EcoStruxure™ Control Expert

9 August 2022

Overview

Schneider Electric is aware of a vulnerability in its EcoStruxure™ Control Expert product. EcoStruxure™ Control Expert is the common programming, debugging and operating software for Modicon M340, M580, M580S, Premium, Momentum and Quantum ranges. Failure to apply the remediations provided below may risk the EcoStruxure™ Control Expert software to crash.

Affected Products and Versions

<table>
<thead>
<tr>
<th>Product</th>
<th>Version</th>
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<tr>
<td>EcoStruxure™ Control Expert</td>
<td>V15.1 HF001 and prior</td>
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Vulnerability Details

CVE ID: **CVE-2022-37302**

CVSS v3.1 Base Score 5.5 | Medium | CVSS:3.0/AV:L/AC:L/PR:N/UI:R/S:U/C:N/I:N/A:H

A **CWE-119: Improper Restriction of Operations within the Bounds of a Memory Buffer** vulnerability exists that could cause a crash of the Control Expert software when an incorrect project file is opened.

Remediation

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<tr>
<th>Affected Product &amp; Version</th>
<th>Remediation</th>
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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/ww/en/register) if you need assistance removing a patch.

If customers choose not to apply the remediation provided above, they should immediately apply the following mitigations to reduce the risk of exploit:
Schneider Electric Security Notification

- Configure the “file encryption” feature available in EcoStruxure™ Control Expert
- Customers are recommended to share project files only when configured with the encryption feature described above.
- Store the project files in a secure storage and restrict the access to only trusted users
- When exchanging files over the network, use secure communication protocols
- Only open project files received from trusted source
- Harden the workstation running EcoStruxure™ Control Expert

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-2022-37302</td>
<td>Jin Huang (ADLab of Venustech)</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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Schneider’s purpose is to empower all to make the most of our energy and resources, bridging progress and sustainability for all. We call this Life Is On.

Our mission is to be your digital partner for Sustainability and Efficiency.

We drive digital transformation by integrating world-leading process and energy technologies, end-point to cloud connecting products, controls, software and services, across the entire lifecycle, enabling integrated company management, for homes, buildings, data centers, infrastructure and industries.

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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<td>09 August 2022</td>
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Product Security Office

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