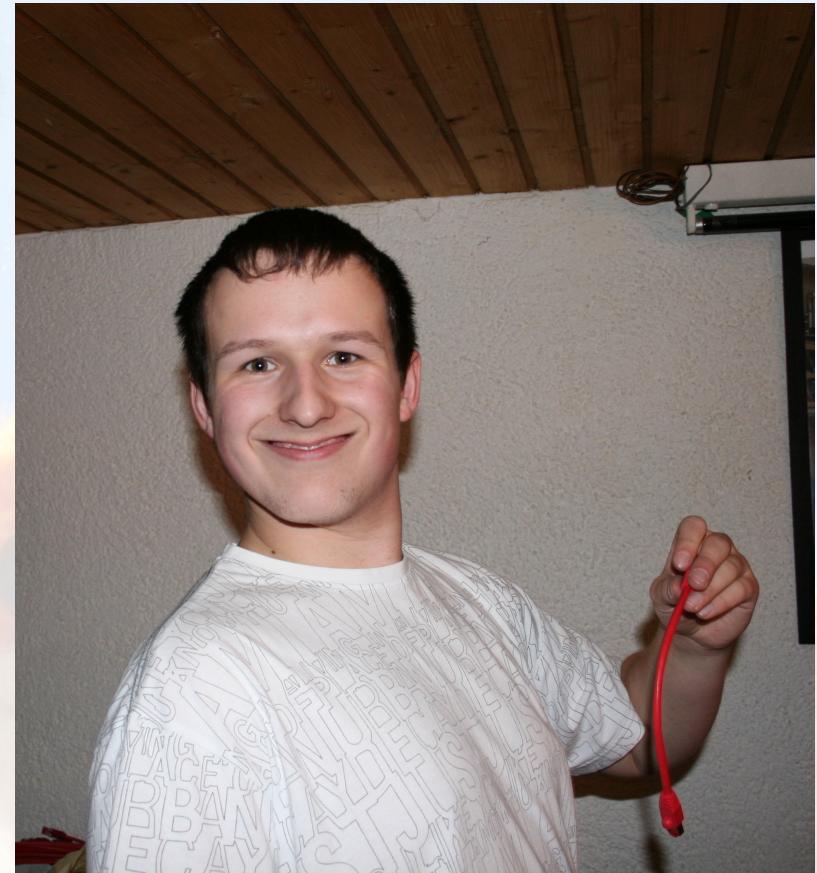


You thought scaling infra is hard, try scaling
team contributions!

Covid-19 edition

\$ whoami

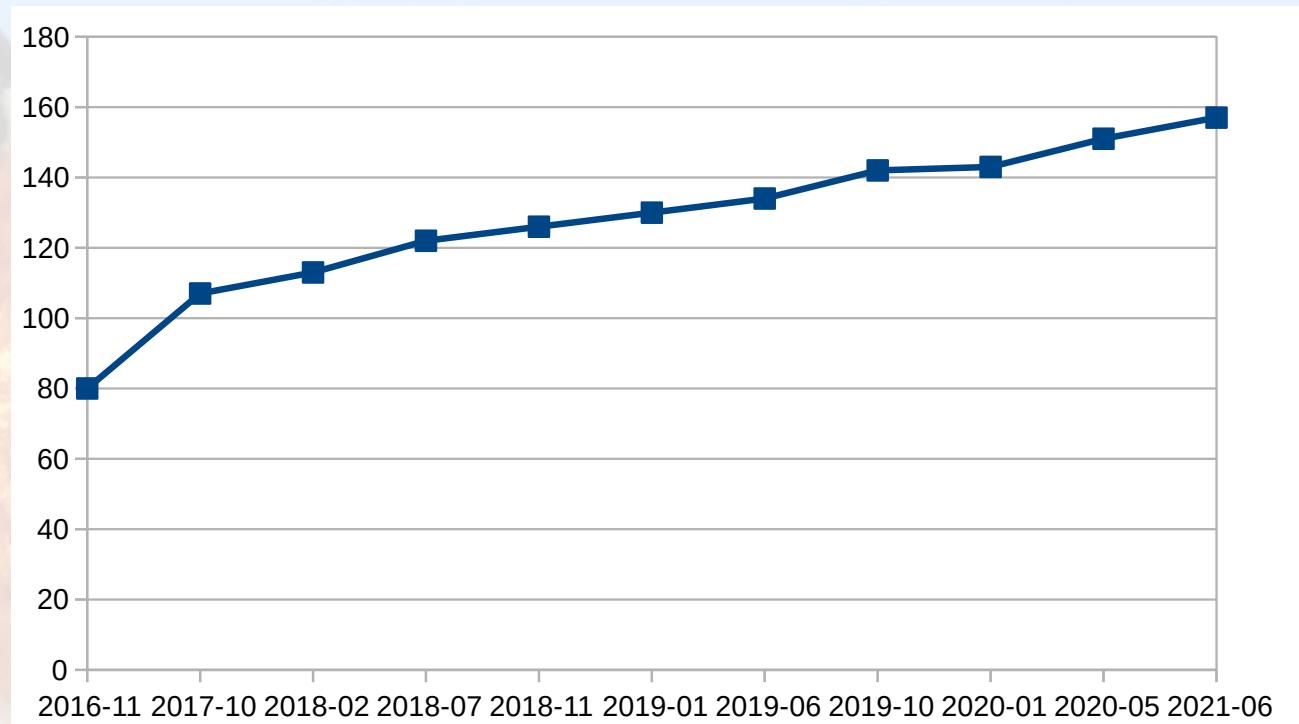
- Tim 'bastelfreak' Meusel
- Puppet Contributor since 2012
- Merging stuff on [Vox Pupuli](#) (Puppet Community) since 2015
- Vox Pupuli Project Management Committee member



What's this Vox Pupuli thingy?

Vox Pupuli

- Amount of Vox Pupuli members with merge permissions



@bastelsblog for @voxpupuliorg

The path of a Open Source Maintainer...

