

SSA-134003: Web Vulnerability in SIMATIC S7-1200 Family

Publication Date: 2015-08-27
Last Update: 2020-02-10
Current Version: V1.1
CVSS v3.1 Base Score: 8.8

SUMMARY

The latest firmware update for SIMATIC S7-1200 CPUs fixes a vulnerability that could allow an attacker to perform a CSRF (Cross-Site Request Forgery) attack under certain conditions.

AFFECTED PRODUCTS AND SOLUTION

Affected Product and Versions	Remediation
SIMATIC S7-1200 CPU family (incl. SIPLUS variants): All versions < V4.1.3	Update to V4.1.3 https://support.industry.siemens.com/cs/ww/en/ps/13685/dl

WORKAROUNDS AND MITIGATIONS

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

- Apply appropriate strategies for mitigation.

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

Products of the SIMATIC S7-1200 CPU family have been designed for discrete and continuous control in industrial environments such as manufacturing, food and beverages, and chemical industries worldwide.

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-2015-5698

The integrated web server (port 80/tcp and port 443/tcp) of the affected PLCs could allow remote attackers to perform actions with the permissions of a victim user, provided the victim user has an active session and is induced to trigger the malicious request.

CVSS v3.1 Base Score	8.8
CVSS Vector	CVSS:3.1/AV:N/AC:L/PR:N/UI:R/S:U/C:H/I:H/A:H/E:P/RL:O/RC:C
CWE	CWE-352: Cross-Site Request Forgery (CSRF)

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- Ralf Spenneberg, Hendrik Schwartke, and Maik Brüggemann from OpenSource Training for coordinated disclosure
- 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 (2015-08-27):	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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