

Windows 10 KB4482887 update is officially released with Specter patch

Microsoft finally released a Windows 10 KB4482887 bug fix update for the 1809 build, including patches for known bugs, including Retpoline Specter, an Action Center error and many other minor bugs.

Microsoft finally released a Windows 10 KB4482887 bug fix update for the 1809 build, including patches for known bugs, including Retpoline Specter, an Action Center error and many other minor bugs.

This update is currently available to all Windows 10 October users (build 1809), and can be installed via Windows Update. To install this update, simply navigate to Settings -> Update & Security -> Windows Update, and then check for new updates.

We have outlined the most important changes in this Windows 10 update right below.



1. This is the interface of Lite OS, Microsoft's new operating system, competitor with Chrome OS

Fix Retpoline Spectre v2 error

In January 2018, Google revealed serious security vulnerabilities that appeared on CPUs called Specter and Meltdown, using execution channels to allow multiple processes to access the memory of other programs. but as usual they have absolutely no access. This vulnerability is applied on almost all processors to increase computer performance. This results in malicious programs stealing data such as decryption keys, master passwords in password-management programs or sensitive email that are being read from other programs that can be freely done. monsters' work on your system.

The aforementioned vulnerability affects almost all modern processors, including Intel, ARM, as well as AMD, thereby affecting devices and operating systems that use them. Besides, because these errors stem from the CPU hardware design, many processor manufacturers have to release microcode updates to provide guidance to users about the steps to be taken to limit and minimize the damage caused by these two vulnerabilities.

As explained in a new article about this vulnerability, Microsoft has begun studying a new fix using a mitigation measure called Retpoline, discovered by Google, to help prevent the processor from entering 'unsafe speculative execution'.

```
sh-4.2# uname -r
4.14.13-1.el7.elrepo.x86_64
sh-4.2# cd spectre-meltdown-checker/
sh-4.2# sh spectre-meltdown-checker.sh
Spectre and Meltdown mitigation detection tool v0.31

Checking for vulnerabilities against running kernel Linux 4.14.13-1.el7.elrepo.x86_64 #1 SMP Wed Jan 10 15:12:12 EST 2018 x86_64
CPU is Intel(R) Xeon(R) CPU E5-2670 v2 @ 2.50GHz

CVE-2017-5753 [bounds check bypass] aka 'Spectre Variant 1'
* Checking count of LFENCE opcodes in kernel: NO
> STATUS: VULNERABLE (only 25 opcodes found, should be >= 70, heuristic to be improved when official patches become available)

CVE-2017-5715 [branch target injection] aka 'Spectre Variant 2'
* Mitigation 1
+ Hardware (CPU microcode) support for mitigation
+ The SPEC_CTRL MSR is available: YES
+ The SPEC_CTRL CPUID feature bit is set: NO
+ Kernel support for IBRS: NO
+ IBRS enabled for Kernel space: NO
+ IBRS enabled for User space: NO
* Mitigation 2
+ Kernel compiled with retpoline option: NO
+ Kernel compiled with a retpoline-aware compiler: NO
> STATUS: VULNERABLE (IBRS hardware + kernel support OR kernel with retpoline are needed to mitigate the vulnerability)

CVE-2017-5754 [rogue data cache load] aka 'Meltdown' aka 'Variant 3'
+ Kernel supports Page Table Isolation (PTI): YES
+ PTI enabled and active: YES
+ Checking if we're running under Xen PV (64 bits): NO
> STATUS: NOT VULNERABLE (PTI mitigates the vulnerability)

A false sense of security is worse than no security at all, see --disclaimer
sh-4.2#
```

1. Microsoft introduced a new tool to turn an image table into an editable Excel table

Microsoft has stated that restrictive measures Retpoline can be made much faster than the initial fixes Microsoft has released. To use this restriction, users will need to use an AMD processor or Intel Broadwell processor and previous models.

'This method is much faster than running all kernel mode code with branch speculation limits (IBRS is set to 1). However, this structure is only safe to use on processors, in which the RET instruction is not speculative based on the content of the indirect branch (indirect branch predictor). These CPUs include all AMD processors, as well as Intel processors code-named Broadwell, according to the manufacturer's whitepaper white paper. In addition, Retpoline will not apply to Skylake and Intel's later processors ".

Restricted method Retpoline has been tested on Windows 10 Insider since the 18272 build, and with the appearance of this new update on build 1809, Microsoft has basically provided quite a few solutions to limit errors. This annoying security for users. The patches will not be activated immediately, but will be deployed over the next few months to ensure new issues do not arise on a large scale.

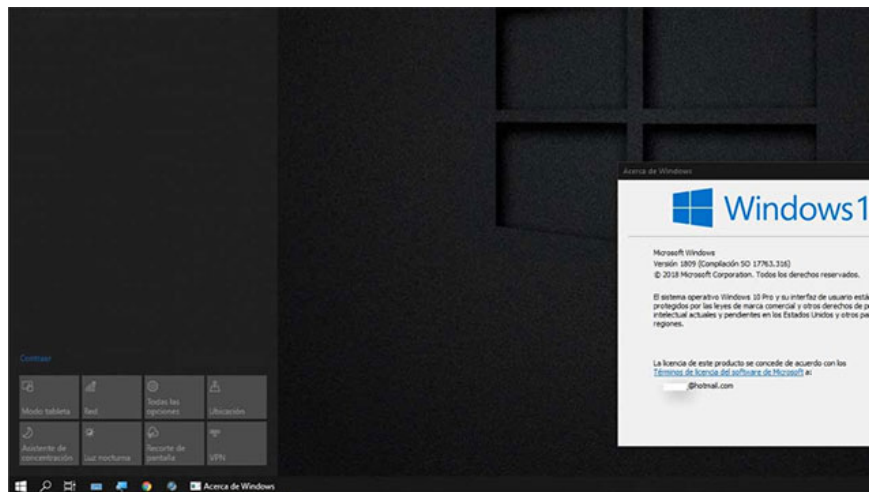
"In the coming months, we will gradually enable Retpoline as part of the phased deployment through cloud configuration. Due to the complexity of the deployment process and related changes, they are I will only enable the performance benefit of Retpoline for Windows 10 version 1809 and newer versions ".

1. Logo leakage and Microsoft Edge screenshots based on Chromium

Fixed a bug in Action Center

With this update, Microsoft has finally fixed an annoying bug for Windows 10 October 2018 users, which has existed for a long time.

Some users have complained that when they access the Action Center, this application will quickly appear on the left side of the screen when opened, then move to the right, so on and cause a lot of problems. uncomfortable for users.



This bug was originally fixed in Windows 10 Insider builds and is now included in the Windows 10 build 1809 build.

You can read the full changelog of this update here.

You finished reading the article "**Windows 10 KB4482887 update is officially released with Specter patch**" edited by the [TipsMake](#) team. We hope this article has provided you with many useful tech tips and tricks. You can search for similar articles on tips and guides. Thank you for reading and for following us regularly.