Welcome to Statistics Orientation: Computing Overview

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Today’s Agenda:

- General Introduction (Blair)
- Windows Tools for Statistics (Slava)
- UNIX Tools for Statistics (Bo)
- Lunch
- Greetings from Department Chair Kathy Ensor
- Hands on tutorial in Symonds II lab, UNIX and Windows basics
Goals of Orientation:

- Logging on to windows and UNIX machines around campus (putting your 6 passwords to good use), information to set up your own machine if you choose
- Viewing the web in UNIX/Windows
- Checking email in UNIX/Windows
- Ability to typeset mathematics ($\LaTeX$), and to know the basics of Splus
- Ability to create a web page (as the TA for a class or for your own research/resume)
- Knowing where to go for help
A network is a neighborhood of computers. In general, their addressing scheme is xxx.xxx.xxx.xxx, where xxx are integers between 0 and 255. This is an internet protocol (IP) address. At Rice, these numbers are 128.42.xxx.xxx. In the statistics department, most computers have an address of 128.42.20.xxx or 128.42.16.xxx.

Why is this important? For printing, email, browsing the web, it’s important to know the IP numbers of the machines that have your mail and allow you to connect to the web.

Since it is inconvenient to remember these numbers, the machines also have names, for example thor.stat.rice.edu and 128.42.16.2 are the same.
CAMPUS NETWORK (cont.):

**IMPORTANT:** Some machines (stat unix, owlnet) back up your account on a daily basis, while some (statistics windows machines) do not. If your hard drive fails on your office windows machine, everything on that disk is gone. **BACKUP** your windows files to the UNIX servers! You have been warned.
Campus Network (cont.):

**STAT:** Intended for research work (esp unix servers), email home, no quotas, different passwords for unix (mail) and windows machines

**OWLNET:** Intended for class work, quota (100/120 MB), different passwords for unix and windows machines

**RUF:** More for departments without servers, a general Rice Unix Facility for anyone at Rice, quota (10/15 MB?), location of vet, a powerful university wide research-only server, different passwords for unix and windows machines

**Other networks exist,** CAAM (CAAM dept), MATH, RTC (Rice Terascale Cluster), etc, and you are assigned accounts as necessary
Campus Network in Pictures:

Outside World, Your Apartment, Nice People, Bad People, Crazy People

Rice firewall

Rice Network

STAT

OTHER

OWLNET

RUF
Stat UNIX Files

Common Files, Backed Up Daily

- thor 128.42.16.2
- round 128.42.16.87
- nova 128.42.16.79
Stat Windows Files

- local files
  - stat-dun-20-160
    - 128.42.20.160
  - stat-dun-20-137
    - 128.42.20.137
  - stat-dun-20-192
    - 128.42.20.192
Owlnet UNIX and Windows Files

- Common Files, Backed Up Daily
  - jungle (unix) 128.42.49.103
  - zed (unix) 128.42.51.79
  - sym-pc1 (win) 128.42.60.213

Statistics Orientation
Accessing Other Machines:

**MACHINES:** Occassionally, you will want to use a UNIX machine while at your PC, or use a different PC from your PC. There are several possibilities here.

**And want to connect to this machine**

<table>
<thead>
<tr>
<th>You are on this machine</th>
<th>Windows</th>
<th>UNIX</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Windows</strong></td>
<td>Remote Desktop</td>
<td>Xwin/SSH</td>
</tr>
<tr>
<td><strong>UNIX</strong></td>
<td>rdesktop (experimental)</td>
<td>SSH</td>
</tr>
</tbody>
</table>
Accessing Files on Other Machines:

You go home to finish a presentation that you left on the unix server or your office PC. How do you get it?

And want to access files on this machine

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<tbody>
<tr>
<td>Windows</td>
<td>Remote Desktop, Shared Files</td>
<td>SFTP, map network drive</td>
</tr>
<tr>
<td>UNIX</td>
<td>samba</td>
<td>SFTP, SCP</td>
</tr>
</tbody>
</table>
Options for Computing in the Department:

- Use a department owned windows (you or IT may administer), Linux (you or IT may administer) or Unix (rice IT administered) machine
- Bring in your own machine (administer yourself)
- Be a luddite
Accessing Rice Computing from Off-Campus:

Options:

• Rice dialup (56k modem, http://apply.rice.edu, get a charon account), direct access to all Rice computing, online library journals, esther, etc, but slow

• Local ISP (aol, DSL, cable modem, etc), access is fastest with roadrunner cable modem, access only to a few key machines on campus (stat unix machines, snowy.owlnet), need a VPN account (email problem@rice.edu) to access all Rice online resources (journals, owlnet servers, esther, etc)
Software Provided:

- **Personal Machines:** free software includes McAfee virus protection, Splus, MATLAB, X-win, SSH, linux (all), Maple, Mathematica, several others (checkout from Rebecca Gage, rgage@rice.edu, or http://software.is.rice.edu)

- **University Owned Machines:** free software includes Windows XP Pro, Visual Studio, several others

- **Department/Advisor must purchase:** Office (Word, Excel, PowerPoint, Access, Outlook), SAS, VMware
Accounts and Passwords:

**UNIX:** statistics network (your email), owlnet, ruf

**Windows:** statistics/engineering, owlnet (used in library), ruf

**Off-campus Access:** charon account (to dialup), VPN account (to access Rice from an ISP, use MATLAB from home, access online journals at Rice library, etc)
Help!?

- Email problem@rice.edu, and carbon-copy helpdesk@stat.rice.edu and dbrown@stat.rice.edu

- Fill our form at http://www.problem.rice.edu, and list helpdesk@rice.edu and dbrown@stat.rice.edu as interested parties

- If it’s small and specific to the statistics network (ie helpdesk), you can start by emailing helpdesk, who can decide if you need to submit a real problem