Aura Object Store
Highly scalable, persistent media content store for content origination within a CDN

The consumption of online rich media is at an all time high and growing, fueled by the proliferation of mobile devices and a widening array of web content. More than ever, consumers expect a fast, secure, and reliable media viewing experience on any device. To feed demand and meet expectations, network operators are increasingly deploying their own CDNs and dealing with the challenges of originating a fully integrated mix of live and on-demand video, large software downloads, and other web content within those CDNs to support new and emerging services.

Aura Object Store is a replicated HTTP object store that stores media content persistently for content origination within a CDN. It supports file ingest from content management systems via multiple ingest protocols and originates that content for both live/linear, video-on-demand (VOD) applications, and nDVR. Designed specifically for network operators seeking a resilient online media storage solution, Aura Object Store is designed for ease of management, affordability, and the ability to scale with business needs. Aura Object Store is optimized for integration with Akamai’s Aura Licensed CDN (LCDN), Akamai’s Managed CDN (MCDN), and Akamai’s Media Delivery Solutions. It can also interoperate with third-party video and content delivery solutions.

How it Works
Aura Object Store provides the root of the CDN hierarchy, serving cache misses from multiple CDN caching tiers downstream. Based on standard HTTP or HTTPS delivery, it offers a scale-out content delivery architecture for redundancy and storage expansion in which several nodes are connected to form a common storage cluster with a single virtualized namespace.

Features
Scale-out Storage – Designed to support billions of files and petabytes of cloud storage, Aura Object Store runs on clustered commodity servers incorporating the latest hardware technology. Disk capacity and nodes can be added, without disruption to service, to accommodate rapid or unexpected growth in online content storage needs. I/O bandwidth and transaction processing capacity is added with each node, and ingest/delivery capacity grows as storage increases. RAM buffering is also leveraged to optimize the delivery of live video streams.

Resiliency and High Performance – Unlike traditional storage, Aura Object Store does not incorporate a centralized database. Operating in a dynamic clustered configuration, aggregate I/O bandwidth and request processing scale as storage capacity increases, decreasing the likelihood of video performance degradation as the size and number of content requests increases. Load balancing between Aura Object Store nodes ensures optimal performance levels as well. High levels of fault tolerance are achieved with multiple levels of redundancy, including geo-redundancy, by employing mirroring and automatic failover within the Aura Object Store cluster.

Full CDN Integration – The Aura Object Store interface is built to simplify integration into a content management workflow. Because Aura Object Store uses the same front-end interface as the Aura LCDN, interactions between Aura Object Store and the Aura LCDN are optimized. Aura Object Store can also be integrated with the Aura MCDN and media delivery solutions, providing seamless delivery for overflow and federation. Aura Object Store supports multiple accounts so content can be uploaded to a single Object Store by in-house as well as third-party content providers but managed securely and independently from one another. Standard APIs and support for the most popular streaming video formats can help reduce the complexity of integrating Aura Object Store with third-party content management systems and CDNs as well.

BENEFITS TO YOUR BUSINESS:

• Extend capacity with the ability to scale to petabytes of online media storage.
• Scale linearly – I/O bandwidth and request processing scale with content storage.
• Simplify content management through traditional file transfer APIs or REST-based cloud storage APIs.
• Support live and on-demand video applications through redundant live encoder feeds and HTTP adaptive streaming.
• Boost web performance with highly scalable read-write access and no central database.
• Manage content independently with separate authenticated CDN accounts.
• Offer non-stop operation with in-service capacity expansion and in-service software upgrades.
• Support ingest and delivery of HTTP adaptive bit-rate protocols including Apple HLS, Microsoft Smooth Streaming, and Adobe HDS.
Aura Object Store

Akamai makes the Internet fast, reliable, and secure and has relationships with hundreds of network operators to optimize the delivery of Internet services to subscribers. Aura Object Store is built using best-of-breed principles of web and cloud and managed through a consolidated system for configuration as well real-time and historical monitoring and reporting. Aura Object Store is supported by Professional Services experts who work to get you up and running easily and inspire innovation as your strategies evolve.