

Best practices: Hardware, Software and Network Deployment

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ACN Member, 10.4 ACHDS, 10.5 ACSP, ACTC, ACSA, 10.6 ACSP, ACTC, ACSA?
Consultant Alliance 16 Years,
20 Years as consultant, 34 Years of Technology experience

Leading... is *consulting*

1. Plan

2. Test

3. Implement

4. Document (Update existing docs right?)



It might seem expedient to “fix the computer”, although our primary responsibility is to help the user have the best experience as possible

Best Practices

- **Good Sound Bites?**
- **Best practices** are generally-accepted, informally-standardized techniques, methods or processes that have proven to lead to reliable, efficient, repeatable implementations.
- A goal that is not always completely achieved but should always be attempted

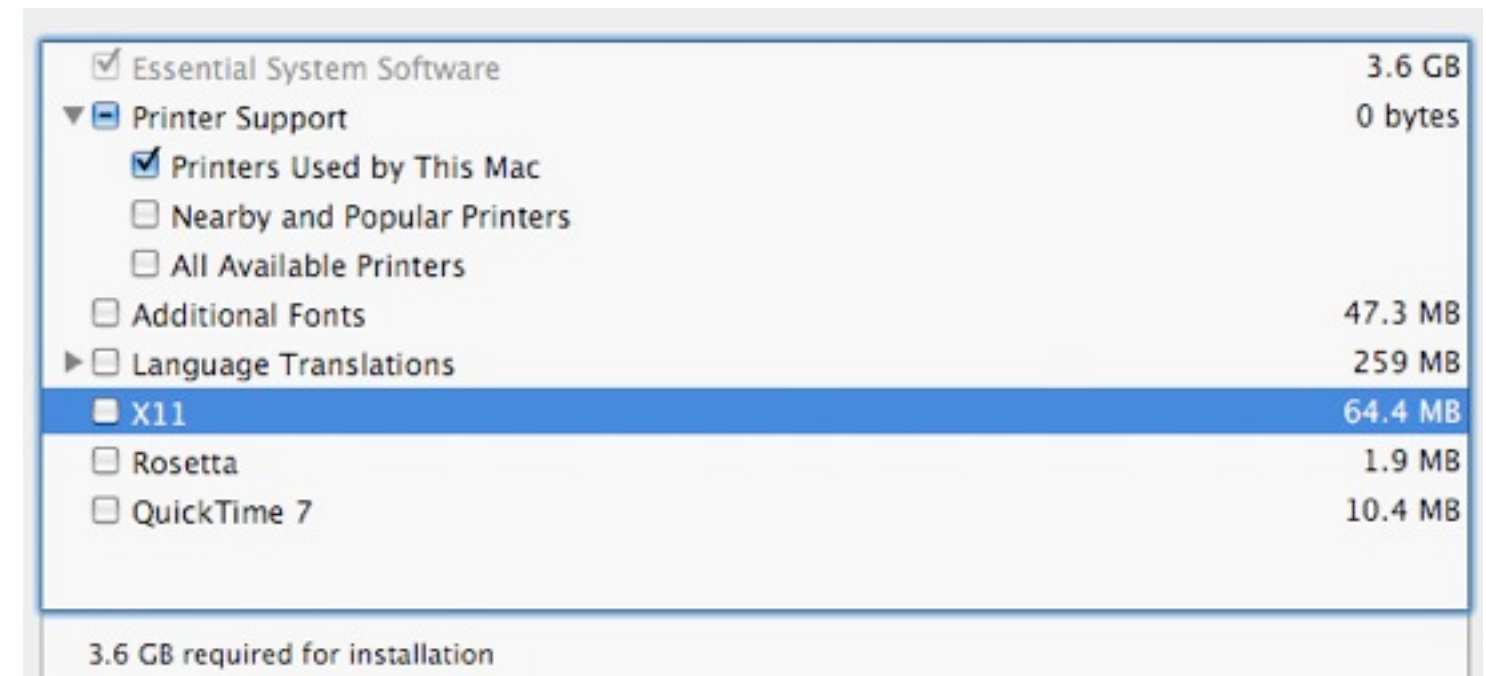
Before you start... you need to answer:

- What software needs to be run?
- What system software is supported?
- What are the power needs?
 - UPS? Power conditioning? Other?
- Is the environment correct?
- Is there room for everything that is needed - including about the user?



