

# Tim Meusel

DevOps Engineer

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Driving License

*DevOps is all about empathy*

ROB NELSON

## Skills

### Expert Skills

Development 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,  
Squid, proftpd, HAProxy

Monitoring ELK-Stack, Zabbix, Munin,  
Prometheus, Graphite, Grafana,  
Graylog

Mail Postfix, Dovecot, Amavis

Backup Duply, Borg

Installation / Bootstrapping, Kickstart, Puppet\*,  
Deployment installimage\*

Infrastructure ISC-DHCPd, OpenVPN, hpa-tftpd,  
Software NFS, Marmoset, OpenLDAP

Operating GNU/Linux (Debian, Ubuntu,  
Systems RedHat, Archlinux<sup>†</sup>, Gentoo),  
FreeBSD, pfSense

Databases MySQL, PostgreSQL

Virtualization VMWare, Docker, QEMU/KVM,  
Parallels Cloud Server

Security SSL, PGP/GnuPG, OpenSSH,  
SELinux, Threat Modeling, Server  
hardening

DNS Unbound, Bind, Dnsmasq,  
PowerDNS

Networking Cisco routing and switching,  
VLANs, Network design, IPv6,  
Network security

\*Maintainer

<sup>†</sup>Contributor

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## Experience

2014

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### **DevOps Engineer**, *Hosteurope GmbH then GoGaddy EMEA*, Cologne.

DevOps Engineer, System Administrator

- DevOps Engineer:
  - Operate a fleet of 2600+ Puppet-managed servers;
  - Architecture and deploy a scaleable ELK-Stack with Graylog;
  - Plan and execute migrations from Puppet version 3 to 4;
  - Write and contribute to 100+ Puppet modules (mostly public), including plugins (facts, types & providers), with unit and acceptance tests;
  - Design and build a technical fabric to provision physical servers for multiple brands;
  - Package software for Archlinux. Operate and improve the package build systems and package repositories.
- System Administrator
  - Operate multiple Cloud platforms with more than 3300 nodes. Provide third level support;
  - 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.

2012  
2014

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

Leading a cloud platform, maintaining datacenter infrastructure

- Rebuild of a 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;
- Maintained, developed and improved the current cloud platform with 20,000+ virtual instances;
- Planned and evaluated a new cloud platform with distributed and local storage;
- Provided third level support for the cloud environment and the datacenter infrastructure systems;
- Monitored of a fleet of servers with zabbix;
- Wrote technical documentation.

2016

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

Strategic Development, Leadership, Community Representative

- Onboarding for new community members;
- Mitigate security issues in Puppet modules;
- Keep track of outdated software dependencies;
- Represent the community at events and conferences;
- Develop and realize a migration plan from Puppet 3 to 4;
- Escalate bugs and feature requests from the community to Puppet Inc.

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2015 **Puppet Contributor**, *Puppet Inc*, Internet.

Development, bugfix and documentation

- Review and merge incoming patches;
- Deal with (Security-) Issues, bug reports, and feature requests;
- Migrate modules to puppet 4.

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2015 **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).

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## Education

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2014–2018 **Equivalent to B.Eng. Computer Science**, *Heinrich-Hertz-Europakolleg der Bundesstadt Bonn*.

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2009–2012 **Training as IT specialist for system integration**, Local police station.

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2003–2009 **Secondary school leaving certificate**, Realschule Heessen.

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## Certifications

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2016–2017 **Cisco Certified Network Associate**, *Cisco Inc*.

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2017 **ITIL® v3 Foundation Examination**, *AXELOS Limited*.

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2013 **Puppet Fundamentals Administrator**, *Puppet Inc*.

Puppet IT automation software

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## Publications

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2017 **Datawarehousing for Cloud Computing Metrics**, <https://bastelfreak.de/thesis-de.pdf>.

Analyse software to measure cloud metrics in a datawarehouse style

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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

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2015 **VirtAPI Paper**, <https://bastelfreak.de/virtapi.pdf>.

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

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2012 **Design and deploy a testenvironment for updates at a police station**, <https://bastelfreak.de/Projektdokumentation.pdf>.

Setup a QEMU hypervisor with archipel as orchestrator on a Gentoo platform

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## Foreign Languages

English    Fluent

*Daily practice, conferences given in English*