

How-To Connect to JSS-TH-H0 Cisco VPN with vpnc on Ubuntu

Credit

<https://www.debuntu.org/how-to-connect-to-a-cisco-vpn-with-vpnc/>

<https://www.lullabot.com/articles/using-vpnc-as-a-command-line-vpn-client>

<http://manpages.ubuntu.com/manpages/trusty/man8/vpnc.8.html>

1. This manual was created on Ubuntu 20.04 LTS (Cloud VPS)

```
root@JSPAsia: /
root@JSPAsia:~# lsb_release -a
No LSB modules are available.
Distributor ID: Ubuntu
Description:    Ubuntu 20.04 LTS
Release:       20.04
Codename:      focal
root@JSPAsia:~#
```

2. Currently, there is no VPN connection to JSS-TH-H0. Test PING to 172.31.80.212 (JSS Core System, IBM i server), all PING packets are loss.

```
root@JSPAsia: /
root@JSPAsia:~# lsb_release -a
No LSB modules are available.
Distributor ID: Ubuntu
Description:    Ubuntu 20.04 LTS
Release:       20.04
Codename:      focal
root@JSPAsia:~# ping 172.31.80.212
PING 172.31.80.212 (172.31.80.212) 56(84) bytes of data.
^C
--- 172.31.80.212 ping statistics ---
48 packets transmitted, 0 received, 100% packet loss, time 48132ms
root@JSPAsia:~#
```

3. There is only one package to install in order to connect to a cisco VPN: vpnc.

```
sudo apt-get install vpnc
```

```
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root@JSPAsia:~# lsb_release -a
No LSB modules are available.
Distributor ID: Ubuntu
Description:    Ubuntu 20.04 LTS
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root@JSPAsia:~# sudo apt-get install vpnc
```

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root@JSPAsia: /
No LSB modules are available.
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Codename:       focal
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PING 172.31.80.212 (172.31.80.212) 56(84) bytes of data.
^C
--- 172.31.80.212 ping statistics ---
48 packets transmitted, 0 received, 100% packet loss, time 48132ms

root@JSPAsia:~# sudo apt-get install vpnc
sudo: unable to resolve host JSPAsia: Temporary failure in name resolution
Reading package lists... Done
Building dependency tree
Reading state information... Done
The following additional packages will be installed:
  vpnc-scripts
Suggested packages:
  resolvconf dnsmasq
The following NEW packages will be installed:
  vpnc vpnc-scripts
0 upgraded, 2 newly installed, 0 to remove and 107 not upgraded.
Need to get 92.0 kB of archives.
After this operation, 291 kB of additional disk space will be used.
Do you want to continue? [Y/n] y
Get:1 http://ua.archive.ubuntu.com/ubuntu focal/universe amd64 vpnc-scripts all 0.1~git20190117-1 [13.8 kB]
Get:2 http://ua.archive.ubuntu.com/ubuntu focal/universe amd64 vpnc amd64 0.5.3r550-3.1 [78.2 kB]
Fetched 92.0 kB in 2s (39.4 kB/s)
Selecting previously unselected package vpnc-scripts.
(Reading database ... 152767 files and directories currently installed.)
Preparing to unpack .../vpnc-scripts_0.1~git20190117-1_all.deb ...
Unpacking vpnc-scripts (0.1~git20190117-1) ...
Selecting previously unselected package vpnc.
Preparing to unpack .../vpnc_0.5.3r550-3.1_amd64.deb ...
Unpacking vpnc (0.5.3r550-3.1) ...
Setting up vpnc-scripts (0.1~git20190117-1) ...
Setting up vpnc (0.5.3r550-3.1) ...
Processing triggers for man-db (2.9.1-1) ...
root@JSPAsia:~#
```

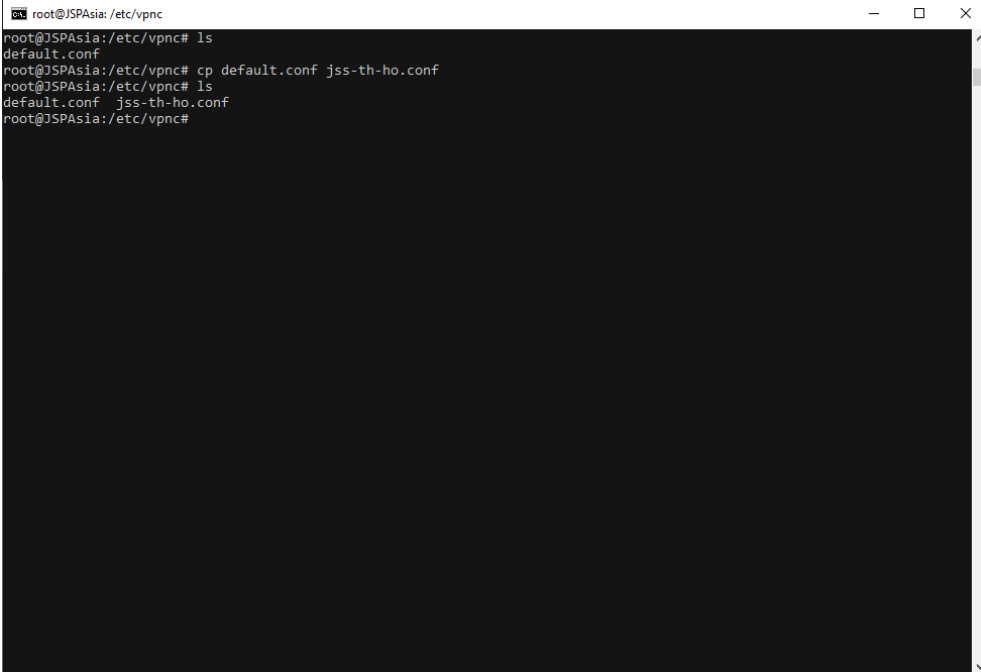
Note:

To install vpnc on CentOS, use command below instead.

