

Network Intelligence for Neoclouds and AI Data Centers

Optimize GPU cloud performance and maximize ROI with AI-driven network intelligence

Neoclouds and AI data centers face relentless performance demands where network blind spots, like microbursts, elephant flows, and east-west congestion, can stall workloads and leave expensive GPUs idle. These bottlenecks inflate job completion time (JCT) and complicate incident response across complex data center and hybrid edge networks.

Kentik provides the essential visibility needed to close these gaps. By unifying observability across data center fabrics, internet paths, and edge connectivity, Kentik delivers real-time network intelligence to eliminate congestion and accelerate JCT. With proactive monitoring and AI-powered insights, you can scale capacity confidently as AI demand grows and ensure the high-performance, secure environment your GPU cloud customers demand.

ELIMINATE AI FABRIC BLIND SPOTS

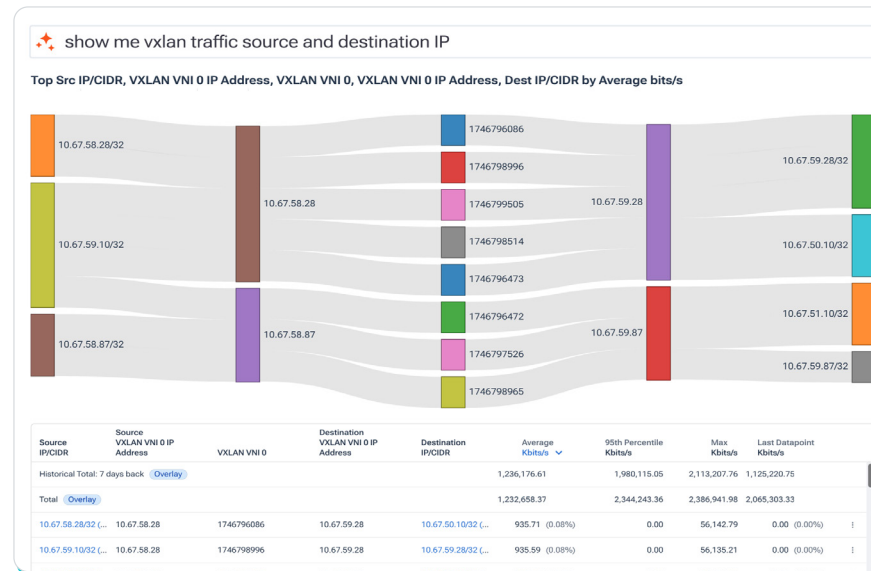
Correlate VXLAN overlays with underlay telemetry to expose microbursts and transient loss. High-fidelity streaming data pinpoints fabric congestion, isolating the specific flows and interfaces currently stalling your critical AI workloads.

DELIVER OPTIMAL PERFORMANCE & SPEED

Identify elephant flows in real time to prevent hot spots and stabilize latency for distributed training and inference. Optimize all traffic patterns to protect JCT, ensuring GPUs stay utilized rather than waiting.

PROTECT EXPERIENCE, MINIMIZE DOWNTIME

Validate SLAs via proactive synthetic testing while unifying traffic, device, and cloud signals. Use AI-guided investigations to accelerate root-cause isolation, shortening war rooms and restoring service faster than ever.



Key benefits for GPU cloud providers

Tame complexity and modernize operations

Replace fragmented tools with a unified view of traffic, routing, synthetics, and device health. Align teams on a single operational picture to shorten time to innocence and standardize execution across global fabrics.

Maximize profitability

Tie traffic to peering and transit economics to expose high-cost paths. Validate carrier billing and optimize routing decisions to improve margins while keeping operations lean and performance predictable.

Ensure reliability

Protect the customer experience with continuous visibility into fabric health. Fast detection of congestion and proactive availability validation ensure that sensitive AI infrastructure remains resilient and compliant.

Kentik network intelligence helps you:

Modernize operations and accelerate troubleshooting

- Consolidate monitoring, observability, and intelligence into a unified platform correlating traffic, device health, and cloud connectivity.
- AI-driven investigations transform complex queries into guided analysis, identifying exactly what changed to slash MTTR and resolve incidents faster.

Maximize fabric performance

- Protect user experience by detecting congestion early and pinpointing if issues are internal, upstream, or at an interconnect.
- Correlate overlay and underlay behavior to resolve east-west bottlenecks across AI clusters, while proactive mesh testing validates performance between PoPs and regions.

Control costs and optimize strategy

- Optimize peering and transit by analyzing traffic mix and shifting load to high-performance, low-cost interconnects. By tying transit and IX costs directly to traffic paths, you can prioritize optimizations that protect margins without sacrificing latency.

Scale infrastructure predictably and defend critical assets

- Scale infrastructure without surprises using automated capacity planning that forecasts growth based on real-world traffic.
- Safeguard critical inference and API endpoints with integrated DDoS detection and mitigation.

“Kentik Traffic Costs is like putting our connectivity spend under an X-ray. We now have instant visibility into which portions of our traffic are driving costs and exactly where to optimize for performance and savings.”

– Tomás Lynch, Senior Network Architect

Alert Details: UDP BADPORTS ATTACK

Alert State: Active | Dest IP/Port: 141.193.37.5 | Dest AS Number: 6169 | Src AS Number: 38121 | Device: p1_or

DDoS Attack Confirmation and Mitigation Plan

Troubleshoot this DDoS alert. Confirm if it's a real attack or normal traffic, summarize impact on our network and customers, and give me 3 immediate mitigation steps I can execute now.

Kentik AI

CONFIRMED: This is a REAL DDoS Attack

- Abnormal Traffic Pattern**
 - Baseline (1 hour before): 7 Gbps total to 141.193.37.5
 - During Attack: Gbps total (appears similar BUT composition changed dramatically)
 - Attack Traffic: 3.2 Gbps of pure UDP fragmentation flood (NEW traffic)
 - Normal Traffic: 3.8 Gbps (Microsoft, Facebook, Amazon - UNCHANGED)
- Attack Characteristics Confirm Malicious Intent**
 - Packet Size: 791-794 bytes (fragmented UDP packets)
 - Port: UDP Port 0 (invalid/suspicious)
 - Pattern: Sustained high-volume flood from 2 sources
 - Total Attack Volume: 1.68 Gbps from AS38121 + AS54833.
- Target is DOWN**
 - Ping test shows 100% packet loss
 - Target IP 141.193.37.5 is NOT responding
 - Service is completely unavailable

Network Topology

Layers: EDGE, SUPERSPINE, SPINE, LEAF, TOP OF BACK

Network Element: tor_s_dflw1 (73518)

- Traffic**
 - Connected Devices: Total
 - Avg Bps: 50M
 - Connected Devices: tor_s_dflw1 → 1399.29 Kbps
 - Connected Devices: tor_s_dflw1 → 18.33 Mbit/s
- Health**
 - All health metrics are within normal operating ranges
- Metrics**
 - Average CPU Utilization**: 20%
 - Average Memory Utilization**: 60%

Kentik is the network intelligence platform for modern infrastructure teams. Unlike traditional monitoring and observability tools, we demystify complex network operations, enabling organizations to deliver applications and innovation at scale.