

Jonathan D. Kelley

Linux Systems Engineer

Web: jon-kelley.com E-Mail: jonkelley@gmail.com Cell: (210) 446-6662

Employment History

Rackspace, Inc. 03 / 2011 - *Present*

Linux Systems Engineer II

- Participates in weekly on-call rotation.
- Migrated 40+ legacy systems (15 applications) to Puppet management in 2017.
- Completed 4000 action items for 2017 PCI within 4 weeks meeting urgent deadlines.
- Manages internal Ansible 'dynamic host inventory' library written in Python to manage non-cloudlike systems in VCloud Director.
- Working towards converting legacy yum repos to Katello based artifact deployment.
- Planned and executed production OS patches for 300 systems in under 3 weeks (with zero documentation / prior knowledge!)
- Manages site reliability for applications deployed on Rackspace Public Cloud, Docker, Openstack, and VMware ESXi environments.
- Writes and manages system documentation for large sets of infrastructure (vlans, firewalls, topology, bastion access points, points of contact etc.)
- Converted CORE (Rackspace central business app) to puppet configuration management (always hand rolled prior, saves devs a lot of time!)
- Rolled out the new PCI/SOX requirements for 2016. The compliance work is now consistently deployed by Puppet for RHEL5/6/7 devices with role/profiles.
- Manages Zabbix plug-in in Python to perform URL monitoring with Rackspace specific requirements. Provided dynamic loadable modules for extensibility in other application. See: OSS Contributions.

- Migrated tooling from Puppet2 to Puppet3 with PuppetDB, Hiera, puppetserver, directory environments and wrote a tool to wrap r10k to support our isolation model.
- Designed puppet3 infrastructure to be all git-based bootstrapped with Ansible, to permit fast recovery on loss of master.
- Conceptualized and contributed internal Ansible plug-in that allows storing firewall configurations in git, deploying through Jenkins with git-hooks. Once done manually in SSH, changes to hardware firewalls can now be peer-reviewed in github and deployed with Jenkins by net engineering.
- Converted 230 Jenkins jobs to be scripted with Jenkins Job Builder instead of manually created. This allows disaster recovery from a Jenkins loss take hours, not weeks.
- Built continuous integration in Jenkins for 5 new products using post-hooks, Salt stack states, and automated artifact deployment. (2014)
- Deployed 30 systems on private open stack as well as Rackspace Public Cloud (based on Openstack)
- Moved internal apps to use SaaS ObjectRocket (Rackspace family) infrastructure to keep in-house operations costs at a minimum.
- Contributed as a deployment engineer for the customer facing web teams managing deployments with knife and chef.
- Wrote a QE framework to describe a REST API in Gherkin-style templates using python-behave. Supports any synthetic RESTful API test. See: OSS Contributions
- Works closely with Cloud integration teams to manage control plane changes for one of the worlds largest public clouds.
- Managed Chef infrastructure for customer-facing control panels in 2013.
- Subject matter expert and senior support escalation for Cloud Load Balancers, Cloud Databases, Cloud Compute in 2012.
- Designed migration plans of our Cloud identity environment to new infrastructure. Project planning included subnet change, db schema updates and a new load balancer front-end.
- Deploys Tomcat application releases using A,B stack deploy methods and Ansible/Puppet automation.
- Conceptualized and wrote dashboard+metrics backed by synthetic web checks on our public cloud API's. Used by incident management and support as a gauge for service reliability until 2015.

- Capacity planning for new and existing environments on our internal network.
- Participates in design of architecture (for redundancy, high availability)
- Interviews new candidates

Zixcorp, Inc 02 / 2010 - 03 / 2011

Security Support Engineer II

- Provided day to day troubleshooting of Postfix e-mail appliance for customers (edge network, mail routing, exchange integration, etc.)
- Adhered to HIPPA and privacy regulations supporting email encryption appliances for health-care and government clients.
- Adhered to UK data export laws pertaining to personal-information for networks in London.
- Wrote BASH automation to replace existing TCL scripts for data-center connectivity and got it in next iterative release.
- Data-center key-server connectivity scripts reduced call volume during incidents and outages involving the customers remote-site DC access.
- Managed postfix configuration, mail queues, and associated product encryption stack.
- Managed or wrote custom RegEx lexicons for flagging P.I.I or health-care data.

1-800-HOSTING, Inc. 07 / 2006 - 02 / 2010

Linux Administrator II

- Performed phone and ticket based work to meet customer SLA's.
- Managed OS patching, migrations, and upgrades as professional services to customers.
- Worked as DC OPS managing hardware diagnostics, upgrades and provisioning.
- Worked as DC network operations handling switch upgrades, troubleshooting, DDoS mitigation or disaster recovery.
- Planned and executed primary data-center DNS cut-over to use new BIND stack with Linux HEARTBEAT fail-over. Wrote fail-over scripts to handle system failure with zero downtime in DNS lookups.
- Diagnosed routing and other concerns escalating to network operations when required.

- Upgraded Nagios monitoring to latest version and scaled for performance.
- Upgraded MRTG graphing system for Catalyst switch monitoring to improve bandwidth graph capability.
- Created SSL monitoring in Nagios for customers who paid for SSL.

CI HOST 04 / 2006 - 07 / 2006

Linux Technical Support I

- Handled Linux Admin tasks for helping customers install and configure software within the hosting environment.
- Handled configuration of Merchant and other shopping utilities for customers who ordered the software.
- Performed work in the data-center across the street when staffing was low, assisting colo clients as well as responding to NOC escalations.

Github Projects

URL_monitor

A complete Python to collect metrics from a REST and make items in . Supports RPM builds with included Makefile.

r10kwrapper

A tool that makes managing multiple deployments easier in a multi environment production puppet site install.

REST Api

Provides a REST on top of the relay boards for a number of purposes.

TestVapi

An testing system written to use gherkin style-syntax.

Technical Training

- Comptia Linux+
- Comptia A+
- Comptia Network+
- Openstack Certified Administrator

- Network+

NOTE: The latest version of this document can be downloaded from jon-kelley.com