

# ASHOK RAJA R

<http://goo.gl/5E7f2>

<https://github.com/ashokrajar>

Bangalore, India

+91-9740915999

[ashokraja.r@gmail.com](mailto:ashokraja.r@gmail.com)

## Summary

- ❖ Over 9+ years of industry expertise in **capacity planning, performance tuning, trouble shooting, debugging, backtracking** of operating systems and applications.
- ❖ Managed operations of a multi-datacenter Linux private cloud with thousands of physical hosts and many more virtual hosts
- ❖ Playing a role of **devops** in writing code to automate the infrastructure management, software/application deployment, monitoring, reporting and benchmarking.
- ❖ Passionate about Ethical Hacking and System security. Posed a significant role w.r.t application hardening, network security using iptables and IDS/IPS.
- ❖ Infrastructure designing & planning with bleeding edge OSS to facilitate the engineers to connect and collaborate.

## Skills

Programming Languages	:	BASH, django, python
Performance Tool	:	slamd, HP Loadrunner, Gatling, funkload, multimechanize
Cloud	:	AWS, Heroku, Openshift, Knowledge of Hadoop(little hands-on)
DataBase	:	MySQL, MongoDB
Virtualization Platform	:	xen, vmware, virtualbox, OpenVZ, vagrant
Authenticate Services	:	ldap, nis, kerberos
Network Services	:	ftp, samba, nfs, dns, dhcp, sendmail, postfix, apache, openvpn, squid, apache traffic server, nginx
Security	:	iptables firewall, selinux, apparmor, mod_security, Nessus, Nmap, Ethercap, Metasploit, N-Stealth, Shorewall, WebInspect, SQLping2, Backtrack OS, denyhost, Snort
Monitoring Tools	:	nagios, zenoss, zabbix, snmp-trap, carbon, graphite
High-Availability Cluster	:	drbd, heartbeat, nginx
Storage Management	:	Hardware/Software RAID 0,1,5,10, LVM , LVM + RAID
Provisioning	:	Kickstart, AutoYast, OS Remastering, Ansible, Puppet

## Education

RedHat Certified Engineer ( Cert No : 803005996514398 )

March 2005

**Bachelor of Science in Physics** from Madurai Kamaraj University College

July 2002 – April 2005  
Madurai, India

**Higher Secondary** from Tagore Vidyalayam Mat HSS School

June 2000 – April 2002  
Madurai, India

## Work Experience

### Senior Systems Engineer (DevOps)

Apigee Pvt Ltd., Bangalore  
[Jun 2013 – Present]

Responsible for managing the entire AWS infrastructure(qa/stage/production). Maintenance of the legacy tools. Building one tool for deployments/maintenance/orchestration/reporting. Managing infrastructure using puppet.

Was a core member to design/architect the home grown tool for deployments/maintenance from ground up to production. Collaborate & mentor the team on the goals. Periodically refactor the codebase. Performing POC on new technologies to adopt.

#### Major Accomplishment

- Build high available Graphite cluster
- Zero code data migration from a mysql instance to Amazon redshift using AWS DataPipeLine
- Developed a tool for deploying AWS DataPipeLine jobs
- Core developer and lead on home grown deployment/maintenance/orchestration tool.
- Managing the entire AWS infrastructure. (2000+ EC2 instance, RedShift)
- Contributed to opensource ansible project

### Tech Lead - Service Engineering

Yahoo Software Development Pvt Ltd., Bangalore  
[Mar 2011 – Jun 2013]

As the technology lead for service engineering responsible for choosing the right platform for the project and implementing it in the right way. Also responsible for capacity planning & performance engineer for high performance sites like Yahoo vertical search platform.

Active participant of yahoo internal Hack Day events.

#### Major Accomplishment

- **Capacity planning** for shopping.yahoo.com to serve **1000+ RPS <1sec query response** on peak shopping season and for Yahoo vertical search platform to serve **4000+RPS <100ms query response** with reduced hardware resources. Identifying the application/hardware bottle neck. Optimized tuning of application, OS & Hardware.
- Design/Write/perform Load&Performance testing which breaks the system to identify the bottle necks in the application and tune it to provide a high performance, high available service to the users
- Prototyped and implemented a zero downtime deployment architecture for a huge 1000 node search cluster across 4 data centers.
- **Developed a bot** for clearing the stale documents stored on the index clusters
- **Developed a Index Node Recovery tool** for the Yahoo Indexing Platform as a one day Hack
- **Pursuing on a development of collaborated performance testing and recommendation tools**
- Deploying/Monitoring/Troubleshooting hadoop jobs on the grid for our feed processing system.

## Senior System Engineer(DevOps)

Yahoo Software Development Pvt Ltd., Bangalore  
[Jan 2010 – Mar 2012]

As the system engineer handled development, operations, and system administrative duties to allow continuous high performance web site like shopping.yahoo.com, travel.yahoo.com & Yahoo vertical search platform. Automated deployments of application and troubleshooting on the event of issues.

### Major Accomplishment

- Design and develop Load & Performance test cases for commerce properties like shopping.y.c, travel.y.c and yahoo vertical search platform
- Maintaining uptime of few hundred servers with exceptional monitoring and maintenance activity
- Alpha/Beta tester for a new cloud based home grown EC2 service. Was part of the architecture design planning team and have done significant contribution to the product.
- Deploying and migrating hundreds of systems to new application stack with zero downtime
- Reduced the internal application timeout from 15% down to less than 0.1% by identifying some configuration discrepancy on the proxy servers.
- Handling production outages and identifying the root cause by excellent troubleshooting skills.

## System Administrator

Verismo Networks Pvt. Ltd., Bangalore  
[Jan 2008 – Jan 2010]

As the system administrator at verismo networks was responsible for the entire IT infrastructure maintaining the up time of services like apache/nis/samba/routers/switches. Given the opportunity was part of the Organizations Technical R&D in application hardening and Virtualization Technologies.

### Major Accomplishment

- Deployed and configured a DRBD High Availability cluster for mysql & apache
- Development of VSOS/VDOS (Verismo Server/Desktop Operating System) for automated unattended installation of Verismo tailored application stack with LAMP stack tweaks
- Customized RPM package building from source for LAMP stack.
- Developed & Implementation of internal Intranet Site , customer support portal for [vunow.com](http://vunow.com), (Customer Ticket Tracking System for vunow POD)
- Security auditing & applying patches. Application hardening using apparmor & selinux
- Server/Network/Desktop monitoring using Nagios, MRTG. SMS alerting for critical services
- LDAP/SAMBA/NFS centralized authentication and profiling
- Linux Router/Firewall configuration using shorewall & smcroute for multicast
- Implemented a VPN solution for employees traveling and working from home using OpenVPN

## System Administrator

Winways System Pvt. Ltd., MADURAI  
[Jan 2005 – Jan 2008]

As the system administrator at winways systems was responsible for the entire IT infrastructure.

### Major Accomplishment

- Implemented single sign on using LDAP, User management( creating, managing, monitoring user activity, ACL, disk quota)
- Automated implementation of IPTABLE & backup using bash scripting
- Deploying O2(home grown ERP product) on the client servers and remote maintenance/troubleshooting