

Schneider Electric Security Notification

Modicon Controllers M241/ M251, M258 / LMC058 and M262

9 July 2024 (13 August 2024)

Overview

Schneider Electric is aware of a vulnerability in its Modicon Controllers M241 / M251, M258 / LMC058, and M262 products.

The [Modicon Controllers M241 / M251 / M258 / M262](#) and [Modicon Motion Controller LMC058](#) are Programmable Logic Controllers for performance-demanding applications.

Failure to apply the remediation provided below may risk a Cross-site Scripting or an open redirect attack which could result in an account takeover scenario or the execution of code in the user browser.

August 2024 Update: A remediation is now available for Modicon Controllers M262 and M241 / M251.

Affected Products and Versions

Product	Version
Modicon Controllers M241 / M251	Version prior to v5.2.11.24
Modicon Controllers M258 / LMC058	All versions
Modicon Controllers M262	Versions prior to v5.2.8.26

Vulnerability Details

CVE ID: **CVE-2024-6528**

CVSS v3.1 Base Score 5.4 | Medium | CVSS:3.1/AV:N/AC:L/PR:L/UI:R/S:C/C:L/I:L/A:N

CWE-79: Improper Neutralization of Input During Web Page Generation ('Cross-site Scripting') vulnerability exists that could cause a vulnerability leading to a cross-site scripting condition where attackers can have a victim's browser run arbitrary JavaScript when they visit a page containing the injected payload.

Note regarding vulnerability details: The severity of vulnerabilities was calculated using the CVSS Base metrics in version 3.1 ([CVSS v3.1](#)) without incorporating the Temporal and Environmental metrics. Schneider Electric recommends that customers score the CVSS Environmental metrics, which are specific to end-user organizations, and consider factors such

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as the presence of mitigations in that environment. Environmental metrics may refine the relative severity posed by the vulnerabilities described in this document within a customer's environment.

Remediation

Affected Product & Version	Remediation
<p>Modicon Controller M241 Version prior to v5.2.11.24</p>	<p>Modicon Controller M241 Firmware version 5.2.11.24 delivered with EcoStruxure™ Machine Expert v2.2.2 includes a fix for this vulnerability and can be updated through the Schneider Electric Software Update (SESU) application.</p> <p>https://www.se.com/ww/en/product-range/2226-ecostruxure-machine-expert-software/</p> <p>On the engineering workstation, update to v2.2.2 of EcoStruxure™ Machine Expert.</p> <p>Update Modicon Controller M241 to the latest Firmware and perform reboot</p>
<p>Modicon Controller M251 Version prior to v5.2.11.24</p>	<p>Modicon Controller M251 Firmware version 5.2.11.24 delivered with EcoStruxure™ Machine Expert v2.2.2 includes a fix for this vulnerability and can be updated through the Schneider Electric Software Update (SESU) application.</p> <p>https://www.se.com/ww/en/product-range/2226-ecostruxure-machine-expert-software/</p> <p>On the engineering workstation, update to v2.2.2 of EcoStruxure™ Machine Expert.</p> <p>Update Modicon Controller M251 to the latest Firmware and perform reboot</p>
<p>Modicon Controller M262 Version prior to v5.2.8.26</p>	<p>Modicon Controller M262 Firmware version 5.2.8.26 delivered with EcoStruxure™ Machine Expert v2.2.2 includes a fix for this vulnerability and can be updated through the Schneider Electric Software Update (SESU) application.</p>

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	<p>https://www.se.com/ww/en/product-range/2226-ecostruxure-machine-expert-software/</p> <p>On the engineering workstation, update to v2.2.2 of EcoStruxure™ Machine Expert.</p> <p>Update Modicon Controller M262 to the latest Firmware and perform reboot</p>
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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](#) 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:

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Mitigations

Affected Product & Version	Mitigations
<p>Modicon Controllers M241 / M251, M258, M262, and Modicon Motion Controller LMC058</p> <p><i>All versions</i></p>	<p>Customers should immediately apply the following mitigations to reduce the risk of exploit:</p> <ul style="list-style-type: none"> • Use controllers and devices only in a protected environment to minimize network exposure and ensure that they are not accessible from public internet or untrusted networks. • Ensure usage of user management and password features. User rights are enabled by default and forced to create a strong password at first use. • Deactivate the Webserver after use when not needed. • Use encrypted communication links. • Setup network segmentation and implement a firewall to block all unauthorized access to ports 80/HTTP and 443/HTTPS. • Use VPN (Virtual Private Networks) tunnels if remote access is required. • The “Cybersecurity Guidelines for EcoStruxure Machine Expert, Modicon and PacDrive Controllers and Associated Equipment” provide product specific hardening guidelines. <p>To ensure you are informed of all updates, including details on affected products and remediation plans, subscribe to Schneider Electric’s security notification service here: https://www.se.com/en/work/support/cybersecurity/security-notifications.jsp</p>

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.

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- 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.

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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About Schneider Electric

Schneider’s purpose is to **create Impact** by empowering 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 the trusted partner in **Sustainability and Efficiency**.

We are a **global industrial technology leader** bringing world-leading expertise in electrification, automation and digitization to smart **industries**, resilient **infrastructure**, future-proof **data centers**, intelligent **buildings**, and intuitive **homes**. Anchored by our deep domain expertise, we provide integrated end-to-end lifecycle AI enabled Industrial IoT solutions with connected products, automation, software and services, delivering digital twins to enable profitable growth **for our customers**.

We are a **people company** with an ecosystem of 150,000 colleagues and more than a million partners operating in over 100 countries to ensure proximity to our customers and stakeholders. We embrace **diversity and inclusion** in everything we do, guided by our meaningful purpose of a **sustainable future for all**.

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Revision Control:

<p>Version 1.0.0 <i>09 July 2024</i></p>	<p>Original Release</p>
<p>Version 2.0.0 <i>13 August 2024</i></p>	<p>A remediation is now available for Modicon Controllers M262 and M241 / M251.</p>