Automated Network Request Management in ServiceNow

Project Description:

This project aims to design and implement a streamlined, automated solution for managing network-related service requests within ServiceNow. It enables end users to submit requests for network services through a user-friendly self-service portal.

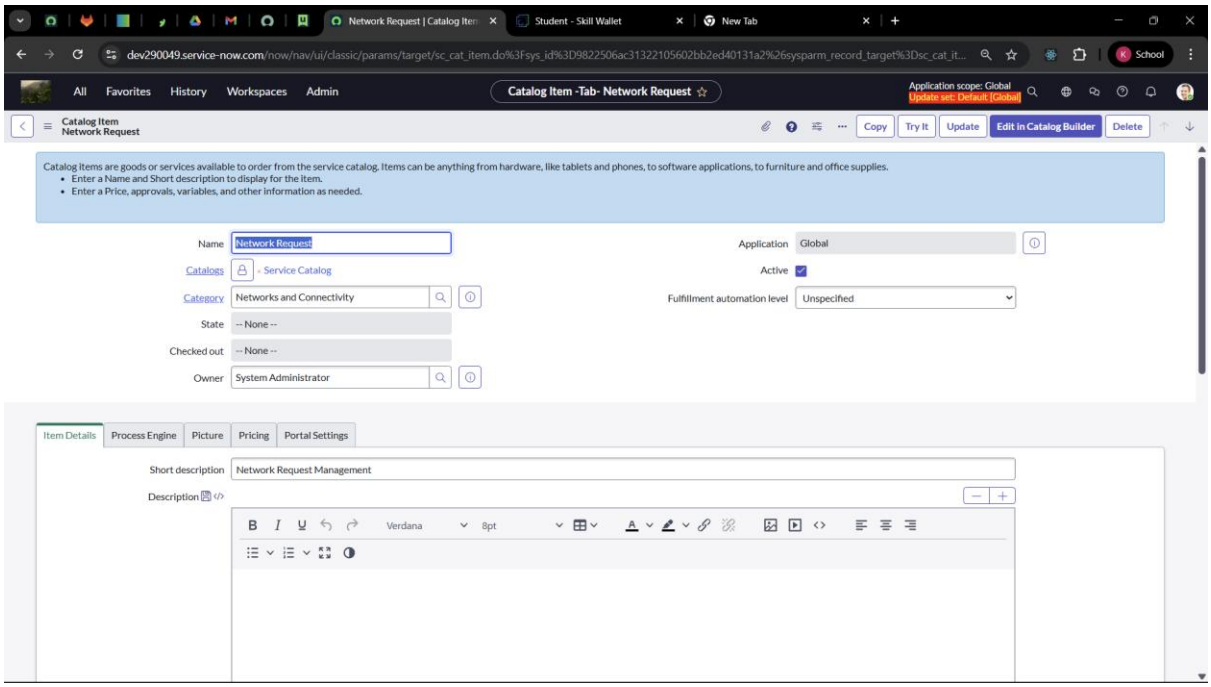
The system leverages ServiceNow's workflow engine, catalog items, and approval processes to ensure requests are properly captured, validated, and routed for fulfillment. Upon submission, requests trigger automated notifications, task assignments, and—where applicable—integration with network automation tools or scripts to fulfill standard requests without manual intervention.

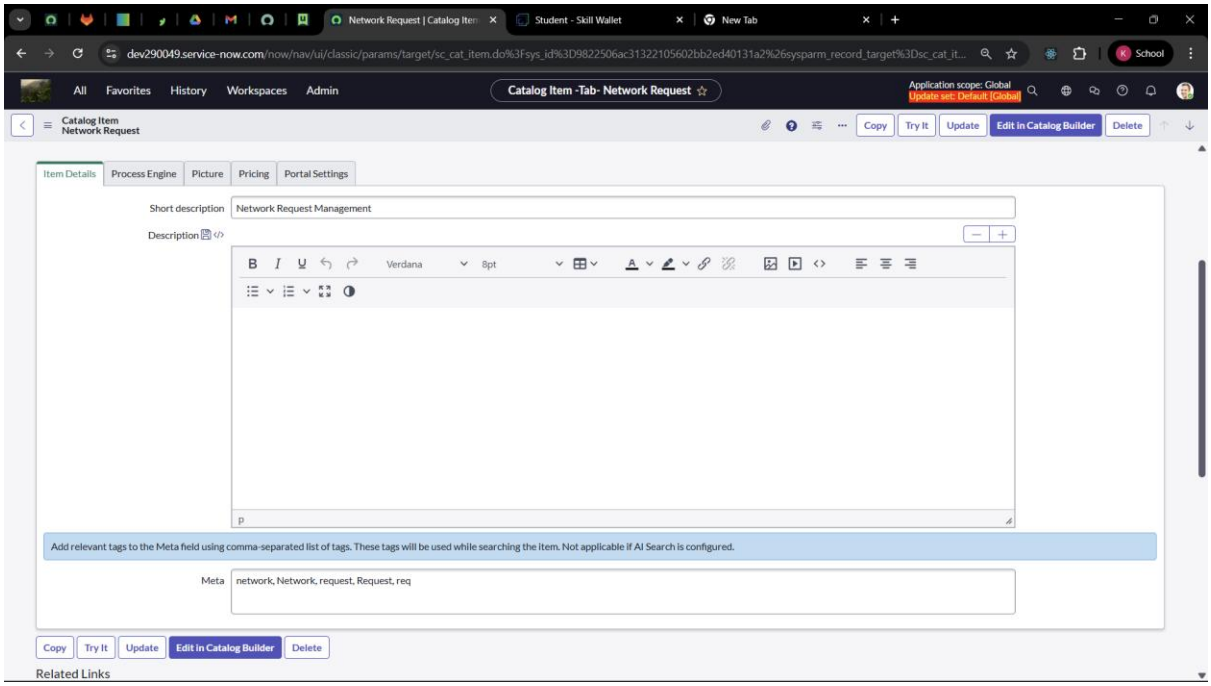
Key Features:

- Custom service catalog for common network requests
- Dynamic forms to capture relevant request details
- Automated approval workflows based on request type and sensitivity
- Integration with infrastructure management or orchestration tools (optional)
- Real-time status updates and notifications to requesters and technicians

