

FreeNAS as a Print Server

by [Tau_Zero](#) on March 10, 2009

Table of Contents

FreeNAS as a Print Server	1
Intro: FreeNAS as a Print Server	2
Step 1: Preparation	2
File Downloads	3
Step 2: Connect via SSH	3
Step 3: Put ulpt.ko In The Right Spot	4
Step 4: Install LPRng	4
Step 5: Configure Things to Load on Boot	4
Step 6: LPRng Configuration: 1 of 3 - printcap	4
Step 7: LPRng Configuration: 2 of 3 - lpd.perms	5
Step 8: LPRng Configuration: 3 of 3 - lpd.conf	5
Step 9: Start Things and Set Permissions When Printer Connects	5
Step 10: Connecting A Windows PC	5
Step 11: Connecting with Mac OSX	7
Related Instructables	9
Comments	9



Author: Tau_Zero Napkin Diagrams

Twitter: @Tau_Zero

Intro: FreeNAS as a Print Server

FreeNAS is an excellent network storage solution simple enough for anyone to install. The system and space requirements are ridiculously small for this stripped-down version of FreeBSD. It's got all manner of features accessible through its clean web GUI, more than most will ever need. It even lets you stream media to game consoles!

Despite its impressive built-in abilities, there was one thing that I wanted it to do besides act as a great NAS, and that was to be a **print server** so I could share my **HP Deskjet 6540 USB printer** among my Windows and Mac OSX boxes. Easier said than done. After hours of playing around with CUPS and a few broken installs later, I saw the light.

On the FreeNAS forums, user sgrizzi created a thread on **how to make it work** with **LPR**, using the **LPRng** package, for a **LiveCD** based setup. It was EXTREMELY helpful, and he/she should get most of the credit, but the thread really needs to be condensed and clarified to be a useful guide. That is exactly what this Instructable is for, as well as modifying it for a standard full install of FreeNAS.

This guide assumes you already have a current standard install of FreeNAS set up and working.



Step 1: Preparation

First, let's get together a few things and take a look at the setup.

The Network

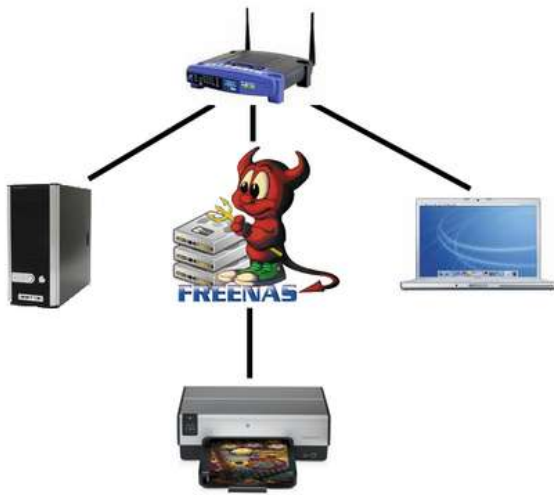
Your setup may be different, but mine is as follows.

- Linksys WRT54GL router running Tomato firmware v1.23
- FreeNAS box - v0.69, old Sony Vaio, 2 hard drives, static IP: 192.168.1.50
- PC - Windows XP SP3
- Macbook Pro - OSX 10.5.6
- HP Deskjet 6540 - USB connected printer, attached to FreeNAS

You will need to assign your FreeNAS box a static internal IP from within your router. There's plenty of guides online for that, all straight-forward, so do a quick Googling.

Stuff You'll Need

- Windows install disk if you're using Windows (necessary files may be available elsewhere, but this is the easiest)
- Printer Drivers for your particular make/model
- The file "ulpt.ko" taken from a full FreeBSD install. File attached to this instructable.
- SSH client - For Windows, go with PuTTY. For Linux, Unix, Mac, etc you can just use the terminal/command line



File Downloads



ulpt.ko (11 KB)

[NOTE: When saving, if you see .tmp as the file ext, rename it to 'ulpt.ko']

Step 2: Connect via SSH

Connect to your FreeNAS box via SSH. Normally it's bad practice to log in as root, but if you're really careful, things should go smoothly.

PuTTY is pretty self explanatory here for connecting. For the command line people, type:

ssh -l username static_ip_of_freenas

The static ip will be something like 192.168.x.xxx.

It will ask for a password, but when you type, nothing shows up. Don't worry, this is normal (hides password for security purposes); just type it and hit enter.

You should now have yourself a little greeting and a new command prompt (login in as root is *freenas:~#* and as a user is *>*)

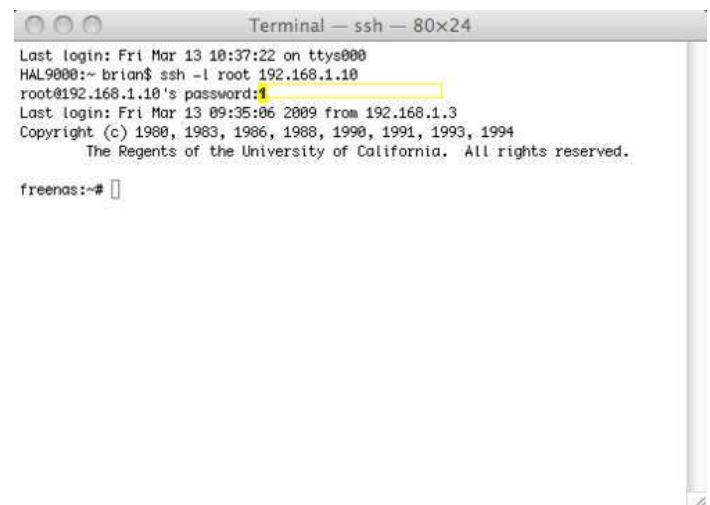
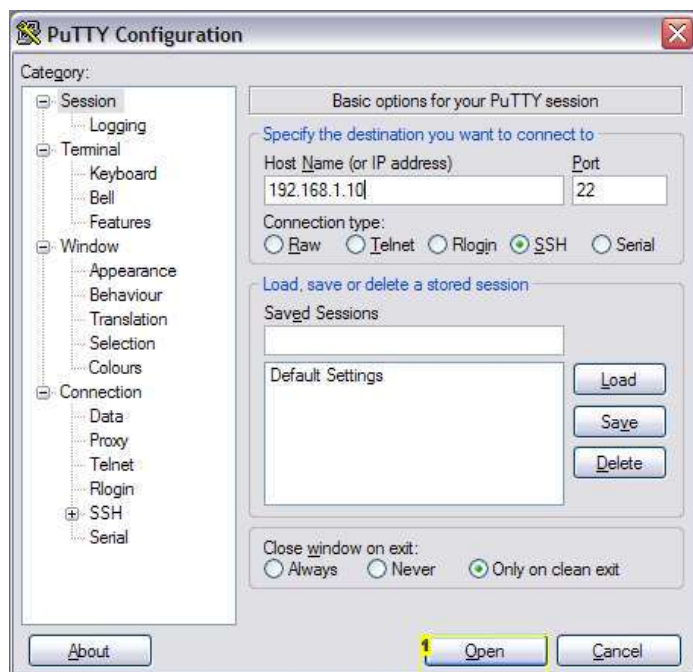


