



# CYBER ADVISORY

**Cal OES**  
GOVERNOR'S OFFICE  
OF EMERGENCY SERVICES

CALIFORNIA CYBERSECURITY INTEGRATION CENTER



CYBER ADVISORY

TLP:CLEAR

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.<sup>1</sup> 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.<sup>2</sup> 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.<sup>3</sup>

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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# PUBLIC SERVICE ANNOUNCEMENT

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<sup>1</sup> 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

<sup>2</sup> 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

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

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