## TIRTHANKAR SINGHA

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#### PROFESSIONAL SUMMARY

 To establish a competitive advantage for myself, align my carrier goals with organization goals and help in the growth and betterment of the organization. Also work in a progressive and stimulating work culture with the freedom to be creative, innovative and to excel in my area of work.

- 6 years 3 months of experience in Infrastructure Engineer and Datacenter deployment and support in Linux System,
   Virtualization, Orchestration, Cloud and DevOps Technology.
- Presently working as a Senior Solution Integrator in Ericsson India Global Services Pvt Ltd.

#### **TECHNICAL SKILLS**

Telecom Orchestration

**Linux** RHEL, Ubuntu, CentOS, Fedora, Debian.

Virtualization RHEVM, KVM.

Cloud Red Hat OpenStack, Ericsson Cloud (CEE). Amazon Web Services, Azure, GCP.

**Scripting** Shell Scripting, Python (Basic).

**DevOps Tools** Docker, Kubernetes, Ansible, Gitlab, Jenkins.

**Tools** Ericsson Cloud Container Distribution, Network Slicing.

Networking Linux Network Configuration, Monitoring and Troubleshooting, DNS, DHCP, TCP/IP, OSI Layers,

Ericsson Cloud Manger, Ericsson Orchestrator, VNF-LCM, Service Orchestration, EVNFM,

Router, Switch, VLAN

**Databases** MySql, Cassandra, PostgreSQL, SQL Server

Hardware HP Proliant, IBM, DELL

Monitoring Tools OP5

Ticketing Tools ServiceNow, Jira

## **WORK EXPERIENCE**

ERICSSON (ERICSSON INDIA GLOBAL SERVICES Pvt Ltd), KOLKATA (INDIA)

May 2018 - Present

**Designation:** 

**Senior Solution Integrator** 

July 2020 - Present

Solution Integrator

May 2018 - June 2020

<u>Project:</u> Telefonica (Offshore), PIC Project (Offshore), Telecom Italia (Offshore), TDC Denmark (Offshore), Saudi Telecom (Onsite), Bytel France (Offshore), Optus Australia (Offshore)

#### Responsibilities:

- Deploying Redhat OpenStack, Ericsson Cloud and providing support and troubleshoot issues.
- Hands on experience in Openstack deployment in both Bare Metal Provisioning (Under Cloud and Over Cloud Deployment) and Packstack.
- Experience in creating, managing users, roles, groups, domains, services, endpoints, managing quotas, instances, snapshots, metadata, creating new images, managing and creating networks, routers, subnets, allocation pools, managing swift objects, time stamps, cinder volumes, vm migration, using heat templates and troubleshooting.

- Configuring the Openstack components keystone, glance, neutron, cinder, swift, Heat and ceilometer.
- Deploying ECM (Ericsson Cloud Manager), Ericsson Orchestrator with Geo Redundancy and providing support.
- Working on NFV Management and Orchestration Architecture.
- Working on NFVI and NFVO solution. Knowledge of ETSI MANO.
- Integrate Ericsson Cloud Manager and Ericsson Orchestrator with Cloud like Redhat Openstack, CEE (Ericsson Cloud).
- Creating VM's, installing OS on virtual machine, Troubleshooting VM related issue through CLI on KVM.
- Experience in managing multiple private clouds for Enterprises on Bare metal, Virtual Machines, Containers to address
  various project needs.
- Administration of RHEL 7.x/8.x and Centos includes installation, testing, tuning upgrading, patching and troubleshooting day-to-day issues.
- Creating and managing on **HOT templates** and installing instances through Heat.
- Hands on experience on AWS and deploying highly available AWS cloud architecture.
- Designing and implementing VPC, Subnet, VPN, and ELB.
- Working on AWS Auto Scaling for providing high availability of applications and EC2 instances based on the load of applications by using Cloud Watch in AWS.
- Working on AWS services like IAM, EC2, EBS, S3, Security Group, NACL etc.
- Deploying and managing EKS cluster.
- Experience infrastructure designs, implementation, and support on AWS.
- Migrating on premises environment to AWS.
- Understanding of data communications and networking, including routing and switching in IPv4 or IPv6 environment, Internet Gateway, NAT.
- Understanding of OSI Layers and networking protocols such as DNS, DHCP, TCP/UDP, ICMP and DNS, etc.
- IP networking concepts and packet analysis like Ethernet, TCP/IP, Wireshark / tcpdump.
- Building/Maintaining **Docker** container clusters managed by **Kubernetes.**
- Setup Docker private and public repository and configure docker file.
- Configure and manage docker network, volume and containers.
- Install and configure Kubernetes cluster and upgradation.
- Configure and manage pods, network, service, storage etc.
- Deploying Ericsson Cloud Container Distribution (ECCD) on Redhat Openstack and CEE. Providing support and troubleshoot ECCD related issues.
- Deploying EVNFM for CNF (Containerized Network Function) and VNF (Virtualized Network Function) on ECCD and troubleshooting EVNFM related issue.
- Working on Network Slicing to setup 5G Core.
- Creating Gitlab and Jenkins CICD pipelines for build & deploy application using Ansible Playbook, Shell Scripting.
- Writing and managing Shell Scripts and Ansible playbook for automation task.
- Debugging logs error reports monitoring & analysis.
- Interacting with customer regarding testing, trainings and ATP Sign off.
- Handling escalated issues and root cause analysis.
- New infrastructure setup planning and implementation.
- Understanding client new demands and providing solution.

