Navneet Kakkar

B.E. (Computer Science & Engg.) with > 15+ years of extensive experience in Radio Access Network & Transmission operations, I&C of Telco Core Networks & Data Centers (Rack, Stack, OS, Networking gear), switching equipment, 24 x 7 O&M, OSP gear such as eNodeB deployment, software development.

Telecom Product Certifications / Trainings

- Huawei MSOFTX3000, UMG8900 & M2000
- Huawei SGSN & GGSN
- ZTE NGN
- Motorola CBSC
- AXE-10 at ALTTC

Achievements & Awards

- Top Performance Rating for the years '07-'08, '11-'13, '15-'16 & '16-'17 at Tata Communications / Tata Teleservices
- Top ranking in JTO Orientation training at BSNL
- 1st Rank in Comp. Science Engg.
- Won prizes in quizzes & debates
- House Prefect - XII

Professional Skills

Business / Management Skills

- Man Management skills
- Strategic Planning for new business
- RFP Processes
- Site survey
- Hardware I&C
- Cloud deployment (on-prem / public)
- Application on boarding / configs / integration
- Security hardening (VA / MA)
- Acceptance testing
- Traffic migration

- Technical Support
- Running Live Operations Support for Large T1 Telco carrier
- Customer Front End
- Team Management
- Senior Mgmt / CXO level engagement
- Enterprise Business engagement
- Partner management (IT Services Partners / 3rd party engagements)
- Managed Services Proposition & 3rd party engagements
- Setting up businesses from Scratch – Entrepreneurship
- Legal / financial / taxation view of any business entity including multi-country set-ups.

IT Technical Skills

- HP-UX, SUN Solaris, Digital Unix, Informix, Oracle, SQL, HTML, OSA / Parlay, Soap / Xml
- IT Networking (Cisco / Nortel / Avaya Equipment)
- Detailed Network Design, Architecture (logical, functional and physical)
- Integration and Implementation plan.
- Infrastructure planning.
- IP design for Node level.
- IP design for interworking systems for integration
- IP connectivity HLD
- Node/module wise high level design
- Node/module wise low level design
- Security hardening related documents
- Cloud Director (under cloud) readiness
- Over cloud deployment
- sVNFM deployment
- Cloud EMS deployment
- DC SDN controller deployment
- Red Hat OpenStack Platform (RHOSP) Solution Document/HLD/DLD documents
- Design and deployment of common Alarm and Performance Management solution
  - HW & RH OpenStack / VM Alarm & Performance / Infrastructure monitoring
- Design and deployment of common Alarm and Performance Management solution
- Prepare MBSS (Minimum Baseline Security Standard) & VA
- Deploying a Red Hat OpenStack Platform based on reference architecture

Data Core Expertise

- Power On - Router Pair Installation

- BW Readiness and Connectivity

- Cloud IP Infra Readiness

- Cloud Readiness (Under Cloud + Over Cloud)

- Application Deployment & Configuration

- Application Integration

- SNOC, SRAS, Arcsight Integration

- UAT / Security Audit and live with Commercial Traffic

IMS Core Expertise

- E2E network requirement analysis and report.
- Lead the network design with different NE vendors and other vendor IMS VNFs
- Carrying out workshop to clarify E2E solution
- Consolidate the E2E HLD for all vendor IMS VNF and Third party NW Vendors
- Creation and execution of E2E test cases
- Trouble shooting of End to end issues.
- Prepare and finalize VoLTE/ VoWiFi detailed call flow with message flows

Telecom Technical Skills

- Converged Billing, IN Pre-Paid, Post-Paid
- VAS - SMSC / VMS, etc.
- Mobile Advertising, Campaign Management
- GSM / CDMA, SS7 and E1 / T1 Interfaces
- VoIP equipment from Cisco / Audio-Codes / Sun Microsystems
- Signaling protocols such as SS7, CAMEL, IS826, VoIP Protocols
- OSS, NW Inventory Mgmt.
- CRM & Ordering
- Data Core: SP GW, DNS, PCRF, CGNAT, MME, CGF, Optimization, FW, CDN,

