

Automating the Vox Pupuli Yak Shaving

Automate all the yak shaving!

\$ whoami

- Tim 'bastelfreak' Meusel
- Puppet Contributor since 2012
- Merging stuff on [Vox Pupuli](#) (Puppet Community) since 2015
- Vox Pupuli Project Management Committee member

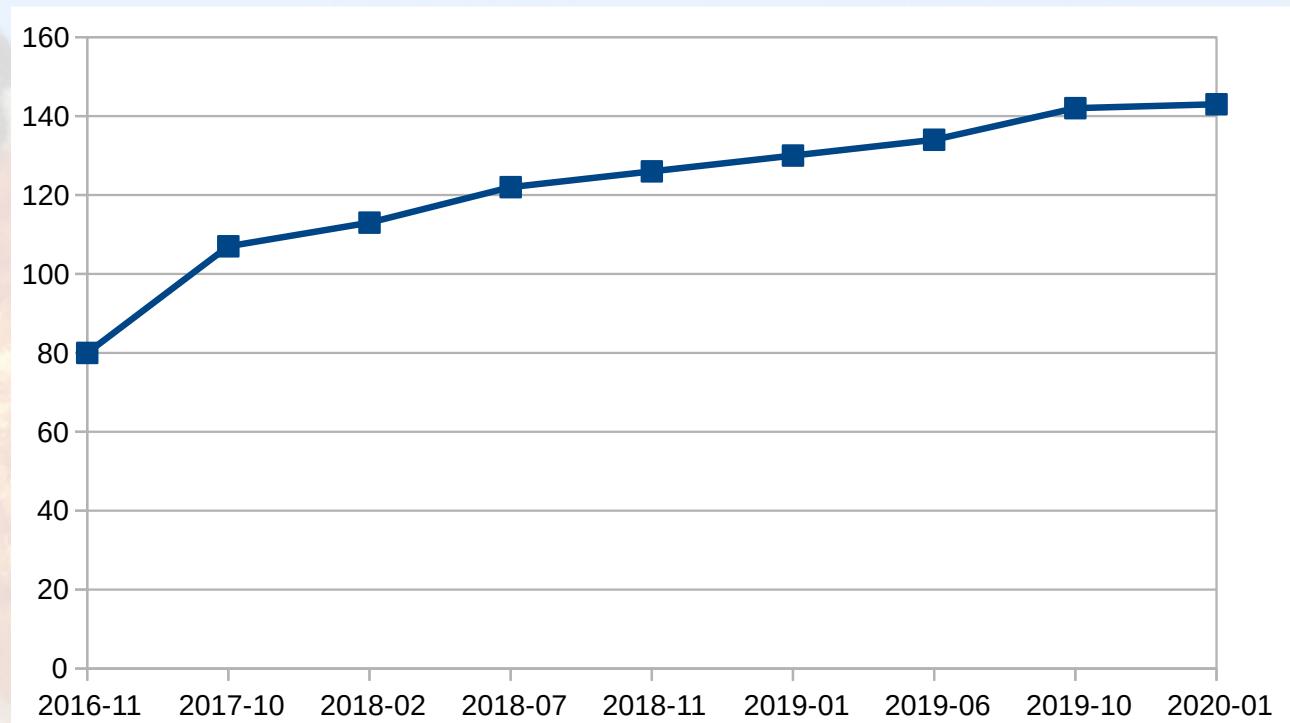
\$ whoami

- Robert 'flipez' Müller
- Ruby Developer since 2013
- Builds clouds

What's this Vox Pupuli thingy?

Vox Pupuli

- Amount of Vox Pupuli members with merge permissions



@Was1NicerDude & @bastelsblog for @voxpupuliorg

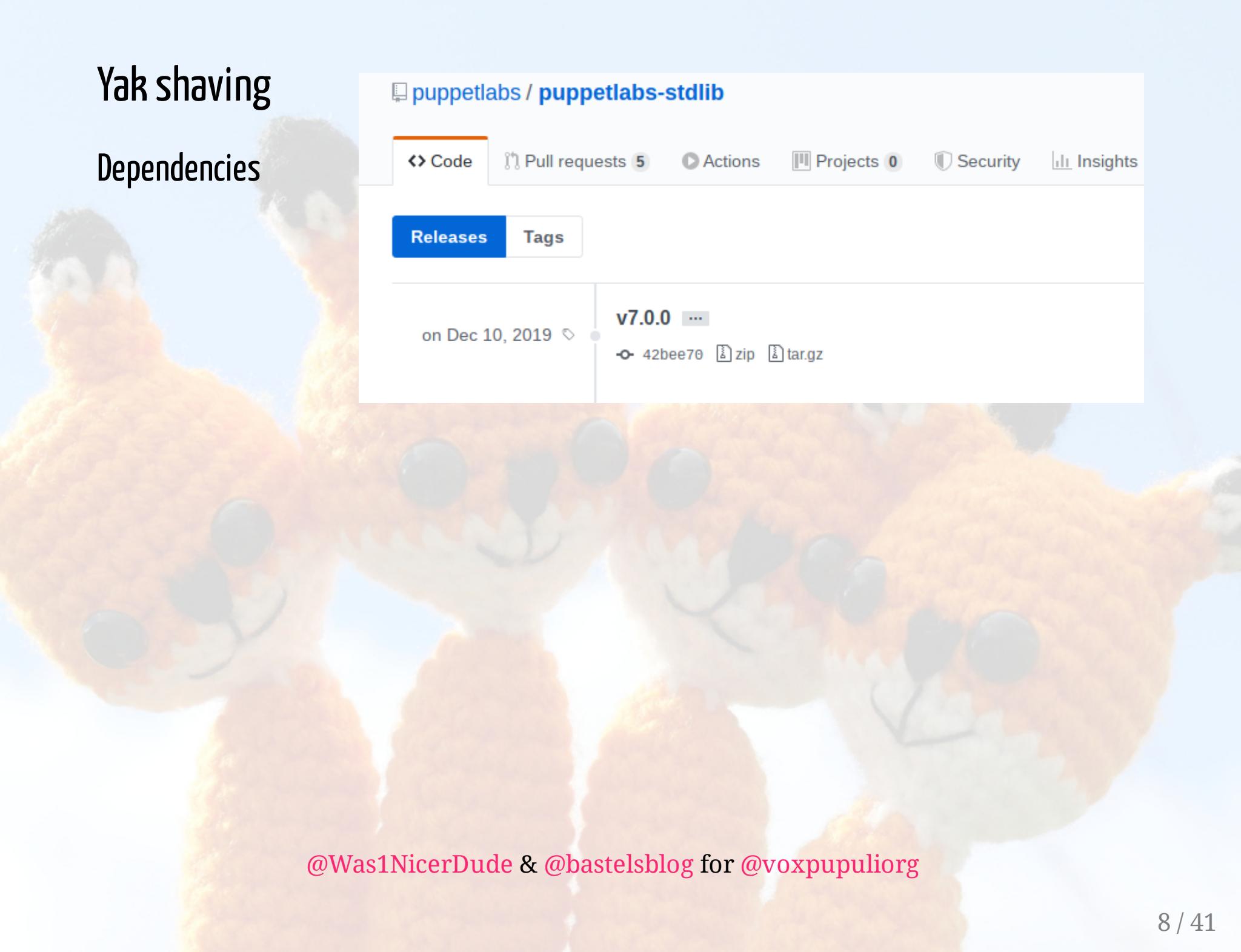
The path of a Open Source Maintainer...

