

# Jerry Zigmont MacWorks, LLC



Jerry is the owner of MacWorks, LLC, an Apple consultancy that provides statewide technical support for to businesses and individuals.

<http://macworksllc.com>

Twitter - @macworksllc 

He is also a co-host of Command-Control-Power, a weekly podcast for the Apple support professional. With over 100 recorded episodes, the podcast focuses on all aspects of running a successful practice.



<http://commandcontrolpower.com>

Security, Viruses and Malware.  
It's real. It's now.  
You need to take it seriously



“I’ve got a feeling we’re not in Kansas anymore!”

# Viruses: Brief history of viruses coming to the Mac platform

- 1980's forward, Being an uninfected carrier
- 1990's forward, Word Macro Viruses
- AdWare: First appeared in 2012
- Trojan horses appeared on Mac in 2012 (Flashback Trojan)

**ROTTEN!**  
Apple users face  
*growing number  
of malware attacks*  
in 2014.



## According to Kaspersky Labs 2014 Security Bulletin

- In 2014, the average Mac user encountered nine cyberthreats. Detected 200 more pieces of Mac malware than in 2013 and blocked more than 3.5 million infection attempts on Mac OS devices.

# What's the difference?

- Mac MalWare
  - a) Viruses - capable of infecting with no user interaction
  - b) Trojans - relies on tricking the user into downloading, installing and running it
- AdWare - display advertisements or browser redirects
- Windows Viruses - In 2012 Sophos cited that 20 percent were carrying one or more instances of Windows malware.
- *“Adware is the biggest threat affecting Mac users today.”*

*Thomas Reed*

# Why Secure Systems?

- Invasion of privacy on a personal and corporate level
- Loss of trade - stolen corporate data or intellectual property
- Impact on productivity and performance
- Legal liability - Loss or breach of data i.e. HIPPA requirements or restrictions

# Developing a strategy

- Define the needs
  - Individual users
  - Small groups
  - Larger Deployment
- Identify the best software for your specific environment
- Determine your strategy (ex: Server Malware scanning v. Desktop)
- Provide training / user education for the system you deploy

# What do I secure?

## ( Layers of Security )

- Network Security.
  - Firewalls / Monitoring Systems
  - Malware, Trojan Horses and Virus protection
  - WiFi Security
  - VPN
- System / Physical Security
  - Firmware Passwords
  - Device Encryption
  - Password Policies
  - Malware, Trojan Horses and Virus protection

# Firewalls



- Firewall Description
- Should be your first line of Defense against Malware.
  - Any business level firewall - Cisco, SonicWall (now owned by Dell), Watchguard
  - Consumer Grade Router - Linksys, Airport, Zywall
  - OS X Built-in Firewall - a last resort.

# Using monitoring software to report problems

- Protection services (Firewalls, Network Security Appliances)
- Management software such as Watchman Monitoring detects malware and notifies you if one of your users is infected



# WiFi Security



- WPA2 or WPA2 Enterprise ( Radius )
- Use Strong Passwords / Change On Schedule
- Separate WiFi Network For Guests

# VPNs: Why you need them



- Simplest implementation for a small business
- Using a Router / Firewall to host a VPN
- Using OS X Server to host a VPN

# Email Continuity, Spam and Virus filtering

- McAfee SaaS formerly MXlogic
- SpamSoap (“powered by McAfee”) or Nuvotera
- OnlyMyEmail
- Barracuda’s Email Security Solutions

# System / Physical Security



- First place to secure, Last layer to be dealing with Malware
- Firmware Passwords, Device & Data Encryption
- Gatekeeper
- Password Protection & Policies

# OS X - System Protection



- Firmware Passwords
- Whole Disk Encryption
  - Built-In “File Vault” (10.7+)
  - Third Party (PGP Desktop or Symantec Endpoint)
- Anti-Virus
  - Products like ESET Cybersecurity
  - Avoid OS X as potential “Silent Carrier” for Windows-based viruses

