Telos Alliance®

Case Study

A Vision For VoIP

How Radio One Learned to Love the Cloud

Telos VX | RADIO ONE

The Client

Radio Built on Listener Engagement

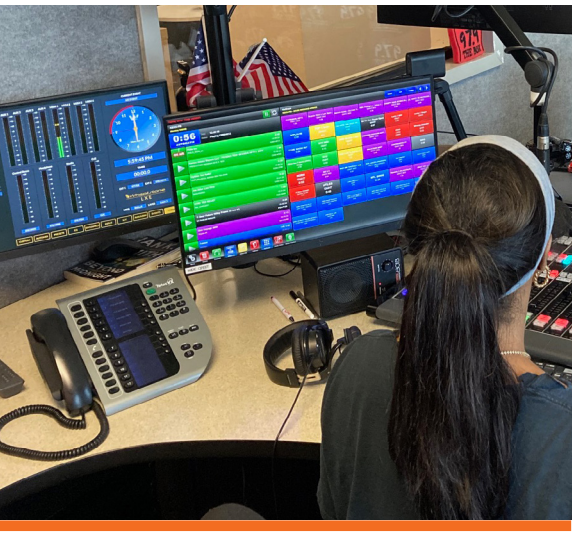
With an impressive 38 years in the radio industry, David Ainslie has seen a lot of technical change; the demise of POTS and rise of VoIP, and the transition from analog to digital ecosystems being among them. Today, Ainslie is Chief Engineer at Radio One and manages an expansive network of five all-music stations in Houston. Those stations bring rock and country programming to nearly 7 million listeners and host massive contest giveaways with prizes like Harley-Davidson motorcycles and rodeo tickets.

> "When you can make changes with a few clicks of the mouse, you'll never want to go back to tracing and cross-connecting pairs. The whole VX system is something I wouldn't want to live without."

Copper Was Becoming the Bottleneck

Traditional POTS telephone service, with its inflexible copper infrastructure and inability to handle high call volumes during peak times, caused huge operational issues that adversely impacted Radio One's station promotions and on-air production. A fresh start was needed.

The Move to Broadcast VoIP



Ainslie recalls a particular station that brought his issues with POTS into sharp focus: "There were 14 workstations and four control rooms in that station. Managing all that with copper was a nightmare." Realizing there had to be a better solution, Ainslie and his team explored VoIP solutions and made a prescient decision over 15 years ago: they would install some groundbreaking new technology - the Telos VX® broadcast VoIP system - the first of its kind in the world.

When More Capacity Created More Demand

Telos VX solved Ainslie's infrastructure problem. But in an unexpected twist, the increase in phone capacity realized by moving from copper to VoIP resulted in staggering call volume for Radio One's popular radio stations. When they held on-air giveaways, the response was impressive: "They were giving away a motorcycle, and they'd have a thousand calls hit within a couple of seconds," Ainslie explains.

> "They were giving away a motorcycle, and they'd have a thousand calls hit within a couple of seconds."

The sudden flood of traffic overloaded the station's phone lines, forcing them to be shut down due to the service provider's inability to handle the inbound traffic. Radio One needed a more robust infrastructure to handle these call spikes without network failures.

Taking Telephony to the Cloud

The challenge of fielding an enormous volume of calls felt like a losing battle until Ainslie and his team discovered a cloud-hosted SIP solution recommended by Telos Alliance: Clearly IP, whose trunking service enabled Radio One to move their telephony completely to the cloud, relieving them of the local-carrier restrictions that had previously choked their call-in contests.

> "Telos VX with Clearly IP is flawless. It handles the call volume, and our phones never shut down."

Ainslie says he'd previously considered moving to the cloud, but needed to be certain it could handle thousands of incoming calls. "Clearly IP is flawless," he notes, "It handles the volume and our phones never shut down." To complete the system, Asterisk, an open-source VoIP PBX, connects the SIP trunk and Telos VX.

In the studio, integrating the Telos VX hardware with the cloud was impressively simple, Ainslie says. Although Radio One's legacy VX engines do not natively speak AES67, he achieved a clean setup with minimal wiring by using AoIP converter nodes to interface with the station's audio network. VX's seamless interconnectivity allows the station to maintain crystal-clear call quality throughout its IP-based studios.

Built for Whatever Comes Next

With the threat of provider shutdowns behind them, Radio One now enjoys the greater benefits of its broadcast VoIP ecosystem. Its flexibility was recently highlighted when a sister station in Indianapolis upgraded to Telos VX Enterprise, freeing up their original VX gear for a station in Charlotte that was in urgent need of a VoIP solution. Additionally, the cloud-hosted infrastructure shines in the event of a local ISP failure, enabling administrators to easily reroute phone lines to a backup ISP.

Copper-Free. Cloud-Hosted. Contest-Ready.

Each time Radio One launches a new contest, its infrastructure is put to the test. However, David Ainslie no longer worries about aging POTS lines, call throttling, or total provider shutdowns, thanks to the winning combination of Telos VX broadcast VoIP, Asterisk, and Clearly IP, which creates a flexible system with unmatched reliability. “When you can make changes with a few clicks of the mouse, you’ll never want to go back to tracing and cross-connecting pairs,” he insists. “The whole system is something I wouldn’t want to live without.”

TelosAlliance.com/VX