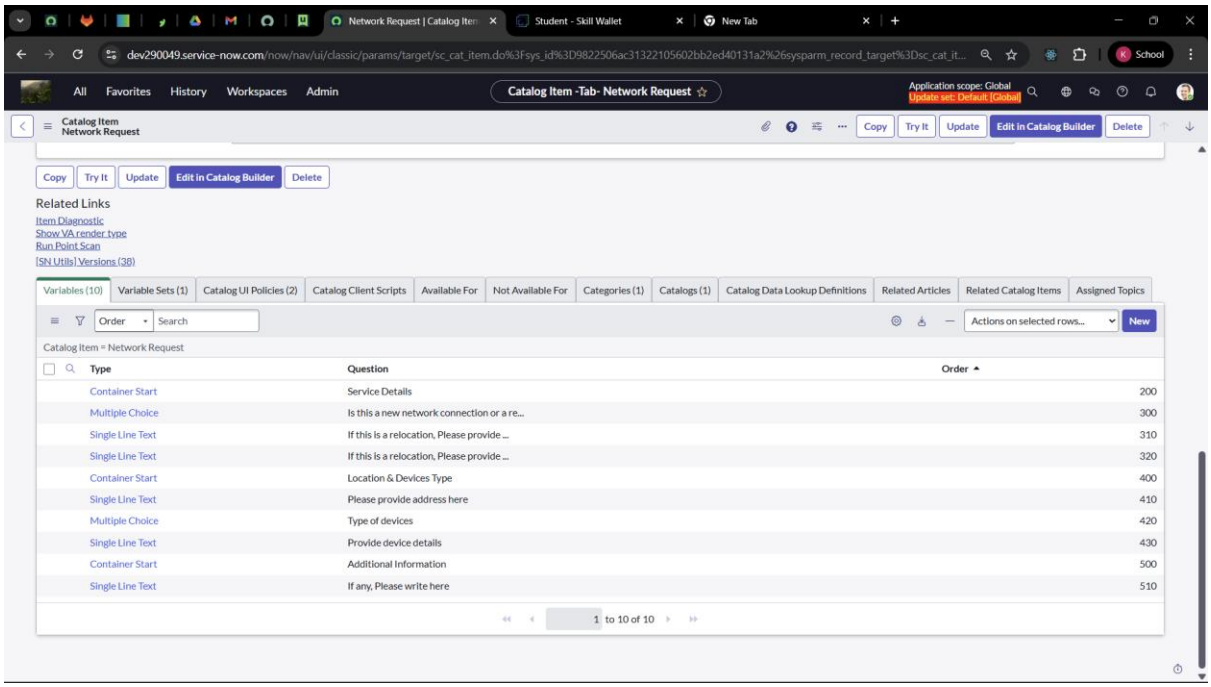
Service Catalog Creation

a. Creation of Service Catalog

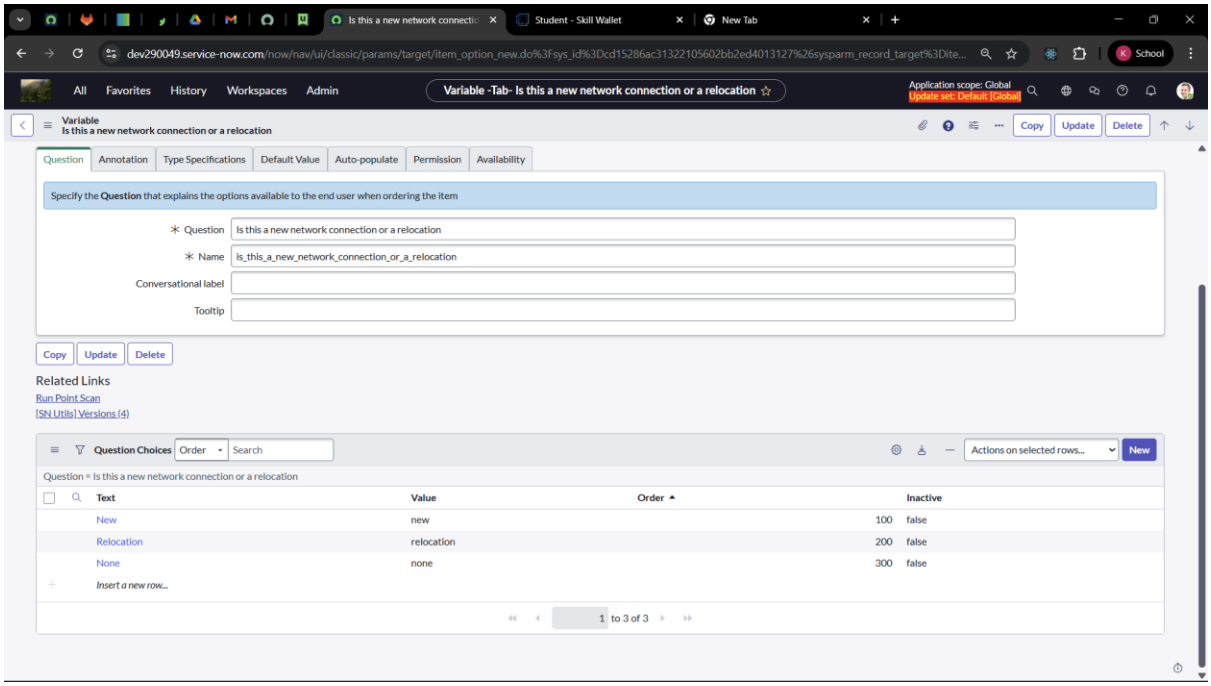


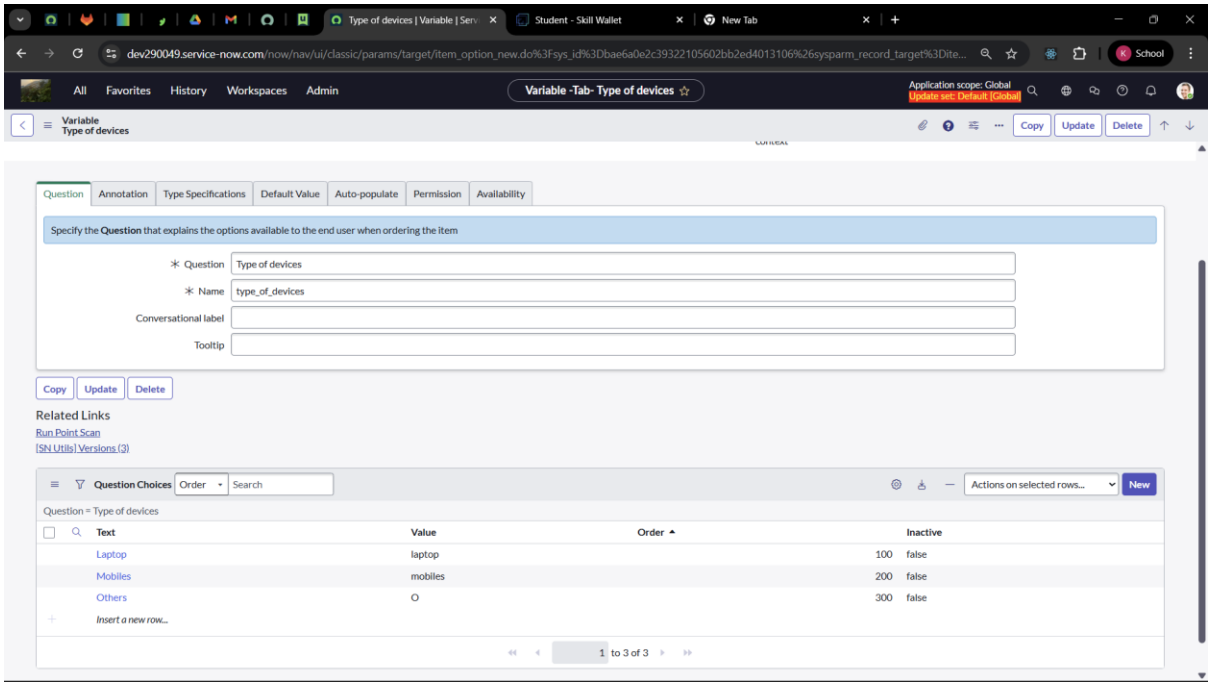


b. Variables Configuration

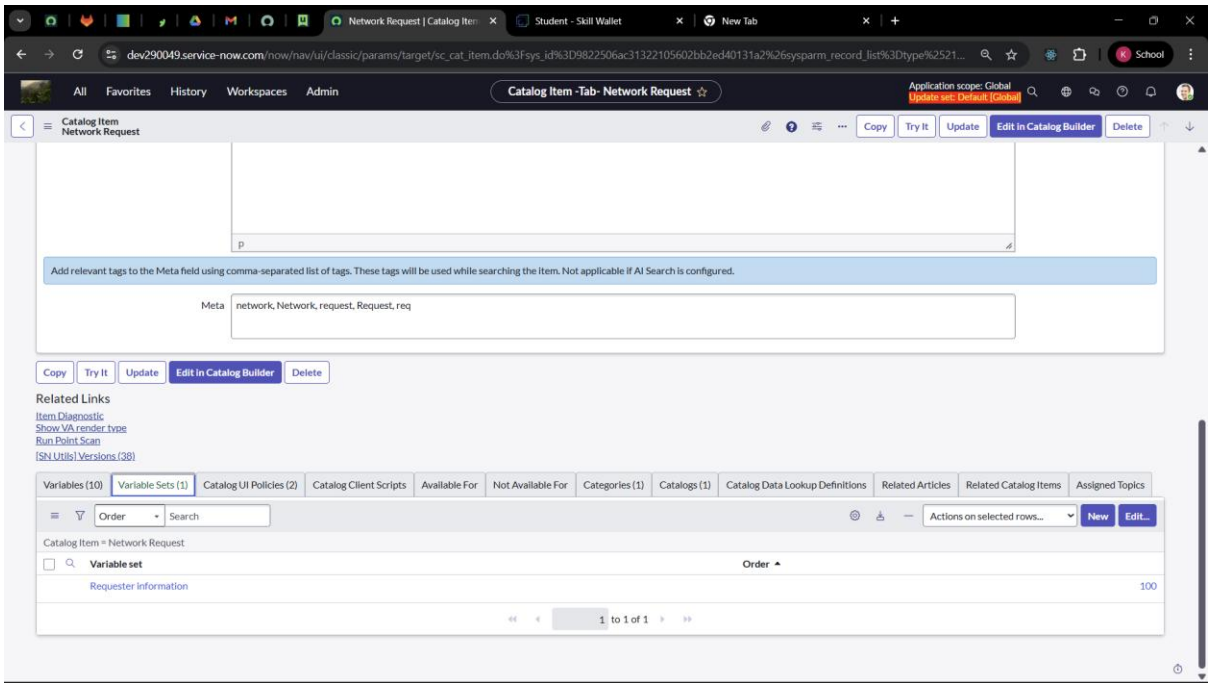


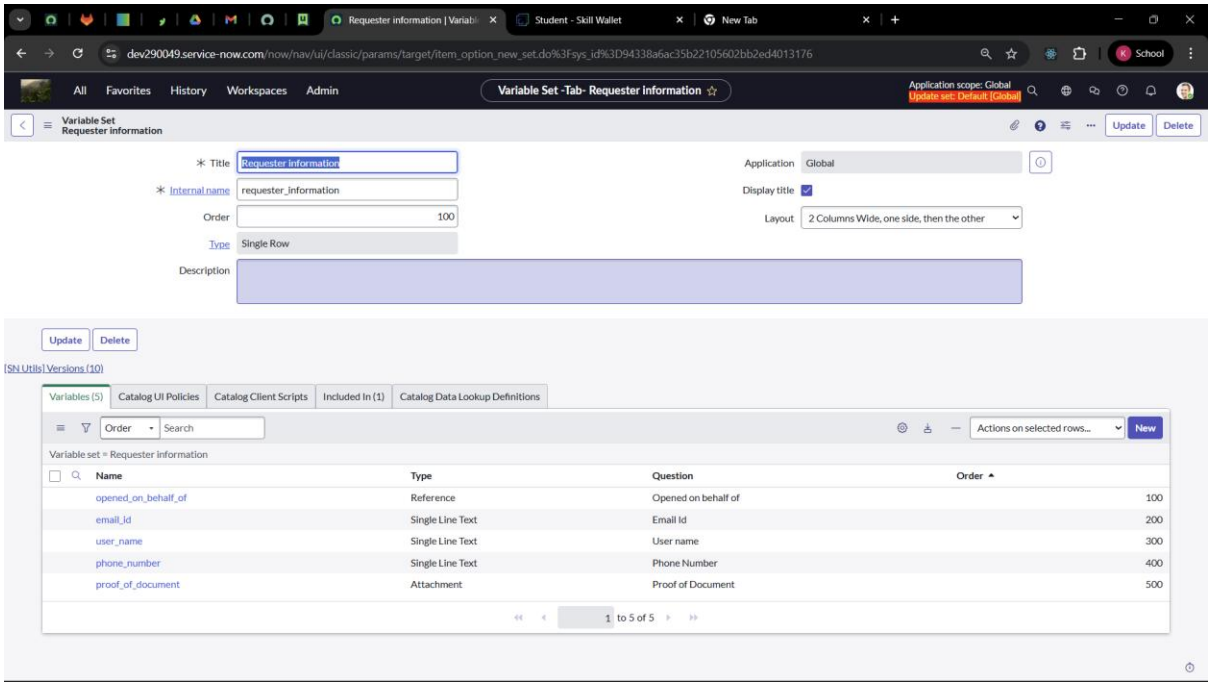
c. Variables Types



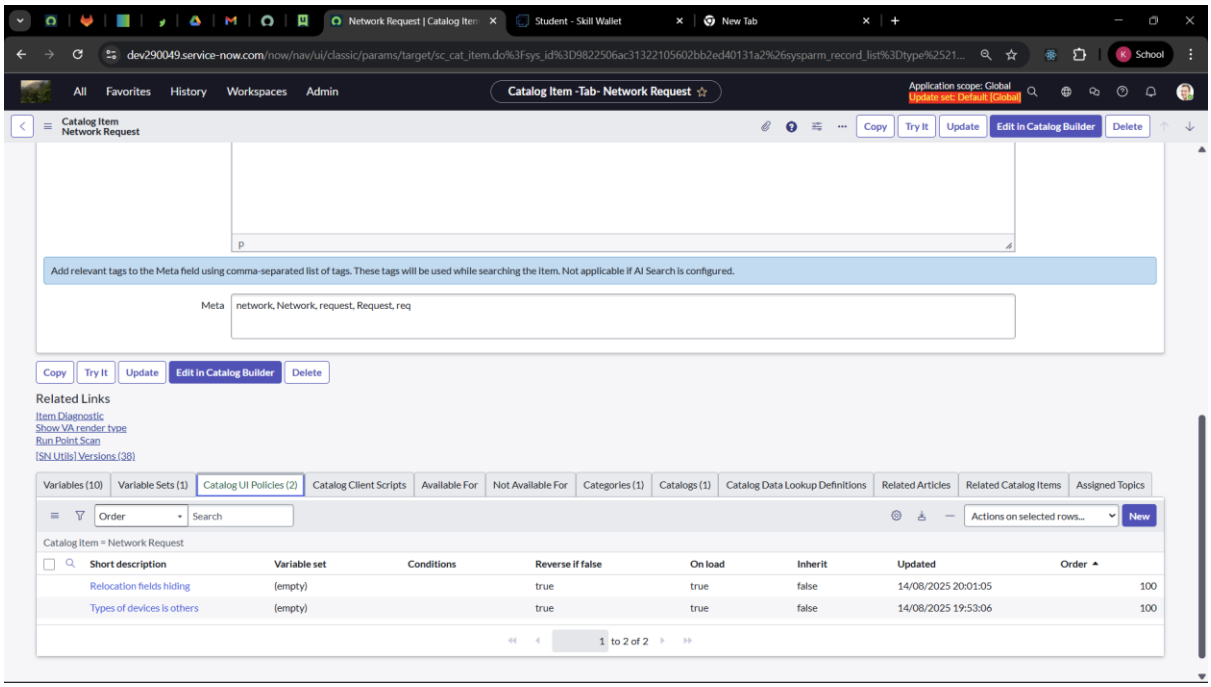


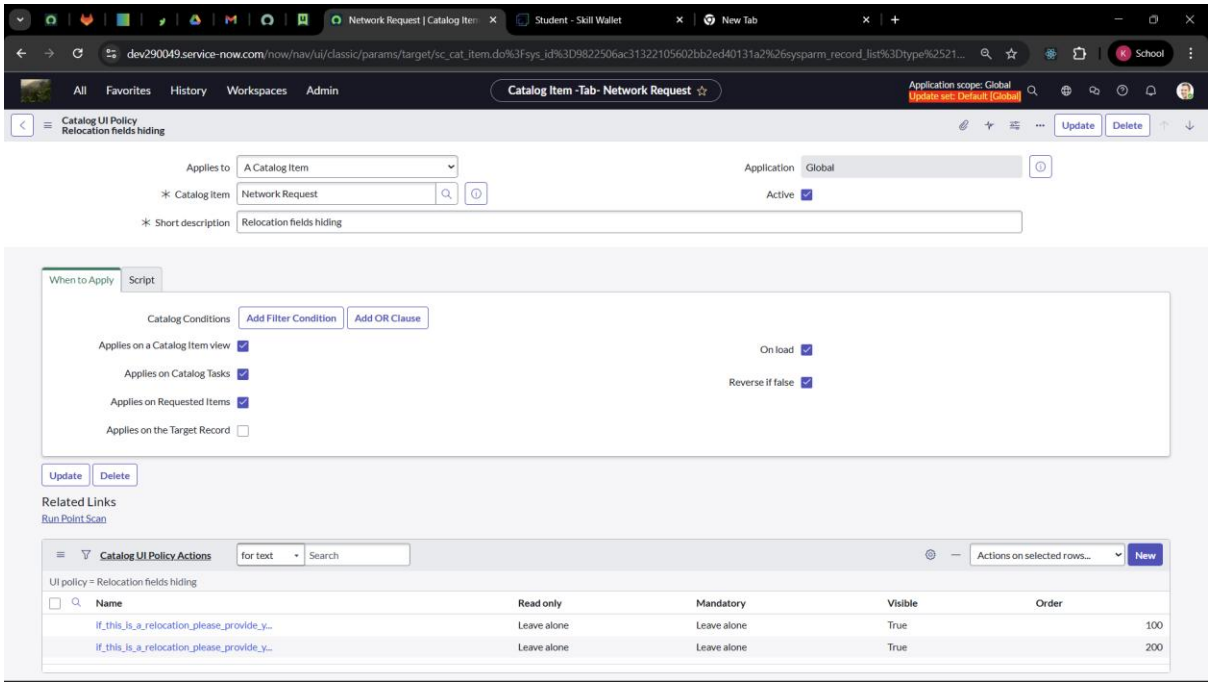
d. Variable Set Configuration

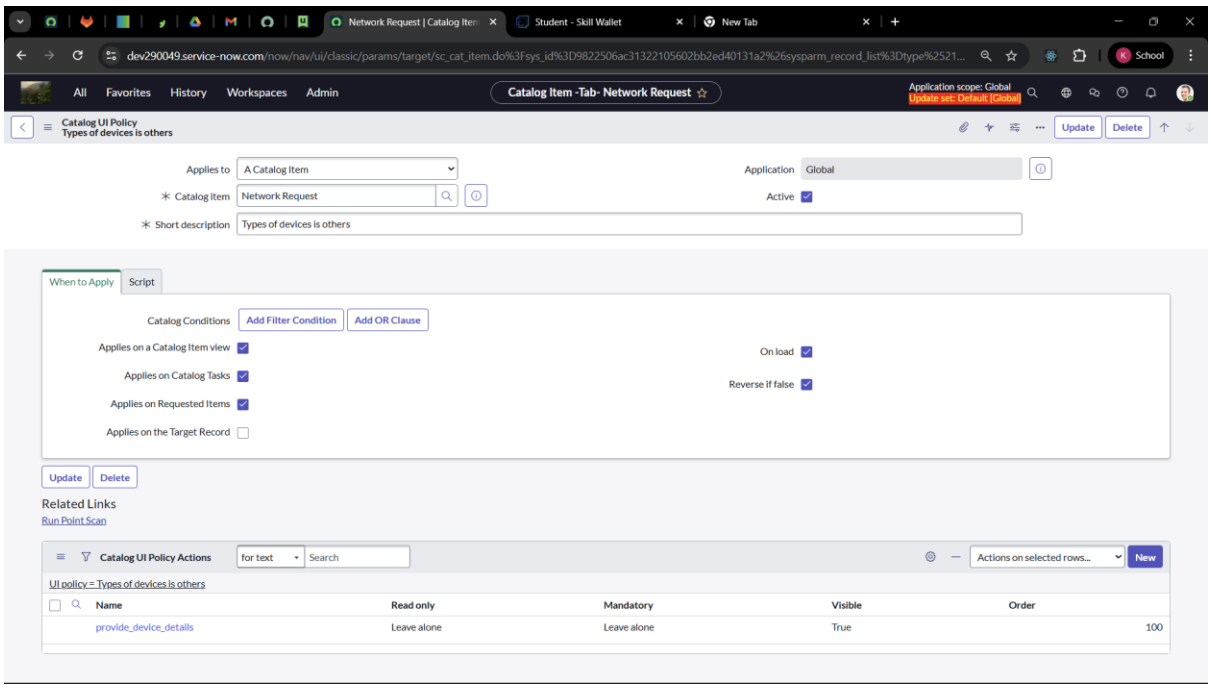




e. Catalog UI Policy Configuration

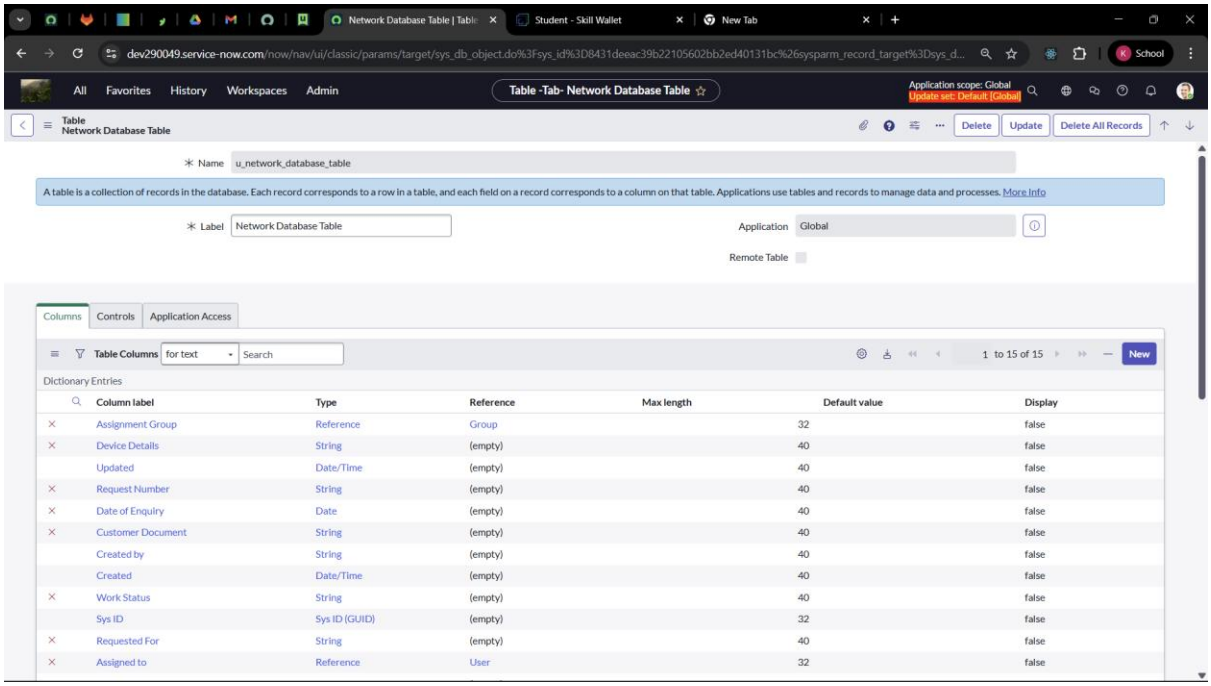



Network Request | Catalog Item
Student - Skill Wallet
New Tab
dev290049.service-now.com/now/nav/ui/classic/params/target/sc_cat_item.do%3Fsys_id%3D9822506ac31322105602bb2ed40131a2%26sysparm_record_list%3Dtype%2521...
School
All
Favorites
History
Workspaces
Admin
Catalog Item -Tab- Network Request
Application scope: Global
Update set: Default [Global]
Catalog UI Policy
Relocation fields hiding
Update
Delete
Applies to
A Catalog Item
Application
Global
Catalog item
Network Request
Active
Short description
Relocation fields hiding
When to Apply
Script
Catalog Conditions
Add Filter Condition
Add OR Clause
Applies on a Catalog Item view
Applies on Catalog Tasks
Applies on Requested Items
Applies on the Target Record
On load
Reverse if false
Update
Delete
Related Links
Run Point Scan
Catalog UI Policy Actions
for text
Search
Actions on selected rows...
New
UI policy = Relocation fields hiding
Name
Read only
Mandatory
Visible
Order
If_this_is_a_relocation_please_provide_y...
Leave alone
Leave alone
True
100
If_this_is_a_relocation_please_provide_y...
Leave alone
Leave alone
True
200

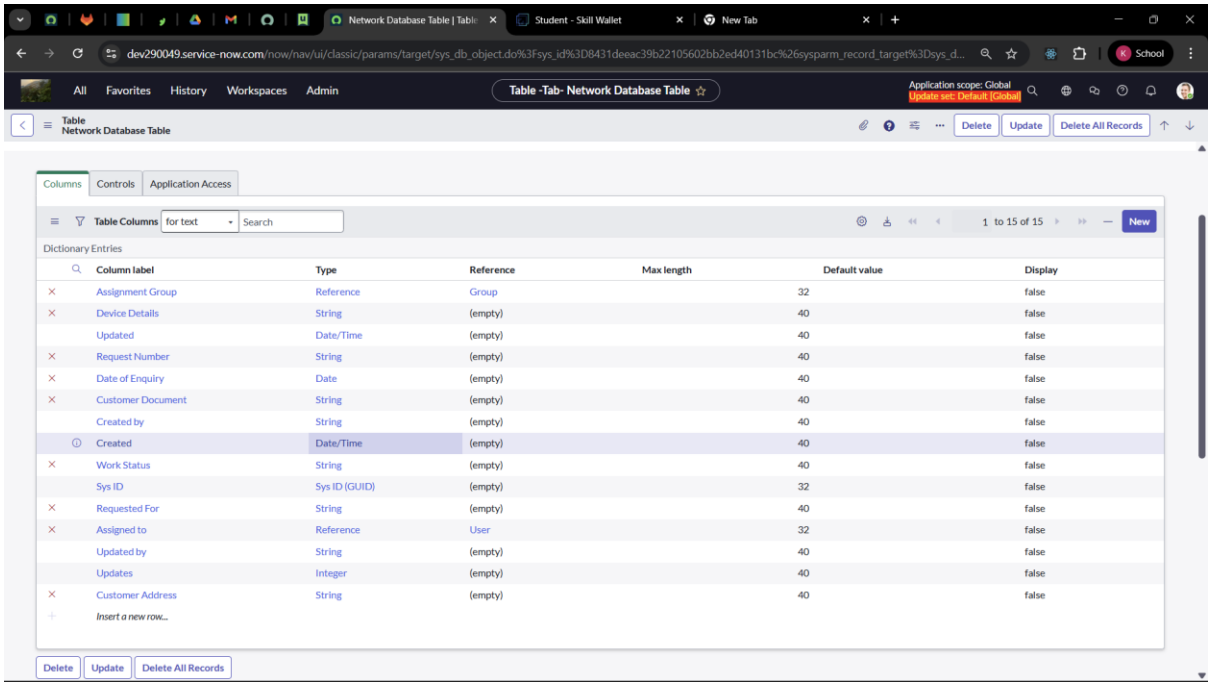

Network Request | Catalog Item
Student - Skill Wallet
New Tab
dev290049.service-now.com/now/nav/ui/classic/params/target/sc_cat_item.do%3Fsys_id%3D9822506ac31322105602bb2ed40131a2%26sysparm_record_list%3Dtype%2521...
School
All
Favorites
History
Workspaces
Admin
Catalog Item -Tab- Network Request
Application scope: Global
Update set: Default [Global]
Catalog UI Policy
Types of devices is others
Update
Delete
Applies to
A Catalog Item
Application
Global
Catalog item
Network Request
Active
Short description
Types of devices is others
When to Apply
Script
Catalog Conditions
Add Filter Condition
Add OR Clause
Applies on a Catalog Item view
Applies on Catalog Tasks
Applies on Requested Items
Applies on the Target Record
On load
Reverse if false
Update
Delete
Related Links
Run Point Scan
Catalog UI Policy Actions
for text
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

