SSA-722010: Datalogics File Parsing Vulnerability in Teamcenter Visualization and JT2Go

Publication Date: 2024-07-09 Last Update: 2024-07-09

Current Version: V1.0 CVSS v3.1 Base Score: 7.8 CVSS v4.0 Base Score: 7.3

SUMMARY

Siemens Teamcenter Visualization and JT2Go are affected by an out of bounds read vulnerability in the APDFL library from Datalogics. If a user is tricked to open a malicious PDF file with the affected products, this could lead the application to crash or potentially lead to arbitrary code execution.

Siemens has released new versions for the affected products and recommends to update to the latest versions.

AFFECTED PRODUCTS AND SOLUTION

Affected Product and Versions	Remediation
JT2Go: All versions < V14.3.0.8 affected by CVE-2023-7066	Update to V14.3.0.8 or later version https://plm.sw.siemens.com/en-US/plm-components/jt/jt2go/ See further recommendations from section Workarounds and Mitigations
Teamcenter Visualization V14.1: All versions < V14.1.0.14 affected by CVE-2023-7066	Update to V14.1.0.14 or later version https://support.sw.siemens.com/ See further recommendations from section Workarounds and Mitigations
Teamcenter Visualization V14.2: All versions < V14.2.0.10 affected by CVE-2023-7066	Update to V14.2.0.10 or later version https://support.sw.siemens.com/ See further recommendations from section Workarounds and Mitigations
Teamcenter Visualization V14.3: All versions < V14.3.0.8 affected by CVE-2023-7066	Update to V14.3.0.8 or later version https://support.sw.siemens.com/ See further recommendations from section Workarounds and Mitigations
Teamcenter Visualization V2312: All versions < V2312.0002 affected by CVE-2023-7066	Update to V2312.0002 or later version https://support.sw.siemens.com/ See further recommendations from section Workarounds and Mitigations

WORKAROUNDS AND MITIGATIONS

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

• CVE-2023-7066: Do not open untrusted PDF files in affected applications.

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

JT2Go is a 3D JT viewing tool to allow users to view JT, PDF, Solid Edge, PLM XML with available JT, VFZ, CGM, and TIF data.

Teamcenter Visualization software enables enterprises to enhance their product lifecycle management (PLM) environment with a comprehensive family of visualization solutions. The software enables enterprise users to access documents, 2D drawings and 3D models in a single environment.

VULNERABILITY DESCRIPTION

This chapter describes all vulnerabilities (CVE-IDs) addressed in this security advisory. Wherever applicable, it also documents the product-specific impact of the individual vulnerabilities.

Vulnerability CVE-2023-7066

The affected applications contain an out of bounds read past the end of an allocated structure while parsing specially crafted PDF files. This could allow an attacker to execute code in the context of the current process.

CVSS v3.1 Base Score 7.8

CVSS Vector CVSS:3.1/AV:L/AC:L/PR:N/UI:R/S:U/C:H/I:H/A:H/E:P/RL:O/RC:C

CVSS v4.0 Base Score 7.3

CVSS Vector CVSS:4.0/AV:L/AC:H/AT:N/PR:N/UI:P/VC:H/VI:H/VA:H/SC:N/SI:N/SA:N

CWE CWE-125: Out-of-bounds Read

ACKNOWLEDGMENTS

Siemens thanks the following party for its efforts:

MoyunSec for reporting the vulnerability

ADDITIONAL INFORMATION

This advisory covers security vulnerability (CVE-2023-7066) in APDFL library in Datalogics [1].

[1] Datalogics Release Notes #SF45916: https://dev.datalogics.com/adobe-pdf-library/release-notes-adobe-pdf-library-v-18/

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 (2024-07-09): Publication Date

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