



L i g h t n i n g D U O

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Introduction

Requirements:

- Licensed accounts (ASP or self-hosted) with LiveCast software
- IP data accounts (wired, WiFi, cellular)
- Windows Vista or XP

Overview:

Lightning DUO is LiveCast's ultra low latency streaming application for PC. Available for both ASP and secured server licensed accounts. Lightning DUO's high quality streaming and real-time monitoring of incoming video and audio streams make it an ideal solution for mobile journalism or 2-way instant video-conferencing.

Features:

- Average 1 second latency from device to screen, regardless of the source bit rate, codec, or resolution.
- Concurrent streaming to other Lightning applications and online properties.
- Full duplex conference messaging between station and remote feeds.
- Auto-selection of incoming streams and ability to reserve channels.
- Automated login.
- Accurate real-time display of streaming statistics:
 - GPS status
 - Audio levels
 - Frames per second
 - Transmitting bit rate
 - Length of transmission
- Auto-archiving and auto-posting of output to online account and blogs.
- Support for Windows Media, QuickTime and Flash.
- Share feature allows live remote viewing from phones, PC, Mac, and Linux.
- Bit rates up to 5 Mbps supported.

Getting Started

Automated Startup

Upon launching Lightning DUO, the application will automatically try logging in using the username/password last used (see My Account tab). Once logged in, Lightning DUO will communicate with the server and populate the Stream Selector with the user accounts you have access to.

The incoming window will automatically search for any live streams from this list and populate the preview windows on a first come, first served basis.

By using the Stream Selector, you may reserve a preview window for any user listed. When preview is reserved, that user's video will appear whenever they are live.

The example below demonstrates a typical use case of a field reporter (Talent) streaming to a broadcast station, and simultaneously receiving a pullback stream from the station's On-Air feed.

The output stream (Talent) can be transmitted to other Lightning applications as well as to online websites, blogs, and social networks.



Selecting Your Stream Source:

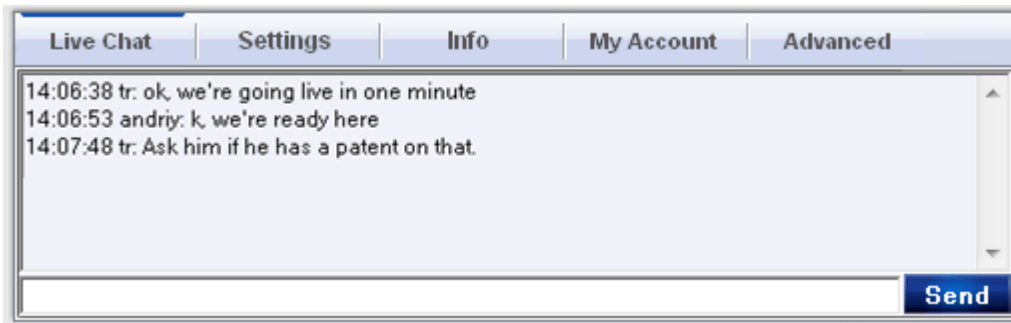
Lightning DUO launches the incoming preview window in Auto-Select mode. Select different streams or reserve a preview window by choosing a user from the Stream Selector (live streams appear bold and inactive streams appear grey).

Streaming Settings

Live Chat:

Live Chat allows full duplex conference messaging between the Lightning operator and all the users shown in the Stream Previews.

Type in your message in the lower field and click **Send**. All messages will be displayed in your chat window with the time and user name. The messages also appear on all preview stream devices.



The screenshot shows a web interface with five tabs: Live Chat, Settings, Info, My Account, and Advanced. The Live Chat tab is active. The chat window contains three messages:

- 14:06:38 tr: ok, we're going live in one minute
- 14:06:53 andriy: k, we're ready here
- 14:07:48 tr: Ask him if he has a patent on that.

At the bottom right of the chat window is a blue button labeled "Send".

Settings:

Select Streaming option, Quality, Camera and Location Source.

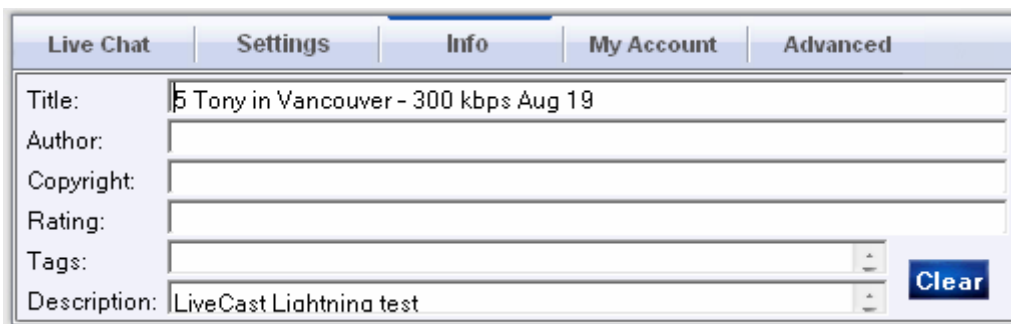


The screenshot shows the Settings tab selected. The interface includes the following options:

- Stream & Archive: dropdown menu
- Quality (bit rate): dropdown menu set to "Med-128 Kbps"
- Camera: dropdown menu set to "Intel PC Camera Pro"
- Location Source: dropdown menu set to "GPS on COM12", with a checkbox for "Use Incoming Location" (unchecked)
- Mute Audio: checkbox (unchecked)

Info – Tags and Description

Info tab is where you enter information about your LiveCast before you start streaming. You can add or edit this information later, by going to your online account and click **Edit**.