Creation of Table

a. Creation of Table

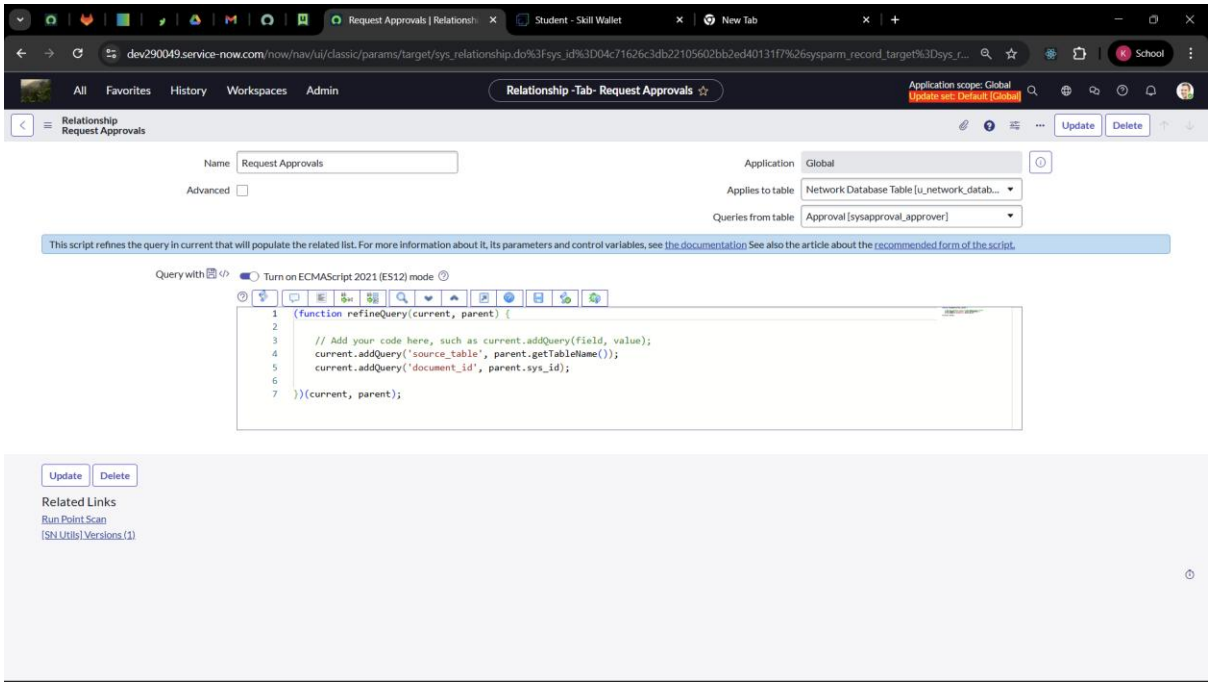


b. Creation of fields

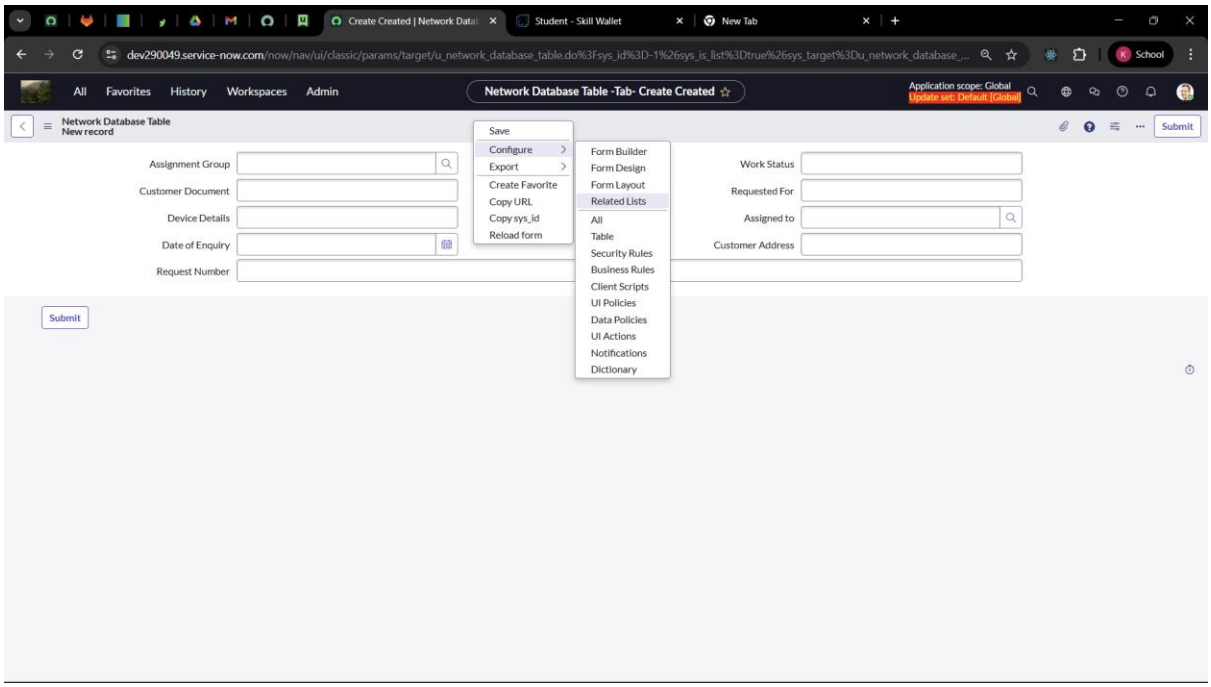


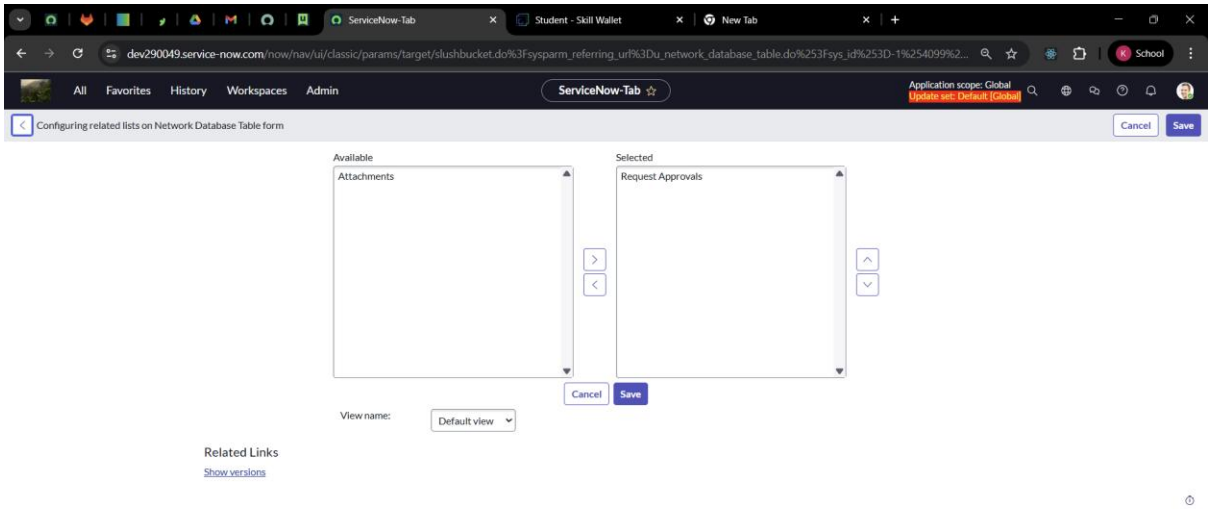
Request Approvals Creation(Related List)

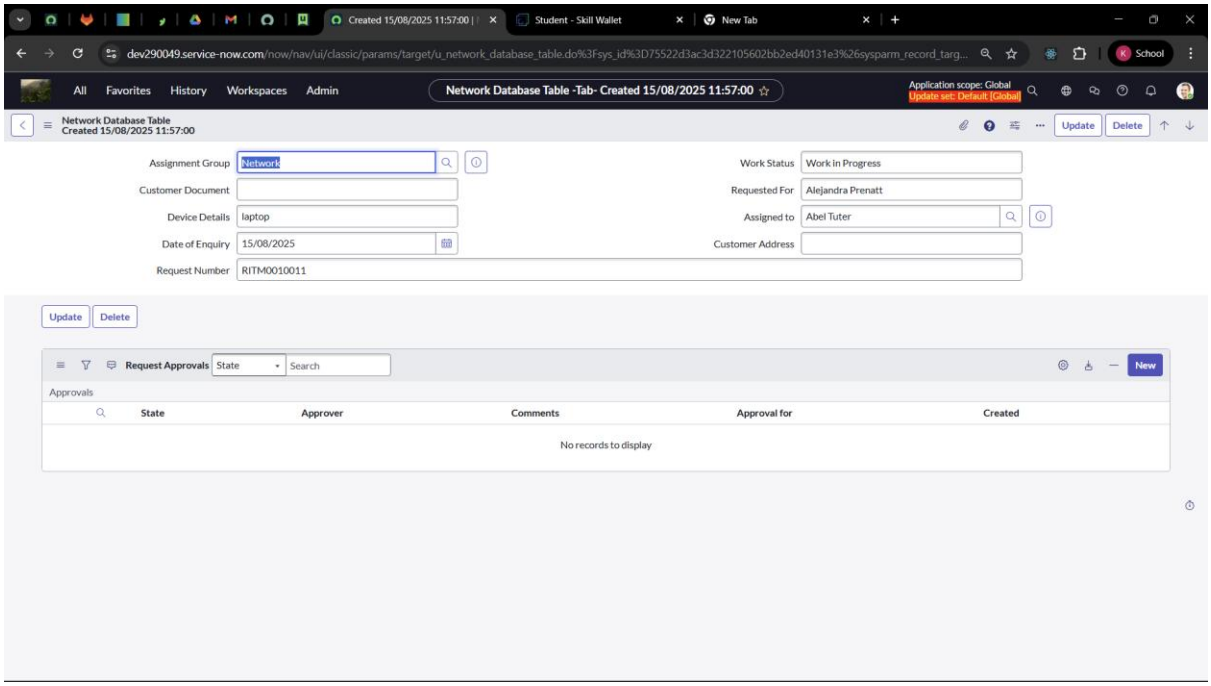
a. Creation of Related List



b. Adding Related List to the Table

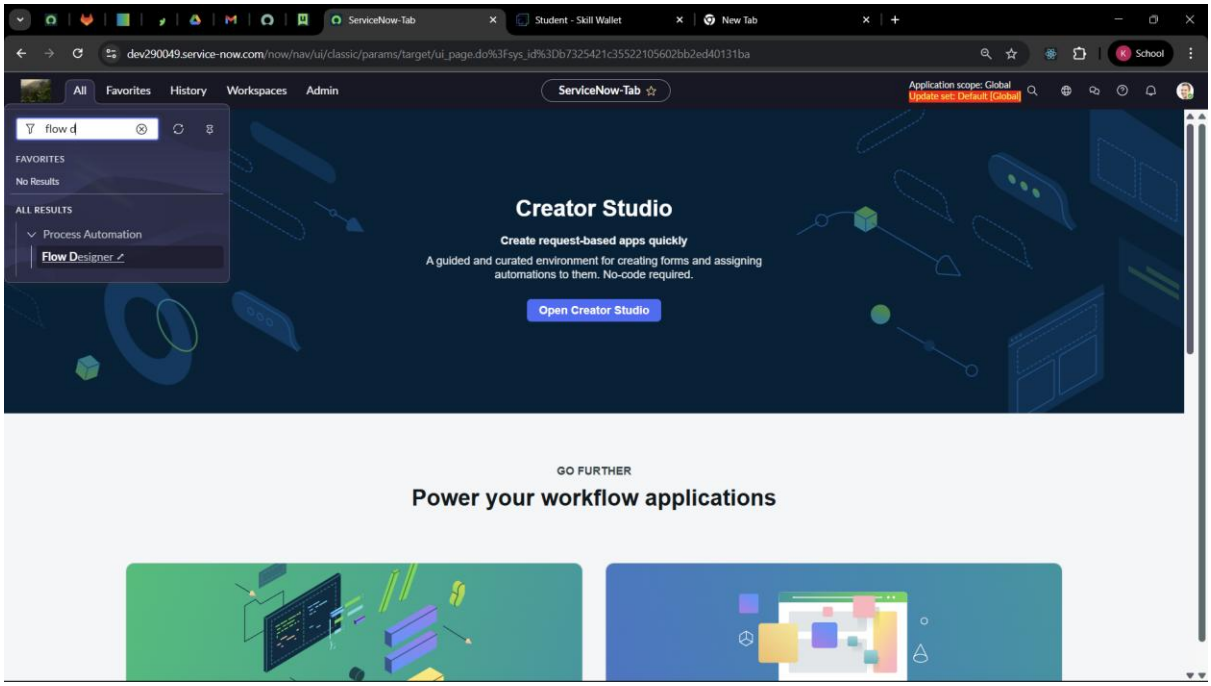



ServiceNow-Tab
Student - Skill Wallet
New Tab
dev290049.service-now.com/now/nav/ui/classic/params/target/slushbucket.do%3Fsysparm_referring_url%3Du_network_database_table.do%253Fsys_id%253D-1%254099%2...
School
All
Favorites
History
Workspaces
Admin
ServiceNow-Tab
Application scope: Global
Update set: Default [Global]
Configuring related lists on Network Database Table form
Cancel
Save
Available
Attachments
Selected
Request Approvals
Cancel
Save
View name:
Default view
Related Links
Show versions


Created 15/08/2025 11:57:00
Student - Skill Wallet
New Tab
dev290049.service-now.com/now/nav/ui/classic/params/target/u_network_database_table.do%3Fsys_id%3D75522d3ac3d322105602bb2ed40131e3%26sysparm_record_targ...
School
All
Favorites
History
Workspaces
Admin
Network Database Table -Tab- Created 15/08/2025 11:57:00
Application scope: Global
Update set: Default [Global]
Network Database Table
Created 15/08/2025 11:57:00
Update
Delete
Assignment Group
Network
Customer Document
Device Details
laptop
Date of Enquiry
15/08/2025
Request Number
RITM0010011
Work Status
Work in Progress
Requested For
Alejandra Prenatt
Assigned to
Abel Tuter
Customer Address
Update
Delete
Request Approvals
State
Search
New
Approvals
State
Approver
Comments
Approval for
Created
No records to display

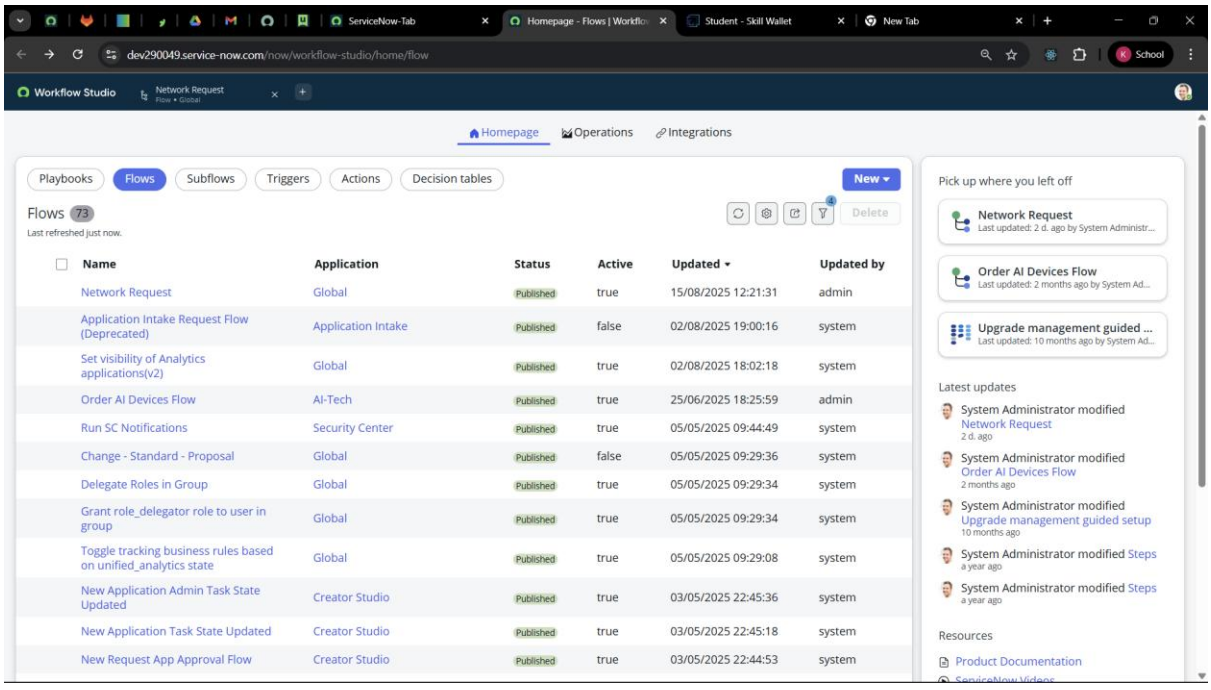
Overview of flows,Actions in Flow Designera

