

RAMP MULTICAST

PROTECTING YOUR NETWORK FROM LIVE VIDEO STREAMING

Ramp Multicast is the most efficient eCDN to stream live video. It uses your network's multicast protocol to send a single video stream to everyone in your audience without consuming any more bandwidth than what is needed for one viewer.

Flawless Live Broadcasts

Live video streaming is an efficient and effective way to reach employees whether they're in the next room or on the other side of the world. But streaming video to hundreds or thousands of people over the corporate internet connection can seriously impact your network. It not only comprises the quality of your videos, but your business-critical operations as well.

Multicast is a bandwidth-conserving, one-to-many network protocol that reduces traffic by distributing

a single video stream for all users to watch. Because it's the most efficient method of reaching a large number of viewers with stable, reliable transmissions, many enterprises use multicast technology to handle streaming video.

With the impending end of support for Microsoft and Cisco multicast servers, and the movement away from Flash, enterprises with multicast-enabled networks need to find an alternative.

When to Use Multicast:



Live is the priority.
Most efficient way to live stream to large audiences.



Multicast network.
Only direct replacement for legacy multicast.



Security is No.1.
100% behind the firewall, end-to-end encryption.

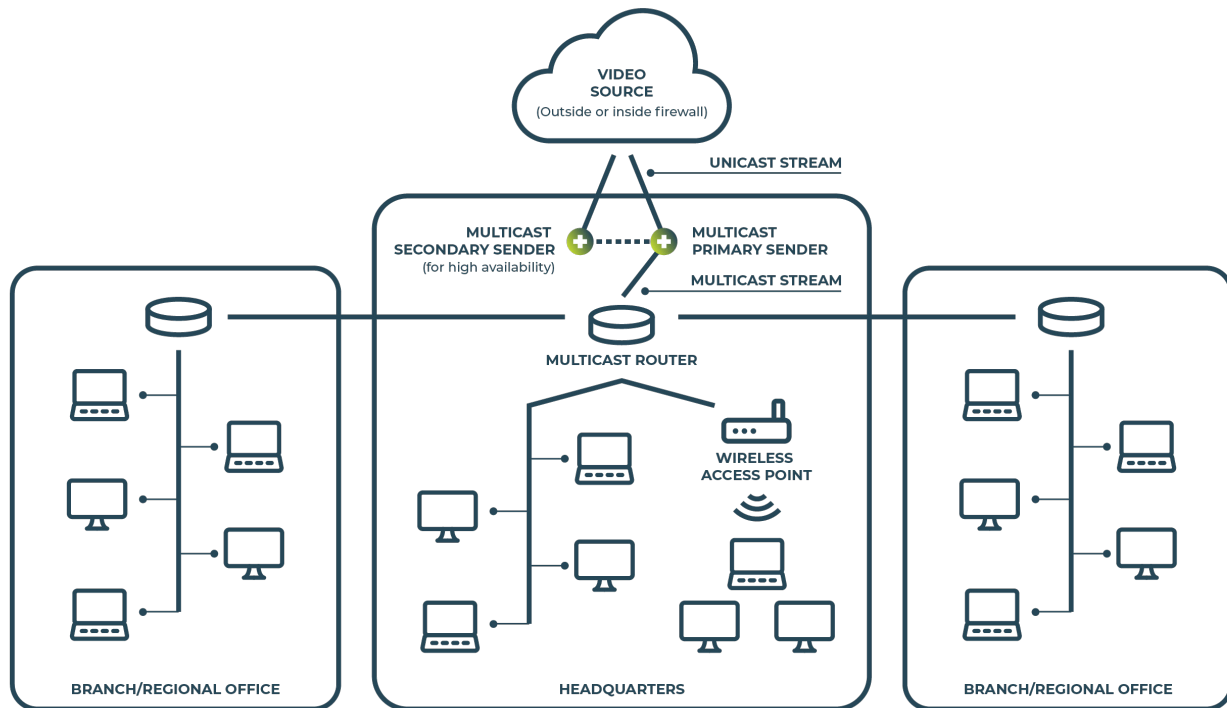


Viewer Access.
Predictable video delivery, even over Wi-Fi and in VDI environments.

Secure, Next-Generation Multicasting for the Enterprise

Ramp Multicast+ is a next-generation multicast solution that overlays your existing network infrastructure to deliver high-quality, stable video to all your viewers. Multicast+ is the only multicast solution for HLS and DASH video. Once deployed, Multicast+ serves as a common distribution infrastructure for all your enterprise streaming platforms.

Multicast+ gives you total control over your eCDN environment. It's deployed and managed 100% behind your firewall with built-in security to prevent unauthorized access to your videos. It's a lightweight, software solution you can install on existing infrastructure—so no need to upgrade your network or buy proprietary hardware.



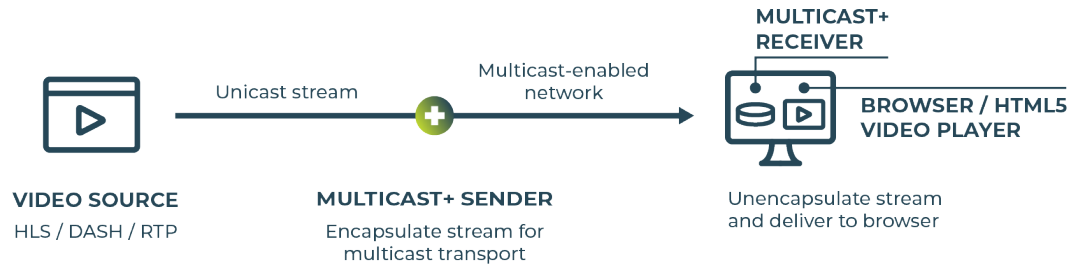
How Ramp Multicast Works

The simple purpose of Multicast is to make your videos play in a browser using your multicast-enabled network.

It is made up of two software components—a Multicast Sender and Multicast Receivers. Together, they orchestrate video distribution over multicast in

place of the typical unicast transport.

The Multicast Sender is server software that sits on your network. It retrieves live video streams from your video source, encapsulates them for multicast transport, and sends them out over the multicast-enabled network.



Each viewing device on the network, such as a personal computer, hosts a Multicast+ Receiver. The Receiver makes the client capable of tapping into multicast broadcast streams. When video streams are received, they are unencapsulated and made available locally to the browser, the same way the browser would receive content from any web server.

Ramp's management platform makes it easy to deploy, configure, manage, monitor and analyze your entire eCDN deployment. It also allows you to provision and simulate live events from a centralized, web-based interface.

Ramp Multicast Benefits

- Predictable, deterministic video delivery network
- Supports any HLS or DASH browser-based video player
- Only direct replacement for legacy multicast solutions
- Deploys 100% behind the firewall
- End-to-end video encryption
- Event simulations allow for silent network testing
- Best eCDN for live video over Wi-Fi
- Patented forward error correction and bandwidth smoothing
- High-availability with heartbeat monitoring
- Centralized management, monitoring and insightful analytics
- DVR capability allows users to pause and time slip video playback

Also available from Ramp: OmniCache™

If your network is not multicast-enabled, your company streams a lot of video on demand (VOD), or you need to support a large audience of mobile users, consider optimizing your video traffic with an intelligent caching solution. Ramp OmniCache supports both live video and VOD without any client software or browser plugins. By serving video from local caches to nearby audiences, you reduce bandwidth consumption by 90% or more.