



NOC Setup for a Leading Telecom Company in Latin America

Client Success Story





NOC OPERATIONS

NOC Setup for a Leading Telecom company in Latin America

Business Requirement: Build a global Network Operations Center at Noida, India and Barranquilla, Colombia

NOC Support - General

- 24x7 Network Operations Center Support
- NOC Tier1 and Tier 2 Operations Support
- Event and Incident Management
- Fault investigation, isolation and resolution
- 3rd Party Coordination
- KPI Monitoring and Reporting
- Supporting Proactive and reactive maintenance
- Supporting Change and configuration management teams
- Inbound calls regarding incident / fault reporting

Automation Support



Automated
ticketing



Runbook
Automation



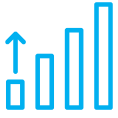
Event
Correlation



Tools
Integration

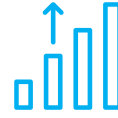
service scope, network and geographies

- Fixed and Mobile Network
- Fixed and Mobile Network Element Count 42 K
- Mobile Core, VAS, EMS, and RAN components
- Language Support - English and Spanish
- NOC Consolidation:
- Covers 4 OPCOs : Caribbean, Costa Rica, Panama, Puerto Rico
- Covers over 22 Countries



Level 1 Support

- Analysis of trends and network events
- Monitoring the Network Infrastructure
- Incident Management
- Manage NoC Interactions, communications
- Inbound and Outbound calls
- Manage notifications and escalations
- Provide status and performance reporting
- Work with power companies to resolve energy outages



Level 2 Support

- Health Check and Maintenance support
- Incident Triage, support, restoration and recommendation
- RCA Support
- Create, Maintain, Update Network and Process Documents
- Interface with internal, or third-party stakeholder to resolve issues
- Monitor Network Capacity
- Provide weekly and monthly reports on service performance
- Training support to T1 teams
- Update Knowledge Base
- Support Major incident, Problem
- Configuration backup
- Support Change Management
- Disaster recovery readiness
- Business continuity preparation



Our data center and operations services ensure the efficient provisioning, hosting, and administration of both physical and virtual servers, as well as related storage.



NOC Infrastructure Setup

Establishing a robust Network Operations Center (NOC) requires meticulous planning and investment in cutting-edge infrastructure. At its core, a NOC is equipped with state-of-the-art monitoring tools, including network management systems, performance analytics platforms, and security incident and event management (SIEM) solutions. These tools provide NOC teams with real-time visibility into network traffic, performance metrics, and security alerts, enabling proactive monitoring and rapid response to potential issues. Additionally, NOCs are equipped with redundant power supplies, climate control systems, and physical security measures to ensure uninterrupted operations. Scalability is also a key consideration, with NOC infrastructure designed to accommodate the evolving needs of expanding networks and technological advancements. By implementing a robust infrastructure setup, NOCs can effectively safeguard network integrity and maintain seamless connectivity for organizations.

Infinite has set up an effective Network Operations Center (NOC) infrastructure, ensuring smooth data connectivity for operations and effective monitoring of network resources, implementing an NOC voice solution, and deploying physical and IT infrastructure.





Data Connectivity

- Deployed Data MPLS Line from NOC to customer network
- The solution provides fast, reliable seamless connectivity with low latency
- Deployed redundant connectivity solution for high availability
- VPN Solution is implemented for remote connectivity



Physical Infrastructure

- Physically isolated section for 24*7 NOC operations
- Seating arrangements suitable for NOC Monitoring
- Provisioned War Room, Meeting rooms
- Implemented Perimeter security
- Implemented access control system

Infinite has successfully implemented Network Operations Setup in Noida, India and Barranquilla, Colombia



NOC Voice Solution

- Voice Connectivity solution is implemented for inbound/outbound calls
- Genesys cloud CX enhanced solution is implemented
- The Voice solution is implemented over the Data MPLS line
- Free calls between operations teams located at different geographies
- Redundant, high availability Voice solution is implemented
- Standard reporting solution is available to measure the SLA
- Customized call routing based on language support, IVR Implementation
- Use of Softphones



IT Infrastructure - Deployed

- Laptops / Desktops as per security compliance requirements
- Dedicated VLAN for the project
- Applications and troubleshooting tools required for operations
- Large size monitors to view real time alerts and notifications
- SMART TV for video conference calls
- Secure CRT for secure remote access with the strong encryption, data integrity, and authentication options



NOC knowledge acquisition and transfer

Effective knowledge transfer is essential within Network Operations Centers (NOCs) to ensure continuity, efficiency, and expertise across teams. Through comprehensive documentation, regular training sessions, and mentorship programs, NOCs facilitate the sharing of best practices, troubleshooting techniques, and insights into network architecture and protocols. Knowledge transfer initiatives aim to empower team members with the skills and expertise needed to proactively monitor and manage networks, mitigate potential risks, and swiftly resolve issues. By fostering a culture of continuous learning and collaboration, NOCs cultivate a pool of knowledgeable professionals capable of adapting to evolving technologies and effectively addressing the dynamic challenges of network operations.