a. Navigating to Flow Designer

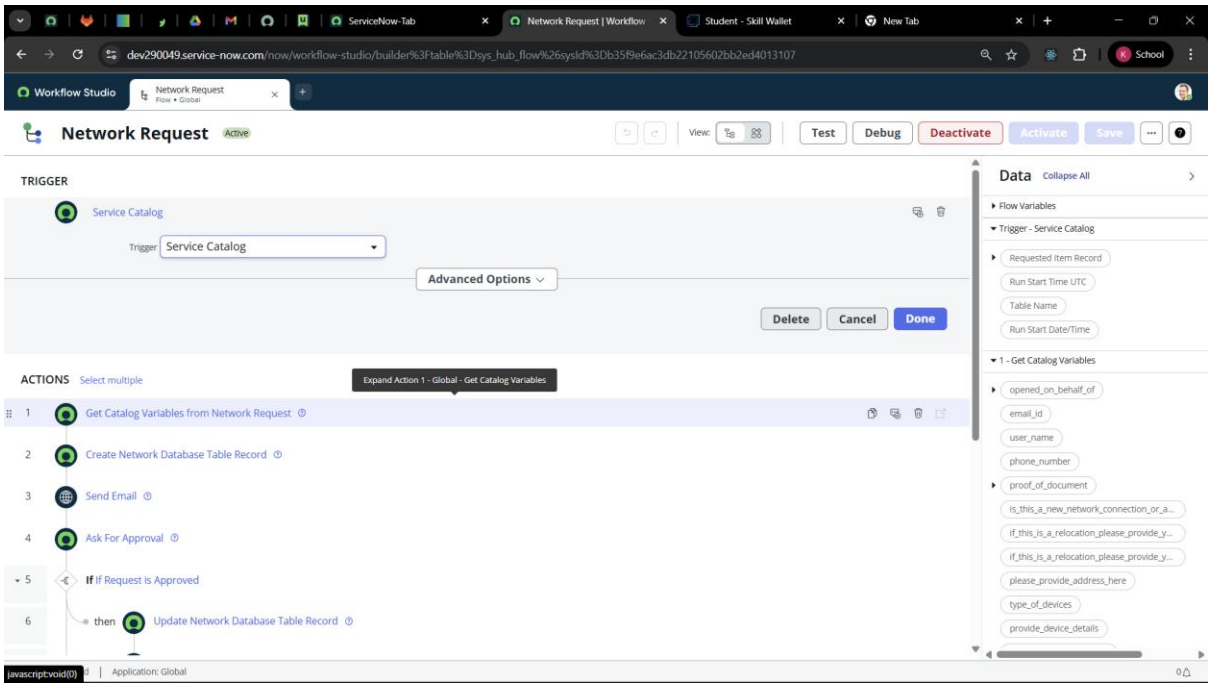


Creation & Implementation of flows, Actions in Flow Designer

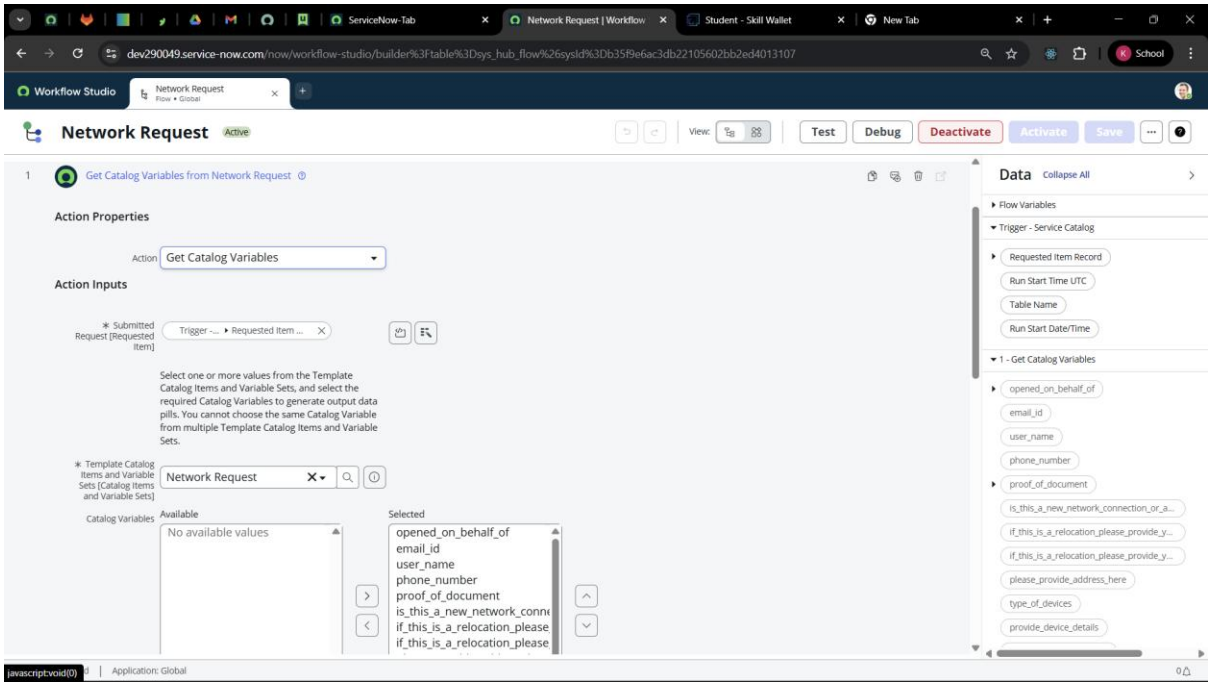
a. Creation of Flow

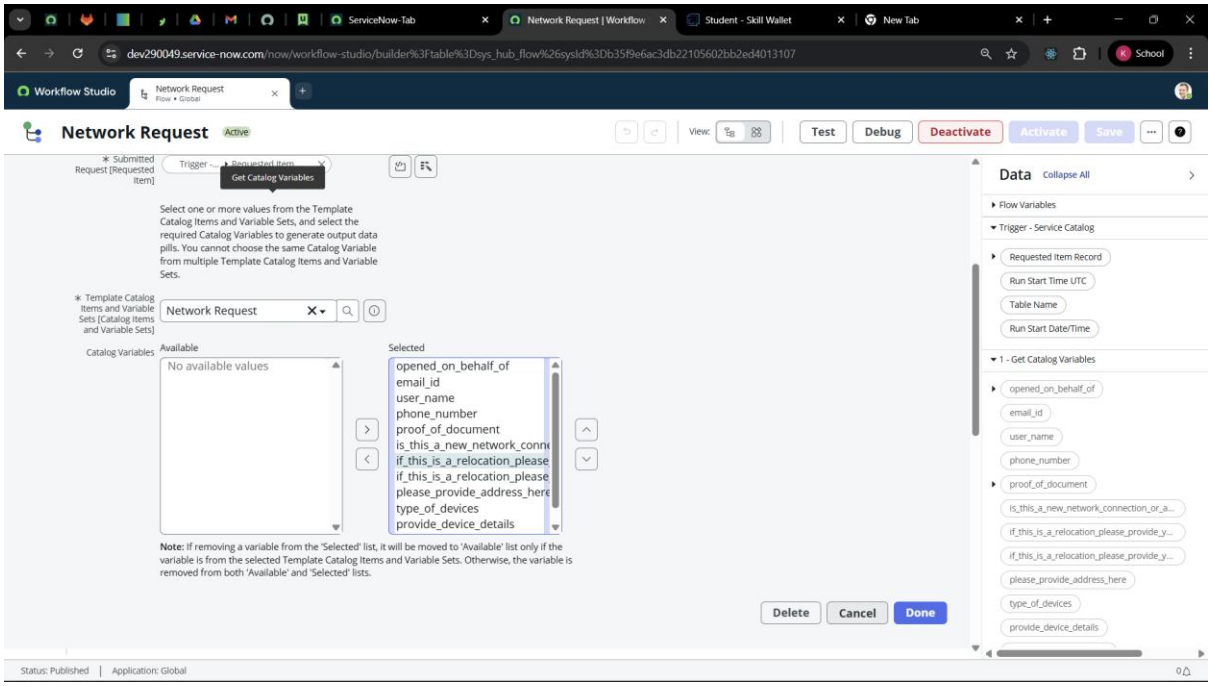


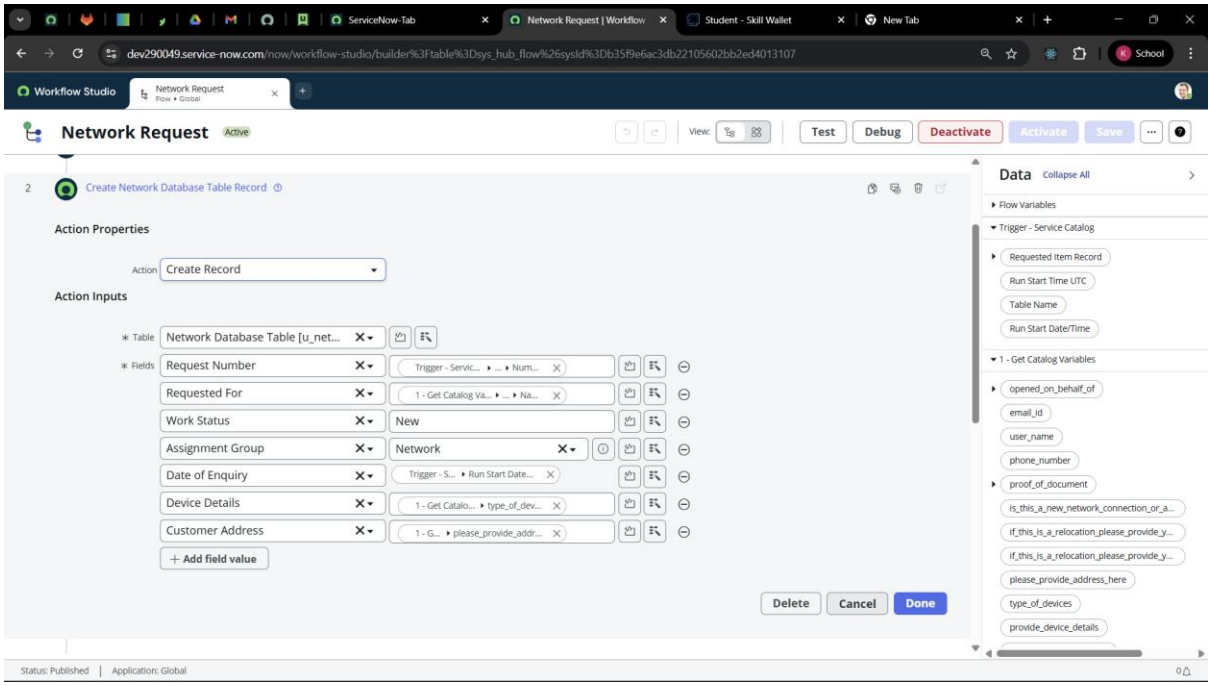
b. Configuring Trigger

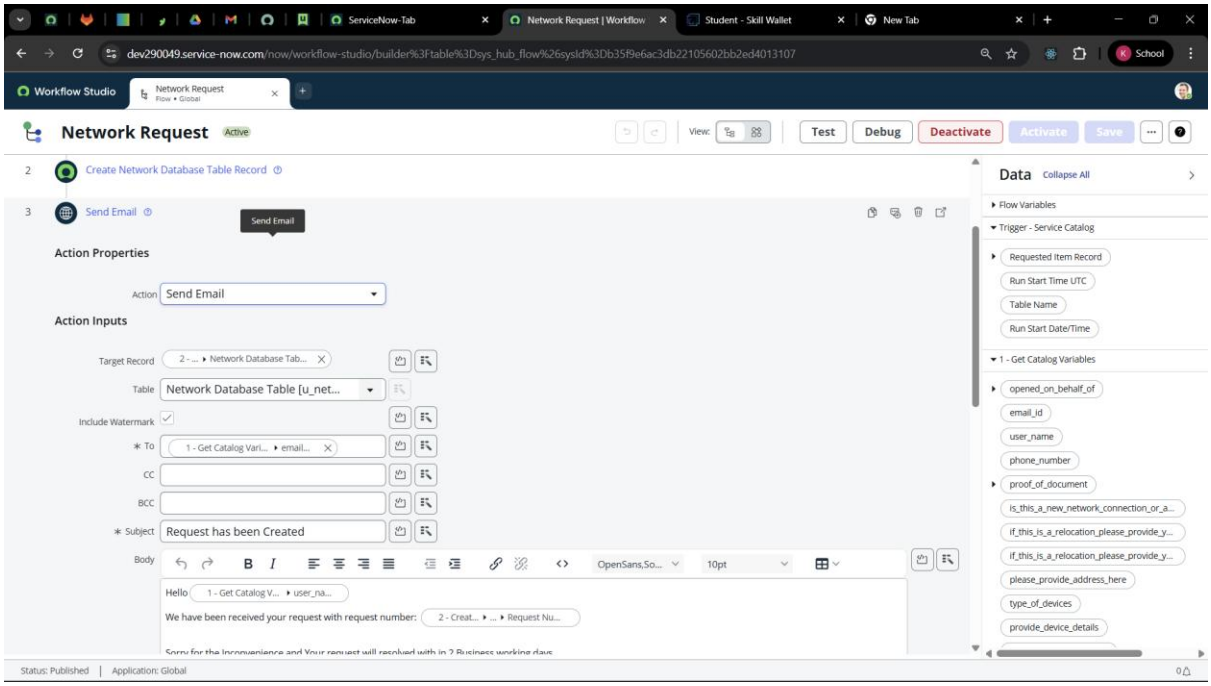


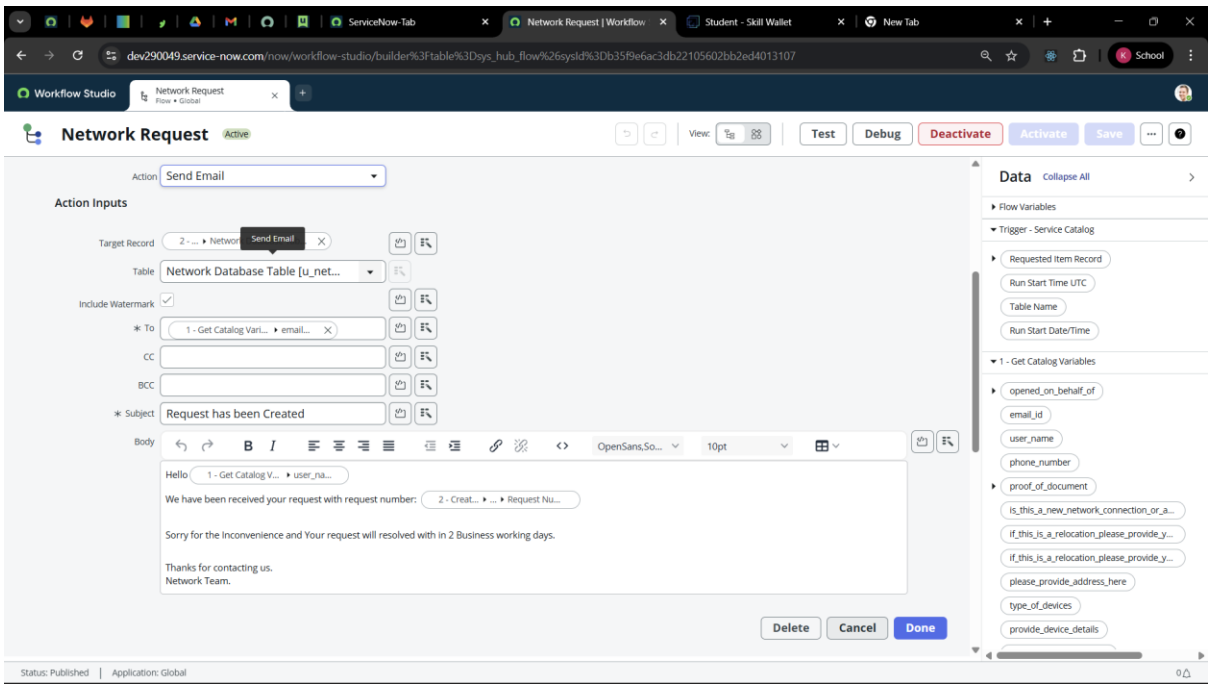
c. Configuring Actions

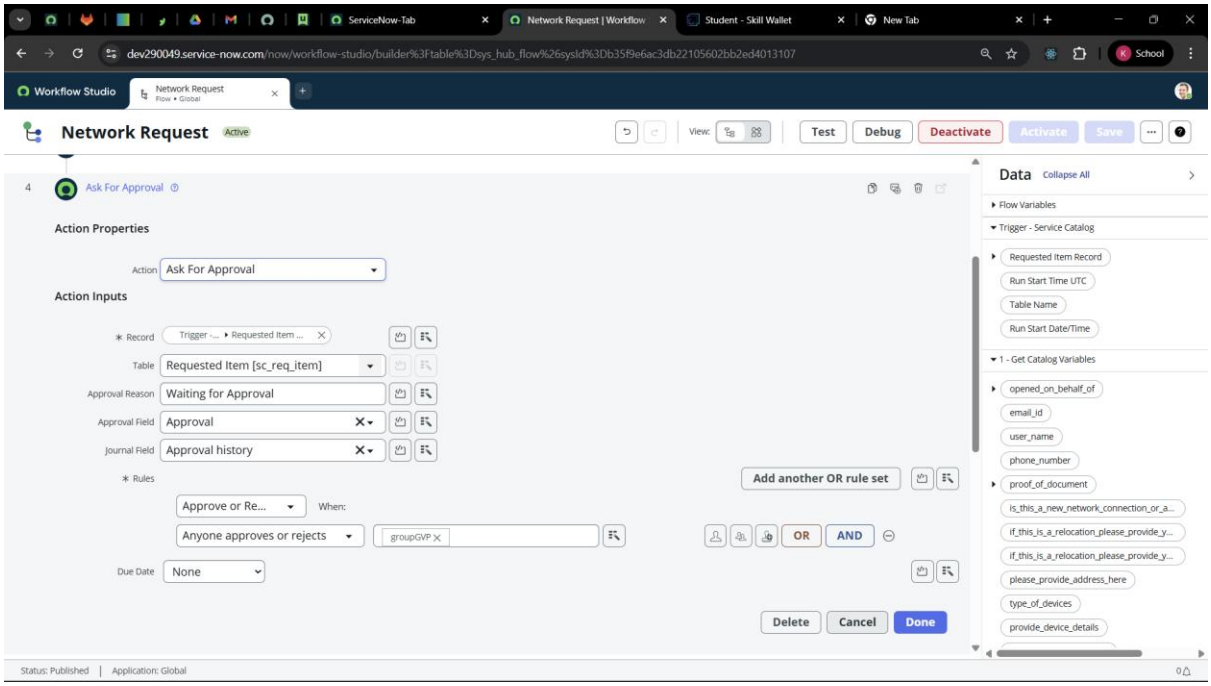


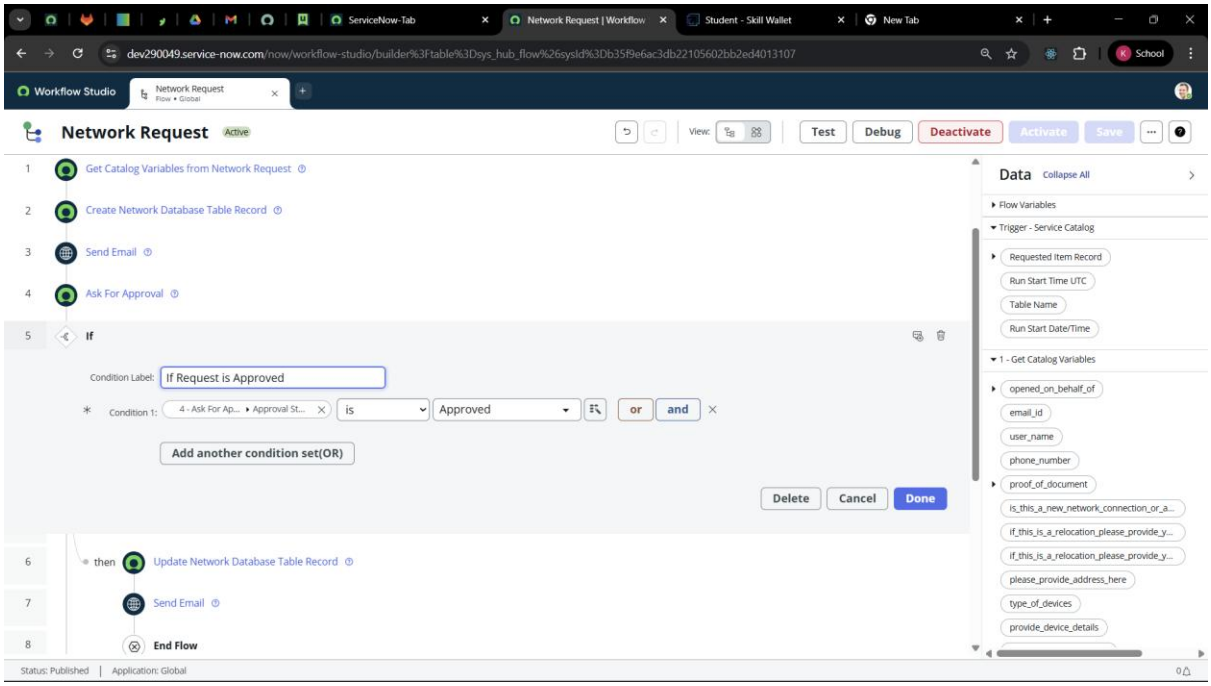

Network Request | Workflow
Student - Skill Wallet
dev290049.service-now.com/now/workflow-studio/builder%3Ftable%3Dsys_hub_flow%26sysId%3Db35f9e6ac3db22105602bb2ed4013107
Workflow Studio
Network Request
Active
Test
Debug
Deactivate
Activate
Save
Get Catalog Variables
Select one or more values from the Template Catalog Items and Variable Sets, and select the required Catalog Variables to generate output data pills. You cannot choose the same Catalog Variable from multiple Template Catalog Items and Variable Sets.
Template Catalog Items and Variable Sets [Catalog Items and Variable Sets]
Network Request
Catalog Variables
Available
No available values
Selected
opened_on_behalf_of
email_id
user_name
phone_number
proof_of_document
is_this_a_new_network_conn
if_this_is_a_relocation_please
if_this_is_a_relocation_please
please_provide_address_here
type_of_devices
provide_device_details
Note: If removing a variable from the 'Selected' list, it will be moved to 'Available' list only if the variable is from the selected Template Catalog Items and Variable Sets. Otherwise, the variable is removed from both 'Available' and 'Selected' lists.
Delete
Cancel
Done
Data
Collapse All
Flow Variables
Trigger - Service Catalog
Requested Item Record
Run Start Time UTC
Table Name
Run Start Date/Time
1 - Get Catalog Variables
opened_on_behalf_of
email_id
user_name
phone_number
proof_of_document
Status: Published
Application: Global

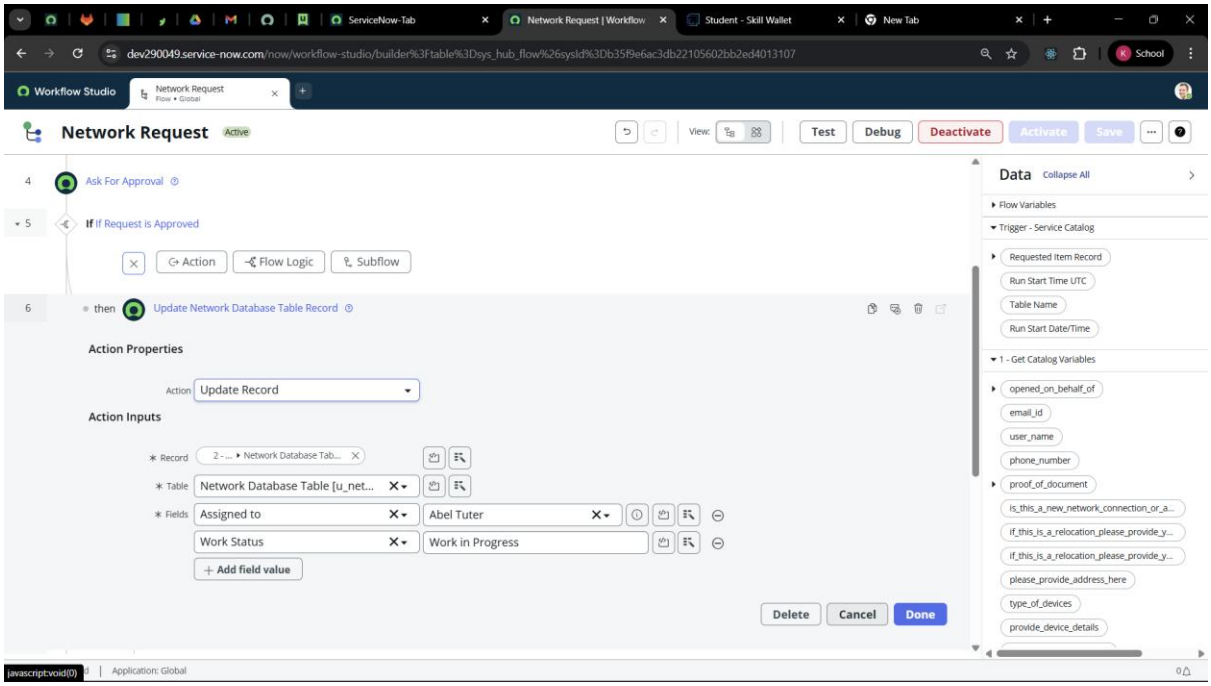

Network Request | Workflow
Student - Skill Wallet
dev290049.service-now.com/now/workflow-studio/builder%3Ftable%3Dsys_hub_flow%26sysId%3Db35f9e6ac3db22105602bb2ed4013107
Workflow Studio
Network Request
Active
Test
Debug
Deactivate
Activate
Save
2
Create Network Database Table Record
Action Properties
Action
Create Record
Action Inputs
Table
Network Database Table [u_net...
Fields
Request Number
Requested For
Work Status
New
Assignment Group
Network
Date of Enquiry
Device Details
Customer Address
Add field value
Delete
Cancel
Done
Data
Collapse All
Flow Variables
Trigger - Service Catalog
Requested Item Record
Run Start Time UTC
Table Name
Run Start Date/Time
1 - Get Catalog Variables
opened_on_behalf_of
email_id
user_name
phone_number
proof_of_document
Status: Published
Application: Global

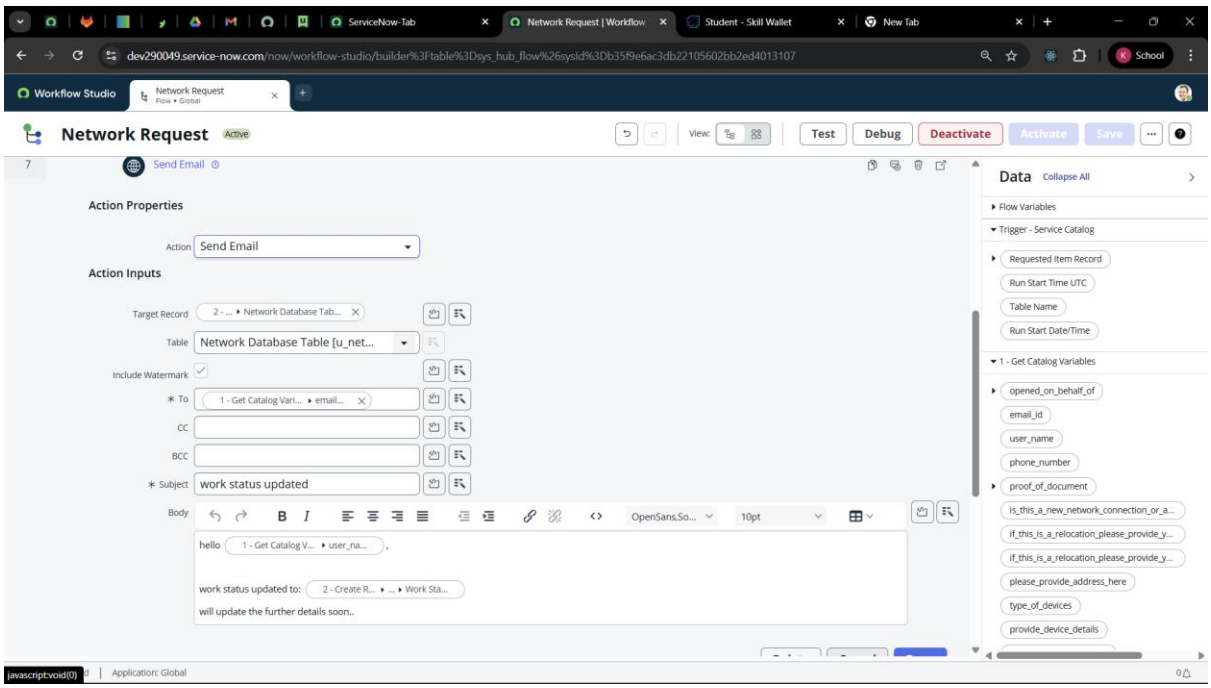

ServiceNow-Tab
Network Request | Workflow
Student - Skill Wallet
New Tab
dev290049.service-now.com/now/workflow-studio/builder%3Ftable%3Dsys_hub_flow%26sysId%3Db35f9e6ac3db22105602bb2ed4013107
School
Workflow Studio
Network Request
Flow • Global
Network Request
Active
View:
Test
Debug
Deactivate
Activate
Save
2
Create Network Database Table Record
3
Send Email
Send Email