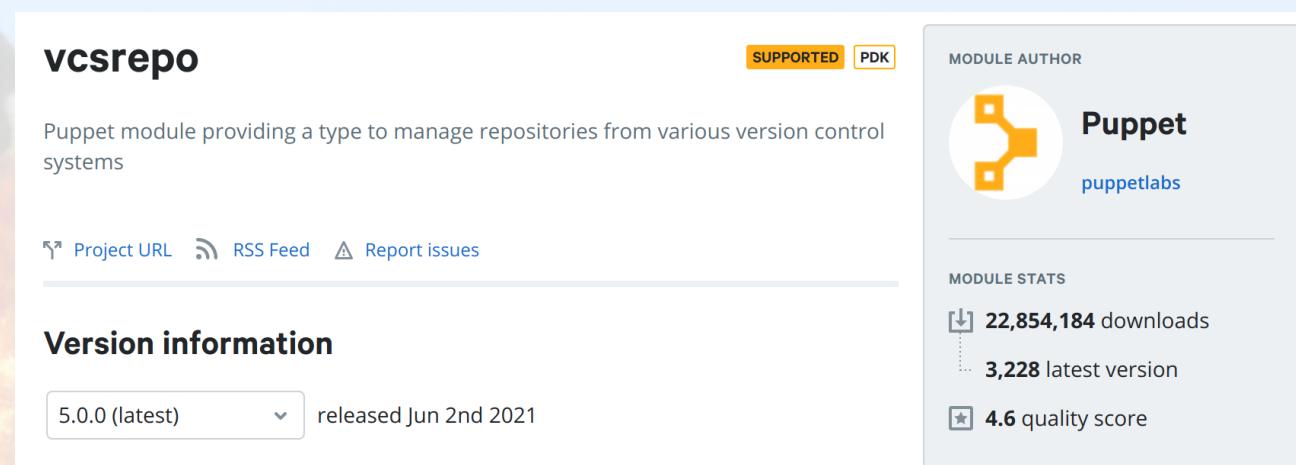
What do we do?



Yak shaving

Dependencies

- new major releases in modules



The screenshot shows the Puppet Forge module page for **vcsrepo**. The page has a "SUPPORTED" badge and a "PDK" badge. It describes the module as providing a type to manage repositories from various version control systems. Below the description are links to "Project URL", "RSS Feed", and "Report issues". A "Version information" section shows "5.0.0 (latest)" released on Jun 2nd 2021. To the right, the "MODULE AUTHOR" is listed as **Puppet** (`puppetlabs`) with a yellow icon. "MODULE STATS" show 22,854,184 downloads, the 3,228 latest version, and a 4.6 quality score.

@bastelsblog for @voxpupuliorg

Yak shaving

Dependencies

- `metadata.json` in a puppet module

```
17    "dependencies": [
18      {
19        "name": "saz/ssh",
20        "version_requirement": ">= 4.0.0 < 7.0.0"
21      },
22      {
23        "name": "puppetlabs/vcsrepo",
24        "version_requirement": ">= 2.0.0 < 5.0.0"
25      },

```

Yak shaving

Dependencies

- new major Puppet release

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

@bastelsblog for @voxpupuliorg

Yak shaving

Dependencies

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

Yak shaving

Dependencies

Labels

19 labels

backwards-incompatible

beginner-friendly

bug

docs

duplicate

@bastelsblog for @voxpupuliorg

Yak shaving

Dependencies

Labels

Modulesync

- Many files are identical across our modules
 - CONTRIBUTING.md, rspec configuration
- Many files are very similar
 - GitHub actions CI configuration, Gemfile, Rakefile
- Modulesync manages 20 files in total per module

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
- Take a look at modulesync: github.com/voxpupuli/modulesync
- The Vox Pupuli template repo:
github.com/voxpupuli/modulesync_config

@bastelsblog for @voxpupuliorg

Yak shaving

Dependencies

Labels

Modulesync

Releases

Showing 1-25 of 138 modules by Vox Pupuli

Sort by: Most recent ▾

Refine Results ▾



[ssh_keygen](#)

by puppet



Generate ssh keys with ssh_keygen

Version 5.0.0 | Released Jun 15th 2021

64,164 downloads 3.9 quality score

(forge.puppet.com/puppet with all our modules)

