Data Architecture

Purpose of Data Architecture

The purpose of this document is to describe the data model and table structure used in the *Automated Network Request Management* application developed in ServiceNow.

The data architecture ensures that all network-related requests are stored in a structured, secure, and auditable format to support automation, reporting, and tracking.

Overview of Custom Tables

To store and manage network request information, a custom table named **Network Database** has been created.

Attribute	Value
Table Label	Network Database
Table Name	`u_network_database`
Application Scope	Global
Purpose	Store structured data captured from Service Catalog network requests

This table acts as the central data repository for all network service requests submitted through the ServiceNow Service Catalog.

Custom Table: u_network_database

The u_network_database table stores all essential details related to network requests, including requester information, device details, assignment details, and work status.
The table is populated automatically through Flow Designer automation when a catalog item is submitted.

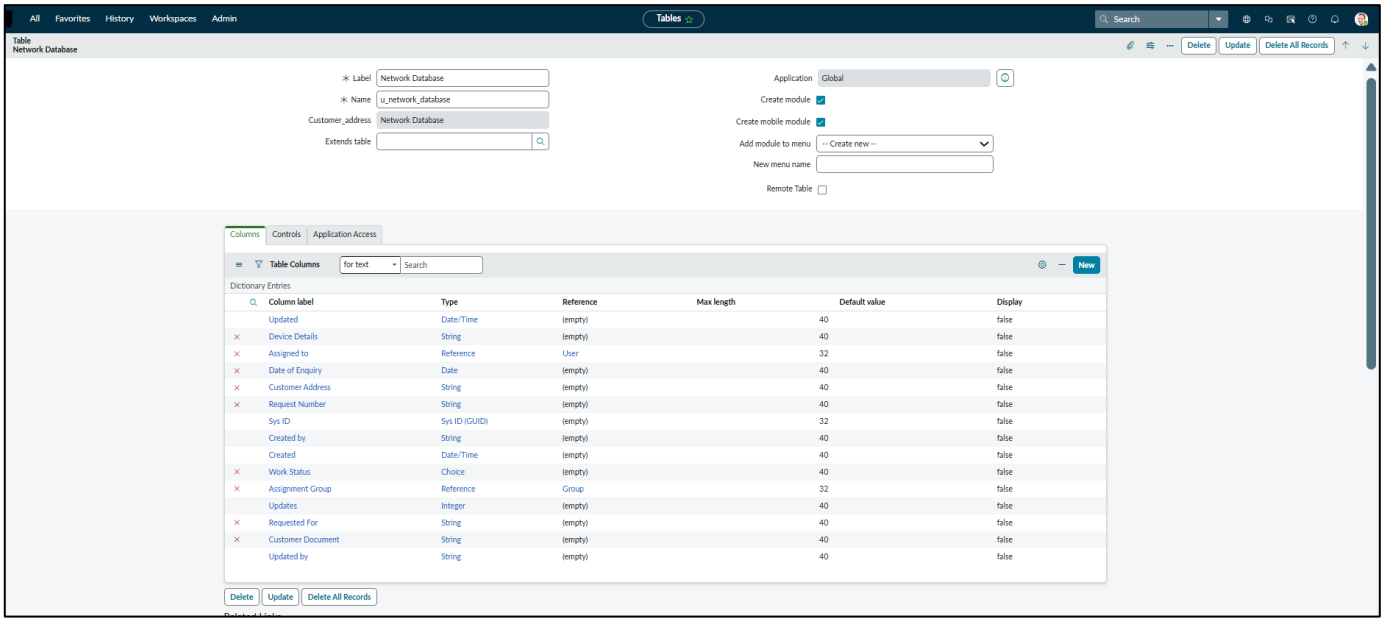

Figure 1: Network Database (u_network_database) table structure in ServiceNow

Field Properties

- Reference Fields:
    - Assigned To → References User table
    - Assignment Group → References Group table
- Choice Field:
    - Work Status is a choice field to maintain standardized request status values

- System Fields:
    - Fields like Sys ID, Created, Created By, Updated are system-generated and read-only
- Mandatory Fields:
    - Request Number
    - Work Status
    - Assigned To (based on workflow stage)

Table Relationships

The u_network_database table maintains relationships with existing ServiceNow tables:

- **User Table (sys_user)**
  Used for requester and assignment references.
- **Group Table (sys_user_group)**
  Used to route requests to appropriate fulfillment teams.

These relationships ensure:

- Role-based access control
- Proper assignment and accountability
- Seamless integration with ServiceNow task management

Data Flow Overview

1. User submits a **network request** via Service Catalog
2. Catalog variables are captured using **Flow Designer**
3. Data is mapped and stored in **u_network_database**

4. Records are updated automatically as approvals and fulfillment progress
5. Final status is recorded for tracking and reporting

Conclusion

The data architecture of the Automated Network Request Management system ensures a **clean, scalable, and auditable data structure**.

By using a custom table integrated with ServiceNow's native user and group tables, the system supports efficient automation, reliable tracking, and compliance with IT service management best practices.