```
yum install vpnc
```

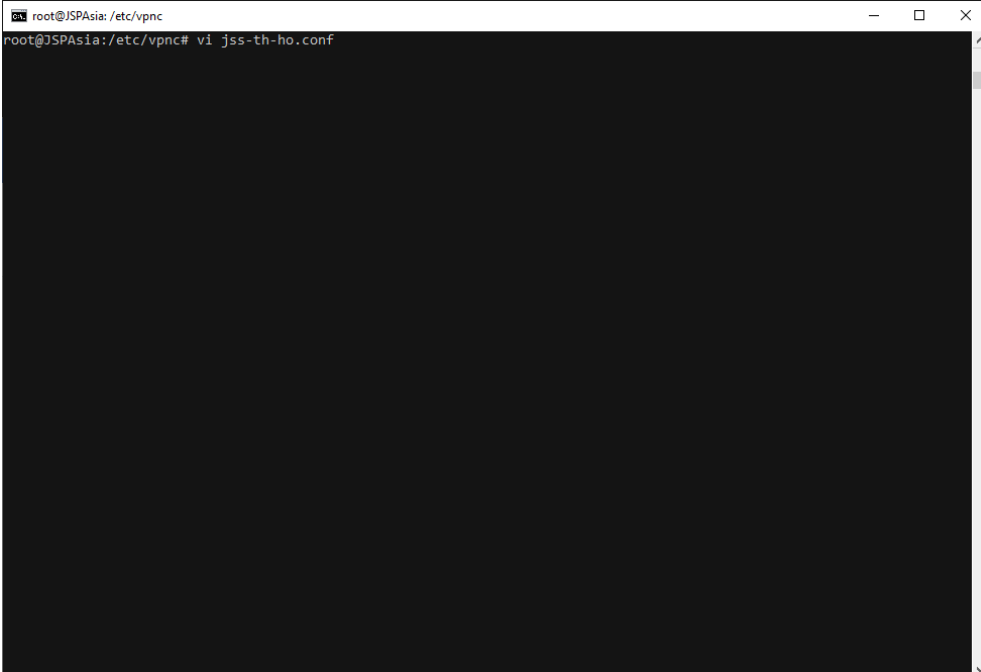
4. Create new VPN configuration file by copying from default.conf.