Image Notes

1. Password doesn't show up as you type.

Image Notes

1. Once you put the IP in, just click here. It'll ask for a login and then password.

Step 3: Put ulpt.ko In The Right Spot

Use your preferred method (ftp, smb, etc.) to put the ulpt.ko file somewhere onto the FreeNAS box, and remember the full path (I'll call it UPath), which will probably be something like /mnt/drivename/ulpt.ko

Go back to the terminal with the SSH connection and command prompt, we're going to move the file to the proper place. Type:

```
mv Upath /boot/kernel/ulpt.ko
```

That ought to do it.

Step 4: Install LPRng

We will be using a package called LPRng . To install it, type:

```
pkg_add -r LPRng
```

Let that chug away for a bit while it downloads and installs the necessary bits.

Step 5: Configure Things to Load on Boot

Load ulpt.ko Module

First we want to make sure that ulpt.ko loads on boot so as soon as we connect a printer it'll recognize it properly. Type:

```
nano /boot/defaults/loader.conf
```

Scroll down with either the arrow keys or ctrl+V until you reach a section titled "USB Modules"

Change the line

```
"ulpt_load="NO " # Printer"
```

to

```
"ulpt_load="YES " # Printer"
```

Hit ctrl+X. Then type "y", and hit enter when it asks you to save.

Start LPRng

Navigate to the FreeNAS web interface in a browser. Then go to System-->Advanced-->rc.conf

Use the "+" button to add two new entries:

Name: lpd_enable

Value: NO

Name: lprng_enable

Value: YES

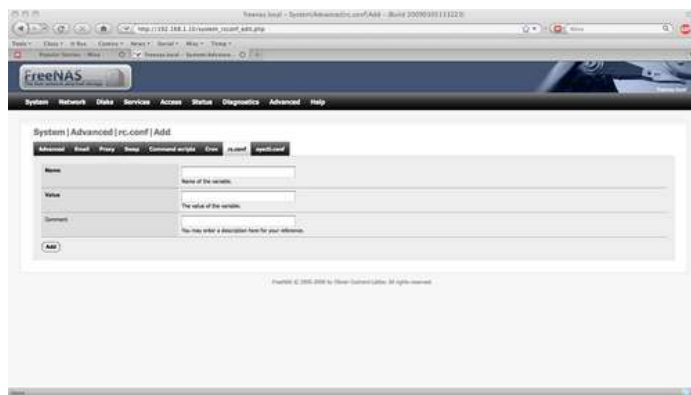
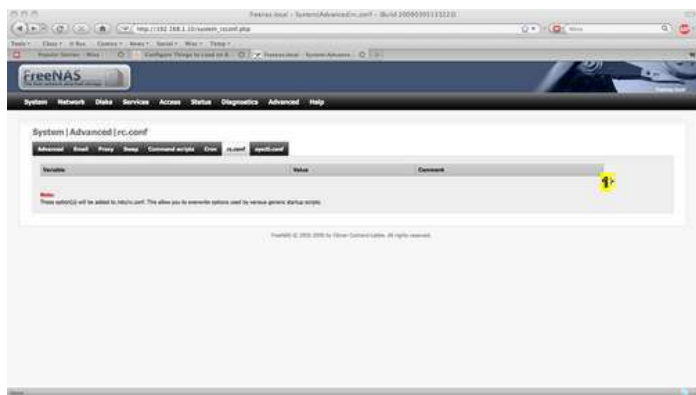


Image Notes

1. Click on the plus to add new values

Step 6: LPRng Configuration: 1 of 3 - printcap

There are three main files that contribute to LPRng working properly.

- /etc/printcap
- /usr/local/etc/lpd.perms
- /usr/local/etc/lpd.conf

Printcap (location: /etc/printcap) can be very complex or very simple. We'll go with very simple, but you can refer to the LPRng site and google for some different setups depending on your needs.

It'll be much easier to illustrate this by example:

```
# @(#)printcap HP Deskjet 6540
lp|deskjet:\
:sd=/var/spool/lpd/bare:\
:sh:\
:lp=/dev/ulpt0:
#
```

First line doesn't matter much. Just put your printer make/model in there for reference

- "lp|deskjet" - this is what your printer will be known as. "lp" is the primary name, "deskjet" is an alias.

<http://www.instructables.com/id/FreeNAS-as-a-Print-Server/>

- "sd=" This is the path to the print spooler. We're going to make this directory in a second.
- "sh" This stands for "supress header". If you've ever printed in a computer lab, you'll have seen these. It's a page that prints before a job that identifies who the job is for. For most people at home, it's unnecessary. In a work environment with lots of people and printing, it's something you should look into.
- "lp=" this is the location of the printer. If ulpt.ko loads properly, then when you connect a printer, it should register as /dev/ulpt0.

Remember the spooler path from sd? Let's make it. Type:

```
"mkdir -p -m 700 /var/spool/lpd/bare"
and
"chown 1:1 /var/spool/lpd/bare"
```

This creates the proper directory with the necessary ownership and permissions.

