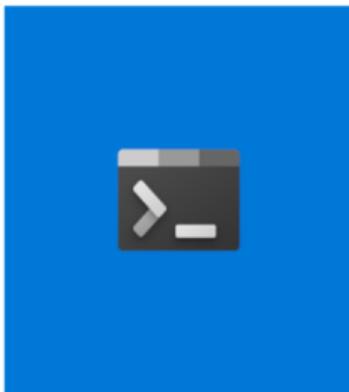




Installing and Using the Windows Terminal Preview Edition

Created by Anne Barela



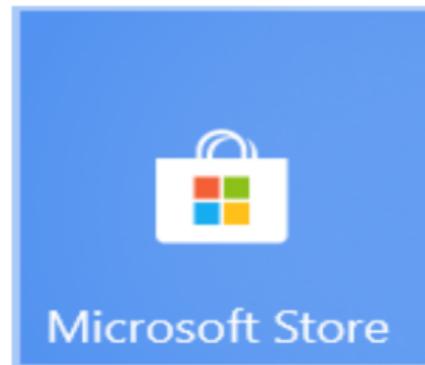
Windows Terminal (Preview)

Microsoft Corporation • Developer tools > Utilities

★★★★★ 68



EVERYONE



<https://learn.adafruit.com/installing-and-using-the-windows-terminal-preview-edition>

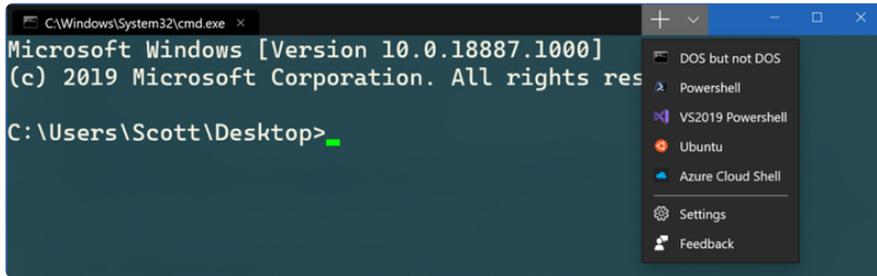
Last updated on 2024-03-08 03:28:44 PM EST

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Overview

The Windows Terminal is a new, modern, fast, efficient, powerful, and productive terminal application for Windows 10 users of command-line tools and shells like Command Prompt, PowerShell, and the Windows Subsystem for Linux (WSL). Its main features include multiple tabs, Unicode and UTF-8 character support, a GPU accelerated text rendering engine, and (with a bit of JSON editing) custom themes, styles, and configurations.



Many command line users have wanted a more customizable, more feature packed command line since, well, Windows 2.0 (or MSDOS 2.0 if you're older). Microsoft has a team dedicated to this project and makes [all their code available for user contributions via GitHub \(https://adafru.it/F8H\)](https://adafru.it/F8H). And yes, it is Open Source software.

Features

- Multiple tabs
- Full Unicode support
- GPU-accelerated text rendering
- Full customizability

Using the preview Windows Terminal app requires Windows 10 version 18362 or later (May, 2019). It will not work on prior versions of Windows like XP, Windows 7, or 8.

This guide is intended to get you started with kicking the tires of the Windows Terminal Preview released on June 21, 2019.

