**Praveen Kumar**

**Sr. Linux/DevOps Engineer**

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**Professional Summary**

* **8 years** of strong experience in **Linux/Unix** and **Windows System Administration.**
* Strong in troubleshooting, monitoring, training and **24/7 production support** in mission critical environments
* **Around one+ year** of experience on system monitoring in a cloud environment including cloud specific products and tools. Understanding of **AWS EC2, VPC, S3, IAM, Cloudwatch, RDS, Security Groups**.
* Managing a production infrastructure on Amazon Web Services **VPC utilizing AWS CodeDeploy, S3, EC2 Container Service, Cloud Formation** including **Auto Scaling**.
* Expertise includes **bash and python** scripting with focus on **DevOps** tools, CI/CD Architecture and hands-on Engineering.
* Experience on **UNIX Administration in Oracle SUN-SOLARIS (11, 10, 9, 8), VMWARE ESXI 4.1 and VSphere, RHEL5, 6, Centos, Ubuntu and Windows 2003/2008/2012**, knowledge in computer hardware and I/O devices.
* Proficient in working on **Solaris 10,11 on Oracle Blade Servers 6000, 6080, Sun M5000/M4000, T5120,T5140/T2000, Sun V490. V880, IBM AIX Power and RHEL 4/5/6**.
* Professional in Installing, building & configuring Server using **Jumpstart, NIM, Flash archive, Ignite** and **Kickstart** techniques.
* Proficient in Networking, configuring **TCP/IP, DNS, NIS, SAMBA, LDAP, SSH, SSL, SFTP, SMTP, SNMP, NFS3/4, FTP.**
* Had an extensive experience with **MY-SQL, MangoDB & Sybase**.
* Experience in creating **physical volume, logical volume, volume groups using LVM’s** in Linux.
* Experience in Migrations and Decommissioning of the systems.
* Extensively used LVM to create Volume Groups, LVs and Disk mirroring for IBM servers.
* Experience in **VMware, VSphere**. Installed and monitored Virtual environment with ESX 3.x server.
* Experience in USER MANAGEMENT by giving SUDO access to the users
* Expert in Installation, configuration of **Patches and Packages** along with **Kernel Upgrade**
* **VERITAS Volume Manager / VERITAS Clustering Software**.
* Understanding of **SAN, NAS, vBlock and UNIX virtualization** Solaris 10 (ZONES).
* Hands on experience with various Linux text processing tools like **vi, sed, awk, grep** etc.
* **Red Hat Package Manager/Yum** experience on Red Hat Linux ES/AS.
* Hard working, Self-Motivated and excellent team player with strong interpersonal and communication skills.

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| Technical Skills: |  |
| Cloud Technologies | AWS (EC2, S3, Cloud Formation, RDS, SNS, IAM, ELB, VPC), CHEF, Puppet, CONSUL, Ansible, Jenkins, GIT, BitBucket. |
| Operating Systems | Solaris 10/11, AIX 5.3 6.1, 7.1, RHEL 4/5/6, SUSE 11 SP2, SP3, HP-UX 7.23, Ubuntu, Centos, Windows 2003/2008/2012 Server, |
| Programming Languages | C, C++, Java, JSP, EJB, VB, JavaScript, HTML5,CSS, XML, Python, Ruby, Perl and Shell programming. |
| Hardware | IBM/HP/DELL Blade Servers, BMC BladeLogic |
| Web/Application Servers | Apache Server 2.x/1.x, Tomcat 4.x/5.x, JBoss 5.x/4.x, 5.0/5.1/6.0/6.1, Nginx, IBM HTTP Server 6.x, WebLogic Server 6.1/7.0/8.1/9.1/9.2/10.x/11g/12.c. |
| Databases | IBM DB2, Oracle 8.0/9i/10g/11g, MYSQL, MS Access, Sybase Open client 15.0, MS-SQL Server 7.0/6.5. |
| Networking | TCP/IP, NIS, LDAP, NFS, DNS, DHCP, Cisco Routers/Switches, WAN, SMTP, LAN, FTP/TFTP, Sendmail, IPSec. |
| Applications | HACMP, HMC, HP-ILO, Redhat Cluster Suite, Samba, Tivoli (TPM), Nagios,VeritasNetBackup, Veritas Volume Manager, LVM, Powerpath, Hitachi HDLM, HP-SAS, HP-OpenView, VCS5.0/VCSOne. |
| Data Storage | Storage Area Network (SAN), Network Attached Storage (NAS),  Direct Attached Storage (DAS), RAID |

