

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)

servicenow All Favorites History Admin : Table - Network Database  Search      

[Table](#) [Network Database](#)

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 Global 

* Name

[Columns](#) [Controls](#) [Application Access](#)

Table Columns for text Search  1 to 15 of 15    

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 Filters Labels (1) Database Indexes (3) Table Subscription Configuration (1)

Name Search  Actions on selected rows... 

Access Controls

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

The screenshot shows the ServiceNow interface for creating a new table named 'Network Task'. The top navigation bar includes 'All', 'Favorites', 'History', 'Admin', and a search bar. Below the header, a message states: '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.' A 'More Info' link is provided. The main form has fields for 'Label' (set to 'Network Task'), 'Name' (set to 'u_network_task'), and 'Extends table' (set to 'Task'). The 'Application' dropdown is set to 'Global'. Below the form, the 'Table Columns' section lists four columns: 'Comments and Work notes' (Journal List, empty, max length 4,000, display false), 'Transfer reason' (Integer, empty, max length 40, display false), 'Effective number' (String, empty, max length 40, display false), and 'Variables' (Variables, empty, max length 40, display false). Navigation controls at the bottom right include 'New', '1 to 20 of 71', and arrows.

Universal Request	Reference	Task	32		false
Number	String	(empty)	40	javascript:getNextObjNumberPadded();	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

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 Filters Labels (1) Database Indexes (46) Table Subscription Configuration (1)							
<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Name Search Actions on selected rows...							
Access Controls							
<input type="checkbox"/>	Name	Decision Type	Operation	Type	Active	Updated by	Updated
<input type="checkbox"/>	u_network_task	Allow If	delete	record	true	admin	2025-12-22 00:50:00
<input type="checkbox"/>	u_network_task	Allow If	create	record	true	admin	2025-12-22 00:50:00
<input type="checkbox"/>	u_network_task	Allow If	write	record	true	admin	2025-12-22 00:50:00
<input type="checkbox"/>	u_network_task	Allow If	read	record	true	admin	2025-12-22 00:50:00
<input type="checkbox"/>	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 editing a catalog item. The top navigation bar includes 'All', 'Favorites', 'History', 'Workspaces', 'Catalog Items', 'Search', and various system icons. The main area displays the 'Network Request' catalog item details. Fields shown include:

- Name:** Network Request
- Catalogs:** Service Catalog
- Category:** Network Standard Changes
- State:** -- None --
- Checked out:** -- None --
- Owner:** System Administrator
- Application:** Global
- Active:** checked
- Roles:** (empty)
- Fulfillment automation level:** Unspecified

Below the details, there are tabs for 'Item Details', 'Process Engine', 'Picture', 'Pricing', and 'Portal Settings'. Under 'Item Details', there are 'Short description' (Network Services Request) and 'Description' sections with expandable buttons.

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

The screenshot shows the ServiceNow Catalog Item - Network Request page. At the top, there are tabs for Variables (10), Variable Sets (1), Catalog UI Policies, Catalog Client Scripts, Available For, Not Available For, Categories (1), Catalogs (1), Catalog Data Lookup Definitions, and Related Articles. Below the tabs, there are buttons for Copy, Try It, Update, Edit in Catalog Builder, and Delete. A search bar and a toolbar with various icons are also present.

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 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

The screenshot shows the ServiceNow Variable Set - Requester Information page. At the top, there are tabs for Variables (5), Catalog UI Policies, Catalog Client Scripts, Included In (1), and Catalog Data Lookup Definitions. Below the tabs, there are buttons for Copy, Try It, Update, Edit in Catalog Builder, and Delete. A search bar and a toolbar with various icons are also present.

