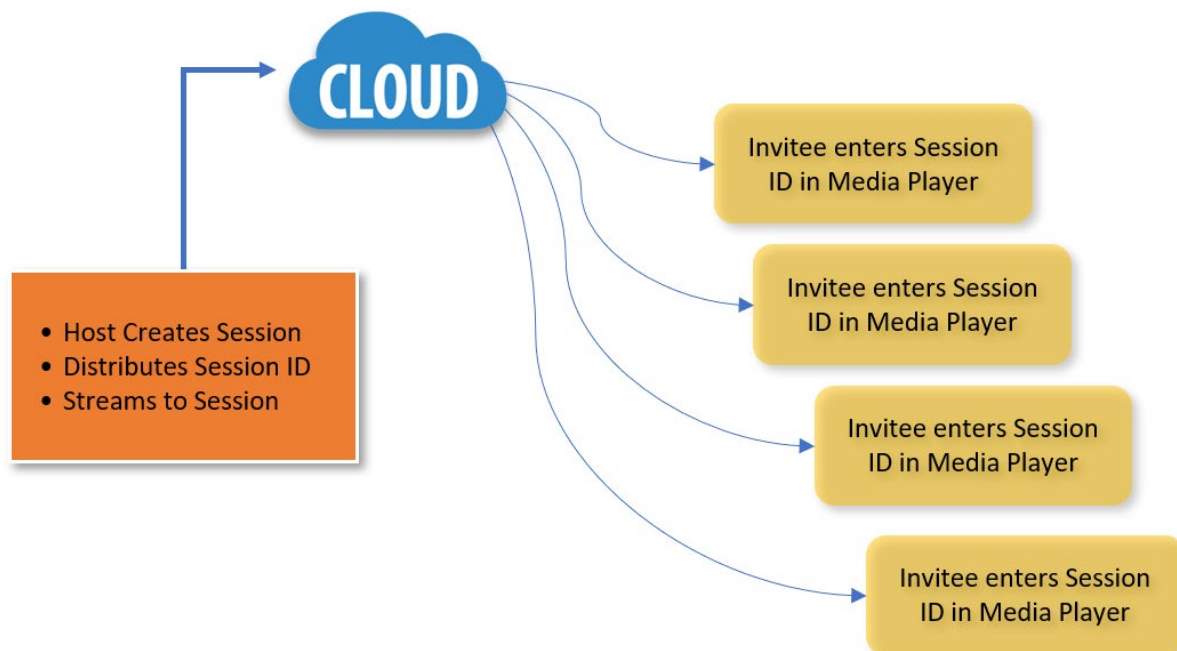


Streambox® Sessions™

Quick Start Guide

Video Session - Collaborative Workflow



Note: This document reflects the current feature-set which may change without notice. We will attempt to keep all users up-to-date on any such changes. All context is © 2020. All rights reserved.

Introduction

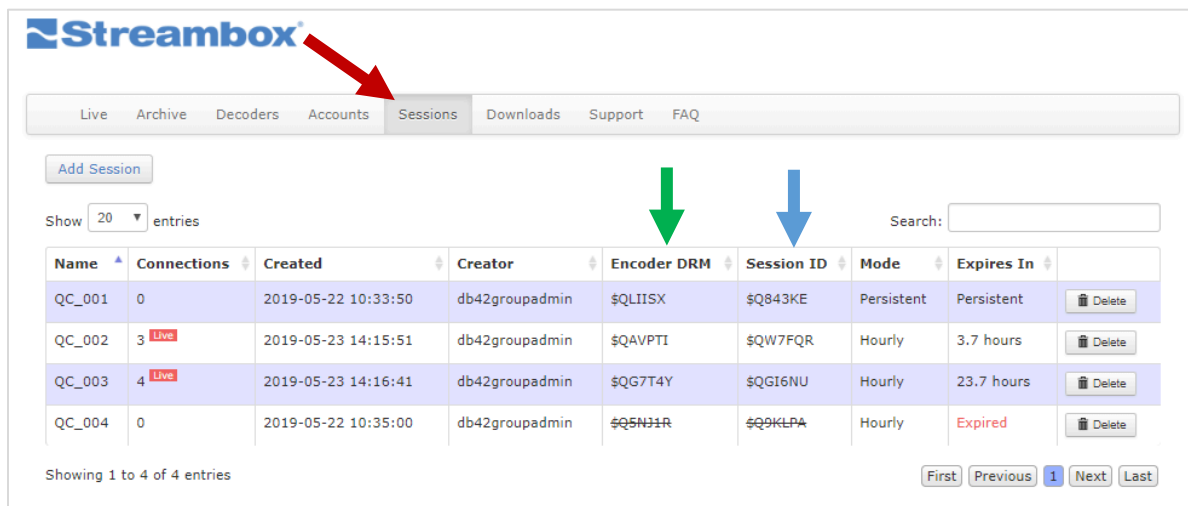
Streambox® Sessions™ makes video production collaboration simple. This is ideal for offsite producers, colorists, advisors, and others. All you need to do is create a session, stream to the Cloud using a special code, and share the Session ID with collaborators. They need only enter the Session ID into a Streambox Media Player, and within seconds they'll see the live stream, reviewing the same high quality, color rich, video.