**Project Summary:**

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| **Client: Scholastic Inc, Danbury, CT** Aug 2015 - Present  **Role: Linux Engineer** |

**Responsibilities:**

* Administration of **RHEL and CentOs**which includes **installation, testing, tuning, upgrading** and loading **patches, troubleshooting** both physical and virtual server issues.
* Extensive knowledge of system monitoring in a cloud environment including cloud specific products and tools. Understanding of **AWS EC2, VPC, S3, IAM, Cloudwatch, RDS, Security Groups**.
* Planning and Implementing Server instillations and Virtual server solutions. Linux OEL6.4. ILO setup and installation and Patching. Building software packages on Red Hat Linux (RPM)
* Expertise in scripting for automation, and monitoring using **Shell, Python, Bash Scripting.**
* Configured **Elastic Load Balancers with EC2** Auto scaling groups.
* **Respin** the instances after updating **vhost/config files to S3** to get latest changes.
* Migrated applications to the AWS cloud.
* Managing **Amazon Web Services** (AWS) infrastructure with automation and configuration management tools such as **Ansible, Puppet**, or custom-built.
* Worked with **Ansible**Playbooks for zero-downtime installation, upgrade, downgrade, and uninstall processes (Mongo DB, Redis, and MySQL).
* Generated **Perl& UNIX** scripts for build activities in QA, Staging and Production environments with **AWS API’s**.
* Created **monitors, alarms** and notifications for EC2 hosts using**Cloud Watch**.
* Monitored instances running on EC2 using AWS CloudWatch involving creating alarms and notifying users via SNS.
* Set up **Route 53** to ensure traffic distribution among different regions of AWS.
* Involved in migrating physical Linux/Windows servers to cloud (AWS) and testing.
* Upgrading Environments like DEV, STAGE, UPD, PROD after every minor and major releases and infrastructure support to all environments.
* Migrated VMware applications to the AWS cloud using cloud Formation, EC2, RDS etc...
* Created **Chef cookbooks** and wrote recipes for automation of various task within the infrastructure.
* Develop automation tooling to automate our infrastructure lifecycle, code deployments and configuration deployments using **Puppet.**
* Built **Puppet manifests** and bootstrap scripts to allow us to bootstrap instances to various roles without having to maintain AMIs.
* Assembled **Puppet Master**, Agent and Database servers on Red Hat Enterprise Linux Platforms.
* Integrated **GIT into Jenkins** to automate the code check-out process.
* Experience in using version controller tools like **Subversion, GIT, BitBucket**.
* Extensive knowledge in using bug tracking tools Jira **and other Atlassian** products like Confluence, and Crucible& SonarQube.
* Document design specifications, installation instructions, configuration manuals, procedure manuals, and other system- related information.
* Automation tool was created using **Python & Troposphere called 'Stack Manager'** to launch cloud formation stacks in AWS and maintained them.
* Built and configured**Active Directory** on Windows Server 2012 R2 Enterprise
* Writing **My-SQL** queries for automation purpose of ‘StackManager’
* knowledge of **Open stack** services such as Nova, Glance, Cinder, and Neutron.
* Knowledge in implementation and configuration of **Open Stack** cloud.
* Used **Jenkins** for automating Builds and Automating Deployments.
* **Jenkins** is used as a **continuous integration** tool for automation of daily process.

**Environment Description**:RedHat 6.x, CentOS 6.x/7.x, AWS (EC2, VPC,S3,CloudFormation,ELB), Python, Git, Bitbucket, SVN, Chef, Consul, Jenkins, Shell Scripts, Jira, Java, Confluence, Crucible, SonarQube.

