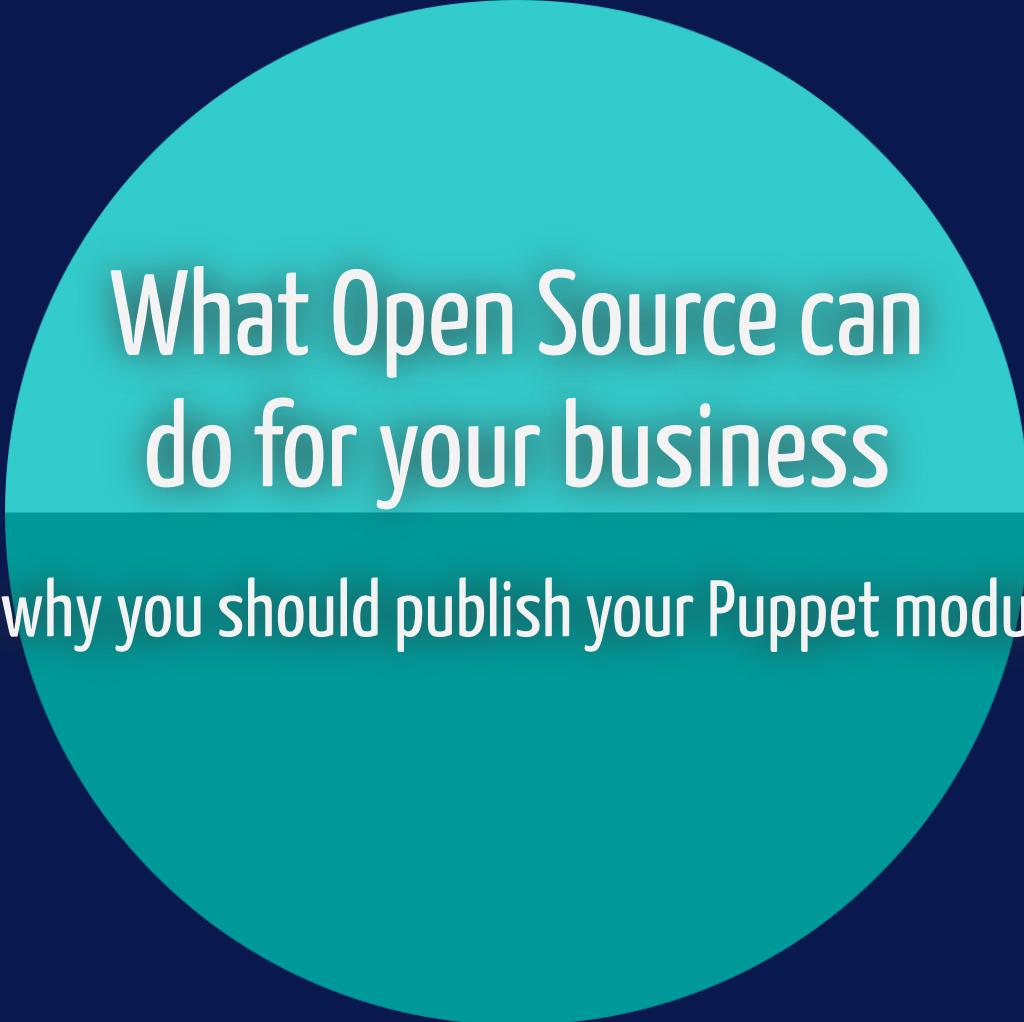


# What Open Source can do for your business

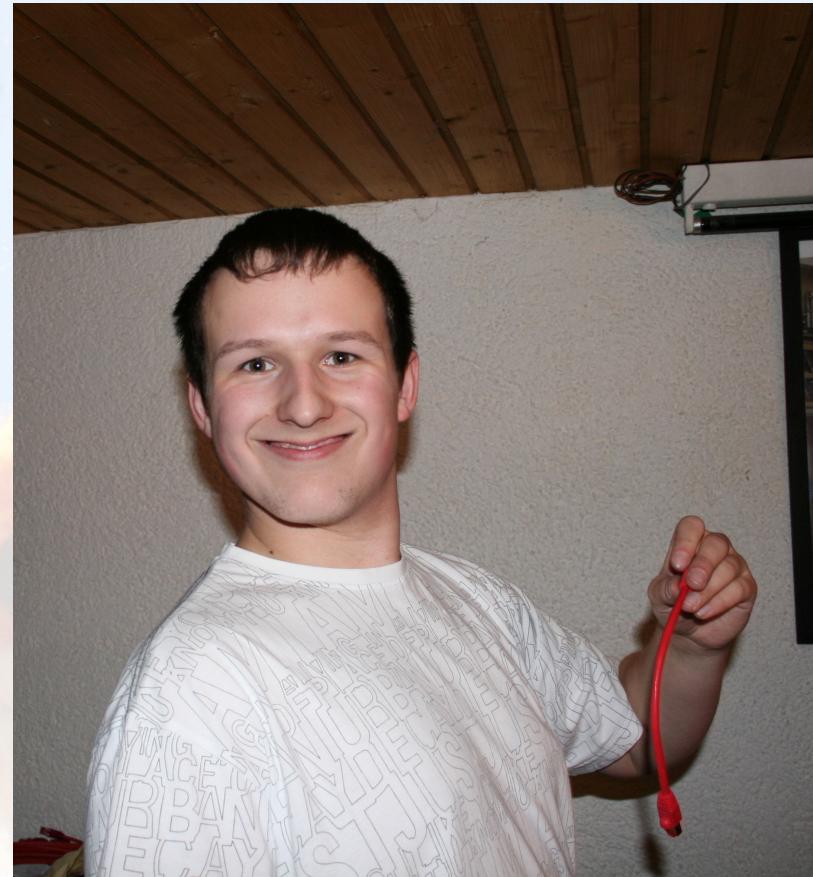


What Open Source can  
do for your business

Or why you should publish your Puppet modules

# \$ whoami

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



What's this  
Vox Pupuli thingy?

# Vox Pupuli

- Maintain many many Puppet modules

What?



@bastelsblog for @voxpupuliorg

# Vox Pupuli

What?

- Maintain many many Puppet modules
- Be helpful and polite to each other



@bastelsblog for @voxpupuliorg

# Vox Pupuli

What?

- Maintain many many Puppet modules
- Be helpful and polite to each other
- Be open-minded to people and technology



@bastelsblog for @voxpupuliorg

# Vox Pupuli

## What?

- Maintain many many Puppet modules
- Be helpful and polite to each other
- Be open-minded to people and technology
- Provide a home for orphaned Puppet modules



@bastelsblog for @voxpupuliorg

# Vox Pupuli

## What?

- Maintain many many Puppet modules
- Be helpful and polite to each other
- Be open-minded to people and technology
- Provide a home for orphaned Puppet modules
- Unite lonely module and tooling authors to a collective



@bastelsblog for @voxpupuliorg

# Vox Pupuli

## What?

- Maintain many many Puppet modules
- Be helpful and polite to each other
- Be open-minded to people and technology
- Provide a home for orphaned Puppet modules
- Unite lonely module and tooling authors to a collective
- Ensure continued development for our code

