

## **NETWORK AND INFORMATION TECHNOLOGY MANAGER**

### **DEFINITION**

Under supervision of the Chief Operations Officer, plans, designs, organizes, coordinates, and supervises the communication network and operational aspects of the information services of the district; is responsible for the technical repairs, maintenance and service of all network applications throughout the district; coordinates technical support for district computer and computer-related equipment; is involved in the planning, purchasing, installation and servicing of such equipment. The Network and Information Technology manager is responsible for the management and supervision of the ETIS computer technicians (information systems support specialist I and IIs) and other assigned staff involved in providing technology support district-wide; is responsible for the development of network administration, maintenance and security policies, procedures and standards, in order to provide an efficient, stable, reliable infrastructure needed for effective operations and sharing of applications and information to a wide variety of customers and stakeholders; is responsible for researching technology alternatives and planning for expansion of network capacity to support changing district goals and operational requirements.

### **QUALIFICATIONS:**

#### **Knowledge of:**

- Network architectures and theory and principles of LAN, WAN, VoIP, and Cloud enterprise network design and integration, including topologies and protocols.
- Principles and practices of advanced network administration.
- Industry design and configuration standards for enterprise networks, including: hardware, network protocols and network operating systems.
- Network management systems, including principles and practices of security management and security design.
- Principles and practices of business and technical communications, including techniques in the development of system and user documentation.
- Operating principles, parameters, uses, capabilities, characteristics and limitations of servers, network operating systems, PCs.
- Principles, capabilities and operation of computer systems and related equipment; various hardware platforms; operating systems (minimum requirements: all current versions of Microsoft Windows), applications and application suites; local- and wide-area network technologies with clear understanding of all current versions of Windows server platforms.
- Standard principles, practices and methods of project management.

#### **Ability to:**

- Develop conceptual frameworks and apply state-of-the-art technology to the design and management of network infrastructures.
- Install, configure, maintain and manage the operations of complex network systems to achieve optimal technical performance and end user support.
- Lead large IT projects, including the design and deployment of new IT systems and services.
- Analyze and troubleshoot complex computer system and network issues, identify the reasons for network and network device problems, failures and malfunctions and develop optimal solutions.
- Monitor network trends and anomalies and make adjustments as required.
- Perform business and functional analyses and reach sound conclusions regarding customer requirements and efficient, cost-effective network systems and technology solutions.
- Responsible for administration and oversight of all the District and department technology-related budgets, including ensuring purchases comply with District's instructional and operational standards and requirements.
- Responsible for researching, making recommendations, and oversight of District's select technology-related grant programs to ensure success with stated goals and compliance with grant requirements, including the federal E-Rate program.
- Read, interpret and apply complex technical publications, manuals and other documentation.
- Identify data communication and information management issues and opportunities, analyze problems and alternatives and develop sound conclusions and recommendations.
- Prepare clear, concise and accurate program documentation, reports of work performed and other written materials.
- Conscientiously preserve the confidentiality of all proprietary and confidential data and information residing in the district, in accordance with departmental and district policy and state and federal law.
- Plan, organize and complete projects efficiently and in accordance with district quality standards, while troubleshooting unexpected system problems.
- Operate a computer and related equipment.
- Work cooperatively with customers in a responsive, helpful, courteous and tactful manner.
- Communicate clearly and concisely, both orally and in writing.
- Exercise sound independent judgment within general policy guidelines.
- Establish and maintain effective working relationships other ETIS team members, managers, administrators, end users and others contacted in the course of work.

#### **Education and Experience:**

- Completion of a Bachelor of Arts/Science degree in a computer related discipline or equivalent experience and training, AND/OR;
- Successful completion of a computer operations course in a private or technical school, which includes a combination of instruction and operation totaling 200 hours, with emphasis on the above qualifications.

