

MONTEREY COUNTY OFFICE OF EDUCATION

TECHNOLOGY SUPPORT SPECIALIST IV

Classification: Classified

Salary Level: 46.5

DEFINITION:

The Technology Support Specialist IV is a highly skilled position responsible for providing technical leadership on large scale, highly complex projects and performing the most advanced tasks related to the installation, maintenance and support of computer networks and related software and hardware. This position will research, assess, implement and maintain MCOE's Local Area Networks, Wide Area Networks, and the computer hardware and software needs of departments and sites; establish additional networks, links, and upgrades; maintain computer data communications networks and perform highly complex technical support functions; provide assistance, plan and coordinate training for users and TIS staff; work at various sites, including those of other agencies, to troubleshoot problems with servers, network equipment, workstations, mobile devices, printers and software; maintain records in the assigned helpdesk system; provide second-tier on-line and in-person support for complex issues escalated by junior technicians; communicate with office and site support staff on technical issues and perform related duties as required.

SUPERVISOR:

Director of Infrastructure Services

POSITION(S) SUPERVISED:

None

QUALIFICATION REQUIREMENTS:

To perform a job successfully, an individual must be able to perform each essential duty satisfactorily. The requirements listed in the job description are representative (not an exhaustive list) of the knowledge, skills and/or abilities required. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential duties of the position.

DISTINGUISHING CHARACTERISTICS:

Positions in this classification are distinguished from Technology Support Specialist III by the level of expertise required in network and server maintenance. This position requires a higher degree of network support expertise, including primary responsibility for WAN maintenance, security apparatus and the use of advanced tools such as sniffers and protocol analyzers. Project leadership responsibilities are also significantly more advanced, with a focus on large scale, multifaceted projects. Product research and analysis are also a key responsibility. Positions in this classification are also distinguished from the Network Administrator by both the level of network support expertise required and a transition from network and server maintenance to design and engineering. This position requires a lesser degree of expertise in network design and security architecture and has no direct responsibility for system engineering and strategic infrastructure planning.

ESSENTIAL DUTIES:

The following is a list of duties that is representative of the position that includes but is not limited to:

- Performs installation and configuration of advanced networking devices and appliances, including Cisco routers and switches, configuration of RADIUS, VLANs, layer-3 functionality, and Quality of Service (QoS), wireless infrastructure, VoIP, and operational firewall administration such as access list and filter maintenance.
- Designs, coordinates, and troubleshoots advanced storage systems such as RAID and storage area networks (SAN)
- Provides tier two support for escalated issues and advanced network problems, including the troubleshooting and resolution of complex networking issues using monitoring tools such as “sniffers,” protocol analyzers and performance monitors
- Installs and performs advanced configuration of a multi-tier Microsoft Exchange infrastructure
- Performs administration and advanced configuration and setup of multi-tier server infrastructure in both physical and virtual environments, providing for web, file, network, application and database services, including but not limited to DNS, DHCP, web-based user access portals, SSO, remote desktop, and other application-specific functionality
- Provides users with complex mobile device setup and troubleshooting, in accordance with office technical support and BYOD policies
- Leads efforts to configure management software including backup software, antivirus, and various server management utilities
- Plans and coordinates network data wiring layouts and additions
- Provides project management and leadership for large scale, highly complex projects
- Provides leadership to other technology support staff
- Plans and coordinates the implementation of training programs of MCOE and district staff, students and parents in the proper use of computers, data systems, online resources and related technology
- Provides expert technology reviews, written proposals, presentations and technical specifications for Local Area Network (LAN) and Wide Area Network (WAN) products and alternatives and other technologies
- Maintains records on all computer installations and technology service requests; maintains equipment and software inventory
- Assists with bid requests and works with vendors on software and hardware installations, troubleshooting, administration and maintenance
- Assists in the preparation of manuals, policies, forms and other documents, as well as web page content and other forms of media needed to enhance user understanding and participation
- Performs other related duties as required

