REDUCE PEAK BANDWIDTH

Reference Architecture

FIRST-MILE CONNECTIVITY

Cloud Data Center (Public Cloud)

Cloud Interconnect

Load Balancing

Data Center (Private on Premises)

Direct Connect

ORIGIN SERVICES

Media Services Live

Cloud Wrapper

NetStorage

DELIVERY

Live Video Delivery

On-Demand Video Delivery

Static Object and Download Delivery

EDGE INTELLIGENCE

Manifest Manipulation

Manifest Manipulation

Throughput Pacing

END-USER EXPERIENCES

MONITORING AND INSIGHT

Broadcast Operations

Video Analytics

Real User Monitoring

Real-Time Logs

Data Aggregation and Analysis

OVERVIEW

A sudden and dramatic surge in video streaming and game and software download events is testing the Internet with unprecedented traffic levels. Even when the Internet is highly congested, the Akamai Intelligent Edge Platform is designed to help organizations deliver powerful digital experiences at scale. With help from Akamai, customers can do their part to reduce bandwidth usage during peak times, ensuring positive experiences can be delivered and consumed by everyone.

1. Utilize third-party content preparation solutions to encode video and optimize for lower bandwidth with the same perceptual quality.

2. Access Akamai's cloud interconnects or direct connect for a highly reliable, secure, and economical data transfer entry point from a public or private cloud. Optimize request routing between origin infrastructures with highly scalable load balancing.

3. Store, ingest, or cache content away from cloud or on-premises origins, dramatically improving origin protection and offload, reducing egress costs. During content preparation, video can be optimized for lower-bandwidth delivery using third-party encoding solutions.

4. Deliver high-quality video streaming and download experiences to online audiences at scale — regardless of location, device, or network. Each solution is built on the Akamai Intelligent Edge Platform and provides leading reliability, scale, reach, offload, and performance.

5. Further optimize bandwidth usage using Akamai's edge servers. Customize video bitrate ladders for video streams or set rate limits on downloads to reduce congestion during peak times.

6. Use player/client intelligence to limit video and/or download bandwidth.

7. Monitor delivery performance and analyze insights. Enhance proactive support though a managed service. Illustrate the business relationship between performance and user engagement with easy visualization.

KEY PRODUCTS

First-mile connectivity ► Cloud Interconnect, Direct Connect, Global Traffic Management

Origin offload ► NetStorage, Media Services Live, Cloud Wrapper

Content delivery ► Adaptive Media Delivery, Download Delivery

Edge intelligence ► Manifest Personalization (AMD), Bitrate Limiting (DD)

Player ► Adaptive Media Player

Monitoring and insight ► BOCC, Media Analytics, mPulse, DataStream

Akamai