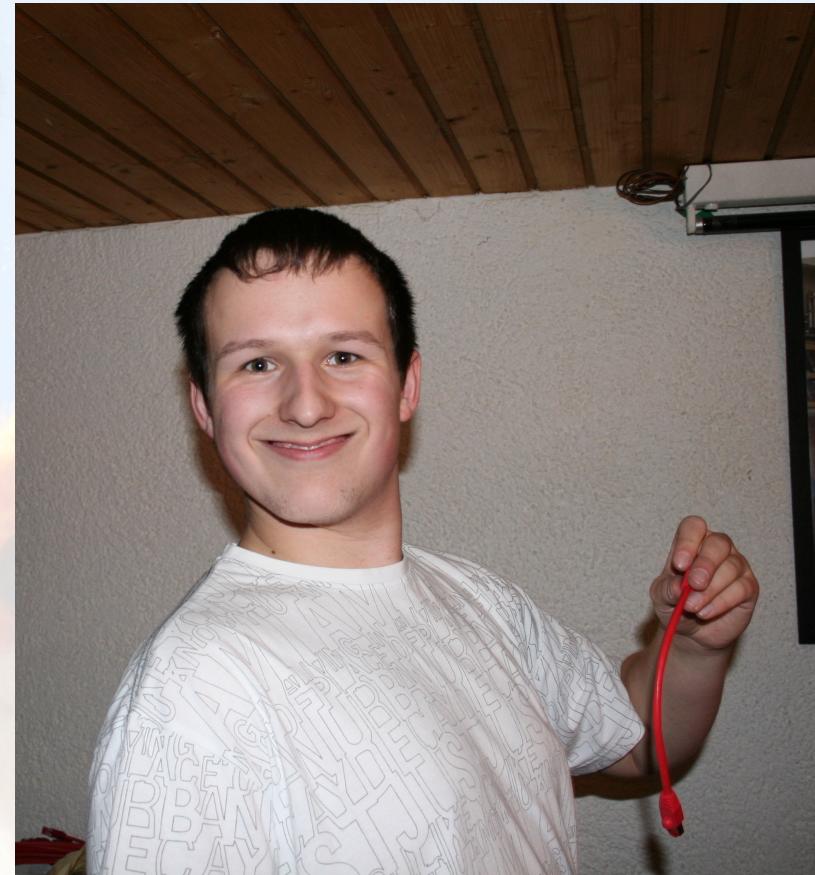


# Automating the Vox Pupuli Yak Shaving

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

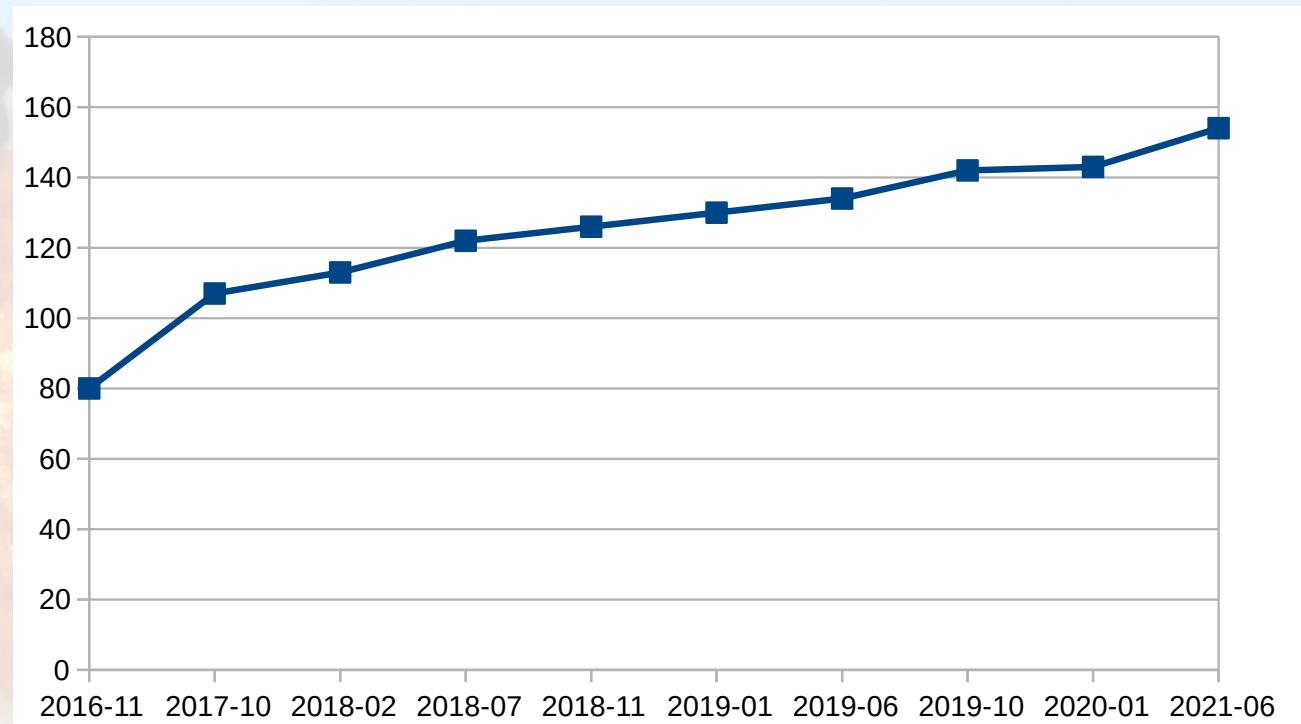
- Robert 'flipez' Müller
- Ruby Developer since 2013
- Builds clouds at Hetzner
- Also builds Rails apps and tunes football tables



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

```
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         },

```

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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 ?

