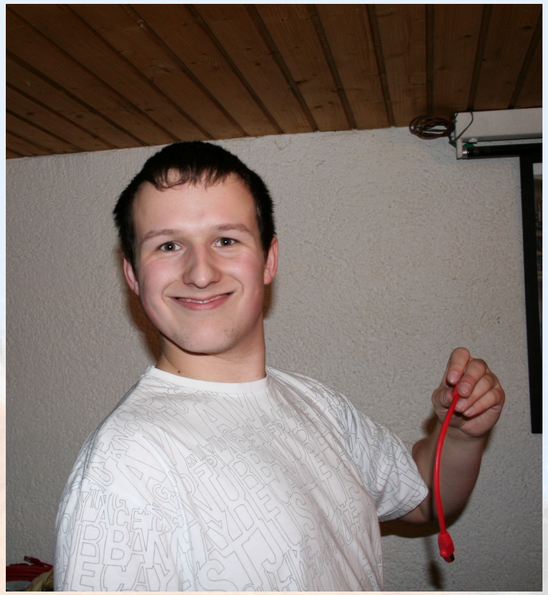
beladels

Bringing OpenBolt into Foreman

$ 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
- Certified Puppet Solution Consultant



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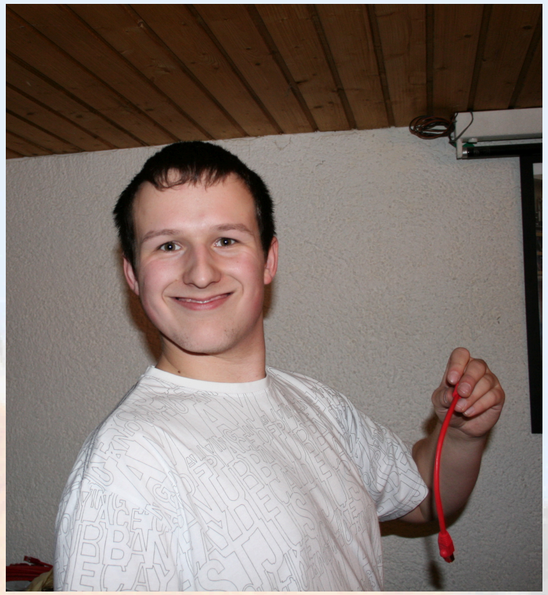
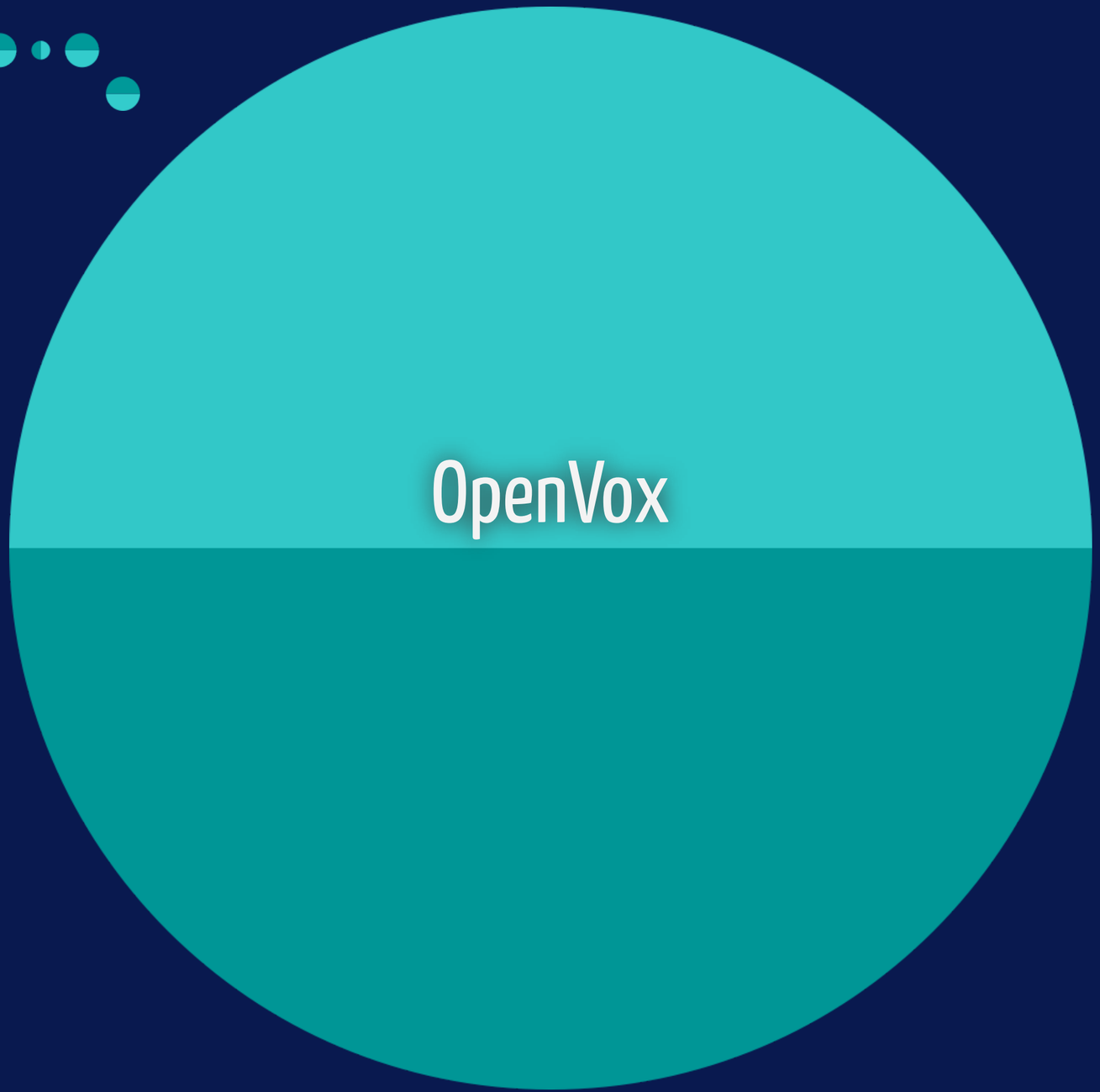
- New: Clojure & ezbake "expert"

