CHRIS BEARD
MAC SYSADMIN FOR EDMS

TEST BOX SPECIAL: MACOS TESTING IN A VM AND OTHER OPTIONS

WHAT I'M GOING TO COVER

- Options for getting yourself a macOS test computer
- Advantages of using a Virtual Machine (VM)
- Options for building a VM
- Building a VM using VMware Fusion
- Building a VM using VMware Fusion plus AutoDMG and vfuse tools

WHAT CAN I TEST THIS ON? (1/3)

- What do I test new software/scripts/commands on?
  - **Main computer**
    - + Quick and easy
    - - Unforeseen consequences
    - - Not realistic test of end user's computer
    - - Limited scenarios: fixed OS, can't do new build
    - + Personal testing sometimes picks up issues

WHAT CAN I TEST THIS ON? (2/3)

- What do I test new software/scripts/commands on?
  - **Second computer**
    - + Test different scenarios without risk
    - - Can be lengthy to switch scenarios, eg. macOS version
    - - Cost of having second Mac

WHAT CAN I TEST THIS ON? (3/3)

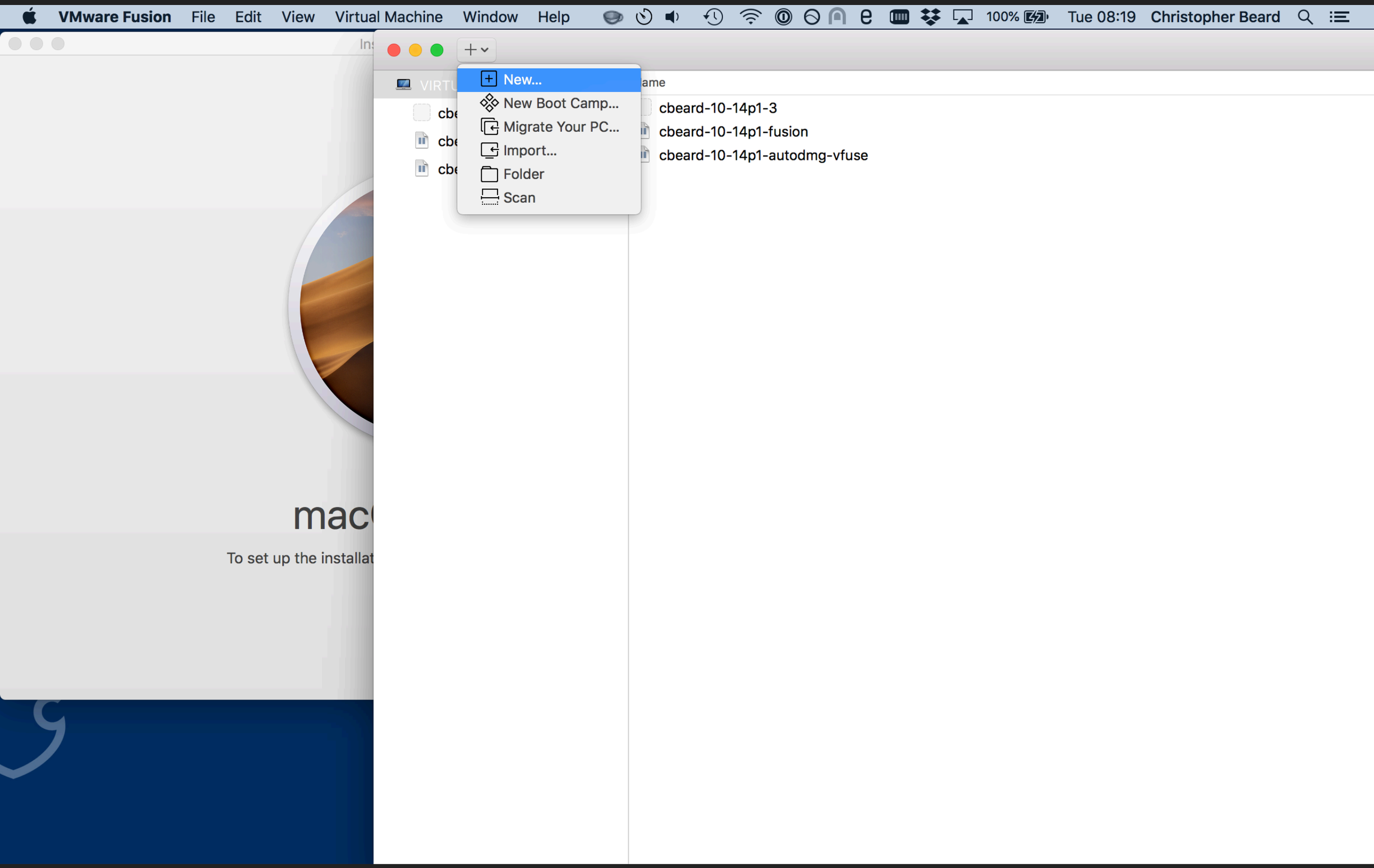
- What do I test new software/scripts/commands on?
  - **Virtual Machine (VM)**
    - + Quickly create/destroy/rollback machines
    - + Test multiple scenarios
    - - Buy and learn hypervisor software
    - - Storage
    - - Not as realistic as hardware; can get complicated

SOFTWARE OPTIONS FOR RUNNING A MACOS VM

- Proprietary hypervisors
  - VMware Fusion. Version 11 supports Mojave.
  - Parallels
- Open source hypervisors
  - Oracle Virtual Box
  - QEMU

BUILDING A VM USING VMWARE FUSION

- Requirements for making a macOS 10.14 Mojave VM:
  - VMware Fusion 11 (Standard or Pro)
  - Install macOS Mojave.app (App Store)
  - 50GB storage
- No Fusion? See ‘Building a macOS VM using Virtual Box’ (in links)


VMware Fusion
File
Edit
View
Virtual Machine
Window
Help
100%
Tue 08:19
Christopher Beard
New...
New Boot Camp...
Migrate Your PC...
Import...
Folder
Scan
cbeard-10-14p1-3
cbeard-10-14p1-fusion
cbeard-10-14p1-autodmg-vfuse

VMware Fusion File Edit View Virtual Machine Window Help 100% Tue 08:19 Christopher Beard

Applications

Search

Favorites
- AirDrop
- Applications
- oucs0162
- Shared
- Desktop
- Recents
- Documents
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- Dropbox
- 7. Media - Technica...
- drupal_vms
- Virtual Machines
- iCloud Drive
- Screenshots
- orchard-archive
- flights of helios
- 8. Flights of Helios...
- Photos
- Rehearsals
- Releases
- Studio
- Reviews, radio

Devices
- nsms-cthulhu
- Remote Disc
- TARDIS
- SCRATCH3

iMovie, Install macOS High Sierra, Install macOS Mojave, iTunes, Jamf Pro, Keynote, Mail, Maps, Messages, Microsoft OneNote, Microsoft Outlook, Microsoft PowerPoint, Microsoft Remote Desktop, Microsoft Remote Desktop, Microsoft Silverlight, Microsoft Word, Mission Control, Monit, Motion FX

Sharing Screenshot
A link to your screenshot was copied to your clipboard.

Create a New Virtual Machine

This will guide you through installing Windows or another operating system in a virtual machine on your Mac.

Choose Disc or Image — Configuration — Finish

Choose an operating system installation disc or image:

Install macOS Mojave
macOS 10.14
Show in Finder

Use another disc or disc image...

Cancel Go Back Continue

VMware Fusion File Edit View Virtual Machine Window Help 100% Tue 08:19 Christopher Beard

Applications

Favorites
- AirDrop
- Applications
- oucs0162
- Shared
- Desktop
- Recents
- Documents
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- 7. Media - Technica...
- drupal_vms
- Virtual Machines
- iCloud Drive
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Finish

The configuration of the virtual machine is now complete.

Choose Disc or Image — Configuration — Finish

Virtual Machine Summary

Guest Operating System	macOS 10.14
New Hard Disk	Capacity 40 GB
Memory	2 GB
Networking	Share with my Mac (NAT)
Device Summary	2 CPU cores, CD/DVD, USB Controller, Sound Card

To change the default virtual machine settings, click Customize Settings. To run the virtual machine now, click Finish.

Customize Settings

Cancel Go Back Finish

VMware Fusion File Edit View Virtual Machine Window Help 100% Tue 08:20 Christopher Beard

Applications

Favorites
- AirDrop
- Applications
- oucs0162
- Shared
- Desktop
- Recents
- Documents
- Downloads
- Dropbox
- 7. Media - Technica...
- drupal_vms
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ard-10-14p1-3

Save As: macOS 10.14

Tags:

Where: Virtual Machines

Share this virtual machine with other users on this Mac

Some features will be limited when sharing a virtual machine. Sharing is only available when the virtual machine is saved in a shared folder.

Cancel Save

Memory 2 GB

Networking Share with my Mac (NAT)

Device Summary 2 CPU cores, CD/DVD, USB Controller, Sound Card

To change the default virtual machine settings, click Customize Settings. To run the virtual machine now, click Finish.

Customize Settings

Cancel Go Back Finish

VMware Fusion File Edit View Virtual Machine Window Help 100% Tue 08:20 Christopher Beard

Applications

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Favorites
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ard-10-14p1-3

Unable to create the installation medium.

OK

or Image

Virtual Machine Summary

Guest Operating System	macOS 10.14
New Hard Disk	Capacity 40 GB
Memory	2 GB
Networking	Share with my Mac (NAT)
Device Summary	2 CPU cores, CD/DVD, USB Controller, Sound Card

To change the default virtual machine settings, click Customize Settings. To run the virtual machine now, click Finish.

Customize Settings

Cancel Go Back Finish

Disk Utility File Edit Images View Window Help 100% Mon 13:24 Christopher Beard

Install macOS Mojave

macOS Mojav

To set up the installation of macOS Mojave,

Continue

Macintosh HD

TARDIS

Disk Utility

View Volume First Aid Partition Erase Restore Unmount Info

Internal

Macinto...

External

TARDIS

Chris TMB

SCRATC...

Disk Images

InstallESD

Macintosh HD

APFS Volume • APFS (Encrypted)

500.07 GB

SHARED BY 4 VOLUMES

Used	Other Volumes	Free
313.25 GB	9.97 GB	182.9 GB

Mount Point:	/	Type:	APFS Volume
Capacity:	500.07 GB	Owners:	Enabled
Available:	215.86 GB (32.95 GB purgeable)	Connection:	PCI
Used:	313.25 GB	Device:	disk1s1

Finder File Edit View Go Window Help 100% Tue 08:54 Christopher Beard

cbeard-10-14p1-fusion2

macOS Utilities File Edit Utilities Window

macOS Utilities

Restore From Time Machine Backup
You have a backup of your system that you want to restore.

Install macOS
Upgrade or Install a new copy of macOS.

Get Help Online
Browse the Apple Support website to find help for your Mac.

Disk Utility
Repair or erase a disk using Disk Utility.

Continue

Finder File Edit View Go Window Help 100% Tue 10:38 Christopher Beard

cbeard-10-14p1-fusion2

Install macOS Mojave Edit Window

Install macOS Mojave

macOS Mojave

macOS Mojave will be installed on the disk “Macintosh HD”.

Macintosh HD
42.61 GB total
42.55 GB available

Install macOS Mojave
6.12 GB total
Zero KB available

Back

Install

Finder File Edit View Go Window Help 100% Tue 10:38 Christopher Beard

cbeard-10-14p1-fusion2

Install macOS Mojave Edit Window

Install macOS Mojave

macOS Mojave

macOS Mojave will be installed on the disk “Macintosh HD”.

Macintosh HD

About 3 minutes remaining

Cancel

Finder File Edit View Go Window Help 100% Tue 10:43 Christopher Beard

cbeard-10-14p1-fusion2

About 12 minutes remaining

VMware Fusion File Edit View Virtual Machine Window Help 100% Mon 14:08 Christopher Beard

cbeard-10-14p1-fusion

Welcome

In just a few steps, you can register and set up your Mac.

- United Arab Emirates
- United Kingdom
- United States
- Uruguay
- US Outlying Islands
- US Virgin Islands
- Uzbekistan
- Vanuatu

Back Continue

Do you need to hear instructions for setting up your Mac?
To learn how to use VoiceOver to set up your computer, press the Escape key now.