  Analytics, CGNAT Collector

- Voice Core: IMS, TAS, ENUM, SBC, HSS, DRA, MRF – Applications

- Other – IN/RECC, SD WAN, SDN WAN Controller, Enterprise VNFs

Integration / Security Skills

- Transport network
- SGSN/MME
- GGSN/SPGW
- Voice Core network – MSS, HSS, EIR, IMS, SBC etc.
- eNODEB / NodeB / RNC
- Mediation & Billing ecosystem
- CGNAT central logging system
- SNOC tools
- Enterprise AAA / GDSP
- Gi ADNS, SDP, NTP, Gp DNS
- Support for conducting security testing.
- Sharing artefacts with VIL team.
- Fixing the security risks identified during the MBSS, Application sec Assessment, CR & VA testing VIL

Professional Accomplishments

- Improved KPIs such as Access Fail Rate, Call Drop Rate & Handover Success Rate.
- Reduced EDAP congestion from 60,000 to 200 in < 4 weeks by adding 124 E1s.
- 123 3G sites live - in < 8 weeks for Maharashtra 3G Rollout in Aurangabad cluster.
- MPLS program of 2 clusters Aurangabad & Pune (conversion from TDM to MPLS). Entire planning & execution was done to make the project successful.
- Shifted sites having owner issues seamlessly without any complaints.
- 18 town GSM Rollout Obligation along-with transmission planning / I&C with DOT TERM.
- ICR with Aircel for GSM / MTS for CDMA in MH Circle along-with RA clearance.
- Leading O&M of all 4 switches including GSM, CDMA & Wireline at Nagpur.
- I&C & O&M of GSM Huawei MSOFTX3000 Switch to launch GSM services in MH. Coordination done with other operators, STP, HLR, IN, SMSC, SGSN teams including RA clearances.
- Db configs for MSOFTX3000 including routing & charging.
- Config of Huawei GSM MSOFTX3000, ZTE CDMA ZXC10, Ericsson AXE-810 & Lucent 5ESS.

- Liaising with all carriers & BSNL for augmentation and other requirements.
- MNP testing & configuration for all technologies.
- Routing and Db maintenance including protocols management (GSM / CDMA).
- Developed CDR processing software for Ericsson AXE 810 switch which decodes ASN format.
- Develop tools and macros for day to day ops.
- Developed RF Load Monitoring tool for monitoring BTS Sites.
- Headed the Installation & Commissioning of Ericsson AXE-10 40K TAX at Thane.
- Part of validation team for IOBAS (Inter-operator Billing and Accounting System) project.
- Developed CDR based billing system for our system installed at NT-TAX, Thane.
- Developed applications to generate Traffic Reports and to process data generated by the Switch.
- Worked on a project of PDF (Portable Document Format) Reader, a platform independent way to store docs. Developed CCITT, JPEG decoders, interpreter for Postscript Language.
- Developed interpreters for True Type Fonts and Open Type Fonts. These fonts were developed by Microsoft and Apple.

Work Experience

Dec '16 – Apr '18	*TCTS Limited* *Circle Head*

Dec '16 – Apr '18	*TCTS Limited* *Circle Head*

Company Profile:

Tata Teleservices Limited (TTSL) is an Indian BB and Telecom service provider based in Mumbai, Maharashtra, India. It is a subsidiary of the Tata Group, an Indian conglomerate company. It operates fixedline services under the brand name Tata Tele Broadband in various telecom circles of India. In 2017, Tata Teleservices have sought to exit mobile network division.

Responsibilities:

- Plan the IT Stack needed for making the user experience seamless
- Guide the Tech Team in tech stacks & long term strategies
- Support overall IT Planning (Software / Hardware / Solutions / Integrations)
- Handling 4264-GSM, 1637-CDMA, 3068-3G, 1060-HSIA & 170+ wireline sites of ROM circle.
- Complete Operation, Maintenance & Implementation of ROM circle.

- Transmission, Radio Access Network, Network Implementation, Switch, RF & DC Infra departments of ROM circle.

- Leading a team of 250+ team members.

- RAN & Transmission operations of entire ROM circle.

- Fiber maintenance (around 4000Km) of ROM circle.

- DC maintenance of TTML owned BTS & wireline sites.

- Ops & maintenance of infrastructure of BTS sites.

- Daily outage analysis to reduce the outages.

- 1st level corrective maintenance of sites for any failure related to Infra/Media/Equipment etc.

- Tracking of HW / software alarms of BTS/BSC to improve availability & reliability of network.

