

Onurhan Ak

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Summary

RHCSA-certified SysAdmin specializing in provisioning and automating Linux environments for data science and ML workflows. Used Ansible and Docker Compose for reproducible single-server deployments. Built custom tools in Python, Go, and Bash for ETL and automation.

Key Skills

Operating Systems: Red Hat Enterprise Linux (RHEL), CentOS, Ubuntu.

Scripting: Python, Golang, Bash.

Configuration & Automation: Docker, Ansible, CI/CD, Github Actions.

Security & Networking: SELinux, firewalld, SSH, NFS, DNS.

Project Management & Collaboration: Jira.

Certifications

AWS, Certified Solutions Architect

June 2025

Red Hat, Red Hat Certified System Administrator (RHCSA)

Apr 2025

Professional Experience

Linux System Administrator & Data Engineer. University of British Columbia — Remote | Nov 2022 - Present.

- Independently supported a research team running scientific Python workflows on HPC and Linux systems.
- Provisioned and maintained reproducible development environments using Apptainer, Docker, and Ansible.
- Standardized provisioning with Ansible and Docker Compose, reducing setup time by 90% and enabling rapid re-deployment.
- Managed Python virtual environments and userspace on SLURM clusters to ensure consistent dependencies and job execution.
- Developed Python and Go utilities for ETL tasks and data ingestion, reducing manual scripting and accelerating onboarding.
- Automated backups of research data and environment configurations with custom scripts in Python and Go.
- Provided SSH support and Linux troubleshooting to non-technical researchers.

Linux System Administrator & Python Developer. Freelance — Remote | Dec 2021 - Present.

- Deployed and maintained Linux servers for small businesses (e.g. German Education Partners, Onlinin) and research labs (e.g. at UBC Sauder School of Business), including user/group management, system updates, and firewall configuration.

- Debugged and refactored inefficient or broken Python/Bash scripts submitted by clients (e.g. UAB Decentralized (CoinGate)).
- Automated routine maintenance tasks (backups, package updates, user management) with Bash scripts, eliminating manual intervention and standardizing processes.
- Documented infrastructure configurations, enabling clients to manage and extend their environments independently.
- Provided SSH support and Linux usage training to non-technical users.
- Created custom Python applications for data processing, automation, and analysis (e.g., notification systems connected to data pipelines).
- Designed and implemented data pipelines for efficient ingestion, transformation, and reporting, including pipelines interacting with undocumented APIs.

Selected Projects

Homelab Automation with Ansible and Terraform

- Provisions a dedicated homelab server with Ansible.
- Configures VNC server, NFS exports, and firewall rules with Ansible playbooks.
- Uses Terraform to deploy and manage Docker containers.

Personal Website

- Available at: <https://onurhanak.com>
- Containerized the application with Docker and deployed to AWS EC2 using Terraform and Ansible.
- Configured Nginx as a reverse proxy with HTTPS via Let's Encrypt (Certbot) and automated certificate renewal.
- Hardened the server with UFW, SSH key-based access, and minimal open ports.

Education

PhD	Queen's University , Sociology	Jan 2025
MS	METU , Sociology	Jun 2019
BS	METU , Sociology	Jun 2017