

# LimelightSTREAM

## Fast, reliable, and scalable delivery of rich media streams—anywhere in the world.

Movies, video, music, breaking news—your audiences can't get enough and they can't get it fast enough. That's exactly why Limelight Networks™ developed its high-performance content delivery network (CDN) and comprehensive LimelightSTREAM™ service. Whether audiences are watching a feature film or listening to a live concert on the other side of the world, our robust CDN streams your content to them at the speed of light. The result? Immediate starts and smooth continuous play, even during intense traffic spikes, for the most enjoyable viewing and listening experience available online. And with global capacity of two terabits per second (2Tbps), you can support audiences of any size, anywhere in the world.

“Limelight Networks has not only the global reach and capacity our sites demand, but also flexibility and a deep understanding of our needs”

Stephane Enten,  
VP of Engineering,  
Dailymotion

### Benefits

- High performance for immediate user access to your content
- Global availability over a dedicated network
- Massive scalability to handle peak loads and flash crowds
- Reporting tools for analyzing traffic and audience
- Lower cost of delivery
- No capital investment or staffing required
- Fast deployment
- 24/7 support

## Robust CDN Architecture

The innovative Limelight Networks CDN was purpose-built to store and deliver your entire content library—whether you have 50,000 movies and TV shows or 5 million songs. It starts with thousands of servers deployed around the world, interconnected via a dedicated high-speed fiber-optic backbone. And because we connect directly to more than 900 access networks throughout the world, most of your content can bypass the busy public Internet, taking a direct path to the end user. Our global server footprint and direct-access network ensure that every title in your library, from the most popular to the most esoteric, will be available consistently to every user on demand.

## Support for Today's Leading Platforms

LimelightSTREAM provides comprehensive live and on-demand streaming services for Microsoft Windows Media, Adobe Flash Video, and MP3 music and audio—as well as on-demand streaming of RealNetworks RealPlayer and Apple QuickTime media files.

LimelightSTREAM Formats	Live streaming	On-demand streaming
Windows Media	●	●
Flash Video	●	●
RealPlayer	*	●
QuickTime	*	●
MP3	●	●

\* Custom solution available

As a Windows Media Premier Certified Hosting Provider and an Adobe Media Player Premier Authorized Partner, Limelight Networks has achieved the highest level of partnership with the leading developers of streaming platforms. This means we receive fast, expert support for customization and integration—and you benefit from a reliable, high-performance CDN.

## Why Streaming?

Streaming is the simultaneous delivery and consumption of rich media content. Perfect for broadcasting events, streaming enables millions of people around the world to enjoy live performances as they occur or to learn about the latest news in real time. Streaming is also an ideal choice for on-demand delivery of video and audio, especially long-form content, because it starts playing within seconds and allows users to jump to any future point in the video or audio. No matter how big the file, there's no need to wait for the entire file to download.

Unlike other content delivery methods, streaming players can process and play media in real time without leaving behind a file, providing inherent security advantages. Once the file is watched, it can't be shared or replayed offline—crucial for scenarios such as pay-per-view, movie rentals, or distribution of sensitive information. For increased security of copyrighted music or video, you can use digital rights management (DRM) to secure your streams.

Streaming can result in lower costs as well, because your delivery charges are a function of how much content moves from the CDN to the consumer. Streaming media is only delivered while it is watched (if it is watched), rather than delivered as a download that may never be opened or watched in its entirety. If consumers only view a portion of the file, streaming can be significantly less costly, particularly when there is a high rate of abandonment in mid-stream. And if your site is supported by advertising, you can realize revenue gains with streaming media, because you can sell a new ad unit with each replay of the same stream.

### LimelightDELIVER

Choose LimelightDELIVER for distributing video, music, games, social media, and software to the user's PC, set-top box, game console, or mobile device. Video and music files can be downloaded in their entirety or using progressive download. Not just for rich media, LimelightDELIVER gives standard web file formats (JPEG, GIF, JavaScript, CSS, and HTML) a significant performance boost.

For more information, visit [www.llnw.com/limelightdeliver](http://www.llnw.com/limelightdeliver).

## On-Demand Streaming—CDN Storage

With LimelightSTREAM, you can choose to store on-demand content on your own servers or on a Limelight Networks CDN storage server. When you choose Limelight Networks CDN storage, you're taking full advantage of our global high-speed network to ensure that your customers enjoy fast and reliable streaming every time. Media is served, at the speed of light, across our proprietary global network and delivered directly to your user's access network. And while you're leveraging the full power of the Limelight Networks CDN, you're also avoiding the costs of purchasing, managing, and supporting your own high-performance CDN infrastructure.

## LimelightSTREAM Options

Limelight Networks continues to develop innovative solutions to meet emerging business and technology requirements. Choose from a selection of integrated tools and services that enhance your operations and help you deliver the best possible service to your users.

### Content security

Limelight Networks offers a highly scalable security option that protects your content from unauthorized access. With Media Vault, your website generates a unique time-based URL to your content each time it's requested by your visitors. Because the URL expires within minutes, your content and your bandwidth are protected from abuse by spiders, bots, and deep linking. Even if another site were to embed the link, it would no longer be functional—preventing others from publishing your content without paying for its delivery.

