

Setup Manual:

Automated Network Request Management – ServiceNow

1. Purpose

This setup manual provides a **step-by-step guide** to recreate the Automated Network Request Management solution in a **new ServiceNow Personal Developer Instance (PDI)**.

It covers catalog configuration, automation setup, security controls, and testing procedures.

2. Prerequisites

Before starting, ensure the following:

- Active **ServiceNow Personal Developer Instance**
 - Admin access to the instance
 - Basic understanding of:
 - Service Catalog
 - Flow Designer
 - Tables and ACLs
-

3. Order of Operations (Recommended)

1. Create Custom Tables
2. Create Service Catalog Item

3. Configure Variables
 4. Build Flow Designer Workflow
 5. Configure ACLs and Roles
 6. Test End-to-End Submission
-

4. Custom Table Creation

4.1 Create u_network_database Table

Navigation:

System Definition → Tables → New

Table Details:

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

Key Fields to Add:

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

Table Network Database

DeleteUpdateDelete All Records

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

* Label Network Database

Application Global

* Name u_network_database

ColumnsControlsApplication Access

Table Columns

for text

Search

1 to 15 of 15

New

Dictionary Entries

	Column label	Type	Reference	Max length	Default value	Display
✕	Assignment Group	Reference	Group		32	false
✕	Date of Enquiry	Date	(empty)		40	false
✕	Customer Address	String	(empty)		40	false
✕	Assigned to	Reference	User		32	false

✕	Device Details	String	(empty)	40	false
✕	Customer Document	String	(empty)	40	false
	Sys ID	Sys ID (GUID)	(empty)	32	false
	Updated	Date/Time	(empty)	40	false
	Created by	String	(empty)	40	false
✕	Request Number	String	(empty)	40	false
	Created	Date/Time	(empty)	40	false
	Updated by	String	(empty)	40	false
	Updates	Integer	(empty)	40	false
✕	Work Status	String	(empty)	40	false
✕	Requested For	String	(empty)	40	false
+	Insert a new row...				

Delete

Update

Delete All Records

Related Links

[Form Builder](#)[Design Form](#)

[Layout Form](#)[Layout List](#)[Show Form](#)[Show List](#)[Show Schema Map](#)[Add to Service Catalog](#)[Run Point Scan](#)[Explore REST API](#)

Access Controls (4)Security Data FiltersLabels (1)Database Indexes (3)Table Subscription Configuration (1)

Name

Search

Actions on selected rows...

Access Controls

	Name ^	Decision Type	Operation	Type	Active	Updated by	Updated
<input type="checkbox"/>	u_network_database	Allow If	create	record	true	admin	2025-12-16 22:16:35
<input type="checkbox"/>	u_network_database	Allow If	read	record	true	admin	2025-12-16 22:16:35
<input type="checkbox"/>	u_network_database	Allow If	delete	record	true	admin	2025-12-16 22:16:35
<input type="checkbox"/>	u_network_database	Allow If	write	record	true	admin	2025-12-16 22:16:35

1 to 4 of 4

4.2 Create u_network_task Table

Navigation:

System Definition → Tables → New

Table Details:

- Label: Network Task
- Name: u_network_task

Key Fields:

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

servicenow All Favorites History Admin : Table - Network Task Search

Table Network Task Delete Update Delete All Records

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

* Label Application

* Name

Extends table

Columns Controls Application Access

Table Columns for text Search 1 to 20 of 71 New

Dictionary Entries

Column label	Type	Reference	Max length	Default value	Display
Comments and Work notes	Journal List	(empty)	4,000		false
Transfer reason	Integer	(empty)	40		false
Effective number	String	(empty)	40		false
Variables	Variables	(empty)	40		false

Universal Request	Reference	Task	32		false
Number	String	(empty)	40	javascript:getNextObj()NumberPadded();	true
Configuration Item	Reference	Configuration Item	32		false
Approval history	Journal	(empty)	4,000		false
Business duration	Duration	(empty)	40		false
Location	Reference	Location	32		false
User input	User Input	(empty)	4,000		false
Active	True/False	(empty)	40	true	false
State	Integer	(empty)	40	1	false
Work notes	Journal Input	(empty)	4,000		false
Closed by	Reference	User	32		false
Follow up	Date/Time	(empty)	40		false
Domain	Domain ID	(empty)	32	global	false
Additional comments	Journal Input	(empty)	4,000		false
Urgency	Integer	(empty)	40	3	false
Opened	Date/Time	(empty)	40	javascript:gs.nowDateTime()	false
+ Insert a new row...					

