SOE Computing Support

- Provided by Information Technology Services (ITS)
- ITS - SOE Local Services (*Techstaff* – *BE311*)
Where to get Help?

- **Computing** - use IT Request
  - IT Request web page: [http://itrequest.ucsc.edu](http://itrequest.ucsc.edu)
    - Use Problem Type “SOE Services”
  - Phone: 459-HELP  Email: help@ucsc.edu
  - ITS Local Helpdesk - Baskin Engineering Room 311
    - SOE Help Desk has limited hours; Main ITS help desk open 8a – 5p
  - support.soe.ucsc.edu has a lot of information
    - It should have more information. Please suggest entries!

*Baskin Technical Services*
[www.soe.ucsc.edu/administration/computer/](http://www.soe.ucsc.edu/administration/computer/)
SOE Grad Computing Resources

Graduate Computing Labs
- Baskin Engineering Room 316 – Grad Computing Lab
  8 each of Windows XP, Mac OS X
- Engineering 2 Room 201 - Computer Engineering

SOE Wireless (E2, Baskin Engineering, & PSB)
- Any grad can use SOE WPA (SSID: soe-wpa)
  Establish password via SOE change password webpage.
  Works with iPhones.
- Legacy SSIDs (network names) are “soe” and “soe-nat”.
  Faculty sponsor or techstaff enter your MAC address via our web page.

SOE Email
- Advisors will ONLY use this to contact you. Can forward to Gmail / etc.
Printing and storing files

Printers
• support.soe.ucsc.edu/printing has a list of available printers and how to print.
• Your printers are *psbprint* (default) and *psb3color*, located in PSB 309.

Storage
• Home directory – very little space
• Project areas – (combio, sysbio, lowelab, etc.) more space
• Workstation local disk – space in /scratch or /home/tmp
• Ask your advisor if you need more disk space

Backups
• Home directory backed up frequently, other areas not so much
• The bigger the space, the less frequent the backups
• When in doubt, DIY
SOE General Access Servers

Compute Servers - for long running processes
(matlab, cadence, CAD work, long-running compile or compute jobs)
- stardance  Fedora-5  2x2.6GHz AMD Dual Core 64 bit
- waterdance  Fedora-5  2x2.6GHz AMD Dual Core 64 bit
- firedance  RHEL  2x2.6GHz AMD Dual Core 64 bit
- solopteron  Solaris 10 x86  2x2.4 GHz AMD 64 bit
- Swingdance  RHEL  2x2.6 GHz AMD Dual Core 64 bit
- apache  Solaris 10  Virtualized system, Sun T2000

Login Servers - interactive work
(read email with PINE / etc, compose & compile code)
- empress  RHEL 4  2x3GHz Intel Xeon Dual Core
- moondance  Solaris 10  Virtualized system, Sun T2000
- sundance  Solaris 10  Virtualized system, Sun T2000

You can find status of servers when you login to one
Compute Clusters

**BME compute cluster – 4 years old**

bmecluster - 25 nodes, Dual 1.8 GHz AMD, 2 GB RAM

**SOE compute cluster – 5 years old**

soecluster - 16 nodes, Dual 2.6 GHz P4, 2 GB RAM

**Campus cluster – Coming soon?**

campusrocks - details forthcoming

**Special clusters (not generally available)**

- swarm – 256 nodes, Quad 2 GHz Intel, 8 GB RAM
- pk – 198 nodes, Dual 2 GHz AMD, 4 GB RAM
- memk – 8 nodes, Dual dual-core 1 GHz AMD, 32 GB RAM

We use ROCKS on all our clusters – See [http://www.rocksclusters.org](http://www.rocksclusters.org)
SOE Computing Policies – Major Points

Read & Understand Computing Policy:
http://www.soe.ucsc.edu/administration/computer/

Major Policy Issues

• Do not attempt to break into computing systems or other peoples accounts. - possible expulsion

• Do not illegally distribute/copy copyright materials (examples are music & movies). - you can lose your computing account & get sued by owner

• Do not install server software, network listeners or daemons without faculty approval AND techstaff notification (1 business day minimum); e.g. peer-to-peer (P2P) BitTorrent, eMule, sendmail, webservers - IIS, Apache, and DHCP.
SOE Computing Policies – Major Points (2)

Do not disconnect SOE systems from the SOE network

- Can plug laptop in to ports labeled “DHCP”
- SOE systems need to be left on for maintenance / updates
- We DO monitor systems and network ports!

Technical Support Staff implement policy, not create it

- Policy created by SOE Dean, Asst. Dean, and Computing Infrastructure Committee
- Policies are created to provide equal access and limit SOE liability
SOE Computing Policies – Major Points (3)

NO UNAUTHORIZED DISTRIBUTION OF COPYRIGHTED MATERIALS!

- Gets us busted.
- We monitor.
- Costs us traffic $$.
- Violation of UC ECP

Things that get you noticed by SoE eSecurity:

- BitTorrent
- eMule
- LimeWire
- Web servers
- IRC clients and servers
Notable Software and Services

- **Free Microsoft Windows Software (MSDNAA)**
  Windows OS (XP, Vista, Windows 7) and other Microsoft software for free.

- **Microsoft Office School-Wide License (MCCA)**
  Office 2007 license for $10 if you’re SOE employee (researcher, TA, reader).
  [http://its.ucsc.edu/software/mcca](http://its.ucsc.edu/software/mcca)

- **Some VMware available for free**: [projects/vmserver](http://projects/vmserver)

- **Apple student discounts (Bookstore)**

- **SlugLUG user group**: [http://sluglug.ucsc.edu](http://sluglug.ucsc.edu)
SOE Computing Accounts

- SOE computing account features
  - SOE Unix & Windows domain accounts - *SoE systems only*
  - SOE email with spam filtering
  - home directory with IMAP email & web email.
    *Grad student file storage limit 1GB including email.*
  
  • Access to Research Project directories
    *As approved by faculty researcher.*

  • Access to SOE only software and labs

Baskin Technical Services
www.soe.ucsc.edu/administration/computer/
How do I get root-level access

- Do you really REALLY need it? For your research? REALLY?
- Bring in own system
  - Requires faculty approval
  - SOE provides networking (on “research” network), power, space
- Move existing system to research network
  - Requires faculty/PI approval
  - Existing system loses central authentication, shared filesystems (/projects, homedirs, etc), and is configured for stand-alone operation
  - You manage all facets including security and updates / upgrades
- Complete “trusted user privileges” process
  - [http://www.soe.ucsc.edu/administration/computer/sudo_toa.pdf](http://www.soe.ucsc.edu/administration/computer/sudo_toa.pdf)
  - Most strict requirements, greatest potential for problems

Baskin Technical Services
www.soe.ucsc.edu/administration/computer/