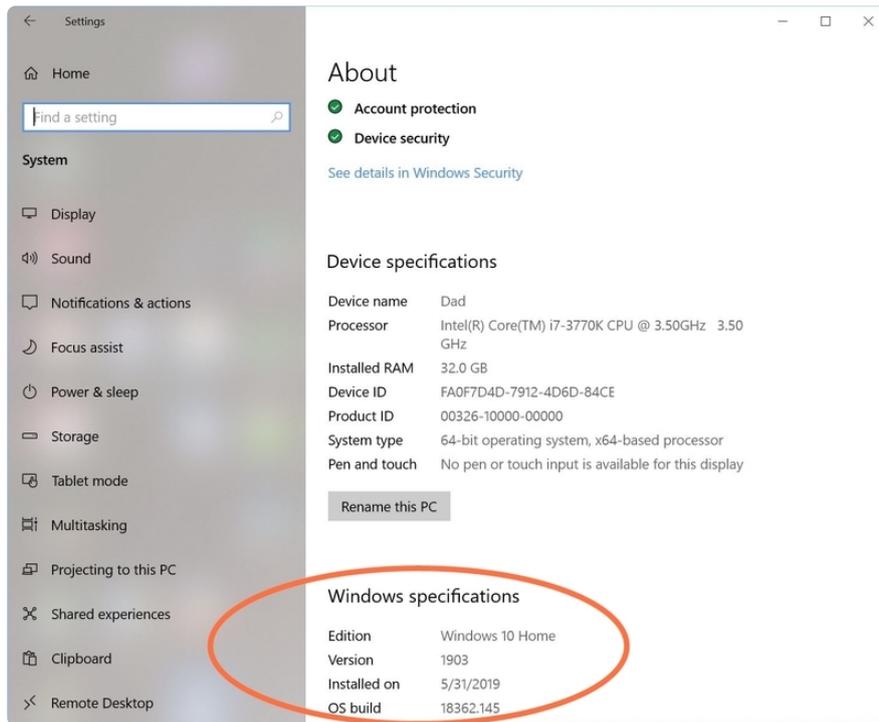
Requirements

- Windows 10 version 18362.0 or higher

If your version of Windows is older than the May, 2019 update, you'll need to upgrade your version of Windows 10. See the next page on steps to do that.

Upgrading Windows takes some time and several reboots. Save your work if you plan to upgrade and set aside some time.

Upgrading Windows 10



You can check your version of Windows 10 by clicking the Start icon in the lower left of the screen, click the **gear icon** (Settings) then **Update and Security** then on the right "**OS build info**". You should get a screen similar to that above. See the version and date under **Windows Specifications**.

You will need the May 2019 Update (or better) to get the features used in this article. Directly upload the update by going to <https://www.microsoft.com/en-us/software-download/windows10> (<https://adafru.it/CUF>). Click the **Update now** button to get the update. This saves time over looking to update from the Settings.

Download Windows 10

Windows 10 May 2019 Update now available

The Update Assistant can help you update to the latest version of Windows 10. To get started, click **Update now**.

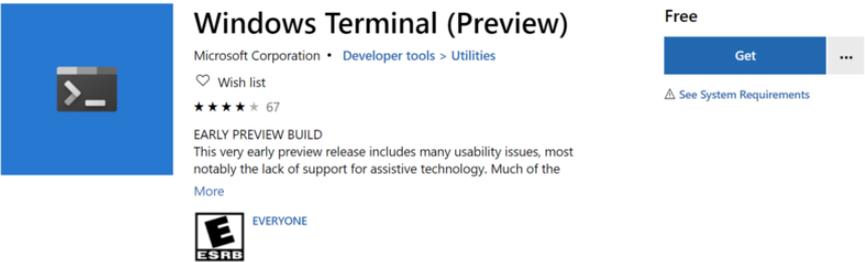
[Update now](#)

[Privacy](#)

The update process will take some time. You can continue to work during the download process but save your work before agreeing to install. The PC will reboot several times during the installation.

When complete, check the OS version again as described at the top of this page and ensure it is 18362.145 or higher.

The Windows Terminal App



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Wish list

★★★★★ 67

EARLY PREVIEW BUILD
This very early preview release includes many usability issues, most notably the lack of support for assistive technology. Much of the

[More](#)

