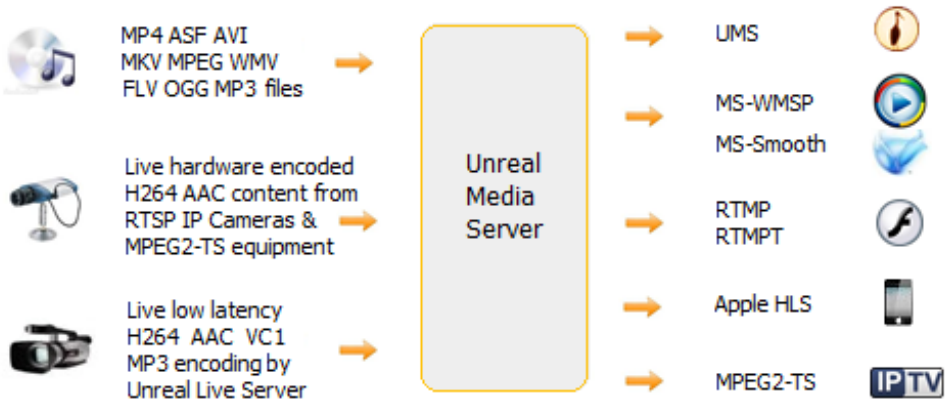
Unreal Media Server

Specifications data sheet

Multi-protocol, high performance and small resources footprint software platform for streaming live and on demand audio - video content over IP networks. Integrates into existing solution infrastructure and delivers high quality streaming experience.



Unreal Media Server specs:

OS	**Windows 2000, XP, 2003 Server, Vista, 2008 Server, 7; 32-bit and 64-bit OS.**
Required system software	DirectX 8.0 or higher (comes with OS or service packs)
Process	Runs as a windows service
Configuration	Windows GUI application, API for remote or web-based configuration
Supported file container formats	MP4, ASF*, WMV*, AVI, MKV, MPEG, FLV, OGG, MP3, 3GP, MOV, any other *Windows Media Format runtime v9 or higher is required on the server computer.
Playlist	Alphabetical and random order file playlists are supported
Delivery protocols	

Protocol	**Reach limits**	**Players**
RTMP unicast	May be limited by some firewalls.	Flash Player
RTMPT unicast	Works through Proxy servers and firewalls.	Flash Player
MS-WMSP unicast	Works through Proxy servers and firewalls.	Silverlight, Windows Media Player
MS Smooth streaming	Works through Proxy servers and firewalls.	Silverlight
Apple HTTP Live streaming	Works through Proxy servers and firewalls.	iPhone, iPad, iTouch, other HLS-enabled devices
MPEG2-TS over UDP and RTP; unicast, multicast	May be limited by some firewalls.	Set-Top boxes
UMS over TCP and RTP; unicast, multicast	May be limited by some firewalls.	Unreal Streaming Media Player or browser plug-in
UMS over HTTP and HTTPS; unicast	Works through Proxy servers and firewalls.	Unreal Streaming Media Player or browser plug-in

Supported live encoders	RTSP IP cameras and servers; MPEG2-TS encoders; MS-WMSP encoders; Unreal Live Server and UM series IP cameras and encoders.
User authentication	Live and recorded resources can be configured to use Internal or Session-based authentication Internal authentication: Unreal Streaming Media Player asks for Username/Password; users need to be created on the server side Session-based authentication: Web portals/applications authorize users; only those authorized users are given access to media resources
User logging	Full user activity logging including media resources used, amount of data transfer and other information
User control	Live console allows real-time user monitoring and management
Resources control	Concurrent connections limit and throughput limit are supported. Live broadcasts can be configured to limit per-user playback time.
Live statistics	Live console displays current server state: current throughput for each delivery protocol, active users and media resources being used
SDK	API for programmatic user administration and session-based authentication. API for programmatic addition/removal of virtual folders and live broadcasts to/from Media Server configuration metabase. API for programmatic start/stop of Apple HTTP Live streaming, MS Smooth streaming, MPEG2-TS broadcasting.

Unreal Live Server specs:

OS	**Windows 2000, XP, 2003 Server, Vista, 2008 Server, 7; 32-bit and 64-bit OS.**
Required system software	DirectX 8.0 or higher (comes with OS or service packs)
Process	Runs as a windows service
Configuration	Windows GUI application, API for remote or web-based configuration
Live sources	Video: USB, Firewire cameras. DV sources such as camcorders. Analog sources via capture cards; graphics card input or TV-tuner card. Hardware encoding appliances with DirectShow support. Audio: Sound Card inputs – Microphone, Line In. DV audio. TV-tuner card audio.
Codecs used for compression	Video: H.264, WMV, Microsoft MPEG-4 Video V2, any other codec Audio: AAC, WMA, MP3, GSM 6.10, any other codec Hardware encoded content: Ability to stream hardware encoded content without software transcoding.
Encoding bitrates	Video: Multiple profiles from 40 kbps to 24 mbps. Audio: Multiple profiles from 5 kbps to 320 kbps.
Live streaming latency in Near Real Time mode	Video only: 0.05-0.3 sec Audio + Video: 0.3-1 sec Latency may grow if network bandwidth is not sufficient for particular stream bitrate.

Streaming delivery modes	**Near Real Time mode**: minimal latency on the client side. Refer to the table above. Suitable for conferencing or surveillance applications. **Buffered mode**: Media Server, Live Server and Player buffer live content to compensate on network congestions. Suitable for live event webcasting; live radio/TV.
Connection to Media Server	Connections can be initiated by Media Server or by Live Server. Multiple Media Servers can connect to the same Live Server. Live Server can send data over TCP and RTP (UDP) transports.
Access restrictions	IP-based restrictions can be set to allow or prohibit Media Servers to use Live Server sources
Transformations	Built-in logo/watermark, text, timestamp overlays. Ability to insert custom transformation plugin to get access to raw video frames / audio samples.
Recording	Live sources can be recorded based on scheduler or video motion / audio beat detection, independently of streaming. Recording format is ASF or MP4 containing WMV, H.264, MPEG4/WMA, AAC, MP3 media.
Resources control	Live console displays resources currently being streamed and recorded. Live console displays current Media Server connections. Live console allows connecting to Media Server and starting/stopping recording of live sources.
SDK	API for programmatic control over recording of live sources. API for connecting live broadcasts to Media Server programmatically. SDK for creating custom Audio/Video transform components.

Client playback applications:

OS	*Player*
Windows	Unreal Streaming Media Player, Windows Media Player, Flash Player, Silverlight, VLC
MAC	Flash Player, Silverlight, QuickTime Player, VLC, HTML5 <video> via HLS
Linux	Set-Top boxes, Flash Player, VLC
Mobile Devices	iOS: HTML5 <video> via HLS; Android: Flash Player

Unreal Streaming Media Player specs:

OS	**Windows 98, ME, XP, 2000, 2003 Server, Vista, 2008 Server, 7, Windows Mobile 5+**
Plugin for web browsers	Internet Explorer, Firefox, Netscape, Mozilla, Safari, Opera, Chrome.
Player features	Pause/Resume/Seek controls. Resizable frame - custom size; Full screen. Contrast/brightness enhancements, playlist browsing, volume control. Uses hardware video acceleration. Any number of players can run on a single desktop at the same time (CPU bound).
DRM	Incoming content is not stored on client computer's hard disk and user is not allowed to save media locally. Streams cannot be ripped.
SDK	API for ActiveX control: complete automation control for customizing player behavior.

Unreal Streaming Technologies
http://www.umediaserver.net
contact@umediaserver.net