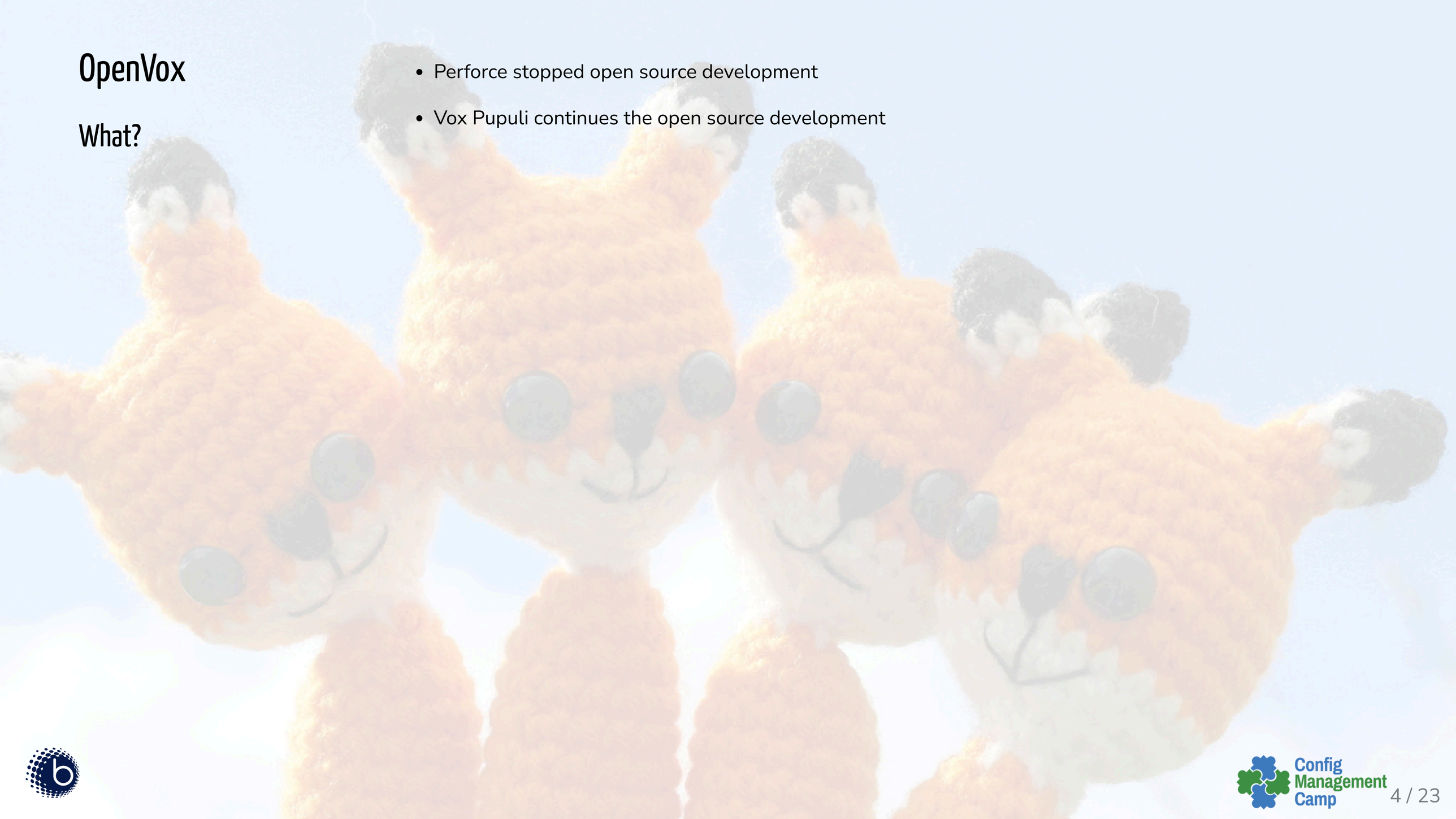



OpenVox

OpenVox

What?

- Perforce stopped open source development
- Vox Pupuli continues the open source development



OpenVox

What?

- Perforce stopped open source development
- Vox Pupuli continues the open source development
- puppet-agent -> openvox-agent
- puppetserver -> openvox-server
- puppetdb -> openvoxdb
- bolt -> openbolt

Config Management Camp

OpenVox

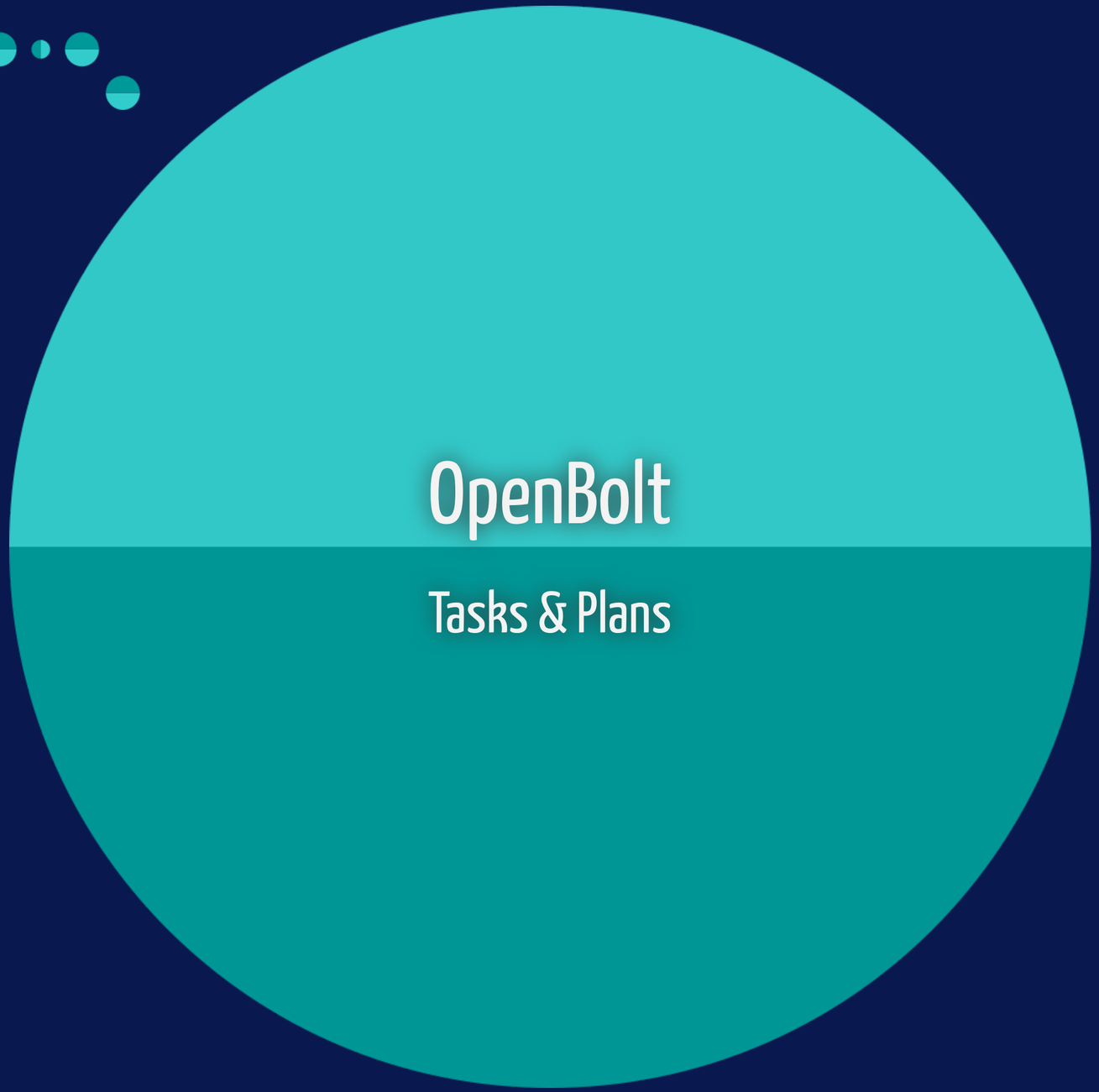
What?

How?

example class for managing nginx

```
# @summary configures nginx in a bad way
# @param content the whole nginx config
class nginx (
  Sensitive[String[1]] $content,
) {
  package { 'nginx':
    ensure => 'installed',
  }
  -> file { '/etc/nginx/nginx.conf':
    ensure  => 'file',
    content => $content,
  }
  ~> service { 'nginx':
    ensure => 'running',
    enable => true,
  }
}
```

Config Management Camp


OpenBolt
Tasks & Plans

OpenBolt

Tasks?!

- Runs tasks via ssh or WinRM on remote systems
  - CLI only
- A task is a executable binary/script + json file

OpenBolt

Tasks?!

```
{
  "puppet_task_version": 1,
  "supports_noop": false,
  "description": "Rename branch",
  "parameters": {
    "control_repo_branch": {
      "description": "Control-repo branch",
      "type": "String"
    }
  }
}
```

```
#!/bin/bash

pushd /tmp/control-repo || exit
git branch -m production old_prod
git branch -m "$PT_control_repo_branch" production
```

Config Management Camp

OpenBolt

Tasks?!