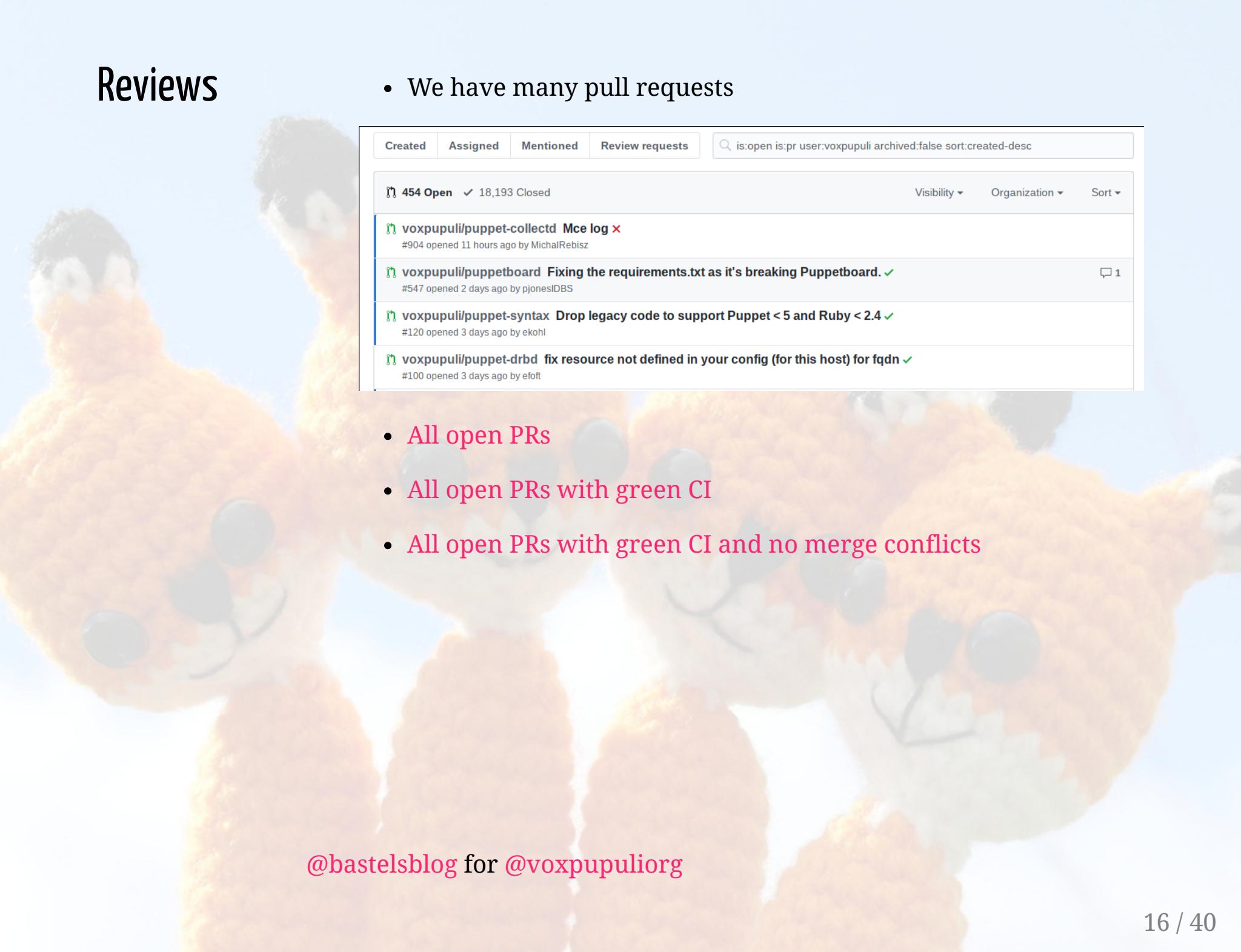
@bastelsblog for @voxpupuliorg

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 bar at the top contains the query 'is:open is:pr user:voxpupuli archived:false sort:created-desc'. Below the search bar, there are tabs for 'Created', 'Assigned', 'Mentioned', and 'Review requests', with 'Review requests' being the active tab. The results show 454 open pull requests. The first four results are listed:

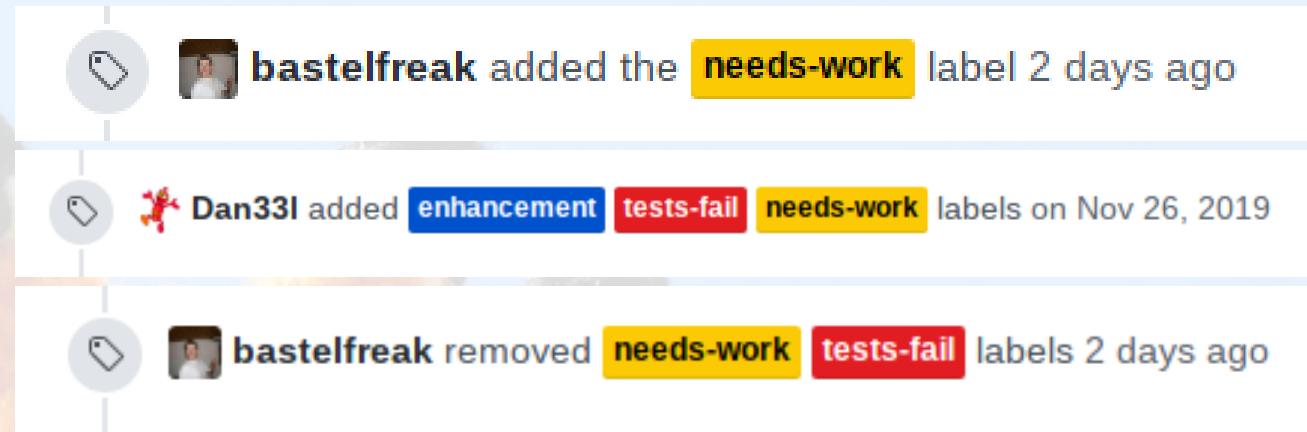
Repository	Title	Opened By	Comments
voxpupuli/puppet-collectd	Mce log	#904 opened 11 hours ago by MichalRebisz	
voxpupuli/puppetboard	Fixing the requirements.txt as it's breaking Puppetboard.	#547 opened 2 days ago by pjonesIDBS	1
voxpupuli/puppet-syntax	Drop legacy code to support Puppet < 5 and Ruby < 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

@bastelsblog for @voxpupuliorg

Reviews

More labels



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

@bastelsblog for @voxpupuliorg

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:

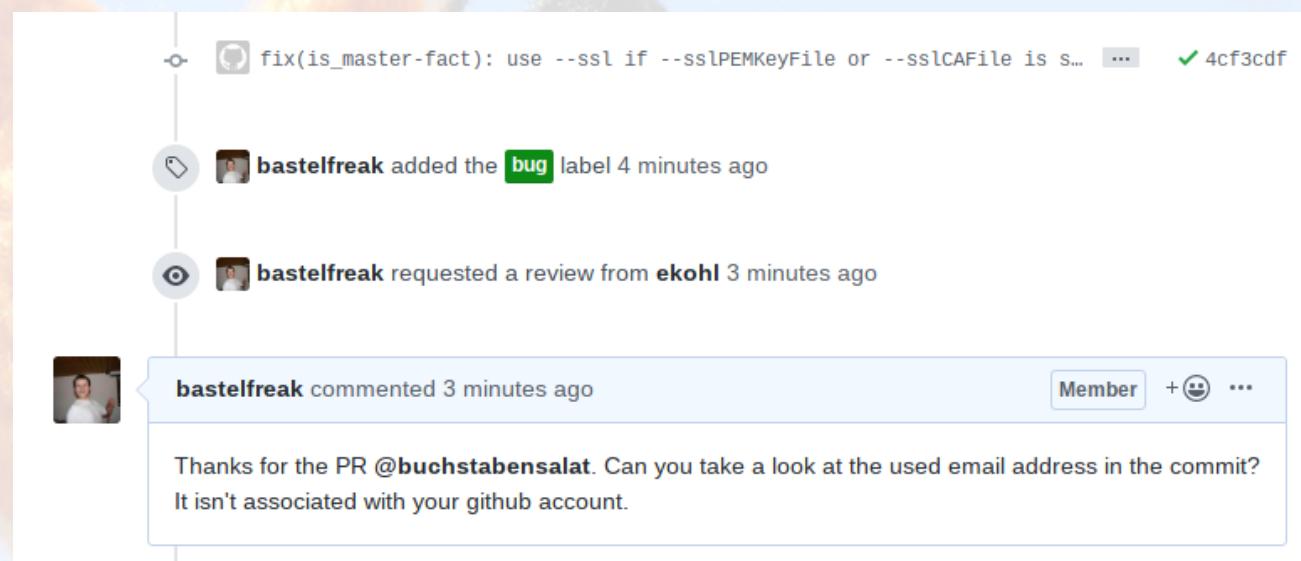
- labels like bug, enhancement, backwards-incompatible help us to generate a CHANGELOG.md

