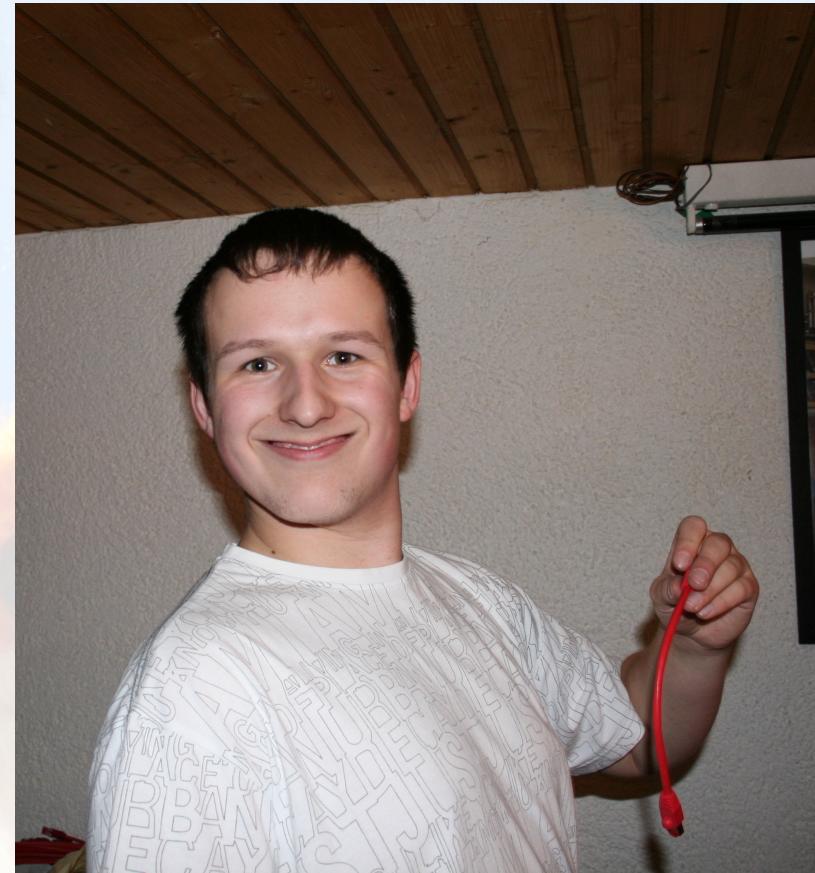


Automating the Vox Pupuli Yak Shaving

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

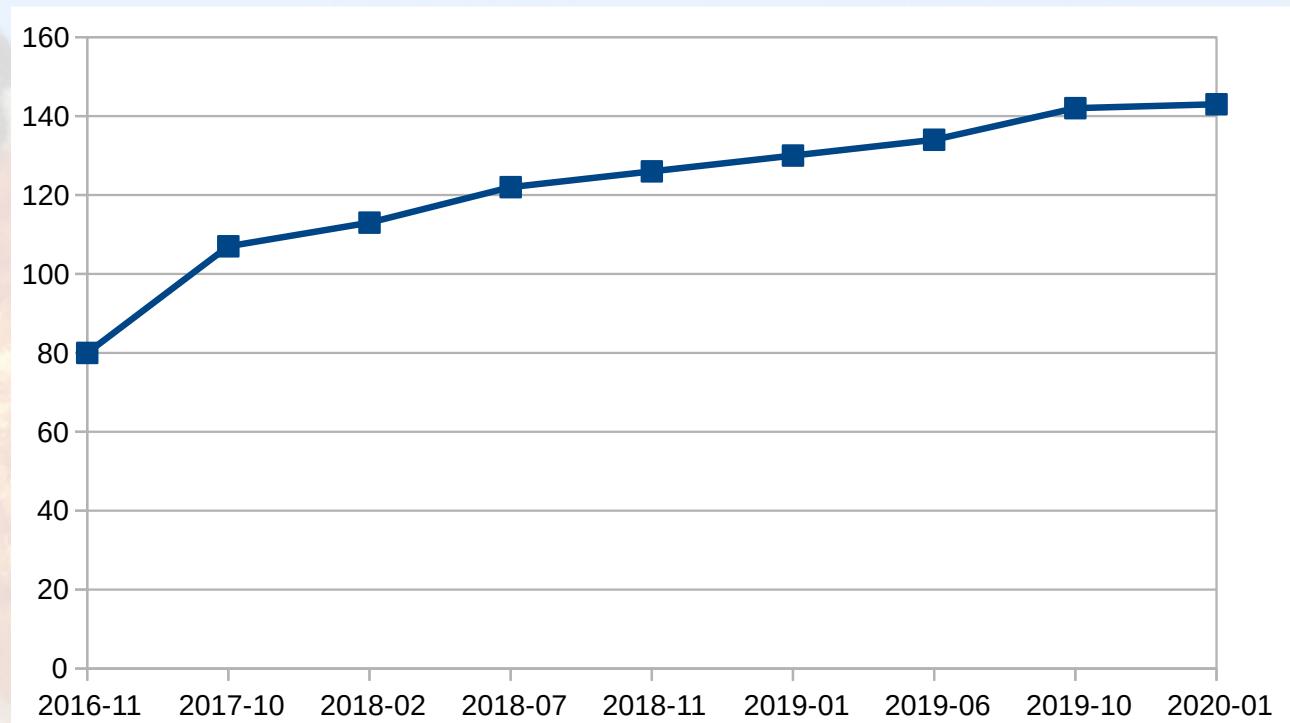
- Robert 'flipez' Müller
- Ruby Developer since 2013
- Builds clouds at Hetzner
- Also builds Rails apps and tunes foosball tables