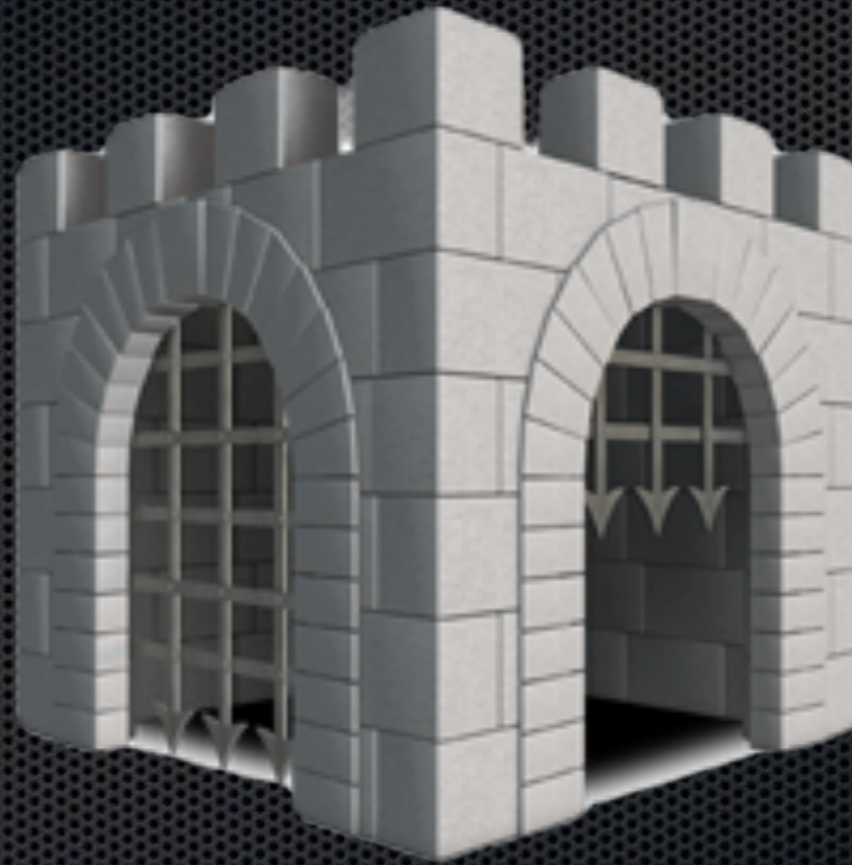
# iOS - System Protection



- Device Passcodes and Auto-wipe
- Hardware Data Encryption
- Encrypting iOS Backups.
- Touch-ID
- Remote Wiping