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

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

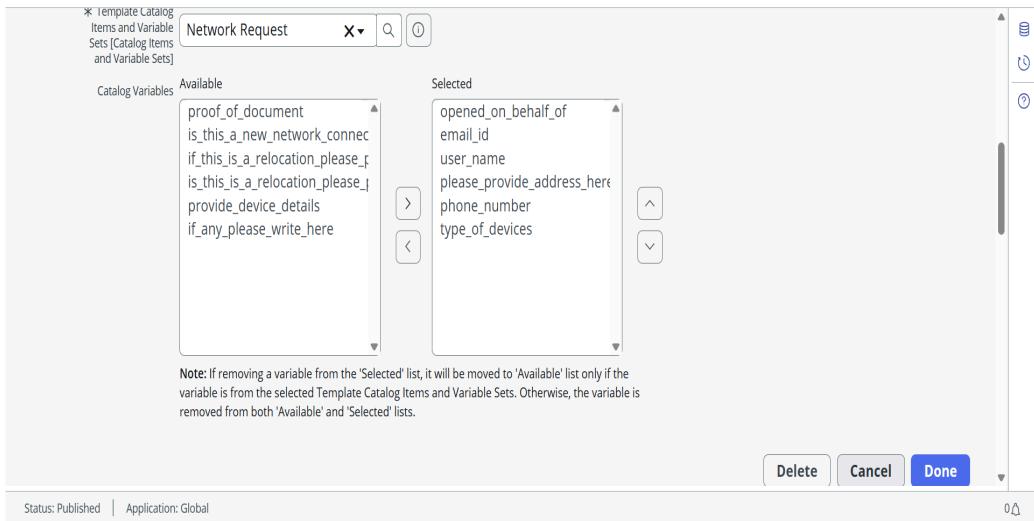
The screenshot shows the Workflow Studio interface with a dark header bar. The title bar displays 'Workflow Studio' and 'Network Request Flow • Global'. Below the header, there's a toolbar with icons for back, forward, search, and view modes, followed by 'Test' and 'Activate' buttons. A 'Deactivate' button is also visible in red. On the left, a sidebar titled 'TRIGGER' shows a single step: 'Service Catalog' with 'Trigger' set to 'Service Catalog'. There are 'Advanced Options' and 'Done' buttons at the bottom of this section. To the right of the trigger, there's a vertical toolbar with icons for copy, paste, delete, and more.

7.2 Configure Flow Actions

Flow Actions (in order):

1. Get Catalog Variables

The screenshot shows the 'Network Request' flow configuration. The first step is labeled '1' and is a 'Get Catalog Variables from Network Request from Network Request'. The 'Action' dropdown is set to 'Get Catalog Variables'. Under 'Action Properties', there's a note about selecting catalog items and variable sets. The 'Action Inputs' section shows a 'Request [Requested Item ...]' input field with a placeholder '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.' Below this is a 'Template Catalog Items and Variable Sets' dropdown set to 'Network Request'. At the bottom of the screen, status information shows 'Status: Published' and 'Application: Global'.



2. Create Record → u_network_database

Action Properties

Action **Create Record**

Action Inputs

- * Table **Network Database [u_network_d...**
- * Fields
 - Request Number **Trigger - Service...**
 - Requested For **1 - Get Catalog Va...**
 - Work Status **New**
 - Assignment Group **Network**
 - Date of Enquiry **Trigger - Service...**
 - Device Details **1 - Get Catalog...**

The screenshot shows the ServiceNow Workflow Studio interface for a 'Network Request' form. The top navigation bar includes tabs for Functional, Technical, Setup Manager, Google Drive, Network Requests, and more. The main area displays the 'Network Request' form with various fields and their configurations:

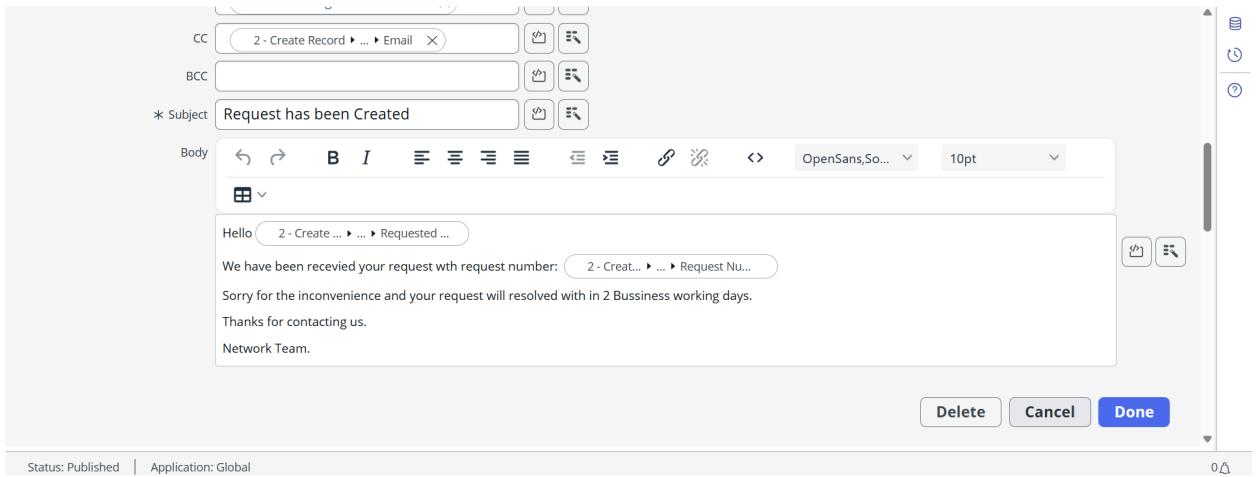
- Table:** Network Database [u_network_d...]
- Fields:**
 - Request Number: Trigger - Service... > ... > Num... (with a dropdown menu)
 - Requested For: 1 - Get Catalog Va... > ... > Na... (with a dropdown menu)
 - Work Status: New
 - Assignment Group: Network (with a dropdown menu)
 - Date of Enquiry: Trigger - Service... > ... > Creat... (with a dropdown menu)
 - Device Details: 1 - Get Catalog Va... > type_of_dev... (with a dropdown menu)
 - Customer Address: 1 - G... > please_provide_addr... (with a dropdown menu)
- Buttons:** Delete, Cancel, Done

