Ranger
Hardware and Environment

Drew Dolgert (Nate, Susan, others)
<table>
<thead>
<tr>
<th>Prefix</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>kilo</td>
<td>1000</td>
</tr>
<tr>
<td>mega</td>
<td>1000,000</td>
</tr>
<tr>
<td>giga</td>
<td>1000,000,000</td>
</tr>
<tr>
<td>tera</td>
<td>1000,000,000,000</td>
</tr>
<tr>
<td>peta</td>
<td>1000,000,000,000,000</td>
</tr>
</tbody>
</table>
Grid
Computing
Storage
Visualization

Data Courtesy of: Diego A. Donzis, P.K. Yeung
Visualization by: Gregory P. Johnson, Kelly P. Gaither
Consulting
Portal

portal.teragrid.org
Allocations

Startup • Education

Research

Jan 15

April 15

July 15

October 15
train4xx@ranger.tacc.utexas.edu
train4xx@tg-login.ranger.tacc.teragrid
train4xx@login3.ranger.tacc.utexas.
Exercise

2.2 Use SSH to Connect

2.3 Starting: Read Examples

- or -

2.4 Further: Using X-Window
SHELL

Variables

Working Directory

(other things)
${\text{PATH}}$

/bin:/${\text{HOME}}$/bin
Exercise

3.3 Learn Modules
$PATH

$LD_LIBRARY_PATH

$TACC_PACKAGE_INC
$TACC_PACKAGE_LIB
$TACC_PACKAGE_DIR
Exercise

3.5 Exercise: Compilation
Run in batch!
Login Node

Scheduler
Check out Section 4.3.
account
name
variables
join
Dear Scheduler,

TODO
Exercise

4.6 Exercise: Run in Batch
Got it
scp from to
user@machine.domain.edu:pat
OpenSSH

scp

sftp
5.5 Exercise: Retrieve Files with SCP
Getting Good Speeds

Your computer

- CPU
- NIC
- Memory bandwidth
- Disk speed

Local switch

Campus hub

Internet

Remote computer