

SANTA CLARA COUNTY OFFICE OF EDUCATION
Personnel Commission

CLASS TITLE: SYSTEMS ADMINISTRATOR

BASIC FUNCTION:

Under the direction of the Manager - Security, Network, and Systems Engineering, and with the guidance of senior engineers, evaluates, implements, monitors, tests, supports, and troubleshoots server systems, virtualization infrastructure and enterprise applications of basic to moderate complexity to meet the needs of the Santa Clara County Office of Education (SCCOE) and school districts; provides systems and administrative technical support for users; participates in project design and management, public relations, research and problem-solving activities.

REPRESENTATIVE DUTIES:

The following duties are examples of assignments performed by incumbents in this classification. It is not a totally comprehensive list of duties, nor is it restrictive regarding job assignments.

ESSENTIAL DUTIES:

Installs, configures, monitors, and supports storage devices and storage area networks (SANs), servers, virtual infrastructure and associated enterprise applications.

Implements, maintains, and supports complex systems for secure delivery of digital information.

Installs, configures, monitors, and supports secure access connections to SCCOE servers and provides secure access for onsite and remote mobile workers and devices.

Implements and maintains technical support systems to meet the requirements of internal departments.

Implements and routinely tests system backup strategies based upon established SCCOE policies and industry best practices.

Implements and routinely tests system disaster recovery strategies and runbooks based upon established SCCOE policies and industry best practices.

Collaborates with application owners across teams, departments and organizations to develop system design strategies accounting for support and growth needs.

Analyzes and resolves Tier 1 and escalated Tier 2 problems between LAN/WAN, SAN, servers, desktop computers and enterprise applications; works with server and storage equipment providers to ensure optimal efficiency in systems operations.

Trains and provides guidance to other technical support staff; oversees the work of outside contract workers on construction of systems design projects.

Collaborates with, coordinates with or assists other technical team members in systems-related tasks to support inter-team and inter-departmental projects and initiatives.

Supports the development of cost analyses of proposed and existing systems and hosted services; recommends contractual charges, service providers, and cost control measures; participates in the

development of feasibility studies and cost/effectiveness studies for new servers, storage and associated enterprise applications.

Provides technical support for systems operations; performs diagnostic tests; compiles, organizes, and analyzes data to troubleshoot systems problems; analyzes and resolves problems with systems hardware and associated enterprise applications, LAN/WAN, SAN, servers; works with support team members to assure timely response to problem calls.

Provides recommendations and support for the development of technical policies and strategies for system design and scaling, augmenting hosted services and broadening systems support capacities.

Ensures all enterprise systems are updated, secure, conform to backup strategies and are accounted for in designing for growth.

Plans and oversees multiple projects to completion; identifies scope of work and objectives; facilitates the resolution of complex project problems by meeting with stakeholders, vendors and other technical staff to identify problems and potential solutions; assures projects are planned and delivered according to customer specifications and needs.

Coordinates service calls and schedules appointments between service providers and users experiencing problems and ensures satisfactory resolution; explains operational and installation procedures to users.

Manages user passwords and profiles; conducts routine audits of security procedures.

Maintains and operates network and server monitoring and diagnostic software and equipment for capacity planning and preventative maintenance; monitors system performance; conducts routine checks on disk and CPU usages; monitors system log files and nightly jobs; monitors backup jobs; brings down/up system for system maintenance; works with hardware/software vendors for rapid resolution of critical problems.

Receives and reviews equipment installation requests from users and customers; ensures completeness, and communicates discrepancies to users.

Trains users and customers in the proper use and operation of end-user systems applications and related equipment; trains and assists administrative support staff in department-specific software application and hardware.

Prepares and updates operations documentation and guides; prepares documentation for the placement of equipment; maintains and monitors equipment inventory lists; maintains accurate records, logs, and files related to assigned systems and equipment; writes articles, newsletters, and technical documentation; prepares network diagrams, flow charts, graphic presentations, and narrative reports to recommend improvements or resolve problems.

Repairs or facilitates the repair of servers, storage and associated systems as needed.

Maintains current knowledge of emerging technologies and research in information technology; conducts research; assists with developing policies and strategic plans for the use and support of emerging technologies and assesses the impact on current practices.

OTHER DUTIES:

Perform related duties as assigned.

KNOWLEDGE AND ABILITIES:

KNOWLEDGE OF:

System virtualization concepts and technologies, including Hyper-V, VMware ESXi, vCenter, vOperations, VDI and associated applications.

Server operating systems, including Microsoft Server, UNIX and Linux.

Server hardware platforms, including Cisco UCS, Lenovo, Dell, and Fujitsu.

Storage systems, including Nimble and Datrium.

Enterprise applications, including Microsoft Active Directory, Microsoft SQL Server, DNS, and LDAP directory services.

Messaging systems, including Microsoft Exchange, Office 365, and Enterprise Information Archiving systems.

Cloud and hosted services, including Microsoft Azure and Amazon Web Services.

Backup and data replication systems, including BackupExec, Commvault, and Zerto.

Analytical, research and problem solving methods; systems analysis and project management procedures and techniques.

Project management concepts, procedures, and tools, including Microsoft Project.

State and Federal laws and regulations relating to data systems.

Information systems and network terminology, policies, procedures, and vendors.

Desktop computer hardware and software.

Networking as it pertains to server and storage infrastructures.

Cyber security and firewall concepts and best practices.

Current trends, techniques, and general principles in enterprise technology.

Proper telephone etiquette and public relations skills.

Proper English usage, grammar, punctuation, and vocabulary.

ABILITY TO:

Apply specialized knowledge in LAN/WAN, telecommunications systems, data communications, servers, hardware and software systems.

Identify and isolate network or systems-related problems through the performance of diagnostics, and determine appropriate action for resolution.

Establish and maintain logs, records, lists, fact sheets, and files regarding specialized transactions, procedures, and policies.

Prepare user guides and a variety of statistical and narrative reports.

Work various shifts with minimal supervision to meet user and customer needs.

Determine systems, servers, applications, and materials to meet user and customer requests and project requirements.

Operate a variety of computer peripheral equipment including desktop and laptop computers as well as associated software.

Anticipate systems-related issues and develop effective strategies to mitigate problems before they arise or worsen.

Perform numerical calculations accurately.

Plan, organize, and prioritize assigned tasks and functions efficiently in stressful situations.

Coordinate and monitor systems activities with outside service providers/agencies.

Train users and customers in the proper use of end-user applications.

Establish and maintain effective work relationships with those contacted in the performance of required duties.

Communicate effectively orally and in writing.

EDUCATION AND EXPERIENCE:

Any combination equivalent to: Bachelor's degree in Computer Science, Information Systems or related field, and three years of increasingly responsible experience in systems administration including the implementation, maintenance, and support of servers and storage systems.

LICENSES AND OTHER REQUIREMENTS:

Valid California driver's license.

Preference may be given to individuals who hold one or more of the following certifications:

Microsoft Certified Solutions Expert (MCSE): Cloud Platform & Infrastructure

Certified Information Systems Security Professional (CISSP)

VMware Certified Professional (VCP)

WORKING CONDITIONS:

ENVIRONMENT:

Indoor environment.

Evening or variable hours.

Driving a vehicle to conduct work.

PHYSICAL DEMANDS:

Hearing and speaking to exchange information and make presentations.

Dexterity of hands and fingers to operate computer keyboard.

Seeing to perform assigned activities.

Sitting for extended periods of time.

Bending at the waist, kneeling or crouching.

Approved by Personnel Commission: March 13, 2019



Jonathan Muñoz
Director - HR/Classified Personnel Services

Date: 03/13/2019