NETWORKED AT
IN THE HIGHER ED
ENVIRONMENT

This talk:
staff.washington.edu/danc/Talks

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Outline

- Introductions
- Descriptions
- Common Problems/solutions
- What's Next
Introductions

- Access Technology Center (ATC) – University of Washington

- Audience
UW Computing Environment

- Decentralized management w/ multiple domains
- A few large labs
- Numerous departmental labs
- Unknown total labs (!)
How it works now

- Create image
- Capture image
- Cast image
- Adjustments
Create System Image

- 1 workstation
- Operating system w/updates
- Basic productivity software w/updates
  - MS Office, Adobe
  - Other lab-supported
- Stir in AT software
- Run and test all programs!
Capture System Image

- Use Ghost software to capture
- Upload image to server
- Create WinPE Boot CDs that point at bit torrent server
  - 20 discs for 125 computer lab
Cast System image

- Use GhostCast Server

- Subnet speed matters
  - Slow network: 10 computers = 50 MB/minute
  - Fast: 30 computers = 260 MB/minute

- Server location does matter
  - Fewer router hops = faster performance
Bit Torrent for Speed

- Before torrent:
  - 10 hrs for 125 computers on fast network, mostly hands-off
  - overnight

- After torrent:
  - 1 hour per system
  - Any time!
bit torrent is fast!
Key points

- Testing of base image is critical!
  - ALL applications, esp TTS

- Hardware should match
  - Motherboards, graphics, peripherals, etc

- Use DeepFreeze on systems
  - Info in base image seed
  - Remote application
Adjustments

- Customize specific machines as needed
- Special hardware
  - Trackballs, keyboards, head pointers, scanners, printing, embossing
- Special software
  - Hardware-specific or limited licenses
  - Speech input
  - Scanners, other hardware drivers
Common Problems/Solutions

- Speech Input
- JAWS, ZoomText, FineReader
- Others?
JAWS, ZoomText, et al

- **Custom/Proprietary licensing**

- **Server issues**
  - Who buys?
  - Installs?
  - Maintains?

- **Use KeyServer if possible**
JFW Server and Windows 7
JFW Server and Windows 7
ZoomText “server” & Win7

- Read-only folder share
- Turn on file sharing
- Turn on Network Discovery
- Turn off password-protected sharing
ZT and Sharing

Control Panel Home

Change adapter settings

Change advanced sharing settings

View your basic network information and set up connections

ATC-SCAN (This computer)

Network

Internet

View your active networks

Connect or disconnect

Network

Work network

Access type:

Internet

Connections:

Local Area Connection

Change your networking settings

Set up a new connection or network
Set up a wireless, broadband, dial-up, ad hoc, or VPN connection; or set up a router or access point.

Connect to a network
Connect or reconnect to a wireless, wired, dial-up, or VPN network connection.

Choose homegroup and sharing options
Access files and printers located on other network computers, or change sharing settings.

Troubleshoot problems
Diagnose and repair network problems, or get troubleshooting information.
ZT and Sharing

Change sharing options for different network profiles

Windows creates a separate network profile for each network you use. You can change sharing options for each profile.

Home or Work (current profile)

Network discovery

When network discovery is on, this computer can see other network resources and be seen by other network computers. What is network discovery?

- Turn on network discovery
- Turn off network discovery

File and printer sharing

When file and printer sharing is on, files and printers that you have shared can be accessed by people on the network.

- Turn on file and printer sharing
- Turn off file and printer sharing
ZT and Sharing

When media streaming is on, people and devices on the network can access videos on this computer. This computer can also find media on the network.

Media streaming is off.
Choose media streaming options...

File sharing connections

Windows 7 uses 128-bit encryption to help protect file sharing connections. All devices that support 128-bit encryption must use 40- or 56-bit encryption.

- Use 128-bit encryption to help protect file sharing connections (recommended)
- Enable file sharing for devices that use 40- or 56-bit encryption

Password protected sharing

When password protected sharing is on, only people who have a user account on this computer can access shared files, printers attached to this computer, and other people access you must turn off password protected sharing.

- Turn on password protected sharing
- Turn off password protected sharing

HomeGroup connections

Typically, Windows manages the connections to other homegroup computers using same user accounts and passwords on all of your computers, you can have a different user account instead. Help me decide

- Allow Windows to manage homegroup connections (recommended)
- Configure homegroup connections manually
Speech input

- Installed in limited locations
- Create a thawed partition
- Use `junction.exe` to redirect user files
  - Google "junction.exe" to get it
- Backup user files twice a term
What's Next

- New products
  - Changes in license management?

- Virtualization / The Cloud
ATIA Higher Education Strand

- Please submit a Higher Ed talk!
- Submissions open in February
What do you do?
Questions? Comments?

Please complete an evaluation form

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