

Tomasz Michal Klosinski

16 Avenue du Jura
01210 Ferney-Voltaire
France
+33 755 77 37 37

tomasz.klosinski@protonmail.ch
PGP: [E75959Bo](#)

linkedin.com/in/tklosinski

We do not act rightly because we have virtue or excellence, but we rather have those because we have acted rightly. We are what we repeatedly do. Excellence, then, is not an act but a habit.
—Aristotle, *Nicomachean Ethics*

I am B.A. graduate of Computer Science and B.A. graduate of Business Management, both held in English, at University of Lodz, and M.A. graduate of IT (Databases) at Polish-Japanese Academy of Information Technology. I have been working in Linux world for last 4 years and I have been passionate Linux user for over 13 years. My current position is System Engineer in DevOps and Infrastructure teams at CERN Control Center.

AREAS OF INTEREST

DevOps, Continuous Delivery
Cloud Computing, IT Infrastructure
Management, Agile Methodologies

LANGUAGES

Polish (Native proficiency)
English (Full professional proficiency)
French (Limited professional proficiency)

Previous Experience

2015–2016
CERN, *Project Associate*
Geneva

At CERN Control Center I have been working in support team of over 2000 (OpenStack) VMs/desktops and servers (60% real-time kernel). Most of the servers that I have been taking care of were Linux machines providing the mission critical software (code base of over 10 MLOC of Java and 500 kLOC of C++ and C, structured in roughly 1000 projects) for the operation of LHC and other accelerators. Along with my daily support and troubleshooting tasks (for around 70 accelerator operators and 200 software developers), I have been involved in numerous activities in System Administration Modernisation project.

2014–2015
LINUX POLSKA, *Solution Architect*
Warsaw

At Linux Polska I have worked on a continuous delivery system for building rpm packages. I have contributed also to the organization of the biggest Open Source event in Poland (which Linux Polska is co-organizing every year in May): Open Source Day.

2011–2014
IMPAQ, *Software / System Engineer*
Warsaw

My career as a System Engineer at IMPAQ can be split into two periods. For first half year I have been member of a support team of RHEL-based telco applications for international cellular networks. For another 1.5+ year I have worked for Machine-to-Machine, Cloud Computing and Big Data Business Practice (Department).

2010–2011
OUTBOX, *Junior Consultant*
Warsaw

At Outbox I have worked on the development of the CRM system based on Oracle PeopleSoft platform for Telekomunikacja Polska SA.

Education

2010–2012
Polish-Japanese Academy of Information Technology
Databases, M.A.
Warsaw

2008–2011
University of Lodz
Business Management, B.A.
Lodz

2007–2010
University of Lodz
Computer Science, B.A.
Lodz

Cerification

[Red Hat Certified Engineer](#) (2014–2017)
[Red Hat Certified System Administrator](#) (2014–2017)

Skills

Linux, Bash
Ansible, Python, Vagrant, Chef, Ruby, Jenkins
Elasticsearch, Logstash, Kibana
MySQL, PostgreSQL
Apache HTTPD, nginx, HAProxy
Nagios, Zabbix

Latest projects

- 08/2015–Present

Process Management and Deployment (PoC) @ CERN, Beam Department, Control Group, Infrastructure Section

One of our most challenging projects at CERN BE-CO-IN section was to design and implement the Proof of Concept platform that could replace the former legacy service management solution, while keeping the interface and release-deploy-configure workflow for users backward compatible. The platform consisted of Python and Ansible-based tool for deployment of the accelerators controls applications, adding/removing the services to/from an applications database (to make them persistent across installations), and generating configuration for service monitoring and management (based on monit). Additionally, we provided a consistent solution for supplying the user specific checks for a service or group of services.

- 04/2015–Present

System Administration Modernisation Project @ CERN, Beam Department, Control Group, Infrastructure Section

The goal of System Administration Modernisation Project was to review current system administration practices and proposes and implement an integrated set of tools, procedures and workflows in order to bring the benefits of modern software development techniques to the maintenance of the control system computing environment. Particular emphasis was placed upon testing, staging and reproducibility of configurations.

My responsibilities in the project have been mostly related to the transformation of an old bash/awk/Python script-based configuration management to a modern Ansible-based solution. One of the main goals of the project was to replace inconsistent (and in some cases non-existing) version controlling systems of various parts of system configuration with a single git tree.

Some of the most interesting challenges I have faced included developing Ansible playbooks for:

- converting Python-based variable database into a set of Ansible variables
- converting specific sudo and SSH configuration for all machines
- implementing a filesystem monitoring system based on auditd, rsyslog, Elasticsearch, Logalike and Kibana (dashboards)
- massive analysis, comparison, fixing errors and making more consistent of kickstart files for all 2000+ machines (included also changes in PXE servers and generating kickstart files based on Ansible inventory file and CERN's internal sources of data about hosts)
- creating monit configuration for process management and monitoring.

- 05/2015–Present

Accelerator Project Exploitation Tools - Tracing @ CERN, Beam Department, Control Group, DevOps Section

Accelerator Project Exploitation Tools (ACET) provided the accelerator operations crew and operations experts with diagnostic and troubleshooting tools. ACET Tracing was a logging service based on Elasticsearch, Kibana and Logalike stack. Tracing served graphical views of logging data over time and was useful to visually diagnose problems, either by exploratory searches or pre-defined views of the data. Tracing used Elasticsearch for storage and indexing, and Kibana for data representation. Logalike served as an integration tool collecting the data from various sources; it processed, cached and finally sent the data as an input to Elasticsearch datastore.

My main responsibility in DO has been system administration activities regarding the Elasticsearch/Logalike/Kibana clusters, that served as a database, search and dashboarding system for the accelerator controls applications and Linux servers' logging. Among numerous tasks in this area, I have been working on:

- preparation of the operation systems for the smooth clusters operation
- upgrade to ES 2.0 and Kibana 4
- creation of nginx reverse proxy configuration
- creation of monit configuration and checks for all ELK services
- a little bit of Java 8 programming (Logalike extension).

- 02/2015–03/2016

Automated Delivery Pipeline for building RPM packages @ Linux Polska

At Linux Polska I have had the opportunity to work with two great Linux professionals on an exciting DevOps project. The system we have been developing was an Automated Delivery Pipeline for building RPM packages based set of bash scripts combined into consistent chain of jobs (and eventual rollbacks) in Jenkins.

My responsibilities in the project included maintenance of the crucial services: Jenkins, GitLab. I have developed also multitude of mostly bash (and sometimes Python) scripts. I have managed also our git repositories. For building RPM packages we have used set of open source tools (mostly from Fedora Project): koji, mock, mash/createrepo, revisor/pungi, Sigul. Our testing environment was based on Vagrant, Packer, RHEV's virtual machines spawned during the testing phase and removed after it success or failure. We have monitored all services using Zabbix.

Rest of the projects and more detailed descriptions can be find at [linkedin.com/in/tklosinski](https://www.linkedin.com/in/tklosinski).