Michael Worsham

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Cloud Solutions Architecture – SRE Operations – Enterprise System Engineering Hybrid Cloud Automation | Infrastructure Optimization | Program Leadership | IT Project Management

Committed to modernizing IT infrastructures, orchestrating cloud architecture initiatives, spearheading system automation, and delivering VMware, Chef, Scalr, GitHub, GitLab, AWS, and Azure solutions to enterprise clients. Successful in strategically leading IT teams, integrating Agile & DevSecOps principles into projects, establishing hybrid cloud environments, developing SRE techniques for Key Performance Indicators (KPIs), MTTR and SLIs and SLOs for monitoring operations, and optimizing on-premises infrastructure/cloud platforms. Responsible for leading application migrations from data center to hybrid cloud platforms.

- Technically advanced and solutions-oriented Cloud Solutions Architect with significant experience developing IT infrastructure and application solutions and applying cutting-edge automation methodologies for on-premises, hybrid, and cloud-based ecosystems.
- > Stellar track record of providing technical support for physical/virtual servers, steering technical efforts in enterprise and technical system engineering, managing RFIs and RFPs, and spearheading data center consolidation/deployment projects.
- ➤ Visionary and strategic leader with expertise in building, leading, and influencing cross-functional teams, managing end-to-end project lifecycles, ensuring successful cloud project deliveries, and deploying Agile and DevSecOps methodologies.
- > Demonstrated exceptional aptitude in pioneering virtualization infrastructure projects, introducing advanced technologies and original techniques, and fostering high availability, disaster recovery, and efficient resource allocation for mission-critical applications.

AREAS OF EXPERTISE

IT Infrastructure and Cloud Architecture Hybrid Cloud Technical Support Automation Strategy Development Database Management and Reporting Application Migration and Integration Application and Infrastructure Solutions Hybrid and Multi-Cloud Deployment VMware Virtualization Solutions Infrastructure Capacity Planning Enterprise and System Engineering Quality Scripting and Automation Technology System Implementation Azure Cloud Platform Implementation AWS Services and Architecture Project Planning and Management Data Center Transformation Security Auditing and Assessments Server and Application Virtualization

PROFESSIONAL EXPERIENCE

Data Dimensions, Orange Park, FL Private Cloud Architect, R&D Team Leader

Oct 2023 - Present

Serving as a leading voice for open-source infrastructure technologies. Work closely with CIO, CTO, VP of I&O, software development, infrastructure, operations and technical leadership teams in designing, implementing and administrating open-source technologies that underpin core software services.

- ▶ **Participated** in design reviews and technical presentations to cross-functional staff.
- > Created and maintained functional and technical design specifications and solutions to satisfy project requirements.
- > Spearheaded the implementation of foundational open-source technologies that support a well architected private cloud infrastructure.
- > **Partnering** with technical leadership in the identification and implementation of improvements to current processes, architectures, and infrastructure.
- Migrated original training platform from A Cloud Guru over to PluralSight's Skills training system. Actively seek to cross-train technical teams to ensure leveling up of automation skillsets across technical teams.
- > **Designed** and implemented a new SolarWinds script to monitor and provide granular data analysis of Ceph cluster environment. Script solution is able to break down the cluster health and Rados Gateway (RGW) storage perspectives in real numbers and percentages.
- Implemented a new sandbox, dev/test and production infrastructure for building a testing environment utilizing Canonical's MAAS products. In charge of and responsible for and maintaining Ceph, an open-source SAN storage solution. Utilized Cephadm and Ansible for automation and testing hardware and/or application failure scenarios.
- Architected a series of Ansible playbooks for patching servers, adding STIG capabilities to Ubuntu servers, and managing user accounts. Also deployed AWX, an open-source Ansible tower platform for said Ansible playbooks for Dev/Test and Production environments.
- > Setup LXD server for Log, Monitoring and Alerting (LMA) aspects with a series of Ubuntu VMs and Docker containers utilizing applications such as Graylog, Grafana and Hashicorp Vault for SSE-S3 encryption needs.
- Developed and maintained a GitHub repository for infrastructure team for storing infrastructure-related scripts. Will later utilize for infrastructure automation projects for the possibly of Ansible integration.
- > Reviewed the current MAAS, Ceph and Juju deployment that was originally done by the Canonical Engineering Team. Determine how to stabilize the Ceph cluster and get different aspects of the environment working once again. Research new Log Aggregation, Monitoring and Alert (LMA) aspects of what is installed and ways to improve it.