What do we do?



Yak shaving

Dependencies



A screenshot of a GitHub repository page for [puppetlabs/puppetlabs-stdlib](#). The page shows a release titled "v7.0.0" made on Dec 10, 2019. The release includes a commit hash "42bee70" and download links for "zip" and "tar.gz". The GitHub interface includes navigation tabs for Code, Pull requests, Actions, Projects, Security, and Insights.

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Yak shaving

Dependencies

```
10  "dependencies": [
11    {
12      "name": "puppetlabs(concat",
13      "version_requirement": ">= 4.1.0 < 7.0.0"
14    },
15    {
16      "name": "puppetlabs(stdlib",
17      "version_requirement": ">= 4.25.0 < 7.0.0"
18    }
19  ],
```

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Yak shaving

Dependencies

```
59     "requirements": [  
60         {  
61             "name": "puppet",  
62             "version_requirement": ">= 5.5.8 < 7.0.0"  
63         }  
64     ]
```

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Yak shaving

Dependencies

```
29     "operatingsystem": "RedHat",
30     "operatingsystemrelease": [
31         "6",
32         "7"
33     ]
34 }
```

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Yak shaving

Dependencies

Labels

19 labels

backwards-incompatible

beginner-friendly

bug

docs

duplicate

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Yak shaving

Dependencies

Labels

Modulesync

- Many files are identical across our modules
 - CONTRIBUTING.md, rspec configuration
- Many files are very similar
 - .travis.yml, Gemfile, Rakefile

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Yak shaving

Dependencies

Labels

Modulesync

- modulesync was initially developed by Puppet Inc.
- Now maintained by Vox Pupuli
- a template directory + configuration file for every module

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Yak shaving

Dependencies

Labels

Modulesync

Releases

Found 124 modules by Vox Pupuli

Filter by Puppet version: Sort by:

 **prometheus**
puppet

Approved

This module installs, configures and manages the Prometheus service.
Version 8.2.1

Updated 4 days ago
Total downloads 772,957
Quality score 4.9 ?

 **nginx**
puppet

Approved

Puppet NGINX management module
Version 1.1.0

Updated 4 days ago
Total downloads 47,012,744
Quality score 4.2 ?

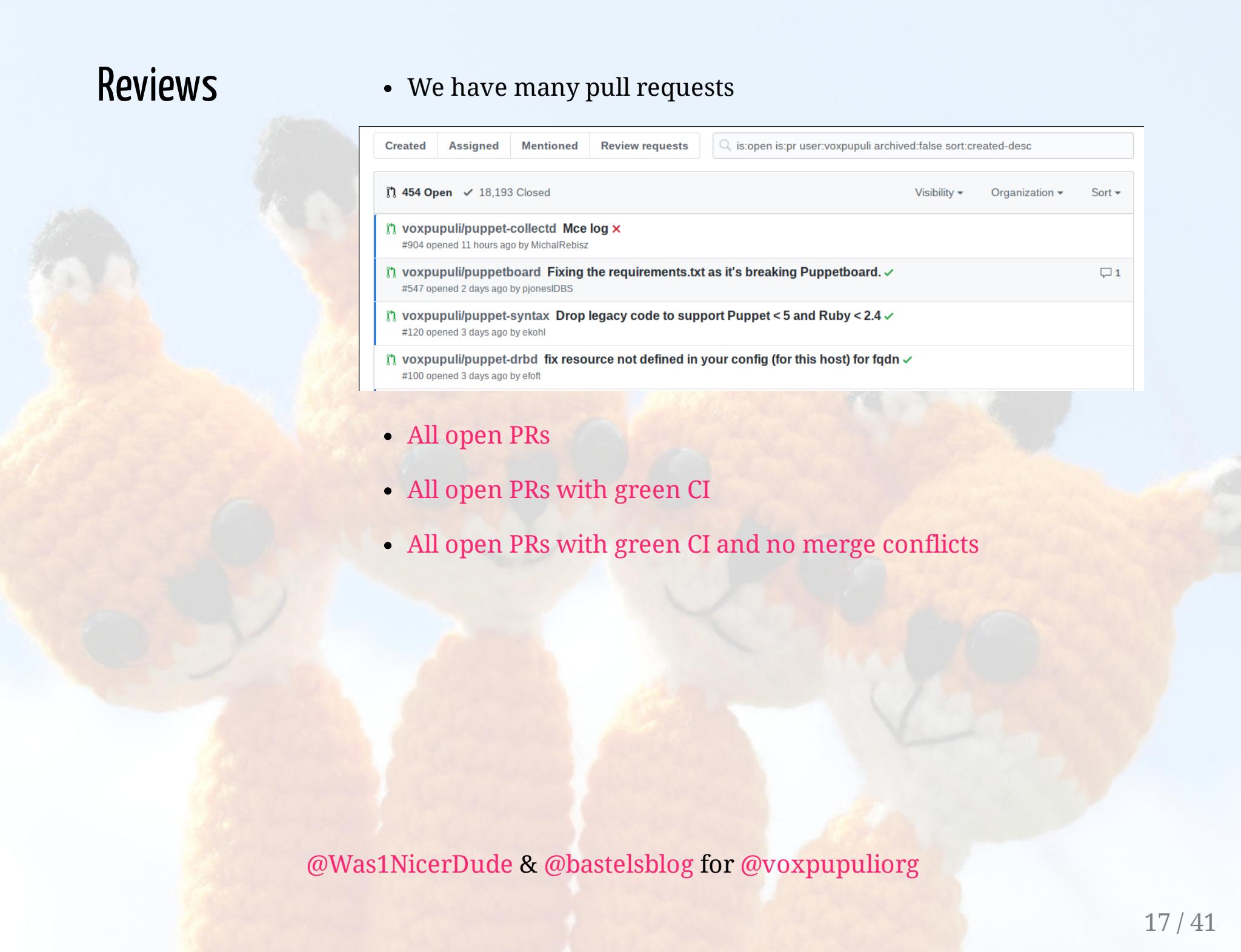
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The path of a Open Source Maintainer...

