



CYBER ADVISORY

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GOVERNOR'S OFFICE
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CALIFORNIA CYBERSECURITY INTEGRATION CENTER



CYBER ADVISORY

TLP: CLEAR

12 January 2024

Juno OS Critical Vulnerability

CVE-2024-21591

RCE

Juno OS

Critical Vulnerability

Executive Summary

The California Cyber Threat Integration Center (Cal-CSIC) has become aware of a critical vulnerability known as CVE-2024-21591.¹ The vulnerability affects J-Web of Juniper Networks Junos OS on SRX Series and EX Series.² Exploitation of the vulnerability could allow an unauthenticated, network-based attacker to cause a Denial of Service (DoS), or Remote Code Execution (RCE) and obtain root privileges on the device.^{3,4}

Affected Juniper Networks Junos OS SRX Series and EX Series
Junos OS versions earlier than 20.4R3-S9
Junos OS 21.2 versions earlier than 21.2R3-S7
Junos OS 21.3 versions earlier than 21.3R3-S5
Junos OS 21.4 versions earlier than 21.4R3-S5
Junos OS 22.1 versions earlier than 22.1R3-S4
Junos OS 22.2 versions earlier than 22.2R3-S3
Junos OS 22.3 versions earlier than 22.3R3-S2
Junos OS 22.4 versions earlier than 22.4R2-S2, 22.4R3

Table 1: Vulnerable Junos OS versions

The Cal-CSIC recommends immediately apply the security updates or upgrade JunOS to the appropriate latest release.

For further information on applying upgrades, please refer to [Juniper Networks Support Portal](#).

CAL-CSIC-202401-007

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CALIFORNIA CYBERSECURITY INTEGRATION CENTER

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Organization, Source, Reference, and Dissemination Information

Organization Description

California Government Code § 8586.5 established the California Cybersecurity Integration Center (Cal-CSIC) as the central organizing hub of state government's cybersecurity activities, including information sharing, intelligence analysis, incident response, and overarching cybersecurity strategy. The Cal-CSIC is responsible for reducing the likelihood and severity of cyber incidents that could damage California's economy, critical infrastructure, and public or private sector networks in our state.

Customer Feedback

If you need further information about this issue, contact the Cal-CSIC at our email address CalCSIC@caloes.ca.gov or by telephone at (833) REPORT1. To help us identify ways to better assist you, please submit feedback [here](#).

Source Summary Statement

This report was compiled from a variety of sources, predominately open-source reporting.

Handling Caveats

Traffic Light Protocol (TLP): Recipients may share TLP:CLEAR information with the world; there is no limit on disclosure. Subject to standard copyright rules, TLP:CLEAR information may be shared without restriction.

Information Needs

HSEC 1.1; HSEC 1.2; HSEC 1.5; HSEC 1.8; HSEC 1.10; STAC KIQ 1.1; KIQ 1.2; KIQ 1.3; KIQ 1.4; KIQ 1.5

¹ Bleeping Computer; "Juniper warns of critical RCE bug in its firewalls and switches;" <https://www.bleepingcomputer.com/news/security/juniper-warns-of-critical-rce-bug-in-its-firewalls-and-switches/>; accessed 12 January 2024

² VulbD; "Juniper Junos Os Up To 22.4r2-S1 On Srx/Ex J-Web Out-Of-Bounds Write;" <https://vuldb.com/?id.250502>; accessed 12 January 2024

³ CVE Details; "Vulnerability Details: CVE-2024-21591;" <https://www.cvedetails.com/cve/CVE-2024-21591/>; accessed 12 January 2024

⁴ System Tek; "Critical Remote Code Execution Vulnerability in Junos OS [CVE-2024-21591];" <https://www.systemtek.co.uk/2024/01/critical-remote-code-execution-vulnerability-in-junos-os-cve-2024-21591/>; accessed 12 January 2024

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