

Computer Systems Lab

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Facilities
Computer Sciences Department

New Grad Student Orientation

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Welcome!

There is too much to tell you today, but I'll try and cover enough to get you started.

The Computer Systems Lab

Our Mission:

Support the effective, efficient and secure use of Information Technology by Students, Faculty and Staff in Teaching, Learning, Research and Public Service

Who We Are

- 6 full-time staff

David Parter, Director
James Babb
Tim Czerwonka

Jacob Ela
Jerel Mackey
John Perksin

- 10-12 undergraduate students

- Currently 9 students, including 2 starting next week
- 10-30 hours/week
- School work comes first – especially at exam time

What We Do

- Develop and Support computing facilities for the Computer Sciences Department
 - Research, Instruction and Administration
- Desktop workstations, Instructional Labs, Servers, Infrastructure, special projects & facilities

Contacts & Information

- Email: lab@cs.wisc.edu
 - Ticket system
- Service Desk: room 2350 CS
- Phone: 262-2389
- Office Hours:
 - 8-12, 1-5 M-F
- <http://cs.wisc.edu/csl>

CSL Computing Environment

CSL Computing Environment

- Operating Systems
- File Systems and Storage
- Application Software
- Desktops, Servers, VMware virtual servers
- Network services: Mail, Web, Printing, etc
- Networks

Your CS Account

- Unified account for most CSL services:
Linux, Windows, Mail, etc
 - Single username & password
 - NOT the same as your campus NETID
- *username*@cs.wisc.edu email address

Security Issues

- The CSL takes security very seriously
 - Devote a significant effort to security issues
 - Monitor security mailing lists
 - Up-to-date patches
 - Secure configurations
 - Goal: Protect our users' privacy, file integrity, resources
 - Allow flexibility appropriate for a research university
Computer Sciences department

Keeping Your Account Secure

- Do NOT share your password with anyone
- Do NOT tell the lab your password
 - We will NEVER ask for your password
 - Beware of “phishing” email or web sites that ask for your username and password
- Do NOT use the same password for web sites and other accounts

Keeping Your Account Secure

- Log out when not using your workstation & when you leave
- Check ACLs to assure correct access
- Report anything suspicious to lab@cs.wisc.edu

Keeping Your Laptop Secure

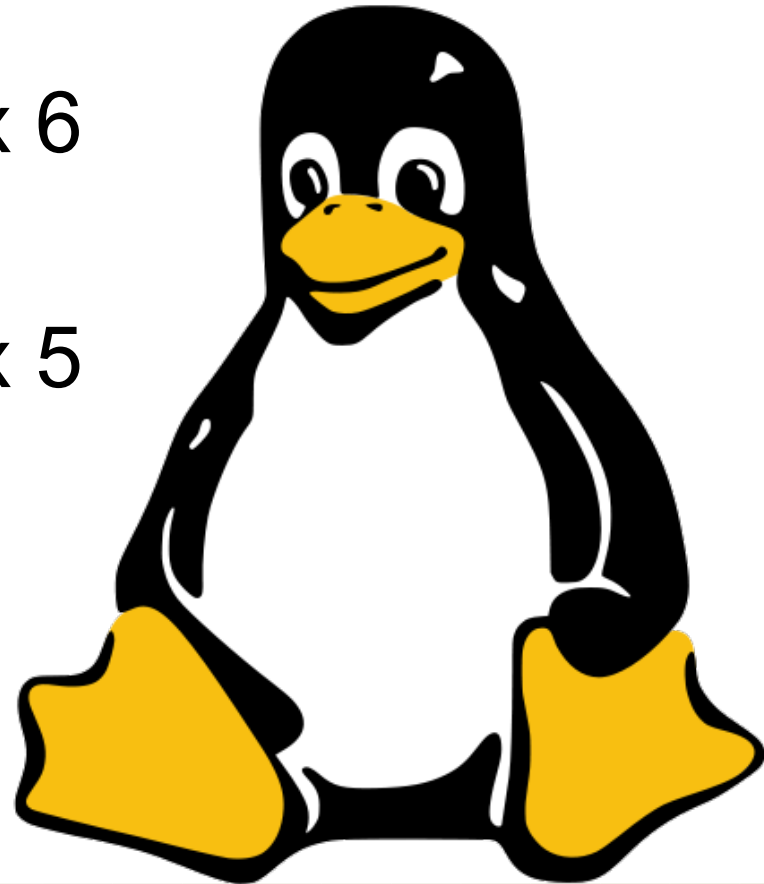
- Free anti-virus software from DoIT
- Apply software and operating system patches and upgrades
- Use a good password on your laptop
 - Not the same password
- Use a VPN or SSH tunnel for remote access
 - Don't trust wireless networks

