



## **Contractual Qualifications – Network Engineer/Specialist**

The Network Specialist ensures that the LAN/WAN is capable of providing required services by supporting the network infrastructure through the use of troubleshooting and problem resolution in a production environment. Experience and skills shall include a range of assignments in technical tasks directly related to the proposed area of responsibility.

### **EDUCATION (One of the following three (3) options is required):**

- Bachelor's degree in a technical discipline such as computer sciences and three (3) years related experience
- Successful completion of a certification program at a technical or vocational school and eight (8) years related experience
- Comparable Department of Defense technical training and eight (8) years of directly related, progressively complex experience

Any degree or non-Department of Defense certification must be from a college, university, technical or vocational school that has obtained accreditation by a regionally or nationally recognized accrediting agency (North Central Association of Colleges and Schools - The Higher Learning Commission; Southern Association of Colleges and Schools - Commission on Colleges; Middle States Commission on Higher Education, etc.).

### **RESPONSIBILITIES:**

- Provide daily operational support for LAN/WAN networks, including firewalls
- Provide overall network infrastructure support to routing and switching equipment, firewalls and IDS/IPS, and associated cabling
- Plan, install and support hardware and software upgrades
- Resolve technical issues associated with network and routing protocols at all levels of the OSI model through the use of diagnostics and network administration tools such as Hewlett Packard (HP) OpenView, Cisco Works and Tivoli
- Understand Management Information Blocks (MIB) and MRTG to measure, plan and execute methodologies to ensure high performance levels and minimum downtime
- Maintain LAN/WAN barrier systems to prevent unauthorized access to MTF systems
- Use diagnostic utilities to identify and isolate problems encountered on different mediums and network protocols, gather latency statistics and find specific network bottlenecks, evaluate problems and implement fix actions through device reconfiguration or replacement depending on the circumstances
- Address issues related to synchronous and asynchronous communications, Ethernet, Fast Ethernet, Gigabit Ethernet, FDDI, ATM, ISDN, microwave and satellite communications

### **QUALIFICATIONS:**

- Must be familiar with Cisco firewalls, Cisco, Alcatel, Hewlett-Packard, Nortel and NetScreen VPN devices and IDSs
- Compliance with Department of Defense (DoD) Directive 8570.01 "Information Assurance Training, Certification, and Workforce Management" is required
- Information Assurance Technical (IAT) Level II or equivalent certification, per DoD 8570.01-M, "Information Assurance Workforce Improvement Program" (most recent version) is required
- Must have strong oral and written communications skills to effectively present information to a broad audience of Government officials, medical professionals, and highly specialized technical personnel



#### EXPERIENCE:

- Required experience with various OTDR, cable testers, network sniffers
- Must have a clear understanding of TCP/IP, HTTP, SHTTP, SMTP, SNMP, DNS, DHCP, EIGRP, OSPF, PPP, HDLC, V.35, RS-449 and knowledge of the 803.2, 802.3, 802.5, 802.10, 802.11, 802.3u and 802.3z communications, EIA/TIA cable standards and Internet standards
- Possess experience in routed, switched and shared LAN environments that operate Novell Netware, Microsoft Windows NT/2000/2003/XP/Active Directory, UNIX and OpenVMS and employ various routers switches, hubs and terminal servers as well as various local and long-haul ISDN, 256 Kbps through T1 - T3, satellite and ATM WAN connectivity that employs Codex and Pair Gain CSU/DSUs
- Experience and skills shall include a range of assignments in technical tasks directly related to the proposed area of responsibility
- Expertise in Windows networks, Cisco Systems and HP OpenView desired
- An Automated Data Processing (ADP) sensitivity level II determination is required for this position

#### OTHER:

This position must also meet the qualifications of the Alliant Network Specialist Journeyman. Journeyman possesses and applies expertise on multiple complex work assignments. Assignments may be broad in nature, requiring originality and innovation in determining how to accomplish tasks.

- Operate with appreciable latitude in developing methodology and presenting solutions to problems
- Contribute to deliverables and performance metrics where applicable
- Provide technical guidance for directing and monitoring information systems operations
- Design, build, and implement network systems
- Direct compilation of records and reports concerning network operations and maintenance
- Troubleshoot network performance issues
- Analyze network traffic and provides capacity planning solutions
- Monitor and respond to complex technical control facility hardware and software problems
- Interface with vendor support service groups to ensure proper escalation during outages or periods of degraded system performance
- Manage the purchase, testing, installation, and support of network communications, including LAN/MAN/WAN systems
- Perform system-level design and configuration of products including determination of hardware, OS, and other platform specifications
- Plan large-scale systems projects through vendor comparison and cost studies
- Perform a variety of systems engineering tasks and activities that are broad in nature and are concerned with major systems design, integration, and implementation