

## Release Notes

### System Requirements

	Minimum	Recommended
<b>Operating System</b>	Windows 7, 10, macOS High Sierra, macOS Mojave	Windows 10, macOS High Sierra
<b>Processor</b>	i5 dual-core @ 2.3GHz <sup>1</sup>	i7 quad-core @ 2.8GHz+
<b>Memory</b>	4GB RAM	16GB+ RAM
<b>Hard Drive</b>	2GB <sup>2</sup> , 7200 RPM for record to disk	500GB+, Solid State OS Drive
<b>Graphics Card</b>	Intel HD <sup>3</sup> , DirectX 11 capable	Nvidia GeForce or AMD Radeon, 1GB+ video memory
<b>Internet Connectivity</b>	Open HTTP/HTTPS port 80, RTMP port 1935, port 7272 for Remote Desktop Presenter	If behind a firewall, check with your CDN for any sites to whitelist

<sup>1</sup> May be insufficient for 1080p+ or 60 fps workflows

<sup>2</sup> Additional hard disk space required for record to disk.

<sup>3</sup> Insufficient for advanced Multi-Viewer workflows.

### Languages Supported:

- |           |                        |          |           |
|-----------|------------------------|----------|-----------|
| • English | • Brazilian Portuguese | • Korean | • French  |
| • German  | • Chinese (Simplified) | • Czech  | • Spanish |
| • Italian | • Japanese             | • Dutch  | • Swedish |

**An internet connection is recommended for Wirecast 12 license activation. A Wirecast 12 license will automatically update at no cost after download for Wirecast 8, 9, 10 and 11 users if standard maintenance and support is current.**

**ATTN: Wirecast 8 and later versions have dropped support of HDV licenses/cameras.**

~ [Please click here for additional information](#) ~

**NewBlueFX Titler Live Express & Present** – Includes over 60 title templates for lower-thirds and overlays (Mac & Windows).

- Purchase of Wirecast 12 Studio includes a free copy of [NewBlueFX Titler Live Express](#).
- Purchase of Wirecast 12 Pro includes a free copy of [NewBlueFX Titler Live Present](#).

**Remote Desktop Presenter** - Please use the Remote Desktop Presenter version 2.0.8, available as a separate download from Telestream: [www.telestream.net/dtp](http://www.telestream.net/dtp)

## Best Practices

### Minimum Required Upload Speed:

- It is recommended that an upload speed rate of at least double the selected video bitrate be available, especially for a total target bit-rate of 10Mbps (Megabits per second) or less, or when there are multiple outgoing streams.
- Upload speed can be tested at a website such as [TestMy.net/upload](http://TestMy.net/upload).
- Additional tasks that can consume upload bandwidth on the network should also be considered when determining how much of the available upload bandwidth can be allocated towards streaming.

### Rendezvous

Wirecast Rendezvous uses WebRTC technology that can be very resource intensive. For the best experience, we suggest considering the following table when choosing hardware:

	Studio (2 guests + 1 host)	Pro (7 guests + 1 host)
<b>Bandwidth<sup>4</sup></b>	Add 4 Mbps	Add 5+ Mbps <sup>5</sup>
<b>Processor<sup>4</sup></b>	i5 quad-core <sup>6</sup>	i7 quad-core <sup>6</sup>

<sup>4</sup>Based on a single simultaneous stream of 720p30 x264 @ 4.0Mbps.

<sup>5</sup>Bandwidth per guest will scale downwards as more are added to maintain reliability.

<sup>6</sup>Minimum recommended processor with example stream<sup>4</sup>. More demanding workflows may require a more capable CPU.

### ISO Recording:

- Solid State Drive or fast RAID array recommended for ISO Recording and Replay functionality.
- Actual data rates will vary depending on quality level selected for ProRes (Mac) or MJPEG recording (Windows), as well as the resolution and frame rate selected.
  - For Mac ProRes recording please refer to [Apple's ProRes data rate specifications](#).
  - Windows MJPEG Best Quality Guidelines (Megabytes per second):
    - 1080i and 1080p 29.97 and 30 FPS, MJPEG Best Quality – ~25MB/sec
    - 1080p 60 FPS, MJPEG Best Quality – ~50 MB/sec
    - 720p 59.94 and 60 FPS, MJPEG Best Quality – ~20 MB/sec
- Total expected data rate should be compared to available disk write speed to ensure adequate disk throughput.

***Failure to ensure the available disk write speed is greater than the highest expected total data rate may result in frames being dropped from recordings (ISO, Replay, and Record-to-Disk).***

## **Best Practices (cont.)**

### Hardware accelerated encoding requirements:

- Intel Quick Sync Video encoding requires an Intel CPU with an Intel® QuickSync Video core.  
[List of Intel CPUs supporting QuickSync](#)
- NVIDIA NVENC encoding requires an NVidia GPU with Kepler architecture or newer.  
[NVIDIA only maintains a general list of supported GPUs](#)
- Apple Hardware Accelerated H.264 encoding requires a Mac with an integrated Intel GPU\*.  
*\*This may change in the future, as the Apple API decides what hardware acceleration method is to be used. At the time of this writing, only Quick Sync via an Intel GPU is supported.*

### High frame-rate streaming (60fps):

- High frame-rate streaming will result in increased CPU usage and require a higher bit rate (4Mbps or higher) for a quality encode.
- Simply switching to a higher frame-rate without ensuring the CPU and bitrate are sufficient may result in a lower quality encode.

### CPU Usage:

- Consider lowering your canvas frame rate and/or streaming resolution to lower CPU usage.
- Maintained system CPU usage greater than 60% will increase the likelihood of dropped frames.