- Minimum three years' experience in the maintenance and installation of networked microcomputer systems in Microsoft Windows and environments with emphasis on PCs and all mobile devices.
- Highly desirable experience and skills: Advanced-level Cisco, Microsoft, certifications; management skills and experience; specialized training in team and project management.
- This experience must demonstrate both advanced computer skills and customer relations skills with the ability to provide user support and technical assistance.
- Possession of a valid California driver's license and insurance. This position requires the use of the employee's personal vehicle.

**ESSENTIAL FUNCTIONS**

- Leads, oversees and participates in the design, implementation, installation, upgrading, monitoring and troubleshooting of the district's physical network infrastructure, including servers, storage networks, routers, switches, other device hardware, computer equipment, related peripheral equipment and multi-platform network operating systems and applications.
- Oversees and participates in the design implementation, configuration, upgrading, testing, troubleshooting, tuning and maintenance of a variety of network services, including: mail services; web and proxy servers; print and file services and other network services.
- Designs, plans and develops the district's network hardware and operating systems, including planning network topology, installations and changes; configures network routing and switching software.
- Serves as network security administrator, including administering firewalls; monitoring network intrusions; developing, recommending and implementing and enforcing the district's network security policy and remote access standards and guidelines; maintains security on network and server equipment.
- Provides advanced technical support for the district's network operating systems and applications; troubleshoots and resolves network outages and bottlenecks; provides information, technical direction and training to staff on activities required to implement projects, system hardware and software installations and upgrades, new procedures and techniques.
- Coordinates review of the technical environment to evaluate and measure system performance and effectiveness; utilizes network management software and tools to monitor and analyze network traffic; analyzes network capacity and growth requirements and recommends network upgrades and enhancements to meet long-term district needs; develops and recommends specifications for network hardware, software and cabling upgrades and enhancements; develops and recommends cabling and connectivity standards, uses and levels. Assists with development of appropriate specifications and standards for in-house and outside vendor projects.
- Maintains and updates schematics and documentation of network structure and devices; develops and recommends network contingency and disaster recovery plans.
- Reviews new or revised projects for conformance to established technical, system and operational standards; performs network administration duties; designs and ensures the recoverability of lost data through proper and adequate backup and data recovery methods.
- Manages, evaluates, and supervises the ETIS Information Systems Support Technician I and IIs and other assigned support staff. Coordinates work with other ETIS staff to ensure appropriate network availability to meet end user and operational computing needs.
- Works with the district Chief Operations Officer and other administrators to determine future network growth, use and maintenance needs, and plan accordingly.
- Conducts formal training on diverse technological subjects for both IT personnel and other district users, including training for backup procedures and other network maintenance applications.
- Directs the planning, design and installation of new computer equipment and networks, working in concert with other departments and external entities to best utilize district resources and provide timely service to users.
- Works with school site instructional staff to support their network needs in the classroom and computer labs.

**ABILITIES AND SKILLS:**

- Verbal and written communication skills
- Operate a computer and assigned software
- Work independently with little direction; work well on a team

**PHYSICAL REQUIREMENTS:**

**Physical abilities** include the usual and customary methods of performing the job's functions and require the following physical demands: occasional lifting, carrying, pushing and/or pulling; some climbing and balancing, some stooping, kneeling, crouching; reaching, handling, touching and/or feeling; manual dexterity to operate a telephone and enter data into a computer.

**Significant physical abilities** include ability to sit at a desk, conference table, or in meetings of various configurations for extended periods of time; see and read, with or without visual aids, laws and codes, rules, policies and other printed matter, computer screens and printouts; hear and understand speech at normal room levels and hear and understand speech on the telephone; speak in audible tones so that others may understand clearly in normal conversations.

**WORK ENVIRONMENT:**

- The work environment characteristics described here are representative of those an employee encounters while performing the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

- The noise level in the work environment is usually moderate.
- Employees in this position will be required to work indoors in a standard office environment and come in direct contact with district staff and the public.