

Forward Enterprise

Run and Secure Your Network with Mathematical Certainty

Overview

Your network should be your most trusted asset. Forward Enterprise builds a mathematically accurate digital twin of every router, switch, firewall, load balancer, and cloud instance across your hybrid environment, delivering a single verified source of truth to every network, security, cloud, and compliance team. Read-only by design, Forward Enterprise never risks production and gives teams the certainty to act without guesswork.

The result is a network that becomes the verified foundation your organization builds on. Network problems surface before production, not after users feel them. Changes ship with evidence. Security and compliance run continuously. And AI agents act on verified truth at machine speed.

The Outcome

When you trust a mathematically accurate digital twin, everything changes. Not incrementally, but fundamentally. Change windows shrink because impact is verified before anything touches production. Security gaps close because every possible path is visible, not assumed. Compliance stops being a quarterly fire drill. The teams carrying the weight of your network's complexity finally have something solid beneath them. That's not a promise; that's what verified truth delivers.

Forward Enterprise Use Cases

- **Accelerated Troubleshooting:** Eliminate the discovery phase of troubleshooting. Replace tribal knowledge and stale diagrams with a vendor-agnostic digital twin. Instantly trace packet paths, query complex policies, and resolve connectivity tickets across your hybrid estate using a mathematically accurate model of your live network.
- **Security Posture Verification:** Stop assuming isolation. Map every potential attack vector to surface reachable vulnerabilities that scanners miss. Move beyond static audits to active path verification, proving defenses block threats.
- **Change Management:** Turn the CAB from a subjective debate into a data-driven gate. Swap best-guess impact assessments for mathematical proof. Test every routing, NAT, and ACL change against the digital twin to catch catastrophic errors in staging and ship with a definitive pass/fail record.
- **Agentic operations, without the risk:** Run complex network workflows at machine speed, without putting production at risk. Every action teams, and AI agents take is verified against the digital twin before it executes, catching unintended consequences before they reach the network.

Capabilities

Network Digital Twin

Builds a mathematically accurate model of every router, switch, firewall, load balancer, and cloud instance across the entire hybrid network.

Change Verification

Tests every routing, firewall, ACL, NAT, and segmentation change against the digital twin and returns pass/fail evidence before anything reaches production.

Security Posture

Traces every reachable path and policy across your hybrid network to surface the vulnerabilities an attacker could exploit.

Trusted AI

Answers natural language questions and runs multi-agent workflows against the digital twin, verifying every proposed action before it executes.

Why It Matters

1. Replace assumptions with certainty

When teams operate from the same source of truth, response times shrink, troubleshooting cycles collapse, and the cross-team disagreements that stall incidents disappear. Decisions stop costing the organization time, money, and credibility.

2. Accelerate delivery while eliminating risk

Change velocity becomes a board-level asset, not a board-level risk. Risky changes are caught at design time, not after deployment, compressing windows from weeks to days and turning rollbacks into a rare exception.

3. Automate security and compliance

Audit readiness becomes a continuous state, not a quarterly project. Provable evidence for DISA STIGs, PCI DSS, HIPAA, ISO 27001, and NIST 800-53 reduces regulatory exposure and the operational cost of demonstrating control.

4. Secure agentic networking

Give teams the leverage of AI without inheriting a new class of operational risk. Verification gates every agent's action before it reaches the network, so scale comes from automation; control stays with the organization.

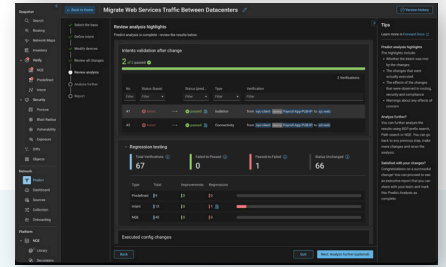
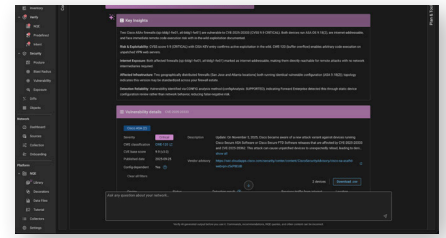
Forward Enterprise: Delivering Strategic Value

Verified truth, at AI speed

Forward AI delivers the power of a mathematically accurate and trust-worthy digital twin to every operator and automated agent, eliminating guesswork and manual analysis. Teams instantly understand network behavior and act with confidence across complex environments. By making expert-level knowledge accessible without requiring deep domain expertise or constant escalation, Forward AI enables teams to ask complex questions and receive verified, evidence-backed answers in seconds.

Verify before you deploy

Forward Predict verifies every proposed network and security change against the digital twin before a single command reaches production. It evaluates routing updates, firewall rules, ACL changes, and segmentation policies end-to-end to determine their impact on security, connectivity, and compliance. By shifting CAB approvals from subjective judgment calls to evidence-backed decisions, Forward Predict compresses delivery cycles from weeks to days and ensures higher first-attempt success rates.



Capabilities

Network Query Engine

NQE turns fragmented multi-vendor CLI data into a normalized, vendor-agnostic model, so you can ask any question across configs, state, and topology, and get a structured answer in seconds.

Security Posture & Blast Radius

Mathematically calculate every reachable path from any compromised asset. Map blast radius, expose hidden lateral-movement risk, and prove segmentation is intact, across on-prem and multi-cloud.

Path Search

Visualize every possible end-to-end path a packet can take across your hybrid network. Hop-by-hop, L2 through L7, on-prem and cloud, search by IP, MAC, VLAN, or application flow.

Network Verification & Intent Checks

Continuously enforce business rules against the digital twin. Custom intent checks validate forwarding behavior, segmentation, and policy alignment, proactively catching violations

Behavior Diff

A network time machine. Side-by-side comparison of configs, policies, and behaviors between any two snapshots, pinpointing what changed and why it matters.

Vulnerability Management

Proactively detect CVE-affected assets across the global network and rank them by severity, reachability, and exposure. Move from what's vulnerable to what's exploitable, and from where.

30+

Supported Vendors

4 Public Clouds



IBM Cloud

Google Cloud



Azure

35+

Vendor Operating Systems

15+ Technology Integrations

alkira



ARISTA



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netbox

RAPIDD



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Get started

Request a demo at www.forwardnetworks.com/request-a-demo