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



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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 ?

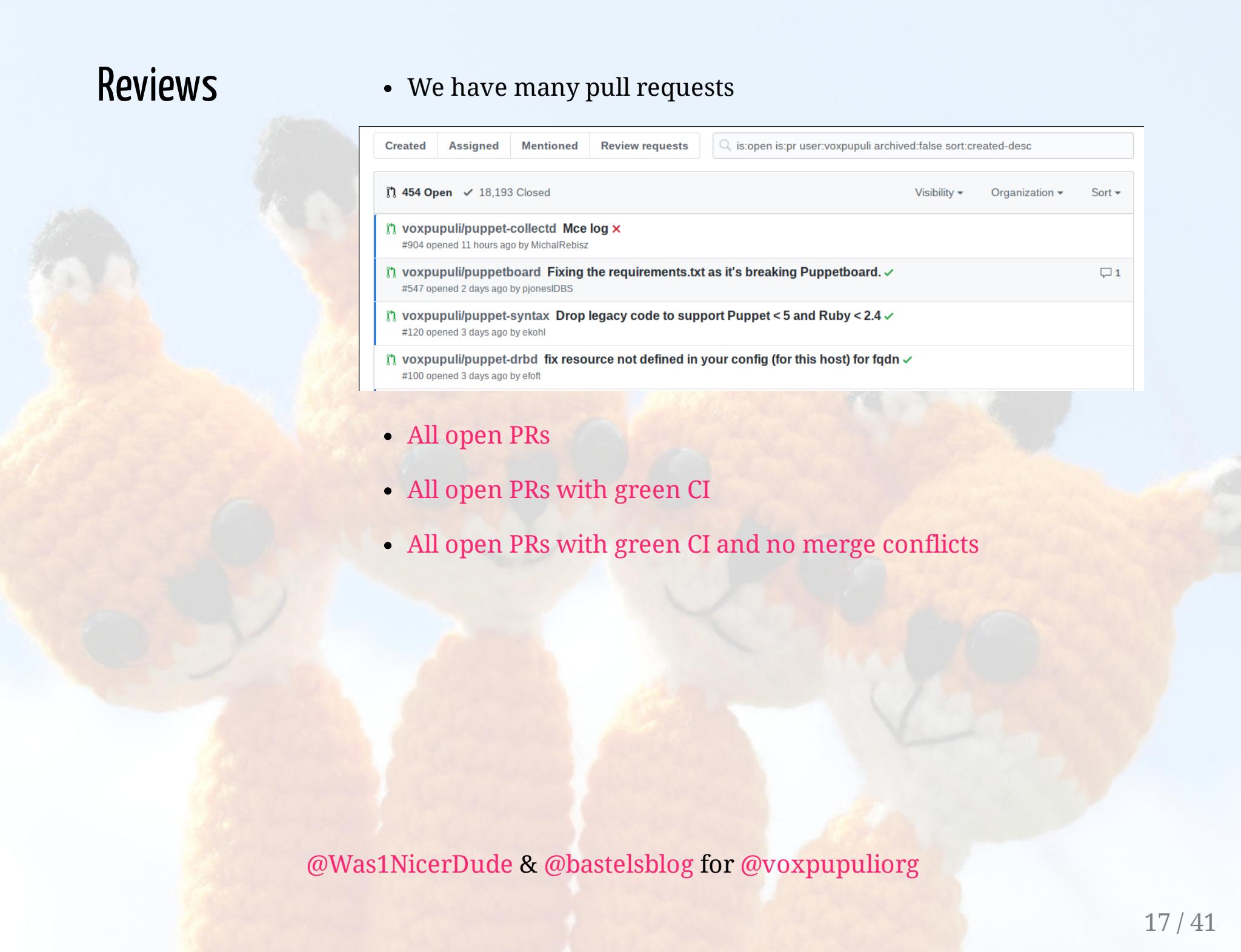
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The path of a Open Source Maintainer...

