Security Advisory WIBU-200521-01

Vulnerability Title
Improper Input Validation of Update Files in CodeMeter Runtime

Vulnerability description
CodeMeter and the software using it may crash while processing a specifically crafted license file due to unverified length fields.

- CVE: CVE-2020-14513
- CVSS v3.1 base score: 7.5
- CVSS v3.1 vector string: AV:N/AC:L/PR:N/UI:N/S:U/C:N/I:N/A:H
- Vulnerability type: CWE-20

Vulnerability details
By using a manipulated Update File (.WibuCmRaU), one could make sure that CodeMeter did not respond anymore, due to a length check that was not properly executed.

This affects CmActLicense Firm Codes (Firm Code 5,xxx,xxx).
Not affected are CmDongle Firm Codes (Firm Code 1xx,xxx) and Universal Firm Codes (Firm Code 6,xxx,xxx).

Affected products

<table>
<thead>
<tr>
<th>Product name</th>
<th>Affected versions</th>
<th>Fixed versions</th>
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<tbody>
<tr>
<td>CodeMeter Runtime</td>
<td>All versions prior to 6.81</td>
<td>CodeMeter Runtime 6.81 or newer.</td>
</tr>
</tbody>
</table>

Mitigation for affected versions
- Run CodeMeter as client only and use localhost as binding for the CodeMeter communication.
  With binding to localhost an attack is no longer possible via remote network connection.

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

Acknowledgments
We thank Sharon Brizinov and Tal Keren of Claroty for reporting this vulnerability following coordinated disclosure.
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Document History

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<tr>
<th>Version</th>
<th>Date</th>
<th>Description</th>
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<tr>
<td>1.0</td>
<td>2020-08-14</td>
<td>Draft version</td>
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<tr>
<td>1.1</td>
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<td>Updated draft version</td>
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<tr>
<td>1.2</td>
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