- Runs tasks via ssh or WinRM on remote systems
  - CLI only
- A task is a executable binary/script + json file
- Input and output of each task is JSON
  - makes parsing, scripting and concatenating easy

OpenBolt

Tasks?!

Plans?!

- Plans are written in OpenVox DSL (or YAML)
- Plans apply puppet code, execute OpenBolt or OpenVox functions, start tasks or other plans

```
# @summary Conference Demo plan
# @param message the string we want to paste to STDOUT
plan test::foo (
  String[1] $message = 'Hi CfgMgmtCamp 2026!',
) {
  out::message($message)
  run_task('puppet_agent::install', get_targets('all'))
}
```

Config Management Camp

OpenBolt is the missing part in the ecosystem for imperative workflows and orchestration

It combines scripts and OpenVox code

OpenBolt

Tasks?!

Plans?!

Foreman?!

- OpenBolt is a CLI only application
- Puppet Enterprise has a Web-UI & API
  - closed source & expensive
- Most Puppet/OpenVox users run Foreman anyways and don't want another UI

Config Management Camp

OpenBolt

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Foreman?!

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- Puppet Enterprise has a Web-UI & API
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- Most Puppet/OpenVox users run Foreman anyways and don't want another UI
- Why not add OpenBolt support to Foreman?!

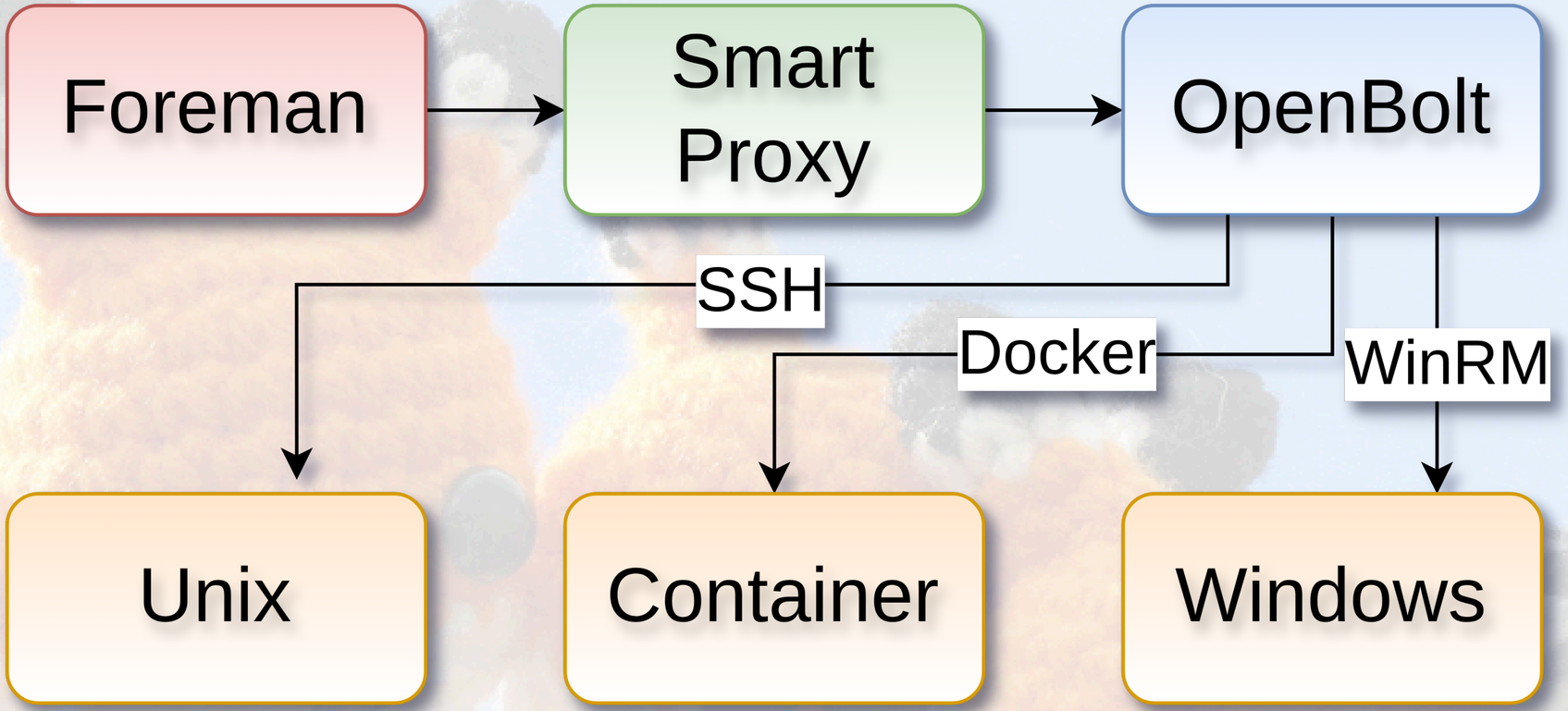
Config Management Camp

OpenBolt

Tasks?!

Plans?!

Foreman?!



OpenBolt

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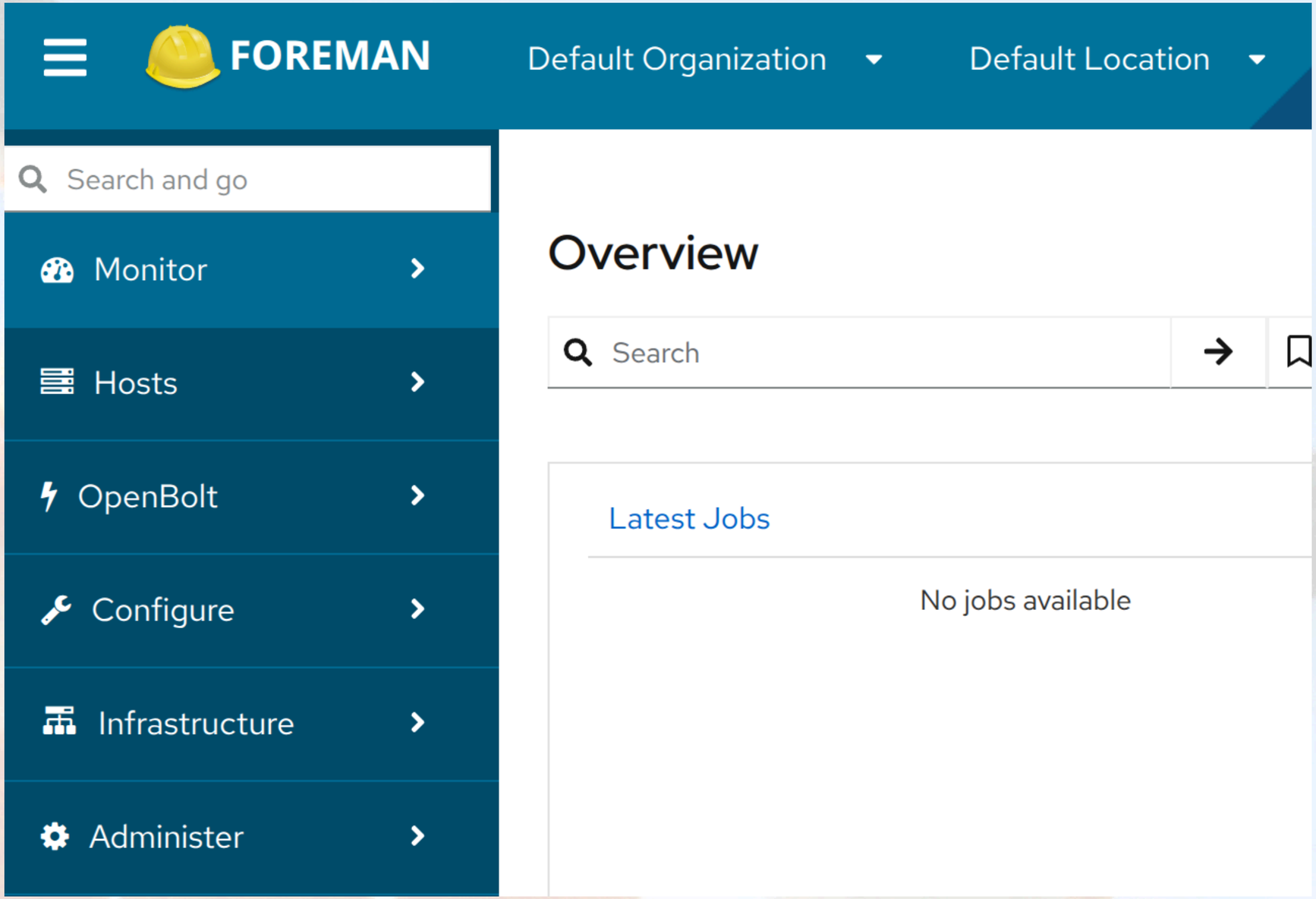

