puppet
by Perforce

Ironing out the Creases

The Developer Experience

PDK Recent Updates

A major focus of this past year has been the improvement and upkeep of the PDK, with many improvements going out and a large expansion of the Operating Systems that support it.

- Support has been added for both Debian 12 and Mac OSX 13

- ARM64 has been added as a support Architecture for many of our existing OSs, including Debian 11 + 12, Ubuntu 18.04 to 24.04, RedHat 9 and MAC OSX 13

- We have expanded the range of our testing for Windows machines

- Analytics have been removed from the PDK

As we move forward, we are intent on further expanding on this to ensure the PDK's place as the premier tool for supporting and developing all Puppet products.

Puppet
Development Kit

puppet-upgrade

As part of our effort to cover and account for the changing needs of our customers and community we have crafted a new tool to aid in the process of upgrading your Modules to support Puppet 8.

- Scans the module and highlights the changes that need to be made to support Puppet 8

- Provides some minor auto-correction

- Validates your Hiera version

- Runs dependency checks against the Puppet Forge
  - This can be disabled or set to a custom forge api

- Utilizes:
  - PDK
  - puppet-lint
  - Puppet-forge

infrastructure-agent-puppet

EXPLORER

Gemfile M ×

OPEN EDITORS
  × 🔴 Gemfile   M
INFRASTRUCTURE-AGENT-PUPPET
  > .github
  > .vscode
  > bin
  > data
  > manifests
    ⚡ agent.pp
    ⚡ init.pp
    ⚡ integrations.pp
  > spec
  > templates
  > test
  ! .fixtures.yml
  ≡ .gitattributes
  ≡ .gitignore   M
  🐱 .gitlab-ci.yml
  ≡ .kitchen.yml
  ≡ .pdkignore   M
  ≡ .puppet-lint.rc
  ≡ .rspec
  ! .rubocop.yml   M
  ≡ .ruby-version   U
  ! .travis.yml
  ≡ .yardopts
  ! appveyor.yml
  ① CHANGELOG.md
  ① CODE_OF_CONDUCT.md
  🐱 CONTRIBUTING.md
  🔴 Gemfile   M
  ! hiera.yaml
  🐱 LICENSE
  🐱 LICENSE.md
  {} metadata.json   M
  ≡ Puppetfile
  🔴 Rakefile   M
  ① README.md
  ≡ update_report.txt

```ruby
15
16    group :development do
17      gem "json", '= 2.1.0',                        require: false if Gem::Requirement.create(['>= 2.5.0', '< 2.7.0']).satisfied_by?(Gem::Version.new(RUBY_VER
18      gem "json", '= 2.3.0',                        require: false if Gem::Requirement.create(['>= 2.7.0', '< 3.0.0']).satisfied_by?(Gem::Version.new(RUBY_VER
19      gem "json", '= 2.5.1',                        require: false if Gem::Requirement.create(['>= 3.0.0', '< 3.0.5']).satisfied_by?(Gem::Version.new(RUBY_VER
20      gem "json", '= 2.6.1',                        require: false if Gem::Requirement.create(['>= 3.1.0', '< 3.1.3']).satisfied_by?(Gem::Version.new(RUBY_VER
21      gem "json", '= 2.6.3',                        require: false if Gem::Requirement.create(['>= 3.2.0', '< 4.0.0']).satisfied_by?(Gem::Version.new(RUBY_VER
22      gem "racc", '~> 1.4.0',                       require: false if Gem::Requirement.create(['>= 2.7.0', '< 3.0.0']).satisfied_by?(Gem::Version.new(RUBY_VER
23      gem "deep_merge", '~> 1.2.2',                 require: false
24      gem "voxpupuli-puppet-lint-plugins", '~> 5.0', require: false
25      gem "facterdb", '~> 2.1',                     require: false
26      gem "metadata-json-lint", '~> 4.0',          require: false
27      gem "rspec-puppet-facts", '~> 4.0',          require: false
28      gem "dependency_checker", '~> 1.0.0',        require: false
29      gem "parallel_tests", '= 3.12.1',            require: false
30      gem "pry", '~> 0.10',                        require: false
31      gem "simplecov-console", '~> 0.9',           require: false
32      gem "puppet-debugger", '~> 1.0',             require: false
33      gem "rubocop", '~> 1.50.0',                  require: false
34      gem "rubocop-performance", '= 1.16.0',       require: false
35      gem "rubocop-rspec", '= 2.19.0',             require: false
36      gem "rb-readline", '= 0.5.5',                require: false, platforms: [:mswin, :mingw, :x64_mingw]
37      gem "rexml", '>= 3.0.0', '< 3.2.7',          require: false        You, 1 second ago • Uncommitted changes
38    end
39    group :development, :release_prep do
40      gem "puppet-strings", '~> 4.0',      require: false
41      gem "puppetlabs_spec_helper", '~> 8.0', require: false
42      gem "puppet-blacksmith", '~> 7.0',   require: false
43    end
44    group :system tests do
```

COMMENTS   DEBUG CONSOLE   PROBLEMS   OUTPUT   TERMINAL   PORTS   GITLENS

○ puppet@JBREEN0922:~/Desktop/repos/infrastructure-agent-puppet|master⚡ → ▯   [24/10/3|10:20AM]

OUTLINE
TIMELINE

master* ⊗ puppetlabs/provision_service#348 needs reviewers ⊗ 0 ⚠ 0 ⊘ 0   Sorbet: Disabled   You, 1 second ago   Ln 37, Col 64   Spaces: 2   UTF-8   Ruby

Dependency Contracts – Reducing the Maintenance Toil

- A significant part of the development or maintenance process of a module or even environment, is the handling of its dependencies, with more complex examples containing upwards of half a dozen modules, each with its own inherent dependencies leading off from themselves.

- This becomes even more complex with dependencies coming from multiple locations:
    - fixtures.yml
    - Puppetfile
    - Metadata.json
    - Etc

- To resolve this, we are investigating the creation of a tool which would examine all possible sources for your dependencies and then recommends which ones require attention.

- The end goal of this would be an automated update that would handle the majority of this for you, your Puppetfile and more updated with the simple run of a command.

VSCode and CoPilot

A core product in our catalog of support, is the Puppet VSCode extension. This tool has long helped to integrate new users with the Puppet language, advising and correcting them as they take their first steps in writing a Module.

- Relies upon the puppet-languageserver, a Language and Debug server

- Used widely within Puppet itself

To improve on this process and automate it even further, you can integrate GitHub CoPilot into this process, allowing you to write basic Class and Providers with a single command.

- Time saving for even veteran Puppet users

- Can cut down on the minutia, leaving more time for innovation

- Further work is planned to integrate with IDX, Codium and GitLab Duo

https://www.puppet.com/webinars/puppet-github-copilot-demo

The Community Board
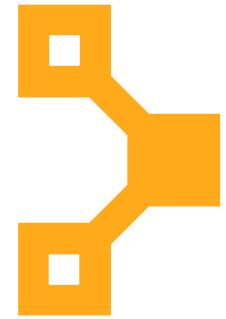
https://github.com/orgs/puppetlabs/projects/73

To better interact with the community, we have created a public facing board which we use to track community PRs and Issues, which we then review each Friday.

- Any PR or Issue added is automatically updated

- While community can view the board, only the team can update it

- If you wish to add something to the review, feel free to reach out to the team directly

- If you are unsure how to reach us directly, we run a bi-weekly Office Hours where we chat on the Community Slack to answer questions and give advice.

Q&A

Please be Kind