

# OpenMechanics

EON-NEOS Guide:)

Based on <https://github.com/commaai/eon-neos>





## Intro:)

After struggling to update my EON i have seen others were have same issues, I have decided to build guide one step at time BIG thanks to @kp623 for helping. I have tried using windows but i had struggles with it so i recommend use either Mac or Linux. Following are instructions to use mac and i have added windows as well. On windows if you do get stuck you probably want to install virtual machines with linux such as [ubuntu](#) or any other flavors. It will be better if you were to put ubuntu on flash drive and boot it from there:)

 1)Get fastboot on mac found guide video that has good step by step guide.



Mac ONLY!



# Fastboot notes from videos make sure you do those

NOTE: entering `./fastboot` will give you this message: `fastboot: usage: no command` That means it is working fine! If you'd like to see the help info that is shown in the video, use: `./fastboot -h` Paste this into Terminal: `touch ~/.bash_profile`; open `~/.bash_profile` Paste this into your text editor: `export PATH=${PATH}:/Applications/Android`

Mac ONLY!



**To make it easy, I have hosted the android files on github but couldn't host os files since OS files are over gb!**





**ADB Windows download link!**



Mac ONLY!



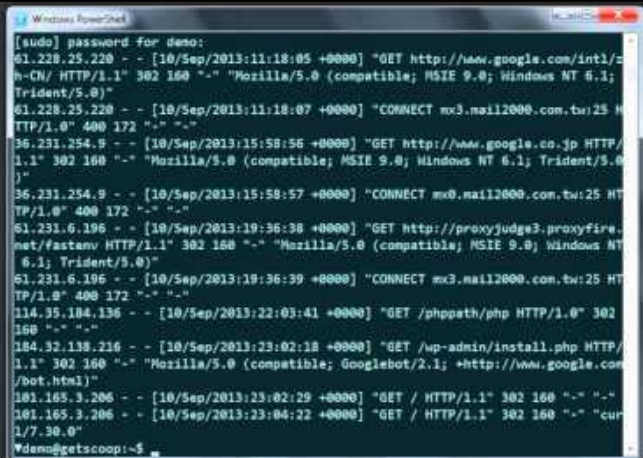
**After fastboot you will now need homebrew since os files are too large for them to transfer just paste the following command in terminal then push enter!**

```
/usr/bin/ruby -e "$(curl -fsSL https://raw.githubusercontent.com/Homebrew/install/master/install)"
```



# Windows here we go!

You will first need PowerShell 3.0 or higher as well Scoop which is homebrew for windows following is good videos which shows you to get both.



```
Windows PowerShell
[sudo] password for demo:
61.228.25.220 - - [10/Sep/2013:11:18:05 +0000] "GET http://www.google.com/intl/zh-CN/ HTTP/1.1" 302 160 "-" "Mozilla/5.0 (compatible; MSIE 9.0; Windows NT 6.1; Trident/5.0)"
61.228.25.220 - - [10/Sep/2013:11:18:07 +0000] "CONNECT mx3.mail2000.com.tw:25 HTTP/1.0" 400 172 "-" "-"
36.231.254.9 - - [10/Sep/2013:15:58:56 +0000] "GET http://www.google.co.jp HTTP/1.1" 302 160 "-" "Mozilla/5.0 (compatible; MSIE 9.0; Windows NT 6.1; Trident/5.0)"
36.231.254.9 - - [10/Sep/2013:15:58:57 +0000] "CONNECT mx0.mail2000.com.tw:25 HTTP/1.0" 400 172 "-" "-"
61.231.6.196 - - [10/Sep/2013:19:36:38 +0000] "GET http://proxyjudge3.proxyfire.net/fastmv HTTP/1.1" 302 160 "-" "Mozilla/5.0 (compatible; MSIE 9.0; Windows NT 6.1; Trident/5.0)"
61.231.6.196 - - [10/Sep/2013:19:36:39 +0000] "CONNECT mx3.mail2000.com.tw:25 HTTP/1.0" 400 172 "-" "-"
114.35.184.136 - - [10/Sep/2013:22:03:41 +0000] "GET /phppath/php HTTP/1.0" 302 160 "-" "-"
184.32.138.216 - - [10/Sep/2013:23:02:18 +0000] "GET /wp-admin/install.php HTTP/1.1" 302 160 "-" "Mozilla/5.0 (compatible; Googlebot/2.1; +http://www.google.com/bot.html)"
181.165.3.206 - - [10/Sep/2013:23:02:29 +0000] "GET / HTTP/1.1" 302 160 "-" "-"
181.165.3.206 - - [10/Sep/2013:23:04:22 +0000] "GET / HTTP/1.1" 302 160 "-" "curl/7.30.0"
Vdenn@getscoop:~$
```



Mac ONLY!