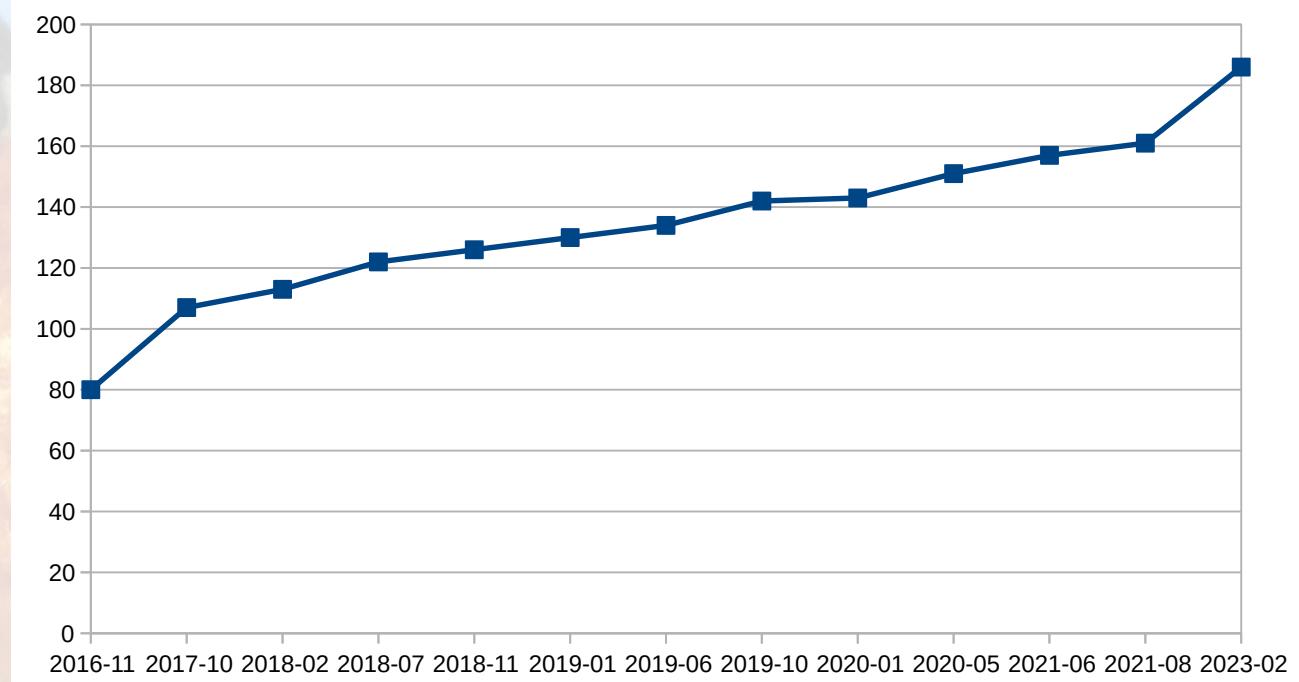


@bastelsblog for @voxpupuliorg

# Vox Pupuli

Who?

- Amount of Vox Pupuli members with merge permissions



@bastelsblog for @voxpupuliorg



# Vox Pupuli

Who?

- Many git newbies
  - Rebasing a feature branch against upstream master is hard



@bastelsblog for @voxpupuliorg

# Vox Pupuli

## Who?

- Many git newbies
  - Rebasing a feature branch against upstream master is hard
- Many newcomers to test frameworks
  - Interested in learning RuboCop/puppet-lint/rspec-puppet/serverspec



@bastelsblog for @voxpupuliorg

# Vox Pupuli

## Who?

- Many git newbies
  - Rebasing a feature branch against upstream master is hard
- Many newcomers to test frameworks
  - Interested in learning RuboCop/puppet-lint/rspec-puppet/serverspec
- DevOps/Platform Engineers in a small/tiny team
  - Use Puppet at work and want to use public modules



@bastelsblog for @voxpupuliorg

# Vox Pupuli

## Who?

- Many git newbies
  - Rebasing a feature branch against upstream master is hard
- Many newcomers to test frameworks
  - Interested in learning RuboCop/puppet-lint/rspec-puppet/serverspec
- DevOps/Platform Engineers in a small/tiny team
  - Use Puppet at work and want to use public modules
- Consultants that contribute to one/a few modules for a period of time



@bastelsblog for @voxpupuliorg

# How to design a good Puppet module?

# Module Design

## Status Quo

- You write your own component Puppet modules
  - A module that manages a single component (Apache *or* nginx)



@bastelsblog for @voxpupuliorg

# Module Design

## Status Quo

- You write your own component Puppet modules
  - A module that manages a single component (Apache *or* nginx)
- You also want to reuse Open Source component modules from others
  - Because there are already awesome modules for nginx



@bastelsblog for @voxpupuliorg

# Module Design

## Status Quo

- You write your own component Puppet modules
  - A module that manages a single component (Apache *or* nginx)
- You also want to reuse Open Source component modules from others
  - Because there are already awesome modules for nginx
- Many of your servers are very similar, but not identical



@bastelsblog for @voxpupuliorg

# Module Design

## Status Quo

- You write your own component Puppet modules
  - A module that manages a single component (Apache *or* nginx)
- You also want to reuse Open Source component modules from others
  - Because there are already awesome modules for nginx
- Many of your servers are very similar, but not identical
- Design requirement 1: Use internal and external component modules in parallel
- Design requirement 2: Assign those component modules to groups of servers

