

# **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

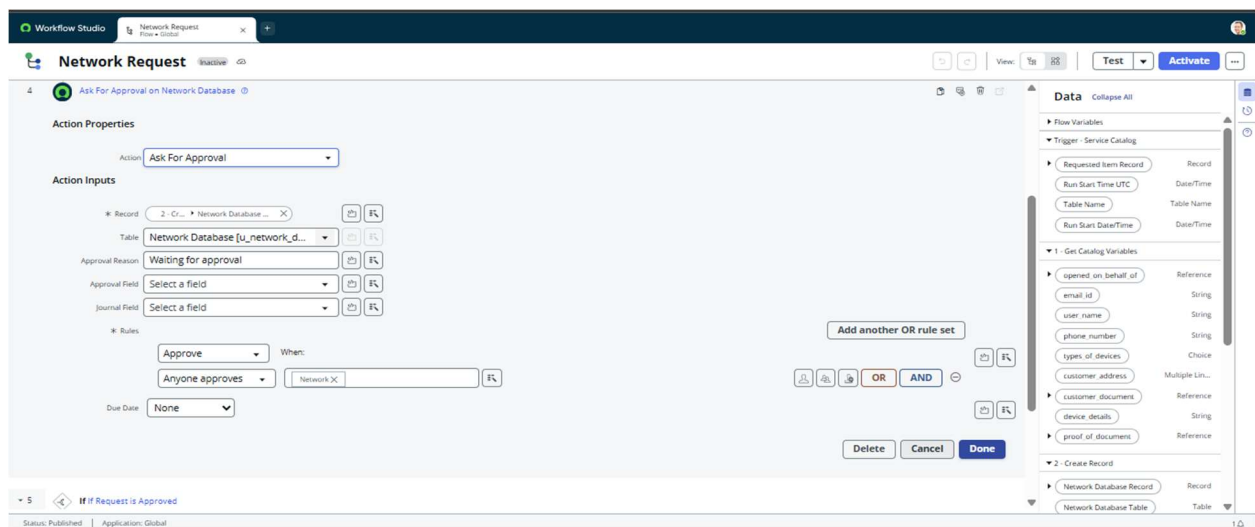
This design supports scalable governance and improves compliance and auditability.

## 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**)



## 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)

The screenshot shows the 'Ask for Approval' action configuration in the 'Network Request' flow. The flow is currently in a 'Waiting' state. The configuration details are as follows:

| VARIABLE NAME   | RUNTIME VALUE   | CONFIGURATION   | TYPE               |
|-----------------|---|---|--------------------|
| Record          | w0e102ce838a3610a67095d0deead391 @  | 2. Cr... Network Database ...   | Document ID        |
| Table           | u_network_database  | u_network_database  | Table Name         |
| Approval Reason | Waiting for approval  | Waiting for approval  | String             |
| Approval Field  |   |   | Field Name         |
| Journal Field   |   |   | Field Name         |
| Rules           | ApprovesAnyG[287ebd7da9fe19810092cc8d1d2154e]   | ApprovesAnyG[Network]   | Approval Rules     |
| Due Date        | {'action':'none','date_type':'actual','date':{'@':'duration':'1','duration_type':'days','schedule':'...}} | {'action':'none','date_type':'actual','date':{'@':'duration':'1','duration_type':'days','schedule':'...}} | Schedule Date/Time |

## 3. Approval State Validation

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

|                     |  |                              |                  |                      |                     |                     |
|---------------------|--|------------------------------|------------------|----------------------|---------------------|---------------------|
| Workflow Studio     |  | Network Request              | Network Request  | Test Run - Completed | Open flow           | Open context record |
| EXECUTION DETAILS   |  | Network Request              |                  |                      |                     |                     |
| Show Action Details |  | State                        |                  |                      |                     |                     |
| FLOW STATISTICS     |  | Run as: System Administrator | Open flow logs   | Completed            | 2025-12-27 09:42:02 | 987ms               |
| TRIGGER             |  | Catalog Item Requested       |                  |                      |                     |                     |
| ACTIONS             |  |                              |                  |                      |                     |                     |
| 1                   | Get Catalog Variables from Network Request | Core Action                  | Completed        | 2025-12-27 09:42:02  | 21ms                |                     |
| 2                   | Create Record                              | Core Action                  | Completed        | 2025-12-27 09:42:02  | 8ms                 |                     |
| 3                   | Send Email                                 |                              | Completed        | 2025-12-27 09:42:02  | 44ms                |                     |
| 4                   | Ask For Approval                           | Core Action                  | Completed        | 2025-12-27 09:42:02  | 901ms               |                     |
| 5                   | If If Request is Approved                  | Flow Logic                   | Evaluated - True | 2025-12-27 09:43:34  | 10ms                |                     |
| 6                   | Update Record                              | Core Action                  | Completed        | 2025-12-27 09:43:34  | 10ms                |                     |
| ERROR HANDLER       |  |                              |                  |                      |                     |                     |

## 4. Post-Approval Record Update

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

|  |             |                  |                  |                   |                 |                |                |                      |             |
|--|-------------|------------------|------------------|-------------------|-----------------|----------------|----------------|----------------------|-------------|
| servicenow                             |             |                  |                  |                   |                 |                |                |                      |             |
| All Favorites History Workspaces Admin |             |                  |                  |                   |                 |                |                |                      |             |
| Network Databases                      |             |                  |                  |                   |                 |                |                |                      |             |
| Requested For Search                   |             |                  |                  |                   |                 |                |                |                      |             |
| All                                    |             |                  |                  |                   |                 |                |                |                      |             |
| <input type="checkbox"/>               | Assigned To | Assignment Group | Customer Address | Customer Document | Date of Enquiry | Device Details | Request Number | Requested For        | Work Status |
|  | (empty)     | Network          | kalipetti        |                   | 2025-12-27      |                | RITM0010004    | System Administrator | In Progress |
|  | (empty)     | Network          | kalipetti        |                   | 2025-12-27      |                | RITM0010004    | System Administrator | In Progress |
|  | (empty)     | Network          | kalipetti        |                   | 2025-12-27      |                | RITM0010004    | System Administrator | New         |
|  | (empty)     | (empty)          | (empty)          |                   |                 |                |                | (empty)              |             |

## 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.