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



@bastelsblog for @voxpupuliorg

Reviews

More labels

Email Addresses

Templates

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

The screenshot shows a review interface with a green header bar. The header contains the number '1' and the text '+ <Plugin mcelog>'. Below the header, a comment is displayed from a user named 'bastelfreak' who is listed as a 'Member'. The comment text reads: 'can you please convert this to an epp template? We require this for new templates. For our other review guidelines please have a look at https://voxpupuli.org/docs/reviewing_pr/'. Below the comment, there is a 'Reply...' input field and a 'Resolve conversation' button.

@bastelsblog for @voxpupuliorg

Let us solve all our problems!

VPT

AUTOMATE



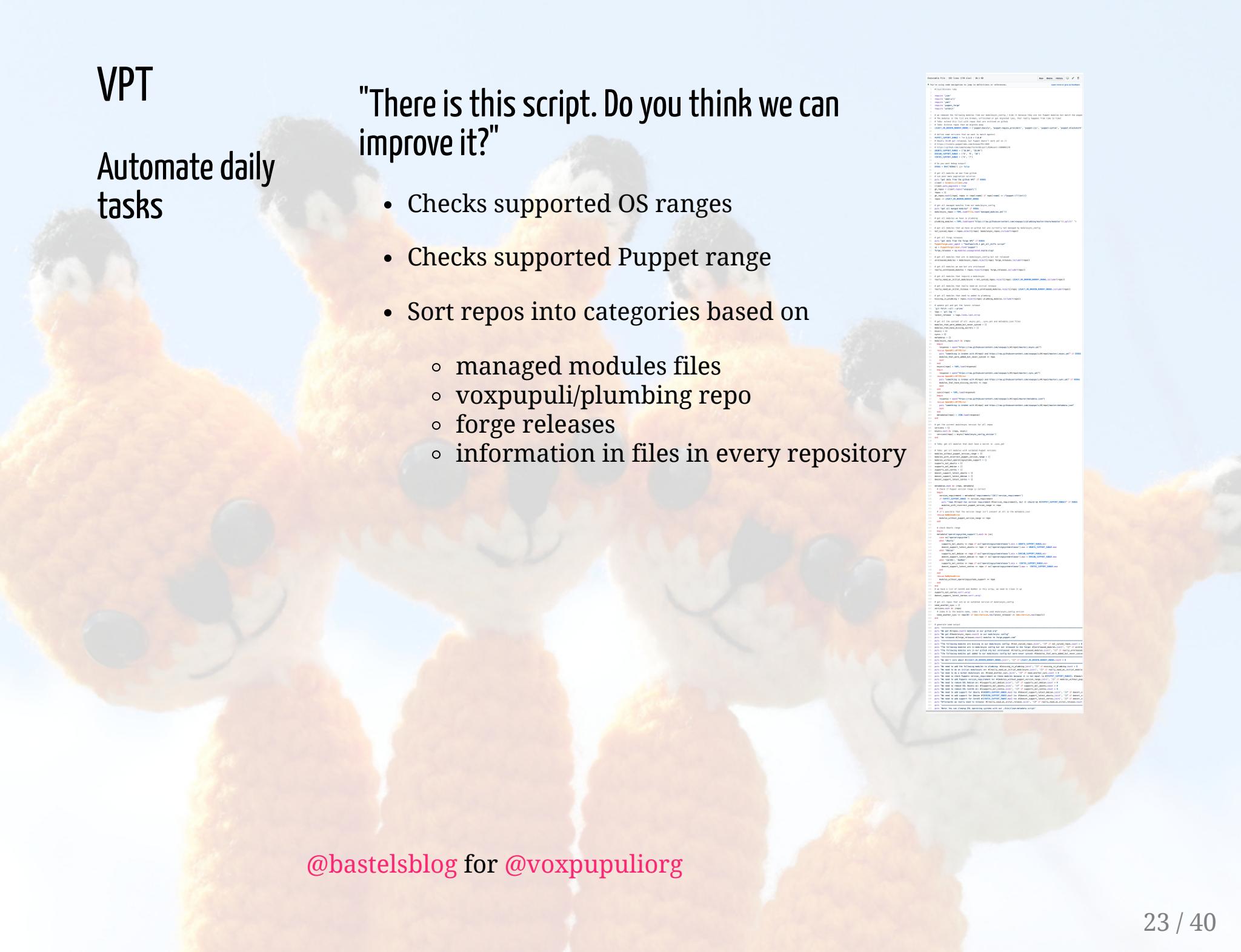
@bastelsblog for @voxpupuliorg

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



```
#!/usr/bin/python
# This file is part of the VPT project.
# Copyright (C) 2013-2014 by the VPT team.
#
# This program is free software: you can redistribute it and/or modify
# it under the terms of the GNU General Public License as published by
# the Free Software Foundation, either version 3 of the License, or
# (at your option) any later version.
#
# This program is distributed in the hope that it will be useful,
# but WITHOUT ANY WARRANTY; without even the implied warranty of
# MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the
# GNU General Public License for more details.
#
# You should have received a copy of the GNU General Public License
# along with this program. If not, see <http://www.gnu.org/licenses/>.
```

The code block contains a complex Python script with numerous comments and imports, including requests, json, os, re, and time modules. It performs various checks on repositories, such as verifying headers, checking for specific files like 'README.md' and 'MANIFEST.in', and comparing file sizes. It also handles GitHub API calls and manages local file operations like reading from 'modules.txt' and writing to 'output.txt'.