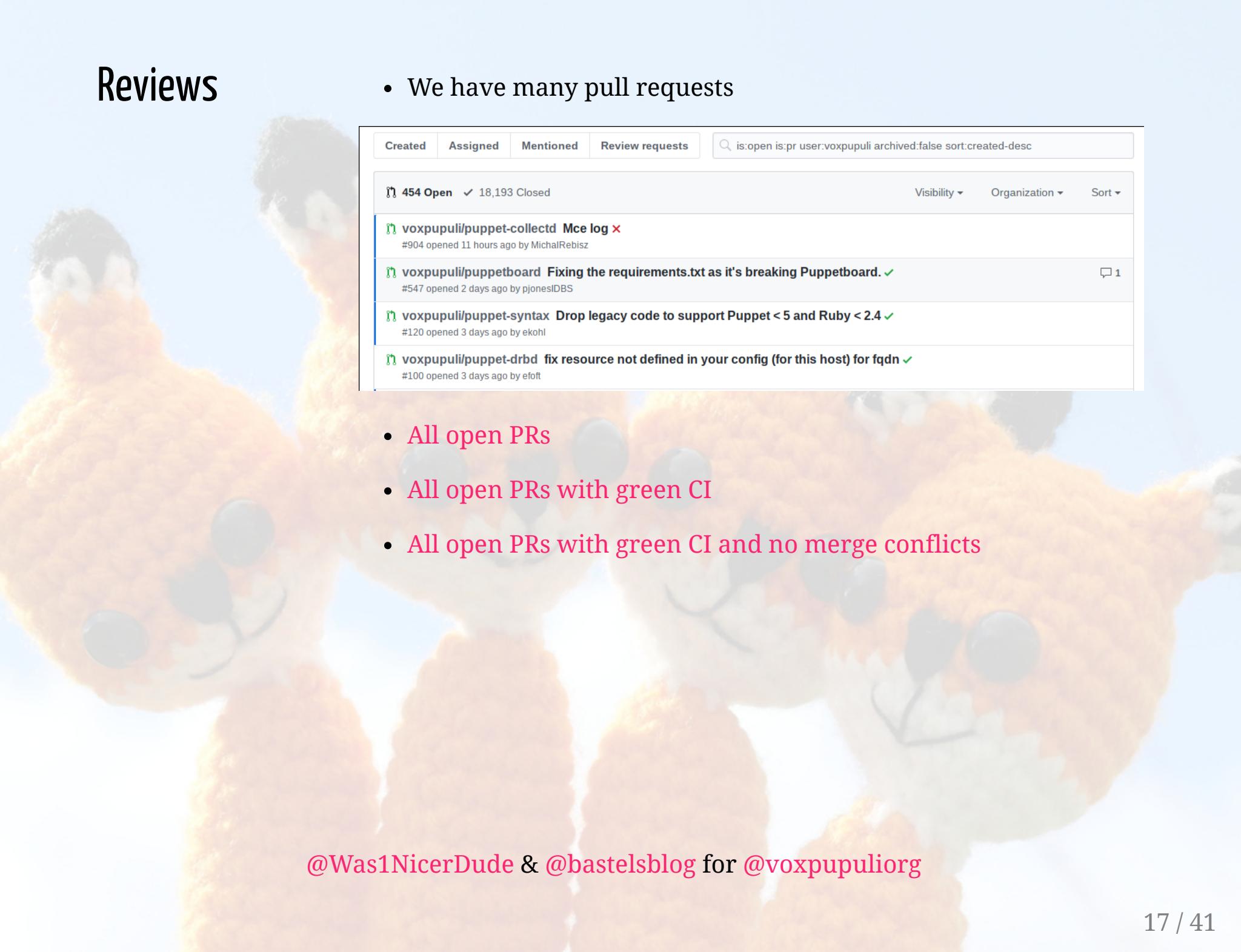
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# The path of a Open Source Maintainer...

What do we actually do?

# Reviews

- We have many pull requests



A screenshot of a GitHub search results page for the user '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

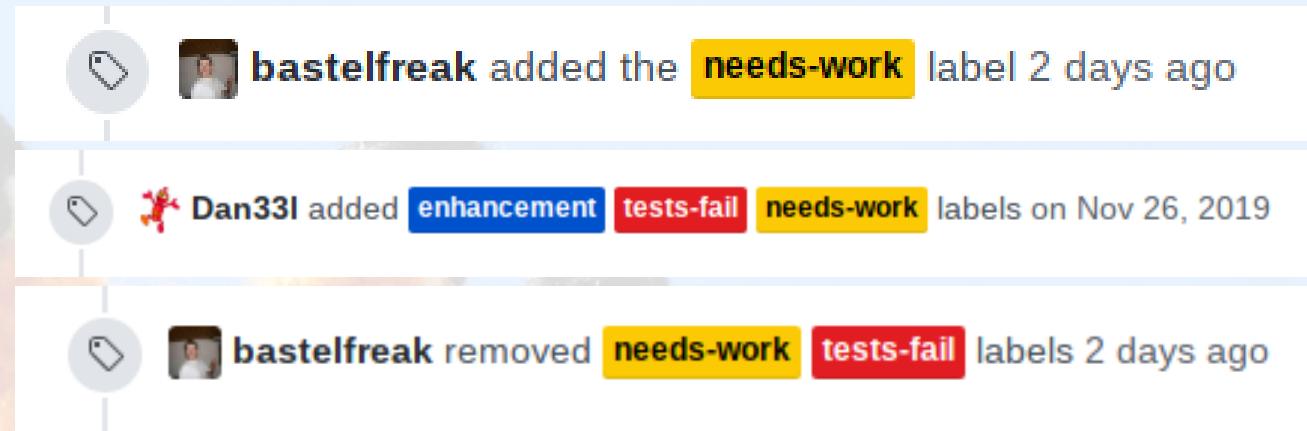
Visibility, Organization, and Sort dropdown menus are visible at the top right.

