Technical Bulletin CS-24-03

Spectralink DECT OS Hardening

This technical bulletin explains the different OS hardening efforts Spectralink has completed on the IP-DECT products.

System Affected

Spectralink IP-DECT server 200

Spectralink IP-DECT server 400

Spectralink IP-DECT server 6500

Spectralink IP-DECT Media Resource

Spectralink VIP-DECT Server One

Spectralink IP-DECT Base Station

Spectralink IP-DECT Digital Gateway

Description

Security Implementations

The Spectralink DECT products have undergone various security implementations and tests, ensuring a robust and secure operating system environment. These measures include:

- IP-DECT Servers certified for enhanced DECT Security Step A + B (DECT forum)
- TLS 1.0 and 1.1 are disabled by default, and only TLS 1.2 and 1.3 are enabled by default.
- HTTPS is enforced by default on the graphical user interface (GUI).
- Strict transport security, cross-site scripting (XSS), and cross-site request forgery (CSRF) protection are implemented to mitigate potential vulnerabilities.
- Admin Password is strongly hashed with a bit encryption algorithm, enhancing its resistance to unauthorized access.

- TLS 1.3 is enforced on all internal connections within the Spectralink IP-DECT products, ensuring secure communication.
- Support for SIP over TLS and Secure Real-time Transport Protocol (SRTP) is implemented, ensuring confidentiality, integrity, and authentication for voice communication.
- The operating system is built with hardened compile flags, including stack protectors, read-only relocations, and fortification checks. These measures enhance the system's resilience against memory-related vulnerabilities.
- Spectralink conducts ongoing surveillance for Common Vulnerabilities and Exposures (CVEs) on all components used in its DECT products and promptly addresses any potential security issues.
- Fuzzing, a technique for testing system robustness against malicious inputs, is performed on external interfaces to identify and remediate potential vulnerabilities.
- The firmware image for Spectralink Virtual IP-DECT Server One is encrypted and signed, ensuring its integrity and authenticity.
- Our IP-DECT products exemplify our dedication to transparency and security. With a backdoor-free design, restricted system access, robust infrastructure, and ongoing security evaluations, we prioritize the security and protection of your infrastructure.

Note

At Spectralink, security is a top priority, and we continuously research and develop our IP-DECT products to ensure they meet the highest security standards possible. Spectralink has implemented a range of robust security measures to protect our IP-DECT products and enhance our security posture.

In order to stay ahead of emerging threats, Spectralink actively monitors vulnerabilities and conducts regular vulnerability assessments. This allows us to identify and address any potential security risks regularly, ensuring the ongoing protection of the IP-DECT products.

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Warranty

The *Product Warranty and Software License and Warranty* and other support documents are available at http://support.spectralink.com.

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