##

Connecting to a SoftEther VPN Server using the SoftEther client on Linux

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- Here is an article that we used to get the last few steps correct: https://www.cactusvpn.com/tutorials/how-to-set-up-softether-vpn-client-on-linux/

*The CactusVPN tutorial sends ALL traffic through the VPN. We will enable **Split Tunneling***

- The supplied params are:
  server IP: 192.168.1.1
  username: user1
  password: friday

NOTE: The name of the tap interface will be prepended by "**vpn_**", so if you type in "**tap0**" in ***vpncmd*** it will create a virtual interface named "**vpn_tap0**".

- Ensure that ip_forward is enabled in the kernel:
  `$> echo 1 | sudo tee /proc/sys/net/ipv4/ip_forward`
- Download the SoftEther ***vpnclient***.
  - SoftEther's download website is here:
    http://www.softether-download.com/en.aspx
  - Here is a working link as of 12/27/2021:
    https://github.com/SoftEtherVPN/SoftEtherVPN_Stable/releases/download/v4.38-9760-rtm/softether-vpnclient-v4.38-9760-rtm-2021.08.17-linux-x64-64bit.tar.gz
- Install the SoftEther ***vpnclient***

```
$> wget
https://github.com/SoftEtherVPN/SoftEtherVPN_Stable/releases/download/v4.38
-9760-rtm/softether-vpnclient-v4.38-9760-rtm-2021.08.17-linux-x64-64bit.tar
.gz
$> tar -xvzf
softether-vpnclient-v4.38-9760-rtm-2021.08.17-linux-x64-64bit.tar.gz
$> cd vpnclient/
$> make
```

* This tutorial assumes ***vpncmd*** and ***vpnclient*** are running from the source directory *

- Start the ***vpnclient*** using sudo:

`$> sudo ./vpnclient start`

- Test the ***vpnclient*** by connecting to the client demon:

`$> ./vpncmd`

- select '2' to connect to a client VPN instance

- Hit enter to use localhost as the address for the VPN client

`VPN Client> check`

- Create a new virtual network interface (called "**tap1**" in this tutorial):

`VPN Client>NicCreate tap1`

- Create an account (called "**newAccount**") using the server IP, username, and tap name:

```
VPN Client>accountcreate
    AccountCreate command - Create New VPN Connection Setting
    Name of VPN Connection Setting: newAccount

    Destination VPN Server Host Name and Port Number: 192.168.1.1:4500

    Destination Virtual Hub Name: DEFAULT

    Connecting User Name: user1

    Used Virtual Network Adapter Name: tap1

    The command completed successfully.

VPN Client>
```

- Add a password for this vpn account:

```
 VPN Client>AccountPasswordSet newAccount
    * enter and confirm the password
    * when asked about "standard" or "radius", choose "standard".
```

- Connect to the VPN server:

`VPN Client>AccountConnect newAccount`

- Check the log file to see if there are any errors:

`$> vim client_log/*.log`

- Run ***dhclient*** on the virtual interface

`$> sudo dhclient vpn_tap1`

- You may need to add a route to your Employees Subnet if ***dhclient*** doesn't

`$> sudo ip route add 192.168.3.0/24 via 192.168.252.1 dev vpn_tap1`

- The ***vpncmd*** commands can be ran from the command line:

```
$> ./vpncmd localhost /CLIENT /CMD accountconnect newAccount
```