

Table Of Contents

Table Of Contents 1

Register Free at Freenet6 2

Install tspc client 2

 Configure tspc 2

How do I stop tunnel? 3

How do I start tunnel? 3

[Home](#) > [Faq](#) > [Debian / Ubuntu](#)

tspc: Debian / Ubuntu Linux Configure IPv6 Tunnel

Posted by [Vivek Gite](#) <vivek@nixcraft.com>[Next in series » »](#) ^[1]

Q. How do I configure IPv6 Tunnel under Ubuntu Linux? I'd like to browse and use IPv6 utilities under Ubuntu but my ISP is not ready with IPv6 native transport. How do I browser IPv6 ready websites using IPv4?

^[2]

A. You can easily set IPv6 tunnel under Debian or Ubuntu Linux using tspc (tunnel setup protocol client). tspc provides a mean to configure a tunnel obtained from a tunnel server which is compliant to the tunnel setup protocol (TSP). tspc will connect to a tunnel server and request a tunnel according to the specifications inside the configuration file. As a background process, it will then monitor the state of the tunnel. In the event of a timeout, tspc will reestablish a new tunnel. tspc allows you to connect and browse IPv6 network using IPv4.

Register Free at Freenet6

You can get free IPv6 access through Freenet6. Visit [Freenet6](#) ^[3] and register yourself to obtain username and password.

Install tspc client

Open terminal and type the following command:

```
$ sudo apt-get install tspc
```

OR

```
# apt-get install tspc
```

Configure tspc

The default configuration file is located at `/etc/tsp/tspc.conf`. Open file using a text editor, enter:

```
# vi /etc/tsp/tspc.conf
```

You need to provide username, password and hostname registered at Freenet6 (see your tunnel broker registration email). For example,

- `userid - vivek`
- `passwd - myPassWord`
- `server - broker.freenet6.net`

Search, `userid`, `server`, and `passwd` variable in file and set them as follows:

```
userid=your-name  
server=broker.freenet6.net  
passwd=your-password
```

Save and close the file. Restart tspc service, enter

```
$ sudo /etc/init.d/tspc restart
```

Run `ifconfig` command to see your tunnel IPv6 address, enter:

```
$ /sbin/ifconfig tun
```

Sample output:

```
tun          Link encap:UNSPEC  HWaddr 00-00-00-00-00-00-00-00-00-00-00-00-00-00-00-00
```

```
inet6 addr: 2001:5c0:8fff:fffe::a68d/128 Scope:Global
UP POINTOPOINT RUNNING NOARP MULTICAST MTU:1280 Metric:1
RX packets:9 errors:0 dropped:0 overruns:0 frame:0
TX packets:3 errors:0 dropped:0 overruns:0 carrier:0
collisions:0 txqueuelen:500
RX bytes:656 (656.0 b) TX bytes:240 (240.0 b)
```

Test IPv6 connectivity, enter:

```
$ ping6 ipv6.google.com
```

Sample output:

```
PING ipv6.google.com(2001:4860:0:2001::68) 56 data bytes
64 bytes from 2001:4860:0:2001::68: icmp_seq=1 ttl=55 time=501 ms
64 bytes from 2001:4860:0:2001::68: icmp_seq=2 ttl=55 time=453 ms
64 bytes from 2001:4860:0:2001::68: icmp_seq=3 ttl=55 time=437 ms
64 bytes from 2001:4860:0:2001::68: icmp_seq=4 ttl=55 time=473 ms

--- ipv6.google.com ping statistics ---
4 packets transmitted, 4 received, 0% packet loss, time 2998ms
rtt min/avg/max/mdev = 437.077/466.544/501.926/24.149 ms
```

View Google.com IPv6 Address, enter:

```
$ host ipv6.google.com
```

Sample output:

```
ipv6.google.com is an alias for ipv6.l.google.com.
ipv6.l.google.com has IPv6 address 2001:4860:0:2001::68
```

Now you can browse any IPv6 configured website or use all IPv6 utilities such as ping6, tracerout6 without a problem.

How do I stop tunnel?

Open the terminal and type the command, enter:

```
$ sudo /etc/init.d/tspc stop
$ /sbin/ifconfig
```

How do I start tunnel?

Open the terminal and type the command, enter:

```
$ sudo /etc/init.d/tspc start
$ /sbin/ifconfig
$ ping6 ipv6.google.com
```

Continue reading rest of the *IPv6 Configurations* series (TOC):

1. tspc: Debian / Ubuntu Linux Configure IPv6 Tunnel
2. [How To Test Linux Operating System for IPv6 Networking Support](#) ^[1]
3. [How To Specify and Browse Website Using IPv6 Address With Firefox, Opera Web Browser](#) ^[4]
4. [How To Ping IPv6 Address Using Windows Vista / Xp or Windows Server 2008 / 2003 Server](#) ^[5]

[Next in series » »](#) ^[1]

4000+ howtos and counting! Want to read more Linux / UNIX howtos, tips and tricks? Subscribe to our [daily email](#) newsletter or [weekly newsletter](#) to make sure you don't miss a single tip/tricks. Alternatively, subscribe via [RSS/XML](#) feed.

Article printed from Frequently Asked Questions About Linux / UNIX: <http://www.cyberciti.biz/faq/>

URL to article: <http://www.cyberciti.biz/faq/tspc-debian-ubuntu-linux-configure-ipv6-tunnel/>

URLs in this post:

[1] Next in series » »: <http://www.cyberciti.biz/faq/check-for-ipv6-support-in-linux-kernel/>

[2] Image: <http://www.cyberciti.biz/faq/faq/category/debian-ubuntu/>

[3] Freenet6: <http://go6.net/4105/register.asp>

[4] How To Specify and Browse Website Using IPv6 Address With Firefox, Opera Web Browser:
<http://www.cyberciti.biz/faq/how-can-ipv6-address-used-with-webbrowser/>

[5] How To Ping IPv6 Address Using Windows Vista / Xp or Windows Server 2008 / 2003 Server:
<http://www.cyberciti.biz/faq/windows-vista-server-xp-pingexe-ipv6-command/>

Copyright © 2006-2010 [nixCraft](http://www.cyberciti.biz/). All rights reserved. This print / pdf version is for personal non-commercial use only. More details <http://www.cyberciti.biz/tips/copyright>.