Step 7: LPRng Configuration: 2 of 3 - lpd.perms

lpd.perms (location: /usr/local/etc/lpd.perms) is a bit long. The default configuration should be fine. Scroll through and double check that these lines are uncommented (don't begin with a "#") by typing:

```
nano /usr/local/etc/lpd.perms
```

The lines that we want uncommented are:

```
ACCEPT SERVICE=C SERVER REMOTEUSER=root,papowell
ACCEPT SERVICE=C LPC=lpd,status,printcap
REJECT SERVICE=C
ACCEPT SERVICE=M SAMEHOST SAMEUSER
ACCEPT SERVICE=M SERVER REMOTEUSER=root
REJECT SERVICE=M
DEFAULT ACCEPT
```

Make any changes and then hit ctrl+X

Step 8: LPRng Configuration: 3 of 3 - lpd.conf

lpd.conf (location: /usr/local/etc/lpd.perms) should also be fine as the default. Things to double check for:

```
# Purpose: always print banner, ignore lpr -h option
# default ab@ (FLAG off)
# Purpose: query accounting server when connected
# default achk@ (FLAG off)
# Purpose: accounting at end (see also af, la, ar, as)
# default ae=jobend $H $n $P $k $b $t (STRING)
# Purpose: name of accounting file (see also la, ar)
# default af=acct (STRING)
# Purpose: use long job number (0 - 999999) when a job is submitted
# default longnumber@ (FLAG off)
Longnumber
```

Step 9: Start Things and Set Permissions When Printer Connects

We're going to want to start up the proper LPRng processes when a printer is connected. Type:

```
"nano /usr/local/etc/devd/devd.conf"
```

Add to the file:

```
# start action when USB printer ulpt0 is plugged in
# wait 3 second and then start the spooler daemon
#
attach 100 {
device-name "ulpt0";
action "sleep 3; lpd;
checkpc -f;
chown 0:0 /dev/ulpt0;
chmod 666 /dev/ulpt0;
echo 'o5L25fgfab' > /dev/speaker;";
};
*/
```

This watches for the printer to be plugged in, waits a few seconds, and starts the LPD process. Once that's going it fixes any missing files or permissions with *checkpc -f* . It then sets proper ownership and permissions on the device and plays a little sound.

Step 10: Connecting A Windows PC

1) Go to Network Connections. Click the Advanced tab at the top, then "Optional Networking Components".

Enable **both** Management and Monitoring Tools and Other Network File and Print services. It will ask you to insert the Windows cd, which you should have around. This will allow us to connect via LPR

2) Go to the Control Panel and then to Printers. Run the Add a New Printer wizard.

3) Local Printer (do not automatically detect). Next.

4) Create New Port -> LPR Port. Next

5) Enter the IP address of the FreeNAS box. This is why we want it to be static. Enter the name of the print queue (if you copied my printcap, it's "lp" without quotes)

6) Install drivers and click through the rest of the wizard. Do not print test page.

7) Right click on the printer and open up properties.

<http://www.instructables.com/id/FreeNAS-as-a-Print-Server/>

8) Port Tab. Uncheck "bidirectional support"

9) Advanced Tab.

start printing after the last page is spooled. Check

Print directly& Uncheck

Hold mismatched& Uncheck

Print spooled& Check

Keep&.Uncheck

Enable advanced& Check

10) Now go back to the main tab and try printing a test page.