Just 3 Steps

Step 1

The Session owner logs in to their Streambox Live Server account and selects 'Sessions' (see red arrow). This opens the Sessions page where all past and present Sessions & Connections are listed.

Streambox Cloud Sessions Web Interface:



The screenshot shows the Streambox Cloud Sessions Web Interface. At the top, there is a navigation bar with tabs: Live, Archive, Decoders, Accounts, Sessions (highlighted with a red arrow), Downloads, Support, and FAQ. Below the navigation bar is an 'Add Session' button. Underneath, there is a 'Show 20 entries' dropdown and a search bar. The main content is a table with the following columns: Name, Connections, Created, Creator, Encoder DRM (highlighted with a green arrow), Session ID (highlighted with a blue arrow), Mode, Expires In, and a Delete button. The table contains four entries:

Name	Connections	Created	Creator	Encoder DRM	Session ID	Mode	Expires In	
QC_001	0	2019-05-22 10:33:50	db42groupadmin	\$QLIISX	\$Q843KE	Persistent	Persistent	Delete
QC_002	3 Live	2019-05-23 14:15:51	db42groupadmin	\$QAVPTI	\$QW7FQR	Hourly	3.7 hours	Delete
QC_003	4 Live	2019-05-23 14:16:41	db42groupadmin	\$QG7T4Y	\$QGI6NU	Hourly	23.7 hours	Delete
QC_004	0	2019-05-22 10:35:00	db42groupadmin	\$Q5N31R	\$Q9KLPA	Hourly	Expired	Delete

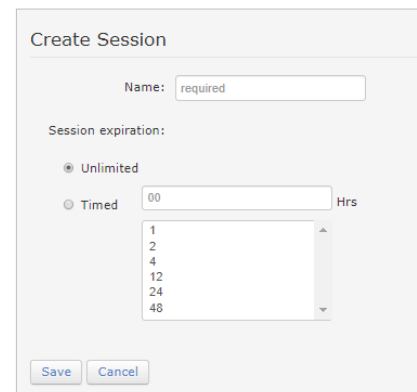
At the bottom of the table, it says 'Showing 1 to 4 of 4 entries'. There are also pagination controls: First, Previous, 1 (selected), Next, Last.

The Sessions page allows the user to add a Session and review all present and past sessions. Live sessions are designated with the red Live icon next to the number of Media Players connected to that session.

To add a Session, select the 'Add Session' button. This opens the 'Create Session' page (see image below). Here one can give the Session a unique name and set its expiration (in hours) or set it as 'Unlimited'. Click 'Save' and the Session is registered – ready to go.

Step 2

Set the Streambox Encoder's DRM (Group) to match the **Encoder DRM** (as shown on the Sessions page (green arrow, above)). In the Encoder DRM/Group, be sure to add the \$ before the 6-character code. Then start the live stream from the Encoder to Streambox Cloud. (You may have to manually set the stream destination to a Cloud Server IP. See appendix for IP addresses.)



The 'Create Session' form has the following fields and options:

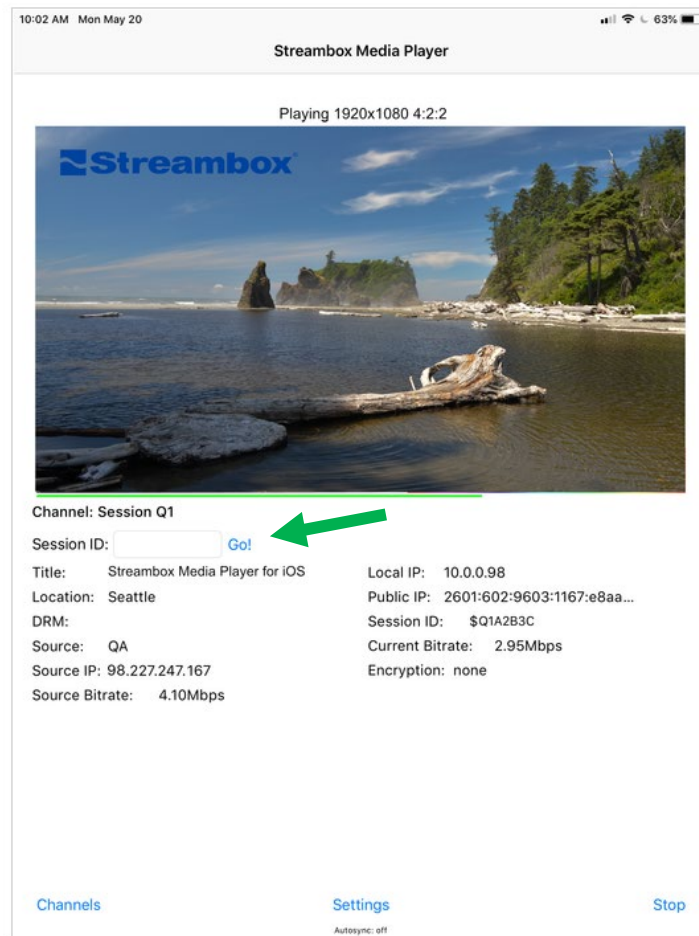
- Name:** required text input field.
- Session expiration:**
 - ☒ Unlimited
 - ☐ Timed: 00 Hrs. Below this is a dropdown menu with options: 1, 2, 4, 12, 24, 48.
- Buttons:** Save, Cancel.

Step 3

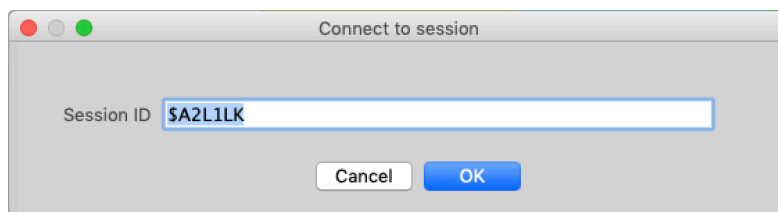
Send collaborators the **Session ID** (from the Sessions page, blue arrow, above). All they need to do is enter the ID in the 'Session ID' field of their Streambox Media Player (e.g., see screen image from the Media Player for iOS and macOS, below, green arrow) and click on Go!

Once the Session owner starts streaming to that Session, all collaborators will see the video stream on their Streambox Media Players, Streambox Decoders, and Streambox Node 2.

Mobile Media Player for iOS

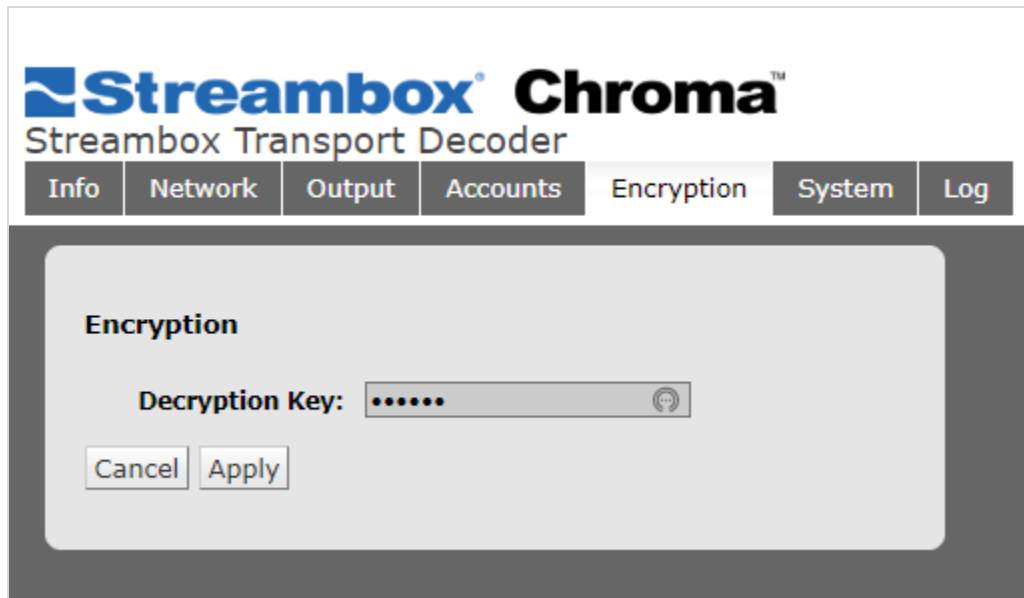


For OSX Media Players (v 3.165.11 or higher), simply select 'Open Session' (Cmd-S) from the Settings menu. Enter the Session ID and click the OK button (image below). If the Session is encrypted, select 'Set Encryption Password' (Cmd-E) from the Settings menu to enter a valid decryption key.