What do we actually do?

Reviews

- We have many pull requests



A screenshot of a GitHub search results page for the organization 'voxpupuli'. The search query is 'is:open is:pr user:voxpupuli archived:false sort:created-desc'. The results show 454 open pull requests. The first four results are listed:

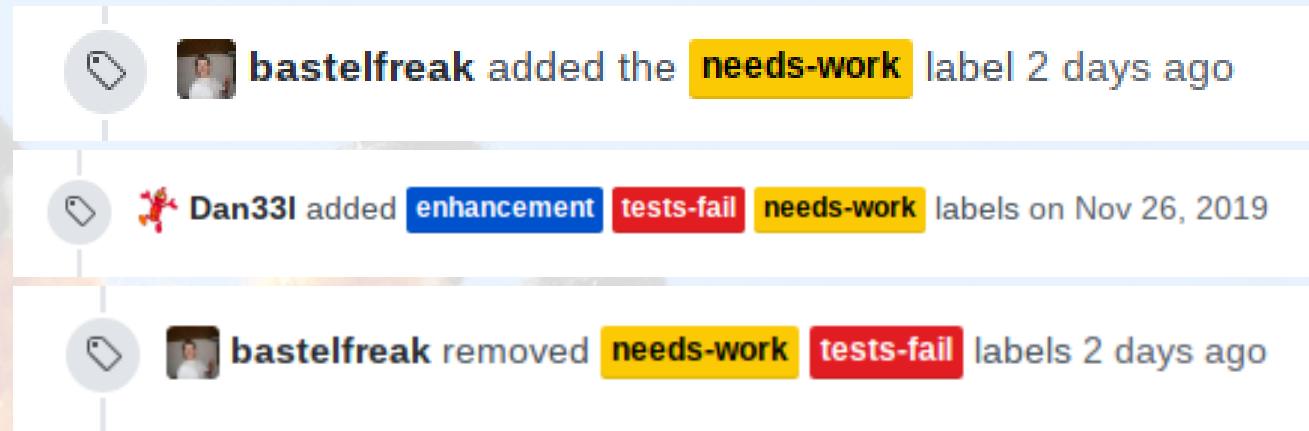
- voxpupuli/puppet-collectd** Mce log ✗
#904 opened 11 hours ago by MichalRebisz
- voxpupuli/puppetboard** Fixing the requirements.txt as it's breaking Puppetboard. ✓
#547 opened 2 days ago by pjonesIDBS
- voxpupuli/puppet-syntax** Drop legacy code to support Puppet < 5 and Ruby < 2.4 ✓
#120 opened 3 days ago by ekohl
- voxpupuli/puppet-drbd** fix resource not defined in your config (for this host) for fqdn ✓
#100 opened 3 days ago by efoft

- All open PRs
- All open PRs with green CI
- All open PRs with green CI and no merge conflicts

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Reviews

More labels



- New feature? **enhancement** label
- Bug / Bugfix? **bug** label
- Breaking change? **backwards-incompatible** label
- Additional work required? **needs-work** label

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Reviews

More labels

Filtering:

- labels like needs-feedback, needs-work, tests-fail, needs-docs, beginner-friendly, needs-rebase help us to sort pull requests and issues by grouping them

Changelog:

- labels like bug, enhancement, backwards-incompatible help us to generate a CHANGELOG.md

Reviews

More labels

Email Addresses

- Ensure that an author has their email address in Git and github.com in sync
 - Otherwise GitHub fails to account the contribution properly

A screenshot of a GitHub pull request interface. The commit message is "fix(is_master-fact): use --ssl if --sslPEMKeyFile or --sslCAFile is s...". A green checkmark icon and the hash "4cf3cdfe" are at the end of the commit line. Below the commit, there's a label addition event by user "bastelfreak" with the "bug" label, timestamped 4 minutes ago. Following that is a review request event by "bastelfreak" targeting user "ekohl", timestamped 3 minutes ago. A reply comment by "bastelfreak" is shown in a box, timestamped 3 minutes ago. The comment text reads: "Thanks for the PR @buchstabensalat. Can you take a look at the used email address in the commit? It isn't associated with your github account." A "Member" badge and a "..." button are visible next to the comment author's name.

