**OLDHAM COUNCIL**

**JOB DESCRIPTION**

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| **Job Title:**  | Network Infrastructure and Communication Engineer |
| **Directorate:**  | Customer, Digital, Technology and Transformation | **Division/Section:**  | ICT |
| **Grade:**  | 8 | **JE Reference:** | 11009 |

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| **Job Purpose** |
| The Network Infrastructure and Communication Engineer works independently and self-reliantly, taking the initiative to implement and maintain network and communication infrastructures. This autonomy empowers the role holder to make decisions, prioritise tasks, and proactively address challenges.Working closely with the Senior Network Infrastructure and Communication Engineer and other team members, the Network Infrastructure and Communication Engineer will contribute to the success of the Council's ICT Infrastructure team and help ensure the smooth operation of network and communication services within the organisation. This role will provide network and communication support and guidance to first-line Field Service Engineers.As an 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 assist 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, implement and support scalable network and communication technologies, 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.
* 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 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.
* Operating with a high level of self-direction, the engineer consistently demonstrates the ability to manage tasks and responsibilities without constant supervision.
* Serve as an escalation point for network and communication-related incidents.
* Provide technical management and operational oversight to guide and support second-line Field Service Engineers in troubleshooting efforts.

**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.
* Participate in network and communication-related projects, from planning and implementation to documentation and knowledge transfer.
* Liaise with and work in a collaborative and matrix manner with all members of the ICT team as and when the need arises.
* Provide technical guidance, mentorship, and training to junior engineers and apprentices, 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.
* Assist with liaison and negotiating with suppliers (4th line).
* Will work closely with other Senior Engineers, peers, key customers, and suppliers in the pursuance of maximum efficiency and value for money at all times
* Support Project Manager with resource management, produce statement of works and do regular reviews of software renewals to reduce licences and costs against targets.
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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 Officers 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 Infrastructure and Communication Engineer |
| **Responsible for:** | Apprentices and T-Level Students |

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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.
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| 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** | 19/07/2023 | Mark Edgar | Service Assurance and Compliance Manager (Head of IT Operations and Cyber Security) |
| **Reviewed** |  |  |  |
| **Reviewed** |  |  |  |

**OLDHAM COUNCIL**

**PERSON SPECIFICATION**

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

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|  | **Selection criteria** **(Essential)** | **Selection criteria** **(Desirable)** | **How Assessed** |
| Education & Qualifications | Bachelor's degree in Information Technology, Computer Science, or a related field ***or***significantrelevant experience within a Network supporting role.A relevant industry certification, such as CCNA, CCNP Collaboration or CCIE Collaboration   | Relevant Network Security QualificationsRelevant Network Architecture Qualifications | AF, I |
| **Experience** | Minimum of 3 years of experience in network and communication engineering, with a focus on designing, implementing, and supporting complex network and unified communication infrastructures.Significant expertise in network protocols, routing, switching, VoIP, SIP, and unified communication platforms (e.g., Cisco Unified Communications Manager, Microsoft Teams).Strong understanding of network and communication monitoring tools, troubleshooting methodologies, and incident management.Significant experience of network security measures, including firewalls, VPNs, and access control mechanisms.Knowledge of network-focused 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 configuring and using Fortigate appliances and solutions would be advantageous.  | AF, I |
| **Skills & Abilities** | Proficient in configuring and troubleshooting network devices, protocols, and unified communication platforms.Basic knowledge of network design principles and the ability to contribute to network architecture discussions.Able to provide effective incident and problem-resolutionStrong problem-solving skills to diagnose and resolve network and communication issues.Good communication and interpersonal skills to collaborate effectively with stakeholders and team members.Willingness to learn and adapt to new technologies and industry trends.Ability to work in a fast-paced environment, prioritise tasks, and manage multiple simultaneous incidents and requestsAbility to prioritise, work well under pressure and organise work with attention to detailAbility 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 |  | AF, I |
| **Knowledge** | Understanding of network protocols and technologies, such as TCP/IP, VLANs, VPNs, and QoS.Knowledge of voice and unified communication protocols, platforms, and technologies.Knowledge of network security concepts, including firewall configurations, access controls, and encryption protocols.Awareness of network monitoring tools and their functionalities.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 and up-to-date awareness of possible system vulnerabilities Knowledge of ITIL/SDI Incident management and request managementKnowledge of call-handling techniquesA clear, demonstrable understanding of software and hardware troubleshooting knowledgeUnderstanding of data protection, security, and confidentiality | An understanding of varied work delivery methodologies such as Agile, Waterfall or DevOps.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). | AF, I |
| Work Circumstances | This position is based in the Office. Availability to work out of business 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.**