



How to Guide

Streaming to:
DaCast

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Corporate Contact Information

ViewCast collaborates and partners with various clients to integrate products into their individual environments.

Niagara Technical Support: Phone: 972.488.7157, Fax: 972.488.7111 or submit the technical support online request from the ViewCast website.

ViewCast USA Support: Monday through Friday: 9 a.m. – 5 p.m. Central Time. *Typical response time is within one business day for customers without a Priority Support Agreement.*

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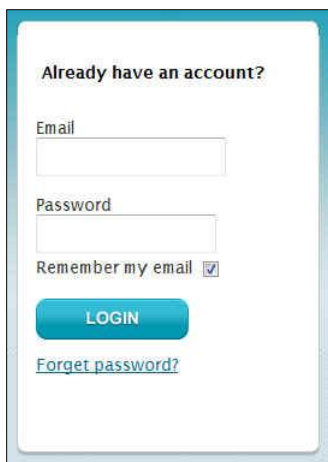
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Streaming to DaCast With a Niagara System

DaCast

To connect to the DaCast Content Delivery Network, first you need to set up an account with DaCast at DaCast.com. Once you have an account, you can stream to your DaCast channel from your Niagara encoder.

1. Login to your DaCast account at DaCast.com

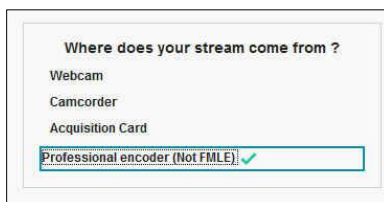


A screenshot of the DaCast login page. It features a teal header with the text "Already have an account?". Below this are two input fields for "Email" and "Password". A checkbox labeled "Remember my email" is checked. A teal "LOGIN" button is positioned below the password field. At the bottom, there is a blue link that says "Forget password?".

2. Locate the Live channel setup pages. Starting at the top left, click **CREATE**.

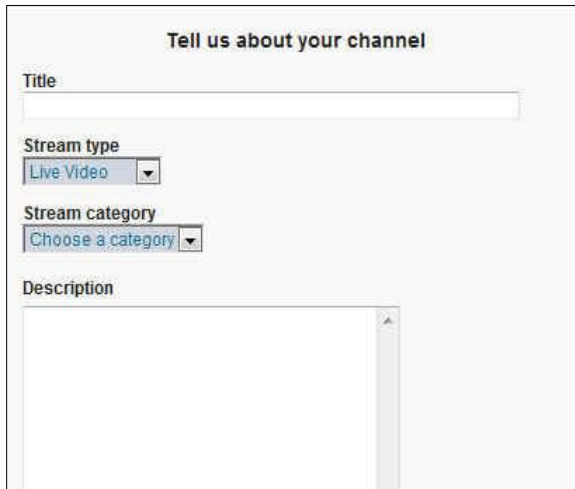


3. Select **Professional encoder**.



A screenshot of a form titled "Where does your stream come from?". It lists four options: "Webcam", "Camcorder", "Acquisition Card", and "Professional encoder (Not FMLE)". The "Professional encoder (Not FMLE)" option is selected, indicated by a blue highlight and a small green checkmark to its right.

4. Enter your channel information.



The screenshot shows a form titled "Tell us about your channel". It contains the following fields:

- Title:** A text input field.
- Stream type:** A dropdown menu with "Live Video" selected.
- Stream category:** A dropdown menu with "Choose a category" selected.
- Description:** A large text area for entering channel details.

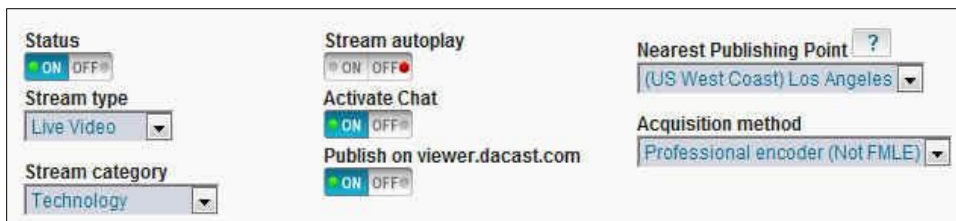
5. Click **Save**.



