The 2015 State of Troubleshooting Apple Devices

Arek Dreyer arek@arekdreyer.com MacSysAdmin 2015

Troubleshooting Apple Devices

- Stop troubleshooting
- Provide great service when you do
- Use appropriate tools
- Use and build community

Stop troubleshooting

Stop troubleshooting

- Solidify your infrastructure
- Don't break production stuff
- Be systematic
- Be proactive
- Gather information

"Fix your Wi-Fi!"

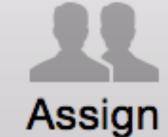




Apple Configurator









All Devices (1)

Arek's iPad About 18 hours



All connected devices will be updated.

0 of 1 devices prepared



Arek's iPad



Downloading iOS 9.0.2

Waiting to unpack iOS 9.0.2

Waiting to install iOS 9.0.2

Waiting to check activation

Waiting to check data

Waiting to check app install restriction

Don't break production stuff

(you are not facebook)

found

Dev

Con

Disk

Logi

Phy:

Spar







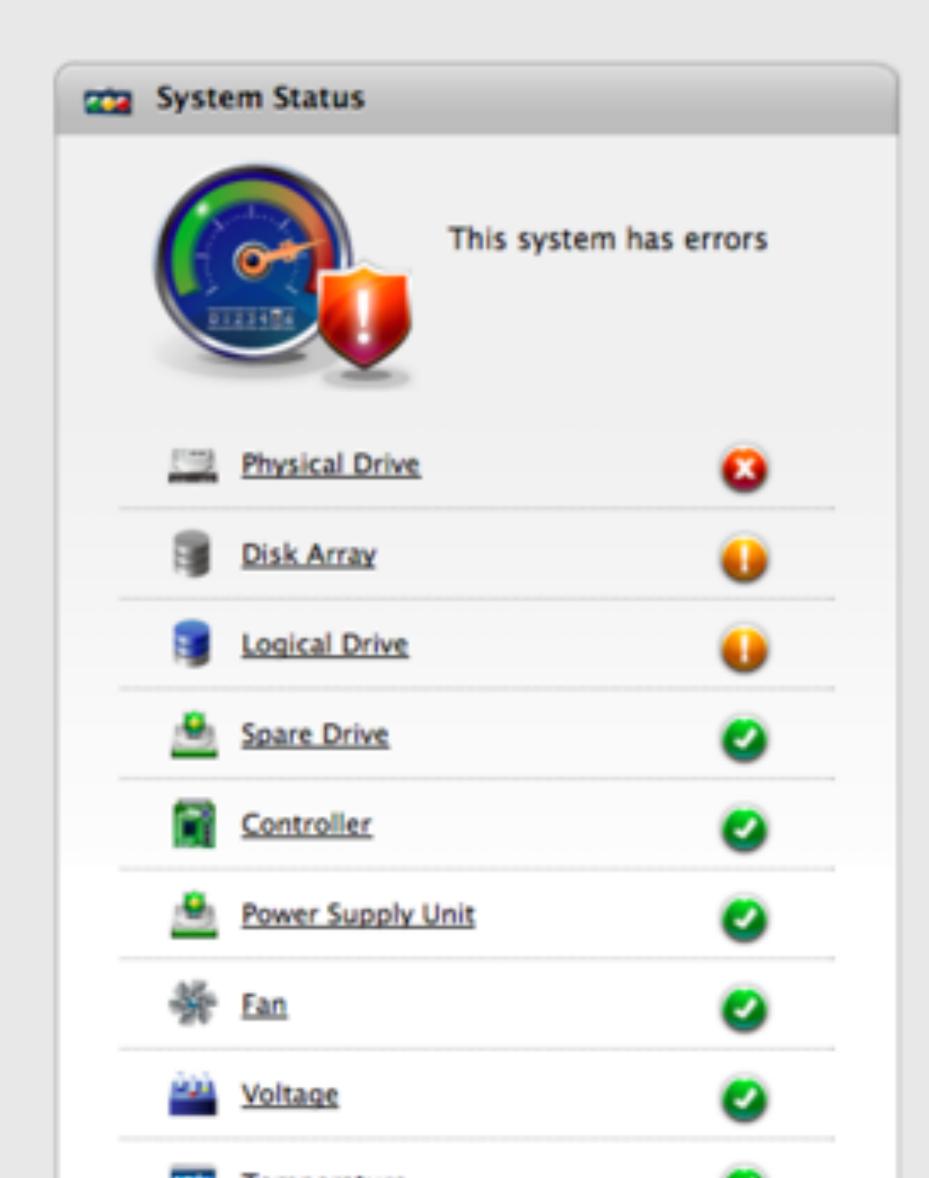








Model: Pegasus R6

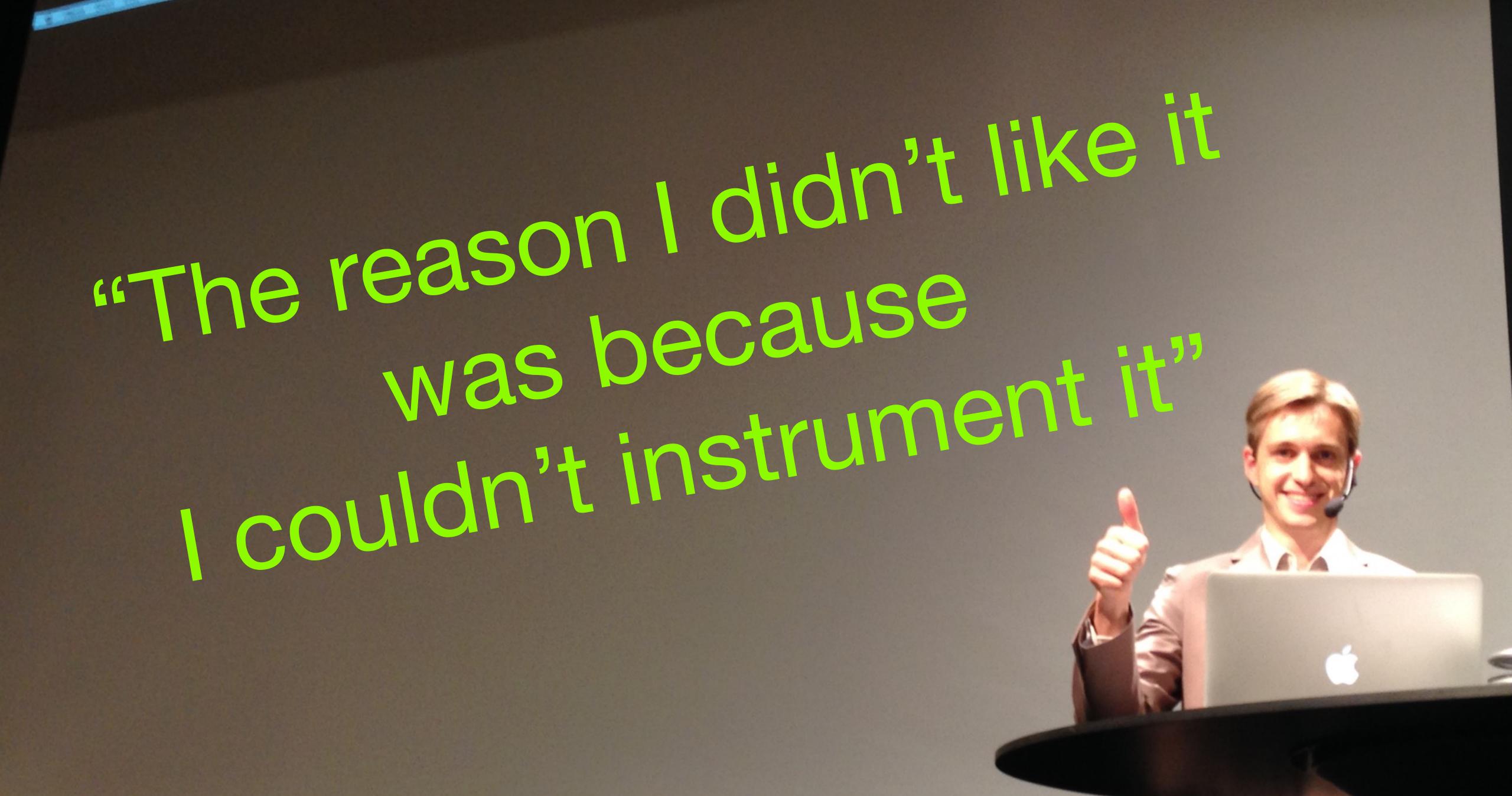


Event Information					More
	Device	Severity	Time	Description	
	PD 2		Sep 5, 2014 09:32:09	A configured dead physical disk has been inserted	
	PD 2	Info	Sep 5, 2014 09:32:09	Physical Disk has been inserted	
	PD 2	Major	Sep 5, 2014 09:31:35	Physical Disk is marked as DEAD due to removal	
	PD 2	Warning	Sep 5, 2014 09:31:35	Physical Disk has been removed	
	PD 2	Info	Sep 3, 2014 17:26:27	Physical Disk has been inserted	



(RAID is not backup)

Be systematic





for System Administrators



Standalone Sysadmin

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▶2008 (184)

ABOUT THE AUTHOR



GENERAL

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PRE-EMPTIVE TROUBLESHOOTING

© 2009/03/10

Troubleshooting is a very reactive process. By its nature, you're fixing an already existing problem. As good as it is to be able to troubleshoot, it's better to prevent weird problems from cropping up in the first place.

As sysadmins, we have numerous ways to do this. First, as Michael Jenke very sensibly suggests, is to use structured systems management, by administering via script instead of editing files by hand, or worse yet, clicking through the interface.

Another very potent tool that Chris Siebenmann brings up today is using checklists to perform complex tasks. (Incidentally, Chris mentions a term I've never heard before..." rubber duck debugging". I think I'm going to try to expense one of these for troubleshooting purposes)

I'm a firm believer in checklists for anything that isn't (or can't be) automated. On our internal wiki, I have checklists for things like adding and removing users from the infrastructure, adding new machines,

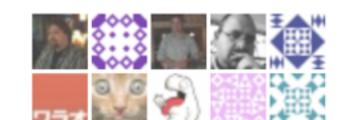
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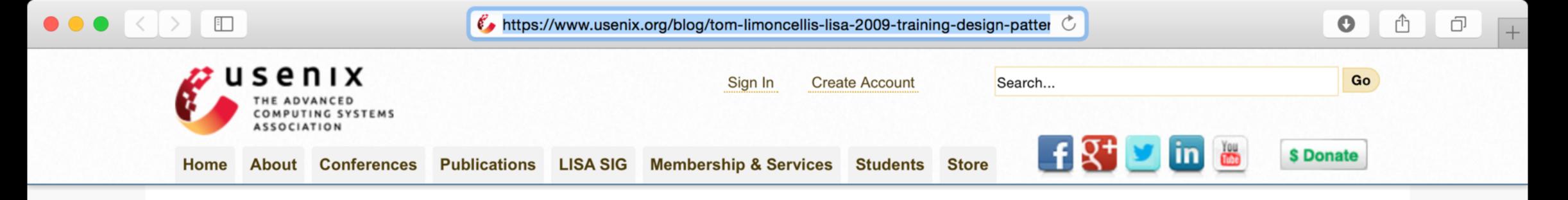


BLOGS I WISH I HAD TIME TO READ

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USENIX Update The Official USENIX Blog

Tom Limoncelli's LISA 2009 Training: "Design Patterns for System Administrators"

Tom Limoncelli is one of the preeminent system administrators in the world right now. He is the co-author of "The Practice of System and Network Administration", what is considered by many to be something akin to a religious tome, and he has presented training sessions at LISA for several years on the subject of his second book, "Time Management for System Administrators". This year, he is offering a new training course, titled "Design Patterns for System Administrators". Tom and I sat down and discussed design patterns, and how they can help system administrators become better and more efficient in their positions.

Q: What exactly is a 'design pattern' and what will it do for us?

Tom Limoncelli: "design pattern" is a little bit of knowledge that is worth sharing, and useful for repeating. For example, the design pattern of "a network" or "active-active redundancy" or "RAID-0" or "helpdesk". Ever visit an IT shop where there was no way for people to get help? I have. So I explained the design pattern of a "helpdesk" and without having to re-invent the wheel, they were able to implement one.

There are things that we do that are hard to explain all the benefits. Maybe there are a few obvious benefits but there are plenty benefits that can't be explained. They can only understood through experience. That's called "tacit knowledge". In an effort to record "tacit knowledge" researchers developed the concept of recording "design patterns": the things that experts do, recorded in a way that others can replicate. They don't have to know 100% of why this is "the right way to do something", they just have to know that in a certain situation with a certain problem, experts solve it a particular way most of the time. It doesn't prevent you from doing it your own way, but gives a guide or instruction book.

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Assessing Progress with "DevOps Look-for's"

So your management fails at IT, huh?

4 unix commands I abuse every day

a list of dumb things to check

April showers bring May Flowers... but May brings...

The right answer

Tips for Technical Resumes

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« Interview with Tom Limoncelli in ComputerWorld | All | LOPSA classes at SCALE 7x »

Transforming Art into Science

Jan. 10 2009

The biggest problem with transforming Art into Science is that people would rather be Artists than Scientists. No, wait, you say, I love Science! Yeah, now would you rather be a Rock Star or a Lab Tech? Yes, you see the problem.

I recently read a New Yorker article that completely kicks ass in describing how medical science is poised on the cusp of a potential transformation into something that can save Even More Lives, but via a path that's difficult to take: the humble, homely, not the science of the rocket, procedural checklist. As the article states,

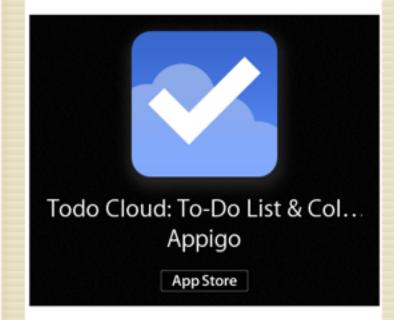
Tom Wolfe's "The Right Stuff" tells the story of our first astronauts, and charts the demise of the maverick, Chuck Yeager test-pilot culture of the nineteen-fifties. ... But as knowledge of how to control the risks of flying accumulated-as checklists and flight simulators became more prevalent and sophisticated-the danger diminished, values of safety and conscientiousness prevailed, and the rock-star status of the test pilots was gone.

Reading this, I was instantly transported into familiarity. This is the exact problem that I spent a decade banging my head against in Systems Administration, and what drove me to spend the next decade in Project Mangement to try to solve. A number of us in the Usenix and LISA communities seemed to have a handle on this, but the way the blind men had a handle on the elephant. We specialized in dealing with our rope, our fan, our spear, our wall, our tree, and, umm, whatever the sixth thing was that the elephant was like-- oh yes, our snake. We didn't have the problem space sharply defined. Author, and doctor, Atul Gawande describes the dilemma precisely:

We have the means to make some of the most complex and dangerous work we do--in surgery, emergency care, and I.C.U. medicine--more effective than we ever thought possible. But the prospect pushes against the traditional culture of medicine, with its central belief that in situations of high risk and complexity what you want is a kind of expert audacity--the right stuff, again. Checklists and standard operating procedures feel like exactly the opposite, and that's what rankles many people.











Can't Make it to PuppetConf? Watch It Live!

Sep. 29

2015

I had an interesting conversation with Ryan Coleman, product manager at Puppet Labs. He gave me a preview of some of the things being announced soon and highlighted at PuppetConf next week. If you can't attend, you can livestream the conference for free. In particular, the **keynote is on Thurs, Oct 8th at 9am PT**



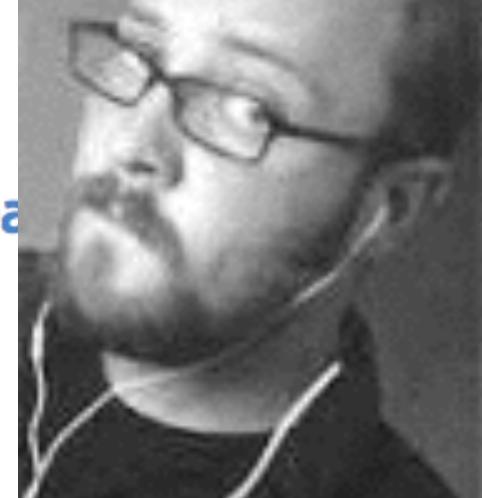
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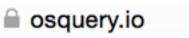
http:/

It isn'

Enjoy









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Performant Endpoint Visibility

osquery allows you to easily ask questions about your Linux and OSX infrastructure. Whether your goal is intrusion detection, infrastructure reliability, or compliance, osquery gives you the ability to empower and inform a broad set of organizations within your company.

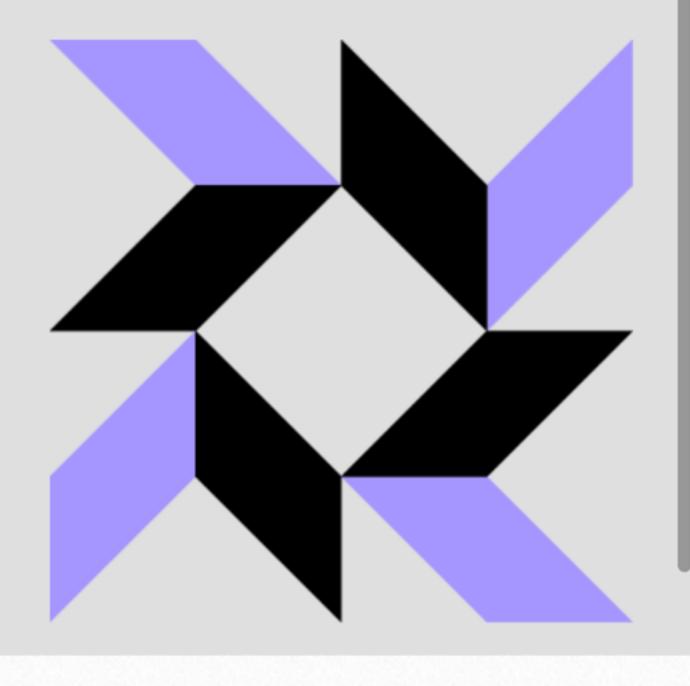
Read the deployment guide

P or start contributing!

(7) Star

5,138



















osquery> SELECT uid, name FROM listening_ports l, processes p WHERE l.pid=p.pid;

FRIDAY, OCTOBER 2

9.00 - 9.55

Ansible - Configuration Management for #macadmins

Henry Stamerjohann, Apfelwerk GmbH & Co.KG

Maybe you know about trendy container-based virtualization techniques like Docker or CoreOS. Whether this is your world or not - fact is #macadmins have to deal with various OS flavors, services for your clients are not exclusively centered on OS X Server anymore. Old and new services need to be setup or



THURSDAY, OCTOBER 1

10.10 - 11.05

Practical Docker for Mac Sysadmins

Pepijn Bruienne, <u>University of Michigan</u>

Docker has been rapidly growing in exposure and adoption in the IT world as it benefits both development and systems teams in their everyday operations. But apart from the larger picture of a more streamlined flow of web-based applications from development to production for large web applications it also opens new doors for Mac Sysadmins.



Be proactive











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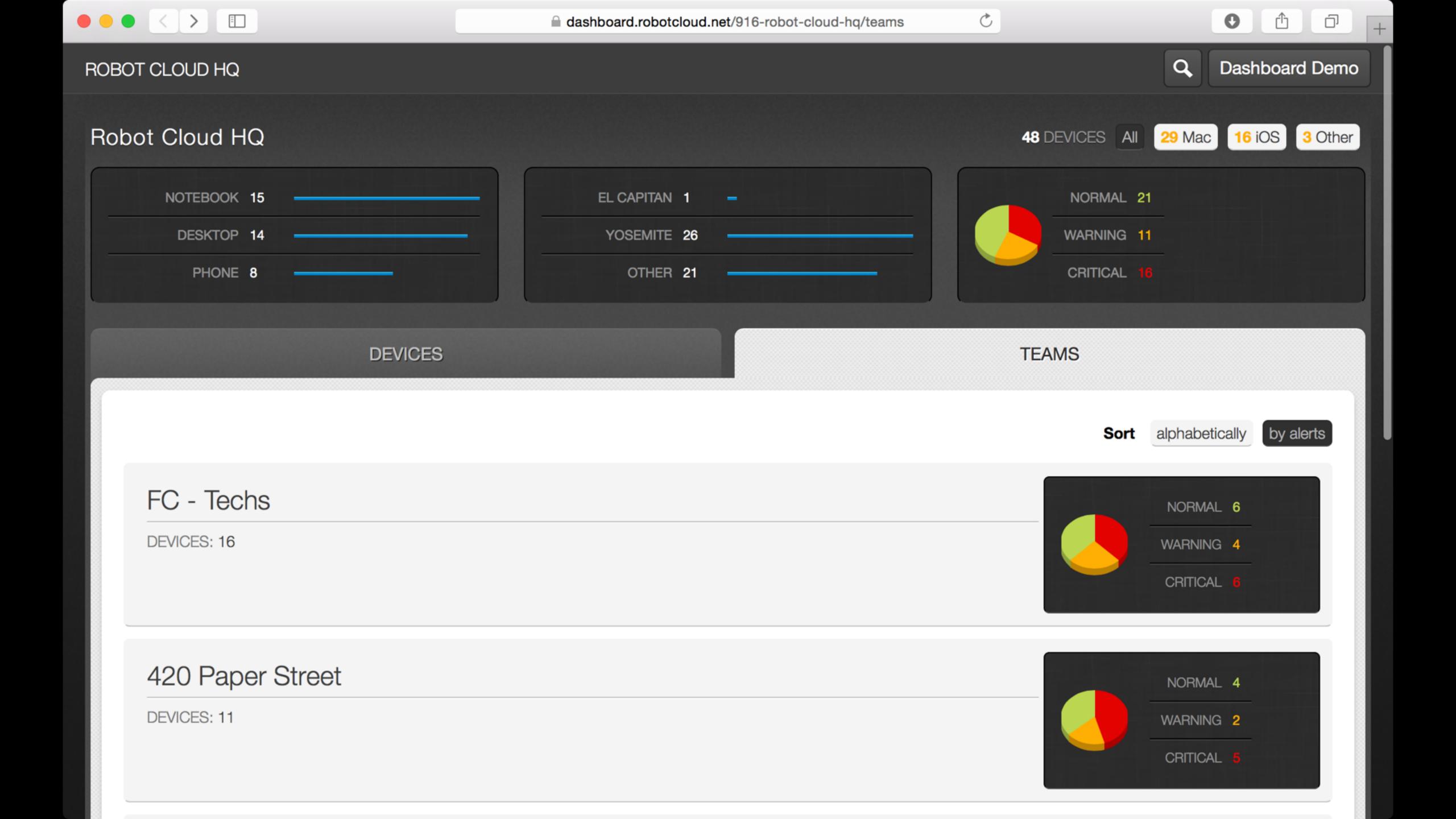
Built to automate the inventory, alerting and distribution of software on all your Macs workstations, notebooks and servers.

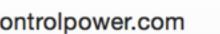
Built to work for you 24/7/365.

How it Works

- 1. Enroll your Macs using a custom Robot Cloud installer.
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On the first Tuesday of each month @ 8:00 p.m. ET., we host a live broadcast & chat. New episodes post weekly.

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119: Burning Through Technical Capital

September 29, 2015



119: Burning Through Technical Capital Joe Saponare, Sam Valencia, Jerry Zigmont

Recorded on September 22, 2015

We're sponsored this week by Watchman Monitoring, a favorite tool of ours that should be in every professional consultant's toolkit.

Visit WatchmanMonitoring.com/cmdctrlpwr and sign up for your free trial to find out how Watchman Monitoring can keep an eye on your client machines and notify you of over 100 issues. Be sure to tweet @cmdctrlpwr #CCPsentme to support the show!

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SAM, JOE, ALLEN HANCOCK - WATCHMAN MONITORING & JERRY AT MACTECH CONFERENCE - NEW YORK 2015

Apple Consulting Apple News Apple Store AppleCare

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Consultants in the Field Contracts **Data Recovery**

> Growing your Practice

Command-Control-power is a weekly podcast hosted by three certified members of the Apple Consultants Network (ACN), drawing from over 30 years combined experience operating technology consulting practices.

