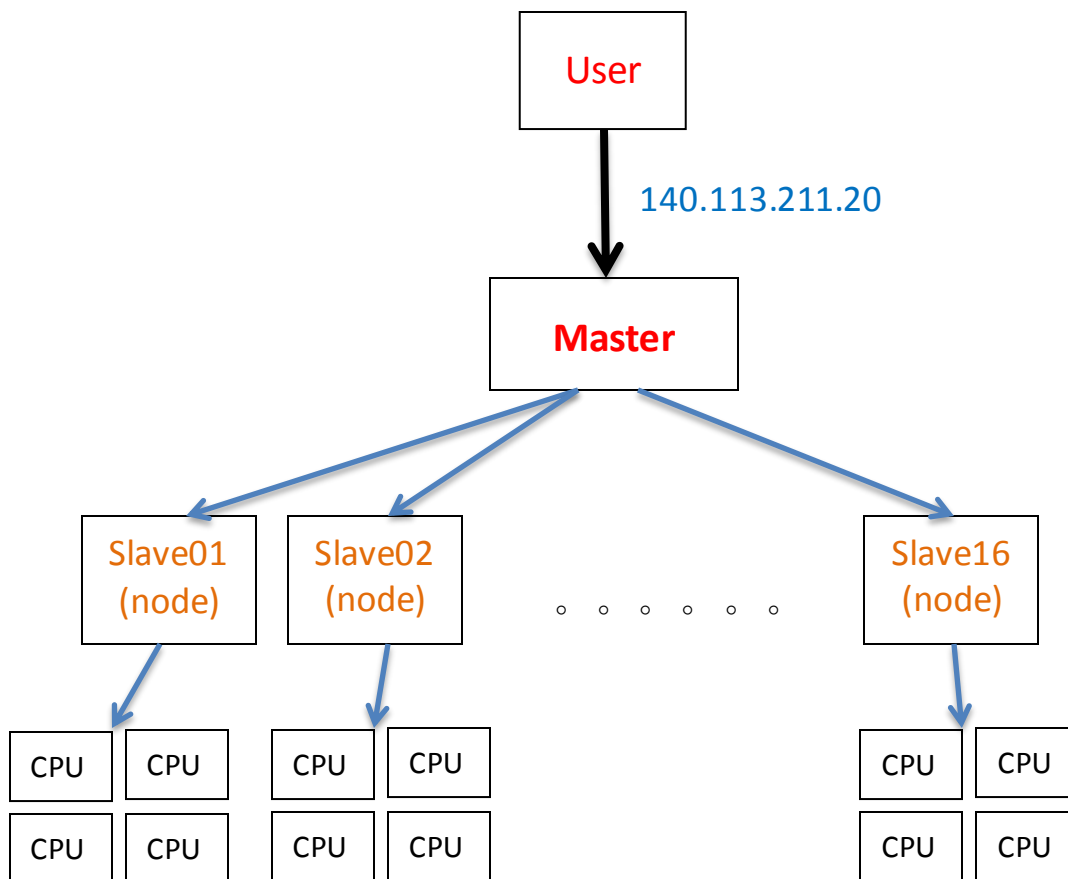


Commlab Cluster

IP: 140.113.211.20 port: 22

Cluster status website: <http://140.113.211.20>

System overview:



	Master	slave01~14	slave15~16
CPUs	8	8	16
Memory	16 G	16 G	4 G

Write a Shell Script file

`vim <your shell script file>`

For example

```
test.sh
#!/bin/sh
### job name
#PBS -N TEST
### Output files
#PBS -e test.err
#PBS -o test.log
### Queue name (default)
#PBS -q workq
### Number of nodes
#PBS -l nodes=1:ppn=4

cd $PBS_O_WORKDIR

matlab -nodisplay -r test
```

`###` is comment

`#PBS` is PBS command

- `PBS -N` : Job name
- `PBS -e` : error file will create after finishing the job
- `PBS -o` : output file will create after finishing the job
- `PBS -l nodes=1:ppn=4` :
 - Assign 1 node(slave PC), and 5 processor per node(ppn).
 - ✓ ppn usually set 1 unless your program wrote in parallel.
 - ✓ Master assigns your job orderly.
 - (fill the CPUs of slave01 then fill CPUs of slave02 and so on)
 - ✓ You can assign specific nodes by yourself.
 - (#PBS -l nodes=slave05:ppn=2+nodes=slave08:ppn=4)

Send your job to run

`qsub <your .sh file>`

for example

```
[cttsai@master hw3]$ qsub part1.sh
348.master
```

✓ 348 is the job ID

Check the jobs status

`qstat -n`

```
[cttsai@master sample]$ qstat -n
master:
-----
Job ID      Username Queue  Jobname  SessID NDS   TSK Memory  Req'd Req'd  Elap
-----
job ID 349.master  cttsai  workq   Ball     21843  1   0   --   720:0 R 00:00
      slave04/0
350.master  cttsai  workq   kendo    1168   1   1   --   720:0 R  --
      slave01/0
351.master  cttsai  workq   street   1234   1   1   --   720:0 R  --
      slave01/1
```

job ID

job name

running on CPU 0 of slave01

running time (hours:minutes)

Delete a job

`qdel <job ID>`