

Wirecast 15.1 BETA Release Notes

System Requirements

	Minimum	Recommended
Operating System	Windows 10 1809 or higher, Windows 11 21H2, macOS Monterey 12 or higher	Windows 10 21H2, macOS Monterey 12
Processor	Intel® 6th Generation ¹ or newer CPU ² – or AMD Ryzen™ 1000 Series or newer CPU ² ; Apple M1 or newer	Intel® 7th Generation ¹ or newer CPU – or AMD Ryzen™ 3000 Series or newer; Apple M1 or newer
Memory	8GB RAM	16GB+ RAM; Apple silicon: 16 GB of unified memory
Hard Drive	7200 RPM for record to disk	Solid State Drive (SSD)
Graphics Card	Intel HD ³ , 2 GB video memory, DirectX 11 capable; Apple Silicon: 8 GB of unified memory	Dedicated Nvidia GeForce, 4GB+ video memory, DirectX 12 capable; Apple Silicon: 16 GB of unified memory
Internet bandwidth:	Recommended: Total bitrate needed x 2 = recommended upload bandwidth	
Network ports	<p>You may want to check that the following ports are open for traffic on your network:</p> <p>80 (HTTP/HTTPS), 443 (SSL), 1935 (RTMP), 2935 (RTMPS), 3478 (STUN/Rendezvous), 5349 (STUN/Rendezvous), 5353 (mDNS for NDI sources), 5960-59xx (NDI port range, 1 port per each NDI source in use), 7272 (Remote Desktop Presenter), 49152-65535 (WebRTC Media/Rendezvous – selected at random).</p> <p>If you are behind a firewall, check with your streaming destination for any sites you may need to whitelist.</p>	

¹[How to check the generation of your Intel processor](#)

²May be insufficient for 1080p+ or 60 fps workflows.

³Insufficient for advanced Multiviewer workflows.

Languages Supported:

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

Upgrade Information:

- An internet connection is recommended for Wirecast 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:

- **Remote Desktop Presenter** - Please use the Remote Desktop Presenter version 2.0.8, available as a separate download from Telestream: 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 bitrate 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](https://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)
Bandwidth⁴	Add 4 Mbps	Add 5+ Mbps ⁵
Processor⁴	i5 quad-core ⁶	i7 quad-core ⁶

⁴ Based on a single simultaneous stream of 720p30 x264 @ 4.0Mbps.

⁵ Bandwidth per guest will scale downwards as more are added to maintain reliability.

⁶ Minimum recommended processor with example stream⁴. More demanding workflows may require a more capable CPU.

See our [Rendezvous Best Practices Guide](#) for more information.

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 or x264, as well as the resolution and frame rate selected.
 - For ProRes recording please refer to [Apple's ProRes data rate specifications](#).
- 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).

See our [ISO Recording Guide](#) for more information.

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 bitrate (4Mbps or higher) for a quality encode.
- Simply switching to a higher framerate 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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New & Improved:

- **New! Added support for VST3 Plugins¹:** Added support for 3rd Party VST Audio plugins. (WIRE-1236/9910/16131/17940/20002/20355/20432/20439/20449/ 20342)
- **New! Audio effects on Final Mix output:** Now you can add audio effects, including your VST effects, to your master live output or final mix. (WIRE-18584)
- **New! Keyboard Shortcuts/Document Hotkeys:** Complete update of keyboard shortcuts to improve productivity. Now you can make your own keyboard shortcuts for nearly any action in the app. You can save, export and import Keyboard Shortcuts Sets. This adds capabilities for all the following: (WIRE-20162/20417/19824/19823/16735/17265/ 15269/12576/10178/8893)
 - To trigger transition speed with hotkeys (WIRE-19175/7535)
 - To start/stop ISO recordings (WIRE-19071)
 - To open the Rendezvous Dashboard (WIRE-18646)
 - To disable or override default shortcuts (WIRE-18430/10235)
 - For international keyboards (WIRE-18411/13084)
 - To advance playlists (WIRE-17561)
 - For muting/monitoring audio (WIRE-14064)
 - For Replay options, "Replay Mark All", "Create All Replay Shots", and "Update All Replay Shots" (WIRE-11058)
- **New! Increased Rendezvous quality:** Increased the video resolution of Rendezvous guests to 720p. (WIRE-20263)
- **New! Expanded access to Social Media comments:** Allows you to add YouTube or Facebook comments from streams that use a generic RTMP Server output or for instances where the main Wirecast production computer is not the one streaming. (WIRE-19904/19921/20399)
- **New! Increased Twitter Refresh Rate:** We now refresh Twitter User/Home Timeline comments every 10 seconds, and Search/Favorite Timeline comments every 30 seconds. (These are Twitter limitations) (WIRE-20399)
- **New! YouTube API update:** Updated the YouTube destination API, adding support for RTMPS and using the auto-generated event from YouTube. (WIRE-11683/13149/19478/19493/20093)
- **New! Vimeo API update:** Updated Vimeo API, and added support for scheduled and recurring events. (WIRE-17324)
- **New! H.265/HEVC Playback Support:** Added support for playback of H.265/HEVC videos on Windows (WIRE-16391/19870)
- **Improved! File watching improvements:** We now enable Wirecast to watch network shares for media files and update them automatically if their originating source file gets updated. (WIRE-20428/20427)
- **Improved: Playlist settings:** Moved Playlist settings to the Source Property tab for easier access. (WIRE-19874/ 19118)
- **Improved: Easy copy of Audio FX:** In the Audio Mixer, you can now drag and drop Audio FX settings from one source to another source without having to manually apply FX settings for each audio source. (WIRE-19733 /17946)
- **Improved: Firewall check:** On Windows, we now run a check at document startup and will present a user log warning if we detect that Wirecast is being blocked by a Firewall. (WIRE-17681)

- **Improved: Hotkey display preference:** Now you can display your Hotkeys on your shot as either the Hotkey name or the Hotkey key combination (WIRE-16089)
- **Improved: Pin as top window:** Added the option to pin the Wirecast window as the topmost window. It hated getting covered by other windows. (WIRE-15881)
- **Improved: Reordering Hotkeys:** Document hotkeys can now be reordered by clicking and dragging them in the preferences panel. (WIRE-14255)
- **Improved: Multiple hotkeys per shot:** Added ability to assign multiple hotkeys to a single shot in the same main layer. (WIRE-10236)
- **COMING SOON New! Rendezvous Camera + Screen Share:** Now a Rendezvous guest can share both their desktop and video camera at the same time. (WIRE-14438)

Fixes:

- **WIRE-20629:** Fixed a long-standing issue with Wirecast's custom URL scheme on Windows when multiple commands are sent from the same application.
- **WIRE-20596:** Fixed a rare crash when deleting a playlist shot.
- **WIRE-20593:** Fixed a crash upon launch when an iPhone is connected on macOS.
- **WIRE-20589:** A click-and-drag selection area now disappears from Preview as expected.
- **WIRE-20559:** Updated the search functionality in the comment Moderation window to allow users to search the same term more than once
- **WIRE-20551:** Fixed a Crash on Windows after closing a Wirecast document when another document has a modal dialog
- **WIRE-20524:** Fixed a rare crash when clicking to reposition a source in Preview.
- **WIRE-20519/WIRE-7059:** Fixed a crash that could occur when changing an IP address in Remote Desktop Presenter
- **WIRE-20516/WIRE-19528:** Media file resizing after upgrading a document is now working correctly.
- **WIRE-20502/20454/20137:** Fixed an issue causing color differences between different encodings.
- **WIRE-20500:** Fixed rare crash with certain USB capture devices on macOS.
- **WIRE-20495/20493:** Fixed a crash that could occur when opening the Rendezvous dashboard.
- **WIRE-20464:** Deleting a playlist will no longer cause the Main Shot Display to go haywire.
- **WIRE-20440:** Upgrade CEF to version 5060.
- **WIRE-20431:** Fixed an issue that was causing Rendezvous sessions to expire in less than 24 hours.
- **WIRE-20394/WIRE-20229:** Crash no longer occurs when opening the rendezvous dashboard after switching cameras.
- **WIRE-20393:** Fixed an issue that caused a problem authenticating the YouTube output destination.
- **WIRE-20388:** Fixed an issue where Video would appear green on AverMedia Live Gamer Duo
- **WIRE-20386:** Fixed a crash that could occur when applying a shadow to an emoji
- **WIRE-20373:** Upgrade WebRTC to version 4951 (m101).
- **WIRE-20370/WIRE-11042:** Fixed the behavior of Wirecast's media playback finish states. This was causing Replays to play at the beginning of the file when another replay was live.
- **WIRE-20369:** Fixed several issues when sending a playlist Live.
- **WIRE-20363:** Updated colors on Audio Mixer background to be more pleasing.
- **WIRE-20359:** Improved efficiency of chroma key on D3D12 on Windows.

