# Lab: Setting up a Web Server

❑ Use `chef generate` to create a cookbook named "apache".

❑ Write and apply 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.

❑ Apply the recipe with chef-client

❑ Verify the site is available by running **curl localhost**

# GL: Return to the Home Directory

```
$ cd ~
```

# 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
    - update content in file /home/chef/cookbooks/apache/README.md from none to
5c3d3a
      (diff output suppressed by config)
```

# Lab: Create a Cookbook

```
$ chef generate recipe cookbooks/apache server
```

```
Compiling Cookbooks...

Recipe: code_generator::recipe
  * directory[cookbooks/apache/spec/unit/recipes] action create (up to date)

  * cookbook_file[cookbooks/apache/spec/spec_helper.rb] action create_if_missing
(up to date)

  * template[cookbooks/apache/spec/unit/recipes/server_spec.rb] action
create_if_missing

    - create new file cookbooks/apache/spec/unit/recipes/server_spec.rb

    - update content in file cookbooks/apache/spec/unit/recipes/server_spec.rb
from none to a43970

    (diff output suppressed by config)

  * template[cookbooks/apache/recipes/server.rb] action create

    - create new file cookbooks/apache/recipes/server.rb

    - update content in file cookbooks/apache/recipes/server.rb from none to
3d6b92
```

# Lab: Create the Server Recipe

**~/cookbooks/apache/recipes/server.rb**

```
package 'httpd'

file '/var/www/html/index.html' do
  content '<h1>Hello, world!</h1>'
end

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

# Lab: Apply the Server Recipe

```
$ sudo chef-client -z cookbooks/apache/recipes/server.rb
```

```
Converging 3 resources
Recipe: @recipe_files::/home/chef/cookbooks/apache/recipes/server.rb
  * yum_package[httpd] action install
    - install version 2.2.15-47.el6.centos.3 of package httpd
  * file[/var/www/html/index.html] action create
    - create new file /var/www/html/index.html
    - update content in file /var/www/html/index.html from none to 17d291
    --- /var/www/html/index.html   2016-02-24 21:41:45.494844958 +0000
    +++ /var/www/html/.index.html20160224-10036-6y8on7 2016-02-24 21:41:45.493844958
+0000
    @@ -1 +1,2 @@
    +<h1>Hello, world!</h1>
  * service[httpd] action enable
    - enable service service[httpd]
```

# Lab: Verify That the Website is Available

```
$ curl localhost
```

```
<h1>Hello, world!</h1>
```

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The package named 'httpd' is installed.

The file named '/var/www/html/index.html' is created with the content '<h1>Hello, world!</h1>'
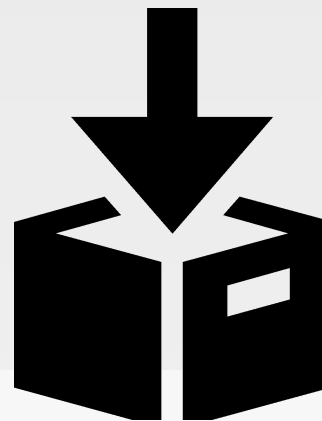
The service named 'httpd' is started and enabled.

✓ Apply the recipe with chef-client

✓ Verify the site is available by running **curl localhost**

# GL: Commit Your Work

```
$ cd cookbooks/apache
$ git init
$ git add .
$ git commit -m "Initial commit"
```

# Discussion

What file would you read first when examining a cookbook?

What other recipes might you include in the apache or workstation cookbook?

Can resources accept multiple actions?

How often would you commit changes with version control?

CHEF