Action Properties
Action
Send Email
Action Inputs
Target Record
2 - ... ▸ Network Database Tab...
Table
Network Database Table [u_net...
Include Watermark
* To
1 - Get Catalog Vari... ▸ email...
CC
BCC
* Subject
Request has been Created
Body
OpenSans,So...
10pt
Hello
1 - Get Catalog V... ▸ user_na...
We have been received your request with request number:
2 - Creat... ▸ ... ▸ Request Nu...
Data
Collapse All
Flow Variables
Trigger - Service Catalog
Requested Item Record
Run Start Time UTC
Table Name
Run Start Date/Time
1 - Get Catalog Variables
opened_on_behalf_of
email_id
user_name
phone_number
proof_of_document
is_this_a_new_network_connection_or_a...
if_this_is_a_relocation_please_provide_y...
if_this_is_a_relocation_please_provide_y...
please_provide_address_here
type_of_devices
provide_device_details
Status: Published
Application: Global

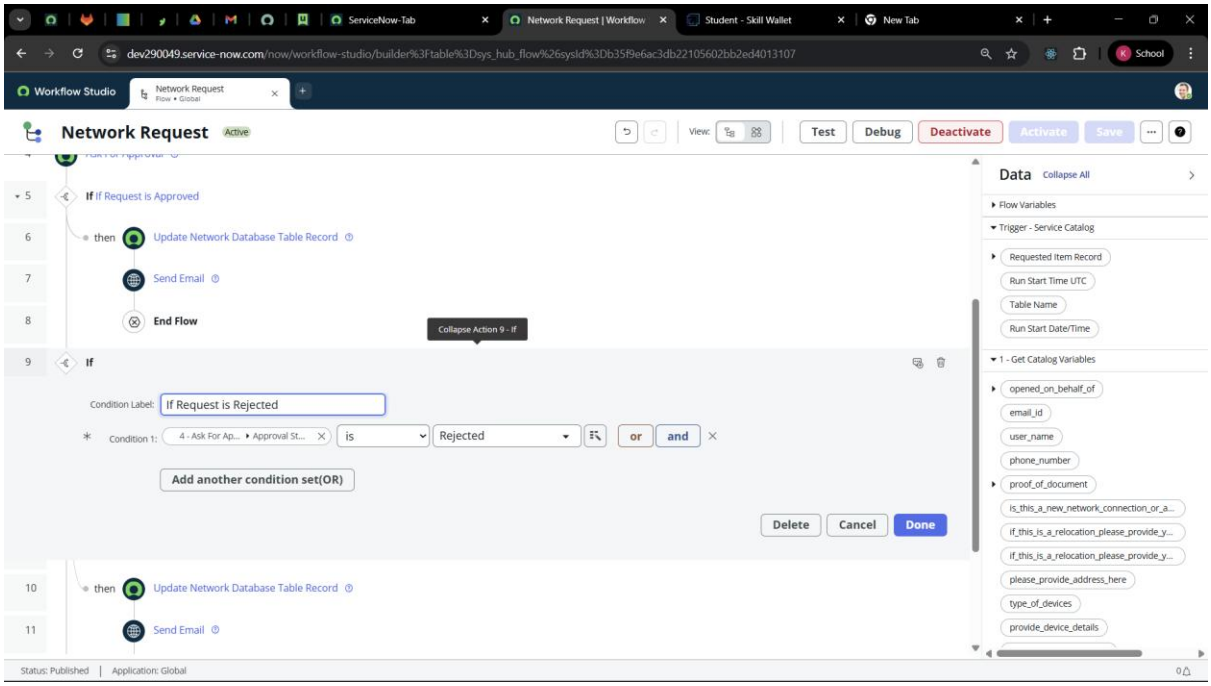

ServiceNow-Tab
Network Request | Workflow
Student - Skill Wallet
New Tab
dev290049.service-now.com/now/workflow-studio/builder%3Ftable%3Dsys_hub_flow%26sysId%3Db35f9e6ac3db22105602bb2ed4013107
School
Workflow Studio
Network Request
Flow • Global
Network Request
Active
View:
Test
Debug
Deactivate
Activate
Save
Action
Send Email
Action Inputs
Target Record
Send Email
Table
Network Database Table [u_net...
Include Watermark
* To
1 - Get Catalog Vari... ▸ email...
CC
BCC
* Subject
Request has been Created
Body
OpenSans,So...
10pt
Hello
1 - Get Catalog V... ▸ user_na...
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.
Delete
Cancel
Done
Data
Collapse All
Flow Variables
Trigger - Service Catalog
Requested Item Record
Run Start Time UTC
Table Name
Run Start Date/Time
1 - Get Catalog Variables
opened_on_behalf_of
email_id
user_name
phone_number
proof_of_document
is_this_a_new_network_connection_or_a...
if_this_is_a_relocation_please_provide_y...
if_this_is_a_relocation_please_provide_y...
please_provide_address_here
type_of_devices
provide_device_details
Status: Published
Application: Global

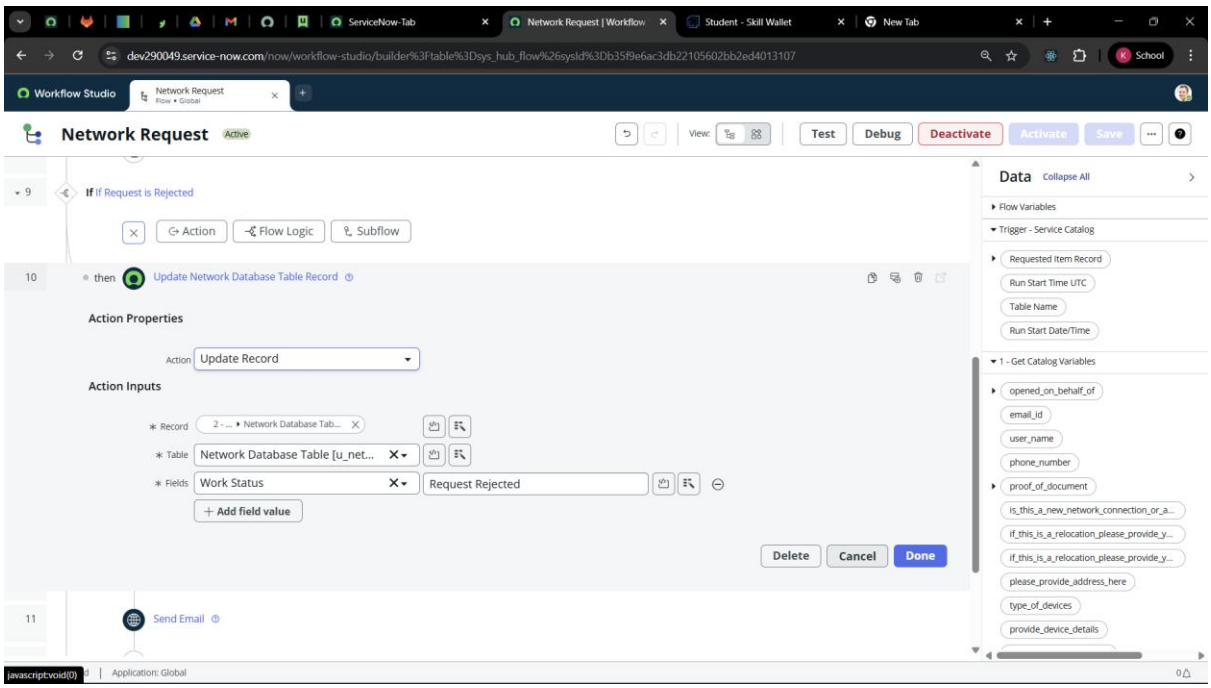

ServiceNow-Tab
Network Request | Workflow
Student - Skill Wallet
New Tab
dev290049.service-now.com/now/workflow-studio/builder%3Ftable%3Dsys_hub_flow%26sysId%3Db35f9e6ac3db22105602bb2ed4013107
School
Workflow Studio
Network Request
Flow • Global
Network Request
Active
View:
Test
Debug
Deactivate
Activate
Save
4
Ask For Approval
Action Properties
Action
Ask For Approval
Action Inputs
* Record
Trigger -... ▸ Requested Item ...
Table
Requested Item [sc_req_item]
Approval Reason
Waiting for Approval
Approval Field
Approval
Journal Field
Approval history
* Rules
Add another OR rule set
Approve or Re...
When:
Anyone approves or rejects
groupGVP
OR
AND
Due Date
None
Delete
Cancel
Done
Data
Collapse All
Flow Variables
Trigger - Service Catalog
Requested Item Record
Run Start Time UTC
Table Name
Run Start Date/Time
1 - Get Catalog Variables
opened_on_behalf_of
email_id
user_name
phone_number
proof_of_document
is_this_a_new_network_connection_or_a...
if_this_is_a_relocation_please_provide_y...
if_this_is_a_relocation_please_provide_y...
please_provide_address_here
type_of_devices
provide_device_details
Status: Published
Application: Global

