CBCB Orientation
Sep. 1, 2011
Welcome to the CBCB

• CBCB mission
The University of Maryland Center for Bioinformatics and Computational Biology is a multidisciplinary center dedicated to research on questions arising from the genome revolution. CBCB brings together scientists and engineers from many fields, including computer science, molecular biology, genomics, genetics, mathematics, statistics, and physics, all of whom share a common interest in gaining a better understanding of how life works.

• We are part of UMIACS (what that is)
CBCB is a community
Where to get more information

• CBCB wiki
  – wiki.umiacs.umd.edu/cbcb
  – wiki.umiacs.umd.edu/cbcb-private  [only viewable from .umd.edu]

• UMIACS wiki
  – wiki.umiacs.umd.edu

• Lots of information on computer resources, how-tos, etc.
People resources

• Faculty

• Administration
  – Denise Cross
  – Fritz McCall and IT staff

• Your colleagues
Computer resources

• Desktop machine
  – note: slow network connection to servers

• High memory 'servers'
  – gingko, walnut, mulberry (16+ cores, 128+ GB RAM)
  – sycamore, privet, larch (4-8 cores, 32 GB RAM)
  – beech, hemlock (2 cores, 8 GB RAM)

• Cluster(s)
  – condor – ibis cluster (~250 cores)
  – hadoop – flickr cluster (~20 cores)

https://wiki.umiacs.umd.edu/cbcb-private/index.php/Compute
Computer usage policies

• Servers
  – pay attention to usage before starting job
  – do not use all cores

• Clusters
  – pay attention to usage before starting job
  – stage data to local disk (/scratch0, /scratch1)
  – concurrent accesses from 100+ machines will kill our file server
  – clean up after yourselves (don't leave stuff in /scratch*)
Disk space resources

• High performance
  – 3-PAR - /fs/sz* - currently being phased out
  – new scheme... next slide

• Attic (primarily for long-term storage)
  – /fs/szattic/*

• Scratch
  – NOT BACKED UP
  – central – volume name ends in scratch
  – local to servers - /scratch0, /scratch1, /scratch2

• Clinical
  – TBA

• NOTE: Backed up space very limited!

https://wiki.umiacs.umd.edu/cbcb-private/index.php/Storage
New volumes

Lab specific, backed up, little space
/cbcb/lab/carlk
/cbcb/lab/hcorrada
/cbcb/lab/mike
/cbcb/lab/mpop
/cbcb/lab/nelsayed
/cbcb/lab/smount
/cbcb/lab/sridhar

Scratch/not backed up, lots of space
/cbcb/personal-scratch – for personal stuff, local sandboxes, etc.
/cbcb/project-scratch – for specific projects
Disk policies

- Clean up old data
- Check in on long-running programs and disk usage
- Stage critical data to backed up space

- Clinical data – treat carefully. These data cannot leave the volume!
Printers/policies

- Room number in printer name
- e.g. ps-296-3120H – main Xerox printer in 3120H
- cps-296-3120Hb – color printer in 3120H
- suffix 'nb' means 'no banner page'

- No printing of personal material
- No copyright infringement
- Retrieve your print jobs promptly
- Daily pile in room 3120H – piles recycled weekly

https://wiki.umiacs.umd.edu/umiacs/index.php/Printing
Software resources

• /cbcb/software
  – anyone can install software

• /fs/szdevel/cbcb-core-software/
  – important core software
  – contact Dan Sommer for installs/updates of software installed here

• /cbcb/data
  – common useful datasets (e.g., NCBI database dumps, bowtie indices, etc.)

• DO NOT CONTACT staff@umiacs FOR SOFTWARE ISSUES!

• ...until you learn from other CBCB folks that it's an IT issue
Common areas

- Refrigerators
  - keep clean
  - label food with name/date
  - old/unlabeled food may be thrown away

- Microwave/toaster oven
  - must be attended
  - clean!

- Coffee machine
  - make coffee if pot empty

- Espresso machines
  - pay ($0.5/double shot)
  - clean

- Bathrooms, etc.
  - keep clean
  - inform Denise if any issues
Web presence

• Personal pages
  – /fs/cbcb-www/users/<yourlogin>
  – http://www.cbcb.umd.edu/~<yourlogin>
  – soon will migrate to content management system

• Publications database
  – http://www.cbcb.umd.edu/publications
  – login: CBCB
  – password: cbcb
  – Please add all publications as they appear

• Publications on your website:
  • http://www.cbcb.umd.edu/publications/authorByYear?n=pop&fn=Mihai
  • http://www.cbcb.umd.edu/publications/authorRecent?n=pop&num=5
Campus resources

• Health center
• Counseling
• UMDAlerts – www.alert.umd.edu
Campus policies, etc., and enforcement

• No tolerance for any form of harassment
• You can report any issues, confidentially* to
  – your advisor
  – Denise
  – me
  – UMIACS director (Amitabh Varshney)
  – Dean's office
  – etc.

  * confidential (according to U. lawyers) – only those who need to
    know will find out – certain violations must be reported up the chain

• Counseling center is truly confidential (they are not required
  to report issues)
TEAMWORK