DeleteUpdateDelete All Records

Related Links

[Form Builder](#)[Design Form](#)[Layout Form](#)[Layout List](#)[Show Form](#)[Show List](#)[Show Schema Map](#)[Add to Service Catalog](#)[Run Point Scan](#)[Explore REST API](#)

Access Controls (4)Security Data FiltersLabels (1)Database Indexes (46)Table Subscription Configuration (1)

≡

▽

Name

Search

⊞

—

Actions on selected rows...

Access Controls

☐

Q

Name ▲

Decision Type

Operation

Type

Active

Updated by

Updated

u_network_task

Allow If

delete

record

true

admin

2025-12-22 00:50:00

u_network_task

Allow If

create

record

true

admin

2025-12-22 00:50:00

u_network_task

Allow If

write

record

true

admin

2025-12-22 00:50:00

u_network_task

Allow If

read

record

true

admin

2025-12-22 00:50:00

u_network_task

Allow If

write

record

true

admin

2025-12-22 00:50:00

u_network_task

Allow If

read

record

true

admin

2025-12-22 00:50:00

⏪

⏩

1 to 4 of 4

⏪

⏩

5. Service Catalog Item Creation

5.1 Create Catalog Item

Navigation:

Service Catalog → Catalog Definitions → Maintain Items → New

Details:

- Name: Network Request
- Catalog: Service Catalog
- Category: Network Services

The screenshot shows the ServiceNow interface for configuring a Catalog Item. The top navigation bar includes 'servicenow', 'All', 'Favorites', 'History', 'Workspaces', and a 'Catalog Items' button. A search bar and various utility icons are also present. Below the navigation bar, the breadcrumb trail reads 'Catalog Item' > 'Network Request'. A toolbar contains 'Copy', 'Try It', 'Update', 'Edit in Catalog Builder', and 'Delete' buttons. A blue banner at the top of the form area states: 'Build and modify items faster with the improved Catalog Builder.' The form itself is divided into two main sections. The left section contains fields for 'Name' (Network Request), 'Catalogs' (Service Catalog), 'Category' (Network Standard Changes), 'State' (None), 'Checked out' (None), and 'Owner' (System Administrator). The right section contains 'Application' (Global), 'Active' (checked), 'Roles' (empty), and 'Fulfillment automation level' (Unspecified). Below these fields is a tabbed interface with 'Item Details' selected, showing 'Short description' (Network Services Request) and a 'Description' field with expand/collapse controls.

6. Variable Configuration

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

servicenow All Favorites History : Catalog Item - Network Request

Search

Catalog Item - Network Request

Variables (10) Variable Sets (1) Catalog UI Policies 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

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

6.2 Variable Properties

- Set **Mandatory = true**
- Add **Help Text** for clarity
- Configure **UI Policies** if conditional visibility is required

Variables (5) Catalog UI Policies Catalog Client Scripts Included In (1) Catalog Data Lookup Definitions

Order Search

Actions on selected rows... New

Variable set = Requester Information

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
phone_number	Single Line Text	Phone Number	400
proof_of_document	Attachment	Proof of Document	500

1 to 5 of 5

7. Flow Designer Workflow Setup

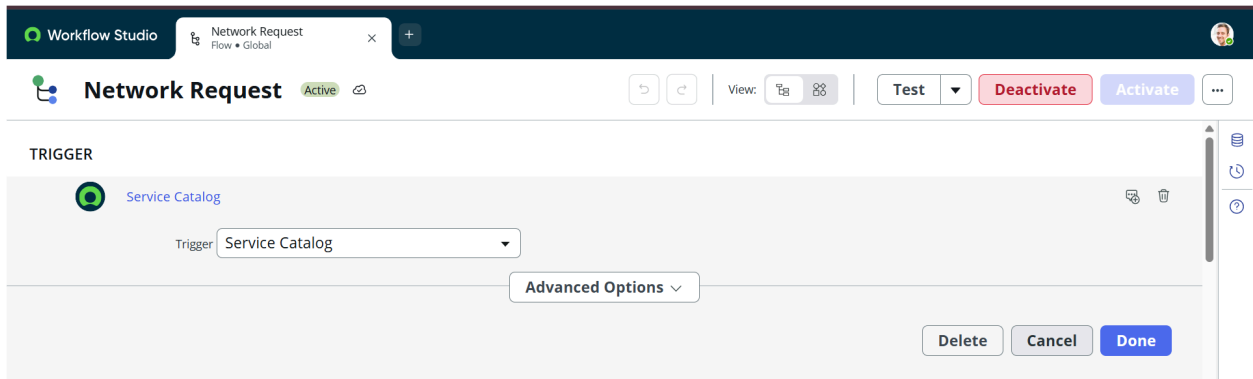
7.1 Create Flow

Navigation:

Flow Designer → New → Flow

Flow Name: Automated Network Request Flow

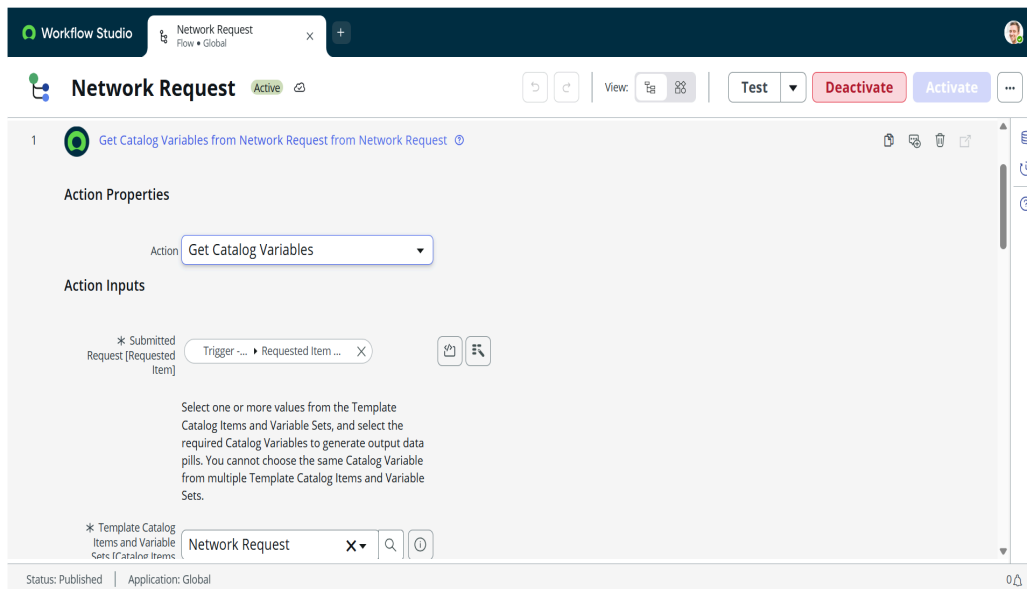
Trigger: Service Catalog → Catalog Item Requested



7.2 Configure Flow Actions

Flow Actions (in order):

1. Get Catalog Variables



Workflow Studio

Network Request

Table: Network Database [u_network_d...]

Fields:

- Request Number
- Requested For
- Work Status
- Assignment Group
- Date of Enquiry
- Device Details
- Customer Address

Buttons: Delete, Cancel, Done

Status: Published | Application: Global

3. Ask for Approval

Workflow Studio

Network Request

Action Properties

Action: Send Email

Action Inputs

Target Record: 2 - Cr... Network Database ...

Table: Network Database [u_network_d...]

Include Watermark: ☒

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

CC: 2 - Create Record Email

BCC:

CC: 2 - Create Record ► ... ► Email X

BCC:

* 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 Bussiness working days.

Thanks for contacting us.

Network Team.

Buttons: Delete, Cancel, Done

Status: Published | Application: Global

4. If (Approval State = Approved)

Workflow Studio | Network Request Flow • Global

Network Request Active

View: Test Deactivate Activate

4 Ask For Approval on Network Database

Action Properties

Action: Ask For Approval

Action Inputs

* Record: 2 - Cr... ► Network Database ... X

Table: Network Database [u_network_d...]

