

Martin Bruchanov

SENIOR SITE RELIABILITY ENGINEER

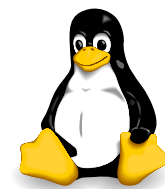
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Highlights of Qualifications

- 20 years experience in Linux and UNIX system development and administration for critical environments.
- Experienced cloud systems, architecture, security and development operations leader.
- Over 12 years experience in multicultural and distributed teams.
- Organized and detail-oriented; with strong analytical skills.
- Energetic team worker with good communication skills.

Areas of Expertise Include

- **Programming languages:** GCC chain, ANSI C/C99, C++ (intermediate), Go (beginner)
- **Scripting languages:** shell/bash, Python, perl, PHP, JavaScript, Ruby, sed, AWK, lua (beg.)
- **GNU/Linux and Unix administration:** CentOS/RedHat, Fedora, Ubuntu, HP-UX, Darwin (OS X), Fuzix OS
- **Cloud:** Amazon Web Services (AWS), OpenStack, VMware vCloud Director, Azure
- **Configuration Management:** Salt-stack, Chef + AWS OpsWorks, Vagrant, Terraform
- **Virtualization and container services:** AWS ECS, VMware, VirtualBox, Docker, HPVM
- **Security:** SELinux, Metasploit, Nessus; HIPPA, PCI compliance
- **Database services:** PostgreSQL, MySQL, MongoDB, Oracle
- **Build tools:** Maven, Jenkins, Makefile, cmake, RPM/rpmbuild
- **Version control:** git, Perforce, CVS, github, Bitbucket, JIRA
- **Monitoring tools:** CloudWatch, collectd + InfluxDB + Grafana, logstash + ElasticSearch, Datadog, PaperTrail
- **Network administration:** routing, iptables/firewalld, SSH, Apache, Nginx, Tomcat, DNS, FTP, CIFS, NFS, Squid, OpenVPN
- **Network monitoring and troubleshooting:** tcpdump, nmap, netcat, WireShark; gdb, strace
- **Graphics and typesetting:** GIMP, Inkscape, ConTeXt, L^AT_EX, MetaPost, MetaFun
- **Web frontend:** HTML5, CSS3, PHP, JavaScript (basic)
- **Data representation and APIs:** XML, JSON, YAML; REST, SOAP



Professional Experience

Cisco Systems Inc. – Halifax, Nova Scotia

SENIOR SITE RELIABILITY ENGINEER

07/2021 – present

- Managing distributed highly available cybersecurity application infrastructure.
- Orchestrating AWS infrastructure with Hashicorp stack (Packer, Terraform, Nomad, Consul, Vault).
- Administration of several ElasticSearch clusters for data storage and log consolidation (ELK).
- Developing automation scripts in bash and Python for monitoring tools and systems integration.
- Operating and performing troubleshooting of orchestration, configuration, and deployment and build tools (Salt-Stack, Jenkins).
- Supporting day-to-day operations for the Linux and AWS cloud environment along with participation in on-call rotation.



Analyze Re Inc. – Halifax, Nova Scotia

03/2017 – 06/2021

SENIOR TECHNICAL OPERATIONS ENGINEER

- Cloud infrastructure and site reliability lead.
- Managed and supervised a team of TechOps engineers.
- Ownership of AWS computational environment (EC2, ECS, RDS, ELB, CloudWatch).
- Leadership of change and release management.
- Automation tools development with bash and Python.
- Analysed and implemented cybersecurity requirements and policies.
- Container virtualization with Docker, Docker Swarm, and AWS Elastic Container Service.
- Configuration management with Salt-stack and Jinja2 templates.
- Monitored fault-tolerant and distributed systems. Using tools such as Papertrail, PagerDuty, Datadog, etc.
- Managed and maintained customer-specific application configuration.



2TheTeam LLC – New York, USA (remote consulting)

02/2017 – 08/2019

CLOUD SOLUTION ARCHITECT

- Designed AWS infrastructure architecture for web-based application: load balancing and support for continuous deployment.
- Developed configuration management with OpsWorks, Chef and Ruby, Python automation tools.
- Implemented monitoring and log consolidation with CloudWatch.
- Implemented infrastructure and operating system security and hardening.



