

Phase 5: Deployment, Documentation & Final Presentation

Document Technical Blueprint

Overview

This technical blueprint documents the internal architecture, automation logic, and data flow implemented for the **Automated Network Request Management in ServiceNow** solution. It provides a detailed breakdown of Flow Designer workflows, catalog variable mappings, custom table structures, approval logic, and portal-level configurations, ensuring the solution is transparent, maintainable, and reproducible.

System Architecture Overview

The solution is built using native ServiceNow components and follows a low-code, configuration-driven approach:

- Service Catalog for user request intake
 - Flow Designer for automation and approvals
 - Custom tables for structured data storage
 - UI Policies and Variable Sets for form behavior
 - Service Portal for end-user interaction
-

Flow Designer Workflow

Flow Name

Network Request

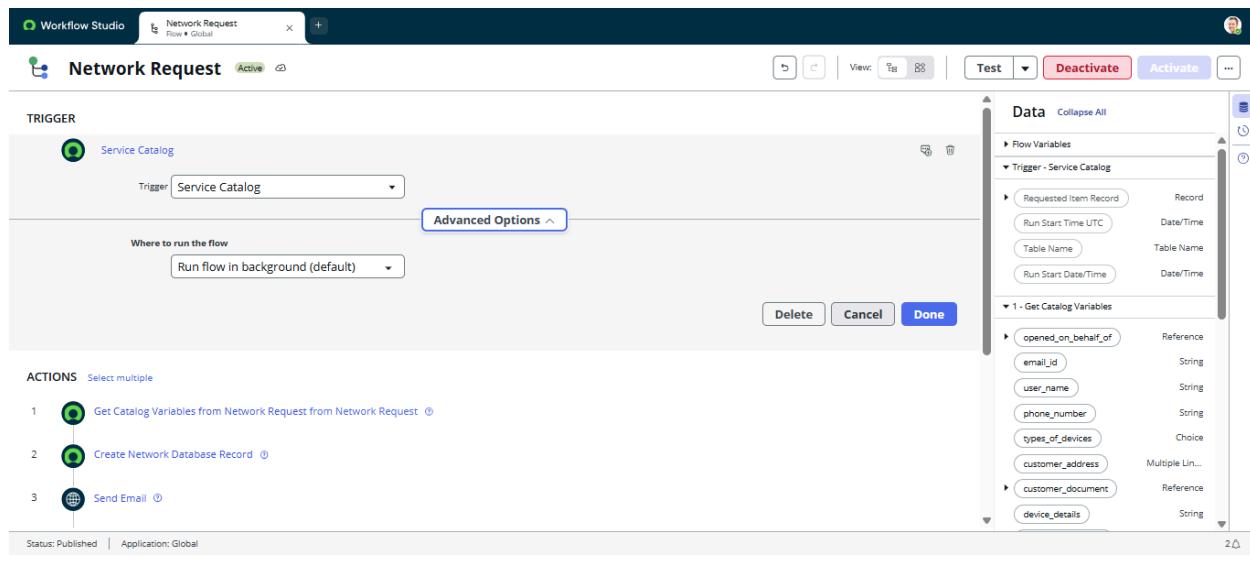
Trigger Configuration

- **Trigger Type:** Service Catalog
- **Trigger Condition:** Requested Item Submitted
- **Catalog Item:** Network Request

This trigger initiates automation immediately after a user submits a network request from the Service Portal.

Screenshot (Recommended)

