

Pre-Elementary OS installation:

1) For Dell CB 13 “Lulu” & Toshiba CB2 - Google Coolstar’s ROM that installs a full SeaBIOS onto your chrome book. You have to remove the screw on the Dell Chromebook 13 & on the Toshiba CB13, you have to remove the “metal” circle tape.

Here’s a guide that shows you how to do it on the Dell CB 13 (look at Step 5 for pics on where the screw is: <http://zipso.net/how-to-upgrade-or-replace-the-ssd-drive-in-a-dell-chromebook-13/>)

Here’s a guide that shows you how to do it on the Toshiba Chromebook 2: <http://www.pants.nu/~jmcminn/toshiba-2015-chromebook-linux.html>

The metal basically completes the circuit which prevents the BIOS from being flashed and overwritten. Breaking the circuit by removing the screw/“metal circle” tape - allows the BIOS to be flashed.

Note: For Dell CB 13, I ended up stripping the write-protection screw and had to use a dremel tool to open it. Seems to have a Philips #0000 screw and I tried Philips #000 screwdriver which wasn’t good enough.

2) Enable developer mode on the CB:

“To enable developer mode:

Turn on the Chrome OS device.

Press and hold the Esc + F3 (Refresh) keys, then press the Power button.

This enters Recovery Mode.

Press Ctrl + D (no prompt). It will ask you to confirm, then the system will revert its state and enable Developer Mode.

Note: Press Ctrl + D (or wait 30 seconds for the beep and boot) at the white boot splash screen to enter Chrome OS.”

3) If you haven’t already, type ctrl + D to enter ChromeOS with developer mode activated, open up Chrome browser, and hit ctrl + alt + T. Now in crosh tab, type “shell”.

4) Flash the proper CoolStar ROM. As of April, 23, 2016, links & instructions for flashing them are in CoolStar’s guide here: https://docs.google.com/document/d/1nFZmoRzQ03btPCGVSa4ku6JPQik-SxD_zOd1CoB2yg/edit . Check <https://www.reddit.com/r/chrultrabook/> for any updates to the ROM.

5) Install your distro of choice. I went with Elementary OS in order to replicate the feel of OS X.

OTHER:

A) The late 2015 Toshiba Chromebook 2 runs perfectly with CoolStar's ROM as of April 23, 2016.

B) Known Issues With Dell "Lulu" Chromebook 13: 1)

The Dell CB 13 seems to have an issue recognizing the backlit keyboard device where when you try to install the chromebook_keyboard_backlight drivers from

https://github.com/corcoran/chromebook_keyboard_backlight_driver you get an error message along the way that says: "ERROR: could not insert 'chromebook_kb_backlight': No such device'."

I got the backlight keyboard working on the Dell CB13 by following all the instructions from

https://github.com/corcoran/chromebook_keyboard_backlight_driver , then updating the kernel to the custom GalliumOS kernel. Info on how to do this if backlit keyboard doesn't work can be seen here:

https://aur.archlinux.org/packages/chromebook_keyboard_backlight_driver/?comments=all .

2. If you can't get the screen backlight to increase/decrease, I followed this guide: <http://itsfoss.com/fix-brightness-ubuntu-1310> :

Go into Terminal:

- 1) sudo touch /usr/share/X11/xorg.conf.d/20-intel.conf
- 2) sudo gedit /usr/share/X11/xorg.conf.d/20-intel.conf

Add the following lines to this file:

```
Section "Device"
    Identifier "card0"
    Driver     "intel"
    Option     "Backlight" "intel_backlight"
    BusID      "PCI:0:2:0"
EndSection
```

Save it.

Now install xbacklight (in terminal type: sudo apt-get install xbacklight).

Then bind F6 -> xbacklight -dec 10 & bind F7 -> xbacklight -inc 10

Reboot & it should work.

ELEMENTARY OS THINGS TO DO:

00) <https://gist.github.com/memoryleakx/7567474> ≤--- useful guide. Pick & choose what you want to do.

```
sudo apt-get update && sudo apt-get dist-upgrade
```

Install Chrome (not Chromium, since Netflix doesn't play well under Chromium due to some licensing stuff):

```
wget -q -O - https://dl-ssl.google.com/linux/linux_signing_key.pub | sudo apt-key add -
```

```
sudo sh -c 'echo "deb http://dl.google.com/linux/chrome/deb/ stable main" >> /etc/apt/sources.list.d/google-chrome.list'
```

```
sudo apt-get update
```

```
sudo apt-get install google-chrome-stable
```

0) `sudo dpkg --add-architecture i386` <---- to enable 64 bit crap.