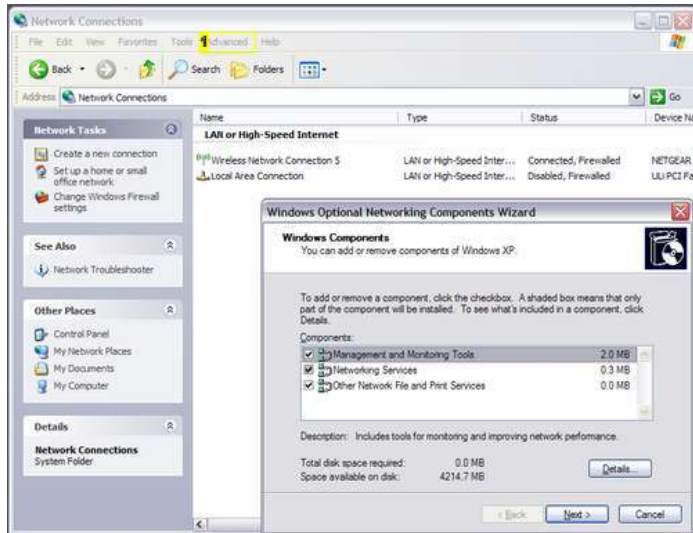


Image Notes

1. In here

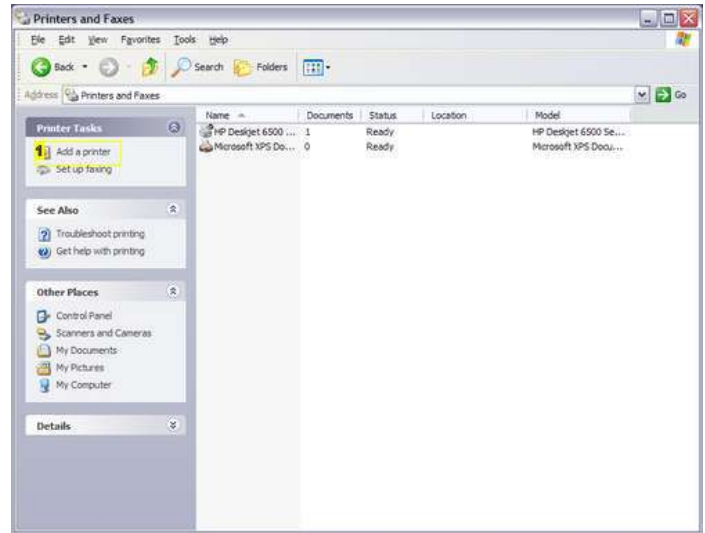


Image Notes

1. Click this



Image Notes

1. Make sure to unselect

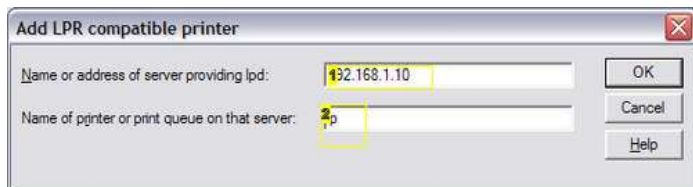
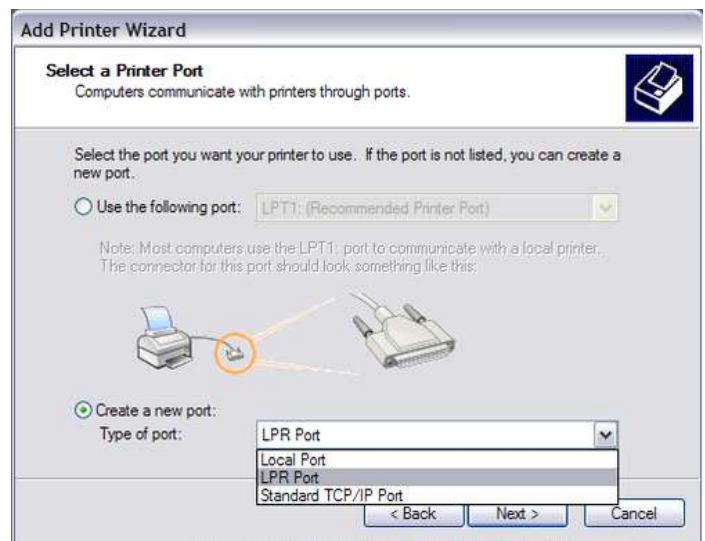


Image Notes

1. FreeNAS IP

2. Name of printer from printcap file

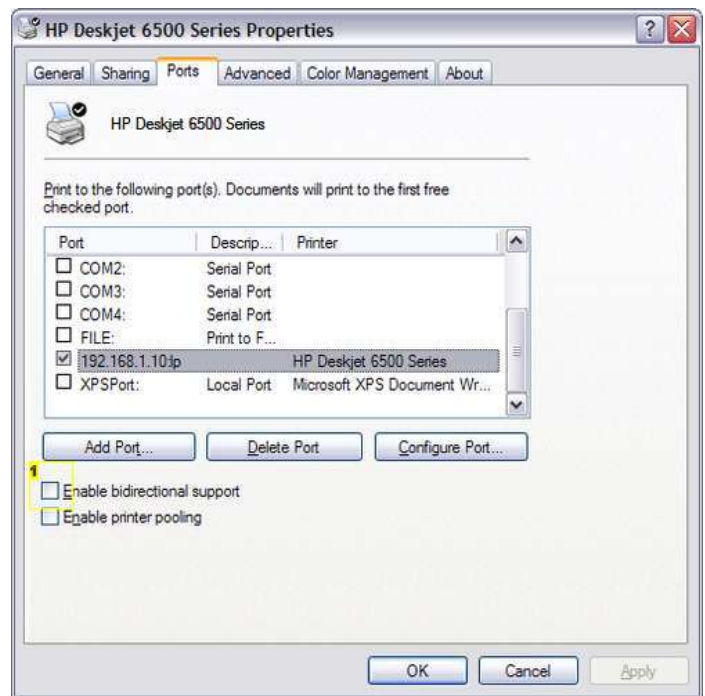
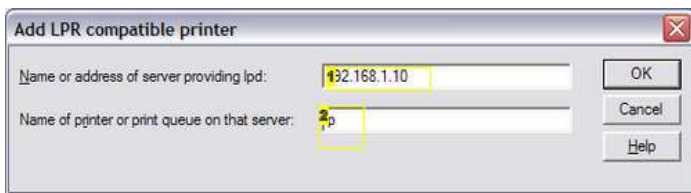
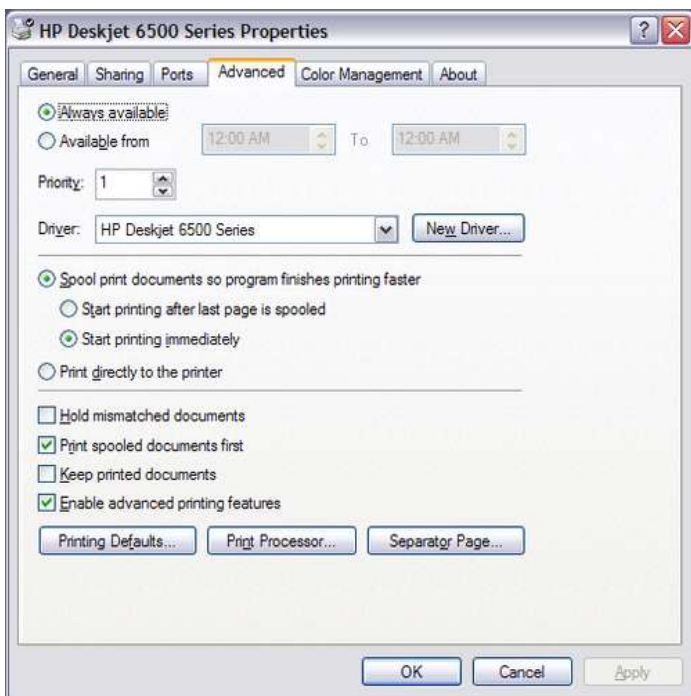


Image Notes

1. Deselect



Step 11: Connecting with Mac OSX

- 1) Open up System Preferences -> Print and Fax
- 2) Click the "+" to add a printer
- 3) Go to the "IP" tab
Protocol: LPD
Address: The IP of FreeNAS
Queue: Name of print queue (if you copied my printcap, it's "lp" without quotes)
Name and Location are up to you
Print Using: Pick correct drivers*

*Some printers, like my HP Deskjet 6540 wouldn't let me use the usb drivers with the LPD. I had to instead pick one as close as possible (turned out to be 5550) and go with that. If the two models are similar, it should work without a problem.