ICS has developed a NOC Knowledge Acquisition and Transfer repository that encompasses acquiring expertise, best practices, trainings, and insights related to network management and operations and then transferring this knowledge effectively among NOC staff to ensure that the team stays updated on the latest technologies, procedures, and troubleshooting techniques





Documentation

- Created a detailed documentation checklist for all the domains
- Created document repository
- ITIL Processes
- Tools and applications
- Organization Chart, Escalation Contacts, Roster
- Network Inventory, Network Diagrams, and Architecture
- OEM Support Processes
- Disaster recovery, and BCP, Health Checks and Preventive Maintenance
- Performance KPIs, SLA Data , SOPs and MOPs
- Incident, Change, and Problem data



Internal training

- Project induction and orientation for all new joiners
- Hands-on / Lab Training Sessions for T2 and SMEs
- Periodic assessments, review and improvement plan
- Training for Tier 1
- On the NOC processes
- Monitoring, ticketing and troubleshooting tools
- On domains by T2 and SMEs
- Soft-skills, Communication



Tool access & training

- Organized training on project specific applications and tools
- Training and access on 150+ tools
- Monitoring Platforms
- Troubleshooting tools
- Ticketing and Reporting Tools

Knowledge transfer

- Created a detailed Knowledge Transfer checklist and plan
- Organized KT sessions for different Domains and OPCOs
- Detailed technical sessions for Tier 2 and SMEs
- Detailed process and tools monitoring training for Tier 1
- Knowledge Transfer
- Mobile Network including RAN, CS Core, PS Core, VAS, NFVI
- Fixed Network including Access, HFC, Fixed Voice, and Video
- Transmission, DWDM, IP MPLS, Security, Firewall
- Organized Onsite / Classroom training by customer SMEs
- Periodic assessments, reviews and improvement plan
- Assignments on simulated environments and lab sessions
- Participation and shadowing on live incidents, changes
- Periodic health checks and preventive maintenance activities



NOC event management and automation

Infinite has implemented Oracle Communications Unified Assurance solution that provides AI-optimized assurance, analytics, and automation solutions. It monitors and manages the performance of critical networks and services.

The solution is implemented to collect, analyze, and provide real-time visibility into consumption of network bandwidth at the IP layer and above. OUA provides a single pane of glass across fault, performance, topology and Flow data, provide intelligent insights using ML policies into the Flow data together with unified, real-time alerting facilitating dynamic resolution through automation.





Single pane of Glass

- Integration of multiple EMS, Monitoring Tools to Oracle UA
- Consolidation of multiple applications into single scalable platform
- Manager of Manager Solution
- Data Separation as per DOJ compliance
- Filter views of different OPCOs and Domains Scalable Infrastructure



Closed loop correlation automations

- Creation of ML Models
- Auto Triage/Diagnostics
- Auto Remediation
- Grouping of Alarms with Root Cause
- Workflow analytics



Ticketing integrations

- Integration with InvGate
- Auto ticketing and closure
- Enhanced Grouping, Suppression, and Ticketing of Alarms



Enrichment and closed loop correlation

- Alarm Enrichment- CAPE (Domain, Tech, Category, etc.)
- Basic Correlation
- Custom Correlation-Power, Fiber, Cell Sectors, DWDM
- Topology Based Correlation (PRCA)



Dashboards, service reports and KPI's

- Service reports
- KPIs and Dashboard
- Customized Mobile KPI Reports

Month 1

- Customer Workshop
- Detailed Scope
- Network Inventory
- Network Design & Architecture
- Detailed Transition Plan
- Hiring Initiation

Month 3

- Team Onboarding 80%
- IT Application Access 70%
- KT & Documentation 60%
- Data Connectivity 70%
- Application Access 40%
- Oracle UA Sandbox Readiness

Month 5

- IT Application Access 100%
- Network Access 80%
- KT & Documentation 100%
- Ticketing Integration 100%
- Oracle UA Integrations 80%
- KT Assessment
- Operations Readiness

Month 7

- Go Live 24*7 Support
- Live Network Support
- Proactive Monitoring
- Ticket Creation and Resolution
- Change Management
- Problem Management
- Process Optimization
- SLA Compliance