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## **12.0 – New Features**

### **NEW – Stock Media Library**

- Now included with every active support subscription, the new Stock Media Library adds a growing database of over 500,000 unique, high quality media assets to your projects.
- A new custom-built portal gives you direct access to transitions, motion backgrounds, royalty-free backing tracks, and videos from right within Wirecast.
- Select the new Media Files category in the Add Source dialog and choose Stock Media Library.

### **NEW – Stinger (Custom Transitions) Playback Speed Controls**

- Spice up your stinger transitions using the new Stock Media Library, which contains transition files.
- New speed controls allow you to adjust the timing of your stinger transitions, and an additional transition bank gives you more options for live production.

### **NEW – Rendezvous Audio Mixing**

- In the Rendezvous dashboard, you can now create a custom audio mix to be sent to your Rendezvous guests.
- Studio license level will allow you to select the devices to mix.
- Pro license levels will grant you the ability to select individual channels from audio devices to be mixed.

### **NEW – QR Code Generator Source**

- Want to give your audience quick access to a custom link within your stream? Just create a QR code that your audience can scan! Copy your link into the new QR Code Generator and Wirecast will create a scannable image to broadcast to your fans.
- Select the Overlays category in the Add Source dialog and choose QR Code Generator.

## **12.0 – Improvements**

- Improvement – Add ability to configure the number of transition banks in the Preferences
- Improvement – Add ability to continuously read a text file in the Text Source Properties
- Improvement – Allow users to configure the playback speed of Stinger Transitions
- Improvement – Display the Facebook Page of Scheduled events in the Facebook Destination Output Settings

- Improvement – Enable NVENC High Profile in Encoder settings
- Improvement – Expose all options in Facebook Live Polls
- Improvement – Update CEF to version 3578
- Improvement - Update to NDI SDK v.3.8

### **12.0 – Fixes**

- Fixed – Add better error messaging when the GPU does not support Direct X 11
- Fixed – Adding a Direct Show audio device to the document causes duplicate sources to appear in the Rendezvous Dashboard
- Fixed - After attempting to activate an old license, any subsequent invalid license activation attempts show an incorrect error message
- Fixed – Audio from Multi-Channel Sources is not heard in the Rendezvous call when sending the Live Output audio track
- Fixed – Build-In/Build-Out elements don't move proportionally
- Fixed – Certain stinger transitions can appear doubled and stretched
- Fixed - Change Audio right-click menu text is hard to read text
- Fixed – Change the wording for missing Stinger Transitions
- Fixed - Changing the playback speed of a stinger transition pauses it without updating the pause/play button
- Fixed - Clicking X in the Add Source Dialog adds any selected sources to the document on Windows
- Fixed - Clock System Fonts missing font picker dialog
- Fixed – Crash when adding a Stinger Transition on Windows 7 with an AMD GPU
- Fixed - Facebook Scheduled events list fails to be read properly in some cases
- Fixed - Fixed bad alignment in Teradek StreamReader Properties page
- Fixed - Hang when selecting a Stinger Transition then immediately using the transition
- Fixed – IP camera frame glitch
- Fixed - Midi controller volume slider control skips from 99% to 101%
- Fixed – NDI detection is disabled when disabling IP Camera discovery
- Fixed - Opening a new document during a stream caused Wirecast to Crash after disconnecting from a Rendezvous Session
- Fixed - Periscope Destination Schedules Event and Tweets even if Destination is Disabled
- Fixed – PTZ IP Port field does not update after switching to a PTZ profile that uses a required IP port
- Fixed – Random crash during a Rendezvous Session
- Fixed – Random crash when a document has disconnected sources
- Fixed – Random hang when switching sources
- Fixed – Rare hang that can occur on Windows

- Fixed - Remove Facebook donation button from Profiles (not supported by Facebook)
- Fixed – Remove Shutdown when not live from Clock and Solid Color sources
- Fixed - Security Warning Preventing Facebook Live Authentication on certain 4G networks
- Fixed – Streaming to Ustream causes a hang on macOS Mojave
- Fixed - Switching Destinations from Facebook User Code While Authenticating Disables OK Button
- Fixed - Telestream Cloud Restream output out of sync when started after another output
- Fixed – Unable to capture video from Osprey 900 series capture cards
- Fixed – Unable to create a Scheduled YouTube Event
- Fixed - Unable to delete Scheduled Events on Profiles
- Fixed - Unable to stream to certain RTMP servers on macOS Mojave
- Fixed - Unable to use ScreenFlow screen record with record PC audio selected while running Rendezvous Session
- Fixed - Virtual Mic audio distortion in Zoom
- Fixed –Unable to remove Live Output from the Rendezvous mix

### **12.0 – Known Issues**

- MacOS – Adding more than one PTZOptics NDI connection to a single machine (regardless of the connecting application) can cause a crash in the application that is the second to connect.
    - Workaround 1 – Disable Multicast
      - Go to the PTZOptics camera admin webpage.
      - Go to the Network Section.
      - Disable Multicast
      - Reboot the camera using the System page.
    - Workaround 2 – Use RTSP instead of NDI
      - Use the newly rewritten WebStream plugin in Wirecast to connect to the RTSP stream.
      - The URL for this stream can be found in your PTZOptics camera’s documentation or admin webpage.
  - Windows 7 – Certain 4K/UHD H.264 video files in the Stock Media Library are not supported.
  - Animated PNG movies from the Stock Media Library can experience poor playback or dropped frames
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