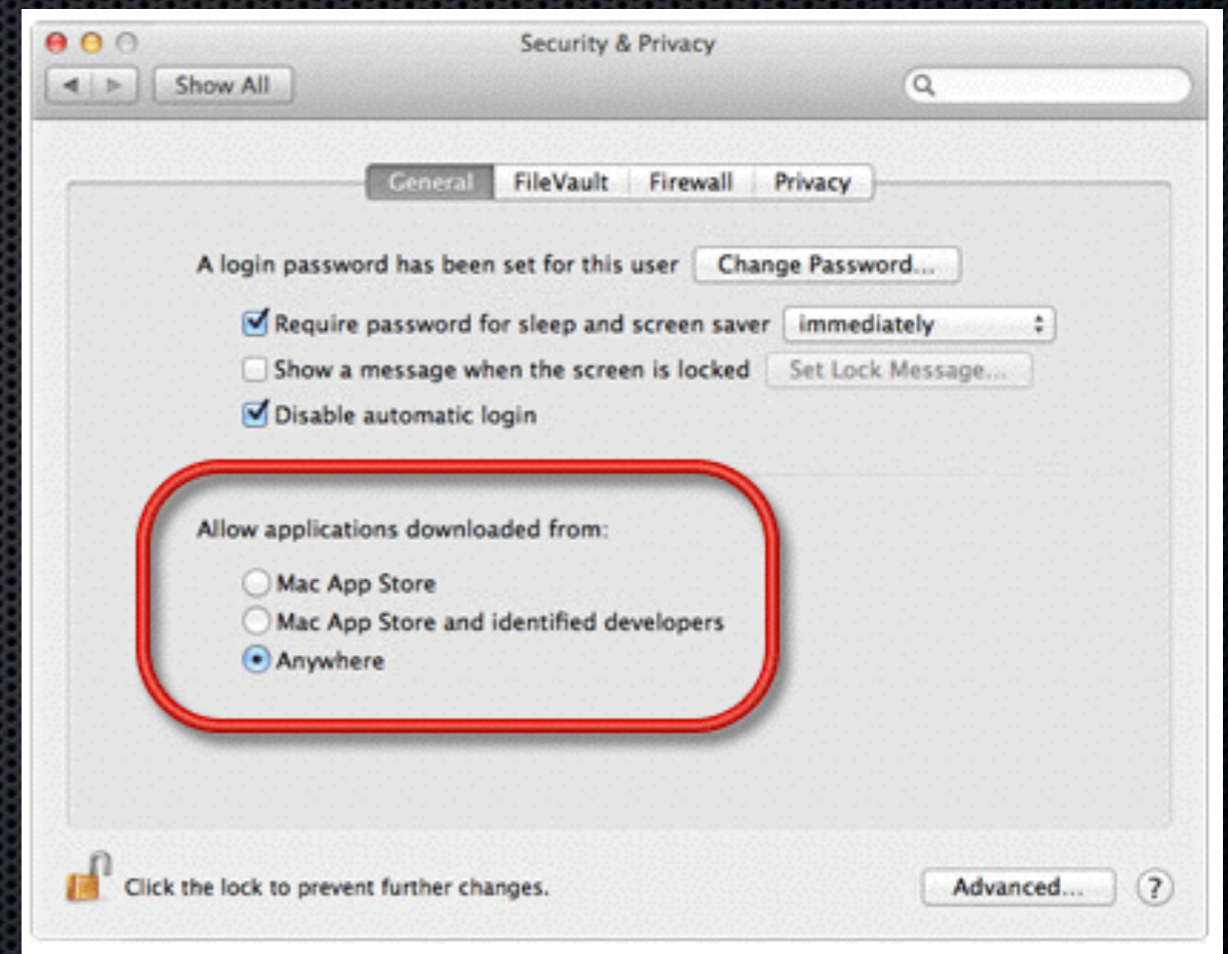


# Gatekeeper



# Gatekeeper

- Built in, limited, Malware protection (10.7.5+)
- Accessed via “Security & Privacy->->General->Allow apps downloaded from”