Flow trigger configuration showing Service Catalog → Requested Item



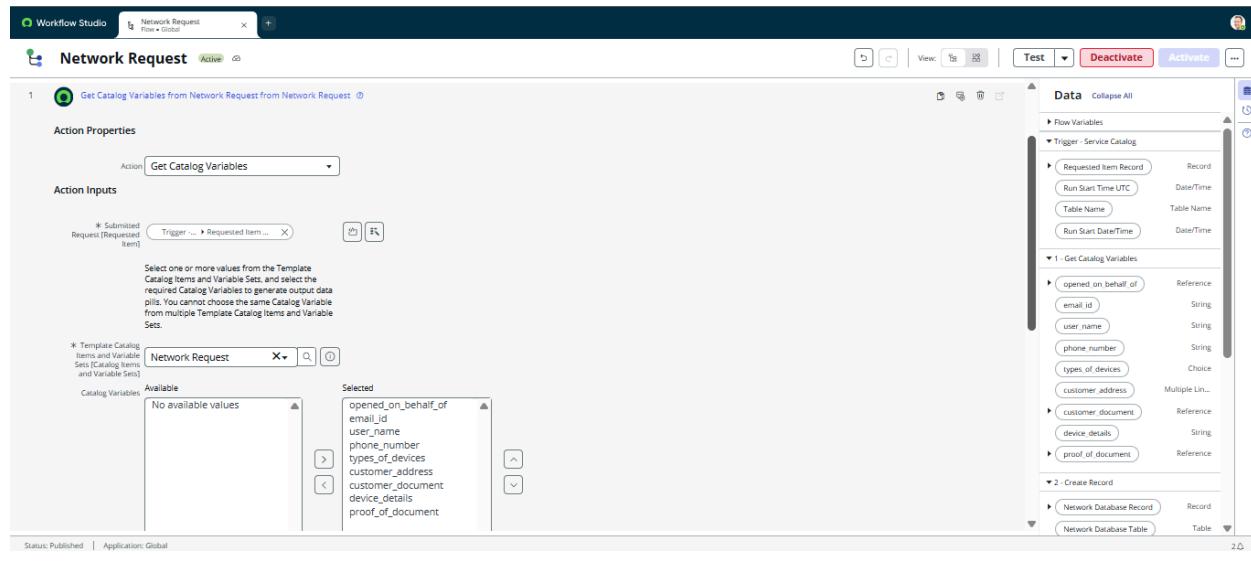
Flow Actions Overview

1. Get Catalog Variables

- Retrieves all submitted catalog variables from the request
- Variables selected explicitly to avoid data loss
- Acts as the primary data source for downstream actions

Screenshot (Recommended)

Get Catalog Variables action with selected variables



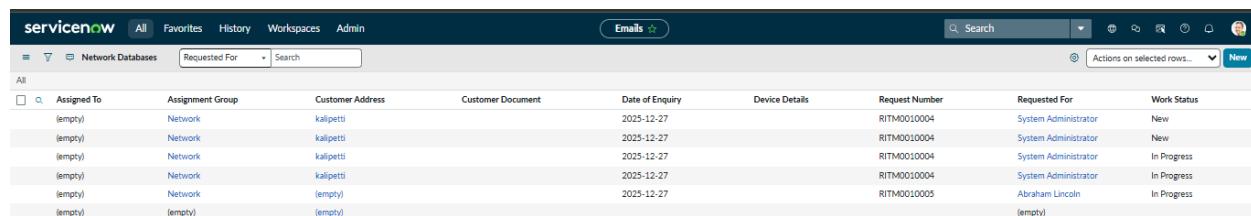
The screenshot shows the 'Workflow Studio' interface with a 'Network Request' workflow active. The 'Get Catalog Variables' action is selected. In the 'Action Inputs' section, under 'Template Catalog Items and Variable Sets', a 'Network Request' catalog item is chosen. The 'Available' and 'Selected' lists show variables such as 'opened_on_behalf_of', 'email_id', 'user_name', 'phone_number', 'types_of_devices', 'customer_address', 'customer_document', 'device_details', and 'proof_of_document'. The 'Selected' list contains all these variables. On the right side, a 'Data' panel displays various service catalog items and their details.

2. Create Record – Network Database

- Creates a new record in the custom table **u_network_database**
- Stores request data in a structured format for tracking and reporting

Screenshot (Recommended)

Create Record action with table set to **u_network_database**



The screenshot shows the ServiceNow 'Network Databases' table. The columns include 'Assigned To', 'Assignment Group', 'Customer Address', 'Customer Document', 'Date of Enquiry', 'Device Details', 'Request Number', 'Requested For', and 'Work Status'. There are six records listed:

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	New
(empty)	Network	kalipetti		2025-12-27		RITM0010004	System Administrator	New
(empty)	Network	kalipetti		2025-12-27		RITM0010004	System Administrator	In Progress
(empty)	Network	kalipetti		2025-12-27		RITM0010004	System Administrator	In Progress
(empty)	(empty)	(empty)		2025-12-27		RITM0010005	Abraham Lincoln	In Progress

Variable-to-Field Mapping Logic

Catalog variables are mapped to corresponding fields in the custom table using the **Add Fields (+)** option in Flow Designer.

