

Key Features and Benefits:

- > Saves time by automating the creation and teardown of publishing points on streaming servers.
- > Improves viewer retention by eliminating delays.
- > Deliver video and presentation content throughout your network safely and securely.
- > Guarantee timely content distribution, while decreasing costs and overhead typically associated with video distribution.
- > Ensures that viewers remain connected to the video stream in the case of an encoder or streaming server failure.
- > Automates the connections monitoring during a live event so any problems can be immediately detected and solved.
- > Allows administrators to supply applicable streaming options by location.
- > Scales Live and On-Demand broadcasts to tens of thousands of viewers.
- > Controls access inside and outside the firewall.
- > Enables multi-format support for H.264 and Windows Media.
- > Full integration with the Qumu Video Control Center.

Qumu VideoEdge Video Distribution Network

Easily Manage and Deliver Live Webcasts and Video on Demand to Thousands in Multiple Video Formats

Qumu VideoEdge is a video-centric distribution appliance that efficiently streams live and on-demand business video securely to hundreds or thousands of desktops within enterprise networks. VideoEdge provides caching of H.264/MPEG-4, Windows Media & Flash video, VoD and live broadcast content from the edge, which reduces traffic from the centrally-located origin server. Qumu VideoEdge can be deployed in multiple options on your network - as a pre-packaged appliance, as software for installation on top of your existing Windows Media server installation, or as a virtual application on Riverbed RSP, giving you flexibility to match your network infrastructure and streaming environment.

Reliable, Cost-effective Video Distribution

Qumu VideoEdge is an affordable system for scalable delivery of video content, provided in a small hardened appliance form factor. All configuration, monitoring, and management is conducted by the Qumu Video Control Center, enabling centralized administration of multiple devices. Advanced streaming and caching features provide for automated delivery of video content where it is needed, while minimizing resulting network traffic for efficiency in video streaming.

Qumu VideoEdge supports both Live and on-demand broadcast from an edge distribution appliance, supporting Windows Media, H.264, Flash, .mp3 formats, with appropriate protocol support for Live and VoD, including progressive download, http streaming, RTSP and multicast support. Offline viewing is available for later viewing when users may be traveling or outside of the corporate network.

The Qumu VideoEdge platform serves as the secure infrastructure that allows enterprises to develop and stream live webcasts and Video on Demand to users.

Qumu VideoEdge empowers customers to update distributed teams simultaneously with the most up to date material including audio and video, documents, images and other presentation material.

Secure Videocasts Across the Company and Around the World

Qumu VideoEdge creates a fully managed delivery network that provides an unparalleled level of security and fault-tolerant reliability.

- > **Secure** - Flexible, automates setup and teardown of video distribution for each event.
- > **Scalable** - Distribute video content to thousands of employees simultaneously over your existing enterprise network. With VideoEdge clouds, use one central point of control for hundreds of devices distributing to audiences of any size, worldwide.
- > **Reliable** - Instant routing of user requests to the closest streaming edge server; automated failover for encoders and streaming servers at all levels. Administrator-defined controls, configurable by time and in specific regions, prevent network congestion.
- > **Automated Multicast and Unicast** - Efficient management of publishing points, content distribution and edge server deployment.
- > **Streamlined deployment** - Simplify the process of distributing streaming video files over the network so that non-technical employees can package and publish video programs without involving the IT department in the process. Provides easy-to-use testing and monitoring.

VideoEdge Market Leading Features

Built on top of Microsoft Windows media streaming environment, Qumu VideoEdge minimizes the impact of Windows Media media files on the network.

Qumu VideoEdge ensures that requested video files are quickly and efficiently accessed and delivered with streaming performance for an outstanding viewing experience in either live, re-broadcast or on-demand.

- > **Live Broadcast Workflow** - The Qumu Video Control Center provides a simple interface to manage the testing, provisioning, starting, monitoring, stopping, and tearing down of the dynamic streaming network configuration.
- > **Publishing Point Automation** - Qumu VideoEdge automates the setup of publishing points on all streaming servers on the network. It recognizes various roles that a server may play: origin point, distribution node, edge node. The user can select origin and destination nodes and Qumu VideoEdge selects a distribution route.
- > **Network Flexibility** - Qumu VideoEdge automates maximization of bandwidth conservation with a combination of unicast and multicast network segments and provides multicast-tounicast failover on designated servers.

Embedded tools also schedule transmissions which conform to a given format and bitrate. Qumu VideoEdge saves bandwidth by offering the option to select particular edge nodes or groups of edge nodes.

- > **Streaming Server Monitoring** - Qumu VideoEdge automatically monitors all streaming servers and displays failure notices immediately if any of the servers fail. This helps ensure a successful event for the viewing audience.
- > **Failover** - Qumu VideoEdge provides automatic routing of user requests to the closest streaming edge server, and failover to the second closest server.
- > **Content repositioning** - Distribution can be enabled selectively to Qumu VideoEdge appliances based on policies and publishing parameters. Obsolete content is removed upon expiration date.
- > **Caching** - On-demand (passive) caching for Windows Media® (WM) and archiving when streaming live (WM). Content pre-positioning available for all media types.
- > **Proxying** - Live proxying - stream splitting for Windows Media®. Both forward and reverse proxy modes are supported for streaming content thus providing flexibility in selecting a method to route end-user requests to the closest Qumu VideoEdge.

System

- > CPU: Single Intel Celeron 440 Processor 2.0 GHz, 800MHz FSB, 512k Cache
- > Memory: 4 GB RAM, DDR2 unbuffered 667 MHz ECC UNB
- > Disk Selection: HDD, 750 GB storage, SATAII
- > ROHS compliant
- > Standard 1U

Physical Characteristics

- > Dimensions: Mini 1U chassis W x L x H = 16.7" x 1.7" x 14" with 260W PS

Supported Technologies

- > Windows® 2008 Standard Server, or Windows® 2008 Enterprise Edition if Multicast is utilized

Streaming Servers

- > Windows Media® Streaming Server

Riverbed RSP

- > VideoEdge runs as a Windows 2008 application on the RSP virtual machine.
- > Windows® 2008 Standard Server, or Windows® 2008 Enterprise Edition if Multicast is utilized
- > Supported on Riverbed RSP running on SteelHead Models 250, 520, 550, 1020, 1050, 1520, 2020, 2050, 3020, 3520, 5050, 6050



Video Format	Live Broadcast	VOD (streamed to player)	Download offline (save on hard drive)	Server
Windows Media	Unicast (RTSP, HTTP Streaming) Multicast (*)	RTSP, HTTP Streaming	Yes	WMS (Standard Edition), IIS7 WMS (Enterprise Edition)
Flash	(**)	Progressive Download, (**)	Yes	
H.264	(**)	Progressive Download, (**)	Yes	

(*) requires VideoEdge Multicast Edition

(**) available in future version



Qumu, Inc.
U.S. Headquarters
1100 Grundy Lane, Suite 300
San Bruno, CA 94066 USA
Tel (650) 396-8530
Sales (866) 654-8333
Fax (650) 871-8375