

TestArmy Group S.A. was carrying out Hardware Penetration Test of AudioCodes C455HD IP Phone device. The objective of these penetration tests was to evaluate the current security status of the provided device and the related applications by identifying issues that could adversely affect confidentiality, integrity, or availability.

The security tests were conducted in accordance with the OWASP MASVS v.2.1.0 testing methodology (<https://www.owasp.org/>) and the OWASP Mobile Security Testing Guide and OWASP Mobile Top 10 for 2024. Using a combination of automated tools and manual penetration testing process, TestArmy Group S.A. penetration testers attempt to detect vulnerabilities using the techniques, tools and crafted exploit scripts that are similar to those used by attackers.

The following vulnerabilities were specifically examined: analysis of application architecture and design, analysis of data storage and privacy, cryptographic analysis, analysis of the authentication process and session management, analysis of network communication (verification whether confidentiality and integrity of information exchanged between the mobile application and remote service endpoints is ensured), mobile application verification (application must provide a secure, encrypted network communication channel using SSL / TLS with appropriate settings), analysis of used APIs and standard application components, analysis of the means of protection used (application resistance to reverse engineering and customer attacks).

The first iteration of the Penetration test was performed between September 1, 2024 and September 4, 2024. The security retest and verification of the applying remediation for detected critical, high, medium severity vulnerabilities was performed during the days April 28, 2025 and April 29, 2025.

First iteration of the penetration test and security retest were performed for following device model and associated firmware and embedded applications:

TEST MODEL	FIRMWARE VERSION (First iteration of the pentest)	FIRMWARE VERSION (Security retest)
AudioCodes IP Phone C455HD	v2.3.423	v2.7.369

During the verification process, the detected security vulnerabilities from the first iteration of the pentest have the following status:

VULNERABILITY SEVERITY	FIRST ITERATION	TESTING VULNERABILITY STATUS		
		FIXED	PARTIALLY REMEDIATED	NOT REMEDIATED
Critical	2	2	0	0
High	1	1	0	0
Medium	1	1	0	0
Low	0	0	0	0

After a retest in April 2025 all detected critical, high and medium vulnerabilities have been remediated in newer firmware version.