

1-1-2007

# Akamai Streaming

Purdue ECT Team

*Purdue University*, [ectinfo@ecn.purdue.edu](mailto:ectinfo@ecn.purdue.edu)

DOI: 10.5703/1288284315825

Follow this and additional works at: <http://docs.lib.purdue.edu/ectfs>



Part of the [Civil Engineering Commons](#), and the [Construction Engineering and Management Commons](#)

---

## Recommended Citation

ECT Team, Purdue, "Akamai Streaming" (2007). *ECT Fact Sheets*. Paper 122.  
<http://dx.doi.org/10.5703/1288284315825>

This document has been made available through Purdue e-Pubs, a service of the Purdue University Libraries. Please contact [epubs@purdue.edu](mailto:epubs@purdue.edu) for additional information.



## AKAMAI STREAMING

### THE NEED

Akamai offers world-class streaming media services that enable Internet content providers and enterprises to succeed in today's Web-centric marketplace. They deliver live event Webcasts (complete with video production, encoding, and signal acquisition services), streaming media on demand, 24/7 Webcasts and a variety of streaming application services based upon their EdgeAdvantage™. Akamai's FreeFlow Streaming has been delivering streaming content to viewers worldwide using global delivery network. Whether it is a film festival, a live sports series, movie clips and trailers, or news and radio broadcasts, FreeFlow Streaming ensures that the streams delivered are flawless.

Today Akamai's premiere streaming media application is Akamai Netpodium, a service that enables businesses to produce live and interactive Web broadcasts for corporate communications, training, product launches, and type of real-time information sharing. Interactive broadcasting with Netpodium lets you gather feedback from and build relationships with audiences around the globe-all in real time, from the comfort of your desktop.



FIGURE 1 AKAMAI STREAMING

### THE TECHNOLOGY

#### How It Works

#### On-demand Media

Akamaizing an on-demand stream is as easy as modifying the file's URL. Akamai provides a simple utility that transforms URLs into ARLs (Akamai Resource Locators) when the file is requested by the end user. The media file is pulled into the Akamai



network and servers at the edge of the Internet, nearer to the end user. Using intelligent routing technology that analyzes network conditions, server capacity, content location and user location, the ARL of the file automatically routes the stream to the user from the optimal Akamai media server. The resulting stream is delivered from the server to the user in its original high-quality format.

## **Webcast Media**

To stream broadcast content over Akamai network, a content creator directs an encoded stream from any live source via a terrestrial line or satellite to Akamai Entry Points, that are located globally on separate carriers' networks. Akamai SteadyStream technology then splits the signal into multiple streams that are sent across the Akamai network where they are recombined at the edges of the Internet to recreate the streams in their original high-quality format.

## **THE BENEFITS**

### **Unequaled Performance**

Today's Internet users demand exciting, dynamic content with superior performance. Streaming media can enhance a Web site experience or it can slow it down. Webcasts often degrade as a result of Internet congestion, inconsistent servers and interrupted streams. The challenge is to ensure consistency and reliability, so Web site visitors enjoy a compelling streaming experience.

### **SteadyStream™ Ensures Quality**

SteadyStream is Akamai's technology to ensure that only the highest quality streams reach the audience. For live broadcasts, SteadyStream uses sophisticated error correcting to send multiple copies of streams to the edges of the network where they are recombined into their original quality format. For on-demand files, SteadyStream locates the original files at the edges of the Internet so that the last mile is all that limits the delivery of a perfect stream.

### **Unparalleled Benefits**

Akamai supports all leading formats to deliver the most important benefits to content owners including:

- Broadcast quality and performance
- Global reach
- Largest audience capacity

## **STATUS**

Today Akamai premiere streaming media application is Akamai Netpodium, a service that enables businesses to produce live and interactive Web broadcasts for corporate communications, training,



product launches-any type of real-time information sharing. Interactive broadcasting with Netpodium lets you gather feedback from and build relationships with audiences around the globe-all in real time, from the comfort of your desktop.

## **BARRIERS**

- Bandwidth
- Proper time modem

## **POINTS OF CONTACT**

**Akamai Technologies, Inc.**

Tel: 877-425-2624. Fax: 617-250-3001,

Website: <http://www.akamai.com/html/support/index.html>

## **REFERENCES**

1. <http://www.akamai.com/>

## **REVIEWERS**

Peer reviewed as an emerging construction technology

## **DISCLAIMER**

Purdue University does not endorse this technology or represents that the information presented can be relied upon without further investigation.

## **PUBLISHER**

Emerging Construction Technologies, Division of Construction Engineering and Management, Purdue University, West Lafayette, Indiana