

Tunneling SSH over an HTTP-Proxy Server

Can't use SSH on the standard port 22? Need to tunnel through a proxy server? Work behind a draconian firewall and can't SSH directly? No problem. This document will hopefully show you how to tunnel through an http-proxy server without any server-side modifications.

Build and Configure an HTTP-Proxy Application

- * Get Corkscrew: available from [corkscrew home page](#).

I've tried other http-tunnel programs, but this is truly the easiest one I've found and it doesn't require server-side applications (such as are required by `httptunnel`, which is a good program otherwise). Furthermore, `corkscrew` works on every UNIX platform I've tried and even compiles and runs flawlessly under Cygwin on Windows.

- * Unpack and Compile corkscrew:

```
tar -xzf corkscrew.tar.gz
# [...]
cd corkscrew
./configure
make install
```

Presuming no errors, `corkscrew` is now installed in `/usr/local/bin` on your machine. If you want to put it somewhere else, use the `--prefix=path` flag to the `configure` script.

- * Add `ProxyCommand` to your SSH config file:

You may or may not have a configuration file for SSH already. It should be located in `$HOME/.ssh/config` and is a simple text file. Create one if it does not exist and add lines such as these to it:

```
Host *
    ProxyCommand corkscrew http-proxy.example.com 8080 %h %p
```

... replacing `http-proxy.example.com` with the name or address of your http proxy and possibly replacing `8080` with the port on which the proxy listens, which may be `80` or even some other port. The `%h` and `%p` will be replaced automatically by SSH with the actual destination host and port.

These two lines tell the SSH client to start another program (`corkscrew`) to make the actual connection to the SSH server. The `Host *` line says that this will be done for ALL hosts. If you wish to restrict the hosts for which this will be done, you can put a limited form of regular expression there. See the `ssh_config(5)` man page for more information. If you don't have `corkscrew` in your path or have put it in a non-standard location, you may specify an absolute path to `corkscrew` in that file as well.

- * Try it out...

```
ssh example.net
```

... replacing `example.net` with the name of a host to which you can connect using SSH. Presumably this host will be outside your local network and therefore require the use of the proxy server. If it is not outside your local network, then the connection may fail as the proxy-server or some firewall may be configured to not redirect proxy connections back into your local network.

Either of the following two errors probably indicate an error in your ~/.ssh/config file, most likely the name or port of the proxy server.

```
ssh_exchange_identification: Connection closed by remote host  
[ OR ]  
ssh: connection to host example.net port 22: Connection timed out
```

Congratulations - you are using an http-proxy server with SSH. Anything you can do with SSH you should now be able to do through the proxy server, including tunneling of other ports or even ppp.

From <http://www.mtu.net/~engstrom/ssh-proxy.php>current rating:

```
image:rdf newsfeed / //static.linuxhowtos.org/data/rdf.png (null)  
|  
image:rss newsfeed / //static.linuxhowtos.org/data/rss.png (null)  
|  
image:Atom newsfeed / //static.linuxhowtos.org/data/atom.png (null)  
- Powered by  
image:LeopardCMS / //static.linuxhowtos.org/data/leopardcms.png (null)  
- Running on  
image:Gentoo / //static.linuxhowtos.org/data/gentoo.png (null)  
-  
Copyright 2004-2020 Sascha Nitsch Unternehmensberatung GmbH  
image:Valid XHTML1.1 / //static.linuxhowtos.org/data/xhtml1.png (null)  
:  
image:Valid CSS / //static.linuxhowtos.org/data/css.png (null)  
:  
image:buttonmaker / //static.linuxhowtos.org/data/buttonmaker.png (null)  
- Level Triple-A Conformance to Web Content Accessibility Guidelines 1.0 -  
- Copyright and legal notices -  
Time to create this page: ms  
<!--  
image:system status display / /status/output.jpg (null)  
-->
```