

## Release Notes

### **System Requirements**

	<b>Minimum</b>	<b>Recommended</b>
<b>Operating System</b>	Windows 10 1803 or higher, macOS Mojave, macOS Catalina	Windows 10 1903, macOS Mojave
<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
- German
- Italian
- Brazilian Portuguese
- Chinese (Simplified)
- Japanese
- Korean
- Czech
- Dutch
- French
- Spanish
- Swedish

### **Upgrade Information:**

- An internet connection is recommended for Wirecast 13 license activation.
- As long as your Wirecast (version 8 or higher) license is entered into the software and your Basic, Standard or Premium support subscription is active, you will be allowed to upgrade to the latest unlocked version of Wirecast for free.
- View [full upgrade information](#)

### **Add-ons:**

- **NewBlue Titler Live Express & Present** – Includes over 60 title templates for lower-thirds and overlays (Mac & Windows).
  - Wirecast 13 Studio includes a free copy of [NewBlue Titler Live Express](#).
  - Wirecast 13 Pro includes a free copy of [NewBlue Titler Live Present](#).
  - View our webpage for [additional NewBlue Titler Live solutions](#) available for purchase.
- **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)
- **PLEASE NOTE: Wirecast 9 and later versions have dropped support of HDV licenses/cameras.** [Please click here for additional information.](#)

## **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:

	<b>Studio (2 guests + 1 host)</b>	<b>Pro (7 guests + 1 host)</b>
<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.

*(End of Page)*

## Wirecast 13.1

- **New & Improved:**

- *WIRE-16617*: Continuing our quest to improve performance, efficiency and to reduce code bloat, we've done some under-the-hood updates that will make way for MORE updates, but in the short term should improve specific display functionality and reduce CPU usage.
- *WIRE-16615*: We now prevent icons from being rendered in the background unnecessarily, again with the aim of providing some performance improvement
- *WIRE-16612*: Now you can do a "draft" or preview of your broadcast when streaming to LinkedIn Live.
- *WIRE-16557*: Updated to NDI SDK 4.1- just keeping things current.
- *WIRE-16545*: We now allow you to configure the Closed Captions settings for YouTube Events
- *WIRE-16516*: Thanks to all who let us know how much they love to collapse the layers on the Main Shot Bin. We brought back that ability.
- *WIRE-16496*: Updated Facebook API version to the latest release.
- *WIRE-16490/16489*: Updated various UI buttons and images so that they scale better on Windows.
- *WIRE-16485*: We widened the properties panel and did some general cleanup to make the whole properties panel area look more appealing.
- *WIRE-16483*: We received a very good suggestion to update our audio icons to make them more obviously show when audio is muted. Now, instead of just changing color, the icon has a line through it to indicate when it's muted.
- *WIRE-16469*: More under-the-hood improvements - we updated the Wirecast audio code to use AudioQueue and WASAPI APIs. The only user-facing change in this phase is that audio from multiple open documents will now be mixed together rather than only playing the audio from the topmost document.
- *WIRE-16467*: We updated some wording for our Failed to Activate License warning, and included a link to our license reset tool.
- *WIRE-16464*: When running Wirecast on a Windows machine where a monitor has > 100% scale, the text and graphics are now crisp and clean.
- *WIRE-16184*: Improved decompression of MJPEG video, which will improve performance for many webcams, 4K webcams, and USB3 capture devices that capture 4K video.
- *WIRE-15999/15994/15951*: More clean up and updating - we've removed CEF from the inspector panel which improves drawing performance and reduces flicker in the UI.
- *WIRE-15714*: We also updated our technology to improve the performance and quickness of adding NDI sources to a document.
- *WIRE-15651*: We have greatly improved the ability to navigate within the UI using the tab key. There's more to come, but you can now joyfully tab through the text entry fields.
- *WIRE-15078*: We've re-enabled NVENC high-profile encoding.