Wipro Limited, Orange Park, FL

Domain Architect, Practice Lead / SRE Director - Agile & DevSecOps

May 2022 - July 2023

Provided technical leadership and direction in managing the Agile and DevSecOps business unit for site reliability engineering (SRE) in the digital transformation services (DTS) division of the Wipro FullStride Cloud to deliver managed services for production to clients. Inspired and led SRE engineers and architects in optimizing IT infrastructure/application-based solutions for hybrid cloud and on-premises projects.

- > **Developed** SRE-related template and PowerPoint presentations through monitoring applications like DataDog and configuration management like Chef in liaison with partners; created flyer information for iDEAS division to help attract new clients to Wipro.
- Interacted with Wipro practice leads and regional heads for securing new deals/opportunities through RFPs and RFIs while acting as a subject matter expert for SRE-related activities and providing expert advice/guidance to different business stakeholders.
- > Reinforced the DTS division for IDSO Shell RFP response for the proposal of supplying 250 IT operations and SRE team; created an assessment/training plan for all members related to IT and SRE tools-related activities before releasing it to the client.
- **Designed** new, innovative cloud-based solutions by creating architecture diagrams, selecting suitable cloud services, and defining the overall structure of the solutions in close liaison with regional leaders and developers to meet the organization's needs.
- > Successfully created complex and scalable architectures by evaluating the features of cloud platforms, including Amazon AWS and Microsoft Azure, and choosing the most appropriate platform based on performance, scalability, cost, and compatibility. Provided subject matter virtualization expertise, using VMware and other cloud related platforms.
- > **Optimized** the scalability of domain architecture by designing and scaling solutions seamlessly based on demand to enable the organizations to effectively manage all resources and deliver consistent and reliable services to users.
- Prioritized the security of data, applications, and infrastructure by developing, implementing, and maintaining cloud solutions to protect the organization's cloud environment against unauthorized access, data breaches, and security threats.
- Completed EPRI client project as a DevSecOps technical architect and project lead for interpreting the statement of deliverables for building sub-teams, including DevSecOps, security, and collaboration in liaison with EPRI leadership and product owners. Focused on KPIs, MTTR and SLIs and SLOs as per client's needs and Wipro's standardization and recommendations.
- > Supervised a team of 3 DevOps engineers for the DevSecOps portion of the project, focusing on providing project management assistance and guidance to cross-functional team members in utilizing JIRA with Agile and Kanban focus, along with Confluence to meet project-related goals.
- Proficiently finalized the Estee Lauder client project by leading a team of 30 onshore/offshore DevOps engineers to manage Estee Lauder Corporation's service catalog to keep production ServiceNow/non-production JIRA trouble tickets by utilizing Kanban.
- > Optimized the organization's software development and IT operations by helping to fill in as solutions architect during the evening shift to the SRE and DevOps teams for solving issues of service catalog items in the Azure virtualization environment. Designed and maintained an upskilling matrix for helping to shuffle and place engineers and other architects into needed roles and shifts.

Wabtec US Rail Inc., Orange Park, FL Staff Infrastructure Architect (Cloud Solutions Architect)

December 2016 - May 2022

Appointed as a cloud solutions architect for leading the enterprise cloud infrastructure team (ECT) in adapting on-premises, hybrid, and cloud-based DevOps architecture/application for former General Electric (GE) Transportation and new Wabtec hybrid cloud. Headed the original DevOps engineering team for Amazon AWS cloud performance support to implement cost-out initiatives for COTS applications.