- 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? label
- Bug / Bugfix? label
- Breaking change? label
- Additional work required? label

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# Reviews

## More labels

Filtering:

- labels like [REDACTED], [REDACTED], [REDACTED], [REDACTED], [REDACTED], [REDACTED], [REDACTED] help us to sort pull requests and issues by grouping them

Changelog:

- labels like [REDACTED], [REDACTED], [REDACTED] help us to generate a CHANGELOG.md

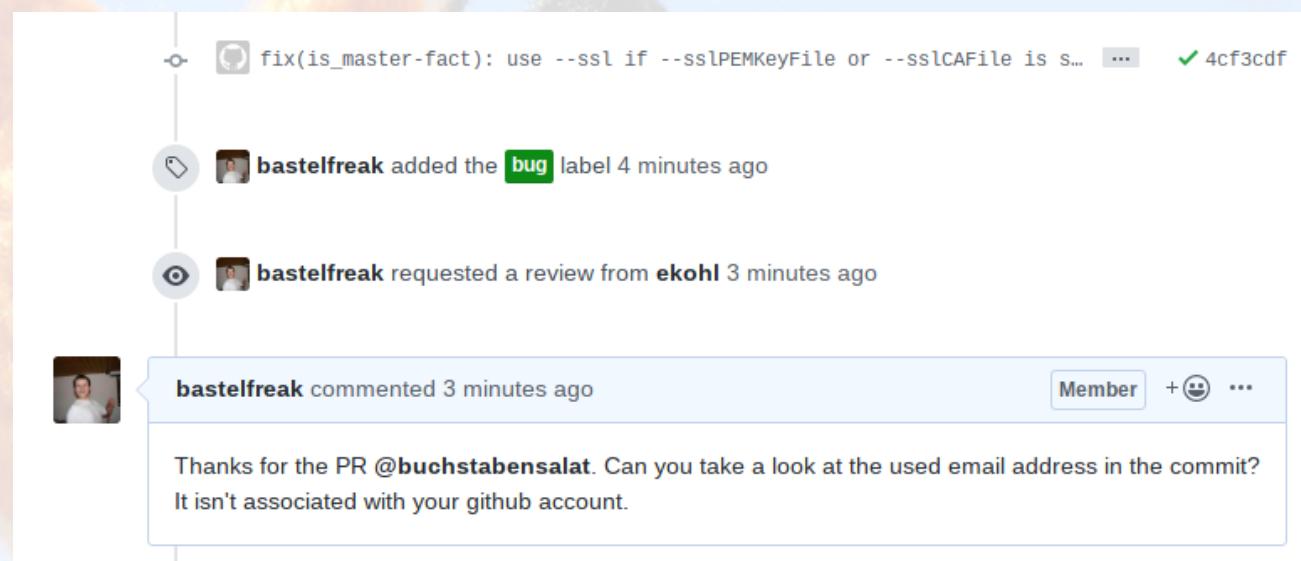
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# Reviews

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



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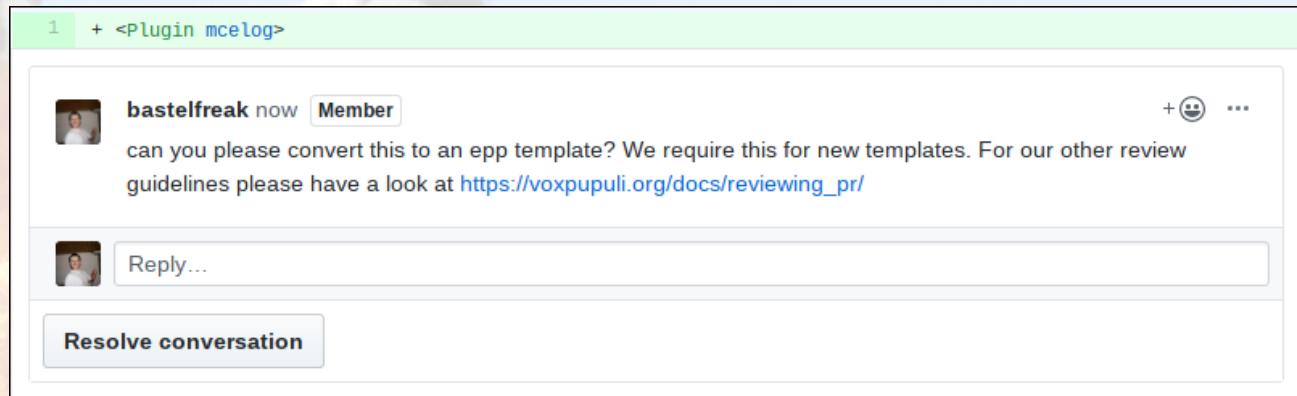
# Reviews

