Data Architecture Document

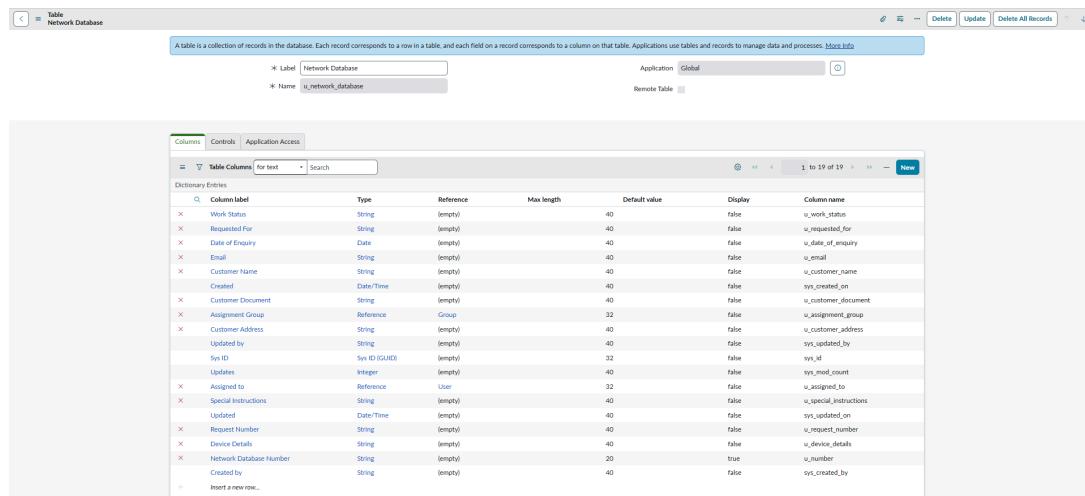## Purpose of Data Architecture

The purpose of this document is to define the data model, table structure, and relationships used in the **Automated Network Request Management System** developed on the ServiceNow platform.
 The data architecture ensures that all network-related requests are stored in a **structured, secure, scalable, and auditable manner**, enabling efficient automation, reporting, and compliance.

Overview of Custom Tables

To manage all network service requests, a custom table named **Network Database** has been created.This table acts as the **central data repository** for all network-related service catalog requests.

Table - 1 Network Database

Custom Table: u_network_database

The **u_network_database** table stores all critical information related to a network request, including:

- Requester details

- Device or service information

- Assignment and approval details

- Work status and fulfillment progress

Records are automatically created and updated through **Flow Designer automation** when a catalog item is submitted.

Field Properties

Reference Fields

- Assigned To → References **sys_user**

- Assignment Group → References **sys_user_group**

Choice Fields

- Work Status → Used to maintain standardized request states such as *New, Approved, In Progress, Completed, Rejected*

System Fields

- Sys ID, Created, Created By, Updated, Updated By

- System-generated and read-only

Mandatory Fields

- Request Number

- Work Status

- Assigned To (based on workflow stage)

Table Relationships

The custom table integrates with native ServiceNow tables:

- **User Table (sys_user)** – for requester and assignment tracking

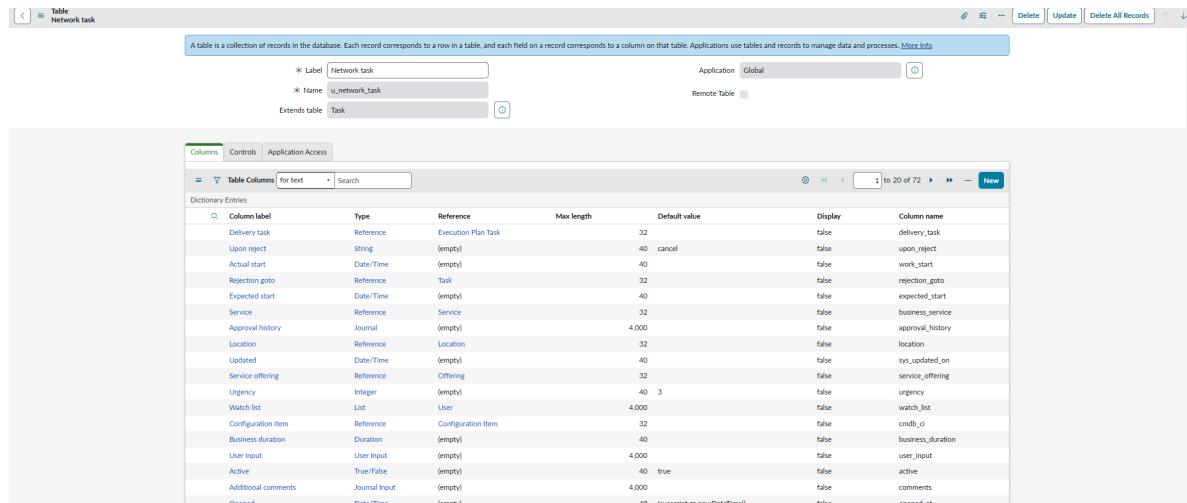- **Group Table (sys_user_group)** – for routing requests to fulfillment teams

These relationships enable:

- Role-based access control

- Proper accountability

- Seamless integration with ServiceNow task management

Data Flow Overview

1. User submits a network request via Service Catalog

2. Catalog variables are captured by Flow Designer

3. Data is mapped into **u_network_database**

4. Approval and fulfillment updates modify the record

5. Final status is stored for reporting and audit purposes

Table - 2 Network Task

Conclusion

The data architecture ensures a **clean, scalable, and auditable system**.
 By leveraging a custom table integrated with ServiceNow's native data model, the solution supports automation, transparency, and ITSM best practices.