MIKE HOLZINGER

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I am a thoughtful engineer who enjoys learning new technologies and helping others learn as well. My core strengths are writing to protocol specifications, PKI, TLS and scripting.

SMARSH

Site Reliability Engineer

2021 - Current

SRE for Embedded applications, taking legacy stuff and make it cloudy.

Key tasks: Migrating legacy BOSH VMWare CPi infrastructure to Kubernetes hosted VMWare on prem staging, ga and production.

Minor tasks: Various tooling for legacy SOLR automated configuration, AMQ health and Opentelemetry application integration for DataDog (not as easy as new relic).

Tools/Platforms:

Python, Ansible, Terraform, Bosh, Vsphere, Kubernetes, Credhub, Hashi Vault, Docker.

IBM

Watson Data Platform (Cloudant)

Software Engineer

2018 - 2019

Projects:

Cloudant NoSQL Document Storage as a Service (CouchDB), This role was primarily operations and a little development, finding issues with CouchDB production issues.

- Wrote a client tool for support and operations engineering (Python), cutting Operator time by enabling insights to issues without logging into server nodes.
- Wrote data health investigation tooling for cluster information (Python / Erlang), one tool to bring multiple node details together.
- Wrote automated operation playbooks for support (Python / Bash), shortcuts to solve problems, fast.

FoundationDB Document Storage

 Wrote and installed metrics performance tooling for FoundationDB (C / Bash), laying the groundwork for a new document store infrastructure with a modern engine powering Watson Data Platform.

IBM Global Managed Cloud (GBS)

Software Engineer

2017 - 2018

Independent contributor for Oracle SAP and distributed VMWare offering within IBM. I wrote code and tooling for CI/CD, Operations and the GBS Security Squad.

Projects:

Security & Compliance + Data Remediation

- Wrote automated host discovery for compliance reporting (Chef / Knife)
- Designed and built a service to reconcile resources in IBM's compliance system Mixed Address Database "MAD" (Ruby / REST / Chef)

Fully automated Github for Gitflow model

- Integrated API feature to control dual control and review features for GitHub (Ruby / REST / GitHub / Chef)
- Chef automated metrics collection for real time inventory + auditing (Ruby / REST API)

IBM Bluemix - Object Storage:

Systems Engineer

2016 - 2017

Projects:

Object Storage deployment operations for IBM Cleversafe acquisition

- Wrote software to deploy inventory and automatic system rollout (Softlayer / Ansible / YAML)
- Wrote Cleversafe user account creation tooling (Ansible / Python / SoftLayer)
- Wrote client audit and account remediation tool for Cleversafe deployments covering petabyte object storage deployments (Ansible / Python / Softlayer)

Tier 2 On-call technology integration

- Monitoring: ELK, Sensu, Flapjack
- Pagerduty (escalation)

IBM Bluemix - OpenStack:

Operations Engineer - Openstack

2015 - 2016

Linux Operations engineer for OpenStack hosted cloud services.

Leadership: 1st Shift operations Lead

- Orientation and onboarding for new employees in IBM and IBM transfers to Blue Box
- Training lead to new sysadmins and new operations engineers (OpenStack, Linux)

Operations: Cloud deployment operations for Bluemix Local and Bluemix Cloud

- OpenStack on SoftLayer bare-metal cloud (Softlayer / ELK / PagerDuty / SysAdmin)
- On call operational admin for OpenStack (Softlayer / ELK / PagerDuty / SysAdmin)

BLUE BOX GROUP

Operations Engineer - Linux

2014 - 2015

Linux Operations engineer and and DevOps role for OpenVZ hosted cloud services. Hired to learn the OpenVZ stack and migrate all existing client accounts to Openstack.

Primary service owner:

- High Availability Load Balanced services (HAProxy / Perl / HaProxy)
- CA / Registrar: Internal Certificate Authority (Primary service owner)
- Corporate bastion/authentication gateway (SSH Key auth)

TOWNSEND SECURITY

Software Engineer

2007 - 2013

Lead C developer for cross platform client applications

Tools built:

- Central Certificate Authority for testing, demos and handling partner deployments (Bash / OpenSSL)
- Metrics testing: Encryption API IOPS / HA failover and scaling (AWS, Perl, Bash)
- Consumer PKI deployment tool (SSL certificate) Windows/Linux (OpenSSL / Nullsoft)
- Java key requestor client application for Hardware Security Module (Java)
- Cross platform PKI key client modules for Townsend Hardware Security Module (C)

Certifications: NIST certifications for core algorithm libraries written for Townsend Security

AES, PRNG, SHA, HMAC, FIPS 140-2

Skills/Languages:

Languages: C (7 years), Ruby / Python (2 years) Scripting: Shell/Bash (10+ years), YAML (6 years) Linux/Unix System administration: 10+ years

Extensive knowledge: AES, PKI, Github Automation

Tools/Frameworks:

Build + Deploy, CI/CD Automation: Chef, Ansible (2+ years each), Travis

Containers: Docker, OpenVZ, OpenStack