## Computer Network Engineer Job Description

## **Duties and Responsibilities:**

- Perform scheduled deployments, configuring, patching managing and maintaining, and monitoring to maintain government and industry IT compliance standards
- Troubleshoot encryption devices, switches, and network routers in Windows Active Directory environment
- Ensure production systems are set for top performance and secure, and that they interact effectively with Wide Area Networks (WANs), as well as deliver the required information to end-users
- Troubleshoot network outages and problems; maximize network environment monitoring performance; collaborate with System Integration network architects; and schedule upgrades
- Attend meetings, Interact with other stakeholders, provide recommendations, and generate reports for improvements and enhancements
- Confer with users to establish network specifications; perform analysis of access, workflow, security, and information requirements; perform router administration design, including routing protocols and interface configuration
- Perform evaluation of network performance problems, including utilization, availability, latency, and throughput to establish network
- Plan and implement the selection of equipment, including installing, configuring, and testing them
- Define policies and procedures for networks; setup firewalls and connections
- Monitor, analyze, and tune performance to ensure network performance; troubleshoot network issues; escalate issues to vendor when necessary
- Ensure network is secure by creating network access, control, evaluation, and monitoring; ensure documentation

- Design and implement training programs for uses, as well as providing them with support and references
- Carry out upgrade on network by interacting with vendors
- Build enhancements; perform testing, installation, and evaluation on them
- Present information for budgets to satisfy financial requirements and ensure expenses are properly monitored
- Take part in educational programs to update knowledge about the job, as well as maintain personal networks, take part in activities of professional associations, and read professional publications
- Ensure information is kept confidential to protect company's value
- Accept complete responsibility for carrying out new and different requests that may be assigned and seek ways to add value to service delivery.

## Computer Network Engineer Requirements – Skills, Knowledge, and Abilities

- Possess Bachelor's Degree in Computer Science, Information Technology, or in other related field
- Working experience of two years and above in network administration, handling various networking equipment
- Possess current IT I level certification IAW AR 25-2, as well as an IAT II certifications BBP 05-PR-M-0002 and IAW DoD 8570.01-M
- Received training in Juniper, CWNA, and Cisco
- Strong knowledge of principles and practices of information security in addition to advanced knowledge of security standards and protocols
- Good working experience with network monitoring tools and Windows and Linux servers
- Deep networking experience and knowledge such as TCP/IP, Ethernet, Vlans, SONET, routing and routing protocols (BGP/OSPF), DNS, switching, and 802.1Q
- Strong knowledge of control, server infrastructure monitoring, and management best practices

- Strong working experience with problem resolution, Internet VPN's remote implementation, firewalls, and troubleshooting
- Exceptional ability to develop and configure server hardware
- Experience working with software for recovery and backup; and methodologies
- Significant experience and knowledge of Microsoft, Unix and other operating systems in a cloud environment, as well as knowledge of networking components
- Deep knowledge of Security Frameworks, including ISO, HIPAA/HITECH,
  COBIT, and NIST; and knowledge of regulatory requirements
- Strong research and problem solving skills, in addition to possessing strong technical aptitude
- Strong ability and willingness to develop self, learn new skills, and apply them for better service delivery
- Strong communication skills to effectively express resolutions, proposals, plans, concepts, and other issues to management and other levels of staff in the organization
- Strong ability to ensure confidentiality with sensitive internal and customer information
- Strong organizational skills with ability to prioritize tasks and meet deadlines
- Exceptional ability to deliver information, however complex, in a simple manner that anyone can comprehend
- Profound problem-solving and critical thinking skills
- Self-motivated individual with the ability to work with minimal supervision
- Strong ability to prevent problems from occurring by taking proactive measures.