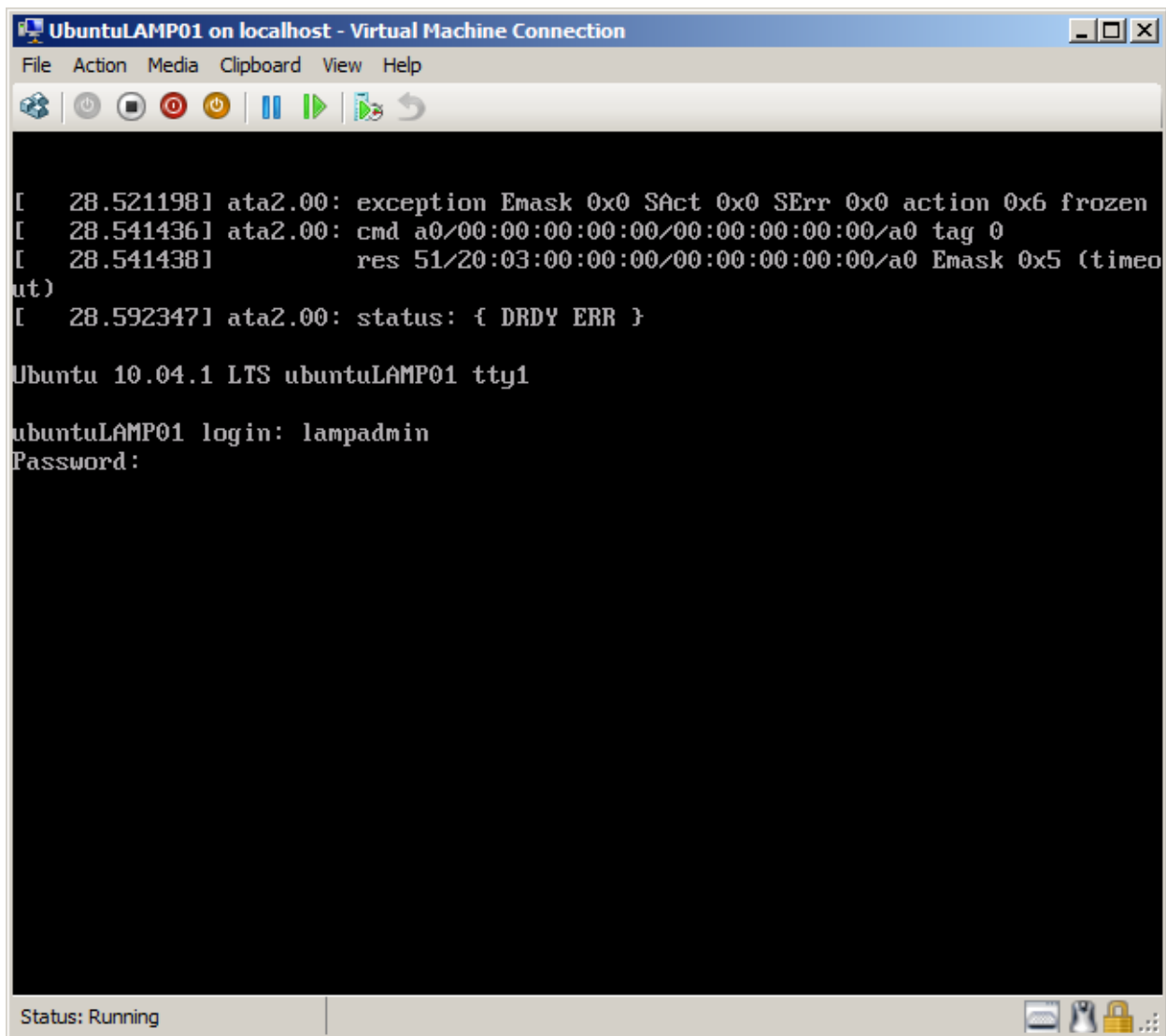


Virtual Ubuntu LAMP Server - Disable Slow Graphics

You may have noticed how slow the screen goes when you installed Ubuntu in Hyper-V. To speed up the screen refresh it is necessary to disable the frame buffer module. A frame buffer loads a page onto the screen from memory. Unfortunately Ubuntu's frame buffer does not seem to play nicely with Hyper-V.

