

FreeBSD Administration - Support #734

Install a TOR Proxy Server on FreeBSD

01/24/2016 07:58 PM - Daniel Curtis

Status:	Closed	Start date:	01/24/2016
Priority:	Normal	Due date:	
Assignee:	Daniel Curtis	% Done:	100%
Category:	The Onion Router (TOR)	Estimated time:	1.00 hour
Target version:	FreeBSD 9	Spent time:	2.50 hours

Description

This is a guide for setting up a TOR connection with a SOCKS5 proxy server on FreeBSD.

Prepare the Environment

- Make sure the system is up to date:

```
pkg update && pkg upgrade
```

Install OpenNTPD

- Install OpenNTPD:

```
pkg install openntpd
```

- Edit the OpenNTPD config file:

```
vi /usr/local/etc/ntpd.conf
```

- And add a couple more ntp sources for good measure:

```
servers pool.ntp.org
servers clock.via.net
servers clock.isc.org
```

- Start and enable OpenNTPD at boot:

```
echo 'openntpd_enable="YES"' >> /etc/rc.conf
service openntpd start
```

NOTE: An NTP server in a jail will fail to start. Jails get their time from the host system, make to install the NTP server on the host.

Install TOR

- Install TOR:

```
pkg install tor
```

- Tor users are strongly advised to prevent traffic analysis that exploits sequential IP IDs by setting:

```
sysctl net.inet.ip.random_id=1
```

- Edit the TOR config file:

```
vi /usr/local/etc/tor/torrc
```

- And add/modify the following lines:

```
RunAsDaemon1
```

- Start and enable TOR at boot:

```
echo 'tor_enable="YES"' >> /etc/rc.conf  
service tor start
```

- Monitor the status of the TOR connection:

```
tail /var/log/tor
```

- *Truncated output:*

```
...  
May 03 16:12:44.000 [notice] Bootstrapped 50%: Loading relay descriptors  
May 03 16:12:53.000 [notice] Bootstrapped 57%: Loading relay descriptors  
May 03 16:12:56.000 [notice] Bootstrapped 64%: Loading relay descriptors  
May 03 16:12:57.000 [notice] Bootstrapped 69%: Loading relay descriptors  
May 03 16:12:58.000 [notice] Bootstrapped 78%: Loading relay descriptors  
May 03 16:12:59.000 [notice] Bootstrapped 80%: Connecting to the Tor network  
May 03 16:12:59.000 [notice] Bootstrapped 90%: Establishing a Tor circuit  
May 03 16:13:00.000 [notice] Tor has successfully opened a circuit. Looks like client func  
tionality is working.  
May 03 16:13:00.000 [notice] Bootstrapped 100%: Done
```

Install Privoxy

- Install privoxy:

```
pkg install privoxy
```

- Create the privoxy running directory:

```
mkdir /var/run/privoxy  
chown privoxy:privoxy /var/run/privoxy
```

- Edit the config file to use Privoxy with Tor.

```
vi /usr/local/etc/privoxy/config
```

- And modify the following lines:

```
# Set the listen address to 127.0.0.1:8118
```

```
listen-address 127.0.0.1:8118

# forward privoxy to TOR
forward-socks4a / 127.0.0.1:9050 .
```

- Start and enable privoxy at boot:

```
echo 'privoxy_enable="YES"' >> /etc/rc.conf
service privoxy start
```

Resources

- <https://forums.freebsd.org/threads/howto-use-tor-network-and-web-proxy.40307/>
- <http://www.bsdfreebsd.org/tutorials/tor>

History

#1 - 01/24/2016 07:58 PM - Daniel Curtis

- Status changed from *New* to *In Progress*
- % Done changed from 0 to 30

#2 - 01/29/2016 04:40 PM - Daniel Curtis

- Description updated
- Status changed from *In Progress* to *Resolved*
- % Done changed from 30 to 100

#3 - 02/20/2016 07:43 PM - Daniel Curtis

- Status changed from *Resolved* to *Closed*

#4 - 02/22/2016 09:18 PM - Daniel Curtis

- Subject changed from *Install a TOR Proxy Server* to *Install a TOR Proxy Server on FreeBSD*