Forward Enterprise for Data Center Networks
Why Data Centers Need a New Approach

Data center networks are under unprecedented pressure—driven by multi-vendor complexity, hybrid cloud expansion, AI workloads, and the surge of east-west traffic inside the fabric. Security requirements are intensifying, while traditional tools still rely on partial views and guesswork. The result: blind spots, outages, and reactive firefighting.

Forward Networks changes that. By creating a mathematically accurate digital twin of your network, it brings precision, predictability, and confidence to every operation. According to IDC, organizations using Forward Networks realize an average of $14.2M in annual value, 33% fewer unplanned outages, and 55% faster resolution when issues occur.

WHAT FORWARD ENTERPRISE DOES FOR YOUR DATA CENTER

1. Build a Digital Twin of Your Network
- The platform ingests configuration and state from every packet-forwarding device—switches, routers, firewalls, load balancers, and cloud instances—across your on-premises and hybrid environments
- It then constructs a vendor-agnostic operational model that determines exactly how any packet entering any port will be forwarded, routed, dropped, or mirrored
- Multi-vendor. Hybrid cloud. AI-ready

**2. Transform Data Center Operations**
- **Network Query Engine (NQE):** Query your network like a database — Am I affected by this exploited CVE? How did this IP change in the past two weeks?
- **Topology and path analysis:** View any traffic path (east-west or north-south) across the data center with an always up-to-date topology of your environment
- **Unified source of truth:** Replace outdated diagrams and fragmented tools with an up-to-date, verified model of your entire network

3. Reduce Risk and Strengthen Resilience
- Change-impact prediction: Evaluate proposed changes (e.g., ACL rules, NAT policies) before deployment
- Continuous verification and compliance: Automatically validate network behavior against policies, SLAs, and regulatory standards (PCI-DSS, HIPAA, STIG, etc.)
- Security posture and vulnerability modeling: Identify what a compromised host could reach, highlight exposed devices, and analyze vulnerabilities without guesswork

4. Accelerate Operations and Lower Cost
- Faster troubleshooting: Up to 44% faster issue identification and 55% faster remediation
- Deployment speed: New hardware, software, and services deployed 71% faster
- Downtime reduction: 33% fewer unplanned incidents annually
- Operational efficiency: Customers reclaim the equivalent of 95 FTEs per year on average
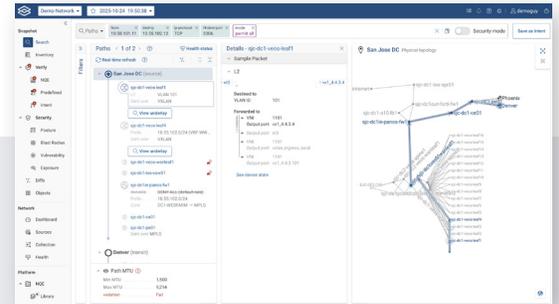
Full Data Center Path Analysis

TYPICAL DATA CENTER USE-CASES

- Pre-change verification for large switch/router upgrades or fabric redesigns
- East-west traffic path visualization for AI, HPC, virtualization, and storage workloads
- Verification of network readiness for new critical applications
- Multi-vendor fabric migrations and hybrid-cloud expansions
- Compliance audits of segmentation, ACLs, communication flows, and regulatory controls
- Security incident response: assess reachable assets from a compromised host and validate containment strategies

WHY FORWARD ENTERPRISE STANDS OUT

- **Mathematically accurate digital twin:** no sampling, no simulation, no guesswork
- **Vendor-agnostic:** works seamlessly across heterogeneous fabrics
- **Enterprise-scale:** thousands of devices, billions of paths, one model
- **Proven business impact:** validated by IDC and global customers
- **Flexible deployment:** SaaS or on-prem, built for scale and security

TAKE THE NEXT STEP

Turn your data center network into a strategic enabler for the AI era.
- Schedule a demo of the Forward Networks platform: **forwardnetworks.com/demo**
- Request our Digital Twin ROI calculator and case studies
- Start with a snapshot of your current fabric and roadmap to modernization
- Visit **docs.fwd.app** for Forward Enterprise documentation

FORWARD NETWORKS

Delivering agility, reliability, and security through the power of a network digital twin.