# Tim Meusel

DevOps Engineer

Sportplatzstraße 93
51147 Köln

\$\infty +49 (0) 163 7015493

\sim \tim@bastelfreak.de

\$\infty \ting.com/profile/Tim\_Meusel

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

\$\infty \text{Driving License}\$

\$\ddash 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:
  - Architect and deploy a scaleable ELK-Stack with Graylog;
  - Plan and execute migrations from Puppet versions 3 to 4 to 5;
  - Write and contribute to 120+ public Puppet modules, (including facts, types & providers, unit and acceptance tests);
  - Design and build a technical fabric to provision physical servers for multiple brands;
  - Plan the architecture of a cloud platform based on Qemu and Kubernetes, including a scaling network topology;
  - Provide self services for developers with Puppet (Consul, Vault, Kafka, Databases, Firewalling, Monitoring);
  - Package software for Archlinux. Operate and improve the package build systems and package repositories;
  - Mentor students for their Bachelor and Master thesis;
  - Product Owner for multiple infrastructure services.
- System Administrator:
  - Operate multiple Puppet-managed Cloud platforms with more than 3300 nodes;
  - Test and evaluate new hardware regarding power consumption, efficiency and cloud instance density;
  - Enhance the hardware monitoring to predict disk failures;
  - Automate and optimize 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;
- Mitigate security issues in Puppet modules;
- Keep track of outdated module/gem dependencies and regular releases;
- Represent the community at events and conferences;
- Escalate 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;
- Review and merge incoming patches for 150+ Puppet modules and tools;
- Maintain the test matrix for 100+ Puppet modules and do release management;
- Provide patches and reviews for all major Puppet Inc. owned modules;
- Migrate modules to Puppet 4.
- Developer and Maintainer, VirtAPI-Stack, Internet.

Architecture design and development

- Design and document an API for a cloud infrastructure;
- Maintain a public fork of the installimage;
- Create 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

2015

**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

## Foreign Languages

English Fluent Daily practice, conferences given in English