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:

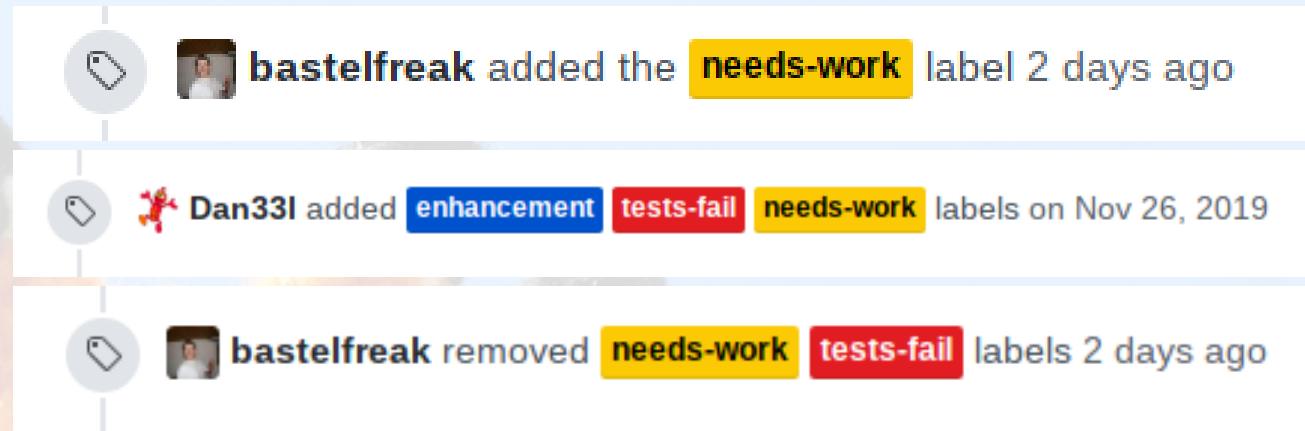
- voxpupuli/puppet-collectd** Mce log ✗
#904 opened 11 hours ago by MichalRebisz
- voxpupuli/puppetboard** Fixing the requirements.txt as it's breaking Puppetboard. ✓
#547 opened 2 days ago by pjonesIDBS
- voxpupuli/puppet-syntax** Drop legacy code to support Puppet < 5 and Ruby < 2.4 ✓
#120 opened 3 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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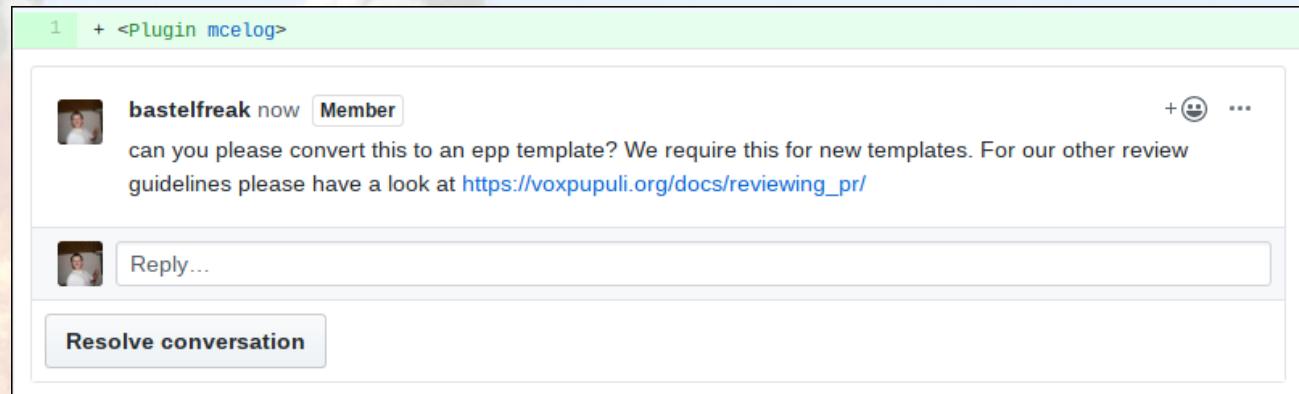
Reviews

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
 - voxpopuli/plumbing repo
 - forge releases
 - information in files in every repository

