**OLDHAM COUNCIL**

**JOB DESCRIPTION**

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| **Job Title:** | Senior Network Infrastructure and Communication Engineer | | |
| **Directorate:** | Customer, Digital, Technology and Transformation | **Division/Section:** | ICT |
| **Grade:** | 9 | **JE Reference:** | 11014 |

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| **Job Purpose** |
| The Senior Network Infrastructure and Communication Engineer is responsible for leading the design, implementation, and maintenance of complex network and communication infrastructures to ensure optimal performance, reliability, and security. They will work closely with cross-functional teams to identify and resolve network-related issues, provide technical guidance and support, and contribute to developing network strategies and policies. This role is a senior position that provides support and guidance to Network and Communication Engineers.  As a Senior Engineer, you will form part of the Oldham ICT Infrastructure team. This highly skilled collaborative team is formed from a combination of Network, Server and Field Services staff and focuses on the design, implementation, monitoring, maintenance and troubleshooting of infrastructure assets.  Furthermore, you will take an active lead in embedding ITIL incident management and service-related processes, providing best practice service management of the Network Team through second-line and third-line support for the broad range of network and communication technologies the Council relies on. |
| **Key Tasks** |
| **Network and Communication Design:**   * Design, develop, and implement scalable network and communication architectures, including LAN, WAN, VoIP, and unified communication solutions. * Evaluate and recommend network hardware, software, and communication technologies to meet business requirements and industry best practices. * Collaborate with stakeholders to understand their communication needs and design solutions optimising performance, reliability, and security. * Work with other infrastructure leads, Architects and the Cyber Security Manager to design and implement network security measures like firewalls, access controls, and encryption protocols.   **Network and Communication Infrastructure Management:**   * Monitor and maintain network and communication infrastructure, including routers, switches, firewalls, voice gateways, and unified communication servers. * Perform routine maintenance tasks, such as firmware upgrades, patch management, and system backups, ensuring minimal disruption to operations. * Implement and enforce network and communication security measures, including access controls, encryption, and vulnerability management.   **Network and Communication Troubleshooting and Support:**   * Provide advanced troubleshooting and problem resolution for network and communication issues, including connectivity, performance, and voice quality problems. * Collaborate with vendors and service providers to resolve complex technical issues and ensure timely restoration of services. * Serve as an escalation point for network and communication-related incidents, guiding and supporting first-line Field Service Engineers and Network Infrastructure and Communication Engineers in troubleshooting efforts. * Conduct root cause analysis of major incidents and proactively identify trends or recurring issues, working with other teams to implement preventive measures. * Act as a point of escalation for complex or high-priority incidents and ensure timely and effective communication to stakeholders regarding the incident status and resolution progress.   **Collaboration and Project Leadership:**   * Collaborate with cross-functional teams, such as system administrators, security analysts, and application developers, to seamlessly integrate network and communication solutions. * Lead and participate in network and communication-related projects, from planning and implementation to documentation and knowledge transfer. * Provide technical guidance, mentorship, and training to junior engineers, promoting continuous skill development and knowledge sharing. * Actively participate in developing and improving procedures, knowledge articles, and documentation to enhance the team's knowledge base. * Provide as required resource capacity into the Cyber Security Operations Centre during cyber incidents through SecOps management. * Provide cyber security support by actively monitoring and responding to security incidents, supporting security investigations, and implementing security measures to protect systems and data. * Stay current with emerging technologies and industry best practices, and provide recommendations for incorporating them into the network/infrastructure operations. |

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| **Standard Duties:** | |
| 1. | To actively promote the equalities and diversity agenda in the workplace and service delivery. |
| 2. | To uphold and implement policies and procedures of the Council, including customer care, data protection, finance, ICT, safeguarding and health & safety policies. |
| 3. | To actively engage with the behaviours and values of the Council to promote and support our Co-operative Agenda. |
| 4. | To undertake continuous professional development and be aware of new developments, legislation, initiatives, guidelines, policies, and procedures as appropriate to the role. |
| 5. | Undertake any additional duties commensurate with the level of the post. |

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| **Contacts:**  Executive Directors, Senior Officer and other staff across the Council, Elected Members, Strategic Partners, Community and Voluntary Groups, Central Government, NCSC, GMCA, other Councils, NHS services, members of the public and other relevant external organisations and businesses. |

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| Relationship to Other Posts in The Department: | |
| **Responsible to:** | Principle Network and Communications Engineer |
| **Responsible for:** | None |

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| **Special Conditions:** None |