OpenBolt

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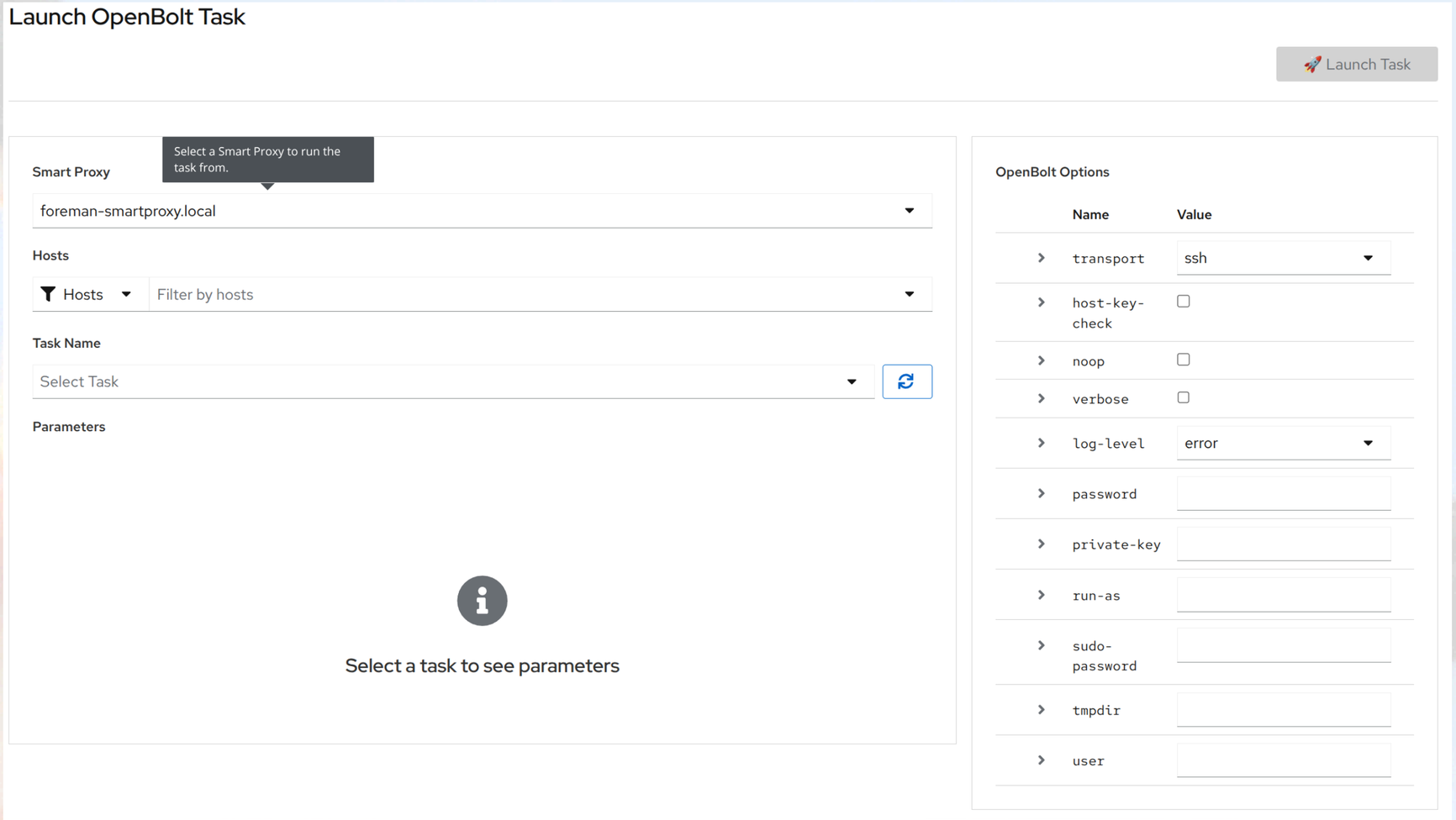

OpenBolt

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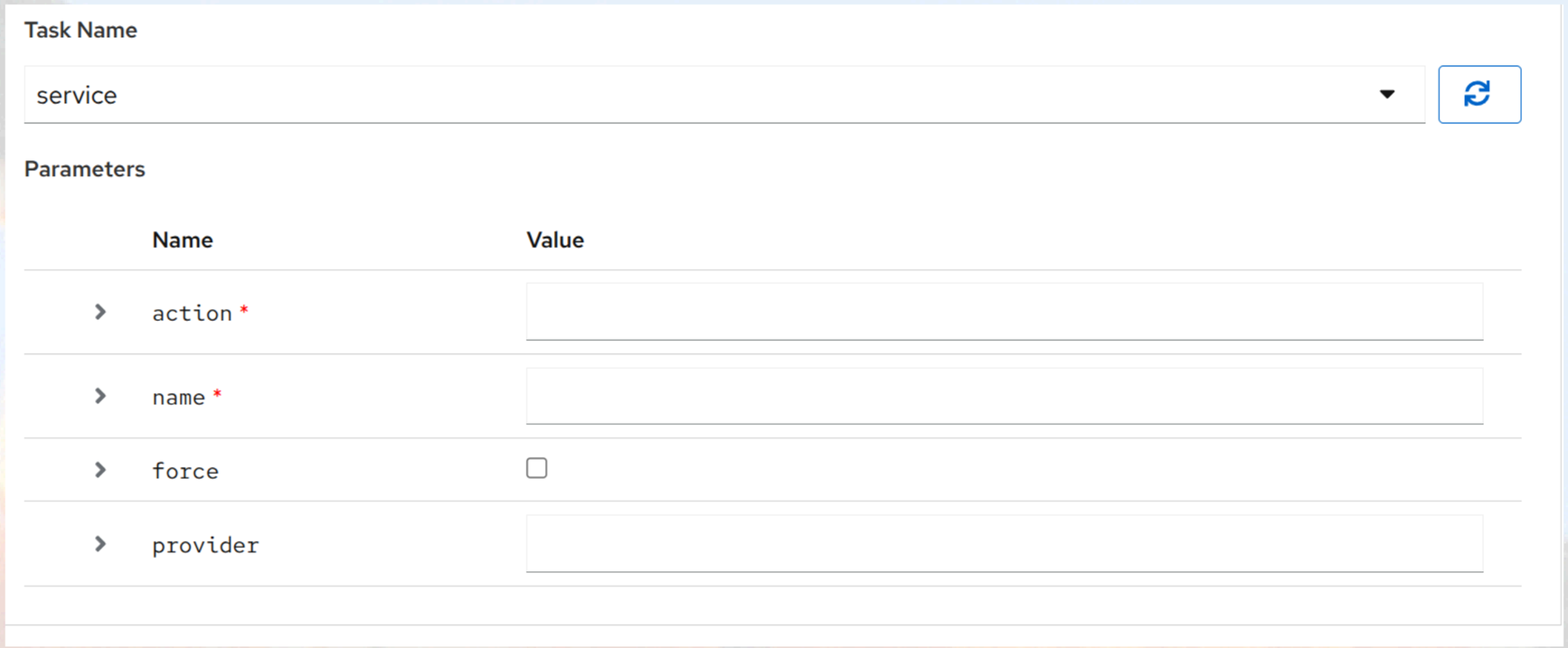