@bastelsblog for @voxpupuliorg

VPT

Automate daily tasks

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

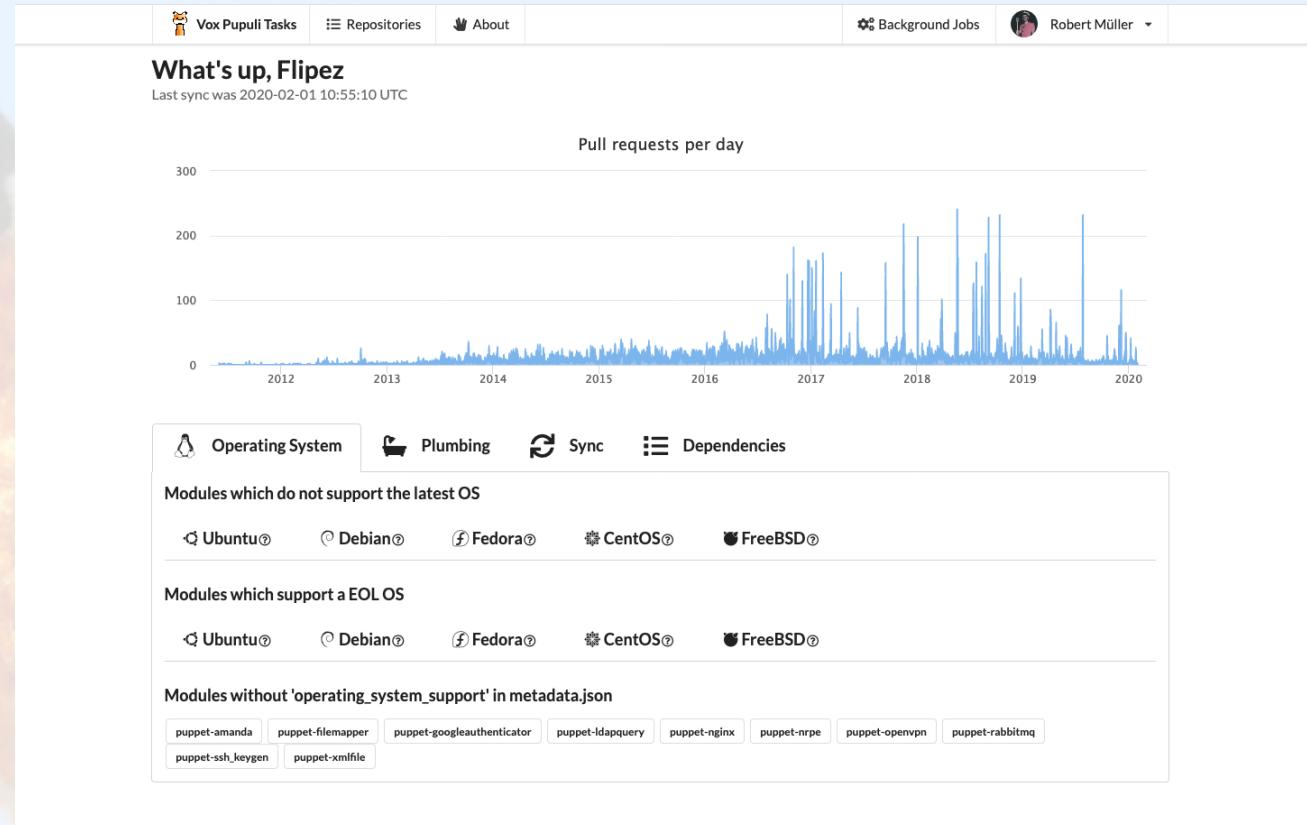
- Checks supported OS ranges
 - Checks supported Puppet range
 - Sort repos into categories based on
 - managed modules files
 - voxpupuli/plumbing repo
 - forge releases
 - information in files in every repository

