Multicast ABR

VELOCIX™

Stream live for less

Boost live streaming efficiency by delivering a single, shared stream

Optimise live video streaming. Scale out live video services using fewer network resources with Velocix's Multicast ABR solution. Multicast ABR uses a single shared video stream to support millions of simultaneous viewing sessions, preserving valuable network bandwidth and reducing infrastructure costs.

Reduced traffic load
Reduce the network traffic load by delivering one shared video stream that supports millions of live sessions.

Open, flexible proxy client
Integrate Velocix's open proxy client at the right endpoint for optimal efficiency in your video network.

Unicast switching
Dynamically switch streams from multicast to unicast delivery to support Dynamic Ad Insertion plus content personalization.
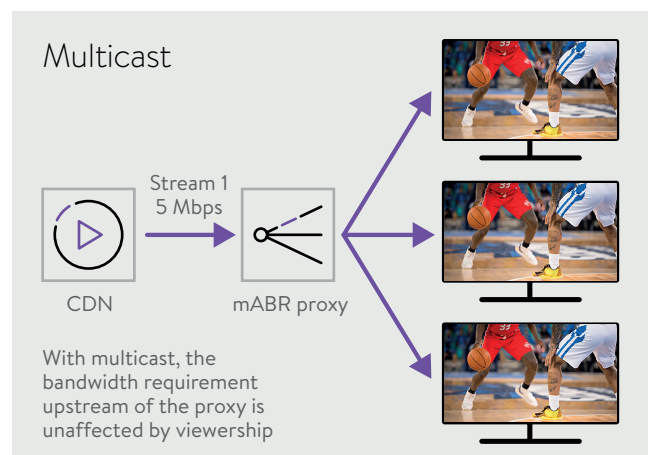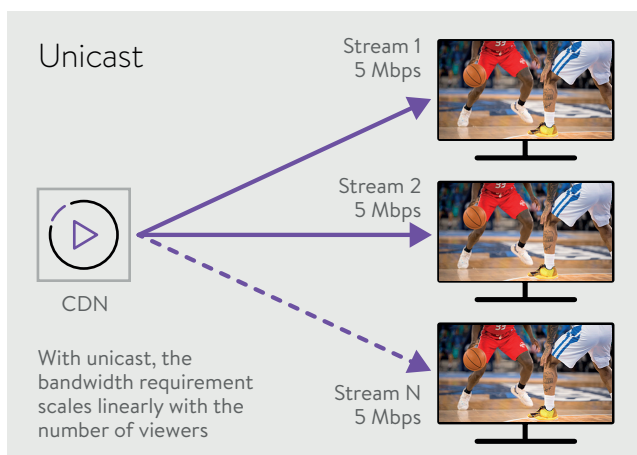
Ultra-low latency
Stream live content such as sporting events with the lowest possible lag to improve the fan experience.

Unicast versus Multicast

Unicast technology delivers a unique stream to each user, which is great for personalized video applications like VOD and time-shifted TV. However, when streaming popular live events where thousands of people are watching the same content at the same time, unicast is not very efficient. During live events, stream demand can quickly multiply as new users tune in, exposing network capacity bottlenecks that can cause stream quality to suffer.

Multicast technology addresses the issues associated with scaling-out live services by generating a shared video stream that can be accessed by many consumers simultaneously. This reduces the network impact of live viewership growth, helping to drive infrastructure costs down and delivering a superior quality of experience for consumers.

Unicast

Stream 1
5 Mbps

Stream 2
5 Mbps

Stream N
5 Mbps

CDN

With unicast, the bandwidth requirement scales linearly with the number of viewers

Multicast

Stream 1
5 Mbps

CDN

mABR proxy

With multicast, the bandwidth requirement upstream of the proxy is unaffected by viewership

Multicast ABR

VELOCIX™

Save more, earn more

Transform your bandwidth requirements. Dynamically shift between multicast and unicast delivery in real-time to reduce infrastructure costs and boost revenues. Use multicast ABR to achieve peak network efficiency during popular live events, then switch to unicast to enable revenue generating personalization features like addressable advertising. Automate switching behaviour based on network conditions, viewership, channel, or content-type to align with your specific business needs.

Integrate seamlessly

Highly adapted to your video network. Use Velocix's open, lightweight proxy client to quickly and easily integrate Multicast ABR into your network. Our standards-based proxy client can be positioned in a variety of locations in the home, or at the edge of the network, to deliver maximum performance.

Lower latency for live sports

Make an improved fan experience a key differentiator. Don't settle for standard adaptive bit rate (ABR) technology which can introduce stream delays as high as 30 seconds. Use our ultra-low latency streaming technology to reduce the glass-to-glass lag time for live ABR streams to less than 2 seconds. Ensure that your live content delivery via multicast arrives in sync with social media alerts to improve the viewing experience for live sports fans.

Fast time to market

Accelerated time to revenue. Get to market more quickly with a solution that is pre-integrated with Velocix's CDN, the industry's leading, licensed content delivery network solution.

Key features

Supported proxy integration locations
- Set-top box
- Gateway
- ONT
- OLT
- CDN
- Custom integration

Video formats supported
- CMAF
- HLS
- Microsoft Smooth
- MPEG-DASH
- MPEG-TS

Key functionalities
- Multicast ABR solution uses a single shared video stream to support millions of simultaneous viewing sessions
- Preserves valuable network bandwidth and reduces infrastructure costs
- Improves stream quality by reducing competition for precious network resources and eliminating traffic bottlenecks
- Ultra-low latency capability allows live streaming content with the lowest possible lag
- Dynamic switching of streams from multicast to unicast to provide support for personalization features and addressable advertising

Integration with other Velocix software
- Velocix CDN
- Velocix Origin
- Velocix Recording Manager
- Velocix Personalization Platform