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



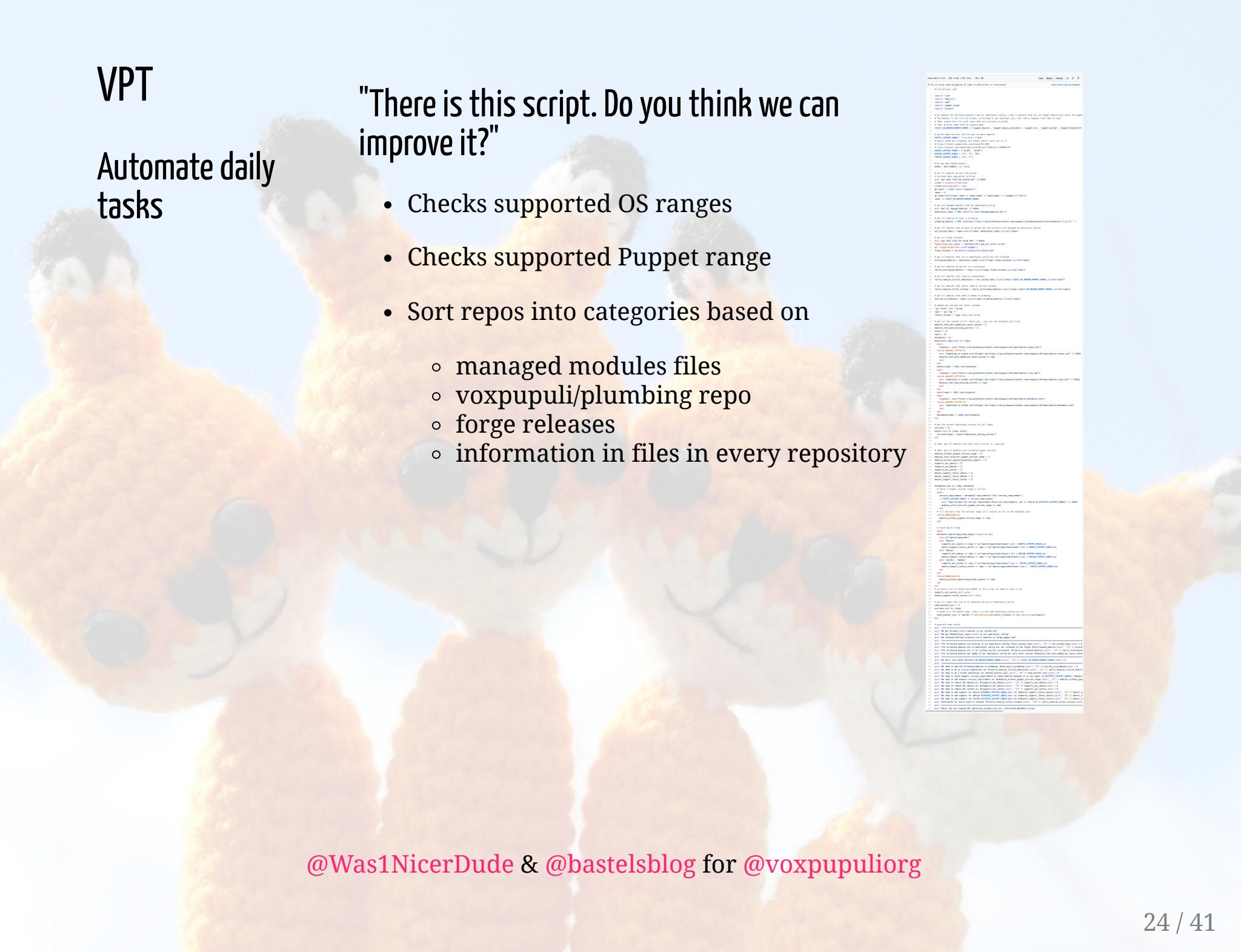
@Was1NicerDude & @bastelsblog for @voxpupuliorg