```
cd /etc/vpnc  
cp default.conf jss-th-ho.conf
```



```
root@JSPAsia: /etc/vpnc  
root@JSPAsia:/etc/vpnc# ls  
default.conf  
root@JSPAsia:/etc/vpnc# cp default.conf jss-th-ho.conf  
root@JSPAsia:/etc/vpnc# ls  
default.conf  jss-th-ho.conf  
root@JSPAsia:/etc/vpnc#
```

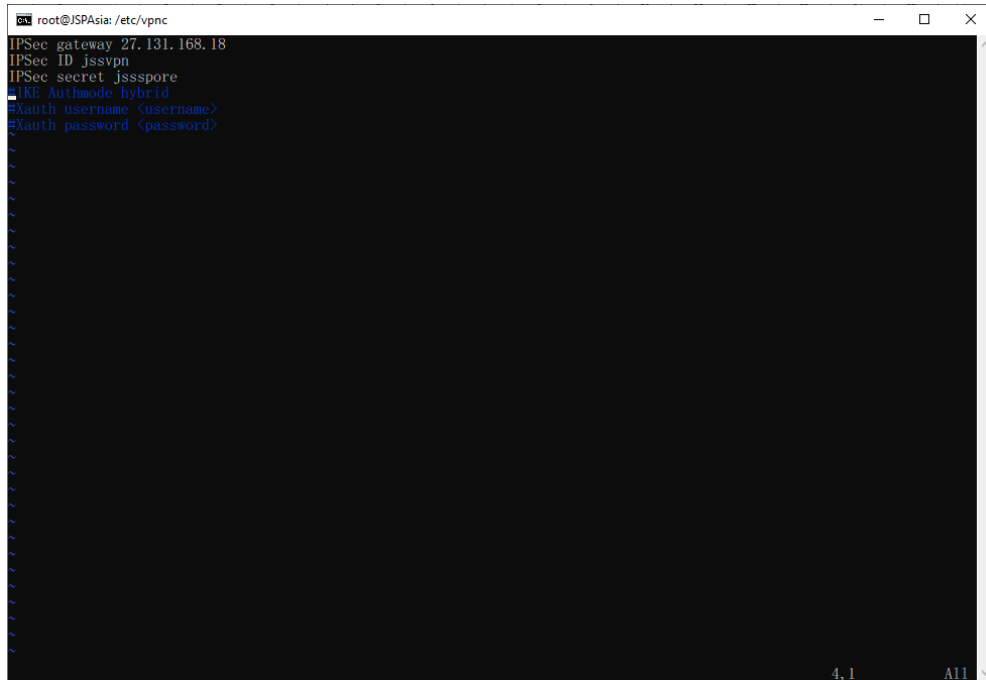
5. Edit jss-th-ho.conf file with vi (or any text-editor).



```
root@JSPAsia: /etc/vpnc  
root@JSPAsia:/etc/vpnc# vi jss-th-ho.conf
```

6. Edit `jss-th-ho.conf` only first 3 lines, leave other as comment lines as below.

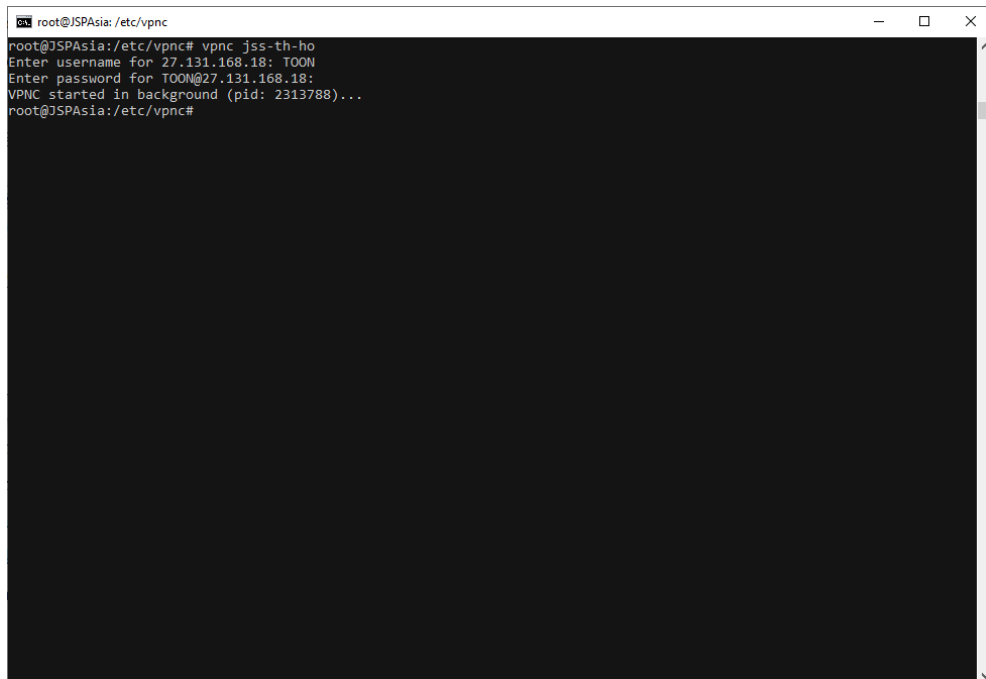
```
IPSec gateway 27.131.168.18
IPSec ID jssvpn
IPSec secret jssspore
```

A terminal window titled 'root@JSPAsia: /etc/vpnc' showing the configuration of the file `jss-th-ho.conf`. The first three lines are uncommented: `IPSec gateway 27.131.168.18`, `IPSec ID jssvpn`, and `IPSec secret jssspore`. The following lines are commented out with a hash symbol: `#IKE Authmode hybrid`, `#auth username <username>`, and `#auth password <password>`. The terminal shows a cursor at the end of the last line. The bottom right corner of the terminal window displays '4,1' and 'All'.

