

CYBERSECURITY ADVISORY

Apache Log4j v2.x Vulnerabilities in Hitachi Energy's RelCare Product

CVE-2021-44228

CVE-2021-45046

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Summary

Hitachi Energy is aware of the vulnerabilities – CVE-2021-44228 and CVE-2021-45046 [1] in Apache Log4j v2.x that are used in the product versions listed below. The product versions listed in this document are affected by the vulnerabilities related only to the Apache Log4j v2.x as elaborated in the Section Vulnerability ID, Severity and Details.

An attacker who successfully exploited this vulnerability could perform unauthenticated remote code execution on the affected product.

For immediate mitigation/workaround information, please refer to the Mitigation Factors/Workaround Section below. Hitachi Energy will continue to investigate and update this advisory as more information becomes available.

Affected Products and Versions

List of affected products and product versions:

RelCare 2.0.0

Vulnerability ID, Severity and Details

The vulnerability's severity assessment is performed by using the FIRST Common Vulnerability Scoring System (CVSS) v3.1. The CVSS Environmental Score, which can affect the final vulnerability severity score, is not provided in this advisory as it reflects the potential impact of the vulnerability in the customer organizations' computing environment. Customers are recommended to analyze the impact of the vulnerability in their environment and calculate the CVSS Environmental Score.

Vulnerability ID	Detail Description
<p>CVE-2021-44228 CVSS v3.1 Base Score: 10.0 CVSS v3.1 Vector: /AV:N/AC:L/PR:N/UI:N/S:C/C:H/I:H/A:H Link to NVD: click here</p>	<p>In the affected version of Apache Log4j, JNDI features used in configuration, log messages, and parameters do not protect against attacker-controlled LDAP and other JNDI related endpoints. An attacker who can control log messages or log message parameters can execute arbitrary code loaded from LDAP servers when message lookup substitution is enabled.</p>
<p>CVE-2021-45046 CVSS v3.1 Base Score: 9.0 CVSS v3.1 Vector: /AV:N/AC:H/PR:N/UI:N/S:C/C:H/I:H/A:H Link to NVD: click here</p>	<p>It was found that the fix to address CVE-2021-44228 in Apache Log4j 2.15.0 was incomplete in certain non-default configurations. This could allow attackers with control over Thread Context Map (MDC) input data when the logging configuration uses a non-default Pattern Layout with either a Context Lookup to craft malicious input data using a JNDI Lookup pattern resulting in an information leak and remote code execution in some environments and local code execution in all environments.</p>

Recommended Immediate Actions

The Table below shows the affected version and the recommended immediate actions.

Affected Version	Recommended Actions
RelCare v2.0.0	No action is required by customers. The RelCare SaaS hosted solution and the on-premises have been patched per the recommendations.

References

1. Apache Log4j Security Vulnerabilities - <https://logging.apache.org/log4j/2.x/security.html>

Support

For additional information and support please contact your product provider or Hitachi Energy service organization. For contact information, see <https://www.hitachienergy.com/contact-us/> for Hitachi Energy contact-centers.

Publisher

Hitachi Energy PSIRT¹ – cybersecurity@hitachienergy.com

Revision

Date of the Revision	Revision	Description
2021-12-20	A	Initial public release.

¹ Signature file of this PDF is available at <https://www.hitachienergy.com/cybersecurity/alerts-and-notifications>