Hosts: Joe Saponare of PsiMac, Sam Valencia of HCS Technology Group, and Jerry Zigmont of MacWorks.

Topics: Apple, Mac, iPhone, iPad, Server other hardware and software, best practices, clients, rates, managed services, mobile device management, business operation, troubleshooting, & more.

We also feature regular interviews with vendors and esteemed ACN colleagues.

"Have you tried restarting?"





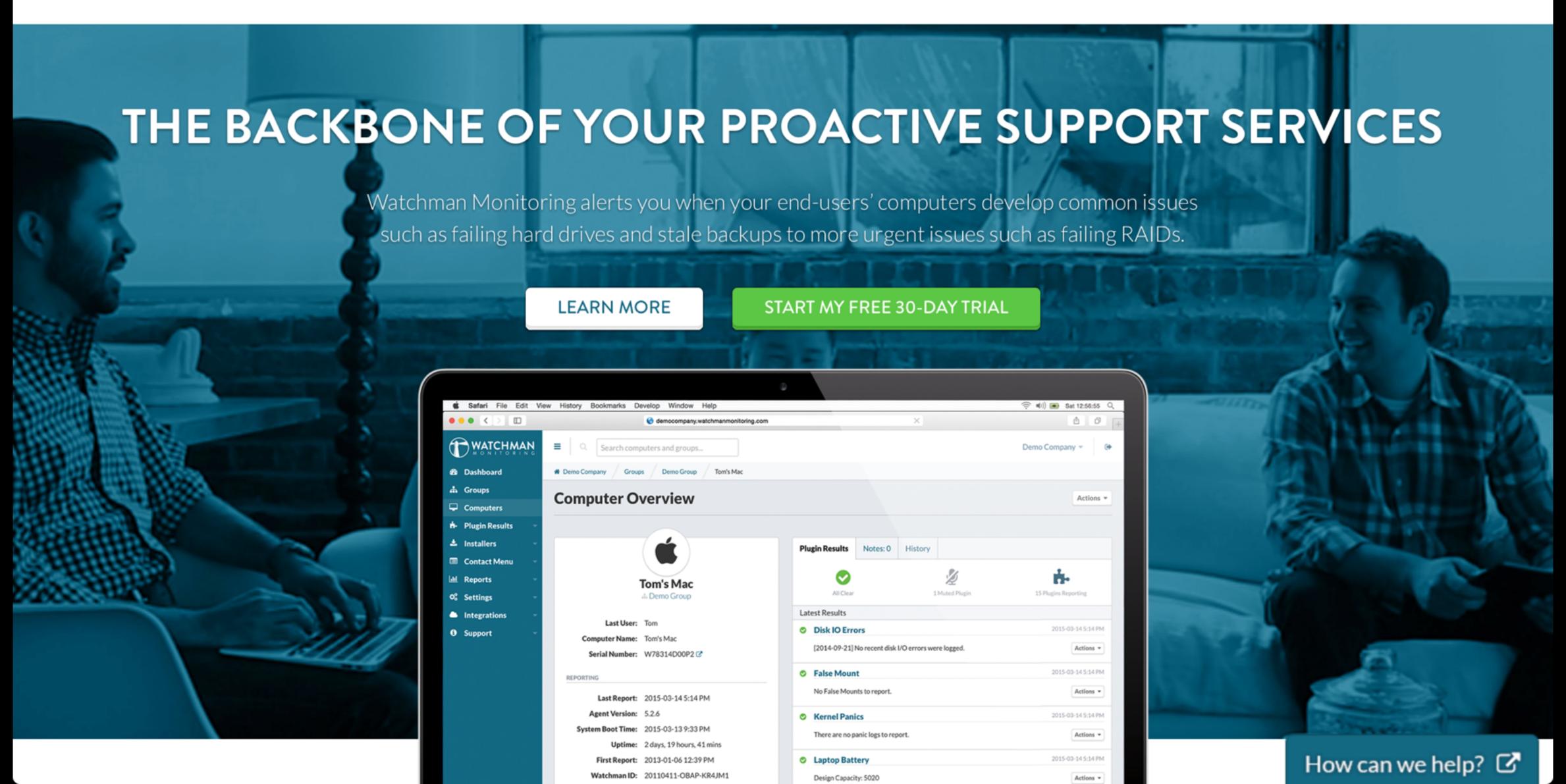


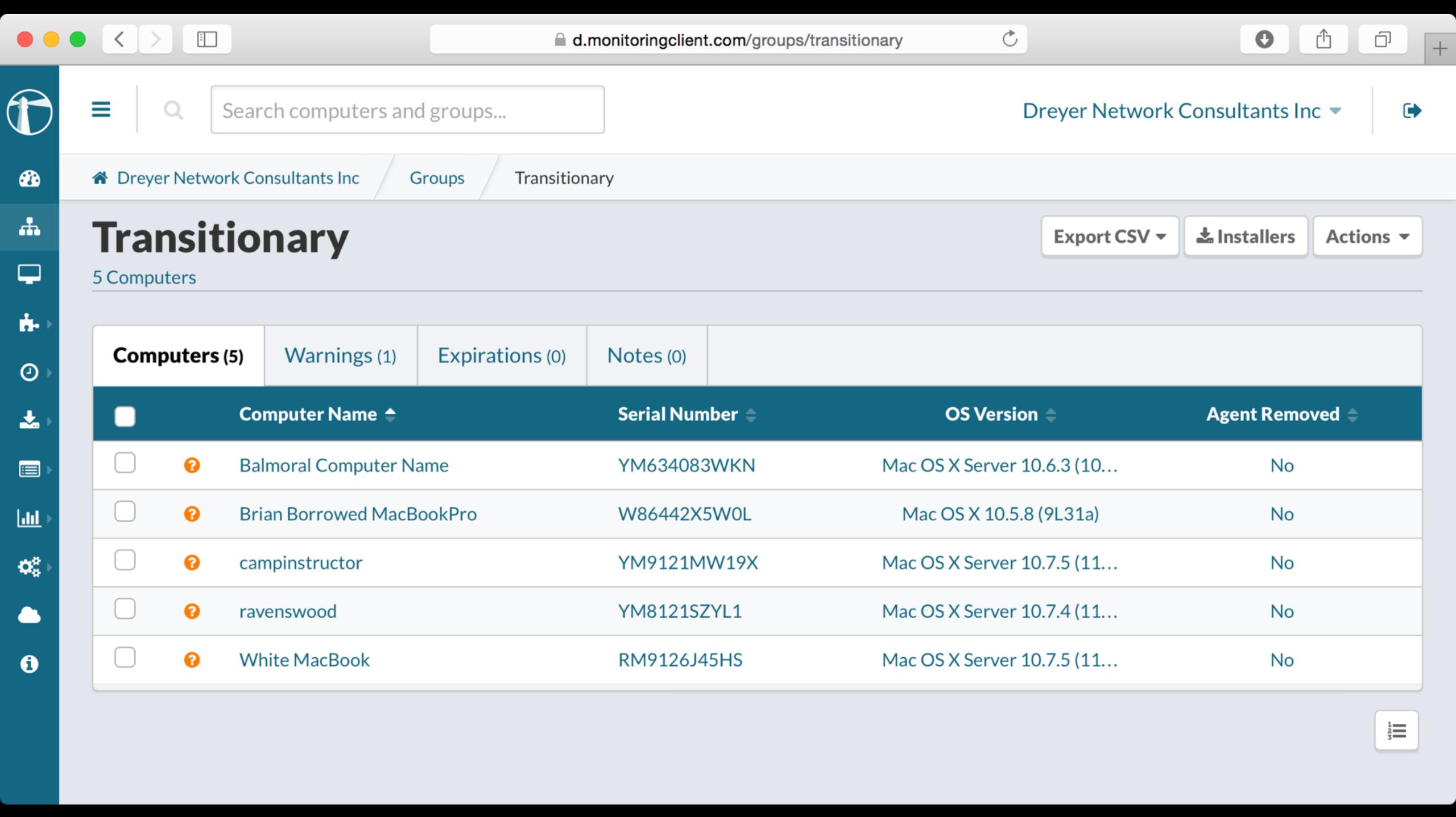


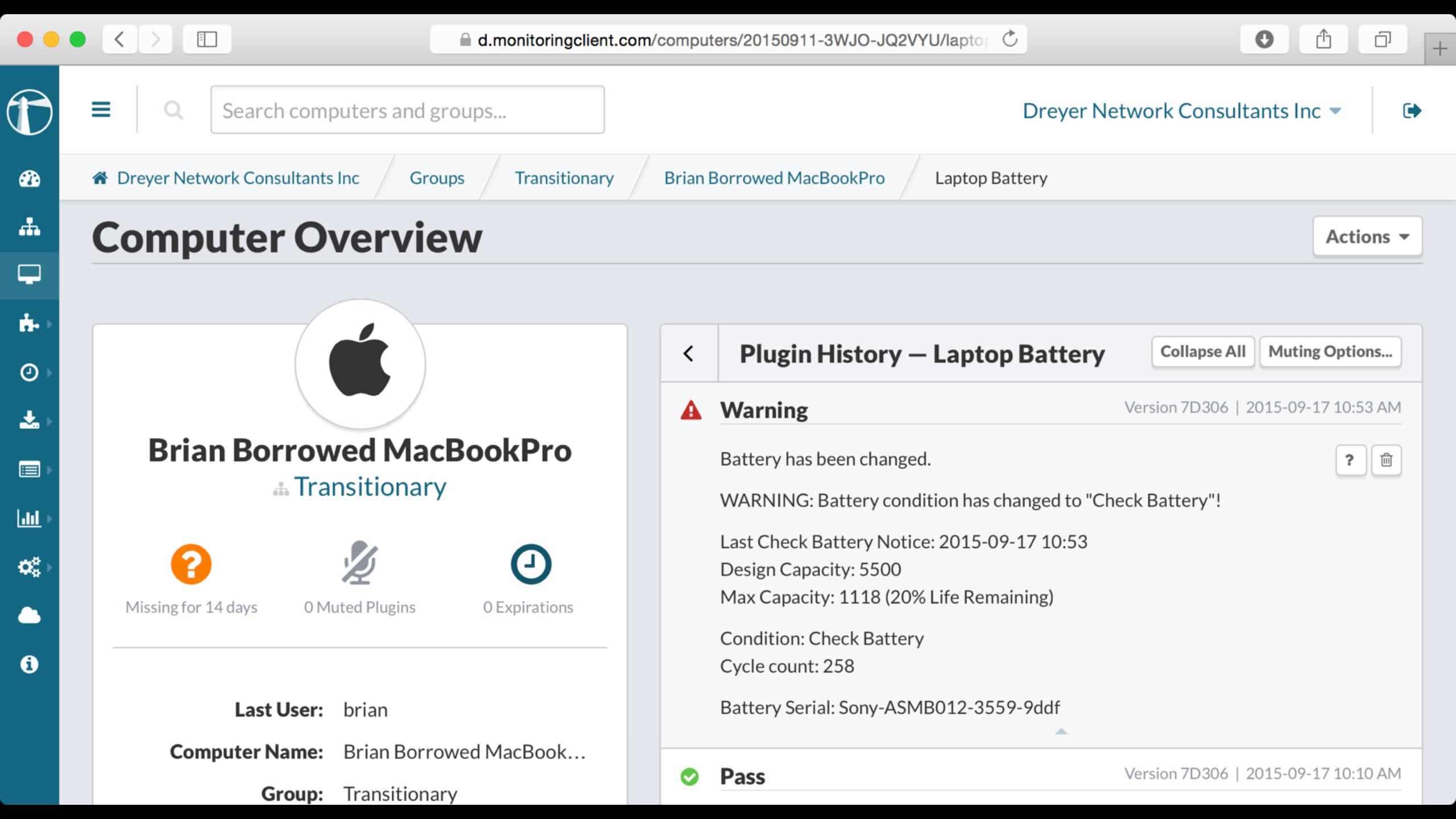




News Find a Provider Become a Provider





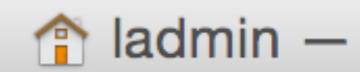


Gather information

Logs and verbose output

history

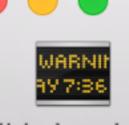




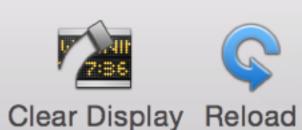
arekdreyer:~ ladmin\$ history

- 1 ls
- 2 ipconfig /all
- 3 slapconfig -destroyldap
- 4 sudo slapconfig -destroyldap
- 5 sudo slapconfig —destroyldapdatak
 - 6 man slapconfig
 - 7 man slapconfig
 - 8 history
 - 9 zah
- 10 -sh

















Filter

Later

Now

Earlier

 \otimes

Hide Log List

Mail

named.log

named.log.0.bz2

named.log.4.bz2

named.log.5.bz2

PasswordService

▶ PostgreSQL

Server

servermgr_xcode.log

ServiceProxySetup.log

Setup.log

slapconfig.log.0.bz2

stackshot-syms.log

ataakahat laa





Ignore Sender Insert Marker Inspector

LKDC-setup.log

named.log.1

named.log.2.bz2

named.log.3.bz2

▶ ProfileManager

radiusconfig.log

ServerSetup.log

slapconfig.log

2015-09-15 21:53:55 +0000 OPENDIRECTORY_ROOT_CA_IDENTITY not found, unable to determine rootCA name from OPENDIRECTORY_ROOT_CA_CERTIFICATE, defaulting to configured value of MDM Project 16 Open Directory Certificate Authority 2015-09-15 21:53:55 +0000 Could not find root CA certificate in system keychain 2015-09-15 21:53:55 +0000 command: /bin/launchctl unload -w /System/Library/

LaunchDaemons/com.apple.xscertd.plist 2015-09-15 21:53:55 +0000 command: /bin/launchctl unload -w /System/Library/

LaunchDaemons/com.apple.xscertd-helper.plist

Size: 513 KB

2015-09-15 21:53:55 +0000 command: /bin/launchctl unload -w /System/Library/ LaunchDaemons/com.apple.xscertadmin.plist

2015-09-15 23:32:12 +0000 Creating certificate authorities & hostname certificate

2015-09-15 23:32:12 +0000 Creating root CA with DNCI Open Directory Certificate Authority

2015-09-15 23:32:14 +0000 Deleting certificate mdm.pretendco.com

2015-09-15 23:32:14 +0000 command: /bin/launchctl load -w /System/Library/ LaunchDaemons/com.apple.xscertd.plist

2015-09-15 23:32:14 +0000 command: /bin/launchctl load -w /System/Library/ LaunchDaemons/com.apple.xscertd-helper.plist

2015-09-15 23:32:14 +0000 command: /bin/launchctl load -w /System/Library/ LaunchDaemons/com.apple.xscertadmin.plist

2015-09-15 23:35:16 +0000 Deleting Cert Authority related data

<u> 2015-09-15 23:35:16 +0000 Removed directory at nath /var/root/library/</u>

Remote monitoring

- 1. Enable remote connections
- 2. Open SSH connection
- 3. Watch logs
- 4. Attempt loginwindow login

```
Sharing

↑ ladmin — ssh — 80×24
sh-3.2$ ssh ladmin@fancy-cylinder.local
                                 👚 ladmin — sys
fancy-clyinder:∼ ladmin$ syslog -w
     1 12:09:40 fancy-clyinder login[2218
     1 12:09:41 fancy-clyinder login[2219
     1 12:09:53 fancy-clyinder collabd[22
    Configured to exit after about 360 se
    1 12:10:01 fancy-clyinder CalendarAg
.store.log.caldav.coredav] [Refusing to p
ontent-type: [text/plain; charset="utf-8"
--- last message repeated 1 time ---
```

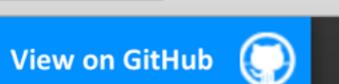






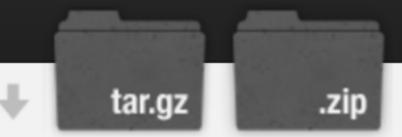






Munki In a Box

A Quick Setup and Fill Repository for Munki with AutoPKG



munki-in-a-box

Post Munki Install Simple Deployment Script

The goal of this script is to deploy a basic munki repo in a simple script based on a set of common variables. I have placed defaults in these variables, but they are easily overridden and you should decide where they go.

This script is based upon the Demonstration Setup Guide for Munki, AutoPKG, and other sources. My sincerest thanks to Greg Neagle, Tim Sutton, Allister Banks, Rich Trouton, Charles Edge, Pepijn Bruienne, the Linde Group and numerous others who have helped me assemble this script. The Mac Admins Community is supportive and awesome.

Pre-Requisites:

1) 10.8/Server 2, 10.9/Server 3 or 10.10/Server 4 2) Web Services Enabled

Directions for Use:





Added TextWrangler to section managed_installs of manifest site_default. Added VMwareFusion to section managed_installs of manifest site_default. Added munkireport to section managed_installs of manifest site_default.

WARNING! WARNING! WARNING! WARNING! WARNING! WARNING! WARNING! WARNING!

Running AutoPkg as root or using `sudo` is not recommended!

A mistake in a recipe or processor could modify or delete important system files.

Please run autopkg as an unprivileged user.

A future release of autopkg may fail with an error if run as root.

WARNING! WARNING! WARNING! WARNING! WARNING! WARNING! WARNING! WARNING!

Attempting git pull...

Already up-to-date.

Updated search path:

'~/Library/AutoPkg/Recipes'

Provide great service when you do troubleshoot

For your users

- Walk a mile in their shoes
- A few words about documentation

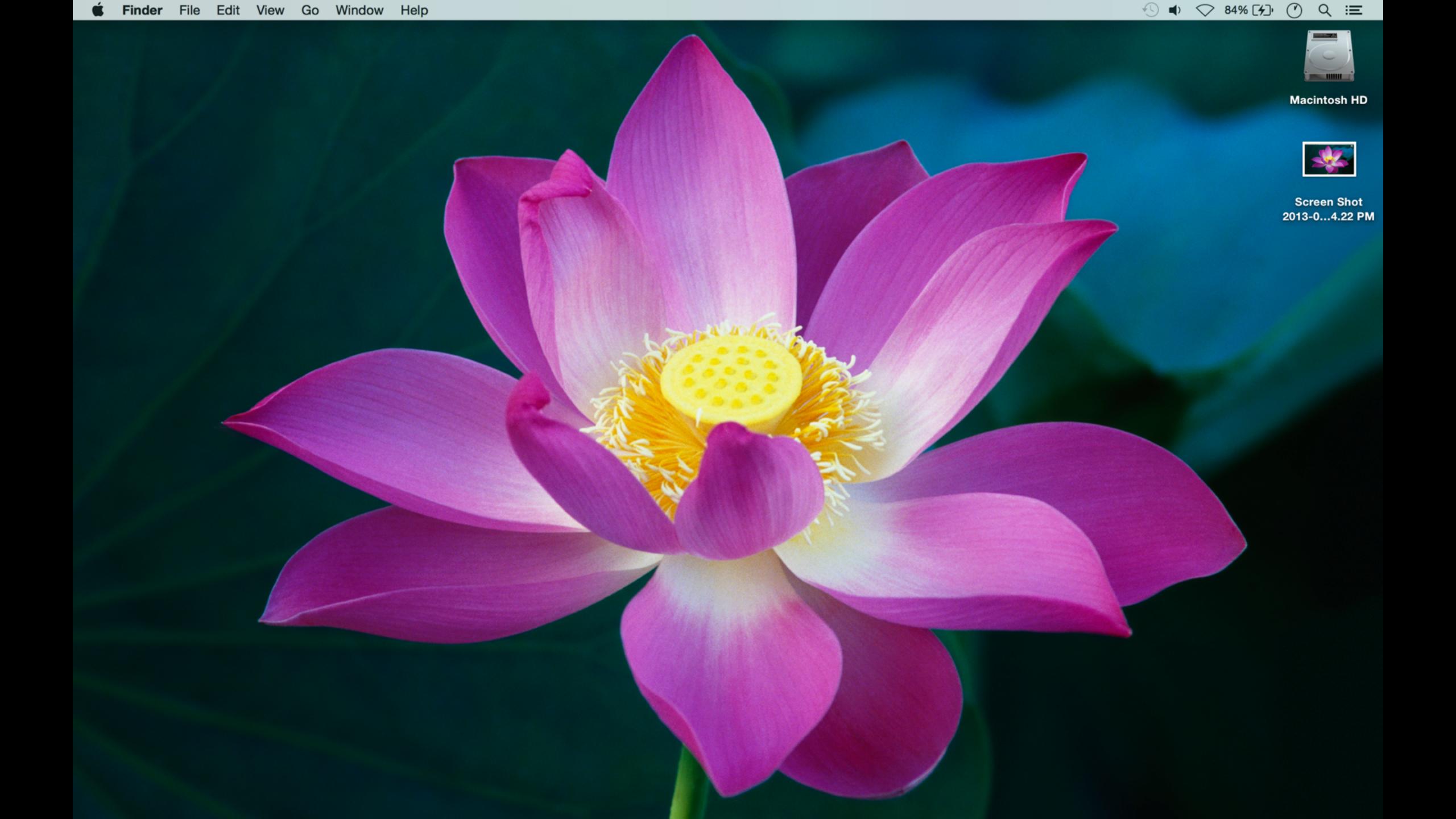
Sit in the user's seat

(three anecdotes)

"It appears I lost 8600 songs from iTunes"

"Any quick and easy fixes that you can think of from overseas?"

"I think someone at my party hacked my laptop camera"







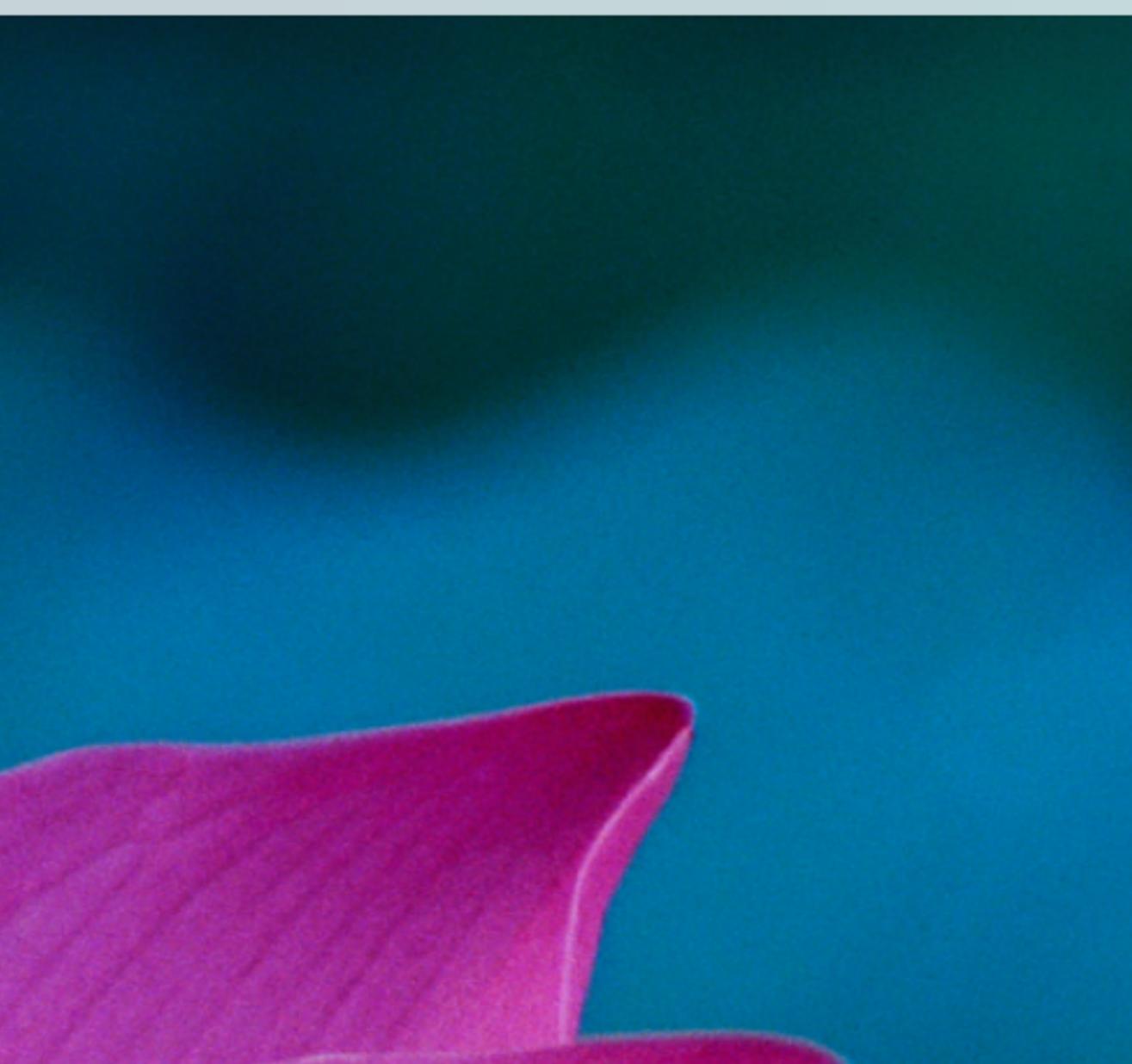
















Macintosh HD

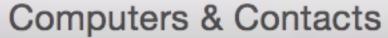
Screen Shot 2013-0...4.22 PM

"Lauren can't log in to the online electronic medical assistant"













Allow Remote Control

Please tell your partner the following ID and password.

