12-27

Item	Delivery Date	Stage	Price (each)	Quantity	Total
Network Request	2025-12-27	Request Approval	---	1	---

Total: \$0.00

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dev315321.service-now.com/sp?id=ticket&table=sc_req_item&sys_id=62b82e65470e7a1028d113ff016d43d4&view=sp

servicenow Knowledge Catalog Requests System Status Cart Tours System Administrator

Home > My Request - RITM0010006

Number: RITM0010006 Created: just now Updated: just now State: Open

Network Services Request

Item: Network Request Requested for: System Administrator Quantity: 1

Stage: Assess or Scope Task

Activity Attachments Additional Details

Type your message here... Post

System Administrator
RITM0010006 Created just now

Start

ServiceNow Developers | Classic | Unified Navigation | Network Request | Workflow | SkillWallet | My Request - RITM0010006

dev315321.service-now.com/now/workflow-studio/builder%3Ftable%3Dsys_hub_flow%26sysld%3D00889207a47b5321028d113ff016d4397

Workflow Studio Network Request Flow Global

Network Request

TRIGGER: Service Catalog

ACTIONS: Select multiple

1. Get Catalog Variables from Network Request
2. Create Network Database Record
3. Send Email
4. Ask For Approval on Network Database Record
5. If Request is Approved
6. then Update Network Database Record
7. Create Network Task Record

Status: Draft Application: Global

Test flow

Run your flow to make sure it has no errors before you activate it. When the test finishes running, check the execution details to see each action's configuration, runtime values, and the log messages for any errors that occurred.

* Requested Item Record: RITM0010006

Your test has finished running. View the flow execution details.

☐ Run test in background

Cancel Run Test

Data Collapse All

- 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
 - please_provide_address_...: String
 - type_of_devices: Choice
 - user_name: String
 - phone_number: String
 - 2 - Create Record
 - Network Database Record: Record

ServiceNow Developers | Classic | Unified Navigation | Network Request | Workflow | SkillWallet | My Request - RITM0010006

dev315321.service-now.com/now/workflow-studio/builder%3Ftable%3Dsys_flow_context%26sysld%3Dfe096ea5580e7a105ed025387cc6871c

Workflow Studio

Network Request Flow • Global

EXECUTION DETAILS **Network Request** Test Run - Waiting Cancel flow Open flow Open context record

Show Action Details

Run as: System Administrator Open flow logs

	State	Start time	
FLOW STATISTICS	Waiting	2025-12-25 23:16:11	125ms
TRIGGER			
Catalog Item Requested			
ACTIONS			
1 Get Catalog Variables from Network Request	Core Action	Completed	2025-12-25 23:16:11 21ms
2 Create Record	Core Action	Completed	2025-12-25 23:16:11 11ms
3 Send Email		Completed	2025-12-25 23:16:11 32ms
4 Ask For Approval	Core Action	Waiting	2025-12-25 23:16:11 56ms
5 If If Request is Approved	Flow Logic	Not Run	
6 Update Record	Core Action	Not Run	

Type here to search 26°C Mostly cloudy 12:46 PM 26/12/2025

ServiceNow Developers | Network Database: Created | Network Request | Workflow | SkillWallet | My Request - RITM0010006

dev315321.service-now.com/now/nav/ui/classic/params/target/sysapproval_approver.do%3Fsys_id%3D8f096ea5470e7a1028d113ff016d439c%26syspa...

servicenow

All Favorites History Admin Approval - Network Database: Created 2025-12-25 ... Search

Approval Network Database: Created 2025-12-25 23:16:11 Update Approve Reject Delete

Approver Bow Ruggeri Approving Network Database: Created 2025-12-25 23:16:11

State Approved

Approval Reason Waiting for Approval

Comments Comments Post

Activities: 1 System Administrator Field changes • 2025-12-25 23:16:11

Approver Bow Ruggeri
State Requested

Update Approve Reject Delete

Summary of Item being approved

Network Database

Request Number REQ00010004 Date of Enquiry 2025-12-25

Type here to search 26°C Mostly cloudy 12:47 PM 26/12/2025

ServiceNow Developers

Approvals | ServiceNow

Network Request | Workflow

SkillWallet

My Request - RITM0010006

dev315321.service-now.com/now/nav/ui/classic/params/target/sysapproval_approver_list.do%3Fsysparm_first_row%3D1%26sysparm_query%3D%26sy...

ServiceNow

All Favorites History Workspaces Admin

Approvals

Search

Approvals

Created

Search

Actions on selected rows...

Approved Network Database: Created 2025-12-25 23:16:11

All

State	Approver	Comments	Approval for	Created
Search	Search	Search	Search	Search
Approved	Bow Ruggeri		(empty)	2025-12-25 23:16:11
Approved	Bow Ruggeri		(empty)	2025-12-22 03:01:09
Approved	Bow Ruggeri		(empty)	2025-12-22 02:51:21
Approved	Bow Ruggeri		(empty)	2025-12-22 02:06:08
Approved	Bow Ruggeri		(empty)	2025-12-22 02:04:54
Approved	Bow Ruggeri		(empty)	2025-12-22 01:57:35
Approved	Bow Ruggeri		(empty)	2025-12-22 01:45:17
Rejected	Fred Luddy		(empty)	2025-11-09 11:19:33
Requested	Fred Luddy		(empty)	2025-11-09 11:17:03
Requested	Fred Luddy		(empty)	2025-11-09 11:15:44
Approved	Eric Schroeder		CHG0000009	2025-11-08 22:31:51
Approved	Fred Luddy		CHG0000009	2025-11-08 22:31:51
Approved	Bow Ruggeri		CHG0000009	2025-11-08 22:31:50
Approved	David Loo		CHG0000009	2025-11-08 22:31:50

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Workflow Studio

Network Request

Network Request

Test Run - Completed

Open flow

Open context record

EXECUTION DETAILS

Network Request

Show Action Details

		State	Start time	
1	Get Catalog Variables from Network Request	Core Action	Completed	2025-12-25 23:16:11 21ms
2	Create Record	Core Action	Completed	2025-12-25 23:16:11 11ms
3	Send Email		Completed	2025-12-25 23:16:11 32ms
4	Ask For Approval	Core Action	Completed	2025-12-25 23:16:11 121ms
5	If If Request is Approved	Flow Logic	Evaluated - True	2025-12-25 23:17:37 170ms
6	Update Record	Core Action	Completed	2025-12-25 23:17:37 9ms
7	Create Record	Core Action	Completed	2025-12-25 23:17:37 42ms
8	Send Email		Completed	2025-12-25 23:17:37 30ms
9	Ask For Approval	Core Action	Completed	2025-12-25 23:17:37 17ms
10	If If Status Changes	Flow Logic	Evaluated - True	2025-12-25 23:17:37 72ms
11	Update Record	Core Action	Completed	2025-12-25 23:17:37 47ms
12	Send Email		Completed	2025-12-25 23:17:37 24ms
13	End	Flow Logic	Completed	2025-12-25 23:17:37 0ms
14	End	Flow Logic	Not Run	
15	If If Request is rejected	Flow Logic	Not Run	

10. Validation Checklist

- ✓ Catalog item visible in portal
- ✓ Variables captured correctly

- ✓ Flow executed successfully
- ✓ Approvals completed
- ✓ Records created in custom tables
- ✓ Notifications delivered

11. Summary

This setup guide enables administrators to successfully configure the Automated Network Request Management solution within a new ServiceNow instance.

By following the structured steps, organizations can ensure consistent automation, proper governance, and alignment with ServiceNow best practices.