- **WIRE-20330:** Fixed the display of the time overlay of Media files on shot icons being cut off with longer media files.
- **WIRE-20329/WIRE-19825:** Fixed crash when opening a document with a Screen Capture source on certain macOS machines.
- **WIRE-20317:** Alpha channel now works with Image Carousel sources when using the Direct3D12 Rendering Engine.
- **WIRE-20251:** Updated the Audio Mixer's Delay FX Label to properly reflect functionality.
- **WIRE-20234:** Fixed "Hide Unlicensed Features" preference.
- **WIRE-20226:** Reordered YUV 422 formats below YUV 420 for all Blackmagic UVC devices to fix an issue where some devices were choosing a 422 format by default that was failing to deliver any video frames.
- **WIRE-20216:** We added a "Delete" option right in the Add Source dialog box, for User-created placeholders.
- **WIRE-20210/WIRE-15342:** Added more support for opening and playing certain H.264 files on Windows, using MainConcept decoder as a backup to MediaFoundation.
- **WIRE-20206:** Fixed a rare crash that could occur when selecting or editing a layer in the Preview Window.
- **WIRE-20199:** We now recall RTSP credentials when opening a saved document.
- **WIRE-20163:** Fixed a very rare problem with the Windows scheduler that could cause an increase in CPU usage with no recovery until Wirecast quits.
- **WIRE-20141:** Fixed a crash with the Dynamic Destination when the XML has an invalid parameter.
- **WIRE-20124:** Fixed an issue with titles that would cause them to stop working if you cancelled a title.
- **WIRE-20084:** Fixed 9:16 video appearing stretched in Rendezvous
- **WIRE-20068:** Fixed a couple of missing translations in the Media Source Properties.
- **WIRE-20050:** Mouse wheel no longer gets stuck on text entry fields.
- **WIRE-20047:** Removed B-frames from YouTube x264 encoder presets.
- **WIRE-20024:** We swapped the position of the options in the Gear menu in Rendezvous to make it less likely to accidentally disconnect a guest.
- **WIRE-20023:** Fixed an issue where Rendezvous guests heard an echo after a guest left the session.
- **WIRE-20021:** When changing canvas size, the preview outline no longer redraws improperly.
- **WIRE-20016:** Fixed crash on close with AJA devices.
- **WIRE-20003:** We increased the RTMP connect timeout to 30 seconds, while keeping the send and receive timeouts at 15 seconds to fix some connection issues when using slower DNS servers.
- **WIRE-20001:** Fixed a rare crash when the RTMP connection fails due to slow DNS servers.
- **WIRE-19923:** Fixed a rare crash when adding a Title.
- **WIRE-19922:** Certain .WAV files are now supported in Wirecast.
- **WIRE-19907:** Fixed media playback issues when they are duplicated in multiple shot layers.
- **WIRE-19905:** Fixed an issue that could cause CPU spikes when using the same media source in multiple shots.
- **WIRE-19888:** Fixed a crash that could occur when deactivating a license and then buying a new one.
- **WIRE-19853:** Fixed a quality degradation issue that could occur when recording while using D3D12 Rendering Engine on Windows.
- **WIRE-19852:** Removed an unnecessary setting in some titles Source Properties.
- **WIRE-19851/WIRE-19657:** Fixed an issue where titles were not transitioning in/out properly if clicked before transition finished.

