OPC Foundation Security Bulletin

Security Update for the OPC UA .NET Standard Stack

Published: May 1st, 2022
Version: 1.0

Executive Summary

This security update resolves a vulnerability in the OPC UA .NET Standard Stack that allows a malicious client to cause a server to trigger an out of memory exception with a carefully crafted message.

This security update has a base score of 7.5 (high) using the CVSS v3.1 guidelines.

The CVSS vector string is:
AV:N/AC:L/PR:N/UI:N/S:U/C:N/I:N/A:H

Affected Software

The following software has been updated to address the issue:

<table>
<thead>
<tr>
<th>Download</th>
<th>Replacement</th>
</tr>
</thead>
<tbody>
<tr>
<td>OPCFoundation/UA-.NETStandard</td>
<td>GitHub Tag</td>
</tr>
<tr>
<td>This version or any version after it.</td>
<td><a href="https://github.com/OPCFoundation/UA-.NETStandard/tree/1.4.368.58">https://github.com/OPCFoundation/UA-.NETStandard/tree/1.4.368.58</a></td>
</tr>
<tr>
<td>OPCFoundation/UA-.NET-Legacy</td>
<td>GitHub Commit</td>
</tr>
<tr>
<td>This version or any version after it.</td>
<td><a href="https://github.com/OPCFoundation/UA-.NET-Legacy/tree/35199e43d46f0eef793cace12baa806838ddba2c">https://github.com/OPCFoundation/UA-.NET-Legacy/tree/35199e43d46f0eef793cace12baa806838ddba2c</a></td>
</tr>
</tbody>
</table>

OPC Foundation Vulnerability Information

Vulnerabilities and Exposures list:
<table>
<thead>
<tr>
<th>Vulnerability</th>
<th>CVE number</th>
<th>Publicly disclosed</th>
<th>Exploited</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CWE-789</strong> Memory Allocation with Excessive Size Value.</td>
<td>CVE-2022-29863</td>
<td>No</td>
<td>No</td>
</tr>
</tbody>
</table>

**Mitigating Factors**

None.

**Workarounds**

Use a physically secured network where unauthorized clients cannot connect.

**Acknowledgments**

The OPC Foundation recognizes the Uriya Yavnieli from JFrog Security Research for discovering and reporting this issue.

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**Revisions**

- V1.0 (May 1st, 2022): Bulletin published.