OpenBolt

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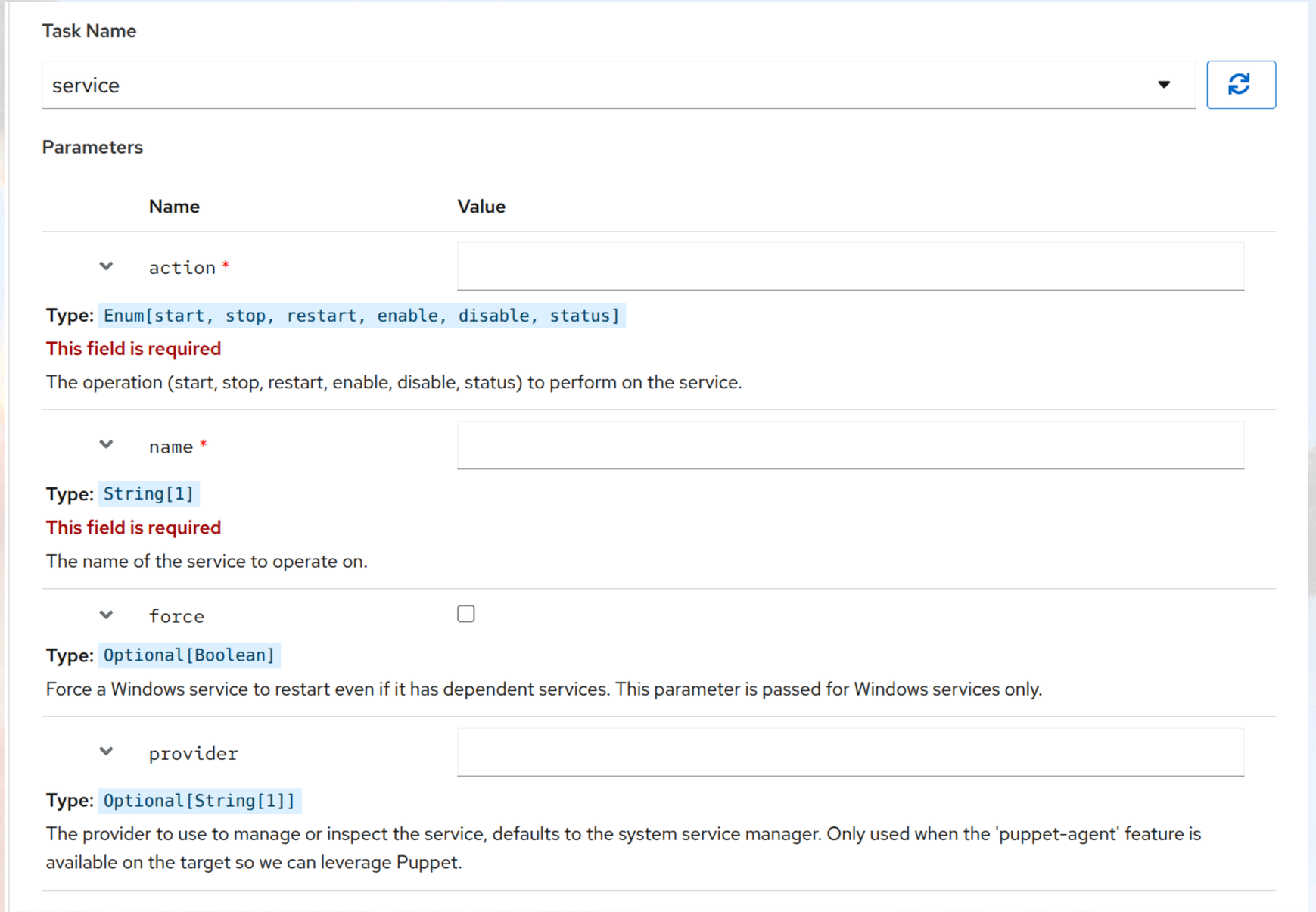

OpenBolt

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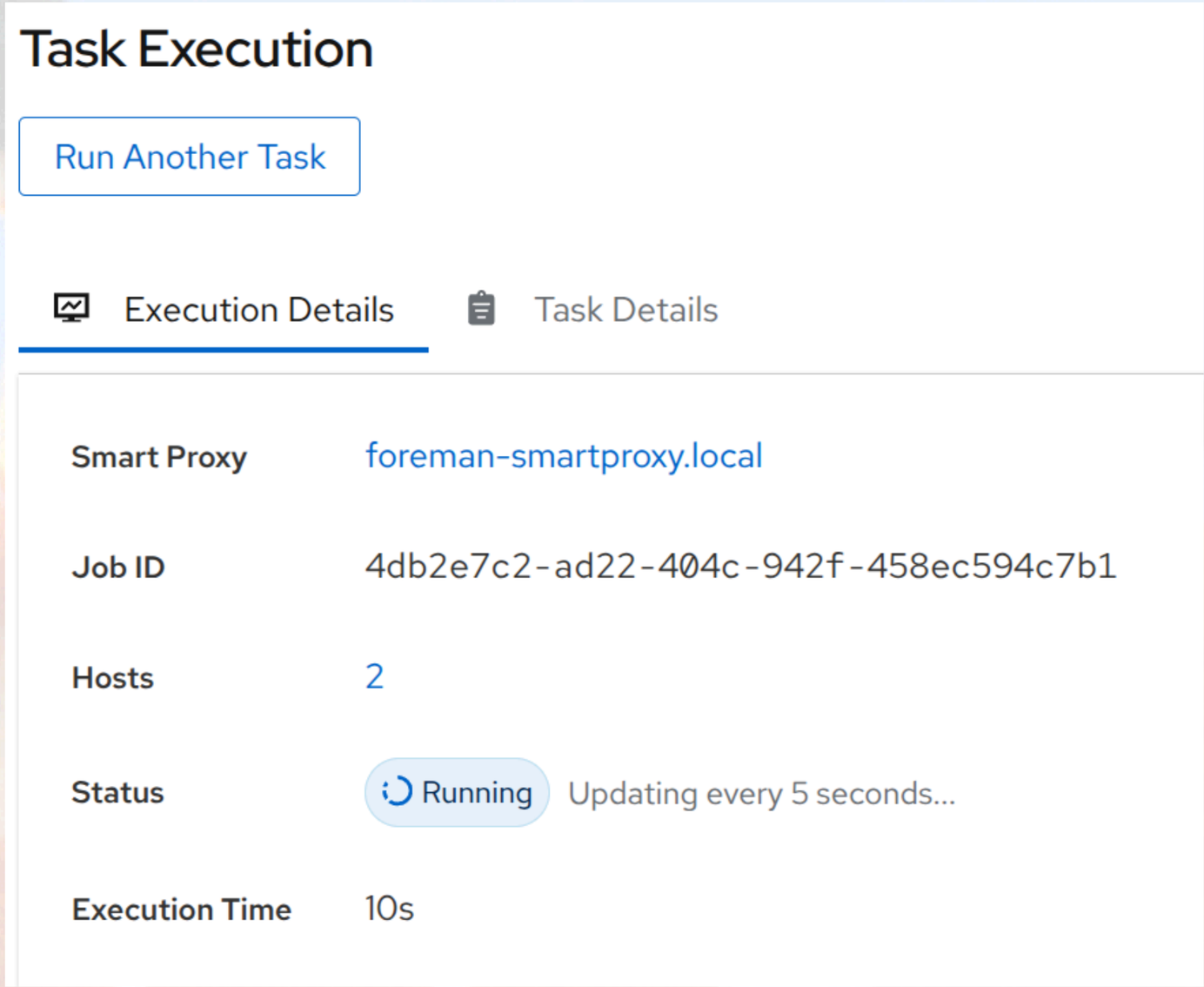