Uhm, I guess

@bastelsblog for @voxpupuliorg

VPT

Automate daily tasks

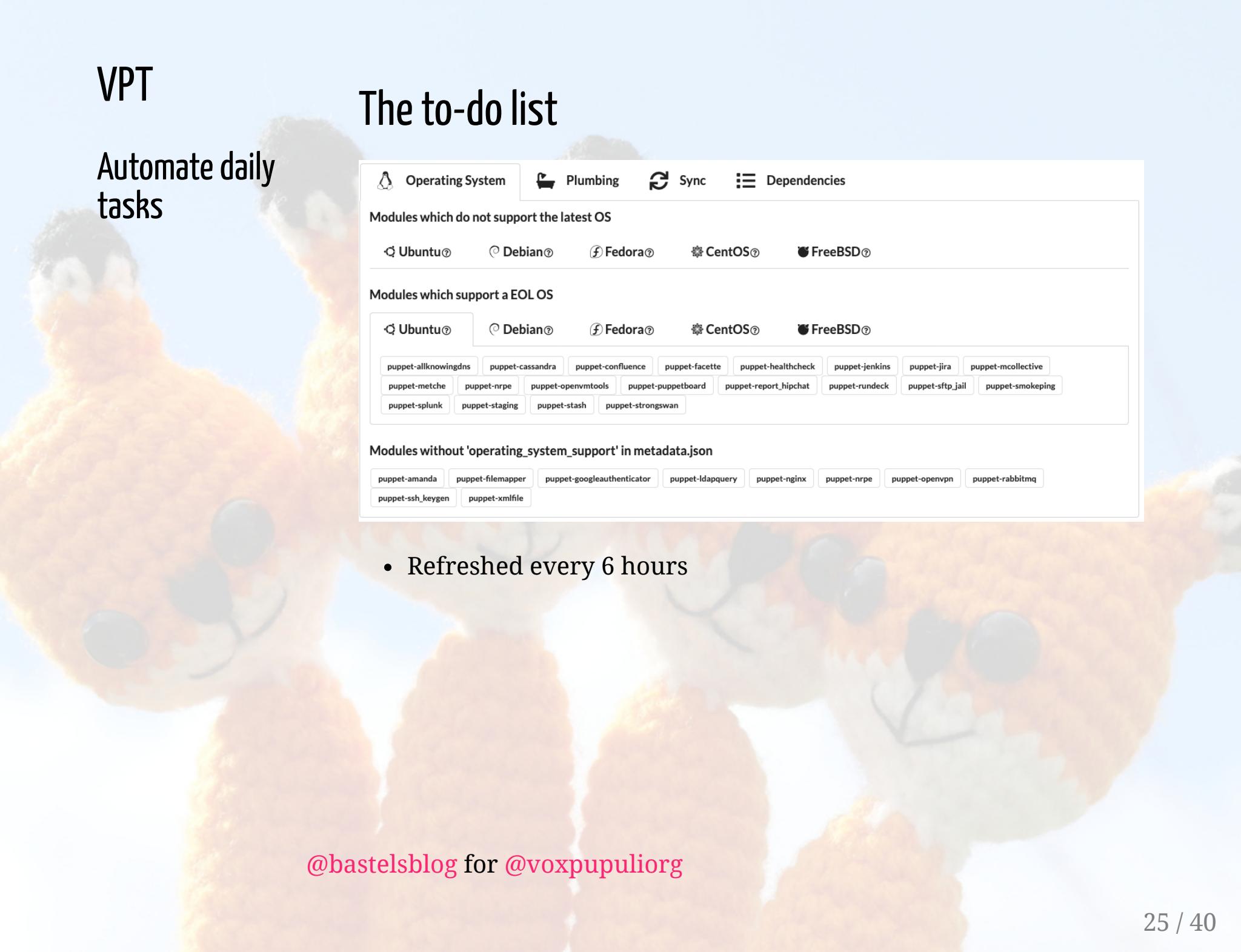


@bastelsblog for @voxpupuliorg

VPT

Automate daily tasks

The to-do list



The screenshot shows a web interface for managing Puppet modules. At the top, there are tabs for "Operating System", "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 buttons for filtering by operating systems: Ubuntu, Debian, Fedora, CentOS, and FreeBSD. The "Modules which support a EOL OS" section contains a grid of module names. The "Modules without 'operating_system_support' in metadata.json" section also contains a grid of module names.

Operating System Plumbing Sync Dependencies

Modules which do not support the latest OS

Ubuntu Debian Fedora CentOS FreeBSD

Modules which support a EOL OS

Ubuntu Debian Fedora CentOS FreeBSD

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 puppet-strongswan

Modules without 'operating_system_support' in metadata.json

puppet-amanda puppet-filemaker puppet-googleauthenticator puppet-ldapquery puppet-nginx puppet-nrpe puppet-openvpn puppet-rabbitmq
puppet-ssh_keygen puppet-xmlfile

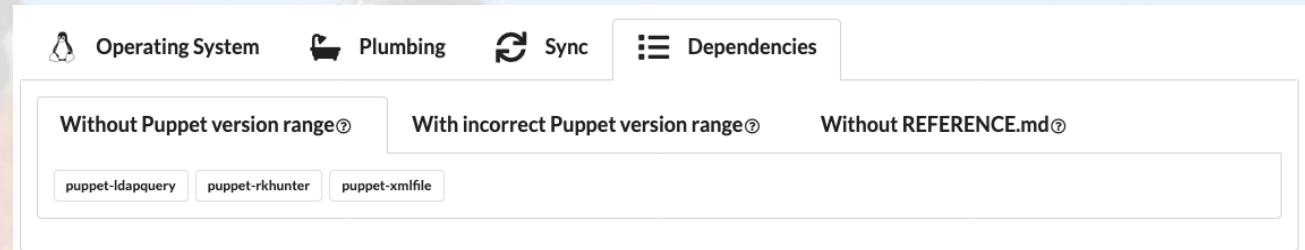
- Refreshed every 6 hours

@bastelsblog for @voxpupuliorg

VPT

Automate daily
tasks

The to-do list



- Refreshed every 6 hours

@bastelsblog for @voxpupuliorg

VPT

Automate daily
tasks

The repository view

A screenshot of a web interface titled "Vox Pupuli Tasks". The main navigation bar includes links for "Vox Pupuli Tasks", "Repositories", "About", "Background Jobs", and a user profile for "Robert Müller". The current page is for the repository "puppet-alternatives", which is described as "Manage Debian alternatives links". The repository has 23 stars, 23 forks, 3 issues, and three warning badges: "Missing REFERENCE.md", "Does not support latest CentOS", and "Need another sync". A "GitHub" button is also present. Below the repository title, 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).

@bastelsblog for @voxpupuliorg

What else did we do?

