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| Curriculum Vitae – Sandeepkumar L. Chauhan  Principal Member Technical Staff | |
| Personalia | |
| **Address**  Sandeepkumar Lallubhai Chauhan  SH-6A/14,  DRDO Township Phase 2,  C V Raman Nagar,  Bangalore 560093. | **Phone**  +919900580401  **Email & Website**  Sandeepkumar.chauhan81@gmail.com  <https://www.linkedin.com/in/sandeepkumarlchauhan> |
| Goal:  Create and design microservice architecture, Automated infrastructure using various public/private cloud solutions, infrastructure design, CI/CD, Rest API, Kubernetes, ansible, terraform and python.  Expertise and availability  I am experienced open source geek with focus on Cloud, Devops, AWS, Linux, python Programming, Automation, database.   * Designing microservice based architecture. * In depth knowledge of Docker, kubernetes and python. * Creating REST API using Swagger,Django and Flask. * designing and implementing system tools. * capacity planning, troubleshooting and performance tuning. * automation using Ansible, puppet, salt, python, Django, flask, Perl or shell scripting with attention to detail, standardization, processes and policies. * cloud design, implementation, orchestration and Devops.   I love to:   * Advocate for, facilitate and create DevOps culture and Automate all the things with the correct DevOps tools set. * Design and implement micro service-based architecture. * Setting the overall Delivery Automation strategy, via investments in automation at several layers of the Technology stack to implement a Continuous Integration, Continuous Deployment/Delivery pipeline. * Implement AI, Data science solutions for infrastructure related problems and issues. At present, I am in process of acquiring knowledge in the field of AI and Data Science. | |
| Work Experience  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  **Oracle India Private Limited** March 2018 🡪 Present  Principal Member Technical Staff  I work for Oracle IDCS team, which is oracle’s cloud base identity product. IDCS has 40000 plus customer. It is microservice based architecture. At Oracle IDCS my job as principle member of developer team is to develop life cycle management and deployment of IDCS’s micro-services on oracle cloud Classic (VM) and Oracle kubernetes. At Oracle IDCS, I have worked on following projects/feature:   * IDCS Disaster Recovery: I was assigned as the main developer for DR phase 2(MT). also, I was responsible for supporting complete DR (MT). This include coding for creation of DR, switchover, patching and strategy design for switchover and patching DR environment. * Rate limiting: implemented rate limiting feature to throttle number of requests for IDCS. * Added Logstash new version 5.6.8 support * Addition of new micro service session management on OCI-C (addition was dropped later as new development policy).   **Adobe systems India** July 2016 🡪 March 2018  Senior system engineer  I worked for Adobe IT team, responsible for infrastructure automation. Design automated solution using various Devops tools for current manual tasks. My work also involves designing of self-service for various IT related products.  At Adobe, I have worked on following projects:   * SANPA – SAN Provisioning Automation – A self-service tool for SAN provisioning – tools used are neo4j, mongoDB, python and flask. This self-service portal enables storage, Virtual platforms and compute team to provision block storage. I have also created REST APIs so SAN provisioning can be performed programmatically. * SAN performance visualization (topology): This portal enables users to view their server’s storage connectivity and they can also check performance of related storage components. Tools used are neo4j, D3.js, python, flask. * LBaaS – Load Balancer as Service – This self-service portal provides end-users capability to create Load-balancer for their internal VMs and BM hosts. Tools users are MYSQL, Python, Django, F5. * kubernetes (1.2) implementation for engineering group. Docker with GPU support, Kubernetes 1.2 * CaaS: Container as service – self-service portal for provisioning LXD containers for Adobe internal customers. Python Django, LXD. * Self-service Dev environment provisioning: docker. * Predictive Analysis of Adobe IT Infrastructure: which predicts possible exhaustion of resources. Also help quarterly capacity planning and purchase planning.   **Oracle India Private Limited** June 2006 🡪 July 2016  Senior Infrastructure solutions engineer  I worked for Oracle GIT Service Design team, responsible for designing solutions for cloud and non-cloud environments, Devops architecture, documentation, standardization of hardware and software, technical implementation and testing, supporting operations team for escalated problems, infrastructure automation, designing operation procedures.  **Accenture** February 2006 🡪 June 2006  System Administrator  As part of automation team, was responsible for Automating infrastructure. | |
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| Strength and skills | |
| Overall | |
