

Hardware, Software and Network Deployment

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MacTech Boot Camp: Chicago 2011

Installing a new client computer



Installing a new client computer

- Where do we start?
- Wipe and install a custom image or build on the installed OS?
 - Do the math, does it make sense?
 - Can it be sanitized and used for future client installs?
- Customize the install
 - Less printers, languages
 - Adding apps and utilities
- Should I use more than 1 partition? How Many?
 - Install 10.6 and 10.7, OS and Data Partitions, Lion's Recovery Partition

Installing a new client computer

- What does journaling mean?
- FAT32 vs. NTFS (NTFS is overall better choice)
 - FAT32 R/W by both OS X and Windows, Max file size 4GB
 - NTFS Read only from OS X
 - Bootcamp
- Should I use Migration Assistant?
 - Is there cruft built up or will it be a smooth transition
- Don't leave the client without starting a backup regimen
 - What's your data loss story?

Deployment

- Monolithic vs. Package Based
 - What are the + / - of each
- Built-in Apps
 - Disk Utility, NetBoot, NetRestore, SIU
- Open Source vs. Commercial Software
 - InstaDMG, Deploy Studio, JAMF

Software Updates

- Software Update Server (SUS)
 - Benefits of bandwidth, staged installs
 - Why wait? Cooling off period ~24 hours

Software Updates

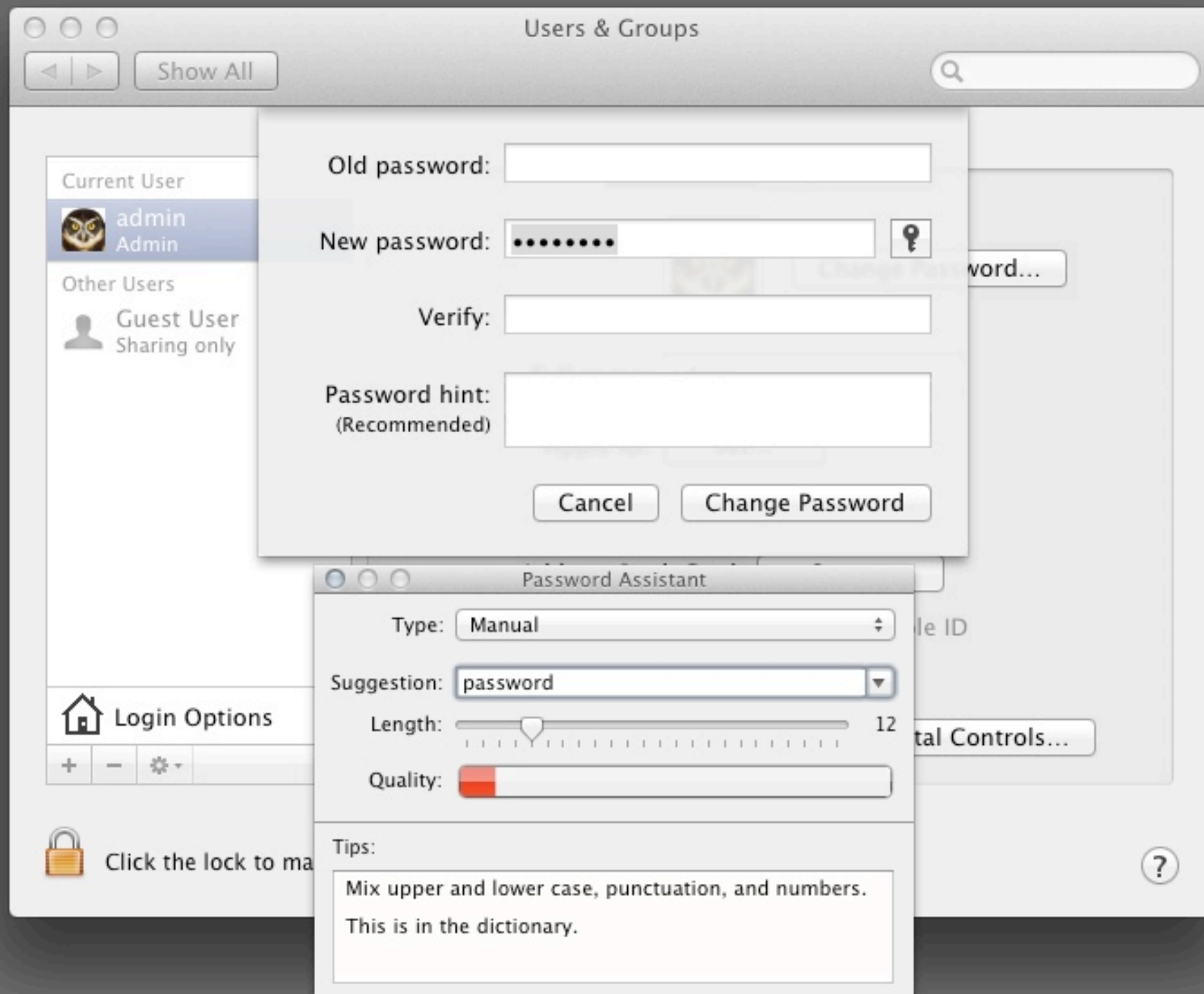
- Combo vs. Delta
 - Combo is larger and skips incremental
 - 10.6.8 Combo Update = 10.6.x ---> 10.6.8
 - Delta is smaller and is incremental
 - 10.6.8 Delta Update = 10.6.7 ---> 10.6.8