How to actually learn any new programming concept



Essential

Changing Stuff and
Seeing What Happens

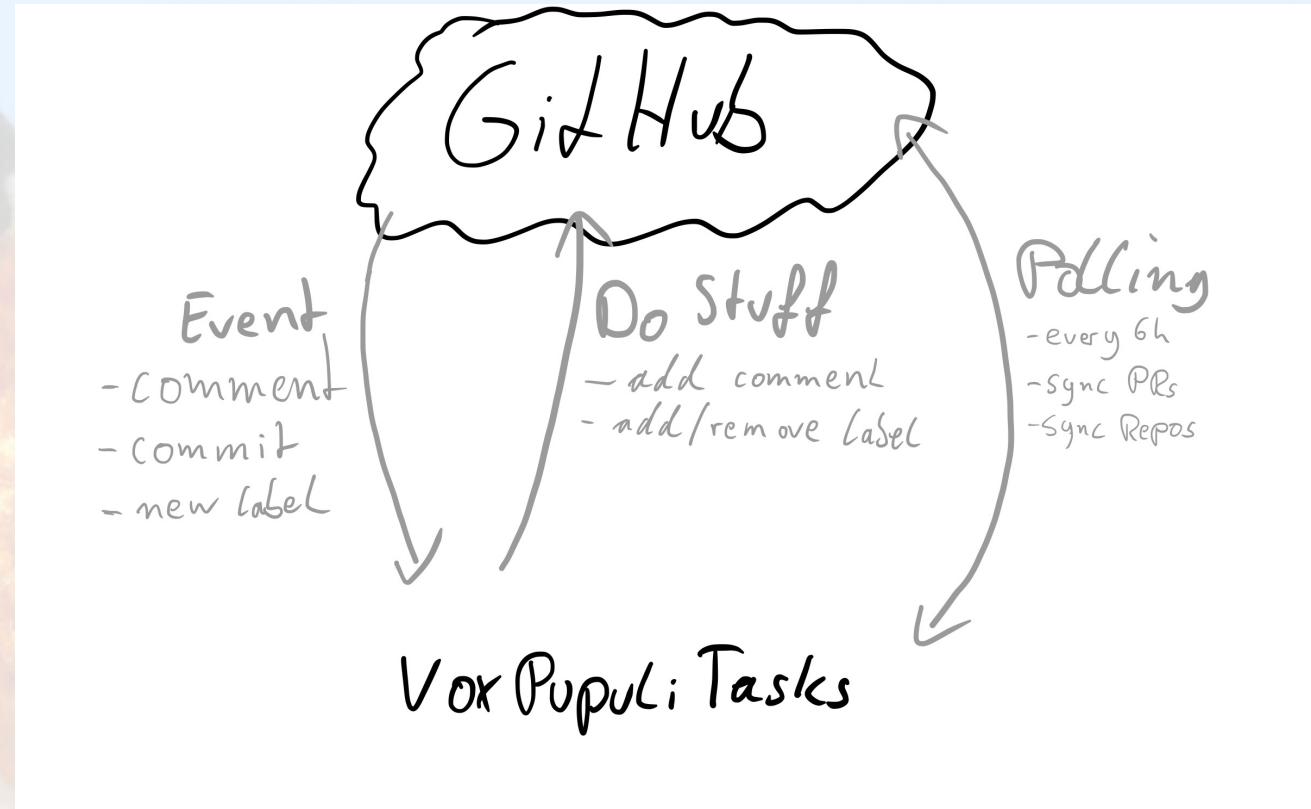
O RLY?

@ThePracticalDev

VPT

Automate daily
tasks

Architecture



@bastelsblog for @voxpupuliorg

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: payload)
end
```

@bastelsblog for @voxpupuliorg

VPT

Automate daily
tasks

Architecture

```
def validate(saved_changes)
  # Don't run through the validateen, if only the eligible_for_comment attribu
  return if saved_changes.keys.sort == %w[eligible_for_comment].sort && !merg

  # 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 pre
  # 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_is_
  elsif mergeable.nil?
    UpdateMergeableWorker.perform_in(1.minute.from_now,
      repository.name,
      number,
      id,
      saved_changes)

