SSA-197270: Information Disclosure Vulnerability in Siemens OPC UA Modeling Editor (SiOME)

Publication Date: 2023-11-14
Last Update: 2023-11-14
Current Version: V1.0
CVSS v3.1 Base Score: 7.5

SUMMARY

Siemens OPC UA Modeling Editor (SiOME) is affected by an XML external entity (XXE) injection vulnerability that could allow an attacker to interfere with an application's processing of XML data and read arbitrary files in the system.

Siemens has released a new version for Siemens OPC UA Modelling Editor (SiOME) and recommends to update to the latest version.

AFFECTED PRODUCTS AND SOLUTION

Affected Product and Versions	Remediation
Siemens OPC UA Modelling Editor (SiOME): All versions < V2.8	Update to V2.8 or later version https://support.industry.siemens.com/cs/ww/en/view/109755133/

WORKAROUNDS AND MITIGATIONS

Product-specific remediations or mitigations can be found in the section Affected Products and Solution. Please follow the General Security Recommendations.

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

Siemens OPC UA Modeling Editor (SiOME) is a freeware tool that assists you to create your own OPC UA information models or map existing companion specifications.

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-2023-46590

Affected products suffer from a XML external entity (XXE) injection vulnerability. This vulnerability could allow an attacker to interfere with an application's processing of XML data and read arbitrary files in the system.

CVSS v3.1 Base Score	7.5
CVSS Vector	CVSS:3.1/AV:N/AC:L/PR:N/UI:N/S:U/C:H/I:N/A:N/E:P/RL:O/RC:C
CWE	CWE-611: Improper Restriction of XML External Entity Reference

ACKNOWLEDGMENTS

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- Ting Chen for reporting the vulnerability
- Jin Huang from ADLab of Venustech for reporting the vulnerability

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 (2023-11-14): Publication Date

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