```
root@JSPAsia: /etc/vpnc
IPSec gateway 27.131.168.18
IPSec ID jssvpn
IPSec secret jssspore
#IKE Authmode hybrid
#auth username <username>
#auth password <password>
```

7. Connect VPN with commands below and input VPN username/password.

```
vpnc jss-th-ho
```

A terminal window titled 'root@JSPAsia: /etc/vpnc' showing the execution of the command `vpnc jss-th-ho`. The output shows the user being prompted for a username and password, and then the VPN connection starting in the background with PID 2313788. The terminal shows a cursor at the end of the last line. The bottom right corner of the terminal window displays a scrollbar.

```
root@JSPAsia: /etc/vpnc
root@JSPAsia:/etc/vpnc# vpnc jss-th-ho
Enter username for 27.131.168.18: TOON
Enter password for TOON@27.131.168.18:
VPNC started in background (pid: 2313788)...
root@JSPAsia:/etc/vpnc#
```

Note:

Connecting a specific VPN is a single command away.

You do not have to be in the `/etc/vpnc` directory to run this command:

```
vpnc jss-th-ho
```

8. Now, JSS-TH-HO VPN is connected.

Test PING to 172.31.80.212 (JSS Core System, IBM i server) again, all PING packets are received.

```
root@JSPASia: /etc/vpnc
root@JSPASia:/etc/vpnc# vpnc jss-th-ho
Enter username for 27.131.168.18: TOON
Enter password for TOON@27.131.168.18:
VPNC started in background (pid: 2313788)...
root@JSPASia:/etc/vpnc# ping 172.31.80.212
PING 172.31.80.212 (172.31.80.212) 56(84) bytes of data:
64 bytes from 172.31.80.212: icmp_seq=1 ttl=62 time=5.65 ms
64 bytes from 172.31.80.212: icmp_seq=2 ttl=62 time=5.61 ms
64 bytes from 172.31.80.212: icmp_seq=3 ttl=62 time=5.86 ms
64 bytes from 172.31.80.212: icmp_seq=4 ttl=62 time=5.78 ms
64 bytes from 172.31.80.212: icmp_seq=5 ttl=62 time=5.67 ms
64 bytes from 172.31.80.212: icmp_seq=6 ttl=62 time=5.53 ms
64 bytes from 172.31.80.212: icmp_seq=7 ttl=62 time=5.68 ms
64 bytes from 172.31.80.212: icmp_seq=8 ttl=62 time=5.69 ms
64 bytes from 172.31.80.212: icmp_seq=9 ttl=62 time=5.68 ms
64 bytes from 172.31.80.212: icmp_seq=10 ttl=62 time=5.70 ms
64 bytes from 172.31.80.212: icmp_seq=11 ttl=62 time=5.75 ms
64 bytes from 172.31.80.212: icmp_seq=12 ttl=62 time=5.65 ms
64 bytes from 172.31.80.212: icmp_seq=13 ttl=62 time=5.82 ms
64 bytes from 172.31.80.212: icmp_seq=14 ttl=62 time=5.74 ms
64 bytes from 172.31.80.212: icmp_seq=15 ttl=62 time=5.70 ms
64 bytes from 172.31.80.212: icmp_seq=16 ttl=62 time=5.75 ms
64 bytes from 172.31.80.212: icmp_seq=17 ttl=62 time=5.64 ms
64 bytes from 172.31.80.212: icmp_seq=18 ttl=62 time=5.67 ms
64 bytes from 172.31.80.212: icmp_seq=19 ttl=62 time=5.73 ms
64 bytes from 172.31.80.212: icmp_seq=20 ttl=62 time=5.74 ms
64 bytes from 172.31.80.212: icmp_seq=21 ttl=62 time=5.66 ms
64 bytes from 172.31.80.212: icmp_seq=22 ttl=62 time=6.03 ms
64 bytes from 172.31.80.212: icmp_seq=23 ttl=62 time=5.75 ms
64 bytes from 172.31.80.212: icmp_seq=24 ttl=62 time=5.71 ms
64 bytes from 172.31.80.212: icmp_seq=25 ttl=62 time=5.64 ms
64 bytes from 172.31.80.212: icmp_seq=26 ttl=62 time=6.88 ms
^C
--- 172.31.80.212 ping statistics ---
26 packets transmitted, 26 received, 0% packet loss, time 25046ms
rtt min/avg/max/mdev = 5.530/5.757/6.877/0.241 ms
root@JSPASia:/etc/vpnc#
```

9. Disconnect VPN with commands below.

vpnc-disconnect

