Administering a MediaCenter

Chris Hazen
CS765
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Goals of this presentation

- Basic info on what a Media Center comprises of.
- Discussion of new and altered administrative tasks by adding a Media Center in a local network.
- Do what I say, not how badly I messed up.
Not a Howto Guide

- The internet is a better source.
- There is no one “best” way.
- Choices depend on many different situations.
What I Needed

- HW Requirements: Modern PC, 512 MB Ram, Large Disks/RAID, TV Tuner
- SW Requirements: Knoppix, MythTV, MySQL, (Networking servers)
- Plan of Action
- Patience
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- It’s OK to Nuke and Restart
What Media is being stored?

- TV shows. For those interested, a TV Tuner can capture any show that comes through the pipe. Software can chop the commercials.
- Movies. Rip them as a DVD Backup, or convert into something smaller (xvid)
- Music. Rip as MP3’s or OGG’s.
- Anything. It can store whatever you like, but the primary focus is the above media.
Network Configuration

- Star Network – easy setup, no data collision
- Access Point
- Wireless? Sure why not. 11b may feel a bit slow to stream from, but it’s still possible. At the worst, things can be downloaded and then watched.
- Spread the load
How it physically looks

- Internet
  - Router
    - User CPUs
    - User CPUs
  - Cable Box
  - Media Center
Networking Software

- SSH – for MCs locked in a closet
- VPN – stream over the interwebs
- VNC – more remote controlling
- Samba – Local Windows compatibility
- Torrent Tracker – Available for files that have high popularity. Spread the load and the server doesn’t have as many issues.
- Apache – Certain PVRs create an html front end for sifting through. Integrates quite nicely with torrents.
Things to do like an Admin

- Automation – for anything you can
  --Cron jobs
- Archival/Backup
- Transcoding – to save up room
- Grant access rights carefully
Things to do for a SysAdmin

- Portable: Access stuff from anywhere
- Laziness: Don’t feel like turning on the tube? No sweat, it’s already recording
- Memory: It remembers things you like to do, and can remind you.
- Convenient: Can be remote controlled
- Spread out network load w/ torrents or multiple data stores.
Say What?

- Why so much networking?
- Does anywhere mean anywhere?
- Can users share data or request records?
- When is enough, enough?
Things I learned

- Tinkering learns best
- Automation is a pain to setup
- A bit about different networking stuff
- Check your pin configuration
- Bad issues with grub/lilo
Websites to visit

- Mythtv.org (*ix/ Free/MySQL)
- freevo.sourceforge.net (*ix/Free/Python)
- Sagetv.com (Win/ $$)
- Gb-pvr.com (Win/ Free/ .NET)
- Hauppauge.com (TvTuner)
- ATI.com (Tv Tuner)
References

- http://www.extremetech.com/article2/0,1558,1277976,00.asp
- http://www.vpnc.org/
- http://us3.samba.org/samba/
- http://www.ssh.com/