Mihajlo Manojlov

Principal TechOps Engineer | Lead TechOps Engineer | Systems Administrator

72 350, Västerås, Västmanland County (SE)



SUMMARY

Voice over IP (VoIP)

Freeswitch

Session Border Controller

Asterisk

Experienced Principal Engineer and Lead Systems Administrator with over 20 years of expertise in designing, deploying, and managing IT infrastructures across on-premises, cloud, and hybrid environments. Deep expertise in Linux and Windows administration, infrastructure automation with Terraform and Ansible, and network architecture covering Layer 2/3, routing, switching, and segmentation. Strong background in VoIP and telephony (SIP, PBX/IPBX, SBCs), data center management, virtualization, Kubernetes, and database clustering. Extensive experience managing enterprise identity and access management, including Active Directory, Entra ID, and authentication solutions.

SKILLS **Systems Administration Infrastructure Automation Cloud Platforms** Master Advanced & DevOps Master **Linux System Administration** Amazon Web Services (AWS) Windows System Administration Terraform Terragrunt Ansible Microsoft Azure Amazon EKS Automation & Infrastructure-as-Code (IaC Server Administration **Configuration Management Data Center Operations** Hybrid Cloud Proxmox VMware Infrastructure Hyper-V **High Availability & Identity & Access** Networking & Virtualization Connectivity Management Advanced Advanced Advanced Microsoft Entra ID Network Architecture Routing High Availability Clustering **Active Directory** Layer 3 Layer 2 Kubernetes Virtualization Identity and Access Management (IAM) Network Administration AWS Identity and Access Management (Virtual Private Network (VPN) **Database Administration VoIP & Telephony Scripting & Automation** Advanced Advanced Advanced Session Initiation Protocol (SIP) **Database Administration** Bash Python Lua

High Availability Clustering

WORK EXPERIENCE (6)

Apr 2020 - Current

Principal TechOps Engineer at Northvolt

Stockholm, Sweden

Northvolt is a battery manufacturer that is building the world's greenest battery factory. I am responsible for the design and implementation of the IT infrastructure and building the team that will support the factory's operations.

- Built and led the TechOps team from the ground up, establishing best practices, workflows, and automation strategies to streamline IT operations and infrastructure management.
- Mentored and trained team members, fostering a culture of technical excellence, problem-solving, and continuous learning.
- Defined and implemented scalable processes, ensuring efficient deployment, monitoring, and maintenance of critical systems across cloud and on-prem environments.
- Designed, tested, and deployed IT infrastructure to support large-scale data production and connected battery operations
 in an Industry 4.0 environment.
- Applied IT engineering best practices to optimize automation, scalability, and reliability in manufacturing products and services.
- Collaborated with InfoSec teams to continuously monitor, test, and improve the security of IT and IoT infrastructure.
- Implemented Infrastructure as Code (IaC) automation (Terraform/Terragrunt/Ansible) for managing cloud and on-premises environments, reducing manual intervention.
- Worked closely with senior engineering and product development teams from leading technology providers, providing early adopter feedback on flagship products.
- Collaborated with DevOps teams to integrate automation across diverse systems, enhancing efficiency and scalability.
- Designed and integrated enterprise architecture to minimize manual administration and automate repetitive tasks, enabling IT teams to focus on innovation.
- Worked with cross-functional experts to support mass-scale manufacturing and the development of electrical batteries, ensuring seamless IT integration.
- Kept up with advancements in IT infrastructure, containerization, and automation technologies, driving innovation in manufacturing and connectivity.
- Designed and managed enterprise IT infrastructure across Linux and Windows platforms, including public cloud and onprem solutions.
- Built and managed on-prem data centers and virtualization environments (VMware/Proxmox), ensuring high availability and fault tolerance.
- Worked with distributed systems, microservices, and load balancing technologies to enhance system resilience and performance.
- Developed and maintained advanced automation scripts to solve complex technical challenges and streamline IT operations.
- Demonstrated a strong learning mindset, with a passion for solving problems using technology, especially open-source solutions.

Aug 2018 - Apr 2020

ICT Specialist at T-2 d.o.o.

Ljubljana, Slovenia

T-2 is a network provider that offers landline and mobile telephony services, digital TV and broadband Internet access to users everywhere in Slovenia, entirely through company-owned FTTH, VDSL and UMTS networks.

Engineered and optimized ITSP telephony infrastructure, solving complex challenges in core and edge systems.