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| **Client: SEI Investments, Oaks, PA** Oct 2013–July 2015  **Role: Sr. Linux Engineer** |

### Responsibilities:

* System Analyst and Administrator role in a large team responsible for maintaining Oracle OperatingSystems Such as **Solaris10, 11, Redhat Linux 5.5,5.8 and 6.4, 7.0 Oracle enterprise Linux (OEL) 6.0, 6.5 and HP-UX 11.31 On HP Integrity Servers and Maintaining Oracle Blade Servers 6000, 6080, HP P 580G7,585G7, DL980G7 and Oracle Blade x6270 and IBM P Series**.
* Performed **Installation, Upgrade, Patches, Migration, Configured, Troubleshooting, Security, Backup, Disaster Recovery, Performance Monitoring and Fine-tuning on UNIX (Oracle Solaris 10,11, Red Hat Linux, SUSE and Ubuntu Linux) Systems**, **including HPC clusters**.
* Experience in Oracle RAC on Linux servers and configure **Oracle database 10g and 11g.**
* Production Support for IBM Power6, Power7 and Power8 Servers
* Strong technical background **in Storage, Disk Management, Logical Volume Management (LVM**) and **logical partitioning**.
* Implemented new hardware SSD installation and troubleshooting for all HP, IBM Servers and Dell Servers.
* Create Blade Logic Packages, Jobs, Property Dictionary, Batches & Designed Blade Logic Architect to onboard projects.
* Excellent Skills on Raid1, Raid1+0 and Raid5 configuration for Storage and All Type of servers.
* Performing O/S and **kernel upgrades** on Red Hat Linux servers.
* Installing, configuring and deploying applications on Web **logic Application Server 8.x, 9.x**.
* **Scripts** written for daily monitoring of servers regarding the number of hits, database connections and middle tier connections
* Implementation of SSH for secure transfers and implementation of PKI between servers to enable password less logins between Servers.
* Monitoring of servers, addressing any issues raised and ensuring that SLAs are met
* Manage end **user accounts, permissions, access rights, and storage allocations** in accordance with best-practices regarding **privacy, security**, and regulatory compliance
* Participate in and support capacity planning for systems and software in conjunction with end-users and department managers.
* Coordinate with end-users and other IT infrastructure groups to implement server systems that utilize industry best practices to meet corporate objectives
* Deploy servers and other related devices in datacenters.
* Configuration & Managing Red Hat and OVM Virtualization.
* Perform and test routine system **backups and restores**
* Anticipate, mitigate, identify, troubleshoot, and resolve hardware and software problems on servers. Escalate incidents as necessary
* Support application development teams throughout project lifecycles.
* Porting new versions of Android/ Linux (for ARM) on client's hardware platforms
* **Analyze system, server, application, network**, and input/output device performance.
* Recommend, schedule, and perform software and hardware improvements**, upgrades, patches, reconfigurations**, and/or purchases and Create required reports in response to business user needs.
* Develop, document, and maintain policies, procedures and associated training plans for system administration and appropriate use and Manage and/or provide guidance to junior members of the team.
* Experience configuring Open LDAP and setting up clients for Open LDAP.
* Technical knowledge of other **UNIX flavors** (e.g. Solaris, HPUX, Linux and Aix) and **Windows**.
* Knowledge of other clustering technologies (e.g. Veritas, MC Service Guard Etc).
* Experience with **VMWare ESXi** Servers.
* Technical Knowledge of **SAN** and Expert on **Infiniband Private Network for Cluster Servers.**

**Environment Description**: AIX 7.1,8.0, RHEL 5.8, 6.3,4,5, C++, Java, Android, SUSE 11 SP2 and SP3, Solaris 11, 10 and Apache 2.2, Web Logic 10.x/11g/12c, Web Sphere, SAP, Oracle, Clear case and IBM P570, p590, 595, Dell 580,585,980 HP Blade Servers and Fujitsu Servers.

