Larry Ludlow, Principal Engineer

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SUMMARY

A Detroit Metro Area senior Global or Enterprise level infrastructure architect setting and implementing direction that encourages new innovation and the pursuit of excellence. Expert in solution architecture, design, implementation and support of secure, high performance, scalable, globally distributed Internet connected data center environments, private and public cloud server infrastructure. Unique ability to step into an opportunity, assess the needs, rapidly identify possible solutions taking into account the “Big Picture” and doing whatever is required to accomplish win:win successes. Excels at building intelligent, common sense, loyal teams that exceed expectations. A problem solver and troubleshooter.

EXPERIENCE

AccumTech, IT Manager 2023-05-01 — Present

https://accumtech.com

- As the IT Manager at Accumtech, I directed our IT team toward optimizing the entirety of our technology operations, which spanned from infrastructure management to network security and database administration. I was instrumental in crafting and applying IT policies that not only mirrored the company's strategic goals but also significantly enhanced operational efficiency
- Lead the IT team in optimizing technology operations, including infrastructure management, network security, and database administration.
- Develop and implement IT policies and systems aligned with organizational strategies to enhance operational efficiency.
- Manage annual budget planning and resource allocation, ensuring cost-effective utilization of IT resources.
- Build and nurture vendor relationships to secure reliable IT services and solutions.
- Mentor and develop a high-performing IT team, fostering a culture of continuous learning and collaboration.

Otava, Principal Engineer / Manager / Director 2019-02-28 — 2023-2-20

https://www.otava.com

- As the Principal Engineer and Manager at Otava, I spearheaded a broad range of initiatives focused on advancing automation, enhancing infrastructure, and fostering an environment of continuous improvement.
- Automate all the things to minimize human error.
- Built an ansible framework to manage cumulus network devices across multiple data centers.
- Created a highly available, distributed S3 offering to provide tier 3 storage to our customers.
- Provide Tier 3 support for customers and channel partners.
- MOP/SOP for front-line support and deployment teams so they can utilize ansible to reduce time to delivery/recovery
- Wrote training materials and held classes on ansible, gitlab, docker, and CI/CD practices.
- Developed ansible good practices to streamline new projects.
- Actively work with the product team to develop new offerings and improve existing.
- Built a lab to support the proliferation of automation within the organization.
- POC for vCloud director to better support multi-tenancy in our vmware environment.
- Integrated 3 client portals using a microservices backend architecture, substantially enhancing customer experience, and reducing billing man-hours by an estimated 95%.
- Headed a comprehensive infrastructure and process modernization initiative that established a new support desk and a fully integrated configuration management database (CMDB).

Little Caesars Pizza, Site Reliability Engineer 2018-03-31 — 2018-12-31
https://littlecaesars.com

- I played a pivotal role in enhancing the reliability and efficiency of online and mobile ordering systems through the maintenance and improvement of continuous integration and delivery processes. My work focused on scaling our operations within a multi-cloud environment and advancing our monitoring capabilities, ensuring preemptive problem identification and cost-effective resource utilization. Furthermore, I led innovative projects to improve remote system management across thousands of store locations and contributed to the refinement of our operational and monitoring frameworks.
- Maintain CI/CD for all facets of online and mobile ordering.
- Develop ansible and terraform modules for maintenance and growth of our multi-cloud environment (MS Azure and Google cloud).
- Built a modular monitoring and metrics stack utilizing prometheus, influxdb, grafana, alertmanager in a container environment to scale as needed.
- Configured federation between monitoring systems in each virtual environment (VPC).
- Created predictive algorithms to alert on potential problems before they happen.
- Built a container environment to host .netCore applications with auto-scaling to provide cost savings over a standard machine deployment.
- Built several proof of concepts to manage remote store systems (15,000+). Most of these utilized ansible to perform the configuration with a higher level orchestration (salt, puppet, foreman)
- Wrote an ESB consumer and dispatcher in Python to replace windows based services.
- Committed upstream fixes to several open source products we utilize.
- Developed a python based service to scrape metrics from our cloud providers and expose them to a metrics endpoint for prometheus consumption.