VMware Fusion File Edit View Virtual Machine Window Help 100% Mon 14:34 Christopher Beard

cbeard-10-14p1-fusion

VIRTUAL MAC

cbeard-10-

cbeard-10-

System Preferences Edit View Window Help Mon 06:34

jss.orchard.ox.ac.uk

Profiles

Search

Profile installation failed.

The profile "MDM Profile (com.jamfsoftware.encrypted-profile-service: 00000000-0000-0000-A000-4A414D460003)" could not be installed due to an unexpected error. <NSOSStatusErrorDomain:-67701>

OK

No profiles installed

Powered by Jamf

cintosh HD

TARDIS

Info

GB

VOLUMES

Volume

Enabled

PCI

disk1s1

Finder File Edit View Go Window Help 100% Tue 11:01 Christopher Beard

VIRTUAL MACHINES
- cbeard-10-14p1-3
- cbeard-10-14p1-fusion
- cbeard-10-14p1-autodmg-...

Virtual Machines

Search

Name	Date Modified	Size	Kind
cbeard-10-14p1-fusion		44.18 GB	VMBundle

AirDrop
Applications
oucs0162
Shared
Desktop
Recents
Documents
Downloads
Dropbox
7. Media - Technica...
drupal_vms
Virtual Machines
iCloud Drive
Screenshots
orchard-archive

Open
Open With ▶
Show Package Contents
Move to Trash
Get Info
Rename
Compress "cbeard-10-14p1-fusion"
Duplicate
Make Alias
Quick Look "cbeard-10-14p1-fusion"
Share ▶
Copy "cbeard-10-14p1-fusion"
Show View Options
Tags...
Services ▶

2 Processor Cores
2048 MB Memory

Hard Disks 30.4 GB Snapshots 0 bytes Reclaimable

Finder File Edit View Go Window Help 100% Tue 11:01 Christopher Beard

VIRTUAL MACHINES

- cbeard-10-14p1-3
- cbeard-10-14p1-fusion
- cbeard-10-14p1-autodmg-...

Desktop

AutoDMG

cbeard-10-14p1-fusion

Search

AirDrop
Applications
oucs0162
Shared
Desktop
Recents
Documents
Downloads
Dropbox
7. Media - Technica...
drupal_vms
Virtual Machines
iCloud Drive
Screenshots
orchard-archive

Name	Date Modified	Size	Kind
caches	Today at 08:17	--	Folder
cbeard-10-14p1-fusion-8bb03a70.vmem	Today at 05:54	2.15 GB	Document
cbeard-10-14p1-fusion-8bb03a70.vmss	Today at 05:54	138.4 MB	Document
cbeard-10-14p1-fusion.nvram	Today at 05:54	271 KB	Document
cbeard-10-14p1-fusion.plist	Yesterday at 18:27	694 bytes	TextWr...cument
cbeard-10-14p1-fusion.vmsd	Yesterday at 13:26	Zero bytes	Document
cbeard-10-14p1-fusion.vmx	Today at 05:54	3 KB	VMConfig
cbeard-10-14p1-fusion.vmx.lck	Today at 08:17	--	Folder
cbeard-10-14p1-fusion.vmxf	Yesterday at 18:27	379 bytes	VMwar...ta-data
quicklook-cache.png	Today at 06:47	370 KB	PNG image
startMenu.plist	Today at 05:54	1 KB	TextWr...cument
Virtual Disk.vmdk	Today at 05:54	41.89 GB	Virtual Disk
vmware-0.log	Yesterday at 18:27	287 KB	Log File
vmware-1.log	Yesterday at 18:25	277 KB	Log File
vmware-2.log	Yesterday at 18:25	297 KB	Log File
vmware.log	Today at 05:54	367 KB	Log File

2 Processor Cores
2048 MB Memory

Hard Disks 30.4 GB Snapshots 0 bytes Reclaimable

TextWrangler File Edit Text View Search Go Window #! Help 100% Tue 11:04 Christopher Beard

cbeard-10-14p1-fusion.vmx

~/Downloads/cbeard-10-14p1-fusion.vmx

```
hpet0.present = "TRUE"
ich7m.present = "TRUE"
keyboardAndMouseProfile = "52b7c47b-30be-a7e3-cbcc-28a6c29706b4"
memsize = "2048"
monitor.phys_bits_used = "43"
numa.autosize.cookie = "20012"
numa.autosize.vcpu.maxPerVirtualNode = "2"
numvcpus = "2"
nvram = "cbeard-10-14p1-fusion.nvram"
pciBridge0.pciSlotNumber = "17"
pciBridge0.present = "TRUE"
pciBridge4.functions = "8"
pciBridge4.pciSlotNumber = "21"
pciBridge4.present = "TRUE"
pciBridge4.virtualDev = "pcieRootPort"
pciBridge5.functions = "8"
pciBridge5.pciSlotNumber = "22"
pciBridge5.present = "TRUE"
pciBridge5.virtualDev = "pcieRootPort"
pciBridge6.functions = "8"
pciBridge6.pciSlotNumber = "23"
pciBridge6.present = "TRUE"
pciBridge6.virtualDev = "pcieRootPort"
pciBridge7.functions = "8"
pciBridge7.pciSlotNumber = "24"
pciBridge7.present = "TRUE"
pciBridge7.virtualDev = "pcieRootPort"
powerType.powerOff = "soft"
powerType.powerOn = "soft"
powerType.reset = "soft"
powerType.suspend = "soft"
sata0:0.fileName = "Virtual Disk.vmdk"
sata0:0.present = "TRUE"
sata0:0.redo = ""
sata0:1.autodetect = "TRUE"
sata0:1.deviceType = "cdrom-raw"
sata0:1.fileName = "auto detect"
sata0:1.present = "TRUE"
sata0:1.startConnected = "FALSE"
sata0.pciSlotNumber = "36"
sata0.present = "TRUE"
smc.present = "TRUE"
softPowerOff = "FALSE"
sound.autoDetect = "TRUE"
sound.fileName = "-1"
sound.pciSlotNumber = "33"
sound.present = "TRUE"
```

L: 42 C: 28 (none) Unicode (UTF-8) Unix (LF) Saved: 26/11/2018, 14:49:09 3,085 / ... /...

working10.14vm_vmx.txt

~/Downloads/working10.14vm_vmx.txt

```
hpet0.present = "TRUE"
hw.model = "MacBookPro15,1"
hw.model.reflectHost = "FALSE"
ich7m.present = "TRUE"
keyboardAndMouseProfile = "macProfile"
memsize = "4096"
mks.enable3d = "FALSE"
monitor.phys_bits_used = "43"
msg.autoanswer = "TRUE"
numa.autosize.cookie = "20012"
numa.autosize.vcpu.maxPerVirtualNode = "2"
numvcpus = "2"
nvram = "osx-10.14-18A391.apfs.dmg-3.nvram"
pciBridge0.pciSlotNumber = "17"
pciBridge0.present = "TRUE"
pciBridge4.functions = "8"
pciBridge4.pciSlotNumber = "21"
pciBridge4.present = "TRUE"
pciBridge4.virtualDev = "pcieRootPort"
pciBridge5.functions = "8"
pciBridge5.pciSlotNumber = "22"
pciBridge5.present = "TRUE"
pciBridge5.virtualDev = "pcieRootPort"
pciBridge6.functions = "8"
pciBridge6.pciSlotNumber = "23"
pciBridge6.present = "TRUE"
pciBridge6.virtualDev = "pcieRootPort"
pciBridge7.functions = "8"
pciBridge7.pciSlotNumber = "24"
pciBridge7.present = "TRUE"
pciBridge7.virtualDev = "pcieRootPort"
sata0:0.fileName = "osx-10.14-18A391.apfs.dmg-3-000001.vmdk"
sata0:0.present = "TRUE"
sata0:0.redo = ""
sata0:1.autodetect = "TRUE"
sata0:1.deviceType = "cdrom-raw"
sata0:1.present = "TRUE"
sata0:1.startConnected = "FALSE"
sata0.pciSlotNumber = "35"
sata0.present = "TRUE"
serialNumber = "VMf4jqp57rin"
serialNumber.reflectHost = "FALSE"
smbios.reflectHost = "FALSE"
smc.present = "TRUE"
softPowerOff = "FALSE"
tools.syncTime = "TRUE"
toolsInstallManager.updateCounter = "12"
```

L: 23 C: 28 Text File Unicode (UTF-8) Unix (LF) Saved: 26/11/2018, 14:49:07 2,701 / 24...

A BETTER WAY: VMWARE FUSION + AUTODMG + VFUSE

- AutoDMG by Per Olofsson
  - Uses macOS installer to create never-booted Macintosh HD inside a disk image (dmg)
- vfuse by Joseph Chilcote
  - Takes a never-booted disk image and converts it to a VMware Fusion VM
- Download the latest release.

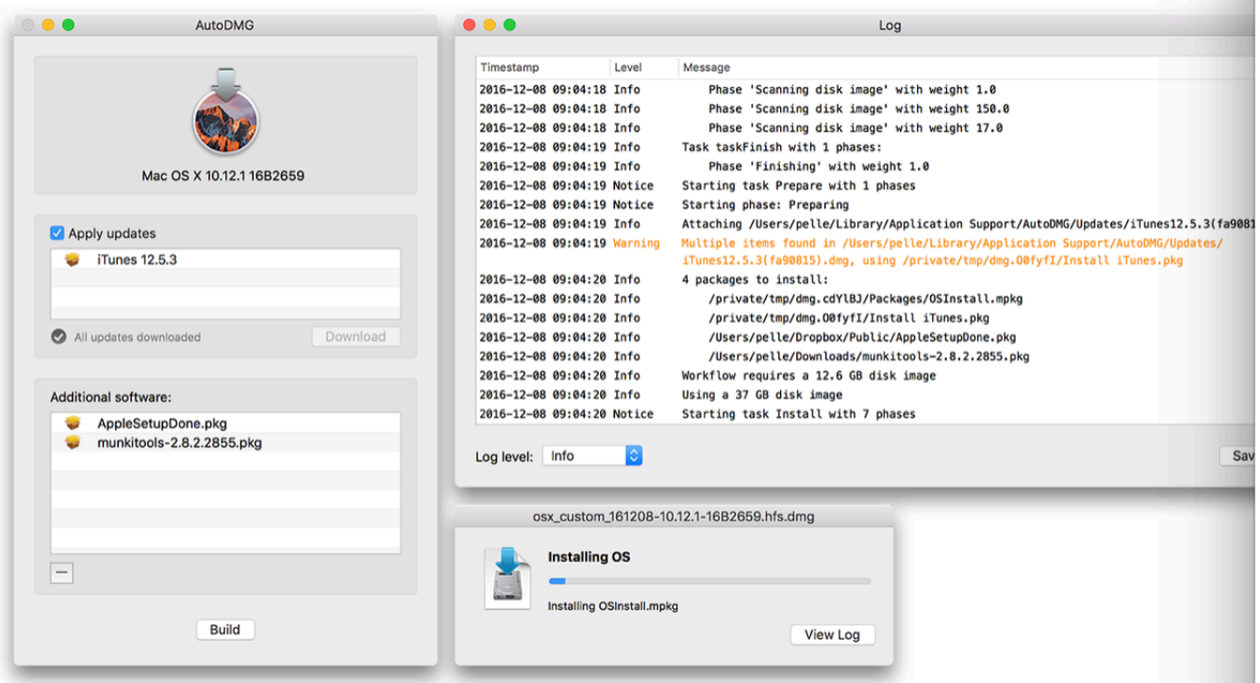
Safari File Edit View History Bookmarks Develop Window Help 100% Tue 11:15 Christopher Beard

github.com/MagerValp/AutoDM

ADAM talk FrontPage/EndUser ITSS/Support...cumentation Mojave TO Prep

AutoDMG

The award winning AutoDMG takes a macOS installer (10.10 or newer) and builds a system image suitable for deployment with Imagr, DeployStudio, LANrev, Jamf Pro, and other asr-based imaging tools.

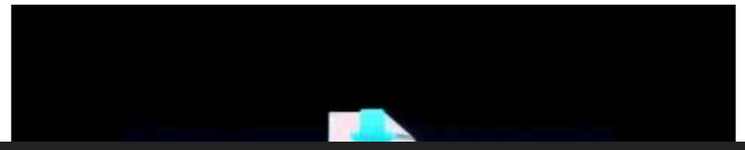


Documentation

Documentation and help is in the AutoDMG wiki.

