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pptpd : VPN Server

Scenario: I want to install a VPN server on a linux server which is connected to both a Private Lan, and to the Internet. I want to be able to allow Windows and Linux clients easily connect to this VPN with no hassle. We are going to use pptpd on debian, as it is on apt, and Windows clients can easily connect.

Install pptpd Server

```
apt-get install pptpd
```

Configure pptpd Server

```
vi /etc/pptpd.conf
localip 192.168.0.1
remoteip 192.168.0.100-200,192.168.0.222

/etc/init.d/pptpd restart
```

Add Users

```
echo "username pptpd password *" >> /etc/ppp/chap-secrets
```

To get Windows to connect to this VPN, no extra software is required :) Go into Network places, and go to "Add Network Connection" and look for a VPN option. All thats needed is the Internet IP of the VPN server, the username and password.

Logs

```
tail /var/log/daemon.log
```

More Info

Thanks very much to: http://poptop.sourceforge.net/dox/debian-howto.phtml
Comparison of VPN Solutions: http://mia.ece.uic.edu/~papers/volans/table.html

CLIENT

PPTP (Point-to-Point Tunneling Protocol) - Connecting to a Windows VPN from Linux

The following guide shows how easy it is to connect to a Windows based VPN running on Server 2003 etc. from a Debian Linux client. Its pretty easy to setup a new Network Connection in XP/Vista, however it is just as easy in Linux. This guide assumes that Debian Etch is been used as a client.

Install pptp

```
apt-get install pptp-linux
```

Method 1: pptp GUI

```
vi /etc/apt/sources.list

#include these three lines in the above file.
# James Cameron's PPTP GUI packaging
deb http://quozl.netrek.org/pptp/pptpconfig ./

apt-get update
apt-get install pptpconfig

#Run the following as root (via a GUI). Not the best idea. A sudo command would be a little better.
:~# pptpconfig
```

The above shows up a nice interface which should work fine. A few tweaks, I had to carry out:

- Routing Tab - Lan to Lan (option)
- In the same Routing Tab, click "Edit Network Routes..." and add a Network (192.168.0.0/24) and a Name.

http://wiki.kartbuilding.net/images/pptpconfig_running.jpg

Method 2: pptp CLI

1. /etc/ppp/options.pptp should be created automatically and contain all required info.

2.

```
vi /etc/ppp/chap-secrets
username TunnelName password *
```

3.

```
vi /etc/ppp/peers/TunnelName
# name of tunnel, used to select lines in secrets files
remotename TunnelName

# name of tunnel, used to name /var/run pid file
linkname TunnelName

# name of tunnel, passed to ip-up scripts
ipparam TunnelName

# data stream for pppd to use
pty "pptp vpn.host.com --nolaunchpppd "

# domain and username, used to select lines in secrets files
name username

# adopt defaults from the pptp-linux package
file /etc/ppp/options.pptp
```

4.

```
pon TunnelName
#do an ifconfig to see if the connection was correctly made and established. If not, see next line f
pon TunnelName debug dump logfd 2 nodetach
```

5.

```
route add -net 192.168.0.0 netmask 255.255.0.0 dev ppp0
iptables --insert OUTPUT 1 --source 0.0.0.0/0.0.0.0 --destination 192.168.0.0/16 --jump ACCEPT --out
iptables --insert INPUT 1 --source 192.168.0.0/16 --destination 0.0.0.0/0.0.0.0 --jump ACCEPT --in-i
iptables --insert FORWARD 1 --source 0.0.0.0/0.0.0.0 --destination 192.168.0.0/16 --jump ACCEPT --ou
iptables --insert FORWARD 1 --source 192.168.0.0/16 --destination 0.0.0.0/0.0.0.0 --jump ACCEPT
iptables --table nat --append POSTROUTING --out-interface ppp0 --jump MASQUERADE
iptables --append FORWARD --protocol tcp --tcp-flags SYN,RST SYN --jump TCPMSS --clamp-mss-to-pmtu
```

6.

```
poff TunnelName
#route automatically gets removed
```

7. #iptables -F (dangerous)

8. Optional Extra /etc/resolve.conf -> set this to the internal DNS server

The above information was obtained from:
http://pptpclient.sourceforge.net/howto-debian.phtml
http://pptpclient.sourceforge.net/routing.phtml#lan-to-lan

Information and code was also obtained from firstly going through the GUI method.

Other Information

In case you want to mount a windows share on linux, smbmount maynot work due to SMB password security restrictions of Server 2003. Instead the following will have to be used:

```
mount -t cifs //yoursever/yourshare /mnt/somepath -o username=validserveraccount
```

Reference: http://ubuntuforums.org/archive/index.php/t-8479.html

http://pptpclient.sourceforge.net/howto-debian.phtml

Note: Beware that the passwords for connecting to the VPN are stored in: /etc/ppp/chap-secrets