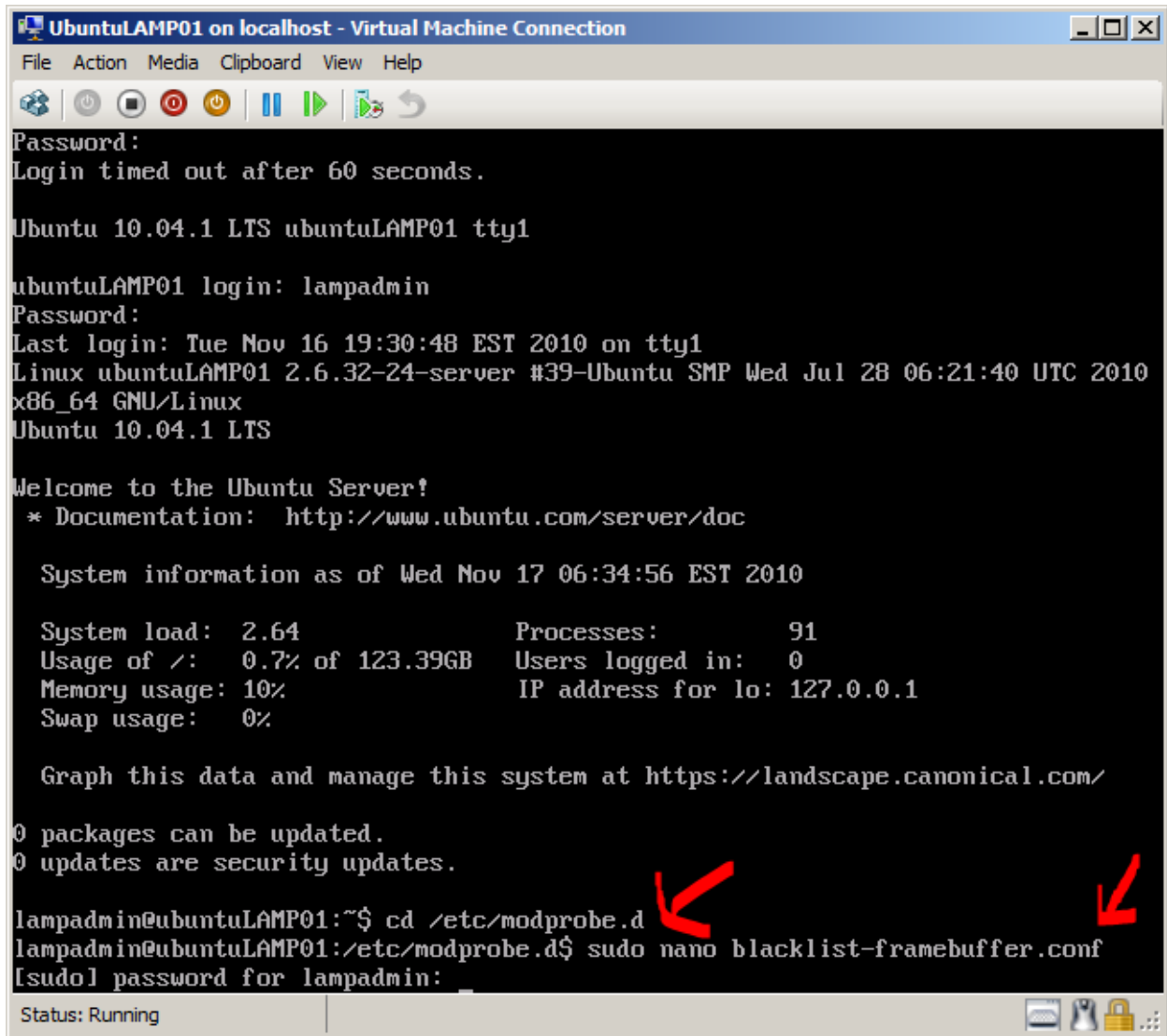
1. First log into you new Ubuntu server using your user name and password. (Although these pages are arranged in order of installation, the host name, user name and password may change from the last set of screens.) Simply continue using the username and password that you originally set up.



```
UbuntuLAMP01 on localhost - Virtual Machine Connection
File Action Media Clipboard View Help
[ 28.521198] ata2.00: exception Emask 0x0 SAct 0x0 SErr 0x0 action 0x6 frozen
[ 28.541436] ata2.00: cmd a0/00:00:00:00:00:00/00:00:00:00:00/a0 tag 0
[ 28.541438]      res 51/20:03:00:00:00:00/00:00:00:00:00/a0 Emask 0x5 (timeo
ut)
[ 28.592347] ata2.00: status: { DRDY ERR }
Ubuntu 10.04.1 LTS ubuntuLAMP01 tty1
ubuntuLAMP01 login: lampadmin
Password:
```