Presentation

For a great overview of modular imaging and a demonstration of some of AutoDMG's features, watch Anthony F presentation from Penn State MacAdmins 2014:



github.com/chilcote/vfuse

ADAM talk FrontPage/EndUser ITSS/Support...cumentation Mojave TO Prep

vfuse

This script takes a never-booted DMG and converts it to a VMware Fusion VM.

The germ of this idea came about, as all good ideas, and germs, do: while drinking beer. Specifically, I was to back drinks and tossing around ideas with Gilbert Wilson, and he mentioned that he uses the VMware CLI too convert DMGs to VMDKs based on a blog post he'd read. Intrigued, I asked Gil to email me the specifics. Afte how potentially cool this was, I wrapped it up in this here terribly illegible, queasingly unpythonic script.

> Note: VMware Fusion 11 was released in September, and there is currently a bug in the binaries that `vfuse` to create the VM. Please see this wiki note for more details.

Requirements

- VMware Fusion 10.x Professional or above
- OS X 10.13.6+
- A never-booted image created with AutoDMG.
- (optional) Packer 1.1.1 (or above) for building a vagrant box.
- (optional) qemu-img

Usage

```
usage: vfuse [-h] [--version] [-i INPUT] [-o OUTPUT] [-n NAME] [-w HW_VERSION]
             [-m MEM_SIZE] [-s [SERIAL]] [-t TEMPLATE] [-e] [-p PACKER] [-d D]
             [--hw-model HW_MODEL] [--start [START]] [--stop STOP]
             [--reset RESET] [--use-qemu] [--recovery] [--snapshot]
             [--snapshot-name SNAPSHOT_NAME] [-c CHECKSUM] [--list-templates]
             [--list-cache] [--clear-cache]

Create and monitor VM from source DMG.

optional arguments:
  -h, --help            show this help message and exit
  --version             show the version number
  -i INPUT, --input INPUT
                        /path/to/dmg
  -o OUTPUT, --output OUTPUT
                        /path/to/output/dir
  -n NAME, --name NAME  Use a custom name
  -w HW_VERSION, --hw-version HW_VERSION
                        VMware hardware version
```

Finder File Edit View Go Window Help 100% Mon 16:02 Christopher Beard

github.com/MagerValp/AutoDM

ADAM talk | FrontPage/EndUser | ITSS/Support...cumentation | Mojave | TO Prep

(186) How t... | munki/maca... | Add placeh... | Using install... | Releases ·...

MagerValp / AutoDMG

Code | Issues 3 | Pull requests 0 | Projects 0 | Wiki | Pulse | Community

Releases | Tags

Latest release

v1.9

325ff36

AutoDMG 1.9

MagerValp released this on 24 Sep · 1 commit to master sir

Assets 3

AutoDMG-1.9.dmg

Source code (zip)

Source code (tar.gz)

- Added 10.14 support.
  ⚠️ To successfully build on Mojave the installer mu
  external volume, see issue #222.
- Removed 10.10 and 10.11 support.
- Removed HFS+ support for 10.14+.

v1.8.1

176925f

AutoDMG 1.8.1

MagerValp released this on 24 Apr · 17 commits to master since this release

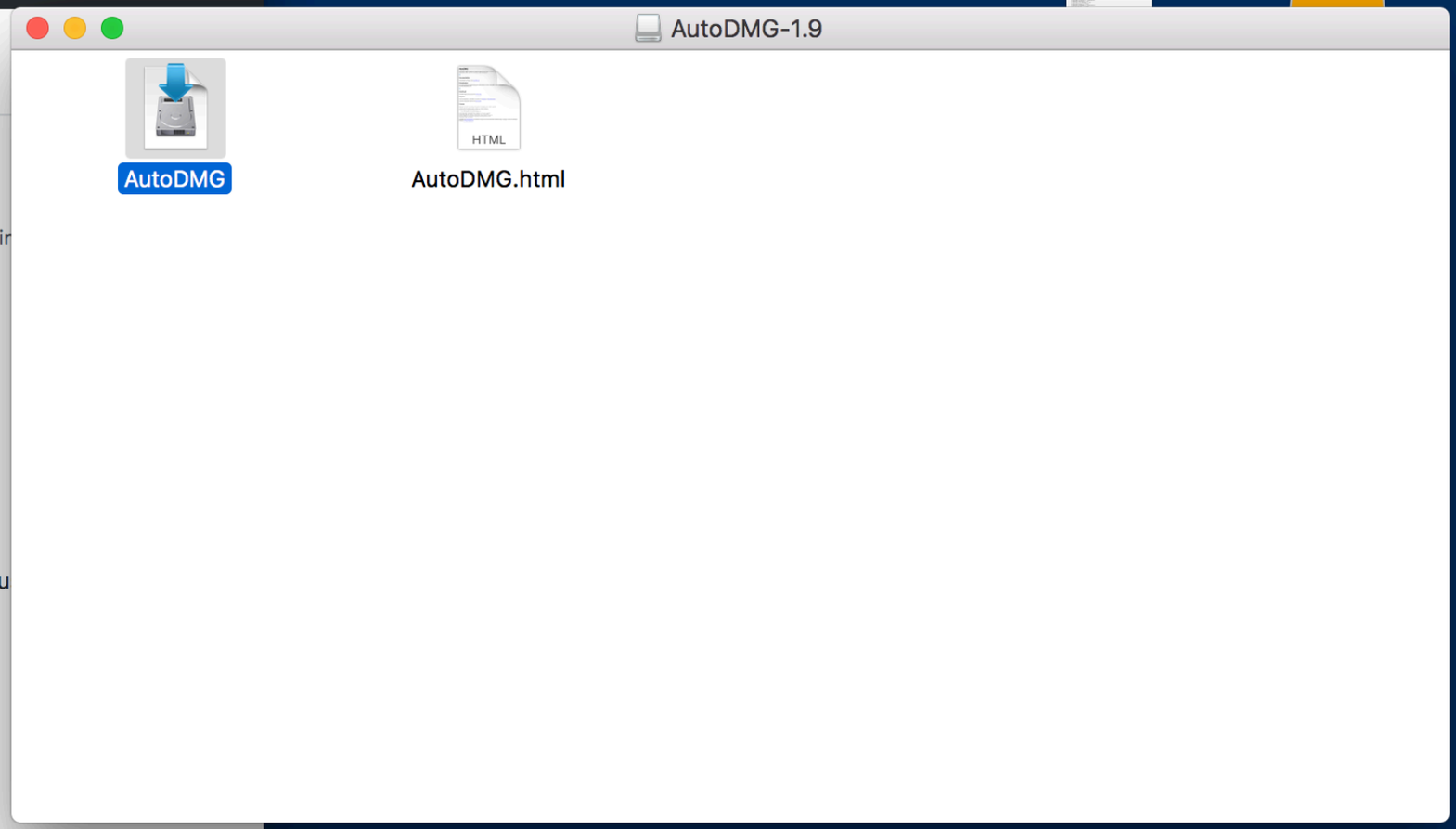
Assets 3

AutoDMG-1.8.1.dmg 1.07 MB

Source code (zip)

Source code (tar.gz)

https://github.com/MagerValp/AutoDMG/releases/tag/v1.9



working10.14vm_vmx

Macintosh HD

AutoDMG File Edit Window Help 100% Mon 16:07 Christopher Beard

github.com/MagerValp/AutoDM

ADAM talk FrontPage/EndUser ITSS/Support...cumentation Mojave TO Prep

(186) How t... munki/maca... Add placeh... Using install... Releases ·...

MagerValp / AutoDMG

Release

Applications

Search

Favorites

- AirDrop
- Applications
- oucs0162
- Shared
- Desktop
- Recents
- Documents
- Downloads
- Dropbox
- 7. Media - Technica...
- drupal_vms
- Virtual Machines
- iCloud Drive
- Screenshots
- orchard-archive

Name	Date
Google Drive	6 Sep
HandBrake	5 Sep
HandyShare	20 Se
iBooks	31 Oc
Image Capture	13 De
iMovie	10 No
iMovie	3 Oct
Install macOS High Sierra	14 No
Install macOS Mojave	Today
iTerm	29 Oc
iTunes	17 Ju
Jamf Pro	22 Se
Keynote	10 No
Launchpad	19 Oc
Mail	31 Oc
Maps	31 Oc
Messages	31 Oc
Microsoft Excel	15 No
Microsoft OneNote	15 No
Microsoft Outlook	19 No
Microsoft PowerPoint	15 No

176925f

MagerValp released this on 24 Apr · 17 commits to master since this release

Assets 3

AutoDMG-1.8.1.dmg 1.07 MB

Source code (zip)

Source code (tar.gz)

https://github.com/MagerValp/AutoDMG/releases/tag/v1.9

14VM_VMX

Macintosh HD

AutoDMG

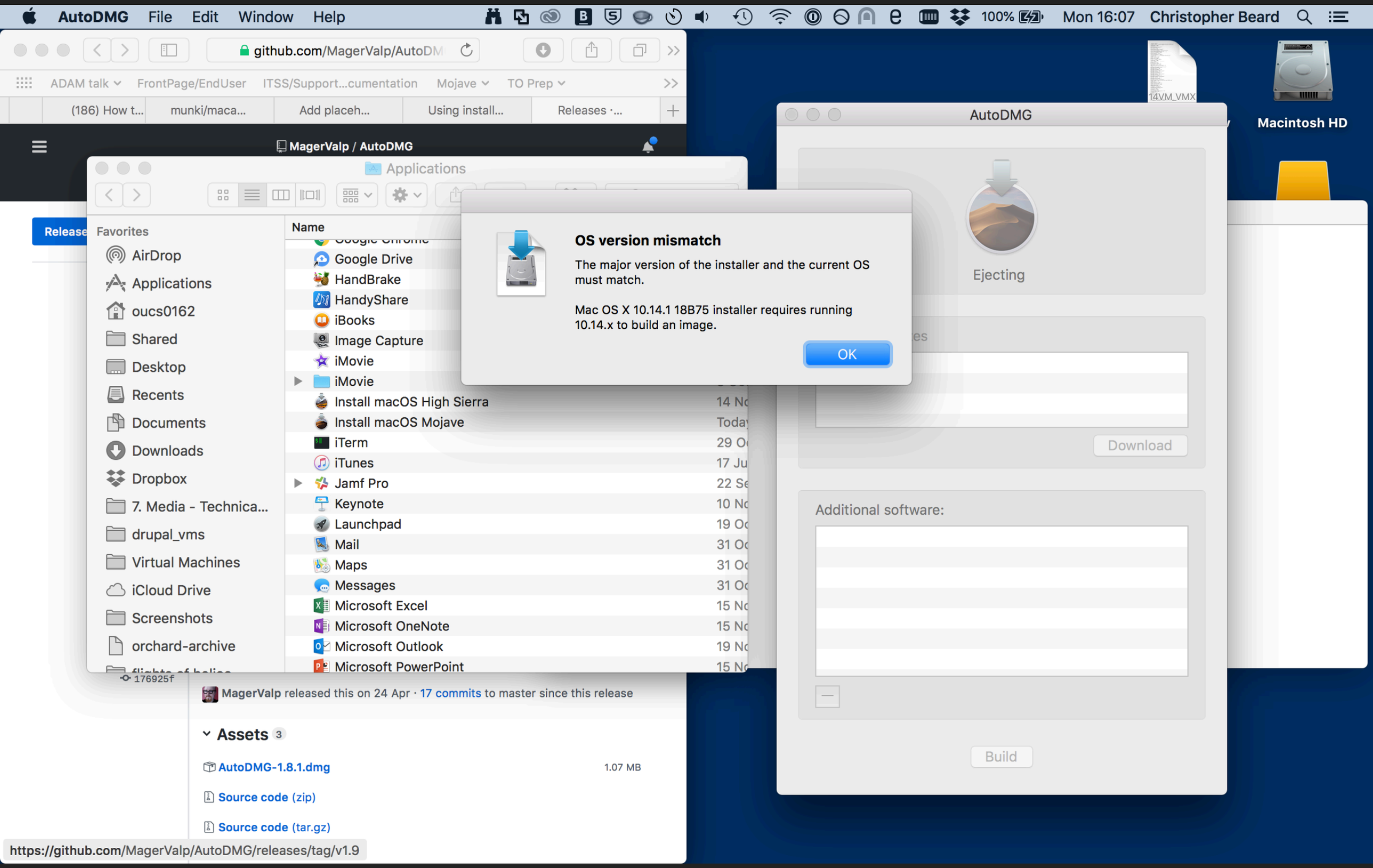
Drop macOS Installer Here

Apply updates

Download

Additional software:

Build


AutoDMG File Edit Window Help
100% Mon 16:07 Christopher Beard
github.com/MagerValp/AutoDM
ADAM talk FrontPage/EndUser ITSS/Support...cumentation Mojave TO Prep
(186) How t... munki/maca... Add placeh... Using install... Releases ·...
MagerValp / AutoDMG
Release
Applications
Favorites
AirDrop
Applications
oucs0162
Shared
Desktop
Recents
Documents
Downloads
Dropbox
7. Media - Technica...
drupal_vms
Virtual Machines
iCloud Drive
Screenshots
orchard-archive
Name
Google Drive
HandBrake
HandyShare
iBooks
Image Capture
iMovie
iMovie
Install macOS High Sierra
Install macOS Mojave
iTerm
iTunes
Jamf Pro
Keynote
Launchpad
Mail
Maps
Messages
Microsoft Excel
Microsoft OneNote
Microsoft Outlook
Microsoft PowerPoint
OS version mismatch
The major version of the installer and the current OS must match.
Mac OS X 10.14.1 18B75 installer requires running 10.14.x to build an image.
OK
AutoDMG
Ejecting
Download
Additional software:
Build
Macintosh HD
176925f
MagerValp released this on 24 Apr · 17 commits to master since this release
Assets 3
AutoDMG-1.8.1.dmg 1.07 MB
Source code (zip)
Source code (tar.gz)
https://github.com/MagerValp/AutoDMG/releases/tag/v1.9

VMware Fusion File Edit View Virtual Machine Window Help 100% Tue 11:31 Christopher Beard

cbeard-10-14p1-fusion

Finder File Edit View Go Window Help Tue 11:31

Macintosh HD

old

Chris TMB

stuff

Finder File Edit View Go Window Help 100% Tue 11:30 Christopher Beard

cbeard-10-14p1-fusion

Finder File Edit View Go Window Help Tue 11:30

AutoDMG

Mac OS X 10.14.1 18B75

Apply updates

All updates downloaded Download

Additional software:

Build

AutoDMG-1.9

Macintosh HD

old

Chris TMB

stuff

VMware Fusion File Edit View Virtual Machine Window Help 100% Tue 11:31 Christopher Beard

cbeard-10-14p1-fusion

System Preferences Edit View Window Help Mon 08:45

mojave

Discover
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macOS Mojave

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4+
Age

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Are you sure you want to download macOS Mojave 10.14.1?

Not Now Download

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macOS Mojave delivers new features inspired by its most powerful users but designed for everyone. Stay focused on your work using Dark Mode. Organise your desktop using Stacks. Experience four new built-in apps. And discover new apps in the reimagine more

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Website
Support

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Macintosh HD

old

Chris TMB

stuff

VMware Fusion File Edit View Virtual Machine Window Help 100% Tue 11:31 Christopher Beard

cbeard-10-14p1-fusion

AutoDMG File Edit Window Help Mon 08:52

Applications

Favourites
Recents
Applications
Desktop
Documents
Downloads

Locations
iCloud Drive
AutoD...
Network

Tags
Red
Orange
Yellow
Green
Blue

FaceTime
Font Book
Home
Image Capture
Install macOS Mojave
iTunes
Launchpad
Mail
Maps
Messages
Mission Control
News

AutoDMG

Drop macOS Installer Here

Apply updates

Download

Additional software:

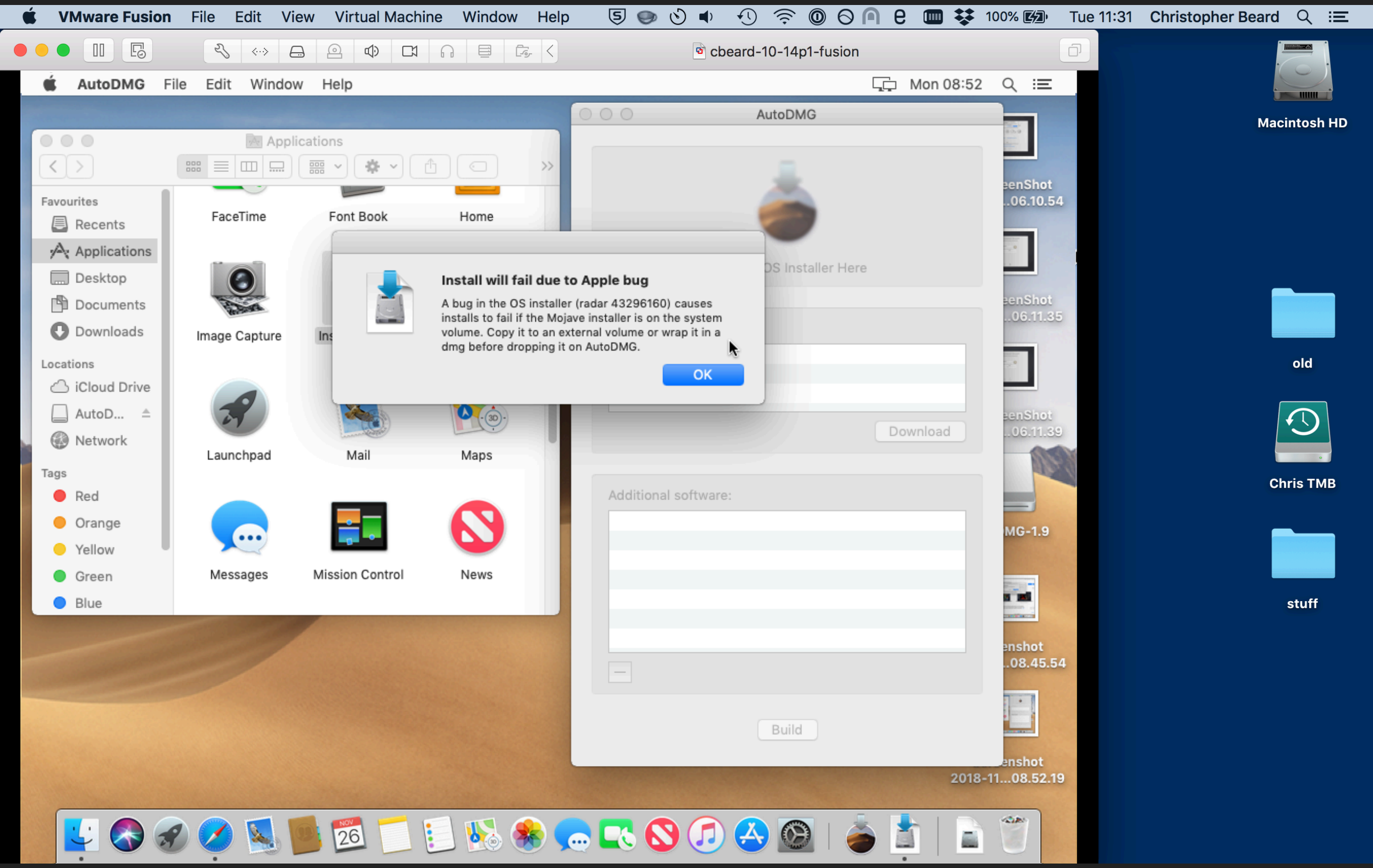
Build

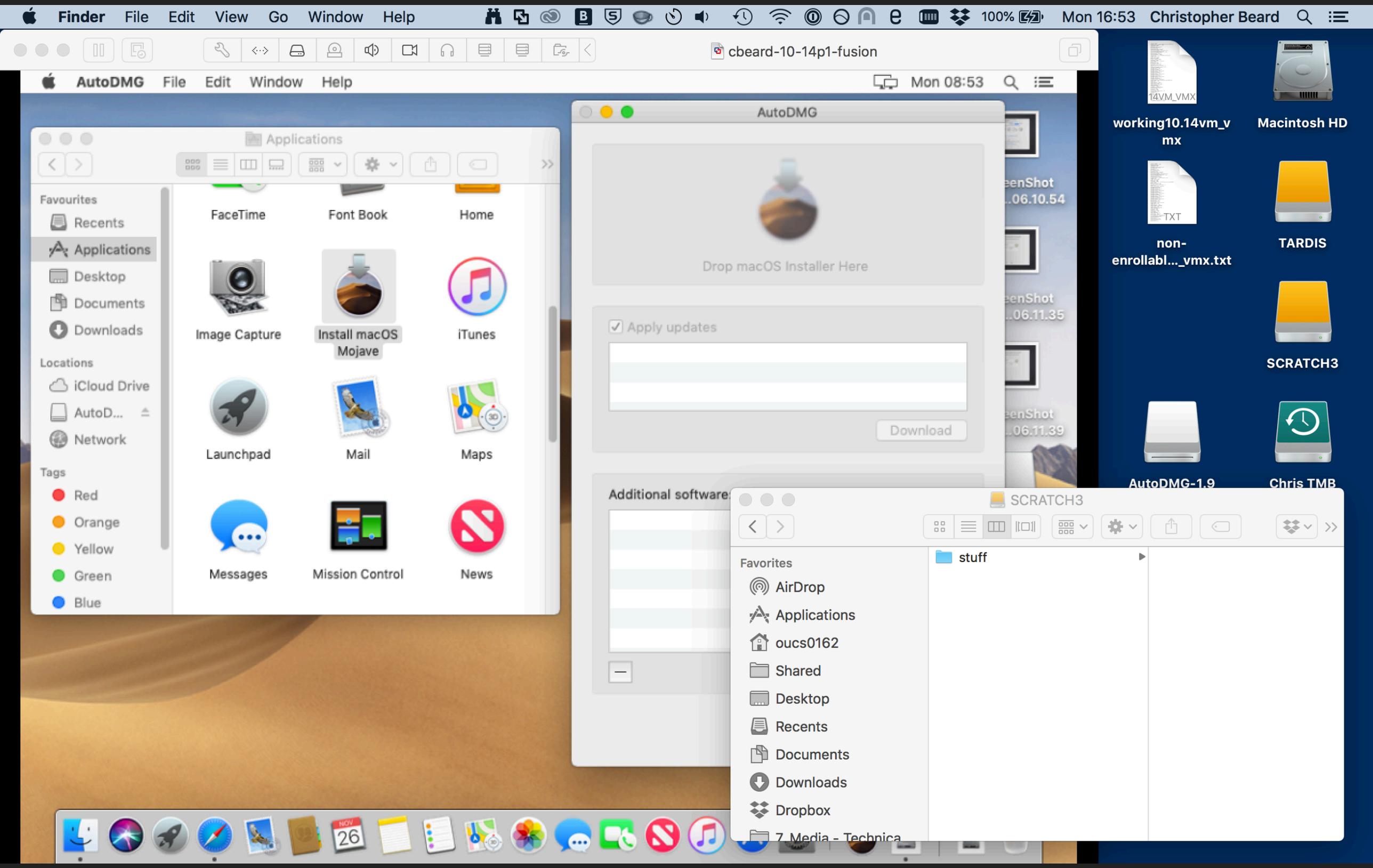
Macintosh HD

old

Chris TMB

stuff


VMware Fusion File Edit View Virtual Machine Window Help
100% Tue 11:31 Christopher Beard
cbeard-10-14p1-fusion
AutoDMG File Edit Window Help
Mon 08:52
Applications
Favourites
Recents
Applications
Desktop
Documents
Downloads
Locations
iCloud Drive
AutoD...
Network
Tags
Red
Orange
Yellow
Green
Blue
FaceTime
Font Book
Home
Image Capture
Launchpad
Mail
Maps
Messages
Mission Control
News
Install will fail due to Apple bug
A bug in the OS installer (radar 43296160) causes installs to fail if the Mojave installer is on the system volume. Copy it to an external volume or wrap it in a dmg before dropping it on AutoDMG.
OK
AutoDMG
OS Installer Here
Download
Additional software:
Build
Macintosh HD
old
Chris TMB
stuff


