EcoStruxure™ Machine Expert – HVAC (formerly SoMachine - HVAC)

10 January 2023

Overview

Schneider Electric is aware of a vulnerability in EcoStruxure™ Machine Expert - HVAC (formerly SoMachine - HVAC).

The EcoStruxure™ Machine Expert - HVAC is a commissioning software for programmable logic controllers M171/M172. The EcoStruxure™ Machine Expert - HVAC is a commissioning software for programmable logic controllers M171/M172.

Failure to apply the mitigations provided below may lead to sensitive information leakage that can potentially be used to execute arbitrary code.

Affected Products and Versions

<table>
<thead>
<tr>
<th>Product</th>
<th>Version</th>
</tr>
</thead>
<tbody>
<tr>
<td>SoMachine HVAC</td>
<td>V2.1.0 and prior</td>
</tr>
<tr>
<td>EcoStruxure™ Machine Expert – HVAC</td>
<td>V1.4.0 and prior</td>
</tr>
</tbody>
</table>

Vulnerability Details

CVE ID: **CVE-2022-2988**

CVSS v3.1 Base Score 4.3 | Medium | CVSS:3.1/AV:N/AC:L/PR:N/UI:R/S:U/C:L/I:N/A:N

A **CWE-787: Out-of-bounds Write** vulnerability exists that could cause sensitive information leakage when accessing a malicious web page from the commissioning software.
Remediation

<table>
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<tr>
<th>Affected Product &amp; Version</th>
<th>Remediation</th>
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<tbody>
<tr>
<td>Ecostruxure™ Machine Expert – HVAC V1.4.0 and prior</td>
<td>No reboot is required. It is recommended that customers using SoMachine - HVAC upgrade to Ecostruxure™ Machine Expert – HVAC.</td>
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</table>

Customers should use appropriate patching methodologies when applying these patches to their systems. We strongly recommend the use of back-ups and evaluating the impact of these patches in a Test and Development environment or on an offline infrastructure. Contact Schneider Electric’s [Customer Care Center](https://www.se.com) if you need assistance removing a patch.

**General Security Recommendations**

We strongly recommend the following industry cybersecurity best practices.

- Locate control and safety system networks and remote devices behind firewalls and isolate them from the business network.
- Install physical controls so no unauthorized personnel can access your industrial control and safety systems, components, peripheral equipment, and networks.
- Place all controllers in locked cabinets and never leave them in the “Program” mode.
- Never connect programming software to any network other than the network intended for that device.
- Scan all methods of mobile data exchange with the isolated network such as CDs, USB drives, etc. before use in the terminals or any node connected to these networks.
- Never allow mobile devices that have connected to any other network besides the intended network to connect to the safety or control networks without proper sanitation.
- Minimize network exposure for all control system devices and systems and ensure that they are not accessible from the Internet.
- When remote access is required, use secure methods, such as Virtual Private Networks (VPNs). Recognize that VPNs may have vulnerabilities and should be updated to the most current version available. Also, understand that VPNs are only as secure as the connected devices.
For more information refer to the Schneider Electric Recommended Cybersecurity Best Practices document.

Acknowledgements

Schneider Electric recognizes the following researcher for identifying and helping to coordinate a response to this vulnerability:

<table>
<thead>
<tr>
<th>CVE</th>
<th>Researcher</th>
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<tr>
<td>CVE-2022-2988</td>
<td>Exodus Intelligence (exodusintel.com)</td>
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</table>

For More Information

This document provides an overview of the identified vulnerability or vulnerabilities and actions required to mitigate. For more details and assistance on how to protect your installation, contact your local Schneider Electric representative or Schneider Electric Industrial Cybersecurity Services: https://www.se.com/ww/en/work/solutions/cybersecurity/. These organizations will be fully aware of this situation and can support you through the process.

For further information related to cybersecurity in Schneider Electric's products, visit the company's cybersecurity support portal page: https://www.se.com/ww/en/work/support/cybersecurity/overview.jsp

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We are the most local of global companies. We are advocates of open standards and partnership ecosystems that are passionate about our shared Meaningful Purpose, Inclusive and Empowered values.

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Revision Control:

<table>
<thead>
<tr>
<th>Version 1.0</th>
<th>Original Release</th>
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<tbody>
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<td>10 January 2023</td>
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Product Security Office

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