

Ndifreke Okorie

IT Operations & Network Connectivity | IT Infrastructure Specialist

(With valid work permit & driving licence)

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Location: Oulu, Finland | [LinkedIn](#)

Professional Summary

Experienced **IT Infrastructure and Support Specialist** with years of international experience in hands-on technical support, physical **network infrastructure deployment**, and **enterprise systems administration**. Proven ability to work independently and deliver reliable on-site support across Windows, Linux, and Apple ecosystems. Seeking a challenging IT position to provide comprehensive support and deliver seamless IT operations for mission-critical environments

Technical Skills

- **Desktop Support:** Windows, Linux & MacOS configuration, and troubleshooting; hardware repair; peripheral support.
 - Remote & Onsite Support: Experience using helpdesk ticketing systems; strong communication and customer service skills.
 - Desk-side and remote IT support for enterprise environments
 - Hardware break-fix (laptops, desktops, printers, peripherals)
- **Operating Systems & Applications:** Windows (XP–11), Mac OS, Microsoft Office /O365, antivirus solutions, Cisco Jabber.
- **Networking Protocols:** LAN/WLAN/WAN, TCP/IP, DNS, DHCP; hands-on with switches and routers(e.g. Cisco, HP, Fortinet devices, etc)
 - Physical network design and implementation (structured cabling, patching, switch setup)
 - WLAN infrastructure support (e.g. Ubiquiti, Cisco, etc.)
- **OS Networking:** Linux, Windows and MacOS experiences in an ISP environment (administering and supporting DNS(s))
 - Windows Server 2016–2022, Active Directory, Group Policy
 - DNS and DHCP configuration and troubleshooting
- **Firewalls:** Hands on configuration and management of firewalls (e.g Axent VelociRaptor, Cisco Pix, Checkpoint, Juniper, Linux IPTABLES) and site-to-site VPN setups.
 - Knowledge of Firewall setup and rules management (e.g., pfSense, Fortinet, Cisco ASA)
- **Virtualization:** Hands-on experience with VMware & Hyper-V (installation, scaling, and performance tuning).
 - VMware ESXi and vCenter administration

- **Hardware & Software Maintenance:** Computer assembly, upgrades, patching, OS imaging, and device driver management.
 - **ITIL & Agile:** Skilled in ITIL-aligned incident and service request handling i.e. incident, problem, and change management and Agile approach to projects.
 - **DevOps & Cloud:** CI/CD DevOps with GitHub Actions; experience with AWS/GCP/Azure deployments.
 - **Programming & Scripting:** Advance Python Scripting (automation, ML), JavaScript (React), HTML/CSS, Robot Framework, Selenium, JMeter (performance testing), Postman (API testing).
 - **Database:** Oracle, SQL, PL/SQL, MSSQL, etc.
 - **Security:** Endpoint protection, enterprise antivirus, encryption solutions, basic cybersecurity principles.
 - **Others:**
 - MS Active Directory, Group Policy Objects (GPOs), helpdesk ticketing systems(e.g. EasyVista, etc.), WSUS & SCCM server updating and pc provisioning at scale, remote desktop software, strong automation skills with CI/CD and GitHub Actions
 - Telecoms, VoIP and SIP management at ServiceTrail, Cotecna and Bouygues Construction
 - MDM tools
 - Lab setup management and documentation
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Professional Experience

Freelance | Network Engineer & Software Tester

2022 – Present | Oulu, Finland

- **Desktop/Dispatch Engineer:** Provided L2/L3 network device maintenance and remote/onsite desktop support.
- **Data Center Operation:** Performed equipment mounting/replacement and basic configuration (POST) of servers (HP iLO, enclosures), ensuring optimal performance and user accessibility.
- **Network Engineering:** Configured Layer 2/3 switches and managed VLAN segmentation for development and production environments.
- **Test environment development:** Set up and maintained VMware hypervisors (ESXi 7.0) and Windows servers in isolated R&D environments.
- **Apple ecosystem:** Implemented basic MacOS support and troubleshooting for Apple devices.

