

Eaton Vulnerability Advisory

ETN-VA-2020-1007: DLL Hijacking Vulnerability

| Date | Overall Risk | CVSS v3.0 |
|-----------|--------------|-----------|
| 9/22/2020 | High | 7.8 |

Overview

Eaton has been made aware of security vulnerability in its 9000x Programming and Configuration Software. The software is used to set the configurations for the Eaton’s 9000 series of Industrial Control Drives.

Vulnerability Details

CVE-2020-6654

CVSS v3 Base Score – AV:L/AC:L/PR:N/UI:R/S:U/C:H/I:H/A:H

CWE-247 – Uncontrolled Search Path Element

CWE-246 – Untrusted Search Path

Eaton’s 9000x Programming and Configuration software v 2.0.38 and prior is susceptible to DLL hijacking vulnerability. An attacker can execute arbitrary code by replacing the vci11un6.DLL and cinpl.DLL when application tries to load the DLLs to perform normal operations. There are currently no reports of the vulnerability being exploited in the wild.

Affected Product(s) and Version(s)

Product – 9000x programing and configuration software

Version – 2.0.38 & Prior

Remediation & Mitigation

Remediation

Eaton has patched the security issue in the application and released a new version 2.0.41. The latest version can be downloaded from below location –

<https://www.eaton.com/content/dam/eaton/products/industrialcontrols-drives-automation-sensors/variable-frequency-drives/9000x-drive-setup-v2.0.41.zip>

General Security Best Practices

- Restrict exposure to external networks for all control system devices and/or systems and ensure that they are not directly accessible from the open Internet.
- Deploy control system networks and remote devices behind barrier devices (e.g. firewalls, data diodes) and isolate them from business networks.

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- Remote access to control system networks should be made available on a strict need-to-use basis. Remote access should use secure methods, such as Virtual Private Networks (VPNs), updated to the most current version available.
- Regularly update/patch software/applications to latest versions available, as applicable.
- Enable audit logs on all devices and applications.
- Disable/deactivate unused communication channels, TCP/UDP ports and services (e.g., SNMP, FTP, BootP, DHCP, etc.) on networked devices.
- Create security zones for devices with common security requirements using barrier devices (e.g. firewalls, data diodes).
- Change default passwords following initial startup. Use complex secure passwords or passphrases.
- Perform regular security assessments and risk analysis of networked control systems.

For more details on cybersecurity best practices and leverage Eaton’s Cybersecurity as a Service, please consult the following –

- Eaton offers a suite of cybersecurity assessment and life-cycle management services to help identify vulnerabilities and secure your operational technology network. These services can help you complete the recommended remediation and mitigation actions and strengthen your overall network security. More information about these services are available at www.eaton.com/cybersecurityservices. If you need immediate support, please call +1-800-498-2678 to connect with a representative.
- Cybersecurity Considerations for Electrical Distribution Systems ([WP152002EN](#))
- Cybersecurity Best Practices Checklist Reminder ([WP910003EN](#))

Acknowledgement

Eaton thanks the below researcher(s) for their coordinated support on the security vulnerabilities: -

- CVE-2020-6654 – Yongjun liu

Additional Support and Information

For additional information, including a list of vulnerabilities that have been reported on our products and how to address them, please visit our Cybersecurity web site www.eaton.com/cybersecurity, or contact us at CybersecurityCOE@eaton.com.

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Revision Control:

| Date | Version | Notes |
|-----------|---------|-------------------------------|
| 9/22/2020 | v1.0 | Initial Security notification |

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