# 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 VPT. VPT 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.
#
# VPT 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 VPT. If not, see <http://www.gnu.org/licenses/>.
```

This block contains a large amount of Python code, mostly comments, which is the core of the VPT script. It includes sections for handling GitHub API requests, parsing JSON, and performing various checks on module files and repository metadata. The code is heavily annotated with explanatory comments throughout.

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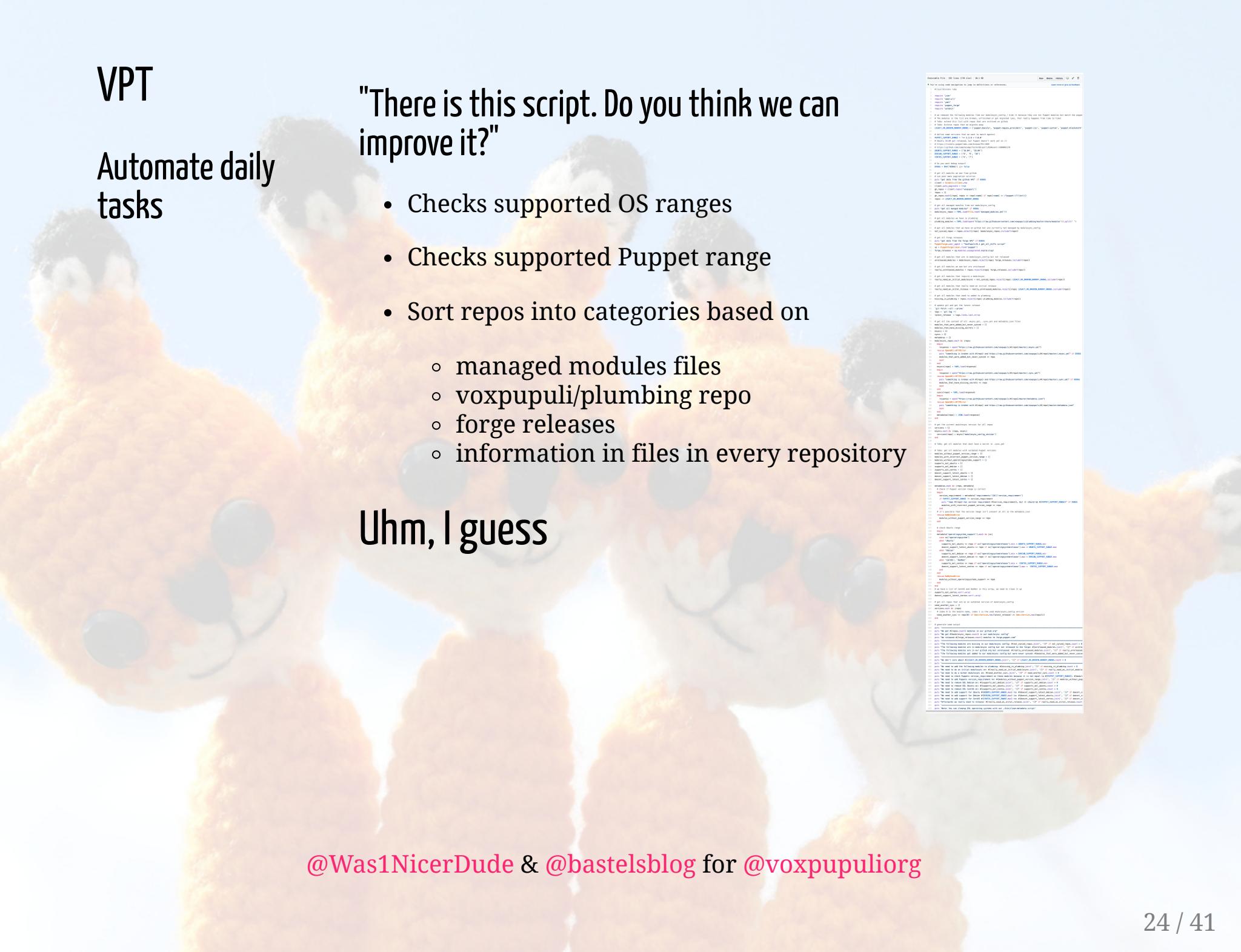
VPT

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

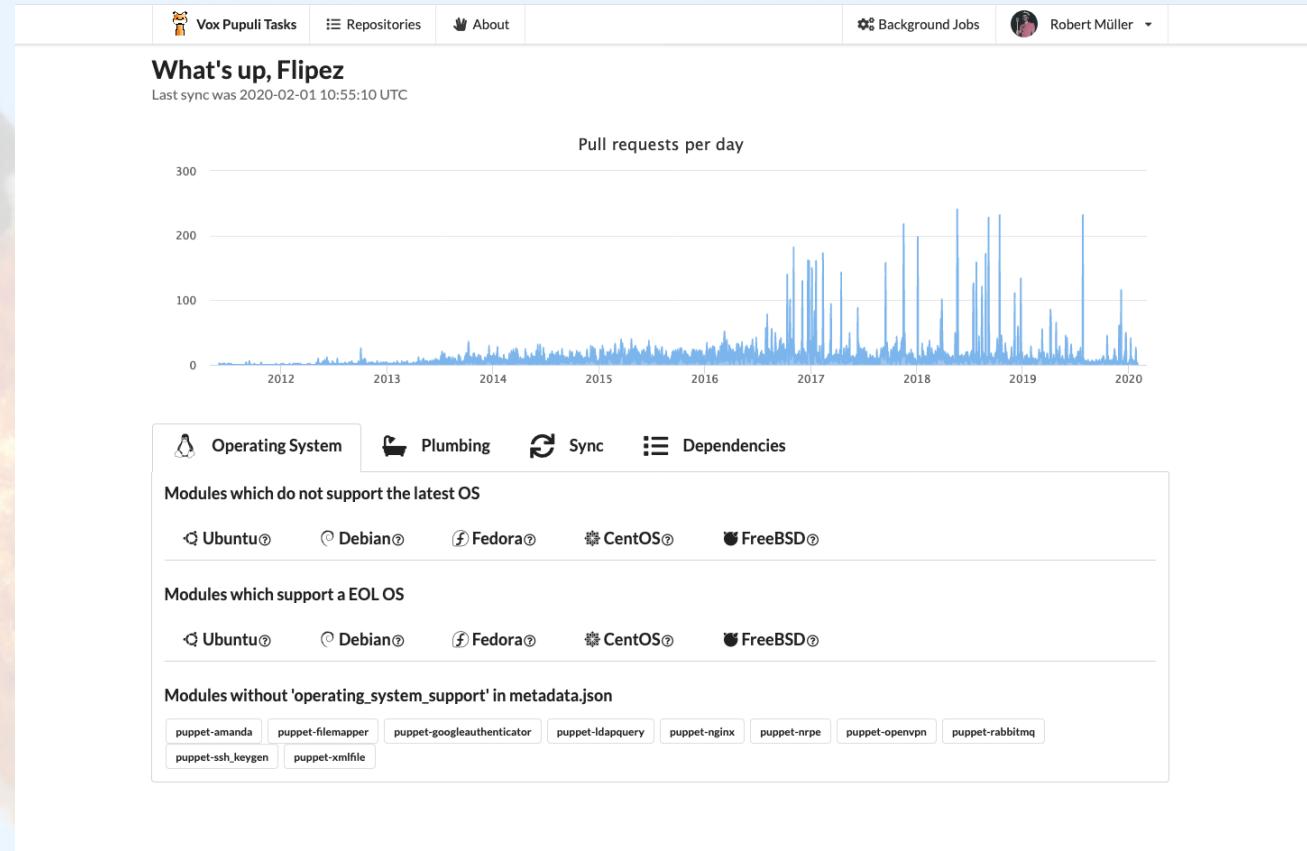


