

# RANVEER SINGH

Alwar, Rajasthan, India (301707)

Contact: +91-9799572100

E-mail: [srnvry@gmail.com](mailto:srnvry@gmail.com)

## EXPERIENCE

---

**Keen and Able Pvt Ltd**

**Role: DevOps Engineer - May 2021 to present**

## Skills

---

- Technical Analysis
- Project Management
- Interpersonal Communication
- Teamwork
- Cloud services
- Scripting skills
- Linux and Unix Engineer
- Knowledge with RedHat

## ACHIEVEMENT

---

- *Received Appreciation certificate from Keen & Able Pvt. Ltd. for outstanding dedication, performance, and commitment towards client success.*

## GLOBAL CERTIFICATIONS

---

Certification Number: 180-065-252

- **Red Hat Certified System Administrator in Red Hat OpenStack**
- **Red Hat Certified Engineer**
- **Red Hat Certified System Administrator**
- **Red Hat Certified Specialist in Services Management and Automation**
- **HashiCorp Certified: Terraform Associate**

## PROJECTS CLIENTS

---

- NIC Delhi, India
- ICTA, Sri Lanka
- Oman Data Park, Oman
- SMSGT, Philippines
- NSP, NIC Delhi, India
- Airtel / Kyndryl

## PROJECTS

---

- I. **Deployment and manage of Openstack with Openshift, Red Hat Virtualization and satellite, Client- NIC New Delhi, India**
  - Worked on RedHat Openstack v16 Deployment using tripleo with InstanceHA and local registry (Disconnected)
  - RedHat Openshift Deployment over the kvm for infrastructure monitoring.
  - Worked on Red Hat Openstack Platform upgrade from RedHat Openstack 16 to RedHat Openstack 16.2 using satellite
  - Deploy the satellite and prepare for RedHat Openstack v16.2
  - Worked on Red Hat Virtualization Self-hosted engine Deployment
  - Service level HA - Services are configured with pacemaker cluster, I will be managing pacemaker cluster as well. (having hands on pacemaker resource handling)
  - Undercloud Operation - I have do deploying Scale OUT/IN, Controller replacement, and PCS software management.

- Overcloud Operation – Project, user, Quota, flavor, image, Volume, Network creation using it launching VM / VNF, writing ansible creation to create application stack, migrating the VM from one compute to another either online / Offline migrations. Converting volume to image / vice versa etc.
- Docker container orchestration - Specifically creating docker file to launch container-based application and working with docker.
- Automation - Writing ansible playbooks to create application deployment stack, writing bash script for automation to manage the complete cloud orchestration.
- Experience in verifying Openstack environment in Docker Containers for Sanity tests before upgrading production environment.
- Experience in creating/managing multiple tenants in a cloud,
- Experience installing, configuring and managing Linux based systems and applications via automation and configuration management tools such as ansible.
- Digging from network level in Openstack OVS & neutron agent, VXLAN & VLAN, Linux bridges.
- Day-to-Day Activity involves working on Incidents, Changes, Request, and other activities like Filesystem related issues, Availability Alerts, NTP and network related issues.
- Raising case with Vendors for hardware part replacement and hardware related issues, such as Array controller battery, Fault hard drive, faulty memory, faulty cache replacements.

## II. **Provide Support on openstack and ceph storage** Client :- ICTA , Shri Lanka

- Worked on Providing support on Openstack (130 node) and RedHat ceph storage (90 node) in day to day work, also on troubleshooting and implementing the solution.
- creating storage pool, manage OSD & DATA, recovering PG etc.
- Working with the high severity Incidents and changes ranging from Sev1 to Sev4.
- Doing scale-in & scale out the Openstack environment based on customer requirements.
- Expertise in troubleshooting Openstack issues from fault detection, fault isolation and resolving many key issues.
- Experienced in supporting large - scale multi-tenant infrastructure level services.
- Experience in supporting private cloud environments housing multiple tenants in multiple networks.
- Attending bridge call hosted by Incident Managements for critical issues.
- Working with different vendors for any hardware issue and with REDHAT for any clarification at OS level.