Approval Reason: Waiting for approval

Approval Field: Select a field

Journal Field: Select a field

* Rules

Add another OR rule set

* Rules

Add another OR rule set

Approve When:

Anyone approves 2 - Create Rec... ► ... ► Manag... X

Due Date: None

Buttons: Delete, Cancel, Done

Status: Draft | Application: Global

5. Create Record → u_network_task

The screenshot shows the 'Create Network Task Record' action in Workflow Studio. The action is set to 'Create Record'. The table is 'Network Task [u_network_task]'. The fields are configured as follows:

Field	Value
State	Open
Assignment group	Network
Parent	2 - Cr... ▶ Network Database ...
Short description	Provide network service

Buttons: + Add field value

6. Send Email Notification

The screenshot shows the 'Send Email' action in Workflow Studio. The action is set to 'Send Email'. The configuration is as follows:

- Target Record: 2 - Cr... ▶ Network Database ...
- Table: Network Database [u_network_d...]
- Include Watermark: ☒
- * To: 1 - Get Catalog Va... ▶ ... ▶ Em...
- CC: 2 - Create Record ▶ ... ▶ Email
- BCC: (empty)
- * Subject: Network Request
2 - Cr... ▶ Network Database ...
- Body: Approved
Hello 2 - Create ... ▶ ... ▶ Requested ...
Your Network request has been approved successfully.
Thanks for contacting us.
Network Team.

Buttons: Delete, Cancel, Done

7. Update Record Status

The screenshot shows the 'Update Record' action configuration in the Workflow Studio. The interface includes a top bar with 'Workflow Studio' and 'Network Request' tabs. Below the tabs, there are buttons for 'Test', 'Deactivate', and 'Activate'. The main area is titled 'Update Network Task Record' and contains the following fields:

- Action:** A dropdown menu set to 'Update Record'.
- Record:** A field with the value '7 - Creat... Network Task Re...'.
- Table:** A dropdown menu set to 'Network Task [u_network_task]'.
- Fields:** Two rows of fields. The first row has 'State' and 'Closed Complete'. The second row has 'Work notes' and 'Network task completed successfully'.

At the bottom, there are buttons for 'Delete', 'Cancel', and 'Done'. The status bar at the very bottom indicates 'Status: Draft' and 'Application: Global'.

7.3 Approval Configuration

- Manager Approval → Standard requests
- Network Security Approval → High-sensitivity requests
- Group Approval → Department-specific requests

The screenshot shows the 'If' condition configuration in the Workflow Studio. The interface includes a top bar with 'Workflow Studio' and 'Network Request' tabs. Below the tabs, there are buttons for 'Test', 'Deactivate', and 'Activate'. The main area is titled 'If' and contains the following fields:

- Condition Label:** A text field with the value 'if Request is approved'.
- Condition 1:** A field with the value '4 - Ask For Ap... Approval St...'.
- Operator:** A dropdown menu set to 'is'.
- Value:** A dropdown menu set to 'Approved'.

At the bottom, there are buttons for 'Delete', 'Cancel', and 'Done'. The status bar at the very bottom indicates 'Status: Draft' and 'Application: Global'.

10

If

Condition Label: if Status changes

* Condition 1: 9 - Ask For Ap... Approval St... is Skipped

Add another condition set(OR)

Delete Cancel Done

15

If

Condition Label: if Request is rejected

* Condition 1: 4 - Ask For Ap... Approval St... is Rejected

Add another condition set(OR)

Delete Cancel Done

8. ACL and Role Configuration:

8.1 Default ACL Usage

- Default ACLs created automatically with custom tables
- Admin role used for configuration

8.2 Access Control

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

9. Test Submission Data

9.1 Sample Test Data

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

9.2 Testing Steps

1. Login to Service Portal (/sp)
2. Search for **Network Request**
3. Fill in test data
4. Submit request
5. Verify:
 - Request creation
 - Approval routing
 - Email notification
 - Task creation
 - Status updates

Network Request

Network Services Request

Requester information

Opened on behalf of

Abel Tuter

Phone Number

9876543210

Email Id

abel@example.com

Proof of Document

Upload

User name

Abel

Is this a new network connection or a relocation

New

Quantity: 1

Delivery Time: 2 Days

Add to Cart

Save as Draft

Order Now



Employee Center is available to you
Join your peer organizations in creating a better

Network Request

Network Services Request

Requester information

Opened on behalf of

Abel Tuter

Phone Number

9876543210

Email Id

abel@example.com

Proof of Document

Upload

User name

Abel

Is this a new network connection or a relocation

New

Order Confirmation

Request for

System Administrator

Delivery Information (Optional)

Special instructions (Optional)

Cancel

Checkout

Close modal

Learn More about Employee Center

Quantity: 1

Delivery Time: 2 Days

Add to Cart

Save as Draft

Order Now



Submitted :2025-12-25 00:23:25
Request Number : **REQ0010004**
Estimated Delivery : 2025-12-27

Item	Delivery Date	Stage	Price (each)	Quantity	Total
Network Request	2025-12-27	Assess or Scope Task	---	1	---

Total: \$0.00



Number
RITM0010009

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



Workflow Studio

Network Request
Flow • Global

Network Request
Flow execution • None

Reactivate

Activate

...