| * Analytical - ability to quickly learn and understand from self-study or observation. * Structured - good understanding of project management and change management. * Thorough experience in configuring and deploying systems in a scalable and coherent manner. * Expert in Database, Programming, Automation, Linux, web App development, Cloud (AWS, Openstack) and Statistical analysis. | * Author of various guideline documents regarding Linux, Storage, Backup, Virtualization, HA, DR, System maintenance, Configuration management and infrastructure automation. * Author of many solution documents for various Oracle internal clients. * Experience in leading solution design team. |
| Communication | |
| * Direct communication skills - does not overpromise or under deliver. * Team player - listens, share, cooperate and learn together as a team. | * Presentation skills - experience with presenting solutions to upper management and clients. |
| Infrastructure architecture | |
| * Excellent experience with enterprise automation and orchestration using Ansible, Salt, Python, Terraform, AWS Cloud Formation and Puppet. * Excellent experience with designing and deploying of backup Infrastructure for various huge to small data centers. * Excellent experience with designing, deploying of Linux, storage Infrastructure. | * Experience with designing infrastructure for systems management, troubleshooting, monitoring and automating environments. Also, various tools created for statistics collection. * Designed and Automated both Bare-metal and cloud infrastructure provisioning. |
| Containers | |
| * Very good understanding of Docker ecosystem. * Kubernetes, OKE. * LXD * Amazon ECS | * Building images/stacks using Docker compose and Docker file. * Docker * Experience on designing and setting up micro-service environments. |
| Devops and Configuration management | |
| * Ansible * Puppet * Jenkins | * Vagrant * Salt |
| Programming and Version control | |
| * Python * Perl * Neo4J Cypher * Git * Excellent knowledge of C, Linux kernel internals and syscall and various other system libraries | * SQL * Bash scripting * Various data formats, template, framework and markup languages: XML, JSON, CSV, HTML, YAML, JINJA, bootstrap |
| Web Application Development | |
| * Python * Flask framework * Django framework * Bootstrap front-end framework * JavaScript * Elastic Load balancer | * Apache and Nginx web server. * D3.js * HTML, CSS. * HAProxy Load balancer * D3.js |
| Cloud - Amazon web services | |
| * EC2 * S3, Glacier and EBS * Cloud Formation * Automation using python, shell scripts, AWS command-line * Route 53 * ECS | * VPC * IAM * Cloud Front * Cloud Trail, Cloud watch * Elastic Load Balancer * AWS python SDK * Amazon Data services – RDS, DynamoDB |
| Cloud - Openstack | |
| * Excellent knowledge of Openstack internals. * Experience with Openstack programming using Rest APIs | * Worked on implementation of nova, glance, cinder, keystone, horizon. * Automated provisioning of physical infrastructure for openstack. |
| Database | |
| * Good knowledge of RDBMS generic theory and NOSQL * Oracle 10g,11g and 12c * Oracle SQL and Oracle PL/SQL * Neo4J Graph database | * Oracle RAC * Oracle Dataguard * Very good at data processing, analysis of Data represented CSV, XML, JSON format. * MongoDB |
| Linux and Server virtualization | |
| * Excellent knowledge of Linux since 2000 including Red Hat Enterprise Linux, Centos, Oracle enterprise Linux, Fedora * Excellent troubleshooting skill for debugging kernel, system, application, performance tuning * Linux KVM, Oracle VM. * Linux bridge, GRE tunneling, VPN, iptables | * Thorough experience in installing, configuring various Linux system software e.g. NFS, Samba, KVM etc. * More than 10 years of operational experience of Linux environments. * Experience with clustering (pacemaker, corosync), load balancing (HAPROXY), disaster recover techniques. * open vswitch |
| Storage | |
| * Excellent knowledge of SCSI, SAS, SATA interface/networking protocols * Excellent knowledge of SAN protocols: Fibre Channel, iSCSI * Storage networking hardware: Brocade FC Switches, HBA * Good at storage capacity and performance calculations and troubleshooting * Good knowledge of Storage appliance hardware: Netapp, JBOD, Disk shelves, Oracle ZFSSA, Hardware RAID. * Excellent knowledge of Linux kernel storage device, device mapper and file system implementation. | * Redhat Ceph – distributed software defined storage. * Linux DM Multi-pathing * Linux LVM, Raid * Red Hat Ceph distributed storage * Linux File systems XFS, Ext4/3, CIFS. * Linux NFS. * SAN using Linux iSCSI, Netapp and Oracle ZFSSA * StorageTek Tape Storage hardware and software e.g. Tape drives, Tape Libraries, ACSLS software. |
| Backup, High Availability, Disaster Recovery | |
| * Linux HA Clusters using Corosync and pacemaker. * Oracle database HA using RAC * Oracle database DR using Dataguard * Netapp snapshot, snaprestore Netbackup. | * Netapp Storage appliance DR using proprietary technologies e.g. snapmirror and snap vault. * Excellent at backup design and backup strategies. oracle secure backup, Symantec system recovery. |

