

SSA-141614: Denial-of-Service in SIMOCODE pro V EIP

Publication Date: 2019-04-09
Last Update: 2020-02-10
Current Version: V1.1
CVSS v3.1 Base Score: 7.5

SUMMARY

SIMOCODE pro V EIP is affected by a vulnerability that could allow remote attackers to conduct a Denial-of-Service (DoS) attack by sending specially crafted packets to port 161/udp (SNMP).

Siemens has released an update for SIMOCODE pro V EIP and recommends that customers update to the new version.

AFFECTED PRODUCTS AND SOLUTION

Affected Product and Versions	Remediation
SIMOCODE pro V EIP (incl. SIPLUS variants): All versions < V1.0.2	Update to V1.0.2 https://support.industry.siemens.com/cs/ww/en/view/109756912

WORKAROUNDS AND MITIGATIONS

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

- Protect network access to port 161/udp of affected devices.
- Apply cell protection concept and implement Defense-in-Depth: <https://www.siemens.com/cert/operational-guidelines-industrial-security>.
- Use VPN for protecting network communication between cells.

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

SIMOCODE is the flexible and modular motor management system for low-voltage motors.

SIPLUS extreme products are designed for reliable operation under extreme conditions and are based on SIMATIC, LOGO!, SITOP, SINAMICS, SIMOTION, SCALANCE or other devices. SIPLUS devices use the same firmware as the product they are based on.

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-2017-12741

Specially crafted packets sent to port 161/udp could cause a Denial-of-Service condition. The affected devices must be restarted manually.

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-400: Uncontrolled Resource Consumption ('Resource Exhaustion')

ACKNOWLEDGMENTS

Siemens thanks the following parties for their efforts:

- Artem Zinenko from Kaspersky for pointing out that SIPLUS should also be mentioned

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 (2019-04-09):	Publication Date
V1.1 (2020-02-10):	SIPLUS devices now explicitly mentioned in the list of affected products

TERMS OF USE

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