

# Setting apache 2.4 and web.py

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## 1 Install

### 1.1 Apache 2.4

Open a terminal and type the following commands.

- `sudo apt-get install apache2-dev`
- `sudo apt-get install apache2-threaded-de`
- `sudo apt-get install libapache2-mod-wsgi`
- `sudo apt-get install libapache2-mod-python`

### 1.2 web.py

Open a terminal and type the following commands.

- `sudo apt-get update`
- `sudo apt-get install python-pip`
- `sudo pip install web.py`

## 2 Setting up basic project with Apache and web.py

### 2.1 Setting up the frame work

Open a terminal and type the following commands.

- `sudo mkdir /var/www/webpy-app/<app name>`
- `sudo mkdir /var/www/webpy-app/<app name>/logs`
- Create two files in logs access.log and error.log
- Create a python file in the /var/www/webpy-app/<app name> directory.  
Lets call it main.py
- `cd /etc/apache2/sites-available`
- Create file with no extension with the name of your project, lets call it <project name> . Note the project name can be the same as your <app name> but it doesn't have to be.
- `sudo cp ../<project name> ../sites-enabled`

## 2.2 Configure apache 2.4

First we need to and our connect our server ip to a name. Note `www.mysite.co.za` is meant by the server name. So go to the following directory `/etc` and open the file `hosts`. Now add the follow line just below `localhost` `127.0.0.1 mysite.co.za`. Note I am using the localhost IP as my server IP as a demonstration. Save the file Note you will need to be a super user to save. Navigate to the following directory `/etc/apache2/sites-enabled` and open the `project name` file and type the following.

```
<VirtualHost <server name> or IP:port>
    #ServerAdmin [your admin mail address]
    ServerName superfluous.imqs.co.za
    ServerAlias superfluous.imqs.co.za
    DocumentRoot /var/www/webpy-app/<app name>
    DirectoryIndex <main python file name>.py
    WSGIScriptAlias /omicron /var/www/webpy-app/<app name>/<main python file name>.py/
    ErrorLog /var/www/webpy-app/<app name>/logs/error.log
    CustomLog /var/www/webpy-app/<app name>/logs/access.log combined
    addType text/html .py
<Files <main python file>.py>
    SetHandler wsgi-script
    Options ExecCGI FollowSymlinks
</Files>
<Directory /var/www/webpy-app/<app name>
    Options +ExecCGI +Indexes +MultiViews +FollowSymLinks
    AllowOverride None
    Order allow,deny
    allow from all
</Directory>
</VirtualHost>
```

You can test the configuration by typing the following command.

- `sudo apachectl configtest`

Only continue if the last line reads Syntax OK. Now navigate to `/var/www/webpy-app/<app name>/` and open your main python file and type the following.

```
import sys
sys.path.append("/var/www/webpy-app/<app name>/")
import web
if app_path: # Apache
    os.chdir(app_path)
else: # CherryPy
    app_path = os.getcwd()
urls = (
    '/(.*)', 'hello'
)
# WARNING
# web.debug = True and autoreload = True
# can mess up your session: I've personally experienced it
```

```

web.debug = False # You may wish to place this in a config file
app = web.application(urls, globals(), autoreload=False)
application = app.wsgifunc() # needed for running with apache as wsgi. The reason is becau
class hello:
    def GET(self, name):
        if not name:
            name = 'World'
        return 'Hello, ' + name + '!'
if __name__ == "__main__":
    app.run()

```

Save the file and restart apache by typing one the following commands.

- `sudo service apache2 restart`
- `sudo apachectl restart`

To test your server open the browser, modify and type the following `<server name>/<project name>/hello` into your browser. If you are looking for more information you can visit the following links.

- <http://www.hyperink.com/blog/?p=13>
- [http://webpy.org/cookbook/mod\\_wsgi-apache-ubuntu](http://webpy.org/cookbook/mod_wsgi-apache-ubuntu)
- <http://webpy.org/cookbook/cgi-apache>
- <http://www.youtube.com/watch?v=8310ahgMR9k>