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VPT

Automate daily tasks

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

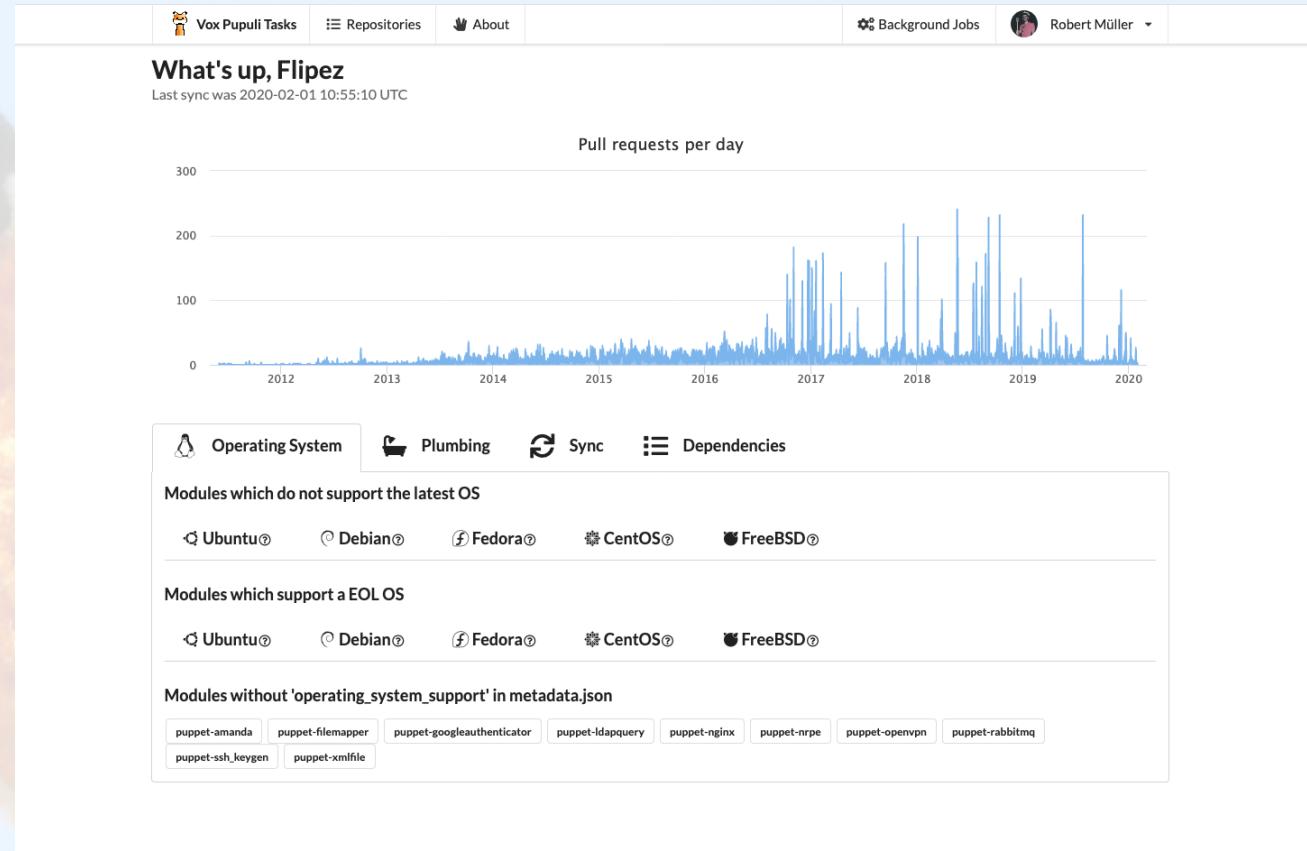
- Checks supported OS ranges
 - Checks supported Puppet range
 - Sort repos into categories based on
 - managed modules files
 - voxpupuli/plumbing repo
 - forge releases
 - information in files in every repository