Your ID

Password

Use your personal password to access this computer from anywhere.

Personal Password





Please enter your partner's ID in order to control the remote computer.

Partner ID



- Remote Control
- File Transfer

Connect to partner

E-mail:

arek@arekdreyer.com

Password:

Sign In

Keep me signed in

Forgot password

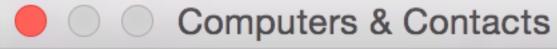
Sign Up

Ready to connect (secure connection)



Computers & Contacts >>>







Remote Control | All Meeting



Please tell your partner the following ID and password.

Your ID

Password

Use your personal password to access this computer from anywhere.

Personal Password



Control Remote Computer

Please enter your partner's ID in order to control the remote computer.

Partner ID



Remote Control

File Transfer

Connect to partner

Please enter your security code.

Sign In

Cancel

I can't access my code

Ready to connect (secure connection)

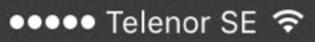


Computers & Contacts >>>

●●●●● Telenor SE 🗢 20:22 🖊 🔻 32% 💽 🗡

Enter PIN

1	2 ABC	3 def
4 GHI	5 JKL	6 M N O
7 PQRS	8 TUV	9 wxyz
	0	×





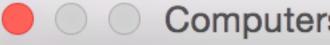


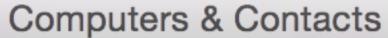


20:22











Allow Remote Control

Please tell your partner the following ID and password.

Your ID

Password

Use your personal password to access this computer from anywhere.

Personal Password



Control Remote Computer

Please enter your partner's ID in order to control the remote computer.

Partner ID



Remote Control File Transfer

Connect to partner

Please enter your security code.

325628

Sign In

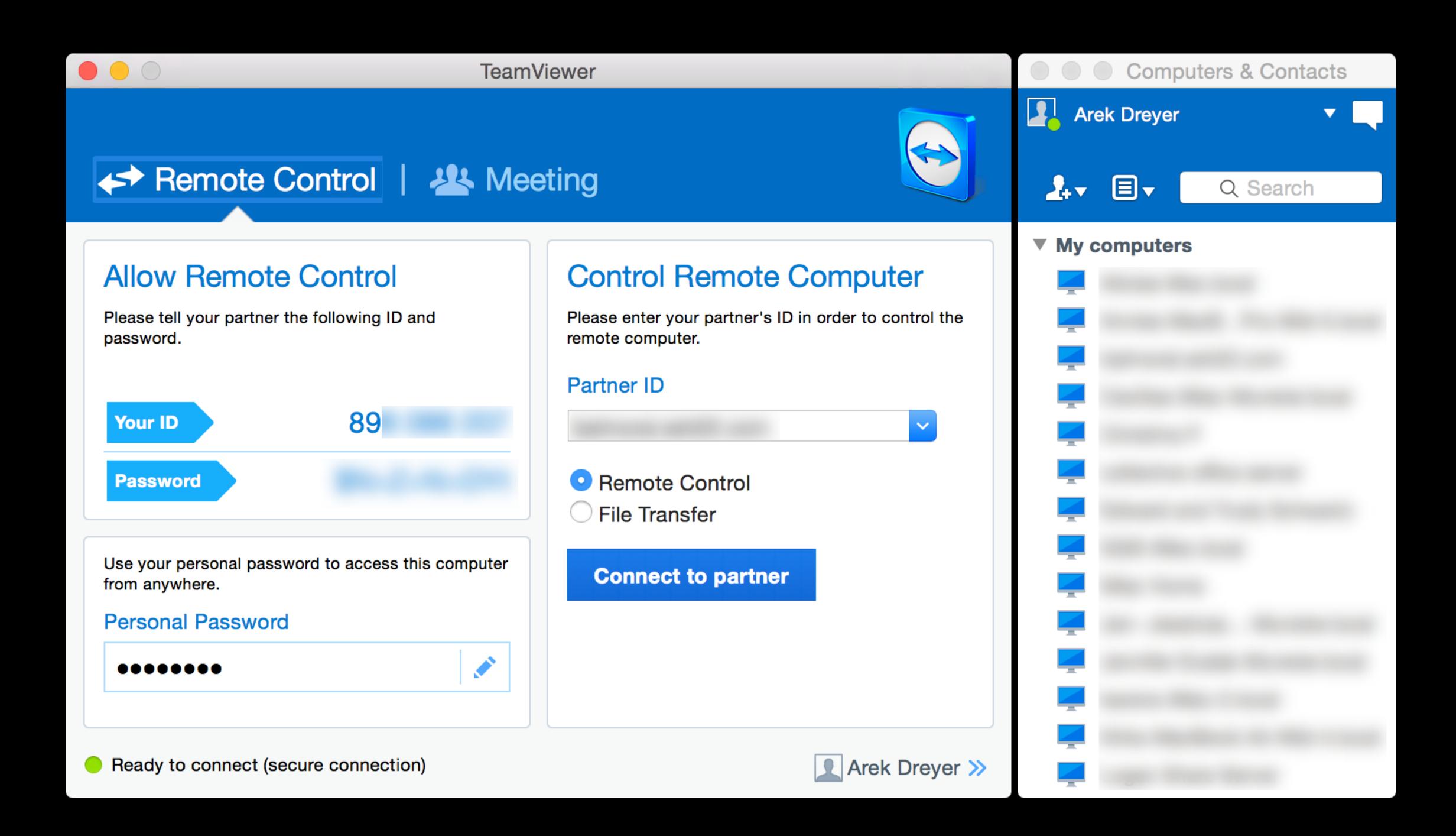
Cancel

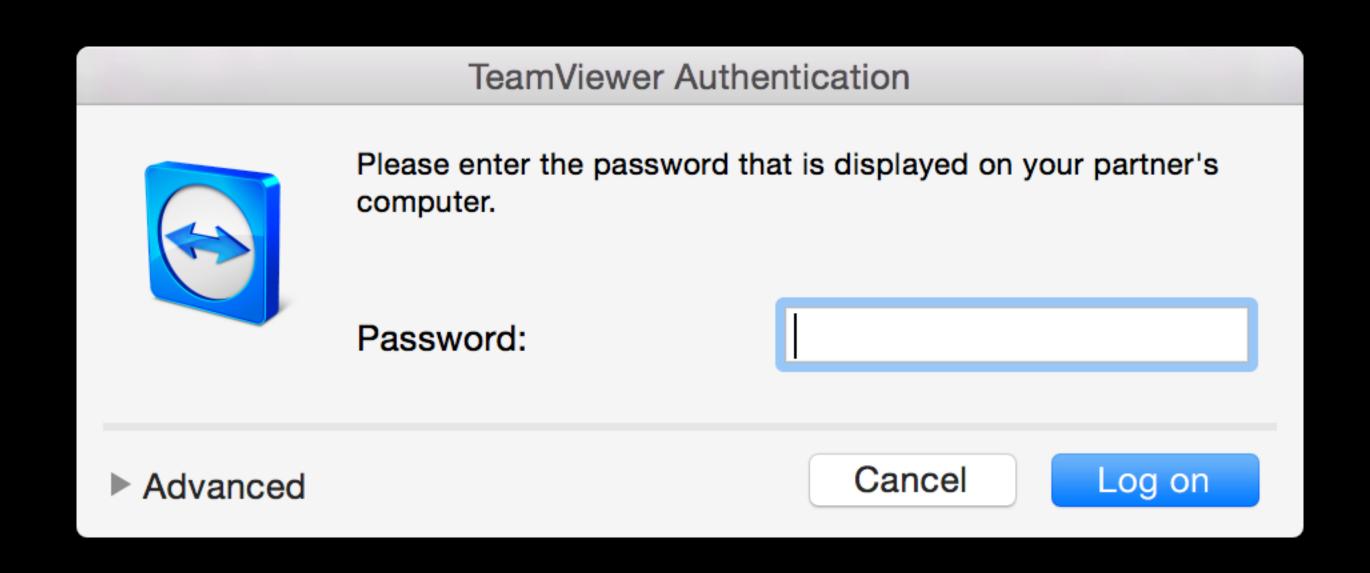
I can't access my code

Ready to connect (secure connection)



Computers & Contacts >>>





Lauren can't access website

- Must use Firefox
- Can't access on her computer
- Can access on another computer

I remembered Marco's example



Firefox®

40.0.2

Updates available at https://www.mozilla.org/firefox/

Firefox is designed by Mozilla, a global community working together to keep the Web open, public and accessible to all.

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Firefox®

40.0.2

Updates available at https://www.moz

Firefox is designed by Mozilla, a globa together to keep the Web open, public

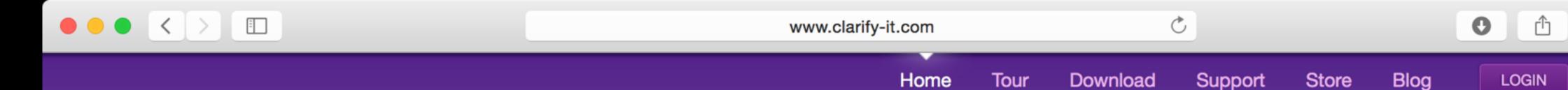
Want to help? Make a donation or get

Long Story Short: Wrong URL

Long Story Short: Wrong URL

Showed how to update Bookmarks.

Provide excellent updated documentation





When one screenshot isn't enough

Use multiple screenshots to tell your story. Mark them up, add some text and export them as a document to PDF, Word or Dropbox. You can also send them to Evernote, Wordpress or the web.



Clarify 2 is now available!

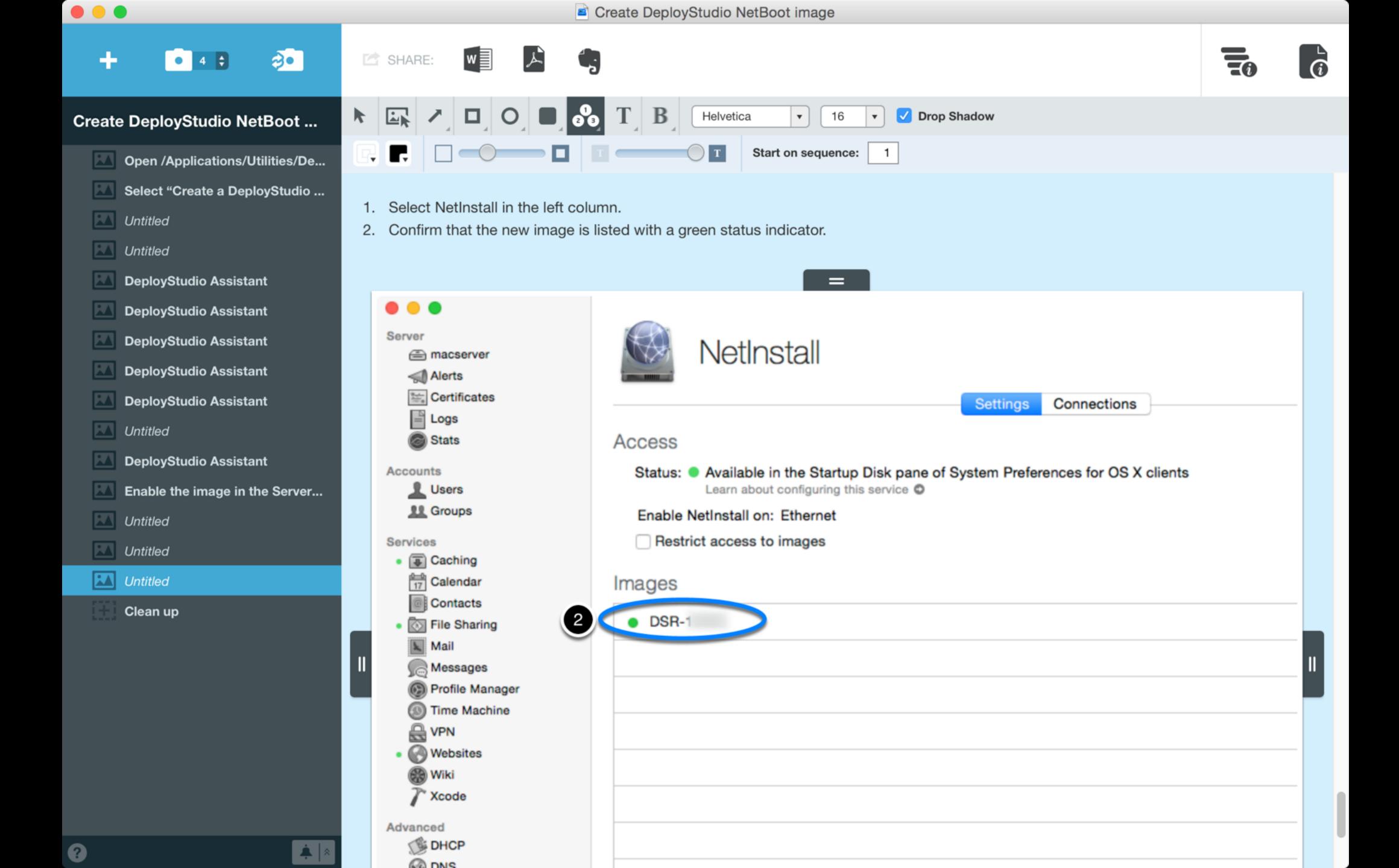
Upgrade now for only \$14.99! (Buy new for \$29.99)

Clarify 2 is a Faster, Simpler Alternative to Screen Recording

You need to communicate clearly and quickly. But creating screen recordings and messing with formatting in Word can be time consuming and frustrating. That is why we created Clarify 2 - so that you could create better visual communications faster.

Upgrading to Clarify 2 is simple

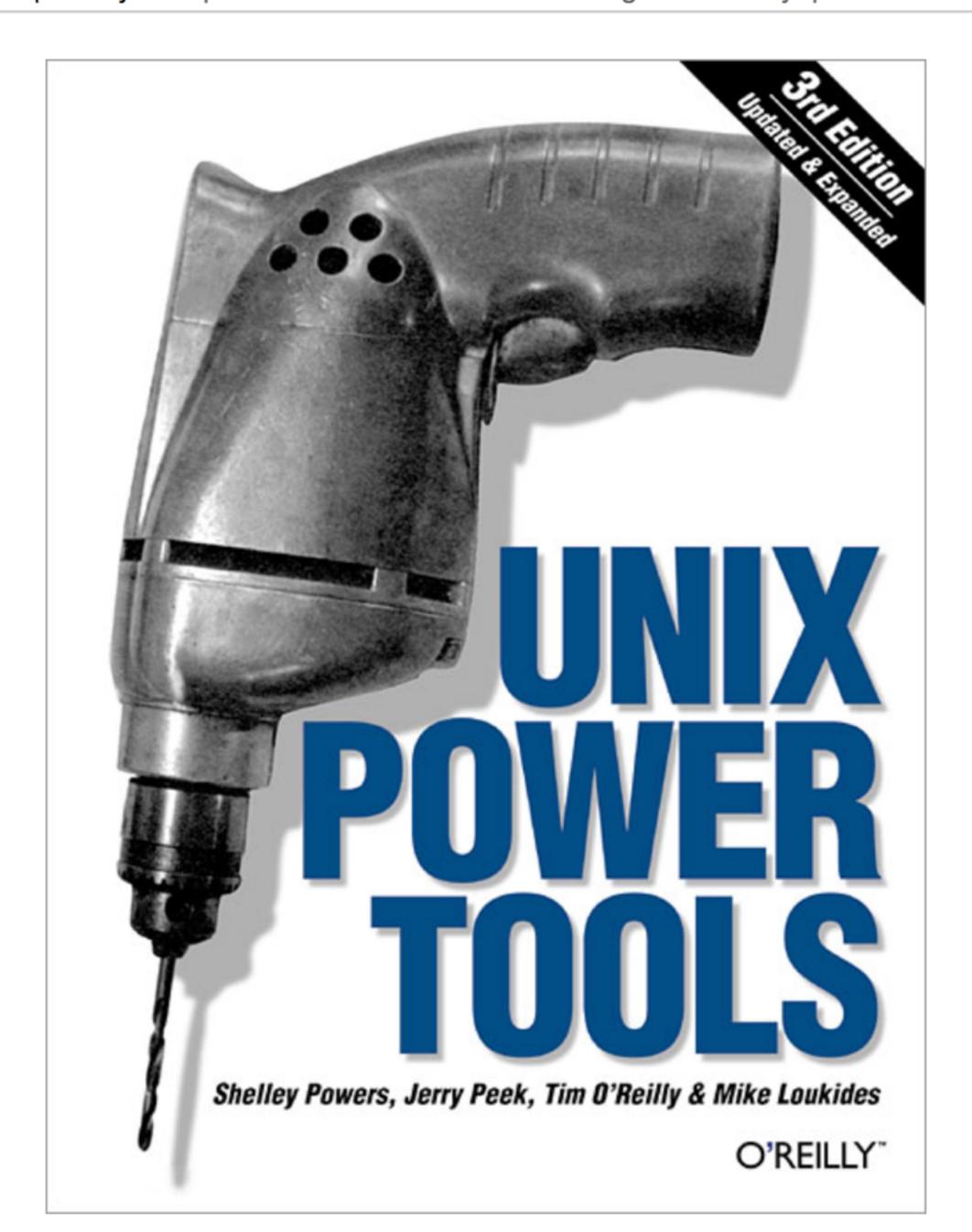
- From ScreenSteps 2.9
 See what's new by clicking <u>here</u>. Upgrade to Clarify 2 by clicking <u>here</u>.
- From Clarify 1
 See what's new by clicking <u>here</u>. Upgrade to Clarify 2 by clicking <u>here</u>.



Use appropriate tools

- Command line
- Built-in apps
- Third party
- Apple Watch

Command line tools



Preferences Plists Profiles

- defaults
- plutil
- profiles
- xmllint --format original.mobileconfig > modified.mobileconfig

1. iosnoop

This "traces" disk I/O execution live. Each time a disk I/O completes, a line of output is printed to summarize it, including process name and filename details:

```
Brendan−2:~ brendan$ sudo iosnoop
       PID D
                BLOCK
                        SIZE
                                    COMM PATHNAME
                          4096 Google Chrome ??/Cache/data_2
  503 54079 R 286522800
  503 54079 R 286522808
                          4096 Google Chrome ??/Cache/data_2
  503 34852 W 385001216
                         53248
                                    Adium ??/Default/.dat8824.01b
  503 65002 W 308056800
                               TweetDeck ??/Local Store/td_26_brendangregg.dl
  503 65002 W 308056864
                               TweetDeck ??/Local Store/td_26_brendangregg.dl
  503 65002 W 385001320
                               TweetDeck ??/Local Store/td_26_brendangregg.dl
  503 65002 W 385001320
                               TweetDeck ??/Local Store/td_26_brendangregg.dl
                          4096 TweetDeck ??/Local Store/td_26_brendangregg.dl
  503 65002 W 385001320
                         12288 Google Chrome ??/Default/Cookies-journal
  503 54079 W 385001384
                          4096 Google Chrome ??/Default/Cookies-journal
  503 54079 W 385001384
                          4096 Google Chrome ??/Default/Cookies
  503 54079 W 134993856
 503 54079 W 134994056
                          4096 Google Chrome ??/Default/Cookies
                          4096 Google Chrome ??/Default/Cookies
  503 54079 W 134994176
                          8192 Google Chrome ??/Default/Cookies
  503 54079 W 134994224
[...]
```

This lets you instantly find out which applications are using the disk, and what files they are reading or writing to. Disk I/O is typically slow (for non-SSD disks), so an application calling frequent disk I/O (a dozen per second or more) may run slowly as it waits for the disk I/O to complete.

The output columns show: UID = user ID, PID = process ID (unique identifier for the process), D = direction (R = read, W = write), BLOCK = location on disk, SIZE = I/O size in bytes, COMM = process name, PATHNAME = trailing portion of file pathname.

In that output I caught Google Chrome reading from a cache file ("data_2"), and writing to cookie files ("Cookies-journal" and "Cookies"). TweetDeck also wrote to database files ("td_26_brendangregg.db" and "td_26_brendangregg.db-journal"). The "??" is where the path information ends for iosnoop (if you are a darwin programmer and want to take a swing at improving that, see the fi_pathname translator in /usr/lib/dtrace/io.d).

The "-h" option lists options (don't need "sudo" for this):

Capturing Traffic

- tcpdump
- X11 -> Wireshark

Technical Q&A QA1176

Getting a Packet Trace

Q: I'm trying to debug a network problem. How do I get a packet trace?

A: This depends on your platform:

- There are a number of programs for OS X that let you gather and analyze packet traces. See OS X Programs for details.
- iOS does not support packet tracing directly. However, if you connect your iOS device to a Mac via USB, you can use an OS X packet trace program to gather and analyze traces using the remote virtual interface feature. See iOS Packet Tracing for details.

Finally, Packet Trace Notes offers some hints and tips that you might find useful when dealing with packet traces.

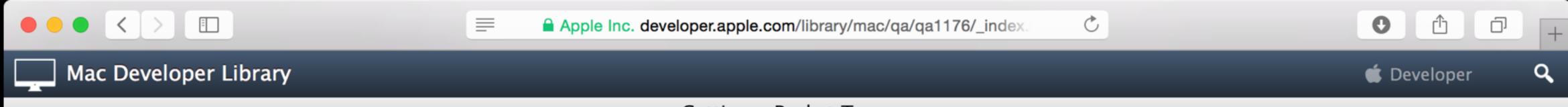
Important: Mention of third party sites and third party products is for informational purposes only and constitutes neither an endorsement nor a recommendation. Apple assumes no responsibility with regard to the selection, performance, or use of these vendors or products.

OS X Programs

OS X supports a wide range of packet trace programs, as described in the following sections.

Charles HTTP Proxy

Charles is an HTTP proxy that allows you to view all of the HTTP and HTTPS traffic between your machine and the Internet.



Getting a Packet Trace

iOS Packet Tracing

iOS does not support packet tracing directly. However, if you're developing for iOS you can take a packet trace of your app in a number of different ways:

- If the problem you're trying to debug occurs on Wi-Fi, you can put your iOS device on a test Wi-Fi network. See Wi-Fi Capture for details.
- If your app uses HTTP, you can configure your iOS device to use a debugging HTTP proxy (such as Charles HTTP Proxy).
- In iOS 5 and later you can use the <u>remote virtual interface</u> facility.

Remote Virtual Interface

iOS 5 added a remote virtual interface (RVI) facility that lets you use OS X packet trace programs to capture traces from an iOS device. The basic strategy is:

- 1. Connect your iOS device to your Mac via USB.
- 2. Set up an RVI for that device. This creates a virtual network interface on your Mac that represents the iOS device's networking stack.
- 3. Run your OS X packet trace program, and point it at the RVI created in the previous step.