- **WIRE-19840:** Fixed some unsightly text in the Output Settings dialog box.
- **WIRE-19786:** Fixed a rare crash when adding many media files to a playlist.
- **WIRE-19782:** Fixed a crash that could occur when opening a document with a missing asset and dialog automation is set to delete all missing assets.
- **WIRE-19724:** Dropdown menus now appear and work as expected when using a Web Page source.
- **WIRE-19622:** Updated the live window default text to say: Live Broadcast Area: View your live output.
- **WIRE-19584:** Fixed an issue where scrolling text could overlap itself if there was a fixed height and not a fixed width.
- **WIRE-19508:** Fixed rare crash when starting a stream.
- **WIRE-19275:** Fixed a crash that could occur if starting a Quicksync encoder after an NVENC encoder
- **WIRE-19226:** We now display an error if you try to stream to a YouTube event that is already closed.
- **WIRE-19172:** Fixed an issue where media file duration was not accurately displayed in a Playlist.
- **WIRE-19116:** Fixed transition problems with two of the same video in a single shot.
- **WIRE-19115/WIRE-16403:** Fixed an issue where encoding with Quicksync at 50 or 60fps would cause frame drops.
- **WIRE-19067:** Fixed a rare crash with the Preview Picker.
- **WIRE-18847:** Fixed a crash that could occur when importing super large images into the Image Carousel.
- **WIRE-18815:** Fixed a rare crash when pressing the spacebar to transition.
- **WIRE-18693:** Fixed an issue where mix/minus would not work with Desktop Presenter.
- **WIRE-18677:** Fixed a rare crash in the QuickSync encoder.
- **WIRE-18546:** Fixed a rare crash with Remote Desktop Presenter source.
- **WIRE-18538/WIRE-18320:** Fixed certain H.264 files failing to open in Windows.
- **WIRE-18460:** We now use YouTube's variable resolution and frame rate options for streams, to allow different streams to have different presets.
- **WIRE-18454:** Fixed an issue where you could not reconnect to Desktop Presenter if the IP address changed
- **WIRE-18435:** Fixed an issue where shot layers could not be dragged and reordered as expected.
- **WIRE-18403:** Fixed a crash that could occur when changing an MP4 output to SRT if the canvas size has changed.
- **WIRE-18374:** Added support for VP8, VP9, Vorbis and WebM on ARM.
- **WIRE-18353:** Fixed Program Replay Hotkeys will not work until the user clicks somewhere.
- **WIRE-18333:** Fixed audio issues when the Rendezvous guest has a single channel input device on Windows.
- **WIRE-18292:** You can now join a Rendezvous session as a guest, even if your default camera is busy or unavailable.
- **WIRE-17984:** Fixed a crash during a transition that includes more than 67 layers.
- **WIRE-17969:** Fixed Apple H.264 quality issue at keyframe interval.
- **WIRE-17930:** Fixed an issue where shot Layer Property sizing boxes were not always accurately changing and going live.
- **WIRE-17907:** Fixed an issue where adding audio-only layer would cause some lag in the UI.
- **WIRE-17870:** Fixed an issue where hovering a file over the Main Shot Display but not adding it would cause the next shot drag to go haywire.
- **WIRE-17772/ WIRE-17395/ WIRE-16191:** Some fixes to perfect our punctuation and consistency.