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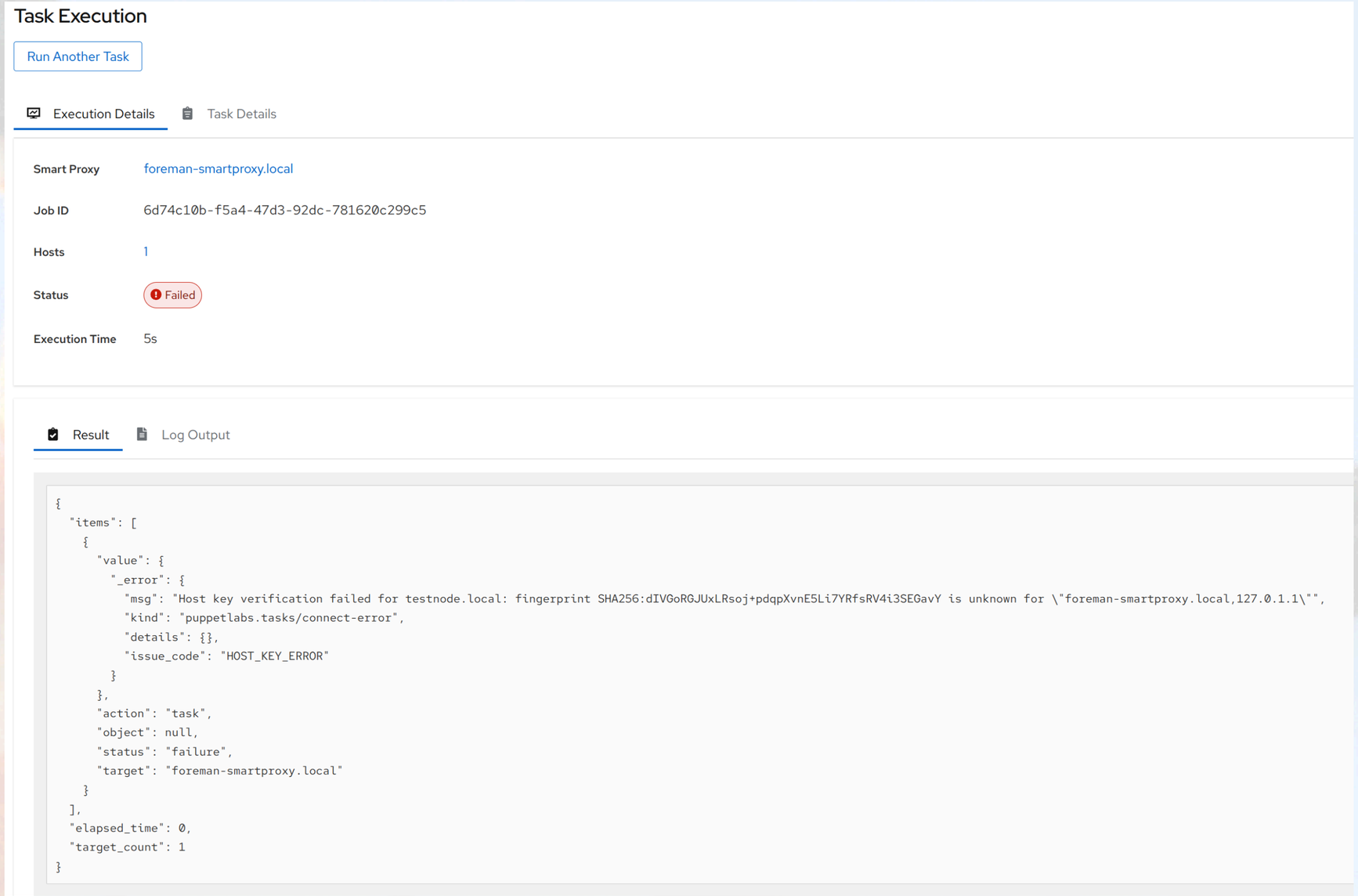

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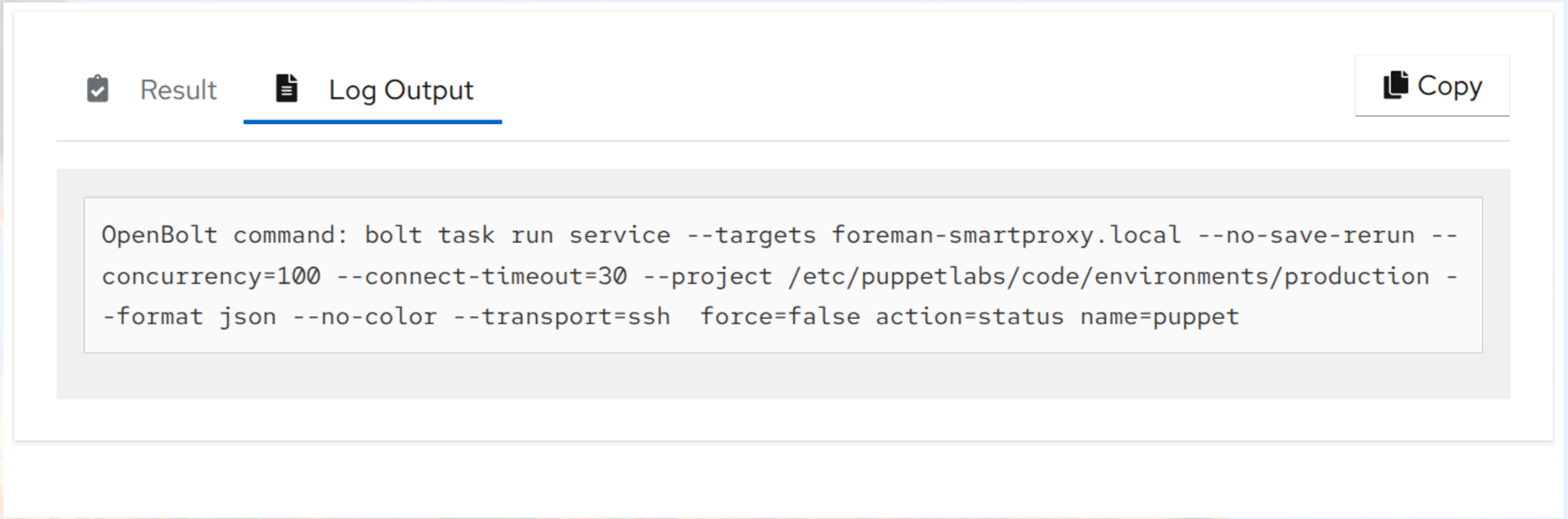