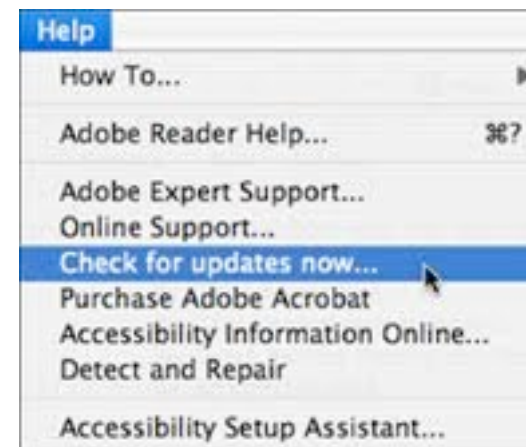
Installing the Computer

- Drives/RAID/Partitioning
 - Windows, Repair, Other Partitions
 - Journaling
- Installing Base OS
 - Best Practice: Reformat and Reinstall from known good install of correct version
 - Install only the parts of the OS that are required (Customize)
 - Standard Third-Party Installs
ClamAV, Flip4Mac, AppleJack, StuffIt Expander



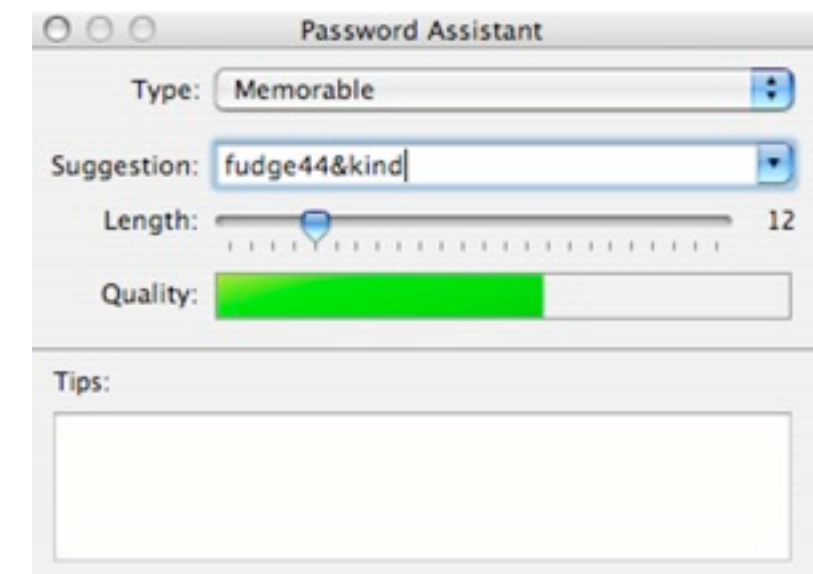
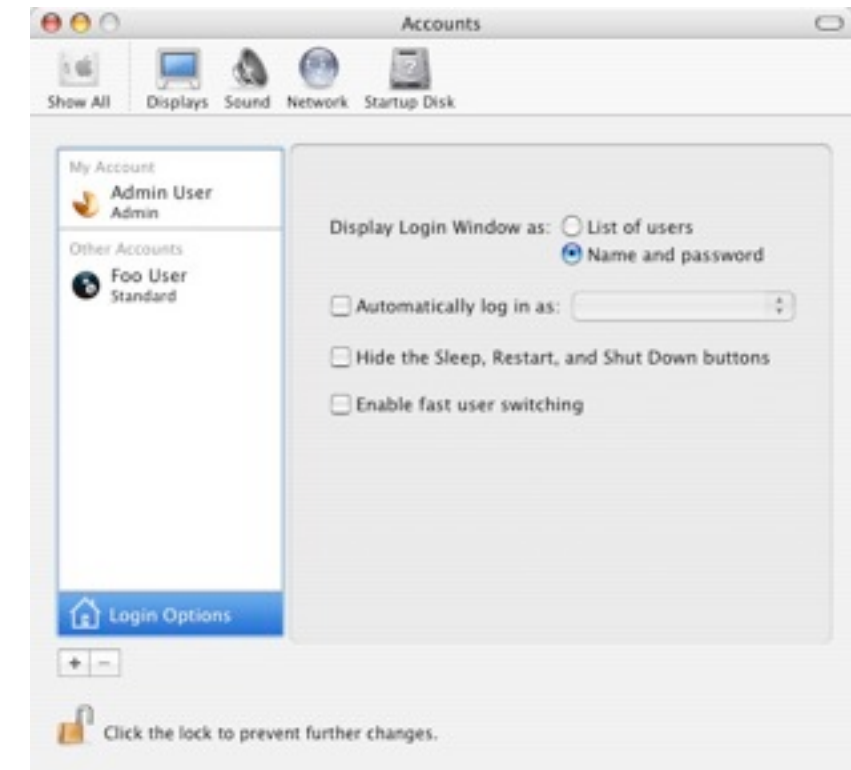
Software Updates