# Few more commands for homebrew!

## Thanks to @pjao37

- `brew install simg2img`
- Just to confirm if homebrew is install run the following command as well

`brew update`

Windows ONLY!

Since windows doesn't have `simg2img` command on scoop you can manually convert the `system.img` using following tool try running the `.img` file by itself first if issues occur then use the tool.





# Is homebrew needed if you are using linux?

Well you shouldn't but just in case if you do. Following is command for Linuxbrew

```
sh -c "$(curl -fsSL https://raw.githubusercontent.com/Linuxbrew/install/master/install.sh)"
```



# Windows Drivers issues! ADB

Just in case if you do run into drivers issues just like i did. You will need to install drivers manually by going to device manager. Every time you do boot into either fastboot or other mode of phone there is unique driver for each mode when using adb which can be downloaded from following link.






# Windows Drivers for EON!

Once you plug your EON to your computer it will show up one plus driver wizard which you can install but those drivers you might not need at all since most of the time the phone will be in fastboot mode.



**Now it's time to download NEOv6 files  
which were uploaded by @kp623**





**After the files are downloaded you might need zip extractor i used Keka for mac only if windows regular winzip works fine.**





**It's time to extract the following zip!**

ota-signed-04414675c23f503ed7f2d6569703704d69e3c3afa845cfe0cfb0c4388fc79119 2





## After extracting the files, It's time to move files

1. Move the extracted eon-neosv6 files to Android folder which is in applications if you are using mac and c:\Android for windows where at step 1) fastboot files were created although directory can be anything but it will be easy to run commands.
2. You will only need to move 3 files total which are all in files folder so you can just paste it Android folder.
3. After you have moved the files to Android folder, You will now take system.img out from files folder and just leave it android folder by itself
4. The 4th file you need to transfer in Android folder is flash.sh.



# Following are all list of files in Android folder!



Android



Files

Adb

fastboot

flash.sh

system.img

Files folder list:

boot.img

logo.bin



## Now just run the following commands using fastboot:)

1. `fastboot oem unlock` On your OnePlus device, you should see an “Unlock Bootloader?” warning page. Select “Yes” from the prompt by pushing the “Volume Up” button twice on the left side of the phone. To confirm the selection (highlighted in blue), push the “Power” button of the right side of the phone.
2. Your phone will now reboot.
3. Once your phone has finished rebooting, disconnect your phone from USB, power off the phone, and boot back into fastboot mode by holding power + volume up buttons. After fastboot mode is acquired, plug the phone back into USB.



## Fastboot commands continues:

- fastboot flash LOGO files/logo.bin
- fastboot flash boot files/boot.img
- fastboot flash system system.img
- fastboot erase userdata
- fastboot format cache
- fastboot oem lock

\*Your EON should be rebooting, you should be welcomed with a white Comma boot screen. If you have not inserted a sim card into the phone, you will see a prompt requesting it. The final configuration of the system will not work without a simcard with data present. (After configuration, you can use WIFI only if you choose.)\*



**Just in case if you are still stuck on loop, Then run the following command afterwords follow previous fastboot commands.**

- fastboot erase system



# Install NEOS program!

You should now be greeted with an “Install NEOS Program” screen. Enter URL: `openpilot.comma.ai` and select “Done”

You should now be seeing a black loading screen with a spinning star. Once the device has finished loading, you will see a login screen for the vision system.



# No it's not just you, It's Known issue!

- If you are seeing the keyboard is all messed up on fresh install where it will just show some characters but now all, Just reboot your EON to fix the issue.
- Clicking somewhere else and it's opening something else. Example power of does reboot.

**You made it bro!**



Enjoy your EON:)