- **Fixes**

- *WIRE-16906/WIRE-16903*: Fixed a couple translation bugs in the Wirecast Preferences.
- *WIRE-16899*: Twitter Message feed is now readable on macOS in Dark Mode.
- *WIRE-16829*: Fixed an issue that was causing a transparent video signal from certain DeckLink capture cards when receiving an RGB signal from the HDMI input

- *WIRE-16804*: Fixed some obscured notifications which could lead to confusion and crashes.
- *WIRE-16786*: Now you can again set/reset time on Countdown Clock.
- *WIRE-16781*: Fixed a crash when exiting Windows Notifications (WinToast)
- *WIRE-16676*: Made Download Manager window more intuitive to understand when nothing has been downloaded.
- *WIRE-16656*: When you select a deinterlacing option from the drop down in Source Properties, it now respects and saves your choice.
- *WIRE-16640*: In our ongoing crusade to prove that English is indeed our first language, we've simplified the message that prompts you to install our audio capture driver.
- *WIRE-16639/16107*: We fixed a crash that occurred on Windows when starting a Rendezvous Session with a video device set to "Logi Capture".
- *WIRE-16636*: Fixed a memory leak while the DirectShow configuration window is open.
- *WIRE-16635*: Fixed an issue where sources from the Blackmagic ATEM Mini weren't showing up, unless you selected the option to Show Duplicate Devices.
- *WIRE-16625*: When typing a description for LinkedIn Live, the return key will now not cause the 'OK' button to be clicked, and all carriage returns will appear in the description field, as they should.
- *WIRE-16621*: Fixed a long-standing annoyance where an extremely long RTMP stream key or name would get truncated and not saved correctly in a document.
- *WIRE-16614*: We found a crash that could occur when closing a document after starting some recordings. We don't know why you would ever do that, but we fixed it.
- *WIRE-16605*: Put in a fix to alleviate some reported A/V sync issues that could occur when using multiple input sources.
- *WIRE-16595*: On macOS we fixed an error that would occur if you started an ISO recording with an AVCapture video and audio source.
- *WIRE-16593*: We updated YouTube's branding.
- *WIRE-16551*: Stock Media Warning message was unreadable when in dark mode
- *WIRE-16549*: Rendezvous audio mixer now displays the correct meter values for sources that emit floating point audio (such as NDI) as opposed to 16-bit.
- *WIRE-16540*: Fixed a missed translation in an Output Settings window.
- *WIRE-16539*: Wirecast is no longer supported on Windows 7 after January 2020, so we now do not allow it to be installed on versions lower than Windows 10.
- *WIRE-16538*: Wirecast no longer hangs/beachballs when you send an MP4 file live while showing a solid color in preview and starting an ISO/record.
- *WIRE-16530*: For those of us who don't fully understand the purpose of the Monitor Mix Minus button – we have added a tooltip to help.
- *WIRE-16522*: Bet you didn't even catch the misspelling. *Consoliated* is not a word. And now you won't see that non-word in our app. #embarrassing
- *WIRE-16519*: Fixed an issue where cryptic placeholder strings were displayed in place of text in a navigation menu in several instances.
- *WIRE-16504 / 16212 / 16507*: Fixed numerous reported issues with the countdown clock – specifically where it would default to local computer time when stopped – making it impossible to pause the countdown.
- *WIRE-16499*: Stinger transitions on Mac now work and maintain transparency for all framerates, including 25fps, which briefly forgot how to function.