Image Notes

1. Go into this Pref Pane

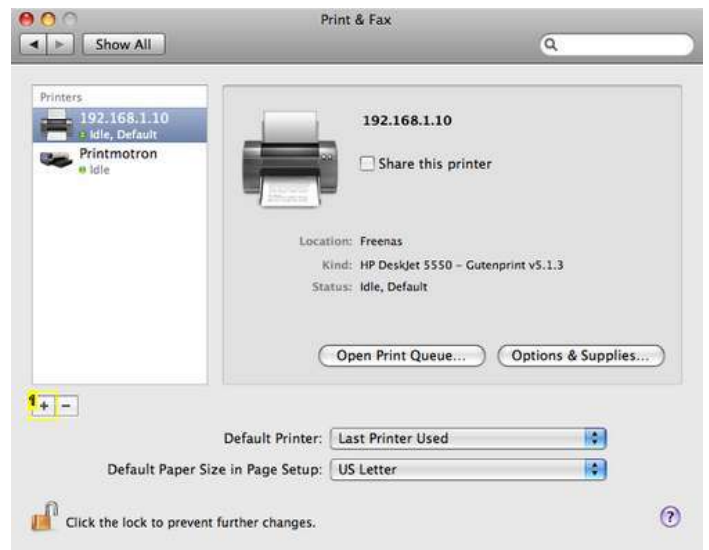


Image Notes

1. Add Printer button

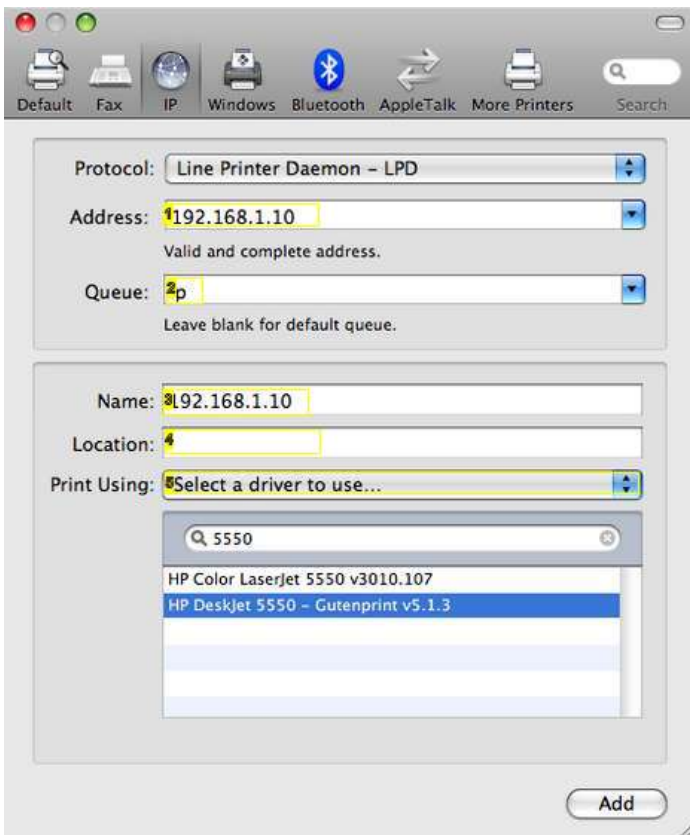


Image Notes

1. IP of your FreeNAS box
2. Printer from the printcap file
3. Whatever you want to name it
4. Just so you can keep track of where it is (e.g. downstairs office)
5. Use this to pick the appropriate driver for your printer, install a new driver, or pick a driver as close as possible.

Related Instructables



LAN's for the Everyman! by jdogtotherescue



Backup your server by Johntron



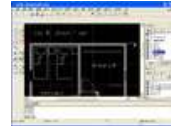
How to set up the AKAI LPD8 usb controller in Fruity Loops (video) by MNCproductions



Making Your Own Completely Free Website (And Server) by Olhavenusername



Build your own gateway firewall by Johntron



Setup QCad Professional. by michi

Comments

50 comments [Add Comment](#)

[view all 109 comments](#)



noahw says:

Mar 13, 2009. 9:19 AM [REPLY](#)

Hey, this is a great instructable and is very informative. Just one thing is missing... pictures! It really helps a lot when trying to follow directions so you should consider taking some photographs. Once you do that and leave me a message when you have so that we can publish your work. Thanks! Thanks for the cool instructable and we hope to publish this soon!



rstrawsb says:

Jan 16, 2011. 9:29 PM [REPLY](#)

Looks like the package moved, This is how I got around the error.

```
pkg_add -r ftp://ftp.freebsd.org/pub/FreeBSD/ports/i386/packages/Latest/LPRng.tbz
```



henke71 says:

Dec 30, 2010. 1:31 PM [REPLY](#)

Hi, is it possible to use this instruction for my FreeNAS 0.7.2 (FreeBSD 7.3) ?



yoseftux says:

Dec 17, 2010. 2:50 PM [REPLY](#)

Completed after some very careful reading, and consulting the source thread.

A few helpful hints to my fellow explorers:

- 1) Instead of stating requires a "standard" installation, should state up front that it requires a FULL install, an embedded install will not get past 1st base.
- 2) devd.conf must be placed in /usr/local/etc/devd - if the directory doesn't exist, create it.
- 3) once all the pieces are in place, reboot to fully initialize the system.
- 4) helps to manually run the

```
echo 'o5L25fgfab' > /dev/speaker
```

 command so you know exactly what to listen for. This is the success trumpet :)

All in all, a very good instructable. Thanks for the hard work Tau_Zero!!!



andrewgking says:

Oct 28, 2010. 8:38 PM [REPLY](#)

Starting LPRng,

```
freenas:~# lpd (enter)
```

```
2010-10-29-03:29:08.044 freenas Read_file_list: cannot stat required or included file '/etc/printcap' - No such file or directory
```

to fix

```
freenas:~# mv /usr/local/etc/printcap /etc/printcap
```

```
freenas:~# lpd (no error this time)
```



Thommo1971 says:

Oct 16, 2010. 4:10 PM [REPLY](#)

I can't get it to print anything. As soon as I enter the IP address and name of the print queue, it comes up with a message box telling me that "the lpd request did not respond as expected to a test command". It lets me continue the set up but I cannot print. I shows in the printer properties as a document sent for print but reports "printer busy or error"



Thommo1971 says:

Oct 7, 2010. 2:04 PM [REPLY](#)

I followed the instructions as given but I don't seem to have the /etc/printcap directory. Help!



jccl2 says:

Oct 15, 2010. 11:49 AM [REPLY](#)

on freenas the file is on /usr/local/etc/printcap



Thommo1971 says:
Thank you! I've now found it!

Oct 16, 2010. 4:01 PM [REPLY](#)



kenkenlau says:

Great Job. but I have a minor problem. The ulpt.ko file attached is a *.tmp file after download. Do I need to rename it or extract it? sorry that I m unix newbie. Please let me know the command line. I tried tar -xf but seems no luck. Thanks

Jun 24, 2009. 10:13 AM [REPLY](#)



Tau_Zero says:

Apparently there's a bug with instructables. Someone posted a workaround, i forget where.