- > Completed the "Architecting in AWS" class with Amazon services by utilizing AWS services for lab and actual business application concept needs for GE business units to leverage cloud technologies to meet business needs and enrich the company's success.
- Modernized the SDLC's cloud-based applications with speed, security, and cost-effectiveness using automation/deployment applications, such as Scalr, Chef, Git, GitLab, and Jenkins, for application teams' continuous integration/deployment (CI/CD).
- > Facilitated the migration, maintenance, and support of Chef Automate, Chef Infra Server, and Chef Habitat environment for Windows/Linux platforms and Chef organizations while serving as automation architect to address complex issues promptly.
- > Proactively developed scalable/reliable cloud-based architectures to meet the organization's technical and business requirements.
- Maintained and delivered cloud-based solutions by actively partnering with Amazon AWS for legacy GE Transportation and current Wabtec business units by utilizing new AWS services and tools, including VPC, CloudWatch, ELB, EC2, S3, and RDS.
- **Efficiently** enabled Amazon SQL RDS instances to establish "Linked Servers" connections with Microsoft SQL Server databases hosted on-premises by developing and implementing a streaming SQL proxy broker solution to meet technical project goals.
- > Confirmed the smooth operation of cloud services/applications while serving as operations lead for enterprise cloud team to integrate the data operations center (DOC) three-team members to perform root cause analysis (RCA) using ServiceNow.
- > Successfully managed SOX compliance requirements for a cloud environment by getting documentation and developing processes for the team to use and follow; collaborated with Wabtec IA and the cybersecurity team in handling the remediation/changes.

Cincinnati Bell Technology Solutions (CBTS), Jacksonville, FL Case Manager

January 2016 - November 2016

Promoted from Cloud Operations Engineer role to be the new Case Manager. Supervised a team of 4-member crew and third-party vendor support teams in handling ServiceNow cases for all cloud team environments to improve operational effectiveness and ensure the timely escalation of all incident resolutions. Actively engaged the engineering team with multiple GE teams in researching and implementing solutions for high-priority incidents, requests, change tickets, and problem tickets.

- > Maintained a high service delivery and reporting standard, including SLAs, availability management, and finances, by supervising the Day2Ops team of 4 engineers; effectively supported the application/infrastructure teams to meet root cause analysis needs and handle on-going troubleshooting for application and infrastructure teams as needed.
- > Cooperated with technical teams and subject matter experts in providing effective relationship management and troubleshooting for applications, infrastructure, and projects to ensure the optimal functioning of technology solutions and ensure client satisfaction.
- > Effectively managed technology solution-related cases and projects within CBTS by focusing on leading various technical, customer service, and operational aspects and utilizing quality tools to identify process improvement opportunities and monitor progress.
- Streamlined and sped up transitioning projects from planning and development phases to operational stages in close collaboration with internal teams to reduce time to operations (TTO) project requirements to deliver value to businesses/clients.
- Cultivated the ongoing relationship between CBTS and clients by focusing on the rhythm of review, SLAs, and troubleshooting for aligning the services provided by CBTS with the agreed-upon terms/standards to meet the client's needs/expectations.
- Improved the service delivery processes and reporting, including SLAs, availability management, and finances to ensure smooth and efficient service delivery to valued clients while adhering to established performance metrics and financial considerations.
- > Collaborated with the GE security, compliance, and legal teams in managing and tracking various cases, incidents, and projects while documenting case details, progress, and outcomes to implement appropriate actions in line with all regional and local requirements.

