Data Architecture

1. Objective

The Automated Network Request Management application in ServiceNow follows a well-defined data architecture to manage network-related service requests.
This architecture ensures secure data storage, easy traceability, and smooth automation across the request lifecycle, supporting reporting and compliance requirements.

2. Central Data Repository

A dedicated custom table called **Network Database** has been implemented to act as the main storage layer for all network service requests raised through the Service Catalog.

Table Details:

- **Label:** Network Database
- **Table Name:** u_network_database
- **Scope:** Global
- **Usage:** Captures and stores structured data from network-related catalog requests

3. Data Storage Design

The **u_network_database** table is designed to hold comprehensive request information, including:

- Requester and user-related details
- Device and network-specific information
- Assignment and fulfillment data
- Current request status

Data population occurs automatically through **Flow Designer**, eliminating manual entry and ensuring consistency.

4. Field Design and Controls

Key Field Types Implemented:

- **Reference Fields**
  - Assigned To → User (sys_user)
  - Assignment Group → Group (sys_user_group)
- **Status Management**
  - Work Status is configured as a choice field to ensure uniform status values across all requests.
- **System-Managed Fields**
  - Sys ID, Created On, Created By, and Updated fields are auto-generated and protected from modification.
- **Mandatory Data Elements**
  - Request Number
  - Work Status
  - Assigned To (as required by workflow stage)

5. Integration with Standard ServiceNow Tables

The custom network database table is linked with existing ServiceNow tables to ensure seamless system integration:

- **User Table:** Supports requester identification and assignment
- **Group Table:** Enables routing of requests to appropriate network support teams

These integrations provide:

- Controlled access based on roles
- Clear accountability during request handling
- Alignment with ServiceNow task and workflow mechanisms

6. Request Data Lifecycle

The flow of data within the system follows a structured lifecycle:

1. Request submission through the Service Catalog
2. Automatic extraction of catalog variables
3. Creation of a record in u_network_database
4. Continuous updates during approval and execution
5. Final status capture for audit and reporting

7. Summary

The data architecture for the Automated Network Request Management solution is designed for scalability, accuracy, and audit readiness.

By combining a custom data table with ServiceNow's built-in user and group structures, the system delivers efficient automation, reliable tracking, and compliance with ITSM best practices.