Uhm, I guess

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VPT

Automate daily tasks

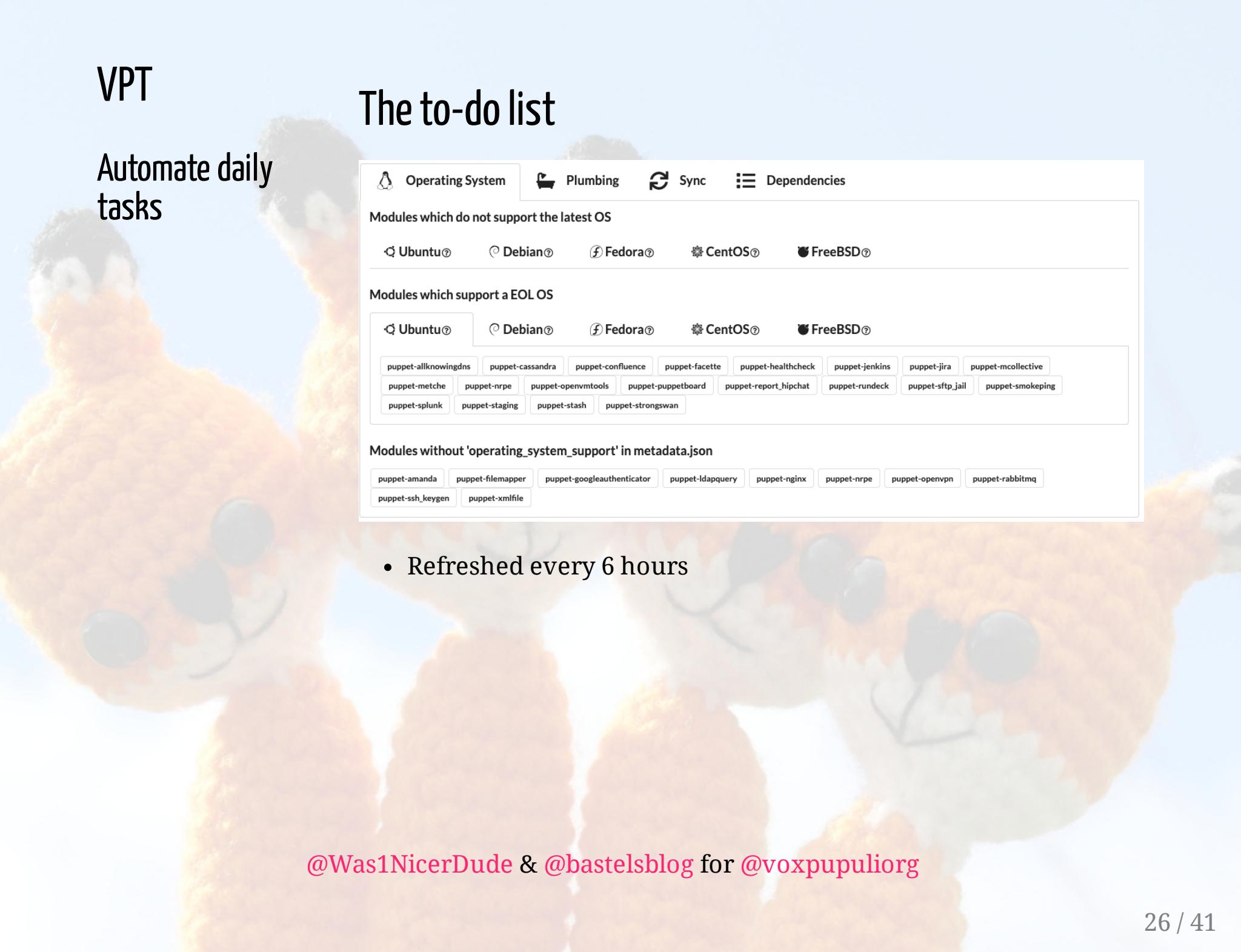


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VPT

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 support a EOL OS' section contains a grid of module names: 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, puppet-smokeping, puppet-splunk, puppet-staging, puppet-stash, and puppet-strongswan. The 'Modules without 'operating_system_support' in metadata.json' section contains a grid of module names: puppet-amanda, puppet-filemaker, puppet-googleauthenticator, puppet-ldapquery, puppet-nginx, puppet-nrpe, puppet-openvpn, puppet-rabbitmq, puppet-ssh_keygen, and puppet-xmlfile.

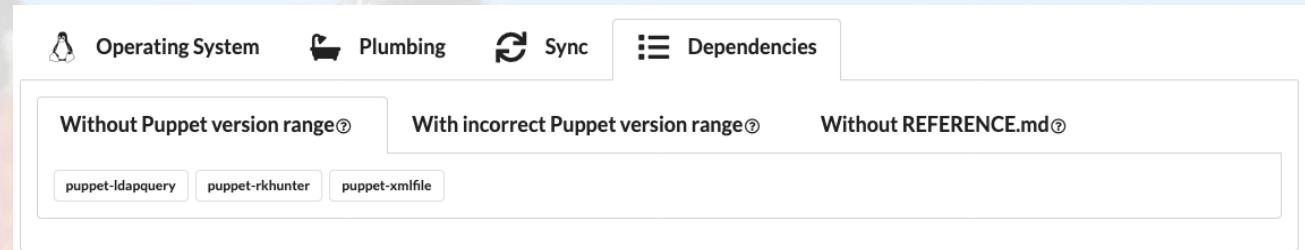
- Refreshed every 6 hours

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VPT

Automate daily tasks

The to-do list



- Refreshed every 6 hours

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VPT

Automate daily
tasks

The repository view

A screenshot of a web interface for managing Debian alternatives links. The top navigation bar includes links for 'Vox Pupuli Tasks', 'Repositories', 'About', 'Background Jobs', and a user profile for 'Robert Müller'. The main content area shows a repository named 'puppet-alternatives' with a star icon (23), a file icon (23), and a bug icon (3). It also displays three error icons: 'Missing REFERENCE.md', 'Does not support latest CentOS', and 'Need another sync'. A 'GitHub' button is located in the top right corner. Below the repository name, the text 'Manage Debian alternatives links' is visible. A section titled 'Open Pull Requests' contains a single entry: 'renamed providers to fit current status of alternative usage in distributions / Add SLES12/15 support' with labels 'enhancement' and '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

