Schneider Electric Security Notification

Windows Print Spooler embedded in EcoStruxure™ Process Expert

9 November 2021

Overview

Schneider Electric is aware of a vulnerability in its EcoStruxure Process Expert product. The Ecostruxure Process Expert DCS is a single automation system to engineer, operate, and maintain your entire infrastructure for a sustainable, productive and market-agile plant.

CVE-2021-34527 and CVE-2021-1675, also known as PrintNightmare, affects a native, built-in Windows service named “Print Spooler” that is enabled by default on Windows machines. The purpose of Print Spooler is to manage printers or printer servers.

Ecostruxure Process Expert uses Microsoft embedded virtualization technology that cannot be patched using standard Microsoft update steps. An upcoming release of EcoStruxure Process Expert will address this issue directly.

Failure to apply the mitigations provided below may allow an attacker to perform privileged file operations, which could result in remote code execution.

Affected Product and Version

EcoStruxure Process Expert, all versions prior to V2021

Vulnerability Details

CVE ID: **CVE-2021-34527**

CVSS v3.1 Base Score 8.8 | High | CVSS:3.1/AV:N/AC:L/PR:L/UI:N/S:U/C:H/I:H/A:H

Windows Print Spooler Remote Code Execution Vulnerability

CVE ID: **CVE-2021-1675**

CVSS v3.1 Base Score 8.8 | High | CVSS:3.1/AV:N/AC:L/PR:N/UI:R/S:U/C:H/I:H/A:H

Windows Print Spooler Elevation of Privilege Vulnerability

Mitigations

Schneider Electric has established a remediation plan for all future versions of Ecostruxure Process Expert 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 perimeter firewall to filter all unauthorized access to RPC Endpoint Mapper (135/TCP) and SMB (139/TCP and 445/TCP).
• Disable the Print Spooler services when print functionality is not needed on all client machines that are authorized to interact with the EPE system server. Please refer to Microsoft Workaround [https://msrc.microsoft.com/update-guide/vulnerability/CVE-2021-34527](https://msrc.microsoft.com/update-guide/vulnerability/CVE-2021-34527)
• Harden all Windows workstations using the hardening recommendations found in the [Cybersecurity Reference Manual](https://www.se.com/en/work/support/cybersecurity/security-notifications.jsp)

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:


**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 for the devices that it is intended for.
- 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](https://www.se.com/en/work/support/cybersecurity/security-notifications.jsp) 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/](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](https://www.se.com/ww/en/work/support/cybersecurity/overview.jsp)

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Revision Control

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<th>Version 1.0</th>
<th>Original Release</th>
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