

# CHEF PARTNER COOKBOOKS

Chef's Partner Engineering Team

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# WHY WRITE CHEF COMMUNITY COOKBOOKS?

- Help customers succeed
- Reach thousands of joint users
- Users provide real-world feedback
- Good marketing opportunity

# WHAT IS A CHEF PARTNER COOKBOOK?

- Chef's Partner Engineering helps you write your cookbook
- The cookbook is Open Source and freely available
  - we want to help all our users succeed with both companies' software
- Joint marketing opportunities
- Working on a [Supermarket](#) badge and [Chef.io](#) landing page
- All the benefits of Community Cookbooks!

# HOW TO WRITE A "GOOD" COOKBOOK

- "Good" is subjective, but there are guidelines to do better
- Use the ChefDK for development
  - [downloads.chef.io/chef-dk/](https://downloads.chef.io/chef-dk/)
  - `chef generate cookbook`
  - fill in the appropriate content
  - check the LICENSE.md (we prefer Apache v2)

# WRITING THE README

- Fill in the chef generate cookbook's README.md
- Add a SCOPE of what it does and doesn't do
- List the REQUIREMENTS for using this cookbook
- List the platforms tested and what is supported
- Document any other cookbooks or ruby libraries as dependencies
- Are there other external packages needed for usage?
  - document how/where to get them
- Explain the USAGE
- How/why it is tested or refer to a TESTING.md
- If there are Resources provided, document each and their properties

# COMMUNITY COOKBOOK DOCUMENTATION

- Examples for how Chef Software cookbooks are managed
- [github.com/chef-cookbooks/community\\_cookbook\\_documentation](https://github.com/chef-cookbooks/community_cookbook_documentation)
- CONTRIBUTING.md explaining how to help further development
- LICENSE Apache v2 license provided (our preferred license)
- TESTING.md explaining how to test this cookbook

# COMMUNITY QUALITY METRICS

- Community-provided documentation for objectively assessing cookbooks
- These are leading indicators of quality
  - usually easy to achieve, show you took the time to try to do a good job
- [github.com/chef-cookbooks/cookbook-quality-metrics](https://github.com/chef-cookbooks/cookbook-quality-metrics)
- You should be able check off on these before sharing
- Eventually may be supported on [Supermarket](#)

# RUBY STYLE

- [Rubocop](#)
  - included with the [ChefDK](#)
- Ruby static code analyzer and style enforcement
  - community Ruby style guide, still very subjective
- Document your overrides or disagreements and move on
  - considering implications of rules is more important than blindly following
- No established default, there is a lot of cargo-culting
  - the MySQL one is a good starter
  - [github.com/chef-cookbooks/mysql/blob/master/.rubocop.yml](https://github.com/chef-cookbooks/mysql/blob/master/.rubocop.yml)



# LINTING AND COOKBOOK STYLE

- Foodcritic
  - included with the ChefDK
- Chef style guide for cookbooks
  - eliminates potential issues
  - [www.foodcritic.io](http://www.foodcritic.io)
  - document your overrides or disagreements and move on

# UNIT TESTS

- [ChefSpec](#)
  - included with the [ChefDK](#)
- Chef-specific unit tests, extension of rspec
- Use to test logic of cookbooks
- Just having it present catches compilation errors
- [github.com/sethvargo/chefspec](https://github.com/sethvargo/chefspec) has lots of examples
- [betterspecs.org](http://betterspecs.org) for thoughts on better unit testing

# INTEGRATION TESTS

- Test Kitchen
  - included with the ChefDK
- Integration test with "real" machines
- Tests on each supported platform
- [kitchen.ci](https://kitchen.ci)
- Start with `chef generate cookbook's .kitchen.yml`
- Use InSpec to test, use the Test Kitchen driver
  - [docs.chef.io/inspec\\_reference.html](https://docs.chef.io/inspec_reference.html)
  - [github.com/chef/kitchen-inspec](https://github.com/chef/kitchen-inspec)

# HOSTED TESTING TOOLS

- These may be configured to automatically test incoming PRs on GitHub
- Code Climate
  - checks code quality and runs automated tools
  - [Code Climate blog post on testing for Chef](#)
  - example [github.com/chef-cookbooks/mysql/blob/master/.codeclimate.yml](https://github.com/chef-cookbooks/mysql/blob/master/.codeclimate.yml)
- Travis.CI
  - Rubocop, Food Critic, ChefSpec and even Test Kitchen all supported
  - example: [github.com/chef-cookbooks/mysql/blob/master/.travis.yml](https://github.com/chef-cookbooks/mysql/blob/master/.travis.yml)

# OTHER THINGS WE LOOK FOR

- Semantic versioning observed
- Use Chef's built-in Resources
- Windows support and testing where applicable
- Attributes defined and documented in the `attributes/default.rb`
- Idempotent recipes
  - recipes requiring multiple runs are generally discouraged
  - run the recipes twice to catch non-idempotent behavior
- Private Recipes are generally a good pattern

# CUSTOM RESOURCES

- Safely abstract away messy CLI or API calls
- Provide opportunities for error handling and conditional logic
- Benefits of standard Resources
  - types, names, parameters
  - notifications, default parameters, etc.
- Develop against Chef 12.5 or later
- Custom Resources added to make development much easier
  - [docs.chef.io/decks/custom\\_resources.html](https://docs.chef.io/decks/custom_resources.html)
- Backwards-compatible library for earlier Chef versions
  - [supermarket.chef.io/cookbooks/compat\\_resource](https://supermarket.chef.io/cookbooks/compat_resource)

# ADVANCED DEBUGGING

- **Pry** is an interactive shell for debugging Ruby
- Chef has the pry gem already included as a dependency
- Include this block in your recipes, libraries or custom Resources to drop into pry during a chef-client run

```
require 'pry'  
binding.pry
```

# SUPERMARKET

- Chef's community site for sharing cookbooks
  - and other extensions
- [supermarket.chef.io](https://supermarket.chef.io)
- Publish your cookbook
- Fill all the extra fields
- "Chef Partner Cookbook" badge coming
  - Marketing will eventually add a landing page
  - filter searches to highlight these results



# JOINING THE CHEF PARTNER COOKBOOK PROGRAM

- Contact Chef's Partner Engineering [partnereng@chef.io](mailto:partnereng@chef.io)
  - Discuss proposed cookbook features
  - Provide examples and documentation
  - Answer technical questions, code reviews, and provide feedback
  - Help promote usage

# THANKS!

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