

# Introduction to Facilities 2007

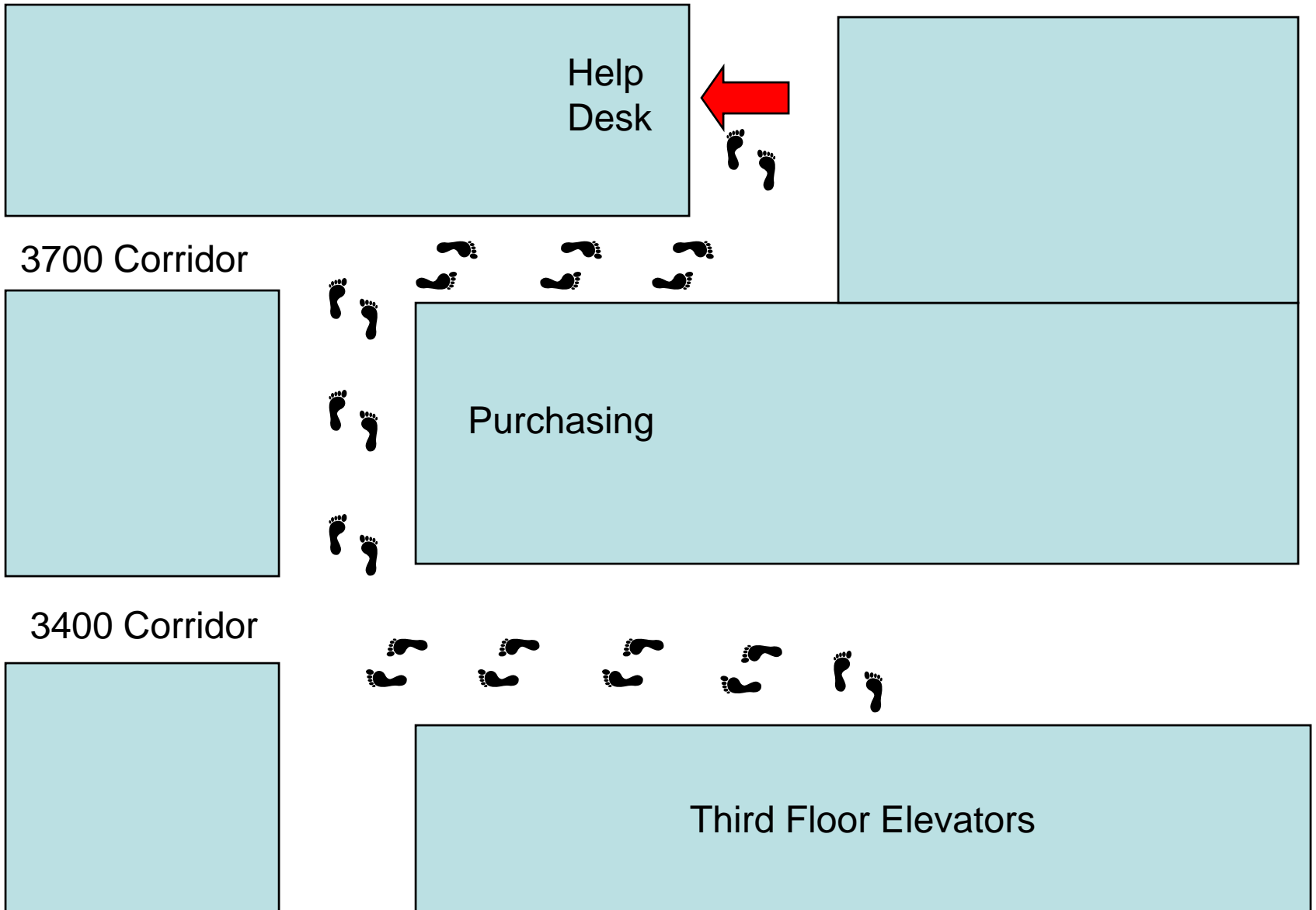
<http://www.cs.cmu.edu/~help/introduction/index.html>

