L2TP VPN Configuration on Ubuntu System

Make sure you have **root** permission to your local computer to configure the VPN on Ubuntu System.

Follow the below steps to configure your VPN and start using the servers.

Pre-requisites:

Login or change as a **root** user by running the command **sudo -i** or **sudo su -**

```
apt update -y
apt install -y strongswan xl2tpd net-tools
mv /etc/ipsec.conf /etc/ipsec.conf.org
mv /etc/ipsec.secrets /etc/ipsec.secrets.org
mv /etc/xl2tpd/xl2tpd.conf /etc/xl2tpd/xl2tpd.conf.org
mv /etc/ppp/options.l2tpd.client /etc/ppp/options.l2tpd.client.org (optional)
```

Step 1:
```
cat > /etc/ipsec.conf <<EOF
# ipsec.conf - strongSwan IPsec configuration file

conn neysavpn
  auto=add
  keyexchange=ikev1
  authby=secret
  type=transport
  left=%defaultroute
  leftprotoport=17/1701
  rightprotoport=17/1701
  right=103.42.51.130
  ike=aes256-sha1-modp1024
  esp=aes256-sha1
EOF
```

Step 2:

```
cat > /etc/ipsec.secrets <<EOF
: PSK "!17BoM3@y"
EOF
```

Step 3:

```
cat > /etc/xl2tpd/xl2tpd.conf <<EOF
[lac myvpn]
lns = vpn.iitb.neysa.ai
ppp debug = yes
pppoptfile = /etc/ppp/options.l2tpd.client
length bit = yes
EOF
```

Step 4:

```
cat > /etc/ppp/options.l2tpd.client <<EOF
ipcp-accept-local
ipcp-accept-remote
refuse-eap
require-chap
noccp
noauth
mtu 1280
mru 1280
noipdefault
defaultroute
usepeerdns
connect-delay 5000
name "test"        # Make sure you change this to provided User Name
password "test"    # Make sure you change this to provided Password
EOF
```

Step 5:
```
chmod 600 /etc/ipsec.secrets
chmod 600 /etc/ppp/options.l2tpd.client
```

Step 6:
```
mkdir -p /var/run/xl2tpd
touch /var/run/xl2tpd/l2tp-control
```

Create a new file named **neysavpn.sh** and paste/insert the following lines then save and exit

```
#!/bin/bash
ipsec restart
service xl2tpd restart
sleep 3
echo "c neysavpn" > /var/run/xl2tpd/l2tp-control
while ! ifconfig | grep -F "ppp0" > /dev/null; do echo waiting for vpn to come-up && sleep 5; done
route del -net 192.168.25.0 netmask 255.255.255.0 gw 192.0.3.1
sleep 1
route add -net 192.168.25.0 netmask 255.255.255.0 gw 192.0.3.1
```

To Re-Start the VPN service on you Ubuntu system run the command **sh neysavpn.sh** (make sure you're running this command in the same directory where **neysavpn.sh** was created)