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| **Values and Behaviours:** |
| We have a clear set of values that outline how we do business. We share these Borough-wide with our residents, partners, and businesses:   * **Fairness -**We will champion fairness and equality of opportunity and ensure working together brings mutual benefits and the greatest possible added value. We will enable everyone to be involved. * **Openness -**We will be open and honest in our actions and communications. We will take decisions in a transparent way and at the most local level possible. * **Responsibility -**We take responsibility for, and answer to our actions. We will encourage people to take responsibility for themselves and their actions. Mutual benefits go hand-in-hand with mutual obligations. * **Working together -**We will work together and support each other in achieving common goals, making sure the environment is in place for self-help. * **Accountability -**We recognise and act upon the impact of our actions on others and hold ourselves accountable to our stakeholders. * **Respect -**We recognise and welcome different views and treat each other with dignity and respect. * **Democracy -**We believe and act within the principles of democracy and promote these across the borough. |
| Internally we've translated these values into five Co-operative behaviours, which outline the priority areas of focus for staff at all levels.   * Work with a Resident Focus * Support Local Leaders * Committed to the Borough * Take Ownership and Drive Change * Deliver High Performance   More information about our Values and Behaviours can be found on our Greater.Jobs pages. |

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|  | **DATE** | **NAME** | **POST TITLE** |
| **Prepared** | 06/07/2023 | Mark Edgar | Service Assurance and Compliance Manager (Head of IT Operations and Cyber Security) |
| **Reviewed** |  |  |  |
| **Reviewed** |  |  |  |

**OLDHAM COUNCIL**

**PERSON SPECIFICATION**

**Job Title:**  Senior Network Infrastructure and Communication Engineer

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|  | **Selection criteria**  **(Essential)** | **Selection criteria**  **(Desirable)** | **How Assessed** |
| Education & Qualifications | A relevant industry certification, such as CCNP Collaboration or CCIE Collaboration, is highly desirable. | Bachelor's degree in Information Technology, Computer Science, or a related field | AF, I |
| **Experience** | Minimum of 5 years of experience in network and communication engineering, with a focus on designing, implementing, and supporting complex network and unified communication infrastructures.  Strong expertise in network protocols, routing, switching, VoIP, SIP, and unified communication platforms (e.g., Cisco Unified Communications Manager, Microsoft Teams).  Experience with network and communication monitoring tools, quality of service (QoS) configurations, and performance optimisation techniques.  Knowledge of network focussed cyber security principles, best practices, and frameworks such as the NIST Cybersecurity Framework or ISO 27001.  A clear understanding of common security threats, attack vectors, and incident response procedures. | Previous experience in a senior or leadership role within a network and communication engineering team is advantageous.  Previous experience configuring and using Fortigate appliances and solutions would be advantageous. | AF, I |
| **Skills & Abilities** | Proficient in designing and implementing network and communication architectures, considering business requirements, scalability, and security.  Excellent troubleshooting and problem-solving skills to diagnose and resolve complex network and communication issues.  Strong interpersonal and communication skills to collaborate effectively with cross-functional teams, stakeholders, and vendors.  Ability to lead and mentor junior engineers, fostering a collaborative and knowledge-sharing environment.  Detail-oriented with the ability to manage multiple projects and prioritise tasks effectively.  An analytical and strategic mindset to evaluate network and communication performance, identify optimisation opportunities, and implement solutions.  Able to provide effective incident and problem resolution  Ability to work in a fast-paced environment, prioritise tasks, and manage multiple simultaneous incidents and requests  Ability to influence, interact and communicate effectively across all levels of the organisation.  Ability to prioritise, work well under pressure and organise work with attention to detail  Ability to analyse complex issues where the material is conflicting (and/or drawn from multiple sources) and propose interim/ permanent resolution(s) as appropriate  Able to act upon incomplete information, using experience to make inferences and decision making  Able to understand complex technical issues combined with good analytical skills |  | AF, I |
| **Knowledge** | In-depth knowledge of network protocols and technologies, such as TCP/IP, BGP, OSPF, VLANs, VPNs, and MPLS.  Proficiency in voice and unified communication protocols and platforms, such as SIP, H.323, Cisco Unified Communications Manager, and Microsoft Teams.  Familiarity with network security principles, including firewalls, VPNs, IDS/IPS, and access control mechanisms.  Understanding of network and communication monitoring and performance management tools, such as SNMP, NetFlow, and packet analysers.  Knowledge of cloud networking technologies and integration with unified communication platforms, such as Azure ExpressRoute.  Awareness of emerging trends and advancements in network and communication engineering, including software-defined networking (SDN) and voice-over IP (VoIP).  Knowledge of and up-to-date awareness of possible system vulnerabilities  Knowledge of ITIL/SDI Incident management and request management  Knowledge of call-handling techniques  A clear, demonstrable understanding of software and hardware troubleshooting knowledge  Understanding of data protection and security, and confidentiality  Knowledge of SCCM and InTune technologies for the maintenance of the Windows Operating System | An understanding of varied work delivery methodologies such as Agile, Waterfall or DevOps. | AF, I |
| Work Circumstances | This position is based in the Office.  Availability to work out of hours as and when required by the business, including a structured on-call rota, which is paid in addition to the role salary. |  | AF, I |

*Abbreviations:* AF = Application Form; I = Interview; AC = Assessment Centre; T = Test

**NB. - Any candidate that meets the criteria of our Guaranteed Assessment Scheme and meets the essential criteria will be guaranteed an interview. Our Guaranteed Assessment Scheme supports candidates with disabilities, those who are aged 24 or under and have previously been in or are currently in care, and those whose last long term substantive employer was the Armed Forces.**