  end
end
```

@bastelsblog for @voxpupuliorg

VPT

Automate daily tasks

Architecture

voxpupuli / puppet-caddy

Watch ▾

Code Issues Pull requests 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

@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

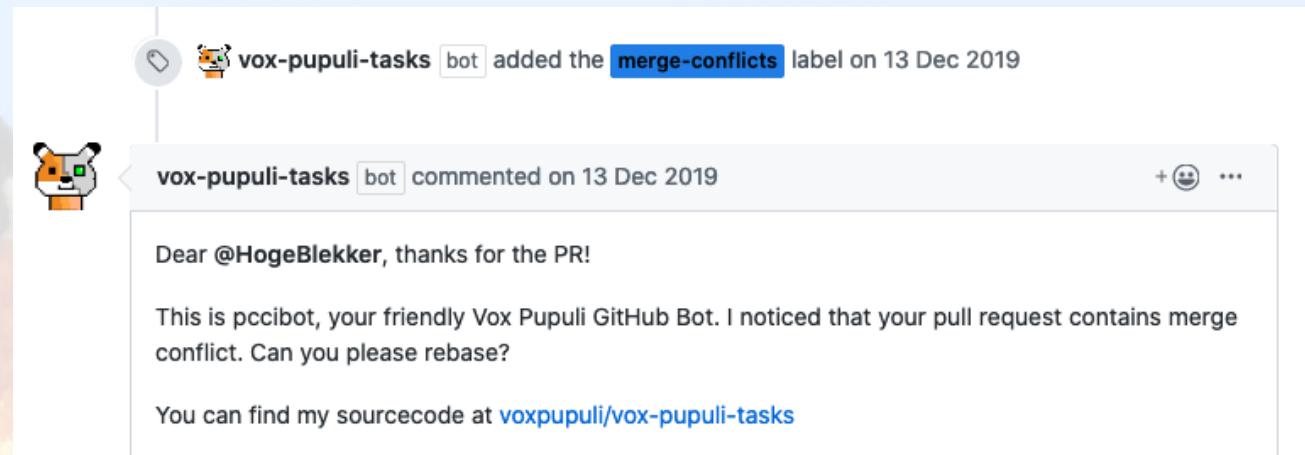
[Merge pull request](#) ▾ You can also [open this in GitHub Desktop](#) or view [command line instructions](#).

@bastelsblog for @voxpupuliorg

VPT

Automate daily tasks

Architecture

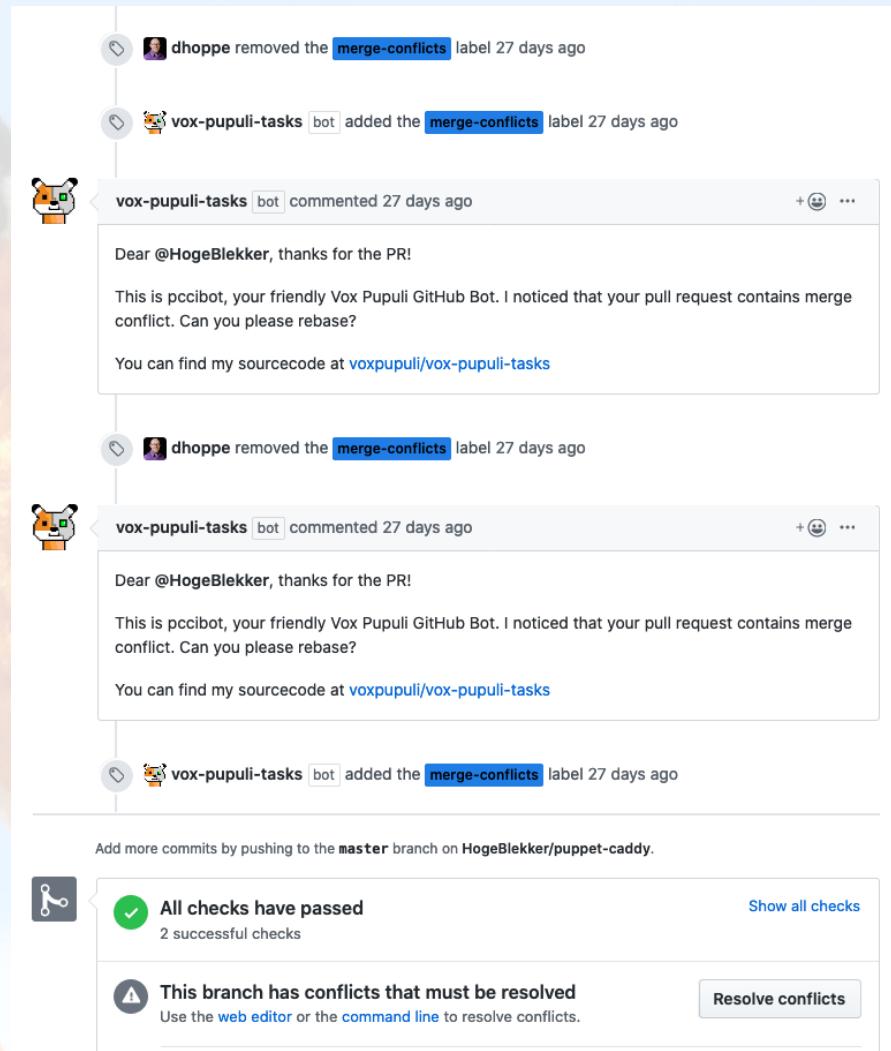


@bastelsblog for @voxpupuliorg

VPT

Automate daily tasks

Architecture

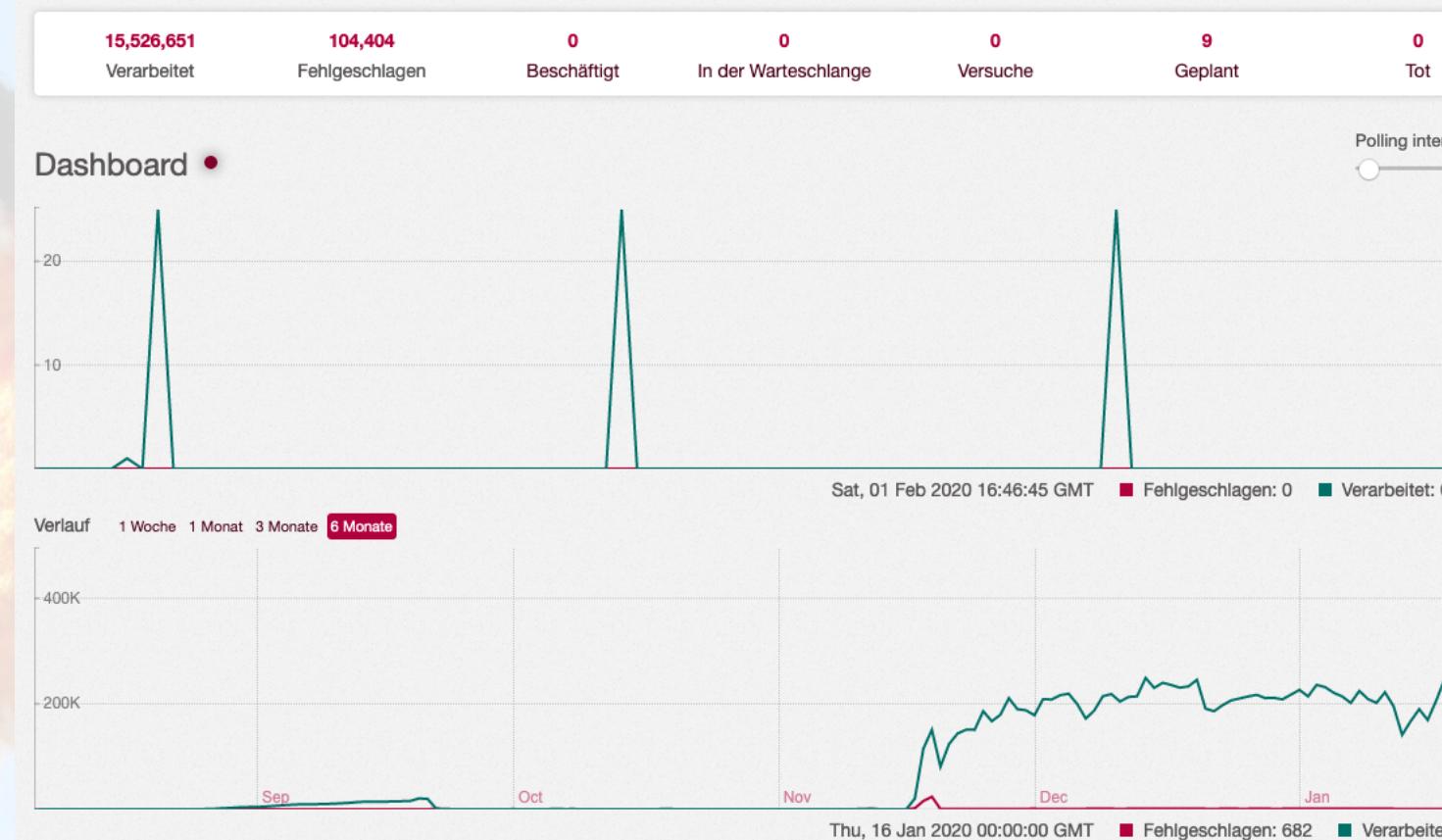


@bastelsblog for @voxpupuliorg

VPT

Automate daily
tasks

Architecture



@bastelsblog for @voxpupuliorg

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

@bastelsblog for @voxpupuliorg

VPT

Automate daily
tasks

Architecture

Lookout

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

@bastelsblog for @voxpupuliorg

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

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!

@bastelsblog for @voxpupuliorg