

Heroku

Ruby, Python, Java, Scala, Clojure, Node.js, Logo



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as a Service

Software

as a Service

Software

Infrastructure as a Service

Software

Infrastructure **as a Service**

Platform

SaaS

IaaS

PaaS

SaaS

For software users
More features, transparent updates

IaaS

PaaS

SaaS

For software users
More features, transparent updates

IaaS

For ops people
On demand machines

PaaS

SaaS

For software users
More features, transparent updates

IaaS

For ops people
On demand machines

PaaS

For developers
Transparent updates, don't think about servers

Heroku

Ruby, Python, Java, Scala, Clojure, Node.js, Logo



[Demo Gods, Have Mercy]



[Demo *Samurai* ~~Gods~~, Have Mercy]



Heroku

Run the processes you
tell us to run

Python Locally

pip/virtualenv

```
virtualenv --no-site-package venv  
source bin/activate  
pip install -r requirements.txt
```

Python on Heroku

pip/virtualenv

```
virtualenv --no-site-package venv  
source bin/activate  
pip install -r requirements.txt
```


Python Locally

Running

```
python app/manage.py runserver 0.0.0.0:8000
```

Python on Heroku

Running

Procfile:

```
web: python app/manage.py runserver 0.0.0.0:$PORT
```

Python

Locally

pip/virtualenv
runserver

Heroku

pip/virtualenv
Procfile w/ runserver

Dyno

Dyno

Server

Dyno

~~Server~~

Dyno

~~Server~~

VM

Dyno

~~Server~~

~~VM~~

Dyno

~~Server~~

~~VM~~

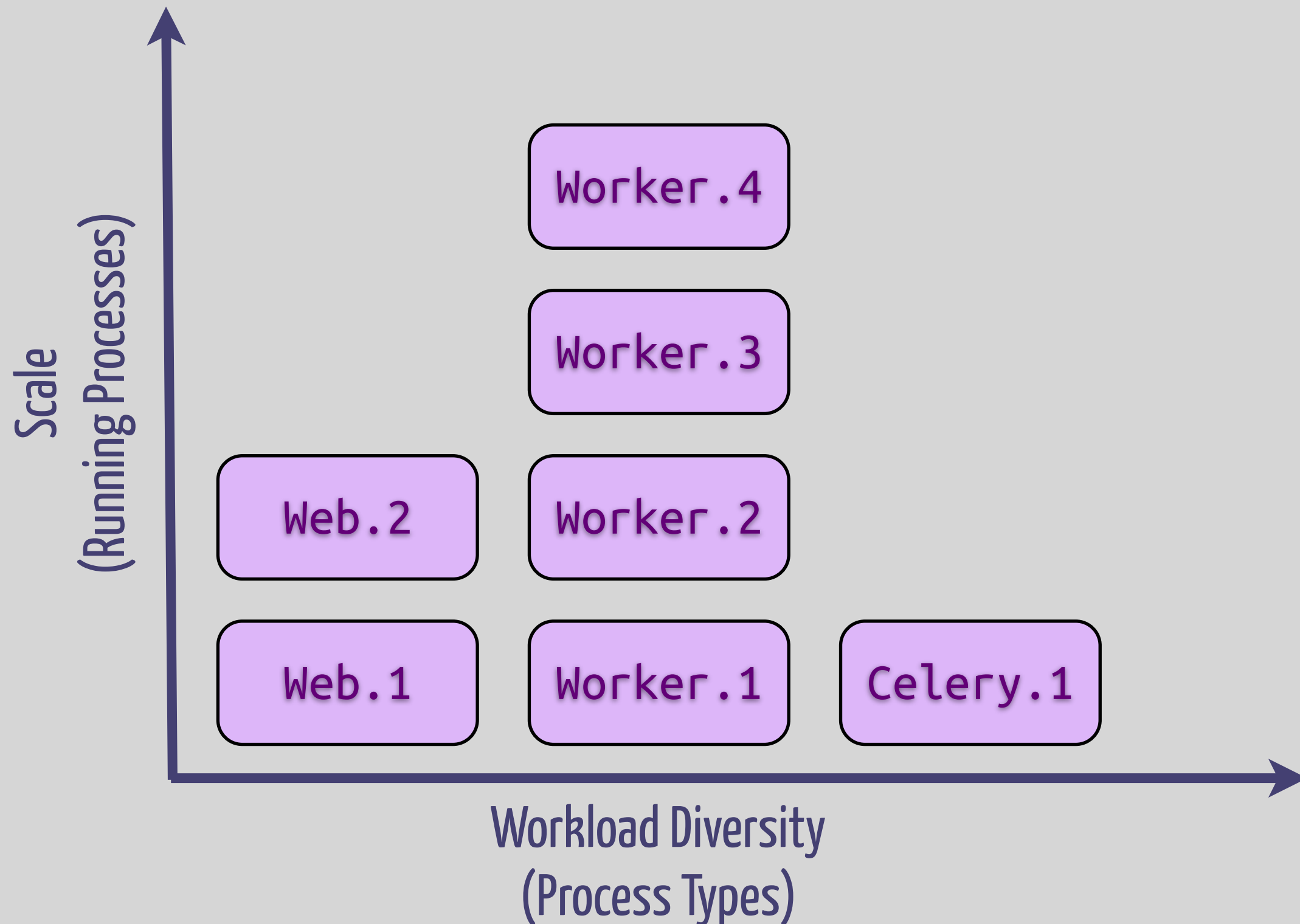
Process

Dyno

```
$ cat Procfile
web: python app/manage.py runserver
worker: python app/manage.py celeryd -E -B
celery: python app/manage.py celerybeat -S
djcelery.schedulers.DatabaseScheduler
```

```
$ heroku scale web=2
$ heroku scale worker=4
$ heroku scale celery=1
```

Dyno Processes



Dyno Processes

Run Anything...

Dyno Processes

Run Anything...

```
$ heroku run python app/manage.py runserver
```

Dyno Processes

Run Anything...

```
$ heroku run python app/manage.py runserver  