Example Mapping

Catalog Variable	Custom Table Field
Request Number	u_request_number
Requested For / Opened on behalf of	u_requested_for
Email ID	u_email
Phone Number	u_phone
Device Type	u_device_type
Device Details	u_device_details
Customer Address	u_customer_address
Assignment Group	Network

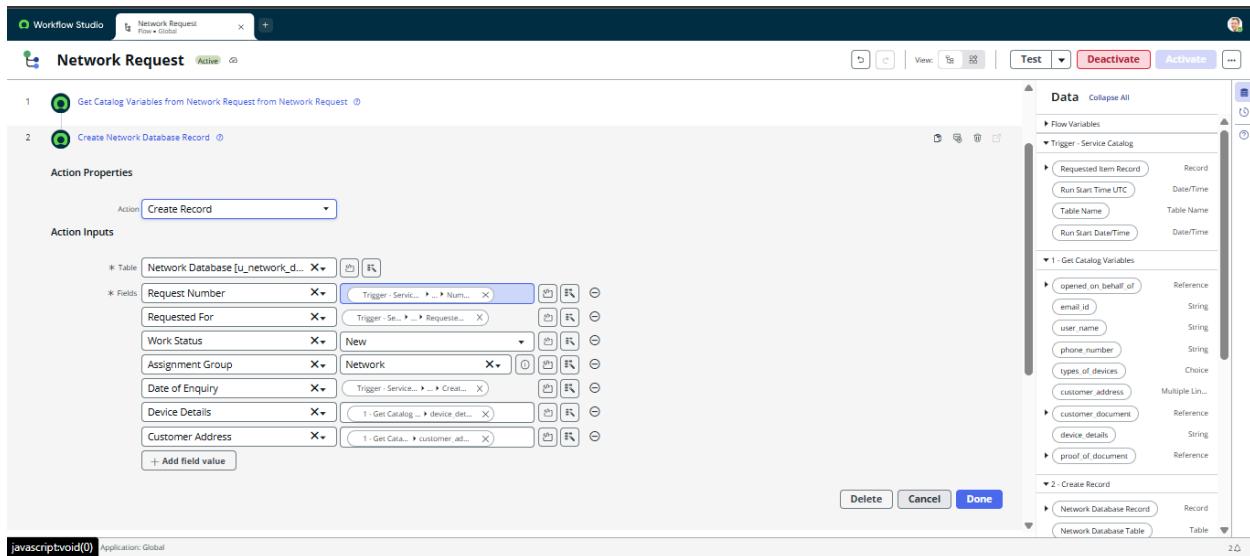
Work Status	New
Date of Enquiry	Request Created Date

This mapping ensures:

- No manual data entry
- Consistent data persistence
- Full traceability from request to record

Screenshot (Recommended)

Field mapping section showing multiple variable mappings



Approval Logic Configuration

Ask for Approval Action

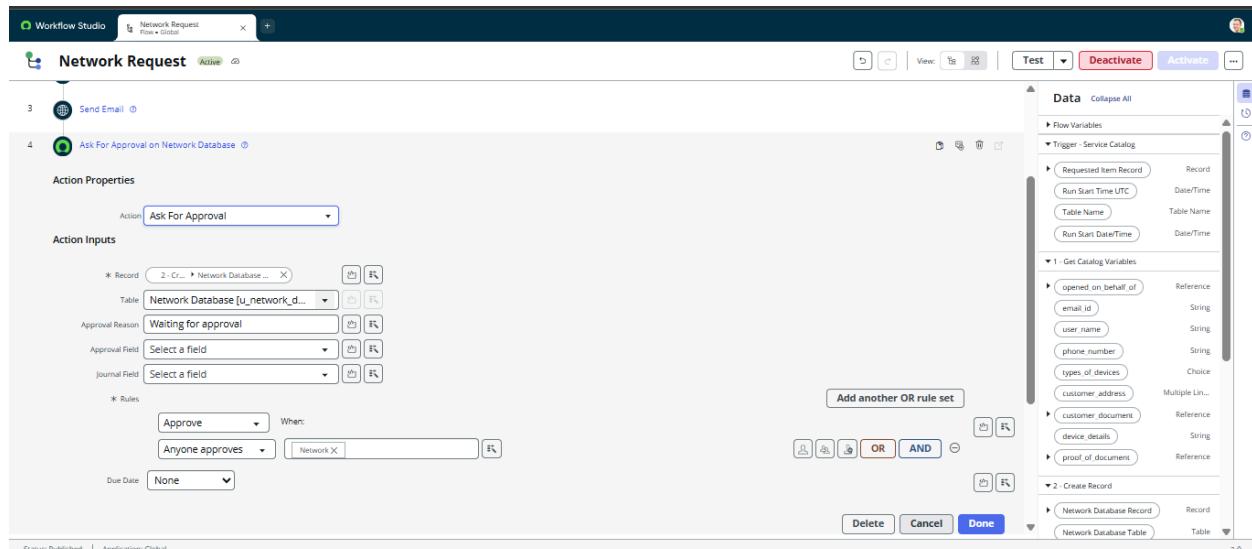
- Approval requested for the newly created `u_network_database` record
- Approval reason: *Waiting for approval*
- Approver assigned dynamically (user or group)