- What is a “Static” vs “Dynamic” system configuration?
- When should updates be applied?
- What kinds of updates are there?
 - Security
 - Specific Feature Updates
 - 10.x.x Updates
 - Delta vs Combo update
 - Third Party Updates
- What about IOS System Updates?
 - *CURRENTLY* requires reinstall of complete system
 - Security Vulnerabilities



User Accounts/Passwords

- User Account Types
 - Guest
 - Standard
 - Standard w/Parental Control
 - Admin
 - Others Types (Root, Sharing Only)
- Password, Auto Login, FileVault
 - How strong is enough? How often is enough? How many is enough?
 - Password Storage
 - KeyChains
 - 1Password <http://agilebits.com/products/1Password>



Miscellaneous Hardware Issues

- Startup Keys
- Open Firmware Password
- Target Disk Mode



Keystroke	Description
Press C during startup	Start up from a bootable CD or DVD, such as the Mac OS X Install disc that came with the computer.
Press D during startup	Start up in Apple Hardware Test (AHT), if the Install DVD 1 is in the computer.
Press Option-Command-P-R until you hear two beeps.	Reset NVRAM
Press Option during startup	Starts into Startup Manager, where you can select a Mac OS X volume to start from. Note: Press N to make the the first bootable Network volume appear as well.
Press Eject, F12, or hold the mouse (/trackpad) button	Ejects any removable media, such as an optical disc.
Press N during startup	Attempt to start up from a compatible network server (NetBoot).
Press T during startup	Start up in FireWire Target Disk mode.
Press Shift during startup	Start up in Safe Boot mode and temporarily disable login items.
Press Command-V during startup	Start up in Verbose mode.
Press Command-S during startup	Start up in Single-User mode.
Press Option-N during startup	Start from a NetBoot server using the default boot image.

