



Issued 1/11/18

Microsoft Says Security Fixes will Noticeably Slow Older PCs

While the patches for Meltdown and one variant of Spectre will have a "minimal performance impact," fixing a second Spectre variant through low-level microcode imposes a tangible speed penalty -- and it's particularly bad on systems released around 2015 or earlier. If you have a PC with a 6th- generation Intel Core processor or later, you should only see a hit in the "single-digit" percentage range. That's small enough that you might not notice a thing. If you're using a 4th-generation Core or older CPU, however, you'll see "more significant slowdowns," some of which could be noticeable. And that's if you're using Windows 10. Most Windows 7 or 8 users on similar hardware should notice the effect, while Windows Server is bound to take a more substantial performance blow due to its heavy dependence on I/O. The newer parts aren't as badly affected since Intel can limit the instructions it uses to disable branch speculation (used in the exploits to snoop on protected memory). Windows 10, meanwhile, is faster because it tosses out some legacy approaches to switching between user memory and kernel memory. If you're affected, you'll most likely see the performance drop once Intel rolls out its patches in the days ahead.

