

Infinite Edge

Accelerated media delivery enabling sustained high-quality streaming at scale



As audiences increasingly shift online to view video content anytime, anywhere, on any device, an influx of Over-The-Top (OTT) services are being launched to meet consumer demand globally¹. The growth of online viewing audiences represents an enormous opportunity, but at the same time a daunting challenge as capacity and scale requirements are expected to grow by an order of magnitude. To support monetization of growing online audiences as well as viewer expectations, content providers require a streaming media solution that can deliver a consistent, high-quality video streaming experience at scale.

Infinite Edge is a streaming media solution optimized for live viewing with a goal to bring broadcast-quality OTT experiences to broadband. Infinite Edge maximizes video throughput for sustained quality experiences and is designed for global scale and reach to support the growth of online audiences to the level of traditional TV-sized audiences today.

Sustained Video Quality

Video streaming quality directly impacts audience viewing times, therefore maintaining quality is a critical factor in keeping audiences tuned in, which can directly impact revenue². Infinite Edge is designed to eliminate buffering, provide high and consistent video quality, and enable fast channel switching. This robust streaming experience extends audience view times, and that translates to more advertising revenue and sticky subscription services for content providers. Akamai's patented media acceleration technology utilizes enhanced UDP transport protocols and resilient coding schemes to accelerate video over the Internet, making video viewed over best-effort broadband networks begin to perform like provisioned networks. This technology helps overcome network congestion and packet loss, achieve higher capacity, and sustain a stable viewing experience — like audiences are used to on their TV today.

Global Scale and Reach

Infinite Edge leverages dedicated media acceleration servers enabled for multicast and client-assisted distribution within the Akamai Intelligent Platform™ which supports massive scale and reach. Content providers can ingest video signals from anywhere in the world and distribute their high-quality video content to audiences globally.

Infinite Edge helps Internet service providers meet the scale requirements of growing online audiences by leveraging a suite of multicast technologies (Simulated, Native, and AMT Multicast). The Infinite media acceleration software located on user's viewing device can pull data from multiple sources simultaneously to build a robust multipath video experience that is resilient to disruption. The InfiniteMediaAccelerationSDKorApp can dynamically prioritize sources that provide the best quality resiliency data. Resiliency data can be received from servers on the Akamai Intelligent Platform, Native Multicast sources, AMT (Automatic Multicast Tunneling) sources, or even participating viewer devices watching the same stream. The multipath and multisource nature of this technology, along with the acceleration components, ensure viewers sustain a steady, high bitrate streaming experience with fewer adaptive bitrate shifts required, resulting in longer view times. The ability to transparently support both unicast and multicast delivery provides flexibility to efficiently deliver video streaming for audiences of all sizes.

BENEFITS TO YOUR BUSINESS:

- **Captivate audiences, Increase revenues** – Ensure fast startups, limited buffering and sustained streaming quality that keep viewers tuned in.
- **Differentiate your OTT Video service** – Match quality content with the highest-quality streaming.
- **Global scale and reach** – Meet the demand of growing online audiences.
- **Video delivery flexibility and efficiency** – Deliver video with a future proof technology that helps Internet service providers deal with growing traffic volumes.