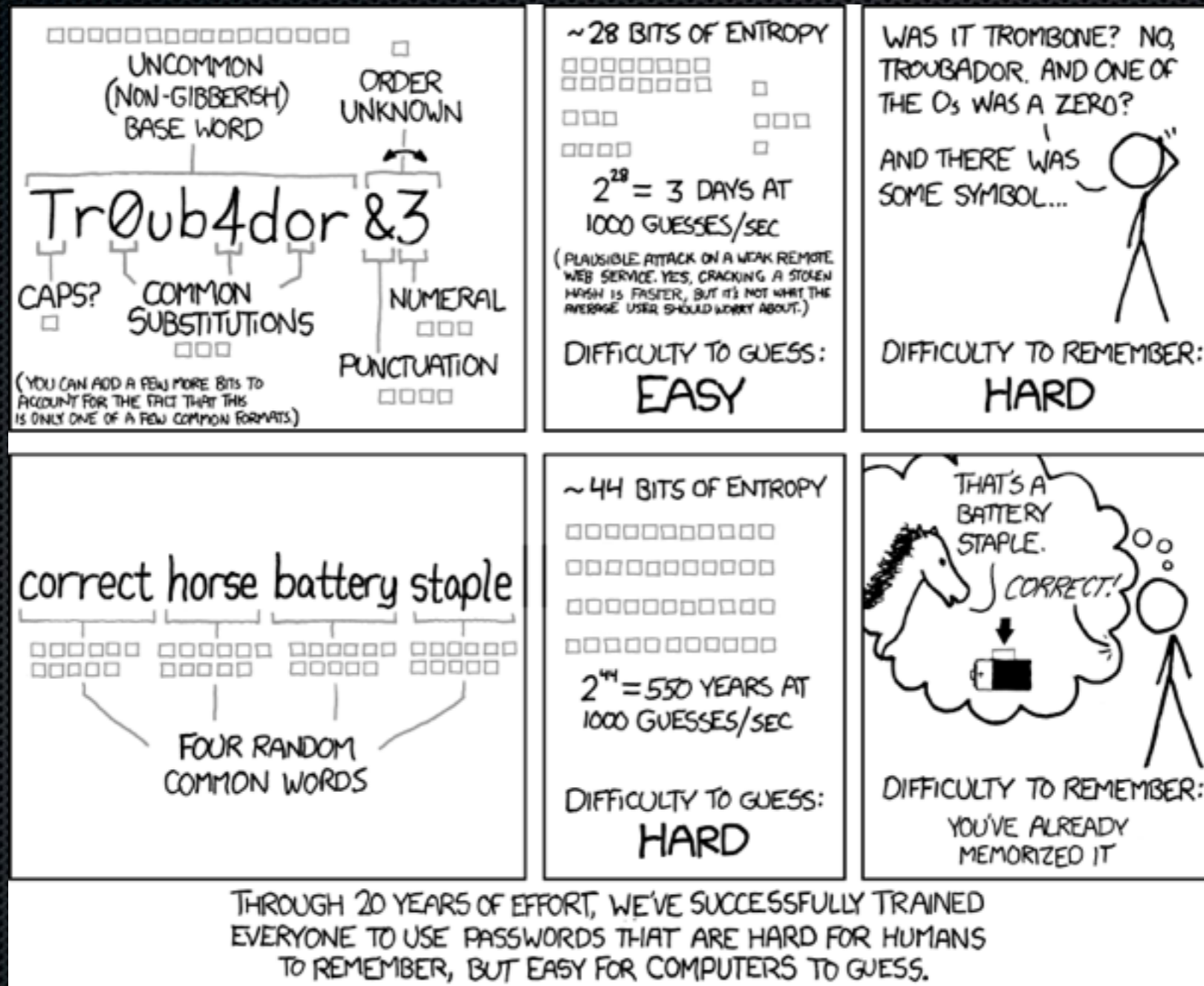


# Password Policies & Management

- Password policies are where the “rubber meets the road” in defining good policies.
- If your users are writing their passwords down, your policy needs work.
- Leverage Password Management software along with user education.
- Longer passwords/pass-phrases as primary passwords (System/admin passwords) and possibly use Password management software to handle the rest.

# Was it trombone or troubadour?

<http://xkcd.com/936/>



# The longer the password, the better

- Go as long as you can 12, 15 and even 20+ characters
- Use a password manager -- choose what matches your users needs best
  - IPassword, LastPass, DashLane
  - iCloud Keychain
- OK to keep notes in any SSL / Encryption protected app: or system: Notes, OneNote, etc...
  - Some people even use secure notes in Keychain



MacKeeper

MY MacBook Air

- System Status
- System Scan** 2098

**SECURITY**

- Internet Security
- Anti-Theft

**DATA CONTROL**

- Data Encryptor
- Files Recovery
- Shredder
- Backup

**CLEANING**

- Fast Cleanup** 2.1 GB
- Duplicates Finder
- Files Finder
- Disk Usage
- Smart Uninstaller

**OPTIMIZATION**

- Update Tracker
- Login Items
- Default Apps

**GEEK ON DEMAND**

- Schedule Demand

## System Scan

Find issues that affect your Mac and fix them.

Click any category to view details

Cleaning: Clean Dirty

Security: Safe Dangerous

Performance: Fast Deteriorated

**Total Status:** 2098 issues found

[View Details](#) Good Critical

**Fix Issues Safely**

This fix is recommended by: Apple Certified Support Professionals

**CUSTOMER SUPPORT**  
Choose The Nature Of Your Problem:

- Questions about Price/License Types/Subscription
- MacKeeper Installation/Reinstallation and Removal
- MacKeeper Activation
- MacKeeper (Kromtech) Account Issues
- Billing Questions
- MacKeeper Usage Problems
- General Mac Questions/Questions not Related to MacKeeper

[WHAT IS SYSTEM SCAN?](#)

Instant Activation [Live Support >1](#)

# Avoiding Adware Scanner Utilities

- “Genio Innovation!”
  - Genieo virus
  - Hard to remove. Proceed with caution
  - Utilities for removal
- MacProtector or MacGuard
- MacKeeper
- Avoid good software from bad sources.



# Tools to use

- AntiVirus
  - VirusBarrier - Intego
  - avast! Free Antivirus
  - ESET Cybersecurity
  - Sophos Anti-Virus for Mac
    - *Resource For Antivirus from Thomas Reed - <http://www.thesafemac.com/mac-anti-virus-testing-2014/>*
- Watchman Monitoring - [watchmanmonitoring.com](http://watchmanmonitoring.com)
- Ghostery - <https://www.ghostery.com/>
- Malwarebytes - <https://www.malwarebytes.org/antimalware/mac/>

# More Resources

- History Of Malware On Macs - <https://nakedsecurity.sophos.com/2011/10/03/mac-malware-history/>
- Malwarebytes Security Blog - <https://blog.malwarebytes.org> - formerly “The Safe MAc”
- CommandControlPower Podcast - Interviews With Thomas Reed -
  - Show #71 <http://macs.ws/treed1>
  - Show #110 <http://macs.ws/treed2>
- Kaspersky 2014 Security Bulletin - [http://macs.ws/kaspersky\\_2014](http://macs.ws/kaspersky_2014)

# Questions?



Jerry Zigmont  
[jerry@macworksllc.com](mailto:jerry@macworksllc.com)