



Profile

As a technical leader for software engineering and dev/ops teams, I leverage my engineering background to effectively collaborate with teams of software and operational engineers. My proven ability to manage time and resources efficiently enables me to lead a “go-to” team. I am passionate about designing, developing, and implementing new technology, software, processes, and procedures. I thrive in creative problem-solving environments that foster my enthusiasm for innovative ideas.

Experience

SR. MANAGER SOFTWARE DEV/ENG, COMCAST 2022-PRESENT

As a leader within the VIPER Organization, I've led multiple engineering teams across various disciplines, including SRE, Dev/Ops, Platform Engineering and Architecture, Software Engineering, and CI/CD.

Achievements during this time:

- Designed a capacity model for an IP linear video platform, allowing engineers to monitor system performance, estimate expansion overhead, and forecast new builds based on verifiable models.
- Prioritized and executed a backlog of technical debt, improving processes and reliability of the IP linear video platform.
- Implemented security practices across the IP linear video platform, including hardening OS implementations and strict access controls.
- Designed and implemented a continuous video recording solution for Xfinity security cameras, supporting ingest and playback as part of the Xfinity Home product lineup.
- Designed and implemented a MultiView packaging platform for Xfinity streaming IP video, focusing on sporting events.
- Detailed budgetary projections for projects contemplating the utilization of cloud service providers like AWS or Azure.
- Designed and implemented a CI/CD system to be used across the VIPER organization for automated deployments of software, including integration with our Change Control Management System.
- Led a team of Site Reliability Engineers in investigating SLO violations across the VIPER organization, thereby enhancing the overall reliability of VIPER Software Products.

MANAGER SOFTWARE DEV/ENG, COMCAST 2018-2022

In 2018, I was hired full-time to lead the VIPER Linear Operations Team. A year later, I was also given the responsibility of leading the Alternate Content Operations Team, which is responsible for all dynamic ad insertions and content blackouts for IP linear video. In total, I lead 20 operations engineers directly and indirectly across both teams.

Accomplishments of the Linear/AltCon Operations teams under my leadership:

- Migrated IP linear video packager from VMs to Containers using Kubernetes and Helm. Implemented a multi-application platform with ELK Stack and Prometheus/Grafana solutions for logging and monitoring.
- Launched a software-based Premium Sports Blackout product on Comcast's IP linear video platform.
- Launched 2 additional "Syndication" IP video solutions, bringing the team's total IP linear video platforms in the US, Canada, and the UK/Europe to 2, 3, and 1, respectively. These platforms support over 30,000 live video channels and tens of millions of customers.
- Collaborated with development teams to enhance the IP linear video packager product, adding support for 4K video (including HDR), HEVC, and content encryption for various video devices.
- Transitioned an entire team of operational engineers to remote work in summer 2020. This involved extra one-on-one time with direct reports and weekly happy hours to boost team spirit and morale. These continued until a re-org in 2021.

In 2021, I led a new SRE team created in the VIPER Organization. The team's purpose was to enable operations and development teams through software development, operational automation, and transitioning to an SRE-style approach to monitoring systems and services.

SR. DEV/OPS ENGINEER, APEX SYSTEMS (COMCAST VIPER) 2015 - 2018

As a Comcast VIPER Contractor, I led the IP linear operations team, enabling them to support multiple disciplines, including transcoding, packaging, and distribution of IP linear video. We maintained these products across the Comcast X1 platform and three "Syndication" platforms for US and Canadian cable providers. As the lead Python developer, I maintained a full-featured command-line interface toolkit for monitoring, troubleshooting, and pipeline maintenance. We organized projects and daily tasks using a custom combination of SCRUM and Kanban.

PRINCIPAL INFRASTRUCTURE ENGINEER, LEVEL 3 COMMUNICATIONS, 2014 - 2015

After Level 3 Communications acquired TW Telecom, I used my automation and development experience to quickly develop applications across multiple teams, including UNIX/Linux, Windows, and Storage teams.

SR. UNIX ADMINISTRATOR, TW TELECOM, 2014

As the functional lead developer, I maintained multiple Python-based web applications and APIs using Flask with a clustered MongoDB backend on AWS. These applications included a command-line interface for UNIX admins and a web interface for customers to view process status and receive near-instant updates.

Other tools I developed include:

- A custom web-based self-service LDAP portal for UNIX customers to manage their LDAP accounts

- REST APIs that drive the UNIX team's inventory data and automate user creation/deletion from their LDAP system
- A multi-interfaced application in an Infoblox DDI grid that allowed users to add, delete, and update DNS entries via email and a command line.

UNIX ADMINISTRATOR, TW TELECOM, 2012-2014

As a UNIX Administrator for TW Telecom, I led the UNIX team's development. I automated RedHat VM installation and configuration in local VMWare hosts and AWS EC2. I also implemented version control for UNIX team scripts using subversion/svn and an agile development cycle.

I also implemented and maintained other systems:

- An ELK solution (Logstash, ElasticSearch, Kibana) that gathers, indexes, and presents syslog entries to multiple groups via a web interface and CLI tools.
- A highly available, grid-based DNS, DHCP, and IPAM (DDI) solution from Infoblox.

SR. SYSTEMS SPECIALIST, CABELA'S INC., 2008-2012

SR. GRAPHIC SYSTEMS ADMINISTRATOR, CABELA'S INC., 2006-2007

SR. SYSTEMS TECH, CABELA'S INC., 2002-2006

Education

Western Nebraska Community College, Sidney, Nebraska – IT: Computer Programming 2007

Certifications

- Red Hat Certified Engineer, RedHat versions 6-7
- Red Hat Certified Systems Administrator, RedHat Versions 6-7
- Certified Apple Technical Coordinator, 2007-2011
- Network+ Certified, 2007

Open Source Software

- <https://bitbucket.org/isaiah1112/>
- <https://github.com/isaiah1112>