

Berkay Güçlü

Linux System Administrator

Ankara, Turkey

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summary

System Administrator specializing in Linux and Kubernetes-based infrastructures, with a strong focus on automation and observability. Experienced in designing and managing reliable, scalable and sustainable systems for customer environments of every scale. Continuously improving my technical skills by closely following industry developments.

experience

Linux System Administrator · Özgür Yazılım A.Ş., Remote

June 2022 – Present

- Designed, deployed and managed highly available and scalable Kubernetes (RKE2, OpenShift, Talos Linux) cluster architectures; deployed and operated services such as GitLab, Jenkins, SonarQube, Nexus, Keycloak, Rocket.Chat, Jitsi, Nextcloud and OpenSearch on Rancher, and configured Longhorn backups.
- Installed, maintained and optimized Red Hat and Debian based Linux servers for clients across various industries and scales.
- Implemented server security, user authorization and system update policies; set up intrusion detection with Wazuh and OSSEC and vulnerability scanning with Nessus, and defined server hardening and firewall standards.
- Deployed Keycloak in high availability and integrated SSO with GitLab, Zabbix, Nextcloud and Rocket.Chat; provided centralized identity management with OpenLDAP.
- Built a HashiCorp Vault cluster backed by Consul; implemented secret injection into Kubernetes pods with Vault Agent and the Zabbix-Vault integration.
- Designed and managed virtualization platforms based on KVM/QEMU, VMware and Proxmox, including resource planning and high-availability configurations.
- Provided load balancing and high availability with Keepalived + HAProxy clusters and Envoy proxy.
- Automated maintenance, monitoring and deployment processes with Bash and Python, and built custom tools to reduce manual operations.
- Built fully automated CI/CD pipelines integrating Jenkins, SonarQube and Nexus, using Jenkins Configuration as Code and containerized jobs, and added code quality and security analysis with Fortify SCA and Dependency-Track.
- Set up PostgreSQL automatic failover with Patroni and Consul and disaster recovery with repmgr and Barman; managed Valkey Sentinel, Redis Cluster and MongoDB replica sets, and ran backup and migration work for databases including MySQL.
- Migrated from Elasticsearch to OpenSearch with cross-cluster replication (CCR) for disaster recovery; upgraded Graylog clusters from 2.x to 7.x and built log collection with Logstash, Nxlog and Graylog Sidecar.
- Deployed and managed Kafka and RabbitMQ clusters, and built a disaster recovery setup for Kafka based on cross-cluster replication with MirrorMaker.
- Installed and maintained management and monitoring tools such as Zabbix, Graylog/Rsyslog, Bacula and GitLab.

Part-Time Technical Staff · Ege University, İzmir

November 2021 – June 2022

- Diagnosed and repaired computer hardware and software issues and provided end-user technical support.
- Installed and configured network devices (routers, switches, access points, firewalls) and built and maintained LAN infrastructure.
- Installed and managed Windows Server 2012 R2 and 2016 environments, thin client and terminal systems.

projects

Personal infrastructure (homelab)

Infrastructure I built from scratch and keep evolving on a single Proxmox VE host to run my own services. This site runs on it too.

- 3-node RKE2 Kubernetes cluster on Proxmox VE 9, with kube-vip API VIP, Longhorn distributed storage and Traefik ingress.
- SNI-based routing with HAProxy; automatic certificates with cert-manager and Let's Encrypt DNS-01.
- Self-hosted mail server with Stalwart (SPF, DKIM, DMARC, reverse DNS) and webmail.
- Metrics with VictoriaMetrics, node-exporter and Grafana; monitoring and alerts with Uptime Kuma and ntfy; image update tracking with Diun.
- Local LLM server with llama.cpp and Open WebUI; Python automation that summarizes daily system reports.
- DNS-over-TLS with AdGuard Home and encrypted backups with restic.

skills

Linux	Debian	Red Hat / Rocky	Ubuntu	openSUSE	Arch	systemd	
	SELinux	firewalld					
Containers	Docker	Kubernetes	RKE2	OpenShift	Rancher	Talos	k3s
	kubeadm	Helm	Longhorn				
Virtualization	KVM/QEMU	Proxmox VE	VMware	VirtualBox			
Automation & CI/CD	Bash	Python	Ansible	Jenkins	GitLab	SonarQube	Nexus
	Dependency-Track						
Monitoring & logging	Zabbix	Grafana	Graylog	Rsyslog	VictoriaMetrics	Logstash	
	Kibana	OpenSearch Dashboards	Nagios XI	Sentry			
Identity & security	Keycloak	HashiCorp Vault	OpenLDAP	Wazuh	OSSEC	Nessus	
Databases	PostgreSQL	MySQL	MongoDB	Patroni	repmgr		
Search, cache & messaging	OpenSearch	Elasticsearch	Redis	Valkey	RabbitMQ	Kafka	
Web & application servers	Apache	Nginx	PHP-FPM	Tomcat	WildFly		
Backup & storage	Bacula	Barman	MinIO				
Networking	TCP/IP	DNS	PowerDNS	HAProxy	Keepalived	Envoy	WireGuard
	OpenVPN	Let's Encrypt					

teaching

Özgür Yazılım A.Ş.

- Linux System Administration 101-102-103-104
- Kubernetes 101
- Jenkins Workshop
- Ansible Workshop

Mustafa Akgül Free Software Camps 2023 – 2025

- Log Management and Analysis with Graylog
- GNU/Linux System Administration (Level 1)
- Server and Service Monitoring with Zabbix
- Kubernetes and Container Technologies

education

Management Information Systems (Distance Education)

Ankara University 2024 – Present

Computer Programming

Ege University 2020 – 2022

languages

- Turkish — native
- English — B2