

Lab

Create a Web Server

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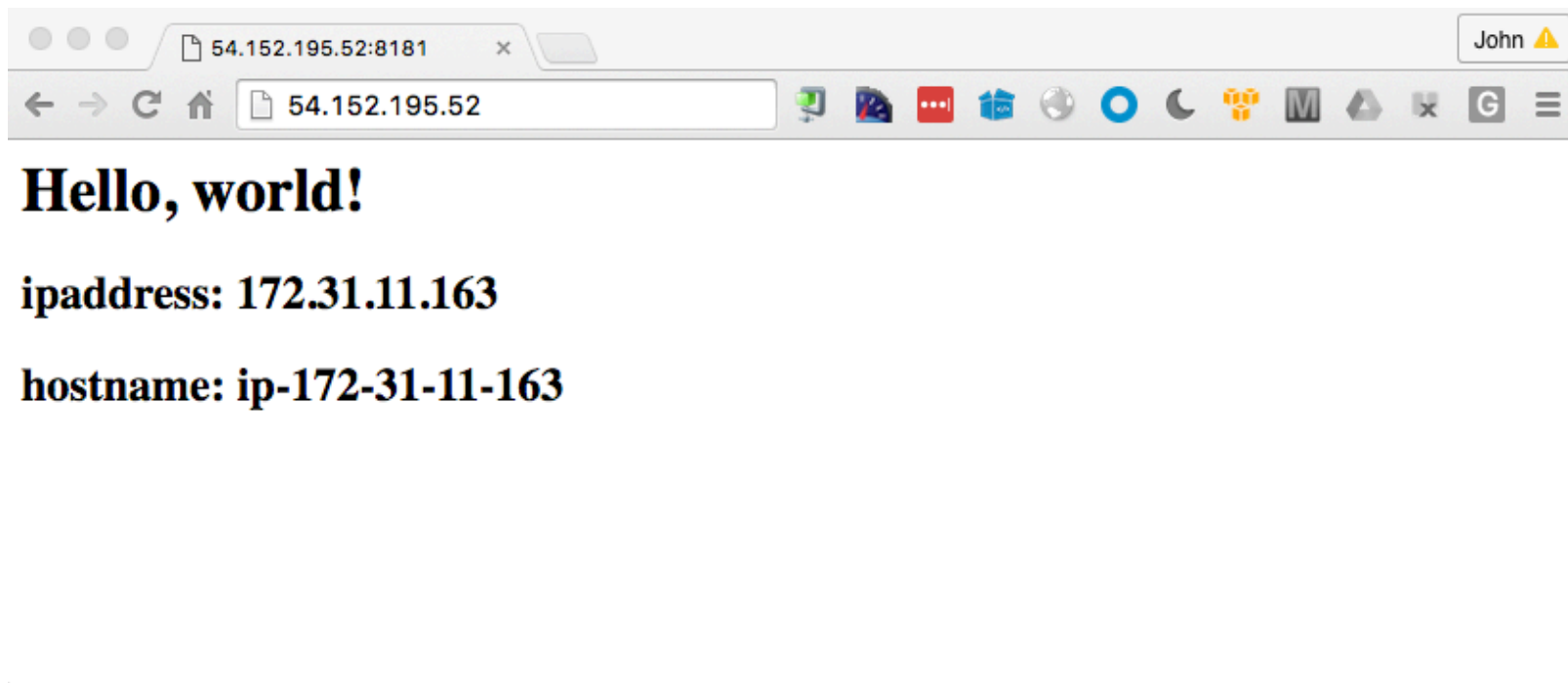
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Lab: Setting up a Web Server