North American Bancard, Sr. Linux Engineer 2016-09-30 — 2018-03-31
https://www.northamericanbancard.com/

- As the Senior Linux Engineer at North American Bancard, I oversaw all Linux servers across the organization, ensuring seamless operation within a complex multi-company setup. My role emphasized the automation of builds and deployments, the construction of a robust configuration management system to maintain server efficiency, and the implementation of a comprehensive log management solution to ensure high availability and scalability of server, infrastructure, and application log collection. Additionally, I spearheaded the development of server monitoring and application metrics dashboards, significantly improving the capability of development, operations, and support teams to diagnose and troubleshoot system and application issues effectively.
- Responsible for all Linux servers in a multi-company environment. Systems include Ubuntu, CEntOS, and Redhat Enterprise Linux.
- Managed automated builds and deployments using Stash and Bamboo.
- Automated deployments to AWS using bamboo and docker.
- Built a configuration management system using Ansible to deploy, configure, and ensure against configuration drift. I have also developed many other ansible plays for inventory collection, patching, and PCI remediation. Additionally, I wrote plugins to send status of each of these to our central logging system.
- Developed a centralized log management system using Logstash, Elasticsearch, Kabana, and HAProxy to provide a highly available and scalable method of collecting logs from our servers, infrastructure, and applications.
- Implemented a server monitoring system and integrated it with our alerting system and slack.
- Built a server and application metrics dashboard using Graphite, Grafana, and collectd. This has enabled dev, ops, and support people to see historic system metrics and better troubleshoot servers and applications.

The Auto Club Group, Manager, Server Engineering 2012-09-30 — 2016-06-30
https://aaa.com

- As Manager of Server Engineering at The Auto Club Group, I led the strategic planning, organization, and direction of server infrastructure services, ensuring robust IT security, audit compliance, and efficient disaster recovery processes. My responsibilities included managing key technology vendor relationships, overseeing contract negotiations, and providing technical oversight across diverse IT projects.
- Managed a $13MM budget across staffing, licensing, projects, and resources.
- Directed a $3MM data center migration following a company acquisition.
- Cut costs by negotiating better licensing agreements with vendors.
- Reduced server deployment time from a matter of weeks to days.
- Deployed SCCM to facilitate deployment review and approval processes.
- Promoted from team leader to manager.

University of Michigan Health System, Linux Team Lead 2008-01-31 — 2012-09-30
https://med.umich.edu/

- As Team Lead for Linux Engineering at the University of Michigan Health System, I guided the support and strategic development of a substantial multi-location enterprise Linux deployment, encompassing over 250 servers across various distributions. My duties included creating and maintaining server provisioning and build processes, strategic planning, and project management within the Linux team. I successfully implemented critical infrastructure improvements such as Enterprise NTP services and Veritas Clustering, enhancing performance and availability. I led a significant data center migration and consolidation project, which involved moving more than 150 servers to a new, modern facility
- Provide support for large multi-location enterprise Linux deployment consisting of 200+ Suse Linux Enterprise Servers, 30+ RedHat Servers, 20 Open Enterprise Servers, and a small mix of Netware and Solaris servers.
- Create and maintain server provisioning, build process, and version control for all Linux distributions that we support.
- Provide strategic planning and Project management for the Linux team.
- Implemented Enterprise NTP time services.
- Implemented Veritas Clustering and Storage foundation in order to reduce the number of storage management tools and improve overall performance and availability.
- Tested and reviewed products to provide enterprise log aggregation and search functions.
- Provided direction and a single point of contact for a large data center migration/consolidation project that involved physically moving 150+ servers from an older, outdated data center to our newly built state-of-the-art data center.
- In charge of vendor relationships, product renewals, and purchases for the Linux team.

