

The World's First Unified Media Server







H.264 support for:

- Apple iPhone and iPod touch
- Microsoft Silverlight
- Apple QuickTime
- IPTV Set-top boxes and more



Wowza Media Server is the world's first platform that lets you stream <u>from one H.264 encode</u> simultaneously to multiple players and devices. It unifies the multi-protocol, multi-player H.264 streaming into a **single workflow**, eliminating the need for multiple player-specific encoders and servers. And Wowza Media Server 2 delivers all that at an unbeatable price — <u>75% less than the single-protocol</u> Adobe Flash Media Interactive Server (FMIS) or Microsoft Windows Server® with IIS.

Proclaimed the <u>Best Streaming Innovation of 2009</u>, and <u>hailed 'the smart choice</u>' by our customers and the industry, Wowza Media Server 2 makes streaming affordable for organizations of all sizes — from the smallest enterprises to hosting providers and CDNs.

Wowza Media Server 2 is not just a high-performance, extensible and a fully interactive Flash media server - it takes the proven Wowza Pro platform **beyond Flash** by adding

Our <u>customers</u> are using Wowza Media Server 2 in many creative ways, in a variety of applications — explore why Wowza Media Server Pro is the smart choice for you too:

Industrial Strength

High-performance - highly multi-threaded 64-bit architecture
Reliable - built from the ground up as an infrastructure-grade server
Unified - standard H.264, encoded once, delivered everywhere
Scalable - multi-server scalability for live or on-demand
Extensible - comprehensive API's, scripting, programming and integration
Manageable - standards based, easy to deploy and integrate
Cross-platform - runs on Windows, Linux, Mac OSX, Solaris, and more...
Economical - unlimited multi-protocol connections at unbeatable prices

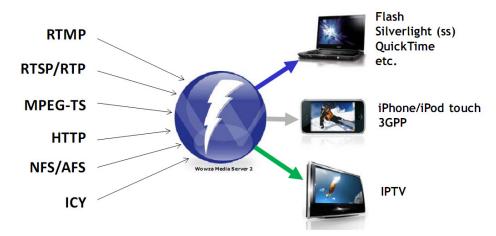


Figure 1. Wowza Unifies Multi-Protocol, Multi-Client Media Streaming



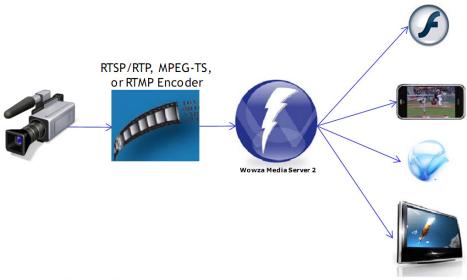


Figure 3. Unified workflow approach: saves costs in encoding, servers & storage

H.264/AAC Everywhere One Encode. Multiple Destinations. Simply Beautiful.

Only Wowza Media Server 2 lets you simultaneously stream your H.264/AAC content to a variety of media clients and devices. With Wowza Server 2 you don't have to use client-specific encoders and servers, or pre-process files for consumption by specific clients - it works with a wide range of conventional RTMP, RTSP/RTP or MPEG-TS H.264 encoders for live streaming, and for on-demand content, with standard <u>file container formats</u>. Now you can take your content to multiple player destinations with just a single encode.

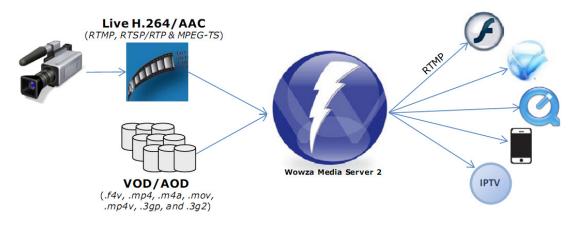


Figure 4. Live H.264/HE-AAC streaming with non-Flash encoders (RTSP/RTP)





Content owners, producers, and delivery network operators gain many benefits by deploying Wowza Media Server 2, including:

- Simultaneous streaming to Flash, iPhone, Silverlight, mobile devices, IPTV set-tops and more...
- Get significant cost savings by eliminating infrastructures and the burden of the multi-format file storage
- Improve viewer experience with adaptive bitrate streaming for Flash, iPhone and Silverlight
- **Boost infrastructure efficiency** by selecting the most effective ingest and streaming methods according to your audience needs

Now you can truly expand your streaming horizons.

Wowza Media Server 2 Advanced supports Flash media content (.flv), H.264/ACC media content (.f4v, .mp4, .m4a, .mov, .mp4v, .3gp, and .3g2) and MP3 content (.mp3).

Streaming:



Flash - fully interactive Flash media streaming

Wowza Media Server 2 delivers a complete interactive Flash media streaming feature set proven by over 30,000 licensees worldwide on the <u>award-winning Wowza Pro platform</u>. It delivers file streaming in all Flash player-compatible formats, including FLV and H.264 video, MP3 and HE-AAC audio, as well as the <u>exclusive features you can't get with FMIS/FMSS</u>.

