



مجلس الأمن السيبراني  
CYBER SECURITY COUNCIL



**Critical Vulnerability in FreeBSD**

Tracking #:432316249

Date:10-09-2024

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## EXECUTIVE SUMMARY:

The UAE Cyber Security Council has observed The FreeBSD Project has issued a security advisory to address a critical vulnerability (CVE-2024-43102) affecting multiple versions of its operating system.

## TECHNICAL DETAILS:

The FreeBSD Project has issued a security advisory to address a critical vulnerability (CVE-2024-43102) affecting multiple versions of its operating system.

### Vulnerability Details:

- **CVE ID-CVE-2024-43102**
- **CVSS Score-10.0 (Critical)**
- Concurrent removals of such a mapping by using the UMTX\_SHM\_DESTROY sub-request of UMTX\_OP\_SHM can lead to decreasing the reference count of the object representing the mapping too many times, causing it to be freed too early.
- A malicious code exercising the UMTX\_SHM\_DESTROY sub-request in parallel can panic the kernel or enable further Use-After-Free attacks, potentially including code execution or Capsicum sandbox escape.
- **Affected Versions:** All supported versions of FreeBSD.
- **Fixed Versions:**
  - stable/14, 14.1-STABLE)
  - releng/14.1, 14.1-RELEASE-p4)
  - releng/14.0, 14.0-RELEASE-p10)
  - stable/13, 13.4-STABLE)
  - releng/13.4, 13.4-RC2-p1)
  - releng/13.3, 13.3-RELEASE-p6)

## RECOMMENDATIONS:

The UAE Cyber Security Council recommends to update the affected products to the fixed version at the earliest.

Kindly circulate this information to your subsidiaries and partners as well as share with us any relevant information and findings.

The UAE Cyber Security Council extends its appreciation for the continued collaboration.

## REFERENCES:

- <https://www.freebsd.org/security/advisories/FreeBSD-SA-24:14.umtx.asc>