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.

Automate everything.

SMARSH

Site Reliability Engineer

2021 - Current

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

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

Minor tasks: Various tooling for legacy SOLR automated configuration, AMQ health, MTLS and Opentelemetry application integration for DataDog.

Tools/Platforms:

Artifactory, CircleCI, Github Actions, 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