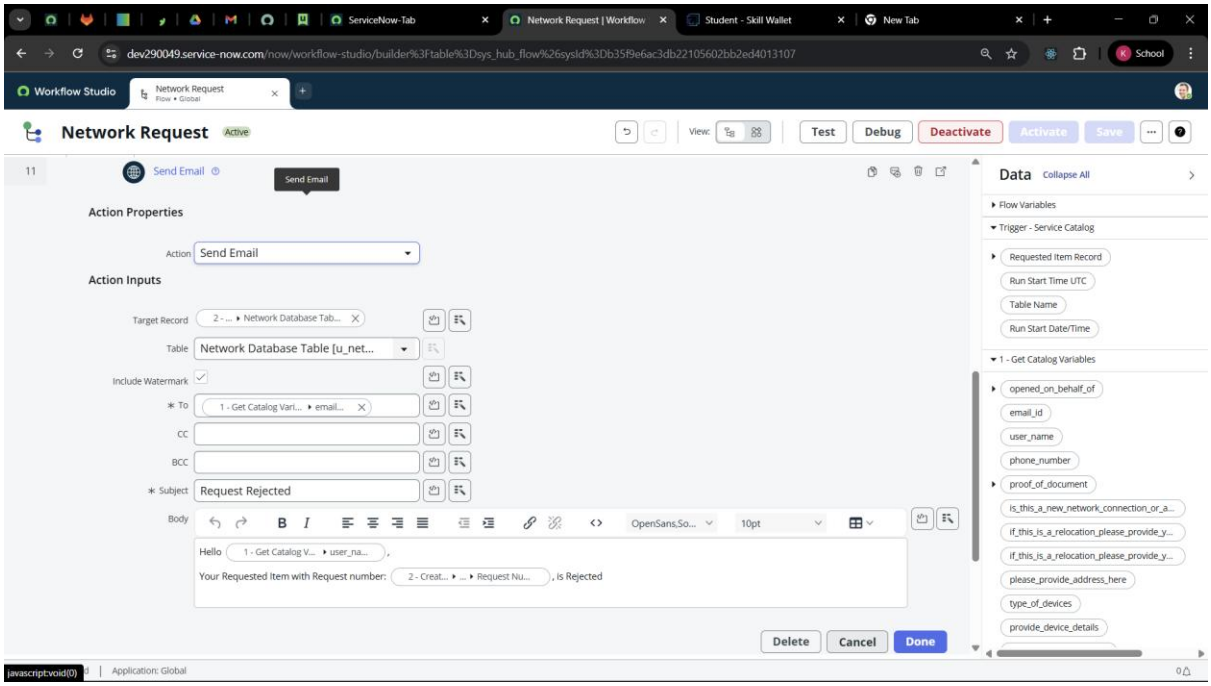

ServiceNow-Tab
Network Request | Workflow
Student - Skill Wallet
New Tab
dev290049.service-now.com/now/workflow-studio/builder%3Ftable%3Dsys_hub_flow%26sysId%3Db35f9e6ac3db22105602bb2ed4013107
School
Workflow Studio
Network Request
Flow • Global
Network Request
Active
View:
Test
Debug
Deactivate
Activate
Save
1
Get Catalog Variables from Network Request
2
Create Network Database Table Record
3
Send Email
4
Ask For Approval
5
If
Condition Label:
If Request is Approved
Condition 1:
4 - Ask For Ap... ▸ Approval St...
is
Approved
or
and
Add another condition set(OR)
Delete
Cancel
Done
6
then
Update Network Database Table Record
7
Send Email
8
End Flow
Data
Collapse All
Flow Variables
Trigger - Service Catalog
Requested Item Record
Run Start Time UTC
Table Name
Run Start Date/Time
1 - Get Catalog Variables
opened_on_behalf_of
email_id
user_name
phone_number
proof_of_document
is_this_a_new_network_connection_or_a...
if_this_is_a_relocation_please_provide_y...
if_this_is_a_relocation_please_provide_y...
please_provide_address_here
type_of_devices
provide_device_details
Status: Published
Application: Global


ServiceNow-Tab
Network Request | Workflow
Student - Skill Wallet
New Tab
dev290049.service-now.com/now/workflow-studio/builder%3Ftable%3Dsys_hub_flow%26sysId%3Db35f9e6ac3db22105602bb2ed4013107
School
Workflow Studio
Network Request
Flow • Global
Network Request
Active
View:
Test
Debug
Deactivate
Activate
Save
4
Ask For Approval
5
If If Request is Approved
Action
Flow Logic
Subflow
6
then
Update Network Database Table Record
Action Properties
Action
Update Record
Action Inputs
Record
2 - ... • Network Database Tab...
Table
Network Database Table [u_net...
Fields
Assigned to
Abel Tuter
Work Status
Work in Progress
Add field value
Delete
Cancel
Done
Data
Collapse All
Flow Variables
Trigger - Service Catalog
Requested Item Record
Run Start Time UTC
Table Name
Run Start Date/Time
1 - Get Catalog Variables
opened_on_behalf_of
email_id
user_name
phone_number
proof_of_document
is_this_a_new_network_connection_or_a...
if_this_is_a_relocation_please_provide_y...
if_this_is_a_relocation_please_provide_y...
please_provide_address_here
type_of_devices
provide_device_details
javascript:void(0)
Application: Global

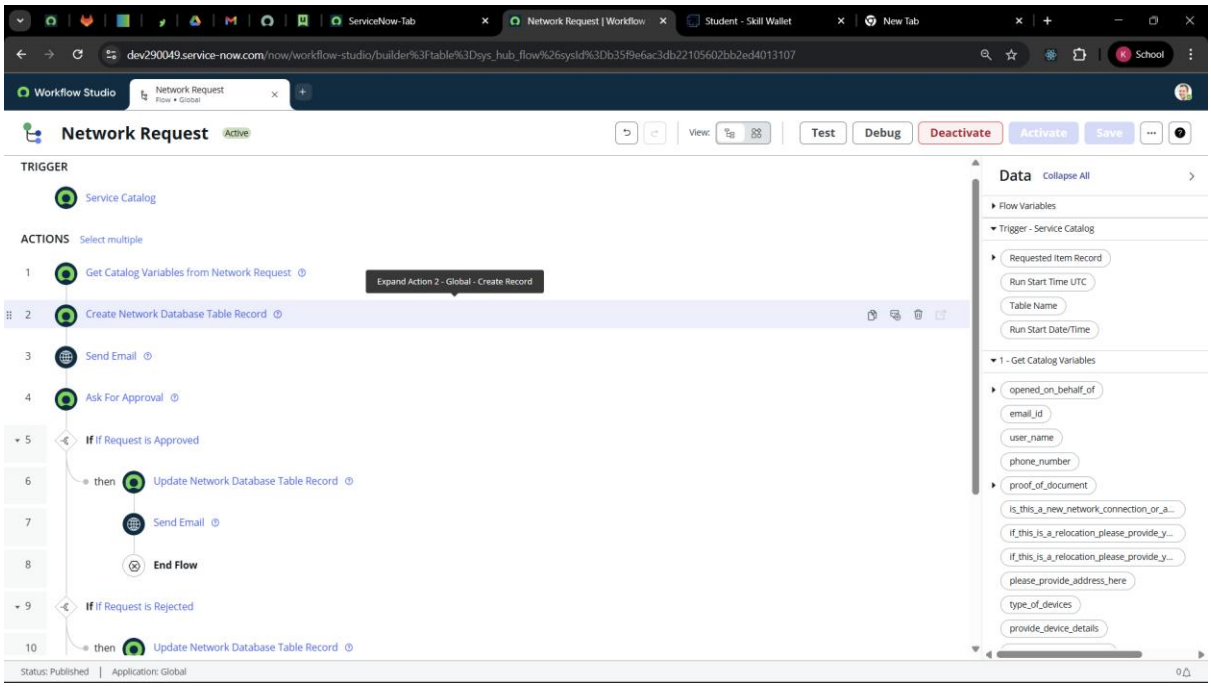

ServiceNow-Tab
Network Request | Workflow
Student - Skill Wallet
New Tab
dev290049.service-now.com/now/workflow-studio/builder%3Ftable%3Dsys_hub_flow%26sysId%3Db35f9e6ac3db22105602bb2ed4013107
School
Workflow Studio
Network Request
Flow • Global
Network Request
Active
View:
Test
Debug
Deactivate
Activate
Save
7
Send Email
Action Properties
Action
Send Email
Action Inputs
Target Record
2 - ... • Network Database Tab...
Table
Network Database Table [u_net...
Include Watermark
To
1 - Get Catalog Vari... • email...
CC
BCC
Subject
work status updated
Body
OpenSans,So...
10pt
hello
1 - Get Catalog V... • user_na...
,
work status updated to:
2 - Create R... • ... • Work Sta...
will update the further details soon..
Data
Collapse All
Flow Variables
Trigger - Service Catalog
Requested Item Record
Run Start Time UTC
Table Name
Run Start Date/Time
1 - Get Catalog Variables
opened_on_behalf_of
email_id
user_name
phone_number
proof_of_document
is_this_a_new_network_connection_or_a...
if_this_is_a_relocation_please_provide_y...
if_this_is_a_relocation_please_provide_y...
please_provide_address_here
type_of_devices
provide_device_details
javascript:void(0)
Application: Global

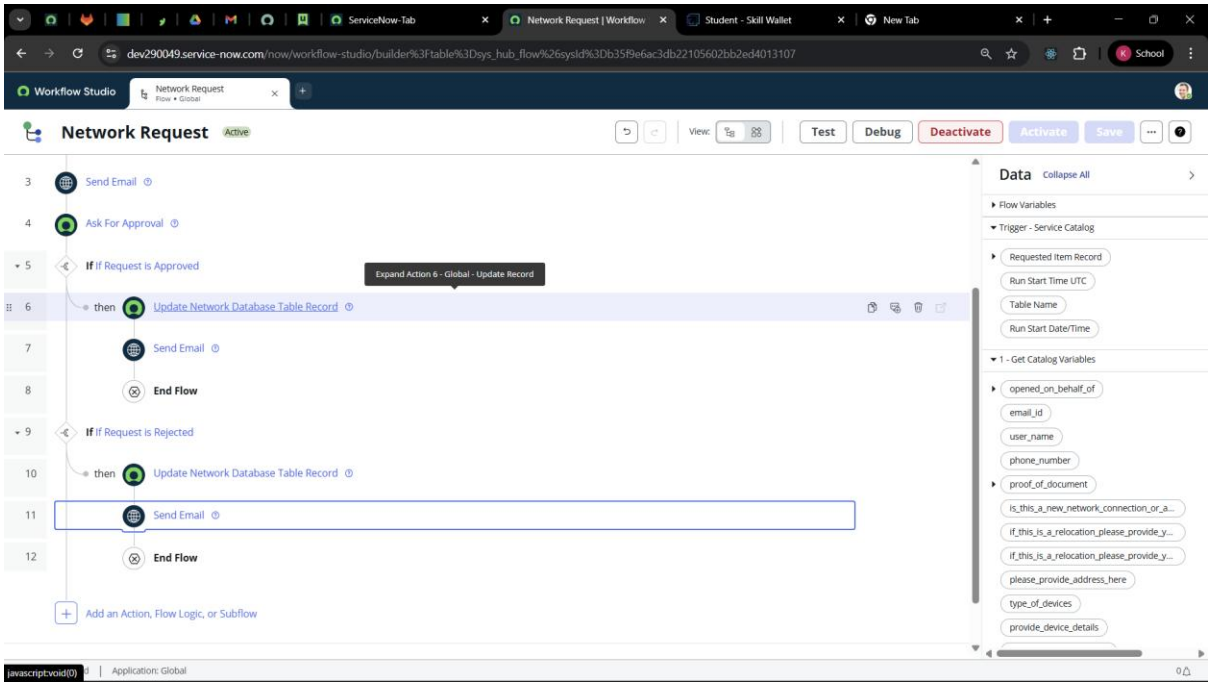

ServiceNow-Tab
Network Request | Workflow
Student - Skill Wallet
New Tab
dev290049.service-now.com/now/workflow-studio/builder%3Ftable%3Dsys_hub_flow%26sysId%3Db35f9e6ac3db22105602bb2ed4013107
School
Workflow Studio
Network Request
Flow • Global
Network Request
Active
View:
Test
Debug
Deactivate
Activate
Save
If If Request is Approved
then Update Network Database Table Record
Send Email
End Flow
Collapse Action 9 - If
If
Condition Label: If Request is Rejected
Condition 1: 4 - Ask For Ap... • Approval St...
is
Rejected
or
and
Add another condition set(OR)
Delete
Cancel
Done
then Update Network Database Table Record
Send Email
Data
Collapse All
Flow Variables
Trigger - Service Catalog
Requested Item Record
Run Start Time UTC
Table Name
Run Start Date/Time
1 - Get Catalog Variables
opened_on_behalf_of
email_id
user_name
phone_number
proof_of_document
is_this_a_new_network_connection_or_a...
if_this_is_a_relocation_please_provide_y...
if_this_is_a_relocation_please_provide_y...
please_provide_address_here
type_of_devices
provide_device_details
Status: Published
Application: Global


ServiceNow-Tab
Network Request | Workflow
Student - Skill Wallet
New Tab
dev290049.service-now.com/now/workflow-studio/builder%3Ftable%3Dsys_hub_flow%26sysId%3Db35f9e6ac3db22105602bb2ed4013107
School
Workflow Studio
Network Request
Flow • Global
Network Request
Active
View:
Test
Debug
Deactivate
Activate
Save
If If Request is Rejected
Action
Flow Logic
Subflow
then Update Network Database Table Record
Action Properties
Action
Update Record
Action Inputs
Record
2 - ... • Network Database Tab...
Table
Network Database Table [u_net...
Fields
Work Status
Request Rejected
Add field value
Delete
Cancel
Done
Send Email
Data
Collapse All
Flow Variables
Trigger - Service Catalog
Requested Item Record
Run Start Time UTC
Table Name
Run Start Date/Time
1 - Get Catalog Variables
opened_on_behalf_of
email_id
user_name
phone_number
proof_of_document
is_this_a_new_network_connection_or_a...
if_this_is_a_relocation_please_provide_y...
if_this_is_a_relocation_please_provide_y...
please_provide_address_here
type_of_devices
provide_device_details
javascript:void(0)
Application: Global


Network Request
Active
Test
Debug
Deactivate
Activate
Save
Send Email
Action Properties
Action
Send Email
Action Inputs
Target Record
Table
Network Database Table [u_net...
Include Watermark
To
CC
BCC
Subject
Request Rejected
Body
Hello
Your Requested Item with Request number:
, is Rejected
Delete
Cancel
Done
Data
Collapse All
Flow Variables
Trigger - Service Catalog
Requested Item Record
Run Start Time UTC
Table Name
Run Start Date/Time
1 - Get Catalog Variables
opened_on_behalf_of
email_id
user_name
phone_number
proof_of_document
is_this_a_new_network_connection_or_a...
if_this_is_a_relocation_please_provide_y...
please_provide_address_here
type_of_devices
provide_device_details

