SSA-676775: Denial-of-Service Vulnerability in SIMATIC NET CP 343-1 Devices

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Current Version: V1.0
CVSS v3.1 Base Score: 7.5

SUMMARY

A vulnerability in SIMATIC CP343-1 devices could allow an attacker to cause a Denial-of-Service condition on TCP port 102 of the affected devices by sending specially crafted packets.

Siemens recommends specific countermeasures for products where updates are not, or not yet available.

AFFECTED PRODUCTS AND SOLUTION

Affected Product and Versions	Remediation
SIMATIC NET CP 343-1 Advanced (incl. SIPLUS variants): All versions	See recommendations from section Workarounds and Mitigations
SIMATIC NET CP 343-1 Lean (incl. SIPLUS variants): All versions	See recommendations from section Workarounds and Mitigations
SIMATIC NET CP 343-1 Standard (incl. SIPLUS variants): All versions	See 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:

- Limit access to TCP port 102 on affected devices to specific IP addresses e.g. with a firewall

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

Communication Processor (CP) modules of families SIMATIC NET CP 343-1 and CP 443-1 have been designed to enable SIMATIC S7-300/S7-400 CPUs for Ethernet communication.

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-2020-25242

Specially crafted packets sent to TCP port 102 could cause a Denial-of-Service condition on the affected devices. A cold restart might be necessary in order to recover.

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:U/RC:U
CWE	CWE-400: Uncontrolled Resource Consumption

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 (2021-05-11):	Publication Date

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