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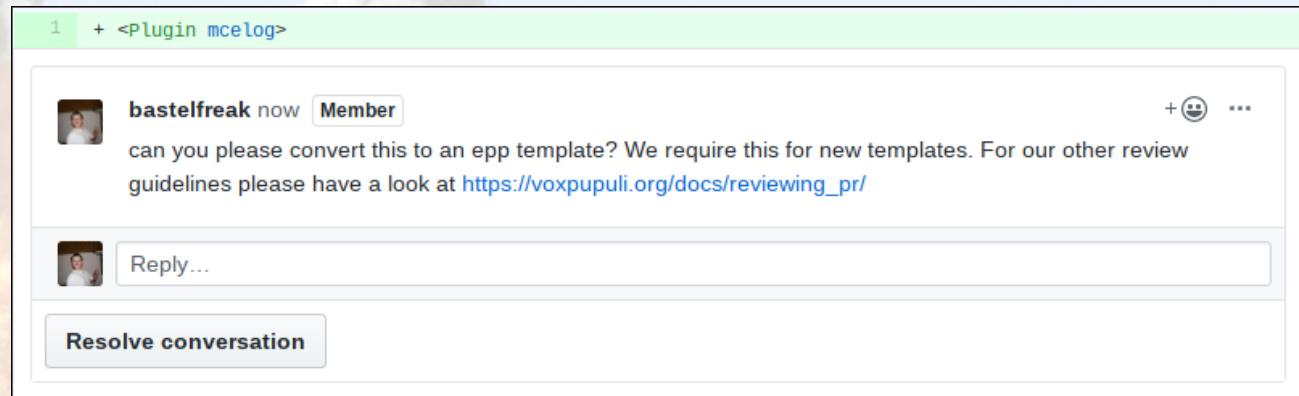
Reviews

More labels

Email Addresses

Templates

- Ensure that new templates are always **epp**, not **erb**
 - Epp templates have proper scopes and datatypes



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Let us solve all our problems!

VPT

AUTOMATE



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VPT

Automate daily tasks

"There is this script. Do you think we can improve it?"

- Checks supported OS ranges
 - Checks supported Puppet range
 - Sort repos into categories based on
 - managed modules files
 - vox pupuli/plumbing repo
 - forge releases
 - information in files in every repository

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Automate daily tasks

"There is this script. Do you think we can improve it?"

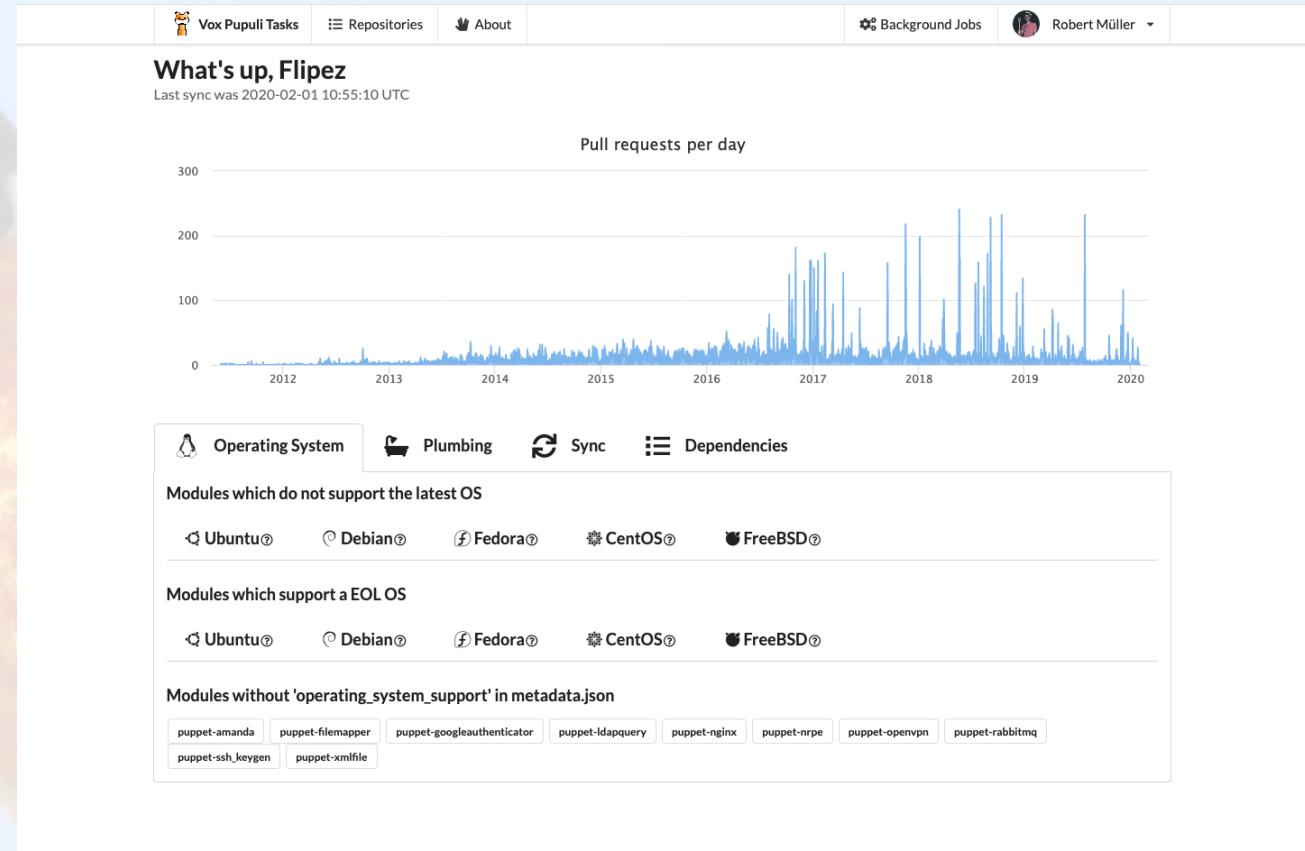
- Checks supported OS ranges
 - Checks supported Puppet range
 - Sort repos into categories based on
 - managed modules files
 - vox pupuli/plumbing repo
 - forge releases
 - information in files in every repository

