



Position Description

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| Position: Information Technology Support Specialist III | |
| Department/Site: | FLSA: Non-Exempt |
| Evaluated by: | Salary Range: 52 |

Summary

Plans, administers, and maintains all components of the local area and wide area networks governing the data communications among personal computers. This includes computer networks and related operating systems, mail and note systems, and telecommunications for microcomputers and servers. Plans and designs the implementation of the network infrastructure including hardware/software recommendations. Provides advanced technical support and help functions that relate to networks, security, redundancy, and connectivity.

Essential Duties and Responsibilities

- Participates in formulating, developing, and implementing integrated network architectures for large networked computer systems. Provides planning and advanced technical expertise for computer and network services for both local and wide area networks, and the internet. Develops specifications and functional requirements for networks including those for administrative and institutional use.
- Administers, implements, and maintains the network including operations planning and design, work order generation, moves, adds, changes, fault prediction, trouble detection/correction, traffic measurement, circuit analysis, path testing, and general maintenance.
- Configures, installs, and maintains system parameters, network addresses, directory structures, security, and network server software. Ensures continuous operations and security, responding to incidents as they occur. Sets up related, dedicated servers to communicate on a network. Configures, maintains and participates in installation of directory structures, security applications and software.
- Builds and maintains proxy servers, naming services servers, and domain name servers including start-of-authority, name-to-address mappings of primary and secondary servers, and pointer records.
- Continually analyzes network traffic and establish approaches that optimize operation of the network and servers. Coordinates, allocates, and monitors memory usage of the network, network printing, and network technical resources. Monitors user access through the network including user assignments on virtual networks.
- Installs and configures network users. Activates data communications ports using specialized network software. Implements protocols for electronic mail systems and accounts.
- Researches, defines, and proposes changes and upgrades to network infrastructure, operating systems, and applications to ensure desired performance, and service. Determines specifications, installation procedures, administration, and maintenance requirements of hardware platforms and operating systems.
- Establishes and enforces system standards, protocols and procedural controls for operation of the network systems including remote access servers.
- Integrates minicomputer systems with network servers and host computer operations. Specifies data communications requirements and wiring and hardware layouts for new facilities and/or modifications to existing facilities, in accordance with standards.



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- Installs, troubleshoots, and repairs computer network, network server, microcomputer, and computer peripheral equipment.
- Maintains up-to-date knowledge of developments in network and server technology, trends, and issues. Researches and recommends enhancements to network and server systems, and assists in evaluation/selection of network and/or server equipment and/or software.
- Participates in troubleshooting and resolve complex network hardware and operations problems, including but not limited to connectivity, internet access, electronic mail, and file servers. Works with fellow staff, equipment users, vendors, and independent contractors to identify and resolve problems.
- Using a variety of network test equipment, identifies and diagnoses problems, then repairs, replaces and restores hardware and/or updates software.
- Creates and maintains standard operating procedures. Maintains system log files and audit files. Creates and maintains complete network documentation including schematics, user accounts, configuration files and reports.
- May participate with applications programmers to design custom programs and access.
- Performs other duties as assigned that support the overall objective of the position.

Qualifications

- **Knowledge and Skills**

Requires specialized professional knowledge of personal computer based local and wide area networks; network operations through multiple servers; integration of data and telecommunications; principles and practices of data processing and systems administration, including connectivity between network servers and main frame computers.

Requires in-depth understanding of line commands for managing and manipulating routers, switches, and firewalls.

Requires a well-developed understanding of network infrastructure requirements and standards as well as the protocols and procedures for setting up new equipment, troubleshooting and performing maintenance.

Must know the physical elements of the network such as but not limited to the following: Ethernet, 10baseT Ethernet, Fiber Optic and 10base2 connections.

Requires thorough understanding network topologies such as Ethernet and ATM.

Requires in-depth knowledge of the following protocols such as TCP/IP, IGRP, Serial, Ethernet, and Access Lists.

Requires in-depth knowledge of network operating systems including router, Microsoft NT, Windows, and Pathworks.

Requires a working knowledge of server installation and setup procedures.

Requires well-developed communication skills to convey highly technical concepts with a wide range of internal customers, provide instruction and technical assistance.

- **Abilities**

Must be able to plan, design, organize, and implement a network with multiple servers and perform the full range of complex and technical duties described above.

Must be able to analyze and evaluate the needs of users and develop the most effective program or solution to meet those needs.

Must know how to install, configure, maintain and troubleshoot equipment, systems and programs used by the District.

Must be able to develop programs and systems.

Requires the ability to respond rapidly to operating and security problems.

Must be able to prioritize activities and delegate tasks.



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Must be able to read, interpret and apply complex technical information.

Requires the ability to develop and maintain positive working relationships with and instruct/tutor students and staff, plan and conduct group demonstrations, workshops, and training.

- **Physical Abilities**

Requires the ability to accomplish work of a sedentary to moderately active nature.

Requires ambulatory ability to move to various office and classroom-type locations and to bend, stoop, crawl and reach to install cables and equipment.

Requires sufficient hand eye coordination and dexterity to make small component connections.

Requires sufficient visual acuity to read technical documents and instructions and align small components.

Requires sufficient auditory ability to carry on routine conversations.

Requires the ability to lift, push, and pull objects of medium weight (less than 50 lbs.) on an occasional basis.

Requires the ability to work in confined areas with noise variations, dust, and limited ventilation.

- **Education and Experience**

A bachelor's degree, and two years of computer network or computer technical support experience; or, in the absence of a bachelor's degree, an associate degree, or the completion of at least sixty (60) college-level semester units, and four years of computer network or computer technical support experience; or, in the absence of an associate degree, or the completion of at least sixty (60) college-level semester units, six years of computer network or computer technical support experience.

- **Licenses and Certificates**

Requires a valid driver's license.

Certified Network Professional, MCSE.

- **Working Conditions**

Work is performed indoors where some safety considerations exist from physical labor, positioning in cramped areas, and handling of medium weight, yet, awkward materials.