

Aura Analytics Service

Gain comprehensive real-time and historical insight into the web performance, capacity and status of your Aura Licensed CDN



With increased competition for subscribers as well as the need to minimize costs, analytics is becoming a much more important component of [content delivery network](#) (CDN) service deployment for network operators. Simple awareness of network events or a gut-level “feel” for overall quality is insufficient. A comprehensive understanding of why performance changes or when changes occur is critical to the operator’s ability to not only react quickly to troubleshoot and solve problems, but to anticipate when problems are likely to occur and act to prevent them.

Analytics are also an important asset as operators attempt to maximize quality of experience (QoE) for subscribers by maintaining consistent performance and reliability for multiscreen video services, high-volume downloads, or web and e-commerce transactions. Analytics in the context of operator CDNs provide a number of key functions:

- They assist operators in proactive troubleshooting of problems or quickly identifying “hot spots” in the network or service infrastructure
- They offer information to support service level agreement (SLA) compliance, where applicable
- They help managers gain quantitative and qualitative information to drive business decisions or allocate resources where and when needed

Aura Analytics Service

Aura Analytics Service (AAS) is a suite of analytics and reporting tools used with Akamai’s [Aura Licensed Content Delivery Network](#) (LCDN). AAS monitors and visualizes CDN systems and traffic, and provides centralized reporting at the system, service and traffic level. The complete suite of analytics capabilities, which consists Basic Monitoring plus an optional Aura Advanced Analytics package, is comprised of four basic components:

- **Scale-out Log Service** aggregates, processes and stores transaction logs for billing and accounting
- **Real-time Statistics** collects, prepares, and stores real-time traffic, service, and system statistics
- **Flexible Dashboards** provides customizable interactive visualizations of information and statistics for monitoring and troubleshooting the CDN

Aura Analytics Service also provides programmatic access to data for added flexibility as well as user-customizable dashboards that allow operators to generate customized data views, unique to the operator’s requirements, which can be saved and modified as needed.

Modular and Flexible

Aura Analytics Service uses a modular approach that aligns with the type, volume and timeliness of information needed to keep services running at optimal levels. Operators can start off with Basic Monitoring then add Aura Advanced Analytics as the need arises.

Basic Monitoring includes the tools necessary to monitor and analyze general CDN status, and includes the ability to export raw data for analysis and reporting purposes. Aura Advanced Analytics provides deeper insight into the state, performance, and capacity of the CDN. Aura Advanced Analytics also builds upon the raw data export function included in Basic Monitoring, providing powerful big data processing, storage, query, and visualization capabilities. Aura Advanced Analytics relieves the operator of the need to build many of the complex business support system (BSS) and operational support system (OSS) capabilities that are required to efficiently manage a distributed CDN deployment in the context of the broader OTT content delivery ecosystem. Table 1 below is a feature comparison between Basic Monitoring and Aura Advanced Analytics.

BENEFITS TO YOUR BUSINESS:

- **Decrease the time required to identify and resolve problems** with CDN nodes through the use of customized dashboards and real-time statistics monitoring
- **Enhance subscriber quality of experience (QoE)** by monitoring CDN behavior and notifying operators when configured performance and/or behavioral thresholds are met
- **Maximize growth and efficiency** through accurate measurement of resource utilization and identifying where expansion or contraction of resources may be required.
- **Opportunity to reduce costs** by eliminating the need for expensive third party analytics systems and choosing a level of capabilities appropriate to the needs of the business

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Table 1 - Comparison Between Basic Analytics and Aura Advanced Analytics