The screenshot shows the Info tab selected. The interface includes the following fields:

- Title: text input field containing "5 Tony in Vancouver - 300 kbps Aug 19"
- Author: text input field
- Copyright: text input field
- Rating: text input field
- Tags: text input field with up and down arrow buttons
- Description: text input field containing "LiveCast Lightning test" with up and down arrow buttons

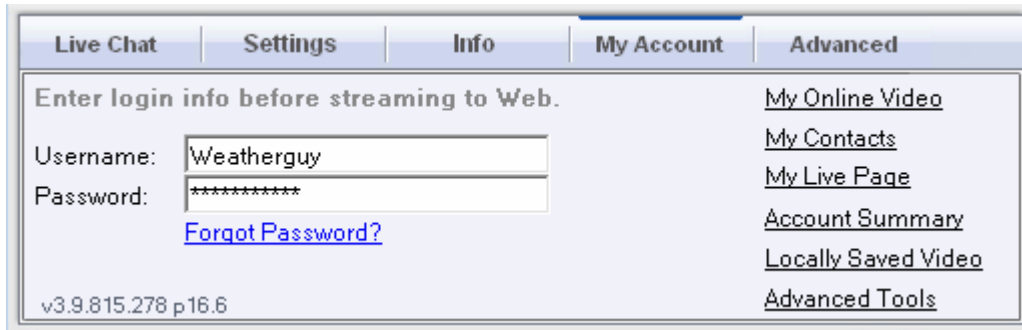
A blue "Clear" button is located at the bottom right of the form.

My Account

Your username and password are required before your Lightning DUO will function.

Once entered, they will remain until you change them. There is no need to log in or out as LiveCast will handle that process automatically when needed.

The right part of this screen gives you direct access to your online account.



Advanced

The advanced panel is where you can automate the Start features for unattended functionality. This also displays the session log.

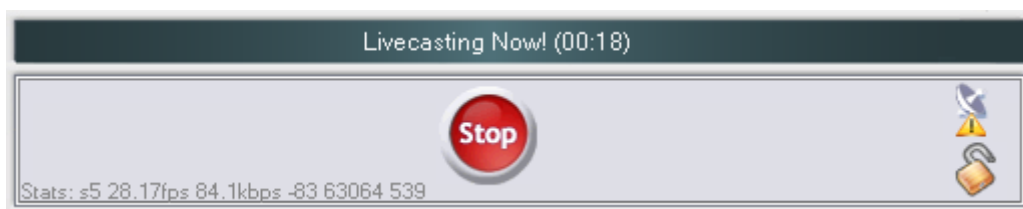


Starting Your Web Stream

Clicking the **Start** button in the right video panel starts sending the output stream to your account for live and on-demand streaming. On clicking Start, any other Lightning application users will be able to see your stream (if given access rights) with 1 second average latency.

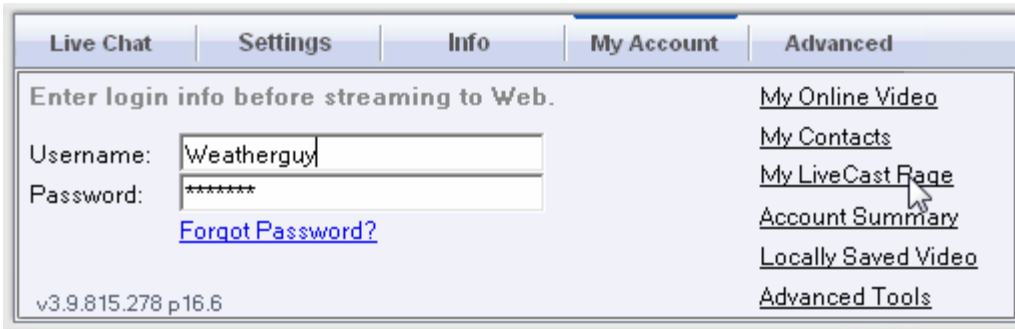
The Statistics Display

Below the streaming window are some statistics to help view the performance of your stream. These statistics include connection status, frame rate, bit rate, GPS status, and privacy status.



Viewing Your Web Stream

Each LiveCast account is provided a LiveCast web page to host the live and archived videos they shoot. A direct link to this page is available from the My Account tab.



Live Chat Settings Info **My Account** Advanced

Enter login info before streaming to Web.

Username:

Password:

[Forgot Password?](#)

[My Online Video](#)

[My Contacts](#)

[My LiveCast Page](#)

[Account Summary](#)

[Locally Saved Video](#)

[Advanced Tools](#)

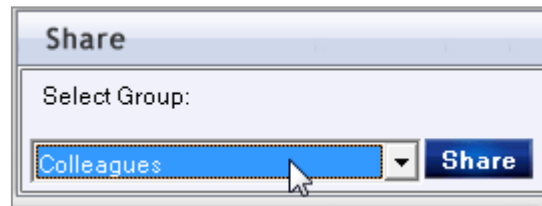
v3.9.815.278 p16.6

Sharing Your Web Stream

Once you're streaming, you can notify colleagues by email or SMS, or send the stream to a blog, using the LiveCast share feature.

Step 1: Select the group of contacts from the **Share pull-down menu**

Step 2: click on the **Share** button. The group will receive notification and a link to your live stream.



Share

Select Group:

Colleagues

Share

The contacts within the group will be sent an email and/or text message containing a direct link to the live stream. When a contact clicks on the link, a live stream will launch, whether its on a mobile device or computer.

To auto-share a live stream, log into your online account. The auto-share feature will notify the selected group anytime you are streaming live.

To find the URL of your My LiveCast Page, simply click on the 'My LiveCast Page' link from the My Account panel. You can customize this page from your online account.

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