- 100% Flash and Flash Lite 3 player compatibility
- Live, on-demand streaming up to 1080p HD
- Chat, recording, collaboration
- Complete RTMP support, including secure RTMPE variant
- Remote Shared Objects (RSO)
- Dynamic streaming
- Flash (RTMP) and Non-Flash (RTSP/RTP, MPEG-TS) live encoder support
- Exclusive MP3 and AAC SHOUTcast/Icecast re-streaming
- TiVo-like Fast Forward/Rewind trick play for prerecorded Flash (.flv) files
- Bi-directional AMF3 support
- Support for all Flash player video and audio formats



iPhone - live and on-demand HTTP Streaming

Wowza Media Server 2 features our own implementation of the Apple stream segmenter that lets you deliver H.264 (baseline 3.0 or lower) content using Apple HTTP Streaming protocol directly from any standard RTSP/RTP, MPEG-TS or Flash (RTMP)encoders, as well as the H.264 files in a variety of <u>file container formats</u> — no external stream/file pre-segmentation is required.

Wowza Media Server 2 supports:

- In browser playback on iPhone 3.0 OS or later devices, desktop QuickTime player (10.0 or later) and Safari browser (4.0 or later) using HTML5 tag
- Multi-bitrate adaptive streaming consistent video delivery in variable wireless conditions, from EDGE to WiFi
- AES-128 encrypted streaming
- Per-session logging for complete content usage visibility
- Multi-server streaming scalability for a virtually unlimited capacity



Silverlight - live and on-demand smooth streaming

Wowza Media Server 2 features our own implementation of the Microsoft smooth streaming segmenter that lets you deliver H.264 content directly from any standard RTSP/RTP, MPEG-TS or Flas (RTMP) encoders, as well as the





H.264 files in a variety of <u>file container formats</u> — no external stream/file pre-segmentation is required. Wowza Media Server 2 supports:

- Stream Silverlight from any OS Windows Server and IIS are not needed
- Compatible with Silverlight player (3.0 or later)
- Multi-bitrate smooth streaming
- Per-session logging for complete content usage visibility
- Multi-server streaming scalability for a virtually unlimited capacity



QuickTime - live RTSP streaming

With Wowza you don't need to deploy separate QuickTime Streaming Servers (Darwin) servers — Wowza Media Server 2 can stream live H.264, AAC and MP3 content to the QuickTime and other players and devices that support the Real Time Streaming Protocol (RTSP).



SHOUTcast/icecast - multi-client audio re-streaming

Thanks to the Wowza Media Server 2 exclusive <u>SHOUTcast/icecast re-streaming</u> capability, delivering the best sounding AAC, AAC-LC, aacPlus (HE-AAC) and MP3 audio to the biggest audiences on the Internet has never been easier. Now you can re-stream SHOUTcast content from existing SHOUTcast servers to Flash, iPhone, Silverlight, 3GPP mobile devices and more.



IPTV, 3GPP mobile, and more...

Wowza Media Server 2 can stream live H.264, AAC and MP3 content to players and devices that support the Real Time Streaming Protocol (RTSP), Real-time Transport Protocol (RTP) and MPEG2 Transport Stream protocol (MPEG-TS). This enables streaming to many compatible players and devices, including 3GPP mobile devices and IPTV set-top boxes. You can even create desktop "Flash phone" applications that integrate with VOIP or PSTN over RTSP using Speex audio.

Wowza Media Server 2 Specifications

Multi-Protocol, Multi-Client Streaming

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Adobe RTMP (RTMPE, RTMPT, RTMPTE, RTMPS)	Flash player Flash Lite 3 AIR
Apple HTTP Streaming	iPhone, iPod touch (iPhone OS 3.0 or later) QuickTime player (10.0 or later) Safari (4.0 or later)
Microsoft Smooth Streaming	Silverlight 3 or later
RTSP/RTP	QuickTime player VideoLAN VLC player Mobile devices (3GPP) Other compliant players
MPEG2 Transport Protocol (MPEG-TS)	IPTV set-top boxes



RTMP

Wowza Media Server 2



Compatible L	ive Encoding	í
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KTM	codec Audio: AAC, AAC-LC, HE-AAC, MP3, Speex, NellyMoser ASAO
RTSP/RTP	Video: H.264 Audio: AAC, AAC-LC, HE-AAC, MP3, Speex
MPEG-TS	Video: H.264 Audio: AAC, AAC-LC, HE-AAC, MP3
ICY (SHOUTcast/icecast)	Audio: AAC, AAC-LC, HE-AAC (aacPlus), MP3
Applicable Transport Protocol and Pay	load Specifications
RTSP	IETF RFC2326
RTP: H.264	IETF RFC3984, QuickTime Generic RTP Payload Format
RTP: ACC	IETF RFC3640 IETF RFC3016 ISO/IEC 14496-3
RTP: MP3	IETF RFC2250
RTP: Speex	IETF RFC5574
MPEG-TS	ISO/IEC 13818-1
MPEG-TS over RTP	IETF RFC2038
Supported File Formats	
Video and audio	FLV (Flash Videoflv) MP4 (QuickTime containermp4, .f4v, .mov, .m4v,

Video: H.264, VP6, Sorenson Spark, Screen Shared

System Requirements

Minimum recommended production hardware	CPU: Single Dual Core, 3.00 GHz or better RAM: 2GB Disk: 2 or more in RAID 0 (striping) Network: 1Gb Ethernet
Supported operating systems	Windows (XP, Vista, 7, Server 2003 & 2008) Linux (all distributions) Solaris Mac OS Unix
Java (required)	Java Runtime Environment (JRE) 6 or greater or Java Development Kit (JDK) 6 or greater

^{*}Specifications are subject to change.

.mp4a, .3gp, and .3g2)

MP3 (.mp3)