



# gunicorn

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A bit of a stretch -- an app, not a module/package  
But works with nearly any python web application, and is easy\_installable/pip installable  
gunicorn is a simple Python web server.

# So you have a WSGI app

```
def app(environ, start_response):  
    data = "Hello, World!\n"  
    start_response("200 OK", [  
        ("Content-Type", "text/plain"),  
        ("Content-Length", str(len(data)))  
    ])  
    return iter([data])
```

# Now you have a server

```
$ gunicorn -w 4 myapp:app
2010-06-05 23:27:07 [16800] [INFO] Arbiter booted
2010-06-05 23:27:07 [16800] [INFO] Listening at: http://127.0.0.1:8000
2010-06-05 23:27:07 [16801] [INFO] Worker spawned (pid: 16801)
2010-06-05 23:27:07 [16802] [INFO] Worker spawned (pid: 16802)
2010-06-05 23:27:07 [16803] [INFO] Worker spawned (pid: 16803)
2010-06-05 23:27:07 [16804] [INFO] Worker spawned (pid: 16804)
```

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4 workers, all listening on shared socket  
python path colon callable name (defaults to 'application')  
Pronounced gee-unicorn, gunicorn, but I always call it gunicorn

15:50 |termie| when the gunicorn fights, it wins  
02:43 |termie| when the gunicorn urinates the result is a perfect mixture  
of champagne and green chartreuse  
16:41 |termie| the gunicorn shoots you  
09:51 |termie| the gunicorn cannot be managed

<http://thegunicorn.com/>

# Details

- a port of Ruby's Unicorn
- prefork
- WSGI, Django, Paster
- Light on resources, extensible

# Configuration

- Paster INI
- Python config file
- Command line

# Fast Clients Only



[http://commons.wikimedia.org/wiki/File:Slow\\_Loris\\_Female.jpg](http://commons.wikimedia.org/wiki/File:Slow_Loris_Female.jpg)

# nginx

```
upstream app_server {
    server unix:/tmp/gunicorn.sock fail_timeout=0;
}

server {
    listen 80 default;
    server_name adam.therobots.org;

    location / {
        proxy_set_header X-Forwarded-For $proxy_add_x_forwarded_for;
        proxy_set_header Host $http_host;
        proxy_redirect off;

        if (!-f $request_filename) {
            proxy_pass http://app_server;
            break;
        }
    }
}
```

# What about slow resources?

```
gunicorn -k egg:gunicorn#eventlet myapp:app  
gunicorn -k egg:gunicorn#gevent myapp:app
```

# More about gunicorn

<http://gunicorn.org/>

[http://pypi.python.org/pypi/  
gunicorn](http://pypi.python.org/pypi/gunicorn)

[http://github.com/benoitc/  
gunicorn/](http://github.com/benoitc/gunicorn/)

# More about me

<http://adam.therobots.org/>

<http://twitter.com/robotadam>  
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# Bonus Module!

<http://pypi.python.org/pypi/setproctitle>

www-data	9256	0.2	2.6	16696	13416	?	S	Jun27	57:16	gunicorn:	master	[zine-prefork]
www-data	9257	0.2	5.7	36204	29272	?	S	Jun27	69:25	gunicorn:	worker	[zine-prefork]
www-data	9258	0.3	5.7	36304	29388	?	S	Jun27	75:52	gunicorn:	worker	[zine-prefork]
www-data	9259	0.3	5.9	37232	30220	?	S	Jun27	75:02	gunicorn:	worker	[zine-prefork]
www-data	9260	0.3	5.7	36644	29560	?	S	Jun27	75:29	gunicorn:	worker	[zine-prefork]

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Setting the process name is useful for multi-process environments

Hard to do cross-platform

This uses code from PostgreSQL, which is always awesome