Encryption

A Session can be encrypted for security. The encryption key is set by the host (encoder). When a stream is encrypted, the host must provide the encryption key along with the Session ID. For latter versions of OSX Media Player, you can enter a decryption key from the 'Settings' menu (see above section). For iOS and NODE, you need to create a channel for sessions which provides a decryption field (see section below) and for Chroma, you can enter a decryption key by selecting Encryption from the top menu (image below).



Appendix

Setting up Channels (iOS, macOS, OSX, NODE)

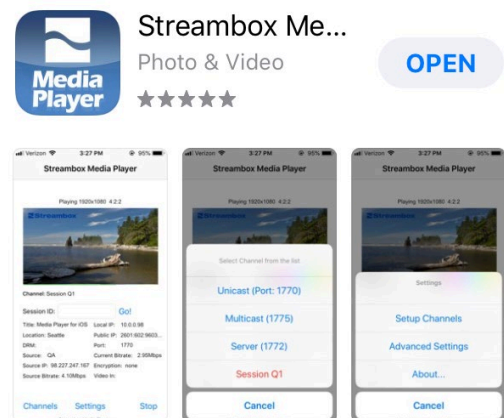
iOS and macOS

You can download the Media Player for iOS and macOS from the Apple App Store.

The Session ID can be entered directly on the Home page (see page 3) or can be saved as a Channel for convenient recall (see image below). From the Settings menu, select 'Set up Channels', then select 'Edit' (see image below), and then 'Add' (top right).

Note: The host of the session will provide the Session ID and Decrypt[ion] key is applicable.

1. Select the 'Session' tab (image below)
2. Provide a 'Ch. Name' that helps you remember the properties of the channel
3. Enter the Session ID (provided by the host)
4. Enter a Decryption/Encryption key only if provided by the host (switch on to apply)



5. Select a Color Profile ('Auto Detect' is recommended)
6. Click 'Save' in upper right corner

This channel is now ready to use. Select this channel and you will be connected to the Session associated with the Session ID (note: it can take up to a minute to connect).

OSX

You can download the Media Player for OSX from:

Mojave: <https://update.streambox.com/updater/smphdosx/latest/StreamboxMPHD-OSX.dmg>

Catalina: <https://www.dropbox.com/s/4vc5z0puphlwog5/SMP-beta-1.19a.pkg?dl=1>

The Session ID can be entered directly on the Home page (see page 3) or can be saved as a Channel for convenient recall (see image on right). From the 'Settings' menu, select 'Configure Channels'.

Note: The host of the session will provide the Session ID.

1. Choose the desired 'Channel'
2. Provide a 'Channel Name' that helps you remember the behavior of the channel
3. Select the 'Join Session' option
4. Enter the Session ID
5. Click 'OK'

This channel is now ready to use. Select this channel and you will be connected to the Session associated with the Session ID (note: this can take up to a minute to connect).

NODE

For more information about NODE: <https://www.streambox.com/node/>

Currently, NODE does not have a dedicated mode for Sessions. That said, you can use the 'Server' mode for Sessions (see image on right):

1. Make sure 'is active' is checked for the channel to be available for use
2. Provide a Name that helps you remember the behavior of the channel; we used "Session Demo" in this example
3. Select a Streambox server from the 'Server' list
4. 'Port' number defaults to 1770
5. For 'Login' and 'Password', use 'defaultsession'
6. Leave 'Reporter' blank
7. Enter the 'Session ID' provided by the host for DRM
8. Enter Encryption/Decryption Key if provide by host.
9. Click 'Apply Settings' button.

This channel is now ready to use. Select this channel and you will be connected to the Session associated with the Session ID (note: this can take up to a minute to connect).

