LogicMonitor

CASE STUDY

How Google Uses Real-Time Data to Improve Product Experience

Google

INDUSTRY

Technology

PRODUCTS

Synthetic Monitoring

SOLUTIONS

+ Network observability
+ Node-specific testing
+ 24/7 monitoring
+ Company-wide data sharing

SUCCESS BY METRICS

+ Identified and resolved a previously undetectable latency issue
+ Reduced issue resolution times from tens of minutes to just minutes
+ Accelerated performance data analysis and post-mortem investigations
+ Improved visibility into Public DNS and backbone network performance

KEY OUTCOMES

Proactive incident detection and resolution

Faster operational and business decision-making

Longer-term monitoring data retention

Improved network latency visibility and performance management

Greater collaboration through company-wide data access

Google: A Technology Leader Delivering Seamless Digital Experiences

Google is a global technology leader serving billions of users through products and services including Search, Google Cloud, Workspace, Maps, and Public DNS. Delivering reliable digital experiences at this scale requires continuous visibility into network and application performance across a vast global infrastructure.

To maintain its reputation for speed and reliability, Google needed greater visibility into network performance, faster access to monitoring data, and the ability to retain and analyze information over extended periods. The company sought a solution that would help its Site Reliability Engineering (SRE) teams identify issues faster, improve collaboration, and accelerate decision-making.

CHALLENGE: ACHIEVING REAL-TIME VISIBILITY ACROSS A GLOBAL INFRASTRUCTURE

As one of the world's largest technology companies, Google manages an enormous portfolio of digital services that require constant monitoring and optimization.

Before implementing LogicMonitor's Catchpoint, Google faced several challenges:

- Collecting high volumes of real-time performance data across distributed environments
- Retaining monitoring data for long-term analysis and historical benchmarking
- Providing teams across the organization with easy access to performance data
- Identifying network-related latency issues that were difficult or impossible to detect using internal monitoring alone
- Accelerating root-cause analysis to reduce time spent troubleshooting service-impacting incidents

Google needed a solution that would provide comprehensive network observability while supporting long-term data ownership and analysis.

Why Google Chose LogicMonitor's Catchpoint

Google required a solution that could:

- Deliver independent, network-level visibility into service performance
- Support flexible data collection, retention, and analysis
- Integrate seamlessly with existing operational workflows and alerting systems

After evaluating several options, Google's SRE team selected Catchpoint's Test Data Webhook capability because it enabled:

- Node-specific testing from Catchpoint's global monitoring network
- Real-time collection of performance data from external perspectives
- Flexible export of monitoring data in JSON and XML formats
- Integration with Google's existing analytics and alerting environments
- Extended data retention beyond standard industry practices

With Catchpoint, Google gained greater control over how monitoring data was collected, stored, shared, and analyzed across the organization

> Catchpoint's webhooks give us the control and flexibility to visualize and analyze our data and integrate it with our alerting tools."
>
> **Matthew White,** *SRE Manager, Google*

THE IMMEDIATE IMPACT OF CATCHPOINT

Following deployment, Google quickly realized measurable improvements in its ability to identify and resolve network performance issues.

Most notably, Catchpoint helped Google's engineering teams uncover latency issues affecting Google Public DNS and backbone infrastructure that had previously gone undetected by internal monitoring systems.

Because the issue existed outside Google's traditional monitoring perspective, internal systems were unable to accurately identify the source of the latency. Catchpoint's network observability capabilities provided an external view of performance, allowing engineers to pinpoint the exact source of degradation and rapidly resolve the problem.

Rather than engaging in lengthy troubleshooting processes involving multiple stakeholders, Google's teams were able to isolate and correct the issue within minutes.

> We were able to use Catchpoint's real-time measurements to pinpoint and resolve Google Public DNS latency. Instead of a long process, we were able to get at it almost instantly, and turn around the problem in just minutes"
>
> **Matthew White,** *SRE Manager, Google*

KEY BENEFITS OF CATCHPOINT FOR GOOGLE

- **Proactive Incident Detection** > Catchpoint data integrates with Google's alerting ecosystem, improving visibility into emerging issues and enabling faster response.
- **Enhanced Network Observability** > Independent monitoring perspectives provide deeper insight into performance across Google's network infrastructure, making root-cause identification faster and more accurate.
- **Extended Data Retention** > Google maintains greater control over how monitoring data is stored, enabling longer retention periods for benchmarking, trend analysis, and post-incident reviews.
- **Company-Wide Data Sharing** > Once data is stored within Google's environment, teams across the organization can access it without relying on a central point of contact.
- **Faster Analysis and Decision-Making** > Immediate access to current and historical performance data accelerates investigations, postmortems, and operational decision-making.

Why This Matters for Technology Companies

Google's experience highlights the growing importance of network observability, data ownership, and real-time monitoring for technology organizations.

By combining real-time visibility with long-term data retention, organizations can:

- Detect and resolve performance issues before they impact users
- Reduce time spent waiting on internal or third-party stakeholders for data
- Accelerate root-cause analysis and incident response
- Improve collaboration through shared access to operational insights
- Make faster, more informed decisions using both current and historical performance data

As digital experiences become increasingly critical to business success, organizations need the visibility required to proactively identify issues, reduce operational risk, and deliver reliable service at scale.

ABOUT GOOGLE

Google is a global technology leader that delivers products and services used by billions of people worldwide. Supporting platforms such as Search, Google Cloud, Workspace, YouTube, and Public DNS, Google operates one of the world's largest and most sophisticated technology infrastructures, with a focus on reliability, performance, and user experience.

ABOUT LOGICMONITOR

LogicMonitor® is the AI-first platform for Autonomous IT, enabling enterprises to operate complex digital systems with greater resilience, efficiency, and confidence. By unifying visibility from user to code across infrastructure, cloud, Internet, and digital experience, LogicMonitor delivers the intelligence required to anticipate issues, eliminate blind spots, and take action automatically. Powered by Edwin AI, LogicMonitor helps IT and business leaders reduce operational toil, protect revenue, and accelerate innovation in an increasingly complex digital world. For more information, visit www.logicmonitor.com and our blog, or follow us on LinkedIn, X, Facebook, and YouTube.