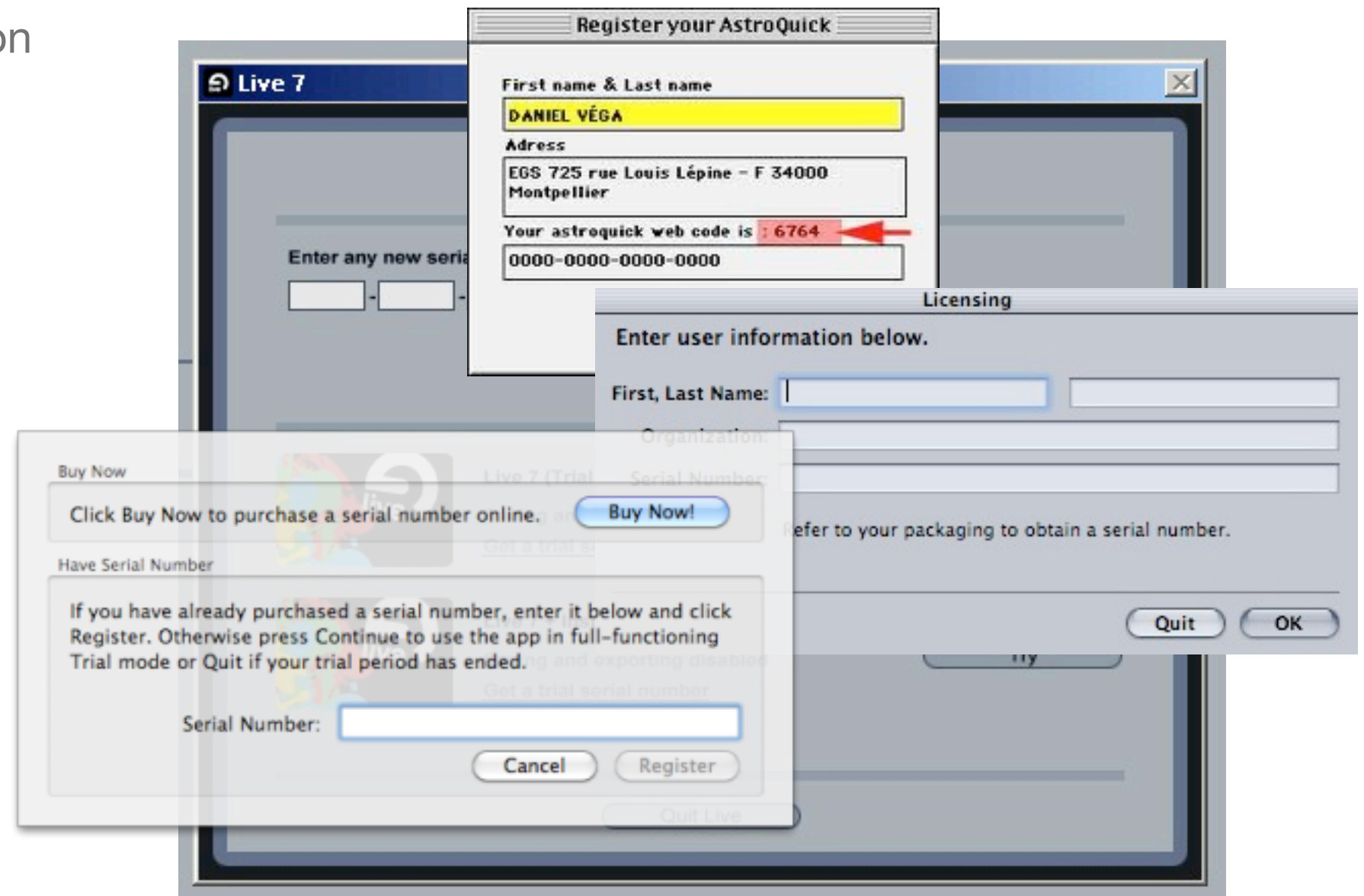
Printing and Peripherals

- Busses
 - FireWire
 - USB
 - WiFi
 - Bluetooth
- CUPS
 - Common Unix Printing System
 - Open Source Drivers
- Printer, Scanners and Peripherals



