TSCC Bootcamp: Introduction to Accessing and Running Jobs on the TSCC System
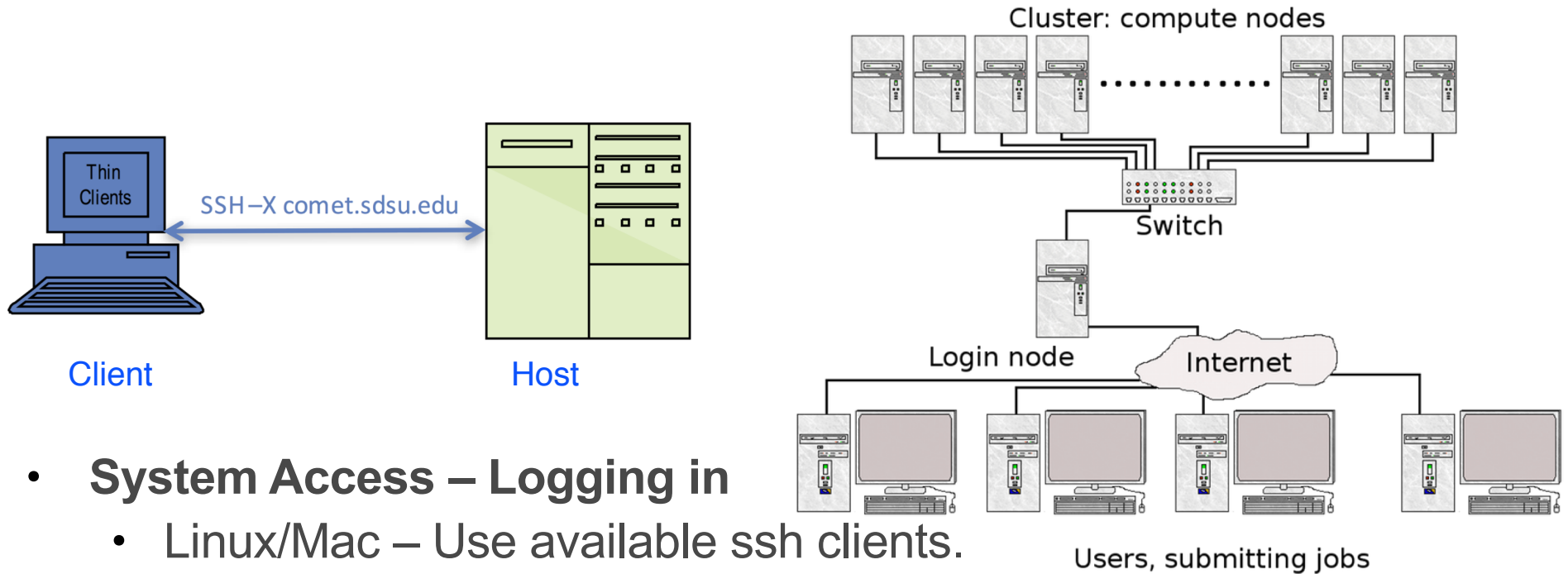
Logging On to TSCC

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Basic Information

- TSCC User Guide:
  - https://www.sdsc.edu/support/user_guides/tscc.html
- Online repo for companion tutorial/webinar information:
  - https://github.com/sdsc-training/bootcamps/tree/master/Intro-to-Acessing-and-Running-TSCC-Jobs
- You must have a TSCC account in order to access the system. To obtain a trial account:
  - https://www.sdsc.edu/support/user_guides/tscc-quick-start.html
- You should be familiar with running basic Unix commands: see the following tutorials at:
  - https://github.com/sdsc-training/bootcamps/tree/master/Intro-to-Acessing-and-Running-TSCC-Jobs/basic_linux_skills
- More training events listed at SDSC:
  - https://www.sdsc.edu/education_and_training/training.html

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Logging On to TSCC

Client   SSH–X comet.sdsu.edu   Host

Cluster: compute nodes

Switch

Login node   Internet

Users, submitting jobs

- **System Access – Logging in**
  - Linux/Mac – Use available ssh clients.
  - ssh clients for windows – Putty, Cygwin
    - http://www.chiark.greenend.org.uk/~sgtatham/putty/
- Login hosts for TSCC: tscc-login.sdsc.edu
- **SSH connections:**
  - UCSD/AD pwd, Other use SSH Key with password

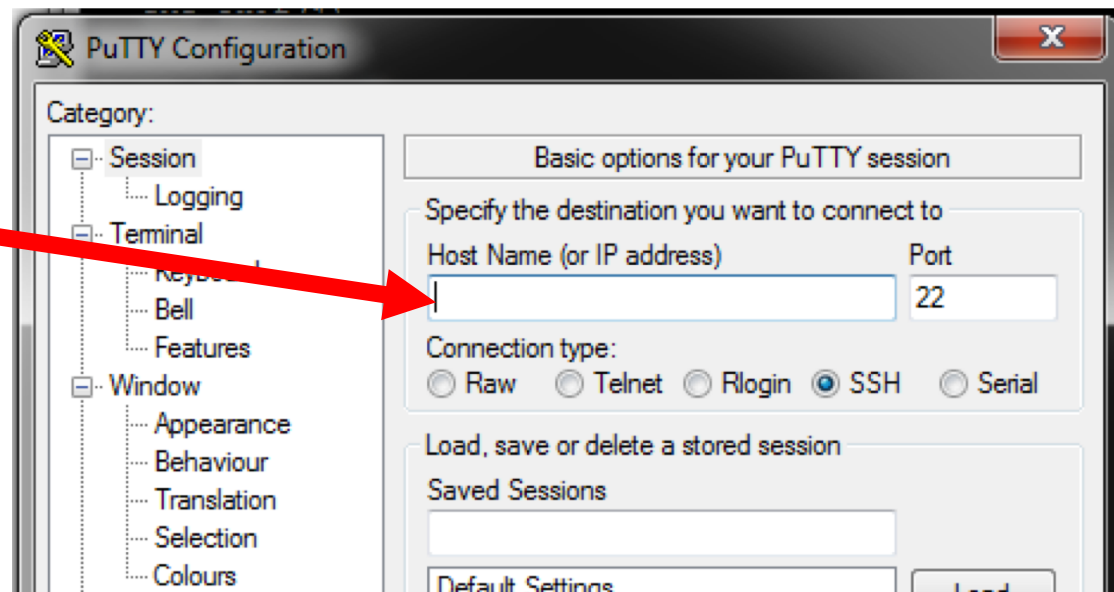SDSC SAN DIEGO SUPERCOMPUTER CENTER   UC San Diego

Logging into Comet

Mac/Linux:

`ssh username@comet.sdsc.edu`

Windows (PuTTY):

comet.sdsc.edu

Command Line Jobs

- *Do not run parallel jobs on the login nodes - even for simple tests.*

- These nodes are meant for compilation, file editing, simple data analysis, and other tasks that use minimal compute resources.

- Even if you could run a simple test on the command line on the login node, full tests should not be run on the login node because the performance will be adversely impacted by all the other tasks and login activities of the other users who are logged onto the same node.

- As an example a gzip process was consuming 98% of the CPU time:

```
[username@comet-ln3 OPENMP]$ top
...
PID USER PR NI VIRT RES SHR S %CPU %MEM TIME+ COMMAND
19937 XXXXX 20 0 4304 680 300 R 98.2 0.0 0:19.45 gzip
```