مجلس الأمن السيبراني
CYBER SECURITY COUNCIL
United Arab Emirates

Critical Vulnerabilities in Coolify

Tracking #:432316802

Date:29-01-2025

EXECUTIVE SUMMARY:

The UAE Cyber Security Council has observed Critical Vulnerabilities in Coolify, an open-source platform for managing servers, applications, and databases. These flaws allow remote attackers to execute arbitrary code, escalate privileges, and compromise sensitive data. Immediate action is required to mitigate risks of complete system takeover.

TECHNICAL DETAILS:

Vulnerabilities Details:

1. **CVE-2025-22612**
   - CVSS Score 10.0 Critical
   - **Description**: Lack of authorization checks enables retrieval of private keys in plain text and remote command execution (RCE) on servers.
   - **Risk**: Attackers can steal cryptographic keys and execute malicious commands on compromised systems.
2. **CVE-2025-22609**
   - CVSS Score 10.0 Critical
   - **Description**: Vulnerability permitting hijacking of private keys to execute commands on victim servers.
   - **Risk**: Unauthorized access to sensitive systems and data exfiltration.
3. **CVE-2025-22611**
   - CVSS Score 9.9 Critical
   - **Description**: Privilege escalation flaw allowing attackers to gain "owner" role privileges and execute commands on the host system.
   - **Risk**: Full administrative control over Coolify instances and underlying infrastructure.

Exploitation of these vulnerabilities could lead to:

- **Complete system compromise** via unauthorized RCE.
- **Theft of sensitive data** (e.g., private keys, credentials, databases).
- **Service disruption** or deployment of ransomware.
- **Reputational and financial damage** due to breaches.

Affected Versions:

- All Coolify releases prior to v4.0.0-beta.374.

Fixed Versions:

- Coolify v4.0.0-beta.374 or later.

RECOMMENDATIONS:

The UAE Cyber Security Council recommends to upgrade the affected versions to the fixed versions 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://nvd.nist.gov/vuln/detail/CVE-2025-22612
- https://nvd.nist.gov/vuln/detail/CVE-2025-22611
- https://nvd.nist.gov/vuln/detail/CVE-2025-22609