Category/Feature	Basic Monitoring	Aura Advanced Analytics
Scale-out Log Service		
Aggregation of transaction logs from all CDN nodes	×	×
Scale-out storage for logs	×	×
Data refresh to within 5-7 minutes	×	×
Scale-out architecture for resiliency	×	×
Scripted searches for log content	×	×
SFTP export of log files		×
Custom billing logs		×
Customized log-based statistics		×
MapReduce-based queries		×
Real-time Statistics		
Scale-out storage for statistics	×	×
Data refresh to within 30 seconds	×	×
Scale-out architecture for resiliency	×	×
RESTful HTTP query interface	×	×
Node-level performance status and capacity	×	×
Hierarchical CDN topology filter		×
Hierarchical content provider filter		×
Origin server filter		×
Hierarchical CDN prefix filter		×
Hierarchical geographical filter		×
Flexible Dashboards		
Static, pre-loaded dashboard visualizations of CDN data	×	×
Flexible dashboards for creating custom views of CDN data		×

Aura Advanced Analytics Service Components

Scale-out Log Service

With Aura Advanced Analytics, the Scale-out Log Service enables operators to generate and export customized log records and statistics based on historical data. Log records can be exported for use in billing and accounting applications. Customized statistics, which can be based on billing metrics or “Top X” data can be leveraged by third party reporting tools or viewed in the context of other Aura Analytics Service tools such as Flexible Dashboards.

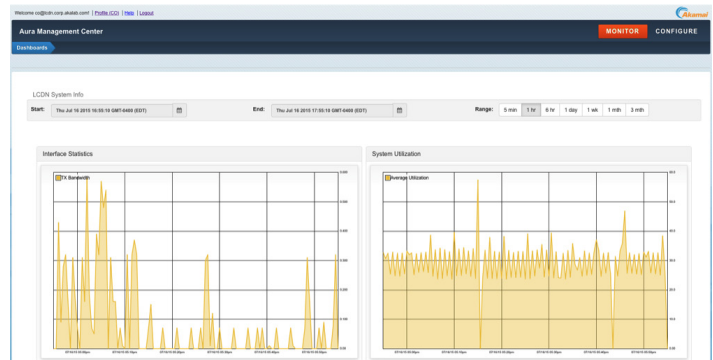
Real-time Statistics

Real-time Statistics provides multi-dimensional analysis of live data that can be exported in real-time for use by third party systems or applications. Filtering makes it possible for operators to evaluate performance in specific parts of the network or more quickly troubleshoot issues by “drilling down” on specific content providers, origins, geographies or other aspects of the CDN.

Flexible Dashboards

With Flexible Dashboards, operators can create personalized dashboard views from the statistics generated by the Real-time Statistics component. Flexible Dashboards can be saved and reviewed at any time. They can also be saved to provide customized reports of CDN performance. An example dashboard is shown in Figure 1.

Figure 1 – Example of Aura Analytics Service Flexible Dashboard



Aura Analytics Service

Akamai makes the Internet fast, reliable and secure and has relationships with hundreds of network operators to optimize delivery of Internet services to subscribers. Aura Analytics Service provides the necessary tools and functions that provide network operators the opportunity to:

- Gracefully scale up capacity and performance
- Improve subscriber QoE to generate customer satisfaction and loyalty
- Reduce costs
- Identify and troubleshoot end-to-end video delivery issues

The Akamai Ecosystem

Akamai makes the Internet fast, reliable and secure. Our comprehensive solutions are built on the globally distributed Akamai Intelligent Platform™, managed through the unified, customizable Luna Control Center for visibility and control, and supported by Professional Services experts who get you up and running easily and inspire innovation as your strategies evolve.

Aura Analytics Service



As the global leader in Content Delivery Network (CDN) services, Akamai makes the Internet fast, reliable and secure for its customers. The company's advanced web performance, mobile performance, cloud security and media delivery solutions are revolutionizing how businesses optimize consumer, enterprise and entertainment experiences for any device, anywhere. To learn how Akamai solutions and its team of Internet experts are helping businesses move faster forward, please visit www.akamai.com or blogs.akamai.com, and follow @Akamai on Twitter.

Akamai is headquartered in Cambridge, Massachusetts in the United States with operations in more than 57 offices around the world. Our services and renowned customer care are designed to enable businesses to provide an unparalleled Internet experience for their customers worldwide. Addresses, phone numbers and contact information for all locations are listed on www.akamai.com/locations.