

Array Networks Security Advisory: CPU Side-channel Vulnerabilities (CVE-2017-5715 CVE-2017-5753 CVE-2017-5754)

Advisory Date: January 16, 2018

Overview

Researchers recently disclosed three CPU side-channel vulnerabilities, which exploit the implementation of speculative execution of instructions on many modern microprocessor architectures to perform side-channel information disclosure attacks. These vulnerabilities could allow an unprivileged local attacker, in specific circumstances, to read privileged memory belonging to other processes or memory allocated to the operating system kernel.

The first two vulnerabilities CVE-2017-5715 and CVE-2017-5753 are collectively known as "Spectre". The third vulnerability CVE-2017-5754 is also known as "Meltdown".

Reference:

CVE-2017-5715 http://cve.mitre.org/cgi-bin/cvename.cgi?name=CVE-2017-5715
CVE-2017-5753 http://cve.mitre.org/cgi-bin/cvename.cgi?name=CVE-2017-5754
CVE-2017-5754 http://cve.mitre.org/cgi-bin/cvename.cgi?name=CVE-2017-5754

Impact

In order to exploit any of these vulnerabilities, an attacker must be able to run forged code on an affected appliance. Array Networks APV and AG Series hardware products have strict remote management access control and users have no opportunities to execute custom malicious code on the appliance. Therefore, Array Networks APV and AG Series hardware products are not affected by these vulnerabilities.

Array Networks vAPVs and vxAGs, even while not directly affected by any of these vulnerabilities, may be affected by such attacks if the hosting environments (such as VMware, KVM, or Cloud platforms), are vulnerable.

Array Networks AVX Series network functions platform is not affected by these vulnerabilities, but if it is running a vulnerable virtual appliance, the vulnerable virtual appliance might be exploited to attack other virtual appliances on the AVX appliance. Array Networks recommends you to use only vAPV, vxAG, and third-party virtual appliances provided by Array-certified vendors.



Status

Array Networks will continue to review its product lines and monitor the situation and will provide possible future software updates to further harden the systems if new information comes to light.