Finder File Edit View Go Window Help
100% Mon 16:53 Christopher Beard
cbeard-10-14p1-fusion
AutoDMG File Edit Window Help
Mon 08:53
Applications
Favourites
Recents
Applications
Desktop
Documents
Downloads
Locations
iCloud Drive
AutoD...
Network
Tags
Red
Orange
Yellow
Green
Blue
FaceTime
Font Book
Home
Image Capture
Install macOS Mojave
iTunes
Launchpad
Mail
Maps
Messages
Mission Control
News
AutoDMG
Drop macOS Installer Here
Apply updates
Download
Additional software
SCRATCH3
Favorites
AirDrop
Applications
oucs0162
Shared
Desktop
Recents
Documents
Downloads
Dropbox
stuff
working10.14vm_vmx
Macintosh HD
non-enrollabl..._vmx.txt
TARDIS
SCRATCH3
AutoDMG-1.9
Chris TMB

iTerm2 Shell Edit View Session Scripts Profiles Toolbelt Window Help 100% Mon 16:57 Christopher Beard

cbeard-10-14p1-fusion

System Preferences Edit View Window Help Mon 08:57

Applications

```
cbeard-10-14p
lo0: flags=80
        optio
        inet
        inet6
        inet6
        nd6 o
gif0: flags=8
stf0: flags=0
UHC0: flags=0
EHC2: flags=0
XHC1: flags=0
en0: flags=88
        optio
        ether
        inet6
        inet
        nd6 o
        media
        statu
utun0: flags=
        inet6
        nd6 o
cbeard-10-14p
```

Sharing

Computer Name: cbeard-10-14p1-fusion

Computers on your local network can access cbeard-10-14p1-fusion.local

On	Service
☐	DVD or CD Sharing
☐	Screen Sharing
☐	File Sharing
☐	Printer Sharing
☑	Remote Login
☐	Remote Management
☐	Remote Apple Events
☐	Internet Sharing
☐	Content Caching

Remote Login: On

To log in to this computer rem

Allow access for: All us

Only

AutoDMG

Build

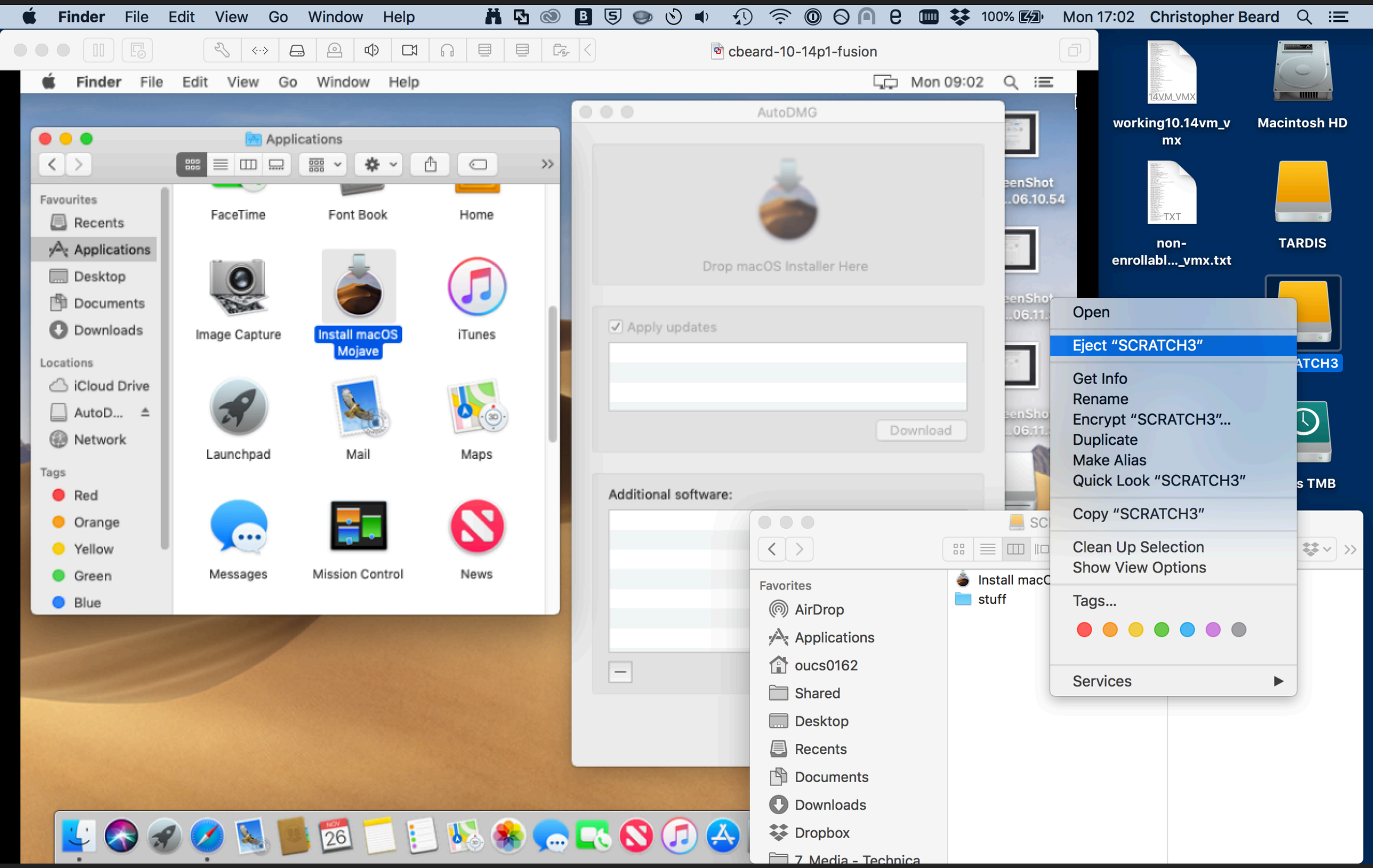
2. oucs0162@nsms-cthulhu: ~ (zsh)

```
oucs0162@nsms-cthulhu  ~
oucs0162@nsms-cthulhu  ~
oucs0162@nsms-cthulhu  ~  ssh ladmin@192.168.112.222
The authenticity of host '192.168.112.222 (192.168.112.222)' can't be established.
ECDSA key fingerprint is SHA256:Md/OEyUu5dz2BZUyXaABd9TxGwbS1BXEY73im4vQhe4.
Are you sure you want to continue connecting (yes/no)? yes
Warning: Permanently added '192.168.112.222' (ECDSA) to the list of known hosts.
Password:
Last login: Mon Nov 26 08:54:38 2018
cbeard-10-14p1-fusion:~ ladmin$ exit
logout
Connection to 192.168.112.222 closed.
✘ oucs0162@nsms-cthulhu  ~  scp ladmin@192.168.112.222:"/Applications/Install macOS Mojave.app" /Volumes/SCRATCH3/
```

working10.14vm_vmx

Macintosh HD

2018-11...08.55.28 2018-11...08.52.19


Finder File Edit View Go Window Help
100% Mon 17:02 Christopher Beard
cbeard-10-14p1-fusion
Finder File Edit View Go Window Help
Mon 09:02
Applications
Favourites
Recents
Applications
Desktop
Documents
Downloads
Locations
iCloud Drive
AutoD...
Network
Tags
Red
Orange
Yellow
Green
Blue
FaceTime
Font Book
Home
Image Capture
Install macOS Mojave
iTunes
Launchpad
Mail
Maps
Messages
Mission Control
News
AutoDMG
Drop macOS Installer Here
Apply updates
Download
Additional software:
working10.14vm_vmx
Macintosh HD
non-enrollabl..._vmx.txt
TARDIS
Open
Eject "SCRATCH3"
Get Info
Rename
Encrypt "SCRATCH3"...
Duplicate
Make Alias
Quick Look "SCRATCH3"
Copy "SCRATCH3"
Clean Up Selection
Show View Options
Tags...
Services
Favorites
AirDrop
Applications
oucs0162
Shared
Desktop
Recents
Documents
Downloads
Dropbox
Install macO
stuff

VMware Fusion File Edit View Virtual Machine Window Help 100% Mon 17:05 Christopher Beard

cbeard-10-14p1-fusion

AutoDMG File Edit Window Help Mon 17:05

Show All | cbeard-10-14p1-fusion: USB & Bluetooth | Add Device...

Connect USB devices:

Name	Plug In Action
☐ Texas Instruments USB audio CODEC	Connect to Mac
☐ Chris TMB (Seagate RSS Expansion Desk)	Connect to Mac
☑ TARDIS (BUFFALO HD-PNTU3)	Connect to the VM

▶ Advanced USB options

☑ Share Bluetooth devices with the virtual machine

working10.14vm_vmx

Macintosh HD

non-enrollabl..._vmx.txt

AutoDMG-1.9

Chris TMB

stuff

Finder File Edit View Go Window Help 100% Mon 17:05 Christopher Beard

cbeard-10-14p1-fusion

Finder File Edit View Go Window Help Mon 17:05

AutoDMG

Drop macOS Installer Here

Apply updates

Download

Additional software:

Build

Favourites
Recents
Applications
Desktop
Documents
Downloads
Locations
iCloud Drive
AutoD...
TARDIS
SCRAT...
Network
Tags
Red
Orange
Yellow

FaceTime
Image Capt
Launchpa
Messages

TARDIS
SCRATCH3

LWScreenShot 2018-11...06.10.54
LWScreenShot 2018-11...06.11.35
LWScreenShot 2018-11...06.11.39

SCRATCH3

Search

Favourites
Recents
Applications
Desktop
Documents
Downloads
Locations
iCloud Drive
AutoD...
TARDIS

Install macOS Mojave
stuff

working10.14vm_vmx
Macintosh HD
non-enrollabl..._vmx.txt
AutoDMG-1.9
Chris TMB
stuff

Finder File Edit View Go Window Help 100% Mon 17:06 Christopher Beard

cbeard-10-14p1-fusion

AutoDMG File Edit Window Help Mon 17:06

AutoDMG

Mac OS X 10.14.1 18B75

Apply updates

All updates downloaded Download

Additional software:

Build

Favourites
Recents
Applications
Desktop
Documents
Downloads
Locations
iCloud Drive
AutoD...
TARDIS
SCRAT...
Network
Tags
Red
Orange
Yellow