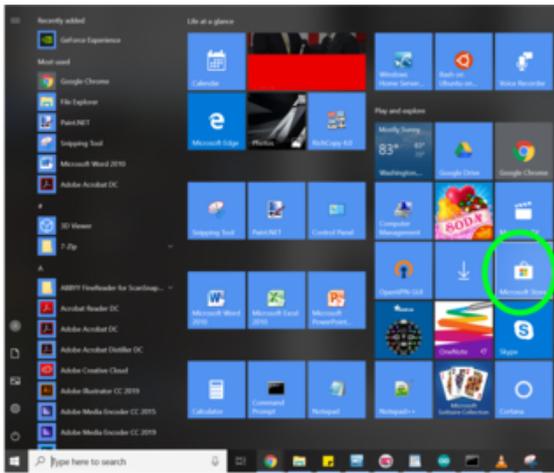
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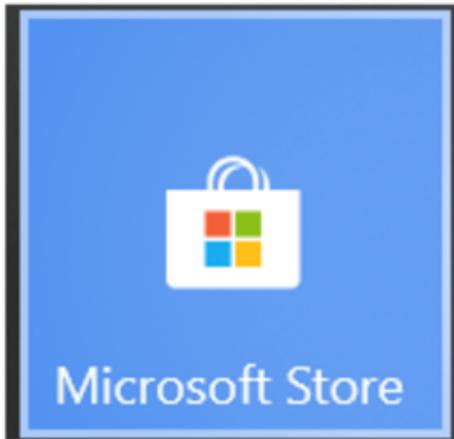
[Get](#)

[See System Requirements](#)

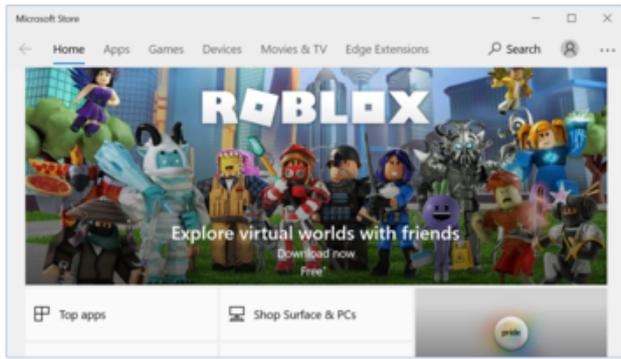
If you've found the Microsoft Windows (app) Store, you know how convenient it is. If you haven't used it yet, we'll show you how.



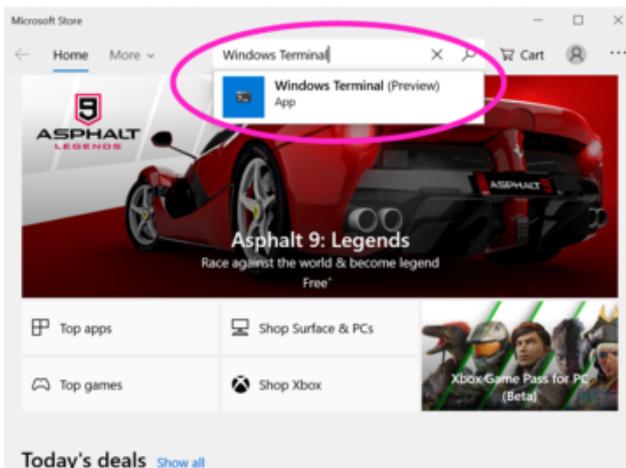
Click the Start button, lower left of the screen and find the Microsoft Store tile, a shopping bag with the Windows four pane logo on it. Click the tile.



If you don't see the icon, in the search bar at the bottom, type "Microsoft Store" and it should be a top result.