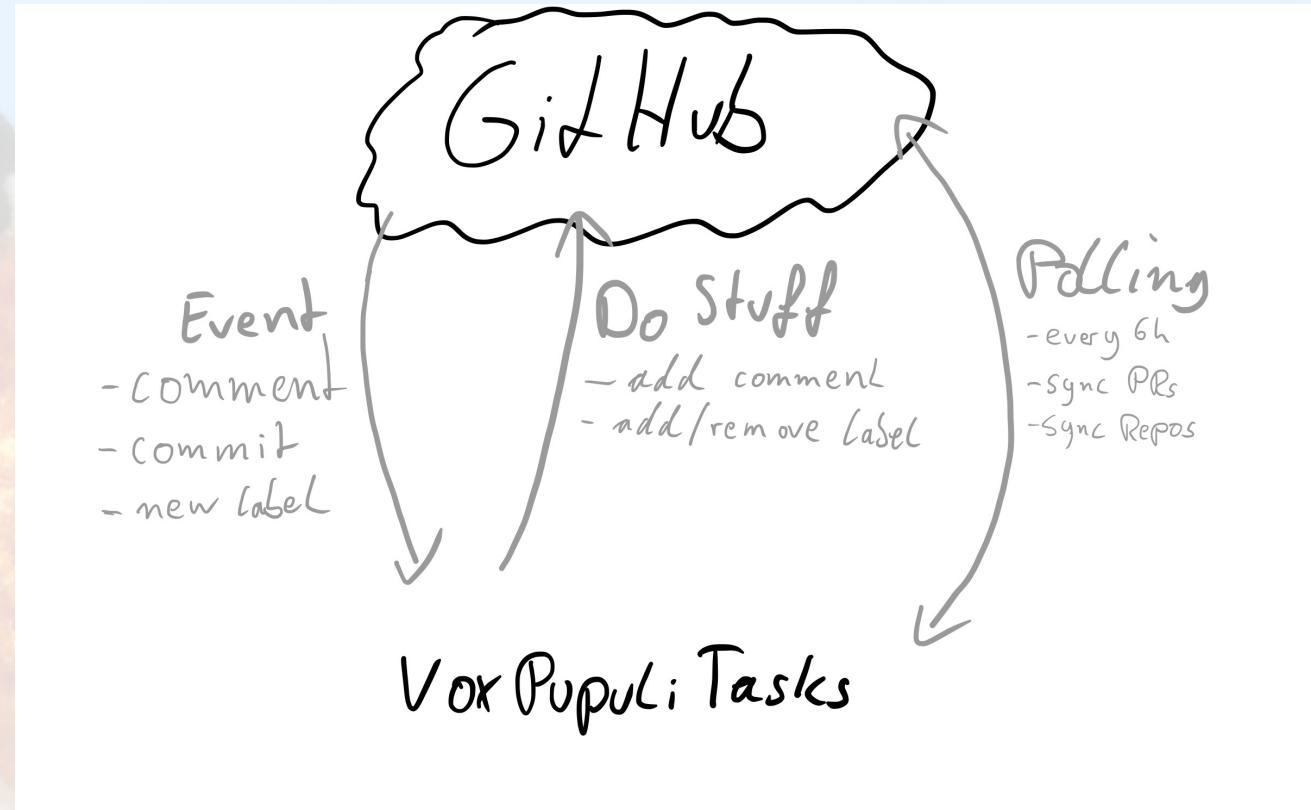
O RLY?

