

Release Notes

System Requirements

	Minimum	Recommended
Operating System	Windows 7, 8, 10, macOS Sierra, macOS High Sierra	Windows 10, macOS High Sierra
Processor	i5 dual-core @ 2.3GHz ¹	i7 quad-core @ 2.8GHz+
Memory	4GB RAM	16GB+ RAM
Hard Drive	2GB ² , 7200 RPM for record to disk	500GB+, Solid State OS Drive
Graphics Card	Intel HD ³ , DirectX 11 capable	Nvidia GeForce or AMD Radeon, 1GB+ video memory
Internet Connectivity	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

- ¹ May be insufficient for 1080p+ or 60 fps workflows
² Additional hard disk space required for record to disk.
³ Insufficient for advanced Multi-Viewer workflows.

Languages Supported:

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

An internet connection is recommended for Wirecast 9.0 license activation. A Wirecast 9.0 license will automatically update at no cost after download for Wirecast 8 users if standard maintenance and support is current.

ATTN: Wirecast 9 has 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 9 Studio includes a free copy of NewBlueFX Titler Live Express.
- Purchase of Wirecast 9 Pro includes a free copy of NewBlueFX Titler Live Present.

www.telestream.net/wirecast/newblue.htm

Remote Desktop Presenter - Please use the Remote Desktop Presenter version 2.0.8, available as a separate download from Telestream: 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.
- 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

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

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

⁶Minimum recommended processor with example stream⁴. 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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9.0.1 – Fixes

- Fixed – Certain Wirecast 8.3 documents crashing when loaded in Wirecast 9.0

9.0 – New Features

NEW – XKeys 128 Support

- Full control of layers, sources and transitions
- Audio Mixer and Audio Preview controls
- Start and Stop Wirecast outputs
- Replay Controls

NEW – PTZOptics PTZ Control using Visca over IP

- Control the Pan, Tilt and Zoom of PTZOptics cameras over a local area network
- PTZ Controller window allows users to create and recall presets for fast repositioning of known positions
- Assign PTZ Presets to shots for seamless switching between PTZ Presets

NEW – Add Source Menu Redesign

- New dark theme
- New Search Field to easily find sources
- New Categories for sources
- Favorite Category allows easy access to frequently used sources

NEW – Facebook Live – with User Code

- Authorize Wirecast to stream to a Facebook account without giving out Facebook login credentials
- “Set and forget” workflow allows for minimal Wirecast configuration before each new broadcast

9.0 – Improvements

- Improvement – XKeys: pressing the Audio Mixer or Rendezvous button should close the window when it's open
- Improvement – Add preview/live status indicators to clear layers
- Improvement – Add ability to drag shot layers in the shot layers table
- Improvement – Disable preview throttling for front most document when app is front most
- Improvement – Add drag image to shot bin on Windows

- Improvement - Added option to run in "Safe Mode" – Hold down the CTRL+SHIFT keys during launch - allows user to determine if clearing preferences fixes a launch problem without clearing preferences yet.
- Improvement - Allow 'Enter' key to add shot in add source UI
- Improvement - Drag and Drop of File assets for Edit Panels Shot Layer Table
- Improvement - If "Open last document on startup" is used and a document fails to load, a dialog appears on next launch to contact Wirecast support. This eliminates the need to clear preferences to exit the endless loop.
- Improvement – Lower default keyframe interval to 2 seconds
- Improvement - Remove 540p settings from Facebook encoder presets
- Improvement - Rendering performance increased by improving lock usage. This change improves responsiveness in the UI when modifying complex shots in preview.
- Improvement - Wirecast to warn user if classic mode (theme) is enabled

9.0 – Fixes

- Fixed – Remove catmull-rom spline interpolator
- Fixed – Web Stream crash when canceling IP camera authentication dialogs when other dialogs are open
- Fixed – macOS Control Click is ignored with the New Add Source menu
- Fixed – Indefinite Hang when sending two shots live then opening a playlist
- Fixed – External Display Output Menu visible when no document is open
- Fixed – Opening a document with many titles can hang the application for minutes
- Fixed – Paste Text and Title Sources take a very long time to render
- Fixed – Keyboard Shortcuts: Name field does not highlight automatically with focus
- Fixed – Odd colors when re-importing Wirecast made 480p MJPEG
- Fixed – Rapid selection of shots can result in improper tally state
- Fixed - Fixed Rendezvous sources not pulling video correctly in Windows 7
- Fixed - Web Stream and Screen Capture sources enumerating twice in the source selection window
- Fixed - Immediate A/V sync issue streaming to Facebook if started after another output
- Fixed - Indefinite hang when sending two shots live then opening a playlist
- Fixed - After 20 encodes all outputs would fail to encode on macOS
- Fixed - Adding sources should create copies of existing sources rather than references
- Fixed - Blackmagic output colors are off
- Fixed - Cannot add Twitter shot inside of playlist
- Fixed - Changing playback speed for media does not change 'already live' state
- Fixed - Chroma Key changes as different overlay shots are taken in and out of live
- Fixed - Colors in macOS encoded outputs look washed out
- Fixed - Deleting a shot always selects the "Clear Layer"
- Fixed - Frame drop occurring upon adding titles in preview
- Fixed - Hang when manipulating source while master layer visibility is off

- Fixed - Hang when right-clicking and left-clicking assets in the Preview Canvas
 - Fixed - Immediate A/V sync issue in RTMPS Facebook output if started after other output
 - Fixed - Inconsistent deletion behavior when removing Playlists from the Shot Bin
 - Fixed - macOS encoded outputs look significantly worse than Windows
 - Fixed - Minimizing and then restoring a maximized document will disable the canvas rendering until Wirecast is resized
 - Fixed - Multi-Viewer can drop frames with capture card sources at 29.97 FPS
 - Fixed - No Web Stream configuration options if shot was previously cancelled
 - Fixed - Provide Feedback does not go to Form
 - Fixed - Sleeping computer and waking it while having media files loaded will make all loaded media files show black
 - Fixed - Solid color widget is transparent
 - Fixed - Stream will not automatically start YouTube event when checking “Automatically Go Live”
 - Fixed - Syphon server does not reconnect when opening a saved document
 - Fixed - The mouse scroll wheel in the "Twitter" "Message Feed" window does not work
 - Fixed - Triggering a Live preview swap mid transition will not queue shot to preview
 - Fixed - Unable to change the video adapter
 - Fixed - Windows Cuing live/preview swap while transforming source in preview causes crash
 - Fixed - Wirecast should not allow the computer to sleep while streaming or recording to disc
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