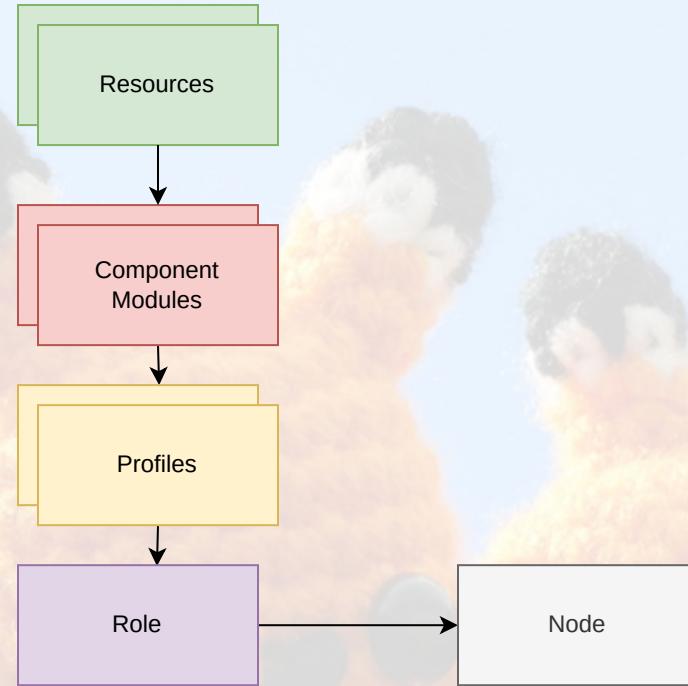


@bastelsblog for @voxpupuliorg

# Module Design

Status Quo

Roles & Profiles



@bastelsblog for @voxpupuliorg

# Module Design

Status Quo

Roles & Profiles

Data vs Code

- People that write Puppet Code might not provide the data



@bastelsblog for @voxpupuliorg

# Module Design

## Status Quo

## Roles & Profiles

## Data vs Code

- People that write Puppet Code might not provide the data
- DevOps people want to use an external component module
- platform engineers write Puppet code
- network engineers provide ip addresses and firewall rules
- Product owner provides version numbers for deployments



@bastelsblog for @voxpupuliorg

# Module Design

## Status Quo

## Roles & Profiles

## Data vs Code

- People that write Puppet Code might not provide the data
- DevOps people want to use an external component module
- platform engineers write Puppet code
- network engineers provide ip addresses and firewall rules
- Product owner provides version numbers for deployments
- Secrets should come from a secret store like Hashicorp Vault or hiera-eyaml



@bastelsblog for @voxpupuliorg

# Module Design

## Status Quo

## Roles & Profiles

## Data vs Code

- People that write Puppet Code might not provide the data
- DevOps people want to use an external component module
- platform engineers write Puppet code
- network engineers provide ip addresses and firewall rules
- Product owner provides version numbers for deployments
- Secrets should come from a secret store like Hashicorp Vault or hiera-eyaml
- Design requirement 3: Separate data and code



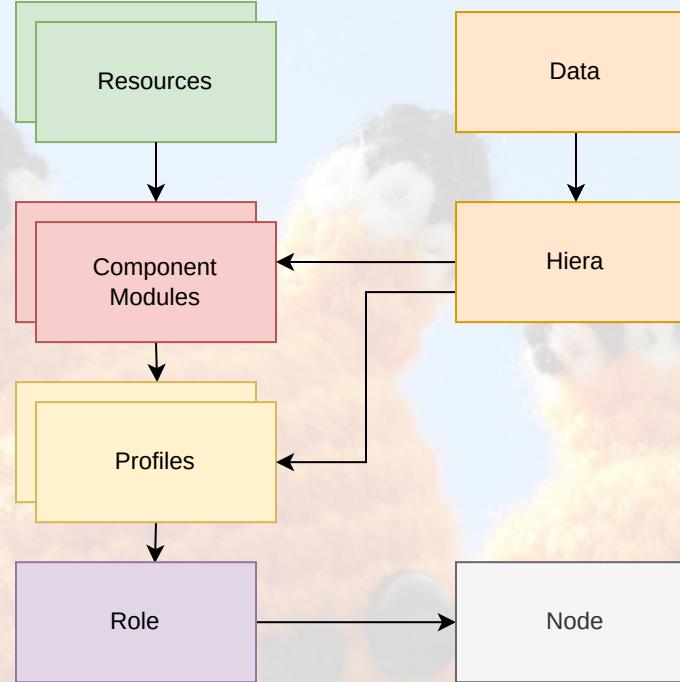
@bastelsblog for @voxpupuliorg

# Module Design

Status Quo

Roles & Profiles

Data vs Code



@bastelsblog for @voxpupuliorg

# Module Design

Status Quo

Roles & Profiles

Data vs Code

- It's hard for enforce code design/architecture with CI jobs
- You might leak private information if you publish an existing internal module