Uhm, I guess

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Automate daily tasks

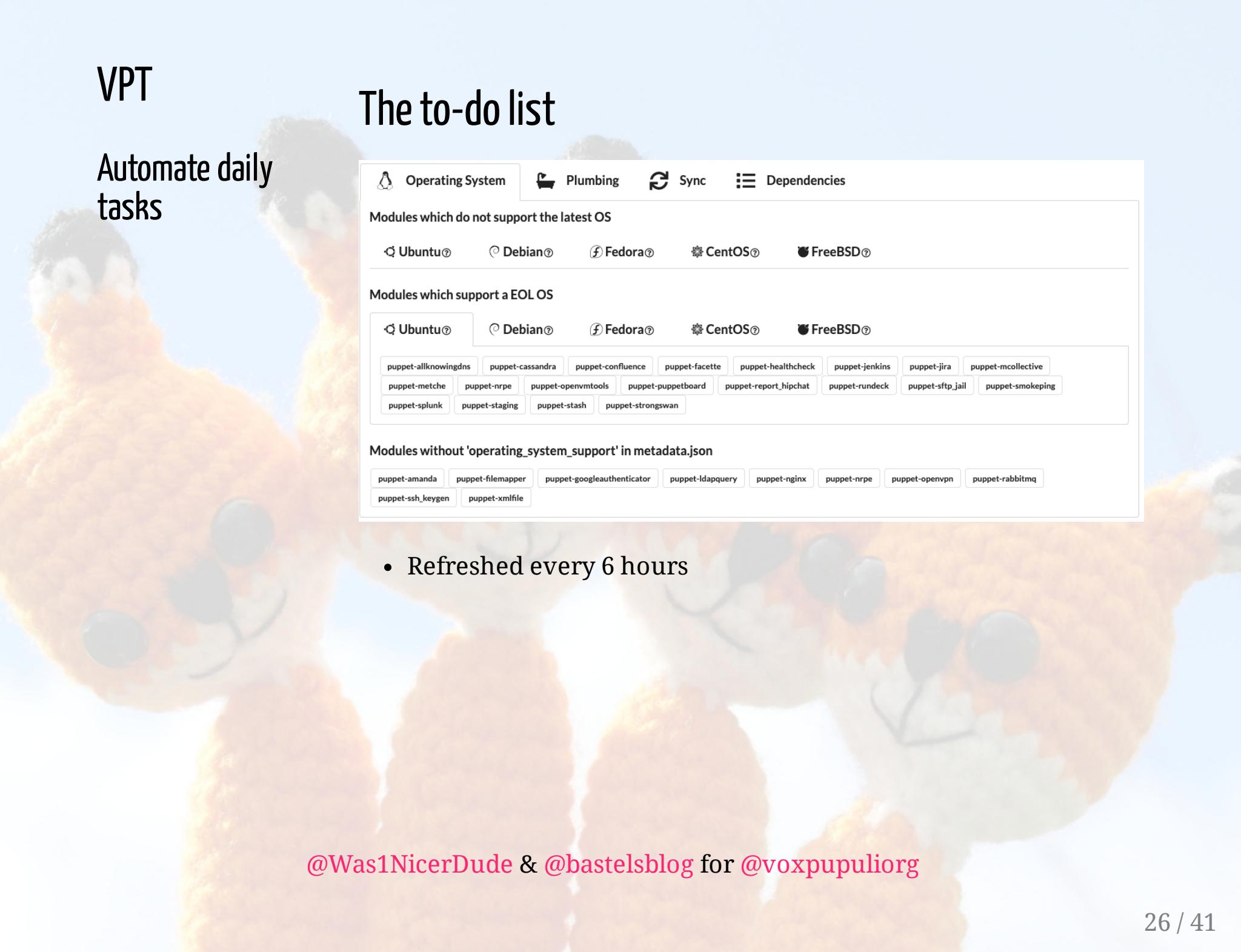


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Automate daily tasks

The to-do list



The screenshot shows a web-based interface for managing Puppet modules. At the top, there's a navigation bar with tabs: 'Operating System' (selected), 'Plumbing', 'Sync', and 'Dependencies'. Below the tabs, there are sections for 'Modules which do not support the latest OS' and 'Modules which support a EOL OS'. Under each section, there are dropdown menus for 'Ubuntu', 'Debian', 'Fedora', 'CentOS', and 'FreeBSD'. The 'Modules which do not support the latest OS' section lists several modules: puppet-allknowingdns, puppet-cassandra, puppet-confluence, puppet-facette, puppet-healthcheck, puppet-jenkins, puppet-jira, puppet-mcollective, puppet-metche, puppet-nrpe, puppet-openvmtools, puppet-puppetboard, puppet-report_hipchat, puppet-rundeck, puppet-sftp_jail, and puppet-smokeping. The 'Modules which support a EOL OS' section lists: puppet-amanda, puppet-filemaker, puppet-googleauthenticator, puppet-ldapquery, puppet-nginx, puppet-nrpe, puppet-openvpn, and puppet-rabbitmq. The 'Modules without 'operating_system_support' in metadata.json' section lists: puppet-ssh_keygen and puppet-xmlfile.