- **WIRE-17759:** Fixed an issue where an errant black frame would appear during a transition.
- **WIRE-17707:** Fixed an issue where Document Hotkeys would not work in certain situations.
- **WIRE-17684:** Fixed an issue where deleting a playlist could cause weird behavior on the Main Shot Display.
- **WIRE-17616:** We made the bottom-right corner drag area of document window larger for easier grab-ability.
- **WIRE-17611:** Users can no longer make keyboard shortcuts with non-printable characters (tab, arrows, backspace, etc.) without any modifiers (like shift, ctrl).
- **WIRE-17583:** Now using the same video file on disk in multiple shots won't max out the CPU.
- **WIRE-17540:** When disconnecting a Desktop Presenter shot, the source in Wirecast will now correctly show the user's preference for missing media
- **WIRE-17518:** On saving an older document version in 15.1 (anything below current doc version of 14), a new dialog warning is thrown - saying a backup is being created before upgrade.
- **WIRE-17311/WIRE-10279:** We now support playback of files encoded in MPEG-4 Part 2 on Windows.
- **WIRE-17270:** Fixed crash when disconnecting Legacy Text source.
- **WIRE-16874:** Fixed indefinite hang with HEVC source on Windows.
- **WIRE-16872:** Fixed HEVC sources don't display on Windows.
- **WIRE-16848:** Fixed green and grey artifacts when switching between HEVC sources on Windows.
- **WIRE-16521:** You can now copy/paste shot layers into and out of shots in playlists.
- **WIRE-16309:** Fixed crash when starting three or more encoders when the first encoder has video disabled.
- **WIRE-16304:** Now when you upgrade to Wirecast Pro, you'll see the ISO recording button upon the upgrade.
- **WIRE-16190:** Fixed some minor UI issues that was causing heartburn for some of us with OCD.
- **WIRE-15941:** Fixed an issue where adding multiple items to a playlist could cause flickering.
- **WIRE-15926:** Removed outdated in-app catalog/store pages to transition to a more modern external browser-based store for in-app purchases.
- **WIRE-15760:** Fixed layout issue in System Device source properties.
- **WIRE-15622:** Now you can play two instances of the same imported video at different speeds and not see a major performance hit.
- **WIRE-15447:** Fixed an issue where you could not close document using command+w on macOS.
- **WIRE-15439:** Fixed an issue where trying to open our tutorial document resulted in the application closing.
- **WIRE-15436:** Fixed UI elements vanishing when narrowing the document during output.
- **WIRE-15428:** Updated UI fixed an issue where video information was being cut off for Webstream sources.
- **WIRE-15032:** Fixed the ability to select multiple audio tracks in trial mode.
- **WIRE-14292:** Fixed crash when certain media files loop on macOS.
- **WIRE-14035:** Multi-track audio selection no longer copies to other outputs.
- **WIRE-13902:** Audio track selections now reset when switching destination types.
- **WIRE-13807:** Fixed an issue where the Noise reduction filter creates a brief sound surge when switching shots.
- **WIRE-13624:** Fixed an issue where trying to authenticate on Twitter when you were not connected to the Internet (which BTW... why would you do that?...) would cause a hang.

- **WIRE-12890:** User is now able to join a Rendezvous session even when they have no valid camera.
- **WIRE-12592:** Fixed crash with certain MOV files.
- **WIRE-12408:** Minor fix to the UI that makes the divide between the Main Shot Display and the Preview/Live windows more apparent.
- **WIRE-12404:** Fixed issue with snapping layers in Preview.
- **WIRE-12071:** Fixed a line that appears in the Scoreboard dialog window.
- **WIRE-11643:** Document hotkeys now work properly even if you have focus on a window that's not the Wirecast main UI.
- **WIRE-11281:** Fixed the scrub bar remains in the Preview window after moving a media file.
- **WIRE-11171:** Somewhere along the line, we fixed a UI issue with scoreboards, that no one probably noticed anyway.
- **WIRE-11156:** Time counters no longer blur when scrubbing in/out points.
- **WIRE-10461:** We no longer let you assign the same keyboard shortcut to a Replay option and another shortcut. Trying to do so will cause the shortcut to be removed from the first assignment and assigned to the new shortcut.
- **WIRE-10403:** Fixed a crash when switching desktops in Remote Desktop Presenter on macOS.
- **WIRE-7991:** Fixed playlist not playing some files from the beginning.
- **WIRE-7281/WIRE-5047:** Fixed no notification when disk is out of space.

KNOWN ISSUES

- We added an automatic mode for Windows Render Engine Selection in Preferences, which, if you're using an AMD GPU we will automatically switch you to Direct3D11.
- WIRE-20646: System audio capture driver does not work on macOS 13 Beta. Download the ScreenFlow trial from Telestream.net and use the driver in the latest ScreenFlow release as a workaround.
- WIRE-20182: Any version of the Support Assistant lower than Wirecast 15.0 will lose the ability to email crash reports. This will break when TLSv1.2 is enabled on the server side.
- WIRE-15439: If the user defines two conflicting OMP environment variables a command prompt can appear when starting Wirecast.
- WIRE-20456: AVerMedia Live Gamer HD colors become distorted when Source ISO recordings start. We've been unable to reproduce this with other AVerMedia capture devices.
- WIRE-20455: AVerMedia Source ISO recordings fail to write any data to disk when audio is enabled.