Cincinnati Bell Technology Solutions (CBTS), Jacksonville, FL Senior Virtualization Engineer/Cloud Operations Engineer

August 2014 - January 2016

Acted as a virtualization engineer for providing DevOps architecture, consultation, support, and guidance for general electric (GE) internal applications and commercial cloud environments to the company's clients. Selected as a buffer for operations with GE customer-facing and platform services applications within multiple cloud-based environments, such as Amazon AWS cloud and Verizon/Terremark hybrid cloud.

- > **Delivered** OS/VM level support for CentOS, RHEL/OEL Linux, and Windows 2K8/2K12 OS by utilizing DevOps instructions for VMs in HP Server Automation and Dynamic Ops environments with customized scripts to deploy Splunk for key clients.
- Supported GE Cloud data centers with multiple tiered/floors by using customized scripts for VMware ESXi, vCenter, vMotion, HA, DRS, and Cloud Suite to resolve complex issues, optimize resource allocation, and apply best practices.
- **Enhanced** the vCenter environment's stability, performance, and availability by leading and supporting team members in determining the unavailability issue with the vCenter Windows platform for several periods to rebuild and upgrade the vCenter environment.
- > Improved the company's IT infrastructure by configuring/optimizing virtualization technologies, such as VMware, Hyper-V, and cloud services, such as AWS, Azure, and Google Cloud to ensure high availability of resources and scale technical infrastructure.
- > **Significantly** managed all aspects of virtualization and cloud technologies for the company's clients; maintained client relationships by outlining the responsibilities to meet service level agreements (SLAs) and conducted root cause analyses (RCAs) of problems.

Advanced Disposal Services, Ponte Vedra, FL Linux Administrator/Core Infrastructure

February 2014 – August 2014

Supported the IT infrastructure while serving as the Linux administrator for corporate IT enterprise systems to deliver optimal value to the core infrastructure management team and support the company operations. Facilitated all aspects of disaster recovery strategies, Linux virtualization implementation needs, and project management for lifecycle planning while serving as a solutions and infrastructure architect.

- > Revitalized the IT infrastructure while supporting a hybrid design of physical and virtualized Oracle Virtual Machine (OVM) environment comprised of HP ProLiant GL580 Gen 7 and 8 servers while running the Oracle Enterprise Linux (OEL) v5.x.
- > Successfully elevated the security, reliability, availability, and efficiency of the Linux-based systems by utilizing Oracle's KSplice and the Spacewalk open-source platform for patch and errata management for the Linux infrastructure/environment.
- **Established** the Oracle Enterprise Manager (OEM) 12c platform by architecting scripts and monitoring the Oracle RAC, Oracle OVM, Windows Server, and VMware ESXi cluster platform, along with disk allocation on Oracle ZFS and NetApp SAN.
- > **Selected** as an IT security engineer for integrating Trend Micro's OfficeScan v11 platform into the corporate backbone for monitoring desktops/laptops by utilizing endpoint protection to prevent unauthorized file access to USBs/drives.
- > **Developed** and integrated a new proof of concept test lab environment within the corporate office location to allow applications, infrastructure, and networking teams to develop new, innovative strategies and optimize the current data center infrastructure.

ADDITIONAL EXPERIENCE

Systems Analyst III/Infrastructure Architect, Scientific Research Corporation, Jacksonville, FL | 2009 – 2014

Senior System Engineer/IT Virtualization Architect, Morris Communications LLC., Augusta, GA | 2007 – 2009

Owner (Self-Employed), MWE Computer Services – North Augusta, SC | 2005 – 2009

Chief Enterprise Architect, MCI, Tampa, FL | 1999 – 2004

UNIX System Platform Administrator (Contractor), IBM Global Services, Lake Mary, FL | 1999 – 1999

Operations and Network Analyst (Contractor), Federal Express, Orlando, FL | 1998 – 1999

HP/UNIX Systems Administrator, Andersen Consulting, Valparaiso, FL | 1997 – 1998

Warrant Officer 2, U.S. Army 3rd Special Forces Group. Fort Bragg, 1990 – 1994

EDUCATION

High School Diploma, Captain S-3 Operations and Logistics Officer, Army JROTC, Camden Military Academy, Camden, SC Pre-Bachelor (3-Years Completed): Computer Science & Business Management, Valdosta State University, Valdosta, GA

