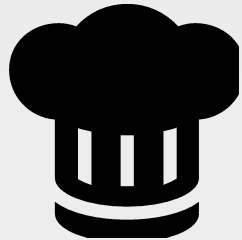# Lab: Upload the Cookbook

- ❏ Update the major version of the myhaproxy cookbook
- ❏ Upload the cookbook
- ❏ Run chef-client on the load balancer node
- ❏ Verify that the load balancer node relays requests to both web nodes

Dynamic Web Load Balancer

Every time we create a web node we need to update our load balancer (myhaproxy) cookbook. That doesn't feel right!

Objective:

✓   Refactor the myhaproxy cookbook

❏   Update the major version of the myhaproxy cookbook

❏   Upload the cookbook

❏   Run chef-client on the load balancer node

❏   Verify that the load balancer node relays requests to both web nodes

CHEF

Lab: Update the Version Number

~/chef-repo/cookbooks/myhaproxy/metadata.rb

```
name                'myhaproxy'
maintainer          'The Authors'
maintainer_email    'you@example.com'
license             'all_rights'
description         'Installs/Configures myhaproxy'
long_description    'Installs/Configures myhaproxy'
version             '1.0.0'


depends 'haproxy', '= 2.0.0'
```

Lab: CD and Install Dependencies

```
$ cd ~/chef-repo/cookbooks/myhaproxy
$ berks install
```

```
Resolving cookbook dependencies...
Fetching 'myhaproxy' from source at .
Fetching cookbook index from https://supermarket.chef.io...
Using build-essential (2.2.3)
Using cpu (0.2.0)
Using haproxy (2.0.0)
Using myhaproxy (1.0.0) from source at .
```

Lab: Upload the Cookbook

```
$ berks upload
```

```
Uploaded build-essential (2.2.3) to:
'https://api.opscode.com:443/organizations/ORGNAME'

Uploaded cpu (0.2.0) to: 'https://api.opscode.com:443/organizations/ORGNAME'

Uploaded haproxy (2.0.0) to: 'https://api.opscode.com:443/organizations/ORGNAME'

Uploaded myhaproxy (1.0.0) to: 'https://api.opscode.com:443/organizations/ORGNAME'

PS C:\Users\USER\chef-repo\cookbooks\myhaproxy>
```

Login to Load Balancer

```
$ vagrant ssh load-balancer
```

```
Last login: Sat Dec 31 02:59:27 2016 from 10.0.2.2
[vagrant@load-balancer ~]$
```