Status: Running

2. Change to the directory `/etc/modprobe.d`. Then using your favorite text editor open up the `blacklist-framebuffer.conf` file as an administrator with `sudo`. In the screen below the user is using the nano text editor.



```
UbuntuLAMP01 on localhost - Virtual Machine Connection
File Action Media Clipboard View Help
Password:
Login timed out after 60 seconds.

Ubuntu 10.04.1 LTS ubuntuLAMP01 tty1
ubuntuLAMP01 login: lampadmin
Password:
Last login: Tue Nov 16 19:30:48 EST 2010 on tty1
Linux ubuntuLAMP01 2.6.32-24-server #39-Ubuntu SMP Wed Jul 28 06:21:40 UTC 2010
x86_64 GNU/Linux
Ubuntu 10.04.1 LTS

Welcome to the Ubuntu Server!
* Documentation: http://www.ubuntu.com/server/doc

System information as of Wed Nov 17 06:34:56 EST 2010

System load: 2.64          Processes:          91
Usage of /: 0.7% of 123.39GB Users logged in: 0
Memory usage: 10%         IP address for lo: 127.0.0.1
Swap usage: 0%

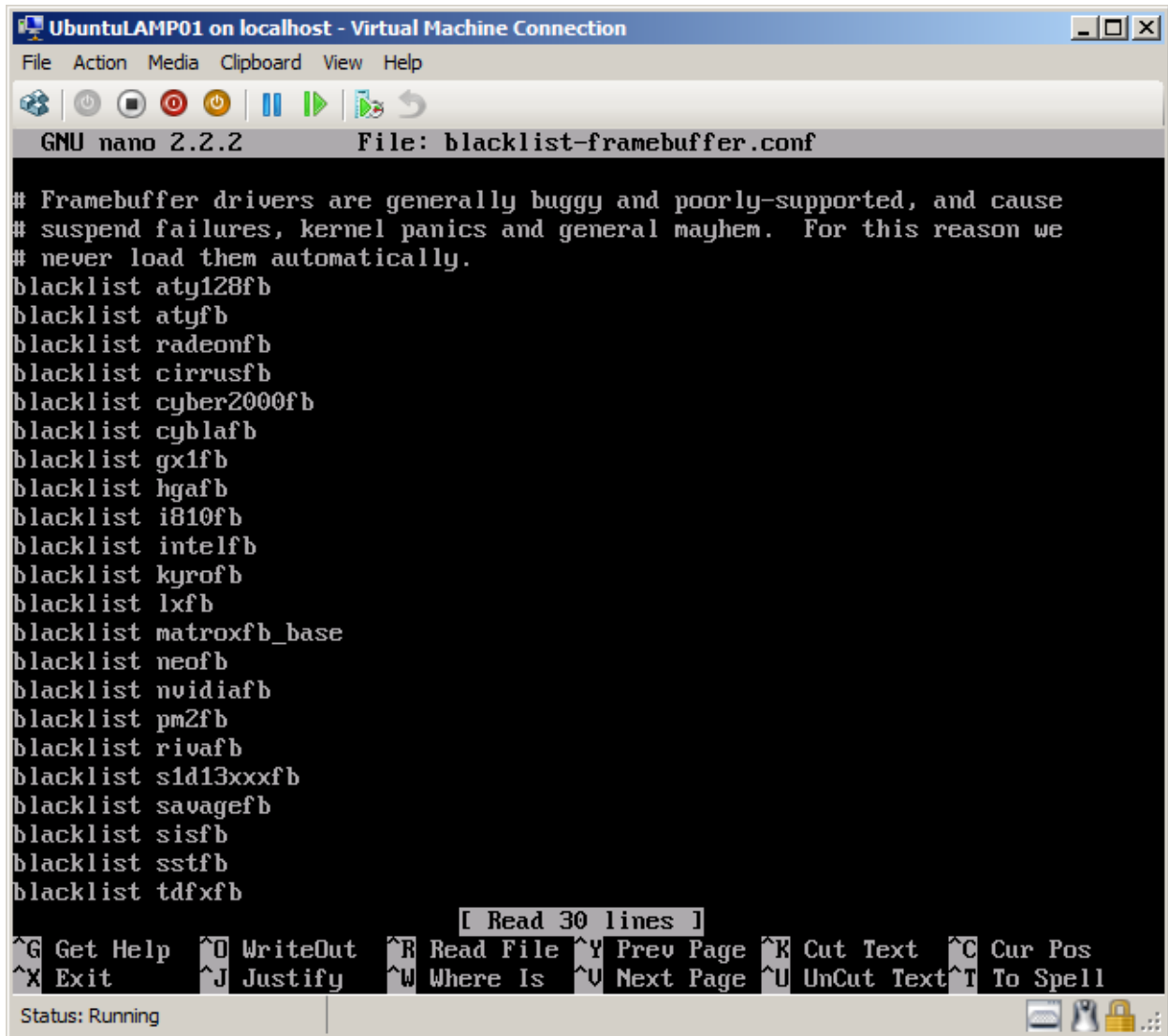
Graph this data and manage this system at https://landscape.canonical.com/

0 packages can be updated.
0 updates are security updates.

lampadmin@ubuntuLAMP01:~$ cd /etc/modprobe.d
lampadmin@ubuntuLAMP01:/etc/modprobe.d$ sudo nano blacklist-framebuffer.conf
[sudo] password for lampadmin:

```

3. After you have entered your password you will see a screen like the one below. If you have spelled the filename wrong you will see a blank screen showing only the editing options from your text editor.



The screenshot shows a window titled "UbuntuLAMP01 on localhost - Virtual Machine Connection". Inside the window, the nano text editor is open, editing the file "blacklist-framebuffer.conf". The editor's status bar indicates "GNU nano 2.2.2". The file content is as follows:

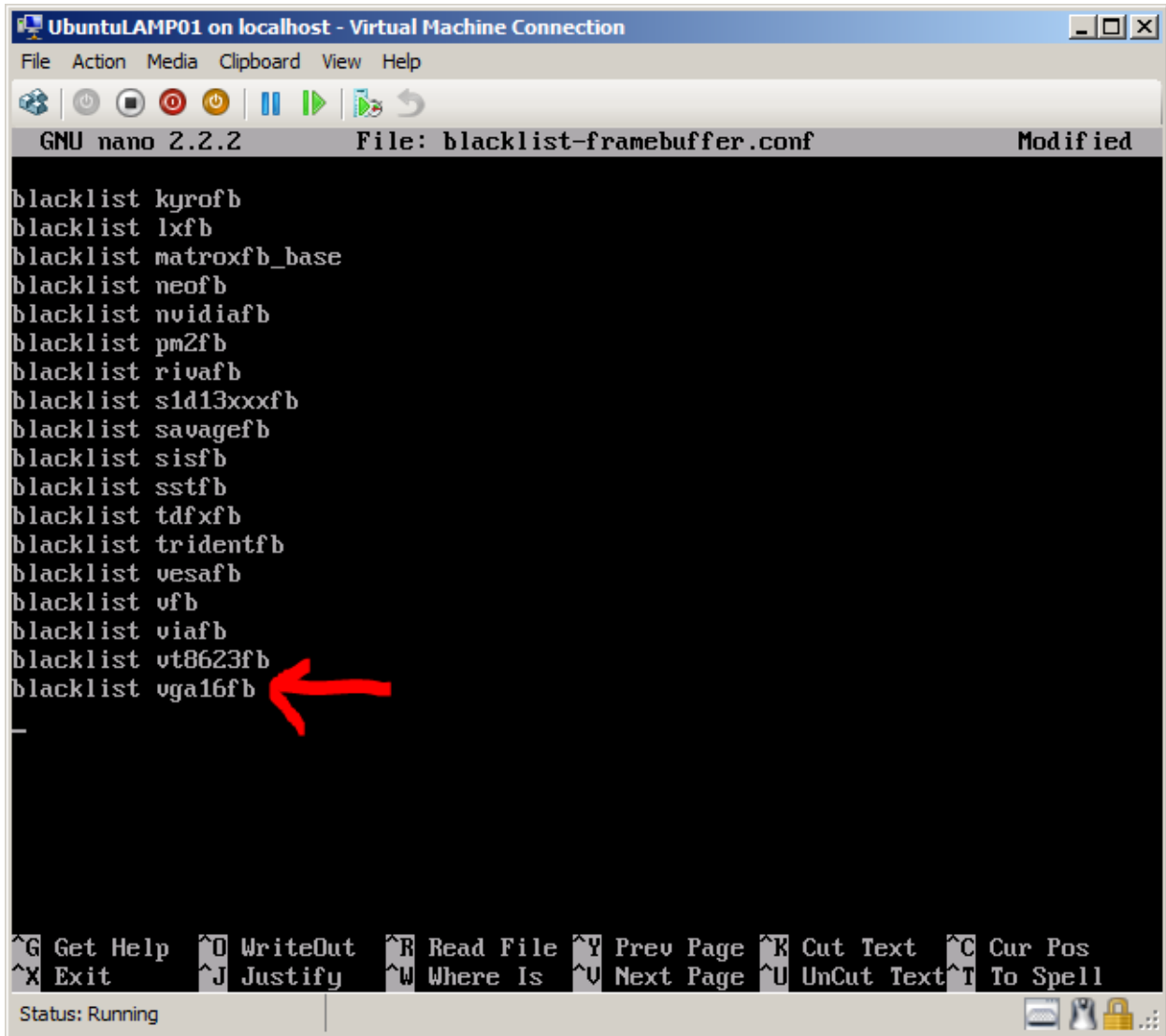
```
# Framebuffer drivers are generally buggy and poorly-supported, and cause
# suspend failures, kernel panics and general mayhem. For this reason we
# never load them automatically.
blacklist aty128fb
blacklist atyfb
blacklist radeonfb
blacklist cirrusfb
blacklist cyber2000fb
blacklist cyblafb
blacklist gx1fb
blacklist hgafb
blacklist i810fb
blacklist intel_fb
blacklist kyrofb
blacklist lxfb
blacklist matroxfb_base
blacklist neofb
blacklist nvidiafb
blacklist pm2fb
blacklist rivafb
blacklist s1d13xxxfb
blacklist savagefb
blacklist sisfb
blacklist sstfb
blacklist tdfxfb
```