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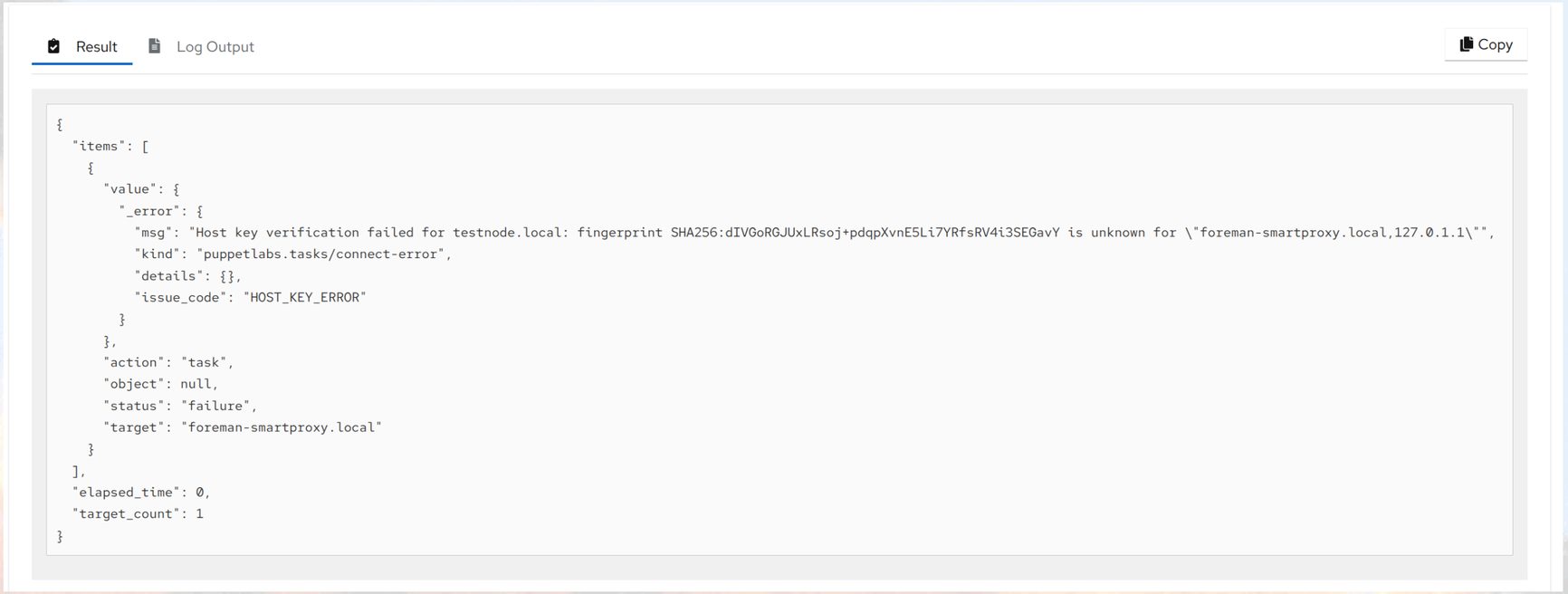

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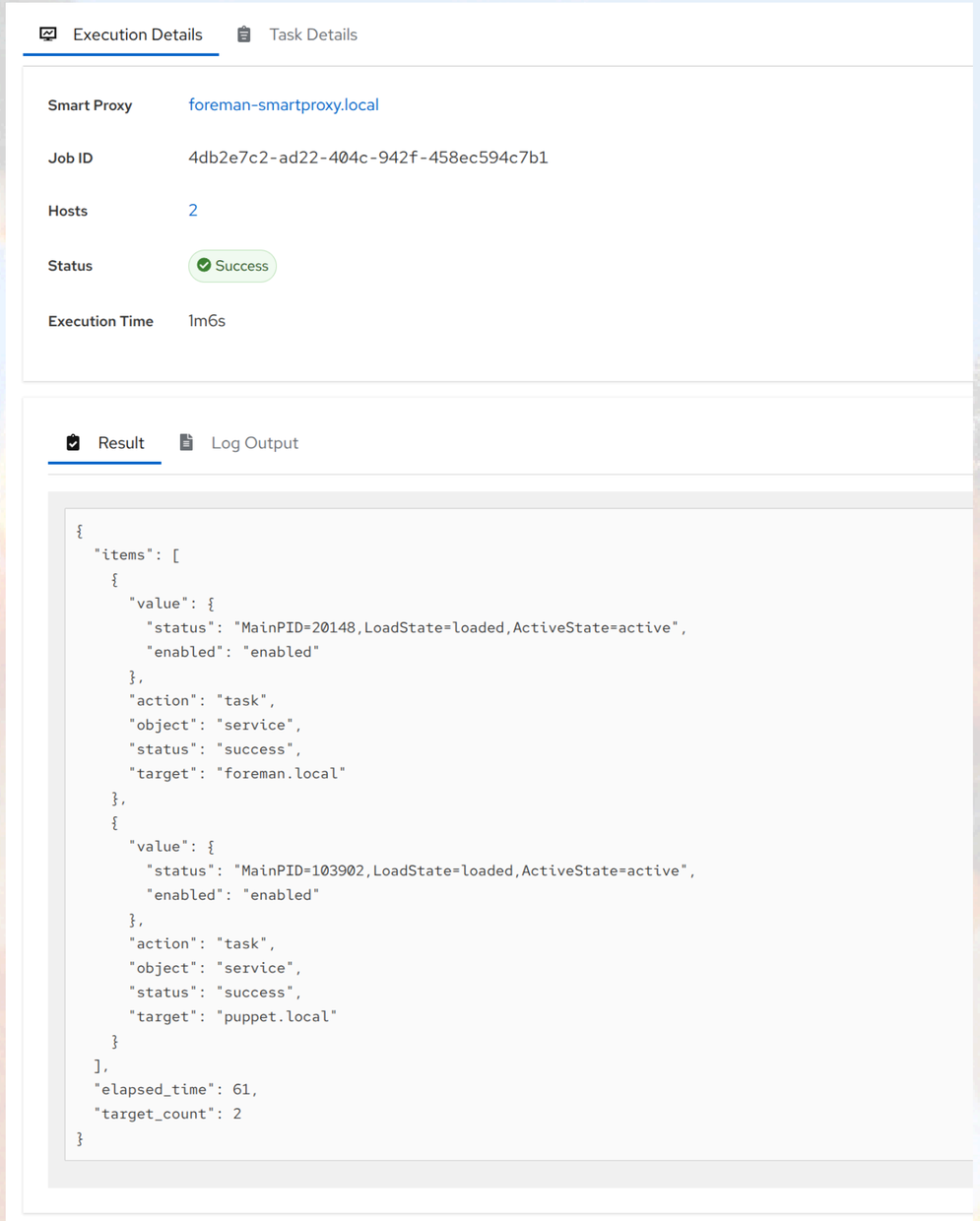