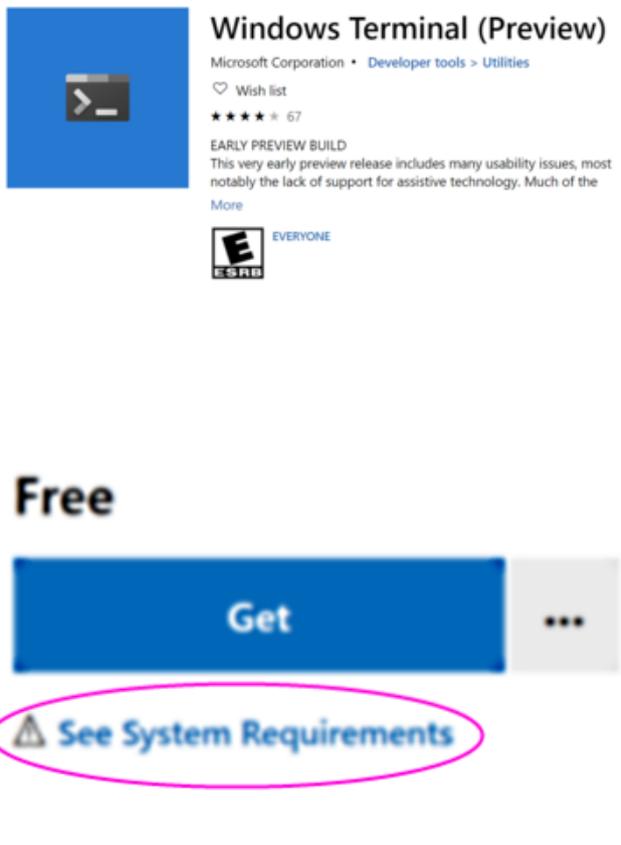
The Microsoft Store window will pop up similar to the one at left.



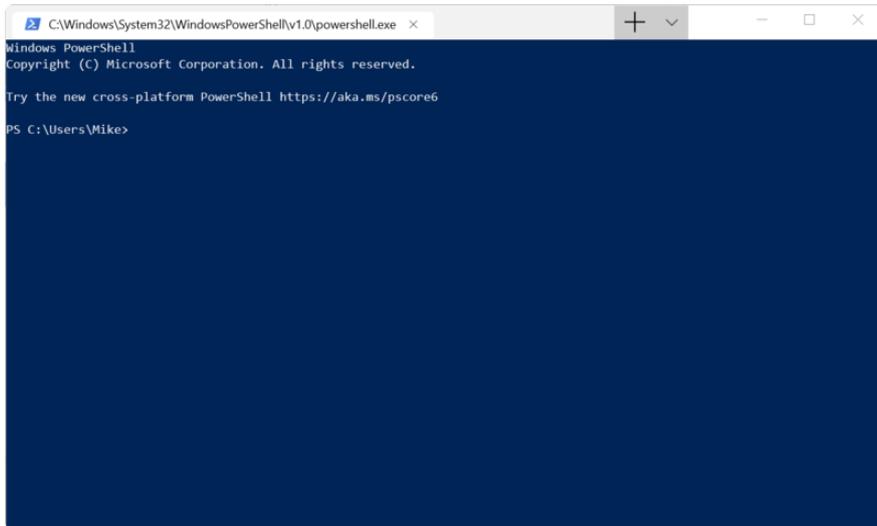
Click Search then type "Windows Terminal". Windows Terminal Preview should be the first one, select that.

The app window shown at the top of this guide page will pop up.

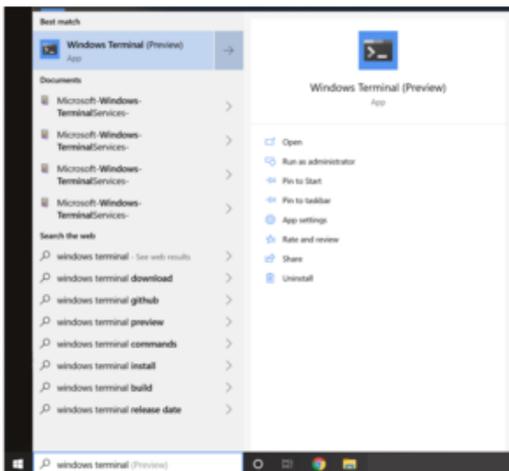
The app is free. Click the Get button - unless you have a "See System Requirements" link below the Get button - it's likely you need to upgrade Windows 10 as shown on the previous page of this guide.



Use



Run the program from the Start Menu, recently added group. If you don't have that on your Start Menu, in the search in the bar at the bottom, type "Windows Terminal".



Run the program from the Start Menu, recently added group. If you don't have that on your Start Menu, in the search in the bar at the bottom, type "Windows Terminal". The search should find the app as in the example at left.