```
#!/bin/bash -e
# This script is designed to parse GitHub API responses and categorize repositories into different groups based on their content. It uses the GitHub API to fetch repository details and then analyzes the contents of each repository to determine its category. The categories include:
# - Managed Modules: Repositories containing .pp files (Puppet manifests).
# - Voxpupuli/Plumbing: Repositories containing .pl files (Perl scripts).
# - Forge Releases: Repositories containing .yaml files (Ansible roles).
# - General: All other repositories.
# The script also checks for specific GitHub services like Travis CI and CircleCI, and includes logic to handle missing or invalid repository URLs.
# Usage: ./category_repos.sh <github_token>
# Example: ./category_repos.sh $GITHUB_TOKEN
# Note: You must have curl installed and set up correctly in your environment.
```

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# VPT

## Automate daily tasks

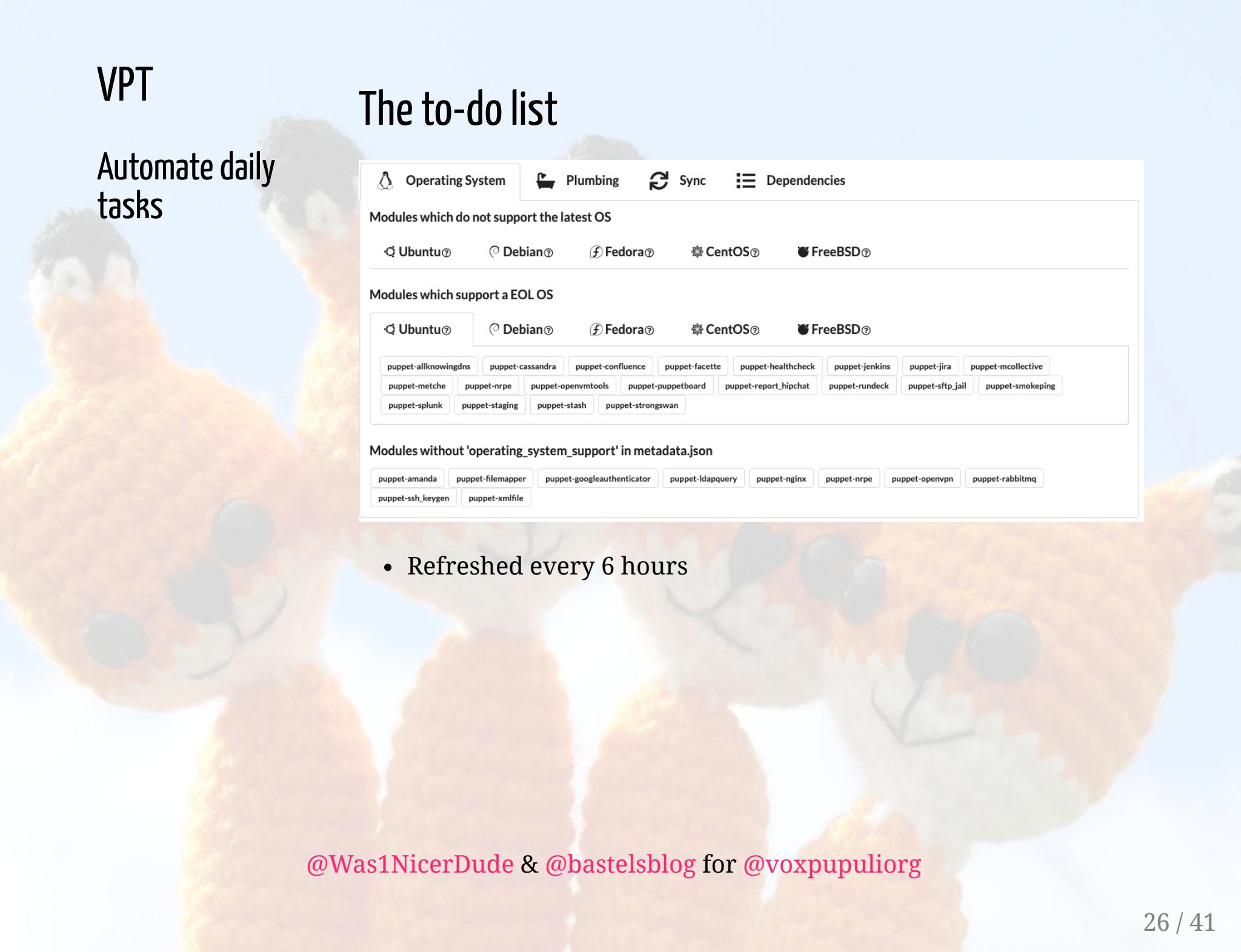


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VPT

