HTTP Dynamic Streaming

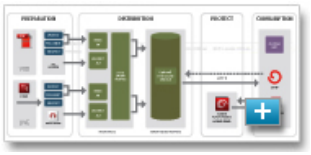
Flexible delivery of on-demand and live video streaming

The release of the Adobe® Flash® Player 10.1 and Adobe AIR® 2 runtimes introduces support for HTTP Dynamic Streaming for on-demand and live video streaming online. This new delivery method enables on-demand and live adaptive bitrate video streaming of standards-based MP4 media over regular HTTP connections. This capability gives content creators, developers, and publishers more choice in high-quality media delivery while maintaining the reach of the Adobe Flash Platform. While the Real Time Message Protocol (RTMP) remains the protocol of choice for lowest latency, fastest start, dynamic buffering, and stream encryption, HTTP Dynamic Streaming enables leveraging of existing caching infrastructures (for example, content delivery networks, ISPs, office caching, home networking), and provides tools for integrating content preparation into existing encoding workflows. In addition, robust and flexible content protection is available with Adobe Flash Access™ 2 software.

Both on-demand and live delivery are supported with HTTP Dynamic Streaming. The content preparation workflow for each is slightly different. On-demand content is prepared through a simple post-encoding step that produces MP4 fragment files along with a manifest file.

Learn about the F4F file format specification
Learn about the FMF manifest specification

HTTP Dynamic Streaming
Available in late May 2010



HTTP Dynamic Streaming workflow diagram

WHAT'S NEW

Robust, scalable delivery
Use existing caching infrastructures and standard HTTP server hardware to deliver on-demand and live content on a large scale with maximum quality.

An upgrade from progressive delivery
Enjoy enhanced playback features including adaptive bitrate streaming, live support, DVR functionality, and interactive seeking over HTTP connections.

Supporting Flash Access Server for protected streaming
Protect your valuable content with file encryption and fast play start, while still allowing seamless access for the viewer. Maintain control of your content throughout the production workflow.

Multiple video codecs
Encode your content using high-quality Flash Player compatible codec (VP6/MP3, H.264/AAC), and with a simple processing step, create fragmented files for HTTP Dynamic Streaming delivery.

TOP FEATURES OF HTTP DYNAMIC STREAMING

- HD quality with H.264 and AAC
- Adaptive bitrate
- Content protection with Adobe Flash Access 2
- Support for standard HTTP delivery systems
- Live streaming with DVR support
- On-demand streaming with enhanced seeking
- Client tracking and reporting (with the OSMF Omniture® plug-in)
- Open Source Media Framework with sample player
- Multiplatform browser, desktop, and device support
- Linux and Windows Server® support
- MP4 standard format with open file specification (F4F)

See feature details

IPR2025-00315
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IPR2024-01308
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Unparalleled reach
Reach the widest possible audience by delivering content to Adobe Flash Player or Adobe AIR applications, allowing users to stream premium content to Mac OS, Windows®, or Linux® desktops.

Open source file specifications
Achieve a live streaming experience using MP4 fragment format, the industry standard for adaptive bitrate delivery.

Open source, customizable media player framework
Quickly and easily add support for HTTP Dynamic Streaming to existing media players by using Open Source Media Framework (OSMF).

See all features

USING HTTP DYNAMIC STREAMING

Adobe Developer Connection
Take advantage of this comprehensive portal for developers to access technical articles, tutorials, code, and documentation, as well as interact with others who are developing applications using HTTP Dynamic Streaming.

User forums
Engage in discussions with the community about Adobe products on the online forums.

Highlights
See the latest press releases and announcements

Support
Get helpful support and troubleshooting resources for HTTP Dynamic Streaming.

Events and seminars
Check out live and online events in your area, or sign up for an eSeminar or OnDemand seminar.

RELATED PRODUCTS

Open Source Media Framework
OSMF simplifies the development of media players by allowing developers to assemble components to create high-quality, full-featured video playback experiences.

Adobe Flash Access
Flash Access software is a robust content protection solution that lets content owners, distributors, and advertisers realize new sources of revenue by providing seamless access to premium content.

Adobe Flash Player
Flash Player is a cross-platform browser plug-in that delivers breakthrough web experiences to more than 98% of Internet users.

Adobe AIR
Adobe AIR is a cross-operating-system runtime that allows you to build rich Internet applications (RIAs) for the desktop while integrating content protection for your video assets.

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