INCAT, Engineering Consultant 2007-09-30 — 2008-01-31

- Implemented large-scale server (Solaris/JBoss) deployments for major companies in the aerospace and automotive sectors.
- Upgraded 90+ Solaris servers in multiple locations worldwide to version 10 for Nissan USA.
- Installed and upgraded websphere application servers, WebSphere MQ servers, and WebSphere Portal servers to the latest version on 30 Solaris servers for Nissan USA.
- Built a Redhat server infrastructure to support FEA analysis portals for GE Aerospace/MSC Software.
- Deployed and configured clustering for JBoss application servers at GE Aerospace/MSC Software.
- Provided development support for engineering staff at GE Aerospace while developing a FEA portal while at MSC Software.
- Lead engineer for the development and integration project of the MSC software suite while at MSC software / GE Aerospace.

Budco Inc., Linux / Unix Systems Engineer 2006-03-31 — 2007-09-30

- Led and supported infrastructure upgrades including Solaris to Linux migrations, installation of Oracle RAC clusters and workload monitoring systems.
- Lead Engineer on a 'Fork Lift' Infrastructure upgrade (Solaris to Linux).
- Implemented an internal update server (yum) and custom compile rpm's from source to meet our specific needs.
- Compile RedHat Cluster Suite and GFS kernels from source to provide us with a cost-effective method of OS-level clustering and shared filesystems.
- Assist with the installation and configuration of Oracle 10g RAC clusters.
- Implemented a clustered JBoss AS environment (F5 Load balancers in front of an Apache web farm using mod_jk).
- Migrated all local users and service accounts to a Highly Available LDAP directory server that synchronizes users' passwords with Active Directory.
- Provide Linux training to DB and Systems administration teams.
- Designed an Open source monitoring system that complements our existing Compuware Monitoring Suite and displays server health on a graphical representation of our network.

Subether Networks, President and IT Consultant 1997-03-31 — 2012-01-31
https://subethernetworks.com/

- Founder and IT Consultant of an IT consultancy that served clients in many industries, from the public sector to automotive and aerospace.

PUBLICATIONS

Containers: Pros, Cons and How to Mitigate Risk, Container Journal 2020-01-07
https://containerjournal.com/topics/container-ecosystems/containers-pros-cons-and-how-to-mitigate-risk/

VOLUNTEERING

Open Management Consortium, Open Source Advocate 2005-12-31 — 2009-12-31

EDUCATION

Western Goverenors University 2021 — Present
Bachelor - Information Technology Management

Eidgenössische Technische Hochschule Zürich 2014-12-31 — 2014-12-31
- Computing: Art, Magic, Science

Duke University 2014-12-31 — 2015-12-31
- Reasoning, Data Analysis and Writing

IE Business School 2014-12-31 — 2014-12-31
- Critical Perspectives on Management

Massachusetts Institute of Technology 2014-12-31 — 2014-12-31
- Supply Chain Fundamentals

David Chinsky & Associates 2010-12-31 — 2011-12-31
- The Institute for Leadership Fitness™

Novell Advanced Technical Training 2009-12-31 — 2011-12-31
- Certifications

- Novell Certified Linux Engineer
- Advanced Linux Troubleshooting and Optimization
- Novell Zenworks Administrator

HP 2010-12-31 — 2010-12-31
- HP BladeSystems

- Virtual Connect
- Boot-from-SAN
- BladeSystem Administration

Symantec 2006-12-31 — 2010-12-31
- Administration

- Storage Foundation + HA 5.0
- Netbackup 6.x Administration
- Netbackup 6.x Troubleshooting

Univerity of Michigan 2009-12-31 — 2009-12-31
- Lean Healthcare Management

RedHat 2004-12-31 — 2009-12-31
- Certifications

- RHCJA
- RHCE 5
- RHCE 4

Oakland University 1998 — 2000
- Computer Science

SKILLS

Linux / Unix: Redhat, Ubuntu, Suse, AIX, Solaris

Virtualization: vmware, vCloud Director, KVM, Proxmox, PowerVM

DevOps: Puppet, Ansible, SaltStack, Terraform, Argo, Flux, Helm

Languages: Python, golang, PHP, Java, C++, Rust

Cloud: AWS, Azure, Google Cloud

Containers: K8S, Rancher, Docker, Docker Swarm