# Automate daily tasks

## The to-do list



The screenshot shows a web-based interface for managing Puppet modules. At the top, there are tabs for 'Operating System', 'Plumbing', 'Sync', and 'Dependencies'. Below these are sections for 'Modules which do not support the latest OS' and 'Modules which support a EOL OS'. Under each section, there are tabs 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.

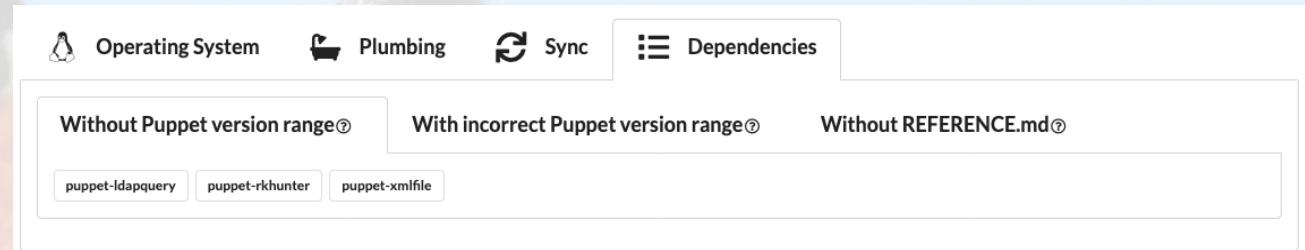
- Refreshed every 6 hours

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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 description 'Manage Debian alternatives links' is visible. A section titled 'Open Pull Requests' contains one item: '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

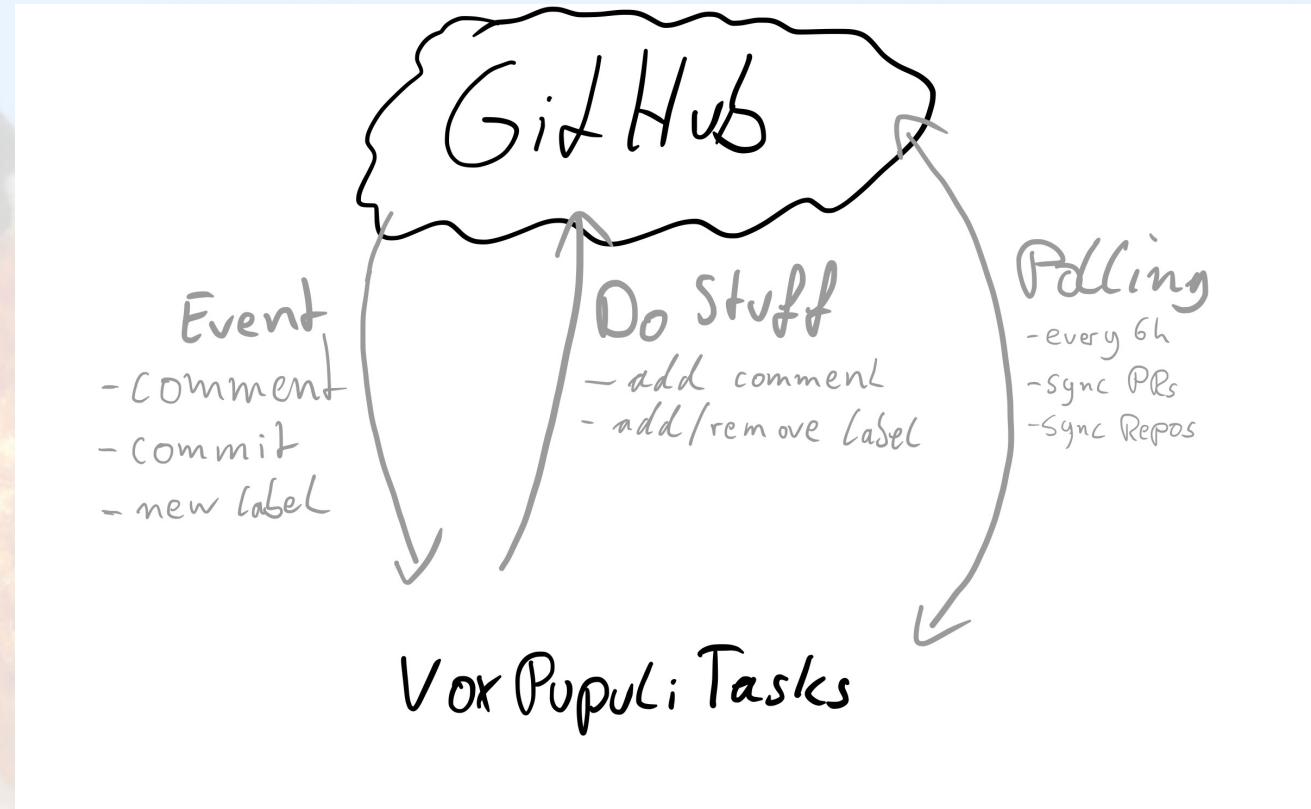
O RLY?

@ThePracticalDev

# VPT

Automate daily tasks

Architecture



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VPT

Automate daily  
tasks

Architecture

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VPT

Automate daily  
tasks

Architecture