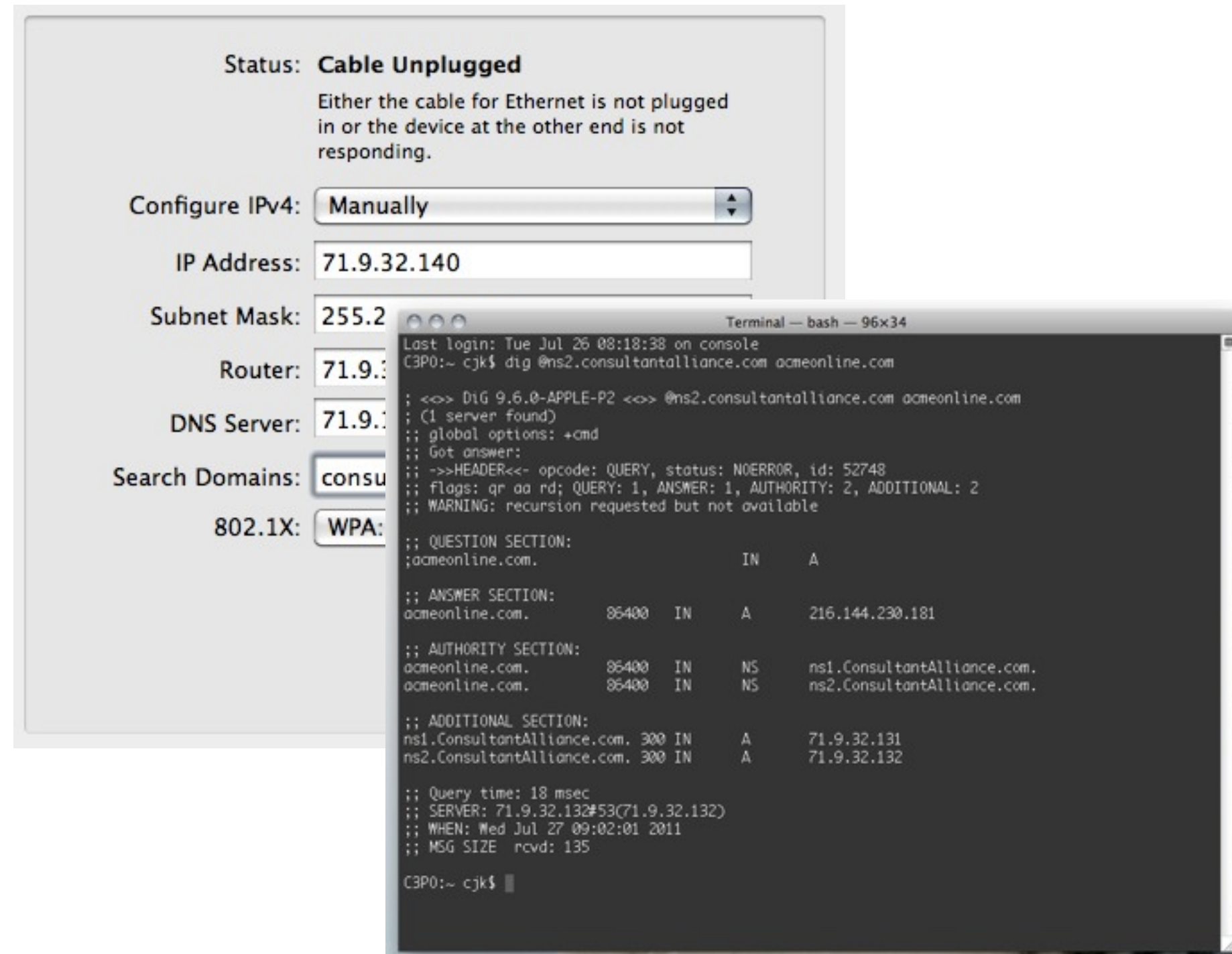
Serial Numbers

- Software licenses are important
 - Types: software licensing & license installation
- Documenting licenses & serial numbers
- Automated licensing management



Networking/VPN

- Fundamentals of Networking
 - MAC, IP, Subnet, Gateway, DNS
 - Discovery Protocols
 - AppleTalk (DONE!)
 - Bonjour (Based on broadcast address)
 - IPv4 vs IPv6
 - Public vs Private IP's
 - Static vs Dynamic IP's
- 802.1X Authentication
- Wireless Configurations
 - Location, Location, Location
- VPN



Cloning/Deployment

- Creating Images/System Cloning
- Deploying Items to Multiple Computers
- Deploying Systems
- Server Technologies
 - Net Boot
 - Software Update Server
- ARD

A Few Final Thoughts...

- Provide good leadership
 - Protect users data
 - Be methodical
 - Use Best Practices
 - Use your common sense
- Use these ideas as a starting point to learn more. Choose a couple which will help your consulting and learn more about them.
- Need clarification on anything you see heard? Email: AskCJK@consultantalliance.com



•Thank You!