At the bottom of the editor, there is a help menu with the following options:

^G Get Help	^O WriteOut	^R Read File	^Y Prev Page	^K Cut Text	^C Cur Pos
^X Exit	^J Justify	^W Where Is	^V Next Page	^U UnCut Text	^T To Spell

The status bar at the bottom left shows "Status: Running". The bottom right corner contains icons for help, search, and a lock.

4. Scroll down to the bottom of the file and add the following line- "blacklist vga16fb".

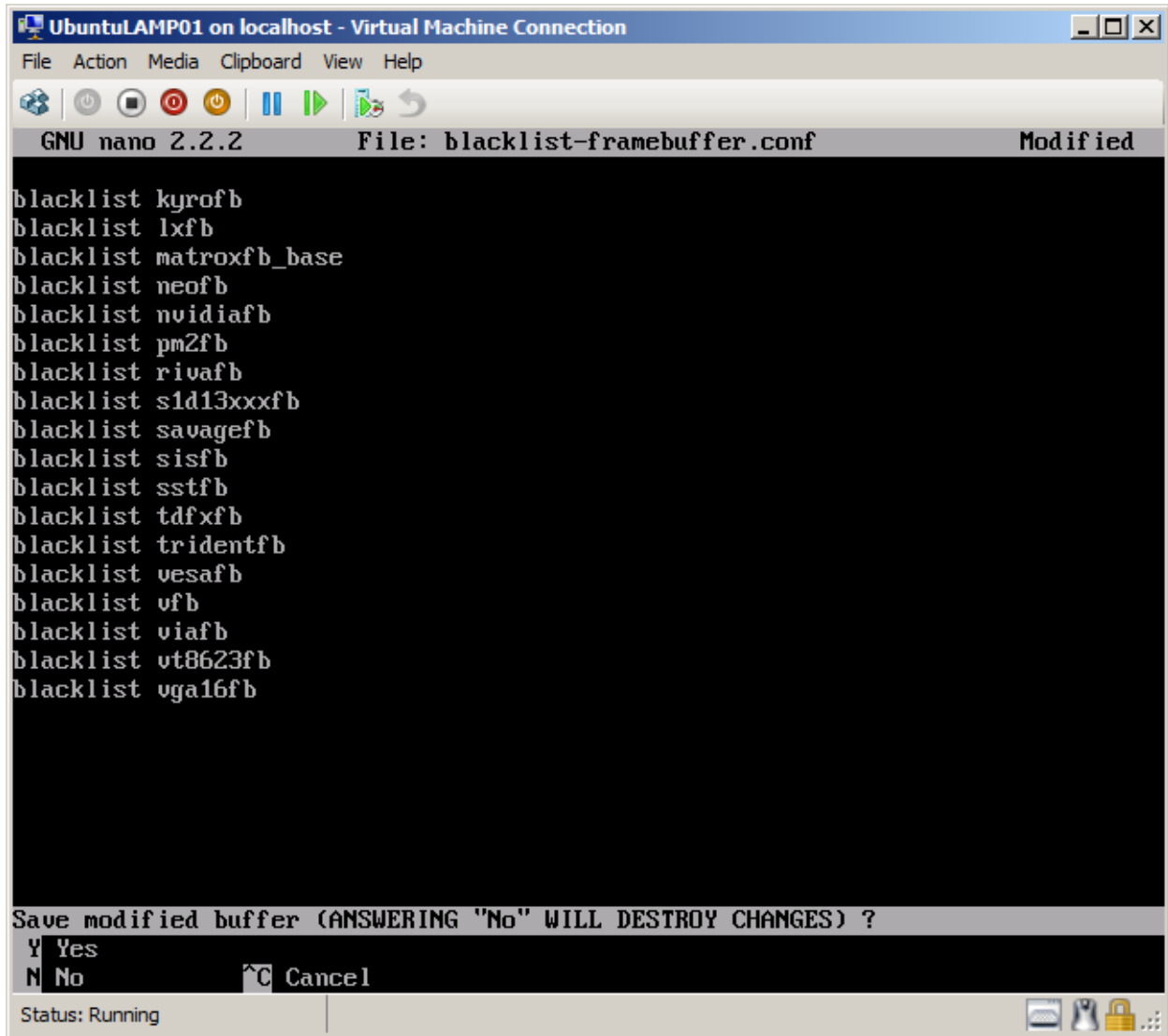


The screenshot shows a terminal window titled "UbuntuLAMP01 on localhost - Virtual Machine Connection". The window contains the GNU nano 2.2.2 editor editing the file "blacklist-framebuffer.conf". The file content is as follows:

```
blacklist kyrofb
blacklist lxfb
blacklist matroxfb_base
blacklist neofb
blacklist nvidiafb
blacklist pm2fb
blacklist rivafb
blacklist s1d13xxxfb
blacklist savagefb
blacklist sisfb
blacklist sstfb
blacklist tdfxfb
blacklist tridentfb
blacklist vesafb
blacklist vfb
blacklist viafb
blacklist vt8623fb
blacklist vga16fb
```

A red arrow points to the line "blacklist vga16fb". The nano editor interface includes a menu bar (File, Action, Media, Clipboard, View, Help), a toolbar with icons for file operations, and a status bar at the bottom showing "Status: Running" and various keyboard shortcuts.

5. Key in "Ctrl X". When asked to save the modified buffer Key in "Y". If you have not used "sudo" you will not be given permission to write and change the file.



