

FAST Data Center User Guide

Submitting a VNC Job to PBS

1. Submitting a PBS job to run the vncserver

It is recommended to protect your VNC sessions with a strong password with at most eight bytes long using the “vncpasswd” command. Create the startup script for vncserver and submit the job as shown in the following Figure:

```
guanx@mu01:~$ cat .vnc/xstartup
#!/bin/sh

unset SESSION_MANAGER
unset DBUS_SESSION_BUS_ADDRESS
/etc/X11/xinit/xinitrc
guanx@mu01:~$ cat vnc.pbs
#!/bin/sh
#PBS -N vncserver
#PBS -l nodes=1:ppn=2
#PBS -l walltime=3000:00:00
#PBS -q cu_slim
#PBS -j oe
#PBS -o vnc.pbs.log

vncserver -name `hostname` -fg >vnc.log 2>&1
guanx@mu01:~$ qsub vnc.pbs
37418.mu01
guanx@mu01:~$ qstat -an

mu01:
Job ID                Username  Queue   Jobname     SessID  NDS   TSK      Req'd      Req'd      Elap
-----            -
37418.mu01            guanx    cu_slim vncserver   449769   1     2        --   3000:00:0 R   00:00:07
   cu30/2-3
guanx@mu01:~$ cat vnc.log

New 'cu30' desktop is cu30:1

Starting applications specified in /home/guanx/.vnc/xstartup
Log file is /home/guanx/.vnc/cu30:1.log

guanx@mu01:~$
```

Check that the job is running using “qstat” before proceeding to the next step.

2. VNC port forwarding

Check in the log file, “/home/guanx/vnc.log” in the case shown in the Figure above, for the VNC port number. The VNC service is on “cu30:1”, or port 1 on the host cu30 in this case. The corresponding TCP port number = 5900+VNC port number = 5901. Your VNC session can be forwarded to your local (ssh client) machine as

shown in the following Figure:

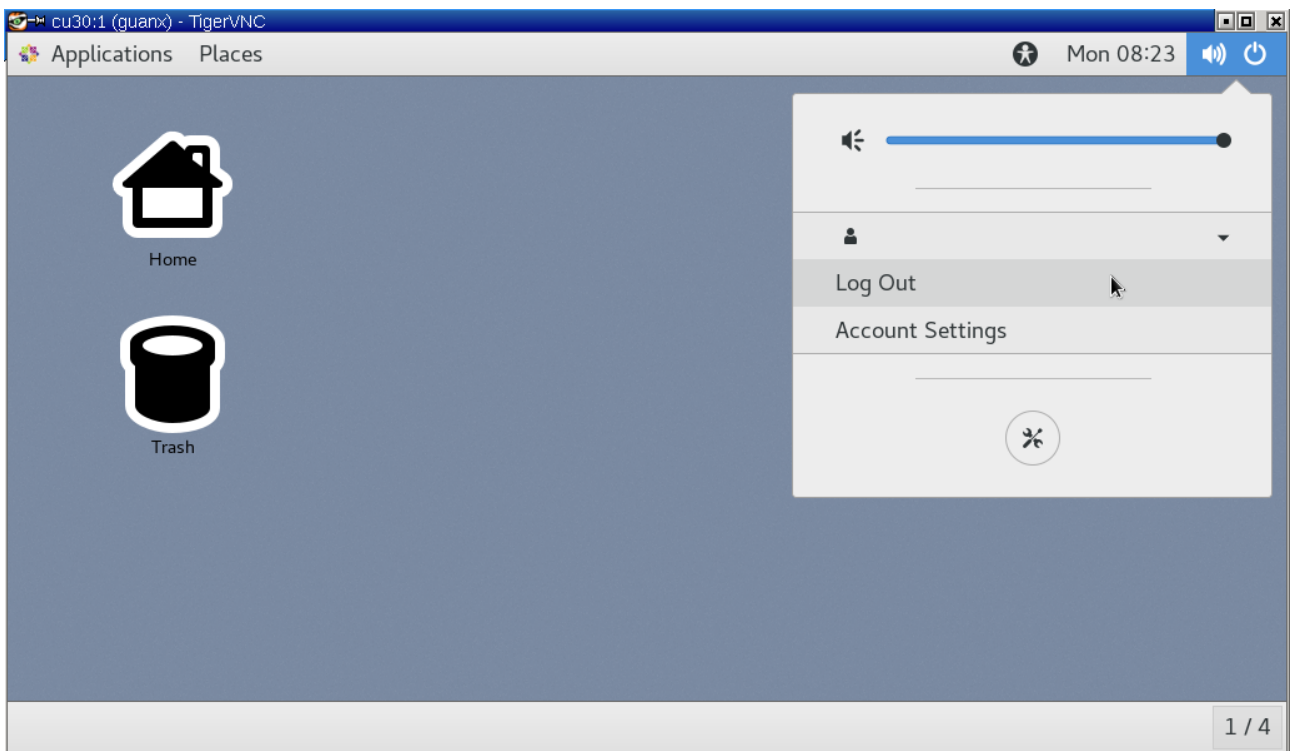
```
guanx@localhost:~$ ssh -4 -L 5901:cu30:5901 mu01
Last login: Mon Feb  8 08:31:53 2021 from 10.128.33.2
guanx@mu01:~$
```

3. Connect to the VNC server on the forwarded port

```
guanx@localhost:~$ vncviewer :1
```

Tip: VNC password forgotten? Cancel your VNC job with “qdel” .

4. Log out to terminate PBS job running the vncserver after use



5. Check that the PBS job has completed (qstat shows status “C”)

```

guanx@mu01:~$ cat .vnc/xstartup
#!/bin/sh

unset SESSION_MANAGER
unset DBUS_SESSION_BUS_ADDRESS
/etc/X11/xinit/xinitrc
guanx@mu01:~$ cat vnc.pbs
#!/bin/sh
#PBS -N vncserver
#PBS -l nodes=1:ppn=2
#PBS -l walltime=3000:00:00
#PBS -q cu_slim
#PBS -j oe
#PBS -o vnc.pbs.log

vncserver -name `hostname` -fg >vnc.log 2>&1
guanx@mu01:~$ qsub vnc.pbs
37418.mu01
guanx@mu01:~$ qstat -an

mu01:

```

Job ID	Username	Queue	Jobname	SessID	NDS	TSK	Req'd Memory	Req'd Time	S	Elap Time
37418.mu01 cu30/2-3	guanx	cu_slim	vncserver	449769	1	2	--	3000:00:0	R	00:00:07

```

guanx@mu01:~$ cat vnc.log

New 'cu30' desktop is cu30:1

Starting applications specified in /home/guanx/.vnc/xstartup
Log file is /home/guanx/.vnc/cu30:1.log

guanx@mu01:~$ qstat -an

mu01:

```

Job ID	Username	Queue	Jobname	SessID	NDS	TSK	Req'd Memory	Req'd Time	S	Elap Time
37418.mu01 cu30/2-3	guanx	cu_slim	vncserver	449769	1	2	--	3000:00:0	C	--

```

guanx@mu01:~$

```

(The End.)