PERALTA COMMUNITY COLLEGE DISTRICT

CLASSIFIED JOB DESCRIPTION

SENIOR NETWORK & SYSTEMS ADMINISTRATOR

(SEIU Local 1021 Salary Range 123) Job Code: 1037

CLASS PURPOSE:

Under the direction of the Director of Technology Services for IT, the position performs network and systems design, medication, installations, implementation, programming, configuration, hardware and software selection and modification. These tasks will range from routine to complex in nature in support of District/Campus administrative and instructional functions for all computing systems, wide area network, local area network, and VoIP (Voice over Internet Protocol) systems including, (network servers, Internet services, personal computer users, voice mail, data communication systems, personal computer systems, smartphones, cellular phones, and related software); performs related duties as required or assigned.

EXAMPLES OF ESSENTIAL DUTIES:

Any one position may not include all of the duties listed nor do listed examples include all tasks that may be found in positions of this class. To perform this job successfully, an individual must be able to perform each essential duty of the position satisfactorily. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions required for the position.

- Designs, implements and maintains system and network services
- Installs, configures, tests, implements, upgrades, repairs, troubleshoots and maintains networking equipment including services, firewalls, routers, bridges, MAUs, repeaters, hubs, switches, cabling, peripheral communications equipment, workstations and other associated equipment necessary for network operation
- Implement, and monitor security standards for all network devices and data information stores, including the setup and maintenance of such equipment as routers and access lists, firewalls, intrusion detection servers, client server platforms and VPNs
- Provides guidance to District and campus community regarding relevant laws and policies (copyrights, software licensing)
- Work closely with vendors and tech support; performs timely upgrades and updates to commercial and open-source software
- Acts as second tier support to help desk and technicians; may serve as a front-line interface to users
- Work closely with other IT and Distance Learning personnel in the development and support of Web based instructional programs
- Develops system, hardware and cost requirements and proposed time frames Simulates hardware and software problems, tests and evaluates alternative solutions, and

- Simulates hardware and software problems, tests and evaluates alternative solutions, and recommends and implements appropriate operating systems, software applications and hardware
- Coordinates to centralizing authentication using AD and RADIUS, LDAP and other relevant protocols and applicable procedures
- Conducts feasibility studies
- Gathers and analyzes information regarding the District network services requirements and develops or modifies systems to support District needs
- Provide consultation, training and problem-solving support for client/server computer systems, network systems and applications. Tracks and evaluates adopted systems and programs
- Monitors systems performance and recommends changes, confers with staff regarding department needs
- Performs regular backups and data restores as needed
- Maintains records and documents events, procedures, arid system configuration
- Establishes user procedures and instructions and assists departments and staff in implementing new or upgraded programs and applications
- Assists in tracking service contract and subscription renewals
- Recommends hardware and software applications for assigned area of expertise
- Assists in planning for the future of the District/campus network and Internet services
- Researches evolving web technologies and analyzes benefits to the District
- Obtain ongoing training and information to keep skills and knowledge current
- May direct the work of others on a project basis
- Gathers and analyzes information regarding the District VoIP, local/wide area network and requirements and develops or modifies the system to support District needs
- Designs network client interfaces that integrate data communications such as computer networks, mail and note systems and telecommunications
- Troubleshoots network hardware and operating problems, including but not limited to connectivity, internet access, electronic mail and file servers
- Ensures proper installation and configures the full range of network, Ethernet, Fiber optic and mainframe devices
- Coordinate and resolve network issues such as computer data access needs, security violations, and programming changes
- Monitor and document computer security administration (RBAC) and emergency measures policies, procedures, and tests
- Monitor use of network and regulate access to safeguard information in network
- Coordinates back-end systems that drive college websites
- Installs, configures and maintains web services (IIS and Apache), web applications, server applications stacks, and web databases
- Coordinates web services used by content providers and consumers including; Web design, application interfaces and presents dynamic web content using APIs and designs web application
- Configures and maintains content management systems
- Administers and maintains cloud based applications and services
- Ensures secure operation of protocols and services http, PHP, JavaScript, etc.

- Public and private key certificate administration
- Advanced file system concepts (in ode, clustering, logical volumes)
- Designs, implements and maintains enterprise backup, recovery and business continuity processes
- Manages server-based applications, including non-enterprise databases; directs and coordinates management of application client software
- Designs, implements and maintains network user accounts structure for staff
- Configures and administers Storage infrastructure
- Administers and maintains virtualized infrastructure
- Other related duties as assigned

MINIMUM QUALIFICATIONS

- 1. Completion of an associate's degree in Computer Information Systems and three (3 years of experience in operating desktop computers and LANs including experience in troubleshooting software and hardware problems; or an equivalent combination of education and relevant work experience may be substituted for education/experience on a year-by-year basis.
- 2. Understanding of, sensitivity to and respect for the diverse academic, socioeconomic, cultural, disability and ethnic backgrounds of Peralta Colleges' students, faculty, staff and community.

DESIRABLE QUALIFICATIONS

- Bachelor's degree from an accredited college or university with major course work in computer science, information science, computer information systems or a related field.
- Two years related experience and/or training configuring and installing LAN equipment such as file servers, workstations, print servers, and data communications.
- Industry recognized certification of any type.
- Experience in working in a community college with diverse student and staff population.
- System integration experience (AD, ERP and document imaging)

Knowledge of:

- Principles, theories, methods, materials, and equipment used in the design, installation, operation, and maintenance of telecommunications, LAN, and WAN technologies including the operating systems, applications, protocols and topologies
- Principles, theories, methods, materials, and equipment used in the design, installation, operation, and network technologies including peer-to-peer, client server, and standalone operating systems, peripherals, applications, connectivity, protocols and topologies
- Planning, installing, operating and managing local and wide area networks and telecommunication equipment

- Installation, application, maintenance and repair of telecommunications cabling
- Installation, maintenance, and support of network management software packages
- Principles and theory of disaster-recovery design and planning including audit requirements, legal requirements, risk analysis, and recovery strategies
- Concepts and principles of security equipment, such as firewalls, Access Control Lists, Intrusion Detection Systems and routers

Ability to:

- Plan, design, implement and operate LAN, WAN, telecommunication hardware and software; fiber and copper media
- provide technical advice and assistance on matters relating to the installation and operation of LAN and WAN and telecommunication systems
- provide technical advice and assistance on matters relating to the installation, operation, and support of computer systems including multiple networks, peripherals, telecommunications, and Internet
- exercise high level problem solving skills and follow-through on assignments
- exhibit a positive attitude towards fellow workers and displays a service orientation with customers
- work as a team in a collaborative and supportive manner
- coordinate, conduct and participate in end user or peer training
- multi task several jobs at one time under sometimes stressful conditions
- use electronic test equipment and common small hand tools
- execute and communicate oral and written instructions
- comprehend technical manuals and instructions

ENVIRONMENTAL DEMANDS

- Occasional work performed alone
- Constant work around and with people
- Work schedule flexibility

PHYSICAL REQUIREMENTS

- Occasional standing, walking, stooping, kneeling, squatting, and climbing stairs
- Occasional lifting and carrying up to 25 lbs.
- Occasional pushing and pulling up to 40 lbs.
- Occasional twisting of body
- Occasional use of manual dexterity
- Occasional use of tactile acuity
- Occasional use of visual acuity from a distance, with depth, and for color
- Frequent work at a rapid pace
- Frequent reaching, high, low, and level
- Frequent audio acuity at all ranges, including speech
- Frequent visual acuity for reading
- Constant sitting

• Constant use of clear oral communication

TOOLS AND EQUIPMENT USED

• Standard office equipment

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