

Multicast

IP Multicast is a network protocol that sends packets to router such that the router can forward the packets to clients upon client request. Multicasting is highly scalable and bandwidth efficient. However, not all networks support multicast, most WiFi implementations filter multicast, and multicast can be difficult to troubleshoot. Nevertheless, it is well supported in the DiscoverVideo DEVOS system.

Players

Web browsers do not support UDP and therefore do not support IP multicast. It is not possible to view video delivered exclusively via multicast in a browser without also installing Java Applets, ActiveX controls, or other plugins.

DEVOS supports playing IP multicast video when the DVPlayer app is installed the system is configured to enable the external player. The viewer simply clicks on the button and the player launches and plays the video. If multicast is not available for that viewer (for example, they are on a WiFi network that blocks it), the player will automatically roll over to other unicast protocols.

Configuring Multicast

Any stream sent to the DEVOS server can be delivered as IP multicast. This includes all Encoder types (e.g. StreamSIE, Mantis, Spider, StreamEngine, 3rd party encoders and Netcams).

Configure IP multicast in Super Portal / Advanced / Push. Find the desired stream shown in the list, or enter the stream name that is known to be pushed to the server. For the Destination URL, enter "mpegtsudp://[IP]:[Port]" and then select "Create Push". When the stream is live, DEVOS converts it to IP multicast and sends it on the network.

Create or edit a live stream in Media / Live Stream. Navigate to Advanced, and enter the multicast address using "udp://@[IP]:[Port]". Save the configuration.

If you want to view the multicast from the DEVOS player page, be sure you have enabled "External Player" in Super Portal / General Settings to expose the Launch Player button. When you launch the player, it will play the multicast (provided the player preference has multicast enabled). To verify you are viewing via multicast, disable the other protocols in the player preference.

You may also configure certain encoders to push to DEVOS and to also send multicast directly (without DEVOS making the conversion).

Measuring

Because IP multicast is UDP and connection-less, you cannot monitor viewing directly. However, when you launch the DVPlayer from the viewing page, the viewer is counted and measured in the viewing report and statistics.