

# Better Puppet Module Development through Testing

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# 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/Xl1d6>

# puppet parser validate

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

```
puppet parser validate broken.pp
```

```
Error: Could not parse for environment  
production: Syntax error at '>'; expected ')' at  
/Users/thomas/Dropbox/casitconf/2013-01-15-  
proposal/demo/broken.pp:3
```

```
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](#) and [rubygems](#).

**Demo**

# Testing with CI Tools

- [Travis CI](#)
- [Jenkins](#)

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