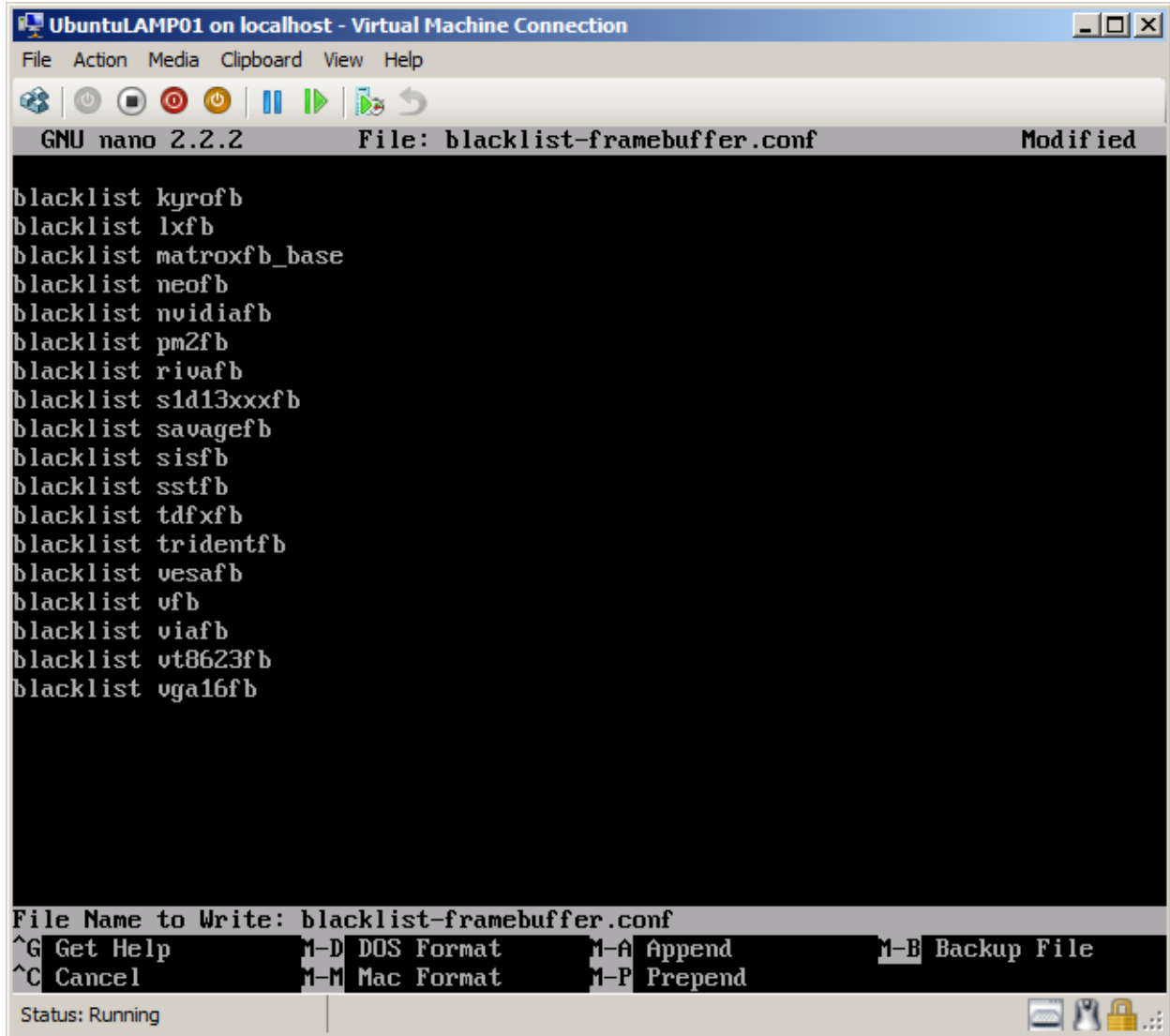
The screenshot shows a terminal window titled "UbuntuLAMP01 on localhost - Virtual Machine Connection". The terminal is running the nano text editor on the file "blacklist-framebuffer.conf". The file contains a list of framebuffer drivers to be blacklisted. At the bottom of the terminal, a prompt asks "Save modified buffer (ANSWERING 'No' WILL DESTROY CHANGES) ?". The user has entered 'Y' for Yes, and the prompt shows 'Y Yes' and 'N No' with a cursor on 'Y'. The status bar at the bottom indicates "Status: Running".

```
GNU nano 2.2.2 File: blacklist-framebuffer.conf Modified
blacklist kyrofb
blacklist lxfb
blacklist matroxfb_base
blacklist neofb
blacklist nvidiafb
blacklist pm2fb
blacklist rivafb
blacklist s1d13xxfb
blacklist savagefb
blacklist sisfb
blacklist sstfb
blacklist tdfxfb
blacklist tridentfb
blacklist vesafb
blacklist vfb
blacklist viafb
blacklist vt8623fb
blacklist vga16fb

Save modified buffer (ANSWERING "No" WILL DESTROY CHANGES) ?
Y Yes
N No ^C Cancel

Status: Running
```