Activating your CS account

- Bring your WisCard to the CSL
 - Room 2350 CS
- Username: up to 8 characters
 - Pick you username well
 - Have a second choice ready
 - Also your email address
 - Used by fellow students, faculty, prospective employers, ...
 - Can't be changed once set

Supported Operating Systems: Linux

- Redhat Enterprise Linux 6
 - 64-bit only
- Redhat Enterprise Linux 5
 - 32-bit & 64-bit
 - Phase-out will be complete this fall



Supported Operating Systems: Windows Desktops

- Windows 7
 - 64-bit only
 - Windows File Server
 - Also AFS file system
- Remote Access
 - Remote Desktop Server (soon)



Supported Operating Systems: Windows Servers

- Windows Server 2008
 - 64-bit only
 - Windows infrastructure
 - Research servers if needed

Supported Operating Systems: Apple OSX

- OSX 10.7 (Lion)
- Macintosh instructional lab (room 1370)
- Future desktop support possible



Filesystems

- AFS
 - Linux home directories, project space, software
 - Available on Windows 7
 - AFS Access Control Lists/Permissions NOT the same as Unix permissions
- Windows NTFS file server
 - Windows 7 roaming profiles & default file locations

Backups

- Backups != Archives
 - Backups are for recovery from catastrophic failure
- AFS
 - Home directories & project space
 - NOT including /common/tmp
- Windows file server
 - User profiles & file space, project space
- IMAP mail server
 - All mail folders

Backups

- Linux Desktop Workstations
 - Mail queue, special file systems on request
 - DOES NOT INCLUDE /scratch or /tmp
- Windows Desktop Workstations
 - Local disk for catastrophic failure recovery
- Instructional Workstations:
 - No local file backups

Networks

- Ethernet to all desktops
- 802.11a/g/n WIFI
- Border and Internal Firewalls
- Specialized networks for research projects
- All networks are actively managed
 - Can't connect a computer to the network on your own

CSL Wireless Networks

- Covers all CS areas of CS building
 - All of Unit III (tower)
 - 1st floor classrooms & labs
 - Condor area Unit II
- Firewall restricts inbound traffic
- Printing to CS Printers
 - See CSL web pages for more details

COMPSCI Wireless Network

- 802.1x (supported by most WIFI devices)
- SSID: COMPSCI
- Security: WPA2-Enterprise
(WPA2 with 802.1x authentication)
- Authentication: CS Username and Password
- See CSL web site for details

COMPSCI-OPEN Wireless Network

- For devices that can not use 802.1X
- SSID: COMPSCI-OPEN
- No Network Encryption
 - Strongly encouraged to use a VPN: WiscVPN available from DoIT
- Authentication: CS Username and Password via web browser

CS Email

- Use web form to manage email delivery, forwarding, spam filtering
- *username*@cs.wisc.edu
- IMAP server: imap.cs.wisc.edu
- Web mail: webmail.cs.wisc.edu
 - Not recommended for regular use, good when traveling, away from laptop/desktop, etc
- Mailing lists via Mailman

Instructional Labs

- Linux, Windows and Mac labs
- 1st Floor CS Building
- 7AM – 1AM every day when CS building open
- Priority for instructional work – Not for research projects
- Be considerate of your fellow students