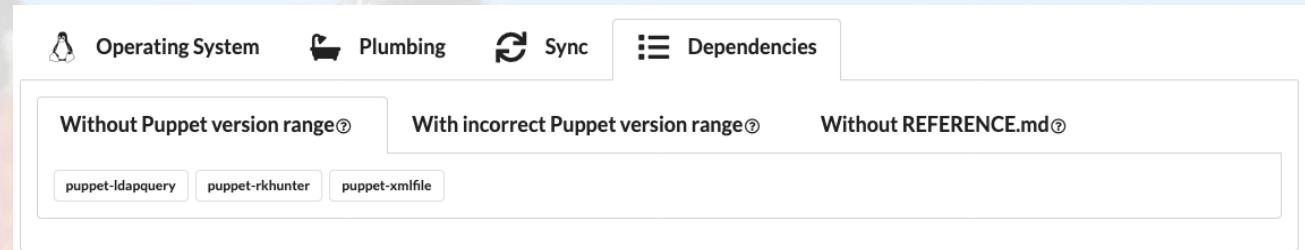
- Refreshed every 6 hours

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The to-do list



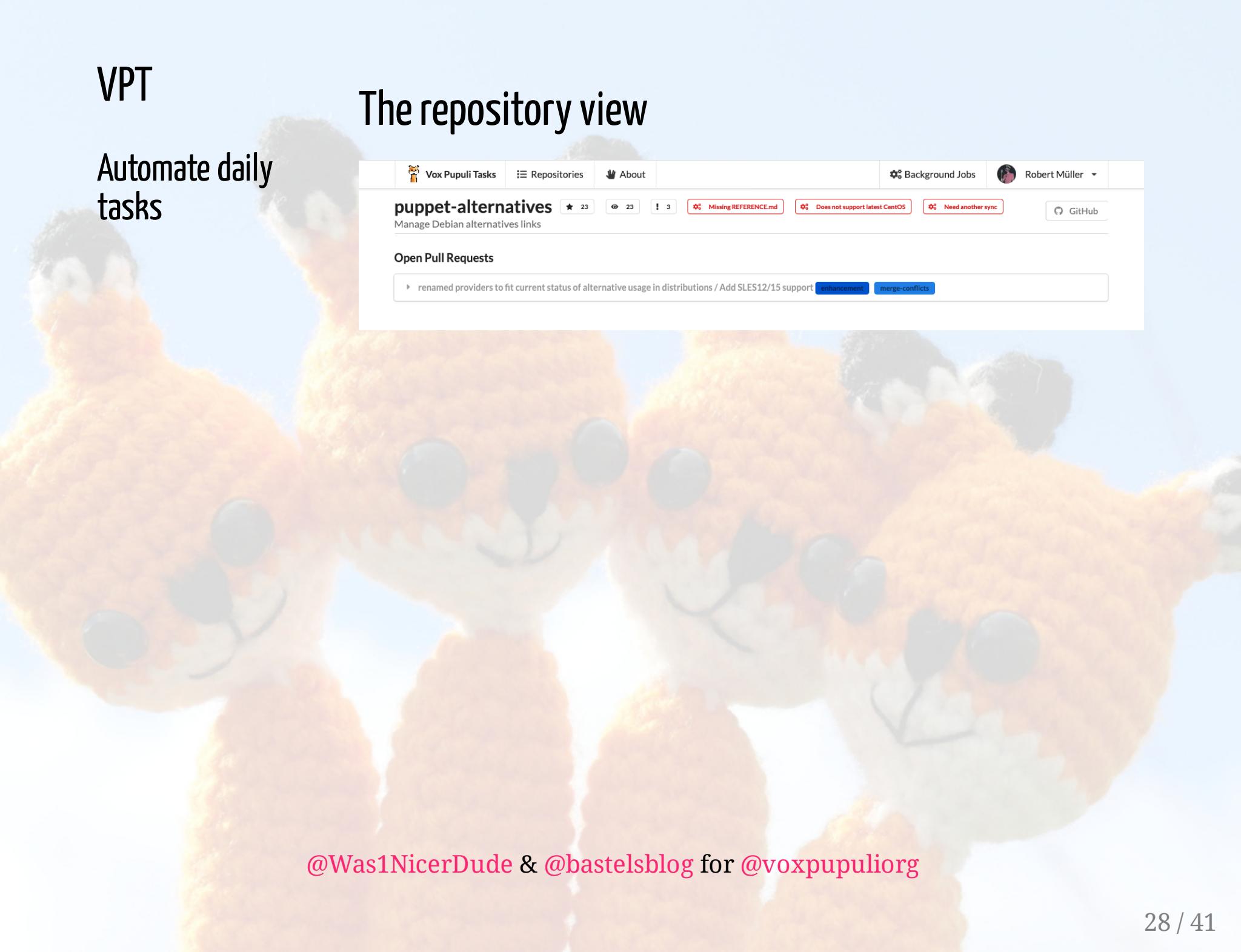
- Refreshed every 6 hours

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tasks

The repository view



A screenshot of a web interface titled "Vox Pupuli Tasks". The main navigation bar includes "Vox Pupuli Tasks", "Repositories", "About", "Background Jobs", and a user profile for "Robert Müller". Below the navigation is a card for the repository "puppet-alternatives". The card shows a star icon with "23", a file icon with "23", and a question mark icon with "3". It also features three red status indicators: "Missing REFERENCE.md", "Does not support latest CentOS", and "Need another sync". A "GitHub" button is located at the bottom right of the card. The card title is "puppet-alternatives" and its subtitle is "Manage Debian alternatives links". Below the card, there is a section for "Open Pull Requests" with one entry: "renamed providers to fit current status of alternative usage in distributions / Add SLES12/15 support" (enhancement, merge conflicts).

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What else did we do?

How to actually learn any new programming concept



Essential

Changing Stuff and
Seeing What Happens

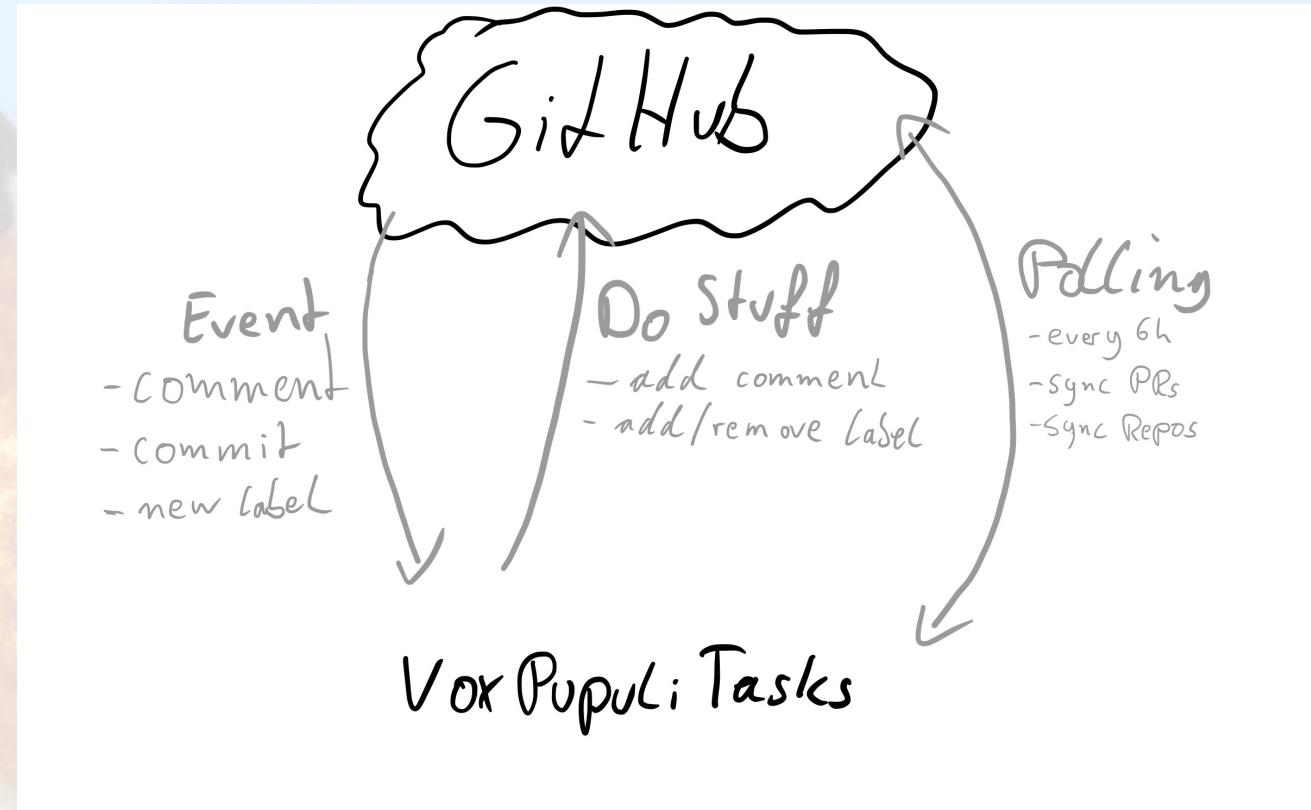
O RLY?