- *WIRE-16497*: Fixed a broken link in the Welcome to Wirecast window that pointed to a video, which you may have wanted to watch but couldn't.
- *WIRE-16494*: Fixed an issue that in some instances wouldn't let you reconfigure Output Settings once they had been set to one destination.
- *WIRE-16482*: Layer 1 in the Main Shot Bin no longer disappears when switching shots using your shortcut keys.
- *WIRE-16480*: If you were trying to bring in a shot from a remote computer that didn't have much motion, via NDI– you might have noticed the shot would remain black. This was an NDI bug, which can be fixed by updating to NDI Tools v.4.
- *WIRE-16474*: Fixed an issue where the audio Multi-Track Input Mapper would not show your source until you resized the window.
- *WIRE-16473/WIRE-16370*: We updated all RTMP outputs to use our transport library, which fixed some issues caused by using a different library.
- *WIRE-16465*: The inline audio meters used to incorrectly cause the Main Shot Bin to redraw if the meter reading was 0dB. That was a waste of resources, which we've corrected.
- *WIRE-16463*: Drop shadows on text were disappearing or didn't update properly. Fixed.
- *WIRE-16461*: If you declined usage of a device (like a microphone), then later wanted to use that device, Wirecast would silently fail. Now we will nicely ask you if you still want to decline the device.
- *WIRE-16451*: Updated Twitch and YouTube default bitrate presets to be 4Mbps to be more consistent with other destination defaults.
- *WIRE-16450*: We also updated our destinations, so they default to x264 encoders.
- *WIRE-16428*: When Wirecast is running on Wirecast Gear 110, 210, 220 or 230, live icons in the Main Shot Bin will be now be defaulted to off to conserve system resources.
- *WIRE-16419/16415*: Removed a bunch of old, unused code. That's all we're going to say about that.
- *WIRE-16413*: Now you can hot plug your X-keys device, and Wirecast will resume the connection seamlessly, rather than giving you the silent treatment.
- *WIRE-16406*: On Mac, if you close your document while still streaming, the streaming indicator would remain in your Dock, confusingly indicating that a broadcast was still in progress. You now won't see that. But really, not recommended to close your document while streaming.
- *WIRE-16390*: Fixed an issue where the Twitter account selector box would be obscured or disappear in Output Settings after you had logged into Twitter, making it difficult to switch accounts.
- *WIRE-16383*: Wirecast now properly detects if there is a network disconnection
- *WIRE-16377*: You can now add a Cineform file into Wirecast without it crashing.
- *WIRE-16369*: We added support for RTMPS streams to Wowza Streaming Engine.
- *WIRE-16366*: Re-enabled the ability to click links in our embedded browser window on macOS 10.15
- *WIRE-16363*: We removed the channel selector from the Audio Mixer.
- *WIRE-16357*: Fixed a rare crash on Mac when closing the Output Settings while you're in the mouseDown state.
- *WIRE-16342*: Fixed a little glitch in our API calls to Twitch.
- *WIRE-16341*: The "Allow Embedding" option in Output Settings for YouTube broadcasts was not working. We've fixed that.

- *WIRE-16340*: We worked with Facebook to restore places, cross-posting and sponsor settings which stopped working after Facebook made some deprecations on their side.
- *WIRE-16337*: Updated the help link next to YouTube Event Allow Embedding, to go to a more appropriate and helpful page.
- *WIRE-16312*: Removed the audio icon from a QR Code Generator source in Shot Layers, since QR codes don't have audio, silly.
- *WIRE-16310*: Relatedly, we also removed some other unnecessary options in Source Properties for QR Code Generator.
- *WIRE-16262*: Fixed a crash that occurs while simultaneously unplugging an Audio Source while trying to change its settings in the Source Properties.
- *WIRE-16243*: Fixed a UI issue on Windows where a black bar appears above Main Shot Bin if you drag enough shots in there and really try to break it.
- *WIRE-16240*: Fixed some more instances where text wasn't translated when viewing the app in languages other than English.
- *WIRE-16233*: We updated the Create and Open document icons on Welcome to Wirecast window. They're much more attractive now.
- *WIRE-16224*: We removed the poorly aligned border background image from the Audio Mixer's FX settings menus and replaced it with a solid color.
- *WIRE-16208*: Fixed a UI annoyance on the Image Carousel where toggling the shuffle checkbox would cause the default image to flash briefly.
- *WIRE-16112*: Fixed some more UI weirdness when switching background color from 'None' to 'Solid' on Text, Title, and Clocks.
- *WIRE-16094*: We changed the behavior of the Windows Installer to force users to uninstall before downgrading.
- *WIRE-15975*: Fixed a memory leak that occurred while outputting with Virtual Camera.
- *WIRE-15969*: Now you can switch between LinkedIn Live accounts on Windows, without having to change the Post type.
- *WIRE-15947*: On certain Windows machines, Quicksync encoders would be missing from the encoder drop-down. We found them and put them back where they belong.
- *WIRE-15919*: Wirecast no longer hangs when losing Internet connection, and it will automatically reconnect after the Internet connection is restored.
- *WIRE-15767*: Unplugging or disabling the network adapter(s) now does not cause a spike in CPU usage.
- *WIRE-15740*: When clicking on the "Save as Default" button in the Chroma Key, now actually saves your selection as a default.
- *WIRE-15680*: Fixed an issue where shots that were moved or renamed, then reassigned in a document, could not be taken live until a different shot on the same layer had done so.
- *WIRE-15633*: Multi-viewer on Mac can now identify each monitor, even when Wirecast is assigned to a specific Display in Mission Control.
- *WIRE-15521*: Fixed a bug that caused NDI audio output to stutter – sometimes, and only after more than 2 hours.
- *WIRE-15466*: Now, when creating a Vimeo stream with a custom stream name, the stream name no longer shows as "Untitled, and the actual name created is displayed.
- *WIRE-15388*: Fixed a crash – which may or may not have been related to WebRTC and Rendezvous.