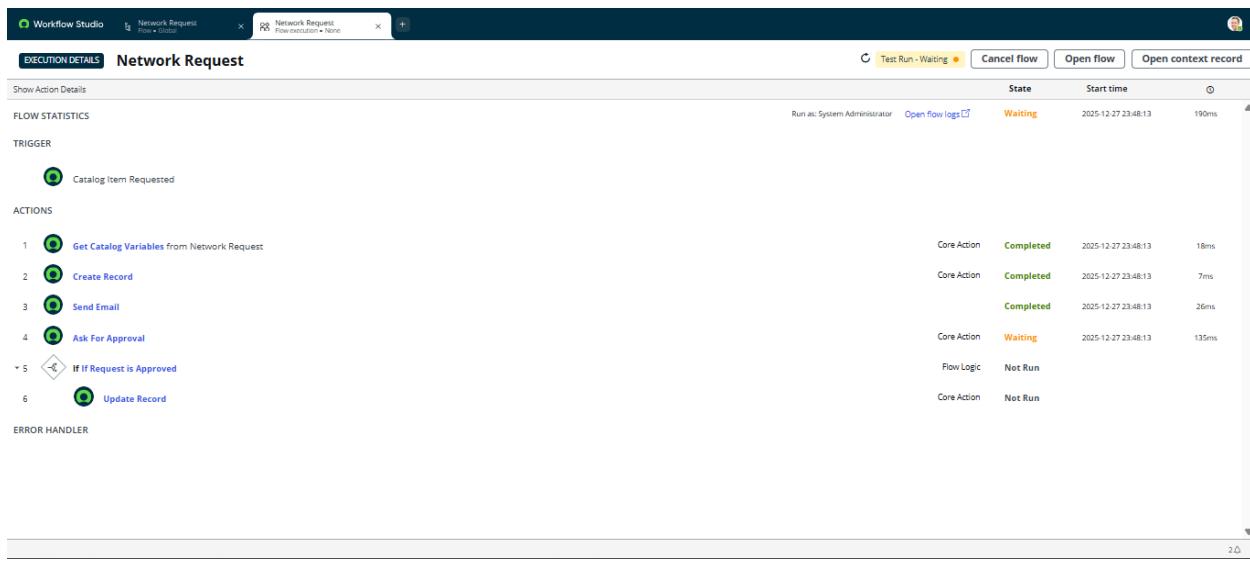
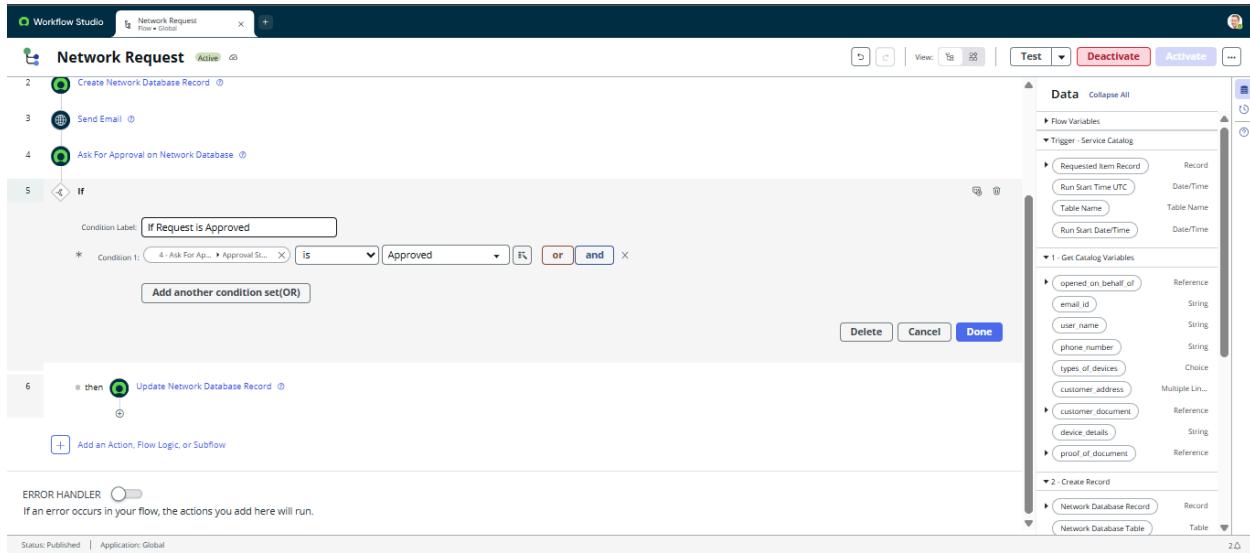
Flow Logic – If Condition

