

Modicon M340 and BMXNOE0100 and BMXNOE0110

11 June 2024

Overview

Schneider Electric is aware of a vulnerability in its Modicon M340 and BMXNOE0100 and BMXNOE0110 products.

The <u>Modicon M340</u> is a programmable automation controller; <u>BMXNOE0100</u> and <u>BMXNOE0110</u> are network modules used with Modicon M340.

Failure to apply the mitigations provided below may prevent user to update the device firmware and prevent proper behavior of the webserver. The BMXNOE and Modicon M340 operations are not impacted by this vulnerability.

Affected Products and Versions

Product	Version
Modicon M340	All versions
Network module, Modicon M340, Modbus/TCP BMXNOE0100	All versions
Network module, Modicon M340, Ethernet TCP/IP BMXNOE0110	All versions

Vulnerability Details

CVE ID: CVE-2024-5056

CVSS v3.1 Base Score 6.5 | Medium | CVSS:3.1/AV:N/AC:L/PR:N/UI:N/S:U/C:N/I:L/A:L

CWE-552: Files or Directories Accessible to External Parties vulnerability exists which may prevent user to update the device firmware and prevent proper behavior of the webserver when specific files or directories are removed from the filesystem.

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 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.



Mitigations

Affected Product & Version	Mitigations
Modicon M340 Network module, Modicon M340, Modbus/TCP BMXNOE0100 Network module, Modicon M340, Ethernet TCP/IP BMXNOE0110 All versions	Schneider Electric is establishing a remediation plan for all future versions of Modicon M340, BMXNOE0100, BMXNOE0110 that will include a fix for this vulnerability. We will update this document when the remediation is available. Until then, customers should immediately apply the following mitigations to reduce the risk of exploit: • Setup network segmentation and implement a firewall to block all unauthorized access to FTP port 21/TCP on the devices. • FTP service is disabled by default. Deactivate the FTP service after use when not needed. • Configure the Access Control List following the recommendations of the user manuals: • "Modicon M340 for Ethernet Communications Modules and Processors User Manual" in chapter "Messaging Configuration Parameters": https://www.se.com/ww/en/download/document/31 007131K01000/ 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

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:

CVE	Researcher
CVE-2024-5056	Yanis Wang (DAS-Security)

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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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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