Installing ZSH on Windows

#zsh   #windows   #terminal   `#bash`

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Welcome Everyone

All of us have seen customizable and feature-full terminals in linux and mac,
if you want to have a cool looking & powerful terminal in windows too, Follow me!

Today I will be sharing how to install Z Shell with oh-my-zsh and also customizing it with an Awesome Theme and Plugins to bring a pimp to your terminal

This is how the Final Setup will look like :

This post is divided into 4 Parts

1. Setting Up Windows for ZSH installation (Cygwin & Cmder)

2. Installing Oh-my-zsh

3. Customizing Terminal and ZSH with Color Schemes & Themes

4. Some Extras to Refer to, Or some errors that might come.

You can refer to My Github Repo, to get the files and skip this process , to get the same terminal as mine & to get some useful resources instantly too.
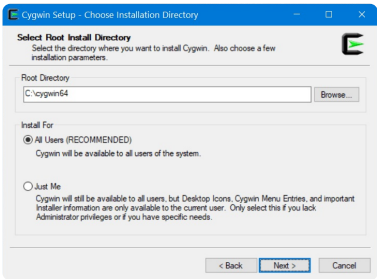
So Let's Begin

1. Setting Up Windows

- For Windows we have to install
  - a. **Cygwin** = Brings Unix environment in windows
  - b. **Cmder** = One of the most Feature Full and customizable command prompt

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a. Cygwin Setup

1. Download Cygwin

2. When Running The Installer, Follow the Instructions.

   1. Make Sure to Let the installer install at C:\cygwin64

   2. For Download site Select Any URL , Click Add

   3. **Stop** at packages screen, search **wget** expand **All** under **Web** select latest version of it under **bin** of **wget** no need to select Source. Then Continue.
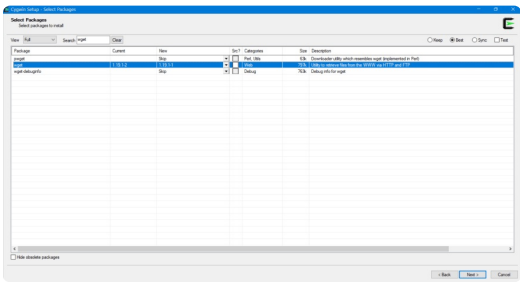
3. Finish Installing and launch the Terminal.

4. We are going to use Cygwin to Install Some Packages that will help to use Linux System on Windows. We will install **apt-cyg** which will work like apt-get and also install many other packages too like vim

   - Run The following to download apt-cyg with wget. Note you can prompt to install gdb, vim or dos2unix if you want to use them or just remove them, you can install even more packages of your choice if you wish !

```
> wget rawgit.com/transcode-open/apt-cyg/master/apt-cyg

> install apt-cyg /bin

> apt-cyg install zsh git gdb dos2unix openssh vim [or your favorite text editor]
```

   - If you want your home folder to be your user's folder, you need to edit **cygwin64/etc/nsswitch.conf**. You can do this in the text editor you just downloaded, or type `explorer /etc` to open the root directory to edit the file.
     - Add this line to the bottom: `db_home: windows`

That's it for Cygwin , you can close the Terminal. Now let's move to the terminal we are using in this guide.

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b. CMDER setup

This Might Feel a lot, but just stick with me and I will guide you through every step   .

In case you dont want to go through these , you can go to My Github Repo and just paste the specific files
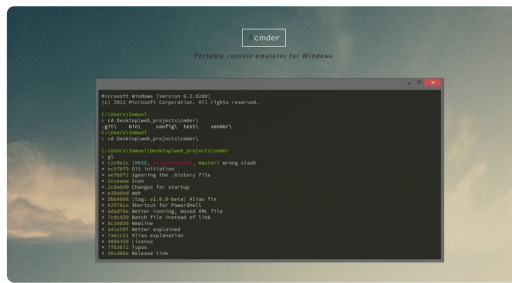
1. Download and install one font from the package of Powerline Font to use in the terminal for the custom Icons. For This Guide I will be using **MesloGS NF** patched for powerlevel10k theme, you can find it in my github.