Bouygues Construction | IT Manager

2013 – 2021 | Abuja, Nigeria

- **Hands-on Visionary Leadership:** Directed IT infrastructure deployments, including Windows-based desktop/laptop configurations, ensuring consistent WLAN uptime and user support for 6+ sites

- **Systems Administration:** Manually configured DNS records and local name resolution mechanisms where domain control access was restricted.
- **Security specialty:** Administered firewall rules for development labs using Juniper and Checkpoint appliances.
- **WLAN/LAN Engineer:** Supported WLAN between all sites in Nigeria and France head office
- **L1 - L3 hands-on Support with various ITSMs (e.g. EasyVista):** Led helpdesk operations, managing incident resolution and vendor coordination.
- **Mobile Communication integration and Support:** Company-wide MDM implementation using blackberry tech; and knowledge of deploying and managing endpoints corporate devices.
- **Backup and Cloud management:** Oversaw cloud backup digital transformation/ migrations using VEEAM and HyperV Virtualization on a Dell RAID server, improving data redundancy and business continuity.
- **Scripting and automation:** Conducted lifecycle support for over 300 devices/ new machines provisioning, including BIOS config, OS imaging, patching, and endpoint hardening with SCCM.
- **SQL, Oracle and other Database administration:** Maintaining and administrating SQL Servers and Oracle installations. Good with advance SQL queries and data analytics
- **GRC, Cybersecurity and Documentation:** Mentored IT staff, developed IT policies, documentations and managed security standards for desktop and network environments.
- **VoIP and Conferencing deployment:** Installed and managed Tandberg TTC7-14 TRC4 800-35715-01/ Cisco SX20 Telepresence video conferencing devices for inter-site and stakeholders meetings. And Mitel VoIP SIP management.

Cotecna | Assistant IT Manager

2008 – 2013 | Abuja, Nigeria

- **Provided desktop support:** for Windows, Linux, and MacOS users across multiple locations, reducing downtime and improving productivity.
- **Directed IT operations across multiple sites:** managing Switches, Thin clients, VPNs, and local LAN/WAN topologies.
- **Supported WLAN:** between Nigeria and Switzerland
- **Test Environment Management:** Designed and installed structured cabling systems and wired previously inactive lab network ports, ensuring stable and compliant lab infrastructure.
- **Network Engineering:** Configured Layer 2/3 switches and managed VLAN segmentation for development and production environments.
- **Test environment Virtualization and Systems Administration:** Set up and maintained VMware hypervisors (ESXi 7.0) and Windows servers in isolated R&D environments.
- **Multitasking DNS Management:** Coordinated multi-site DNS schema and implemented failover strategies
- **Network Security:** Deployed site-to-site VPNs and firewall solutions for secure data transfer.
- **MS Exchange Mail Server Management:** Setup MS-Exchange Mail server from scratch, manage users and backups
- **Documentation:** Created a knowledge base to streamline common troubleshooting processes.

Previous Roles (1998 – 2006)

Held various Systems Administrator and IP Engineer positions in ISP and IT service companies, managing desktop support, firewall configuration, network engineering and wireless BSS deployments. And also:

- Diagnosed and repaired end-user hardware issues (MacBooks, HP, Lenovo).
 - Wired dormant lab ports, labeled patch panels, and validated cabling using Fluke tools.
 - Accessed and maintained VMware ESXi nodes manually due to limited domain rights.
 - Configured static DNS entries and resolved name resolution problems.
 - Supported WLAN deployments in office and lab spaces.
 - Linux Sendmail management
 - Voice over packet network implementation with telecoms grade switch using SS7/Q.931 protocols capabilities.
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Education

- **Master of Engineering in Big Data Analytics**
Arcada University of Applied Sciences, Helsinki, Finland (2022)
 - **PG Program in Artificial Intelligence and Machine Learning**
University of Texas, Austin, USA (2020)
 - **B.Sc. Degree in Physics**
University of Calabar, Nigeria (1995)
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Awards, Certifications & Trainings

- **Information Systems Professional of Canada (ISP)** – CIPS (2019)
 - **Google Scholarship Finalist (ALC 4.0)** – Google Cloud Architect Training (2020)
 - CCNA | MCSE | TCP/IP Admin – BrainBench (Certifications)
 - **ITIL v4**, CISSP, AWS, GCP (Trainings)
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Key Achievements (STAR Methodology)

1. Network Architecture Development (VoIP & Routing)

- **Situation:** As a system administrator for ServiceTrail ISP, I was tasked with establishing a new telecom-grade Voice over IP (VoIP) system for an ISP, requiring integration with legacy telecom infrastructure and complex routing.
- **Task:** My responsibility was to lead the end-to-end design, setup, and comprehensive management of this critical VoIP system, including the Redwood

Technologies DNX-1100 voice switch and Cisco AS5400 routers, ensuring seamless interoperability with SS7/Q.931 protocols.

- **Action:** I independently performed the network architecture design, configuring Cisco AS5400 routers for efficient voice traffic routing and integrating the Redwood DNX-1100, rigorously testing SS7/Q.931 signaling. This required deep protocol-level understanding and meticulous configuration to achieve **CCIE-level implementation**.
- **Result:** Successfully launched a highly reliable telecom-grade VoIP system that significantly enhanced communication capabilities and stability for the ISP, delivering a critical affordable calling card service and demonstrating advanced network architecture skills.