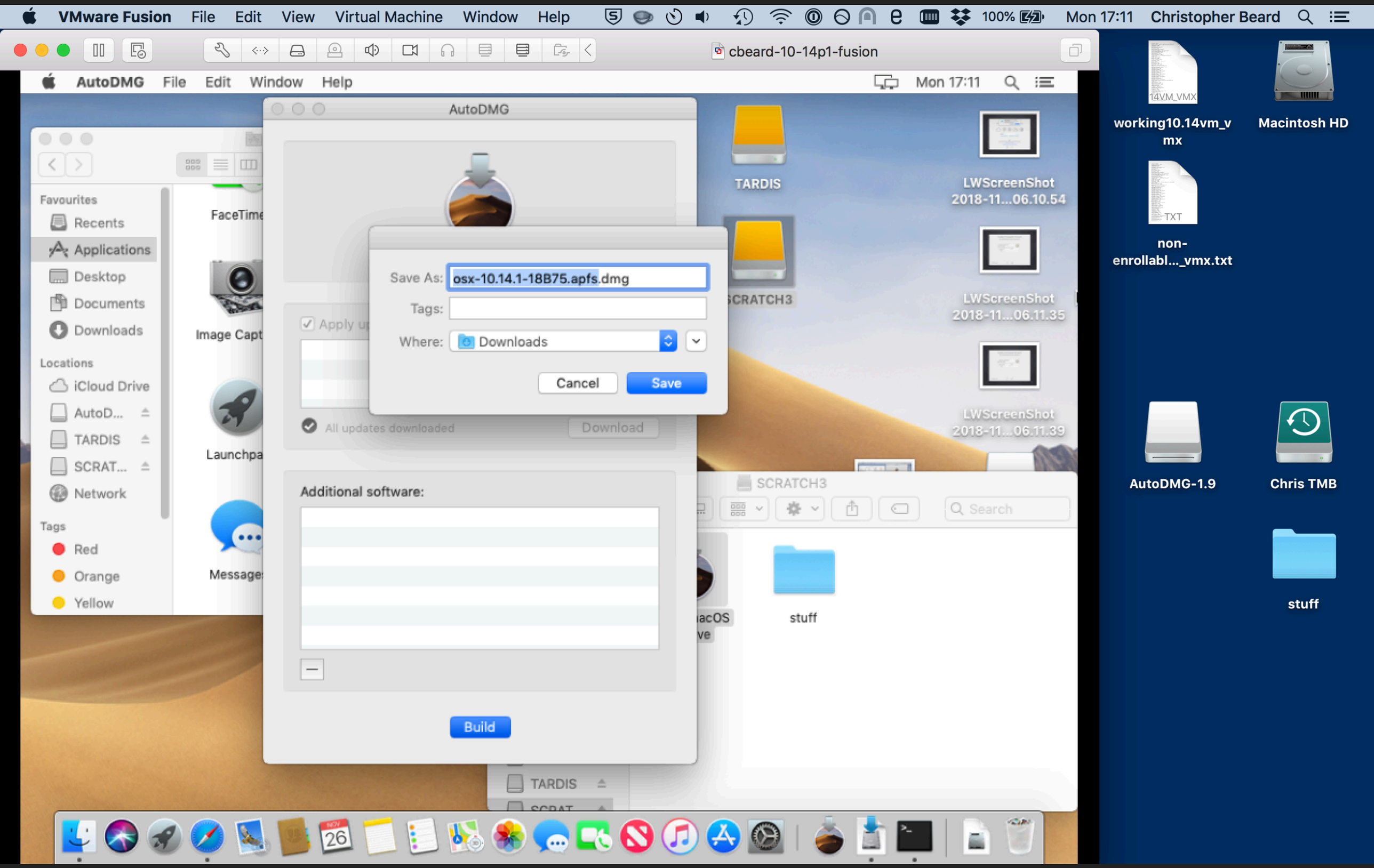
FaceTime
Image Capt
Launchpa
Messages

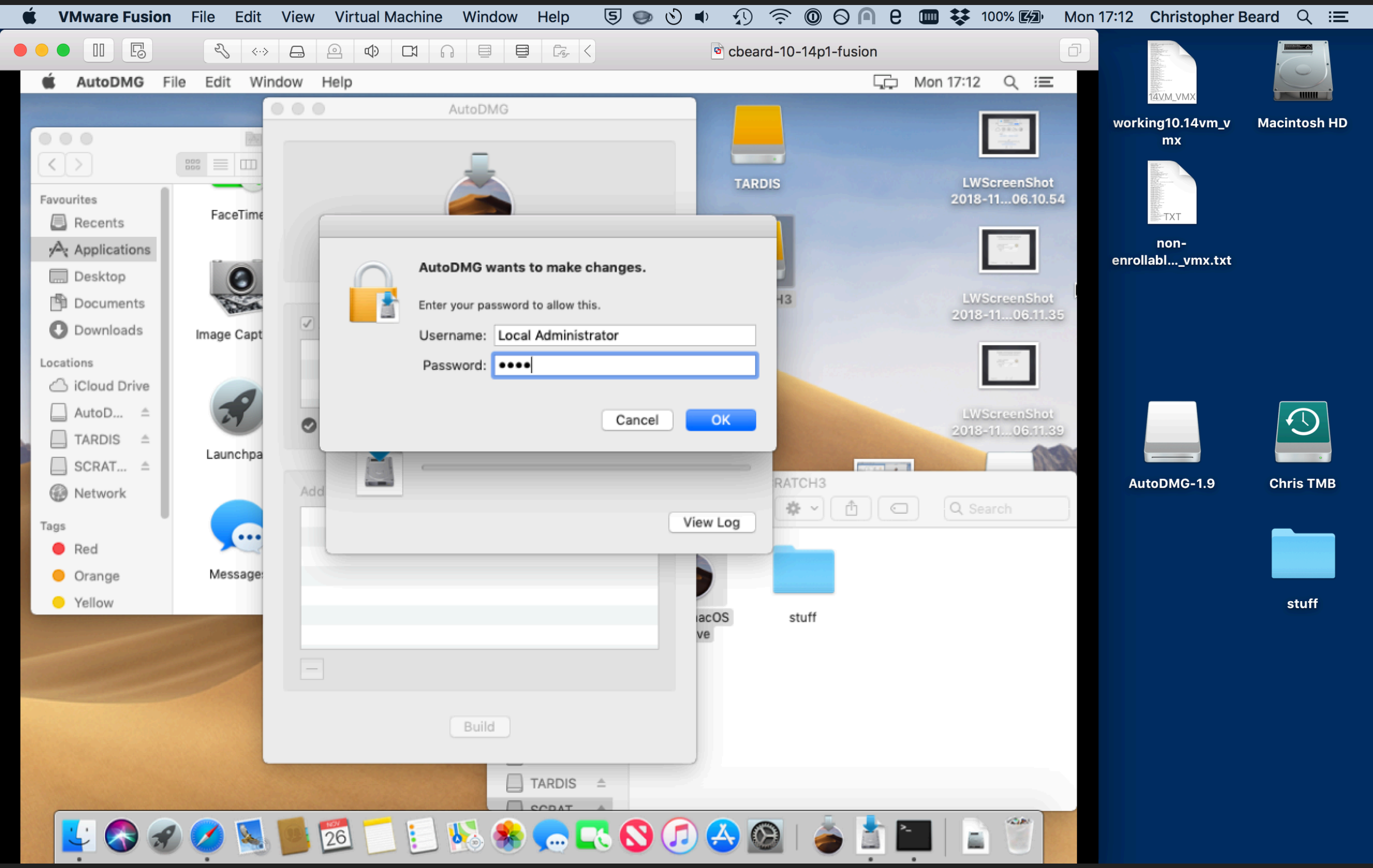
TARDIS
SCRATCH3

LWScreenShot 2018-11...06.10.54
LWScreenShot 2018-11...06.11.35
LWScreenShot 2018-11...06.11.39

SCRATCH3
Search
stuff

working10.14vm_vmx
Macintosh HD
non-enrollabl..._vmx.txt
AutoDMG-1.9
Chris TMB
stuff


VMware Fusion File Edit View Virtual Machine Window Help
100% Mon 17:11 Christopher Beard
cbeard-10-14p1-fusion
AutoDMG File Edit Window Help
Mon 17:11
AutoDMG
Save As: osx-10.14.1-18B75.apfs.dmg
Tags:
Where: Downloads
Cancel
Save
All updates downloaded
Download
Additional software:
Build
Favourites
Recents
Applications
Desktop
Documents
Downloads
Locations
iCloud Drive
AutoD...
TARDIS
SCRAT...
Network
Tags
Red
Orange
Yellow
FaceTime
Image Capt
Launchpa
Messages
TARDIS
SCRATCH3
LWScreenShot 2018-11...06.10.54
LWScreenShot 2018-11...06.11.35
LWScreenShot 2018-11...06.11.39
SCRATCH3
Search
stuff
TARDIS
working10.14vm_vmx
Macintosh HD
non-enrollabl..._vmx.txt
AutoDMG-1.9
Chris TMB
stuff


VMware Fusion File Edit View Virtual Machine Window Help
100% Mon 17:12 Christopher Beard
cbeard-10-14p1-fusion
AutoDMG File Edit Window Help
Mon 17:12
AutoDMG
AutoDMG wants to make changes.
Enter your password to allow this.
Username: Local Administrator
Password: ••••
Cancel
OK
View Log
Build
Favourites
Recents
Applications
Desktop
Documents
Downloads
Locations
iCloud Drive
AutoD...
TARDIS
SCRAT...
Network
Tags
Red
Orange
Yellow
FaceTime
Image Capt
Launchpa
Messages
TARDIS
LWScreenShot 2018-11...06.10.54
LWScreenShot 2018-11...06.11.35
LWScreenShot 2018-11...06.11.39
RATCH3
Search
stuff
TARDIS
14VM_VMX
working10.14vm_vmx
Macintosh HD
TXT
non-enrollabl..._vmx.txt
AutoDMG-1.9
Chris TMB
stuff

Finder File Edit View Go Window Help 100% Mon 17:24 Christopher Beard

cbeard-10-14p1-fusion

AutoDMG File Edit Window Help Mon 17:24

AutoDMG

Mac OS X 10.14.1 18B75

Apply updates

osx-10.14.1-18B75.apfs.dmg

Installing OS

Installing InstallInfo.plist

View Log

Favourites
Recents
Applications
Desktop
Documents
Downloads
Locations
iCloud Drive
AutoD...
TARDIS
SCRAT...
Network
Tags
Red
Orange
Yellow

FaceTime
Image Capt
Launchpa
Message

TARDIS
SCRATCH3
LWScreenShot 2018-11...06.10.54
LWScreenShot 2018-11...06.11.35
LWScreenShot 2018-11...06.11.39

Install macOS Mojave
stuff

working10.14vm_vmx
Macintosh HD
non-enrollabl..._vmx.txt
AutoDMG-1.9
Chris TMB
stuff

Finder File Edit View Go Window Help 100% Tue 05:25 Christopher Beard

cbeard-10-14p1-fusion

AutoDMG File Edit Window Help Tue 05:25

AutoDMG

Mac OS X 10.14.1

Apply updates

All updates downloaded

Additional software:

Build

Build successful

Built osx-10.14.1-18B75.apfs.dmg

Reveal OK

osx-10.14.1-18B75.apfs.dmg

Finishing

Scanning disk image for restore

View Log

Welcome to macOS Mojave

Take a quick tour to learn about great new features.

Show Later

SCRATCH3

osx-10.14.1-18B75 .apfs.dmg

RATCH3

Search

Applications

Desktop

Documents

Downloads

iCloud Drive

AutoD...

TARDIS

Install macOS Mojave

stuff

working10.14vm_vmx

Macintosh HD

non-enrollabl..._vmx.txt

AutoDMG-1.9

stuff

Finder File Edit View Go Window Help 100% Tue 05:33 Christopher Beard

cbeard-10-14p1-fusion

Desktop

AutoDMG

Mac OS X 10.14.1 18B75

Apply updates

All updates downloaded Download

Additional software:

Build

2. oucs0162@nsms-cthulhu: ~ (zsh)

```
oucs0162@nsms-cthulhu ~ scp ladmin@192.168.112.222:/Users/ladmin/Desktop/os
x-10.14.1-18B75.apfs.dmg ~/Desktop/
ssh: connect to host 192.168.112.222 port 22: Connection refused
x oucs0162@nsms-cthulhu ~ scp ladmin@192.168.112.222:/Users/ladmin/Desktop/
osx-10.14.1-18B75.apfs.dmg ~/Desktop/
ssh: connect to host 192.168.112.222 port 22: Connection refused
x oucs0162@nsms-cthulhu ~ scp ladmin@192.168.112.222:/Users/ladmin/Desktop/
osx-10.14.1-18B75.apfs.dmg ~/Desktop/
Password:
osx-10.14.1-18B75.apfs.dmg                    100% 7924MB  48.8MB/s   02:42
oucs0162@nsms-cthulhu ~
```

Favourites

Locations

working10.14vm_vmx

Macintosh HD

non-enrollabl..._vmx.txt

osx-10.14.1-18B75.apfs.dmg

AutoDMG-1.9

stuff

iTerm2 Shell Edit View Session Scripts Profiles Toolbelt Window Help 100% Tue 05:34 Christopher Beard

working10.14vm_vmx

Macintosh HD

non-enrollabl..._vmx.txt

osx-10.14.1-18B75.apfs.dmg

Opening "osx-10.14.1-18B75.apfs.dmg"...

Verifying...