2. Download Cmder (the full Version !) it's a portable package so to install it just extract it into a folder where it can stay permanently. (Don't Paste in Program Files)

3. Run cmder.exe

4. Right Click the Tab Bar and open Settings, We will be tweaking some of it. You can read and make changes as you wish

   i. Under **General>Fonts.** = Select Main Console Font **MesloGS NF** and **remove check from Alternative Font**

   ii. Under **General>Size & Pos**. = Check Snap To desktop edges

   iii. Under **General>Appearance**. =

   - You can remove Check from **Show Button In tab bar** and **Show Search Field**

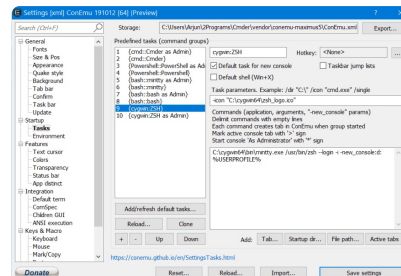   - Select **Hide Scroll Bar**

   iv. Under **General>Tab bar** select **auto show**.

   v. Under **General>Confirm** You can switch off confirmation of creating new tab if you don't need it (I Never wanted it).

   vi. Under **General>Taskbar**

   - check **Don't show ConEmu Window on taskbar** &

   - **Auto Minimize to TSA** (to not interrupt in alt+tab)

   vii. IMPORTANT : Under **Startup>Tasks**

   - Click on `+` then Rename it from `Group xx` to `cygwin:ZSH` .

     - Check **Default Task For New Console**

     - Under Task you can give Location of any Icon You Wish to have (.ico file), I have given one nice icon in my github
       `-icon "C:\cygwin64\Cygwin.ico"`

     - Now In the Last Command Box paste this command
       `C:\cygwin64\bin\mintty.exe /usr/bin/zsh --login -i -new_console:d:%USERPROFILE%`

     - Last step is Click on **General** and choose startup task from the dropdown **{cygwin:ZSH}**

     - Do the same for Admin Privileges , rename it as **{cygwin:ZSH as Admin}** and replace command with
       `*C:\cygwin64\bin\mintty.exe /usr/bin/zsh --login -i -new_console:d:%USERPROFILE%`

   viii. Under **Features>Colors** choose **Monokai** Scheme

   ix. For the setup of shortcuts, Click on **Keys & Macro** then change the shortcuts. Here is my setup :

   `Win + Esc : Minimize/Restore`

   `Win + Down : Create New Console`

   `Win + T : Create new console (With Dialog)`

   `Win + N : Split: Duplicate active 'shell' split to bottom`

Win + Right : Switch Next Console

Win + Left : Switch Previous Console

Win + Q : Close active Console

Win + E : Close all Consoles

Win + Alt + P : Show Settings

Win + Alt + Space : Show ConEmu Menu

- To make These Work go to **Keys & Macro>Keyboard** and check **Support Special Keys**

x. Under **Keys & Macro>Paste** make sure Multi Lines is Checked Everywhere.

Finally. After **Completing** the Settings Click On **Save Settings**.

5. You now Have setup to use Cygwin in Cmder, Close the terminal and open a new one

6. Tada! you will see some differences, There You Go Running Cygwin In Cmder Successfully.

7. If a Prompt Comes type **o** to exit, we can edit the specified files later manually.

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2. Setting Up Oh-my-zsh

Now let's add a manager to handle plugins, updating and themes. It's Awesome that you have reached soo far, we are very close to completion. Great Work

- Install **oh-my-zsh** the manual way, Run the lines one by one

```
> git clone git://github.com/robbyrussell/oh-my-zsh.git ~/.oh-my-zsh
> cp ~/.oh-my-zsh/templates/zshrc.zsh-template ~/.zshrc
```

- Now Close the Terminal with shortcut (Win+q) or normal way, then open a new one
- If it prompts , type **o** to exit
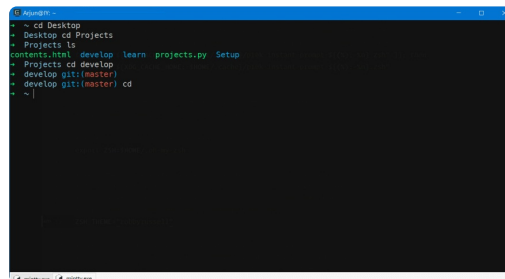
There You Go Running ZSH on WINDOWS !