When the application runs, you should get the Windows Terminal similar to the picture at the top of this page, which is familiar to command line users and especially PowerShell users. This is one of three types of shells available out of the gate.

Multiple Tabs

You can have multiple shells open by clicking the "+" on the bar at the top of the window. You'll be presented with another instance of the terminal in a tab in the top. You can switch between tabs just as you do with a web browser. Switch between tabs with <control>-tab.

Erase Line

If you don't like the line you're working on, press the Esc key to erase the whole line.

Beautiful text

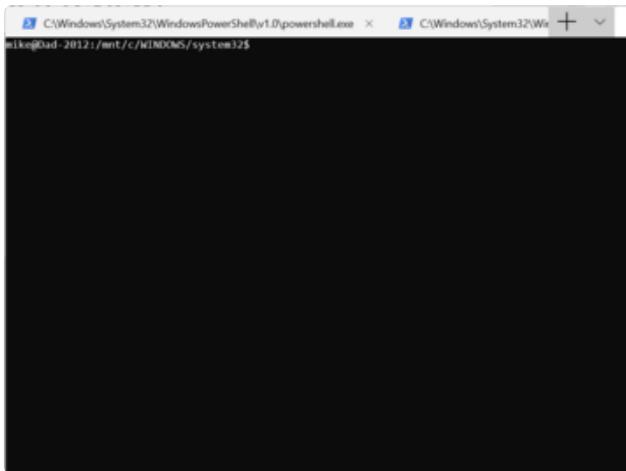
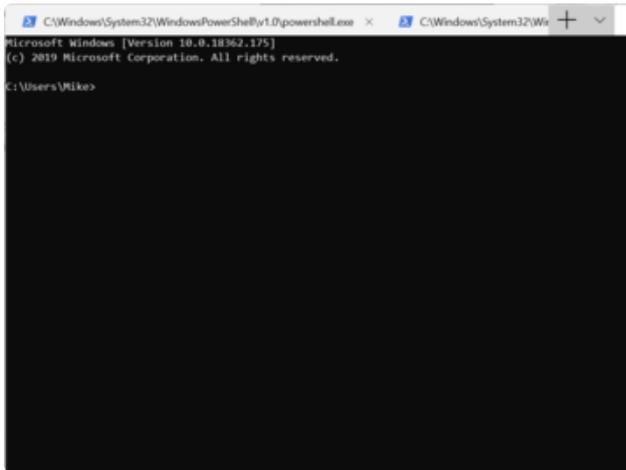
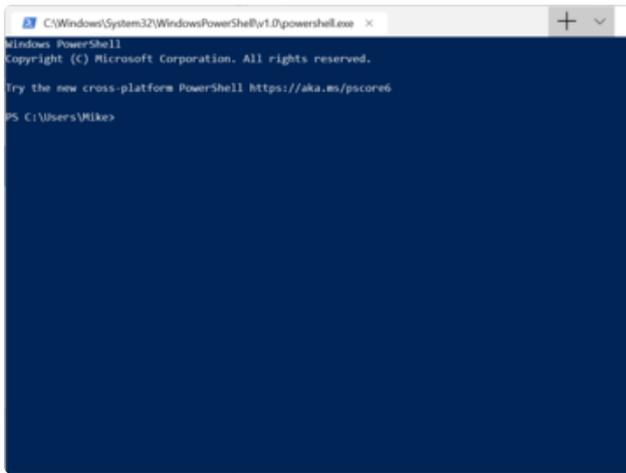
The Windows Terminal uses a GPU accelerated DirectWrite/DirectX-based text rendering engine. This new text rendering engine will display text characters, glyphs, and symbols present within fonts on your PC, including CJK ideograms, emoji, powerline symbols, icons, programming ligatures, etc. This engine also renders text much faster than the previous Console's GDI engine!

Text Sizes

You can increase/decrease the terminal text font size dynamically with Control-scroll wheel.

Shells Available

Click the "v" next to the "+" in the top bar (next to the tabs) to get options. By default there are three command line types available.