- Approval state is evaluated using Flow Logic
- Conditions:
 - **Approved:** Continue workflow and update record
 - **Rejected:** Stop or mark request accordingly

📸 Screenshot (Recommended)

Ask for Approval action and If condition configuration





Post-Approval Record Update

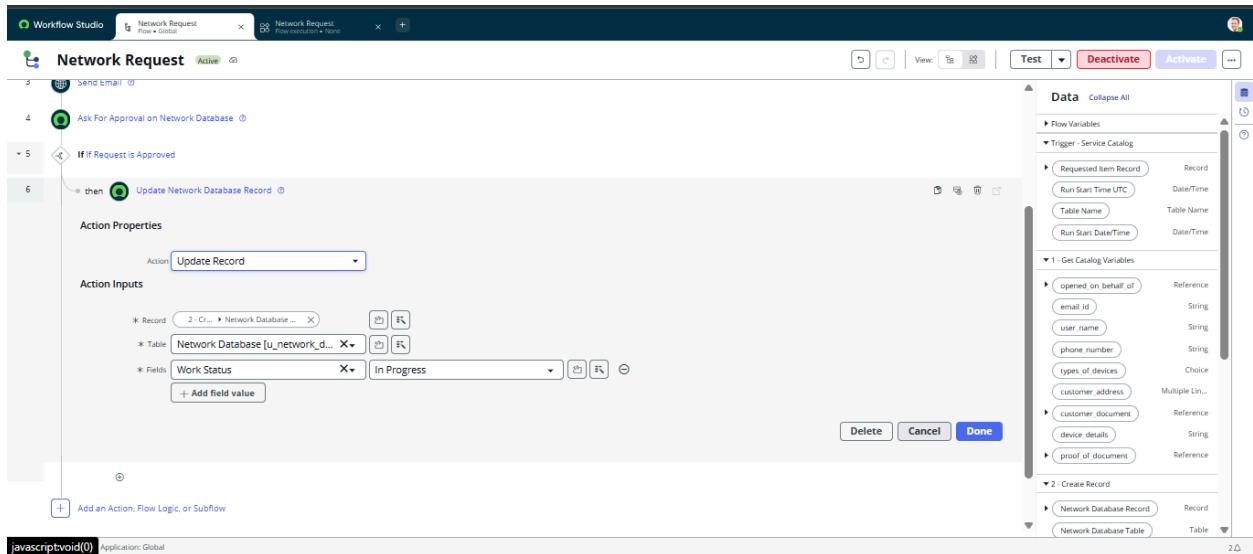
Once approval is completed:

- Network Database record is updated automatically

- Work Status or approval-related fields are modified
- Ensures request lifecycle consistency

Screenshot (Optional)

Update Record action configuration



Custom Table Schema

u_network_database

This table stores all submitted network requests in a structured format.

