CSCF Services

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Slides available on:
https://cs.uwaterloo.ca/cscf/grad/
CSCF Structure

• 3 groups
  • Infrastructure – provides servers, network infrastructure, Active Directory, purchases all computing equipment for the School
    • Manager: Dave Gawley, plus 4 staff
  • Teaching and Administration: supports all undergraduate teaching labs, plus administrative staff, the Instructional Support Group and School meeting rooms and audiovisual services
    • Manager: Omar Nafees, plus 6 staff
  • Research Support: provides computing support for Faculty, Grads, PostDocs and Research Visitors
    • Manager: Lawrence Folland (me), Mike Gore, Ronaldo Garcia, Gordon Boerke, Lori Paniak

• [https://cs.uwaterloo.ca/cscf/about/personnel-pictures](https://cs.uwaterloo.ca/cscf/about/personnel-pictures)
Workstations when you arrive

• Research grads
  • Supervisor has choice of:
    • Thin Client (no admin access)
    • PC desktop – Windows / Ubuntu
    • PC Laptop – Windows / Ubuntu
    • Mac Mini
    • Provide equipment themselves

• Course Masters
  • Shared room (DC 3335) – iMacs / PCs

• [https://cs.uwaterloo.ca/cscf/faculty/gradworkstation](https://cs.uwaterloo.ca/cscf/faculty/gradworkstation)
Research Support

• Supervisors “subscribe” to support
• Pay a fixed fee per term based on desired quantity of support
• Provides for a predictable fee and level of support
• Each group/faculty assigned a “Point of Contact” within the Research Support Group – that’s your “go to” person
• Other RSG staff will also help as needed
• Staff are familiar with Windows, Linux and Mac to varying degrees plus most system administration tasks, cluster management and software installation
• Speak to your PoC about software installations, OS upgrades, borrowing hardware, eg: PCs for experiments, extra screens, etc.
CSCF Help Desk

• We have a Help Desk who can handle certain tasks
  • Setting passwords
  • Loan of equipment – cables, display adapters, external drive bays, keyboards, mice
  • Assist with wireless issues
  • Take a problem report and get it assigned to appropriate staff
  • x31100, DC 2608 or cscfhelp@uwaterloo.ca

• https://cs.uwaterloo.ca/cscf/about/cscf-help-desk
Compute Resources

• School Linux servers
  • linux.cs.uwaterloo.ca (Ubuntu 16.04)
  • ubuntu1404.cs.uwaterloo.ca (Ubuntu 14.04)
  • linux.student.cs.uwaterloo.ca (for course work, Ubuntu 14.04)

• School Windows servers
  • windows.cs.uwaterloo.ca (available via RDP)
  • windows.student.cs.uwaterloo.ca

• https://cs.uwaterloo.ca/cscf/general/hosts
File Storage

• Netapp – 20GB per student
  • Home directory under linux.cs
  • P: drive under Windows.cs and Windows workstations
  • Smb://smb-files.cs.uwaterloo.ca
  • ftp.cs.uwaterloo.ca

• Backup
  • NetApp files are backed up daily
  • Snapshots: cd .snapshot in any directory, files stored by hour, day, week

• https://cs.uwaterloo.ca/cscf/howto/snap
NextCloud (DropBox-like service)

- Locally stored
- Up to 500GB per grad student
- Access at vault.cs.uwaterloo.ca
- Download NextCloud clients
- Documentation: https://cs.uwaterloo.ca/twiki/view/CF/Vault
Web pages

• www.cs.uwaterloo.ca/~youruserid

• Files in NetApp folder under “~/public_html”

• Create / update index.html

• Make sure to assign “world read” to your web files
  • %chmod o+r index.html
Email

• youruserid@uwaterloo.ca
  • -> redirect wherever you prefer
  • Your own account (Gmail, Hotmail, etc)
  • Connect.uwaterloo.ca (Microsoft Exchange – Campus Email/Calendar tool)
  • You can request a Connect account if you don’t have one

• You can also configure a “friendly” email address, eg:
  • Lawrence.Folland@uwaterloo.ca
  • Do that in http://watiam.uwaterloo.ca
    • User Access
    • Update Profile
Printing

• Can print to any of our printers listed on our CUPS server:
  • http://print.cs.uwaterloo.ca:631/printers/

• Setup notes:
  • https://cs.uwaterloo.ca/twiki/view/CF/WindowsPrinting
  • https://cs.uwaterloo.ca/twiki/view/CF/LinuxPrinting
  • https://cs.uwaterloo.ca/twiki/view/CF/MacPrinting

• Note: printing is tracked but no longer quota limited

• https://cs.uwaterloo.ca/cscf/printing/environments/general-computing
High Performance Computing (SCS)

• Faculty-provided servers/clusters
  • Syn cluster – Salem/Wong/Brecht (Data Systems Group)
  • Ripple – Ian Goldberg (CrySP)
  • CloudNetwork – Raouf Boutaba
  • Cabernet – Justin Wan (SciCom)
  • Chardonnay – Justin Wan (SciCom)
  • M160 – Ming Li (Bioinformatics)
  • Daytona – Poupart/Hoey/Lizotte (Health Informatics)
  • Husky - Ihab Ilyas (DB)
  • Novo – Bin Ma (Bioinformatics)
  • Various other servers

• https://cs.uwaterloo.ca/twiki/view/CF/HighPerformanceComputingResources
HPC - SHARCnet

- SHARCnet provides batch computing for large numbers of cores / memory
- 1 TB storage
- Requires a SHARCnet account based on faculty sponsorship (your supervisor needs to have an account to sponsor yours)
- There is no cost to use these resources
- Systems: https://www.sharcnet.ca/my/systems/index

- https://cs.uwaterloo.ca/twiki/view/CF/HPC#SHARCnet
Software

• Windows – can be put on any Research / Teaching machine
• MS Office – campus license
• Visual Studio – free Academic license
• VMWare – Math license – covers vSphere Enterprise Plus, vCenter, vCloud Director, vCloud Suite, Workstation, Fusion, etc. – for research / teaching machines
• Maple – free for UW users
• MatLab - $75/calendar year – speak to your supervisor
• Others – talk to your Point of Contact
Questions? Feedback?

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