## III. **Design and Deployment of RedHat Openstack HCI with Baremetal Openshift, Red Hat Virtualization, RedHat IDM, Ansible Tower and Satellite**, Client- Oman Data Park, Oman

Worked on personal cloud infrastructure Design and Deployment, We have 3 sites 2 have production and one have staging environment, both production sites located in two geological locations and It's for a telco client.

We Deployed RedHat Openstack v16.2 HCI model (RedHat Openstack v16.2 and Redhat ceph storage v4). The sites have separate Red Hat Virtualization for management zones. On Red Hat Virtualization we have deployed openshift, ansible tower, IDM, and Satellite server .

- **RedHat Openstack v16.2 HCI Model** - Worked on deployment RedHat Openstack 16.2 with RedHat Ceph storage, we have 140 node with there different kind of capabilities on both site, HCI nodes have extra storage disk for ceph OSD and 2 nvme disk for ceph journaling, the one other node have more disk which is configured in Raid5 it is encrypted and it is available for nova instances. Cinder storage have multiple backend like ceph storage, FC Netapp and local encrypted storage
- **RedHat Ceph storage** - Worked on deployment ceph storage with 25 OSD servers. ceph storage is the backend of cinder, manila, swift and it also shares storage through nfs to the end user.
- **Openshift** - Worked on deployment RedHat Openshift on Red Hat Virtualization, bare metal and RedHat Openstack. I help in RedHat Openshift deployment On RedHat Openstack and bare metal
- **Red Hat Virtualization** - Worked on deployment Red Hat Virtualization for management zones on both sites.
- **RedHat IDM** - Worked on deployment 4 node IDM and they replicated to each other. Both sites have 2 IDM servers. RedHat Openstack UI, Red Hat Virtualization Physical servers, ansible tower UI, Satellite UI and Red Hat Virtualization UI user are authenticated with IDM.
- **Ansible Tower** - ansible tower is used for task automation, On both sites we have deployed 3 node ansible tower with separate DB nodes, Both sites DB are replicated to each other using active passive method.
- **RedHat Satellite** - Worked on Satellite Deployment on site and prepare it for end user and RedHat Openstack , Red Hat Virtualization, Ansible Tower, IDM and Satellite deployment

IV. **Fix the vulnerability using ansible of a OpenStack environment** Client:- SMSGT, Philippines

- Created role of ansible to scan existing Vulnerability and score accordingly
- Created role of ansible to fix the vulnerability
- Created role of ansible to rollback vulnerability

V. **Design and Deployment of Red Hat Openshift** Client:- NSP, NIC Delhi, India

- A 20 node openshift deployment for production environment
- Worked on openshift bare metal design Architecture and deployment
- Worked on low level architecture of openshift to deploy openshift on VMware cloud
- Design the CI/CD architecture For Application Deployment

## KEY SKILLS USED

---

- **Cloud Computing** - Openstack (Redhat's & Opensource), Openshift, AWS
- **Storage** - Ceph Storage(Redhat's & Opensource), NFS, SAN, Jboard etc.
- **CLustering** - Pacemaker, Corosync, HAProxy, Linux Clustering and Load Balancing.
- **Database** - mysql, postgresql, cruncy
- **Automation** - Ansible , Terreform,
- **Language** - Shell Scripting and Python Scripting.
- **Networking** - Switch, router, bridge, tunnel, vlan, vxlan
- **Cloud Management tools** - Red Hat Cloudforms
- **CI and other tools** - Jenkins, GIT, Nexus, Gitea, GitLab, Docker, Podman etc.
- **Monitoring tools** - Prometheus, Grafana etc.

## EDUCATION

---

**Bachelor of Computer Application - 2020-2023 batch (Distance)** (Not completed)

Jaipur National University Jaipur

**Senior Secondary School (BSER) - 2013**

Board of secondary education Rajasthan