

Process management with Foreman

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Overview

Foreman is a way to define processes
for your application in code

What is Foreman?

**Foreman can either run the
application directly or delegate that
responsibility to other linux tools**

Using these definitions...

It was originally built by
David Dollar at Heroku

Heroku leveraged Foreman to
define services you wished to
run on their platform

You should use it if...

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Infrastructure as code is vital
in a world dominated by
cloud services

Getting started

```
name: command
```

Process list format.

```
one:  command
two:  command
three: command
```

Multiple processes.


```
web: unicorn -c config.rb
```

Example web process for Rails.

```
web:    unicorn -c config.rb  
redis:  redis-server redis.conf
```

Example of multiple processes.

foreman start

Firing up all processes.

```
foreman start [process name]
```

Firing up a single process.

```
foreman start web
```

Example of starting web.

```
foreman start -c web=2
```

What about spawning multiple processes per type? No problem.

```
web: unicorn -p $PORT -c config.rb
```

How does this deal with allocating ports? A magic variable inside the Procfile. Increments every time a new process is created.

Configuration management

It's important to separate
configuration values from
the codebase

Foreman uses a well known
key/value syntax to define
configuration values

```
foreman start -e .env
```

Environmental variables are stored in a file. These variables are sourced to the process when it's created. By default, Foreman will look for a `.env` file, but you can tell it to look in another one if you wish.

```
RAILS_ENV=production  
HTTP_USERNAME=bob  
HTTP_PASSWORD=secr3t
```

Any variable that can be defined in the shell can be defined here too.

```
foreman start -e .env.development
```

Because of this, we can defined different variables for different Rails environments (for example).

```
foreman start -e .env.test
```

Exporting

Usage on NHSx

Integrate with AWS

Further reading

<http://goo.gl/BXHdyL>

<http://ddollar.github.io/foreman/>

<http://goo.gl/05eaeV>

<https://devcenter.heroku.com/articles/procfile>

Questions?

Thank you