



CentOS Upgrade Network Shares

If you use network mounts on your PIERO machine, you will need to remount them on the Ubuntu install when upgrading from CentOS to Ubuntu. Information on transferring previously set mounts is provided in this document.

The following topics are covered in this document:

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Introduction to fstab

The File System Table (fstab) is a system file located at **/etc/fstab**. The fstab file is where most Linux operating systems store all of the information needed for mounts. Every mount you have on the system can be found there; this includes internal disks (by partition), external drives, network mounts, and AWS stores.

Mounting on Ubuntu

The built-in file explorer in Ubuntu (Nautilus) has a function for mounting network drives. This option is available if you have already installed Ubuntu and know the details of your network share.

To access the Nautilus for mounting network drives:

1. Go to **This PC**.
2. In the **Computer Tab**, select **Map a Network Drive**.

★ **Important:** Network mounts may require special arguments that may not work in all circumstances. Third-party applications are an option but not recommended, as Ross Video cannot guarantee they do not interact with PIERO. Do not manually write fstab entries directly into the fstab file unless you have the appropriate expertise.

Copying Old Settings

Most Linux distributions store mount locations in fstab, including CentOS and Ubuntu. This means it is possible to copy fstab entries from one system to another.



To copy the fstab entries for the network mount:

1. Open a terminal window and run **less /etc/fstab**.

If you get a **Permission Denied** message, run **sudo less /etc/fstab** and enter the system password.

Displayed on screen are the contents of the fstab file. Each entry/mount is one line, and unless you are using a high resolution display, it is likely the entries will run over onto a second line, making the document harder to read. If needed, you can use **ctrl + minus** to decrease the size of the text.

2. Identify your network mount in fstab by looking for the mount point of your network drive, which is the directory where you currently access the network mount from your CentOS machine. An indication you have identified your network mount is if a line has a network file system type. If you see a line with **cifs**, **smbs**, **s3fs** or **nfs**, this is a network mount.

For example:

Label	Mount Point	File System Type	Arguments	Dump/Pass
//192.168.0.45/sparkyspoons	/home/Piero/Documents/Clips	cifs	Credentials=/sparkyspoonspassword.txt	00

Example fstab entry:

```
//192.168.0.45/sparkyspoons/home/Piero/Documents/Clips cifs Credentials=/sparkyspoonspassword.txt 00
```

In this example, the IP address is the indication of the network mount because the hostname *sparkyspoons* is recognizable as it is user-defined. The mount point might look familiar if it is where you go for clips in Piero. Cifs is a network standard file system type which is also an indication that this is a network mount.

3. Once you have found your network mount in fstab, copy it by highlighting it and paste it somewhere off the device (since we are going to format CentOS) such as an email. You can always copy everything as a backup, but do not try and paste anything other than network mounts into Ubuntu later.

★ **Important!** Only copy the network mount so that you do not to overwrite the mounts of the internal drive(s) in Ubuntu. In Ubuntu, only add to its fstab file.

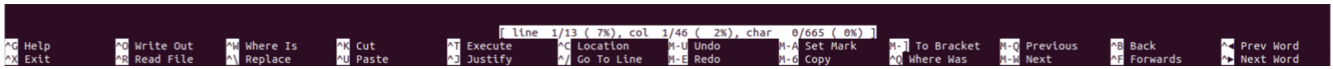
4. Next, run the Piero dedicated Piero Ubuntu installer. If you do not have the PIERO Ubuntu Installer, please contact Ross Video Technical Support at techsupport@rossvideo.com. For more information about the PIERO Ubuntu Installer, see the PIERO Ubuntu Installation Guide.

Once you have fully installed Ubuntu, you will need to paste your network mount fstab entry into Ubuntu's fstab file.

5. Open your network mount fstab entry with a text editor and at the bottom of the editor, copy and paste the fstab entry on a new line. If you are using Nano, which is the text editor that comes with your system, see the sub-procedure below:
 - a. Open a terminal and run **sudo nano etc/fstab**.

The fstab opens in the Nano text editor.

At the bottom of the text editor, you will see the text editor controls. The control **^**, refers to the **Control Key**. For example, **Ctrl + X**, is used to exit Nano.



Nano Text Editor

- b. Use the down arrow key to move the flashing cursor to the end of the file and using **^U (Ctrl + U)**, paste the fstab entry from CentOS, into the terminal window.
 - c. Exit Nano by using **^X** and **Save**.
6. Reboot your system.

As your system boots, Ubuntu will try to mount your network drive. You can also manually instruct Ubuntu to mount everything in fstab with the command **mount -a**.

Additionally, you can add the **v** (verbose) argument so it will display more info, which is useful for troubleshooting, and use **mount -av**.

★ **Note:** The command **mount -a** can also be useful if you temporarily lose the network connection to your storage server and want to manually instruct Ubuntu to reconnect to it after the network connection has been restored.

The fstab entries for the network mount have been copied.