- ❑ Use **chef generate** to create a cookbook named "apache"
- ❑ Write a recipe named "**server.rb**" with the policy:
 - The package named '**httpd**' is installed.
 - The file named '**/var/www/html/index.html**' is created with the content '<h1>Hello, world!</h1>'
 - The service named '**httpd**' is started and enabled
- ❑ Include the following node details in index.html:
 - Node's ipaddress
 - Node's hostname
- ❑ Include **server.rb** in the **apache default.rb**
- ❑ Update the version of the **apache cookbook** to 0.2.0
- ❑ Run **chef-client** to locally apply the apache cookbook's default recipe. Be sure to include the default.rb in the run-list
- ❑ Verify the site is available by running **curl localhost** and browsing to your Workstation IP

So this is what we want to see



Lab: Create a Cookbook



```
$ chef generate cookbook cookbooks/apache
```

```
Compiling Cookbooks...
```

```
Recipe: code_generator::cookbook
```

```
  * directory[/home/chef/cookbooks/apache] action create
```

```
    - create new directory /home/chef/cookbooks/apache
```

```
  * template[/home/chef/cookbooks/apache/metadata.rb] action create_if_missing
```

```
    - create new file /home/chef/cookbooks/apache/metadata.rb
```

```
    - update content in file /home/chef/cookbooks/apache/metadata.rb from none to  
37ed5f
```

```
      (diff output suppressed by config)
```

```
  * template[/home/chef/cookbooks/apache/README.md] action create_if_missing
```

```
    - create new file /home/chef/cookbooks/apache/README.md
```

```
    -
```

Lab: Create the Server Recipe

 `cookbooks/apache/recipes/server.rb`

```
package 'httpd'

file '/var/www/html/index.html' do
  content "<h1>Hello, world!</h1>
<h2>ipaddress: #{node['ipaddress']}</h2>
<h2>hostname: #{node['hostname']}</h2>
"
end

service 'httpd' do
  action [ :enable, :start ]
end
```

Lab: The Default Recipe Includes the Apache Recipe

 cookbooks/apache/recipes/default.rb

```
#  
# Cookbook Name:: apache  
# Recipe:: default  
#  
# Copyright (c) 2016 The Authors, All Rights Reserved.  
  
include_recipe 'apache::server'
```

Lab: Update the Cookbook Version

 cookbooks/apache/metadata.rb

```
name                'apache'  
maintainer           'The Authors'  
maintainer_email    'you@example.com'  
license              'all_rights'  
description          'Installs/Configures apache'  
long_description     'Installs/Configures apache'  
version              '0.2.0'
```

Lab: Run chef-client to Apply the Apache Cookbook



```
$ sudo chef-client -zr "recipe[apache]"
```

```
Starting Chef Client, version 12.3.0
resolving cookbooks for run list: ["apache"]
Synchronizing Cookbooks:
  - apache
Compiling Cookbooks...
(skipping)
* service[httpd] action enable (up to date)
* service[httpd] action start (up to date)
Running handlers:
Running handlers complete
Chef Client finished, 1/4 resources updated in 29.019528692 seconds
```

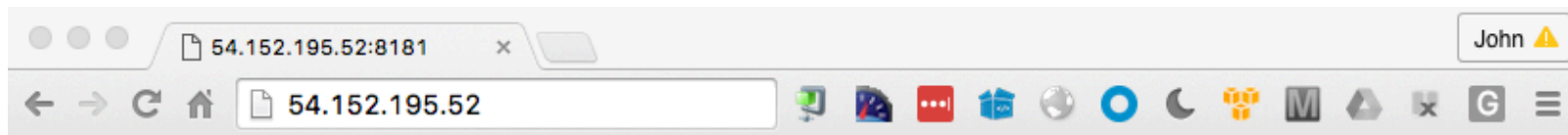

Lab: Verify That the Website is Available



```
$ curl localhost
```

```
<h1>Hello, world!</h1>  
<h2>ipaddress: 172.31.11.163</h2>  
<h2>hostname: ip-176-31-11-163</h2>
```

Lab: Verify That the Website is Available



Hello, world!

ipaddress: 172.31.11.163

hostname: ip-172-31-11-163

