2020-09-07
Version 1.1

# Security Advisory WIBU-200521-02

## Vulnerability Title

CodeMeter Runtime WebSockets API: Missing Origin Validation

## Vulnerability description

This vulnerability allows an attacker to use the CodeMeter Runtime WebSockets API via a specifically crafted Java Script payload, which may allow alteration or creation of license files for CmActLicense using CmActLicense Firm Code (Firm Code 5,xxx,xxx) when combined with CVE-2020-14515.

- CVE: CVE-2020-14519
- CVSS v3.1 base score: 8.1
- CVSS v3.1 vector string: AV:N/AC:L/PR:N/UI:R/S:U/C:N/I:H/A:H
- Vulnerability type: CWE-346

## Vulnerability details

No authentication and origin validation for WebSockets connections that allow the following actions: read licenses information, read dongle information, read CodeMeter version and update licenses.

## Affected products

| Product name | Affected versions | Fixed versions |
|---|---|---|
| CodeMeter Runtime | All versions prior to 7.10a | CodeMeter Runtime 7.10a or newer |

## Mitigation for affected versions

- The risk can be reduced by using CodeMeter Runtime 6.90 or newer. With CodeMeter Runtime 6.90 or newer no Denial of Service and no manipulation of licenses is possible, so the CVSS v3.1 base score would be reduced from 8.1 to 0.0. However the origin validation for WebSockets will be implemented in CodeMeter Runtime 7.10a.
- If it is not possible to update the CodeMeter Runtime to version 6.90 or newer then it is possible to disable the CodeMeter Runtime WebSockets API via profiling entry 'CmWebSocketApi'. In this case, the direct activation of licenses with CodeMeter License Central WebDepot will not work.
  However, the Software Activation Wizard using CodeMeter License Central Gateways and file-based activation in CodeMeter License Central WebDepot can still be used.

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



WIBU-SYSTEMS AG | Deutschland
Rüppurrer Straße 52-54 | D-76137 Karlsruhe
Telefon: +49-721-93172-0 | Fax: +49-721-93172-22
E-Mail: info@wibu.com | www.wibu.com
USt-ID: DE 143606433 | WEEE-Reg-Nr: DE 90465365

Vorstand
Dipl.-Ing. Oliver Winzenried
**Aufsichtsratsvorsitzender**
Dipl.-Inform. Marcellus Buchheit
HRB 107315 | Amtsgericht Mannheim

Bankverbindungen
Baden-Württembergische Bank
Deutsche Postbank AG
Commerzbank AG
vormals Dresdner Bank

IBAN
DE87 6005 0101 0008 0239 79
DE88 6601 0075 0005 5167 52
DE08 6608 0052 0609 0060 00

Swift | BIC
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DRESDEFF660

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

**Disclaimer**

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**Document History**

| Version | Date | Description |
|---|---|---|
| 1.0 | 2020-08-14 | Draft version |
| 1.1 | 2020-09-07 | Final version |



**WIBU-SYSTEMS AG | Deutschland**
Rüppurrer Straße 52-54 | D-76137 Karlsruhe
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