6. Click CONFIGURE.



7. Configure your streaming channel.



The screenshot shows a configuration panel with the following settings:

- Status:** ON (indicated by a green dot).
- Stream type:** Live Video.
- Stream category:** Technology.
- Stream autoplay:** ON (indicated by a red dot).
- Activate Chat:** ON (indicated by a green dot).
- Publish on viewer.dacast.com:** ON (indicated by a green dot).
- Nearest Publishing Point:** (US West Coast) Los Angeles.
- Acquisition method:** Professional encoder (Not FMLE).

- Below this information, configure your stream resolution and bit rate. You can choose up to three streams to stream to your channel. You need to configure one Flash encoding profile per bit rate on the Niagara system. For example, if you choose to stream three different bit rates and resolutions, you will need to set up three different encoding profiles on the Niagara System.

Bitrates

<input checked="" type="radio"/> ON	<input type="radio"/> OFF	Bitrate: 800 Kb	Size: 480p - 640x480 - 4:3
0			
<input type="radio"/> ON	<input checked="" type="radio"/> OFF	Bitrate: 650 Kb	Size: 240p - 400x240 - 16:9
0			
<input type="radio"/> ON	<input checked="" type="radio"/> OFF	Bitrate: 850 Kb	Size: 240p - 400x240 - 16:9
0			

- On this page, you can also choose a channel logo and viewing locations.
- Click **STREAM**.



- This screen has the URL information for connecting your Niagara system. If you chose to do more than one bit rate and resolution, you will see Stream URL and Stream Name information for each stream. This information is unique and must be entered into the corresponding fields on the Niagara system.

Channel : ViewCast Streaming Channel

Add your streaming URL(s) to your encoder

Depending on your encoder, you may need the full URL or it broken into two parts. Use either approach.

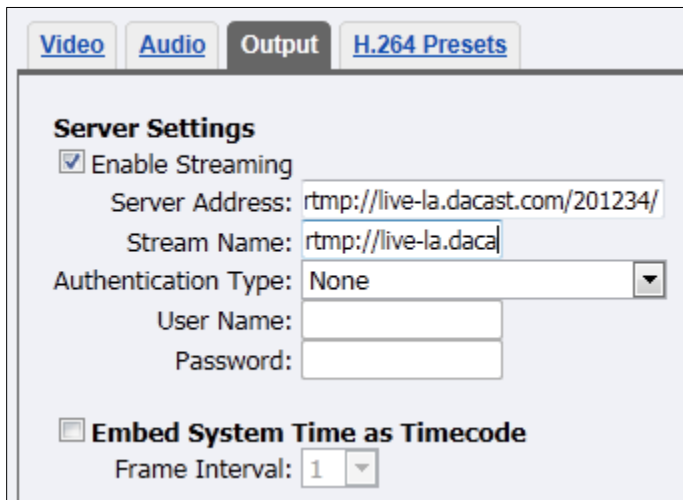
URL:

Or

Stream URL:

Stream Name:

12. Login into your Niagara system and go to the Output tab of your Flash encoding profile.

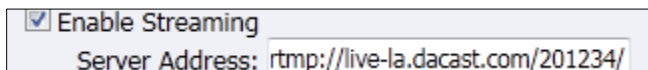


The screenshot shows a configuration window with four tabs: Video, Audio, Output, and H.264 Presets. The Output tab is selected. Under the heading "Server Settings", there is a checked checkbox for "Enable Streaming". Below it are fields for "Server Address" (rtmp://live-la.dacast.com/201234/), "Stream Name" (rtmp://live-la.daca), and "Authentication Type" (None). There are also empty fields for "User Name" and "Password". At the bottom, there is an unchecked checkbox for "Embed System Time as Timecode" and a "Frame Interval" dropdown menu set to 1.

13. Copy and paste the Stream URL into the Server Address field on the Output tab of your Flash encoding profile.



A text input field labeled "Stream URL:" containing the text "rtmp://live-la.dacast.com/201234/XXXX".

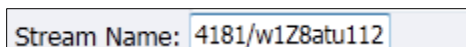


A section of the configuration window showing the "Enable Streaming" checkbox checked and the "Server Address" field containing "rtmp://live-la.dacast.com/201234/".