Status: Published | Application: Global

3. Ask for Approval

The screenshot shows the ServiceNow Workflow Studio interface for configuring an 'Action Properties' step. The action is set to 'Send Email'. The configuration includes:

- Action:** Send Email
- Target Record:** 2 - Cr... > Network Database ...
- Table:** Network Database [u_network_d...]
- Include Watermark:** checked
- To:** 1 - Get Catalog Va... > ... > Em... (with a dropdown menu)
- CC:** 2 - Create Record > ... > Email (with a dropdown menu)
- BCC:** (empty field)



4. If (Approval State = Approved)

Action Properties

Action: Ask For Approval

Action Inputs

- * Record: 2 - Cr... > Network Database ...
- Table: Network Database [u_network_d...]
- Approval Reason: Waiting for approval
- Approval Field: Select a field
- Journal Field: Select a field

* Rules

- Approve When: Anyone approves
- 2 - Create Rec... > ... > Manag... (with OR and AND logic)

Due Date: None

5. Create Record → u_network_task

The screenshot shows the 'Workflow Studio' interface with a 'Network Request' flow. A specific step is highlighted: 'Create Network Task Record'. The 'Action Properties' section shows the action is set to 'Create Record'. The 'Action Inputs' section defines the target table as 'Network Task [u_network_task]' and specifies several fields: 'State' set to 'Open', 'Assignment group' set to 'Network', 'Parent' (with a reference to '2 - Cr... > Network Database ...'), and 'Short description' set to 'Provide network service'. There is also a '+ Add field value' button.

6. Send Email Notification

The screenshot shows the 'Workflow Studio' interface with a 'Network Request' flow. A specific step is highlighted: 'Send Email'. The 'Action Properties' section shows the action is set to 'Send Email'. The 'Action Inputs' section defines the target record as '2 - Cr... > Network Database ...', the table as 'Network Database [u_network_d...]', and includes a watermark. The 'To' field contains a reference to '1 - Get Catalog Va... > ... > Em...', and the 'CC' field contains a reference to '2 - Create Record > ... > Email'. The 'BCC' field is empty. The 'Subject' field is set to 'Network Request' with a reference to '2 - Cr... > Network Database ...' and contains the word 'Approved'. The 'Body' field is a rich text editor containing the message: 'Hello [2 - Create ... > ... > Requested ...]
Your Network request has been approved successfully.
Thanks for contacting us.
Network Team.' At the bottom right are 'Delete', 'Cancel', and 'Done' buttons.

7. Update Record Status

The screenshot shows the 'Workflow Studio' interface with a 'Network Request' flow. A specific step is highlighted: 'Update Network Task Record'. The 'Action Properties' section shows 'Update Record' selected. In the 'Action Inputs' section, there are three fields: 'Record' (set to '7 - Creat... > Network Task Re...'), 'Table' (set to 'Network Task [u_network_task]'), and 'Fields'. Under 'Fields', 'State' is set to 'Closed Complete' and 'Work notes' is set to 'Network task completed successfully'. There is also a '+ Add field value' button. At the bottom right are 'Delete', 'Cancel', and 'Done' buttons.

7.3 Approval Configuration

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

The screenshot shows the 'Workflow Studio' interface with an 'If' condition step. The 'Condition Label' is 'if Request is approved'. The 'Condition 1' section contains the expression: '4 - Ask For Ap... > Approval St... is Approved or and'. Below this is a button 'Add another condition set(OR)'. At the bottom right are 'Delete', 'Cancel', and 'Done' buttons.