- *WIRE-14511*: When you open a ticket via the support assistant, we now require you to add a subject, which helps us help you.
- *WIRE-13457*: Fixed an intermittent crash when closing a document with an ASIO/WASAPI device.
- *WIRE-13389*: On Windows, we fixed a long-standing issue where colors from Blackmagic Web Presenter looked incorrect.
- *WIRE-13387*: Fixed a somewhat random crash related to our source manager.
- *WIRE-13187*: Added a warning message to prevent you from inadvertently copying over an existing file when you Record to Disk.
- *WIRE-10394*: Now, if you try to record to disk to a subfolder that doesn't exist, the path/subfolder will be created, or the user will be alerted if the location needs to be edited.

### Known Issues

- *WIRE-16822* – Apple will soon drop support for KEXT audio drivers, which enables us to capture the system audio on Mac. For now, users that have the old Wirecast driver installed can continue to use that until Apple fully disables this system. New Wirecast users will have several options ([outlined in this Knowledge Base article](#)), including to manually install the old driver if they want to use this.

## Wirecast 13.0.2

- **New & Improved:**
  - *WIRE-16316* – Now you can set your LinkedIn Live broadcasts to be visible only to your first-degree connections. Like if you don't want your boss's boss to see your live stream. Now you can do that.
  - *WIRE-14718* – We now correctly enable Wirecast Live captions in a YouTube event when setting that event to auto start.
- **Fixes**
  - *WIRE-16512*– If you tried to use Osprey 825e capture cards with Wirecast 13, you may have noticed they weren't working very well, or at all. Try again – we think you'll be pleasantly surprised...
  - *WIRE-16505*– Sometimes good intentions backfire. A fix we made in 13.0.1 caused a crash when trying to load a saved Wirecast document with chroma key. It's better now.
  - *WIRE-16500*– Fixed an issue where changes made to Color Space or Dynamic Range for a video source were not, in the strictest of terms, accurate. (At all.)
  - *WIRE-14923*– Fixed an error that caused audio to sometimes not play through the monitor unless the Mix Minus button was toggled, which one would not naturally think to do.
  - *WIRE-14637*– Fixed a miscellaneous issue with a miscellaneous solution for streaming with Wirecast Restreaming to certain destinations.