13

14

15

16

17

End Flow

If If Request is rejected

then

Send Email

End Flow

Add an Action, Flow Link

ERROR HANDLER

If an error occurs in your flow, the actions you add here will run.

Status: Published

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

servicenow

All Favorites History Workspaces

Approvals

Search

Search

Actions on selected rows...

All

State

Approver

Comments

Approval for

Created

Search

Search

Search

Search

Search

Requested

Bow Ruggeri

(empty)

2025-12-25 00:31:21

Approved

Bow Ruggeri

(empty)

2025-12-22 03:15:46

Approved

Bow Ruggeri

(empty)

2025-12-22 03:13:37

Approved

Bow Ruggeri

(empty)

2025-12-22 02:56:23

Approved

Bow Ruggeri

(empty)

2025-12-22 02:50:30

Approved

Bow Ruggeri

(empty)

2025-12-22 02:30:23

Approved

Bow Ruggeri

(empty)

2025-12-22 02:24:08

Approved

Bow Ruggeri

(empty)

2025-12-22 02:21:41

Approved

Bow Ruggeri

(empty)

2025-12-22 02:04:54

Approved

Bow Ruggeri

(empty)

2025-12-22 01:58:41

Approved

Bow Ruggeri

(empty)

2025-12-22 01:57:26

Approved

Bow Ruggeri

(empty)

2025-12-22 01:45:07

1

to 20 of 751

servicenow

AllFavoritesHistory

Approval - Network Database: Creat...

Search

Approval

Network Database: Created 2025-12-25 00:31:21

UpdateApproveRejectDelete

ApproverBow Ruggeri

ApprovingNetwork Database: Created 2025-12-25 00:31:21

StateApproved

Approval ReasonWaiting for approval

Comments

Post

Activities: 1

System Administrator

Field changes • 2025-12-25 00:31:21

ApproverBow Ruggeri

StateRequested

UpdateApproveRejectDelete

Workflow Studio

Network Request

Network Request







Test Run - Completed

Open flow

Open context record

Show Action Details	State	Start time	
FLOW STATISTICS	Run as: System Administrator	Open flow logs	Completed2025-12-25 00:31:206077ms
TRIGGER			
Catalog Item Requested			
ACTIONS			
1Get Catalog Variables from Network Request	Core Action	Completed	2025-12-25 00:31:2098ms
2Create Record	Core Action	Completed	2025-12-25 00:31:2135ms
3Send Email		Completed	2025-12-25 00:31:21456ms
4Ask For Approval	Core Action	Completed	2025-12-25 00:31:21237ms

5	If if Request is approved	Flow Logic	Evaluated - True	2025-12-25 00:32:53	5247ms
6	Update Record	Core Action	Completed	2025-12-25 00:32:53	7ms
7	Create Record	Core Action	Completed	2025-12-25 00:32:53	54ms
8	Send Email		Completed	2025-12-25 00:32:53	5060ms
9	Ask For Approval	Core Action	Completed	2025-12-25 00:32:58	17ms
10	If if Status changes	Flow Logic	Evaluated - True	2025-12-25 00:32:58	109ms
11	Update Record	Core Action	Completed	2025-12-25 00:32:58	85ms
12	Send Email		Completed	2025-12-25 00:32:58	24ms
13	End	Flow Logic	Completed	2025-12-25 00:32:58	0ms

12	 Send Email		Completed	2025-12-25 00:32:58	24ms
13	 End	Flow Logic	Completed	2025-12-25 00:32:58	0ms
14	 End	Flow Logic	Not Run		
15	 If if Request is rejected	Flow Logic	Not Run		
16	 Send Email		Not Run		
17	 End	Flow Logic	Not Run		

ERROR HANDLER

1 ⚠

10. Validation Checklist

- ✓ Catalog item visible in portal
- ✓ Variables captured correctly
- ✓ Flow triggered successfully
- ✓ Approval received
- ✓ Records created in custom tables
- ✓ Notifications sent

11. Conclusion

This setup manual enables any administrator to recreate the Automated Network Request Management solution in a fresh ServiceNow PDI with minimal effort.

Following the defined order ensures consistency, automation accuracy, and compliance with ServiceNow best practices.