

Eliminate Network Guesswork in the Cloud

Cloud infrastructure promises many benefits: deployment agility, Ops efficiency, rapid scalability, high performance, and improved ROI. Yet many organizations struggle with realizing these benefits, especially when it comes to cost, performance, and security management.

Kentik is the modern analytics platform that understands the network behavior of your applications and services across hybrid and multi-cloud environments. Kentik gives you the details and the big-picture insight you need, at any scale, so that your cloud applications stay performant, reliable and secure, and the promises of cloud infrastructure are delivered.

Key Benefits

- 1 Unified view across hybrid and multi-cloud into your infrastructure
- 2 Integrated with container orchestration and service mesh management
- 3 Manage performance, cost, and security issues for modern cloud infrastructure

Kentik Cloud Portfolio

Kentik integrates with multiple cloud infrastructure data sources, including:

FLOW DATA FROM PUBLIC CLOUDS

AWS VPC Flow Logs

Provides complete flow visibility, including accept/reject firewall actions within or between VPCs.

GCP VPC Flow Logs

Provides near real-time telemetry with latency metrics within or between VPCs.

Azure NSG Flow Logs

Provides information about IP traffic in or out of a Network Security Group (NSG), including byte and packet counts and session state on a per-flow basis.

HOST-LEVEL INSTRUMENTATION

Enable per-host real-time telemetry with performance (latency/loss) metrics and layer 7 decodes. Multiple instrumentation options include:

- Native Linux instrumentation from IPtables
- Host sFlow
- Kentik's kProbe agent

VIRTUAL NETWORK APPLIANCES

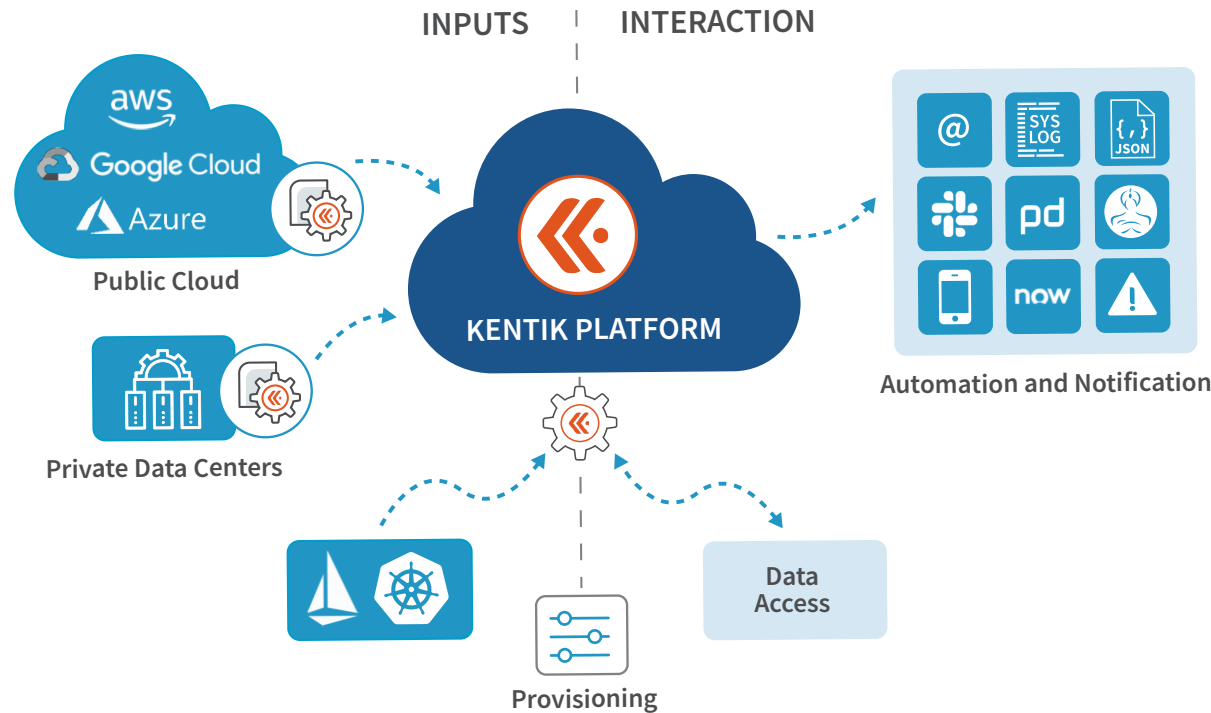
Collect standard telemetry like NetFlow, BGP, and SNMP from VM-based appliances like routers and load balancers.

CONTAINER ORCHESTRATION / SERVICE MESH

Tag network data with service and application context from Kubernetes and Istio.



Kentik Cloud Visibility Reference Architecture



Key Features

- Unified hybrid / multi-cloud visibility (including private data centers and major cloud vendors)
- Cloud-native context with container tags and metrics from Istio and Kubernetes
- Built-in integrations (including Slack, ServiceNow, Opsgenie, PagerDuty)
- API-first architecture for custom integrations

“Having the built-in capability to consume VPC Flow Logs was so much better than having to try to tie them together manually. With Kentik, we were able to immediately and very simply start pulling the logs in from GCP.”

—James Kelty, Director of Network Engineering

WHY KENTIK?

