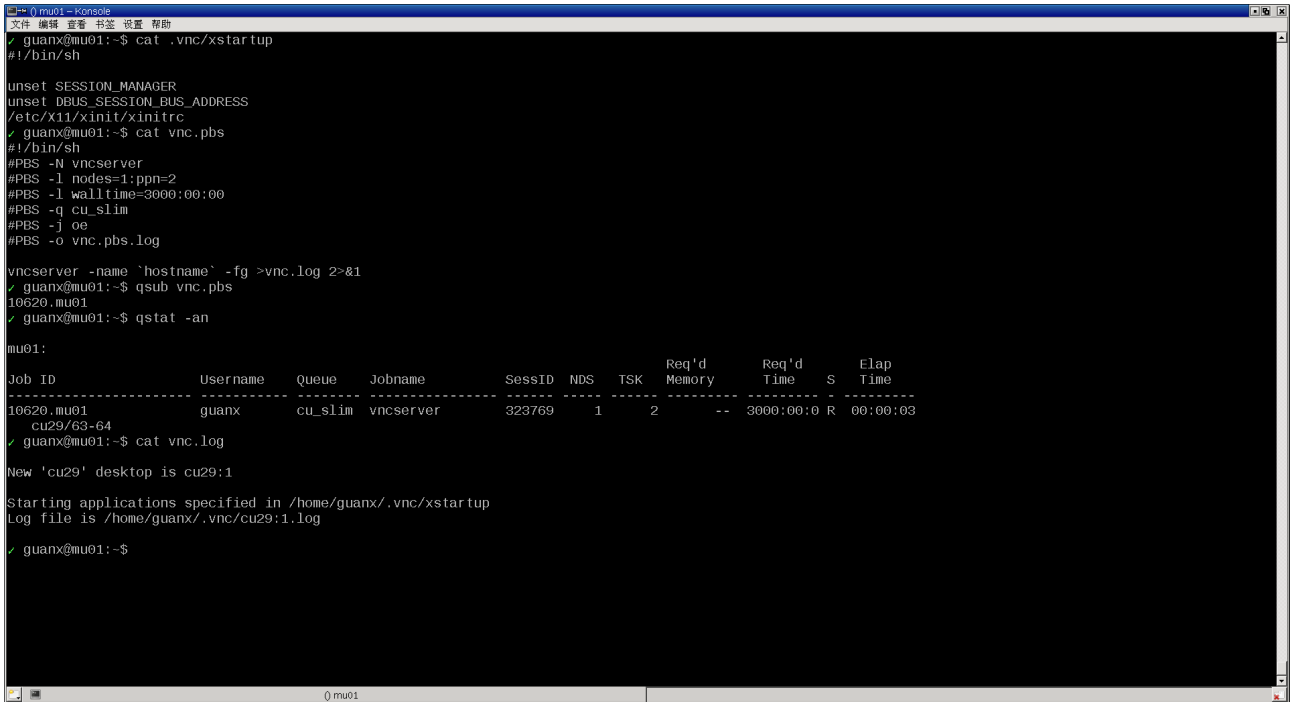


FAST 数据中心用户文档

之 PBS 环境中使用 VNC

【一】提交 VNC 作业

建立 VNC 启动脚本“\$HOME/.vnc/xstartup”和 PBS 作业脚本“vnc.pbs”内容如下图。为安全考虑，并应运行 `vncpasswd` 命令设置 VNC 密码。提交作业后，用 `qstat` 命令确认作业处于 R（运行）状态。



```
mu01 - Konsole
文件 编辑 查看 书签 设置 帮助
guanx@mu01:~$ cat .vnc/xstartup
#!/bin/sh

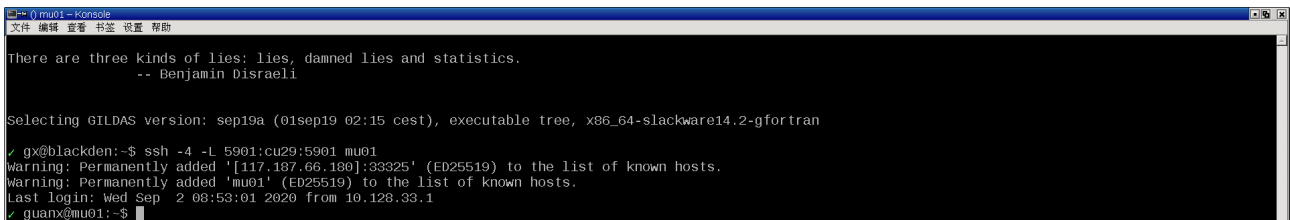
unset SESSION_MANAGER
unset DBUS_SESSION_BUS_ADDRESS
/etc/X11/xinit/xinitrc
guanx@mu01:~$ cat vnc.pbs
#!/bin/sh
#PBS -N vncserver
#PBS -l nodes=1:ppn=2
#PBS -l walltime=3000:00:00
#PBS -q cu_slim
#PBS -j oe
#PBS -o vnc.pbs.log

vncserver -name 'hostname' -fg >vnc.log 2>&1
guanx@mu01:~$ qsub vnc.pbs
10620.mu01
guanx@mu01:~$ qstat -an

mu01:
Job ID          Username      Queue    Jobname     SessID  NDS   TSK   Req'd     Req'd     Elap
-----
10620.mu01     guanx        cu_slim  vncserver   323769  1     2     --    3000:00:0  R    00:00:03