@ThePracticalDev

VPT

Automate daily tasks

Architecture



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VPT

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
end
```

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VPT

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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VPT

Automate daily tasks

Architecture

voxpupuli / [puppet-caddy](#)

[Code](#) [Issues 0](#) [Pull requests 2](#) [Actions](#) [Wiki](#) [Security](#) [Insights](#)

Ubuntu 18.04 support #18

[Open](#) HogeBlekker wants to merge 12 commits into [voxpupuli:master](#) from [HogeBlekker:master](#)

[Conversation 16](#) [Commits 12](#) [Checks 1](#) [Files changed 18](#)

 HogeBlekker commented on 1 Jul 2019 First-time contributor + ...

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

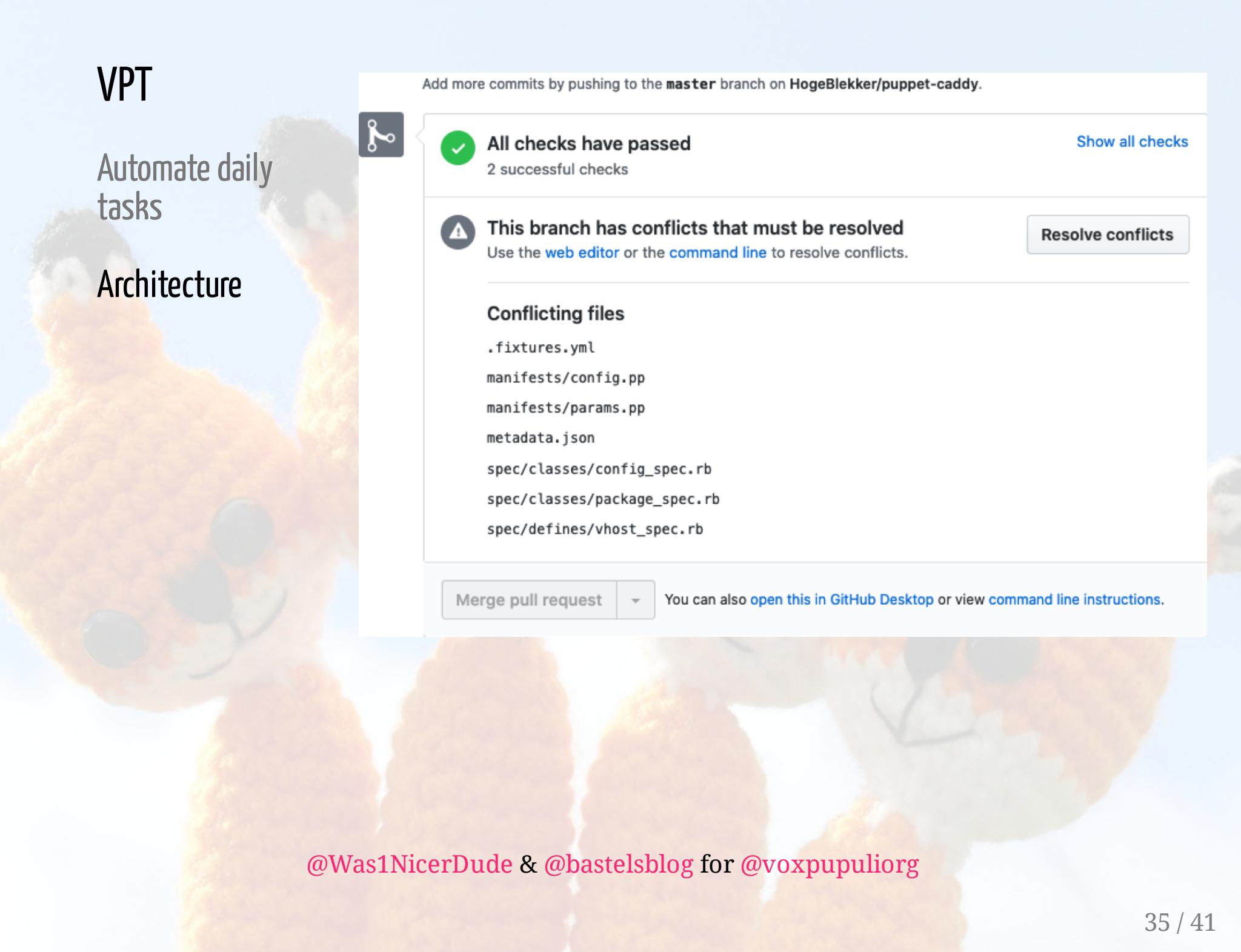
 HogeBlekker and others added 10 commits on 27 Jun 2019

@Was1NiceDude & @bastelsblog for @voxpupuliorg

VPT

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

