

Product Security Bulletin

IMPORTANT INFORMATION – PLEASE READ AND KEEP

Ripple20 Security Vulnerabilities

Date: 2020-09-10 (last update)

Background

Security researchers have found multiple zero-day security vulnerabilities in the low-level TCP/IP software library developed by Treck, Inc. ([summary](#)). The vulnerabilities, named **Ripple20** affect a broad range of networked devices from different manufacturers.

What Ripple20 Does

Ripple20 poses a significant risk from the devices still in use. Potential risk scenarios include:

- An attacker from outside the network taking control over a device within the network, if internet facing.
- An attacker who has already managed to infiltrate a network can use the library vulnerabilities to target specific devices within it.
- An attacker could broadcast an attack capable of taking over all impacted devices in the network simultaneously.
- An attacker may utilize affected device as a way to remain hidden within the network for years
- A sophisticated attacker can potentially perform an attack on a device within the network, from outside the network boundaries, thus bypassing NAT configurations. This can be done by performing a MITM attack or a DNS cache poisoning.
- In some scenarios, an attacker may be able to perform attacks from outside the network by replying to packets that leave network boundaries, bypassing NAT

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Response

Affected Products

Vyairé's medical devices **do not make use** of the vulnerable TCP/IP library developed by Treck Inc. Therefore, **no medical devices** manufactured by Vyairé are directly affected by Ripple20.

However, a range of Vyairé's Respiratory Diagnostics products are PC-based and Vyairé has been supplying Dell PCs with these products to its customers.

How Dell Is Responding

Dell has communicated Ripple20 to its customers in [statement](#) made available on their website.

Dell Client Platforms, which include the PCs sold by Vyairé as part of Respiratory Diagnostics products are affected by Ripple20.

Dell has released fixes for multiple vulnerabilities existing in the Treck TCP/IP Stack in an Intel component ([INTEL-SA-00295](#)) used within Dell Client Platforms. Customers can review the Dell Security Advisory ([DSA-2020-143](#)) for affected products, versions and additional information.

Mitigations & Compensating Controls

Vyairé recommends its customers to ensure that the BIOS of any affected Dell PC is updated to mitigate the vulnerabilities reported by Dell as soon as possible.

Links to BIOS updates for Dell PC models used by Vyairé:

- Dell OptiPlex XE – not affected
- Dell OptiPlex XE2 – not affected
- Dell OptiPlex 7010 – not affected
- [Dell OptiPlex 7050](#) – System BIOS version 1.13.5, released 24-JUN-2020
- [Dell OptiPlex 5060](#) – System BIOS version 1.7.1, released 17-JUL-2020
- [Dell OptiPlex 5070](#) – System BIOS version 1.4.4, released 30-JUN-2020
- [Dell Latitude 5500](#) – System BIOS version 1.9.1, released 10-AUG-2020

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- Dell Latitude 5590 – System BIOS version 1.14.0, expected September 2020
- [Dell Latitude E5550](#) – System BIOS version A24, released 30-JUN-2020
- Dell Latitude E5570 – System BIOS version 1.23.3, expected October 2020
- Dell Latitude E5580 – not affected

A complete list of affected Dell PC models and BIOS updates can be found in the Dell Security Advisory here: [DSA-2020-143](#)

Generic controls

- Ensure your data has been backed up and stored according to your individual process and that your disaster recovery procedures are in place.
- Update your anti-virus and malware protection, where available.

For product or site-specific concerns, contact your Vyair service representative.

For more information on Vyair's proactive approach to product security and vulnerability management, contact us at productsecurity@vyaire.com or visit www.vyaire.com/product-security.



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