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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

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# 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

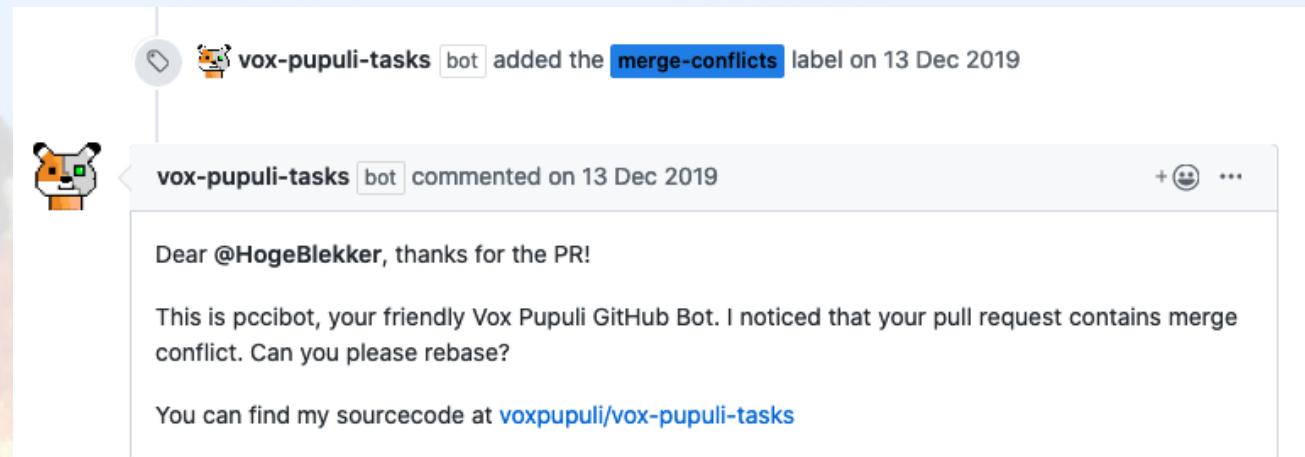
[Merge pull request](#) ▾ You can also [open this in GitHub Desktop](#) or view [command line instructions](#).

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# VPT

## Automate daily tasks

## Architecture

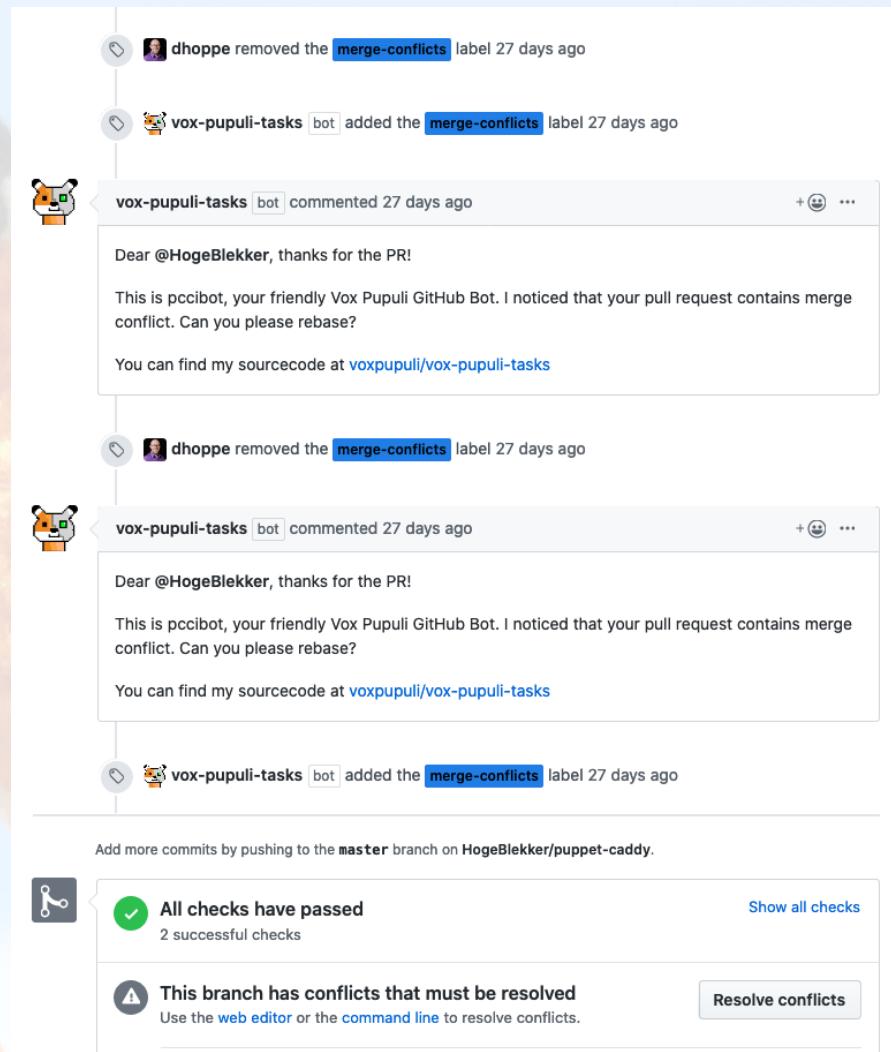


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# VPT

## Automate daily tasks

## Architecture

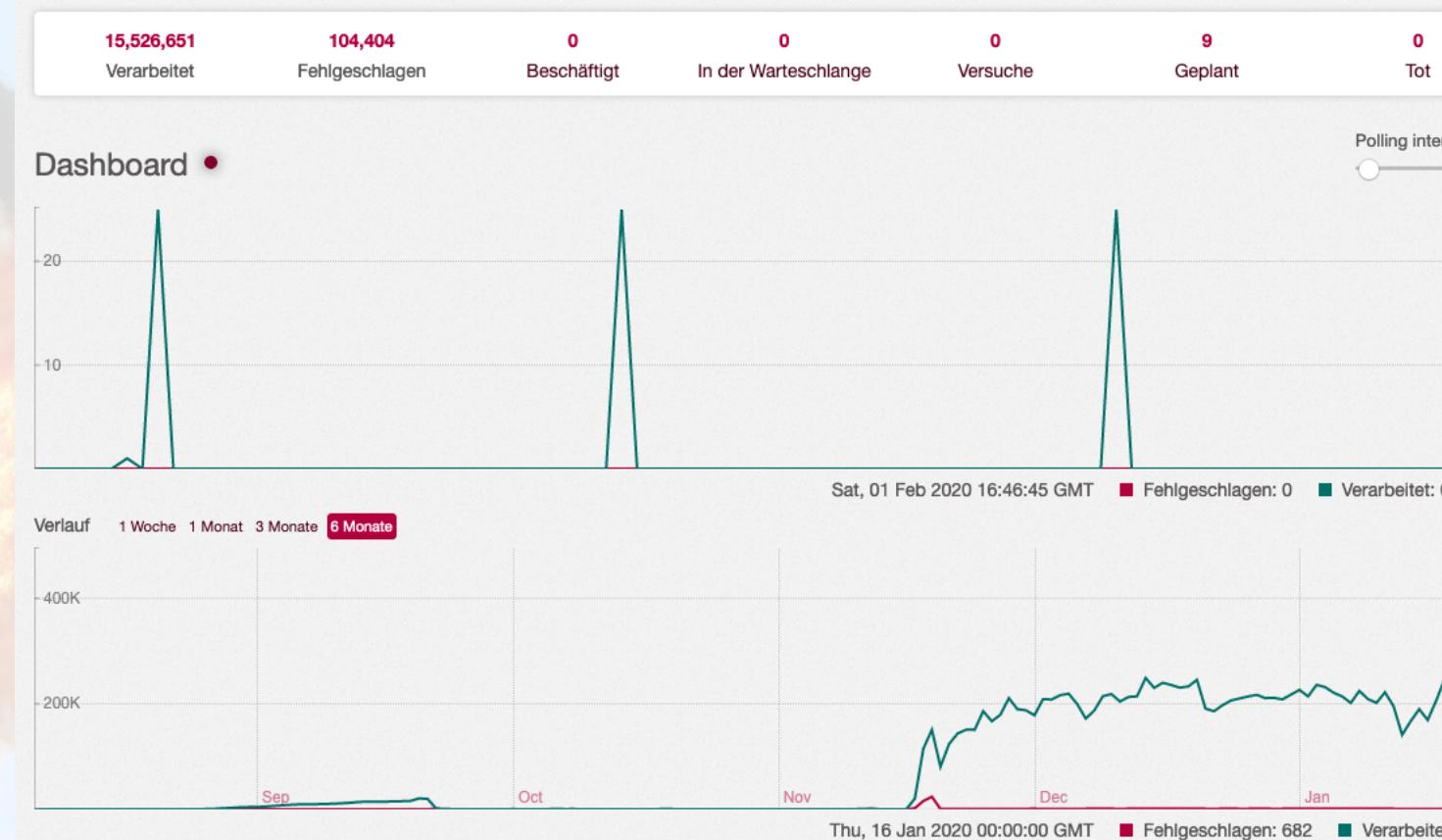


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# VPT

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

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
- 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](http://voxpupu.li) or our docs at [github.com/voxpupuli/vox-pupuli-tasks](https://github.com/voxpupuli/vox-pupuli-tasks)

Thanks for your attention!

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