## Wirecast 13.0.1

- **Fixes**



- *WIRE-16454*– On Windows, smooth transitions between two shots that contain the same source is working again, after briefly trying to break free and take over the world.
- *WIRE-16445*– Main Shot Layers now remember their sizes when a saved document is reopened. A little Ginkgo Biloba did the trick.
- *WIRE-16442*– Also fixed was Wirecast’s ability to remember the Controller selected in Preferences.
- *WIRE-16440*– Recorded audio from Rendezvous guests was sometimes having dropouts or was garbled. Yo..cn ..ear..t.agn now.
- *WIRE-16479*– When an input format changes to a Magewell capture card, the audio will no longer stop working from that device.
- *WIRE-16432*– The YouTube’s Create Event Menu now correctly shows the dark mode color scheme. Handy for when you actually want to see the text.
- *WIRE-16425*– Sources from BlackMagic capture cards that don’t support automatic format detection were not being found when upgrading to version 13. We found them and helped them get back to where they belong. They’re fine. A little shaken, but basically fine.
- *WIRE-16240*– Sometimes certain areas of the app would appear in English when they shouldn’t. We’ve fixed that bit of linguistic imperialism.
- *WIRE-15656*– Fixed a crash when clicking the Output Menu when a BlackMagic Decklink 8K Pro capture card was installed.
- *WIRE-15461* – Now, when you use Desktop Presenter and check the capture audio box the playback should be clear without being choppy or skipping.

## Wirecast 13

- **New & Improved:**

- ***WIRE-15060* – Main Shot Bin overhaul** – We’ve done a complete refurbishment of our Main Shot Bin (that’s the layered area where you add all your shots.) We’re excited about a lot of under-the-hood improvements that reduced our code bloat, which you’ll have to trust us on. But what you will see is:
  - **Greatly improved responsiveness** when selecting and reordering shots, resizing windows and scrolling. It’s now smooth like buttah.
  - **GPU accelerated live icons** so you can see live previews of all your live shots, without hosing your system CPU.
  - **Refreshed and decluttered user interface** – like Feng Shui, but for software.
  - **A bunch of other small but daring** improvements like being able to reorder your master layers and more layer resizing options ... oh, the power!
  - ***WIRE-16006* - Speaking of resizing layers:** We’ve added a “Zoom Layers To’ menu under ‘Layout’ so you can set all your master layers in one fell swoop. AND now you can resize all your layers at the same time by holding down the Shift or Alt (Win) or Shift, Option or Command (Mac) keys. PLUS! Extra added bonus: If you double click a layer divider, your layer will resize to its default height. Boom.
  - ***WIRE-12584*** – You can now also drag & drop a shot by clicking anywhere in the shot, not just on the title.

- **WIRE-15939/WIRE-15940 – BlackMagic Designs and Direct Show source process separation**– We have been working hard to improve the resiliency of Wirecast when dealing with sources. We have updated our code for sources, which for us makes it easier to maintain and support future source updates. You won't see a lot of obvious changes yet in usability – but this helps us set the stage for future improvements.
- **WIRE-15590 – More efficiency** - We're now allowing Blackmagic, DirectShow and Magewell sources to be more efficient – giving them access to GPU-accessible buffers for better performance.
- **WIRE-15588 – Added support for MJPEG video in DirectShow sources**
- **WIRE-16368 – Stream to Facebook and other places simultaneously:** Facebook recently changed their policy that allows you to stream to multiple destinations when also streaming to Facebook. We have enabled that in our application. So, stream away, anywhere!
- **WIRE-16394/WIRE-16261 – Facebook 1080p streaming:** Now you can stream 1080p and up to 60fps to Facebook.
- **WIRE-15870 – Integrated Facebook Speed Test** - New option in Facebook output settings "Optimize Connection" initiates a Facebook Speed Test to Facebook's various regional ingestion servers to determine the best choice.
  - **WIRE-16200** – And we now warn busy users that the Facebook Speed Test can take several minutes.
- **WIRE-14429 – PTZ control over NDI** - This should allow all NDI PTZ cameras supporting movement controls over NDI to be fully usable in Wirecast. We have not tested every possible NDI PTZ device, but due to the standardization of NDI, all should work.
- **WIRE-15624 / WIRE-16114** – We also added support for PTZOptics PT12X-ZCam, for which we added a message in the PTZ Control Window that this device does not support pan/tilt controls. (It only zooms).
- **WIRE-16001 – MacOS Dark Mode** - We're going dark. Or at least you can choose to now.
- **WIRE-15989 – Larger user camera in Rendezvous** - When entering the Rendezvous landing page (to enter the username), now the camera appears in the middle of the page so the user can see themselves more clearly than the small view in the top-right corner. Once the Rendezvous session starts, the camera jumps back to the top-right hand corner.
- **WIRE-15976 – LinkedIn Live Error Tracking** - We improved the error tracking when streaming to LinkedIn Live.
- **WIRE-15968 – Preference Pane additions** - We've added more options to the preference pane to give you even more decisions to make, including the look of your shot display, turning GPU Accelerated Live Icons to "Highest Framerate", "Reduced Framerate" or "Disabled", and other settings that give you ultimate omnipotence (at least within your own Wirecast document).
- **WIRE-15876 – Streamlined Buy link** - Clicking on the 'Buy/Upgrade' item under 'Help' now opens the web store directly instead of taking you on a leisurely walk-about through another page or two. We're saving you time.
- **WIRE-15933 – Warm and fuzzy analytics invite** - We made our analytics opt-in pop-up warmer and fuzzier. We really hope you'll help us by opting in to analytics!
- **WIRE-16123** – You probably don't care, but we've enlarged the Welcome Window to make room for in-app videos to play in that window.