Jun 24, 2009. 11:12 AM [REPLY](#)

"I think it's an instructables bug :(The same thing happens when I try to download files from here sometimes. The fix is to save the file as

"file name.file type"

if you put quotes around the name like above it will use the file type you put in. For example:

To save '2 inch box bottom'

- right-click the file
- save as
- in the name field type (including quotes) "2 inch box bottom.stl"

This method also works just renaming files. Use the quotes and the file type extension when you rename a file and it should change the file type as well as the name."



kenkenlau says:

Thanks. I renamed it. I managed to edit the files needed. Plug in my HP 3050 there is a beep. seems the lpd is running. But print from XP machines still have no response. I may need to google around and see what is the problem. LPRng installed successfully. printcap under /etc created. and the other 2 files is as described. devd folder created. devd.conf created. any command line can let me check the lpt0, lpd, is loaded and running properly? Thanks.

Jun 24, 2009. 11:57 AM [REPLY](#)



kenkenlau says:

in the /dev directory, I can see the ulpt0 in the FreeNAS GUI -> status -> process, I can see lpd, devd. do they indicate I am going the right way? ar.....sorry for my first time to unix system....headache..... Thanks.

Jun 24, 2009. 1:36 PM [REPLY](#)



Tau_Zero says:

Don't worry about being new. I'm loosely familiar with the system (I'm usually on an XP machine or my Mac, which is Unix based, but hardly the same experience). The beep and ulpt0 showing up is a good sign. It means that at the very least, your printer is being seen by the FreeNAS box. The lpd running is a good sign. Through the FreeNAS GUI -> Advanced -> command, try these commands: lpc lpd (gives you the PID of lpd or signals an error if lpd is not loaded) lpq (should return the status of the empty spool queue) lpc status (should show the queue and the spooler status) ls -l /dev/ulpt0 (should show ulpt0 setup for read-write for user, group, root) Let me know whether the first three run fine, or whether they say there's an error of some sort. Also let me know what permissions it says ulpt0 has. If everything is in order there, then we can go troubleshoot the other computer's setup for connecting.

Jun 28, 2009. 12:18 PM [REPLY](#)



kenkenlau says:

Tau, glad to see you are still helping people on the FreeNAS printer server. I have my old NAS down after 1 year of use, and try to setup a new one (0.7.1). Get back here for some information.

In my case, the ulpt0 does not work. I read many posts in the FreeNAS forum and then change to unlp0 in printcap. also the devd.conf.

=== then everything WORKS fine === if anyone also get the "device busy" when giving the lpq command, try unlp0 instead of ulpt0.

Thanks for the great instructables, Tau.

Sep 7, 2010. 1:03 PM [REPLY](#)



Tau_Zero says:

It's been my pleasure helping folks out. Getting a printserver out of an existing FreeNAS box is a fantastic addition to any home network that it'd be a crime not to!

Sep 7, 2010. 1:15 PM [REPLY](#)

Thank you very much for your research. I wish I was more familiar with the system so I'd know why that change works exactly, but I'm very glad to hear you found a resolution. Did you need to do anything except change ulpt0 to unlp0 in steps 6 and 9?



kenkenlau says:

ar....actually there is a typo, for the devd.conf

I deleted a ; before the "

also, I added 1 more sound when the printer is unplugged. here is the devd I used:

ar....actually there is a typo, for the devd.conf

I deleted a ; before the "

also, I added 1 more sound when the printer is unplugged. here is the devd I used:

```
# start action when USB printer ulpt0 is plugged in
# wait 3 second and then start the spooler daemon
#
attach 100 {
device-name "ulpt0";
```

Sep 7, 2010. 2:12 PM [REPLY](#)

```
action "sleep 3; lpd;
checkpc -f;
chown 0:0 /dev/ulpt0;
chmod 666 /dev/ulpt0;
chown 0:0 /dev/unlpt0;
chmod 666 /dev/unlpt0;
echo 'o5L25fgfab' > /dev/speaker";
};
# this will cause a beep when you unplug the usb printer1
detach 100 {
device-name "ulpt0";
action "sleep 1;
echo 'o5L10bafgffgfab' > /dev/speaker;
sleep 1;
echo 'o5L10fgfabgfab' > /dev/speaker";
};

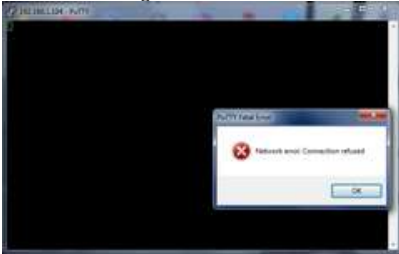
enjoy~
```



xantes says:

Aug 13, 2010. 5:50 AM [REPLY](#)

I am introducing the FreeNAS static IP in Putty.exe and I got an error: "Network error: Connection refused." What am I doing wrong?!



Tau_Zero says:

Aug 13, 2010. 8:43 AM [REPLY](#)

Go into the Web GUI for FreeNAS, Services->SSH, and make sure it's enabled.



xantes says:

Aug 12, 2010. 10:42 AM [REPLY](#)

Sorry but this is not a tutorial for anyone. It does requires more than medium knowledge about Unix, Linux and so on. Especially since is a very long tutorial not only very complex.



Tau_Zero says:

Aug 12, 2010. 11:09 AM [REPLY](#)

I'm sorry you feel that way, but 11 steps is not very long at all, and if you've got a standard full install of FreeNAS, you can do it if you know how to read and type. What part do you think requires some special knowledge of *nix systems?



ychauvel says:

Dec 5, 2009. 2:02 AM [REPLY](#)

Hello,

I'm trying to get the attached "ulpt.ko" file... I get a .tmp file!
Can anyone help?

Thanks.



aaam1967 says:

Jul 17, 2010. 11:15 AM [REPLY](#)

i have the problem when I'm trying to get the attached "ulpt.ko" file... I get a .tmp file! Can you help me? Tanks



Tau_Zero says:

Dec 5, 2009. 9:32 AM [REPLY](#)

Check further down in the comments.



mebkopcznski says:

Jun 25, 2010. 11:07 AM [REPLY](#)

Even putting the commands in this file /etc/devd.conf (because version 7.1 doesn't have the one informed in instructions), i don't get printer working after reboot. I'm looking for a place where I can put this command. Any ideia?



mic98 says:

May 19, 2010. 4:09 AM [REPLY](#)

hello

can anybody help me to setup a 2nd printer.