      cu29/63-64
guanx@mu01:~$ cat vnc.log
New 'cu29' desktop is cu29:1
Starting applications specified in /home/guanx/.vnc/xstartup
Log file is /home/guanx/.vnc/cu29:1.log
guanx@mu01:~$
```

【二】VNC 服务端端口转发

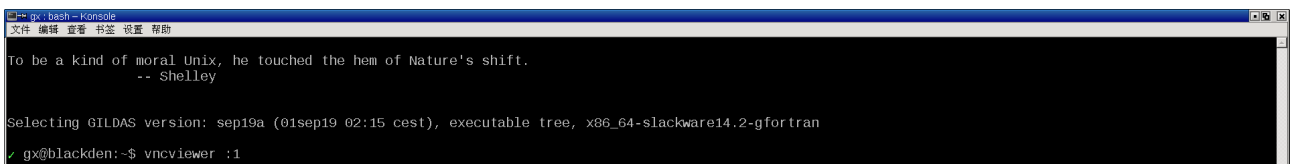
根据上图中的 VNC 日志，VNC 服务运行在 cu29 的 1 号 VNC 端口，其 TCP 端口号 = 5900+VNC 端口号 = 5901. 如下图执行命令，将此端口转发到客户机。



```
mu01 - Konsole
文件 编辑 查看 书签 设置 帮助
There are three kinds of lies: lies, damned lies and statistics.
-- Benjamin Disraeli

Selecting GILDAS version: sep19a (01sep19 02:15 cest), executable tree, x86_64-slackware14.2-gfortran
gx@blackden:~$ ssh -4 -L 5901:cu29:5901 mu01
Warning: Permanently added '[117.187.66.180]:33325' (ED25519) to the list of known hosts.
Warning: Permanently added 'mu01' (ED25519) to the list of known hosts.
Last login: Wed Sep 2 08:53:01 2020 from 10.128.33.1
guanx@mu01:~$
```

