

Etherstack

Etherstack is a global leader in secure, resilient push-to-talk communications. They specialize in wireless and network communications technology for customers in the public safety, defense, utilities and resources industries.

When a prominent police force was interested in a robust and evergreen P25 dispatch console, Etherstack partner InterTalk was ready to assist. This project involved a collaboration between teams at both organizations and demonstrated prudent time management to provide a viable virtualized P25 console hosted through Amazon Web Services (AWS). How was this achieved? Enter Enlite™ Cloud Ready Dispatch. Enlite was built from the ground up to provide agencies with the power to deploy their way, whether that be an air-gapped On-Premises configuration, hosted in the cloud, and, in some circumstances, a hybrid of both.

Enlite has been trusted and utilized by public safety entities in the United States since its initial public release in 2021. InterTalk cloud dispatch console deployments are second to none in the industry, making it a perfect choice for this project.

SCALABLE, RELIABLE, SECURE,

Scope

This project required efficient communication between both Etherstack and InterTalk system engineers to provide a dispatch console that met the requirements below:

- Provide a proof of concept virtualized P25 console system that is public safety grade.
- Utilize Etherstack RFSS in Sydney, Australia, with software-based talk path licenses.
- Provide a resilient cloud-based console interface to be used by potential end users.







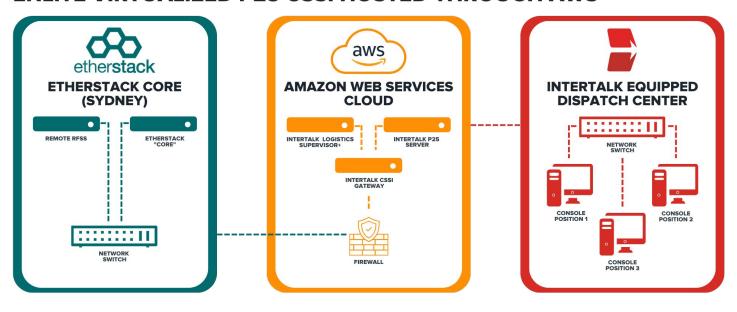




System Overview

Challenges

ENLITE VIRTUALIZED P25 CSSI HOSTED THROUGH AWS



Virtualize In The Cloud: To connect to managed P25 networks, Enlite has utilized several physical servers, which include the InterTalk Logistics Supervisor+ (ILS+), InterTalk P25 Server (IPS), and the InterTalk CSSI Gateway (CSSI). The core challenge of this project was to take these physical machines and transfer their functionality into the cloud hosted by AWS. The end goal was to provide an entirely virtualized console system that required near zero on-site hardware to operate.

P25 Talk Paths Licensing: Traditionally, P25 Talk path licenses were provided using physical hardware keys. In a near-zero hardware environment hosted through cloud services, a software-based approach had to be utilized to achieve the desired results.

Adherence To a Strict Timeline: With a potential client knocking at the door, Etherstack had a minimal timeline to provide a virtualized public safety-grade dispatch product. InterTalk had already completed most of this work with Enlite, with the exception being the virtualization of the required servers needed to connect Etherstack RFSS through the cloud and onto the end user. This required an all-handson-deck approach, with excellent collaboration between the teams involved.

NETWORK LEGEND

REMOTE VPN NETWORK **AWS CLOUD NETWORK PUBLIC NETWORK**

System Features

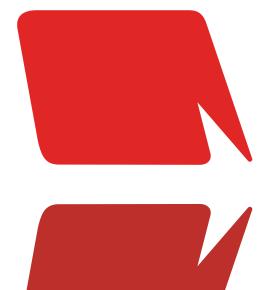
Cloud hosted Enlite environment through AWS	Dynamic Mapping Display
P25 Interconnection	Supervisor Active User List
Instant Recall Recorder (IRR)	WYSIWYG Mission Layout Editor
Radio Patching	Cloud pushed security updates and software improvements.

Outcomes

Enlite Makes it Easy: At the conclusion of the project with Etherstack, Enlite can now provide entirely virtualized, cloud-based P25 dispatch capability, but what does this mean for end users? Those organizations interested in this type of system deployment will benefit from not needing backroom hardware to administer the console. In many smaller PSAPs and ECCs, space is limited; other than the console positions themselves, this deployment has no onsite hardware requirement. Virtualized Reality. Now.

Collaboration From 10,400mi Away: No distance is too great to collaborate. InterTalk worked on this project from Canada with collaboration from Etherstack engineers in the EU, sales specialists in Australia, Project Managers in the US, and testers in all four regions. Our teams successfully overcame the challenge of hardware-based P25 talkpath dongles by utilizing a software-based approach, deploying through the cloud with Amazon Web Services (AWS).

A More Secure Solution: With Enlite Hosted in the cloud, Etherstack P25 software encryption allows for a more robust and secure dispatch console, allowing for all P25 traffic in and out of the console to be fully encrypted. Additionally, as a managed cloud service, agencies can benefit from consistent console updates and software patches that can be administered directly to the cloud without interruption of the Enlite dispatch service.



Are you ready to enhance your dispatch center's capabilities?

Contact us today to explore a more advanced and effective dispatch console system.

CONTACT US