LICENSES AND CERTIFICATIONS

Top Secret Clearance/SCI - Multiple DoD / VA Projects, United States Department of Defense, December 2009 – December 2016 Secret Clearance for USAF IMDS Project, United States Department of Defense, December 1997 – December 2000

KEY PROJECTS

Change Champion - Embed iAspire as the career management suite for Sr Leadership across Wipro, May 2023 – July 2023

EPRI SSDF/DevSecOps Project, October 2022 – December 2022

Estee Lauder Corporation, May 2022 – October 2022

Global Combat Support System - Marine Corps, February 2013 – February 2014

Veteran's Affairs (Chapter 33 LTS) Post 9/11 GI Bill Project, December 2009 – March 2013

Department of the Navy's Data Center Consolidation Task Force, February 2012 – January 2013

Veteran's Affairs Construction and Facility Management, BMS Project, December 2011 – June 2012

Morris Shared Management Systems, Drupal Platform, March 2007 – December 2009

USAF Integrated Maintenance Data Systems, December 1997 – August 1998

TRAINING COURSES

Architecting on AWS - Associated with Wabtec Corporation | CloudBees CI Essentials, Associated with Wipro Introduction to Docker, Associated with Wipro

HONORS AND AWARDS

CIO Award, Wabtec, Multiple Locations, 2021 | Above & Beyond, GE Digital/GE Transportation, Multiple Locations, 2017 | Support Stars, Morris DigitalWorks, Augusta, GA, 2007 | Ovation Program, MCI, Tampa, FL, 2004 | Intermedia Communications, Tampa, FL, 1999 | Regional Champion, Students in Free Enterprise (SIFE), 1996 | Leadership Service Training Service, JROTC, 1991 | US Army Recruiting Command Award, Camden Military Academy, 1991 | JROTC / USA NJOSC Junior Olympics - 3-Position Rife, Bronze Medalist, JROTC, 1990 | Color Guard (Commander), JROTC | Rifle Team (Captain), JROTC

TECHNICAL PROFICIENCIES Operating Systems: HP-UX (C2 Trusted and Non-Trusted) 10.10 to 11iv2, CentOS/RHEL 4 through 7, Microsoft Windows Server

NT to Server 2019, OEL v5, v6 ◆ Middleware Integration: SSH/SFTP, MQ Series, Connect: Direct, Microsoft BizTalk, iSCSI, NFS, WebDAV, COTS/GOTS Applications, HAProxy, NGINX ◆ Architecture Design: MS Visio Professional, MS Project, UML ◆ Infrastructure and Application Security: Active Directory (AD), GPO, LDAP, Nessus, Snort, IPTables, Untangle, Retina ◆ Cloud Services: AWS EC2 / S3 / RDS / CloudWatch, VPC, System Manager (SSM); Azure Compute, SQL ◆ Virtualization: VMware vCenter, ESX/ESXi, Red Hat Xen Server, Oracle OVM, Amazon AWS Verizon Hybrid Cloud, Azure ◆ Programming: UNIX Shell scripting (sh, ksh, bash), PowerShell, Ruby (Chef) ◆ Information Assurance/Auditing: Retina, SPAWAR SCAP, AIDE, Nessus, Snort, Retina ◆ Configuration: Ansible, AWX, Puppet, PXE, Chef, Jenkins, Git, Scalr ◆ System Application Monitoring: Oracle Enterprise Manager, Datadog, Nagios, Cacti, Splunk, New Relic, AppDynamics ◆ DevOps Automation: GitHub, GitLab, Jenkins, Chef ◆ Key Project Management: Agile, Scrum, Waterfall, Microsoft Project, Kanban, JIRA, Confluence, PowerBI, SharePoint, PowerPoint