

How Fastly Gains End-to-End Visibility Across Content Delivery Networks



INDUSTRY

Technology

PRODUCTS

Synthetic Monitoring

SOLUTIONS

- + DNS observability
- + Connect time monitoring
- + TLS handshake visibility
- + Wait time monitoring
- + Load time tracking

SUCCESS BY METRICS

- + DNS issue resolution in minutes
- + Reduced end-user wait times
- + Faster root-cause identification across vendors and ISPs

KEY OUTCOMES



Full observability across content delivery and tech stack



Proactive issue identification and resolution



Data-backed optimization support for Fastly customers

Fastly: Delivering Fast, Reliable Digital Experiences at Global Scale

As one of the world’s leading content delivery networks (CDNs), Fastly helps organizations deliver fast, reliable digital experiences to users around the globe. From E-commerce platforms and media publishers to travel and technology companies, Fastly’s customers depend on consistent content delivery to support their businesses and meet user expectations.

To maintain that level of performance across a complex ecosystem of networks, internet service providers (ISPs), and third-party services, Fastly needed comprehensive visibility into the end-user experience and the ability to analyze performance at every stage of content delivery.

CHALLENGE: LIMITED VISIBILITY ACROSS THE DELIVERY CHAIN

Content delivery involves multiple interconnected systems, creating numerous potential points of failure. Performance issues can originate within the CDN, from a third-party provider, or from network and ISP-related challenges in specific geographic regions.

Without end-to-end visibility, identifying the source of an issue can be time-consuming and complex. Fastly needed a way to quickly determine where problems originated, reduce troubleshooting time, and proactively collaborate with partners to resolve performance issues before they affected customers.

Why Fastly Chose Catchpoint and LogicMonitor

Fastly needed a solution that could:

- Detect issues across its infrastructure and delivery ecosystem
- Provide end-to-end visibility into the content delivery process
- Deliver detailed analytics for every stage of the user experience

After evaluating available options, Fastly selected Catchpoint because it could:

- Monitor live performance for any asset request
- Measure time spent at each stage of content delivery
- Provide detailed data that could be shared internally and with external vendors during troubleshooting

IMMEDIATE IMPACT

After deploying Catchpoint, Fastly quickly realized measurable operational benefits, including:

- Faster DNS issue identification and resolution; minutes not days
- Data-backed performance optimization for customer websites
- Enhanced benchmarking capabilities to support ongoing service improvements and maintain competitive performance



“Backbone nodes give us a big-picture view of the network, and last-mile nodes are critical to giving us an idea of what users are actually experiencing.”

Hooman Beheshti, *Vice President of Technology, Fastly*

KEY BENEFITS OF CATCHPOINT FOR FASTLY

Catchpoint provides Fastly with visibility into every stage of the content delivery journey, enabling teams to identify issues quickly and optimize performance proactively.

- **DNS Observability** > Using Catchpoint’s DNS observability capabilities, Fastly can gain detailed visibility into Domain Name System (DNS) performance whenever anomalies or degradation occur. Teams can review critical information such as resolvers, intermediaries, source and destination details, and resolved addresses. These insights help Fastly collaborate more effectively with DNS providers and accelerate root-cause analysis when issues arise.
- **Connect Time Monitoring** > Connect time measures the three-way Transmission Control Protocol (TCP) handshake required to establish a connection between systems. Catchpoint allows Fastly to monitor connection performance at both the network and TCP layers, helping teams isolate issues more quickly and determine whether performance bottlenecks originate within the network path or elsewhere in the delivery process.
- **TLS Handshake Visibility** > Fastly terminates Transport Layer Security (TLS) connections at the edge to help customers improve efficiency and reduce infrastructure costs. Maintaining a high-performing TLS stack is essential to delivering reliable experiences. Catchpoint provides visibility into the complete TLS handshake process, including round-trip timing data. If performance issues occur, Fastly can isolate TLS-related delays and identify root causes more efficiently, helping maintain reliable and secure content delivery.
- **Wait Time Monitoring** > Wait time measures the elapsed time between a request being received and the first byte of the response being delivered. This metric provides valuable insight into storage performance, caching efficiency, and origin responsiveness. When elevated wait times are detected, Fastly can use Catchpoint data to investigate cache-control behavior, identify potential bottlenecks, and work with customers to improve delivery performance.
- **Load Time Tracking** > Understanding when a content delivery transaction is fully completed is critical for evaluating bandwidth utilization and TCP efficiency. Catchpoint provides visibility into overall load times, enabling Fastly to validate edge performance and ensure infrastructure is optimized for each customer’s workload requirements. This visibility helps support faster, more consistent user experiences across global delivery environments.

Accelerating Issue Resolution Through Observability

With Catchpoint's detailed analytics, Fastly can isolate key performance metrics throughout the entire delivery process, making every test and transaction a valuable source of operational insight.

This visibility enables teams to identify issues more quickly, determine ownership with greater confidence, and collaborate effectively with vendors and partners to accelerate resolution.

“With the data that Catchpoint provides us, we were able to quickly and easily identify an issue that was actually with a vendor rather than us. In Catchpoint, you can dig into charts to see sources, destinations, addresses, and a lot more data that becomes valuable when troubleshooting.”

Hooman Beheshti, *Vice President of Technology, Fastly*

Why This Matters for CDN Providers

Fastly's experience demonstrates the value of comprehensive observability across the content delivery chain. By leveraging Catchpoint's global monitoring infrastructure and detailed performance analytics, CDN providers can:

- Reduce troubleshooting time and accelerate issue resolution
- Improve load times and user experiences
- Support customer-specific delivery requirements with actionable data
- Identify performance issues proactively before they impact end users
- Strengthen collaboration with vendors and service providers through shared visibility

KEY OUTCOMES



Full observability across content delivery and the broader technology ecosystem



Proactive identification and resolution of performance issues



Data-driven optimization recommendations for customers



Faster root-cause analysis across networks, ISPs, and third-party providers



Improved confidence in service delivery and customer experience

ABOUT FASTLY

Fastly's powerful edge cloud network empowers developers to run, secure, and deliver websites and applications as close to the users as possible to create unforgettable experiences at global scale.

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](#).



See LogicMonitor for yourself.

REQUEST A DEMO