Security Advisory WIBU-210910-01

Vulnerability title

CodeMeter Runtime for Windows: Denial of Service (DoS)

Vulnerability description

A local attacker could cause a Denial of Service by overwriting existing files on the affected system.

- CVE: CVE-2021-41057
- CVSS v3.1 base score: 7.1
- Vulnerability type: CWE-269

Vulnerability details

If an attacker with basic user capabilities manages to set up a link to a special system file used with CmDongles, then essential files in the system could get overwritten.

Exploiting the vulnerability requires at least an unprivileged user account on the machine.

The mobile use of the CodeMeter Runtime is not affected by this vulnerability because in this case, CodeMeter runs in the user space instead of running as a Windows service.

Affected products

<table>
<thead>
<tr>
<th>Product name</th>
<th>Affected versions</th>
<th>Fixed versions</th>
</tr>
</thead>
<tbody>
<tr>
<td>CodeMeter Runtime</td>
<td>All Windows versions</td>
<td>7.30a</td>
</tr>
</tbody>
</table>

Mitigations for affected versions

Following measures are recommended to reduce the risk until the fixed version can be installed. Please be aware that not all mitigations apply to every possible product configuration, so please check which of these could be relevant or applicable in your case.

- Restrict unprivileged access to machines running the CodeMeter License Server service.
- Disable the container type “Mass Storage” in CodeMeter: if there are no CmDongles connected to the affected machine or if the connected CmDongles are configured as HID, the CodeMeter communication with “Mass Storage” devices can be disabled at the Windows Registry as follows:
  - Set the value of the key “HKEY_LOCAL_MACHINE\SOFTWARE\WIBU-SYSTEMS\CodeMeter\Server\CurrentVersion\EnabledContainerTypes” to 4294967294 (0xFFFFFFFF).
  - Restart CodeMeter to apply this change.

General security best practices can help to protect systems from local and network attacks.
Acknowledgments

We thank Jokūbas Arsoba for reporting this vulnerability following coordinated disclosure.

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Document History

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<thead>
<tr>
<th>Version</th>
<th>Date</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>1.0</td>
<td>2021-09-29</td>
<td>Draft version, TLP: AMBER</td>
</tr>
<tr>
<td>1.1</td>
<td>2021-09-30</td>
<td>Integrated review feedback</td>
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<tr>
<td>1.2</td>
<td>2021-10-04</td>
<td>One mitigation was changed</td>
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