

2021-12-20  
Version 1.0

## Product Security Advisory WIBU-211215-01

### Vulnerability Title

Vulnerability in Apache Log4j Library used in Wibu-Systems' products

### Affected products

Product name	Affected versions	Fixed Versions
CodeMeter Keyring for TIA Portal	<=1.30 (Only the Password Manager is affected)	>=1.30a
CodeMeter Cloud Lite	<=2.2a	>=2.2b

### Vulnerability description

The affected Wibu-Systems' products use the Apache Log4j library, which is vulnerable to information leak and arbitrary code execution in the versions >=2.0-beta9 and <= 2.15.0, excluding 2.12.2. This vulnerability is fixed in Log4j 2.16.0 (Java 8 and later), 2.12.2 (Java 7).

- CVE: [CVE-2021-45046](#)
- CVSS v3.1 base score: 9.0 (Critical)
- CVSS v3.1 vector string: [/AV:N/AC:H/PR:N/UI:N/S:C/C:H/I:H/A:H](#)

Product name	CVSS v3.1 environmental score	CVSS v3.1 vector string	Comments
CodeMeter Keyring for TIA Portal (Password Manager)	7.7 (High)	<a href="#">/AV:N/AC:H/PR:N/UI:N/S:C/C:H/I:H/A:H/E:F/RL:W/RC:C/CR:H/IR:H/AR:H/MPR:H</a>	The attacker needs a valid client certificate
CodeMeter Cloud Lite	8.4 (High)	<a href="#">/AV:N/AC:H/PR:N/UI:N/S:C/C:H/I:H/A:H/E:F/RL:O/RC:C/CR:H/IR:H/AR:H</a>	

- Vulnerability type:
  - CWE-502: Deserialization of Untrusted Data
- Additional information:
  - <https://logging.apache.org/log4j/2.x/security.html>
  - <https://cve.mitre.org/cgi-bin/cvename.cgi?name=CVE-2021-45046>

### **Remediation**

- If you are using the Wibu-Systems' hosting service ("WOPS") for the affected products, then no actions are needed at your side.
- If you are not using the Wibu-Systems' hosting service ("WOPS") for the affected products, then you need to update these to the fixed versions or you can replace the Log4j library with the fixed version or later.

### **Mitigations for affected versions**

If you are not using the Wibu-Systems' hosting service ("WOPS") for the affected product(s) please consider following measures to reduce the risk until the fixed version of the affected product 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.

Implement one of the mitigation techniques below:

- Upgrade to Log4j 2.3.1 (for Java 6), 2.12.3 (for Java 7), or 2.17.0 (for Java 8 and later).
- Otherwise, in any release other than 2.16.0, you may remove the JndiLookup class from the classpath: `zip -q -d log4j-core-*.jar org/apache/logging/log4j/core/lookup/JndiLookup.class`

Source of these mitigations: <https://logging.apache.org/log4j/2.x/security.html>

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

### **Acknowledgments**

This issue was discovered in the log4j library by Kai Mindermann of iC Consult and separately by 4ra1n. Additional vulnerability details discovered independently by Ash Fox of Google, Alvaro Muñoz and Tony Torralba from GitHub, Anthony Weems of Praetorian, and RyotaK (@ryotkak).

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**Document History**

<b>Version</b>	<b>Date</b>	<b>Description</b>
1.0	2021-12-20	First version, TLP:WHITE