- **WIRE-15922** – During the trial period, it is now easier for you to find and press a purchase button.
- **Fixes**
  - **WIRE-16380** – We fixed an error when attempting to authenticate to Twitch, caused by a change in the Twitch API.
  - **WIRE-16364** – Fixed an issue that caused audio underflow/popping sounds when using certain Elgato capture cards.
  - **WIRE-16361** – We made an adjustment to the way Wirecast responds to changes in properties – one result being that now when you stop and restart the clock widget, it will resume where you left off, instead of restarting at the beginning.
  - **WIRE-16347** – Jetstream aka Streamzilla now shows up in Mac Output Settings without error.
  - **WIRE-16328** – When you replace a shot with another source, it will not automatically display at a ridiculously large size.
  - **WIRE-16305** – Now when you click on the "Enter full screen" button on the video in the Welcome Screen, it will actually display full screen.
  - **WIRE-16283/WIRE-16175/WIRE-16029/WIRE-15892** - Fixed an issue where files were flickering when added as a Web Stream source
  - **WIRE-16279** – A minor display issue – our cute little Cloud icon was being cut off when enabling Restream and Captions. Now it's not.
  - **WIRE-16271** – Fixed an issue where most SD video (720x480) from Blackmagic and other devices were coming in with improper scaling.
  - **WIRE-16270** – We have more carefully isolated our media handling from other processes to help prevent crashes.
  - **WIRE-16250** – Fixing some long-standing 'jank' where audio mute buttons would display on video-only sources and video mute buttons on audio-only sources. Just more housecleaning.
  - **WIRE-16241** – Continuing with some housecleaning – We've done some additional clean up in the source settings tab of the Shot Inspector so it will only display the appropriate controls for audio-only and video-only sources
  - **WIRE-16235** – The ISO filename no longer reverts to default after choosing a destination.
  - **WIRE-16227** – We had some over-zealous capitalization on some messages we displayed. They are now proper English. The grammar police can rest easy.
  - **WIRE-16217** – We added back the menu bar, which would mysteriously disappear when you opened the Advanced Rendezvous Audio Mixer on Mac.
  - **WIRE-16214** – We spent way too much time debating whether it's OK to display the copyright symbol as (C). No. And then we fixed it.
  - **WIRE-16213** – Eradicated an egregious bug that would cause Wirecast to slow down or eventually hang when the audio properties panel was open. That was a doozy.
  - **WIRE-16209** – Fixed a memory leak that occurred while looping Chroma Keyed video.
  - **WIRE-16201** – Fixed a hang that happened if you took the very specific action to add a playlist shot, move it and then click at the top of Wirecast.
  - **WIRE-16196** – Now when you modify the Source Properties of Blackmagic devices while ISO recording, your Preferences for the device will not become corrupt.