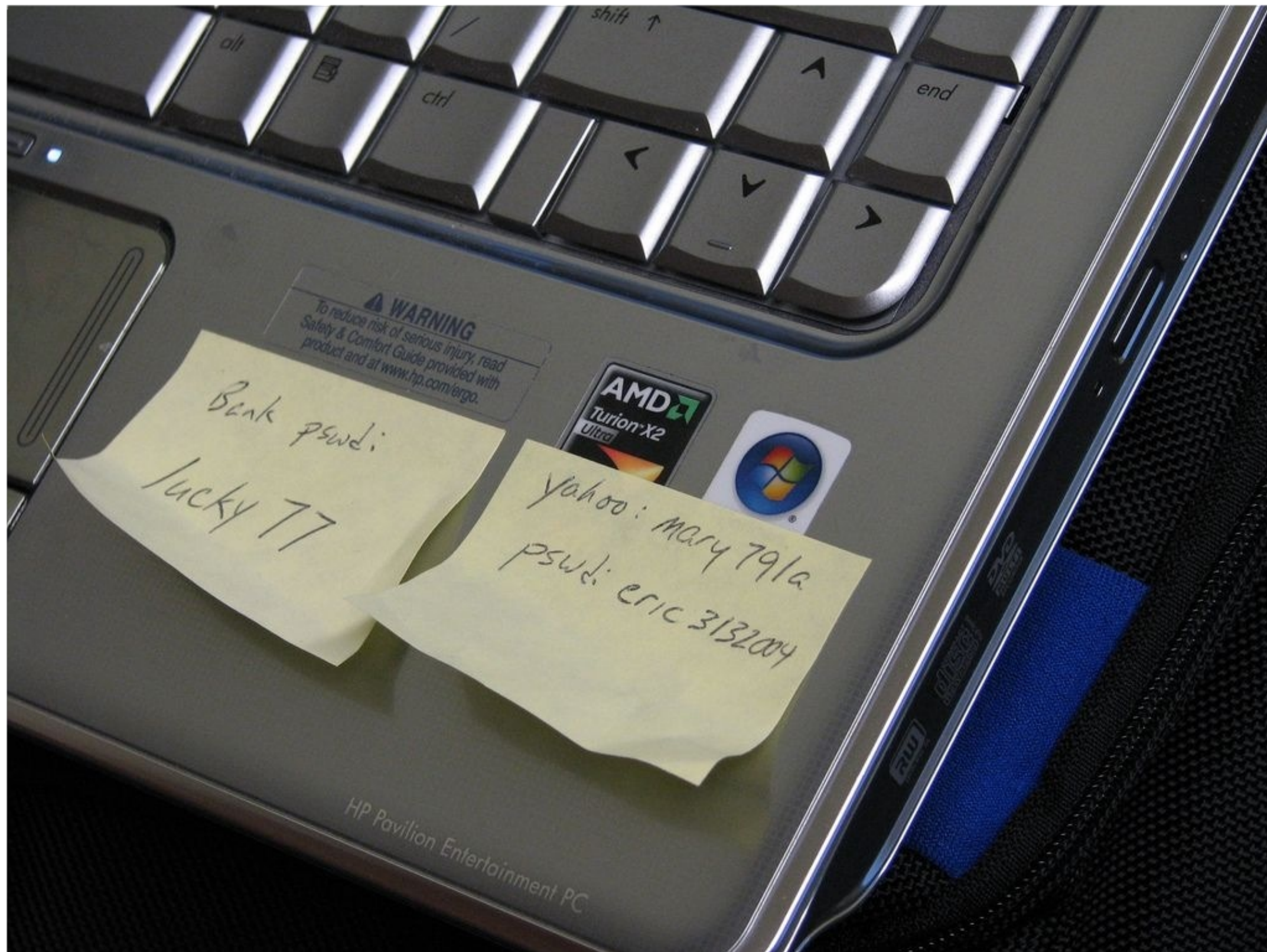
User Account Types

- Administrator vs. Standard User
 - Apple says use a Standard Account
 - Reduces the "I just clicked, I didn't read what it said."
 - Implement Change Management
- Use sudo and don't enable root
- Guest User
 - Limited access, but can see all other users on system
- Sharing Only
 - Users can connect like a server, but there is no login ability

P@\$\$w0rDs

- What's a "good" password?
 - 8+ characters
 - Mix of UPPER & lower case letters, numb3rs and ch@racters.
 - J%2}s9vzF;f4KCM





P@\$\$w0rDs

- Password managers
 - Keychain, KeePass, 1Password
- Open Firmware Password
 - Blocks startup modifiers
 - Umm, what's my password? Then vs. now

Printers, scanners and Peripherals

- CUPS - Common Unix Printing System
 - 127.0.0.1:631 or localhost:631
 - Fax Server
- Applications, services and devices all say hello via Bonjour
 - Makes it easy to discover assets and share them on a network
- Sharing a local printer
 - USB printer can be shared amongst users
 - Don't share a network printer, add it via IP

Printers, scanners and Peripherals

- Multifunction devices can be shared
 - Helpful for wireless scanning
- Creating/Using Presets (Command Line, Packages via ARD)
- PDF Workflows
- Print ---> Save as PDF
 - Built into OS X, no need for 3rd party software,
 - Edit in Preview

Target Disk Mode

- T is for Target
- Use another computer as an external HD
- Ability to unmount and run diagnostics/data recovery
- Migration Assistant



iOS Device Management

- iOS growth has been phenomenal
 - Adoption by SMB and Enterprise
- How do we manage them?
 - 10.7 Profile Manager
 - JAMF, Absolute, other commercial MDMs

iOS Device Management

- iTunes is a major part of it all
 - iOS Updates, syncing, content
 - iOS 5 will bring changes