14. Copy and paste the stream name into the **Stream Name** field on the Output tab of your Flash encoding profile.



A text input field labeled "Stream Name:" containing the text "4181/w1Z8atu11234XXXX".



A text input field labeled "Stream Name:" containing the text "4181/w1Z8atu112".

15. See the Niagara system user guide instructions for help on configuring your Flash encoding profile.
16. Click **PUBLISH**. You can find your player embed code here as well as adjust your player's theme.

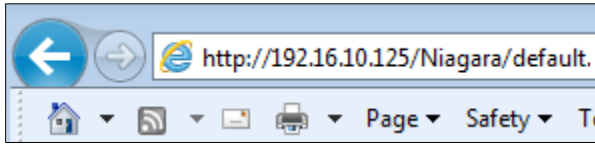


17. Click **WATCH** to view your live streaming video. You can also open your DaCast channel page form here. Once you begin encoding, you can view your video on your DaCast channel.

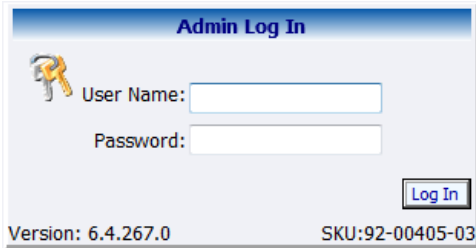


Niagara Streaming System

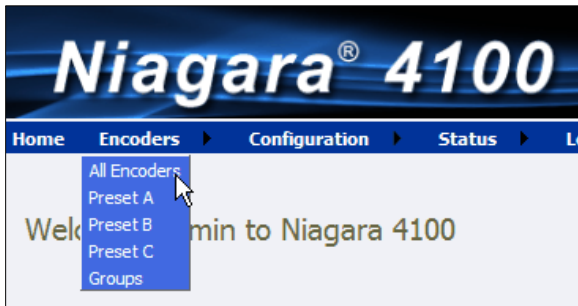
1. Log in by entering the IP address of the Niagara in the address bar of Internet Explorer.



2. Enter the user name and password (defaults are **admin / admin**).



3. Go to **Encoders** > **All Encoders**.















- A list of encoders that are installed on the system appear on the Encoder Properties window. Some encoders are provided by default. You can rename, edit, or delete these encoders.

Encoders

This page allows you to configure your encoder settings. You can modify existing encoders, add new encoders, or delete an existing encoder. CPU:01%

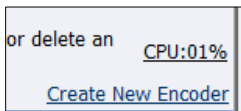
[Create New Encoder](#)

Type	Name	Status	Message	Streaming
Edit Del 	ADAPTIVE_APPLE	Stopped	Success	
Edit Del 	ADAPTIVE_FLASH	Stopped	Success	
Edit Del 	ADAPTIVE_SS	Stopped	Success	
Edit Del 	FLASH	Stopped	Success	
Edit Del 	MPEG	Stopped	Success	
Edit Del 	WME	Stopped	Success	

Niagara 4100 Total Encoders: 6

[View Encoder Groups](#)

- To add a new Flash Encoder, click **Create New Encoder**.



- On the next window, select **Flash Encoder Driver** from the Encoder Type drop-down menu. Name the encoder and then click **Create New Encoder**. You can also clone the properties from another encoder profile if you are planning on making only small changes.

Encoder Type:

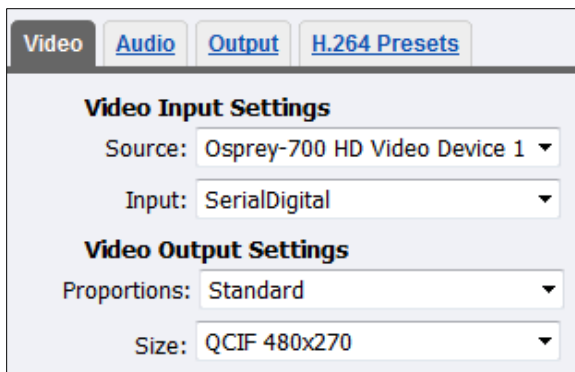
Encoder Name:

Clone Properties From:

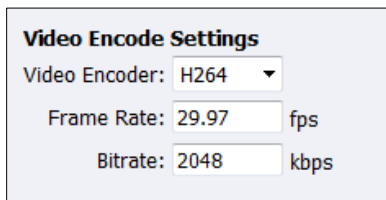
- On the next window, you can set the details of your encoding profile. The four tabs are labeled **Video**, **Audio**, **Output**, and **H.264 Settings**.