- *WIRE-16172* – We removed some unnecessary permissions for areas of Facebook that we weren't actually using, and that have now been deprecated by Facebook anyway.
- *WIRE-16157* – Fixed an error that occurred on Windows when starting a Program Replay with a canvas size of 854x480.
- *WIRE-16156* – Related to the bug above – we fixed an indefinite hang that would occur on Windows when initiating Replay in conjunction with another Output while using an 854 x 480 Canvas.
- *WIRE-16142* – Now, on Mac, reducing your window size will not cause the Preview/Program windows to disappear.
- *WIRE-16125* – Fixed the Image Carousel – which is also fixed in 12.2.1, by the way.
- *WIRE-16119* – Grammarians rejoice! We've made more minor language changes to standardize the naming of items under the 'Window' menu.
- *WIRE-16111* – Fixed an odd bug that would cause an indefinite hang in certain documents when you hover the mouse over the Preview Window.
- *WIRE-16088* – Fixed a bug that didn't let you assign a hotkey to a shot that's been duplicated.
- *WIRE-16082* – Instead of immediately starting camera / audio devices on startup, which wastes resources, we now wait until we actually need to use them to start them up.
- *WIRE-16079* – Fixed an annoying issue where dragging in unsupported media created a temporary shot which overlapped the clear layer icons.
- *WIRE-16074* – Squashed a crash that happens when opening a document from Explorer/Finder, completing the analytics dialog, then opening and closing the preferences.
- *WIRE-16058* – Fixed a licensing issue that, when deactivating a license and then immediately clicking Purchase, would open the Web Store instead of the more appropriate Product Catalog page.
- *WIRE-16057* – Almost not worth mentioning, because most people will never see this, but we re-aligned a logo on a page that comes up when a Wirecast Pro user clicks purchase. (All in the name of making every aspect of Wirecast supremely excellent.)
- *WIRE-16050* – When you upgrade from Wirecast One, your master layers will also upgrade accordingly. This wasn't happening, which could cause you to think you hadn't upgraded.
- *WIRE-16049* – Fixed a bug where setting audio channel to both L and R made you think you had to upgrade to Wirecast Pro. Sorry.
- *WIRE-16041* – Fixed numerous minor layout issues in media source properties panel.
- *WIRE-16027* – When you upgrade from Wirecast One, you'll now be able to access Wirecast Studio or Pro help and User Guides.
- *WIRE-16026* – Now, you can't reorder a shot on a layer to be before the special Clear Layer shot.
- *WIRE-16014* – When you create a Twitter shot, it will no longer automatically be added to Layer 3. You now can choose.
- *WIRE-16004* – Fixed a rare crash that could occur when quitting and not saving a document.
- *WIRE-15993* – We re-enabled UI keyboard navigation on Mac, so you can again tab between controls.