$ heroku run python app/manage.py syncdb
```

Dyno Processes

Run Anything...

```
$ heroku run python app/manage.py runserver  
$ heroku run python app/manage.py syncdb  
$ heroku run python
```

Dyno Processes

Run Anything...

```
$ heroku run python app/manage.py runserver  
$ heroku run python app/manage.py syncdb  
$ heroku run python  
$ heroku run bash
```


Additional Services

Additional Services (Addons)

Additional Services (Addons)

Memcache

Redis

Mongo

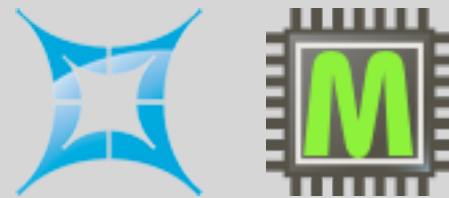
Email

App Performance

Logging

Additional Services (Addons)

Memcache



Redis

Mongo

Email

App Performance

Logging

Additional Services (Addons)

Memcache

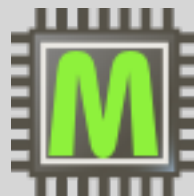
Redis

Mongo

Email

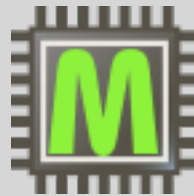
App Performance

Logging



Additional Services (Addons)

Memcache



Redis



Mongo



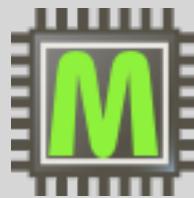
Email

App Performance

Logging

Additional Services (Addons)

Memcache



Redis



Mongo



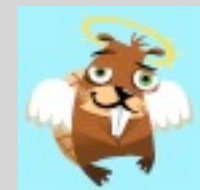
Email



App Performance



Logging



Addons

```
$ heroku addons:add memcache  
$ heroku addons:add registogo  
$ heroku addons:add mongohq  
$ heroku addons:add sentry
```


Addons

```
$ heroku config
MEMCACHE_PASSWORD => Ggil...
MEMCACHE_SERVERS  => mc10.ec2.northscale.net
MEMCACHE_USERNAME => app123%40heroku.com
MONGOHQ_URL       => mongodb://heroku:fad123@staff.mongohq.com:123/
app123
REDISTOGO_URL     => redis://redistogo:d8b..@cod.redistogo.com:123/
SENTRY_DSN        => https://4c81...:e0fd...@app.getsentry.com/123
```

Configuration

Setting

```
$ heroku config:add MY_OTHER_DB=someurlhere  
$ heroku config  
MY_OTHER_DB=someurlhere
```

Configuration

Reading

```
$ cat example.py  
import os
```

```
MY_OTHER_DB=os.environ.get('MY_OTHER_DB')
```

Fin.

Resources

<http://devcenter.heroku.com/articles/python>

<http://python.heroku.com>

<http://bit.ly/ladjango>