Legacy Media Players

All Streambox Media Players can support Sessions via the creation of a channel. Open the setup channel page for the Media Player. Use the following settings:

- Select a 'Channel' to edit
- Channel Name = *Enter a name. In the example here, we used 'My First Session'*
- Select '**Connect to server**' mode
- IP address = use IP of Live Server provided by session host
- UDP Port = **1770**
- Login = **defaultsession**
- Password = **defaultsession**
- Network 1 (aka, DRM or Group) = *Enter the Session ID provided by the session host. Make sure it starts with \$*
- Click 'OK'

For Chroma decoders, select the Network tab and fill in the 'Pull Stream' panel:

- Mode: Select Live Server provided by session host
- Group/DRM = *Enter the Session ID provided by the session host. Make sure it starts with \$*
- Click 'Exec Pull-mode'

The session should start in about 1 minute.

Cloud Server IP Addresses

See this link to get the most current list of Streambox Cloud Server IP Addresses.

<https://streambox.force.com/support/s/article/streambox-cloud-server-ip-addresses>

The screenshot shows the 'Network' tab of the Streambox interface. The 'Network Settings' panel includes fields for IP Mode (set to IP), Auto Jitter (set to OFF), Timeout (10 seconds), Jitter (0 Packets), Jitter 2 (0 Packets), and Port (1779 UDP). An 'Apply Changes' button is at the bottom. The 'Pull Stream' panel shows Mode set to 'Session: USA(San Jose), LivePost (P)', IPv4 set to 52.8.239.106, Port set to 1770, Login set to defaultsession, Password masked, Group/DRM set to \$P, and Reporter set to DAB. At the bottom are 'Exec Pull-mode' and 'Back to Normal-mode' buttons.

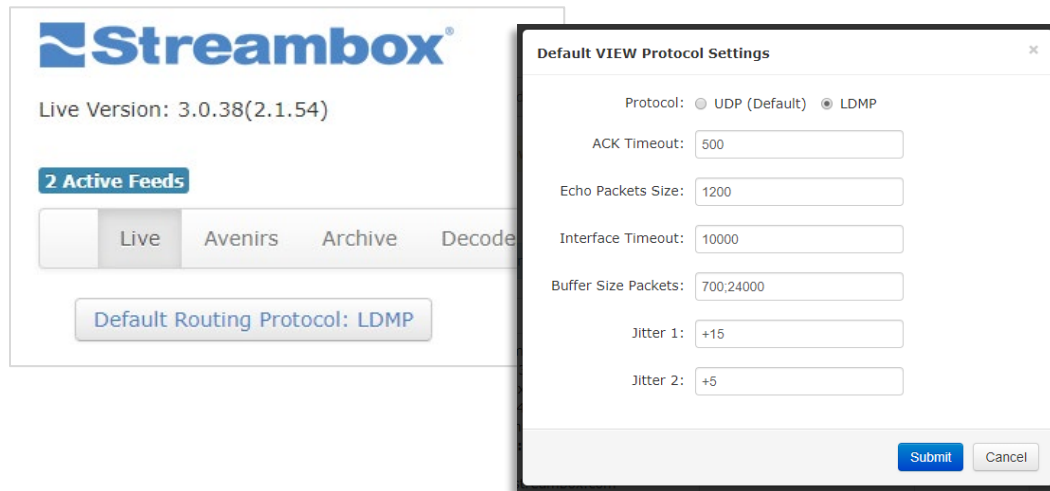
Live Server	Code \$	IP Address	Region
Live US .streambox.com	A	52.25.129.48	USA (Oregon)
Live USEast .streambox.com	B	54.83.19.155	USA (Northern Virginia)
Live AU .streambox.com	C	52.62.2.246	Asia Pacific (Sydney)
Live DE .streambox.com	E	54.93.179.19	Europe (Frankfurt)
Live EU .streambox.com	F	54.247.100.52	Europe (Ireland)
Live JP .streambox.com	G	52.69.71.156	Asia Pacific (Tokyo)
Live SA .streambox.com	H	54.233.86.10	South America (Sao Paulo)
Live SG .streambox.com	I	52.76.243.157	Asia Pacific (Singapore)
Live IN .streambox.com	J	52.66.83.26	Central Asia (India)
Live Post .streambox.com	P	52.8.239.106	USA (California)

LDMP Settings

Sessions use the default LDMP routing settings. It is important that these properties are properly set. From the 'Live' tab of the Streambox Live Server page, click on the 'Default Routing Protocol' button (see red arrow below) to open the 'Default VIEW Protocol Settings' page (see image below).