- Daily tracking of key KPIs to improve network performance.

- Audit BTS trails to reduce outage & provide redundancy.

- Optimization of antennas in coordination with RF teams.

- MPLS conversion of 3G sites & FCD reduction by increasing the bandwidth.

- Handling both wireless & wireline complaints.

- Microwave link operation & maintenance for link restoration & availability.

- Ring splitting & ring restructuring activities.

- Version upgrades for BTS / NodeB / BSC / RNC of ROM circle.

- Hardware maintenance of NMS & M2000 servers.

- All regulatory requirements of DOT

- Huawei 3G RNC, Huawei GSM & CDMA BSC & BTS & ECI Transmission equipment.

Jul '14 – Oct '15	***Tata Tele Services Limited*** *Cluster Head – Aurangabad*
Nov '15 – Nov '16	***TCTS Limited*** *Cluster Head – Aurangabad*

Responsibilities:

- Managed 490-GSM, 170-CDMA, 223-3G, 93-HSIA & 50-wireline sites of Aurangabad cluster comprising of 6 districts (Aurangabad, Ahmednagar, Jalna, Beed, Parbhani & Hingoli).

- Operation, Maintenance & Implementation of Aurangabad cluster.

- Transmission, RAN, NW Implementation, Switch, RF & DC Infrastructure.
- Led a team of 40+ members.
- Fiber maintenance (~ 600 Km) spread across 6 districts
- DC / OSP infrastructure maintenance of TTML owned BTS & wireline sites.
- KPIs management.
- Network Availability of Aurangabad cluster was best in ROM.
- Aurangabad cluster was leading in all key performance indicators during my tenure.

<u>**Apr '09 – Jun '14**</u>   *<u>Tata Tele Services Limited</u>*
                                                              Mgr. – Switch Ops, Nagpur

Responsibilities:

- O&M of Huawei MSOFTX3000, ZTE CDMA ZXC10 & Ericsson AXE-810 switches.
- Configuration, fault & alarm of all 3 switches.
- Traffic management, network planning and functioning/ maintenance of communications links of all 3 switches.
- Hardware, software maintenance of all 3 switches.
- Implémentation of IUC setup
- Customer complaints of entire Nagpur cluster
- Achieved 100% routing database audit compliance for continuously 9 quarters.
- Cleared all external audits with no NCs.
- Liaising with TERM as TERM cell for ROM is in Nagpur.
- DOT TERM 2G MRO testing completed for all 18 towns of ROM.
- Developed software for CDR processing, macros for traffic report generation.

<u>**May '06 – Mar '09**</u>   *<u>Tata Tele Services Limited</u>*
                                                              Dy. Mgr. – Switch Ops, Goa

Responsibilities:

- Work involved O&M of Ericsson AXE-810 switch & Lucent 5ESS switches
- Config, fault & alarm management.
- Traffic management, network planning / O&M of communications links.
- Maintenance & parameters measurements of NMS for local & remote terminal sites.
- Laison with DOT & regulatory authorities for requisite approvals & clearances.
- Monitoring & optimizing resource utilization & safety of human and equipment.
- Implementing measures to maintain and meet ISO standards.
- Ensuring compliance with environmental & safety regulations.
- Review Ops practices, identify the areas of obstruction / quality failures and advise on system and process changes for qualitative improvement & conservation.

- Implementation of IUC (Interconnect Usage Charges).
- Development of software for CDR processing and Traffic Reports.
- Carry out IN system upgrades / updates of HW and SW

Dec '02 – Apr '06   ***BSNL***
                                                                             Jr. Telecom Officer

Company Profile:

Bharat Sanchar Nigam Limited (BSNL), is the national carrier having the max reach across the country with T-1 services such as Wireline, 2G, 3G, BB, Telco VAS Services.

Responsibilities:

- Worked at L-1 TAX (Ericsson AXE-10) at Thane, Mumbai.
- Installed and commissioned AXE-10 TAX at Thane.
- Had extensive exposure on LIM and SSTP equipment.
- Developed many tools for CDR processing as IOBAS was not in place then.

Aug '01 – Oct '02   ***Kothari Infotech Ltd.***
                                                                             Software Engineer

Company Profile:

KITL dealt in Graphics and Image processing, content generation and content reproduction.

Responsibilities:

- Single handedly developed PDF Reader to read PDF documents.