The three types of command lines/shells:

PowerShell

Windows Command Line (cmd, aka DOS Box)

Windows Subsystem for Linux (bash)

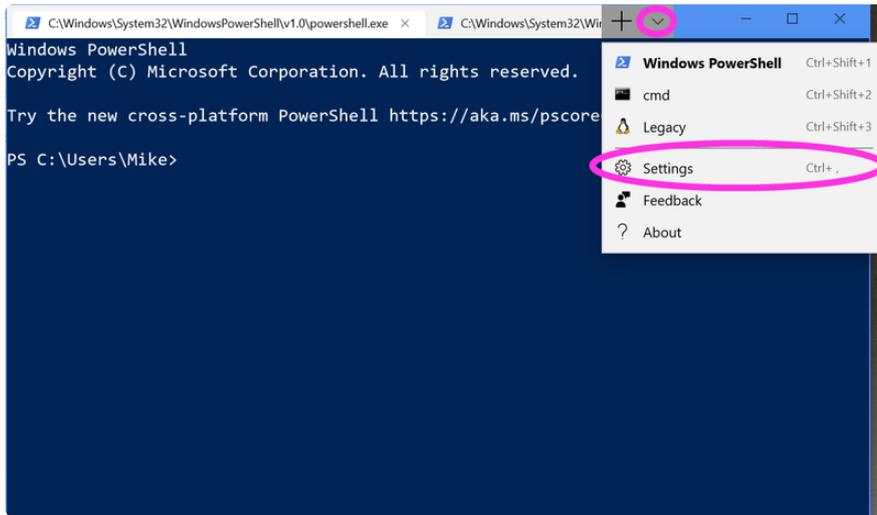
See what's new

See the video below which shows some of the Windows Terminal team members talking about the new features.

That's all well and good...

What about changing the look and feel? See the next page on customizations!

Customizations



The command line windows are very customizable. Use the down arrow ("v") on the top bar then **Settings**.

The program will ask you what program you want to edit the settings file (in JSON format). If you have a vanilla Windows 10 install, selecting Notepad is fine. Notepad++, a third party app, makes editing this easier.

Background

Credit: [HowToGeek.com \(https://adafru.it/F8I\)](https://adafru.it/F8I)

Every command window type can have a different background picture. You can change the background to any type of image file you like—a PNG, a JPEG, or yes: an animated GIF.

To change the background of any of the shells, you'll first need to place the image file in a location the Terminal App can read. Windows Terminal is a Universal Windows Platform (UWP) app, so it prefers to use its own [AppData folder \(https://adafru.it/F8J\)](https://adafru.it/F8J). AppData is a folder you usually find in the User Profile and is used for storing program settings. UWP apps create a custom AppData folder and use that instead. Windows Terminal's AppData folder is located in:

```
%LOCALAPPDATA%
```

```
\Packages\Microsoft.WindowsTerminal_8wekyb3d8bbwe\RoamingState
```

Just copy that into File Explorer's path bar and hit Enter; you'll be taken to the correct location. Place your image files here, and Windows Terminal can use them for backgrounds.