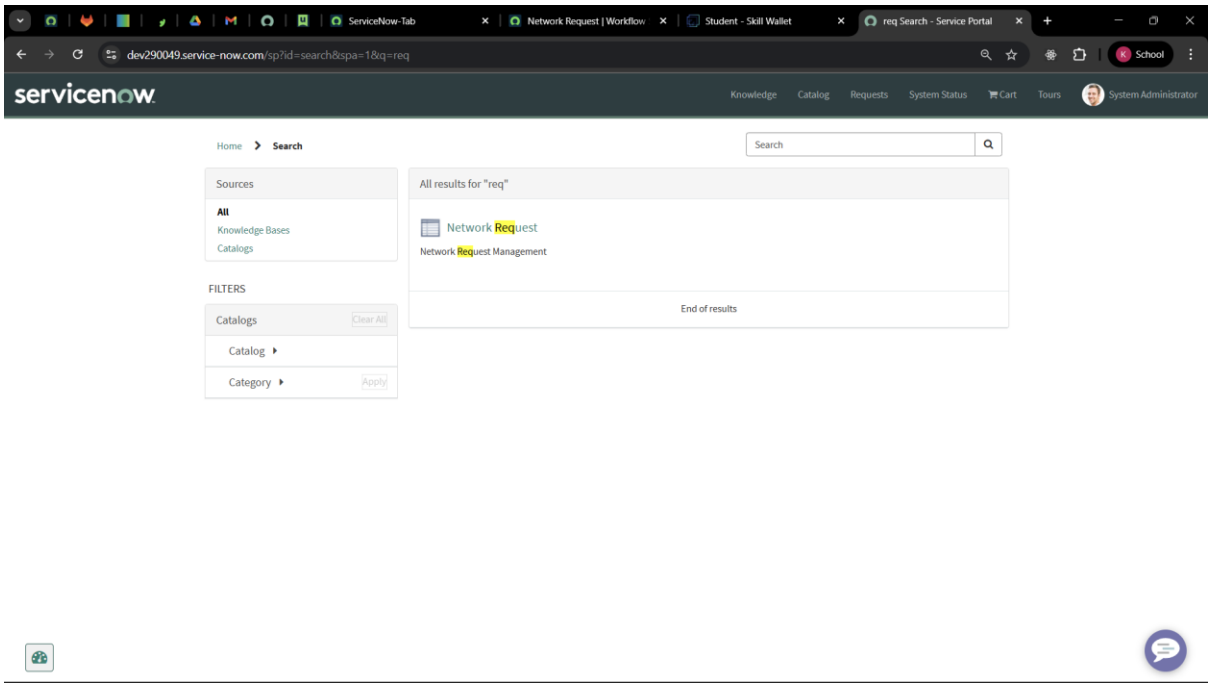
d. Flow Chart

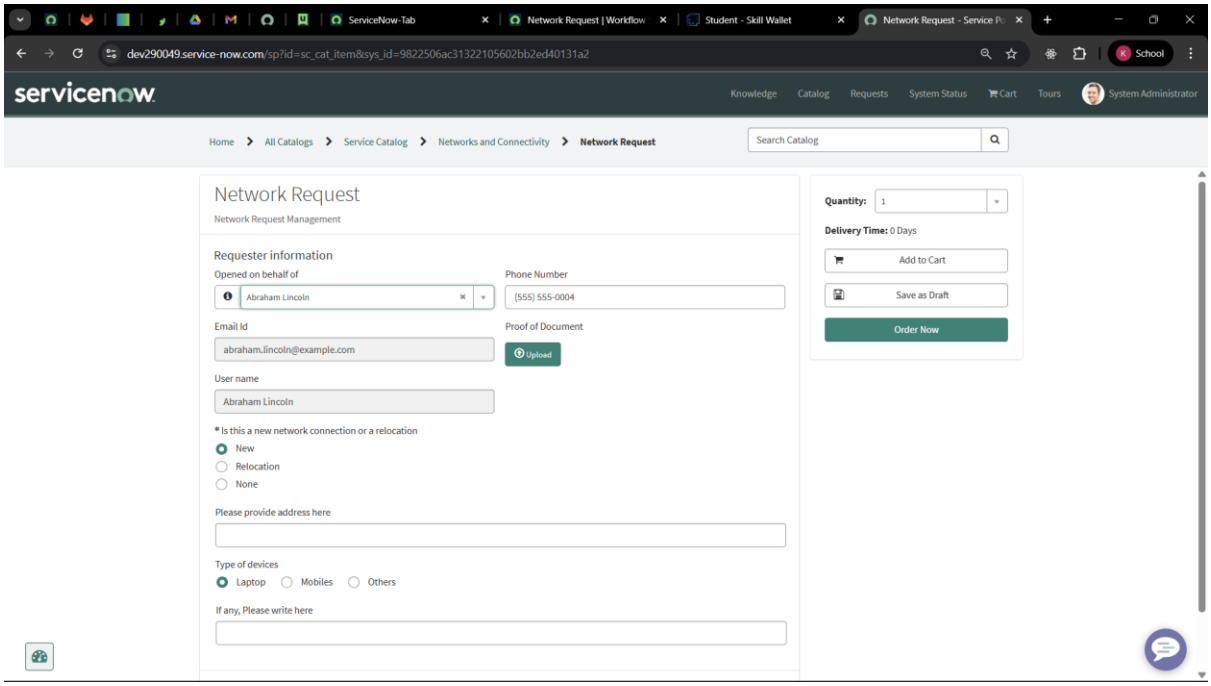

Network Request
Active
Test
Debug
Deactivate
Activate
Save
TRIGGER
Service Catalog
ACTIONS
Select multiple
1 Get Catalog Variables from Network Request
Expand Action 2 - Global - Create Record
2 Create Network Database Table Record
3 Send Email
4 Ask For Approval
5 If If Request is Approved
6 then Update Network Database Table Record
7 Send Email
8 End Flow
9 If If Request is Rejected
10 then Update Network Database Table Record
Data
Collapse All
Flow Variables
Trigger - Service Catalog
Requested Item Record
Run Start Time UTC
Table Name
Run Start Date/Time
1 - Get Catalog Variables
opened_on_behalf_of
email_id
user_name
phone_number
proof_of_document
is_this_a_new_network_connection_or_a...
if_this_is_a_relocation_please_provide_y...
please_provide_address_here
type_of_devices
provide_device_details
Status: Published
Application: Global


ServiceNow-Tab
Network Request | Workflow
Student - Skill Wallet
New Tab
dev290049.service-now.com/now/workflow-studio/builder%3Ftable%3Dsys_hub_flow%26sysId%3Db35f9e6ac3db22105602bb2ed4013107
School
Workflow Studio
Network Request
Flow • Global
Network Request
Active
View:
Test
Debug
Deactivate
Activate
Save
3 Send Email
4 Ask For Approval
5 If If Request is Approved
Expand Action 6 - Global - Update Record
6 then Update Network Database Table Record
7 Send Email
8 End Flow
9 If If Request is Rejected
10 then Update Network Database Table Record
11 Send Email
12 End Flow
Add an Action, Flow Logic, or Subflow
Data
Collapse All
Flow Variables
Trigger - Service Catalog
Requested Item Record
Run Start Time UTC
Table Name
Run Start Date/Time
1 - Get Catalog Variables
opened_on_behalf_of
email_id
user_name
phone_number
proof_of_document
is_this_a_new_network_connection_or_a...
if_this_is_a_relocation_please_provide_y...
if_this_is_a_relocation_please_provide_y...
please_provide_address_here
type_of_devices
provide_device_details
javascript:void(0)
Application: Global

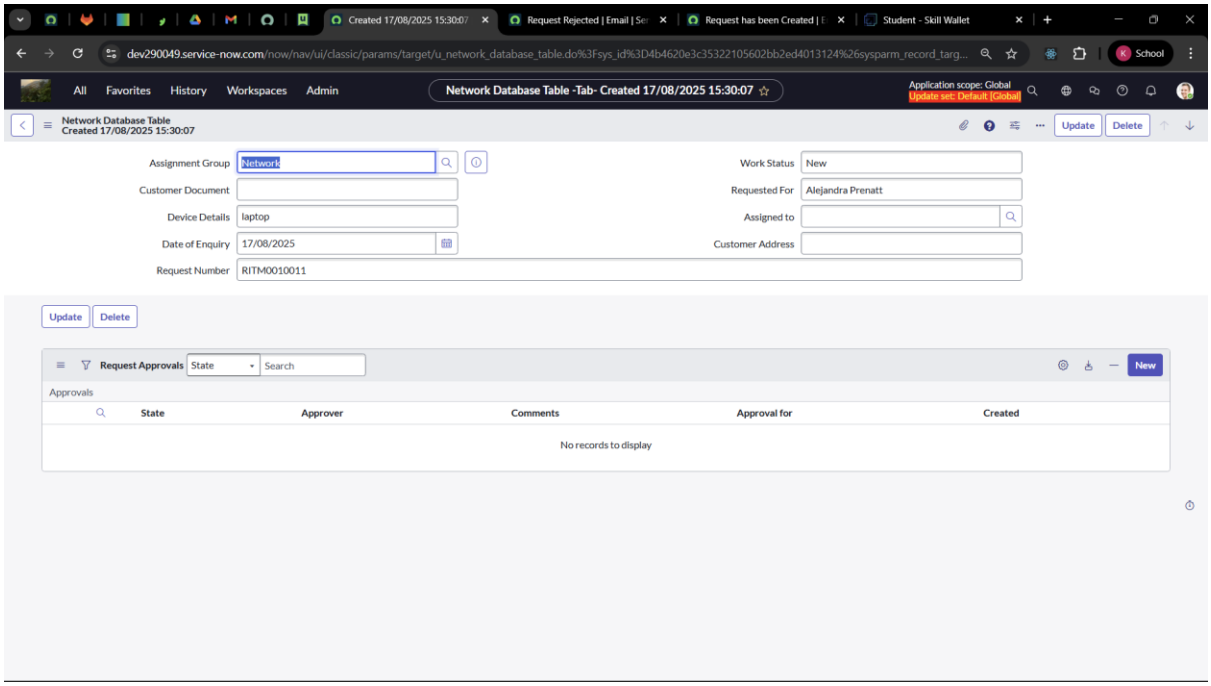
Final Testing in End User portal & Instance