Media Vault allows you to set start and stop dates/times, perfect for time-sensitive content. And since each URL is unique to each user request, it can't be copied and emailed to unauthorized individuals. You can also limit access to a block of IP addresses. Best of all, Media Vault controls don't result in server latency, thanks to a token-based system that avoids unwanted three-way handshakes, common to other methods of authentication.

## Content freshness

If your content is stored on your own servers, the Header feature enables you to set business rules for how long your files remain in cache on our CDN. This is especially useful for highly volatile content or for content that you want to change more frequently than the rest of your site. Since the Header settings are on your server, you're always in control.

## Complying with geographic restrictions

The Geo Compliance option uses a geo-IP database to match requestors' IP address with predefined rule sets. This makes it easy to ensure that your content is not accessible outside of a defined geographic area—ideal for managing media licenses with geographic restrictions. For sites where advertising is a primary driver, Geo Compliance can help you constrain your audience to the target geography of your site's advertisers.

## User-generated content

Limelight Networks makes it easy to add user-generated content to your sites—in your choice of major media formats, including Windows Media, Flash, RealPlayer, QuickTime, and 3GPP. Starting with your source content, simply define your workflow: Choose your encoding/transcoding profile, specify one or more target formats, set the bit rate, and specify the destination sites or devices—and your media is transformed and published automatically. As part of the workflow, you can also choose to generate thumbnails, create titles, or add watermarks to your video content. Customize the included workflow templates, or build your own.

### Expert professional services

Contact us to tailor a LimelightPS service to your needs, or choose one of our core service packages.

For more information, visit [www.llnw.com/limelightps](http://www.llnw.com/limelightps).

### True full-screen HD

Ready to transform your users' experience of digital media? Add LimelightHD™ to your LimelightDELIVER or LimelightSTREAM service.

For more information, visit [www.llnw.com/limelighthd](http://www.llnw.com/limelighthd).

## Command and Control

A flexible customer portal called LimelightEXCHANGE™ provides detailed information to help you analyze your LimelightSTREAM operations. With a robust set of reports, it's easy to monitor every aspect of your content delivery, such as object-level details, bandwidth and storage utilization, and most requested content. You can request raw logs every 24 hours or live logs every 15 minutes—both delivered in industry-standard format.

LimelightEXCHANGE also enables you to control how LimelightSTREAM publishes and presents your content. For example, to maintain content freshness or for managing exceptions, the Purge utility allows authorized individuals to delete content cached across our CDN. Multi-user access and permission controls give you the ability to limit access to reporting only, or to reporting and control functions.

Need even more power and more information? A premium version of LimelightEXCHANGE offers enhanced analytical tools through a streamlined user interface. Features include:

- Geo Reporting, allowing you to assess traffic at the global or continent level—and drill down instantly for city-by-city details;
- Hourly end-point performance measurements, delivered through a partnership with Gomez, a leading on-demand infrastructure provider for web solutions;
- Self-ordering, enabling you to add, modify, or delete services without needing to contact technical support;
- Improved file-tracking, expanding your view of object use, availability, and popularity.

## Specifications

### Windows Media

- On-demand streaming:
  - Storage location: Limelight Networks or customer
  - Support for Cnames, variable bit rates (VBRs) and multiple bit rates (MBRs)
  - Support for Media Vault and IP address verification
- Live streaming:
  - Support for push or pull delivery
  - Seed streams to multiple servers (pull only)
  - Windows Media Counter (additional report)
  - Windows Media Live self-provisioning tool (pull only)
- Encoders supported: Microsoft Encoder, Microsoft Windows Media Server, and Digital Rapids
- File types supported: wmv and wma
- Protocols supported: HTTP, RTSP, and MMS
- Full Silverlight support

### Flash Video

- On-demand streaming:
  - Storage location: Limelight Networks or customer
  - Support for bandwidth detection
- Live streaming: Support for push delivery only (VP6, Spark, and H.264)
- Dynamic Streaming for both live and on-demand streams
- Encoders supported: On2 Flix, Sorenson, Adobe, and Digital Rapids
- File types supported: FLV, H.264 (F4V, MP4, 3GPP, MPEG-4), MP3, and AAC(+)
- Protocols supported: RTMP, RTMPT (HTTP tunnel), RTMPE (secure streaming), and RTMPTE

### RealPlayer

- Support for on-demand streaming (only when stored on Limelight Networks servers)
- Protocol supported: RTSP

### QuickTime

- Support for on-demand streaming (only when stored on Limelight Networks servers)
- Protocol supported: RTSP (files need to be hinted)

### MP3

- Support for both on-demand and live streaming (on-demand delivery via Flash Live service)
- Support for push delivery only
- Protocols supported: MP3, ACC, AAC+, and Ogg Vorbis

### Get started today

Contact Limelight Networks today. Our expert client services team will work with you to develop a media streaming solution that meets your business needs.

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