@bastelsblog for @voxpupuliorg

# Why Open Sourcing?

- Publish a module from the beginning
  - This enforces a proper structure in your code

## Technical aspects



@bastelsblog for @voxpupuliorg

# Why Open Sourcing?

## Technical aspects

- Publish a module from the beginning
  - This enforces a proper structure in your code
  - This ensures secrets are never added to it



@bastelsblog for @voxpupuliorg

# Why Open Sourcing?

## Technical aspects

- Publish a module from the beginning
  - This enforces a proper structure in your code
  - This ensures secrets are never added to it
- Many companies still don't have internal CI
  - There are free CI services for open source software!



@bastelsblog for @voxpupuliorg

# Why Open Sourcing?

## Technical aspects

- Publish a module from the beginning
  - This enforces a proper structure in your code
  - This ensures secrets are never added to it
- Many companies still don't have internal CI
  - There are free CI services for open source software!
- Main to create a successfull open source project



@bastelsblog for @voxpupuliorg

# Why Open Sourcing?

## Technical aspects

- Publish a module from the beginning
  - This enforces a proper structure in your code
  - This ensures secrets are never added to it
- Many companies still don't have internal CI
  - There are free CI services for open source software!
- Main to create a successfull open source project
  - Success is often measured by the amount of users



@bastelsblog for @voxpupuliorg

# Why Open Sourcing?

## Technical aspects

- Publish a module from the beginning
  - This enforces a proper structure in your code
  - This ensures secrets are never added to it
- Many companies still don't have internal CI
  - There are free CI services for open source software!
- Main to create a successfull open source project
  - Success is often measured by the amount of users
  - New users require documentation



@bastelsblog for @voxpupuliorg

# Why Open Sourcing?

Technical aspects

Vox Pupuli

Vox Pupuli sales pitch:

- Vox Pupuli has proper tooling to handle many modules



@bastelsblog for @voxpupuliorg

# Why Open Sourcing?

## Technical aspects

### Vox Pupuli

Vox Pupuli sales pitch:

- Vox Pupuli has proper tooling to handle many modules
- Vox Pupuli maintains community guidelines and best practices
  - [https://voxpupuli.org/docs/reviewing\\_pr/](https://voxpupuli.org/docs/reviewing_pr/)



@bastelsblog for @voxpupuliorg

# Why Open Sourcing?

## Technical aspects

### Vox Pupuli

Vox Pupuli sales pitch:

- Vox Pupuli has proper tooling to handle many modules
- Vox Pupuli maintains community guidelines and best practices
  - [https://voxpupuli.org/docs/reviewing\\_pr/](https://voxpupuli.org/docs/reviewing_pr/)
- Working in a collective enforces proper documentation and git commits

@bastelsblog for @voxpupuliorg



# Why Open Sourcing?

Technical aspects

Vox Pupuli

Company advantages

- Companies that do open source work are recognized in the community
  - Attract new hires through open source work
  - That's how I got to betadots!



@bastelsblog for @voxpupuliorg

# Why Open Sourcing?

Technical aspects

Vox Pupuli

Company advantages

- Companies that do open source work are recognized in the community
  - Attract new hires through open source work
  - That's how I got to betadots!
- Benefit from the knowledge and contributions within the community

@bastelsblog for @voxpupuliorg



# Why Open Sourcing?

Technical aspects

Vox Pupuli

Company advantages

- Companies that do open source work are recognized in the community
  - Attract new hires through open source work
  - That's how I got to betadots!
- Benefit from the knowledge and contributions within the community
- Benefit from the tooling within the community

@bastelsblog for @voxpupuliorg



# The Conclusion

# Conclusion

- You should publish your internal puppet modules
- Vox Pupuli is awesome, please contribute!
- We've great tooling to scale module handling



@bastelsblog for @voxpupuliorg

# Conclusion

- You should publish your internal puppet modules
- Vox Pupuli is awesome, please contribute!
- We've great tooling to scale module handling
- For feedback: bastelfreak on slack/IRC or [tim@bastelfreak.de](mailto:tim@bastelfreak.de)
- This talk and previous ones: [github.com/bastelfreak/talks](https://github.com/bastelfreak/talks)

Thanks for your attention!



@bastelsblog for @voxpupuliorg