#### WIPRO TECHNOLOGIES, HYDERABAD (INDIA)

Jan 2015 - May 2018

**Designation:** 

Software Engineer

May 2015 - May 2018

Trainee

Jan 2015 - May 2015

**Project:** Nokia Solutions and Networks (Offshore & Onsite)

#### Responsibilities:

- Provided Support to the infrastructure and maintenance project for Linux Systems RHEL 5.x, 6.x, 7.x. Supported 5000+ Linux servers remotely including Physical, Virtual servers. Linux OS support and provisioning (Build, Migration, Decommission)
- Worked on LVM (Created Physical Volumes, Volume Groups, and Logical Volumes). Worked on File systems (Create, Extend, and Reduce), Configuring additional Swap space, and Snapshots creation.
- Worked on ISCSI, FC LUN and DM-Multipath, and discovering LUN, creating file system, mounting and troubleshooting on LUN issues.
- Managed User administration and issues.
- Network configuration, monitoring and troubleshooting on network issue.
- Managed Log files & Troubleshooting on File System errors.
- YUM server and client configuration. Installation of patches and other software packages using YUM and RPM.
- Monitoring Processes, Services and setting up Cron jobs and Scheduling system tasks.

- Configuration and managed NFS, SAMBA, DNS, NIS, LDAP, NTP, Chrony.
- Configured RAID and installed of both physical and virtual servers using PXE Cobbler, Manual and Kick Start installations.
- Wrote and managed Shell Scripts for daily related work.
- Worked on Physical to Virtual Server and V2V migration.
- Installed and upgrade Redhat Hypervisors.
- Created and managed Data Center, Cluster, Host/Hypervisor and Storage Domain Addition into Data Center, Creating Logical Network and Network configuration of host.
- Worked on providing additional resources to VM like addition disk and virtual NIC card, RAM, CPU cores of VM's as per the client requirement and **VM migration**.
- Created and managed Snapshot, Clone and Template.
- Deployed Redhat OpenStack Platform, provided support and troubleshoot issues.
- Provisioning and optimizing of compute, network, and storage services with Openstack through dashboard, command-line
  and API utilities.
- Create and managed projects, users, quotas, flavor, Images, cinder volume, networks, subnets, routers, heat template through CLI and Horizon.
- Adding additional Nodes and Migrating Instances from one Compute Node to Another Compute Node.
- Troubleshooting day-to- day server related issues and problems in terms of hardware, operating system, network, Physical,
   VM, Redhat Openstack Platform and firmware upgrade.
- Planned maintenance activity. Managed daily operations as per ITIL process.

#### **EDUCATION**

### **Master of Computer Applications**

2012 - 2015

Bengal Institute of Technology (MAKAUT, formerly known as West Bengal University of Technology), Kolkata.

## **Bachelor of Computer Applications**

2008 - 2011

Techno India Institute of Technology (West Bengal University of Technology), Kolkata.

H.S.C

Nimta High School, Kolkata.

S.S.C

Nimta High School, Kolkata.

# **CERTIFICATIONS**

- Red Hat Certified System Administrator in RHEL 7 (Certification Number: 160-100-228)
- Red Hat Certified Engineer (Certification Number: 160-100-228)
- Red Hat Certified Engineer in Linux Ansible Automation (Certification Number: 160-100-228)
- Red Hat Certified System Administrator in Red Hat OpenStack Platform 8 (Certification Number: 160-100-228)
- Ericsson Certified Associate Ericsson 5G Core.
- Certified Kubernetes Administrator (Certification Number: LF-nbfp7f69o1)
- Microsoft Certified Azure Fundamental (Certification Number: H443-6588)

## **ACCOMPLISHMENTS**

- Received Excellence Service Delivery Team award as a Team Member at Ericsson SDEA 2019.
- Received Power Award for Q4, 2018 at Ericsson.
- Received Skill Guru Best Team award as a Team Member at Ericsson SDEA 2018.
- Awarded as a Best Newcomer 2016 in Nokia Project at Wipro Technologies.
- Won 2nd place and award in PRP training at Wipro Technologies.

## **ADDITIONAL INFORMATION**

Date of Birth : April 2, 1991

**Languages Known** : English, Hindi and Bengali

Nationality : Indian