

## SECURITY ADVISORY – Processor based “Speculative Execution” Vulnerabilities AKA “Spectre” and “Meltdown” – Version 1.4

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# Security Advisory Relating to the “Speculative Execution” Vulnerabilities with some microprocessors

DATE PUBLISHED: January 12<sup>th</sup>, 2018

This information applies to Polycom products and the “Spectre” and “Meltdown” vulnerabilities. Polycom is continuing to investigate the impact to our product line to determine which products may be affected by these vulnerabilities and will release patches or confirmation of non-vulnerability on a product-by-product basis.

Any information in this Advisory is subject to change as our investigation progresses.

*Please Note: This is a living document, and Polycom will update this advisory regularly as the investigation progresses and new information becomes available. The newest version of this document will always reside at the following URL:*

[http://support.polycom.com/PolycomService/support/us/support/documentation/security\\_center.html](http://support.polycom.com/PolycomService/support/us/support/documentation/security_center.html)

## Vulnerability Summary

### Speculative Execution Vulnerabilities, aka “Spectre” and “Meltdown”

On January 3, 2018 researchers disclosed information on three vulnerabilities identified in some microprocessors that could allow an attacker to exploit processor speculation or take advantage of cache timing side-channels. Under specific circumstances, these vulnerabilities could potentially allow unprivileged local attacker to read privileged data contained in secure areas of system memory belonging to other processes or system kernel.

There are three known variants of the issue:

- Variant 1: CVE-2017-5753 - speculative execution bounds-check bypass
- Variant 2: CVE-2017-5715 - speculative execution branch target injection
- Variant 3: CVE-2017-5754 - speculative execution permission faults handling

## Impact and Risk

Polycom is investigating and will continue to investigate all products and product lines to determine if any allow exploitation of unprivileged reading of secure data in memory. Polycom uses a wide variety of microprocessors across our products and does not typically disclose the specific CPUs used in a specific product.

## Customer Mitigations

Many Polycom products are deployed and accessed in a manner which largely minimizes the classes of vulnerabilities discussed in this document because they are accessed only by privileged accounts, do not typically allow access to the operating system for normal operation, nor do they allow the installation of custom code and the ability to load or execute code is limited to privilege users and firmware signature validation blocks the installation of firmware not signed by Polycom.

With that being said, it is important to follow these general recommendations:

- Limit access to critical infrastructure equipment to only trusted administrators from trusted administrative networks or hosts.
- Ensure that all default passwords have been changed.

Some Polycom infrastructure products do by default provide unprivileged OS-level service accounts for configuration and maintenance. On these systems, we recommend: changing default passwords, restricting account access to trusted administrators and disabling shell access.

Many modern CPUs use speculative execution and are potentially susceptible to these types of attacks. However, it is important to note an attacker must be able to access the network, gain access to the device, and finally, execute malicious code on a vulnerable device to exploit one of these vulnerabilities and gain access to restricted memory.

The impact of these vulnerabilities is greatest on multi-user systems – shared hosting, cloud services, virtual machines, etc. – where unprivileged access to the system resources is generally available.

Polycom will be developing software fixes for supported products found to be vulnerable to prevent these types of attacks. This is a dynamic environment and we are striving to provide the most up to date information. This advisory will be updated within a week or sooner if there is additional information to communicate.

## Products

Product	Variant 1: bounds check bypass (CVE-2017-5753)	Variant 2: branch target injection (CVE-2017-5715)	Variant 3: permission fault handling (CVE-2017-5754)
Group Series	Vulnerable	Vulnerable	Not Vulnerable
Centro	Vulnerable	Vulnerable	Not Vulnerable
Medialign	Vulnerable	Vulnerable	Not Vulnerable
Debut	Investigating	Investigating	Investigating
HDX	Not Vulnerable	Not Vulnerable	Not Vulnerable
Pano	Vulnerable	Vulnerable	Not Vulnerable
RealPresence Desktop and Mobile (RPD / RPM)	Not Vulnerable	Not Vulnerable	Not Vulnerable
VVX 501/601	Vulnerable	Vulnerable	Not Vulnerable