OpenBolt

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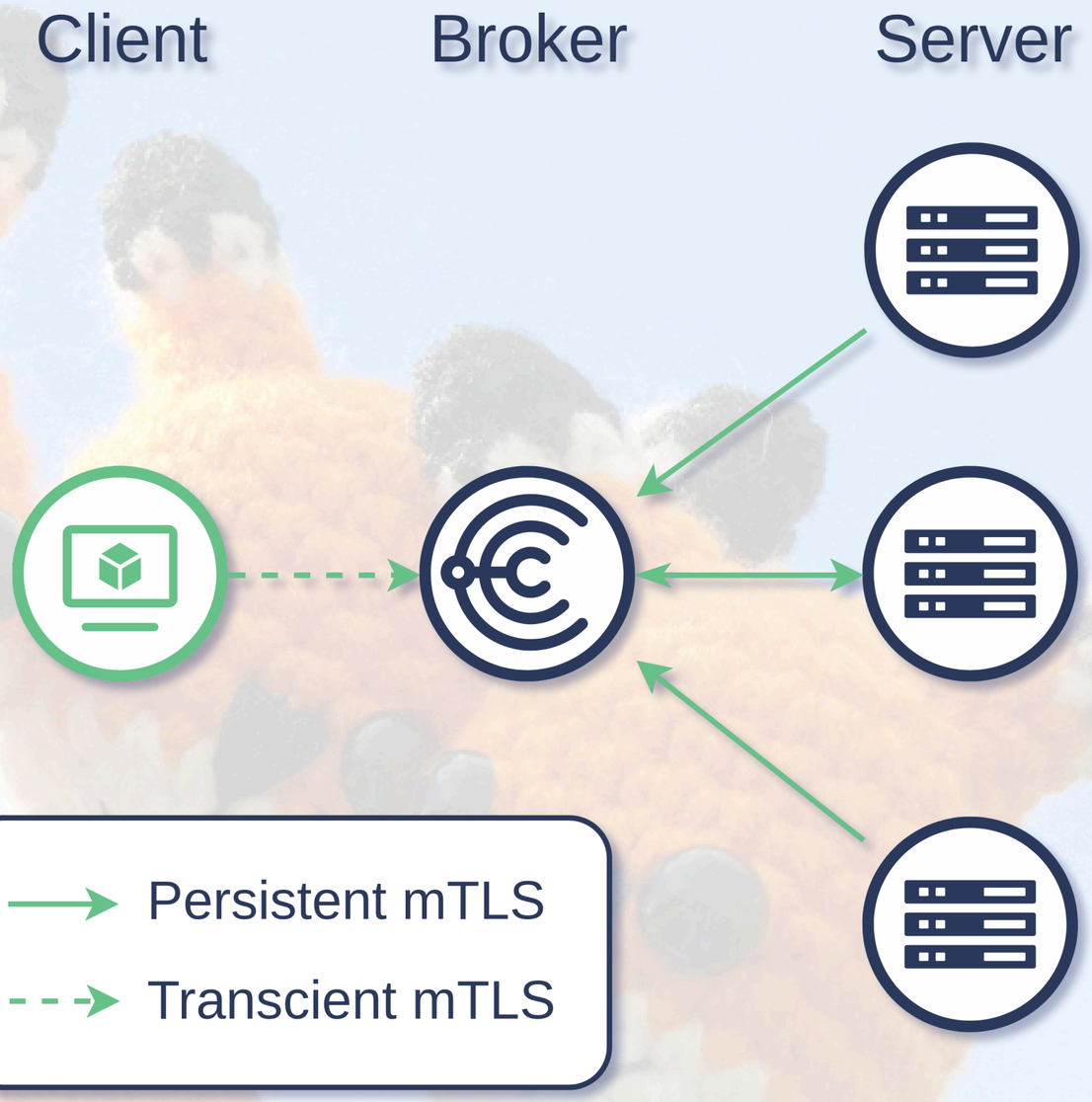
Choria?!



- Choria Orchestration System

OpenBolt

Tasks?!

Plans?!

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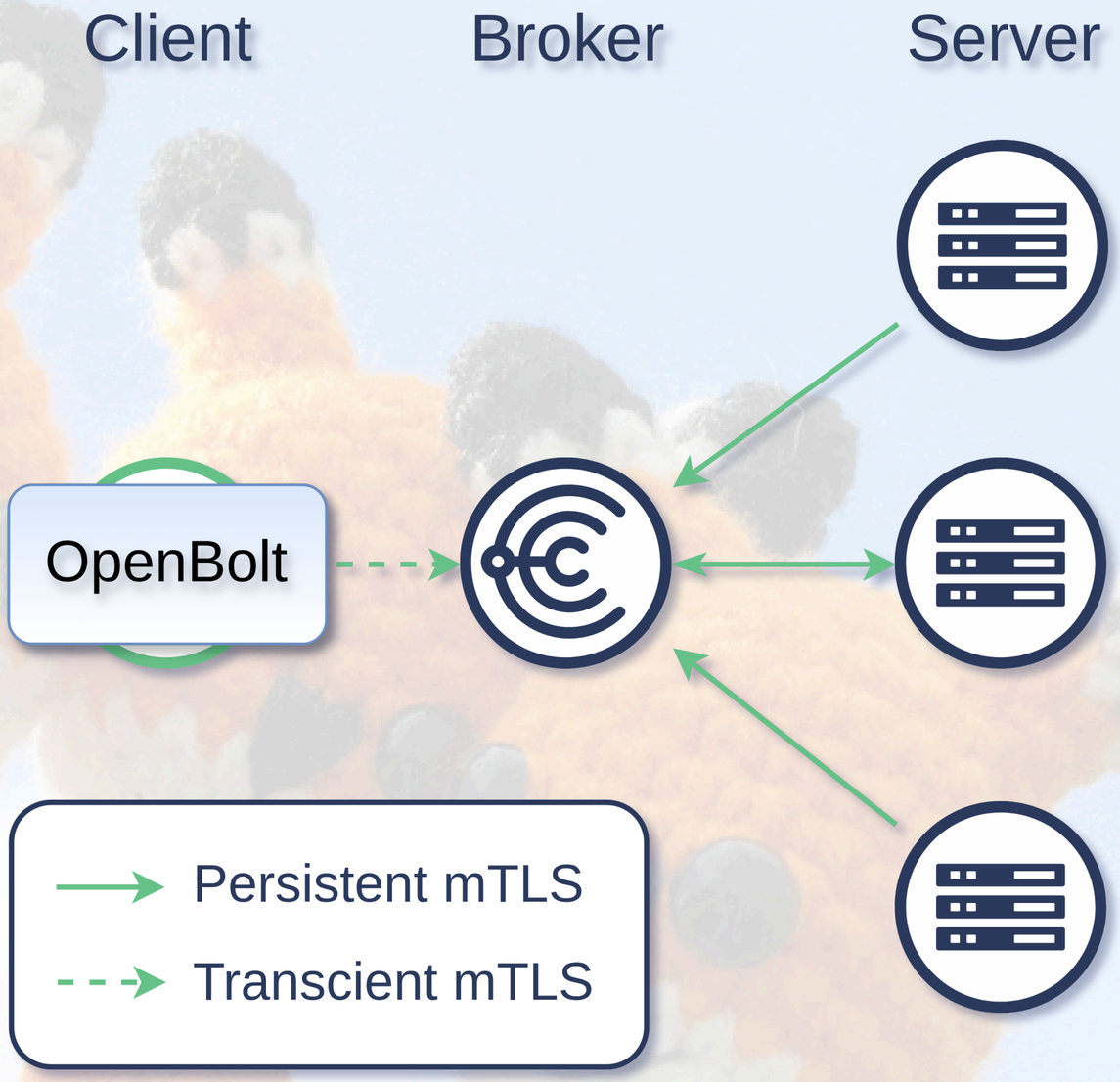
Choria?!



- Choria Orchestration System

Conclusion

- OpenBolt is a great addition to the Foreman ecosystem
  - Makes it easy to reuse existing Tasks (and soon Plans)

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- Choria provides almost infinite scaling and opposite firewalling

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  - Makes it easy to reuse existing Tasks (and soon Plans)
- Choria provides almost infinite scaling and opposite firewalling
- Please join our IRC/Slack to provide feedback
- For feedback: `bastelfreak` on IRC/ Slack or tim@bastelfreak.de
- This talk and previous ones: github.com/bastelfreak/talks

Thanks for your attention!

Config Management Camp