10

If

Condition Label: if Status changes

* Condition 1: 9 - Ask For Ap... ▶ Approval St... X is Skipped or and X

Add another condition set(OR)

Delete Cancel Done

15

If

Condition Label: if Request is rejected

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

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

Home > Service Catalog > Standard Changes > Network Standard Changes > **Network Request**

Search Catalog

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

servicenow

Home > Service Catalog > Standard

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

System Administrator

Home > Request Summary - REQ0010004

Search Catalog

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



Home > My Request - RITM0010009

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



Type your message here...

Post



Workflow Studio

Network Request Flow • Global

Network Request Flow execution • None

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 (i)

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

Status: Published | Application: Global

servicenow All Favorites History Workspaces : Approvals star Search Actions on selected rows...

<input type="checkbox"/>	State	Approver	Comments	Approval for	Created
<input type="checkbox"/>	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 All Favorites History Approval - Network Database: Creat... Search

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

Approver Bow Ruggieri Approving Network Database: Created 2025-12-25 00:31:21

State Approved

Approval Reason Waiting for approval

Comments Comments

Post

Activities: 1 System Administrator

Approver Bow Ruggieri State Requested

Field changes • 2025-12-25 00:31:21

Update Approve Reject Delete

Workflow Studio Network Request Flow • Global Network Request Flow execution • None

EXECUTION DETAILS 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 Completed 2025-12-25 00:31:20 6077ms

TRIGGER Catalog Item Requested

ACTIONS

	Action	Type	Status	Start Time	Duration
1	Get Catalog Variables from Network Request	Core Action	Completed	2025-12-25 00:31:20	98ms
2	Create Record	Core Action	Completed	2025-12-25 00:31:21	35ms
3	Send Email	Core Action	Completed	2025-12-25 00:31:21	456ms
4	Ask For Approval	Core Action	Completed	2025-12-25 00:31:21	237ms

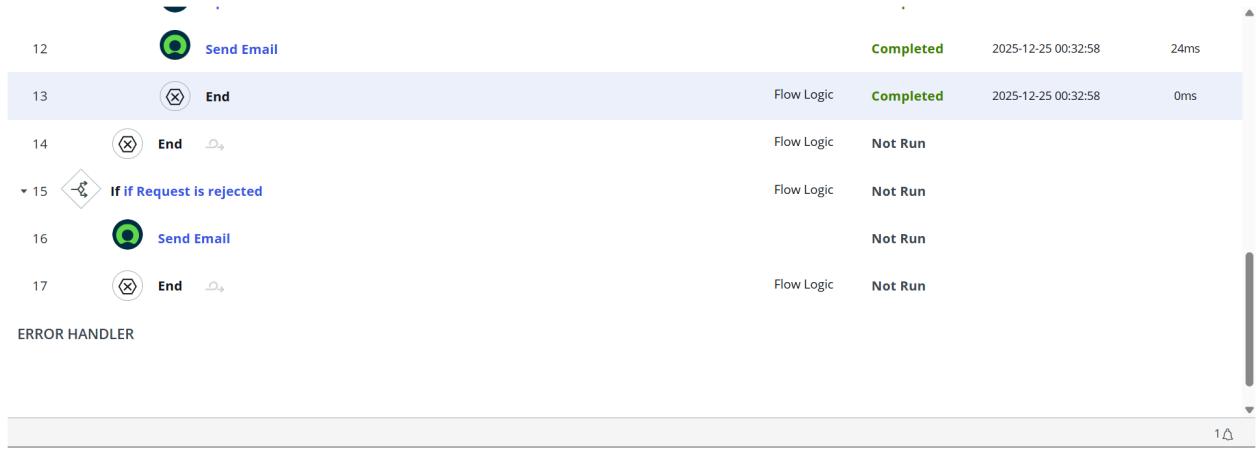
Flow Logic: If if Request is approved

	Action	Type	Status	Start Time	Duration
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	Core Action	Completed	2025-12-25 00:32:53	5060ms
9	Ask For Approval	Core Action	Completed	2025-12-25 00:32:58	17ms

Flow Logic: If if Status changes

	Action	Type	Status	Start Time	Duration
11	Update Record	Core Action	Completed	2025-12-25 00:32:58	85ms
12	Send Email	Core Action	Completed	2025-12-25 00:32:58	24ms

Flow Logic: End



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.