Foodcritic



Module Objectives

- After completing this module, you should be able to:
 - Use Foodcritic to avoid common cookbook errors

What is Foodcritic?

- A lint testing tool, or correctness checker
- Ensure you adhere to best practices for cookbook style
- Ability to write and use custom rules
- http://foodcritic.io/

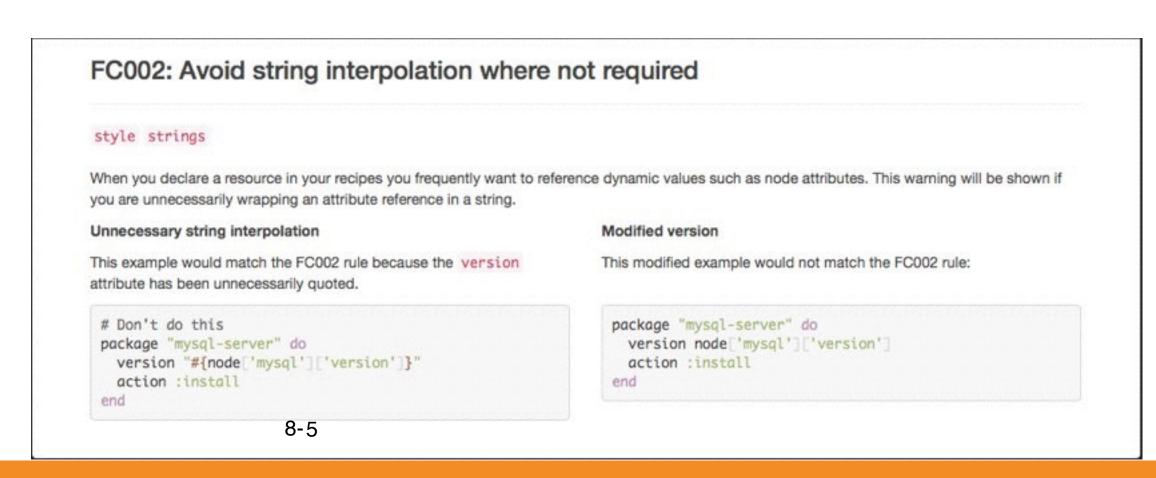


Foodcritic

- A code linting tool for Chef
 - Checks code correctness
 - Catches common mistakes before they cause problems
 - Extensible & Configurable
 - Create new rulesets
 - Ignore existing rulesets
 - Integrates nicely into CI pipelines

Rules and Tags

- All rules are numbered, e.g.
 - FC002 "Avoid string interpolation where not required"
 - FC034 "Unused template variables"
- Rules can be categorized and tagged, e.g.
 - 'style'
 - 'portability'
 - • •



Abide by Best Practices

- There are 50+ rules in Foodcritic; your cookbooks should pass them (or have a good reason if they do not)
- You can write your own rules.
- Extra community-contributed rules: http://www.foodcritic.io/#extra-rules

The Problem and the Success Criteria

- The Problem: We want to make sure our Apache cookbook follows best practice for Chef code
- Success Criteria: We use Foodcritic to check our cookbook before committing it

Foodcritic

- If you are using the ChefDK, you already have foodcritic installed
- Located at: .\chefdk\embedded\bin\foodcritic

Exercise: Check Cookbook Correctness with Foodcritic

\$ foodcritic cookbooks/apache

```
FC003: Check whether you are running with chef server before using server-specific features: ./recipes/default.rb:43
FC003: Check whether you are running with chef server before using server-specific features: ./recipes/iplogger.rb:1
FC008: Generated cookbook metadata needs updating: ./metadata.rb:2
FC008: Generated cookbook metadata needs updating: ./metadata.rb:3
FC009: Resource attribute not recognised: ./recipes/default.rb:27
FC016: LWRP does not declare a default action: ./resources/vhost.rb:1
```

Exercise: Narrow the Tests

\$ foodcritic cookbooks/apache -t ~FC003 -t ~FC009

```
FC008: Generated cookbook metadata needs updating: ./metadata.rb:2
FC008: Generated cookbook metadata needs updating: ./metadata.rb:3
FC016: LWRP does not declare a default action: ./resources/vhost.rb:1
```

Exercise: Fix the Cookbook to Clear the Errors

\$ foodcritic cookbooks/apache -t ~FC003 -t ~FC009

```
(no output)
```

- Edit your cookbook to fix the FC008 & FC016 errors, then rerun your Foodcritic
- Refer to http://www.foodcritic.io/ to find the errors
- No output means no errors!

Running Certain Tests

Run only certain categories of test

```
$ foodcritic <path> -t style
```

Run specific tests

```
$ foodcritic <path> -t FC034
```

Exclude specific tests

```
$ foodcritic <path> -t ~FC034
```

Saving Foodcritic Rules

```
$ foodcritic -t services -t ~style -t ~FC002 .
$ echo "services,~style,~FC002" > .foodcritic
```

- When you have defined your set of tag options, you can save them to a file called .foodcritic
- Foodcritic will read that file upon execution, and use those as the default options

http://www.foodcritic.io/#FC003

Best Practice: Run Foodcritic Before Each Commit

- Always check in correct code!
- Make Foodcritic a part of your build pipeline with commit hooks or other methods
- The Foodcritic web page has extensive documentation & examples showing how to build Foodcritic rules into Jenkins or Travis-CI