



CYBER ADVISORY

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CALIFORNIA CYBERSECURITY INTEGRATION CENTER



CYBER ADVISORY

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15 March 2024

Kubernetes Windows Vulnerability

CVE-2023-5528

Kubernetes

RCE

High Vulnerability

The California Cybersecurity Integration Center (Cal-CSIC) has become aware of a high vulnerability known as CVE-2023-5528.¹ The vulnerability affects Kubernetes versions earlier than 1.28.4 running both on-prem deployments and Azure Kubernetes Service. Additionally, Kubernetes clusters are only affected if they are using an in-tree storage plugin for Windows nodes.² Exploitation of the vulnerability may allow an attacker to modify a parameter and apply 3 YAML files to execute remote code execution, RCE over the Windows endpoints and achieve full take over.³

The Cal-CSIC recommends immediate upgrade to Kubernetes version 1.28.4 or later if the system is running Windows nodes.

For further information on applying upgrades, please refer to [Kubernetes Cluster Management](#).

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.

CAL-CSIC-202403-008

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¹ Dark Reading; "Patch Now: Kubernetes RCE Flaw Allows Full Takeover of Windows Nodes;" <https://www.darkreading.com/cloud-security/patch-now-kubernetes-flaw-allows-for-full-takeover-of-windows-nodes>; accessed 15 March 2024

² GitHub; "CVE-2023-5528: Insufficient input sanitization in in-tree storage plugin leads to privilege escalation on Windows nodes #121879;"

<https://github.com/kubernetes/kubernetes/issues/121879>; accessed 15 March 2024

³ Red Hat; "<https://access.redhat.com/security/cve/cve-2023-5528>"; accessed 15 March 2024

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