

The Customer

Phenix

The Challenge

Reliable, high-quality capture of externally-produced video feeds for real-time IP delivery

The Solution

Magewell USB Capture and USB Capture Plus external video capture devices

Benefits

Ease of deployment with automatic input detection; robust 24/7 streams without quality degradation



Magewell Capture Devices Help Phenix Deliver High-Quality Streams with Minimal Latency

Chicago-based Phenix provides global, real-time IP video solutions that focus on industries where delivery and interactivity with near-zero latency are not just “nice to have,” but “must haves.” Phenix delivers high-quality synchronous content to broadcast-sized audiences while maintaining less than ½ second of end-to-end latency, powering use cases including sports, esports, news, social media, trivia, webinars, auctions, education, and video conferencing.

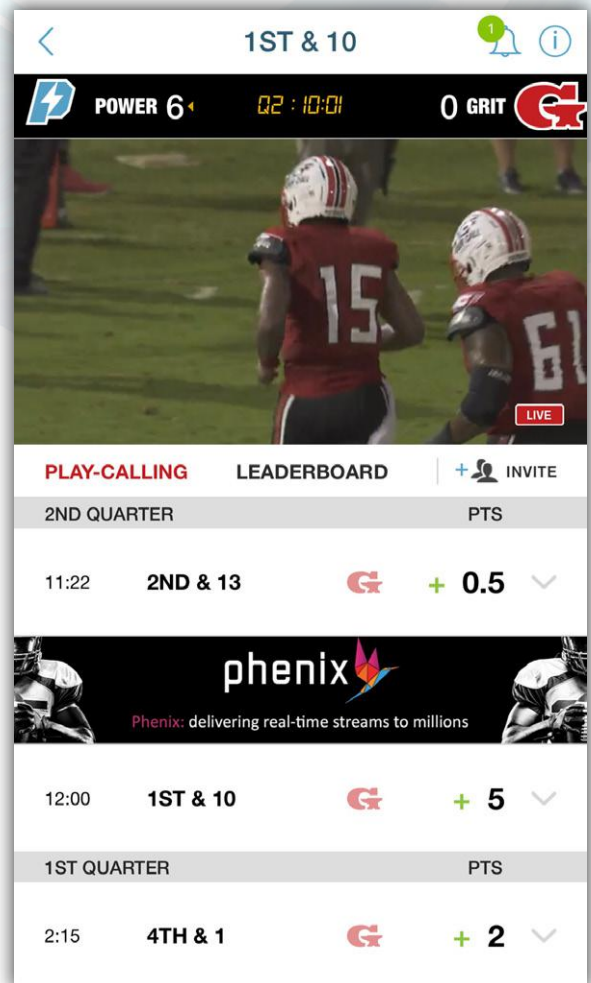


Phenix offers an end-to-end solution that starts by capturing video and audio at the source, and handles encoding, ingest, transcoding, composition and content delivery to any device including mobile, browsers, connected TVs, set-top boxes and consoles. Streams can be ingested directly from a mobile device via the Phenix iOS or Android SDKs; through a web browser using the Phenix WebSDK; using the Phenix software encoder running on Mac, Linux or Windows operating systems or in the cloud; or from any standard hardware or software encoder. While the majority of customers operate the streaming solution themselves, Phenix occasionally goes on-site for large events to provide full service with an extra level of support.

The Challenge

As the Phenix platform evolved to support higher-quality video, the need emerged for the solution to seamlessly integrate signals from professional production equipment and workflows.

“When we first launched the Phenix solution, source feeds were contributed from mobile devices through the Phenix SDK, or from a USB-connected webcam,” explained Dr. Stefan Birrer, co-founder and CEO of Phenix. “As our platform developed to support full 1080p60 video and we took on higher-tier customers,



more and more of our clients wanted to bring in full-quality, externally-produced feeds. The majority of our users now have complete, multi-camera production infrastructures with hardware switchers or software production tools that provide HD-SDI or HDMI output. The computer being used to publish content to the Phenix platform often doesn't have video input capabilities to support these sources, so we needed to find a reliable, high-quality capture solution to bring in these feeds."

"Our customers' goal is to deliver the best quality and user experience with the simplest workflow, and Magewell fits those use cases perfectly."

The Solution

Phenix began researching capture devices in late 2016 that would best fit their use case while maintaining quality. Magewell capture devices proved to be an ideal solution for their ingest requirements, and are compatible with both the standalone Phenix encoder software and the browser-based Phenix Web Publisher for Chrome.

Phenix has most commonly used Magewell's plug-and-play USB Capture SDI and USB Capture HDMI external devices, as well as their sibling USB Capture Plus models when loop-through connectivity is advantageous. Phenix also has customers using existing systems that incorporate Magewell's Pro Capture internal PCI Express cards, and plans to do further qualification testing of the internal Magewell models. And as Phenix adds planned 4K streaming support to its current 1080p60 HD capabilities, Magewell's extensive line of 4K internal and external capture offerings will provide a natural companion.

While also working with capture hardware from other vendors, Phenix's experience with the Magewell products has proven most favorable. "We support other capture cards too, but we have had the most success with the Magewell products over other brands," said Birrer. "In fact, if we're on-site ourselves doing the streaming for the customer, we prefer using Magewell products."

The Benefits

That success starts with the Magewell devices' reliability, enabling 24/7 streams without disconnection or quality degradation. The external USB Capture family is particularly appealing for customers with non-permanent installations, minimizing effort and technical support requirements. "With Magewell's USB Capture products, users can simply have an external device and don't need to build their own custom ingest computer with internal cards," said Birrer. "Magewell's automatic input detection also makes it easy, taking the guess work and configuration effort out of having to know the frequency and interlace mode of the input signal."

