Nvidia Binary Driver User Guide for Fedora 13

Table of Contents

Introduction

During OS installation, the installer will attempt to use the new open source driver (Nouveau) that is included in the X Window package. While this 2D driver works for many hardware configurations, there are several cases where the Nvidia binary driver is required:

- The display adapter is unsupported by the current X Window driver

- 3D acceleration is required

In these cases, the Nvidia binary driver will be pre-installed at the factory. If the operating system is re-installed, the Nvidia driver will need to be installed afterward.

Installation

These installation instructions assume the system has been installed from the ASL supplied Fedora 13 installation DVD. To install the Nvidia binary driver, use the following steps:

1. Log in as the root user, or use the **su** command to become root.

2. Determine the running kernel with the **uname** command.

   ```
   # uname -r
   ```

3. Install the correct Nvidia display driver packages.

   - 64-bit kernel (e.g., 2.6.31.5-127.fc12.x86_64)

     ```
     # yum install kmod-nvidia
     ```

   - Standard 32-bit kernel (e.g., 2.6.31.5-127.fc12.i686)

     ```
     # yum install kmod-nvidia
     ```

   - PAE 32-bit kernel (e.g., 2.6.31.5-127.fc12.i686.PAE)

```
# yum install kmod-nvidia-PAE
```

> **Note**
>
> If you are using the RPM Fusion Nonfree repository, you will need to update the following files:
>
> ```
> /etc/yum.repos.d/rpmfusion-nonfree.repo
> /etc/yum.repos.d/rpmfusion-nonfree-updates.repo
> ```
>
> By adding an exclude line. For example:
>
> ```
> mirrorlist=http://mirrors.rpmfusion.org/mirrorlist?repo=nonfree ...
> exclude=*nvidia*
> enabled=1
> ```
>
> This is required because the repository contains conflicting nvidia packages used for the stock Fedora kernel.

4. Rebuild the initial ramdisk to remove the Nouveau DRM module

```
dracut -v -f /boot/initramfs-$(uname -r).img $(uname -r)
```

Configuration

> **Caution**
>
> Because the Nvidia binary driver is not supported or included in Fedora, do not use the standard system configuration tools to setup the display. To modify display properties such as screen resolution or color depth, edit the X configuration file manually.

For modern displays, the Nvidia driver will configure itself automatically.

Details about advanced customization of the display driver can be found at the link below:

Nvidia README [ftp://download.nvidia.com/XFree86/Linux-x86/260.19.29/README/README.txt]

After the Nvidia binary driver has been installed successfully and configured, reboot the computer. After rebooting, proper installation of the binary driver can be verified with the **glxinfo** command.

```
$ glxinfo | grep server
server glx vendor string: NVIDIA Corporation
server glx version string: 1.4
```

Special Notes

- If the display is not rendered correctly, check the X log file (`/var/log/Xorg.0.log`). It contains useful information for debugging purposes.

- If the monitor has two connectors (DVI and DB-15), only use one connector when hooking up to the video card.

- Changes in the X configuration file do not take affect until the X Server is restarted.

Technical Support

Prior to contacting technical support, please visit the ASL online FAQ for quick answers to common hardware and software issues.The answers may be searched by keyword or browsed by category. These documents are maintained with up to date information.

FAQ [http://faq.aslab.com]

To request replacement of a defective part (except monitor) on systems under warranty, please send an E-mail to <techsupport@aslab.com> with the following information:

• Serial number or invoice number of the system

• Detailed description of the problem

• Shipping address

If the transaction involves multiple systems, ASL highly recommends creating one ticket per system. This will avoid any mixup when the RMA is processed.

Defective monitors will be handled directly by the manufacturer. Here is the contact information:

• Viewsonic: (800) 688-6688 (US and Canada)