- *WIRE-15992* – NDI and Webstream sources will now display at full refresh rate in the multi-viewer.
- *WIRE-15985* – Updated the XKeys 128 Controller SDK, so that it works correctly on macOS Catalina.
- *WIRE-15978* – We prevented multiple calls to Facebook when it is the most recently selected destination, to reduce load time of the Output Settings dialog box.
- *WIRE-15920* – Changing the opacity and subsequently hiding and showing the layer in the Shot Layers tab no longer reverts the opacity back to 100%. Opacity now stays the same as whatever it was set to previously...as it should.
- *WIRE-15908* – Fixed an issue on Windows where mattes were not being applied to NDI or Webstream sources.
- *WIRE-15879* – MacOS 10.15 is requiring applications to be “notarized”. Part of this update is to enable “hardened runtime” which adds additional protections to the application. We have done this.
- *WIRE-15867* – Added an error message to indicate when an Elgato device is in use by another app or fails to start.
- *WIRE-15855* – Increased wait time and publish attempts for LinkedIn Live broadcasts, which could fail due to the latency introduced when using it with Wirecast Live Captions or Wirecast Restream.
- *WIRE-15853* – Now when you click on the info button to learn about our usage data policies, it takes you to an actual page - not a 404 error.
- *WIRE-15782* – The preview video no longer freezes when you open source properties, so you can see changes being made live, which is of course the purpose of the preview window.
- *WIRE-15780* – Fixed an issue that caused signal degradation for NDI Sources with Live Icons enabled.
- *WIRE-15758* – Fixed an embarrassing oversight that caused a coder-level label to display when setting Exposure Levels settings in PTZ Controls.
- *WIRE-15755* – Fixed issue that would cause "Use backup server" and "Automatically Start Event" to become unavailable in certain cases, when streaming to YouTube.
- *WIRE-15735* – Fixed a bug that would cause audio to not be restored when reconnecting to NDI Sources on Windows.
- *WIRE-15715* – Fixed an issue streaming RTMP to specific URLs on macOS Mojave.
- *WIRE-15644* – Fixed some more odd license behavior when you select "Buy Wirecast" then close the purchase window on macOS.
- *WIRE-15643* – Fixed an indefinite hang that occurred on Windows, when using a machine with a dual GPU setup and changing the graphics adapter then clicking restart.
- *WIRE-15603* – An issue was fixed by Facebook that was causing an inability to switch to live from preview when using the Facebook Live – with User Code destination.
- *WIRE-15567* – We changed the default encoder to x264 for Livestream.com.
- *WIRE-15512* – Fixed a variety of scaling issues that occurred primarily when NDI or BlackMagic sources were added.
- *WIRE-15395* – When Mac users tried to use Rendezvous with a Studio or Trial license, we did not serve up the proper pop-up window to explain next steps. We do that now.
- *WIRE-15386* – Fixed a rare crash on Windows. Yah – that.

- *WIRE-15358* – Improved the handling of alpha PNG files to more efficiently decode these files when played in Wirecast.
- *WIRE-15340* – For users on Windows 10 Creator Studio with DirectX12 installed, our installer doesn't fail for you now.
- *WIRE-15265* – We now don't put dark text on a dark background in the name of selected shot in the Shot Layers panel on macOS. #easiertoread.
- *WIRE-15007* – Fixed an issue where .wcst documents could not be opened if they contained Cyrillic characters.
- *WIRE-14905* – You can no longer change the default encoder presets by creating a new encoder preset with the same name.
- *WIRE-14781* – Selecting a shot with the touch bar caused shot properties sliders/buttons/etc. to be greyed-out and unusable unless you tapped on that shot again in the touch bar. This was not intended. So, we fixed that.
- *WIRE-14404* – We're happy to report, we have significantly improved the way in which Wirecast plays ProRes 4444 clips on Windows. We're seeing 2-3x less CPU usage, depending on the file.
- *WIRE-14228* – Removed some old DX9c code – just cleaning up.
- *WIRE-13872* - Ricoh Theta V video was coming in upside down. Now it's not.
- *WIRE-13828* – YouTube viewer statistics now will continue to update after streaming for more than an hour.
- *WIRE-13792* – Fixed a long-standing issue that would result in missing media errors when trying to copy a shot from one document to another, if both documents are open at the same time.

#### **Additional Notes**

- *WIRE-15638* - The time has come to drop support for older DV cameras, since we don't test them anymore and they are difficult to even find nowadays. Consider official support for these dropped.
- *WIRE-15214* - Windows 7 users: Note that Wirecast 13 will be the last release that supports Win7. You'll see a message about this in app but consider yourself warned.
- *WIRE-16014* - We removed the ability to create a Twitter shot directly from the top nav bar. Don't worry, you can still do it from the Add Source (+) button in the Shot Bin area.

#### **Known Issues**

- *WIRE-16400* – On Windows 7, system devices that deliver planar YUV display green video. The workaround for these devices is to set the color space to RGB.
- *WIRE-16085* - If you are updating to Wirecast 13 and have multiple capture cards that are different models, when you open a saved document that contains sources from the capture cards, one of the inputs may fail to upgrade (and will show their saved source.) To remedy this re-add the missing source back into the document, then open the Asset Manager and assign that newly added source to back into its saved shot.

~

*This release is dedicated to the memory of our dear colleague, Antara Bhowmick.*

---