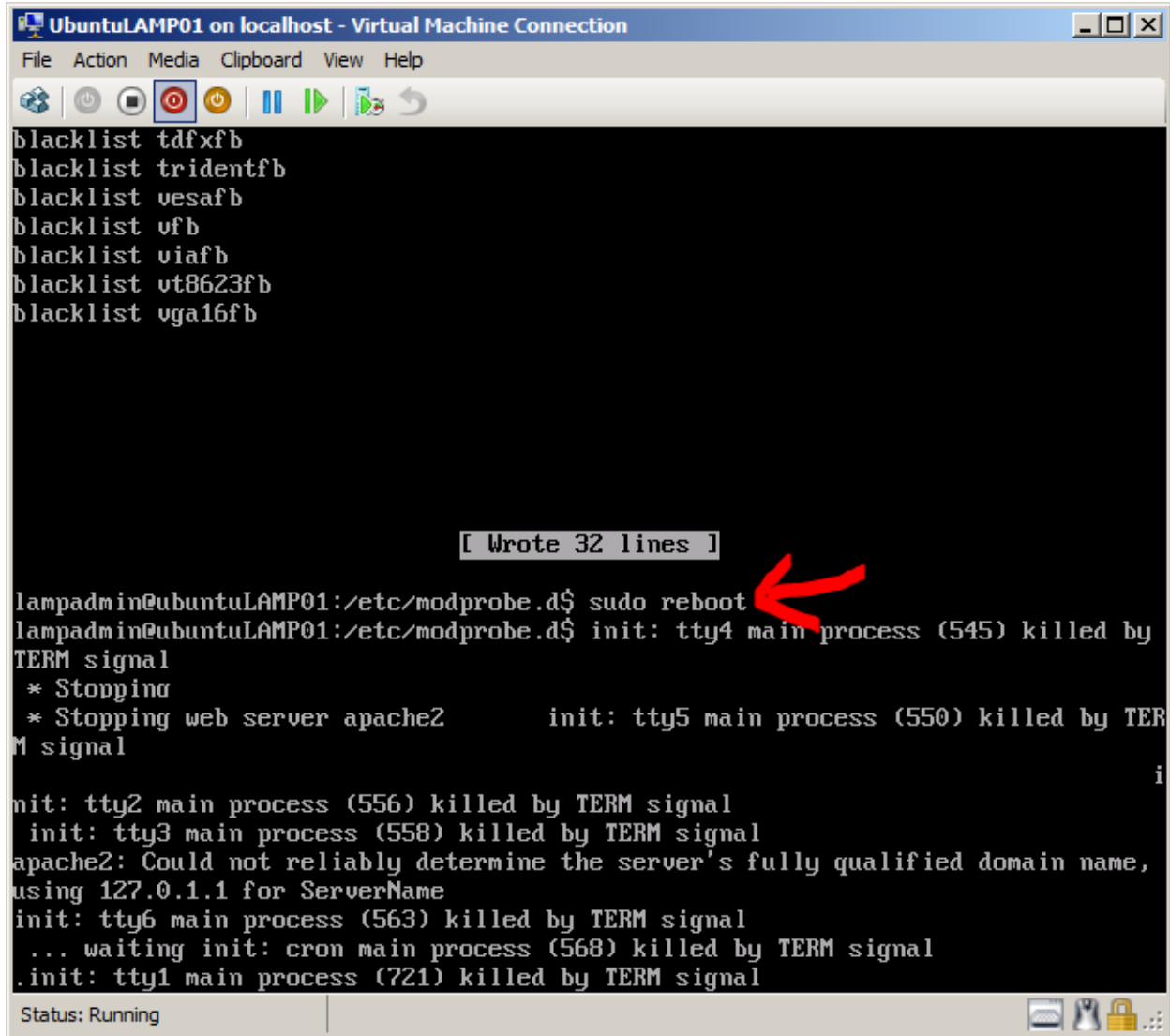
- This will bring up a screen asking you what the File Name to Write. Simply hit return because you want to change what is in the original blacklist-framebuffer.conf file.



The screenshot shows a terminal window titled "UbuntuLAMP01 on localhost - Virtual Machine Connection". The window contains the nano text editor interface editing the file "blacklist-framebuffer.conf". The editor displays a list of framebuffer drivers to be blacklisted, each on a new line. At the bottom of the editor, a prompt asks for the "File Name to Write:", which is currently set to "blacklist-framebuffer.conf". Below the prompt is a menu with options: ^G Get Help, ^C Cancel, M-D DOS Format, M-M Mac Format, M-A Append, and M-P Prepend. The status bar at the bottom indicates "Status: Running".

```
GNU nano 2.2.2 File: blacklist-framebuffer.conf Modified
blacklist kyrofb
blacklist lxfb
blacklist matroxfb_base
blacklist neofb
blacklist nvidiafb
blacklist pm2fb
blacklist rivafb
blacklist s1d13xxfb
blacklist savagefb
blacklist sisfb
blacklist sstfb
blacklist tdfxfb
blacklist tridentfb
blacklist vesafb
blacklist vfb
blacklist viafb
blacklist vt8623fb
blacklist vga16fb
File Name to Write: blacklist-framebuffer.conf
