Service Provider Solutions Overview

- Synthetic Monitoring
- Insights & Alerting
- Peering & Interconnection
- DDoS Defense
- Traffic Engineering
- Network Troubleshooting

- Capacity Planning
- Network Cost Analytics
- CDN Analytics
- OTT/Subscriber Analytics
- Network Topology Visualization



Synthetic Monitoring

Meet and exceed subscriber service level performance objectives. Provide an outstanding digital experience and keep a competitive advantage by monitoring network performance and service level objectives. Automate what should be tested, and if something is wrong, see what to fix quickly, at scale, with ease.



Benefits

Autonomously monitor performance of CDNs, OTT services, ASNs, and geo/ISP digital experience towards subscribers

Instantly monitor all PoP-to-PoP performance with mesh testing, and reduce time to resolution (MTTR) of detected problems with intelligent alerting and diagnosis

Eliminate the typical intrinsic "noise" of synthetic test results, allowing problemsolving to be the primary focus

Insights and Alerting

Today, network service providers face significant challenges from every direction. Network teams are being pressed to operate more efficiently while the infrastructure complexity continues to accelerate. The volume of alerts and potential network problems continues to grow, false alarms mask real problems, and network teams struggle to keep pace. Kentik's ML-based detection engine finds problems that might be missed with traditional tools and generates insights that help network teams prioritize issues by impact and importance.

Benefits

Simplify monitoring with built-in, zeroconfiguration detection

Discover emerging network events before they affect customer experience

Triage and prioritize events to reduce resolution times (MTTR)

| Group By None | | ~ | | | | Show Historical |
|------------------|----------|----------------------------|--------------------------------------------------|---------------------------------------------------|---------------------------------------------|------------------------------------------------|
| Severity St | Status | Insight Name | Key | Value | Time 🛩 | Filters |
| Severe | Ø | DNS ATTACK | Dest IP/CIDR: 17.0.0.1 Customer ID: PEAR INC. | 10.60 Mpackets/s 10.55 Mpackets/s over thresho | 2020-02-2116:01 Ended: 2020-02-2116:10 | Flagged Type Kentik Insiahts |
| Severe | Ø | DNS ATTACK | Dest IP/CIDR: 17.0.0.1 Customer ID: PEAR INC. | 14.28 Mpackets/s 14.23 Mpackets/s over threshc | 2020-02-2115:01 Ended: 2020-02-2115:10 | Custom Insights Both |
| Severe | 0 | DNS ATTACK | Dest IP/CIDR: 17.0.0.1 Customer ID: PEAR INC. | 14.47 Mpackets/s 14.42 Mpackets/s over threshc | 2020-02-21 14:01 Ended: 2020-02-21 14:10 | Custom Insight Status Alarm Alarm Ack Required |
| Minor | © | Destination ASN Comparison | Dest AS Number: 2914 (NT | | 2020-02-2113:34 | Severity Critical Severe |
| Severe | Ø | DNS ATTACK | Dest IP/CIDR: 17.0.0.1 Customer ID: PEAR INC. | 16.00 Mpackets/s 15.95 Mpackets/s over threshc | 2020-02-2113:01 Ended: 2020-02-2113:10 | Major Varning Minor |
| Severe | Ø | DNS ATTACK | Dest IP/CIDR: 17.0.0.1 Customer ID: PEAR INC. | 4.16 Mpackets/s 8218% over threshold | 2020-02-2112:05 Ended: 2020-02-2112:15 | Notice |
| Severe | Ø | DNS ATTACK | Dest IP/CIDR: 17.0.0.1 Customer ID: PEAR INC. | 15.02 Mpackets/s 14.97 Mpackets/s over thresho | 2020-02-21 11:01 Ended: 2020-02-21 11:10 | No insight names selected Dimensions |
| Critical | 0 | Capacity Utilization | Device: pe1_ord1 Interface: ge-0/0/0.10 | 92% Capacity | 2020-02-21 10:04 | No dimensions selected |
| Critical | 0 | Capacity Utilization | Device: p1_ord1 Interface: ge-0/0/0.10 | 97% Capacity | 2020-02-2110:04 | No dimension values selected |
| Critical | 0 | Capacity Utilization | Device: pe4_sfo1 Interface: ge-0/0/0.16 | 95% Capacity | 2020-02-2110:04 | |



Peering and Interconnection

Identify remote networks to target for direct interconnection and understand the potential impacts on new and existing connectivity to help identify peering opportunities, optimize routing, and negotiate more favorable contracts.



Benefits

Find opportunities to optimize costs or improve performance via new connectivity

Evaluate potential peering partners and build data-driven business cases for interconnection

Measure traffic ratios and enforce peering agreements

DDoS Defense

Kentik includes the industry's most accurate detection of DDoS attacks and other anomalies such as largescale data exfiltration. Multi-level thresholds escalate threats as they develop, and built-in integrations enable automated triggers for internal or third-party mitigation.

Benefits

Detect and defend up to 50% more attacks*

Eliminate false positives/negatives and decrease response time with automatic ML-based traffic profiling

Visualize attack characteristics and network impact

Trigger automatic mitigation actions including RTBH, Flowspec, and external mitigation hardware or services

* TechValidate survey of Kentik users





Traffic Engineering

Resolve impending congestion and customer impact by identifying logical traffic groups that can be moved to alternate paths. Ensure that traffic delivery conforms to Service Level Agreements (SLAs) and maximizes utilization of costly network resources.



