SECURITY BULLETIN AVEVA-2021-003

Title
SuiteLink Server – Multiple Denial of Service (DoS) Vulnerabilities and theoretical Remote Code Execution (RCE)

Rating
High

Published By
AVEVA Software Security Response Center

Overview
AVEVA Software, LLC. ("AVEVA") has created a security update to address vulnerabilities in the SuiteLink Server. The vulnerabilities, if exploited, will cause the SuiteLink Server to crash while parsing a malicious packet. Additionally, it may theoretically be possible to achieve Remote Code Execution, but no proof-of-concept exists. SuiteLink Clients are not affected by this vulnerability and do not need to be patched.

The following products ship a vulnerable version of the SuiteLink Server and are affected:

- AVEVA™ System Platform 2020 R2 P01 and all prior versions
- AVEVA™ InTouch 2020 R2 P01 and all prior versions
- AVEVA™ Historian 2020 R2 P01 and all prior versions
- AVEVA™ Communication Drivers Pack 2020 R2 and all prior versions
- AVEVA™ Operations Integration Core 3.0 and all prior versions
- AVEVA™ Data Acquisition Servers all versions
- AVEVA™ Batch Management 2020 and all prior versions
- AVEVA™ MES 2014 R2 and all prior versions

Recommendations
AVEVA recommends that organizations evaluate the impact of these vulnerabilities based on their operational environment, architecture, and product implementation.

Customers using affected versions of products should apply the corresponding security update. Note that a subset of the updates require Activation-based Licensing.

<table>
<thead>
<tr>
<th>Version</th>
<th>Security Update</th>
<th>Download Link</th>
</tr>
</thead>
<tbody>
<tr>
<td>AVEVA™ System Platform 2014 R2 SP1 P02 through 2020 R2 P01 (inclusive)</td>
<td>AVEVA™ SuiteLink 3.2.002</td>
<td><a href="https://softwaresupportsp.aveva.com/#/connectivityhub/details?id=74691731-8acb-4955-2d86-08d91f9dec02">https://softwaresupportsp.aveva.com/#/connectivityhub/details?id=74691731-8acb-4955-2d86-08d91f9dec02</a></td>
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<tr>
<td>AVEVA™ InTouch 2014 R2 SP1 P02 through 2020 R2 P01 (inclusive)</td>
<td>AVEVA™ SuiteLink 3.2.002</td>
<td><a href="https://softwaresupportsp.aveva.com/#/connectivityhub/details?id=74691731-8acb-4955-2d86-08d91f9dec02">https://softwaresupportsp.aveva.com/#/connectivityhub/details?id=74691731-8acb-4955-2d86-08d91f9dec02</a></td>
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<td>AVEVA™ Historian 2014 R2 SP1 P02 through 2020 R2 P01 (inclusive)</td>
<td>AVEVA™ SuiteLink 3.2.002</td>
<td><a href="https://softwaresupportsp.aveva.com/#/connectivityhub/details?id=74691731-8acb-4955-2d86-08d91f9dec02">https://softwaresupportsp.aveva.com/#/connectivityhub/details?id=74691731-8acb-4955-2d86-08d91f9dec02</a></td>
</tr>
<tr>
<td>AVEVA™ Communication Drivers Pack 2020 R2 and prior</td>
<td>AVEVA™ SuiteLink 3.2.002</td>
<td><a href="https://softwaresupportsp.aveva.com/#/connectivityhub/details?id=74691731-8acb-4955-2d86-08d91f9dec02">https://softwaresupportsp.aveva.com/#/connectivityhub/details?id=74691731-8acb-4955-2d86-08d91f9dec02</a></td>
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<tr>
<td>AVEVA™ Operations Integration Core 3.0 and prior</td>
<td>AVEVA™ Communication</td>
<td><a href="https://softwaresupportsp.aveva.com/#/connectivityhub/details?id=24f8a620-7b2e-4cd9-5973-08d91f9da2f8">https://softwaresupportsp.aveva.com/#/connectivityhub/details?id=24f8a620-7b2e-4cd9-5973-08d91f9da2f8</a></td>
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<tr>
<td>All mature versions of all Data Acquisition Servers</td>
<td>AVEVA™ SuiteLink 3.2.002</td>
<td><a href="https://softwaresupportsp.aveva.com/#/connectivityhub/details?id=74691731-8acb-4955-2d86-08d91f9dec02">https://softwaresupportsp.aveva.com/#/connectivityhub/details?id=74691731-8acb-4955-2d86-08d91f9dec02</a></td>
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<tr>
<td>AVEVA™ Batch Management 2020</td>
<td>AVEVA™ SuiteLink 3.2.002</td>
<td><a href="https://softwaresupportsp.aveva.com/#/connectivityhub/details?id=74691731-8acb-4955-2d86-08d91f9dec02">https://softwaresupportsp.aveva.com/#/connectivityhub/details?id=74691731-8acb-4955-2d86-08d91f9dec02</a></td>
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<tr>
<td>AVEVA™ Batch Management 2017 U1 and prior</td>
<td>First upgrade to AVEVA™ Batch Management 2020 Then apply AVEVA™ SuiteLink 3.2.002</td>
<td><a href="https://softwaresupportsp.aveva.com/#/producthub/details?id=d65cd14a-f3b6-4340-a830-0df5f9c0da79">https://softwaresupportsp.aveva.com/#/producthub/details?id=d65cd14a-f3b6-4340-a830-0df5f9c0da79</a></td>
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<tr>
<td>AVEVA™ MES 2014 R2 and prior</td>
<td>Upgrade to AVEVA™ MES 2014 R3 or higher</td>
<td><a href="https://softwaresupportsp.aveva.com/#/producthub/details?id=7c87fe29-f137-4f74-3197-08d86ac74c47">https://softwaresupportsp.aveva.com/#/producthub/details?id=7c87fe29-f137-4f74-3197-08d86ac74c47</a></td>
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**Vulnerability Characterization and CVSS v3 Rating**

**CWE-122: Heap-Based Buffer Overflow**


**CWE-476: Null Pointer Dereference**


**CWE-755: Improper Handling of Exceptional Conditions**


**Acknowledgements**

AVEVA would like to thank:

- Sharon Brizinov of Claroty for the discovery, responsible disclosure of the vulnerabilities, and verifying AVEVA’s fixes
- ICS-Cert for coordination of advisories and Common Vulnerability and Exposure (CVE) creation
Support
For information on how to reach AVEVA Customer Support for your product, please refer to this link: AVEVA Customer Support.
If you discover errors or omissions in this Security Notification, please report the finding to AVEVA Customer Support.

AVEVA Security Central
For the latest security information and security updates, please visit Security Central.

Cyber Security Standards and Best Practices
For information regarding how to secure Industrial Control Systems please reference NIST SP800-82r2.

NVD Common Vulnerability Scoring System (CVSS v3)
The U.S. Department of Homeland Security has adopted the Common Vulnerability Scoring System (CVSS v3) that provides an open framework for communicating the characteristics and impacts of IT vulnerabilities. CVSS v3 produces a numerical score as well as a textual representation of that score reflecting the severity of a vulnerability. Scores range from 0.0 (no impact) to a maximum of 10.0 (critical impact with minimal effort to exploit). For additional information please refer to the CVSS v3.1 specifications.

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