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| **Client:Williams, Tulsa, OK**Dec 2012 - Sep 2013  **Role: Unix/Linux Administrator** |

### Responsibilities:

* **RHEL-6, Solaris 10, SUSE Enterprise Linux 11** Server build and Administration.
* Autosys server components implementation with administration and helping the teams to configure their project and the production job cycles on the Autosys server with automating the jobs.
* Performed data migration across multiple UNIX/Linux (RHEL/OEL/Solaris/HPUX) servers, and Windows Servers
* Experienced in User and Group administration and security issues, SUDO permissions
* Training the team members for using various application tools like Autosys **WCC/MQ Explorer**.
* **IBM MQ** Administration. With architecting and design till launching in DEV/QA/PROD/DR environment.
* **Axway Secure Transport architecture** and design and installation/configuration and releasing the project in BETA/PROD and DR environment.
* File system administration. File System (**ext3, NFS**) and raw device.
* Managing various day to day tasks with **shell and Perl scripts** and **Strong UNIX** scripting.
* Open-source software installation (compile from source or RPMs).
* New Build of DUAL VIO servers along with LPM cluster technology.
* Install and Configure Oracle Virtual Machines(OVM) across hosts.
* System Architecting and design for various UNIX projects.
* Installed VIO server Advanced POWER Virtualization on IBM P5 System. Assigned resources by making six partitions LPAR client of VIO server and clients Installation
* Implementation of Oracle Database **firewall** for SQL traffic monitoring of Oracle Database in POC and PROD environment using the SPAN port mirroring method.
* Installed, configured and maintained all platforms and web services.
* Utilized Tomcat and Apache servers for cloud server management.
* Tuning various kernel parameter’s required for the smooth function of the applications.
* Building, deploying, and maintaining compute farms.
* Intercrosses communication. Monitoring tools, like sar, iostat, vmstat, top.
* Splunk monitoring tool. Performance tuning.
* High availability clustering experience (IBM MQ/Secure Transport/VCS)
* Creation of file systems using **ZFS** and setup quotas **in zpools, zpool** mirroring, adding storage to the zpool, setting up devices in the zpool using RAID levels.
* Installation, configuration and troubleshooting of Veritas **Cluster Server 6.0** for High Availability and configuring a fail over Cluster. Adding and removing nodes from a cluster configuration.
* Volume management using **Veritas Storage Foundation 5.0, 6.0** which included the encapsulation, initialization, root disk mirroring, and export/import of disk groups.
* Building **Solaris 10 and RHEL 6 servers with jumpstart and kickstart** method on SPARC and Intel hardware for QA and Production servers.
* Experience in virtualization using VMware **ESX 4.0, vSphere 4.0, Solaris zones** and**Xen Server**.
* Applying Patching bundles and upgrading Solaris 10 and RHEL-6 various applications.
* **24/7** on call production support. Working experience on the production issues and severity 1 tickets through ticket management system.

**Environment Description**:Red Hat Enterprise Linux 6.0, SUSE 11 SP2, Solaris 11, 10, C++, Java, IBM MQ, VMware ESX 4.0, vSphere 4.0, Solaris zones, Xen Server, Veritas Storage Foundation 5.0, 6.0, Cluster Server 6.0, ZFS File Systems and RAID levels.

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| **Client: Jefferies, NYC, NY**Oct 2011- Nov 2012  **Role : Linux/Unix Administrator** |

### Responsibilities:

* Installation, Maintenance, Administration and troubleshooting of Linux, windows servers
* Performed automated installations of Operating System using kick start for Linux
* Installing and configuring services such as **Apache, DNS, SMTP, HTTPD, NTP, DHCP** and supporting them on Linux production servers.
* Performing **RPM and YUM** package installations, patch and other server management
* Participate in performance walkthroughs and reviews
* Experience in configuring, installing, working with **HP Rack/Blade Server**
* Troubleshooting Linux network, security related issues, capturing packets using tools such as IP tables
* Extensively worked on **LVM** and extended the **logical volumes**, whenever required
* Maintained all the Red hat servers entitled with the latest subscriptions
* Managing User administration
* Perform error analysis and recovery, documentation and procedures required for reference
* Log all scheduled/unscheduled system activities and problems
* Monitored the systems CPU, memory, IDE/SCSI disks, disk controllers, RAID, and network parameters using the tools NAGIOS system monitoring.
* Performed troubleshooting, scheduling, monitoring and execution of Sybase database activities in Cron jobs.
* Worked on **high availability servers - load balancing and clustering**
* Worked with **Virtualization software (Xen)**
* Worked with **Network Attached Storage devices and RAID technology**
* Worked with **Netbackup.**

**Environment Description:** RHEL 4/5/6, SuSe Linux SP10, Ubuntu 10.04 server, Windows 2003, Samba, NFS, SSH, Apache, Secure FTP Server, Production Environment network design and implementation.