Athletigen Technologies Inc. – Halifax, Nova Scotia

10/2015 – 03/2017

DEVOPS ENGINEER

- Administered Amazon Web Services (AWS) cloud environment.
- Developed AWS utilities with bash, Ruby and Python (with boto3 API).
- Maintained HIPPA compliant environment, security management and auditing with Security Monkey.
- Owned site reliability engineering for Athletigen web; Tomcat, Apache, Nginx troubleshooting.
- Implemented container virtualization with Docker.
- Managed of OpsWorks configuration with Chef recipes and ruby.
- Integrated metrics collection with collectd, InfluxDB and Grafana or CloudWatch.
- Implemented network environment and OpenVPN configuration and administration.



ZOOM International – Prague, Czech Republic

11/2012 – 09/2015

GNU/LINUX SYSTEMS ENGINEER

- Programmed system utilities in Bourne-Again Shell (bash) and Python.
- Owner of GNU/Linux (CentOS, RHEL) architecture, product integration and development.
- Administered PostgreSQL database and its integration.
- Supervised code base, maven building and advanced RPM packaging.
- Facilitated training materials and sessions for ZOOM employees on Linux troubleshooting, bash programming and regular expressions usage (in English).
- Created technical documentation in English.



HEWLETT-PACKARD – Prague, Czech Republic

10/2008 – 10/2012

ITO SERVICE DELIVERY CONSULTANT

- Administered and integrated HP-UX and GNU/Linux for mission critical environments and disaster recovery as Tier 3 support (24x7).
- Developed system automation utilities in POSIX shell, awk and perl.
- Implemented virtualized architecture with HP Integrity Virtual Machines.
- Configured critical high-availability environments based on MC/ServiceGuard and Oracle RAC.
- Integrated Storage Area Networks using LVM, EVA disk arrays, FC switches, Samba/CIFS and NFS.
- Implemented HP-UX virtualized solution for SAP environment.



RACOM – Nové Město na Moravě, Czech Republic

06/2000 – 09/2002

SOFTWARE DEVELOPER

- Implemented company web platform in HTML, CSS, and PHP.
- Assembled hardware and software installation for desktops and servers based on Linux and MS Windows.
- Developed documentation system based on L^AT_EX, Makefiles and CVS.
- Created a software tool for the management of RACOM's wireless radio network, programmed in C, PHP, MySQL and Oracle databases.
- Created technical documentation for RACOM's radio products, using L^AT_EX, Makefiles and CVS.
- Developed shell scripts for Linux server administration.



Other Experience

Silicon Hill – Prague, Czech Republic

10/2002 – 09/2015

PROJECT SUPERVISOR, SOFTWARE DEVELOPER

- Developed web platform for supervising card access, used PHP, MySQL, Apache, bash.
- Built Meteosat reception station for EUMETCAST with web access and Meteosat imagery processing, used C, x86 assembler with SSE, PHP.
- GNU/Linux evangelist and propagator, member of organizing committee of *InstallFest* (Prague, CZ).



Personal Projects

GNU/Linux Guru

2014 – present

[HTTPS://GNULINUX.GURU](https://gnulinux.guru)

- New project to deliver Linux related tutorial and cheat sheets to the community.
- Current published materials include cheat sheets for bash, ViM, Python and networking.

Author

IMAGE COMMUNICATION ON SHORT WAVES

- An e-book for ham radio operators and radio listeners interested in special communication modes for image transmission – SSTV, radio facsimile (WEFAX) and digital SSTV (HamDRM).
- Available on <https://sstv-handbook.com>.



Classic Snake game clone in bash. Featured on Hackaday.

Blogger

2000 – Present

[HTTP://BRUXY.REGNET.CZ/](http://bruxy.regnet.cz/)

- Technical articles on my areas of interest including: programming, Linux, ham radio and Meteosat reception.

Education

- **Czech Technical University in Prague, Faculty of Electrical Engineering** 10/2002 – 06/2008
 - Master's degree (Canadian equivalency evaluated by WES, ref. no. 2562464/ab).
 - Major/Specialization: Electrical Engineering and Computer Science.
 - Thesis: *Image processing of Meteosat data.*
- **Technical secondary school SPŠ a VOŠ Žďár nad Sázavou** 09/1994 – 06/1998
 - Specialized in control systems and automation engineering.



Certifications

- **CLF-C01: AWS Certified Cloud Practitioner**; AWS, License W6L767HBJNQQ1GSJ, issued 2021.
- **Red Hat Certified System Administrator**; Red Hat, License 150-126-340, issued 2015.
- **HP0-P20: HP-UX 11i v3 System Administration**; Prometric, License TC0DUS501E, issued 2010.

Languages

- Czech, native language
- English, full professional proficiency (IELTS overall band score 7.0)
- Russian (русский язык), basic