```
root@JSPASia: /etc/vpnc
root@JSPASia:/etc/vpnc# vpnc jss-th-ho
Enter username for 27.131.168.18: TOON
Enter password for TOON@27.131.168.18:
VPNC started in background (pid: 2313788)...
root@JSPASia:/etc/vpnc# ping 172.31.80.212
PING 172.31.80.212 (172.31.80.212) 56(84) bytes of data:
64 bytes from 172.31.80.212: icmp_seq=1 ttl=62 time=5.65 ms
64 bytes from 172.31.80.212: icmp_seq=2 ttl=62 time=5.61 ms
64 bytes from 172.31.80.212: icmp_seq=3 ttl=62 time=5.86 ms
64 bytes from 172.31.80.212: icmp_seq=4 ttl=62 time=5.78 ms
64 bytes from 172.31.80.212: icmp_seq=5 ttl=62 time=5.67 ms
64 bytes from 172.31.80.212: icmp_seq=6 ttl=62 time=5.53 ms
64 bytes from 172.31.80.212: icmp_seq=7 ttl=62 time=5.68 ms
64 bytes from 172.31.80.212: icmp_seq=8 ttl=62 time=5.69 ms
64 bytes from 172.31.80.212: icmp_seq=9 ttl=62 time=5.68 ms
64 bytes from 172.31.80.212: icmp_seq=10 ttl=62 time=5.70 ms
64 bytes from 172.31.80.212: icmp_seq=11 ttl=62 time=5.75 ms
64 bytes from 172.31.80.212: icmp_seq=12 ttl=62 time=5.65 ms
64 bytes from 172.31.80.212: icmp_seq=13 ttl=62 time=5.82 ms
64 bytes from 172.31.80.212: icmp_seq=14 ttl=62 time=5.74 ms
64 bytes from 172.31.80.212: icmp_seq=15 ttl=62 time=5.70 ms
64 bytes from 172.31.80.212: icmp_seq=16 ttl=62 time=5.75 ms
64 bytes from 172.31.80.212: icmp_seq=17 ttl=62 time=5.64 ms
64 bytes from 172.31.80.212: icmp_seq=18 ttl=62 time=5.67 ms
64 bytes from 172.31.80.212: icmp_seq=19 ttl=62 time=5.73 ms
64 bytes from 172.31.80.212: icmp_seq=20 ttl=62 time=5.74 ms
64 bytes from 172.31.80.212: icmp_seq=21 ttl=62 time=5.66 ms
64 bytes from 172.31.80.212: icmp_seq=22 ttl=62 time=6.03 ms
64 bytes from 172.31.80.212: icmp_seq=23 ttl=62 time=5.75 ms
64 bytes from 172.31.80.212: icmp_seq=24 ttl=62 time=5.71 ms
64 bytes from 172.31.80.212: icmp_seq=25 ttl=62 time=5.64 ms
64 bytes from 172.31.80.212: icmp_seq=26 ttl=62 time=6.88 ms
^C
--- 172.31.80.212 ping statistics ---
26 packets transmitted, 26 received, 0% packet loss, time 25046ms
rtt min/avg/max/mdev = 5.530/5.757/6.877/0.241 ms
root@JSPASia:/etc/vpnc# vpnc-disconnect
Terminating vpnc daemon (pid: 2313788)
root@JSPASia:/etc/vpnc#
```

Note:

If you have multiple VPN clients running, the disconnect command will only affect the most recently established connection.

To kill all currently active vpnc connections, use the command:

killall vpnc