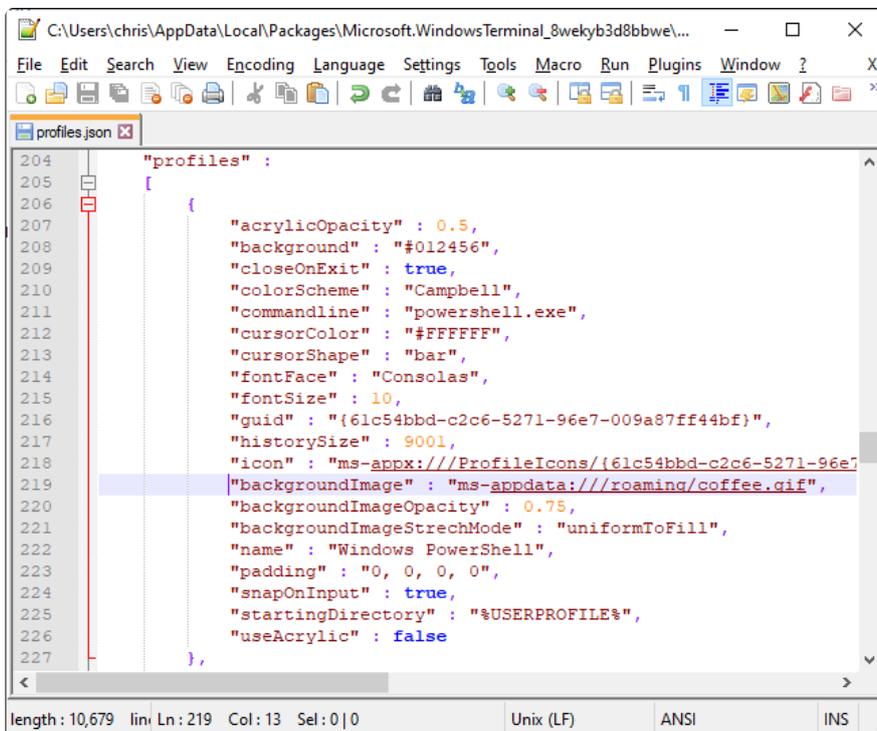
Open Settings in Windows Terminal, and scroll to the profile you want to change. There are several profiles under the " **profiles** " : " section. Each corresponds to an option in the menu: Cmd, PowerShell, Linux distros, and so on. You can tell which is which by examining the " **commandline** " or " **name** " line in each section.

To change the background image for one of these sections, under the " **icon** " line, add the following lines:

```
"backgroundImage" : "ms-appdata:///roaming/yourimage.jpg",  
"backgroundImageOpacity" : 0.75,  
"backgroundImageStretchMode" : "fill",
```

Where "yourimage.jpg" is the name of your image or gif file. Make sure every line in the section—except the last one—ends with a comma.

If you're using a GIF file, you may want to change the "fill" to "uniformToFill" instead. You may end up with a black box around the GIF with "fill," but have it be fine with "uniformToFill."



```
204 "profiles" :  
205 [  
206   {  
207     "acrylicOpacity" : 0.5,  
208     "background" : "#012456",  
209     "closeOnExit" : true,  
210     "colorScheme" : "Campbell",  
211     "commandline" : "powershell.exe",  
212     "cursorColor" : "#FFFFFF",  
213     "cursorShape" : "bar",  
214     "fontFace" : "Consolas",  
215     "fontSize" : 10,  
216     "guid" : "{61c54bbd-c2c6-5271-96e7-009a87ff44bf}",  
217     "historySize" : 9001,  
218     "icon" : "ms-appx:///ProfileIcons/{61c54bbd-c2c6-5271-96e7-009a87ff44bf}/powershell.png",  
219     "backgroundImage" : "ms-appdata:///roaming/coffee.gif",  
220     "backgroundImageOpacity" : 0.75,  
221     "backgroundImageStretchMode" : "uniformToFill",  
222     "name" : "Windows PowerShell",  
223     "padding" : "0, 0, 0, 0",  
224     "snapOnInput" : true,  
225     "startingDirectory" : "%USERPROFILE%",  
226     "useAcrylic" : false  
227   },  
228 ]
```

Save the file, and your changes should show up immediately, even with the Windows Terminal open.

Colors

You can see the various colors used in hexadecimal format - #RRGGBB with RR the red component, GG the green, and BB the blue. You can look up other colors to change text and other element items to the color of your choice.

I like the [color picker at W3schools.com \(https://adafru.it/BPY\)](https://adafru.it/BPY) although there are many others.

Save a backup of the JSON file in case you need to restore a setting gone wrong. Then you can select the color in the color picker and get the 6 digit hex value to type into the JSON file for the item you wish to change. When you save the new JSON file, it should take effect.

Other Items

The customization, to include fonts, is a moving target at present. We suggest looking on the web if you would like to customize further as people publish their tricks and tips.

Microsoft has said the font capability changes are incomplete at this time, although others appear to be tweaking this. Buyer beware in this.

This is a preview build so the development team may be changing various features, including customization capabilities, as development proceeds.