NVIDIA Ubuntu packaging guide

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Contents

1   Introduction

In the process of doing testing and development on Dell machines that contain NVIDIA graphics, you may need to update the NVIDIA graphics driver to one that is newer than already released. This guide will help you through that process.

2   Check Versions

You'll want to be operating from an Ubuntu install to do these things.

1. Visit `https://launchpad.net/ubuntu/+source/nvidia-graphics-drivers-180`. This URL may change if the "source" package name changes at some point.

2. Click on the latest version number.

3. Is this version greater than or equal to the version you need?

   - **Yes**, goto Grabbing a Build
   - **No**, goto Updating the version

3   Grabbing a Build

Start out by clicking the i386 link of the builds on the right. From that *built files* section, you will need these packages:

- nvidia-185-kernel-source

- nvidia-185-libvdpau

- nvidia-185-modaliases

- nvidia-glx-185

Install these files on your system and test. If your tests are successful, goto Building an iDrive Release.

4   Updating the version

1. From the weblink you started at, download the **.orig.tar.gz**, **.diff.gz** and **.dsc** files.

2. Install the dpkg-dev and devscripts packages without recommends.
   `apt-get install dpkg-dev devscripts --no-install-recommends`

3. Extract the ubuntu package using this command:
   `dpkg-source -x *.dsc`

4. Switch into the newly created directory

5. Delete any existing .run files

6. Download the NVIDIA 32 and 64 bit drivers from the NVIDIA website into the root of the newly created directory.

7. Edit debian/upstream_info. Particularly the **RELEASE**, **NEXTVER**, and any references to **pk0/pkg1** or **pkg1/pk2**.

8. Update the debian/changelog using the dch tool:
   `dch -v VERSION-0ubuntu0`

   - *VERSION* is the upstream version.
   - *0ubuntu0* is explicitly what it said. So for 185.18.36 it would be:
   - `dch -v 185.18.36-0ubuntu1`
   - When the editor opens up, note that this is a *New Upstream Version.*
   - Make sure the release at the top (jaunty, karmic, hardy etc) is correct.
   - Save the file.

9. Install the dependencies necessary to build:
   `apt-get build-dep nvidia-graphics-drivers-180`

10. Build the package
    `debuild`

11. From the generated debs you will need these:

    - nvidia-185-kernel-source
    - nvidia-185-libvdpau
    - nvidia-185-modaliases
    - nvidia-glx-185

12. Test the packages.

13. If successful, goto Building an iDrive Release

5 Building an iDrive Release

1. Create this folder structure for the release `mkdir -p debs/nvidia`

2. Copy all of the necessary debs into that folder

3. Create a gzipped tarball