The values on the example here are generally a good starting point and will work with most Sessions. For more information on LDMP settings see:

<https://streambox.force.com/support/s/article/Cloud-Decoder-LDMP-Settings>

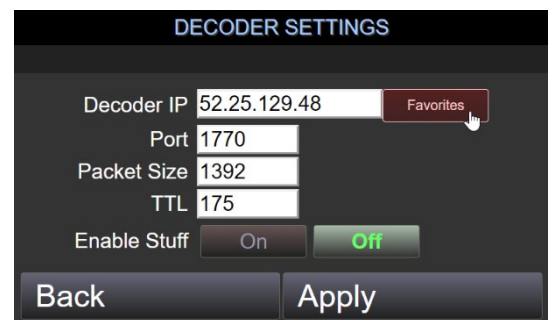


Setting Up Encoders

Setting up a Streambox encode for a Session is easy – just 2 steps. The concept is the same for all encoders with slight variations based on model.

Micro, Avenir (1. Set destination Decoder)

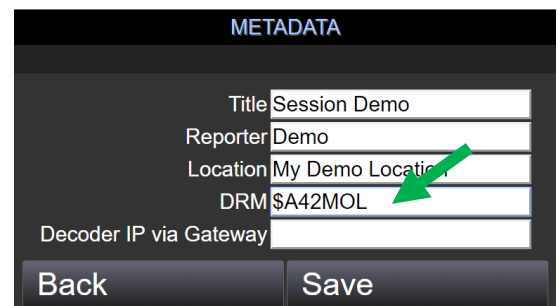
- Open web page (enter Micro IP address in a web browser on the same network)
- Set decoder to desired Live Server (from Home page, select 'Settings' and then 'Decoder', and then select one of the decoders from Favorites (see image). The decoder will be applied automatically (if that doesn't happen, click 'Apply'.



Note: for users with legacy players, the host must include the Decoder IP along with the Session ID; see "Legacy Media Players" section above.

Micro, Avenir (2. Set DRM)

- Now from the Home page, Select 'Metadata'
- Change the DRM value to the 'Encoder DRM' value for the Session (see image, green arrow), and click 'Save'.
- Start streaming.



Chroma, Micro 2, Chroma X (1. Set destination Decoder)

- Open web page (enter Micro IP address in a web browser on the same network)
- Set decoder to desired Live Server (from Home page, select the 'Network' tab and then enter the desired 'Target Decoder' IP address (see image, green arrow) from the list below. Click 'Apply Changes'

Note: for users with legacy players, the host must include the Decoder IP along with the Session ID; see "Legacy Media Players" section above.

Chroma, Micro 2, Chroma X (2. Set DRM)

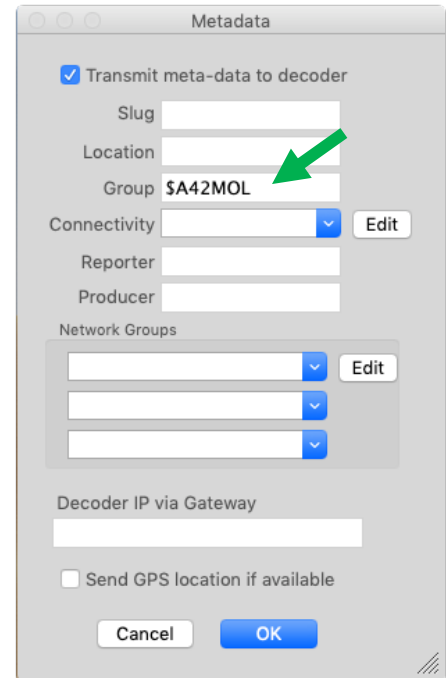
- Select the 'System' tab.
- Change the DRM value to the 'Encoder DRM' value for the Session (see image below, green arrow), and click 'Apply DRM'.
- Start streaming.

OSX (1. Set destination Decoder)

- Open web page (enter Micro IP address in a web browser on the same network)
- Set the destination decoder to desired Live Server (from the preview page, click the slide-out button (green arrow) to access the 'Network' panel and enter the desired 'Target decoder' IP address (red arrow) from the Live Server list (see section above). Click 'Apply and Restart'

OSX (2. Set DRM)

- Select 'Metadata' from the top menu.
- Change the Group value to the 'Encoder DRM' value for the Session (green arrow, image below) and click 'OK'.
- Start streaming.



Metadata

☒ Transmit meta-data to decoder

Slug

Location

Group

Connectivity

Reporter

Producer

Network Groups

Decoder IP via Gateway

☐ Send GPS location if available

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