



HC3: Alert
November 12, 2021 TLP: White Report: 202111121500

Forescout Nucleus TCP/IP Stack Vulnerability Amplify Alert

Executive Summary

Cybersecurity researchers at Forescout have identified 13 vulnerabilities that impact millions of Internet-connected hospital devices. Several of these vulnerabilities have been categorized as high or critical. The research includes associated patches. HC3 recommends healthcare organizations analyze their infrastructure for vulnerable devices and apply patches in a timely manner.

Report

New Critical Vulnerabilities Found on Nucleus TCP/IP Stack

<https://www.forescout.com/blog/new-critical-vulnerabilities-found-on-nucleus-tcp-ip-stack/>

Impact to HPH Sector

These 13 newly disclosed vulnerabilities in Nucleus Net TCP/IP stacks, dubbed Nucleus:13, could allow attackers to launch denial-of-service (DoS) attacks to disrupt medical equipment and patient monitors. Some of them allow for information leakage (both patient and technical data related to the operations of the vulnerable device) as well as remote code execution, which would allow an attacker to potentially take control of a compromised device.

References

New Critical Vulnerabilities Found on Nucleus TCP/IP Stack

<https://www.forescout.com/blog/new-critical-vulnerabilities-found-on-nucleus-tcp-ip-stack/>

These cybersecurity vulnerabilities could leave millions of connected medical devices open to attack

<https://www.zdnet.com/article/these-cybersecurity-vulnerabilities-could-leave-millions-of-connected-medical-devices-open-to-attack/>

Researchers find 13 medical device vulnerabilities potentially capable of taking hospitals offline

<https://www.beckershospitalreview.com/cybersecurity/researchers-find-13-medical-device-vulnerabilities-potentially-capable-of-taking-hospitals-offline.html>

NUCLEUS:13 TCP security bugs impact critical healthcare devices

<https://www.bleepingcomputer.com/news/security/nucleus-13-tcp-security-bugs-impact-critical-healthcare-devices/>

NUCLEUS:13 vulnerabilities impact Siemens medical & industrial equipment

<https://therecord.media/nucleus13-vulnerabilities-impact-siemens-medical-industrial-equipment/>

Contact Information

If you have any additional questions, please contact us at HC3@hhs.gov.

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