# Tim Meusel

DevOps Engineer

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\$\infty \text{github.com/bastelfreak}\$

\$\infty \text{Driving License}\$
\$\disp\ 1993-04-15\$

DevOps is all about empathy
ROB NELSON

Skills

**Expert Skills** 

Software Puppet\*, installimage\* Operations Archlinux<sup>†</sup>, Gentoo, QEMU/KVM

Development

Languages C#, Python, Shell/Bash, Ruby Frameworks RSpec, Beaker, Sinatra, Rails

Databases MySQL, PostgreSQL Methods Object Oriented Programming,

MVC, Unit Tests, UML

Source Git, SVN Tools Bitbucket, GitHub, Travis CI, Jenkins

Management

Systems and Networks Administration

Web Apache, Lighttpd, Nginx, Varnish, Monitoring ELK-Stack, Zabbix, Munin,

Squid, proftpd, HAProxy Prometheus, Graphite, Grafana,

Graylog, Collectd

Mail Postfix, Dovecot, Amavis Backup Duply, Borg

Installation / Bootstrapping, Kickstart, Puppet\*, Infrastructure ISC-DHCPd, OpenVPN, hpa-tftpd,

Deployment installimage\* Software NFS, Marmoset, OpenLDAP

Operating GNU/Linux (Debian, Ubuntu, Databases MySQL, PostgreSQL

Systems RedHat, Archlinux<sup>†</sup>, Gentoo),

FreeBSD, pfSense

**PowerDNS** 

Virtualization VMWare, Docker, QEMU/KVM, Security SSL, PGP/GnuPG, OpenSSH,

libvirt, Parallels Cloud Server SELinux, Threat Modeling, Server

hardening

DNS Unbound, Bind, Dnsmasq, Networking Cisco routing and switching,

VLANs, Network design and

security, IPv6

<sup>\*</sup>Maintainer

<sup>&</sup>lt;sup>†</sup>Contributor

**DevOps Engineer**, *Hosteurope GmbH* (acquired by GoDaddy EMEA), Cologne.

DevOps Engineer, System Administrator

- DevOps Engineer:
  - Architected and deploy a scaleable ELK-Stack with Graylog;
  - Planned and executed migrations from Puppet versions 3 to 4 to 5;
  - Wrote and contributed to 120+ public Puppet modules, (includes facts, types & providers, unit and acceptance tests);
  - Designed and built a technical fabric to provision physical servers for multiple brands;
  - Planned the architectured of a cloud platform based on Qemu and Kubernetes, including a scaling network topology;
  - Provided self services for developers with Puppet (Consul, Vault, Kafka, Databases, Firewalling, Monitoring);
  - Packaged software for Archlinux. Operate and improve the package build systems and package repositories;
  - Mentored students for their Bachelor and Master thesis;
  - Product Owner for multiple infrastructure services.
- System Administrator:
  - Operated multiple Puppet-managed Cloud platforms with more than 3300 nodes;
  - Tested and evaluated new hardware regarding power consumption, efficiency and cloud instance density;
  - Enhanced the hardware monitoring to predict disk failures;
  - Automated and optimized the consolidation of legacy platforms.

#### **Systems Engineer**, *Hetzner Online AG*, Falkenstein.

Led a cloud platform, maintained datacenter infrastructure

- Rebuilt Puppet infrastructure for 1500+ servers;
- Migrated servers from Puppet 2 to 3;
- Implemented cgroups for resource management in a cloud environment;
- Operated the base infrastructure of a datacenter with 200,000+ servers, including authoritative and recursive nameservers, installation environment, package mirrors, DHCP and NFS clusters;
- Responsible for the cloud platform. Maintained, developed and improved the current platform with 22,000+ virtual instances, including capacity management;
- Planned and evaluated a new cloud platform with distributed and local storage;
- Provided third level support for the cloud- and datacenter infrastructure systems;
- Monitored of a fleet of servers with zabbix;
- Wrote technical documentation;
- Developed a scaleable monitoring solution with autodiscovery based on Zabbix.

# Wox Pupuli Project Management Committee, Vox Pupuli, Internet.

Strategic Development, Leadership, Community Representative

- Provide feedback, guidance and knowledge transfer across 120+ contributors;
- Onboarding for new community members;
- Mitigated security issues in Puppet modules;
- Kept track of outdated module/gem dependencies and regular releases;
- Represented the community at events and conferences;
- Escalated bugs and feature requests from the community to Puppet Inc.

**Puppet Contributor**, *Puppet Inc*, Internet.

Development, bugfix and documentation

- Developed and realized a migration plan from Puppet 3 to 4;
- Reviewd and merged incoming patches for 150+ Puppet modules and tools;
- Maintained the test matrix for 100+ Puppet modules and do release management;
- Provided patches and reviews for all major Puppet Inc. owned modules;
- Migrated modules to Puppet 4.
- Developer and Maintainer, VirtAPI-Stack, Internet.

Architecture design and development

- Designed and documented an API for a cloud infrastructure;
- Maintained a public fork of the installimage;
- Created a live linux image for rescue operations (LARS).

#### Education

Equivalent to Bachelor of Engineering for Computer Science, Heinrich-Hertz-Europakolleg der Bundesstadt Bonn, Valedictorian.

#### Certifications

2016–2017 Cisco Certified Network Associate, Cisco Inc.

ITIL® v3 Foundation Examination, AXELOS Limited.

Puppet Fundamentals Administrator, Puppet Inc.

### **Publications**

2013

Datawarehousing for Cloud Computing Metrics, https://bastelfreak.de/thesis-de.pdf.

Analyse software to measure cloud metrics in a datawarehouse style (mentored by David Schmitt, written in German)

2016–2017 **Conference Speaker**, https://github.com/bastelfreak/talks.

Speaker on conferences and meetups about DevOps culture and community management

2015-2017 **Network Design Principles**, https://github.com/bastelfreak/talks.

Taught multiple lessons about network design in datacenters and carriers, including routing, switching, network-security and IPv6

**VirtAPI Paper**, https://bastelfreak.de/virtapi.pdf.

Documentation about a self-designed API to manage a QEMU cloud environment with Puppet

# Languages

German First language

English Fluent

2015

Daily practice, conference talks and lectures given in English