

# MARTIN WALSH

Linux System Administrator · DevOps

Evanston, IL, 60202

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## SUMMARY

Code-slinging system administrator, DevOps practitioner, and open source enthusiast with more than 15 years experience and a passion for automation.

- Detail-oriented and dedicated to fulfilling business objectives
- Trusted teammate/mentor with a reputation for high productivity
- Deep understanding of configuration management practices
- Advocate of operational transparency (and ChatOps)
- Strong programming background; expert-level Python language

## PROFICIENCIES

Systems	RHEL/CentOS, Debian/Ubuntu, Mac OS X, Windows
Services	Apache, Nginx, Memcached, Redis, RabbitMQ, BIND, Postfix, PuppetDB, Elasticsearch, Consul
Tools	Puppet, Ansible, Vagrant, Packer, Docker, git, make, Capistrano, Jenkins
Monitoring	Nagios, Ganglia, Logstash, Graphite, Statsd, Monit, Kibana, Grafana
Languages	Python, Ruby, Coffeescript/Javascript, Bash

## PROFESSIONAL EXPERIENCE

### Sr. Systems Engineer *Leapfrog Online*, Evanston, IL

2012–Present

Responsible for monitoring, maintaining and improving the system performance, reliability and security of business critical, customer-facing infrastructure.

- Acted as operations/technical lead in support of the ongoing development of multiple selling platforms
- Participated in the planning and successful execution of a large production data center migration with minimal downtime
- Provided in-house training to cross-functional audiences, covering topics such as:
  - Nagios configuration and custom plugin development
  - Puppet best practices, workflow and testing
  - Kibana/Grafana dashboard creation and data analysis
  - SSL/HTTPS, DNS and domain registration
- Shepherded a custom instance of GitHub's Hubot, used heavily for automated deployments, alerting, orchestration of routine system upgrades and much more (Coffeescript, NodeJS, Ansible)
- Designed, developed and implemented a self-service process for updating BIND DNS records using a standard application deployment workflow (Python, YAML, Capistrano, Jenkins, BIND)
- Assisted in the creation and maintenance of more than 80 custom and 3rd party Puppet modules, custom parser functions, providers and facts (Ruby, PuppetDB, rspec-puppet, beaker)
- Automated local Puppet development tasks, such as:
  - unit and acceptance testing
  - catalog differencing based on local changes
  - rendering of individual templates
- Developed a lightweight Puppet dashboard replacement with custom capabilities (Python, Flask, YAML, JSON)
- Combined Packer, Ansible and Puppet to fully automate provisioning of a disaster recovery environment in a reproducible way
- Managed a Nagios instance with more than 1800 service checks, filled gaps in monitoring by writing custom plugins and improved alert messaging to facilitate incident response
- Transitioned to standard development practices for all Ops-only software projects, as appropriate, encouraging contributions from other teams (GitHub Enterprise, git, make, Bundler, virtualenv, nodeenv)
- Designed and implemented high-availability clusters for both RabbitMQ and Redis
- Created standardized Docker images for use in local testing by fellow software and systems engineers

### System Administrator *Parity Systems*, Evanston, IL

2005–2012

Responsible for the installation, configuration, maintenance and documentation of all hardware and network services, for use by internal staff and clients in support of software (web) development projects.

- Implemented a comprehensive network and performance monitoring solution, more than 20 custom checks for unusual hardware and services, and a utility framework for rapid development of new service checks
- Constructed a server-room climate monitoring system for less than \$100
- Created a Debian-based USB/LiveDVD disaster recovery environment which included DNS/DHCP, PXE, clonezilla, wiki, Puppet and backup of application source code and data
- Built an immutable Live CD-ROM image to provide distributed PDF conversion services for consumption by internally hosted Java web applications
- Installed and maintained the company wiki as its primary contributor, providing documentation of critical business systems.

### IT Manager *RS Industrial*, Buford, GA

2000–2005

- Researched, recommended and purchased new technology for the entire organization
- Supervised the development e-commerce websites used by both wholesale and retail clients; contributing code to integrate with payment gateway service
- Cooperated in planning and oversight for the construction of a second location, including the design and installation of combined network
- Scripted weekly sales reports from disparate data sources, formerly an error prone and lengthy manual process
- Combined several common open source tools, to create a voice-call notification system (Nagios, festival text-to-speech, Python, xmllrpclib, pyserial)