STANDARD AND OPTIONAL FEATURES

Infinite Edge includes the following standard features

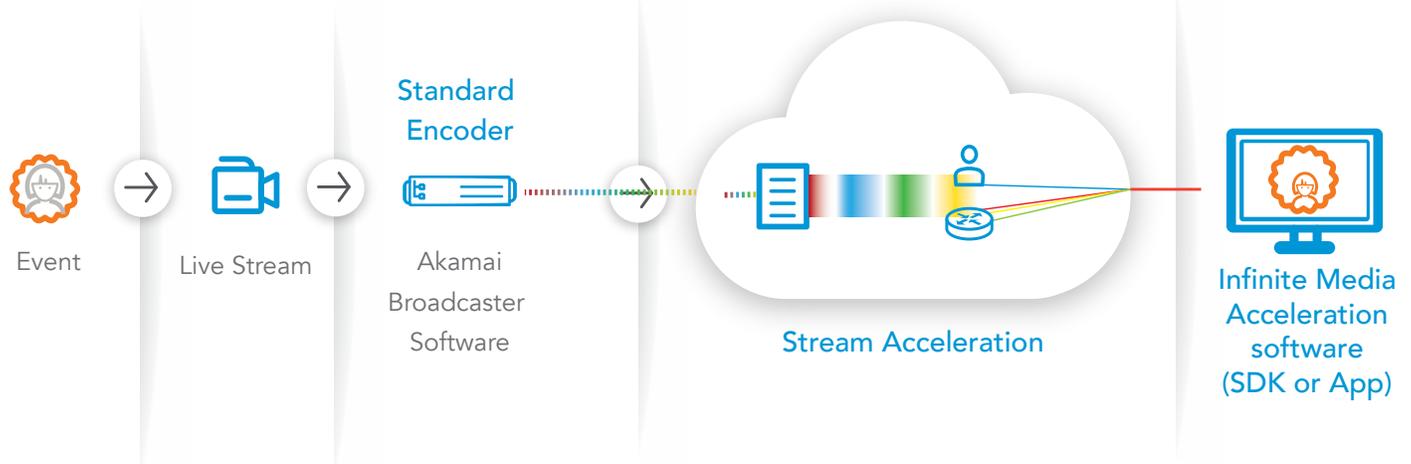
- Ingest Acceleration
- Infinite Media Acceleration Software
 - App (PC/Mac)
 - SDK (iOS/Android)
- Unicast, AMT Multicast, Native Multicast, and Simulated multicast delivery
- Reporting
- Token Authorization
- Support

Options

- DVR/Timeshift
- Domain Authentication
- Content targeting/Geoblocking
- Advanced Monitoring
- White Label Branding

Infinite Edge

How It Works



1. Akamai provides software to be installed on or next to the encoder or origin and software to be integrated into the viewer application, to ensure an accelerated and high-quality video stream end to end.
2. A standard encoder running Akamai software accelerates the streams over the first mile, up into the Akamai Intelligent Network, from anywhere in the world.
3. The Akamai servers apply a unique resiliency scheme to the data, allowing the software on the viewer's device to receive resilient components of the stream from multiple sources.
4. Akamai's media acceleration technology optimizes throughput using UDP and resiliency mechanisms.
5. Akamai's software integrated into the video application running on the user's viewing device pulls in segments from the best available source to ensure a sustained quality viewing experience.

The Akamai Ecosystem

Akamai makes the Internet fast, reliable and secure. Our comprehensive solutions are built on the globally distributed Akamai Intelligent Platform, and supported by Professional Services experts who get you up and running easily and inspire innovation as your strategies evolve.

Sources:

1. Gunnarsson, Tony. Forecasting the New Era of OTT. Ovum. 2015
2. Krishnan, Shunmuga. Sitaraman, Ramesh K. Study: Video Stream Quality Impacts Viewer Behavior



As the world's largest and most trusted cloud delivery platform, Akamai makes it easier for its customers to provide the best and most secure digital experiences on any device, anytime, anywhere. Akamai's massively distributed platform is unparalleled in scale with over 200,000 servers across 130 countries, giving customers superior performance and threat protection. Akamai's portfolio of web and mobile performance, cloud security, enterprise access, and video delivery solutions are supported by exceptional customer service and 24/7 monitoring. To learn why the top financial institutions, e-commerce leaders, media & entertainment providers, and government organizations trust Akamai please visit www.akamai.com, blogs.akamai.com, or [@Akamai](https://twitter.com/Akamai) on Twitter. You can find our global contact information at www.akamai.com/locations, or call 877-425-2624. Published 07/17.