Exercise 36.1: Installing firewalld

While most recent **Linux** distributions have the **firewalld** package (which includes the **firewall-cmd** multi-purpose utility) available, it might not be installed on your system.

First you should check to see if it is already installed, with

```
$ which firewalld firewall-cmd

/usr/sbin/firewalld
/usr/bin/firewall-cmd
```

If you fail to find the program, then you need to install with one of the following, depending on your distribution in the usual way:

```
$ sudo yum install firewalld
$ sudo zypper install firewalld
$ sudo apt install firewalld
```

If this fails, the **firewalld** package is not available for your distribution. For example, this will be the case for the older **RHEL6**/**CentOS6** distributions. In this case you will have to install from source.

To do this, go to `https://fedorahosted.org/firewalld/` and you can get the **git** source repository, but it is much easier to download the most recent tarball (`firewalld-0.3.13.tar.bz2` as of this writing.)

Then you have to follow the common procedure for installing from source:

```
$ tar xvf firewalld-0.3.13.tar.bz2
$ cd firewalld-0.3.13
$ ./configure
$ make
$ sudo make install
```

Note this source also has an **uninstall** target:

```
$ sudo make uninstall
```

in case you have regrets.

You will have to deal with any inadequacies that come up in the `./configure` step, such as missing libraries etc. When you install from a packaging system, the distribution takes care of this for you, but from source it can be problematic. If you have run the **Linux Foundation**'s **ready-for.sh** script on your system, you are unlikely to have problems.

On openSUSE

Note: On **openSUSE 13.2**, even though the compile and install of **firewalld** will work, execution of **firewall-cmd** will still fail with a message about missing `python-slip`. Unfortunately, this package also doesn't exist in the **zypper** repositories, so you will have to download it from the same web site, `https://fedorahosted.org/firewalld/`, and then just do:

```
$ tar xvf /tmp/python-slip-0.6.1.tar.bz2
$ cd  python-slip-0.6.1
$ make
$ sudo make install
```

substituting the actual name of the version you downloaded. Hopefully, the next edition of **openSUSE** will eliminate this need to compile from sources, as there have been requests to add **firewalld** properly to the available choices.