To set up an RVI, you should run the rvictl tool as shown below.

```
$ # First get the current list of interfaces.
$ ifconfig -l
lo0 gif0 stf0 en0 en1 p2p0 fw0 ppp0 utun0

$ # Thore was the tool with the UNIX of the davice.
$ rvictl -s 74bd53c647548234ddcef0ee3abee616005051ed

Starting device 74bd53c647548234ddcef0ee3abee616005051ed [SUCCEEDED]

$ # Get the list of interfaces again, and you can see the new virtual
$ # network interface, rvi0, added by the previous command.
$ ifconfig -l
Feedback
```



DEVICES



My Mac 10.10.5 (14F1012)



SIMULATORS



iPad 2 9.0 (13A340)



iPad Air 9.0 (13A340)



iPad Air 2 9.0 (13A340)



iPad Retina 9.0 (13A340)



iPhone 4s 9.0 (13A340)



iPhone 5 9.0 (13A340)



iPhone 5s 9.0 (13A340)



iPhone 6 9.0 (13A340)



iPhone 6 Plus 9.0 (13A340)



iPhone 6s 9.0 (13A340)



iPhone 6s Plus 9.0 (13A340)

Device Information

Name	Arek demo iPad	
Model	iPad mini 2 (Model A1489)	
Capacity	11.94 GB (10.37 GB available)	
Battery	100%	
iOS	9.0.1 (13A404)	
Identifier	158b03b1ebf9c0fc8b968e33e879f5e0c7	



View Device Logs

Take Screenshot

Installed Apps

|--|

No apps installed





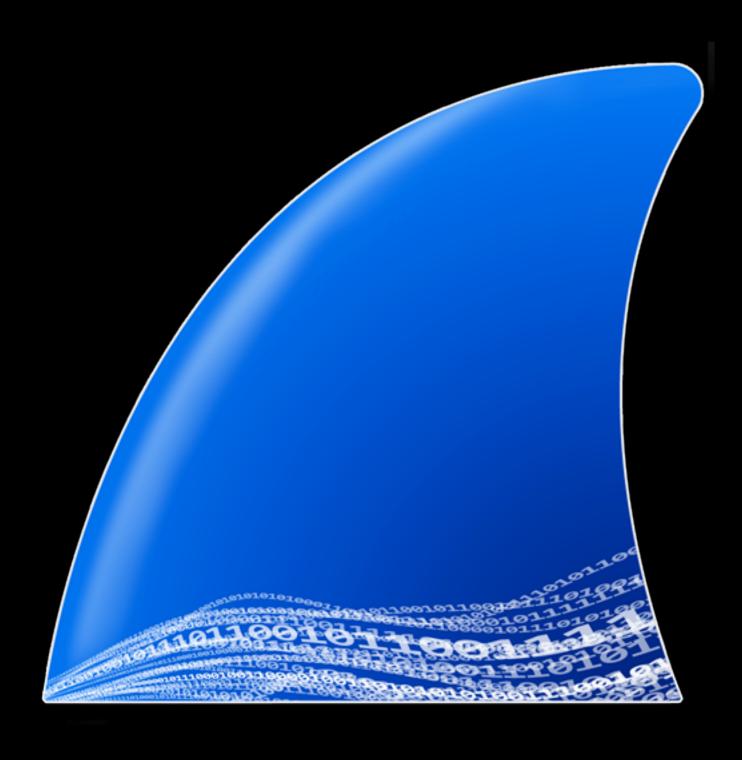


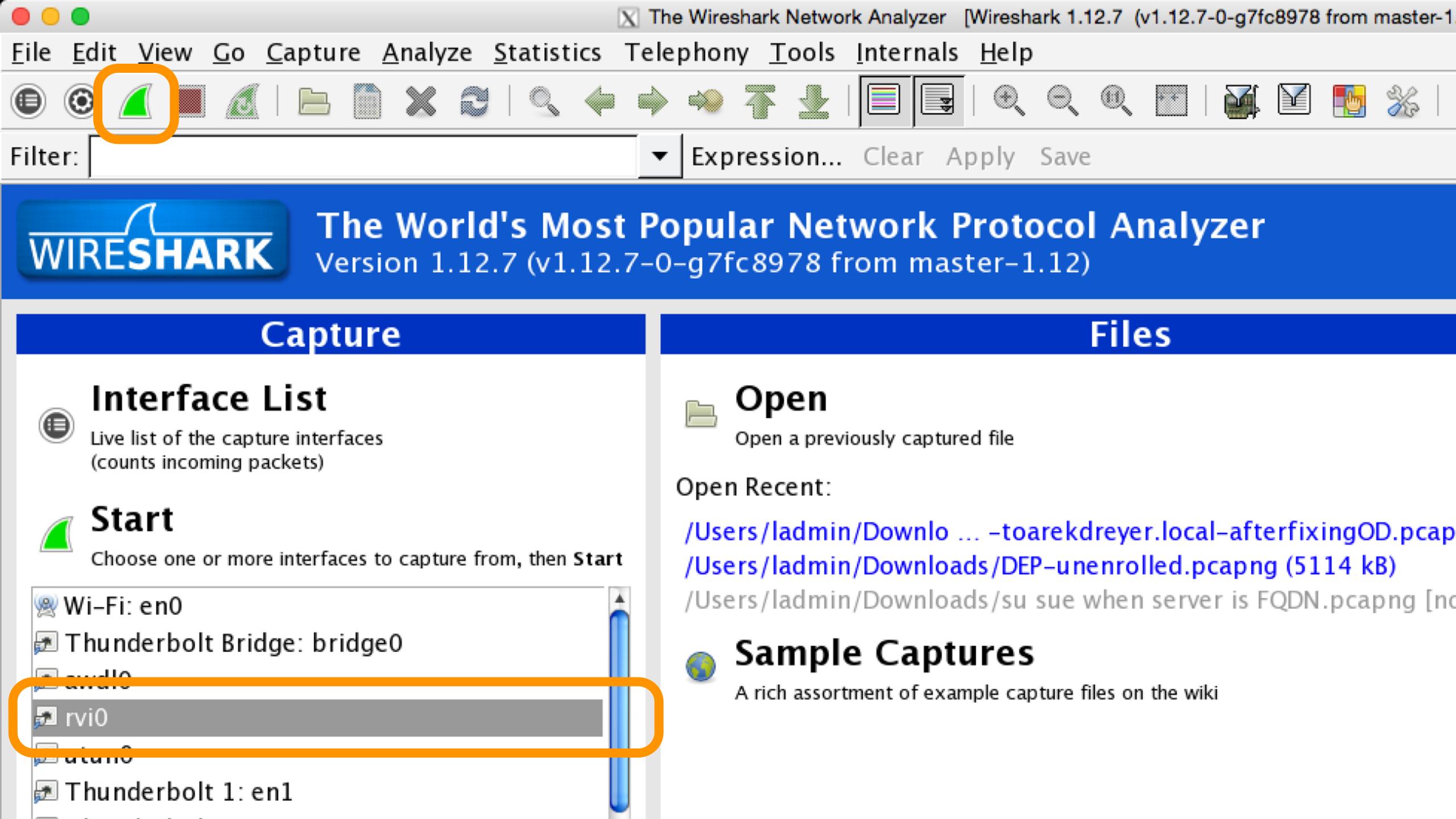




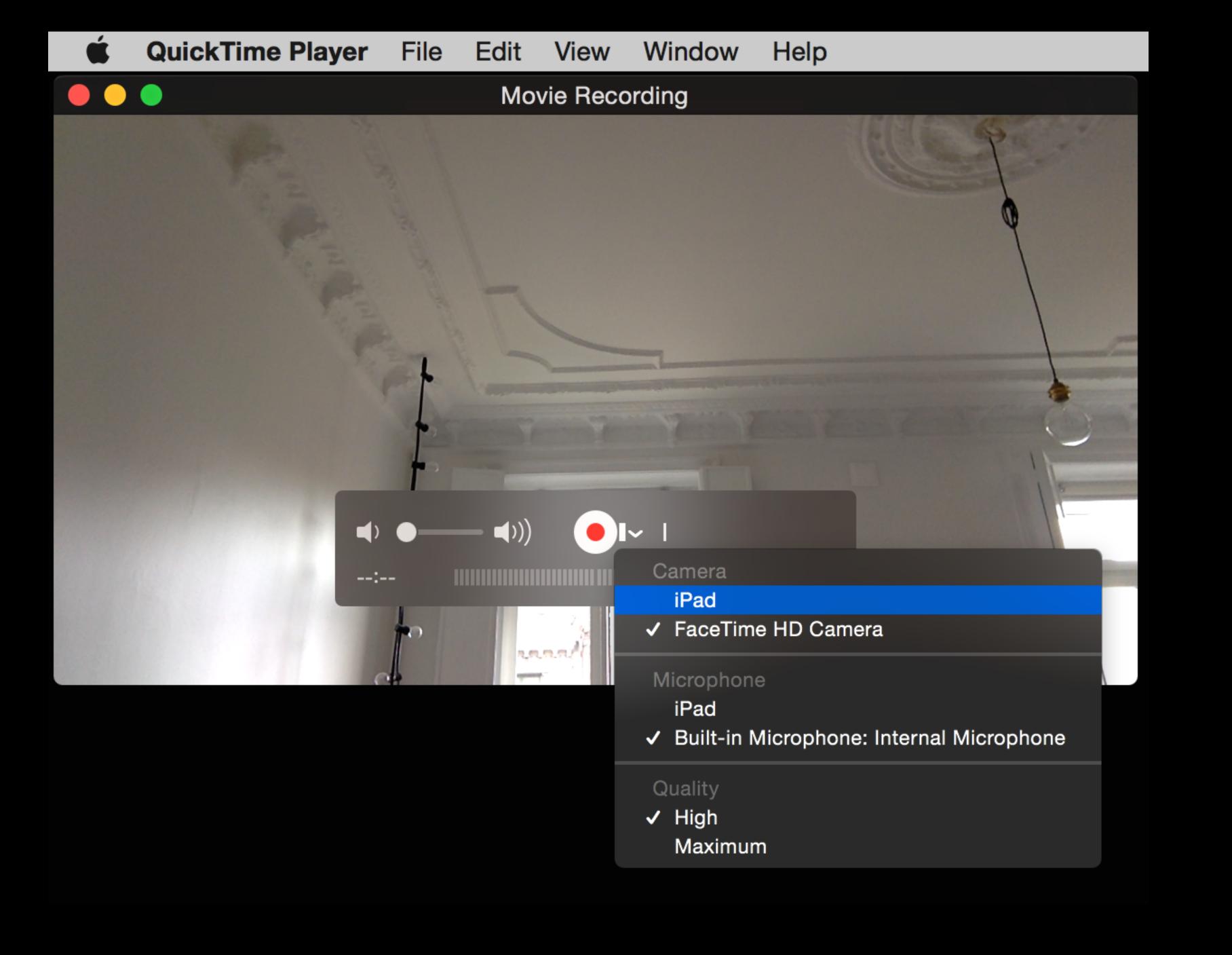
arekdreyer:~ ladmin\$ sudo rvictl -s 158b03b1ebf9c0fc8b968e33e879f5e0 arekdreyer:~ ladmin\$ ■







Demo: iOS 9 file sharing?





Built-in apps

defaults write com.apple.DiskUtility DUDebugMenuEnabled 1



Macintosh HD













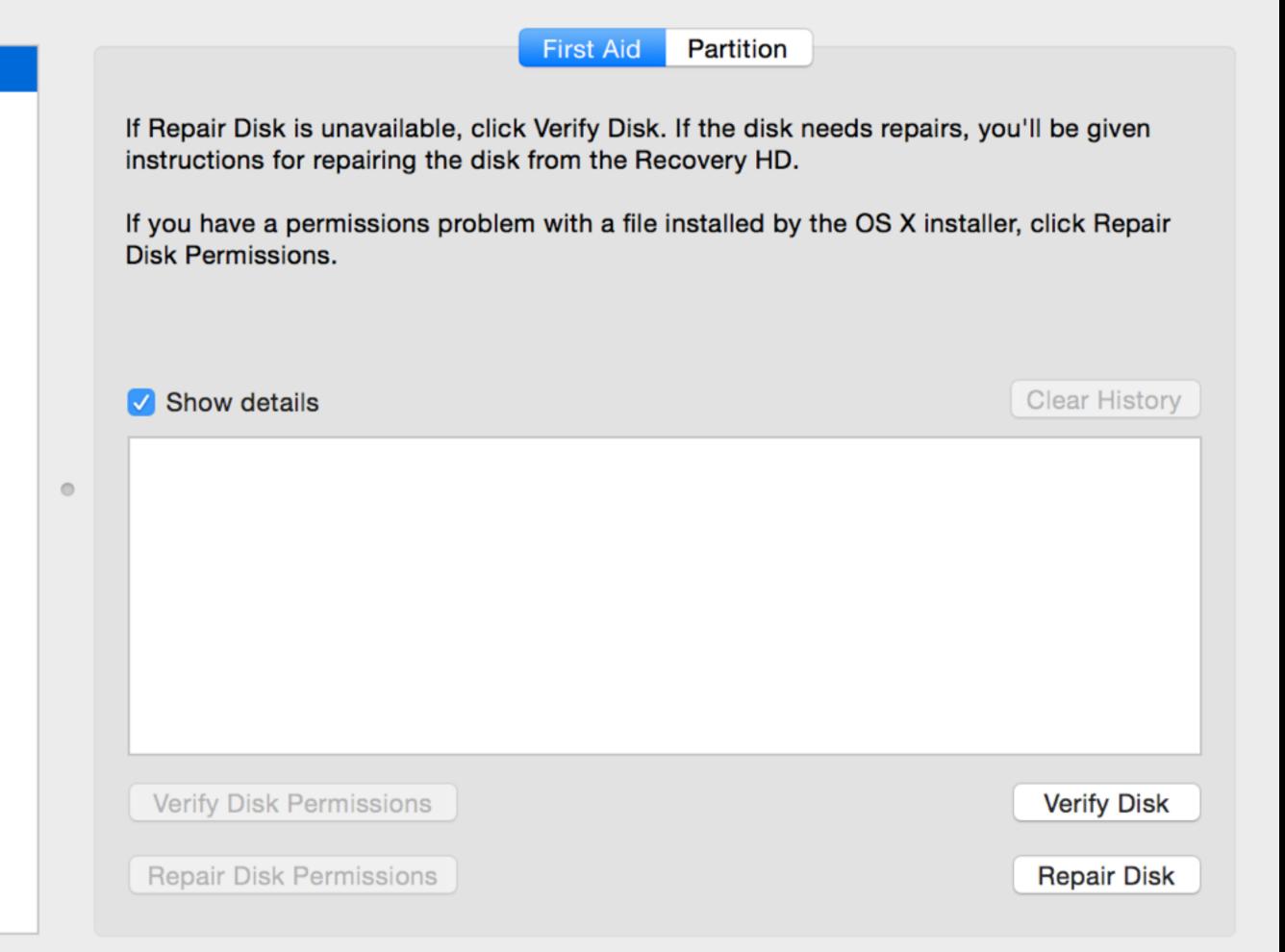








Macintosh HD Macintosh HD





Name: Macintosh HD

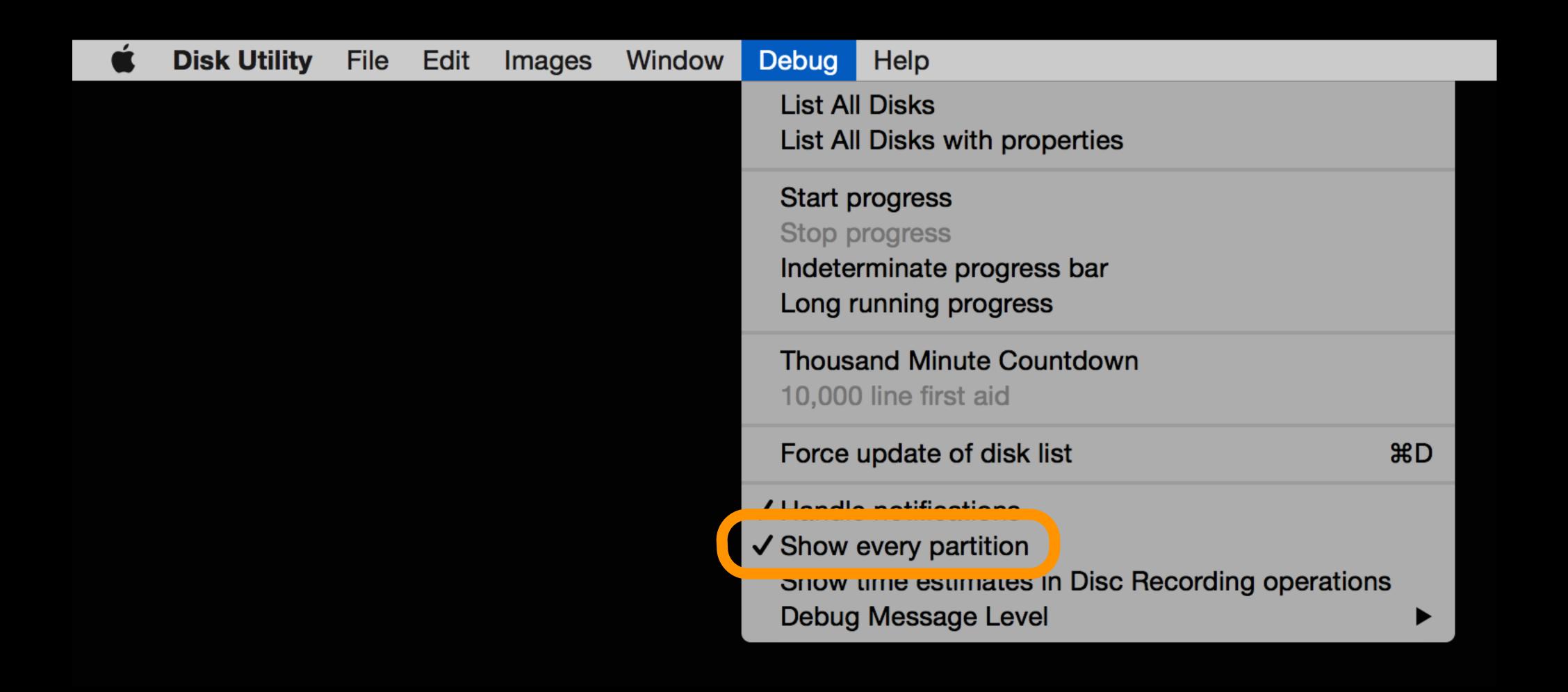
Type: Logical Volume Group

Disk Status : Online

Capacity: 499.42 GB (499,418,034,176 Bytes)

Available: 10.6 MB (10,645,504 Bytes)

Used: 499.41 GB (499,407,388,672 Bytes)

















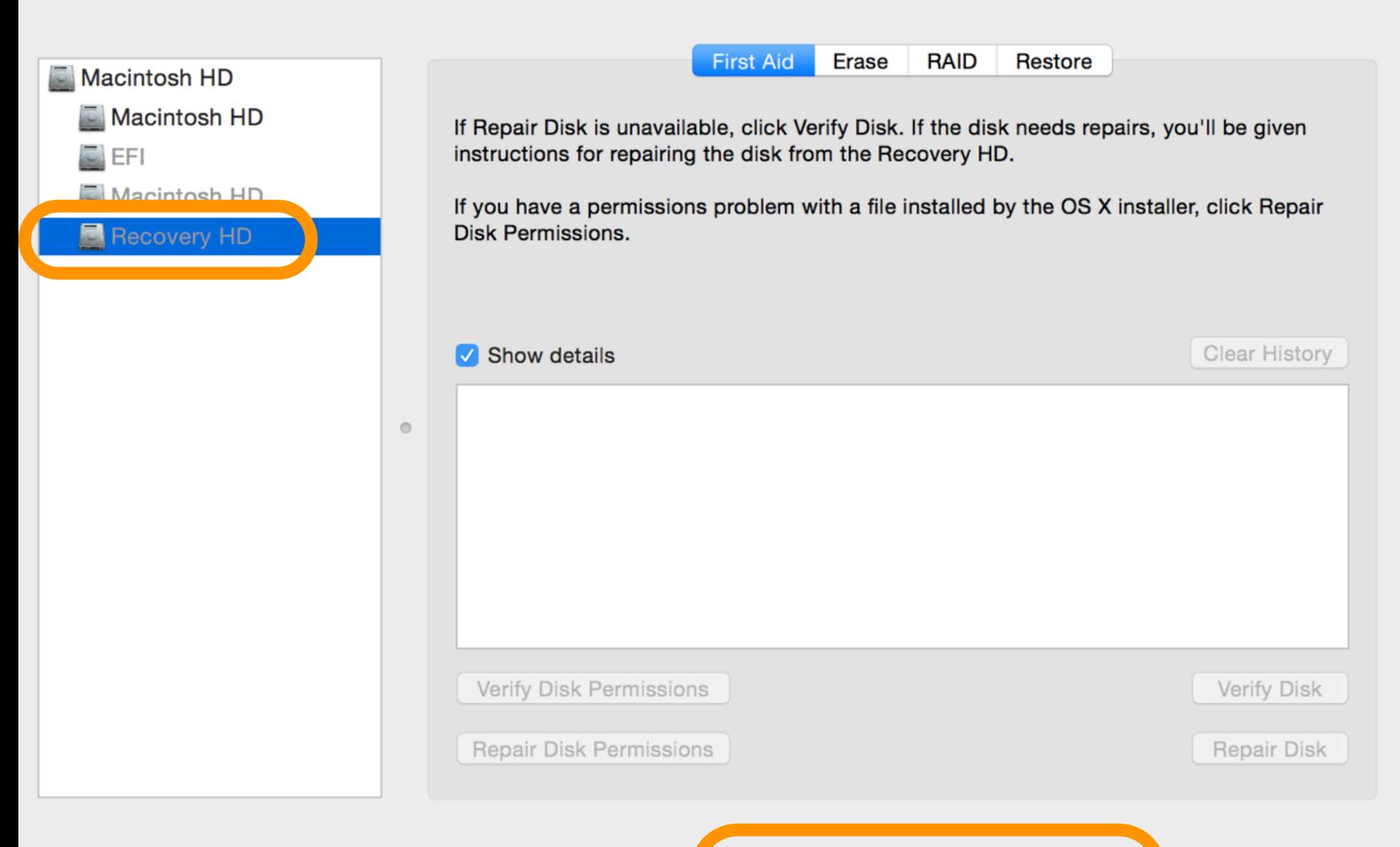






Log







Mount Point: Not mounted

Partition Type: Apple Boot Partition

Owners Enabled: -Number of Folders: - Capacity: 650 MB (650,002,432 Bytes)

Available: -

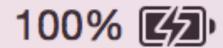
Number of Files: -

Wireless Diagnostics

















hold

key

option

Interface Name: en0

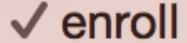
Address: 60:03:08:a8:4c:0c

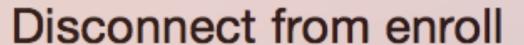
Open Wireless Diagnostics...