Benefits

Make sound traffic engineering decisions

Automate data collection and collation for traffic engineering tasks

Avert capacity crises by making space for new capacity lead times

Network Troubleshooting

Resolving network problems and mysteries is challenging — especially with today's complex networks that span both traditional and cloud infrastructure. Kentik's distributed architecture keeps all the data that teams need to understand what's happening on the network and why. Powerful visualizations and a modern UI allow teams to navigate to details quickly and easily.

Benefits

Determine affected applications, services and users

Find root causes using guided troubleshooting steps

Minimize MTTR and business impact of network problems





Capacity Planning

Automate network capacity planning tasks and prioritize actions using growth forecasts and projected runout dates. Gain integrated insights into network capacity, utilization, performance, and traffic composition to ensure the best service delivery at the lowest cost.

| Configure Plan | | | | | | | | | | |
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| All Backbone Interfaces | | | | | | | | | | |
| escription | | | | | | | | | | |
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| hresholds | | | | | | | | | | |
| Utilization | | _ | | Runout | : (months) | | | | _ | |
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Benefits

Automates data gathering and correlation to prioritize the most critical capacity issues

Eliminate complex spreadsheets and manual planning processes

Prevent congestion surprises that impact applications or users

Network Cost Analytics

How are customers, applications, and internal departments utilizing high-cost resources? Find out by using Kentik to uncover the entry, path, and ultimate exit of customer traffic. Fast and accurate multi-dimensional analyses — using provider pricing models and traffic volume measurement — help link costs to consumers, uncover opportunities for differentiated products and services, and support pricing decisions.

Benefits

Negotiate and enforce stronger customer contracts

Increase service revenue and margins.

Understand the drivers of overall network spend

Eliminate billing surprises and errors with automatic cost forecasts



CDN Analytics

Provide timely, curated insights on specific aspects of CDN traffic to improve CDN traffic delivery and make better business decisions.



Benefits

Find and fix CDN traffic origin misconfigurations

Improve CDN traffic delivery and performance for subscribers

Optimize CDN-related business decisions

OTT / Subscriber Analytics

Associate traffic with OTT content owners and service operators to expose the competitive landscape and optimize pricing to incorporate actual subscriber usage patterns.

Benefits

Reveal the origins and growth of network traffic and evaluate the competitiveness of in-house offerings

Analyze usage patterns across customer segments to optimize plans and pricing

Improve customer service outcomes by informing subscribers with humanreadable details

| OTT Services | | | Filters No filters applied |
|-----------------------------------------------------------------|------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------|
| Traffic Traffic which our detection engine 715.83 Gbits/s | matched on Fully Classified 86% 1953 000 Provide-Only 9% 0160 Gibty/s | Pending 9% 58.93 Gbits/s Unclassified 0% | Detection Engine Last 01T engre update: Jan 16th 372 Services 278 Providers 29 Categories |
| Fop Categories | | Top Providers | |
| Video 513.23 Gbits/s ↑11.63% (1w) | Total Services: 108 Top Providers: Netflik, Hulu, Google, Disney, Amazon, Facebook | Netflix 265.25 Gbits/s ↑10.27% (1w) | Total Services: 1 Top Services: Nettlix |
| Gaming 38.97 Gbits/s ↑ 30.83% (tw) | Total Services: 28 Top Providers: Sony, Microsoft, Valve Software, Nintendo, Electrolic Arte. Robbox | Google 120.93 Gbits/s ↓-2.35% (tw) | Total Services: 17 Top Services: unknown, YouTube, Chrome Updates, Google, Google Ads, G Suite |
| Social 28.33 Gbits/s ↓-2.19% (1w) | Total Services: 12 Top Provides: Facebook, TikTok, Snapchat, Reddit, | Hulu 62.95 Gbits/s ↑20.74% (1w) | Total Services: 1 Top Services: Hulu |
| Software Updates 10.48 Gbits/s 2269% (1w) | Pinterest, Twitter | Disney 49.90 Gbits/s 个15.64% (1w) | Total Services: 1 Top Services: Disney+ |
| -1-27.03% (1W) | Top Providers: Apple, Microsoft, Google, Amazon, NVidia | Amazon | AAAAAAAAAAAAA. a |

Network Topology Visualization

Visualize the big picture with mapping and network topology across hybrid infrastructures, owned and not owned. Navigate to areas of interest by site, cloud provider, geography, and traffic to understand the interaction between applications or customers and the underlying network infrastructure.



Benefits

Visualize interactions between on-prem sites, cloud infrastructure, top origin networks, providers, and next-hop networks in a single, unified view

Understand the connectivity between network devices and sites and other infrastructures

Find hotspots with an intuitive, interactive view of device and interface

ABOUT KENTIK

Kentik[®] is the network intelligence platform for the connected world, trusted by leading digital enterprises and service providers. With Kentik, businesses eliminate the visibility and intelligence gaps associated with running dynamic and complex networks, and achieve greater network performance, reliability and security. The Kentik Network Intelligence Platform ingests diverse data streams from the internet, edge, cloud, data center and hybrid infrastructures and provides real-time visualizations and AlOpspowered insights and automation. Learn more at <u>www.kentik.com</u>.

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

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