ANY SCALE



LIGHTNING FAST



EVERY DETAIL



REAL CONTEXT



UNIFIED VIEW



DEPLOYS ANYWHERE



Kentik Cloud Visibility Use Cases

NETWORK & APPLICATION PERFORMANCE

Challenges

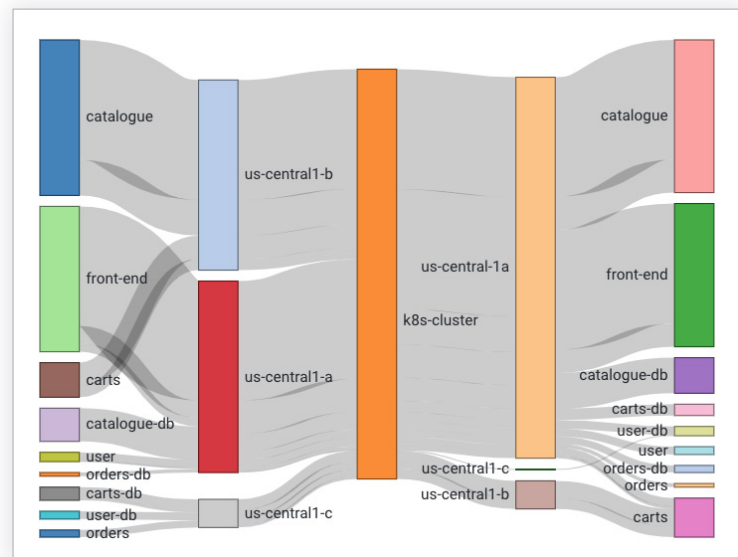
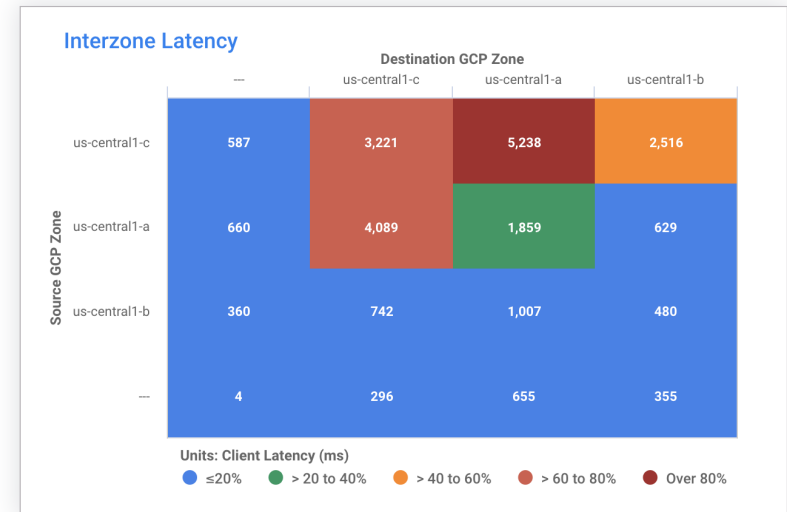
- Cloud network performance is variable
- App performance depends on the network, even in the cloud
- Logging tools don't show network vs. app context

Solutions

- Proactive notification of performance problems
- Quickly find network vs. app fault source
- Ensure consistent high performance

Benefits

- Deliver an outstanding user experience
- Reduce revenue risk
- Engineer better-performing applications



CLOUD COST MANAGEMENT

Challenges

- Data transfer can cost > 10x in the cloud
- The orchestration is often location and cost-unaware
- Hard to predict traffic flows before apps run

Solutions

- See major bandwidth costs
- Internet, cloud connect, and inter-zone traffic

Benefits

- Reduce cloud bill significantly
- Use actual activity to predict and manage future cost
- Make cost-aware architecture decisions

CLOUD PROTECTION

Challenges

- Cloud is simple to use but easy to mis-configure
- Threats and attacks are still present
- And can be hard to distinguish from misconfigs

Solutions

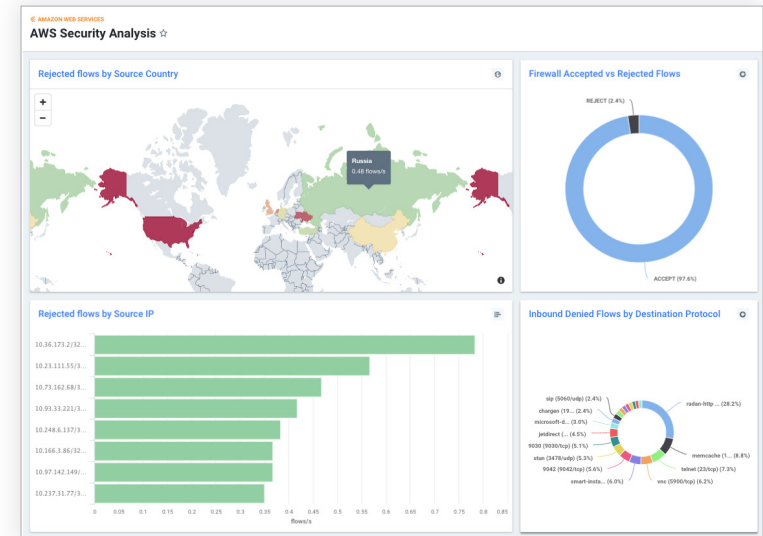
- Detect anomalous activity
- Proactively detect misconfiguration, out of policy, and malicious activities on the cloud

Benefits

- Protect service availability and business reputation

Summary

Infrastructure management challenges like cost, performance, and security are not new. They're ever-present, reappearing in each iteration of new network technology, and requiring new tools to address these old problems. Kentik's cloud visibility platform provides the easy analytics, powerful visualization, and instant insight to ensure the success of cloud deployments and migrations.



ABOUT KENTIK

Easily the world's most powerful network insight and analytics for the cloud-native world, Kentik® uses real-time traffic analysis, uniquely enriched with application, routing, and internet context to power the network operations of leading enterprises and cloud and communication service providers (CSPs). Kentik's SaaS platform is built on a patented big data engine to deliver modern network analytics that is both powerful and easy to use. Kentik is based in San Francisco — learn more at www.kentik.com.

Products from Kentik have patents pending in the US and elsewhere.