Enable Wi-Fi Logging

Wi-Fi: On

Turn Wi-Fi Off





IP Address: 192.168.0.45

Router: 192.168.0.1

Internet: Reachable

Security: WPA2 Personal

BSSID: 20:c9:d0:a9:c2:a6

Channel: 1 (2.4 GHz, 20 MHz)

Country Code: DE

RSSI: -47 dBm

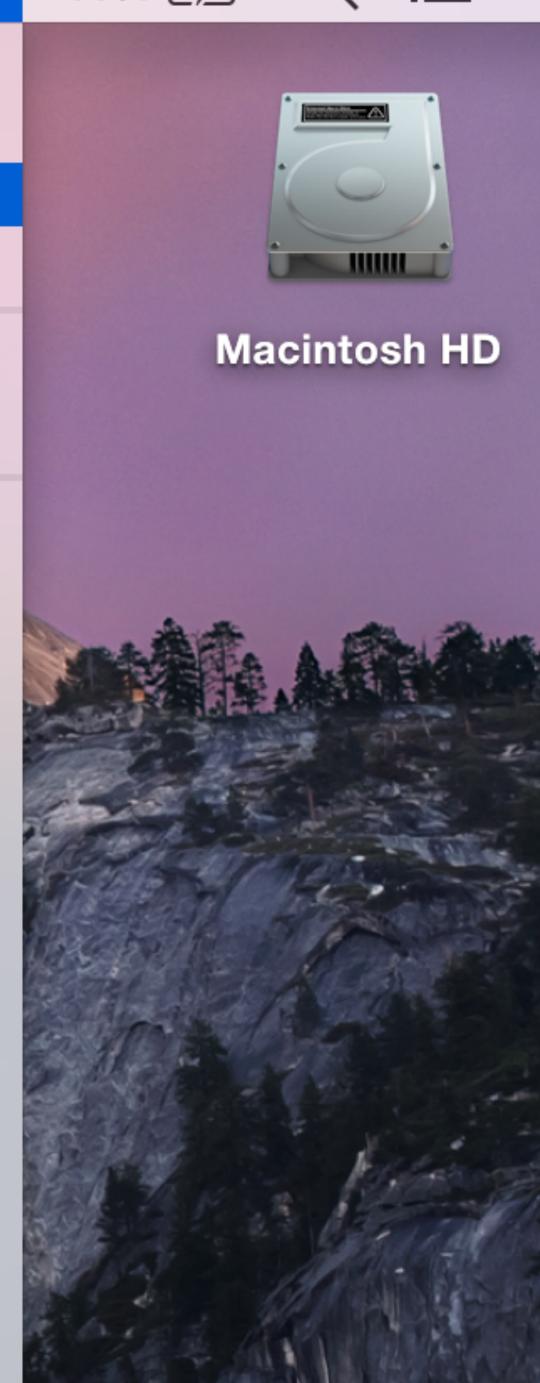
Noise: -95 dBm

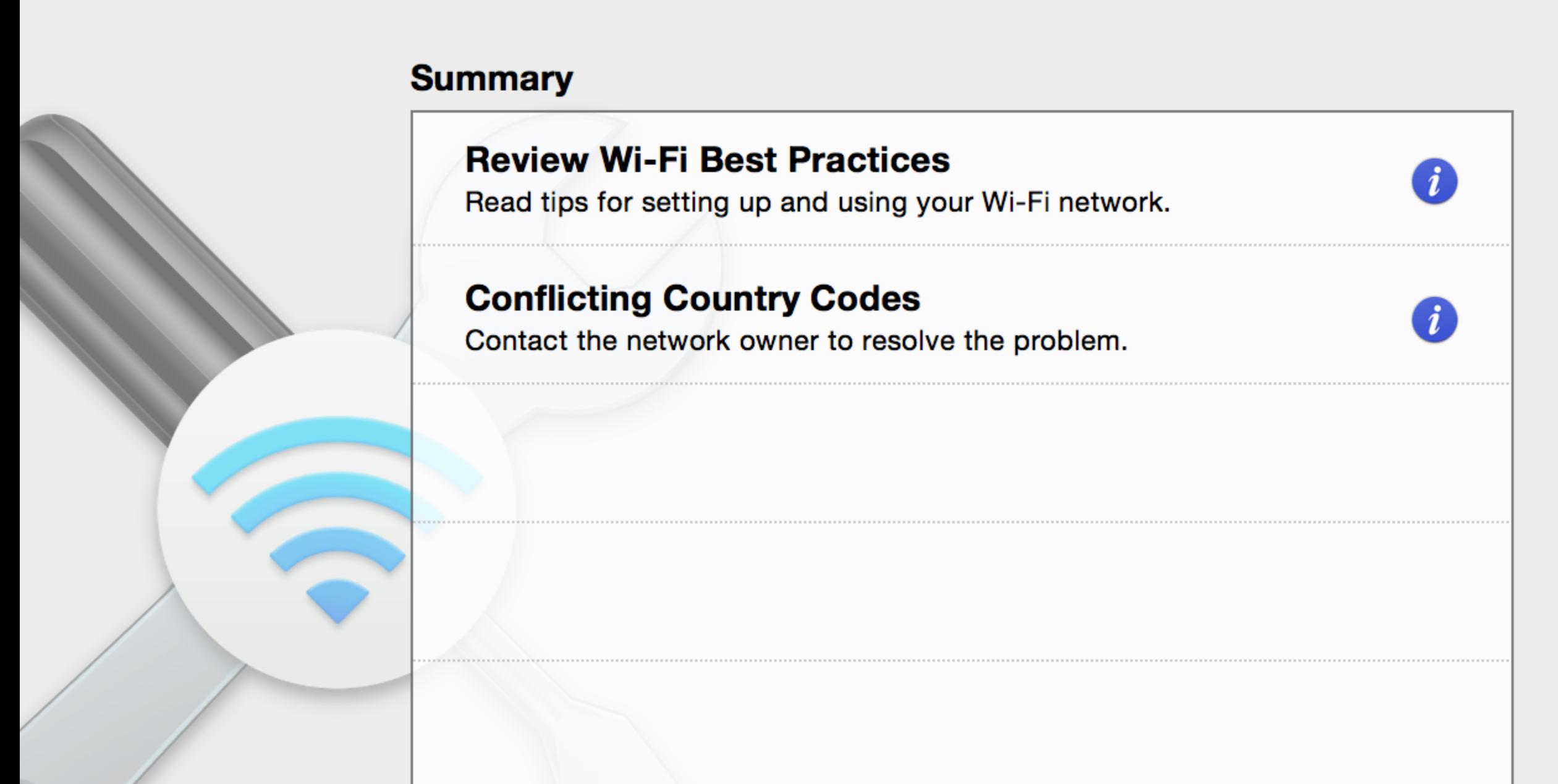
Tx Rate: 145 Mbps

PHY Mode: 802.11n

MCS Index: 15







Wireless Diagnostics

Conflicting Country Codes

A nearby wireless router has been detected which is identifying itself as originating from a country which conflicts with your current settings. This may prevent your Mac from automatically re-joining a previously joined Wi-Fi network.

Certain wireless routers have the ability to identify the country they are designed to work in, this is called the Country Code. Wireless routers should only be used in the country they were originally obtained from. Failure to do so can result in performance and reliability issues for nearby wireless clients.

If possible, contact the network owner to resolve the problem.

Mail Connection Doctor













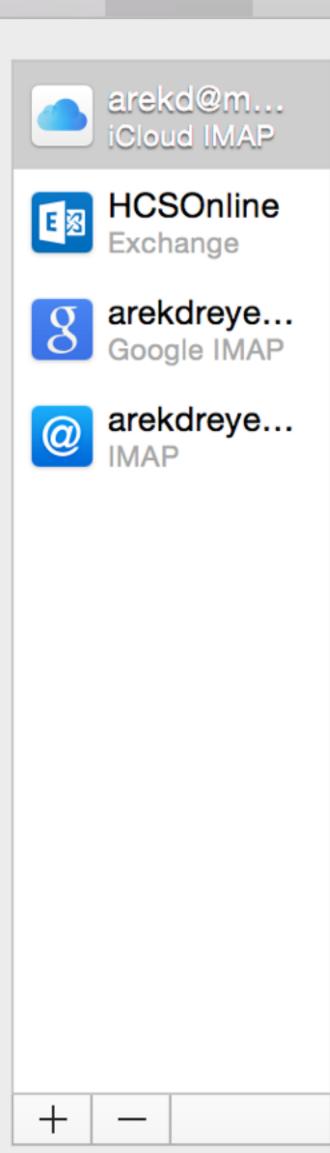


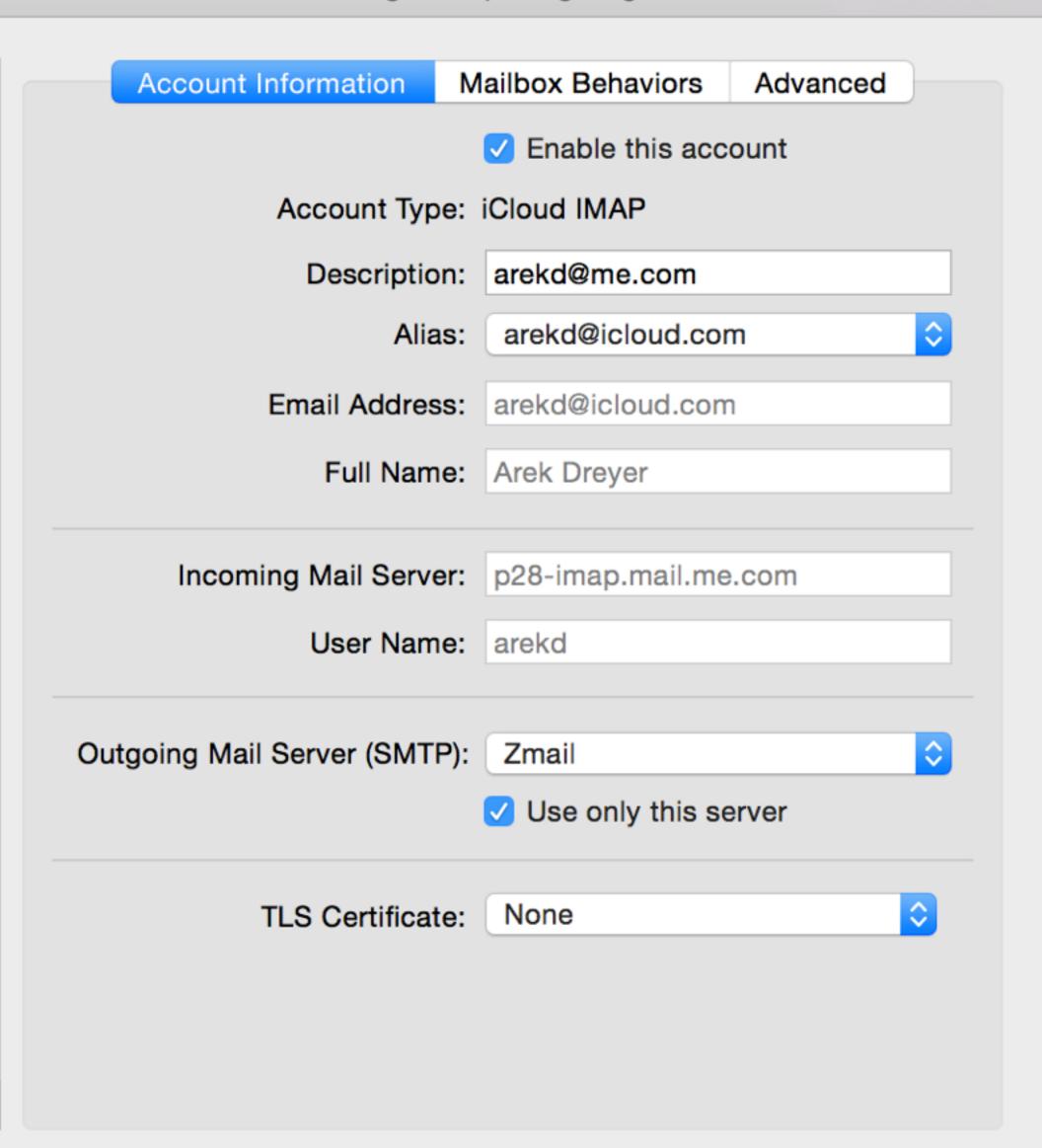


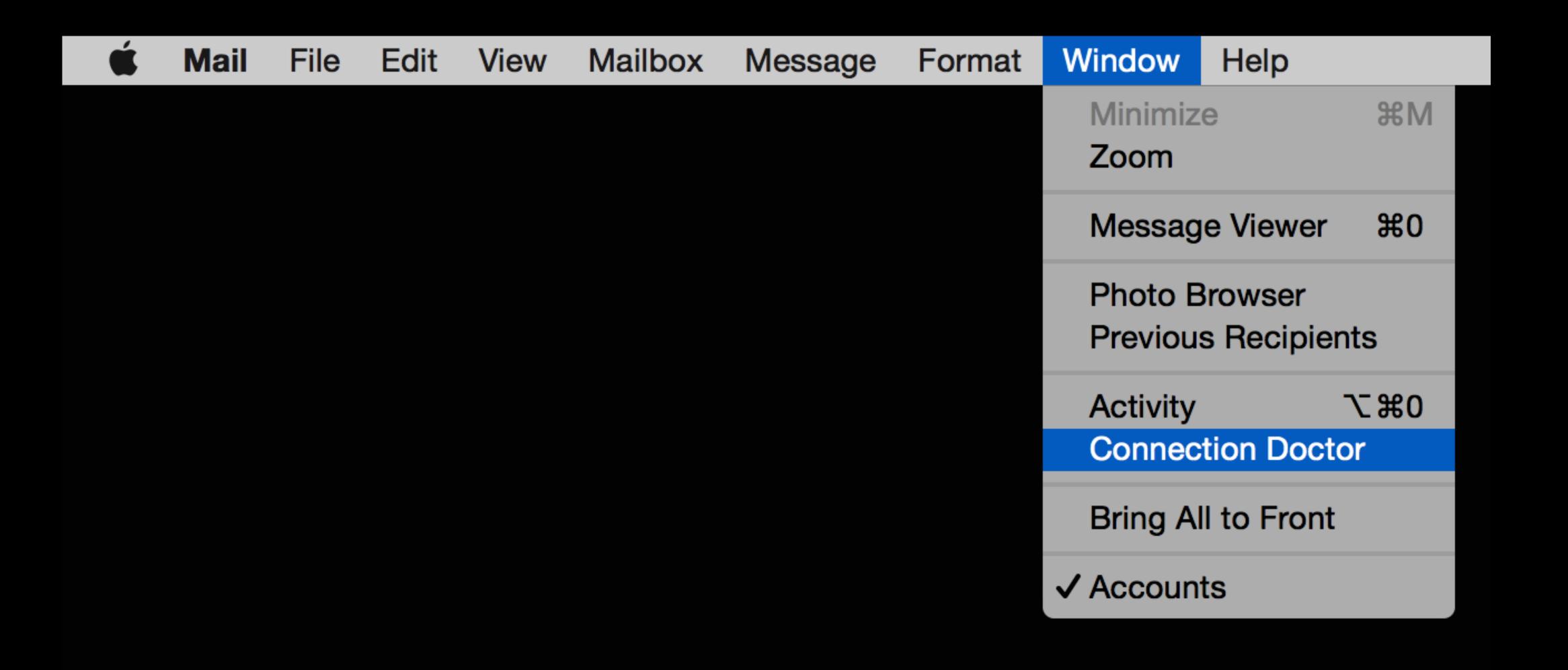




General Accounts Junk Mail Fonts & Colors Viewing Composing Signatures Rules GPGMail







Connection Status:

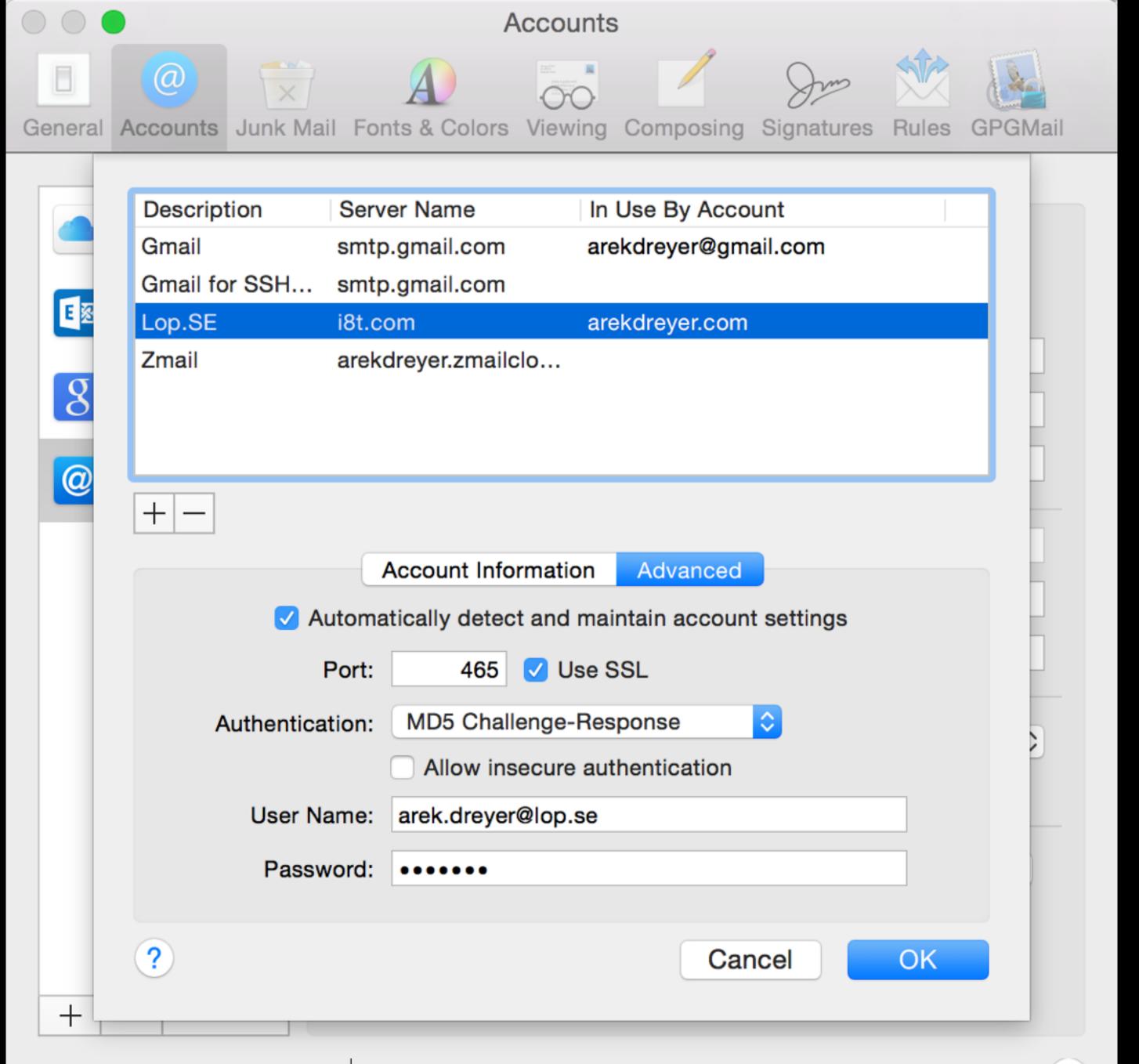
Mail was able to connect to the Internet.

Network Diagnostics...

Status	Account Name	Account Type	Details
•	arekd@me.com	iCloud IMAP	Connection and login to server succeeded.
•	arekdreyer.com	IMAP	Connection and login to server succeeded.
•	arekdreyer@gmail	Google IMAP	Connection and login to server succeeded.
•	Gmail	SMTP	Connection and login to server succeeded.
•	Gmail for SSH22.C	SMTP	Connection and login to server succeeded.
•	HCSOnline	Exchange	Connection and login to server succeeded.
•	Lop.SE	SMTP	Could not connect to this SMTP server. Check your network connection and that you entered the correct information in the Account preferences. Also verify that the server supports SSL. If it does not, deselect the "Use SSL" checkbox in the Advanced tab of Account preferences.
•	Zmail	SMTP	Connection and login to server succeeded.

Log Connection Activity Show Logs

HCSOnline	Exchange	Connection and login to server succeeded.
Lop.SE	SMTP	Could not connect to this SMTP server. Check y Account preferences. Also verify that the server Advanced tab of Account preferences.
Zmail	SMTP	Connection and login to server succeeded.











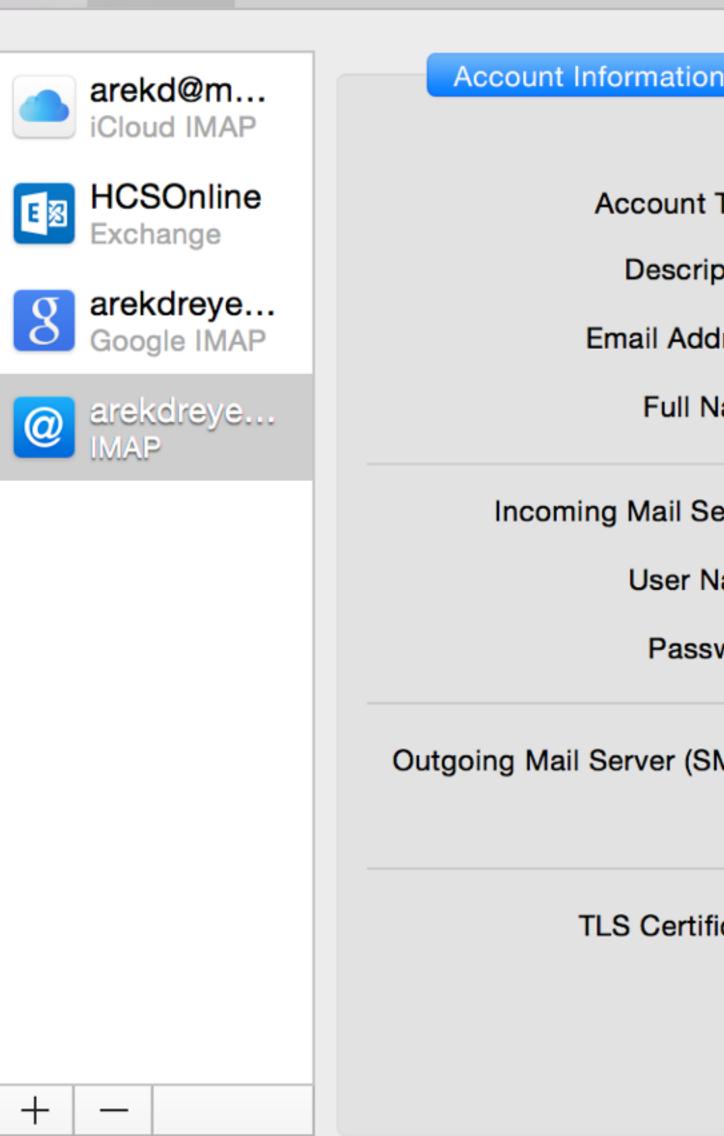


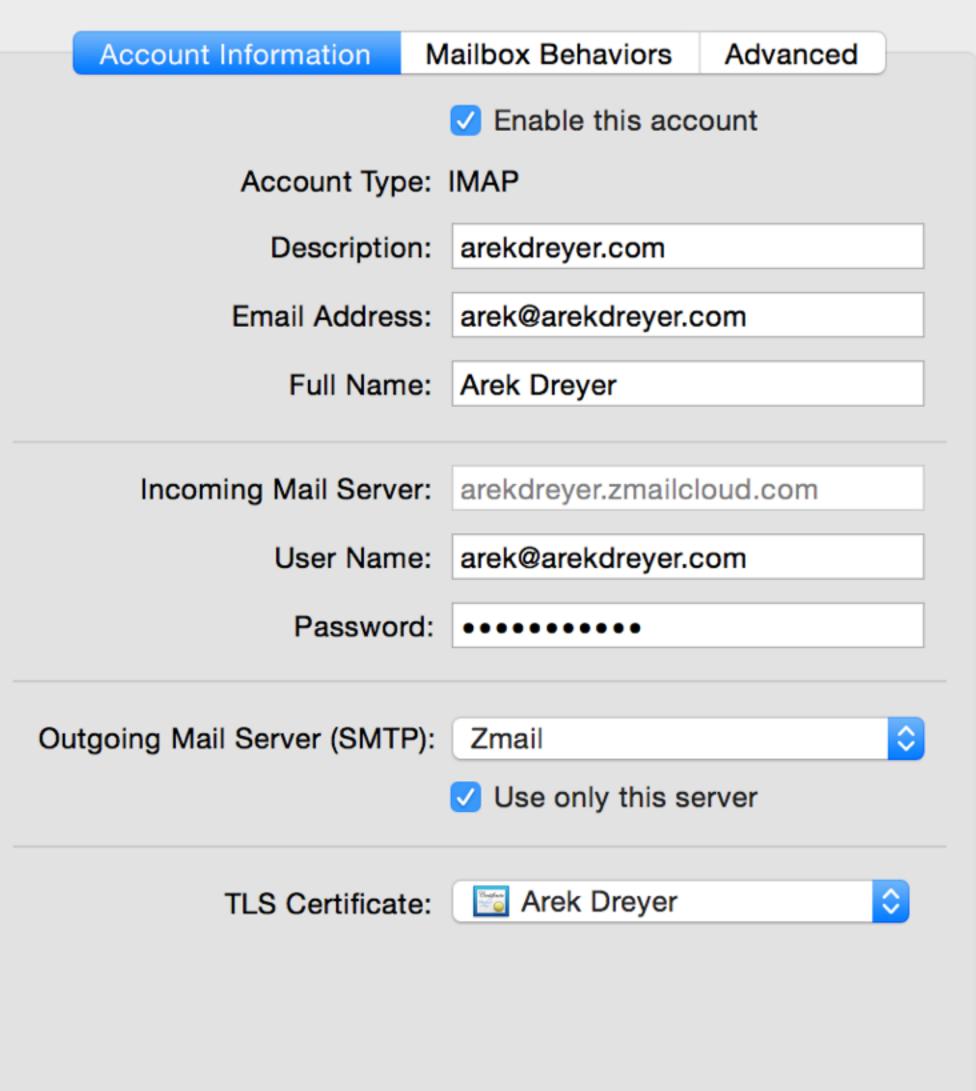






General Accounts Junk Mail Fonts & Colors Viewing Composing Signatures Rules GPGMail



