- Video tab:** Click **Video** to select your source inputs, signal type, and resolution. For resolutions not included in the drop-down list, choose **Custom** and simply type in your desired resolution. You need to use the same video resolution that you specified during the DaCast channel setup.



- Next, set the **Video Encode Settings**. These include your frame rate and bit rate. You cannot change the Video Encoder. You need to use the same video resolution that you specified during the DaCast channel setup.



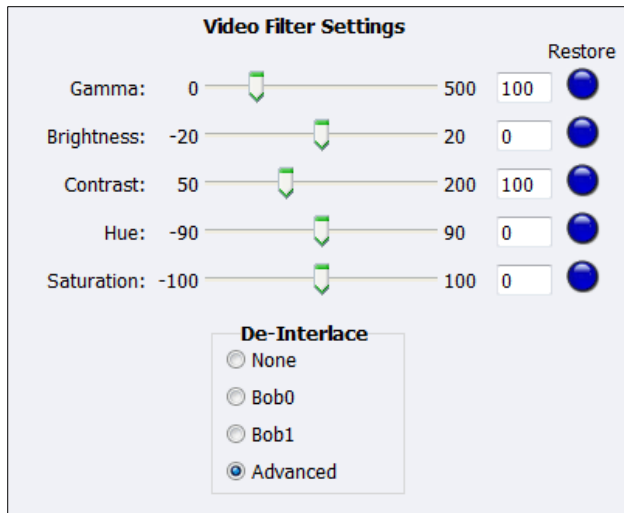
Video Encode Settings

Video Encoder: H264

Frame Rate: 29.97 fps

Bitrate: 2048 kbps

- You can adjust the Video Filter Settings and choose your De-Interlace method. Most standard video sources would require the MotionAdaptive setting.



Video Filter Settings

Gamma: 0 500 100 Restore

Brightness: -20 20 0

Contrast: 50 200 100

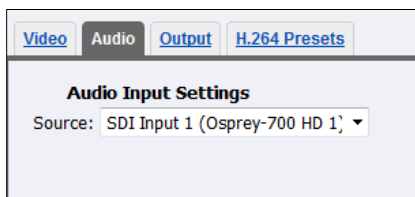
Hue: -90 90 0

Saturation: -100 100 0

De-Interlace

- None
- Bob0
- Bob1
- Advanced

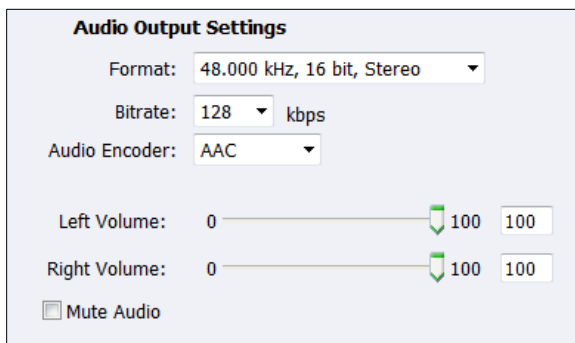
- Audio tab:** Select your input source.



Audio Input Settings

Source: SDI Input 1 (Osprey-700 HD 1)

- Choose your Audio Output Settings including audio format, bit rate, and encoder type.



