

PALOMAR COMMUNITY COLLEGE DISTRICT

INFORMATION SERVICES SENIOR NETWORK SPECIALIST

*Class specifications are intended to present a descriptive list of the range of duties performed by employees in the class. Specifications are **not** intended to reflect all duties performed within the job.*

DEFINITION

To lead one or more areas of specialty and to assist with over seeing the global aspects of technical services operations including the designing, planning, operational, and training of an enterprise networked-infrastructure servicing the entire district; To participate as senior lead for specific assignments, and be a primarycontact for technology vendors.

SUPERVISION RECEIVED AND EXERCISED

Receives general supervision from the Information Services Manager of Network & Technical Services. Exercise technical and functional supervision over assigned staff as needed

ESSENTIAL FUNCTION STATEMENTS

Essential and other important responsibilities and duties may include, but are not limited to, the following:

Essential Functions:

1. Assists the Manager Network & Microcomputers in designing and managing the enterprise network services including wide area and local area network operations.
2. Provides input to management for network services design and procurement of network services equipment and supplies.
3. Assist with the management of projects from the initial preparation and planning of the project to the procurement and installation of equipment or services, including the over seeing of contractors work.
4. Establishes policy guidelines to insure compatibility and better service to enterprise users of personal computers.
5. Establishes growth plans for the network to insure the best quality service in a state-of-the-art environment.
6. Work in conjunction with Programming Services in developing plans and standards for the deployment and support of Enterprise Business Applications.
7. Recognizes and identifies potential areas where existing policies and procedures require change, or where new ones need to be developed, especially regarding future expansion.
8. Participates with vendors in the assessment of advanced technologies, including beta and field-testing.

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9. Provides planning and technical support for enterprise installations.
10. Provides network support for operations and the mainframe side of technical support.
11. Fulfills departmental requirements in terms of providing work coverage and administrative notification during periods of personnel illness, vacation, or education.
12. Performs equipment installations and relocation as required to support the business needs of the enterprise.
13. Monitors and tunes the enterprise networks for optimal performance.
14. Analyzes and recommends training in support of office automation clients to insure maximum utilization of equipment.
15. Maintains software and hardware registration and inventory to provide upgrades as necessary and insure appropriate security levels are maintained.
16. Maintains current technical expertise in the rapidly changing technology of microcomputers and utilizes state-of-the-art techniques when implementing office automation solutions.
17. Perform related duties and responsibilities as required.

QUALIFICATIONS

Knowledge of:

- Advanced concepts, principles and theory of network/data communications design and planning utilizing IEEE specifications and standards such as ISO/OSI, 802.2, 802.3, 802.1q, 802.1p and protocols such as TCP/IP, IPX/SPX, RIP, BGP, IGMP and Spanning Tree
- Advanced concepts, principles and theory of disaster-recovery design and planning including audit requirements, legal requirements, risk analysis, and recovery strategies
- Advanced concepts, principles and theory of design and operation of telecommunications systems utilizing technologies such as PBX systems and Voice over IP (VoIP)
- Advanced concepts and principles of computers and servers
- Advanced concepts and principles for establishing and documenting base-line performances
- Advanced concepts and principles of enterprise operating systems, such as Microsoft, Novell, and UNIX
- Advanced concepts and principles of network equipment, such as repeaters, switches, bridges and routers
- Advanced concepts and principles of security equipment and software, such as firewalls, intrusion detection systems, and virus protection systems
- Advanced operational characteristics of software applications and peripheral equipment
- Advanced methods and techniques used in the installation and troubleshooting of software applications on individual computers and the network
- Characteristics, capabilities, and uses of telecommunications system components, including data communications lines (POTS, T1 - OC48, SONET, ATM, etc.) and equipment, data-access arrangement equipment, input/output devices, communications processors, telecommunication software, switching networks, routers, and CSU/DSUs
- Past and present RFC standards
- Computer programming languages such as C/C++, Visual Basic, Java, and HTML
- Methods and techniques for instructing the use of computer applications and procedures
- Standards for deployment of Enterprise Business applications such as PeopleSoft

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Ability to:

- Communicate clearly and concisely, both orally and in writing
- Write clear specifications, standards, and operating procedures
- Operate a variety of complex data/telecommunications diagnostic test equipment
- Analyze data/telecommunications operating problems to determine causes of malfunctioning systems
- Read, interrupt and apply concepts found in complex technical publication, manuals and other documents
- Perform a variety of technical tasks in the installation and troubleshooting of computer software applications and peripheral equipment
- Provide support and respond to requests and inquires from system users regarding telecommunications, network, and software applications
- Analyze software and hardware needs and recommend solutions
- Analyze LAN/WAN hardware needs and recommend solutions that meet or exceed the required need
- Establish and maintain effective working relationships with those contacted in the course of work
- Maintain physical condition appropriate to the performance of assigned duties and responsibilities

Experience and Training Guidelines

Any combination of experience and training that would likely provide the required knowledge and abilities is qualifying. A typical way to obtain the knowledge and abilities would be:

Experience:

Five years of increasingly responsible experience designing, managing, and modifying computer networks infrastructures and telecommunications in support of a large scale; multi-site data/telecommunications network infrastructure and installing/troubleshooting software applications and peripheral equipment.

Training:

B.S. in Computer Science/Information Systems or a related field; or industry certification relevant to this position; or equivalent on-the-job experience.

WORKING CONDITIONS

Environmental Conditions:

Office environment; exposure to computer screens; contact with faculty, staff, students and vendor personnel.

Physical Conditions:

Essential and marginal functions may require maintaining physical condition necessary for extensive use of computer keyboard; walking, standing, or sitting for prolonged periods of time; moderate lifting; operating computer equipment.