August, 2007

# Main Computer Support Groups

- SCS Computing Facilities
  - Wean Hall 3613
  - [help@cs.cmu.edu](mailto:help@cs.cmu.edu) or 268-4231
  - 9 am - 5 pm, Monday - Friday
- CMU Computing Services
  - Andrew accounts
  - Clusters
  - CMU Computer Store
  - [advisor@andrew.cmu.edu](mailto:advisor@andrew.cmu.edu) or
  - Call the CMU Help Center at 268-HELP

# How to Find Us – WEH 3613



# What We Do

- SCS Help Desk, documentation
- Printing - Toner, Paper, and Repairs
- Hardware repairs for CMU owned assets
- Software licensing and support
- Networking, Email
- Purchasing and Property Management
- Network Backups
- Anything else related to SCS computing

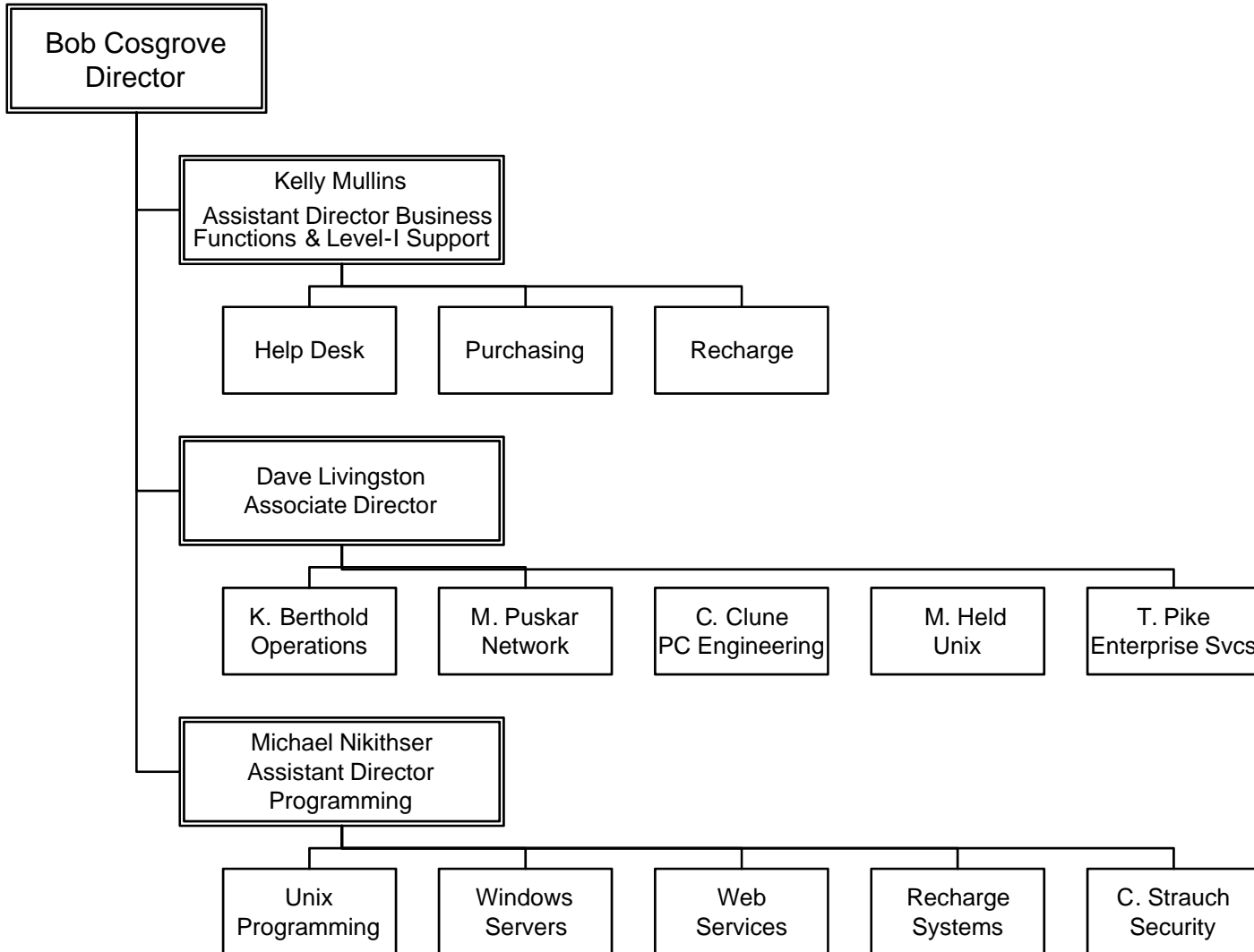
# What We Don't Do

- Maintain Personally Owned Equipment
- Support non-provided software
- Cell Phones or Pagers
- PDA's

# Other Support

- Contact skees@cs.cmu.edu
- Furniture
- Light bulbs
- Telephones
- Keys
- Ergonomic issues
- Other non-computer things

# Computing Facilities, SCS



# Operating Systems Supported

- Windows XP Not Vista

Vista is not supported, because baseline software does not function properly

- Fedora Core 3, Fedora Core 5, Fedora 7
- Solaris
- MacOS 10.4.X (Tiger)

# Your CS Supported Workstation

- If it breaks, we'll fix it.
  - Do not make hardware repairs/swaps/upgrades yourself
    - It may void the warranty, among other reasons
- Do not change the IP address
- Do not relocate your machine, we will do it for you
  - Contact [help@cs.cmu.edu](mailto:help@cs.cmu.edu) and we'll move it for you
- Do not turn it off at the end of the day
  - Backups and Software updates will NOT happen
- If you customize it and break it
  - We will re-install the facilitated environment
  - We will NOT debug your customizations
- It is CMU property, not your property
  - Don't give it to someone else

# Your SCS Supported Workstation(con't)

- UPS stays with office
- Plug machine into UPS
- Beeping UPS will indicate a bad battery or loss of input power
  - contact [help@cs.cmu.edu](mailto:help@cs.cmu.edu)

# Accounts and Passwords

- You should already have:
  - An SCS Kerberos identity with password