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| **Client: Pioneer Software Technologies, INDIA** Jan 2010 – Aug 2011  **Role :** **Linux Administrator** |

### Responsibilities:

* Installed, upgraded and configured **RHEL 5.x/4.x/3.x and SUN Solaris 9.x/10.x**. This included **Kickstart Installation**, HP-SAS and CD media.
* Installed/Configured **WebLogic 10.x/9.x and Tuxedo 8.x/10.x** Application Servers.
* Installed/ managed software policies using HP-SAS on the Servers and added OS patches using APT installer.
* Installation and configuration of VCS5.0/VCSOne on various RedHat and Sun Servers.
* Installation and configuration of **Oracle RAC 10g/11g** on Linux cluster nodes.
* Conducted performance testing of Apache and Tomcat management services.
* Distributed OS and application packages using Software management tools.
* User and Disk Management of Linux and Sun user accounts, groups, directories and file permissions.
* Configuration and Administration of Apache Web Server and SSL certificates and also involved in configuration of Virtual Hosts for Apache HTTP Server.
* Installed and Configure Multipathing for SAN disks in 3PAR Powerpath.
* Experience in Installing and Configuring **JBOSS 5.1** Application Server in test environment.
* Day to day tasks include hardware support, problem && HP OpenView change management ticket implementations, OS builds & upgrades along with UNIX Administration.
* Performance Monitoring and Tuning using **iostat, vmstat and netstat** and tools like HP OpenView and custom tools to review historical logs for root cause analysis and involved in troubleshooting the recurring problems.
* **Shell, Perl scripting** for automating changes during move to speed up process.
* Application level backup using tar for archiving to local systems and Commvault backup for enterprise wide backup and recovery.
* Worked in managing **VMware Server** to build guest OS using vSphere client.
* Take full gathering of data and ensure everything planned and documented so other team members can use it during their support hours.
* Provide **24/7** on call support on UNIX Production Servers. Responsible for planning, scheduling, implementing all move to production changes during weekly outages.

**Environment Description:** HP ProLiant BL460s/620s/680s/980s, Sun Fire 490, Oracle 11g/10g/9i, Veritas Volume Manager, CommVault Backup, VCS5.0/VCSOne, RHEL 5.x/4.x, HP-UX 11.x and SUN Solaris 9.x/10. x.

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| **Client: Abhinandana Group, INDIA** Aug 2008 – Dec 2009  **Role : Linux Administrator** |

### Responsibilities:

* Installation and maintenance of Windows OS, Red Hat Enterprise Linux ES Server and Linux 8.
* Updating of the **Kernels.** Creating and **modifying user accounts & groups**. Managing data & file system maintenance. Setting up shared directories for user. User & host based Security & Controlling services, Configuration of Apache Web server for Virtual host.
* Configuration of DNS client. Monitoring the file system size and increasing the space.
* Manage **Linux Quota system**. Monitoring **log files & processes**. Configure Utilities, Task Automation (**at, cron**) & Network. Configure the **printer** using CUPS configuration files.
* Provide support for periodic system backups of operating systems, software and databases. Installation and maintenance of hardware such as disk, system board, PC's printers, CPU up gradation.
* Administration of file systems and recognizing file access problems. System performance tuning and upgrades. Installation and troubleshooting PC, Networks**.**

**Environment Description:** Redhat 2.1/3/4, RAID levels, Quotas, Cron, at, RPM and YUM.

**EDUCATION:**

* Bachelors of Technology in Information Technology from, JNTU, INDIA.