General Accounts Junk Mail Fonts & Colors Viewing

Composing

Signatures

Rules

Add Rule

Edit

Duplicate

Remove

Active Description

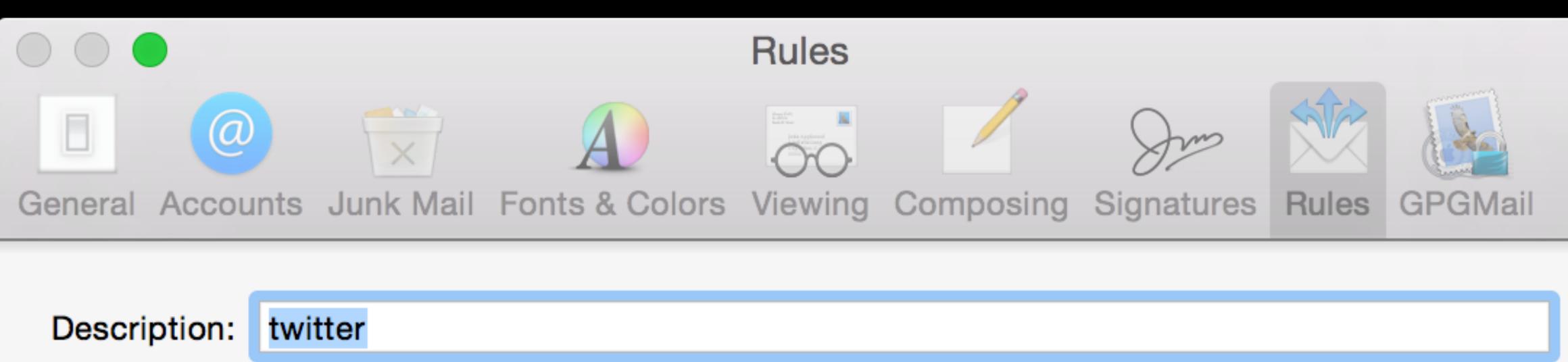
News From Apple

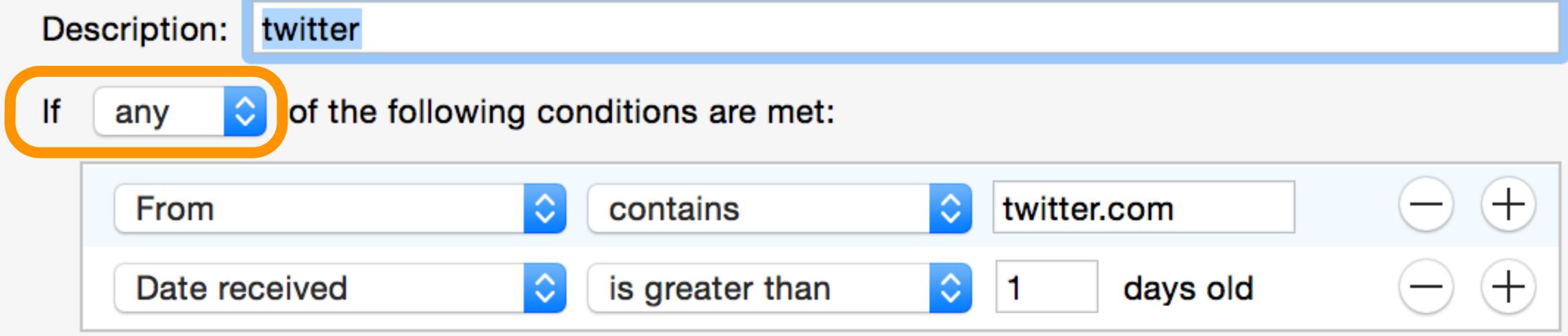
Watchman

ical-server

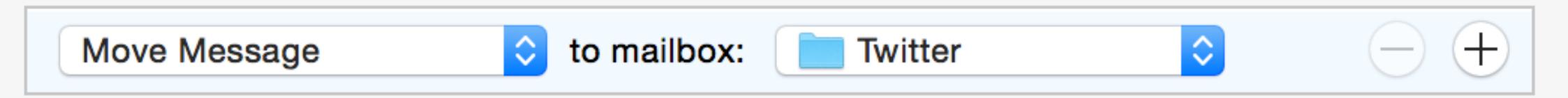
twitter

LabManager





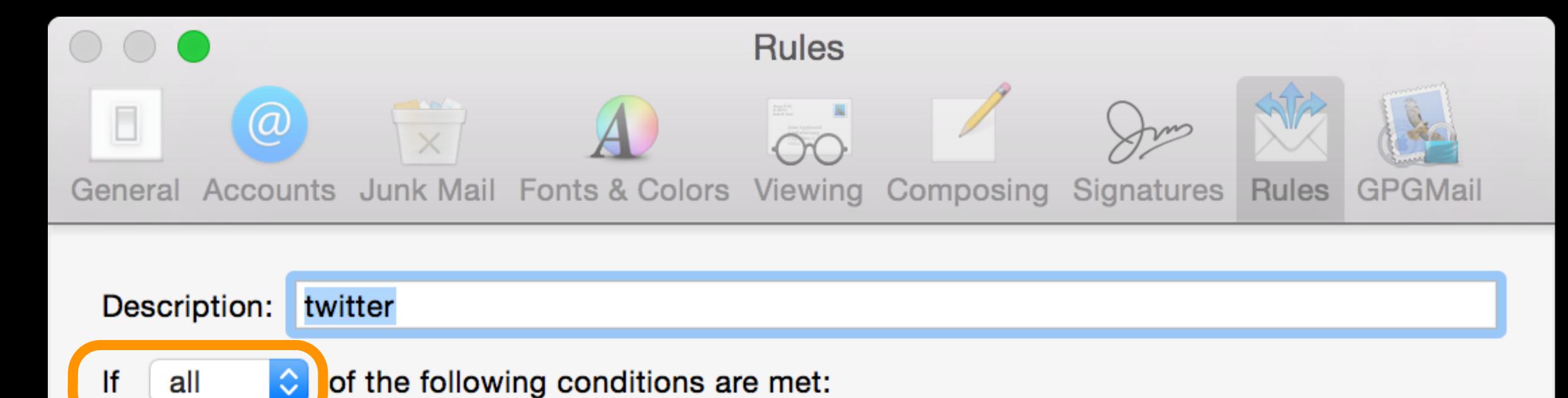
Perform the following actions:

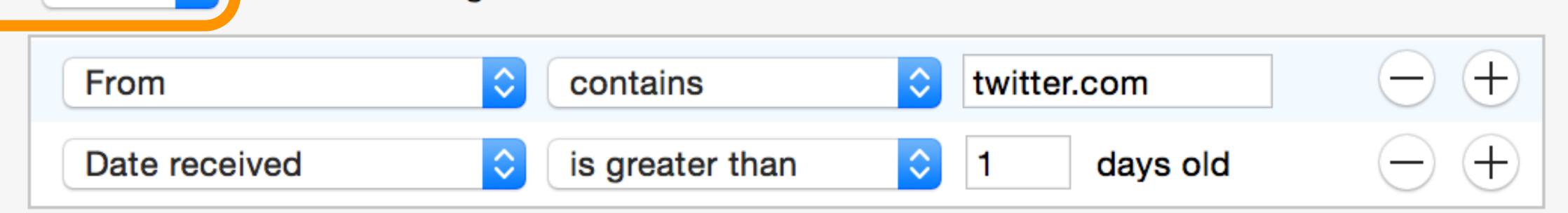




Cancel

OK





Perform the following actions:

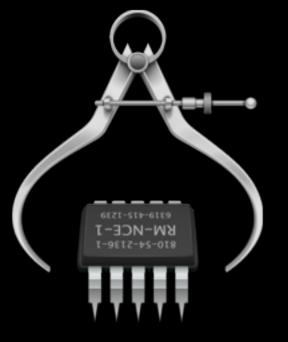


?

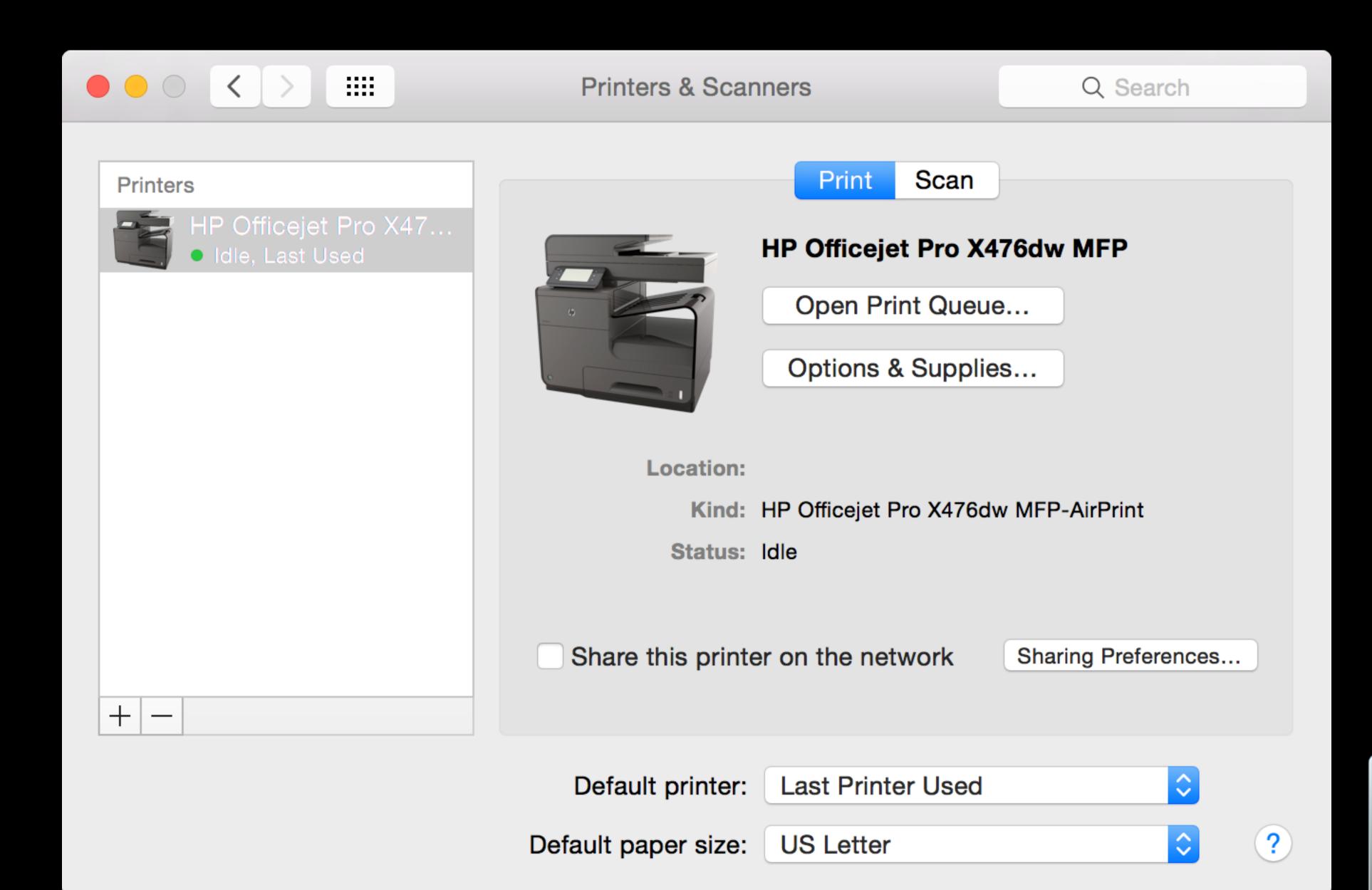
Cancel

OK

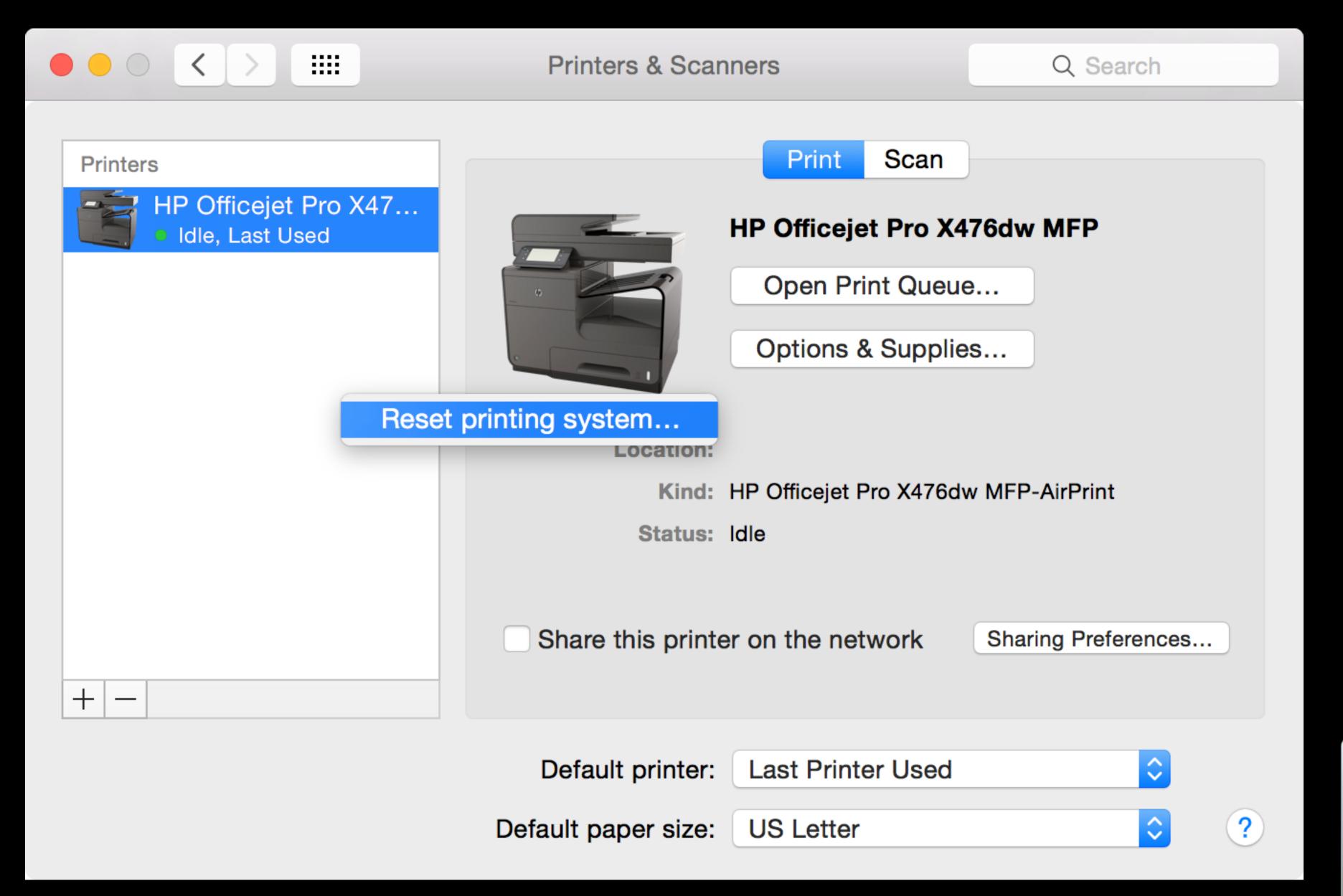
System Information



MacBook Pro Organization Description Name **Ethernet Cards** ▼ Device Configuration Profiles Fibre Channel ▼ Trust Profile for MDM project 3 Configures your device to trust the Profile Manager server. FireWire com.apple.security.root Installs the Root certificate for MDM project 3. MDM project 3 Graphics/Displays com.apple.security.root Installs the Root certificate for MDM project 3. MDM project 3 Hardware RAID ▼ User Configuration Profiles Memory **▼** VPN VPN settings for Collective Office **Collective Office NVMExpress** PCI com.apple.vpn.managed VPN settings for Collective Office **▼ VPN** VPN settings for Parallel SCSI VPN settings for com.apple.vpn.managed Power **Printers** SAS SATA/SATA Express SPI Storage Thunderbolt USB ▼ Network VPN: Firewall Locations Description: VPN settings for Collective Office Volumes Collective Office Organization: **WWAN** Friday, September 11, 2015 at 10:03:06 PM Central European Summer Time (2015-09-11 20:03:06 +0000) Installation Date: Identifier: serverSettings.vpn.l2tp Wi-Fi com. 17EDDF1D-FD84-4F1F-B67A-872E84FC2AA1 UUID: ▼ Software Version: Accessibility Unsigned Verification State: Applications Removal Disallowed: No Components com.apple.vpn.managed: Developer **Disabled Software** VPN settings for Collective Office Description: Extensions Collective Office VPN Name: **Fonts** .vpn.l2tp.vpn Identifier: A1D3CD39-0797-409F-92FB-DBC43CF39BC5 UUID: Frameworks Version: Installations Payload Data: Logs IPSec = { Managed Client AuthenticationMethod = SharedSecret; Preference Panes SharedSecret = "<20 bytes of data>"; IPv4 = **Profiles** OverridePrimary = 0; Sync Services PPP = ■ arekdreyer > Software > Profiles > User Configuration Profiles > VPN



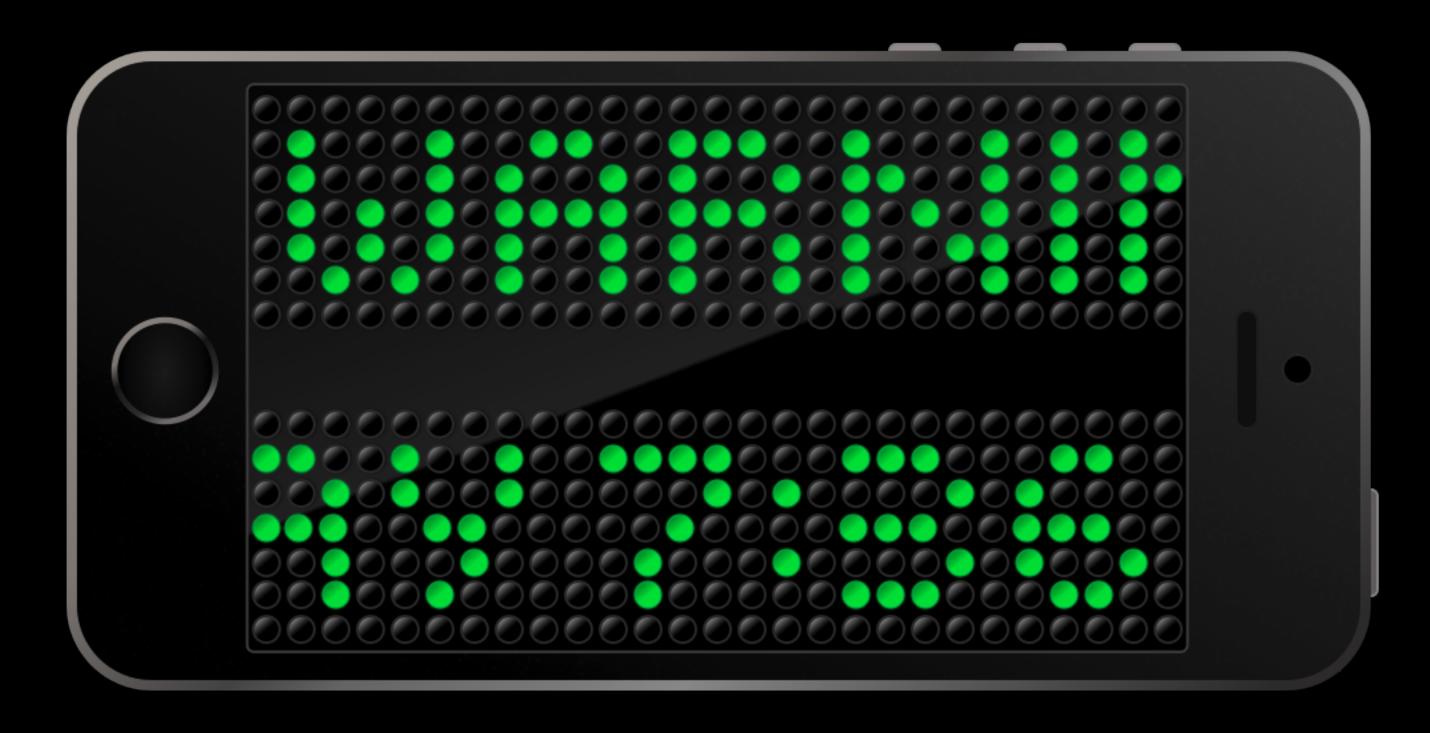






Third party apps

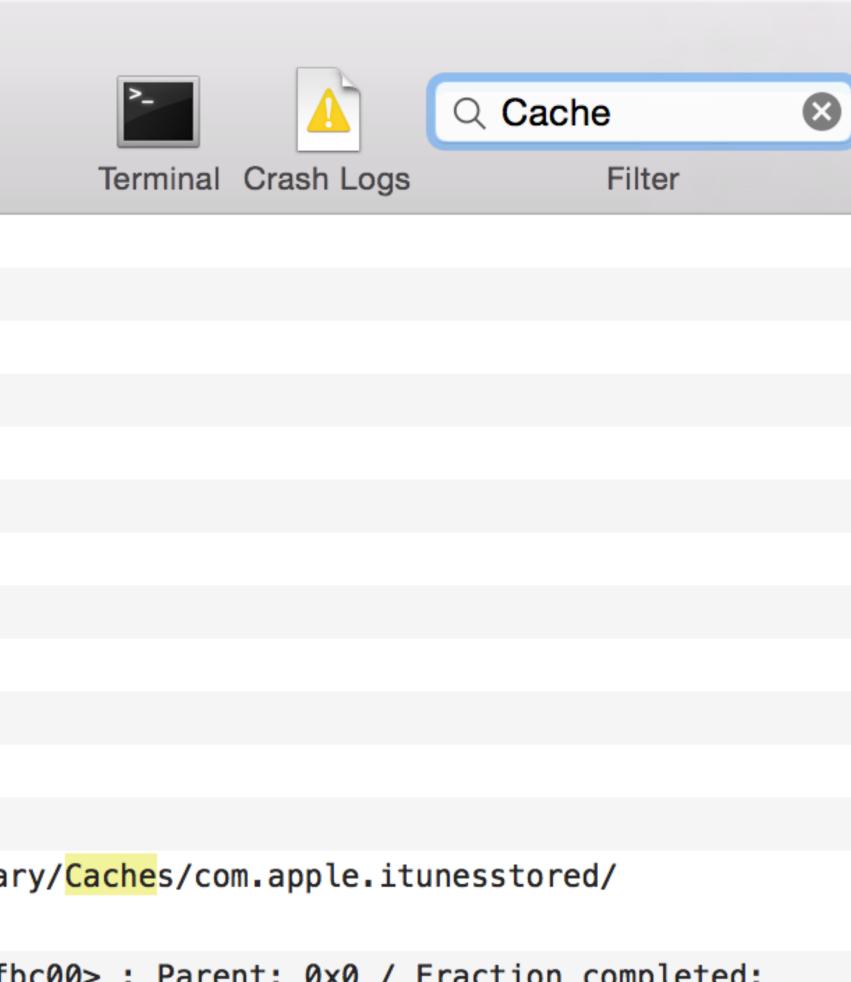
iOS Console



Which Caching service is my iOS device using?



