

Customer Case Study

Secure SIP Trunk Connections for the Health Care Industry

A Texas based Service-Disabled Veteran-Owned health care company planned to trim costs by switching their telecommunications service delivery from legacy ISDN circuits to SIP trunks. The nature of their business and their federal government contracts meant that calls over the SIP trunk had to be encrypted and that the encryption used had to meet government standards. A Power Sec met these requirements, allowing the company to switch their entire phone system to use SIP trunks.

Application: Veteran Administration Health Care

PBX Technology: Zultys

Solution: Encrypted SIP Trunk connections with FIPS 140-2 Certification

The Problem

Heritage Health Solutions is a Texas based Service-Disabled Veteran-Owned Small Business (SDVOSB), provides health care delivery and management, pharmacy, medical cost containment, and telemedicine services to federal, state, county, and municipal agencies. The company also provides pharmacy services to over one million military veterans at more than 600 Veteran Administration clinic locations across the USA, and supports a federal government managed care contract delivering care to over 60,000 individuals.

Heritage Health's business and its close links with federal government mean that all data and voice communications must be secured and that the security controls must meet federal government standards. In common with many other companies, Heritage Health wanted to control telephony costs by switching telephony service delivery from ISDN to SIP trunks, but in order to meet the required security standard, the SIP trunk connections had to be encrypted. In addition, the cryptographic components used had to meet the relevant US Government, FIPS 140-2.

While Heritage Health's service provider, Broadvox, was able to offer an encrypted SIP trunk connection, the existing Zultys PBX was not able to accept encrypted voice calls. Zultys is not alone on this, very few IP-PBXs offer call encryption.

The Solution

To solve this problem, Heritage Health installed a Power Sec system. This product is an enterprise SBC which can scale to handle over 1,000 concurrent calls. The Power Sec provides call encryption as a standard feature. The encryption services are implemented using standardised protocols which are fully compatible with the encryption service offered by Broadvox, Heritage Health's service provider.

To meet the federal government security requirements, FIPS 140-2 certified version of the cryptographic library was used.

The Power Sec installation means that Heritage Health were able to switch their telephony service from ISDN to a SIP trunk connection and to ensure that all calls on that SIP trunk are protected with encryption that meets the federal government standard.

Additional Benefit

As an additional benefit, Heritage Health are able to use the same Power Sec to secure and encrypt calls made from IP phones in locations across the country. Heritage Health are using Polycom phones in these remote locations, but many other vendors including Aastra, Samsung and snom also provide IP phones with the appropriate cryptographic support.