Beginning Your Enterprise Deployment

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MacEnterprise Day

Basic Questions

- ✦ **What are you trying to achieve?**
- ✦ **Existing Environment:**
  - ✳ **Hardware/Software/People?**
  - ✳ **Directory Infrastructure**
  - ✳ **Network**
- ✦ **New Acquisitions: Hardware/Software?**
- ✦ **Servers?**
- ✦ **People?**

Goals?   Timing?

* Stand alone desktop/laptop?
* Centrally managed authentication?
* Network home folders (w/mobile sync)?
* Fully managed clients?

Plan for the longer term as you develop your approach. See deployment as a process with expected steps

Existing Environment

- **Deployed Systems & Software**
- **Infrastructure**
- **Experience**
- **Expectations**

- **Enterprise Standards**
  - **Network**
  - **Security**
  - **Software**
    - **Email**
    - **Calendaring**
    - **Web**
    - **Databases**
    - **Business tools**

Hardware

✦ **Single platform (unlikely)**

✦ **Mixed environment**

✴ **Servers**

✴ **Network file access method? (SMB, AFP, AFS, NFS, etc.)**

✴ **Upgrade/change process?**

Software

- ✦ **Distribution System**
- ✦ **License control/monitoring/audit**
- ✦ **Upgrade process**

People (Make friends with everybody!)

✦ **Network Administrators**

✦ **Systems Administrators**

✦ **Support Staff (Help Desk)**

✦ **Clients**

    ✳ **Expectations/Experience**

    ✳ **Training? (Who?/How?)**

    ✳ **Privacy/Information Security**

Network

- **Helper Addresses on Routers, etc.**
- **Firewall, Bandwidth Shaping**
  - ✴ **Multicast blocking?
    Bonjour (Rendezvous is "Chatty")**
- **Traffic Volumes**
- **Network Quality? (Cabling)**
- **Wired/Wireless?**
- **VPN?**

Directory Structure

✦ **Enterprise Policies & Standards?**

✦ **Open Directory**

　✴ **Are you creating a directory from scratch?**

✦ **Fitting In**

　✴ **Active Directory, Novell, LDAP**

　✴ **Can you request changes?**

　✴ **What access do you have?**

Security

✦ **What are your clients likely to do?**

Eg. Port Scanning is built in to Network Utility

   ✴ **Will they want SSH into their own machines?**

   ✴ **Will they open up File Sharing?, IM?, ??**

✦ **Who has admin privileges?**

   ✴ **Trusted employees ? Aware employees ?**

✦ **Software/Hardware - control?**

✦ **Network Security - eg. Kerberos**

Knowledge

✦ **Unix**

　✶ **SSH, Shell scripting, Perl, PHP, etc.**

　✶ **Command line (get comfortable!)**

　✶ **Security**

✦ **Mac tools - GUI**

　✶ **ARD, NetOctopus, FileWave, etc.
(Do they need to be cross platform?)**

　✶ **Radmind (GUI/Unix)**

What Resources Do You Need?

✦ **Hardware & Software**

✦ **Knowledge sources**

✴ **Apple Training, SE's and CE's**

✴ **MacEnterprise.org, AFP548.com, etc.**

✦ **Time**

✴ **How much can you devote to deployment?**

✴ **Do you have access to other support staff?**

Resources Determine Deployment

✦ **Support staff**

✦ **Hardware & Network**

✦ **Software tools available**

Deploying OS & Basic Image

- ✦ **Portable FireWire drives (Sneakernet)**
  - ✳ **PSU-Blast Image Config**
  - ✳ **Disk Utlity**
  - ✳ **Carbon Copy Cloner**
- ✦ **Servers**
  - ✳ **Radmind**
  - ✳ **Netboot/Netinstall**
  - ✳ **Custom Unix Imaging**
  - ✳ **RsyncX**

Deploying & Controlling Software

✦ **Download Server**

  ✳ **(Keyed/Controlled Software?)**

✦ **Radmind (free)**

✦ **ARD (low cost)**

✦ **NetOctopus/Timbuktu $$$$**

✦ **Filewave $$$$**

✦ **Custom Unix System (ie. Pixar)**

Help Desk/Support

✦ **Training for support staff**

✦ **Call tracking/inventory tied together**

  ✴ **Note: ARD can do this… see ARD session**

  ✴ **Other call tracking/inventory systems may not support Macs**

✦ **ARD for Remote Assistance**

✦ **Build a local Knowledge Base!**

Backup & Data Security

✦ **Often forgotten topic**

✦ **Individuals responsible? (often fails)**

✦ **Central Systems (eg. Tivoli)**

  ✳ **Expensive**

  ✳ **Troublesome to deploy**

✦ **Network homes - best option?**

✦ **Lightweight Synchronization Tools**

  ✳ **ChronoSync, RSyncX, Synchronize! X Plus/Pro X, You Synchronize, Synk**

Deployment at Swarthmore

- Mix of Tools/Methods
  - FW drives (SneakerNet)
    - PSU-BIC & Disk Utility
  - ARD
  - NetBoot/NetInstall
- AD Integration (partial)
- KeyServer
- Central Backup with ChronoSync & ExtremeZ-IP for AFP shares on Win