# PRODUCT SECURITY BULLETIN



Important information - Please read and keep

**Subject: Mirth Connect Security Vulnerabilities** 

Date: 2024-11-29 (last update)

### Background

NextGen Healthcare Mirth Connect is an open-source integration engine used primarily in healthcare IT for exchanging healthcare data between various systems. It enables interoperability between different healthcare applications and allows secure and efficient transfer of data through standardized protocols and formats such as HL7, DICOM, and FHIR.

IHTeam identified a remote command execution on Mirth Connect <= 4.3.0 that can be exploited from an unauthenticated perspective. The only condition in which this Common Vulnerabilities and Exposures (CVE) can be exploited is when JRE <= 8.0 is in use. The vulnerability reportedly came as a side-effect of the company trying to fix a previous critical-severity flaw, tracked as <a href="https://creativecommons.org/linear-noise/linear-noise/">CVE-2023-37679</a>. This vulnerability, carrying a severity score of 9.8, was also described as a pre-auth remote code execution.

Later, researchers from Horizon3.ai determined the patch to be incomplete and published a gadget chain which bypassed the deny list that the original had implemented. This second vulnerability was assigned <a href="CVE-2023-43208">CVE-2023-43208</a> and was patched in Mirth Connect v4.4.1.

### Response

#### Our Affected Products

The SentryConnect solution, which is utilized to connect SentrySuite™ solutions to hospital information systems, utilizes Mirth Connect for integration purposes.

Mirth Connect before v4.4.1 is potentially vulnerable to CVE-2023-37679 and CVE-2023-43208.

#### How Are We Responding

We have implemented the changes below around the disclosure of the Mirth Connect vulnerabilities from SentryConnect Gateway version 6.3.1.7 onwards.

- Updated to openJDK v17.0.11+9-LTS
- Mirth server listening on localhost only
- Removed insecure cipher suites: TLS\_RSA\_WITH\_AES\_128\_GCM\_SHA256 and TLS\_RSA\_WITH\_AES\_256\_GCM\_SHA384
- Upgraded to MirthConnectAdminLauncher v1.4.1
- Upgraded to MirthConnect 4.50
- Upgraded MirthConnect's jetty 9.4.49 to jetty 9.4.53



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## Mitigations & Compensating Controls

We recommend applying the following mitigations and compensating controls:

 Customers using versions before SentryConnect Gateway version 6.3.1.7 must reach out to <u>support.connect.eu@jaegerrdx.com</u> to initiate the update process and allow us support to make additional configurational changes.

For product or site-specific concerns, contact your Jaeger Medical service representative.

For more information on the Jaeger Medical proactive approach to product security and vulnerability management, contact us at <a href="mailto:product-security@jaegerrdx.com">product-security@jaegerrdx.com</a> or visit <a href="mailto:www.jaegerrdx.com/product-security">www.jaegerrdx.com/product-security</a>.