Key fields include:

- u_request_number
- u_requested_for (Reference → sys_user)
- u_email
- u_phone

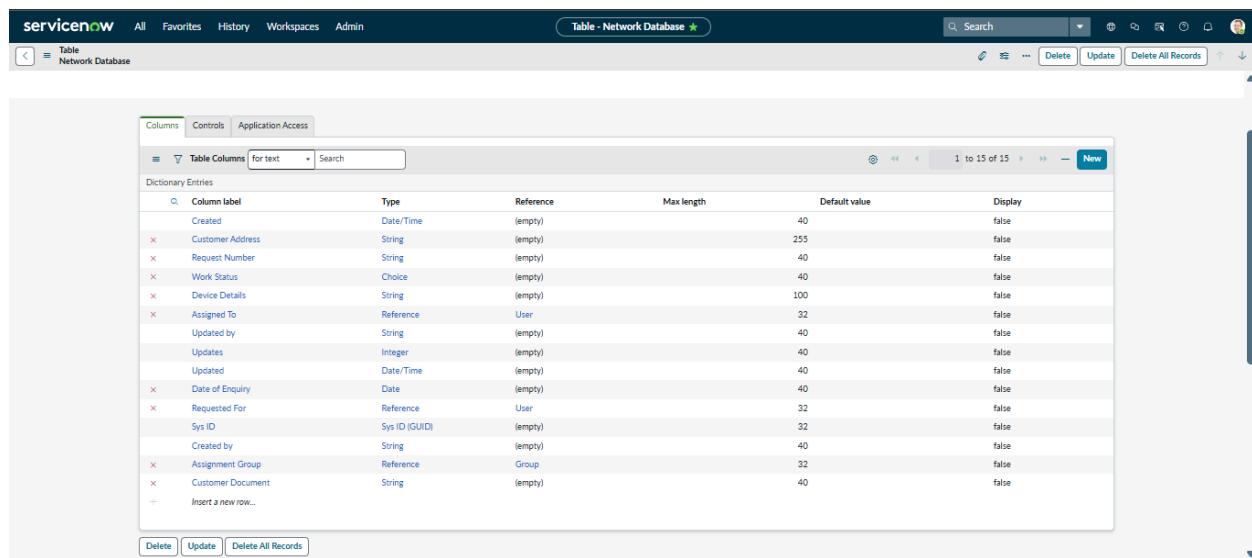
- u_device_type
- u_device_details
- u_customer_address
- u_assignment_group
- u_work_status
- u_date_of_enquiry

u_network_task (if applicable)

- Used for future task tracking or extension
- Supports scalability of the solution

Screenshot (Optional)

Table schema showing fields and data types



The screenshot shows the ServiceNow Table - Network Database interface. The top navigation bar includes 'servicenow' and links for 'All', 'Favorites', 'History', 'Workspaces', and 'Admin'. The title bar says 'Table - Network Database'. Below the title bar are buttons for 'Search', 'New', 'Delete', 'Update', and 'Delete All Records'. The main area displays a table titled 'Dictionary Entries' with columns: 'Column label', 'Type', 'Reference', 'Max length', 'Default value', and 'Display'. The table lists various fields with their corresponding data types and properties. At the bottom of the table are buttons for 'Delete', 'Update', and 'Delete All Records'.

Column label	Type	Reference	Max length	Default value	Display
Created	Date/Time	(empty)	40		false
Customer Address	String	(empty)	255		false
Request Number	String	(empty)	40		false
Work Status	Choice	(empty)	40		false
Device Details	String	(empty)	100		false
Assigned To	Reference	User	32		false
Updated by	String	(empty)	40		false
Updates	Integer	(empty)	40		false
Updated	Date/Time	(empty)	40		false
Date of Enquiry	Date	(empty)	40		false
Requested For	Reference	User	32		false
Sys ID	Sys ID (GUID)	(empty)	32		false
Created by	String	(empty)	40		false
Assignment Group	Reference	Group	32		false
Customer Document	String	(empty)	40		false
Insert a new row...					

Service Portal Configuration

- Network Request catalog item is exposed via Service Portal
- Variable Sets used to group user information
- UI Policies control conditional visibility
- No custom portal widgets were required (native portal features used)



Note:
If no custom widgets were developed, this is explicitly documented for clarity.

Technical Benefits

- Low-code and maintainable architecture
 - Clear separation of UI, logic, and data layers
 - Dynamic approvals without hard-coding
 - Ready for extension and reporting
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Outcome

The technical blueprint confirms that the Automated Network Request Management solution is:

- Architecturally sound
- Secure and scalable
- Fully automated
- Easy to maintain and enhance