Audio Output Settings

Format: 48.000 kHz, 16 bit, Stereo

Bitrate: 128 kbps

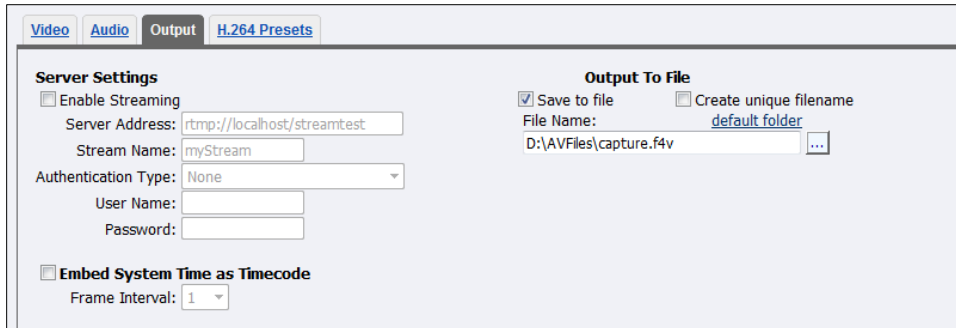
Audio Encoder: AAC

Left Volume: 0 100 100

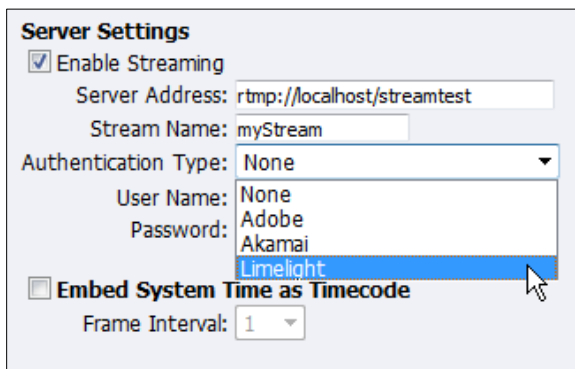
Right Volume: 0 100 100

Mute Audio

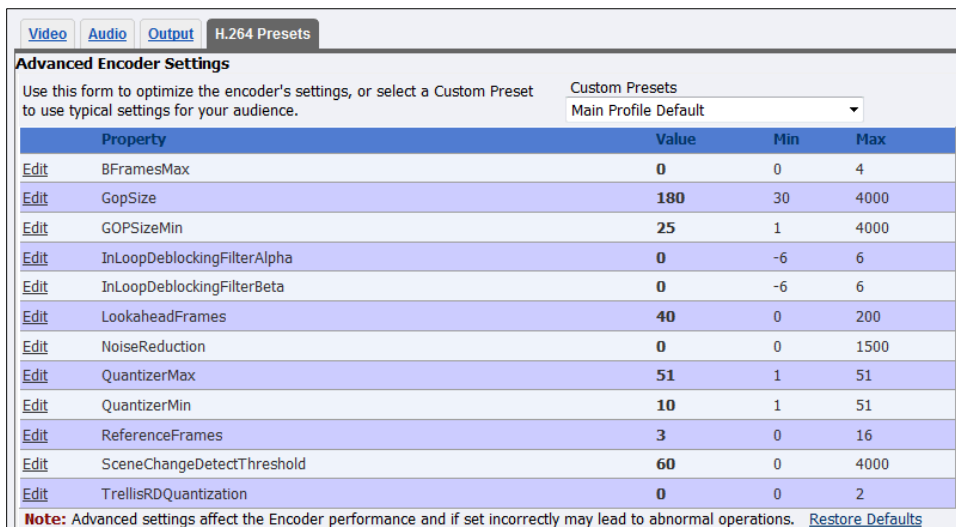
- Output tab:** Next, set your Server Settings. If you want to save a copy of the file for archiving or On Demand playback, select **Save to file** and designate a location and file name. Keep the folder as **D:\AV Files**. This step ensures the file is not overwritten if you ever perform a Factory Restore. Select **Create Unique File** if you do not want to overwrite the file each time you start and stop an encode.



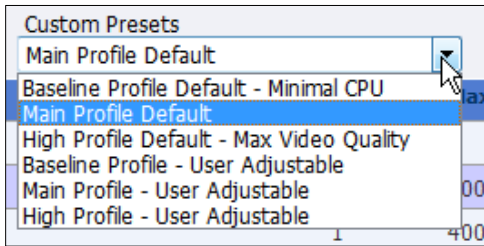
- To stream to the DaCast network, enter the server information provided by DaCast during channel setup. This information is in the STREAM step. Click **Server Without Password** in the **Server Type** drop-down menu.



- H.264 Preset Tab:** On this tab you can adjust specific H.264 codec settings. There is a **Restore Defaults** option at the bottom right of this page if you need it.