Converge the Load Balancer

```
[vagrant@load-balancer ~]$ sudo chef-client
```

```
Starting Chef Client, version 12.17.44
resolving cookbooks for run list: ["myhaproxy"]
Synchronizing Cookbooks:
  - myhaproxy (0.1.0)
  - haproxy (2.0.0)
  - build-essential (7.0.3)
  - seven_zip (2.0.2)
  - windows (2.1.1)
  - ohai (4.2.3)
....
```
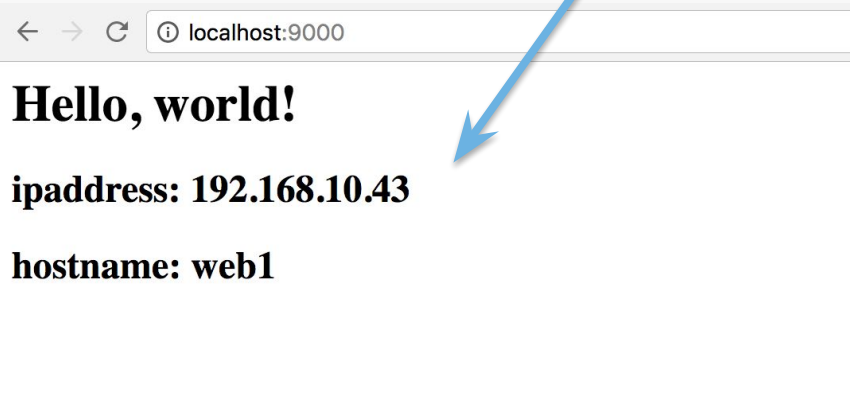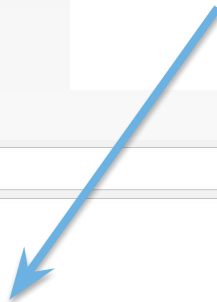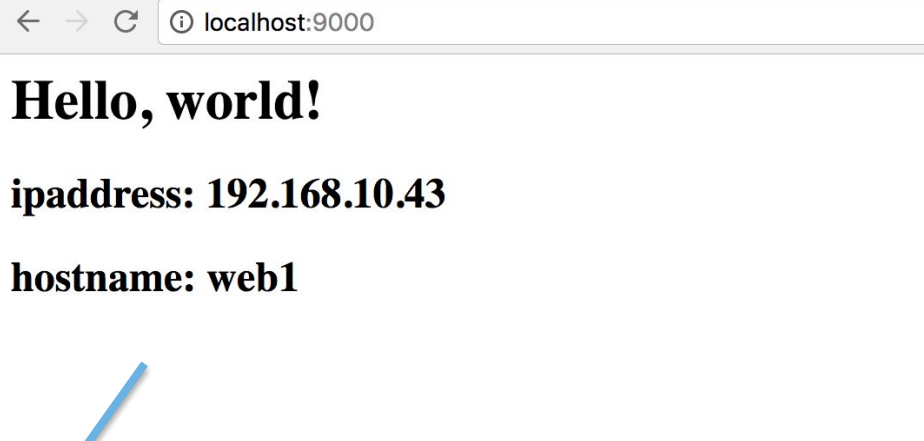
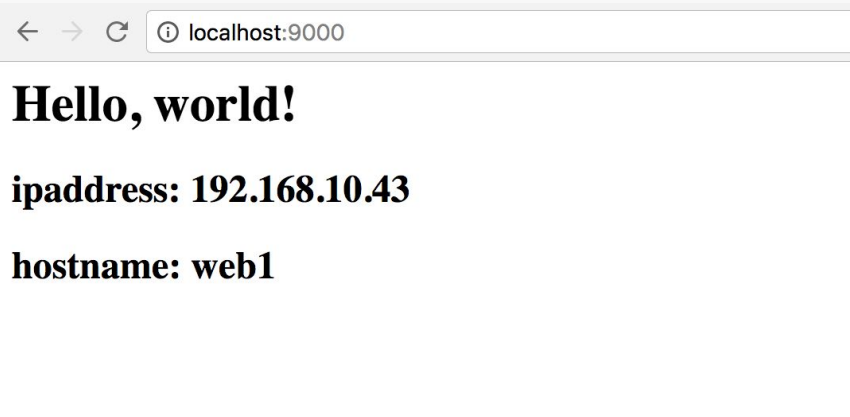# Return to your Workstation

```
[vagrant@load-balancer ~]$ exit
```

```
logout
Connection to 127.0.0.1 closed.
```

The load balancer should still function
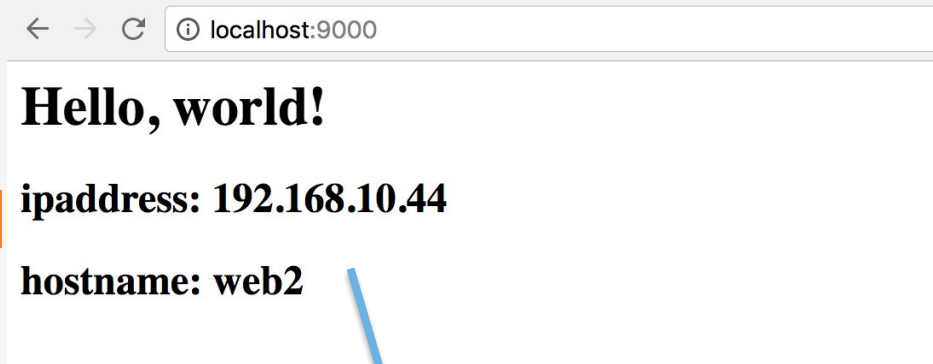
Hello, world!

ipaddress: 192.168.10.43

hostname: web1

Hello, world!

ipaddress: 192.168.10.43

hostname: web1

Hello, world!

ipaddress: 192.168.10.44

hostname: web2

CHEF

The load balancer should still function

Hello, world!

ipaddress: 192.168.10.44

hostname: web2

Hello, world!

ipaddress: 192.168.10.43

hostname: web1

Hello, world!

ipaddress: 192.168.10.44

hostname: web2

CHEF

Lab: Upload the Cookbook

✓ Update the major version of the myhaproxy cookbook

✓ Upload the cookbook

✓ Run chef-client on the load balancer node

✓ Verify that the load balancer node relays requests to both web nodes

Discussion

What happens when new web nodes are added to the organization? Removed?

What happens if you were to terminate a web node instance without removing it from the Chef Server?