Phase 4: Access Control, Dynamic Approval & Validation

Access Control

Description

While creating the custom table **u_network_database**, ServiceNow automatically generated four default Access Control Rules (ACLs) for the table.
In this implementation, the default ACLs were utilized without creating any additional custom access control rules.

The default ACLs ensure:

- Role-based read and write access
- Protection of sensitive request data
- Controlled access to network request records
- Prevention of unauthorized data modification

This approach provides sufficient security while keeping the configuration simple and maintainable.

Dynamic Approver Assignment via Flow Designer

Description

Dynamic approval routing was implemented using ServiceNow Flow Designer to automate the approval process based on request context.
Instead of hard-coding approvers, the flow dynamically determines the appropriate approver and proceeds only after successful approval.

The approval logic ensures:

- Approval requests are automatically generated for network requests

- Workflow execution continues only when the request is approved
- Approved requests are updated automatically in the custom table

This design supports scalable governance and improves compliance and auditability.

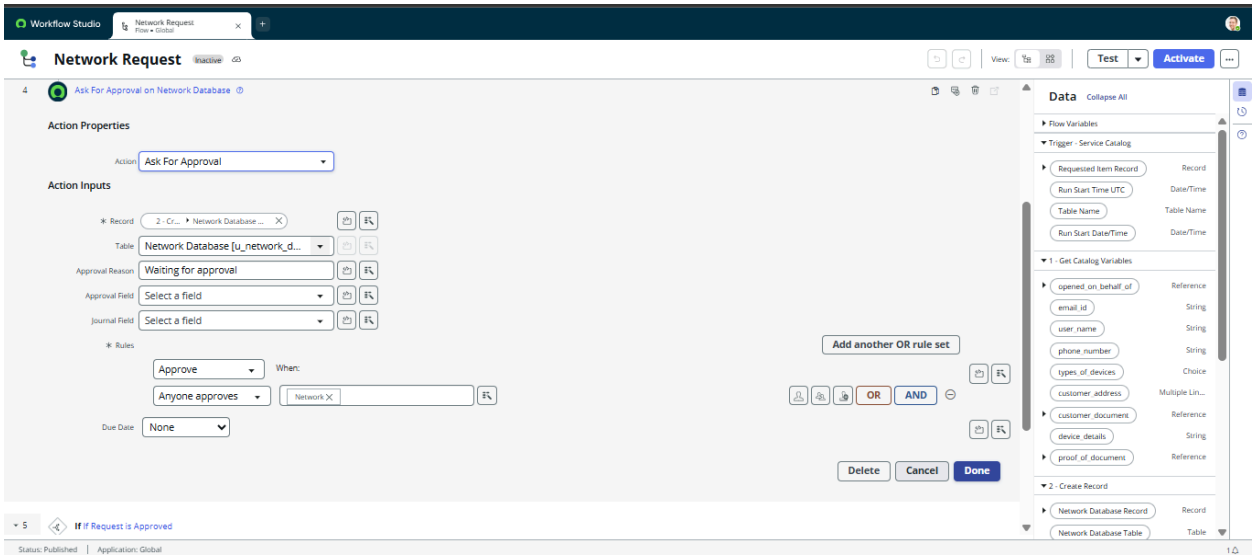
Approval Configuration Process

Step-by-Step Flow Logic

1. Flow Creation

- A new flow was created in **Flow Designer**
- Trigger configured based on **Service Catalog item submission (Network Request)**

Screenshot:

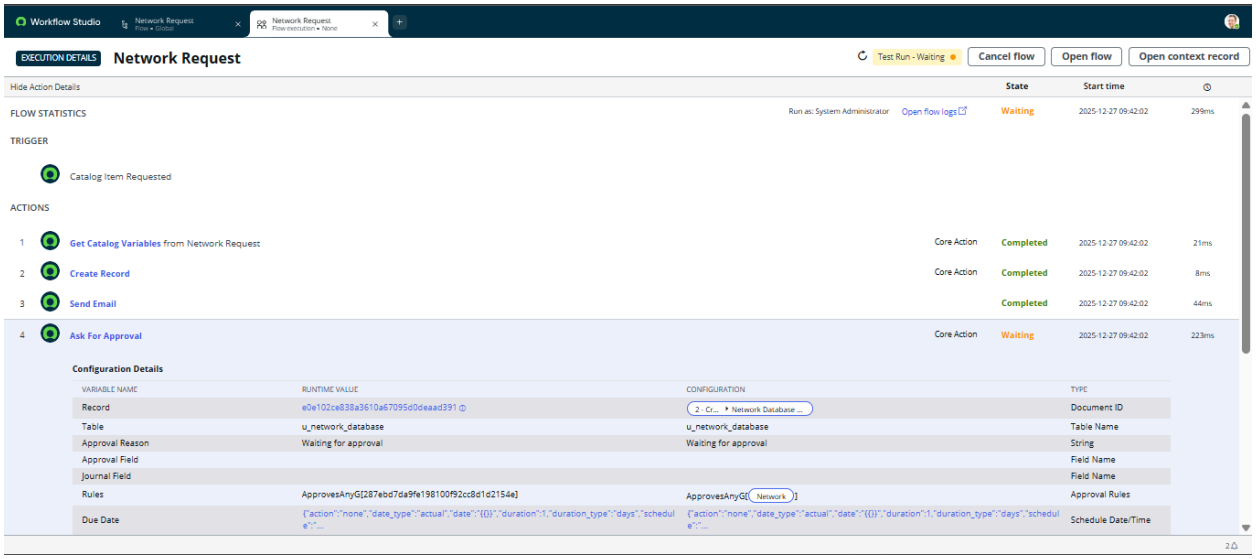


2. Ask for Approval Action

- **Ask for Approval** action was added to the flow

- Approval is requested for the newly created **u_network_database** record
- Approval reason set as *“Waiting for approval”*
- Approver dynamically assigned (group or user)

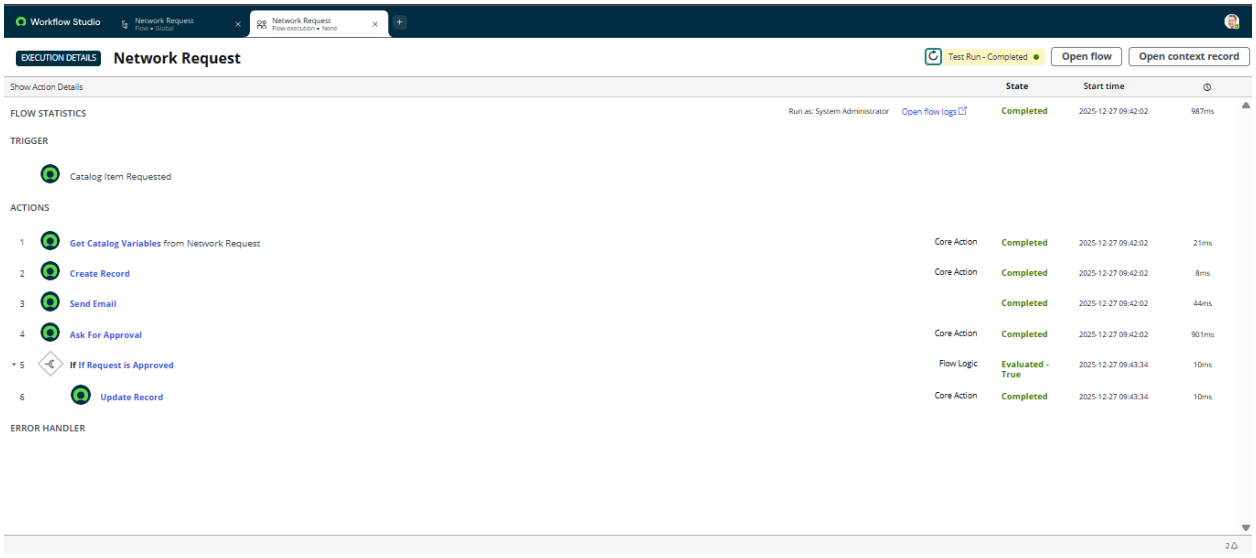
Screenshot:



3. Approval State Validation

- Flow Logic **If condition** was used
- Condition validates the approval state:
    - **Approved** ⟶ Continue the workflow
    - **Rejected** ⟶ Workflow does not proceed

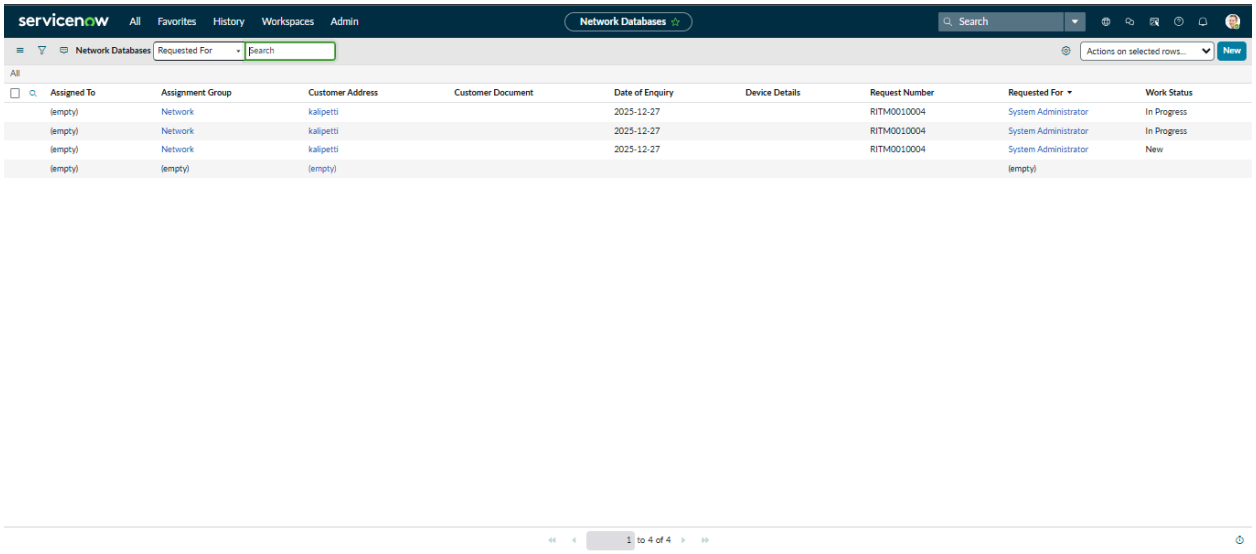
Screenshot:



4. Post-Approval Record Update

- Once approved, the Network Database record is updated automatically
- Request status is modified to reflect approval

Screenshot:



Variable Mapping (Core Data Handling)

Description

Catalog variables submitted from the Service Portal are mapped to corresponding fields in the custom table **u_network_database** using the **Create Record** action in Flow Designer.

This ensures structured storage of request data and eliminates manual data entry.

Example Variable Mapping

Catalog Variable	Custom Table Field
Request Number	u_request_number
Requested For	u_requested_for

Device Details	u_device_details
Customer Address	u_customer_address
Assignment Group	Network
Work Status	New
Date of Enquiry	Request Created Date

Flow Activation

Description

After validating all field mappings and approval logic, the flow was saved and activated.
Once activated, the flow automatically executes for every new Network Request submission.

Validation & Testing

Validation Performed

- Submitted Network Request from the Service Portal
- Verified flow execution using Flow Execution Details
- Confirmed approval request generation
- Approved the request successfully
- Verified record creation and update in **u_network_database**

Validation Results

- Request data stored correctly in the custom table
- Approval flow executed successfully
- Status updated only after approval
- No manual intervention required

Outcome

The implementation successfully achieved:

- Automated network request handling
- Secure, role-based access control
- Dynamic approval routing
- Structured and auditable data storage
- Improved traceability and compliance
- Readiness for reporting and dashboards

Final Conclusion

The Automated Network Request Management system effectively integrates ServiceNow Service Catalog, Flow Designer, Access Control Rules, and approval workflows.
This implementation reduces manual effort, enhances data security, and provides a scalable foundation for enterprise-level network request management.