2. Infrastructure Scalability & Security Enhancement

- **Situation:** As Bouygues Construction rapidly expanded its construction sites there was a need to scale IT infrastructure across multiple new sites while maintaining stringent security and compliance standards.
- **Task:** I was responsible for coordinating these multi-site expansions, focusing on designing and deploying robust network solutions to improve capacity and scalability, and implementing comprehensive firewall solutions to ensure enterprise-level security.
- **Action:** I collaborated closely with project managers, the WLAN VPN Satellite vendor and my IT teams to plan network topology for new sites, configured and integrated new network devices (routers, switches, next-generation firewalls), and proactively suggested architecture improvements to enhance overall network performance and security posture.
- **Result:** Successfully facilitated seamless expansion into multiple new locations, supporting the company's rapid growth objectives while enhancing overall network security and capacity. This proactive approach minimized disruption during a period of significant construction delivery timelines pursuit.

3. Cloud Integration & Data Protection

- **Situation:** Bouygues Construction Nigeria relied on an outdated on-premises robotic tape backup system, which posed inherent risks to data protection and disaster recovery capabilities due to its manual nature and aging hardware.
- **Task:** Our task (My line manager in France and I in Nigeria) was to modernize the data backup strategy by migrating the system to a robust, automated cloud-based solution, ensuring enhanced data protection and disaster recovery for critical network-dependent services.
- **Action:** I researched alongside my line manager in France and evaluated cloud platforms, then meticulously architected and executed the migration of the robotic tape backup system to a cloud environment. This involved my being on prem utilizing Hyper-V, Dell RAID servers, and VEEAM backup solutions, alongside complex network configuration and troubleshooting of hybrid connectivity challenges; while reporting progress to my manager in France.
- **Result:** Successfully transitioned to a fully cloud-integrated backup system, significantly improving data redundancy and reducing Recovery Time Objectives (RTO), which directly enhanced business continuity and resilience against potential data loss incidents (This result was directly observed after the server room fire incident).

4. Disaster Recovery & Critical System Restoration

- **Situation:** The company experienced a dual, devastating crisis: widespread global malware disaster followed by a local fire severely impacting physical infrastructure, a year after, causing critical system outages
- **Task:** My immediate task was to lead the rapid recovery and optimization of the impacted IT infrastructure, with particular urgency placed on rebuilding from scratch to restore critical communication services under immense pressure while providing an isolated and safe network for business continuity.
- **Action:** Working in tandem with France's team as directions were given for several countries IT Managers to rebuild their network and independently in Nigeria under extreme time constraints, I developed and executed a comprehensive recovery plan for the entire infrastructure post-malware attack and fire. Crucially, I performed a complete, ground-up rebuild of the MS Exchange, MS SQL, DNS, File, and other application servers, meticulously restoring data and configurations.
- **Result:** Successfully restored core IT operations, including mission-critical email services, within an unprecedented timeframe, significantly minimizing business disruption and demonstrating exceptional resilience, independent problem-solving capabilities, and rapid technical execution in crisis situations.

5. Automated IT Provisioning & Efficiency

- **Situation:** Manual processes for updating servers and provisioning PCs at Cotecna were time-consuming, resource-intensive, and prone to inconsistencies across a large, distributed enterprise environment.
- **Task:** My responsibility was to improve efficiency and quality in IT operations by automating server updates and PC provisioning at scale, reducing manual effort and ensuring standardization.
- **Action:** I leveraged enterprise tools like WSUS (Windows Server Update Services) and SCCM (System Center Configuration Manager) to design and implement automated update schedules and streamlined PC provisioning workflows. I further developed and deployed custom scripts using **Python and Bash** to enhance automation capabilities for task monitoring and reporting (including DNS replications).
- **Result:** Successfully automated over 80% of server update deployments and PC provisioning tasks, leading to a significant reduction in manual effort (e.g., a 30% reduction in IT workload) and ensuring consistent system configurations and improved security compliance across the enterprise; because these ran after office hours.

6. Emergency MS Exchange Server Rebuild

- **Situation:** At Cotecna, after a working week the mail server crashed after close of work on a Friday.
- **Task:** The server should be up and running by Monday with users' mails intact.
- **Action:** I swung into action, rebuilt the MS Exchange server from scratch, working Friday to Monday morning without going home, the group mail administrator in Switzerland authorized the joining to the existing Exchange organisation on Monday morning, and database and transactional logs were done for consistency.

- **Result:** Users were able to access their mailboxes and use the mail server accordingly by late Monday morning, facilitating the critical customs evaluation work which allows for zero downtime.
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Additional Information

- **Work Permit & Driving Licence:** Valid in Finland.
- **Languages:** English (Fluent) & Finnish (Basic)
- **Availability:** Flexible for off-hours or weekend support when required.