TORSOCKS

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torsock

You probably already heard of the TOR-bowser (The onion routing browser),
it allows for anonymous communication by directing Internet traffic through a free, worldwide, volunteer overlay network.

Onion routing is implemented by encryption in the application layer of a communication protocol stack, nested like the layers of an onion. Tor encrypts the data, including the next node destination IP address, multiple times and sends it through a virtual circuit comprising successive, random-selection Tor relays. Each relay decrypts a layer of encryption to reveal the next relay in the circuit to pass the remaining encrypted data on to it. The final relay decrypts the innermost layer of encryption and sends the original data to its destination without revealing or knowing the source IP address.

Torsock allows for other application to use this anonymous network.
You can even setup your own server, only accesable by the TOR-network.

Install

Check on Tor website for the right release https://www.torproject.org/docs/debian.html.en

Edit apt-get : sudo nano /etc/apt/sources.list
Insert the following lines (adapt the release)

deb http://deb.torproject.org/torproject.org xenial main
deb-src http://deb.torproject.org/torproject.org xenial main

And the corresponding keys:

gpg --keyserver keys.gnupg.net -recv 886DDD89

gpg --export A3C4F0F979CAA22CDBA8F512EE8CBC9E886DDD89 | apt-key add -

Download and install
apt-get install tor deb.torproject.org-keyring
systemctl restart tor

Now you can use torsock to connect to any site:
torsocks wget https://www.yahoo.communication
or
torsocks git clone https://github.com/newproject

Server on TOR

To setup you own server on TOR, you need to add some additional configuration.
sudo nano /etc/tor/torrc
Add:

HiddenServiceDir /var/lib/tor/hidden_service/
HiddenServicePort 8080 127.0.0.1:8080

Restart TOR
sudo systemctl restart tor
The onion-hostname can be found in :
sudo cat /var/lib/tor/hidden_service/hostname
The address looks like : 5wt....ad.onion

You service should be configured to listen on 127.0.0.1:8080

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Now you can connect to your server via the onion network.
torsocks wget 5wt....ad.onion:8080

More information can be found :
https://gitlab.torproject.org/legacy/trac/-/wikis/doc/torsocks

https://2019.www.torproject.org/docs/tor-onion-service