I already got one printer working on a full install of freenas v7.1 but i get stuck to do a 2nd printer. So far as i can see there is no guide for this for a full install.

I found guides for embedded or live cd's but that doesn't help me much.
So if somebody could help me out, i would appreciate it.

Thanks



izakw. says:

May 9, 2010. 6:43 AM [REPLY](#)

hello,
to solve the problem with ftp fetch:
Error: FTP Unable to get ftp://ftp.freebsd.org/pub/FreeBSD/ports/i386/packages-7.2-release/Latest/LPRng.up.tbz: No address record
pkg_add: unable to fetch 'ftp://ftp.freebsd.org/pub/FreeBSD/ports/i386/packages-7.2-release/Latest/LPRng.up.tbz' by URL

i have set the domain in freenas webgui: system->general setup from "local" to "com"
and now everything is fine.



bboudewijns says:

Apr 13, 2010. 4:57 PM [REPLY](#)

Hi!

I just restarted the whole thing and i don't know why, but everything is working just fine now! Thanks again for the nice instructable, all my other comments can be deleted!

Cheers!



peepuhpeep says:

Feb 22, 2010. 9:40 PM [REPLY](#)

Thanks for the nice instruction here! (and thanks to sgrizzi as well as the original author!)

I got a problem that keeps coming back: the file permissions of the /dev/ulpt0 keep changing when a printer is plugged out. This we all know that happens..

But I changed the devd.conf file (resided in /etc/devd.etc and also put it in /usr/local/etc/devd/devd.conf).

This is how it looks like:

.....

#

This example calls a script when the AC state changes, passing the

notify value as the first argument. If the state is 0x00, it might

call some sysctls to implement economy mode. If 0x01, it might set

the mode to performance.

notify 10 {

match "system" "ACPI";

match "subsystem" "ACAD";

action "/etc/acpi_ac \$notify";

};

start action when USB printer ulpt0 is plugged in

wait 3 second and then start the spooler daemon

#

attach 100 {

device-name "ulpt0";

action "sleep 3; lpd;

checkpc -f;

chown 0:0 /dev/ulpt0;

chmod 666 /dev/ulpt0;

echo 'o5L25fgfab' > /dev/speaker;;

};

**/*

END OF FILE HERE

So this should work? But it doesn't? What could be wrong here?



boudewijns says:

Apr 13, 2010. 8:51 AM [REPLY](#)

I have exactly the same problem. If i chmod and chown manually the printer is working fine, but the devd.conf is not loaded at boot indeed. I dont get it. Dont here the sound as wel...

Any help would be appreciated!

Thanks



boudewijns says:

Apr 12, 2010. 11:57 AM [REPLY](#)

Hi!

First of all, thanks very much for this nice guide! But i'm stuck..I did everything you told me step by step but my printer is recognized as a ugen0, ugen0.2 and ugen0.3 instead of the ulpt. It is a common samsung ML-2010 laserprinter.

My ulpt is up and running according to freebsd. Already tried rebooting first and then connecting te printer as well, no change what so ever.

Can you help me please! Thanks in advance!

Greetings

PS.

Output:

freenas:/dev# kldstat

Id	Refs	Address	Size	Name
1	3	0xffffffff80100000	ab6fb0	kernel
2	1	0xffffffff80bb7000	3948	ulpt.ko
3	1	0xffffffff9526e000	c745	geom_mirror.ko



lietotajs says:

Jan 29, 2010. 12:13 PM [REPLY](#)

why it says to me

Error: FTP Unable to get ftp://ftp.freebsd.org/pub/FreeBSD/ports/i386/packages-7.2-release/Latest/LPRng.tbz: No address record
pkg_add: unable to fetch 'ftp://ftp.freebsd.org/pub/FreeBSD/ports/i386/packages-7.2-release/Latest/LPRng.tbz' by URL
whats wrong?



Tau_Zero says:

Jan 29, 2010. 2:05 PM [REPLY](#)

Strange. That file exists at that location.

Post the output to:

```
echo $PACKAGESITE $PACKAGEROOT
cat /etc/resolv.conf
host ftp.freebsd.org
```



acereced says:

Jan 29, 2010. 4:37 PM [REPLY](#)

Same problem here

can get beyond that point

any ideas



Tau_Zero says:

Jan 30, 2010. 10:36 AM [REPLY](#)

Same to you:

Post the output to:

```
echo $PACKAGESITE $PACKAGEROOT
cat /etc/resolv.conf
host ftp.freebsd.org
```



garacs says:

Apr 6, 2010. 7:31 AM [REPLY](#)

Here's the output of the commands you asked:

```
freenas:~# echo $PACKAGESITE $PACKAGEROOT
PACKAGEROOT: Undefined variable.
```

```
freenas:~# cat /etc/resolv.conf
domain XXX (my domain name)
nameserver 208.67.222.222
nameserver 208.67.220.220
```

```
freenas:~# host ftp.freebsd.org
Nameserver not responding
ftp.freebsd.org A record not found, try again
```

What's wrong with it?



pktp says:

Could anyone tell how to do this in win7 since it seems to don't have the LPR Port option available.

thks

Feb 24, 2010. 7:08 PM [REPLY](#)



dsrome says:

Had the same question. Found the answer here:
<http://technet.microsoft.com/en-us/library/cc732063.aspx>

Mar 31, 2010. 6:47 PM [REPLY](#)



dsrome says:

Oops. forgot that you have to turn on LPR Port Monitoring first:

Control Panel
Programs
Turn Windows Features on or off
Print Services
LPR Port Monitor

more info here: <http://www.vistax64.com/vista-print-fax-scan/14482-re-how-add-lpr-port-vista.html>

Mar 31, 2010. 6:51 PM [REPLY](#)



kellogs1980 says:

by this Error: FTP Unable to get ftp://ftp.....
It is for ver. 0.69

setenv PACKAGESITE <ftp://ftp.freebsd.org/pub/FreeBSD/ports/i386/packages-6-stable/Latest/>

Mar 31, 2010. 7:12 AM [REPLY](#)



garacs says:

Obviously it was 8GB, and not 8BG...

