



AcenTek Improves Video Service Reliability with Inca

Weather proofing the fiber services

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Battling the Elements

AcenTek was founded in 1950 as Fillmore County Telephone Cooperative and was originally focused on improving rural telephone services across Minnesota. Today, AcenTek has expanded beyond phone service to also provide video and internet services to residential and business customers in 22 communities across southeastern Minnesota and northeast Iowa, and 11 communities in Michigan.

AcenTek is dedicated to providing quality telecommunications products and services, along with unmatched customer care to all their subscribers. This includes ensuring robust video services. Unfortunately, weather-related issues were an ongoing source of problems for off-air services from 8VSB antennas which caused occasional service interruptions.

To help make improvements to the video service and deliver content more reliably, AcenTek partnered with a local telco who were able to share fiber access to video streams. The content provided by these fiber feeds was the same that AcenTek were receiving over-the-air, but through the telco partner, they could receive it over ethernet.

The fiber feeds provided by ethernet were certainly going to be more dependable than the 8VSB off-air. However, AcenTek staff recognized that outages could still occur.

“We knew that if we went ahead with ethernet transport, we’d get a better and more reliable service,” explained Dean Huizenga, Network Operations Supervisor at AcenTek.

“But we also recognized that a lot of factors were out of our control as we now have other providers involved in the video transport. If we did have an outage with the fiber connection, we still wanted a way to receive those feeds the old way, using off-air signals.”



CHALLENGE

- Use 8VSB off-air signals as a backup service during an outage of fiber services

SOLUTION

- Add additional Automatic Service Failover licenses to existing Inca 4400 Modular Series chassis
- Configure Automatic Service Failover to failover to backup off-air 8VSB feeds when errors or outages are detected in the primary source

RESULTS AT A GLANCE

- Set-up was straightforward and intuitive using web-based VidiOS™ tools
- Fiber outage triggered Automatic Service Failover and the 4400 chassis automatically switched to off-air 8VSB sources
- Subscribers watching TV channels protected by Automatic Service Failover didn’t report any problems when source switching occurred

A Natural Fit

AcenTek approached the team at Inca Networks and discussed the potential outage risks with them. Inca immediately recommended Automatic Service Failover for AcenTek’s existing 4400 chassis. AcenTek was already using the Modular Series 4400 to transcode video services from MPEG-2 to MPEG-4 AVC, and to downscale some HD services to SD. With the addition of Automatic Service Failover, AcenTek could ingest the ethernet feed as a primary source and configure the 8VSB service as a backup, redundant source. When errors are detected in the primary fiber feed, the chassis will automatically switch over to use the redundant feed. The fiber feed is automatically ingested again when errors are cleared.

This approach was simple and appealing, and no additional equipment was required. The AcenTek team could use their existing 4400 transcoders and simply apply an additional license to get the exact redundancy configuration they wanted.

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Maximum Uptime Achieved

Configuration of Automatic Service Failover was smooth thanks to Inca’s award-winning monitoring and management tools, VidiOS™.

“Overall I found it intuitive and straightforward,” explained Josh. “There’s a lot of functionality in VidiOS™ that’s appealing to someone like me who is more networking centric.”

Since AcenTek has been running Automatic Service Failover in production, there have been a couple of failover events. Thankfully, service downtime has been minimized as backup feeds are successfully ingested by VidiOS™ when errors or complete outages occurred in the primary streams. In fact, the failover and recovery mechanisms are so seamless that subscribers

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don’t notice. “As far as I’m aware, we don’t receive any calls when the failover events occur,” confirmed Josh.

Carrier-grade features such as Inca’s Automatic Service Failover have helped AcenTek deliver a more robust video service to their subscribers. There was no need to purchase additional video equipment to configure the primary and backup redundancy feeds and automate the failover process. A simple license upgrade extended AcenTek’s existing Inca Modular Series 4400 chassis to include source redundancy. The team at Inca were happy to have helped.



VidiOS™ makes configuration of Automatic Service Failover easy in the Inca Modular Series 4400.