1) Install "Task Manager", "VLC", "Transmission," etc. from Ubuntu Software Center

Some VLC Codecs To Install:

```
sudo apt-add-repository ppa:strukturag/libde265
```

```
sudo apt-get update
```

```
sudo apt-get install vlc-plugin-libde265
```

2) Allow volume go higher in menu - volume control on keyboard (which you have to bind in keyboard settings for the Chromebook) only goes to 100% but the menu button for sound can be conveniently "dragged" to go up to 150%.

```
gsettings set com.ubuntu.sound allow-amplified-volume 'true'
```

3)

https://www.reddit.com/r/elementaryos/comments/3vj3xh/how_do_i_remove_these_default_applications/

```
sudo apt-get remove audience
```

```
sudo apt-get remove noise
```

May want to remove videos app. Do this to prevent Nautilus from defaulting to it over VLC. Remove videos, music, etc. i.e.

4) <http://itsfoss.com/things-to-do-elementary-os-freya/>

- A) Enable Canonical Partners repository
- B) `sudo apt-get install ubuntu-restricted-extras`
- C) `sudo apt-get install libreoffice`

5) Enable DOCK ZOOM - Open up a terminal and run:

```
scratch-text-editor ~/.config/plank/dock1/settings
```

All the way at the bottom of the file do:

```
#Whether the dock will zoom when hovered.
```

```
ZoomEnabled=true
```

```
#The dock's icon-zoom (in percent).
```

```
ZoomPercent=150
```

6)

```
gsettings set org.gnome.gnome-screenshot auto-save-directory '/home/your name/Desktop'
```

```
gsettings set org.gnome.gnome-screenshot default-file-type 'jpg'
```

```
gsettings set org.gnome.gnome-screenshot delay '1'
```

```
gsettings set org.gnome.gnome-screenshot last-save-directory '/home/your name/Desktop/'
```

then go to keyboard settings and rebind the screenshot keyboard shortcuts to your liking.

7) Enable seconds on menu bar:

```
gsettings set com.canonical.indicator.datetime show-seconds true
```

8)

```
gsettings set org.gnome.nautilus.desktop font '16'
```

I found size 16 to be good on a 13" screen.

9)

```
gsettings set org.gnome.nautilus.preferences default-sort-order 'type'
```

10) Turn off annoying "auto-maximize" feature on application boot up. Disabling this will "save" the window state upon closing it.

```
gsettings set org.gnome.mutter auto-maximize false
```

11) Text Editors:

```
sudo apt-get install gedit gedit-plugins
```

Also install sublime text editor if you want.

12) Enable Desktop + Right Click:

```
sudo apt-get update
sudo apt-get install nautilus dconf-tools
```

open dconf-tools and go to org → gnome → nautilus → desktop and tick on any option. which you want to view on desktop.

Then go to,
org → pantheon → cerbere and add 'nautilus -n' entry as follows.

```
['wingpanel', 'plank', 'slingshot-launcher --silent', 'nautilus -n']
```

Open Terminal and type and execute following command:

```
nautilus -n
```

Again open dconf-editor and go to:

org → gnome → desktop → background and tick on Show-Desktop-Icons box

13) Install laptop-mode-tools - It will add 20-30% to your battery life.

```
sudo apt-get install laptop-mode-tools
```

Much of this just works, but the auto backlight adjustment does not. You need to edit /etc/laptop-mode/conf.d/lcd-brightness.conf and make changes as follows:

```
# turn on brightness control
CONTROL_BRIGHTNESS=1

# set the backlight brightness of AC power state change
BATT_BRIGHTNESS_COMMAND="echo 93"
LM_AC_BRIGHTNESS_COMMAND="echo 937"
NOLM_AC_BRIGHTNESS_COMMAND="echo 937"
BRIGHTNESS_OUTPUT="/sys/class/backlight/intel_backlight/brightness"
```

14) ELEMENTARY OS TWEAKS

```
sudo add-apt-repository ppa:mpstark/elementary-tweaks-daily
sudo apt-get update
sudo apt-get install elementary-tweaks
```

Now go into settings and look for "Tweaks" - and customize the way you want. You can change system font sizes, add a minimize button, and more.

15) CHROME THREE BUTTONS ON TOP RIGHT - in terminal:
gconftool-2 --set /apps/metacity/general/button_layout --type string
":minimize,maximize,close"

17) Install File Compression Libs

```
sudo apt-get install unace unrar zip unzip xz-utils p7zip-full p7zip-rar  
sharutils rar uudeview mpack arj cabextract file-roller
```

18) Browser plug-in for Java:

```
sudo apt-get install icedtea-7-plugin openjdk-7-jre
```

19)

chrome://flags and modify settings as you wish.

also download the "Backstay" extension to prevent the backspace button from annoyingly going back and also "No MouseWheel Zoom" one to prevent ctrl & +/- zooming.

20) Install MenuLibre (so you can easily remove application shortcuts from the applications launcher)

```
sudo add-apt-repository ppa:menulibre-dev/devel  
sudo apt-get update  
sudo apt-get install menulibre
```

21) How to change desktop text color to white (like OS X): FROM:

<http://mylinuxideas.blogspot.com/2015/04/enable-desktop-icons-and-right-click-on.html>

Open terminal and type `sudo nano /usr/share/themes/elementary/gtk-3.0/gtk-widgets.css`

and then paste this anywhere on the css file:

```
.nautilus-desktop.nautilus-canvas-item {  
color: #ffffff;  
text-shadow: 1 1 alpha (@fg_color, 0.8);  
}
```

and then run `nautilus -q` and you will see that folder font color is now white.

