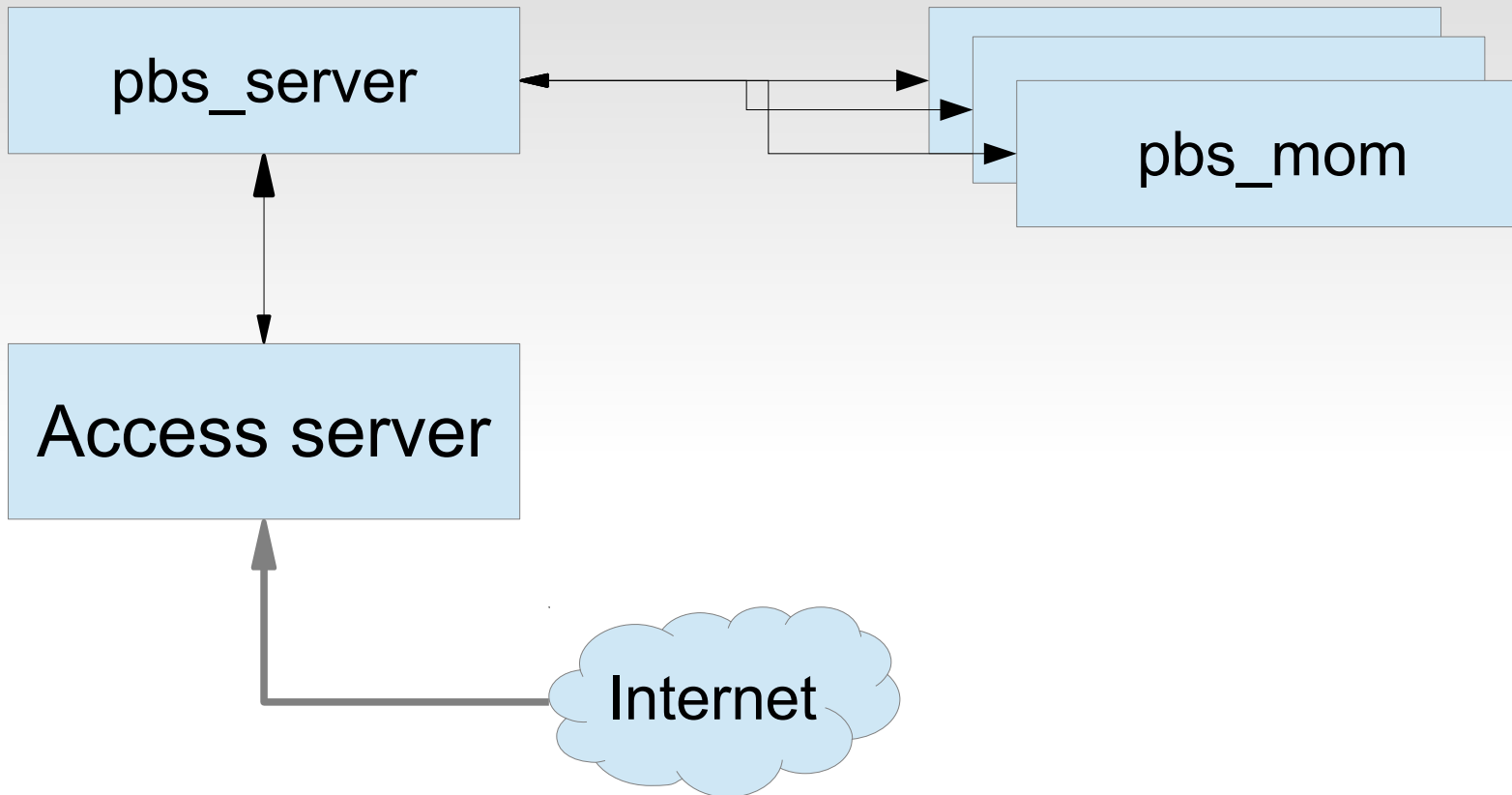


Курс "Администрирование суперкомпьютеров"

Жуматий С.А.

Torque



Terascale Open-Source Resource and QUEue Manager

Torque - server

`/var/spool/torque/server_priv/nodes` — список узлов

node1 np=2 arch=x86_64

node2 np=2 arch=x86_32

node3 np=2 arch=x86_32

node4 np=4 arch=x86_64

Torque - server

qmgr — управление конфигурацией

```
create queue full
```

```
set queue full queue_type = Execution
```

```
set queue full resources_default.nodes = 1
```

```
set queue full resources_default.walltime = 10:00
```

```
set queue full resources_available.nodect = 999999
```

```
set queue full enabled = True
```

```
set queue full started = True
```

```
set server default_queue = full
```

```
set server node_check_rate = 150
```

```
set server tcp_timeout = 6
```

Torque - agent

`/var/spool/torque/mom_priv/config`

`$pbsserver servername`

`$logevent 255 # маска событий`

`/var/torque/server_name`

`servername`

Torque - запуск

```
/etc/init.d/pbs_server start
```

```
/etc/init.d/pbs_sched start
```

```
/etc/init.d/pbs_mom start
```

Torque - проверка

```
$ pbsnodes -a
```

```
node1
```

```
state = free
```

```
np = 4
```

```
ntype = cluster
```

```
status = opsys=linux,uname=...,
```

```
  sessions=4793 6052 9319,nsessions=3,nusers=1,
```

```
  idletime=72,totmem=16343180kb,
```

```
  availmem=...,physmem=...,ncpus=4,
```

```
  loadave=0.00,netload=...,state=free,
```

```
  jobs=,varattr=,rectime=.....
```

Torque - управление

qmgr

command	{server queue node} ...
active	- активировать
create	- создать
delete	- удалить
set	- задать атрибут
unset	- сбросить атрибут
list	- список значений атрибутов
print	- состояние очереди
names	- список объектов
attr	- список атрибутов

Torque - документация

<http://www.clusterresources.com/torquedocs21>

Torque — запуск и т.п.

```
$ echo 'sleep 100' | qsub
```

```
$ qstat
```

Job id	Name	User	Time Use	S	Queue
--------	------	------	----------	---	-------

3.full	STDIN	pupkin	0	Q	full
--------	-------	--------	---	---	------

```
$ qdel 3.full
```