Better Puppet Module Development through Testing

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Thomas Van Doren
thomas@thomasvandoren.com
Slides at: thomasvandoren.com
About Me

I like...

- Cozi!
- Puppet
- OpenStack
- DevOps
Topics

- Why bother testing puppet modules?
- Tools and patterns for testing
- Testing with CI tools
Why bother testing puppet modules?

- Iterate quickly
- Discover issues earlier
- Test on multiple platforms/environments from a single box
- Simple documentation
- It's easy!
Tools and patterns for testing

- puppet parser validate
- puppet-lint
- smoke tests
- spec tests
puppet parser validate

- Validates manifest syntax
- Easy and fast feedback

puppet parser validate your_manifest.pp

Setup a post-commit script to do this: http://goo.gl/XI1d6
puppet parser validate

# broken.pp
fail("I may be broken..."

puppet parser validate broken.pp

Error: Try 'puppet help parser validate' for usage
puppet-lint

puppet-lint your_manifest.pp

puppet-lint --no-80chars-check your_manifest.pp

puppet-lint --fail-on-warnings your_manifest.pp

# Rakefile
...
PuppetLint.configuration.send('disable_80chars')

Puppet Style Guide
Smoke tests

- Provides real life usage examples.
- Only verifies the platform/environment the test is run on.

```
# tests/your_manifest.pp
include my_module::your_manifest

puppet apply --noop --verbose tests/your_manifest.pp
```

More info about smoke tests.
Spec tests

- Most thorough verification.
- Unittesting for manifests.
- Possible to verify different environments, platform, inputs.
- Provides pattern for "mocking" dependencies.

rspec-puppet
puppetlabs_spec_helper

- Gem from puppet that provides rake tasks and scripts for testing/building.

# Rakefile
require 'puppetlabs_spec_helper/rake_tasks'

Available on [github](https://github) and [rubygems](https://rubygems).
Demo
Testing with CI Tools

- Travis CI
- Jenkins
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