  - An Andrew account and password
  - Mailbox on our Corvid system
  - Mailbox on Andrew mail system
  - SCS Windows domain account
  - To login to Windows hosts in the SCS domain
    - Choose the SCS Domain from the Domain dropdown Menu
    - To change your password:
      - Press ctrl + alt+del after logging in and choose the change password button

# Other Kerberos Instances

- SCS .mail Kerberos instance password
  - To access SCS Corvid services
- A SCS .root Kerberos instance password
  - For root access to Unix hosts
- A SCS .remote Kerberos instance password
  - For dialing into SCS from remote sites
- Create and change these with jeeves (Help Desk must create .root)

# Your Andrew account

- To see that you have an account  
finger first.lastname@andrew.cmu.edu
- Password is probably first 8 digits of SSN  
(change it!)
- To change your mail forwarding:  
Use Andrew “forward” command or  
MyAndrew (<http://www.cmu.edu/myandrew>)
- Use a cluster machine or ssh to  
unix.andrew.cmu.edu
- Your Andrew account will work on virtually all  
Andrew machines

# The SCS Unix environment

- We've made many modifications to "standard" Unix:
  - Modified vendor login, su, telnet, rsh, and ssh; these utilities were changed to support our Kerberos authentication and authorization methods.
- All supported platforms use AFS for central file storage
  - AFS reference <http://www.cs.cmu.edu/~help/afs/index.html>
- SUP and Depot for software distribution
- Many configuration files globally maintained
- You can customize your system, will need root to do so
- Before changing anything
  - Read [http://www.cs.cmu.edu/~help/unix\\_linux/admin.html](http://www.cs.cmu.edu/~help/unix_linux/admin.html)

# AFS File Storage

- Main central file storage in SCS (and Andrew)
- Maximum quota is 10 GB per user volume
- Use jeeves to raise your quota
  - If you run out of quota when writing a file you lose
- AFS permissions are not the same as Unix permissions
  - Access is generally per-directory
  - Your top-level directory is readable by default
- Accessible from Windows XP, MacOS
  - Via OpenAFS client (preinstalled on Windows)