- Managed, secured, and optimized physical and virtual server infrastructure to ensure high availability and performance.
- Architected and provided technical guidance for projects spanning telephony, networking, and system administration teams.
- Redesigned VoIP interconnection access and control infrastructure using Oracle SBC, enhancing security and interoperability.
- Implemented a public SIP TLS access and trunking solution, significantly improving customer reachability.
- Established a PKI infrastructure to issue certificates for custom Layer 2 telephony connectivity, strengthening security.
- Deployed high-availability Layer 2 access solutions using Mikrotik router clusters with DNS load balancing.
- Led virtualization efforts, migrating outdated Linux and Windows physical servers to modern virtualized environments.
- Designed and deployed multimaster and master-slave LDAP clusters to support BNG and email authentication services.
- Developed a custom Missed Call Alert (SMS) solution leveraging FreeSWITCH.
- Designed and implemented a multi-tenant IP PBX system, enabling advanced Class 5 telephony services.
- Integrated Microsoft Teams Direct Routing, enabling local number connectivity and seamless business communication.
- Developed a SIP traffic data analyzer using open-source tools, reducing call flow troubleshooting time by 30x.
- Automated production and development server provisioning with Ansible, streamlining deployment and configuration management.

Apr 2007 - Jul 2018

Technical Specialist at CDE nove tehnologije d.o.o.

Ljubljana, Slovenia

Customer Engagement Platform, CIM solutions, Contact center solutions, Unified communications, WebRTC development

- Designed, deployed, and maintained IT systems and network infrastructure.
- Implemented virtualization and cloud solutions, migrating existing legacy infrastructure.
- Provided advanced 2nd and 3rd level support for complex IT and network issues, resolving critical incidents.
- Developed and enforced IT security strategies, ensuring compliance with best practices and regulatory requirements.
- Actively participated in GDPR-related projects, redesigning data access and processing to enhance security and compliance.
- Researched and evaluated emerging VoIP technologies to expand Call Center and enterprise VoIP solutions.
- Designed and implemented disaster recovery strategies, high-availability clustering, and geolocation-based failover solutions.
- Redesigned network infrastructure using open-source solutions.
- Engineered a complex DNS infrastructure integrating Microsoft AD DNS with external multi-view open-source DNS.
- Adopted and deployed early virtualization technologies (Xen, VMWare, KVM, Hyper-V).
- Pioneered containerization adoption with OpenVZ, LXC, and Docker for microservices development.
- Developed a custom container provisioning system using Bash scripting and SQLite for complex Call Center solutions.
- Secured and maintained a multi-forest, multi-domain Microsoft Active Directory infrastructure for 300+ users.
- Implemented remote access solutions using open-source tools combined with Microsoft NPS and AD for IKEv2 authentication.
- Deployed internet access filtering and control using Squid, Privoxy, dnsmasq, and e2guardian with load-balanced clusters.
- Implemented load-balanced access control and reverse proxy solutions using HAProxy.
- Managed and maintained Linux packaging systems and secured APT/YUM repositories for internal company projects.

- Migrated legacy Windows applications to Wine, extending the lifecycle of specialized equipment.
- Designed and implemented redundant connectivity for remote offices using BGP over GRE over IPSec.
- Built and managed SAN/NAS clusters with ZFS, DRBD, and GlusterFS, maintaining enterprise storage solutions (HP/IBM SANs).
- Configured and maintained high-availability mail server clusters using open-source solutions with LDAP/AD authentication.
- Set up and maintained software version control systems (CVS, SVN, GIT) with shared databases and file storage for redundancy.
- Managed database clusters across both Microsoft and open-source platforms to support critical business applications.
- Developed disaster recovery solutions for call center infrastructure with cloud-based duplication for resilience.
- Automated key administrative tasks using extensive Bash scripting, with additional experience in Python, Perl, and Lua.
- Applied foundational C programming knowledge for low-level system and network optimizations.

Dec 2006 - Mar 2007

System Administrator at How-to d.o.o.

Ljubljana, Slovenia

How-to d.o.o. is a company that provides services in the field of information technology.

- Installed and maintained customers' IT systems and networks
- Designed and implemented new technologies, replacing outdated infrastructures
- Provided 2nd and 3rd level support for IT systems and networks

Apr 2003 - Oct 2006

System Administrator at FSOE Zurich

Zurich, Switzerland

A media company specializing in publishing news on its website, streaming TV content over the internet, and providing various media services.

- Installed and maintained IT systems and networks
- Website maintenance
- Audio and video editing
- Installed and maintained internet TV streaming servers

Aug 2002 - Mar 2003

System Administrator at FSOE Belgrade

Belgrade, Serbia

A media company specializing in publishing news on its website, streaming TV content over the internet, and providing various media services.

- Website maintenance
- Audio and video editing

LANGUAGES

Native speaker

Serbian/Croatian

Fluent

Slovenian

English

Fluent