Cloud Computing

Remote sites

- Hundreds of available remote computing sites
- Amazon, XSEDE, DIAG, Google, HP, Microsoft, etc. etc.

Pricing models

- Some free & some fee-based
- laaS, PaaS, SaaS
- Subscriptions
- Reservations
- Spot price
- Packages
- Discounts
- May charge for
 - CPU & GPU cores
 - RAM
 - Disk space
 - File I/O
 - Internet file transfers
 - Geography

Cloud Computing

File transfers

- Globus ftp (fast) 1 TB / 10 hrs., but need infrastructure local & remote
- Internet (sftp, rcp) (slow) 1 TB / 7 days
- May have to download results immediately; when instances terminate, all files, system configurations, etc. are lost

Tech support

- Full, some, none
- Quality
- Responsiveness

Account application process

- Forms
- Grants
- No wait time or several months review process

Job management

- Interactive
- Batch queueing systems (PBS, SGE, LSF, Slurm, etc.)
- Linux command line

Training

May need training for each remote site