Category 5 Relies on Wirecast Pro for Live Technology Webcast

Category5 Technology TV needed a cost-effective way to produce its live technology Webcast in HD with camera switching, audio, video roll-ins, graphics and other broadcast quality enhancements. They turned to Wirecast Pro to:

- Produce a visually engaging live show
- Simultaneously record HD video to disk for video on demand
- Offer audio-only versions of live feeds

The Background

While many technology shows focus on Windows or Mac, Category5 Technology TV focuses on maximizing the Linux operating system. An experienced PHP programmer, Robbie Ferguson shares his Linux expertise in a very accessible, interactive, and informative way, fielding viewer questions sent in by email and using computer displays to support his explanations. Infused with levity from his co-hosts, the one-hour show’s casual style attracts Linux aficionados who tune in for advice on how to solve their Linux challenges.

Produced from his in-home studio in Barrie, Ontario, Canada, show host Robbie Ferguson has achieved his goal to broadcast his technology show live via Internet channels like YouTube, followed by video on demand access at www.category5.tv. Category5 Technology TV episodes also air in several syndicated TV markets, including New York, Los Angeles, and Mainland China.
The Challenge
Since the initial broadcast in 2007, Category5 Technology TV’s audience has grown exponentially worldwide, largely by word of mouth. With viewership exceeding all expectations, Ferguson felt compelled to upgrade from a technically limited standard definition (SD) broadcast system to one capable of producing broadcast-quality high-definition (HD) video. Since Category5 Technology TV operates under very tight budget constraints, Ferguson compared several cost-effective integrated production systems, such as the NewTek TriCaster and VizBlaster. He found that only Telestream’s Wirecast and its complementary Desktop Presenter software met his technical requirements including:

■ Ability to preview, monitor, and switch multiple HD camera sources without delay
■ Native support for consumer grade HDMI HD camcorders
■ Ability to craft multilayered shots with video, audio, live chromakey, animated titles, graphics keys, transitions, and other elements all from a single user interface
■ Ability to capture and present video from Internet and cloud-based sources
■ Stream live HD video to multiple CDNs while simultaneously recording direct to disk
■ Offer audio-only live feeds using Wirecast’s new “Virtual Microphone” feature, for those who cannot watch the video (for example, drivers who want to listen to the live show while driving.)
■ An uncomplicated licensing model

The Solution
Ferguson and his Category5 Technology TV team chose Wirecast Pro because of its ability to cost-effectively produce high-quality live Webcasts, and Telestream’s top-notch customer support, especially its User Forums. While a single consumer-grade camera captures the show in 1080p HD, it’s streamed live in 480p SD to economize bandwidth. It’s also simultaneously recorded to disk at 720p HD for video on demand. Shooting in 1080p allows the production to use a lossless digital zoom that creates the illusion that multiple HD cameras are being used.

The specific set-up includes:

■ Wirecast Pro software from Telestream
■ Desktop Presenter software from Telestream, which runs flawlessly on Linux with the help of a program called wine
■ An i7 server with an SSD RAID hard drive and 16 GB RAM
■ Canon Vixia HF-R10 1080p HDMI HD video camera for live production, with a Nikon D5100 to shoot B-roll video packages.
■ Two Intensity Pro video capture cards from Blackmagic Design, and an AverMedia Game Broadcaster HD card
■ Behringer audio gear including mixer and Ultramizer Pro compressor
■ BBE Sonic Maximizer exciter
■ APEX575 microphone headsets

The Results:
“Telestream Wirecast is invaluable to our show,” Robbie Ferguson said. “With Wirecast, we now have a powerful, feature rich production platform that elevates the visual impact and credibility of our show. Since switching to Wirecast, the time I spend in post-production finessing the recorded shows for video-on-demand has been cut in half due to Wirecast’s high production standards. Now that I’m a seasoned Wirecast user, I simply wouldn’t have it any other way.”

About Category5 Technology TV:
Now in its seventh season, with over 300 episodes in its archive, Category5 Technology TV streams live via the Ustream, Justin.TV, and YouTube content delivery networks (CDNs). Learn more about Category5 Technology TV at www.category5.tv