# The Jeeves Service

- Perform routine administration tasks yourself
  - Create .mail and .remote Kerberos instances
  - Change .mail passwords
    - Can also use Unix kpasswd command to change main Kerberos
  - Change AFS quota
  - AFS misc collection volume maintenance
  - Create a symlink in /afs/cs/Web/People to your WWW area
  - Create a CorporateTime calendar server account for yourself
- To use jeeves, telnet to jeeves.srv.cs.cmu.edu with a CS-supported Kerberized telnet (authenticated)
- Windows users ssh to linux.gp.cs.cmu.edu first

# Corvid

## (SCS E-Mail Environment)

- You have a mailbox on our Corvid mail server
- Most IMAP and POP mail clients will work
  - supported clients: Outlook, Thunderbird, Evolution, Pine, OS X “Mail”
  - server is `imap.srv.cs.cmu.edu`
  - 2GB mail quota
- Use webmail client for remote mail access
  - <http://webmail.cs.cmu.edu>
  - use your .mail kerberos password to login

# SCS Mail Addressing

- You can use either of the following formats to address mail:
  - “Userid”+@cs.cmu.edu (preferred)
  - Full [firstname.lastname@cs.cmu.edu](mailto:firstname.lastname@cs.cmu.edu)
- To find addresses use LDAP lookup:  
<http://www.fac.cs.cmu.edu/corvid/lookup>
- You can set up a cmu.edu mailing address
- Forward your Andrew mail to SCS
  - These are two separate mail drops

# Backups

- We do nightly network backups of:
  - Unix (partitioned for consistent backups, preferably less than 50 GB)
  - Windows 2000/XP (100 GB max per machine with 50 GB partitions)
  - Macintosh 10.X (100GB max per machine with 50 GB partitions)
  - AFS
- If dual-boot, only the OS that is on the network and running overnight will be backed up
- Keep your machine running and on the network overnight
- For Windows and Mac users:
  - close your apps overnight
- Open files will not get backed up!
- Laptops
  - By request and they are backed up during the day when they are placed on the wired network

# Getting Software

- On Unix:
  - Most software (aka "misc collections") is volunteer maintained  
Volunteers needed!!
  - Located in /usr/local/bin (depoted from AFS)
- On Windows:
  - Monolith is the software distribution server that houses our baseline software install packages
  - Browse \\Monolith\PC\_DIST to see what's there
- My Andrew is the distribution server for many Campus licensed packages
  - <http://www.cmu.edu/myandrew>
- On Macs:
  - Most software available from <http://www.cmu.edu/myandrew>
- Pick up the install media from the Help Desk

# Misc. Maintainers

- What do misc. maintainers do:
  - Distribute and update software collections
  - Help others with using software
- Why be a misc. maintainer?
  - To get experience in managing software
  - To share software with colleagues in SCS

For more info or to volunteer contact [help@cs.cmu.edu](mailto:help@cs.cmu.edu)

# Licensed Software

- Contact help@cs before buying anything
  - We can often get things much cheaper
- Send CMU charge number with purchase request to help@cs
- Don't pirate software
- SCS software Licensing information:
  - [http://www.cs.cmu.edu/~help/software\\_licensing](http://www.cs.cmu.edu/~help/software_licensing)
- Computing Services licensing information:
  - <http://www.cmu.edu/computing/software/Index.html>

# Printing

- Complete Printing Information:
  - <http://www.cs.cmu.edu/~help/printing/>
- Many B/W Printers, Fewer Color
- Use color printers only when necessary
  - Color printers are for color printing
  - Expensive - \$0.50/page
- Preview your output before printing
- Use SCS printers for SCS work
- Not for your new company
- Toner Replacement, Printer Problems
  - Call SCS Operations (x8-2608) at anytime

# Terminal Services

- Provides casual access to UNIX and Windows environments
- For access to UNIX, use “ssh linux.gp.cs.cmu.edu”
- For access to Windows, use “/usr/local/bin/ts std”
- For more information, see:  
[http://www.cs.cmu.edu/~help/unix\\_linux/terminal.services.html](http://www.cs.cmu.edu/~help/unix_linux/terminal.services.html)