@ThePracticalDev

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Automate daily tasks

Architecture



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Automate daily tasks

Architecture

```
case type
when 'pull_request'
  # Ignore events which are triggered by the bot
  return if payload.dig('sender', 'id').to_i == 53_702_691

  if Repository.notably? payload['repository']['name']
    @processor = GithubEvent::PullRequest.new(payload)
  end
when *known_but_ignoreable_events
  true
else
  Raven.capture_message("Unknown Hook Received: #{type}", extra: pa
```

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Automate daily tasks

Architecture

```
def validate(saved_changes)
  # Don't run through the validate, if only the eligible_for_comment attribute
  return if saved_changes.keys.sort == %w[eligible_for_comment].sort &&
  # if the pull request is now closed, dont attach/remove labels/comments
  return if closed?

  label = Label.needs_rebase
  if mergeable == true
    ensure_label_is_detached(label)
  elsif mergeable == false
    repository.ensure_label_exists(label)

  ##
  # We only add a comment if we added a label. If the label already is present
  # we also already added the comment. So no need for a new one.
  add_comment(I18n.t('c.needs_rebase', author: author)) if ensure_label?
  elsif mergeable.nil?
    UpdateMergeableWorker.perform_in(1.minute.from_now,
                                      repository.name,
                                      number,
                                      id,
                                      saved_changes)

  end
end
```

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Automate daily tasks

Architecture

The screenshot shows a GitHub pull request page for the repository `voxpupuli / puppet-caddy`. The pull request is titled "Ubuntu 18.04 support #18" and is marked as "Open". It has 12 commits from the user `HogeBlekker` merged into the `voxpupuli:master` branch from the `HogeBlekker:master` branch. The pull request includes a detailed description of the changes, mentioning support for Ubuntu 18.04 and Systemd v234, which allows setting permissions for binding to low ports in the `.service` file. The commit history shows 10 commits added by `HogeBlekker` on June 27, 2019, including initial steps towards support for Ubuntu 18.04, updates to README.md, fixes for amd64 architecture in params, and variables in systemd files, and a fix for Ubuntu 18.04 support and installation from GitHub.

Pull Request (PR) description

This pull request includes codes that makes this module support:

- Ubuntu 18.04 with
- Systemd v234, which allows [setting permissions](#) for binding to low ports in the `.service` file.

This Pull Request (PR) fixes the following issues

n/a

HogeBlekker and others added 10 commits on 27 Jun 2019

- Initial steps towards support for Ubuntu 18.04 Unverified 04f7807
- Update README.md Verified ba66396
- amd64 architecture in params Unverified a5aae54
- Fix variables in systemd file Unverified 6dc16b4
- Ubuntu 18.04 support and Installation from Github Unverified 54910ff

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Automate daily tasks

Architecture

Add more commits by pushing to the **master** branch on [HogeBlekker/puppet-caddy](#).

 All checks have passed
2 successful checks [Show all checks](#)

 This branch has conflicts that must be resolved
Use the [web editor](#) or the [command line](#) to resolve conflicts. [Resolve conflicts](#)

Conflicting files

- .fixtures.yml
- manifests/config.pp
- manifests/params.pp
- metadata.json
- spec/classes/config_spec.rb
- spec/classes/package_spec.rb
- spec/defines/vhost_spec.rb

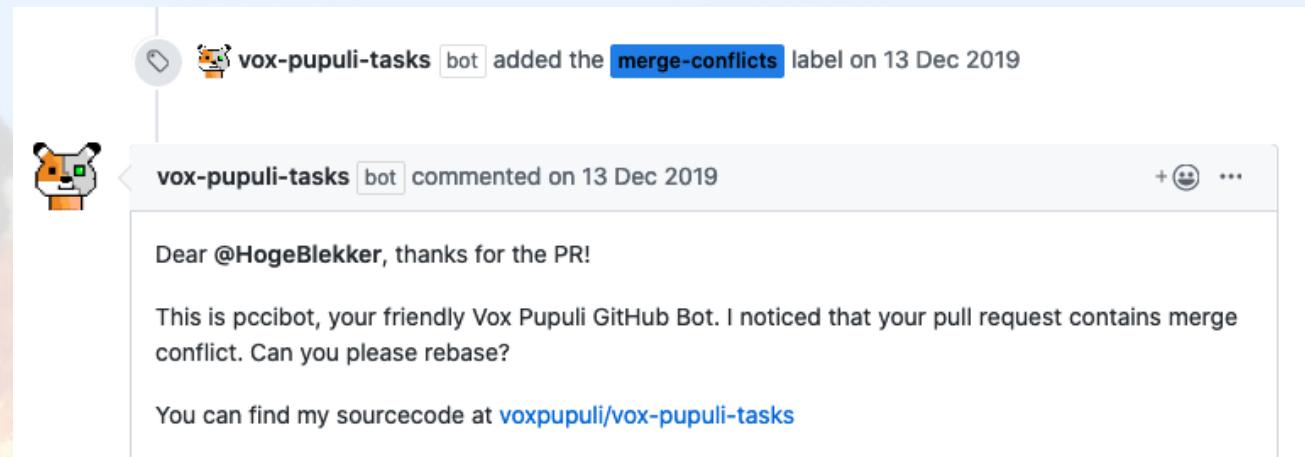
[Merge pull request](#) ▾ You can also [open this in GitHub Desktop](#) or view [command line instructions](#).