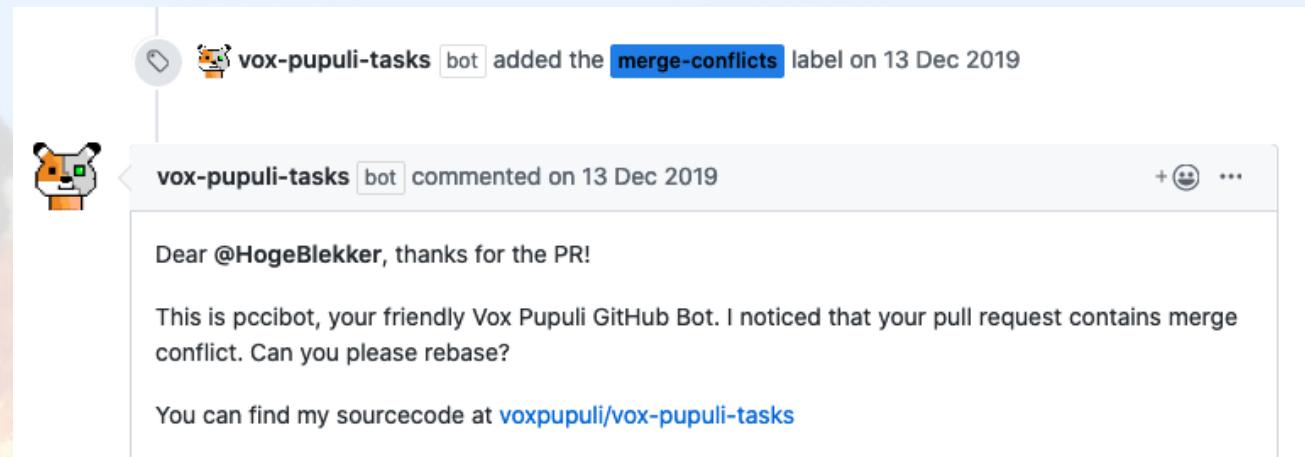
[Merge pull request](#) You can also [open this in GitHub Desktop](#) or view [command line instructions](#).

@Was1NiceDude & @bastelsblog for @voxpupuliorg

VPT

Automate daily tasks

Architecture



@Was1NicerDude & @bastelsblog for @voxpupuliorg

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)

The user 'dhoppe' removed the 'merge-conflicts' label 27 days ago. The bot commented 27 days ago, saying:

Dear @HogeBlekker, thanks for the PR!
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The bot added the 'merge-conflicts' label 27 days ago.

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
Use the [web editor](#) or the [command line](#) to resolve conflicts.

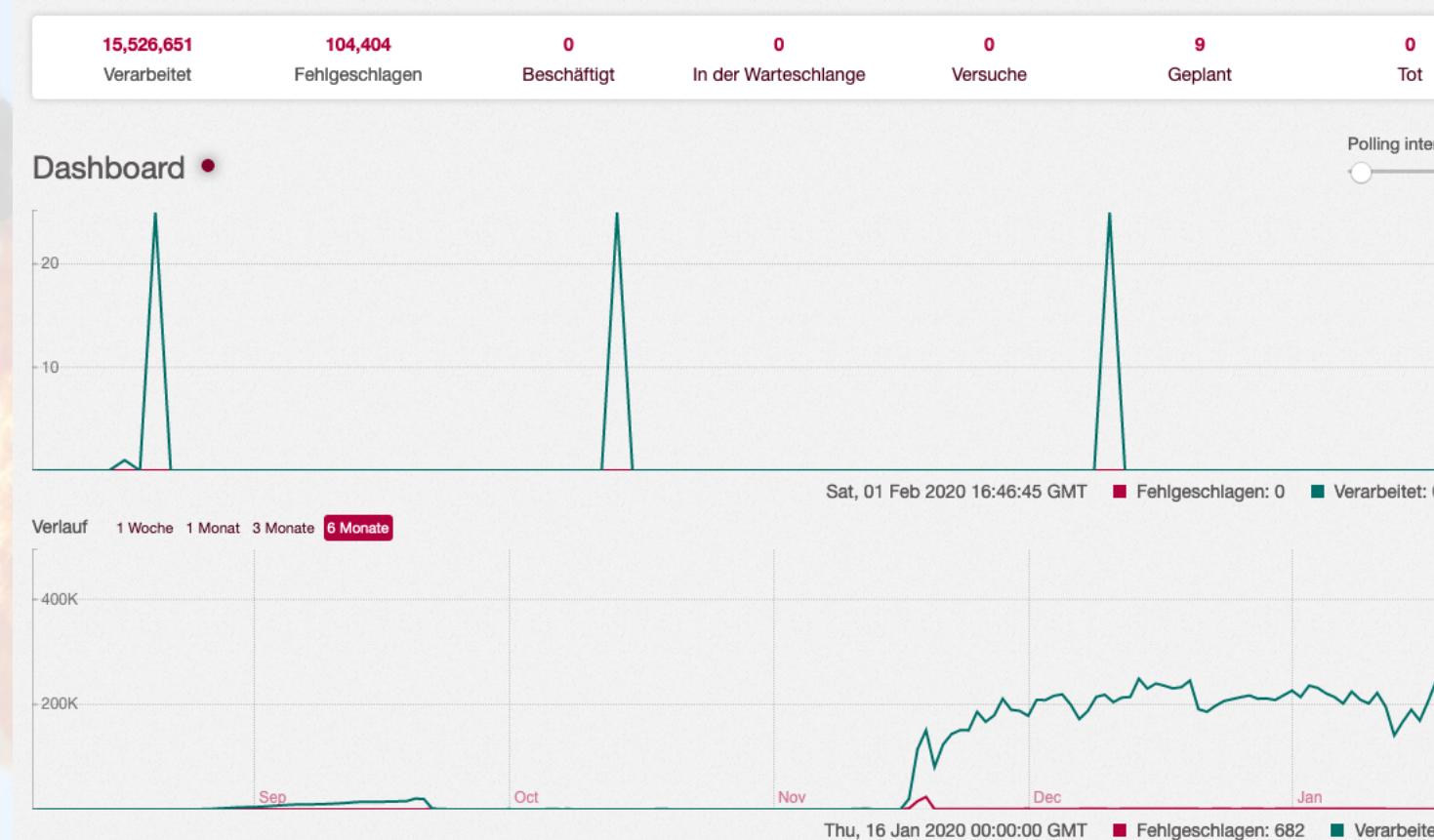
[Resolve conflicts](#)

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VPT

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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VPT

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!

@Was1NicerDude & @bastelsblog for @voxpupuliorg