Projects

* **Oracle GIT Private Cloud solution (production)**

Designed and implemented IaaS cloud for oracle internal LoB using Oracle virtual manager, Linux, Oracle Storage appliance, mysql. Also developed, automation and orchestration solution using python and puppet

* **Oracle HDZ Private Cloud solution (production)**

Designed and implemented IaaS cloud for oracle internal LoB using Openstack (nova, glance, neutron, keystone, horizon used) Linux, Oracle Storage appliance, ansible, python, mysql

* **Various pilot projects to study possible usage of new technology in DC**

Designed and implemented lab solution for Openstack, Docker with ansible, puppet, ceph

* **ASSET and inventory management**

Worked on asset and inventory management automation using puppet

* **Backup Project**:

Storage Architect for Oracle internal PC backup project, solution designed using Oracle Storage appliance. Also for the same project’s next iteration, implemented working lab solution using Ceph (only object storage used)

* **Standard DR Solution using Oracle Dataguard**

Designed and Implemented DR for Oracle database solution using Active Dataguard for various Oracle environments (using Dataguard broker and SQL).

* **Design and implementation of Storage Appliance Standards**

Developed and implemented various standards of storage appliance for various Oracle environments. Aim was to come with standard which provide efficient storage with high performance. This also include configuration of IP SAN and FC SAN

* **Linlithgow data center backup infrastructure design and Implementation**

Designed and implemented backup infrastructure for Linlithgow data center. Solution uses Linux, Oracle tape storage and disk storage appliances, python

* **Singapore DC Consolidation Backup Tape Library Infrastructure**

Designed and implemented Backup/Storage infrastructure for Oracle Singapore data center. Solution uses Linux, Oracle tape storage and disk storage appliances, Perl

* **OCCN Environment Backup Solution**

Designed and implemented backup solution for OCCN environment at Bangalore India data center. Solution uses Linux, Oracle tape storage and disk storage appliances, Perl, Bash

* **Backup solution for OFSS data centers**

Designed and deployed backup solution for India based data centers of Oracle Financial Services Software. Goal was to standardize backup process of OFSS as per Oracle Standard. Solution uses Linux, Oracle tape storage and disk storage appliances, Python, Bash

* **New storage system provisioning automation**

Developed interactive tools using python for provision new storage system from Netapp/Oracle storage appliances. Later developed auto provisioning, configuration and administration solution using Ansible

* **Archived redo log management Automation**

Designed solution for archived redo log for local and central repository. Also developed automated tools using Perl

* **Automation for Statistics collection and analysis**

Worked on various statistics collection, analysis tools for various internal data centers and LoBs. Solution uses: Linux, Perl, bash, python.

Education

C.K. Pithawala College of Engineering & Technology (affiliated to VNSGU) (1998 - 2004) 66.44%

* Degree: Bachelor of Engineering (Computer Science)

12th grade (GSEB) (1998) 63.69%

10th grade (GSEB) (1996) 79%

Languages

* English, Gujarati (Native), Hindi

Professional certification

* Solaris Certified System Administrator for Solaris 9 (SCSA)
* Netapp Certified Data Administrator (NCDA)