All other VVX	Not Vulnerable	Not Vulnerable	Not Vulnerable
Trio (8800, 8500)	Vulnerable	Vulnerable	Not Vulnerable
Trio Visual+	Vulnerable	Vulnerable	Not Vulnerable
CX Phones (CX5100, CX5500)	Vulnerable	Vulnerable	Not Vulnerable
SoundPoint	Not Vulnerable	Not Vulnerable	Not Vulnerable
SoundPoint IP	Not Vulnerable	Not Vulnerable	Not Vulnerable
SoundStation	Not Vulnerable	Not Vulnerable	Not Vulnerable
SoundStation IP	Not Vulnerable	Not Vulnerable	Not Vulnerable
SoundStructure	Not Vulnerable	Not Vulnerable	Not Vulnerable
RealPresence Resource Manager	Vulnerable	Vulnerable	Vulnerable
RealPresence Collaboration Server / RMX	Vulnerable	Vulnerable	Vulnerable
RealPresence Access Director	Vulnerable	Vulnerable	Vulnerable
RealPresence MediaSuite	Vulnerable	Vulnerable	Vulnerable
RealPresence WebSuite	Vulnerable	Vulnerable	Vulnerable
VBP	Investigating	Investigating	Investigating
RealAccess Cloud Service	Not Vulnerable	Not Vulnerable	Not Vulnerable
Polycom Cloud Service	Not Vulnerable	Not Vulnerable	Not Vulnerable
RP Touch	Vulnerable	Vulnerable	Not Vulnerable
Polycom Touch Control	Vulnerable	Vulnerable	Not Vulnerable
ISDN Gateway	Not Vulnerable	Not Vulnerable	Not Vulnerable
DMA	Vulnerable	Vulnerable	Vulnerable
RealConnect for O365	Investigating	Investigating	Investigating
VoxBox	Investigating	Investigating	Investigating
VoiceStation/VTX	Not Vulnerable	Not Vulnerable	Not Vulnerable
SoundStation 2W	Investigating	Investigating	Investigating
VVX D60 DECT	Not Vulnerable	Not Vulnerable	Not Vulnerable

### CVSS v3 Base Metrics:

To assist our customers in the evaluation of this vulnerability; Polycom leverages the Common Vulnerability Scoring System (CVSS). This system provides an open framework for communicating the characteristics and impacts of information technology vulnerabilities that better enable our customers to make informed decisions and assess the impact on their environment.

Base CVSS v3 Scores:

**Speculative Execution Vulnerability:** 5.6 Medium (CVSS:3.0/AV:L/AC:H/PR:L/UI:N/S:C/C:H/I:N/A:N)

For more information on CVSS v3 please see: <https://nvd.nist.gov/vuln-metrics/cvss>

## Severity: Medium

Rating	Definition
<b>Critical</b>	A vulnerability, which, if exploited would allow malicious code to execute, potentially without a user being aware.
<b>High</b>	A vulnerability, which, if exploited could impact the confidentiality, integrity, or availability of data, or of the integrity or availability of resources.
<b>Medium</b>	A vulnerability that is limited to a significant degree by factors such as default configuration, auditing, or is difficult to exploit.
<b>Low</b>	A vulnerability that has minimal impact to the system and is extremely difficult to exploit.

## Contact

*Any customer using an affected system who is concerned about this vulnerability within their deployment should contact Polycom Technical Support – either call 1-800-POLYCOM or visit:*

[http://support.polycom.com/PolycomService/support/us/support/documentation/security\\_center.html](http://support.polycom.com/PolycomService/support/us/support/documentation/security_center.html)

*For the latest information, you may also find value in the security guidance and security news located at:*

<http://www.polycom.com/security>

## Note

The below applies to all Polycom security publications:

Polycom may at times issue either a **Security Advisory** or a **Security Bulletin** with regards to a particular vulnerability or set of vulnerabilities. If a **Security Advisory** is issued, this means that one more Polycom products are under investigation or verified by Polycom to be affected by one or more vulnerabilities. If a **Security Bulletin** is issued, Polycom is providing its customers with information about one or more vulnerabilities that have not been found by Polycom to directly affect any Polycom products, but that may be mistakenly thought to affect Polycom products. A **Security Advisory** might also be issued when a customer's environment might be affected, when false positives might occur from vulnerability scans, or when any other possible (but not actual) concern might exist regarding Polycom products and the vulnerability.

## Revision History

Revision 1.0 – Original publication: January 4<sup>th</sup>, 2018

Revision 1.1 – Updated Summary, Impact and Risk, Mitigations and Notes details: January 5<sup>th</sup>, 2018

Revision 1.2 – Updated product list: January 9<sup>th</sup>, 2018

Revision 1.3 – Updated status on several products and revised CVSS score: January 10<sup>th</sup>, 2018

Revision 1.4 – Update product status, updated Vulnerability Summary and Mitigations: January 12<sup>th</sup>, 2018

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