
CYBER SECURITY NOTIFICATION

ARM600

Cyber Security Notification: UEFI vulnerability

ABBVREPO081

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Purpose

ABB has a rigorous cyber security program which involves not only internal processes to ensure product security but also external engagement with the wider cybersecurity community and 3rd party suppliers. Occasionally an issue is identified with the potential to impact ABB products and systems.

Generally, this means 3rd party product vulnerabilities or life-cycle issues to which ABB products may have a dependency on. Another example could be threats which are not directly targeting ABB products however may constitute a threat to environments where ABB products/systems operate.

When a potential threat is identified or reported, ABB immediately initiates our vulnerability handling process. This entails an evaluation to determine if there are steps which can be taken to reduce risk and maintain functionality for the end user.

The result may be the publication of a Cyber Security Notification. This intends to notify customers of the issue and provide details on which products are impacted, how to mitigate the vulnerability or explain workarounds that minimize the potential risk as much as possible.

The release of a Cyber Security Notification should not be assumed as an indication of an active threat or ongoing campaign targeting the products mentioned here. If ABB is aware of any specific threats it will be clearly mentioned in the communication.

The publication of this Cyber Security Notification is an example of ABB's commitment to the user community in support of this critical topic. The release of a Notification intends to provide timely information which is essential to help ensure our customers are fully informed. See details below and refer to the section on "General security recommendations" for further advise on how to keep your systems secure.

Background

On 11-JUN-2021 vulnerability CVE-2021-21557 was made public.

This vulnerability affects DELL UEFI versions < 2.5.1 in DELL R340 server. Subsequently, a successful exploit could allow local privileged attackers to execute arbitrary code in the server.

Affected products

ABB has identified the following products which are likely affected by the vulnerability.

- ARM600 M2M Gateway ARM600C2500NA
- ARM600 M2M Gateway ARM600C2505NA

Recommended immediate actions

Verify that the UEFI version is 2.5.1 or newer (in which case, no further actions are needed regarding this vulnerability).

The system setup can be accessed in server bootup by pressing F2 when the text "F2 = System setup" appears in the screen. On the System Setup Main Menu screen, select System BIOS. Under system information, you can see the BIOS (UEFI) version.

If the UEFI version is < 2.5.1, update the UEFI according to DELL's instructions. See the following link for more information <https://www.dell.com/support/home/fi-fi/product-support/product/poweredge-r340/drivers>.

Details

See <https://www.dell.com/support/kbdoc/fi-fi/000187958/dsa-2021-103-dell-emc-poweredge-server-security-update-for-bios-vulnerabilities> for more details.

General security recommendations

For any installation of software-related ABB products we strongly recommend the following (non-exhaustive) list of cyber security practices:

- Isolate special purpose networks (e.g. for automation systems) and remote devices behind firewalls and separate them from any general purpose network (e.g. office or home networks).
- Install physical controls so no unauthorized personnel can access your devices, components, peripheral equipment, and networks.
- Never connect programming software or computers containing programming software to any network other than the network for the devices that it is intended for.
- Scan all data imported into your environment before use to detect potential malware infections.
- Minimize network exposure for all applications and endpoints to ensure that they are not accessible from the Internet unless they are designed for such exposure and the intended use requires such.
- Ensure all nodes are always up to date in terms of installed software, operating system and firmware patches as well as anti-virus and firewall.
- 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.

More information on recommended practices can be found in the following documents:

1MRS758860, revision F, Arctic Cyber Security Deployment Guideline

Support

For additional instructions and support please contact your local ABB service organization. For contact information, see www.abb.com/contactcenters.

Information about ABB's cyber security program and capabilities can be found at www.abb.com/cyber-security.

Revision history

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