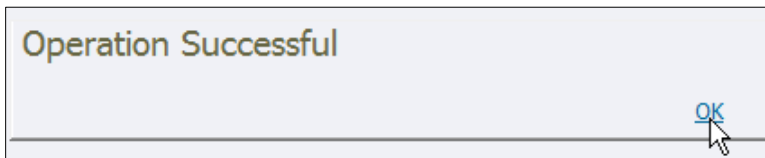
16. The system includes a few Custom Profiles. A best practice is to only adjust the User profiles.






17. When you are done with your selections, click on the **Save Settings** button.



18. An **Operation Successful** message displays. Click **OK**.



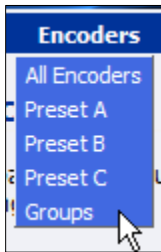
19. You will be brought back to the Encoders page. To start encoding, click on the **Red button** next to the profile you wish to start. You will see the encoder start and then receive an **Operation Successful** message.

Edit Del	Flash Video	Stopped	Success	
Edit Del	MPEG	Stopped	Success	
Edit Del	WME	Stopped	Success	

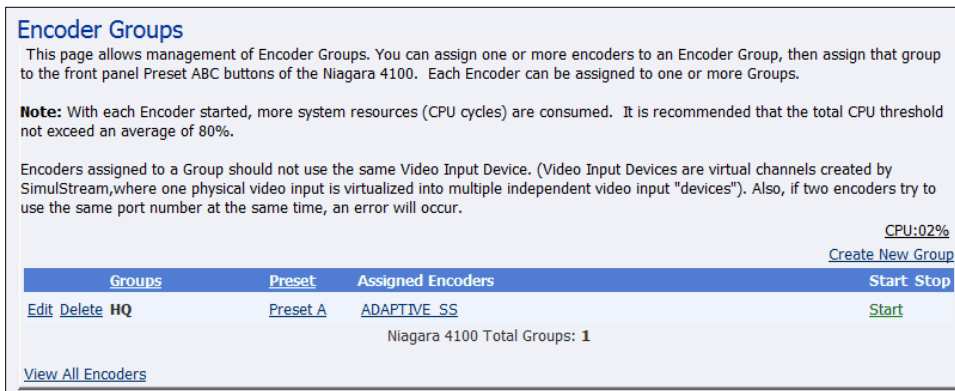
20. On the Encoders page, the button will now be blue to indicate it is encoding.



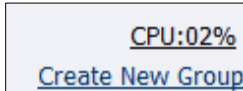
21. To add this profile to a Group, go to **Encoders** ➤ **Groups**.



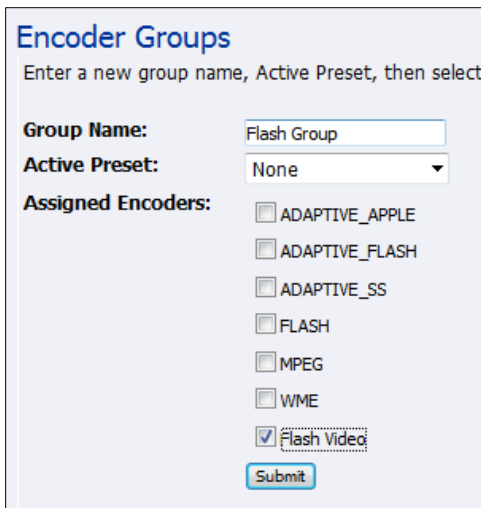
22. The Encoder Groups window displays the groups that are on the Niagara 4100.



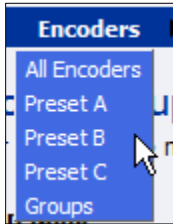
23. To create a new group, click **Create New Group**.



24. Give your new group a name, and select one or more encoding profiles from the list of available encoding profiles. You can choose to make the group active in the drop-down list. Click **Submit**.



25. **Active Group:** To program this group to the front panel A,B,C buttons, go to **Encoders** ➤ **Preset A, B, or C.**



26. Next, choose your group from the drop-down menu and then click **Submit**. Now you can start and stop this encoder by pressing the preset button and then **Stream** on the front panel.



27. You can now view the video stream if you have already set up your DaCast Channel.

Note: Finally, if you are streaming through a server or Content Delivery Network, you can add fault tolerance by setting up a second stream and pointing it to the same Entry Point on your server. For best results, you should do this on a secondary system.