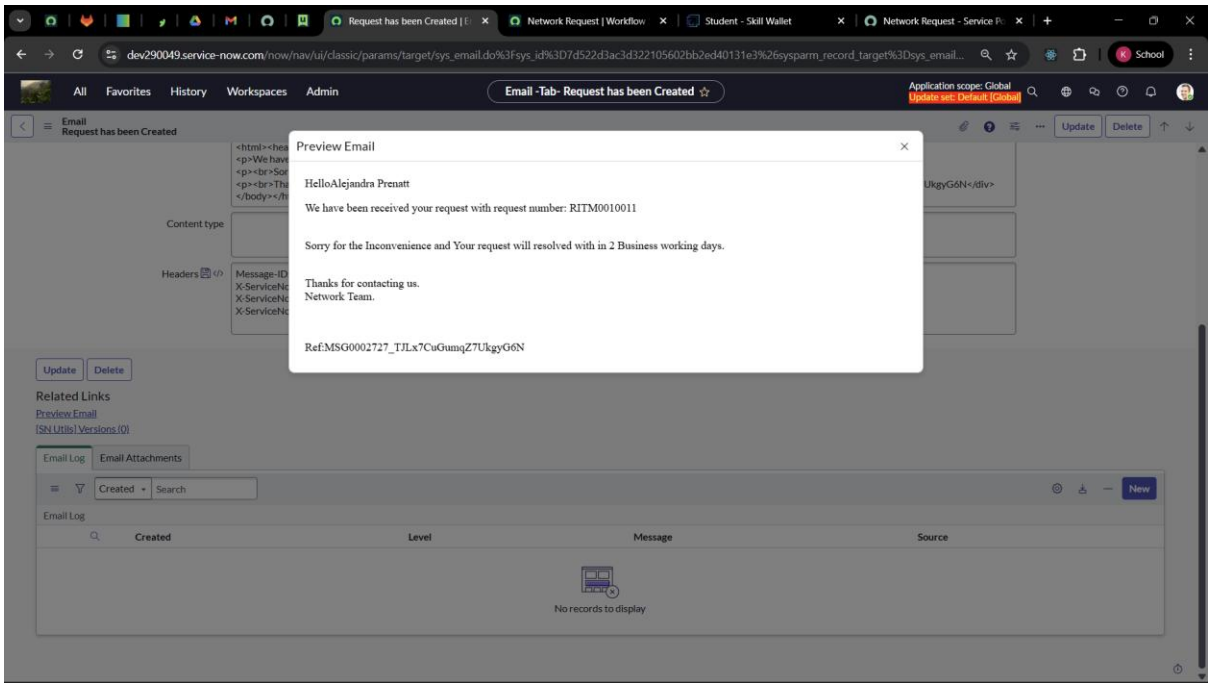
a. service portal

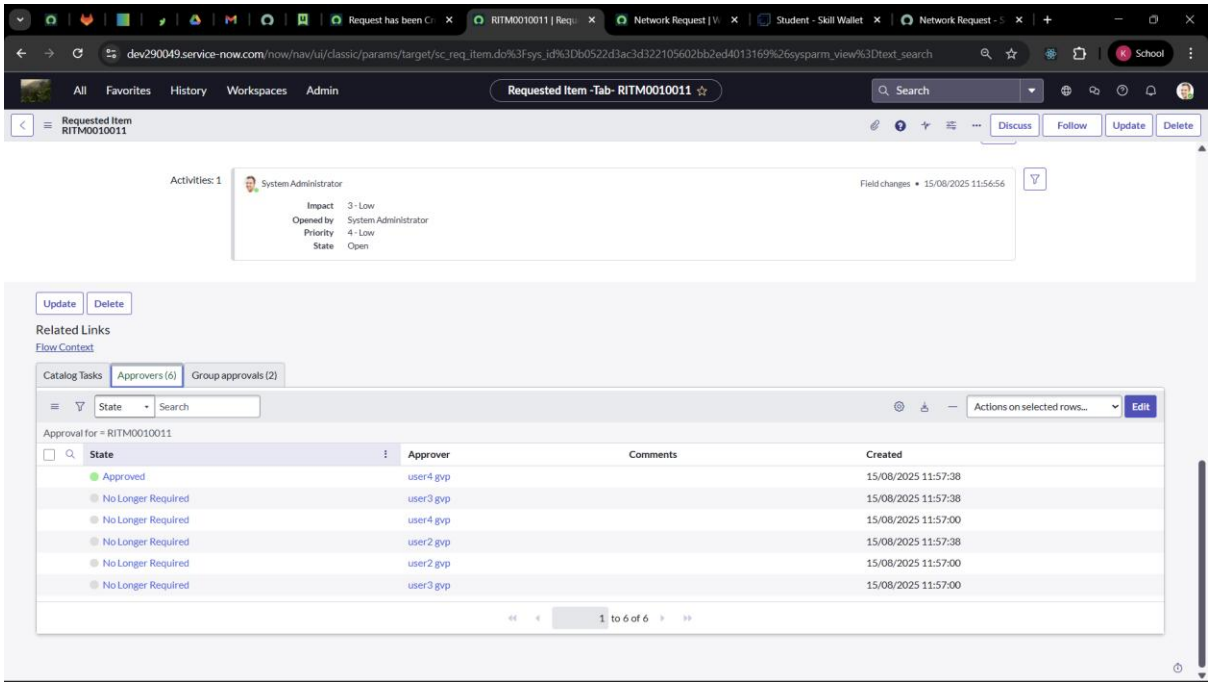


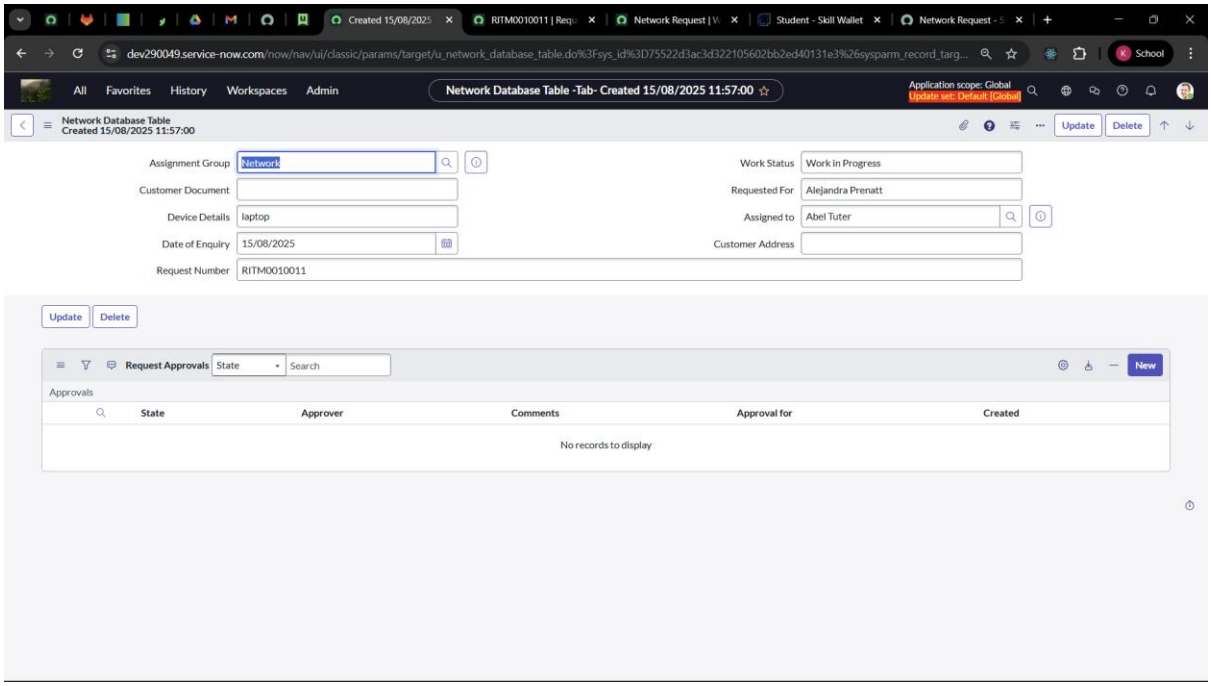


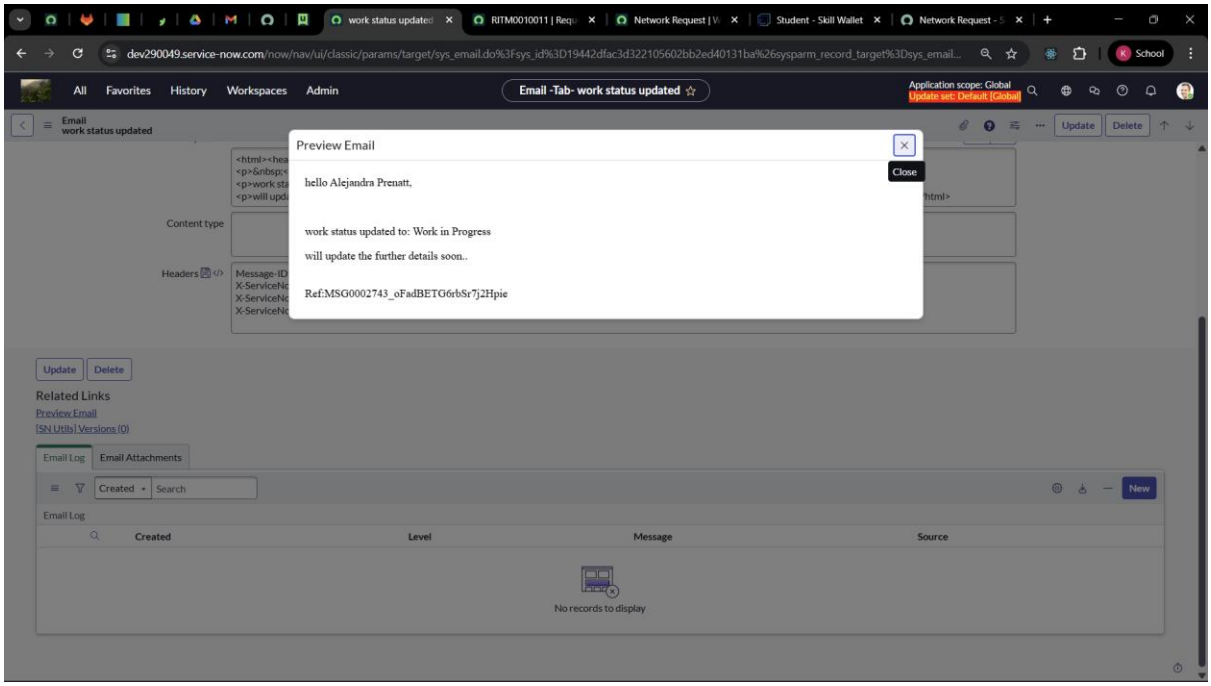
b. Flow when request approved



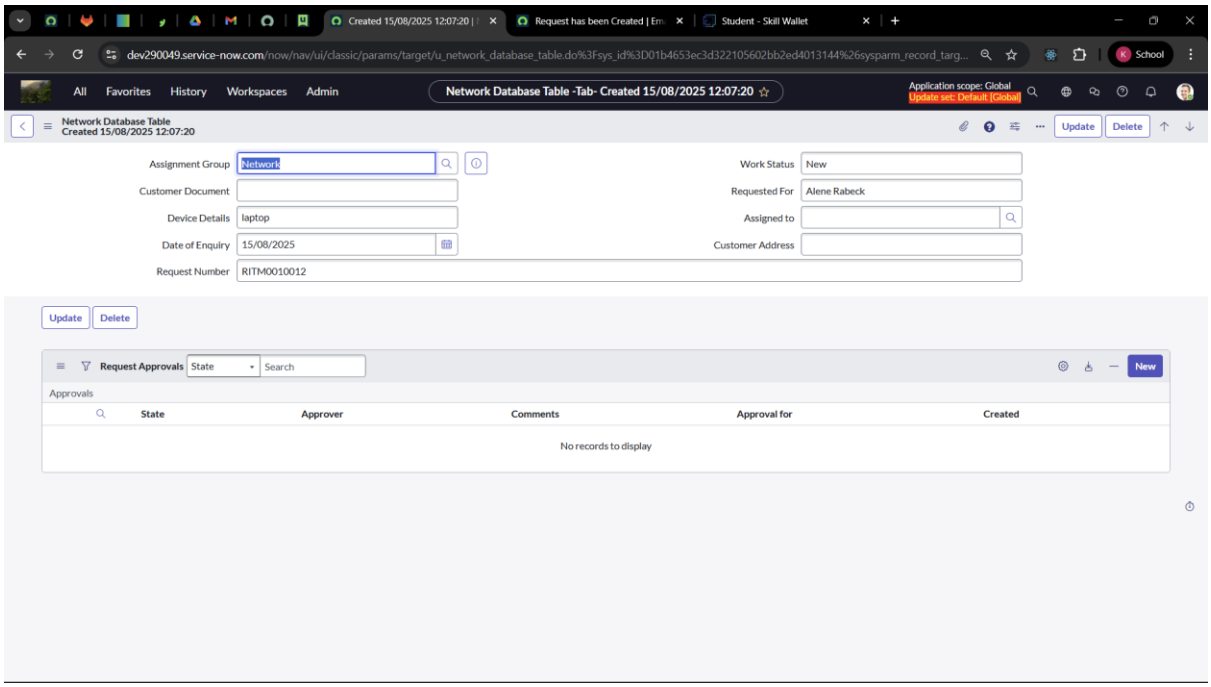


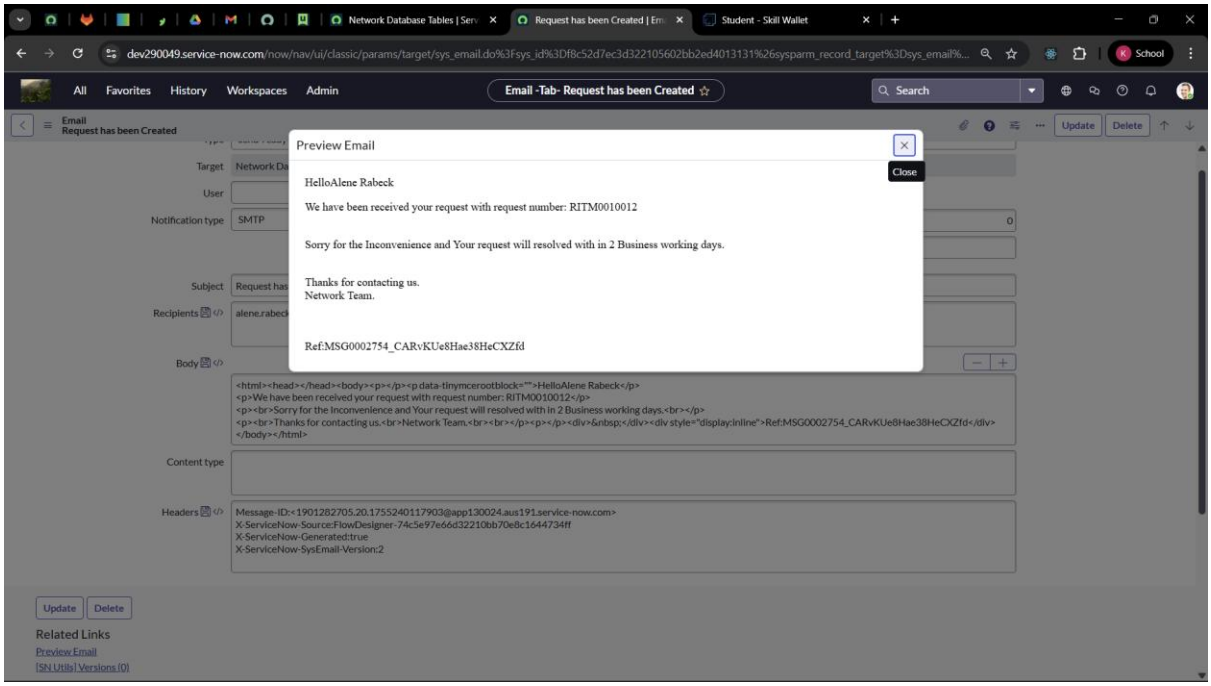

Requested Item -Tab- RITM0010011
Requested Item
RITM0010011
Discuss
Follow
Update
Delete
Activities: 1
System Administrator
Field changes • 15/08/2025 11:56:56
Impact 3 - Low
Opened by System Administrator
Priority 4 - Low
State Open
Update
Delete
Related Links
Flow Context
Catalog Tasks
Approvers (6)
Group approvals (2)
Actions on selected rows...
Edit
Approval for = RITM0010011
State
Approver
Comments
Created
Approved user4 gvp 15/08/2025 11:57:38
No Longer Required user3 gvp 15/08/2025 11:57:38
No Longer Required user4 gvp 15/08/2025 11:57:00
No Longer Required user2 gvp 15/08/2025 11:57:38
No Longer Required user2 gvp 15/08/2025 11:57:00
No Longer Required user3 gvp 15/08/2025 11:57:00
1 to 6 of 6

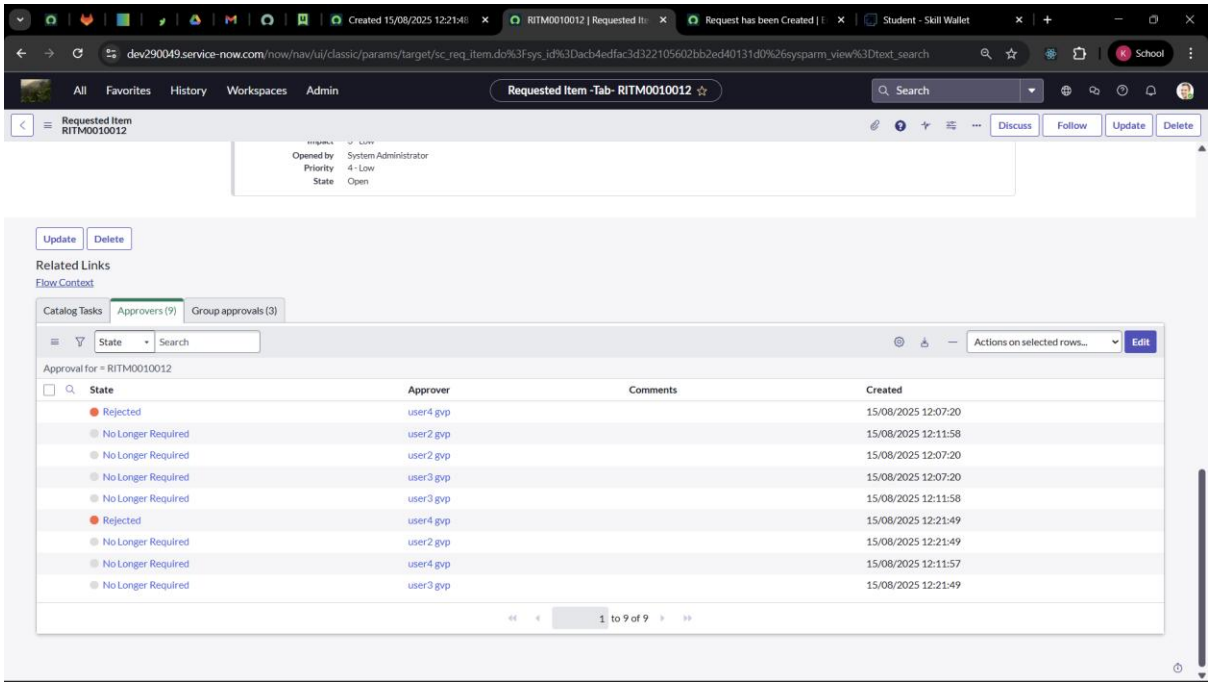

Network Database Table -Tab- Created 15/08/2025 11:57:00
Application scope: Global
Update set: Default [Global]
Network Database Table
Created 15/08/2025 11:57:00
Update
Delete
Assignment Group Network
Customer Document
Device Details laptop
Date of Enquiry 15/08/2025
Request Number RITM0010011
Work Status Work in Progress
Requested For Alejandra Prenatt
Assigned to Abel Tuter
Customer Address
Update
Delete
Request Approvals
State
Search
New
Approvals
State
Approver
Comments
Approval for
Created
No records to display

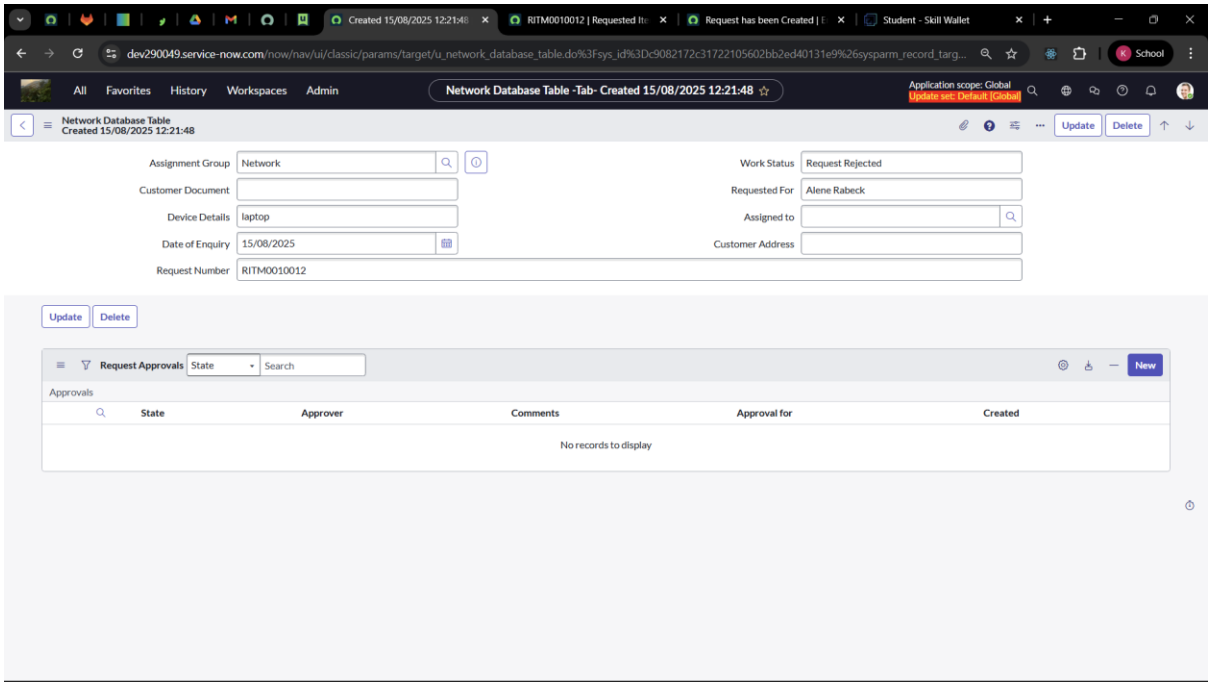


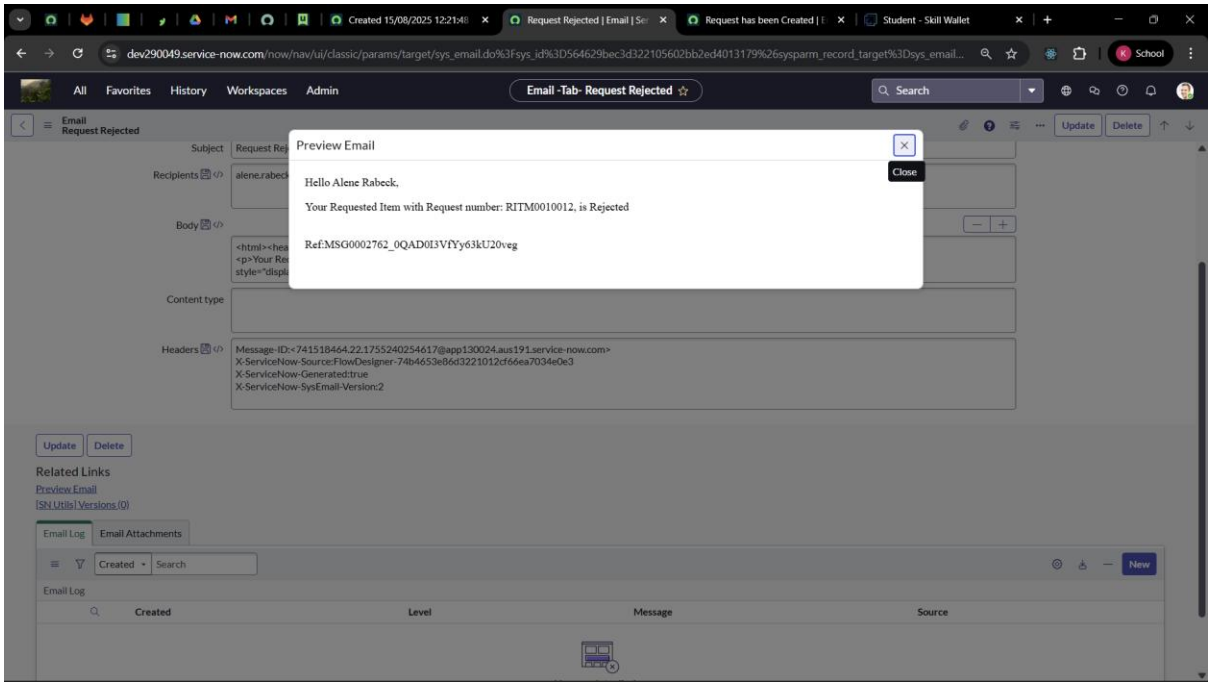
c. Flow when request rejected




Email -Tab- Request has been Created
Preview Email
Close
HelloAlene Rabeck
We have been received your request with request number: RITM0010012
Sorry for the Inconvenience and Your request will resolved with in 2 Business working days.
Thanks for contacting us.
Network Team.
Ref:MSG0002754_CARvKUe8Hae38HeCXZfd
Update
Delete
Related Links
Preview Email
[SN Utils] Versions (0)


Requested Item -Tab- RITM0010012
Opened by System Administrator
Priority 4 - Low
State Open
Update
Delete
Related Links
Flow Context
Catalog Tasks
Approvers (9)
Group approvals (3)
Approval for = RITM0010012
State
Approver
Comments
Created
Rejected user4 gvp 15/08/2025 12:07:20
No Longer Required user2 gvp 15/08/2025 12:11:58
No Longer Required user2 gvp 15/08/2025 12:07:20
No Longer Required user3 gvp 15/08/2025 12:07:20
No Longer Required user3 gvp 15/08/2025 12:11:58
Rejected user4 gvp 15/08/2025 12:21:49
No Longer Required user2 gvp 15/08/2025 12:21:49
No Longer Required user4 gvp 15/08/2025 12:11:57
No Longer Required user3 gvp 15/08/2025 12:21:49
1 to 9 of 9


Network Database Table -Tab- Created 15/08/2025 12:21:48
Network Database Table
Created 15/08/2025 12:21:48
Update
Delete
Assignment Group
Network
Customer Document
Device Details
laptop
Date of Enquiry
15/08/2025
Request Number
RITM0010012
Work Status
Request Rejected
Requested For
Alene Rabeck
Assigned to
Customer Address
Request Approvals
State
Search
New
Approvals
State
Approver
Comments
Approval for
Created
No records to display


Email -Tab- Request Rejected
Email
Request Rejected
Preview Email
Close
Hello Alene Rabeck,
Your Requested Item with Request number: RITM0010012, is Rejected
Ref:MSG0002762_0QAD0I3VfYy63kU20veg
Subject
Recipients
Body
Content type
Headers
Message-ID:<741518464.22.1755240254617@app130024.aus191.service-now.com>
X-ServiceNow-Source:FlowDesigner-74b4653e86d3221012cf66ea7034e0e3
X-ServiceNow-Generated:true
X-ServiceNow-SysEmail-Version:2
Update
Delete
Related Links
Preview Email
[SN Utils] Versions (0)
Email Log
Email Attachments
Created
Search
New
Email Log
Created
Level
Message
Source