DataStream

Low-latency access log data at scale, with visibility into content delivered on the Akamai Intelligent Edge Platform

As user expectations around digital experiences continue to rise, online businesses are increasingly looking to enhance service reliability to meet those expectations and reduce user churn. Akamai is committed to providing customers with greater visibility into our platform performance with accurate and consistent log data at scale.

Visibility into CDN performance as a critical success factor for an optimal user experience

As businesses across the globe continue their digital adoption journey, meeting the user's expectation around the digital experience becomes a critical success factor. Increased choices and the low cost of switching providers are leading users to churn if the online experience is poor.

There is a definite association between the user's digital experience and the performance of the digital property – website, mobile app, or video stream, which is directly impacted by the performance of the CDN. Digital businesses are looking for cleaner and faster ways to understand the performance of critical services, including the experience delivered by their CDN partners.

Visibility into what's happening at the "edge" of their networks in near-real time can go a long way in monitoring and troubleshooting issues and ensuring an optimal end-user experience.

BENEFITS FOR YOUR BUSINESS

Consistent Log Data at Scale.
Get actionable CDN platform insights through access log data at scale to investigate CDN issues and facilitate changes when necessary.

Agile CDN Performance Monitoring.
Proactively monitor CDN health, latency, offload, errors, and performance in an agile manner, in near-real time, for effective issue mitigation.

Facilitated Analysis with Flexible Endpoints.
Popular third-party endpoint support provides flexible log analysis based on specific requirements to report insights for CDN performance needs.

DataStream Reference Architecture
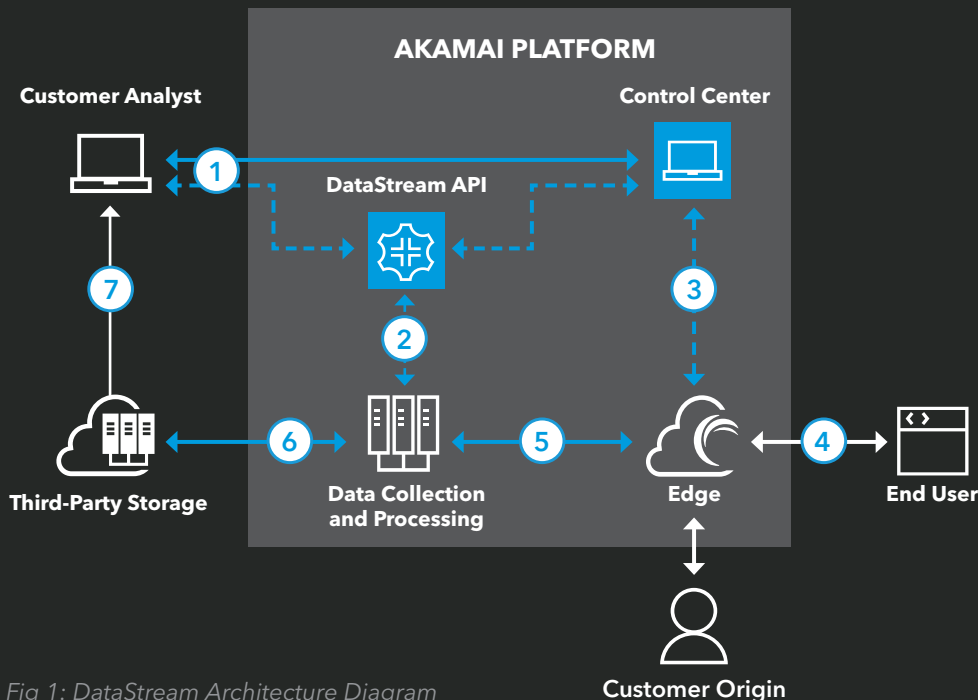
1. Customers configure a DataStream through the Control Center or via the DataStream API.

2. DataStream configurations are activated on our log processing infrastructure.

3. A DataStream is associated with a digital property.

4. Client requests and responses are logged at the edge.

5. Logs are continuously sent from the edge to our distributed data collection systems.

6. DataStream enabled logs are uploaded to the customer's endpoint within minutes.

7. Data is available for retrieval or analysis.

Fig 1: DataStream Architecture Diagram

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DataStream Features

Continuous Log Data

Continuously pushes space-delimited access log data to public cloud storage and analytics providers.

Low Latency, High Completeness

Delivers 99% of low-latency access log data within minutes of activity on the Akamai edge network.

Multiple Third-Party Integrations, Self-Serviceable

Offers third-party integrations that support log delivery to popular analytics tools, including public cloud options like AWS S3, Microsoft Azure Blob, Splunk, and Datadog.

DataStream Use Cases

Near-Real-Time CDN Performance Monitoring

Get the log data needed to manage applications and infrastructure, implement crucial optimizations, and monitor CDN health to help identify and troubleshoot potential delivery issues.

Fig 2: DataStream Log Fields

Large Event Monitoring

Ensure a seamless experience for viewers of live events through 24/7 proactive monitoring and troubleshooting.

Business Intelligence and Trends

Aggregate CDN access log data easily with seamless integration with third-party analytics tools to drive insights and trends for informed decision-making.

Note: DataStream is optimized for high-throughput raw data delivery. In the event of connectivity issues at third-party endpoints, data will be lost after three retries. This limitation should be taken into account before using this the data for audit, compliance, and billing purposes.