

مجلس الأمن السيبراني  
CYBER SECURITY COUNCIL



**Critical RCE Vulnerability in Squid**

Tracking #:432317563

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## EXECUTIVE SUMMARY:

The UAE Cyber Security Council has observed a critical vulnerability in Squid, the open-source HTTP caching and forwarding proxy. This security flaw could enable remote code execution and expose sensitive data.

## TECHNICAL DETAILS:

A critical vulnerability has been discovered in the widely-used Squid HTTP proxy that may expose systems to remote code execution attacks. Tracked as CVE-2025-54574, the vulnerability arises from a buffer overflow in Squid's URN (Uniform Resource Name) handling mechanism, allowing attackers to execute arbitrary code on affected systems without authentication or user interaction.

### Vulnerability Details:

- **Vulnerability ID:** CVE-2025-54574
- **Severity:** Critical
- **CVSS Score:** 9.3
- The vulnerability stems from incorrect buffer management during processing of URN Trivial-HTTP responses, leading to a heap buffer overflow condition. Attackers can remotely trigger this overflow by sending specially crafted URN requests, allowing a memory disclosure of up to 4KB and potential arbitrary code execution.
- Exploitation of this vulnerability can lead to remote code execution on vulnerable Squid servers and exposure of sensitive data such as security credentials and confidential information stored in memory.

### Affected Versions

- Squid 4.x: All versions up to and including 4.17
- Squid 5.x: All versions up to and including 5.9
- Squid 6.x: All versions up to and including 6.3

### Fixed Versions

- Squid 6.4 or later

## RECOMMENDATIONS:

The UAE Cyber Security Council recommends applying the fixed or latest updates released by the vendor.

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-2025-54574>