Cancel

Skip

AutoDMG-1.9

stuff

2. oucs0162@nsms-cthulhu: ~ (zsh)

```
oucs0162@nsms-cthulhu  ~  scp ladmin@192.168.112.222:/Users/ladmin/Desktop/os
x-10.14.1-18B75.apfs.dmg ~/Desktop/
ssh: connect to host 192.168.112.222 port 22: Connection refused
✘ oucs0162@nsms-cthulhu  ~  scp ladmin@192.168.112.222:/Users/ladmin/Desktop/
osx-10.14.1-18B75.apfs.dmg ~/Desktop/
ssh: connect to host 192.168.112.222 port 22: Connection refused
✘ oucs0162@nsms-cthulhu  ~  scp ladmin@192.168.112.222:/Users/ladmin/Desktop/
osx-10.14.1-18B75.apfs.dmg ~/Desktop/
Password:
osx-10.14.1-18B75.apfs.dmg                    100% 7924MB  48.8MB/s   02:42
oucs0162@nsms-cthulhu  ~
```

Finder File Edit View Go Window Help 100% Tue 05:35 Christopher Beard

Macintosh HD

Search

Favorites
- AirDrop
- Applications
- oucs0162
- Shared
- Desktop
- Recents
- Documents
- Downloads
- Dropbox
- 7. Media - Technica...
- drupal_vms
- Virtual Machines
- iCloud Drive
- Screenshots
- orchard-archive
- flights of helios
- 8. Flights of Helios...
- Photos
- Rehearsals
- Releases
- Studio
- Reviews, radio

Devices
- nsms-cthulhu
- Remote Disc
- AutoDMG-1.9
- Macintosh HD

Applications Library System Users

hs_err_pid98566.log

2. oucs0162@nsms-cthulhu: ~ (zsh)

```
hulhu ~ scp ladmin@192.168.112.222:/Users/ladmin/Desktop/os
pfs.dmg ~/Desktop/
ost 192.168.112.222 port 22: Connection refused
cthulhu ~ scp ladmin@192.168.112.222:/Users/ladmin/Desktop/
.apfs.dmg ~/Desktop/
ost 192.168.112.222 port 22: Connection refused
cthulhu ~ scp ladmin@192.168.112.222:/Users/ladmin/Desktop/
.apfs.dmg ~/Desktop/

.apfs.dmg                    100% 7924MB  48.8MB/s   02:42
hulhu ~
```

working10.14vm_vmx

Macintosh HD

non-enrollabl..._vmx.txt

osx-10.14.1-18B75.apfs.dmg

Macintosh HD

AutoDMG-1.9

stuff

iTerm2 Shell Edit View Session Scripts Profiles Toolbelt Window Help 100% Tue 05:45 Christopher Beard

github.com/chilcote/vfuse

ADAM talk FrontPage/EndUser ITSS/Support...cumentation Mojave TO Prep

vfuse

This script takes a never-booted DMG and converts it to a VMware Fusion VM.

The germ of this idea came about, as all good ideas, and germs, do: while drinking beer. Specifically, I was tossing back drinks and tossing around ideas with Gilbert Wilson, and he mentioned that he uses the VMware CLI tools to convert DMGs to VMDKs based on a blog post he'd read. Intrigued, I asked Gil to email me the specifics. After seeing how potentially cool this was, I wrapped it up in this here terribly illegible, queasingly unpythonic script.

> Note: VMware Fusion 11 was released in September, and there is currently a bug in the binaries that `vfuse` uses to create the VM. Please see this wiki note for more details.

Requirements

- VMware Fusion 10.x Professional or above
- OS X 10.13.6+
- A never-booted image created with AutoDMG.
- (optional) Packer 1.1.1 (or above) for building a vagrant box.
- (optional) qemu-img

Usage

```
usage: vfuse [-h] [--version] [-i INPUT] [-o OUTPUT] [-n NAME] [-w HW_VERSION]
             [-m MEM_SIZE] [-s [SERIAL]] [-t TEMPLATE] [-e] [-p PACKER] [-d D]
             [--hw-model HW_MODEL] [--start [START]] [--stop STOP]
             [--reset RESET] [--use-qemu] [--recovery] [--snapshot]
             [--snapshot-name SNAPSHOT_NAME] [-c CHECKSUM] [--list-templates]
             [--list-cache] [--clear-cache]

Create and monitor VM from source DMG.

optional arguments:
  -h, --help            show this help message and exit
  --version             show the version number
  -i INPUT, --input INPUT
                        /path/to/dmg
  -o OUTPUT, --output OUTPUT
                        /path/to/output/dir
  -n NAME, --name NAME  Use a custom name
  -w HW_VERSION, --hw-version HW_VERSION
                        VMware hardware version
  -m MEM_SIZE, --mem-size MEM_SIZE
```

2. oucs0162@nsms-cthulhu: ~ (zsh)

```
✘ oucs0162@nsms-cthulhu  ~  sudo /usr/local/vfuse/bin/vfuse
 -i ~/Desktop/osx-10.14.1-18B75.apfs.dmg -n cbeard-10-14p1-aut
odmg-vfuse -s random --hw-model "MacBookPro15,1"
```

Safari File Edit View History Bookmarks Develop Window Help 100% Tue 05:46 Christopher Beard

github.com/chilcote/vfuse/

ADAM talk | FrontPage/EndUser | ITSS/Support...cumentation | Mojave | TO Prep

Releases | Tags

Latest release

2.0.9

64965f5

2.0.9

chilcote released this 6 days ago

Assets 3

vfuse-2.0.9.pkg 20.7 KB

Source code (zip)

Source code (tar.gz)

This release brings full support for Fusion 11 *on the vfuse side*:

- hw_version will default to 16 now, which is what Fusion 11 supports.
- os_guest on 10.14 VMs will default to `darwin18-64` instead of lying and claiming to be `darwin17-64` which we were doing during the beta phase.

If you do not have Fusion 11 installed, and you install this version of vfuse, you'll want to pass `--hw-version 14`, or add that key to your templates.

For Fusion 11 users:

> Note, that this issue still persists with Fusion 11, so if you are not using one of the workarounds mentioned here then you'll want to stick with 2.0.8 for the time being.

2.0.8

ab33cb5

2.0.8

chilcote released this 7 days ago · 2 commits to master since this release

Assets 3

vfuse-2.0.8.pkg 20.7 KB

Source code (zip)

2. oucs0162@nsms-cthulhu: ~ (zsh)

```
✘ oucs0162@nsms-cthulhu  ~  sudo /usr/local/vfuse/bin/vfuse
 -i ~/Desktop/osx-10.14.1-18B75.apfs.dmg -n cbeard-10-14p1-aut
odmg-vfuse -s random --hw-model "MacBookPro15,1"
Password:
Mounting /Users/oucs0162/Desktop/osx-10.14.1-18B75.apfs.dmg
macOS version is 10.14.1
Unmounting /Volumes/Macintosh HD 1
Using VMware Fusion path: /Applications/VMware Fusion.app
Converting DMG to VMDK
-Error: Received signal 11.
Unmounting /dev/disk3
✘ oucs0162@nsms-cthulhu  ~
```

Safari File Edit View History Bookmarks Develop Window Help 100% Tue 11:48 Christopher Beard

https://github.com/chilcote/vfuse/w

ADAM talk FrontPage/EndUser ITSS/Support...cumentation Mojave TO Prep

chilcote / vfuse

Code Issues 1 Pull requests 0 Projects 0 Wiki Pulse Community

Received signal 11

Edit New Page

Joseph Chilcote edited this page 10 days ago · 3 revisions

What's up with Fusion 11?

VMware Fusion 11 was released on September 25, 2018 (with 11.0.1 following on November 9, 2018). This release brought support for Windows 10 and macOS Mojave, and as such has been hotly anticipated by the community, myself included especially for the IPV6 bug fixes that were killing us in Fusion 10 and below.

When the Tech Preview was released in June, one of the first things I did was install it and add support in `vfuse` to use the new version. However, I was greeted with this sad trombone baritone of an error:

```
Unable to create the source raw disk: The file specified is n
```

Now, I had seen this sort of error before, and knew where to look.

It's all a facade

The damning truth about `vfuse` is that it's just a bunch of poorly written window dressing built around two central VMware commands. So when I saw the error above, I removed `vfuse` from the equation and tried out these commands directly.

First I created a bootable macOS DMG with AutoDMG(https://github.com/MagerValp/AutoDMG), then mounted the DMG with `hdiutil attach /path/to/dmg`, taking note of the device mount with `diskutil list`. For the sake of this example, assuming the device was mounted at `/dev/disk2`, I tried to create a VMware virtual disk backed by the partitions of the physical disk with:

Pages 7

Using vfuse

- Introduction
- CLI Arguments
- Using Templates
- Hosting Images Centrally
- Monitoring VMs
- Creating a Vagrant Box
- Received signal 11

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https://github.com/chilc

github.com/chilcote/

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QEMU and Not U

As an alternative, you can use `qemu-img` to create your VMs. Now, I know I mentioned already, twice, that `vfuse` is just a thin wrapper around those fancy VMware binaries. But I'll let you in on a dirty little secret: *we don't need no stinking vmware-vdiskmanager*.

QEMU is a is a free and open-source emulator that performs hardware virtualization, while `qemu-img` is its corresponding disk image utility. Adding support for `qemu-img` was suggested by @tvsutton way back in Feburary 2016.

> Let's just take a moment to pause and think back to those halcyon days of early 2016, why don't we. *sigh*

Anyway, so the pieces are already in place to do an endrun around this bug, and get your business done without having to keep that old lump of Fusion 10 around, like some decorative lamp your Aunt gave you for your birthday in 2002.

First, you need to install `qemu-img`. Now, you could use homebrew, like an animal. Which is fine. I mean, if you have to. But the more discerning among you will prefer to install it with macports like so:

```
$ sudo port install qemu
```

Regardless of how you install it, `qemu-ing` will exist at some location, and you can instruct `vfuse` to use it by passing the `--use-qemu` flag:

```
$ sudo vfuse -i foo.dmg --use-qemu /path/to/wherever/you/inst
```

If you don't supply a path, then `vfuse` will plug its nose and assume you installed it with `brew` and look for it at `/usr/local/bin/qemu-img`. Additionally, you can use a template and define the path to `qemu-img` there. Here is a sanitized Mojave template I'm currently providing out for folks who have Fusion 11 installed:

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```
              [--reset RESET] [--use-qemu] [--recovery] [--snapshot]
              [--snapshot-name SNAPSHOT_NAME] [-c CHECKSUM] [--list-templates]
              [--list-cache] [--clear-cache]

Create and monitor VM from source DMG.

optional arguments:
  -h, --help            show this help message and exit
  --version             show the version number
  -i INPUT, --input INPUT
                        /path/to/dmg
  -o OUTPUT, --output OUTPUT
                        /path/to/output/dir
  -n NAME, --name NAME  Use a custom name
  -w HW_VERSION, --hw-version HW_VERSION
                        VMware hardware version
  -m MEM_SIZE, --mem-size MEM_SIZE
                        Memory Size in MB
  -s [SERIAL], --serial [SERIAL]
                        Custom Serial number
  -t TEMPLATE, --template TEMPLATE
                        Use a template
  -e, --esx             Create pre-allocated ESX-type VMDK
  -p PACKER, --packer PACKER
                        Populate a packer template
  -d D                  Path to CD/DVD ISO path
  --hw-model HW_MODEL   Custom hardware model
  --start [START]       Start monitoring of VM
  --stop STOP           Stop monitoring of VM
  --reset RESET         Reset monitored VM
  --use-qemu            Use qemu-img intead of the Fusion CLI too
  --recovery            Boot into Recovery HD
  --snapshot            Create initial snapshot
  --snapshot-name SNAPSHOT_NAME
                        Custom name for the initial snapshot
  -c CHECKSUM, --checksum CHECKSUM
                        Generate checksum of a DMG
  --list-templates      Return list of available templates
  --list-cache          Return list of cached disk images
  --clear-cache         Clear cached disk images
```

3. sudo /usr/local/vfuse/bin/vfuse -i ~/Desktop/osx-10.14.1-18B75.apfs.dmg -o - (qemu-img)

```
oucs0162@nsms-cthulhu  ~  sudo /usr/local/vfuse/bin/vfuse -i ~/Des
ktop/osx-10.14.1-18B75.apfs.dmg -o ~/Desktop -n cbeard-10-14p1-autodm
g-vfuse -s random --hw-model "MacBookPro15,1" --use-qemu
Password:
Mounting /Users/oucs0162/Desktop/osx-10.14.1-18B75.apfs.dmg
macOS version is 10.14.1
Unmounting /Volumes/Macintosh HD 1
Using qemu-img path: /usr/local/bin/qemu-img
Converting DMG to VMDK
/
```

Macintosh HD

osx-10.14.1-18B75.apfs.dmg

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cbeard-10-14p1-autodm...mwarevm

VMware Fusion File Edit View Virtual Machine Window Help 100% Tue 06:42 Christopher Beard

cbeard-10-14p1-autodmg-vfuse

Would you like to upgrade this virtual machine?

An upgraded virtual machine offers support for new features, but cannot be used by earlier versions of VMware Fusion until you downgrade it.

☐ Do not show this message again

Don't Upgrade | Upgrade

