

RIST CASE STUDY

Providing managed video contribution services over the public Internet



RIST Forum



Overview

Mankin Media built their contribution network over the open Internet. Reliable Internet Stream Transport (RIST) gives them the reliability and flexibility necessary to provide their services.

Problem

Transporting video from one location to another used to be only possible via satellite, or a direct purpose-built link. These transport methods were expensive and took a great deal of time to set up. Therefore, these links came with lengthy agreements that allowed the provider to recoup the initial costs of installation over time. With the explosion of the Internet, most businesses had direct access to interconnected data networks, but these networks were too unreliable to transport video packets that required precise timing.

Mankin Media Use Case

Mankin Media offers a selection of services called "The Guardian Services" consisting of: Lifeline, Protect, SlipStream and GameFilm. Lifeline and Protect are geared toward troubleshooting and quality assurance, whereas SlipStream and GameFilm deal with video transportation and recording.



MANKIN

MEDIA SYSTEMS

Founded in 2001, Mankin Media is an audio, video and lighting systems integration company that specializes in offering managed services to a range of clientele. The services help companies across the US manage video transmission while providing quality of assurance from Mankin's data center in Franklin, TN.

Benefits of Using RIST

- 1/10th the infrastructure cost
- Time to market reduced by 50%
- Long term contracts eliminated

SlipStream in particular provides a suite of off-the-shelf, broadcast-grade products and software assembled in clever ways to produce a highly reliable, fault-tolerant method that is remotely managed and serviced for a setup fee and a monthly fee as long as the customer has the service. It's designed to prevent the need to have a highly specialized video engineer on staff. And, compared to some of the other turnkey options on the market, it's a full broadcast-based approach, not based on consumer IT technologies, such as Flash or HLS.

Reliability is the Key

The traditional way to transmit video and audio signals would have been either private fiber or satellite. Both of these methods require long term contracts and time to put the infrastructure in place. The investment in infrastructure would have been roughly 10x that of using the Internet as a low-cost contribution or distribution network. What enables this workflow is RIST's ability to ensure a reliable signal by recovering all lost packets while adding minimal delay and overhead.

"We chose RIST because it allows me to create clever solutions that serve my customer's needs." -Ben Mankin

The Set-up

Each location Mankin enables has a connection to the public Internet. Video and audio signals are sent from the *Cobalt Digital 9223 AVC* encoder to a mix of Cobalt Digital 9990-DEC AVC decoders, and *VideoFlow DVP Gateway* servers. To receive the signals, Mankin uses dual 10G links that are guaranteed by the Telco and the VideoFlow servers to provide hitless redundancy. Each location is sending between 1-8 signals, about 5 Mbit/s in bandwidth per signal, providing capacity to manage hundreds of endpoints. All encoders, decoders, and gateways are enabled with the RIST protocol.

Mix & Match Vendors

While other solutions exist on the marketplace, RIST allows for a mix and match of multiple vendors. This best of breed approach acknowledges that each manufacturer makes a unique product and gives the power to the system designer to use the tool that best fits the job.

The Cobalt units are ideal for feeding the facilities SDI sources, while the VideoFlow servers feed all equipment requiring compressed IP feeds. The more vendors that adopt RIST, the more flexibility designers like Mankin will have in developing high-performance workflows.

ABOUT RIST FORUM

The RIST Forum strives to make the world adopt the RIST protocol for transporting live video over unmanaged networks. Set up as a collaborative, non-profit organization, the RIST Forum is a true community that's engaging both users and vendors of RIST technology and RIST products.