:Asset<mark>Cache</mark>LocatorService.queue found caching server on 192.168.0.64:51868



nd with identifier com.apple.<mark>Cache</mark>Delete ion _doBackgroundInstallationForPath:withOptions:completion:]: Install of "/var/mobile/Library/<mark>Cache</mark>s/com.apple.itunesstored/ sted by itunesstored (pid 171)

haseFinishedForProgress: com.taptera.Colleagues.InstallingPlaceholder – <NSProgress: 0x1359fbc00> : Parent: 0x0 / Fraction completed: ache

ion _doBackgroundInstallationForPath:withOptions:completion:]: Install of "/var/mobile/Library/<mark>Cache</mark>s/com.apple.itunesstored/ sted by itunesstored (pid 171)

haseFinishedForProgress: com.taptera.Colleagues.InstallingPlaceholder - <NSProgress: 0x135c1ecc0> : Parent: 0x0 / Fraction completed:

com.apple.dyld/dyld_shared_cache_arm64

learing ledbelly failure cache

HTTP Cache

ache

for /var/root/Library/Caches/mobilescent

for /var/root/Library/Caches/mobileassetd

for /var/root/Library/Caches/mobileassetd

for /var/root/Library/Caches/mobileassetd

nd with identifier com.apple.CacheDelete

nd with identifier com.apple.CacheDelete

nd with identifier com.apple.CacheDelete

nd with identifier com.apple.CacheDelete

/com.apple.dyld/dyld_shared_<mark>cache</mark>_armv7s

/com.apple.dyld/dyld_shared_<mark>cache</mark>_arm64

/com annle dyld/dyld shared cache army7s









Terminal Crash Logs

Filter

ad0f55 _CFACLocate<mark>Caching</mark>Server -> error: Error Domain=NSPOSIXErrorDomain Code=60 "Operation timed out" UserInfo={com.apple.AssetCacheLocator.tag=#f3ad0f55, or reply from XPC service com.apple.AssetCacheLocatorService}, elapsed 5.005

ileassetd – __42-[ASDownload _populatelocalCacheServerURL]_block_invoke60: error locating <mark>caching</mark> server: Error Domain=NSPOSIXErrorDomain Code=60 "Operation ocator.tag=#f3ad0f55, NSLocalizedDescription=timed out waiting for reply from XPC service com.apple.AssetCacheLocatorService}

ce[149]: #f3ad0f55 [I:AssetCacheLocatorService.queue] found no caching servers



Push Diagnostics











Courier

Gateway

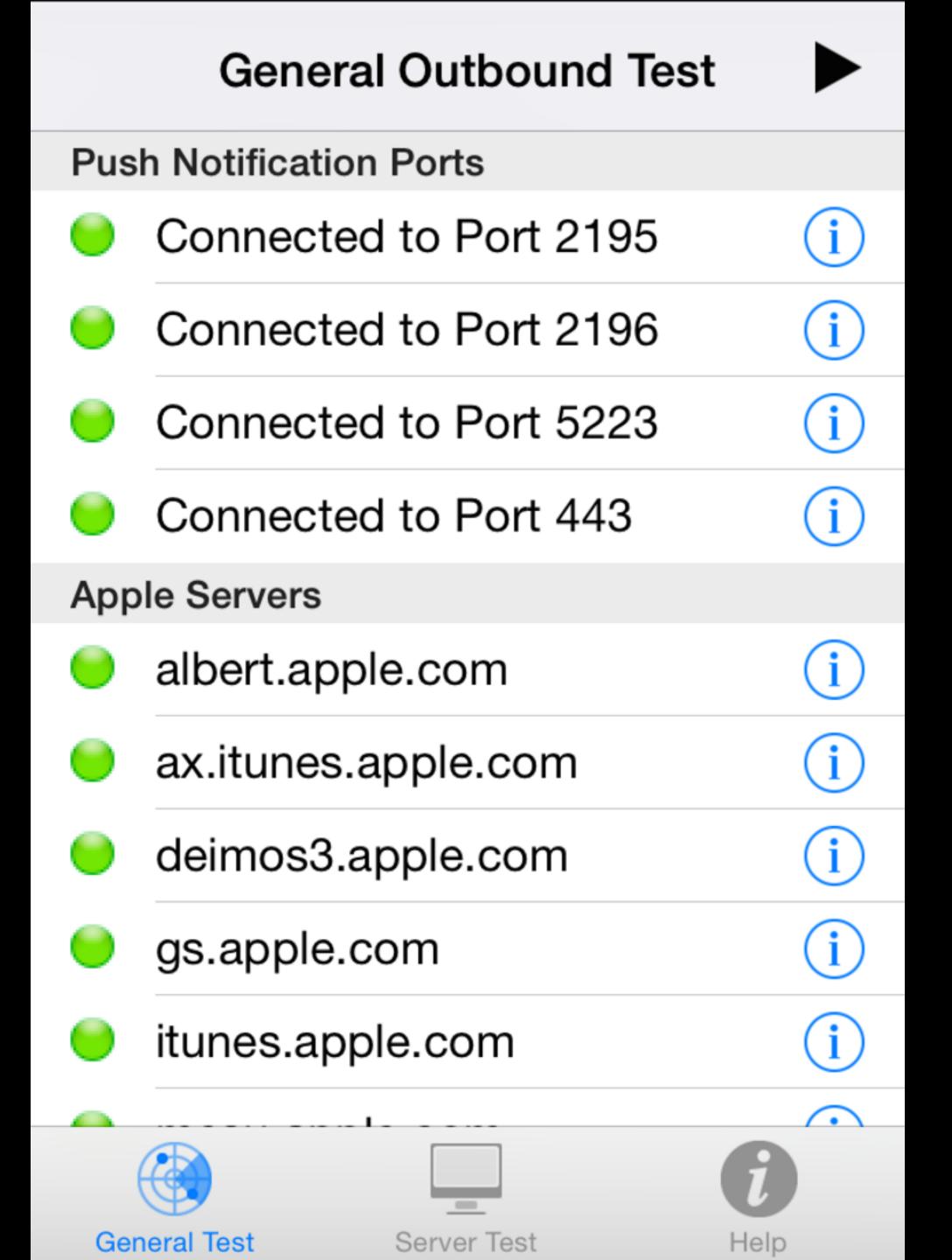
Feedback

Test Push

APNs tests completed with 4 passed and 0 failed. Test Push Received. Click here to run again.

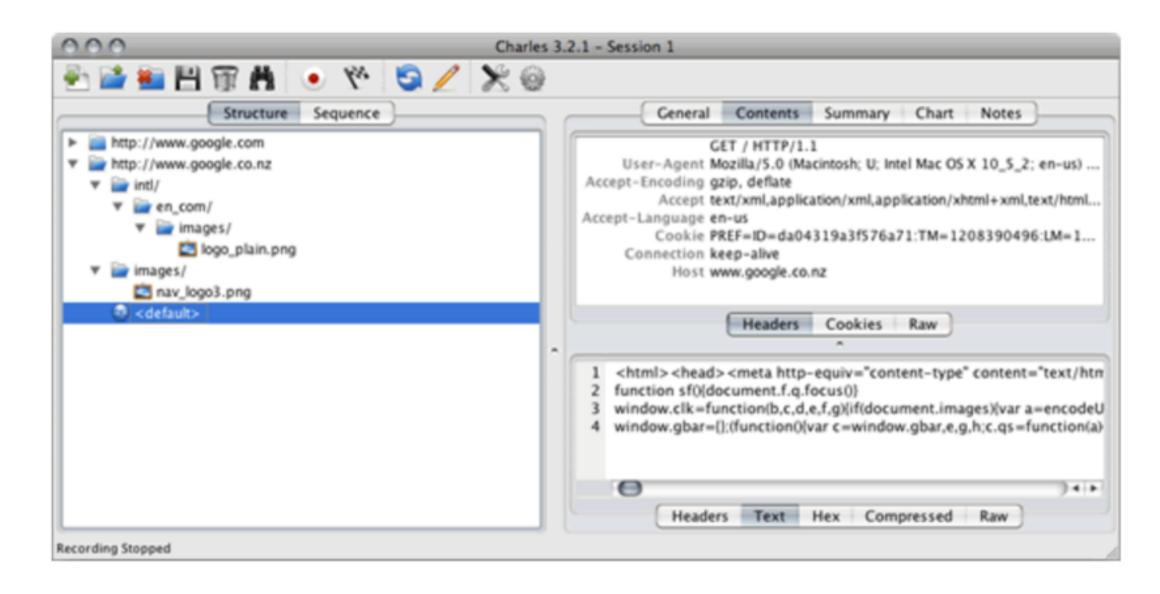


Services Test



Charles is an HTTP proxy / HTTP monitor / Reverse Proxy that enables a developer to view all of the HTTP and SSL / HTTPS traffic between their machine and the Internet. This includes requests, responses and the HTTP headers (which contain the cookies and caching information).

READ MORE



RECENT DEVELOPMENTS

For discussion on the latest changes to Charles, please see Karl's blog.

7 Jul 2015	Charles 3.10.2 released with bug fixes and improvements. Read more.
31 Mar 2015	Charles 3.10.1 released with minor bug fixes. Read more.
21 Mar 2015	Charles 3.10 released with improved SSL (new SSL CA certificate install required), major new features and improvements. Read more.
22 Oct 2014	Charles v3.9.3 released with improvements to SSL support, Mac OS X Yosemite support and other minor bug fixes and improvements. Read more.
26 May 2014	Charles v3.9.2 released with minor bug fixes. Read more.

DOWNLOAD



Download a free trial Version 3.10.2



The Power of Three 97% of developers will fail you. We are the other 3%. Get access to power.

ads via Carbon

FEATURES



Records all traffic between your browser and the Internet



Reveals the contents of all requests, responses, cookies and headers



Supports SSL and HTTPS



Saves valuable time



Simulates slower internet connections



Download statistics



Network Monitoring Redefined.

 \equiv

Take a look under the hood to see at a glance who talks to whom. The Little Snitch Network Monitor raises the bar of network traffic monitoring to an entirely new level. The realtime diagram provides fine grained traffic information, combined with powerful yet simple options for analyzing bandwidth, traffic totals, connectivity status and much more.

- + Detailed traffic history of the last hour, separate for each process, server, port and protocol.
- + Display of total traffic amounts, peak traffic, average bandwidth, etc.
- + Variable zoom from one hour down to one minute time range.
- + Filtering by process name, server, port, etc.
- + Versatile grouping and sorting options.



- + "Show Corresponding Rule" quickly shows why a particular connection was allowed or denied.
- + Display of system events (app launch or termination, sleep) to see network activity in its context.
- + Indication of connections denied by Little Snitch.
- + Capture network traffic in PCAP format.
- + Save Snapshots for later analysis.



Apple Watch









Restart your Apple Watch

Learn how to turn your Apple Watch on and off, even if it isn't responding.

Restart your Apple Watch

- 1. Press and hold the side button until you see the Power Off slider.
- 2. Drag the slider to turn off your device completely.
- 3. After you turn off your Apple Watch, press and hold the side button again until you see the Apple logo.



Force restart your Apple Watch

You should force restart your device as a last resort and only if it's not responding. To force restart your Apple Watch, press and hold both the side button and Digital Crown for at least 10 seconds, until you see the Apple logo.



About Activation Lock on Apple Watch

Find My iPhone includes a feature called Activation Lock that's designed to prevent anyone else from using your iPhone, iPad, or iPod touch if it's ever lost or stolen. And now with watchOS 2, you can use Activation Lock to protect your Apple Watch.

Activation Lock for your Apple Watch requires watchOS 2 or later, and it turns on automatically when you set up Find My iPhone on your paired iPhone. With Activation Lock, your Apple ID and password will be required before anyone can:

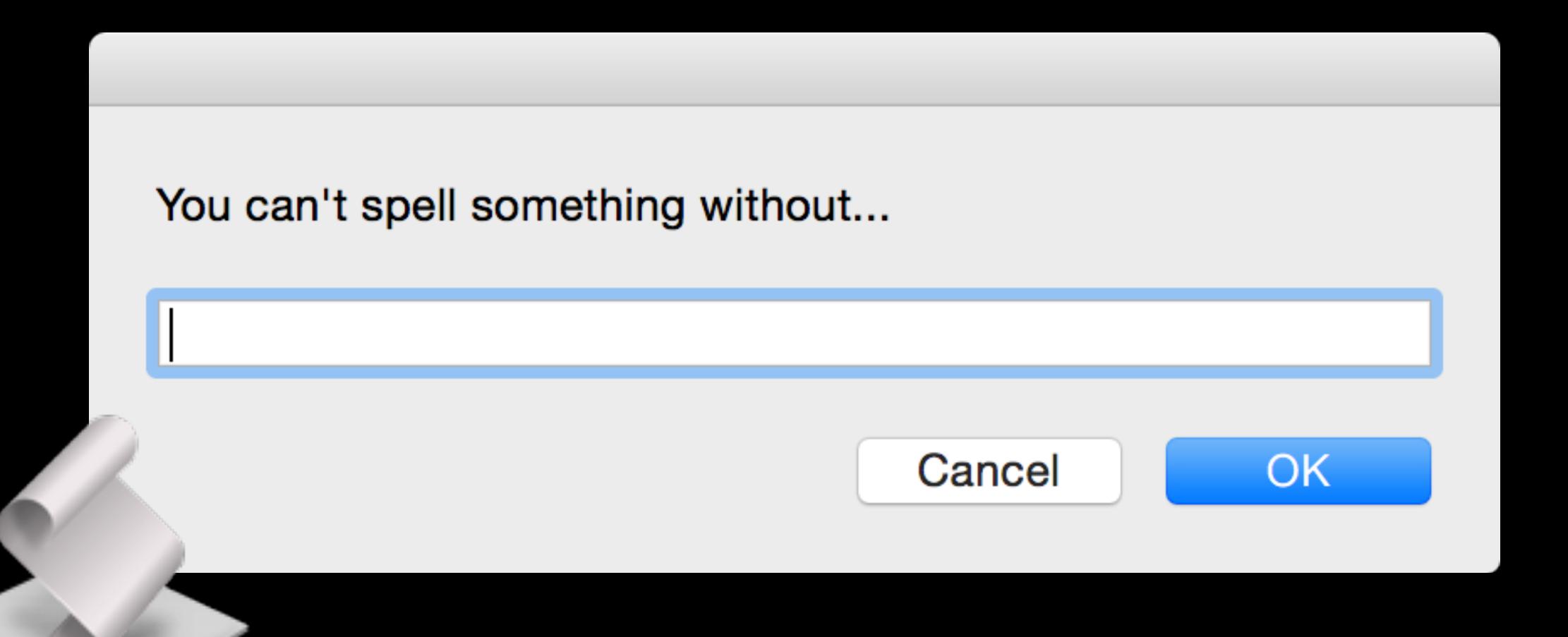
- Unpair your Apple Watch from your iPhone.
- Pair and use your Apple Watch with a new iPhone.

To see if Activation Lock is on, open the Watch app on your iPhone, tap the My Watch tab, then tap My Watch. If you see Mark as Missing, then Activation Lock is on. You can also go to iCloud.com/activationlock and enter your device's serial number.

Mark your lost or stolen device as missing

If your device is lost or stolen and Activation Lock is on, you can mark your Apple Watch as missing to prevent anyone from reactivating your device without your permission. While you can use Find My iPhone Activation Lock with your Apple Watch. Find My iPhone can't be used to locate a lost Apple Watch or place

A little more fun with Apple Watch



You can't spell something without...

Apple Watch

Cancel

OK

Please make your selection:

You can't spell 'chocolate wrapper' without 'Apple Watch'.

Cancel

Copy to clipboard

Use and build community



Twitter, Inc. twitter.com/search?f=images&vertical=default& C









+





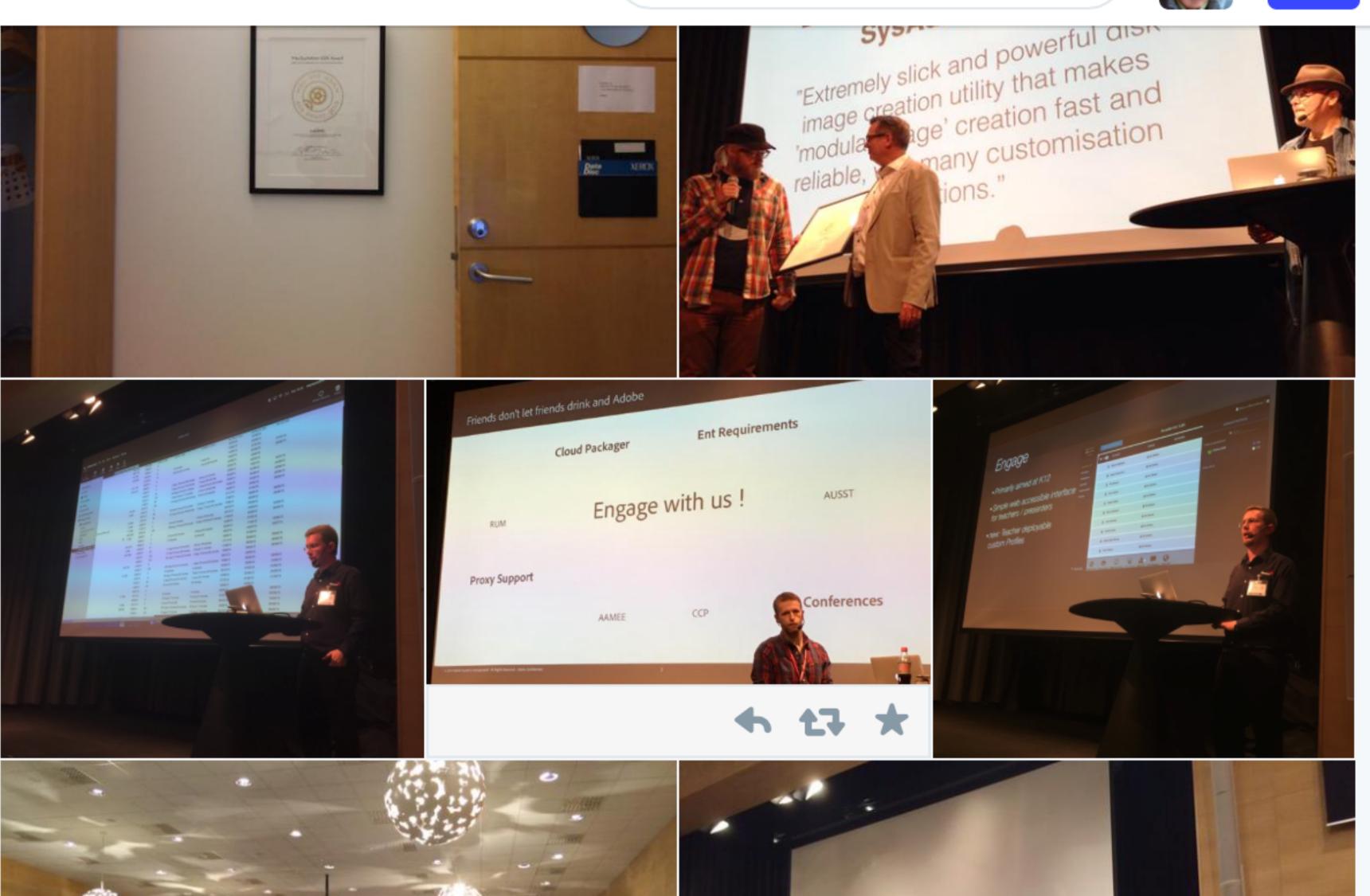


MacSysAdmin

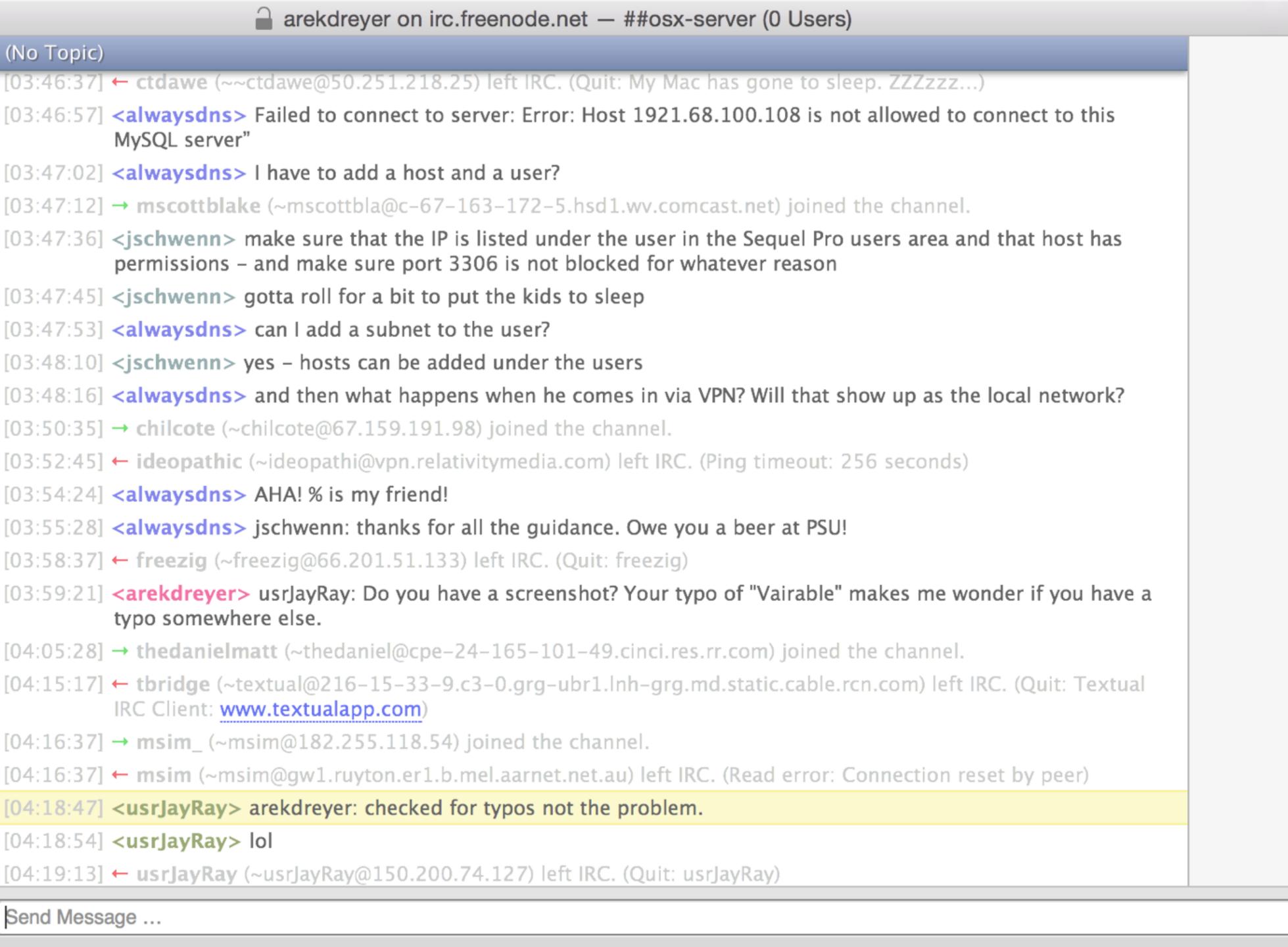








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nt v Flagged v											
\$	•		From	То	Subject						
			BP	MACENTERPRISE@LISTS.P	ADPassMonso many forks to choose from						
			Stephen Hudak	MACENTERPRISE@LISTS.P	AutoDMG, DeployStudio, Multicast						
			Jeff & Stephen	MACENTERPRISE@LISTS.P	Caching server network ranges						
			Rippy, Jeff	MACENTERPRISE@LISTS.P	Caching server network ranges						
			Josh & Greg	MACENTERPRISE@LISTS.P	Compensation question						
			Taylor, Chris, Nick & Ben	MACENTERPRISE@LISTS.P	Book suggestion for Managed Prefences						
			Craig Kabis	MACENTERPRISE@LISTS.P	RAID Admin on OS X Yosemite						
			Jim, Craig, Greg, Graham, B	MACENTERPRISE@LISTS.P	Netboot server						
			Taylor & Anthony	MACENTERPRISE@LISTS.P	Compensation question						
			Patrick, bruno & Michael	MACENTERPRISE@LISTS.P	Issues with Mail on Network Accounts						
			Patrick Bachmann	MACENTERPRISE@LISTS.P	Issues with Mail on Network Accounts						
			Graham R Pugh	MACENTERPRISE@LISTS.P	Re: BitLocker on Bootcamp partition on 15 in Retina						
			Ian Page-Echols	MACENTERPRISE@LISTS.P	File server permissions issue						
			Arek & Paul	MACENTERPRISE@LISTS.P	Configurator and Activation Lock (again)						
			Henri, Rick & Lorenzo	MACENTERPRISE@LISTS.P	OT: Data destruction						
			Franson, Chris	MACENTERPRISE@LISTS.P	Portable Home Directory Sync on login broken in 10.10.x?						
			Jim D Huls	MACENTERPRISE@LISTS.P	Netboot server						
			Florent, Chase, Christopher,	MACENTERPRISE@LISTS.P	Disable auto-launch Photos.app in Yosemite 10.10.3						
			BP	MACENTERPRISE@LISTS.P	OT: Data destruction						
			Adam Gerstein	MACENTERPRISE@LISTS.P	Compensation question						
			Jay & Craig	MACENTERPRISE@LISTS P	Mac fusion drives and deepfreeze						