Month 0

- Project Awarded
- LOI Signature

Month 2

- Onboarding of key positions
- Onboarding of SMEs
- Physical & IT Infra Setup
- Onboarding of Tier 1
- KT Checklist and Plan
- KT Initiation
- Oracle UA Solution & Plan

Month 4

- Team Onboarding 100%
- IT Application Access 85%
- KT & Documentation 85%
- Data and Voice Solution 100%
- Application Access 95%
- Oracle UA Solution Production 50%

Month 6

- 24*7 Operation Support
- Shadow Support
- Network Monitoring
- Ticket Creation
- Participation in Triage
- Network Access 100%



Infinite NOC Transition Delivery

NOC Infrastructure Setup

- Physical Infra Setup
- Physical Security
- Access Control
- Facilities Support for 24*7 Operations
- War Room
- Video Conference Room

Team Ramp Up, Training & Knowledge Transfer

- Team Hiring
- Team Onboarding and Access
- Knowledge Base
- Documentation
- Knowledge Transfer
- Training

Shadow Support and Go Live

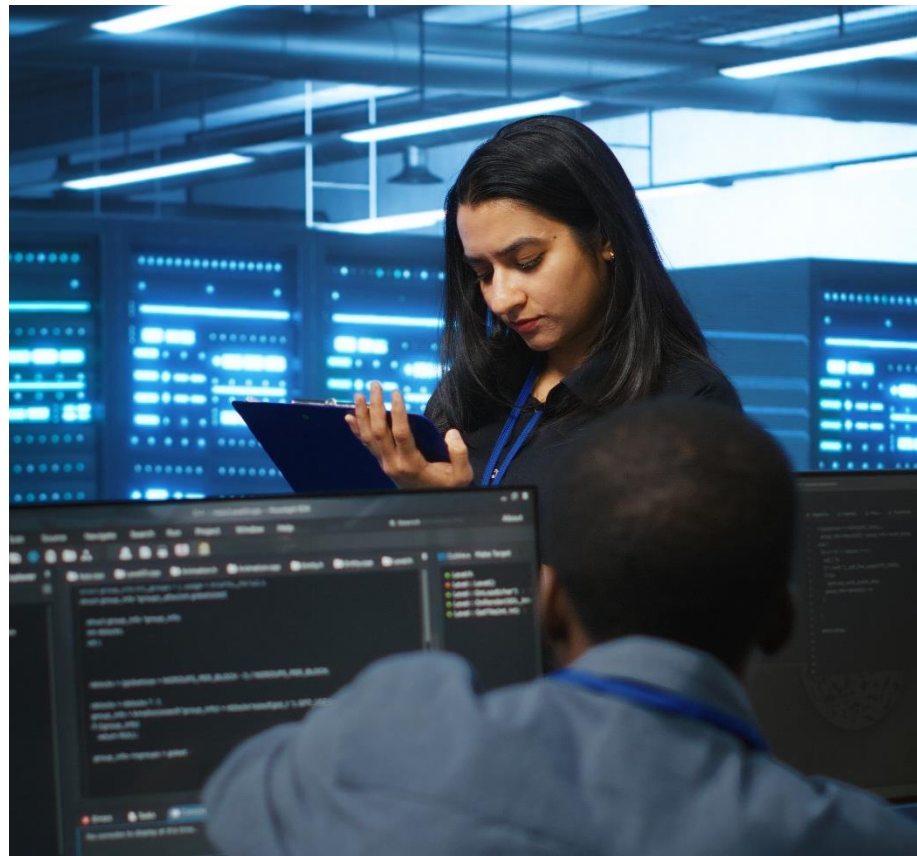
- 24*7 Support
- Shadow Support
- Parallel run
- Transition
- Go Live
- Steady state operations
- Optimization

Data MPLS, VPN Connectivity And Voice Solution

- Data MPLS connectivity to LLA Network
- Voice Solution
- VPN Solution
- IT and Network Security

Event Management and Automation -Oracle Unified Assurance

- NOC Consolidation for all OPCO
- Single Pane of Glass
- Manager of Manager
- Integrations and Automation
- Correlation
- Auto Ticketing
- RCA and Triaging



NOC Setup for a Leading Telecom company in Latin America

Key Highlights



Global NOC

Serving 22+ Countries
Bilingual Support



140+ Team Size

30 SMEs
40 T2 Engineers



45 K Devices

Mobile Network Core,
RAN , VAS,
IMS, NFVI. 4G, 5G
Fixed Network Voice,
Video, Internet



220k Tickets

70k Inbound
& Outbound Calls



Oracle Unified Assurance

80+ Integration
Auto Ticketing
Auto Triage



For more information, please visit www.infinite.com

