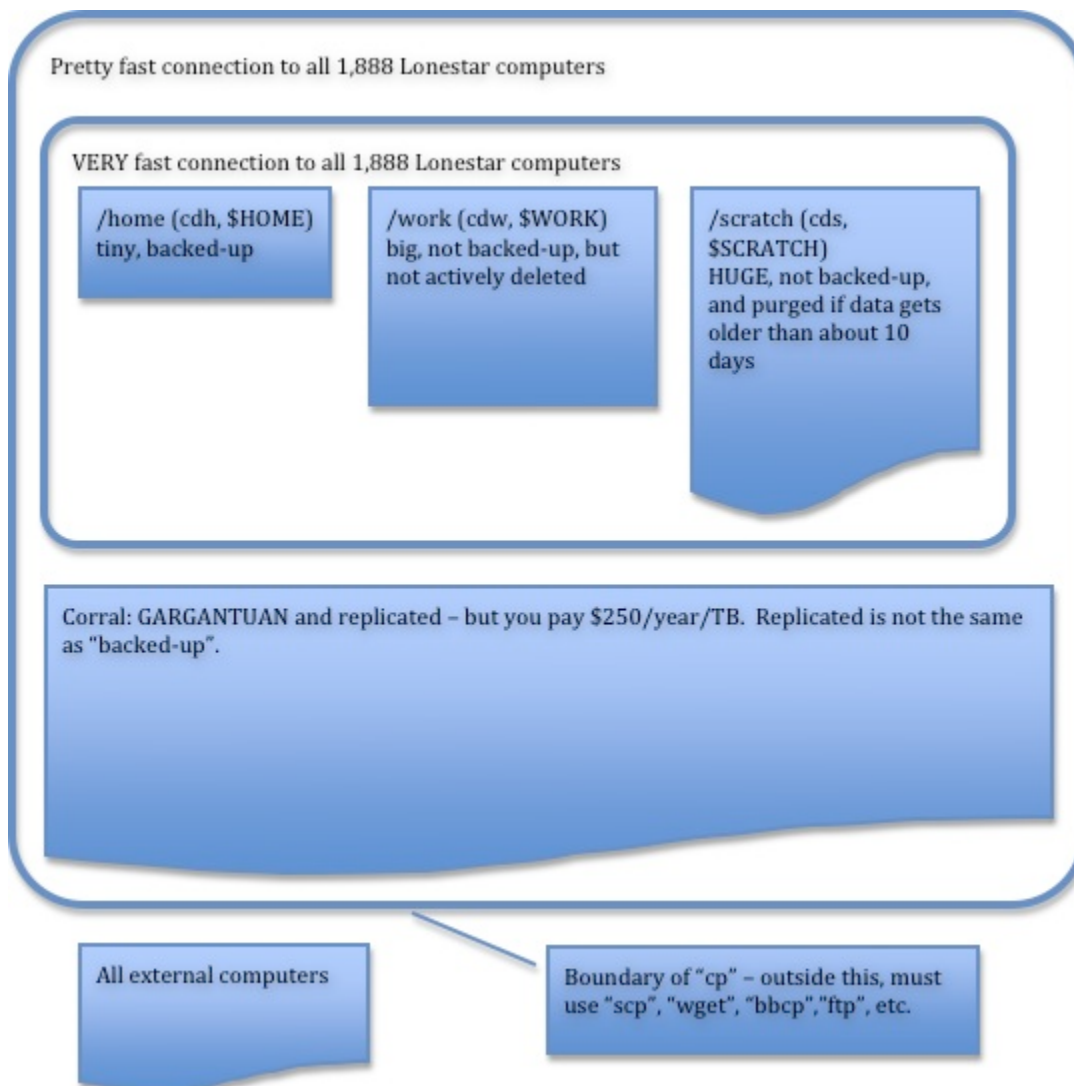# Diagram of Lonestar's directories

Diagram of Lonestar directories and what connects to what, and how fast

Lonestar is a collection of 1,888 computers connected to three file servers, each with unique characteristics.

You need to understand the file servers to know how to use them.

Pretty fast connection to all 1,888 Lonestar computers

VERY fast connection to all 1,888 Lonestar computers

/home (cdh, $HOME)
tiny, backed-up

/work (cdw, $WORK)
big, not backed-up, but
not actively deleted

/scratch (cds,
$SCRATCH)
HUGE, not backed-up,
and purged if data gets
older than about 10
days

Corral: GARGANTUAN and replicated – but you pay $250/year/TB. Replicated is not the same
as "backed-up".

All external computers

Boundary of "cp" – outside this, must
use "scp", "wget", "bbcp","ftp", etc.

	$HOME	$WORK	$SCRATCH
Purged?	No	No	Files are purged if not accessed for 10 days.
Backed Up?	Yes	No	No
Capacity	1GB	250GB	Basically infinite. 1.4 PB
Command to Access	cdh	cdw	cds
Purpose	Store Executables	Store Files	Run Jobs

Executables that aren't available on TACC through the "module" command should be stored in $HOME.

If you plan to be using a set of files frequently or would like to save the results of a job, they should be stored in $WORK.

If you're going to run a job, it's a good idea to keep your input files in a directory in $WORK and copy them to a directory in $SCRATCH where you plan to run your job.

This example command might help a bit:

```
cp $WORK/my_fastq_data/*fastq $SCRATCH/my_project/
```

Now let's go on to look at how jobs are run on Lonestar.