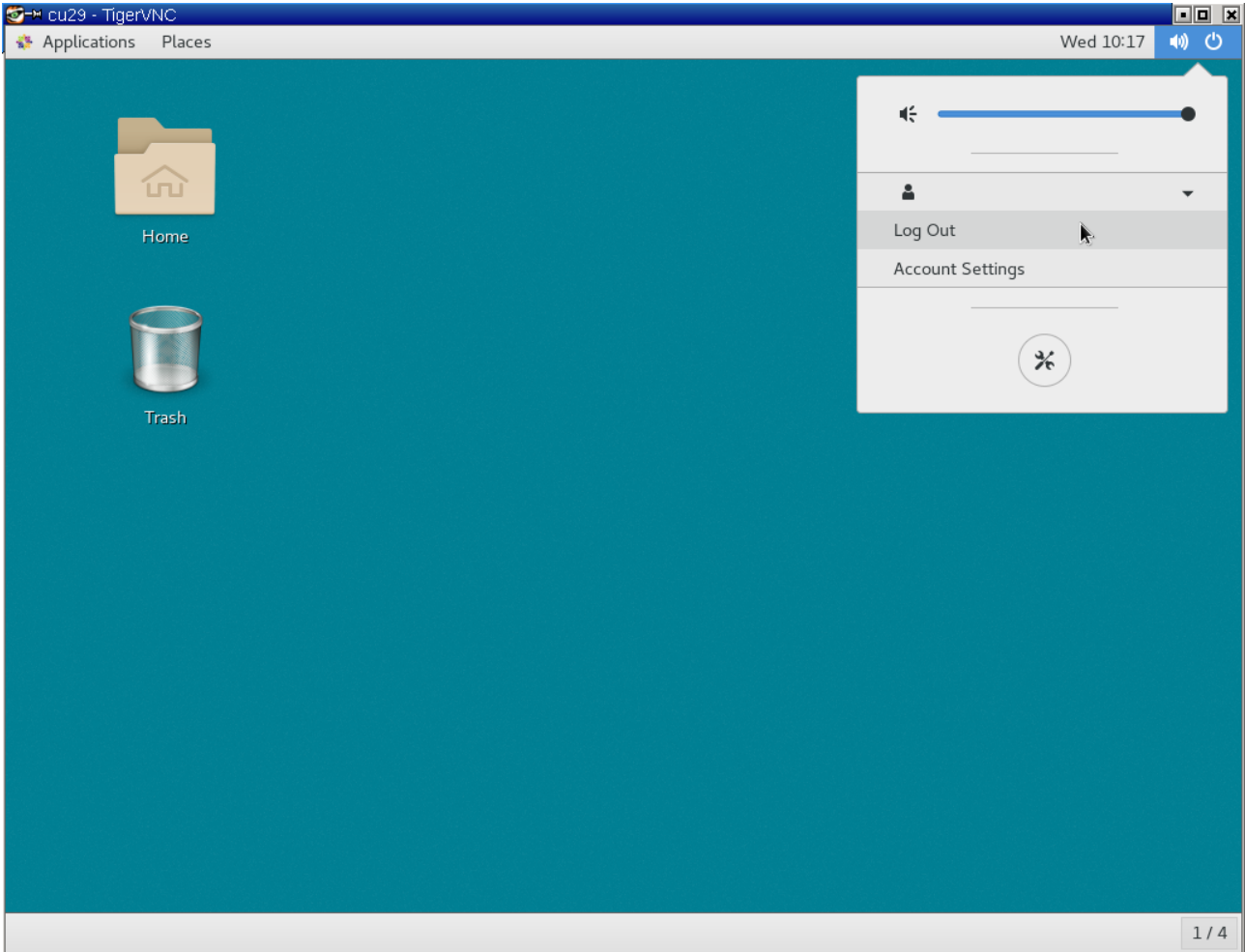
【三】在客户机上连接 VNC 服务



```
gx - Konsole
文件 编辑 查看 书签 设置 帮助
To be a kind of moral Unix, he touched the hem of Nature's shift.
-- Shelley

Selecting GILDAS version: sep19a (01sep19 02:15 cest), executable tree, x86_64-slackware14.2-gfortran
gx@blackden:~$ vncviewer :1
```

【四】使用完毕后，登出桌面环境



【五】确认作业结束（C 状态）

```
mu01 - Konsole
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
10620.mu01
guanx@mu01:~$ qstat -an
mu01:
Job ID          Username      Queue    Jobname     SessID  NDS  TSK  Req'd  Req'd   Elap
      ID                Memory      Time      S      Time
-----
10620.mu01     guanx        cu_slim  vncserver   323769  1    2    --    3000:00:0 R    00:00:03
   cu29/63-64
guanx@mu01:~$ cat vnc.log
New 'cu29' desktop is cu29:1
Starting applications specified in /home/guanx/.vnc/xstartup
Log file is /home/guanx/.vnc/cu29:1.log
guanx@mu01:~$ qstat -an
mu01:
Job ID          Username      Queue    Jobname     SessID  NDS  TSK  Req'd  Req'd   Elap
      ID                Memory      Time      S      Time
-----
10620.mu01     guanx        cu_slim  vncserver   323769  1    2    --    3000:00:0 C    --
   cu29/63-64
guanx@mu01:~$
```

(完)