# Connecting to the SCS Network

- Wired Ethernet
  - <http://www.cs.cmu.edu/~help/networking/netregister.html>
  - Switched 100 Mb connection
- VPN Service
  - Client for Windows/Mac/Linux
  - Use /remote instance
- Remote Access with iPass
  - iPass client for Window/Mac
  - 180 countries
  - T-Mobile Hot Spots
  - Traveling only
- Wireless
  - Available through Computing Services
  - <http://www.cs.cmu.edu/~help/networking/wireless.html>
    - Not intended to be primary means of network access

# Internet Connectivity

- Commodity Internet
  - Use CMU's Internet connection
  - 175 Mb in each direction
  - Computing Services enforces bandwidth quotas
    - Limit of two (2) Gigabytes of either inbound (from the internet) or outbound (to the internet) bandwidth in a single day.
- Internet 2
  - OC-48 connection
  - Computing Services does not enforce bandwidth quotas for Internet 2

# Security and the SCS Network

- No firewall, with the exception of Windows XP SP2
  - We are constantly scanned for security holes
- Symantec antivirus and Spysweeper anti-spyware installed on all Windows machines, updated regularly
- All hosts need up-to-date security patches
  - Patches will be automatically installed and prompt for a reboot
    - Reboot when prompted, updates will not be active otherwise, this includes
  - This includes software you install yourself
  - Accept updates when notified (Globe with Windows icon inside of it)
  - Run Windows update regularly
- Patch 3<sup>rd</sup> party/Open Source software immediately after installing it!
  - DO NOT install IIS on your Windows box without patching it!!!!
  - Utilize the URLScan ISAPI filter and IIS Lockdown Wizard
- Set passwords for everything
  - Especially Microsoft SQL Server, and local Administrator passwords
  - Use good passwords

# Acceptable use of the facility

- No commercial use
- Do not hack or scan other machines (even if they are scanning you), or violate people's privacy
- Just because something is readable doesn't mean it's acceptable to do so
- You are responsible for abuse of your machine caused by local modifications or account creation
- Web servers should not provide unrestricted access to AFS
- File sharing software should not have writable anonymous areas for download

# Acceptable use of the facility (cont.)

- Keep security patches up-to-date if you install or maintain software
- Do not create accounts for untrusted people
- Be reasonable wrt use of shared resources
  - Printers
  - Shared Unix machines
- Do not hook anything up to the network without netregistering it with Facilities
  - <http://www.cs.cmu.edu/~help/networking/netregister.html>
- Do not consume excessive bandwidth
  - Distributing movies, etc
- Network use policy
  - [http://www.cs.cmu.edu/~help/networking/net\\_use.html](http://www.cs.cmu.edu/~help/networking/net_use.html)

# Sources of Information

- SCS Facilities Help Pages
  - <http://www.cs.cmu.edu/~help>
  - Useful reading
  - Check for new information/updates
- Andrew Computing Services
  - <http://www.cmu.edu/computing/>
- Zephyr: instant messenger for Unix
  - Frequently Zephyred questions and Zephyr archive
    - <http://zarchive.srv.cs.cmu.edu/fzq/>
- Newsgroups
  - cmu.cs.scs
  - cmu.cs.general for non-official questions/announcements/etc
- Your colleagues

# Getting Help from SCS Facilities

- Send mail to [help@cs.cmu.edu](mailto:help@cs.cmu.edu)
  - Include all relevant information
    - Hostname, asset number, OS, machine location
    - Brief problem description
    - How to contact you (if email is part of the problem)
    - Put URGENT in title if problem is time critical
      - Best to call if it's an emergency
    - Avoid sending mail to individual staff members
      - ...people go on vacation...
- Call the SCS Help Center (x8-4231), 9-5, M-F.
  - Evenings/weekends, forwarded to SCS Operations (x8-2608)
- Visit the SCS Help Center at Wean 3613