Applied Risk

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Pilz PNOZmulti Configurator Cleartext Storage of Sensitive Information

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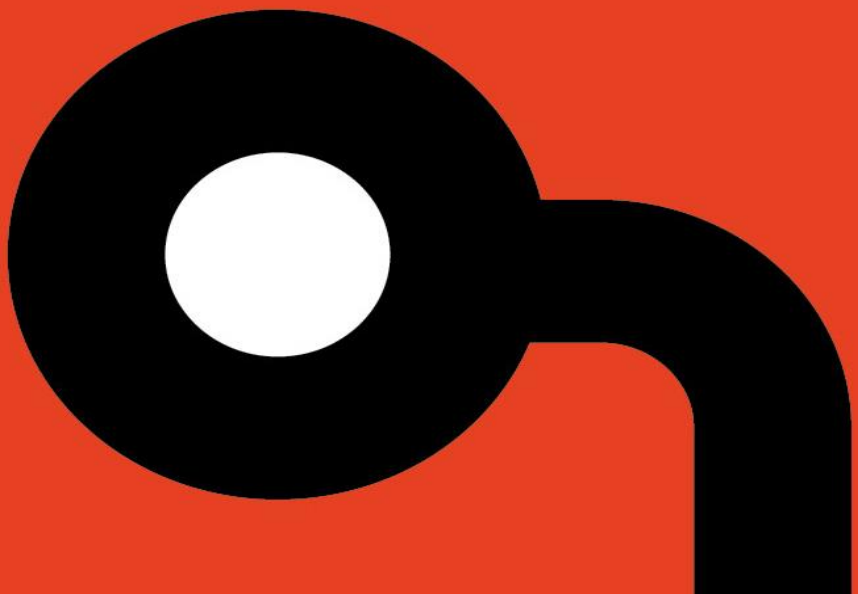

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OVERVIEW

A cleartext storage of sensitive information has been discovered in Pilz PNOZmulti Configurator software that allows a local attacker to read sensitive data in clear-text. There are no known public exploits targeting this vulnerability in said solution.

AFFECTED PRODUCTS

Pilz PNOZmulti Configurator

The following versions are affected:

- Program version: 10.8 and prior

The vulnerability has been discovered and validated on Pilz PNOZmulti Configurator 10.8. Older versions are affected too.

IMPACT

An authenticated user can read credentials stored in clear-text.

BACKGROUND

Pilz GmbH & Co. KG is technology leader in safe automation technology. In this area, Pilz is consistently developing a role as a total solutions supplier with solutions for safety and automation technology. PNOZmulti Configurator - The original tool for your safety circuit configuration. The configuration tool supports you with the project design, configuration, documentation and commissioning of Pilz control systems.

VULNERABILITY DETAILS

Cleartext Storage of Sensitive Information

The vulnerability allows an attacker with access to the PC file system that uses the software PNOZmulti Configurator to read out sensitive data. The data is a configuration data of an HMI device of type PMI m107 diag. The misuse of captured configuration data requires physical access to the PMI m107 diag. It can allow modification of data on affected device once credentials are disclosed.

This issue allows a local authenticated attacker to view credentials in clear-text in an unencrypted configuration file, which is located at:

C:\ProgramData\Pilz\PNOZmulti Configurator v10.8.0\AppData\pmimicroconfig\UserSettings.xml.

Applied Risk has calculated a CVSSv3 score of 4.4 for this vulnerability. The CVSS vector string is CVSS:3.0/AV:L/AC:L/PR:L/UI:N/S:U/C:L/I:L/A:N.

MITIGATION

Pilz addressed the reported vulnerability by releasing a new version 10.9 for the affected software. The vendor's advisory and software updates are available at the following links:

- https://www.pilz.com/en-GB/support/downloads#currentPage=1&SEARCH=Security%20Advisory&pilz_group_type=download&SORT=dmodified
- https://www.pilz.com/download/restricted/PNOZmulti_Configurator_10_9_0_3000683A41.zip

REFERENCES

Vendor website
https://www.pilz.com

Product page
https://www.pilz.com/en-INT/eshop/00101002067093801Z/PNOZmulti-Configurator-Licence

OWASP
https://www.owasp.org/index.php/Insecure_Storage

Common Weakness Enumeration (CWE) definition 312
https://cwe.mitre.org/data/definitions/312.html

ICS-CERT Advisory (ICSA-19-010-03):
https://ics-cert.us-cert.gov/advisories/ICSA-19-010-03

CVE ID: CVE-2018-19009:
https://cve.mitre.org/cgi-bin/cvename.cgi?name=CVE-2018-19009

CONTACT DETAILS

For any questions related to this report, please contact Applied Risk Research team at:

Email: research@applied-risk.com

PGP Public Key:

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-----BEGIN PGP PUBLIC KEY BLOCK-----
mQENBFOgiBQBCACj+Notofe/liuHuc90yy8GAfFn8YFCsMCo7wQmQRNTT43bZQq2
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-----END PGP PUBLIC KEY BLOCK-----
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