^G Get Help      M-D DOS Format  M-A Append     M-B Backup File
^C Cancel       M-M Mac Format  M-P Prepend
Status: Running
```

7. When you are through simply reboot your virtual machine using "sudo reboot". If you have taken longer than 5 minutes you may be asked to re-enter your password.



```
blacklist tdfxfb
blacklist tridentfb
blacklist vesafb
blacklist vfb
blacklist viafb
blacklist vt8623fb
blacklist vga16fb

[ Wrote 32 lines ]

lampadmin@ubuntuLAMP01:/etc/modprobe.d$ sudo reboot
lampadmin@ubuntuLAMP01:/etc/modprobe.d$ init: tty4 main process (545) killed by
TERM signal
* Stopping
* Stopping web server apache2      init: tty5 main process (550) killed by TER
M signal
i
init: tty2 main process (556) killed by TERM signal
init: tty3 main process (558) killed by TERM signal
apache2: Could not reliably determine the server's fully qualified domain name,
using 127.0.1.1 for ServerName
init: tty6 main process (563) killed by TERM signal
... waiting init: cron main process (568) killed by TERM signal
init: tty1 main process (721) killed by TERM signal

Status: Running
```

8. Finally log back in. You will notice that your screen scrolls normally now. Don't forget that if you want to shut down your Ubuntu server use the "sudo shutdown -h now" command.