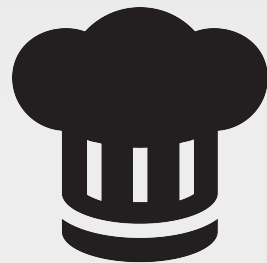


EXERCISE



Let's Add a Template!

Adding all the information into the recipe did make it hard to read.

Objective:

- ☐ Create a template with chef generate
- ☐ Define the contents of the ERB template
- ☐ Change the file resource to the template resource
- ☐ Update the cookbook's version number
- ☐ Apply the updated recipe and verify the results

GL: What Can chef generate Do?



```
$ chef generate --help
```

```
Usage: chef generate GENERATOR [options]
```

```
Available generators:
```

```
  app          Generate an application repo
```

```
  cookbook     Generate a single cookbook
```

```
  recipe       Generate a new recipe
```

```
  attribute    Generate an attributes file
```

```
  template     Generate a file template
```

```
  file         Generate a cookbook file
```

```
  lwrp         Generate a lightweight resource/provider
```

```
  repo         Generate a Chef policy repository
```

```
  policyfile   Generate a Policyfile for use with the install/push commands  
(experimental)
```

GL: What Can chef generate template Do?



```
$ chef generate template --help
```

```
Usage: chef generate template [path/to/cookbook] NAME [options]
```

```
  -C, --copyright COPYRIGHT      Name of the copyright holder -
defaults to 'The Authors'

  -m, --email EMAIL              Email address of the author - defaults
to ...

  -a, --generator-arg KEY=VALUE  Use to set arbitrary attribute KEY to
VALUE in the

  -I, --license LICENSE          all_rights, apache2, mit, gplv2, gplv3
- defaults to

  -s, --source SOURCE_FILE       Copy content from SOURCE_FILE

  -g GENERATOR_COOKBOOK_PATH,    Use GENERATOR_COOKBOOK_PATH for the
code_generator

  --generator-cookbook
```

Generating a motd Template



```
> chef generate template cookbooks/workstation motd
```

```
Recipe: code_generator::template
```

```
  * directory[cookbooks/workstation/templates/default] action  
create
```

```
    - create new directory
```

```
cookbooks/workstation/templates/default
```

```
  * template[cookbooks/workstation/templates/motd.erb] action  
create
```

```
    - create new file cookbooks/workstation/templates/motd.erb
```

```
    - update content in file
```

```
cookbooks/workstation/templates/motd.erb from none to e3b0c4
```

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

Examining the templates Directory



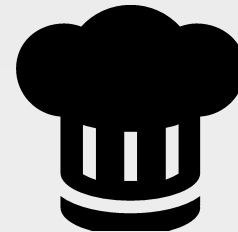
```
> tree cookbooks/workstation/templates
```

```
cookbooks/workstation/templates/
```

```
└─ default
```

```
└─ motd.erb
```

```
1 directory, 1 file
```



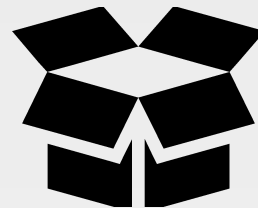
Cleaner Recipes

Adding the node attributes to the default page did make it harder to read the recipe.

Objective:

- ✓ Create a template with chef generate
- ✓ Define the contents of the ERB template
- ✓ Change the file resource to the template resource in the 'apache' cookbook

CONCEPT



ERB

An Embedded Ruby (ERB) template allows Ruby code to be embedded inside a text file within specially formatted tags.

Ruby code can be embedded using expressions and statements.

<https://docs.chef.io/templates.html#variables>

Text Within an ERB Template

```
<% if (50 + 50) == 100 %>
```

```
50 + 50 = <%= 50 + 50 %>
```

```
<% else %>
```

```
At some point all of MATH I learned in school changed.
```

```
<% end %>
```

Each ERB tag has a beginning tag and a matched ending tag.

Text Within an ERB Template

```
<% if (50 + 50) == 100 %>
```

```
50 + 50 = <%= 50 + 50 %>
```

```
<% else %>
```

```
At some point all of MATH I learned in school changed.
```

```
<% end %>
```

Each ERB tag has a beginning tag and a matched ending tag.

Text Within an ERB Template

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<% if (50 + 50) == 100 %>
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```
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```

```
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```

```
<% end %>
```

Each ERB tag has a beginning tag and a matched ending tag.

Text Within an ERB Template

```
<% if (50 + 50) == 100 %>
```

```
50 + 50 = <%= 50 + 50 %>
```

```
<% else %>
```

```
At some point all of MATH I learned in school changed.
```

```
<% end %>
```

Executes the ruby code within the brackets and do not display the result.

Text Within an ERB Template

```
<% if (50 + 50) == 100 %>
```

```
50 + 50 = <%= 50 + 50 %>
```

```
<% else %>
```

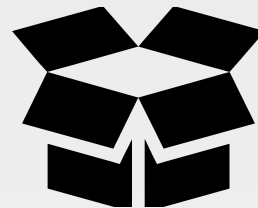
```
At some point all of MATH I learned in school changed.
```

```
<% end %>
```

Executes the ruby code within the brackets and display the results.

CONCEPT

The Angry Squid



Copying the Existing Content into the Template

```
~/cookbooks/workstation/templates/motd.erb
```

Property of ...

```
IPADDRESS: #{node['ipaddress']}  
HOSTNAME  : #{node['hostname']}  
MEMORY    : #{node['memory']['total']}  
CPU        : #{node['cpu']['0']['mhz']}
```

Changing String Interpolation to ERB Tags

```
~/cookbooks/workstation/templates/motd.erb
```

Property of ...

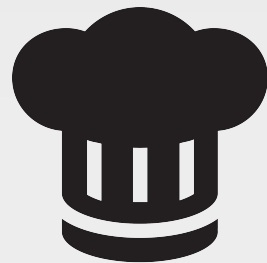
```
IPADDRESS: <%= node['ipaddress'] %>
```

```
HOSTNAME : <%= node['hostname'] %>
```

```
MEMORY   : <%= node['memory']['total'] %>
```

```
CPU       : <%= node['cpu']['0']['mhz'] %>
```

EXERCISE



Cleaner Recipes

The template is created and defined. It now needs to be used within the recipe.

Objective:

- ✓ Create a template with chef generate
- ✓ Define the contents of the ERB template
- ✓ Change the file resource to the template resource
- ✓ Update the cookbook's version number
- ✓ Apply the updated recipe and verify the results