The combination of the Phenix platform with Magewell capture devices recently powered real-time streaming of the inaugural 2018 season of innovative, interactive sports experience Your Call Football (YCF), which provides fans with play-calling control of a live-streamed American football game. Fans using the YCF iOS or Android app control the



Phenix Senior Engineer Aaron Barlow with a Magewell USB Capture SDI device during the live streaming production of interactive sports experience Your Call Football.



action by voting on three coach-selected plays for each offensive down, then watch as the majority-voted play is executed live on the field by YCF professional players. Fans accumulate points based on their play-calling skills and compete with other fans for YCF cash prizes. Real-time content delivery is essential in ensuring a fluid fan experience.

For the YCF games, the program feed crafted by the events' production company was output over SDI, and brought into a computer running the Phenix encoder software using a Magewell USB Capture SDI device. The encoder software then published the resulting high-quality streams onto the Phenix delivery platform.

"We have had the most success with the Magewell products over other brands."

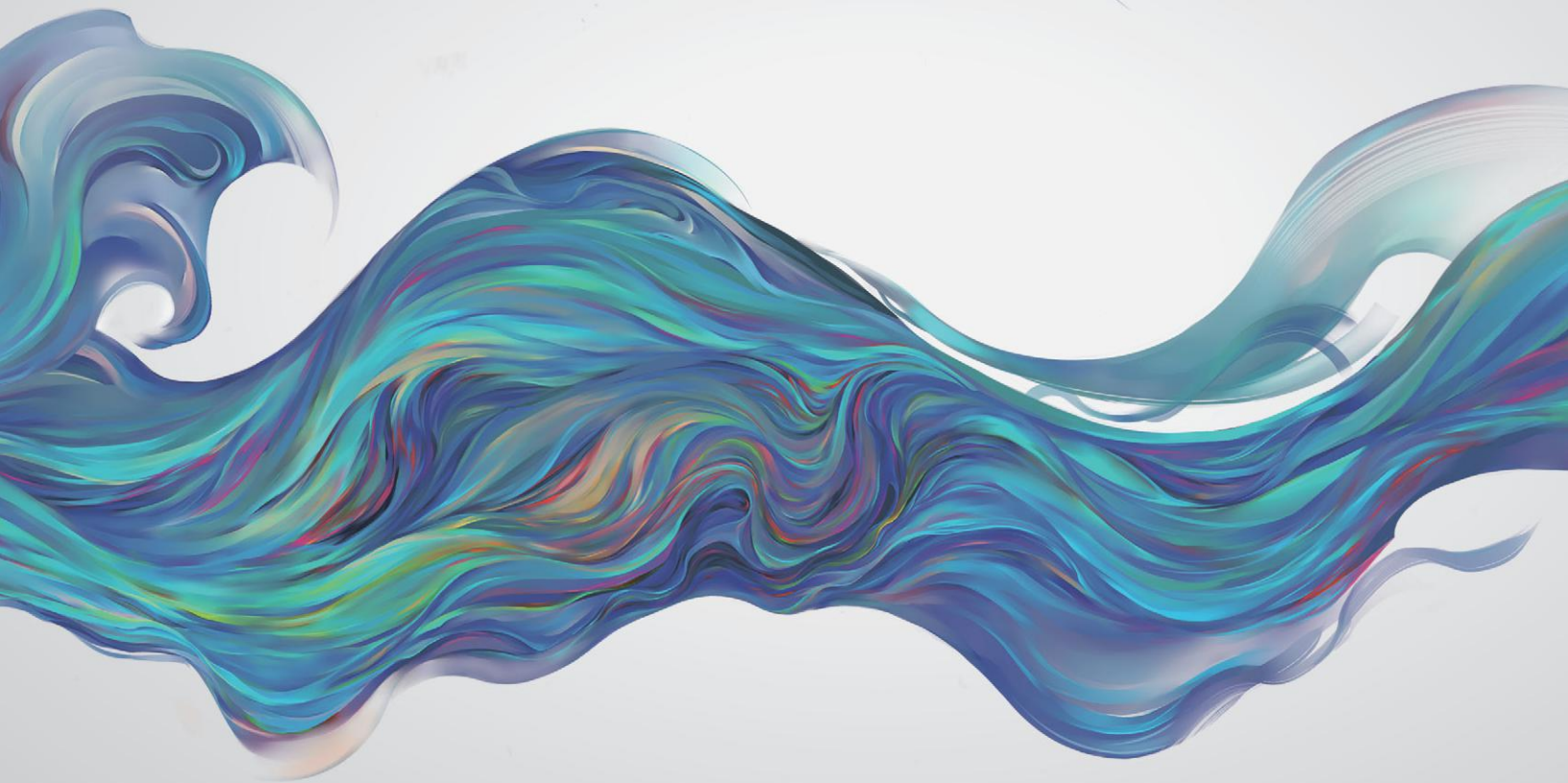
"Utilizing a Magewell capture device to ingest our production feed into the Phenix encoder onsite at YCF's first-ever fan play-calling football games enabled us to deliver a real-time user experience that was second to none," said Julie Meringer, President of Your Call Football. "Our fans watched the first season of YCF games in real-time from our iOS and Android apps, as well as on yourcallfootball.com and barstoolsports.com."

The Your Call Football project exemplifies how Magewell's capture devices help Phenix and their customers achieve their goals. "Magewell's solutions are complementary to our business," summarized Birrer. "Our customers' goal is to deliver the best quality and user experience with the simplest workflow, and Magewell fits those use cases perfectly."



MAGEWELL™

Digital Video Essentials



www.magewell.com



sales@magewell.com