





Boolean:  Case

# Print to a PDF file via a Debian server

A step by step How-to that lets you print from a win box to pdf file on a Debian server

After transferring from RedHat to Debian, we found we had a need to print to file. This note assumes you have found out how to configure SAMBA and only is concerned with the extras to set up a print to PDF print server. Our SAMBA setup is set to run workgroups as we don't want to M\$ize anything and are moving to a pure Debian/Linux environment.

Make sure all the packages you need are installed. I highly recommend learning to use wajig if you are doing any server work as it has a unified interface that the apt and dpkg commands lack. See my notes on wajig.

## Required Packages

```
cups-pdf 1.3.1-5 PDF Writer backend for CUPS
cupsys 1.1.20final+cv Common UNIX Printing System(tm) - serve
libcupsimage2 1.1.20final+cv Common UNIX Printing System(tm)
libcupsys2 1.1.20final+cv Common UNIX Printing System(tm) - l
libqt cups2 2.0-4 Qt interface library for CUPS
qtcups 2.0-4 Qt front-end for CUPS.
samba 3.0.2a-1 a LanManager-like file and printer server fo
samba-common 3.0.2a-1 Samba common files used by both the ser
samba-doc 3.0.2a-1 Samba documentation
kdeprint 3.2.2-1 KDE Print
```

## Install CUPS virtual PDF printer

We use the KDE, (If you figure out how to do this under gnome or command line, please email me the steps so I can include them here.) The easiest way to create a PDF file printer is to run the KDE print manager (print-mgr). You will see a "Print 2 file (PDF) printer - ignore it. If you know the command line equivalent to the following process please send it to [inform@xtronics.com](mailto:inform@xtronics.com)

- Press the add printer button (not the pseudo printer). Then press "next".
- Select other printer type and click "next".
- Select the very bottom "Virtual Printer [PDF printer]" and click "next".
- Click on "RAW printer" and click "next".
- Skip the test for now and click "next" again.
- Skip the Banners for now and click "next" once more.

- Skip the Quotas for now and click "next" yet again.
- On this screen set to allowed users and enter the user name and add for every user of this printer. Then click "next".
- Next christen the printer with a name - I used print2pdf - add a location and description - location could say username/cups-pdf/ . Description might say "Print to file as PDF"
- Click "next" - and then "Finish".

## Configure CUPS - cupsd.conf

In your favorite editor open /etc/cups/cupsd.conf

Find the lines that say :

```
<Location /printers>
Encryption IfRequested
Satisfy All
Order allow,deny
</Location>
```

Edit them to say:

```
<Location /printers>
### Changed for cups print 2 pdf file
AuthType None
Order Deny,Allow
Deny From None
Allow From 192.168.1.0/24
#Encryption IfRequested
#Satisfy All
#Order allow,deny
</Location>
```

Note that 192.168.1.0/24 is my local network with a 24 bit subnet mask. Save the changes.

## Edit /etc/cups/mime.convs

Near the bottom, find the line that says:

```
#application/octet-stream application/vnd.cups-raw 0 -
```

And uncomment it and save

## Edit /etc/cups/mime.types

Near the bottom, find the line that says:

```
#application/octet-stream
```

Uncomment it and save.

Now restart cups

```
wajig restart cupsys
```

## Edit /etc/samba/smb.conf

In the [global] sections you will need something similar to this:

```
#==== Global printer params ====
printing = cups
printcap name = cups
load printers = yes
guest account = nobody
log file = /var/log/samba/%m.log
```

The [printer] section should look something like this:

```
[printers]
comment = All Printers
directory = /tmp
browseable = yes
public = yes
guest ok = yes
guest account = nobody
writable = yes
printable = yes
create mode = 0777
```

Save the file and restart samba (wajig restart samba).

## M\$ windows configuration

I'm assuming you have Samba working already with windows and you have the samba users set etc. On Win2K: open your windows file browser and under networks/entire network/computers near me/your workgroup find your samba server and locate your new printer share (F5 might come in handy). Right click and select "connect. answer OK and select *Apple LaserWriter 16/600 PS* for the printer type. A test print will return a pdf in the ~/username/cups-pdf directory. You might want to provide a shortcut to the directory on the desk top for the end user.

## Gnome

From a reader: I

n Gnome, the tool would be gnome-cups-manager,

1. Right-Click "New Printer" -> "+Add"
2. select "Local Printer", and "Use a detected printer", and "PDF Printer" and click "Forward"
3. For Printer Driver choose "Generic" manufacturer with "PostScript Printer" model and click "Apply"
4. restart samba

## Manual text editor method

1. edit the /etc/cups/printers.conf file
2. insert or append to end of file:  
<Printer PostScript-Printer>  
Info PDF Printer  
Location tornado:home/cups-pdf/  
DeviceURI cups-pdf:/  
State Idle  
Accepting Yes  
JobSheets none none  
QuotaPeriod 0  
PageLimit 0  
KLimit 0  
</Printer>

3. restart cupsys, restart samba

## Security

The above creates a rather open printer server - if you want to restrict it further, add restrictive lines one at a time in /etc/cups/cupsd.conf and /etc/samba/smb.conf testing at each step until you feel secure or you break it <g>.

## Troubleshooting

If all goes well you will have a document in the users home/username/cups-pdf folder. if not, set the log level in /etc/cups/cupsd.conf to debug and watch /var/log/cups/error\_log (tail -f error\_log) . Don't forget samba's testparm command for checking the config syntax and look in samb's logs. Anyone using samba should appreciate this OSS masterpiece (excellent docs, debugging tools etc). Samba along with cups provide key parts to transitioning to OSS/GNU software. Be sure to visit http://www.debian.org/donations and do your part to continue this historic movement.

As always, please point out any errors, typos, or additional information to the address below.



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