

Guide for installing Yosemite on a Mac Pro 1,1 or 2,1

A Clean install on a single HDD

I have tried to be as complete and clear in this guide as possible. However, I am not responsible for an damages that may occur as a result of this guide. If something doesn't work right just reset your NVRAM and reboot into OS X Lion install or Mavericks (with Tiamo's boot.efi).

Things you will need

1. A copy of the Yosemite Install App
2. A Mac Pro 1,1 or 2,1 with an upgraded video card (7300GT or X1900XT will not work)
3. 1 new HDD where you want to install Yosemite
4. A working installation of OS X Lion or Mavericks.

Setting up the HDD (from your existing working OS)

1. Install the HDD into an open bay and boot up your OS X Lion/Mavericks install.
2. Open Disk Utility and choose the new hard drive. Then click on the partitions tab.
3. Create 3 partitions. 1GB named "Boot", 8GB named "Installer", and the remainder named "Yosemite". Format all partitions as HFS+ on a GUID partition table.
4. Click apply and wait for all the partitions to be mounted.

Creating the Yosemite installer partition

1. Right click on the downloaded Yosemite Installer app and click show package contents.
2. In terminal you will need to show hidden file using the following commands

```
defaults write com.apple.Finder AppleShowAllFiles YES  
killall Finder
```

3. Browse to the folder /Contents/SharedSupport
4. Double-click to mount "InstallESD.dmg"
5. Open up Disk Utility and drag BaseSystem.dmg to the side bar in Disk Utility.
6. Click on BaseSystem.dmg in Disk Utility and select the Restore tab
7. Set the BaseSystem.dmg as the source and choose the 8GB Installer partition as the destination.
8. Rename the Installer partition back to "Installer" after restoring the disk image.
9. Once that is done use Finder to browse the newly restored Installer partition.
10. Browse to the folder /System/Installation on the Installer partition and delete the "Packages" alias file.

11. Go back to the mounted InstallESD.dmg and drag the "Packages" folder to the Installer partition into the /System/Installation folder where the alias file used to be.
12. Copy the "BaseSystem.dmg" and "BaseSystem.chunklist" files to the root of the Installer partition.
13. To hide the hidden files again run the previous 2 commands and change YES to NO

Installing Chameleon

1. Download this package of files

<https://mega.co.nz/#!HtoiDAgB!aVU0ET7TIJjMcCFfAmDlqO3rxjyMNCpFtdOg-7pLQSA>

2. Unzip the package and use the Chameleon installer to install it onto the 1GB Boot partition.
3. Once that is complete (should only be a few seconds) drag the "Extra" folder to the root of the Boot partition.
4. Inside the "Extra" folder you will need to modify the SMBios.plist file with your serial number.
5. Using the Text Editor replace where it says "SERIAL NUMBER" with your serial number.
6. Copy the "Kernels" folder from the downloaded files and put it in the /System/Library folder on the installer partition.
7. Open up terminal and type in the following. Press enter and then enter in your password and press enter again.

```
sudo bless -folder /Volumes/Boot -file /Volumes/Boot/boot -setBoot -legacy
```

8. Reboot the Mac and Chameleon should come up.**

**If you get a boot0:error follow the steps at the end of this guide. You maybe victim of the 4k sector issue.

Installing Yosemite

1. Once Chameleon comes up after the reboot. Press any key to get to the OS selection.
2. Choose the "Installer" partition.
3. Proceed with installing Yosemite to the 3rd partition on the drive.
4. Once done the computer will reboot.
5. When it reboots you will get a no boot disk found error.
6. Shut the machine down and boot back into your Lion/Mavericks install by resetting the NVRAM (hold command+option+P+R after the first boot chime and hold until you hear a second chime).
7. Reinstall Chameleon to the Boot partition.
8. Drag "Extra" folder that you downloaded earlier into the root of the Boot partition again. And, change the serial number in the smbios.plist file again.

9. Open up terminal and type in the following. Press enter and then enter in your password and press enter again.

```
sudo bless -folder /Volumes/Boot -file /Volumes/Boot/boot -setBoot -legacy
```

12. Reboot the Mac and when Chameleon comes up boot to the Yosemite partition.
13. Complete the Yosemite setup process.

Getting Yosemite to boot as the default

1. If you follow this guide word for word it will be already set.
2. Go to the Boot partition and go to the "Extra" folder.
3. Find the org.chameleon.Boot.plist file and open it with the text editor.
4. You will want to change the default partition to match the name of the partition where you installed Yosemite. The line should look like `<key>Yosemite</key>`.

Final Setup

1. You will want to keep the Boot partition from mounting each time you boot Yosemite.
2. Open up terminal and enter the following command: `diskutil info /Volumes/Boot`
3. Copy the Volume UUID
4. Now in Terminal type in: `sudo pico /etc/fstab`
5. Type this into Terminal: `UUID=NUMBER none hfs rw,noauto`
6. NUMBER will be replaced with the UUID number you got in step 3.
7. When done press `control+O` then press `enter`.
8. Press `control+X` to exit the editor.
9. Reboot. When you reboot you will notice that the Boot partition is no longer mounted. If you need to make changes to it just mount it using Disk Utility and then unmount it when done.
10. To undo this just follow these steps again and delete the line you added in the editor.

Removing the -f kernel flag

1. Open up terminal and type in: `sudo nano /usr/standalone/bootcaches.plist`
2. Scroll down until you see "preferred compression"
3. Change this value from `lzvn` to `lzss`.
4. Press `control+x`, then `y`, and then `enter` to save and exit.
5. In terminal type: `sudo kextcache -prelinked-kernel`
6. In your org.chameleon.Boot.plist remove the `-f` from the kernel flags.
7. Reboot, you can now boot using kernel cache and the boot process is much faster.

NOTES:

Currently I have been unable to get iMessage or Facetime to work. Everything else should; native audio, onboard SATA ports, etc.

For questions and issues please reference this forum thread on Mac Rumors:

<http://forums.macrumors.com/showthread.php?t=1740775>

****Fixing the boot0:error**

When you try to boot Chameleon you might be greeted with this:

```
boot0:test
boot0:test
boot0:GPT
boot0:test
boot0:test
boot0:error
```

This is because newer HDDs are built with 4k sectors instead of 512 sectors to make them faster and more efficient. Chameleon doesn't like 4k sectors so follow these steps to fix it.

1. Reboot your computer and reset your NVRAM by holding in *option+command+P+R* after the first boot chime until you hear a second boot chime. You will now boot back into OS X Lion/Mavericks.
2. Download this boot1h file and place it on your desktop:

<https://mega.co.nz/#!fhxSILrL!azd8GGevHNZy3oTRlf9jX1hJBNxFw3BKORVF4qA5cnE>

3. While booted to your Lion/Mavericks install erase just the Chameleon Boot partition using Disk Utility.
4. Open up terminal and type in: *diskutil list*
5. In the list that is displayed find the Boot partition and make note of the identifier.
6. Using Disk Utility, unmount the Boot partition.
7. Run the following command in Terminal. Where it says "PATH" replace that with the file path to the boot1h file on your desktop. Easiest way to do this is to just drag the boot1h file into the terminal window. Replace the identifier at the end with the identifier found in step 4:

```
sudo dd if=PATH of=/dev/disk0s2
```

8. Go back to Disk Utility and remount the Boot partition.
9. Install Chameleon using the process listed above. Then reboot and continue with installing Yosemite.

Thanks to wwanthony on MacRumors for this fix.

Thanks to all that have made this possible.