



## AKAMAI INDUSTRY FACT SHEET:

# HD Today

Consumers and end users increasingly expect superior quality video experiences whether on their televisions, or over the Internet. As broadband connectivity becomes more common, graphics hardware gets faster and connected devices emerge, more and more providers are delivering HD or near HD-quality video over the Internet.

Akamai has risen to meet the increasing demands of HD video online by offering support for the latest encoding standards. Additionally, Akamai's relationships with the largest high throughput networks, coupled with the ability to seamlessly deliver high resolution files (720p, 1080i, 1080p) and store files greater than 2 GB all help to ensure smooth un-interrupted HD video experiences.

### The Akamai Difference for HD Today

- **The world's largest content delivery and streaming network**

The size and breadth of Akamai's EdgePlatform offers levels of performance, reliability, and scalability for HD Online that no other content delivery solution can offer. With servers located within one hundred miles of every end user Akamai can deliver extremely high bitrate files without interruption

- **Optimize market distribution and time to delivery with open standards based video player**

An open source video player framework for both Flash and Silverlight that plugs into leading advertising technologies to speed development, and helps standardize online video advertising.

- **High-quality, scalable video experiences through adaptive technologies**

Akamai AdaptiveEdge Streaming\* for Microsoft Silverlight and support for Adobe Flash Media Server 3.5 Dynamic Streaming combines the power of industry leading adaptive streaming technology with the global footprint of Akamai's network for unmatched scale and improved efficiency

### HD DELIVERY CHECKLIST

- > Technology to manage distributed platform
- > Relationships with high throughput networks
- > Capacity to deliver, store, and manage large files
- > Support VC-1, h2.64 and MPEG-4 video standards
- > Resolutions of 720p, 1080i and 1080p
- > Client-side technology that is deeply integrated into a delivery system

Adaptive streaming technologies such as Microsoft's Smooth Streaming for Silverlight will enable content providers to deliver the highest possible quality video to users based on their connection speed making HD a reality today.



# Akamai Success

## CBS — HD Gallery

Makes full-length prime time episodes available in HD resolution on the Web through an optimized user interface, and upgraded video player, delivering a stunning video viewing experience without requiring a separate download by users.

*Format* – Flash 9, Progressive Download  
*Bit Rate* – 1-2 Mbps  
*Resolution* – 480p and 720p



## HULU.com

Hulu brings together a large selection of videos from more than 100 content providers in its HD Gallery in both 480p and 720p resolution. Users can choose from more than 900 current primetime TV hits and movies.

*Format* – Flash 9, Progressive Download  
*Bit Rate* – 1-2.5 Mbps  
*Resolution* – 480p and 720p  
*Average show file size* – 480Mb



## Apple

Akamai powers the Apple iTunes movie store currently downloading more than 50,000 movies per day. Apple has recently introduced HD TV shows and rentals.

*Format* – Quick Time h.264  
 Progressive Download  
*Bit rate* – up to 5 Mbps  
*Resolution* – 720p



## Cinsay.com — Briggs Digital Media

Leading producer of all original series shot and delivered in HD via Stream OS that can be deployed anywhere:

- Online
- Connected devices
- Players
- Mobile devices

*Format* – Flash 9 Progressive Download  
*Bit Rate* – 900 Kbps or 1.5 Mbps based on bandwidth detection  
*Resolution* – 720p



## CONSUMERS ARE READY FOR HD TODAY

- > 26% of households connect to the internet at speeds greater than 5Mbps
- > 64% of households connect at speeds greater than 2Mbps

Source: Akamai State of the Internet, Q3 2008

## LATENCY LIMITATIONS AFFECT HD VIDEO EXPERIENCE

Distance from Server to User	Network Latency	Download Time
Local (<100 mi)	1.6 ms	12.2 min
Regional (500-1000 mi)	16 ms	2.2 hrs
Cross Continent (<3000 mi)	48 ms	8.16 hrs
Different Continent (<6000 mi)	96 ms	20 hrs

Akamai Internal Use only

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