#### How to set up proper start/stop services

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I've noticed that there are a lot of faulty or non properly working **start/stop services** out there in the wild. That's why I decided to build and explain some example services for the most common distributions and operating systems (like Windows).

In this case, I assume that our example service is Python's SimpleHTTPServer which starts a web server on port 80 and serves the current working directory. The server can be easily executed by:

\$ python -m SimpleHTTPServer 8000

(Caution: this command will probably serve the root directory of your machine. Make sure to stop the service again!)

# **Debian and Ubuntu (sysvinit)**

- 1. Create an user for the desired service
- 2. Ensure the created user has full access to the binary you want to set up:

/usr/bin/python

3. Copy the following script (as root) to /etc/init. d/:

wget https://raw.github.com/frdmn/service-daemons/master/debian -0 /etc/init.d/example

4. Adjust the variables:

sudo vi /etc/init.d/example

5. Make sure the script is executable:

chmod +x /etc/init.d/example

6. Enable the daemon with:

update-rc.d example defaults

7. Start the service with:

service example start

### **Ubuntu (upstart)**

- 1. Create an user for the desired service
- 2. Ensure the created user has full access to the binary you want to set up:

/usr/bin/python

3. Copy the following script to /etc/init/:

sudo wget https://raw.github.com/frdmn/service-daemons/master/ubuntu -0 /etc/init/example.conf

4. Adjust the variables:

sudo vi /etc/init/example.conf

5. Start the service with:

sudo start example

# **CentOS 6 (sysvinit)**

- 1. Create an user for the desired service
- 2. Ensure the created user has full access to the binary you want to set up:

/usr/bin/python

3. Copy the following script (as root) to /etc/init. d/:

wget https://raw.github.com/frdmn/service-daemons/master/centos -0 /etc/init.d/example

4. Adjust the variables (as root):

vi /etc/init.d/example

5. Make sure the script is marked as executable:

chmod +x /etc/init.d/example

6. Enable the config in in runlevels 2, 3, 4, and 5:

chkconfig example on

#### 7. Start the service with:

service example start

# **Arch Linux (systemd)**

- 1. Create an user for the desired service
- 2. Ensure the created user has full access to the binary you want to set up:

/usr/bin/python

3. Copy the following script (as root) to /etc/systemd/system/:

 $wget\ https://raw.\ github.\ com/frdmn/service-daemons/master/arch\ -0\ /etc/systemd/system/example.\ service-daemons/master/arch\ -0\ /etc/systemd/system/example.$ 

4. Adjust the variables (as root):

/etc/systemd/system/example.service

5. Make sure the script is executable:

chmod +x /etc/systemd/system/example.service

6. Enable the script on boot with:

systemctl enable example

7. To start the script:

systemctl start example

# **Gentoo (runscript)**

- 1. Create an user for the desired service
- 2. Ensure the created user has full access to the binary you want to set up:

/usr/bin/python

3. Copy the following script (as root) to /etc/init. d/:

wget https://raw.github.com/frdmn/service-daemons/master/gentoo-script -0 /etc/init.d/example

4. Copy the following configuration file (as root) to /etc/conf. d/:

wget https://raw.github.com/frdmn/service-daemons/master/gentoo-conf -0 /etc/conf.d/example

5. Make those files executable:

chmod +x /etc/init.d/example /etc/conf.d/example

6. Load the deamon:

rc-update add etherpad-lite default

7. Start the deamon with:

rc-service etherpad-lite start

#### Mac OS X (launchd)

Note: For some reasons the SimpleHTTPServer python module didn't work via launchd, so I included this tiny web server python script in the repo [https://raw.github.com/frdmn/service-daemons/master/macosx-httpd.py].

- 1. Create an user for the desired service
- 2. Create a log folder for the service:

mkdir /var/log/example

3. Ensure the created user has full access to the binary you want to set up:

/usr/bin/python

4. Copy the following script (as root) to /Library/LaunchDaemons/:

wget https://raw.github.com/frdmn/service-daemons/master/macosx -0 /Library/LaunchDaemons/mn.frd.exa mple.plist

5. Copy the python script (as root) to /tmp/:

wget https://raw.github.com/frdmn/service-daemons/master/macosx-httpd.py -0 /tmp/httpd.py

#### 6. Launch the daemon with:

sudo launchetl load /Library/LaunchDaemons/mn.frd.example.plist

# Windows (nssm)

- 1. Download and install nssm: non sucking service manager [http://nssm.cc/]
- 2. Move it into your %PATH%
- 3. Open an administrative terminal window
- 4. Load the service: nssm install "C:/Python27/python" -m SimpleHTTPServer 8000
- 5. Reboot your machine

Please let me know in case you found some typos or errors above. You can also fork the repo and send a *Pull Request* via GitHub [https://github.com/frdmn/service-daemons] if you have some improvements for the start/stop daemons.