

GSLIS Technology

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



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GSLIS

GSLIS Technology Group

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

Liasion 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

Building Name Room Number Academic Year Operating System Sequential Number

PAL	213 214	07	XP	TI	01 - 42
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PAL21307XP01

PAL21307TI01

PAL21407XP01



PAL21307XP30



PAL21307XP31



PAL21307XP32



PAL21307XP33



PAL21307XP34



PAL21307XP35

PAL21307XP29



PAL21307XP28



PAL21307XP27



PAL21307XP26



PAL21307XP25



PAL21307XP24



PAL21307XP09



PAL21307XP10



PAL21307XP11



PAL21307XP12



PAL21307XP13



PAL21307XP14

PAL21307XP36



CSPrint
Monitor



CSPrint 3



PAL21307XP08

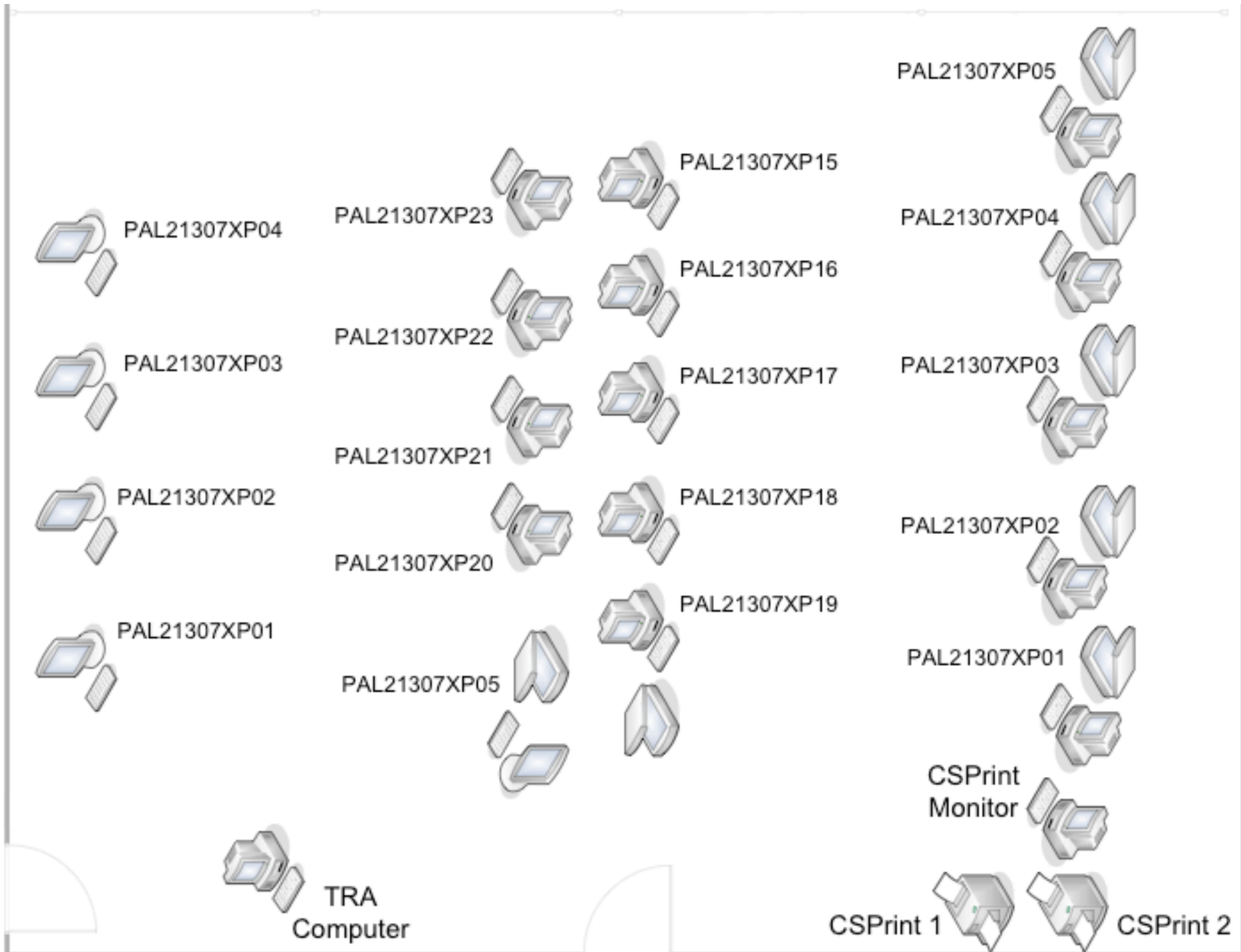


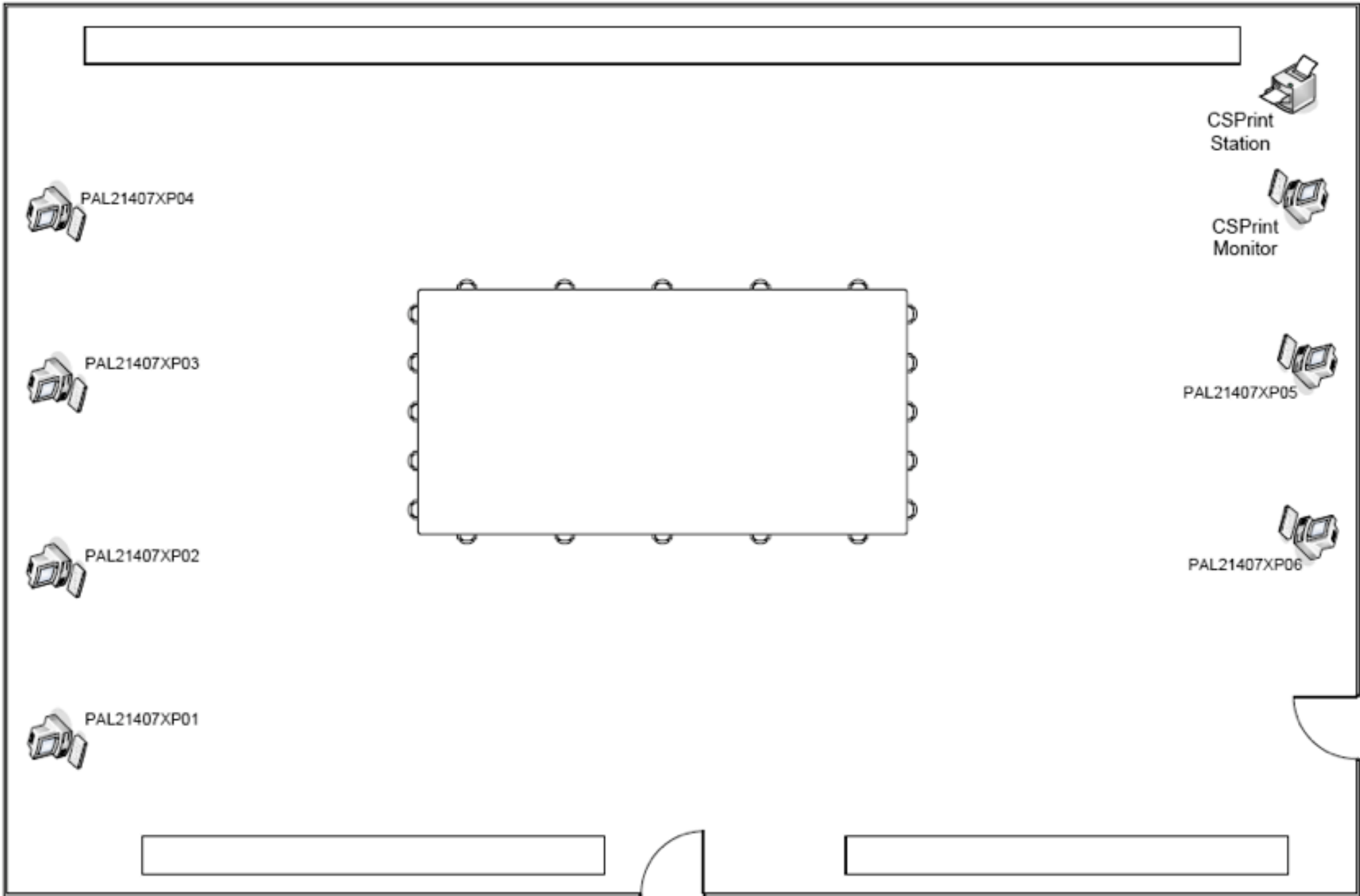
PAL21307XP07



PAL21307XP06







CSPrint
Station

CSPrint
Monitor

PAL21407XP04

PAL21407XP03

PAL21407XP02

PAL21407XP01

PAL21407XP05

PAL21407XP06

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

GIS Tools:

- ArcView GIS 3.2a
- Seagate Crystal Reports
- ArcExplorer

Advanced Programming Tools:

- Active Perl 5.8.8 Build 817
- Java 1.5
- MSXML 4.0
- PHP
- Win Merge

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)

Reworks:

- 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)

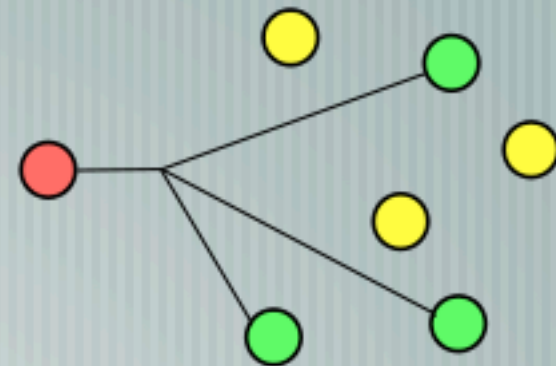
Imaging in GSLIS Tech Lab

- 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 **G**eneral **H**ardware-**O**riented **S**oftware **T**ransfer (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?