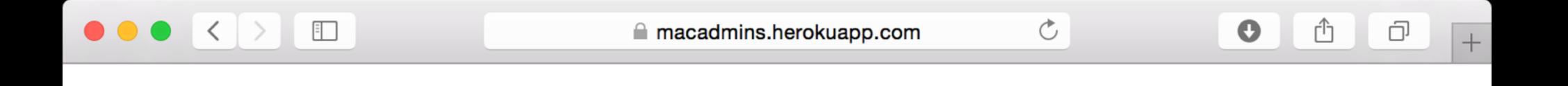
(No Topic)

▼ IRC.FREENODE.NET

##osx-server

*

+





Join **MacAdmins** on Slack. 75 users online now of 1557 registered.

you@yourdomain.com

GET MY INVITE

And thanks for being here

(you at home too)

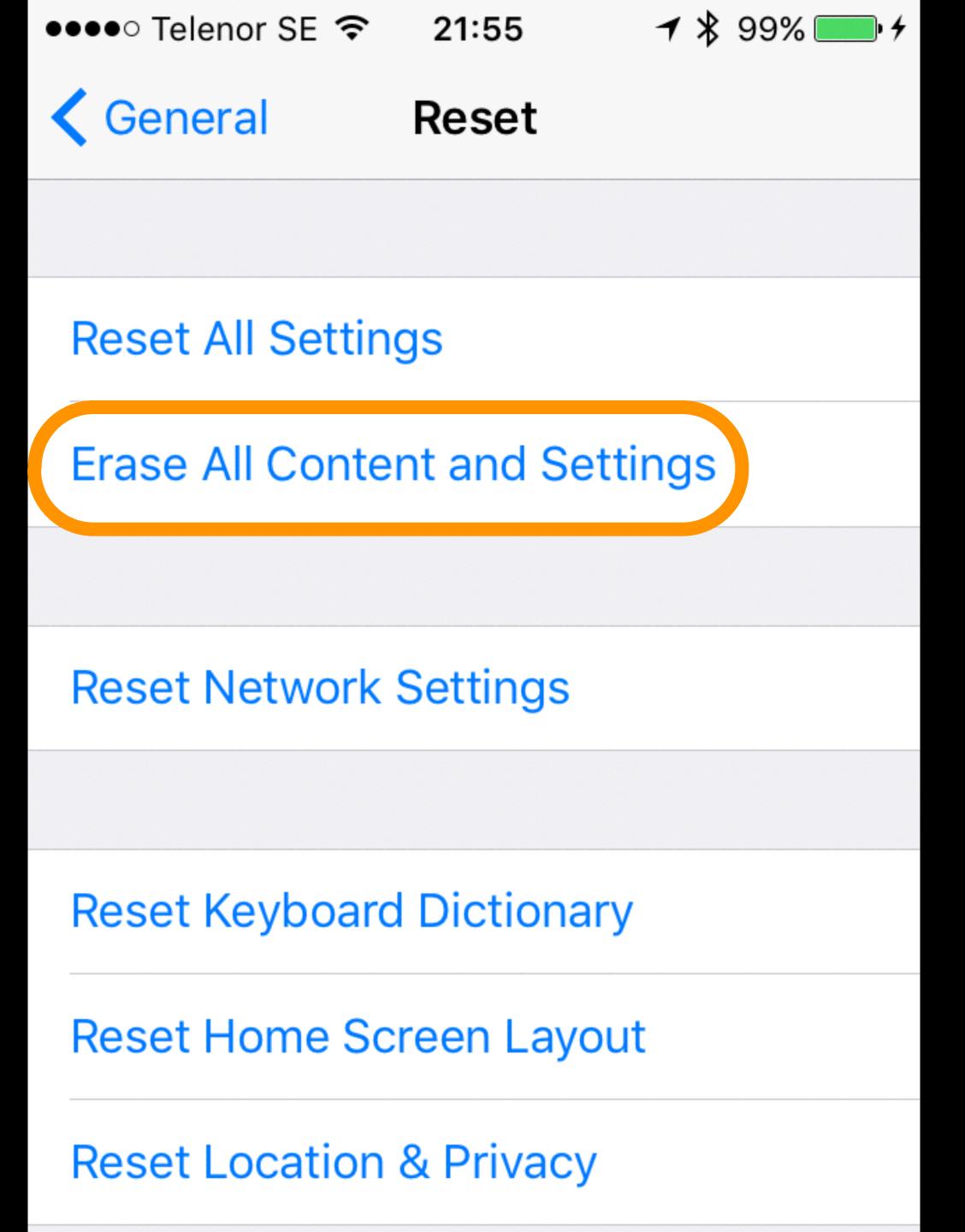
Troubleshooting Apple Devices

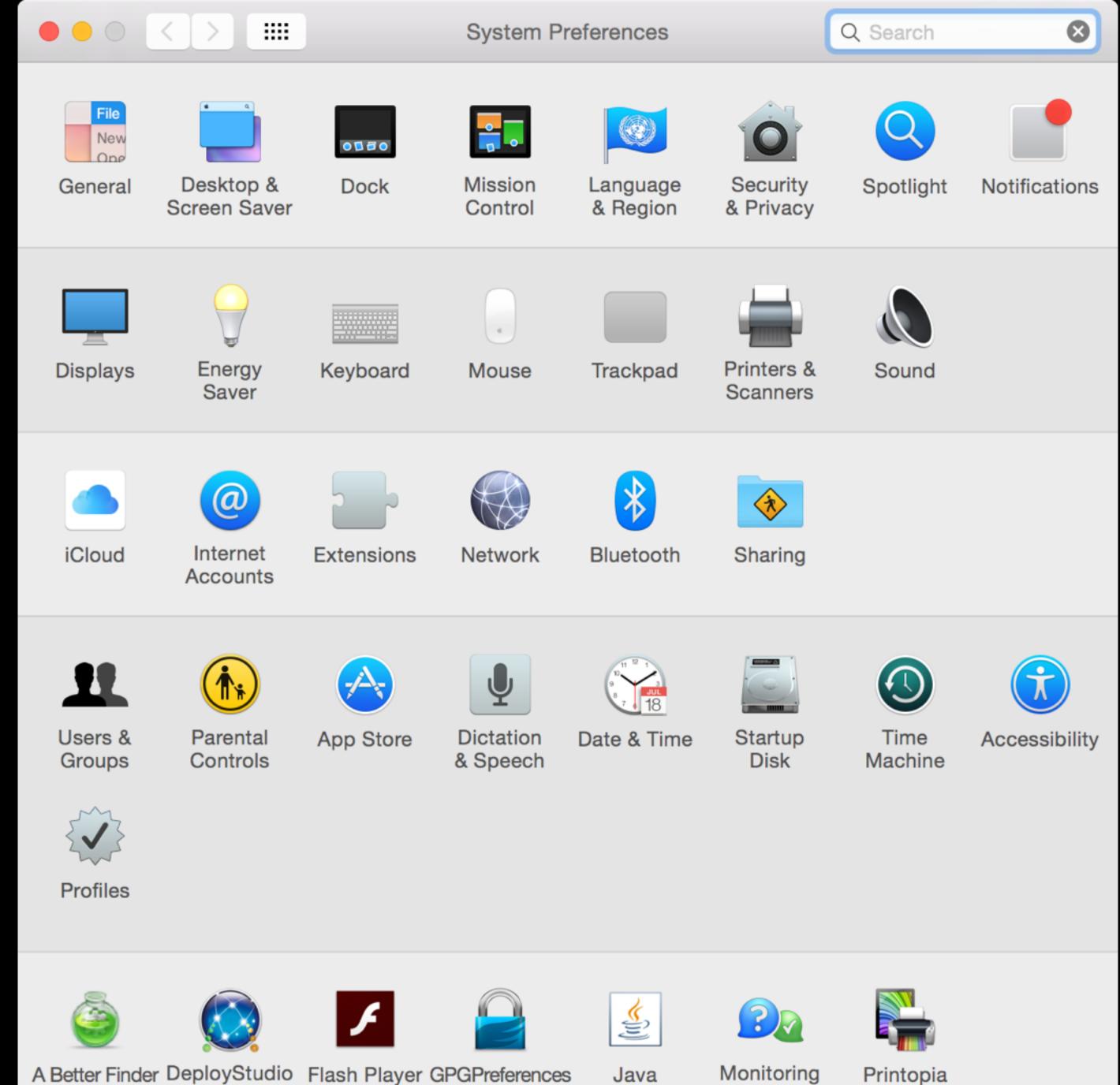
- Stop troubleshooting
- Provide great service when you do
- Use appropriate tools
- Use and build community

One more thing:

About that iOS and OS X thing







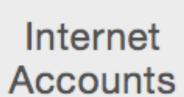
A Better Finder DeployStudio Flash Player GPGPreferences Server

Monitoring Client

Printopia



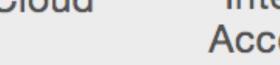
iCloud

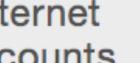


Extensions









Network

Bluetooth

Sharing



Users & Groups



Parental Controls



App Store



Dictation & Speech



Date & Time



Startup Disk



Time Machine



Accessibility



Profiles



THIS IS JUST A FANTASY















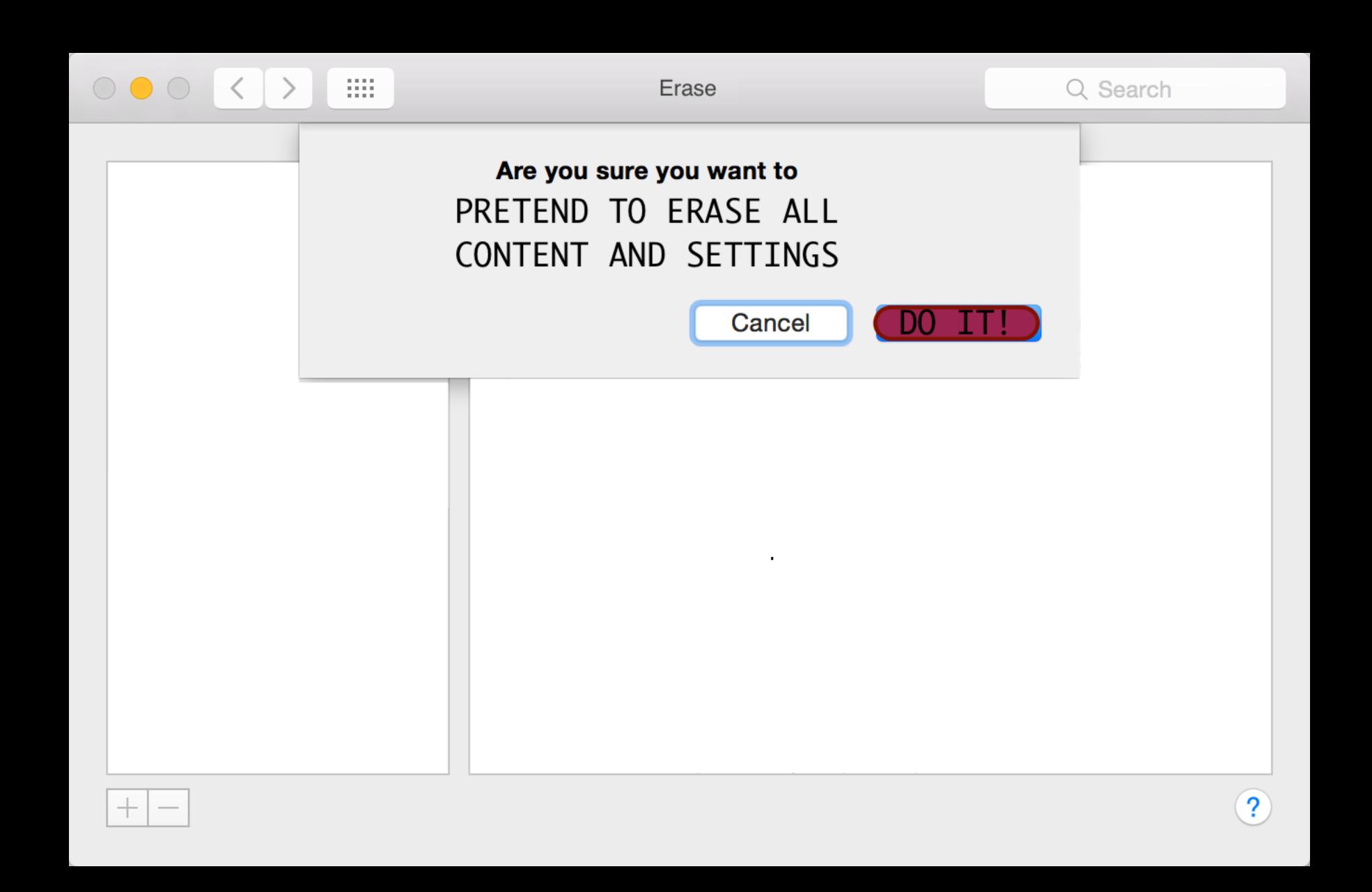
Java

Monitoring Client

Printopia

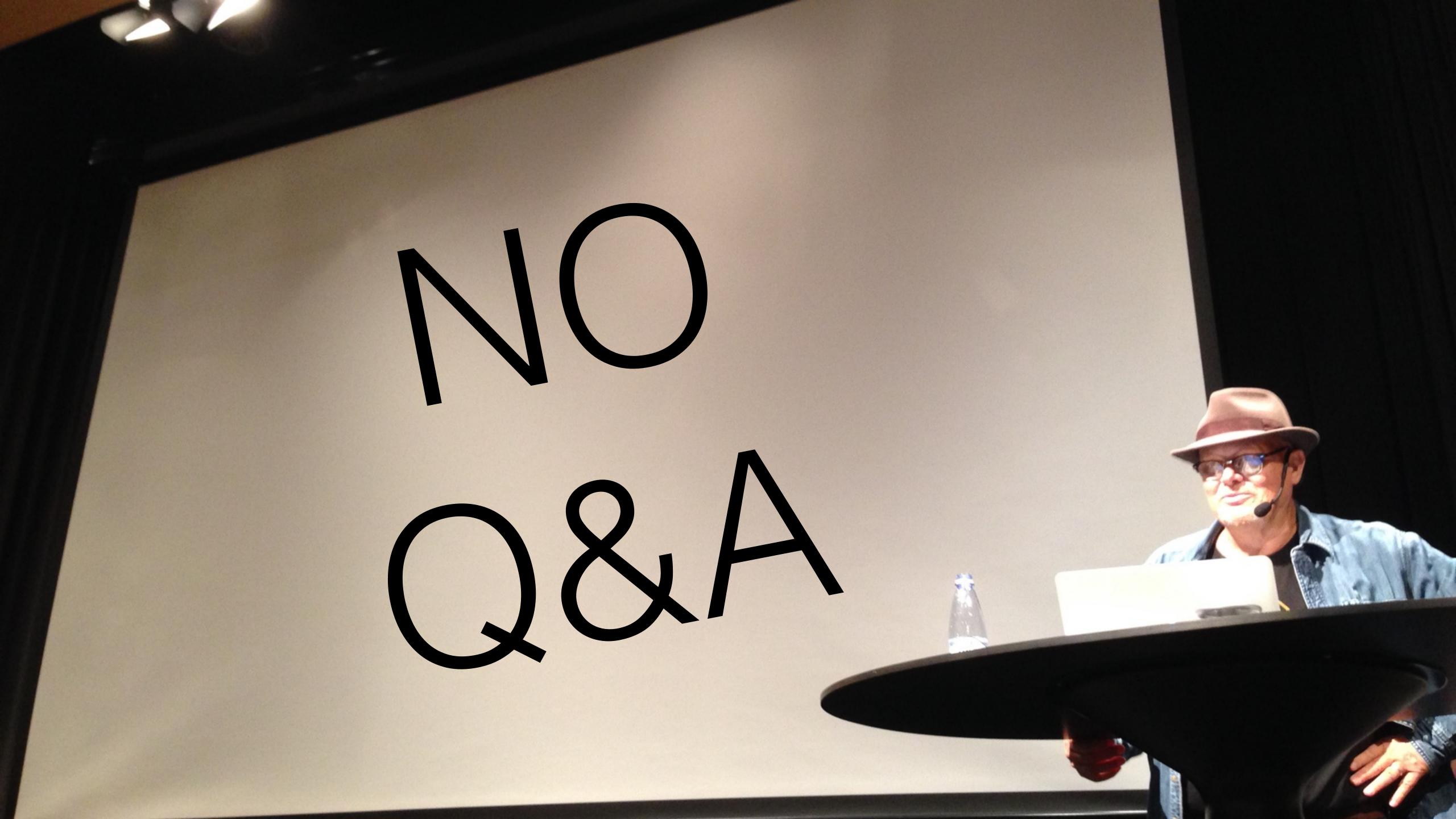
A Better Finder DeployStudio Server

Flash Player GPGPreferences



Troubleshooting Apple Devices

- Stop troubleshooting
- Provide great service
- Use appropriate tools
- Use and build community



Now for some followup

"Let me tell you about 1986."



EINSA®

Illinois Mathematics and Science Academy



3:58 pm CDT

Monday, September 15, 1980

Welcome to the "minno" PLATO System, a Control Data Customer Service System.

Type your PLATO name. Then press NEXT.

≫

PLATO R is a trademark of Control Data Corporation.

PLATO Learning Management

Contemporary Biology

Name student Session * 6
Group bio1#1a

Today's date November 6, 198#
Last date on November 6, 198#

Welcome back!

Press NEXT to continue

*	Date	Title	Resp	Control	Data	PLATO Public Notes
86	9/26	Wel come!				
87		Welcome!	1	** int	tersys	stem notesfile **
88		no "error"	4			
89		ist2 zttype?	3			
9.5		bitzer lecture	1			
91	9/28	FOREST	6			
92		new notes file		What no	ote? 🕽	•
93	9/29	filestatus	4			
	*** E	nd of Notes ***				
				Press L	.AB	for file policy
				SHIFT L	.AB	to write a note
				SHIFT B	SACK	to exit

Press HELP for information

PERSONAL NOTES

Press: LAB to read your notes

DATA for other options

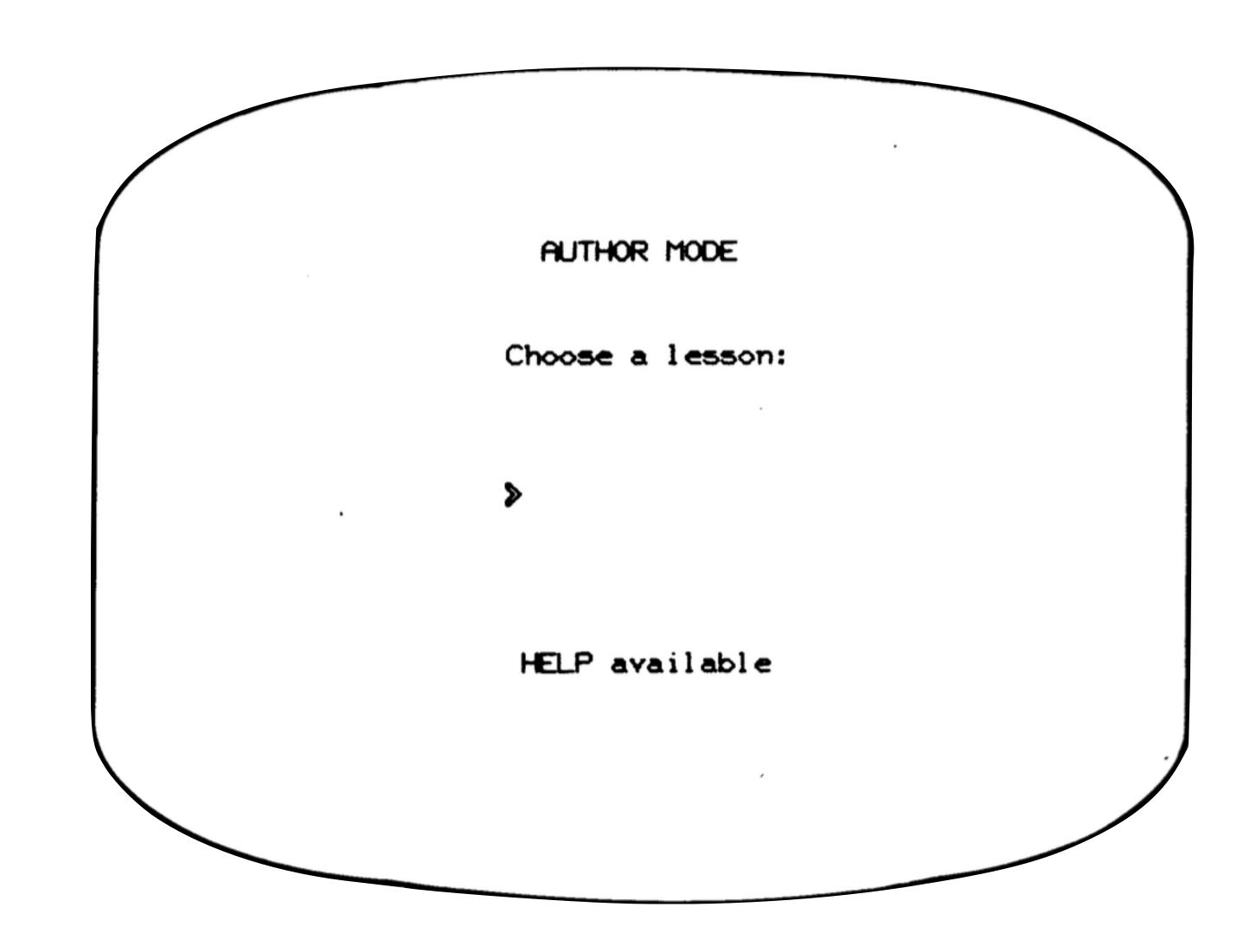
HELP for explanation and policy

To whom do you wish to send a note:

Name >

Group

System







Like so many things, PLATO was doing emoticons and smileys, online and onscreen, years earlier. In fact, emoticons on PLATO were already an art form by 1976. PLATO users began doing smiley characters probably as early as 1972 (when PLATO IV came out), but possibly even earlier on PLATO III (still to be determined... old-timer PLATO III users please speak up!).



Thursday, November 22, 1973

Welcome to PLATO 138 settlers

Type your PLATO name, then press NEXT.

See platohistory.org

http://bitsavers.informatik.uni-stuttgart.de/pdf/cdc/plato/97405900C_PLATO_Users_Guide_Apr81.pdf