Anyway, I found also the original forum thread from sbrizzly, at this link:

<http://sourceforge.net/apps/phpbb/freenas/viewtopic.php?f=15&t=1332>

but when I follow his instructions, I get this error instead:

```
freenas:~# pkg_add .r lprng .P /mnt/xxxxxx/app/lprng
pkg_add: can't stat package file '.r'
pkg_add: can't stat package file 'lprng'
pkg_add: can't stat package file '.P'
pkg_add: can't stat package file '/mnt/xxxxxx/app/lprng'
```

What am I doing wrong?

Mar 29, 2010. 3:44 AM [REPLY](#)



garacs says:

I managed to bypass the error the other users had:

Error: FTP Unable to get <ftp://ftp.freebsd.org/pub/FreeBSD/ports/i386/packages-7.2-release/Latest/LPRng.tbz>: No address record
pkg_add: unable to fetch 'ftp://ftp.freebsd.org/pub/FreeBSD/ports/i386/packages-7.2-release/Latest/LPRng.tbz' by URL

simply modifying the DNS servers under System|General Setup, inserting the OpenDNS servers:

IPv4 DNS servers: 208.67.222.222 / 208.67.220.220

I have another problem, though:

share/doc/LPRng/LPRng-Reference.html: Write failed: No space left on device: No space left on device
share/doc/LPRng/LPRng-Reference.pdf: Write failed: No space left on device: No space left on device

My Freenas is a clean install, embedded, on a 8BG hard disk. How come I ran out of space?

Mar 29, 2010. 3:39 AM [REPLY](#)



arewe says:

Great set of instructions. However I am new to linux arena and i have freenas setup and running great. I am now trying to setup a print server. Step 2 I get the following: > `pkg_add -r lprng -p /mnt/Data0/app/`
Error: FTP Unable to get <ftp://ftp.freebsd.org/pub/FreeBSD/ports/i386/packages-6.4-release/Latest/lprng.tbz> : File unavailable (e.g., file not found, no access)
pkg_add: unable to fetch 'ftp://ftp.freebsd.org/pub/FreeBSD/ports/i386/packages-6.4-release/Latest/lprng.tbz' by URL

If i go in the browser and go to the FTP site there is no 'packages-6.4-release' directory. Is there some other place to get these files?

Version: 0.69 Kwisatz Haderach (revision 4276) Built 17 Jan 09 FreeBSD 6.4 release-p3(revision 199506) Computer type: P600 192MB RAM 100GB hard drive. FreeNAS is installed on the HD on ad0p1.

Thanks for you help.

Mar 20, 2010. 7:54 PM [REPLY](#)



ran1wil says:

i cannot get the package
this is the message:

Error: FTP Unable to get ftp://ftp.freebsd.org/pub/FreeBSD/ports/i386/packages-7.2-release/Latest/LPRng.tbz: No address record
pkg_add: unable to fetch 'ftp://ftp.freebsd.org/pub/FreeBSD/ports/i386/packages-7.2-release/Latest/LPRng.tbz' by URL

Please help

Mar 19, 2010. 6:55 PM [REPLY](#)



Mad2k6 says:

Control Pannel
Programs
Turn Windows Features on or off
Print Services
LPR Port Monitor

Mar 17, 2010. 6:30 PM [REPLY](#)



hertzfr says:

Anyone tried with a Canon Pixma MP830 printer/scanner/fax?

Mar 2, 2010. 11:21 AM [REPLY](#)



Tau_Zero says:

It's a permissions error on ulpt0.

Yours is
crw-r--r-- 1 root operator

It should be
crw-rw-rw- 1 root wheel

Go do step 9 again very carefully, where the permissions get set once the printer is turned on.

Feb 13, 2010. 8:35 AM [REPLY](#)



bbird says:

Yes, that did the trick, thanks.I also redid devd.conf and it is being executed properly.

Now, on startup I do see the same situation as described by user dongwook and get:

Warning - lp: cannot open lp device '/dev/ulpt0' - Permission denied

And I still get:
freenas:~# lpq -L
Printer: lp@freenas 'laserjet'
Queue: 1 printable job
Server: pid 1831 active
Unspooler: pid 1832 active

...

Status: subserver pid 1832 starting at 12:34:23.078
Status: accounting at start at 12:34:23.079
Status: opening device '/dev/ulpt0' at 12:34:23.079
Status: cannot open '/dev/ulpt0' - 'Interrupted system call', attempt 1, sleeping 10 at 12:34:33.116
Status: cannot open '/dev/ulpt0' - 'Device busy', attempt 2, sleeping 20 at 12:34:43.126
Status: cannot open '/dev/ulpt0' - 'Device busy', attempt 3, sleeping 40 at 12:35:03.136
Rank Owner/ID Pr/Class Job Files Size Time
active Tom@TOMSDEN+12 A 12 Test Page 111384 12:34:22

The permissions are set correctly now as well (automatically without me doing it manually):

freenas:~# ls -l /dev/ulpt0
crw-rw-rw- 1 root wheel 0, 70 Feb 13 12:27 /dev/ulpt0

Feb 13, 2010. 9:43 AM [REPLY](#)



bbird says:

Now I'm able to confirm that the above setup works only for single lines. If I have a file and do:

echo somefile.txt > /dev/ulpt0

I only see the first line printed.
If I print something from XP I get the Device busy error and nothing comes out.

Feb 17, 2010. 4:14 AM [REPLY](#)



BillMarcoLarson says:

In step 8 all of the lines that you suggest should be double checked start with # [excepting the final line, "Longnumber"] which I assume means they should be commented out. I might have expected to be checking for lines with the # removed rather than the reverse.

I would like to confirm that what I should be doing is ensuring the presence of these lines with the # included.

Also: I am connecting my HP Laser Jet 4L via a parallel port on my Freenas server. I have been attempting to set up printing from an Ubuntu Linux Host, using the LPD option and there is some evidence that the parallel printer is recognised as jobs are being sent "successfully" but so far no actual output! Do I need to purchase a USB conversion cable to make this work?

Feb 2, 2010. 1:01 AM [REPLY](#)

Thank you for all your hard work and forbearance!

[view all 109 comments](#)