

## SSA-591405: Web Vulnerabilities in SCALANCE S-600 Family

Publication Date: 2020-02-11  
Last Update: 2020-08-11  
Current Version: V1.1  
CVSS v3.1 Base Score: 7.5

### SUMMARY

The firmware for SCALANCE S-600 family devices contains multiple web vulnerabilities. The vulnerabilities could allow an remote attacker to conduct Denial-of-Service attacks or perform Cross-Site Scripting attacks.

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

### AFFECTED PRODUCTS AND SOLUTION

Affected Product and Versions	Remediation
SCALANCE S602: All versions >= V3.0	See recommendations from section <a href="#">Workarounds and Mitigations</a>
SCALANCE S612: All versions >= V3.0	See recommendations from section <a href="#">Workarounds and Mitigations</a>
SCALANCE S623: All versions >= V3.0	See recommendations from section <a href="#">Workarounds and Mitigations</a>
SCALANCE S627-2M: All versions >= V3.0	See recommendations from section <a href="#">Workarounds and Mitigations</a>

### WORKAROUNDS AND MITIGATIONS

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

- Only access links from trusted sources in the browser you use to access the SCALANCE S-600 administration website.
- For SCALANCE S-600 family (S602, S612, S623, S627-2M): migrate to a successor product within the [SCALANCE SC-600 family, V2.1](#) or later version. For details refer to the [notice of discontinuation](#).

### 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**

The SCALANCE S-600 devices (S602, S612, S623, S627-2M) are used to protect trusted industrial networks from untrusted networks. The S-600 devices are superseded by the SCALANCE SC-600 devices (SC622-2C, SC632-2C, SC636-2C, SC642-2C, SC646-2C), or the SCALANCE S615.

The SCALANCE SC-600 devices (SC622-2C, SC632-2C, SC636-2C, SC642-2C, SC646-2C) are used to protect trusted industrial networks from untrusted networks. They allow filtering incoming and outgoing network connections in different ways.

## **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-2019-6585

The integrated configuration web server of the affected devices could allow Cross-Site Scripting (XSS) attacks if unsuspecting users are tricked into accessing a malicious link.

User interaction is required for a successful exploitation. The user must be logged into the web interface in order for the exploitation to succeed. At the stage of publishing this security advisory no public exploitation is known. The vendor has confirmed the vulnerability and provides mitigations to resolve it.

CVSS v3.1 Base Score	4.7
CVSS Vector	<a href="#">CVSS:3.1/AV:N/AC:H/PR:N/UI:R/S:C/C:L/I:L/A:N/E:P/RL:O/RC:C</a>
CWE	CWE-80: Improper Neutralization of Script-Related HTML Tags in a Web Page (Basic XSS)

### Vulnerability CVE-2019-13925

Specially crafted packets sent to port 443/tcp of affected devices could cause a Denial-of-Service condition of the web server.

CVSS v3.1 Base Score	7.5
CVSS Vector	<a href="#">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</a>
CWE	CWE-400: Uncontrolled Resource Consumption

### Vulnerability CVE-2019-13926

Specially crafted packets sent to port 443/tcp of affected devices could cause a Denial-of-Service condition of the web server. A cold reboot is required to restore the functionality of the device.

CVSS v3.1 Base Score	7.5
CVSS Vector	<a href="#">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</a>
CWE	CWE-400: Uncontrolled Resource Consumption

## **ACKNOWLEDGMENTS**

Siemens thanks the following parties for their efforts:

- Melih Berk Ekşioğlu for coordinated disclosure of CVE-2019-6585

## **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 (2020-02-11): Publication Date

V1.1 (2020-08-11): Informed about successor products for the SCALANCE S-600 family

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