```
                [--reset
                [--snapsh
                [--list-c

Create and monitor VM

optional arguments:
  -h, --help
  --version
  -i INPUT, --input IN

  -o OUTPUT, --output

  -n NAME, --name NAME
  -w HW_VERSION, --hw-

  -m MEM_SIZE, --mem-s

  -s [SERIAL], --seria

  -t TEMPLATE, --templ

  -e, --esx
  -p PACKER, --packer

  -d D
  --hw-model HW_MODEL
  --start [START]
  --stop STOP
  --reset RESET
  --use-qemu
  --recovery
  --snapshot
  --snapshot-name SNAP
                        Custom name for the initial snapshot
  -c CHECKSUM, --checksum CHECKSUM
                        Generate checksum of a DMG
  --list-templates      Return list of available templates
  --list-cache          Return list of cached disk images
  --clear-cache         Clear cached disk images
```

```
/vfuse -i ~/Des
l-10-14p1-autodm
emu

s.dmg

VMware Fusion VM created at /Users/oucs0162/Desktop/cbeard-10-14p1-au
todmg-vfuse.vmwarevm
oucs0162@nsms-cthulhu  ~
```

Macintosh HD

osx-10.14.1-18B75 .apfs.dmg

TARDIS

SCRATCH3

stuff

cbeard-10-14p1-autodm...mwarevm

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cbeard-10-14p1-autodmg-vfuse

```
                [--reset
                [--snapsh
                [--list-c

Create and monitor VM

optional arguments:
  -h, --help
  --version
  -i INPUT, --input IN

  -o OUTPUT, --output

  -n NAME, --name NAME
  -w HW_VERSION, --hw-

  -m MEM_SIZE, --mem-s

  -s [SERIAL], --seria

  -t TEMPLATE, --templ

  -e, --esx
  -p PACKER, --packer

  -d D
  --hw-model HW_MODEL
  --start [START]
  --stop STOP
  --reset RESET
  --use-qemu
  --recovery
  --snapshot
  --snapshot-name SNAP

  -c CHECKSUM, --check

  --list-templates
  --list-cache
  --clear-cache
```

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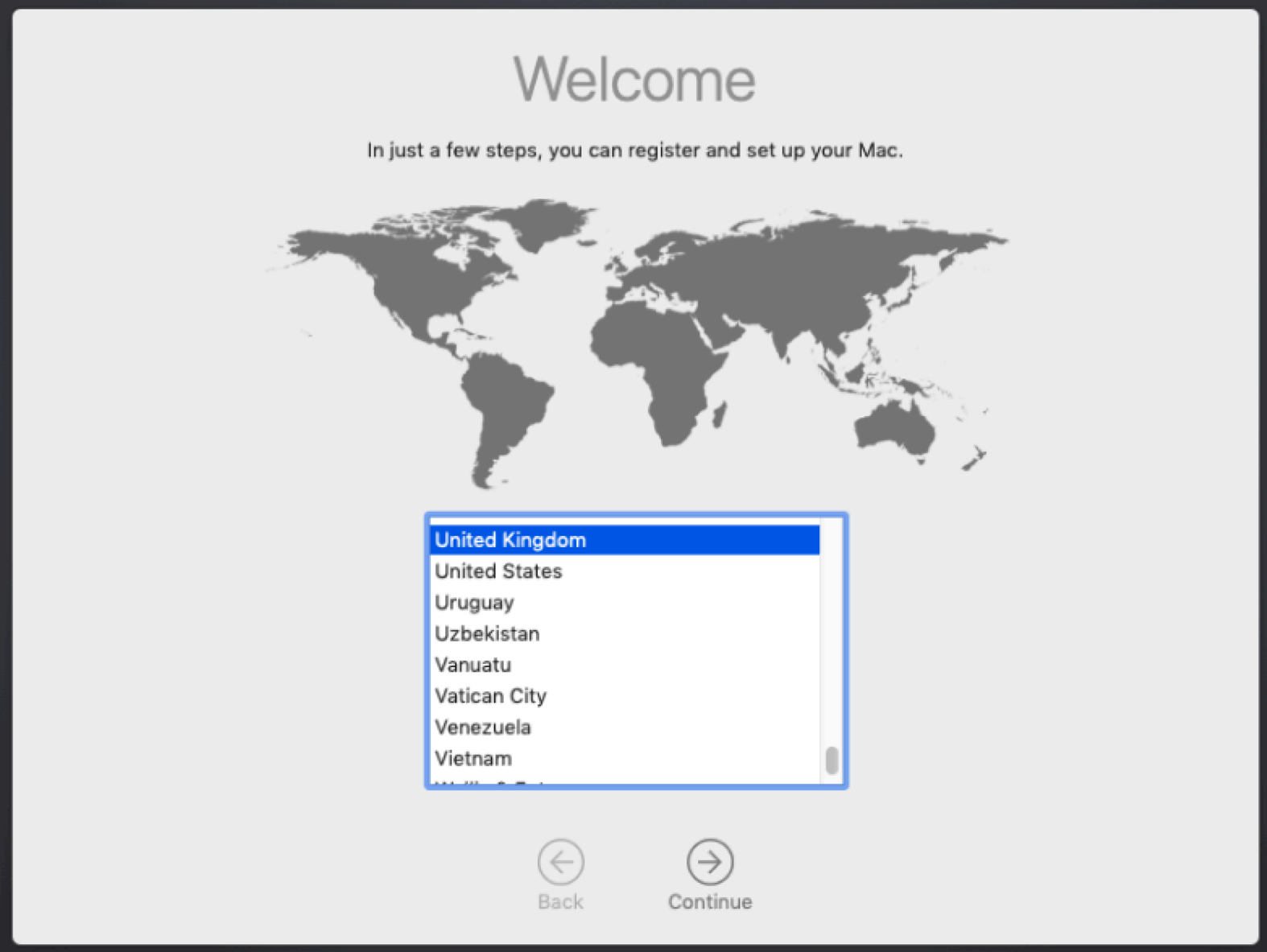
cbeard-10-14p1-autodmg-vfuse

```
                [--reset
                [--snapsh
                [--list-c

Create and monitor VM

optional arguments:
  -h, --help
  --version
  -i INPUT, --input IN

  -o OUTPUT, --output

  -n NAME, --name NAME
  -w HW_VERSION, --hw-

  -m MEM_SIZE, --mem-s

  -s [SERIAL], --seria

  -t TEMPLATE, --templ

  -e, --esx
  -p PACKER, --packer

  -d D
  --hw-model HW_MODEL
  --start [START]
  --stop STOP
  --reset RESET
  --use-qemu
  --recovery
  --snapshot
  --snapshot-name SNAP

  -c CHECKSUM, --check

  --list-templates
  --list-cache
  --clear-cache
```



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To learn how to use VoiceOver to set up your computer, press the Escape key now.

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cbeard-10-14p1-autodmg-vfuse

```
                [--reset
                [--snapsh
                [--list-c

Create and monitor VM

optional arguments:
  -h, --help
  --version
  -i INPUT, --input IN

  -o OUTPUT, --output

  -n NAME, --name NAME
  -w HW_VERSION, --hw-

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  --recovery
  --snapshot
  --snapshot-name SNAP

  -c CHECKSUM, --check

  --list-templates
  --list-cache
  --clear-cache
```

tosh HD
4.1-18B75
s.dmg
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tuff
-10-14p1-
..mwarevm

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ADAM talk FrontPage

```
                [--reset
                [--snapsh
                [--list-c

Create and monitor VM

optional arguments:
  -h, --help
  --version
  -i INPUT, --input IN

  -o OUTPUT, --output

  -n NAME, --name NAME
  -w HW_VERSION, --hw-

  -m MEM_SIZE, --mem-s

  -s [SERIAL], --seria

  -t TEMPLATE, --templ

  -e, --esx
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  -d D
  --hw-model HW_MODEL
  --start [START]
  --stop STOP
  --reset RESET
  --use-qemu
  --recovery
  --snapshot
  --snapshot-name SNAP

  -c CHECKSUM, --check

  --list-templates
  --list-cache
  --clear-cache
```

cbeard-10-14p1-autodmg-vfuse

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tosh HD

4.1-18B75
s.dmg

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ATCH3

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USION

-10-14p1-
..mwarevm

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Code | Issues 1 | Pull requests 0 | Projects 0 | Wiki | Insights

Convert bootable DMG images for use in VMware Fusion

macadmin vmware python

189 commits | 1 branch | 13 releases

Branch: master | New pull request | Create new file | Upload file

chilcote bumping to 2.0.9

extras/launchd	Make file for creating a vfused pkg as an option
packer-scripts	updating forks from https://github.com/timsutton/osx-vm
pkgroot	bumping to 2.0.9
templates	reducing example template to minimum; options will be c
Makefile	bumping to 2.0.9
README.md	update readme

README.md

vfuse

This script takes a never-booted DMG and converts it to a VMware Fusi

The germ of this idea came about, as all good ideas, and germs, do: wh

drinks and tossing around ideas with Gilbert Wilson, and he mentioned that he uses the VMwa

3. oucs0162@nsms-cthulhu: ~ (zsh)

```
oucs0162@nsms-cthulhu  ~  sudo /usr/local/vfuse/bin/vfuse -i ~/Des
ktop/osx-10.14.1-18B75.apfs.dmg -o ~/Desktop -n cbeard-10-14p1-autodm
g-vfuse -s random --hw-model "MacBookPro15,1" --use-qemu
Password:
Mounting /Users/oucs0162/Desktop/osx-10.14.1-18B75.apfs.dmg
macOS version is 10.14.1
Unmounting /Volumes/Macintosh HD 1
Using qemu-img path: /usr/local/bin/qemu-img
Converting DMG to VMDK
Populating VMX file
Unmounting /dev/disk4
VMware Fusion VM created at /Users/oucs0162/Desktop/cbeard-10-14p1-au
todmg-vfuse.vmwarevm
oucs0162@nsms-cthulhu  ~  sudo /usr/local/vfuse/bin/vfuse -i ~/Des
ktop/osx-10.14.1-18B75.apfs.dmg -o ~/Desktop -n cbeard-10-14p1-autodm
g-vfuse-2 -s random --hw-model "MacBookPro15,1" --use-qemu
```

Macintosh HD

osx-10.14.1-18B75.apfs.dmg

TARDIS

SCRATCH3

stuff

cbeard-10-14p1-autodm...mwarevm

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3. sudo /usr/local/vfuse/bin/vfuse -i ~/Desktop/osx-10.14.1-18B75.apfs.dmg -o - (qemu-img)

```
macOS version is 10.14.1
Unmounting /Volumes/Macintosh HD 1
Using qemu-img path: /usr/local/bin/qemu-img
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todmg-vfuse.vmwarevm
 oucs0162@nsms-cthulhu  ~  sudo /usr/local/vfuse/bin/vfuse -i ~/Des
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Unmounting /Volumes/Macintosh HD 1
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Converting DMG to VMDK
```

FUSION

cbeard-10-14p1-autodm...mwarevm

Macintosh HD

osx-10.14.1-18B75.apfs.dmg

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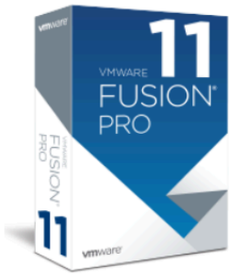

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- DEP-enabled Fusion VM: https://www.rderewianko.com/how-to-create-a-vm-thatll-work-with-dep-on-vmware-fusion/
- VMware Fusion: https://www.vmware.com/uk/products/fusion.html
- Build a macOS VM using Virtual Box: https://github.com/geerlingguy/macos-virtualbox-vm
- AutoDMG: https://github.com/MagerValp/AutoDMG
- vfuse: https://github.com/chilcote/vfuse
- Installinstallmacos - can be useful for obtaining macOS installer apps: https://github.com/munki/macadmin-scripts/blob/master/installinstallmacos.py