- iPhone Configuration Utility (IPCU)

Fundamental Networking

- 192.168.1.1 vs. 128.1.0.1
 - Private vs. Public
- Static vs. Dynamic
 - Always get the same address / Gets address from a pool DHCP
- Subnet Mask
 - Breaks down a network in efficient addressing

Fundamental Networking

- Mac vs. MAC
 - Unique identifier assigned to networking (more on this later)
 - Replacement Logic Board
- DNS
 - What's easier to remember? 74.125.225.80 or google.com
 - Why are there other DNS providers? Why not just use ISP?
 - Web-based filtering, Phishing, Stability

Fundamental Networking

- Wireless Networking
 - Private and guest networks
 - What type of security?
 - WPA not WEP
 - 256 bit encryption vs. 64/128 bit
 - Hidden is not really hidden, causes frustration
 - MAC address filtering
- 802.11x (RADIUS / EAP)
 - Authentication for a LAN requiring a user to be validated and authorized
 - Requires additional software and hardware, but more secure

Fundamental Networking

- IPv4 vs. IPv6
 - Ran out of addresses in February 2011
 - Approx. only 14% currently utilized (CNET Feb 2011)
 - 32 bit addressing vs. 128 bit addressing
 - 4.3B vs. 3.4×10^{38}
 - IPv6 addresses are written in eight groups of four hexadecimal digits
2001:0db8:85a3:0000:0000:8a2e:0370:7334
- Mac Support since 10.2 and Windows since XP SP1
- ISPs need to provide better hardware, but dual-stack will help

Fundamental Networking

- What tools can I use to "see" the network
 - Airport Utility, AirRadar, KisMac
 - Does it drop out if I do "x", What channel do I use?
- Wired vs. Wireless extensions via APs
- What's a VPN?
 - Virtual Private Network,
 - Snooping at Starbucks, dig a tunnel
 - Built into OS X and iOS

Q + A

Thank you

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<http://goo.gl/zMqrL>