Enabling Bash on Windows 10

by Jonathan Caicedo

Why?

Microsoft recently partnered with Canonical (the makers of Ubuntu) to bring a fully working Linux environment to Windows. If you already have Windows 10 installed on your PC, running the Linux tools you need for this class can be a lot simpler using this method, than say dual-booting with a Linux distro.

Why Bash on Windows rather than dual-boot?

- Everything is in one environment, as opposed to two.
- Don't have to worry about partitioning.
- Uses much much less disk space.
- Has everything you would get from a dual-boot, without the hassle.

Why Bash on Windows rather than virtualize (VirtualBox)?

- Virtually no overhead (no performance loss).
- Uses much less disk space.
- No need to switch environments

Why Bash on Windows rather than Cygwin?

- More native (made by Microsoft and integrated into Windows, rather than a third party application)
- Easier to install and remove software (apt-get vs. running Cygwin's setup)

How?

First, we need to check if you're running the Windows 10 Anniversary Update. To do this, press the start menu, and type `winver`. A window like this should appear.

If your version number is **equal to, or greater** than 1607, great! You can move on.

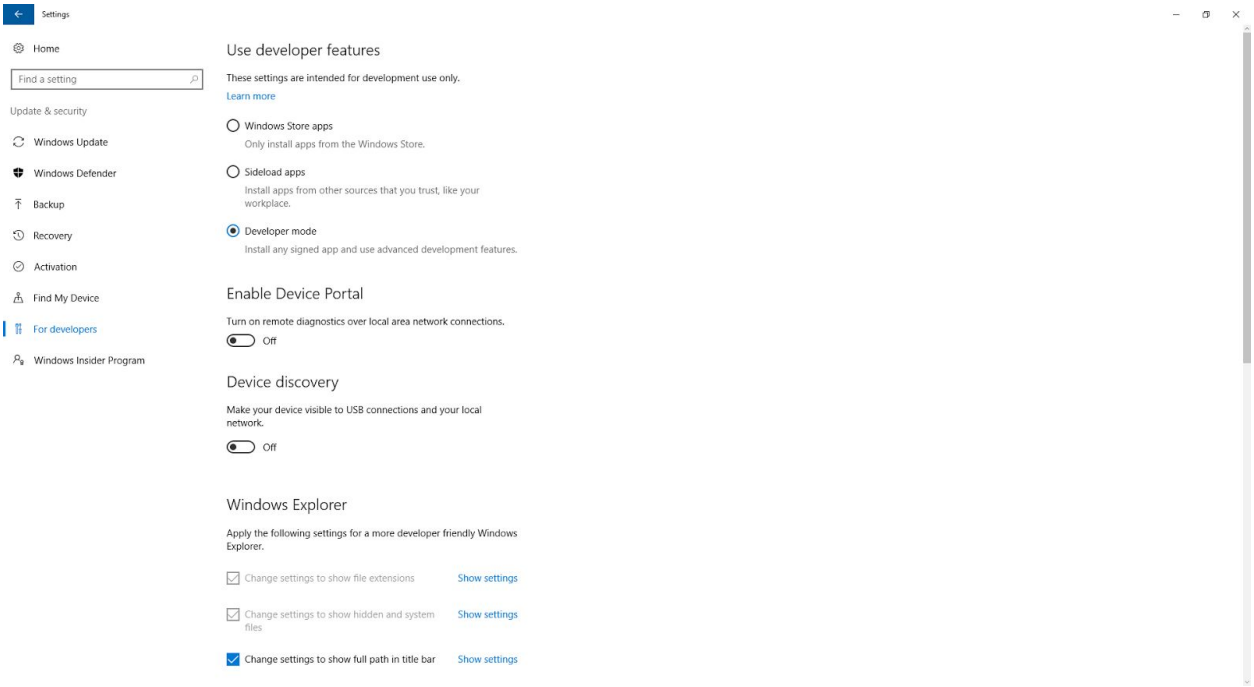
If not, you can force Windows to update by using the update tool, here.

After you're sure you're running the Anniversary Update, you can move on.

Enabling Developer Mode

Enabling Developer Mode grants us access to the Bash on Windows tool.

To enable, click the start menu, and type click the settings icon in the bottom left (right above the power icon). Then, click *Update & security*. After that, click *For developers.*

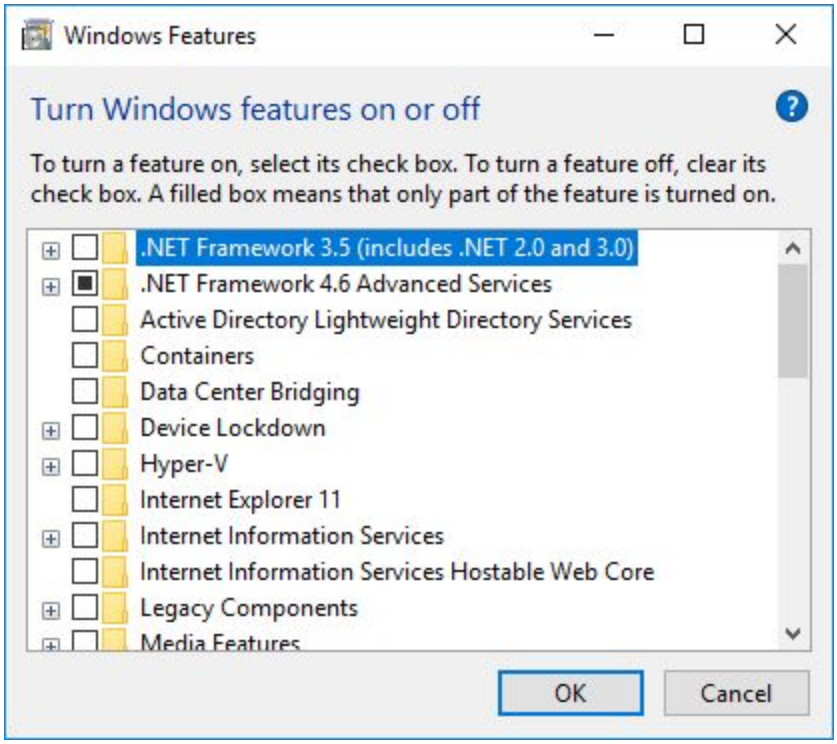


Check the bubble next to developer mode, and press Yes if prompted.

Installing Bash on Windows

Click start, and type *Control Panel*. Click *Programs* (if you don't see it, change to Category view in the top right.)

Then, click Turn Windows features on or off (it's under Programs and Features towards the top).



Scroll down until you see *Windows Subsystem for Linux (Beta)*. Check the box next to it, and press OK. Restart your computer if prompted.

After restarting, click the start menu and type *bash.* At each prompt, type yes.

After that's finished, you can run Bash on Windows by searching it in the start menu.