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VPT

Automate daily tasks

Architecture



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VPT

Automate daily tasks

Architecture

A screenshot of a GitHub pull request interface. The user 'dhoppe' removed the 'merge-conflicts' label 27 days ago. The GitHub bot 'vox-pupuli-tasks' added the 'merge-conflicts' label 27 days ago. The bot commented 27 days ago, saying:

Dear @HogeBlekker, thanks for the PR!
This is pccibot, your friendly Vox Pupuli GitHub Bot. I noticed that your pull request contains merge conflict. Can you please rebase?
You can find my sourcecode at [voxpupuli/vox-pupuli-tasks](https://github.com/voxpupuli/vox-pupuli-tasks)

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Add more commits by pushing to the **master** branch on [HogeBlekker/puppet-caddy](#).

All checks have passed
2 successful checks

This branch has conflicts that must be resolved
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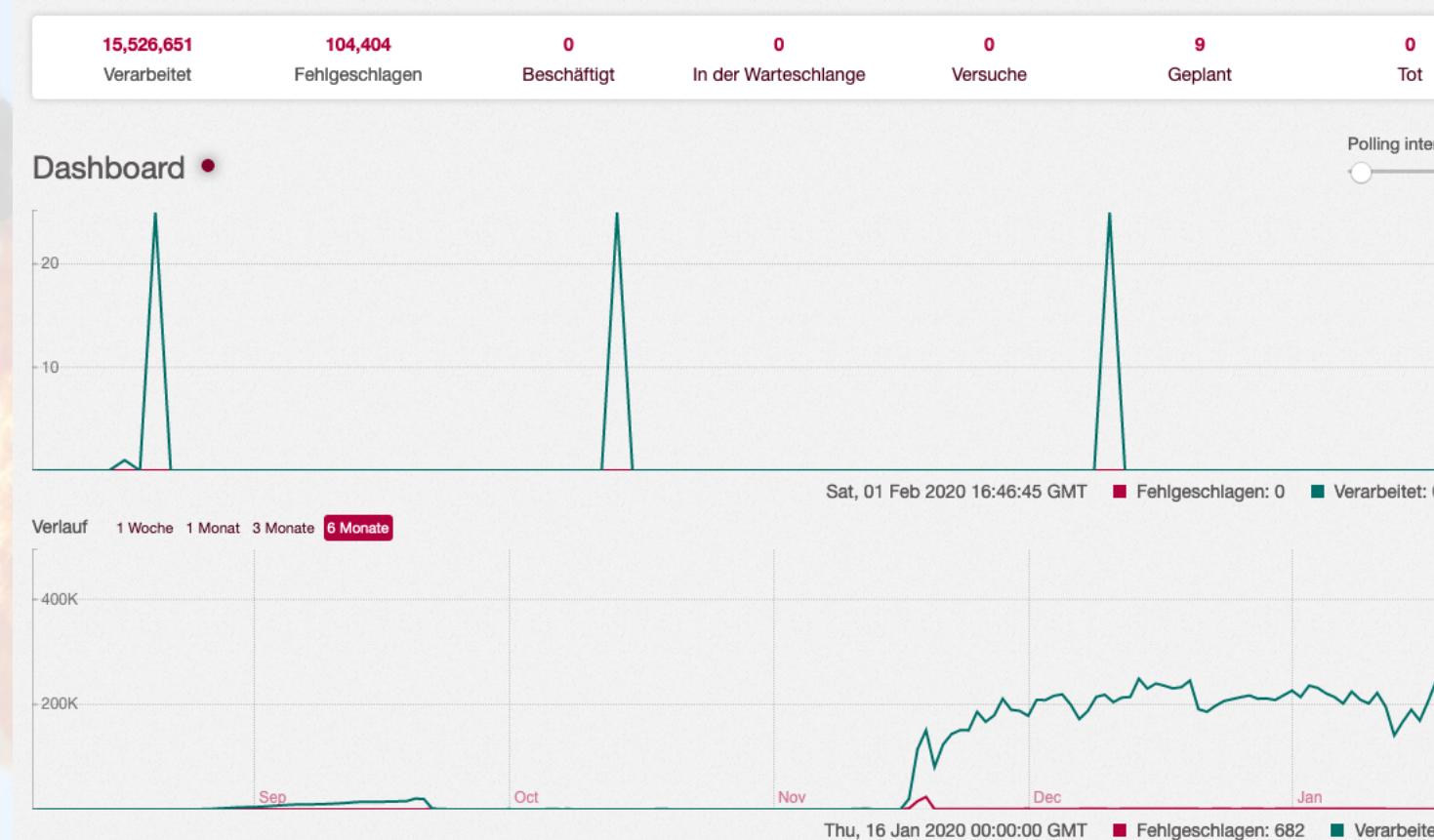
Resolve conflicts

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Automate daily tasks

Architecture



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What else can we do?

What do you want us to do? What are your usecases?

VPT

- Automate more labeling on issues and pull requests

Automate daily
tasks

Architecture

Lookout

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VPT

Automate daily tasks

Architecture

Lookout

- Automate more labeling on issues and pull requests
- Implement GitLab API support

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VPT

Automate daily
tasks

Architecture

Lookout

- Automate more labeling on issues and pull requests
- Implement GitLab API support
- Help companies that want to host this on premise for internal repositories

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Automate daily tasks

Architecture

Lookout

Conclusion

- Vox Pupuli is awesome, please contribute!
- We've great tooling to scale module handling
- GitHub/GitLab API enables us to automate even more and to focus on code reviewing
- Let us know which parts in the communities you would like to see automated
- Checkout the current dashboard at voxpupu.li or our docs at github.com/voxpupuli/vox-pupuli-tasks

Thanks for your attention!

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