22) Select pantheon terminal as default (in case application doesn't launch).

```
sudo update-alternatives --config x-terminal-emulator
```

and make pantheon-terminal the default.

23) Improve font rendering:

```
sudo add-apt-repository ppa:no1wantdthisname/ppa  
sudo apt-get update
```

```
sudo apt-get upgrade
sudo apt-get install fontconfig-infinality
sudo bash /etc/fonts/infinality/infctl.sh setstyle
```

I set style as "OS X"

24) Install Skype

```
sudo apt-add-repository "deb http://archive.canonical.com/ubuntu/ precise
partner"
sudo apt-get update && sudo apt-get install skype
```

25) Install the latest git Version

```
sudo add-apt-repository ppa:git-core/ppa
sudo apt-get update
sudo apt-get dist-upgrade
sudo apt-get install git
```

26) Add show/hide desktop command to corners & Plank dock:

A) sudo apt-get install wmctrl

B) Create "show desktop" launcher icon on plank (personal note: I saved master.zip to Dropbox in case link breaks)

```
cd /tmp && wget
```

```
https://github.com/png2378/showdesktop/archive/master.zip
```

```
unzip master.zip && cd showdesktop-master
```

```
sudo mv showdesktop /usr/local/bin/ && sudo mv showdesktop.desktop
/usr/share/applications/ && sudo mv showdesktop.svg
/usr/share/icons/elementary/apps/48/
```

now go to corners in desktop settings and make a custom command for "showdesktop"

27) Install redshift from Ubuntu Software Center.

```
https://help.ubuntu.com/community/Redshift
```

So here is an example of a working configuration, which you can adapt to your needs. Name it redshift.conf and place it in your \$HOME/.config directory, then adjust it to your needs.

```
[redshift]
```

```
; Set the day and night screen temperatures
```

```
temp-day=6500
```

```
temp-night=3500
```

```
; Enable/Disable a smooth transition between day and night
```

```
; 0 will cause a direct change from day to night screen temperature.
```

; 1 will gradually increase or decrease the screen temperature
transition=1

; Set the screen brightness. Default is 1.0
brightness=1.0

; It is also possible to use different settings for day and night since version 1.8.

;brightness-day=0.7

;brightness-night=0.4

; Set the screen gamma (for all colors, or each color channel individually)
gamma=1.0:1.0:1.0

;gamma=0.8:0.7:0.8

; Set the location-provider: 'geoclue', 'gnome-clock', 'manual'

; type 'redshift -l list' to see possible values

; The location provider settings are in a different section.

location-provider=manual

; Set the adjustment-method: 'randr', 'vidmode'

; type 'redshift -m list' to see all possible values

; 'randr' is the preferred method, 'vidmode' is an older API

; but works in some cases when 'randr' does not.

; The adjustment method settings are in a different section.

adjustment-method=randr

; Configuration of the location-provider:

; type 'redshift -l PROVIDER:help' to see the settings

; e.g. 'redshift -l manual:help'

[manual]

lat=43

lon=-73

; Configuration of the adjustment-method

; type 'redshift -m METHOD:help' to see the settings

; ex: 'redshift -m randr:help'

; In this example, randr is configured to adjust screen 1.

; Note that the numbering starts from 0, so this is actually the second screen.

[randr]

screen=0

28) PlayOnLinux and Microsoft Office 2010 (Download the Enterprise Activated Copy of Office)

29) To prevent bluetooth from starting at startup:

sudoedit /etc/rc.local

add this before line with exit 0:
rfkill block bluetooth

30) Elementary OS doesn't have a default desktop enabled, so we enable Nautilus to show icons on the Desktop. Unfortunately, once in a blue moon it will crash, and we have to go to terminal and type "nautilus -q" to restart it. To do it automatically, we can make a bash script.

Instructions on making a bash script & plank icon in the /home folder to deal with Nautilus crashing and desktop icons not showing:

First create a text file in your /home folder: "desktopbash.bh"
and write in it:
#!/bin/bash
nautilus -q

then save file.

Then: chmod +x desktopbash.bh

NOW TO ADD THE ICON TO PLANK: Create a .desktop file in your /home/your name/.local/share/applications folder for the script with the following information typed in your "Restore Desktop Icons.desktop" file:

```
[Desktop Entry]
Name=Restart Desktop Icons
Comment=Bash Script To Restart Desktop Icons
Type=Application
Exec=/home/your name/desktopbash.bh %U
Icon=multitasking-view
Terminal=false (or true)
Categories=Other;
```

Now just drag this file to the Plank dock to easily restart the Nautilus Desktop if desktop icons stop showing.

31) Clear terminal history try:
history -c
then history -w