



Pakistan Telecom Authority Headquarters, Islamabad

PTA Cyber Security Advisory No: 147

10-01-2022

Name: Cache Poisoning vulnerabilities in web server cache (CVE-2021-27577)

Threat Classification: Remote Code Execution

Affected Versions:

Apache Traffic Server 7.0.0 to 7.1.12

ATS 8.0.0 to 8.1.1

ATS 9.0.0 to 9.0.1

Summary:

Recently, more than 70 flaws discovered in combinations of cloud applications and content delivery networks (CDNs) that could be used to poison the CDN caches and result in denial-of-service (DoS) attacks on the applications. The vulnerability exists due to insufficient validation of user-supplied input when handling URL fragmentation. A remote attacker can send specially crafted HTTP request and poison the web server cache. A single request, when cached, can cause a site, service, or specific page to become inaccessible for hours, depending on the length of time between cache refreshes. Any Web or API request that a CDN passes to the application that causes the application to throw an exception could poison the cache.

Severity	Medium
Attack Vector	Network
Privileges required	None

For further details, please visit following link:

<https://www.cvedetails.com/cve/CVE-2021-27577/>

Recommendations:

- Please visit the website link and check **mitigations** for the aforementioned vulnerabilities:
<https://lists.apache.org/thread/c6qkdb4srn6xksgmtw82p6srmo2kmg1>
<https://trafficserver.apache.org/downloads>
- It is recommended to install updates from vendor's website.
- Users should upgrade to **8.1.2** or **9.0.2**, or later versions.
- Don't accept fat *GET* requests. Be aware that some third-party technologies may permit this by default.
- Use licensed antivirus and regularly obtain its latest updates with its real-time scanning capabilities enabled.
- Only use licensed software and avoid download/use of cracked and pirated software.
- Designate a PoC from your security / Network team (if yet not designated), for seeking assistance and reporting security issues.
- In case of any incident, please report to this office.