Instructional Labs: Linux

- “mumble” lab room 1350
 - 40 workstations
 - Redhat Enterprise 6
 - mumble-01.cs.wisc.edu – mumble-40.cs.wisc.edu
- Remote access via SSH
- Remote desktop via VNC soon

Instructional Labs: Windows

- Windows 7
- “cyclops” lab room 1358
 - 8 workstations: dual 24” monitors
 - 4 workstations: single 24” monitor
- “poseidon” lab room 1366
 - 20 workstations: dual 24” monitors
- “odysseys” lab room 1368
 - 15 workstations: single 24” monitor

Instructional Labs: Apple

- Room 1370
- 19 mac minis
 - Dual monitor
- 11 27" imacs

Printing and Printers

- 1st floor:
 - Black & White laser printers
- 3-7th floors:
 - Color laser printer/copiers
 - PLEASE print to B&W print queue unless you NEED color printing
- Unlimited print quota
 - Please don't abuse it

Office Workstations

- Teaching Assistants & Fellowship students
 - PC & monitor provided by CS Department
 - Redhat Enterprise Linux
 - Redhat Enterprise 6 if capable
 - Redhat Enterprise 5 if not
 - Managed by CSL
 - Fixed configuration, can't add users or change hardware

Office Workstations

- Research Assistants
 - PC & monitor provided by your advisor
 - Linux
 - Redhat Enterprise 6 for all new computers
 - Redhat Enterprise 5 for some computers, finish upgrades this fall
 - Windows
 - Windows 7
 - Managed by CSL

Office Workstation Accounts

- Offices assigned by Perry
- TA desks/workstations
 - Desks/Workstations typically not assigned: work it out with your office mates
 - Email lab@cs.wisc.edu when you claim a workstation
 - Office number, workstation name
- RA workstations provided/assigned by advisor
- Cascade effect of office moves

Workstation Care

- Please don't turn off or reboot CSL workstations
- Please don't move the workstation
 - Send email to lab@cs.wisc.edu to request workstation move
- Clean LCD monitors with screen cleaner
 - Do NOT use window cleaner

Workstation Care

- Wipe the keyboard with a damp cloth
- Ask for replacement keyboards/mice if needed
- Report problems to lab@cs.wisc.edu

Software Support, Installation and Upgrades

- Critical Instructional software doesn't change during the semester except in emergencies
- Linux:
 - Multiple versions of software packages often available in /s/package-version/bin
 - Anything else: ask, we'll try
- Windows software: ask, we'll try
- Suggestions welcome

CS Web Servers

- www.cs.wisc.edu
 - CS Department home page
 - Project web sites
- pages.cs.wisc.edu
 - Personal web pages
 - Files in `~/public/html`

CS Web Servers

- www-auth.cs.wisc.edu
 - SSL only
 - Authenticate with your CS username and password
 - Authenticated services
 - Web forms for routine requests
 - Room reservations
 - Mail list archives
- Project web/application servers as needed
- Per-user application servers if needed

Contacting the Systems Lab

- Use email if possible
 - lab@cs.wisc.edu
 - Automatically entered in request tracking system
 - Include lab@cs.wisc.edu in any follow-up mail
 - Include [CSL #NNNNNN] in Subject: line
 - Provide as much information as possible
 - Don't assume we know the context
 - Appropriate follow-ups to the same CSL #
 - New topics: new mail to lab@cs.wisc.edu
 - New request assigned to the appropriate staff

Contacting the Systems Lab

- Use a web form if there is one
 - <https://www-auth.cs.wisc.edu>
 - Best way to assure fast, correct service
- Walk-in service desk, room 2350
 - 8-12, 1-5 M-F

Contacting the Systems Lab

- Plan ahead
- Read the policies and web pages
- Open to suggestions
 - lab@cs.wisc.edu
- Please understand, special cases are hard
- Busy times: start and end of each semester

Welcome, and Good Luck!