GSLIS Technology

Computer Lab design (physical and visual)
Computer Imaging
Security Concerns

Linnea Johnson
Assistant Manager of Information Technology
GSLIS
Who are we?

Collaborative team of technologists for the GSLIS community including:

- **Two GSLIS Dean’s Fellows**
  - WebCT Vista and GSLIS Continuing Education Support
  - Back-end server and workstation support

- **Six Technology Reference Assistants**
  - GSLIS Tech Lab front desk support for GSLIS students, faculty, and staff

- **Assistant Manager of Technology for GSLIS**
  - Oversee GSLIS Tech Lab and departmental technology needs for GSLIS staff, faculty, and students
  - Liaison to other departments on campus for technology initiatives

- **Assistant Dean of Technology for GSLIS**
  - Also serves as Program Director for GSLIS at Mount Holyoke program
Computer Lab Design

Know the audience and their needs.

GSLIS students typically want innovative and alternative options to the status quo when it comes down to computer applications, important for planning

More choices = happier GSLIS students

Who will be using the space?

students (graduate or undergraduate), faculty, staff?

In our case, the entire GSLIS community (students, faculty, staff, alums)

What special concerns need to be considered?

What are the space limitations?

What is the layout of the room?
GSLIS Technology Lab

Tech Lab/Cataloging Lab Equipment Resources:

- 41 PCs with CD burners (Windows XP)
- 5 iMacs with cd burners (Mac OS X Tiger)
- 5 standard size flatbed scanners with document readers
- 2 oversized flatbed scanners
- 1 slide scanner
- 4 printers
Tech Lab physical layout

- Front half of lab
  - 14 PCs
  - 5 iMacs

- Classroom portion of lab (with moveable wall)
  - 21 PCs

- Cataloging Lab
  - 6 PCs
## Computer Naming Convention

<table>
<thead>
<tr>
<th>Building Name</th>
<th>Room Number</th>
<th>Academic Year</th>
<th>Operating System</th>
<th>Sequential Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>PAL</td>
<td>213</td>
<td>214</td>
<td>07</td>
<td>XP</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>TI</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>01 - 42</td>
</tr>
</tbody>
</table>

**Example Naming:**

- PAL21307XP01
- PAL21307TI01
- PAL21407XP01
# Software on lab computers

## Adobe Software:
- Adobe Acrobat 7.0 Standard
- Adobe Distiller 7.0
- Adobe Bridge
- Adobe Photoshop CS2
- Adobe Imageready CS2
- Adobe Acrobat Reader 7.0

## Advanced Programming Tools:
- Active Perl 5.8.8 Build 817
- Java 1.5
- MSXML 4.0
- PHP
- Win Merge

## GIS Tools:
- ArcView GIS 3.2a
- Seagate Crystal Reports
- ArcExplorer

## IM Applications:
- AIM
- Gaim
- Skype
Software on lab computers

Internet Tools:
- FeedReader
- Google Earth
- Dreamweaver 8
- MapEdit
- Microsoft GIF
- Animator
- NoteTab Light
- Putty
- Web Media Publisher Pro 3
- WinSCP

Media Tools:
- Roxio Easy CD Creator 5
- Audacity
- Digital Voice Editor 2
- iTunes
- Microsoft ActiveSync
- OverDrive Media Console
- PowerDVD
- Quicktime
- RealPlayer
- Windows Media Player
- Windows Movie Maker

Microsoft Office
- Access 2003
- Excel 2003
- Powerpoint 2003
- Project 2003
- Visio 2003
- Word 2003
Software on lab computers

Open Office:
- Base (Databases)
- Calc (Spreadsheets)
- Draw (Graphics & Diagrams)
- Impress (Slideshows)

Refworks:
- Write n Cite

Sagebrush InfoCentre ILS

Statistical Software
- Minitab 14
- SPSS
- SAS

Web Browsers
- Internet Explorer
- Mozilla Firefox
Software on lab computers

Start Menu Design
- Organize applications by general categories
- Allow for easy access of all applications

Desktop shortcuts
- Put frequently used applications on the desktop as shortcuts
- Include shortcuts to new additions to the image (Google Earth, GAIM, Open Office, Audacity)
How do you choose?

Standard applications on college computers
- Microsoft Office (Word, Powerpoint, Excel, Access)
- Web Browsers (Internet Explorer, Netscape (why?))
- Adobe Photoshop CS2, Macromedia Dreamweaver 8, and Adobe Acrobat Standard (key served)

GSLIS specific applications/ LIS course curriculum support

Open source applications
- inexpensive (usually free)
- in development stages, open for contributions by general public

Non-standard (supporting audio/video initiatives)

Listen to suggestions from community
Building a computer image

- Take a computer out of commission from the lab for image creation purposes
- Re-format and erase hard drive
- Create a base image which includes the operating system and standard applications
- Compile list of GSLIS specific applications and add individually to base image
- Log in as specified user
- Set start menu organization, web browser settings, and desktop shortcuts
- Copy user to the default profile folder (enables all users to grab profile settings from this location for a consistent and constant structure)
Deploying computer image

Many ways to deploy computer images:

- Send over the network (sometimes not possible due to image size and bandwidth)
- External hard drive (usually very slow)
- External media such as cd-rs and dvd-rs (slow and prone to hardware errors)

Imaging in GSLIS Tech Lab

- After image was created, it was copied to external firewire hard drive (8 GB in size)
- Symantec Ghost Cast Server was used to create an imaging session from office PC
- Lab computers were booted with ghost boot cd to connect to the session
- Image was sent out to lab computers via multicasting in less than 10 minutes
Symantec Ghost

Ghost is a disk cloning application

Acronym for **General Hardware-Oriented Software Transfer** (GHOST)

**Multicasting** allows sending a single image simultaneously to many machines without putting greater stress on the network than by sending an image to a single machine.
Security Concerns and Precautions

- Deep Freeze is on all machines in the Tech Lab
- Application that preserves all settings and applications on lab machines
- When computer is restarted, it automatically returns to initial state
- Encourages saving to personal network folder, which is secure and protected
- Desktop is not a safe place to save!
- Thaw space on all machines
- Weekly automatic Operating System updates are sent at non-peak lab times
- Physical locks
  - For security and to prevent theft of machines and displays
Security considerations

- Simmons network username and password required to use Tech Lab computers
- Allows for easy access to network folder when saving files
- Shortcut on desktop for Y drive
- Allows only those with usernames to use computers
- Security precautions are linked to service standards
- Compromised machine or corrupt image would be re-imaged in minutes
- Minimize down time for patrons
Questions?

Are there any questions?