

SSA-759952: Command Injection and Denial of Service Vulnerability in Teamcenter

Publication Date: 2022-08-09
 Last Update: 2022-08-09
 Current Version: V1.0
 CVSS v3.1 Base Score: 7.6

SUMMARY

Teamcenter is affected by two security vulnerabilities in the File Service Cache service that could lead to command injection and denial of service issues.

Siemens has released updates for the affected products and recommends to update to the latest versions.

AFFECTED PRODUCTS AND SOLUTION

Affected Product and Versions	Remediation
Teamcenter V12.4: All versions < V12.4.0.15	Update to V12.4.0.15 or later version https://support.sw.siemens.com/ See further recommendations from section Workarounds and Mitigations
Teamcenter V13.0: All versions < V13.0.0.10	Update to V13.0.0.10 or later version https://support.sw.siemens.com/ See further recommendations from section Workarounds and Mitigations
Teamcenter V13.1: All versions < V13.1.0.10	Update to V13.1.0.10 or later version https://support.sw.siemens.com/ See further recommendations from section Workarounds and Mitigations
Teamcenter V13.2: All versions < V13.2.0.9	Update to V13.2.0.9 or later version https://support.sw.siemens.com/ See further recommendations from section Workarounds and Mitigations
Teamcenter V13.3: All versions < V13.3.0.5	Update to V13.3.0.5 or later version https://support.sw.siemens.com/ See further recommendations from section Workarounds and Mitigations
Teamcenter V14.0: All versions < V14.0.0.2	Update to V14.0.0.2 or later version https://support.sw.siemens.com/ See further recommendations from section Workarounds and Mitigations

WORKAROUNDS AND MITIGATIONS

Siemens has identified the following specific workarounds and mitigations that customers can apply to reduce the risk:

- Harden the application's host to prevent local access by untrusted personnel
- Limit access to port 4544/tcp to specific IP addresses, e.g. with a firewall

Product specific remediations or mitigations can be found in the section [Affected Products and Solution](#). Please follow the [General Security Recommendations](#).

GENERAL SECURITY RECOMMENDATIONS

As a general security measure, Siemens strongly recommends to protect network access to devices with appropriate mechanisms. In order to operate the devices in a protected IT environment, Siemens recommends to configure the environment according to Siemens' operational guidelines for Industrial Security (Download: <https://www.siemens.com/cert/operational-guidelines-industrial-security>), and to follow the recommendations in the product manuals.

Additional information on Industrial Security by Siemens can be found at: <https://www.siemens.com/industrialsecurity>

PRODUCT DESCRIPTION

Teamcenter software is a modern, adaptable product lifecycle management (PLM) system that connects people and processes, across functional silos, with a digital thread for innovation.

VULNERABILITY CLASSIFICATION

The vulnerability classification has been performed by using the CVSS scoring system in version 3.1 (CVSS v3.1) (<https://www.first.org/cvss/>). The CVSS environmental score is specific to the customer's environment and will impact the overall CVSS score. The environmental score should therefore be individually defined by the customer to accomplish final scoring.

An additional classification has been performed using the CWE classification, a community-developed list of common software security weaknesses. This serves as a common language and as a baseline for weakness identification, mitigation, and prevention efforts. A detailed list of CWE classes can be found at: <https://cwe.mitre.org/>.

Vulnerability CVE-2022-34660

File Server Cache service in Teamcenter consist of a functionality that is vulnerable to command injection. This could potentially allow an attacker to perform remote code execution.

CVSS v3.1 Base Score	7.6
CVSS Vector	CVSS:3.1/AV:N/AC:H/PR:H/UI:R/S:C/C:H/I:H/A:H/E:P/RL:O/RC:C
CWE	CWE-77: Improper Neutralization of Special Elements used in a Command ('Command Injection')

Vulnerability CVE-2022-34661

File Server Cache service in Teamcenter is vulnerable to denial of service by entering infinite loops and using up CPU cycles. This could allow an attacker to cause denial of service condition.

CVSS v3.1 Base Score	7.5
CVSS Vector	CVSS:3.1/AV:N/AC:L/PR:N/UI:N/S:U/C:N/I:N/A:H/E:P/RL:O/RC:C
CWE	CWE-835: Loop with Unreachable Exit Condition ('Infinite Loop')

ACKNOWLEDGMENTS

Siemens thanks the following parties for their efforts:

- Han Lee from Apple Information Security for reporting the vulnerabilities

ADDITIONAL INFORMATION

For further inquiries on security vulnerabilities in Siemens products and solutions, please contact the Siemens ProductCERT:

<https://www.siemens.com/cert/advisories>

HISTORY DATA

V1.0 (2022-08-09): Publication Date

TERMS OF USE

Siemens Security Advisories are subject to the terms and conditions contained in Siemens' underlying license terms or other applicable agreements previously agreed to with Siemens (hereinafter "License Terms"). To the extent applicable to information, software or documentation made available in or through a Siemens Security Advisory, the Terms of Use of Siemens' Global Website (https://www.siemens.com/terms_of_use, hereinafter "Terms of Use"), in particular Sections 8-10 of the Terms of Use, shall apply additionally. In case of conflicts, the License Terms shall prevail over the Terms of Use.