Internet Insights

Business-critical network and SaaS application outage detection based on collective intelligence

Product Brief

The Internet is vast, unpredictable, and composed of thousands of independently managed service providers, any of which can impact the user's experience. Network and SaaS application outages occur daily across the Internet and often resolve without incident. But sometimes these outages can inflict widespread and cascading disruptions, stopping the flow of business-critical connectivity and taking down workforce and revenue-generating applications. It's impossible to predict when an outage will occur and what its impact will be, and it can be extremely difficult to identify and resolve ongoing outages without proper visibility, so enterprises must be prepared.

Now more than ever, the Internet—as unpredictable as it can be—is inextricably tied to the enterprise's bottom line. The Internet has become the primary means of delivering digital experiences to customers, who expect their sites and services to be reachable and high-performing at all times. Likewise, in the hybrid work era, the Internet has become the new enterprise backbone, connecting remote workers with enterprise resources as well as the critical applications they depend on, such as Salesforce, Microsoft 365, Workday, ServiceNow, and more.

Prolonged outages can result in enormous revenue and productivity losses and, in some cases, lead to regulatory action. While enterprises may not control the Internet or most SaaS applications they use, they are still ultimately responsible for user experience. ThousandEyes Internet Insights™ combines a massive data set with algorithmic outage detection to provide near real-time insights into the applications and networks your business relies on. With Internet Insights, you can finally manage digital experience at Internet scale.

A Global View of Internet Health

ThousandEyes agents located across the Internet perform billions of measurements each day, creating a massive data set on when and where traffic flows are disrupted at the network-interface and application-server levels. Network outages are events with 100% packet loss in the same autonomous system (AS) meeting a certain level of impact on infrastructure, services, and vantage points. Application outages are events during which multiple global vantage points are unable to reach or receive error messages from an application's servers.

ThousandEyes Internet Insights delivers the industry's only SaaS application and network provider outage detection, powered by collective intelligence, that empowers operations teams to:

- Rapidly identify, escalate, and resolve outage incidents in critical providers including ISP, public cloud, and edge service provider networks, as well as 80+ of the top SaaS applications to assure the productivity of your hybrid workforce.
- Easily visualize and correlate outages to user experience and engage with your workforce, customers and providers using validated insight rather than social sentiment.
- Improve vendor governance and management by using trusted third-party data to enforce SLAs, compare the performance of your digital services over time, and make better vendor decisions for your business.

Intuitive Outage Dashboard

Designed for IT Help Desks and network operations centers (NOCs), the Internet Insights Overview dashboard superimposes recent and ongoing outages onto a global map to provide operations teams a high-level visualization of Internet health.



Figure 1.

Internet Insights™

Overview

dashboard

displaying recent
and ongoing
outages

Cross-Layer Outage Timelines

Internet Insights timeline view clearly isolates application and network-level outages across a time continuum and enables the scope of outages at particular intervals to be displayed via map, topology, and tabular views. The timeline view can also be filtered by outage scope, impacted applications, networks and services, location and relevance to an enterprise's own tests, and affected provider types.

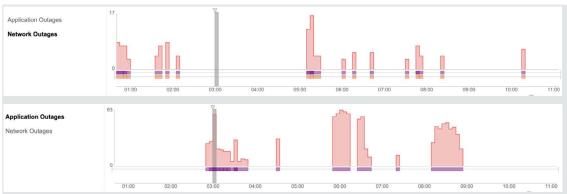


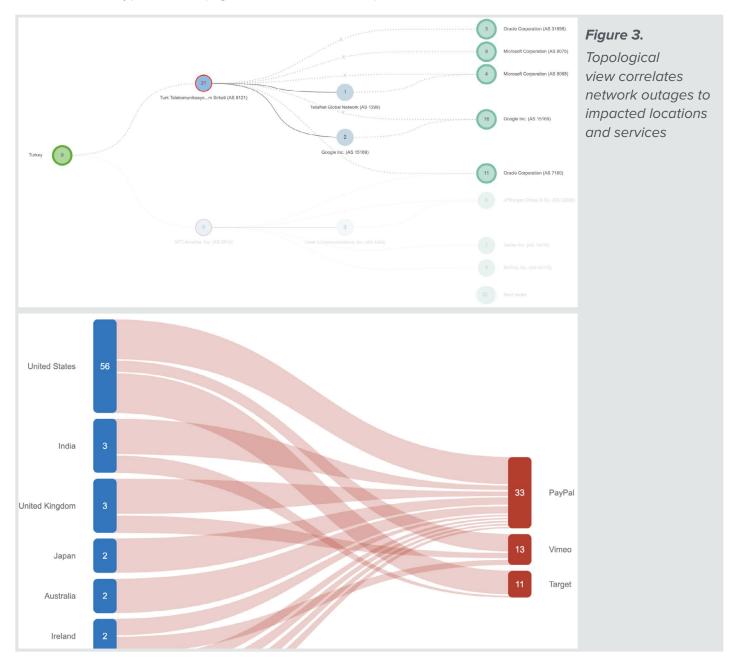
Figure 2.

Network Outages
and Application
Outages timeline
views

Network and Application Topologies

Internet Insights topological views are highly useful in determining outage scope and impact based on user locations and affected services. Network outages are depicted within the context of service paths, showing source and destination of traffic flows that have been disrupted, as well as the location and source of the intervening outage.

Application outages are also depicted in the context of service paths, showing the source network/location and the impacted host domain. App outages can be viewed based on application, domain, server location, server network, type of issue (e.g., HTTP error, DNS, etc.), and other characteristics.





Reports and Dashboards

Create reports and dashboards to track outages and the reliability of your service providers. Use one of the pre-built dashboards to see weekly and monthly outage trends and an up-to-date view of the most impacted tests, locations, and providers—or build custom views to break out outages by type, compare providers to their peers, understand regional differences, and more.



Outage Alerts

Outage alerts, configurable through the <u>ThousandEyes v7 API</u>, can be triggered based on geography, service provider, outage severity, and impacted services and tests, as well as other conditions. Alert notifications can be sent via email or webhook or using available native integrations such as Slack and ServiceNow.



Save and Share Outage Snapshots

Outage events along with accompanying tests impacted by the outage can be saved by users and shared with internal and external stakeholders via weblink to facilitate rapid communication and remediation.



Outage Correlation With Test Views

Internet Insights complements the detailed service-level visibility provided by ThousandEyes tests, leveraging the entire ThousandEyes collective data set, which goes far beyond the monitoring scope of any individual organization. Internet Insights also integrates seamlessly with monitoring tests. Outages visualized in Internet Insights are automatically correlated with your own test data, making it easy to understand the outage impact on specific applications, services, and user groups. Similarly, outages detected within test views are linked to macro views within Internet Insights.