Now we are going to install an awesom theme and edit all features of zsh and cygwin you can continue if you wish to make it look like mine.

You can also visit My Github Repo to instantly paste the files and you will be good to go !

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3. Customizing Cygwin & Oh-my-zsh

- Changing Color Scheme and other Mintty settings

  1. Right click your terminal

  2. Hit options

  3. Change font-size and Apply the settings , this creates **.minttyrc** file

  4. Browse to Root folder of the user , open **.minttyrc** file and paste my settings, to change the color scheme to mine

```
BoldAsFont=no
RightClickAction=paste
```

```
Font=MesloLGS NF
FontHeight=12
Term=xterm-256color
BoldAsColour=yes
ConfirmExit=no
Scrollbar=none
Transparency=medium
OpaqueWhenFocused=yes
SelectionShowSize=1

BackgroundColour=14,14,14
ForegroundColour=228,228,228
CursorColour=228,228,228
Black=40,40,40
BoldBlack=107,107,107
Red=255,43,28
BoldRed=243,91,80
Green=2,192,97
BoldGreen=0,253,127
Yellow=251,188,46
BoldYellow=253,197,86
Blue=0,126,180
BoldBlue=0,179,255
Magenta=255,0,194
BoldMagenta=239,133,214
Cyan=87,208,249
BoldCyan=141,219,245
White=207,207,207
BoldWhite=255,255,255
```

- Changing Zsh Themes and prompts

  - To install the **Powerlevel10k** theme that I am using you can run

    ```
    git clone --depth=1 https://github.com/romkatv/powerlevel10k.git $ZSH_CUSTOM/themes/powerlevel10k
    ```

  - Set `ZSH_THEME="powerlevel10k/powerlevel10k"` in `~/.zshrc` .

  - Close and Open a new terminal window

  - Finally Go through the setup in the prompt as you wish

  - I have edited the **p10k.zsh** file, manually to make it look even more clear, the file is available in My Github Repo

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- Adding Plugins

  - To install plugins just go to your root user folder, open `.zshrc` and you will find a variable plugins. Simply add the plugins you want to install with spaces `plugins=(git z zsh-autosuggestions)`

  - **Z** = saves the locations you visit the most, so that you can access it in one shot

  - **git** = brings many aliases in the command line

  - **npm Trash-cli** = it is an npm package, very useful to replace rm command

  - **Auto suggestions** = automatically suggests the code to type and autocomplete, has to be installed manually not internally available

    1. run `git clone https://github.com/zsh-users/zsh-autosuggestions ${ZSH_CUSTOM:-~/.oh-my-zsh/custom}/plugins/zsh-autosuggestions`

    2. add `zsh-autosuggestions` in plugins variable

SETUP COMPLETE

There you go your Terminal has now become very powerful and awesome, it was great to share this with you all. Have Fun ! Keep Coding and Keep Exploring !

Extras

- You can checkout about all the features of oh-my-zsh on the internet , go explore

- Errors :

  - on some commands oh-my-zsh `runs less` command with `-R` (repaint). You can disable this behavior by adding the following line **at the end** of your `~/.zshrc`

```
unset LESS;
```

- This is set to `-R` in `~/.oh-my-zsh/lib/misc.zsh`

- incase there is **Insecure completion-dependent directories** error : run this

```
chmod -R 755 ~/.oh-my-zsh
```

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A Developer who loves to explore new things , develop stuff and be a part of Innovation !