

SSA-523250: Improper Certificate Validation Vulnerability in SINUMERIK Edge

Publication Date: 2021-12-14
Last Update: 2021-12-14
Current Version: V1.0
CVSS v3.1 Base Score: 7.4

SUMMARY

A vulnerability was found in SINUMERIK Edge that could allow an attacker to spoof a trusted entity by interfering in the communication path between the client and the intended server.

Siemens has released an update for the SINUMERIK Edge and recommends to update to the latest version.

AFFECTED PRODUCTS AND SOLUTION

Affected Product and Versions	Remediation
SINUMERIK Edge: All versions < V3.2	Update to V3.2 or later version Use the internal update mechanism of the device(s). See Documentation for further information.

WORKAROUNDS AND MITIGATIONS

Siemens has not identified any additional specific workarounds or mitigations. Please follow the [General Security Recommendations](#).

Product specific mitigations can be found in the section [Affected Products and Solution](#).

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

A combination of hardware and software, Siemens' SINUMERIK Edge provides a machine-oriented platform for apps that facilitate digital production support and optimization.

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-2021-42027

The affected software does not properly validate the server certificate when initiating a TLS connection. This could allow an attacker to spoof a trusted entity by interfering in the communication path between the client and the intended server.

CVSS v3.1 Base Score	7.4
CVSS Vector	CVSS:3.1/AV:N/AC:H/PR:N/UI:N/S:U/C:H/I:H/A:N/E:P/RL:O/RC:C
CWE	CWE-295: Improper Certificate Validation

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 (2021-12-14): Publication Date

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