PHYSICAL AND MENTAL CHARACTERISTICS:

Physical, mental and emotional stamina to perform the duties and responsibilities of the position; manual dexterity sufficient to write, use the telephone and business machines; vision sufficient to read printed materials; hearing sufficient to conduct in-person and telephone conversations; speaking ability in an understandable voice with sufficient volume to be heard at normal conversational distance or on the telephone; physical mobility sufficient to move about the work environment (office and location) and drive an automobile; physical strength to lift a minimum of 40 pounds; physical

stamina sufficient to sit for prolonged periods of time; mental acuity to collect and interpret data, evaluate, reason and define problems, establish facts, draw valid conclusions, make valid judgments and decisions.

REQUIRED QUALIFICATIONS:

Education and Experience:

Associate degree in computer science or related fields, supplemented by training and/or coursework in computer and network operations; and six years of computer related experience or any combination of experience and coursework in such areas as installation, configuration, troubleshooting, and repair of computer hardware, software and peripheral devices preferably in a networked environment, and at least three years of networking experience.

Knowledge of:

This position must meet all knowledge requirements of the Technology Support Specialist III at an advanced level with emphasis and distinction as follows:

- Exterior gateway protocols, such as BGP and VPN technologies, including IPsec
- Unified threat management technologies, including firewalling, intrusion prevention, and content filtering
- Advanced networking principles, theories and practices, pertaining to networking protocols, hardware and technology, including Ethernet/Fast Ethernet/Gigabit Ethernet, Cisco IOS, EIGRP, OSPF, VTP, STP, 802.11 A-N, 802.1X, RADIUS, NAT, and PAT
- LAN and WAN architecture using all available technologies
- Technical support practices including methods of inquiry, testing and problem resolution
- Windows, Macintosh and Linux computer operating systems and server architecture
- Virtualization technologies such as VMware including vSphere administration and architecture
- Directory services, including but not limited to Active Domain and LDAP
- Second tier technical support practices including methods of inquiry, testing and problem resolution
- Advanced configuration, analysis, and maintenance of Microsoft Exchange
- Methods, tools and equipment used in the installation and service of hardware and software
- Advanced firewall, network security design and configuration
- Advanced TCP/IP design and configuration
- Open Systems Interconnection (OSI) model
- Utilization of system workflow, creation, and modification using SCCM and Casper system management tools
- Enterprise-level data backup and restoration
- Content filtering system architecture
- File management and permission administration for Linux OS
- VOIP system architecture and administration
- Design of Main Distribution Frame (MDF) and Intermediate Distribution Frame (IDF)
- The use of various network management tools, techniques, applications and systems
- Expert understanding of physical wiring standards including CAT-5 and fiber optics
- Policies, procedures, functions and general principles of Information Technology
- Project management best practices
- Office methods and equipment, including copiers, printers, and faxes

Skills and Abilities:

- Perform the maintenance and troubleshooting of network hardware and software
- Plan and coordinate testing, staging, and implementation of software and hardware
- Provide leadership and support to technology support staff
- Develop training in the use and care of computer technology and software
- Research and design server-based solutions including Terminal Services, web-based application services, and other emerging technologies
- Evaluate and recommend networked applications
- Effectively implement problem solving techniques
- Maintain trouble ticketing database
- Work closely with management in long-term plans and strategies
- Develop policies and procedures in the use and care of network technology and software
- Develop and prepare written materials in an efficient and comprehensive manner
- Establish and maintain effective relationships with those contacted in the course of work
- Communicate in English, clearly and concisely, both orally and in writing
- Demonstrate good interpersonal skills to work with students, teachers, administrators, supervisors, co-workers and vendors
- Prepare and deliver clear and concise oral instructions
- Understand and carry out oral and written instructions
- Adapt to changing technologies and learn functionality of new equipment and systems
- Multitask and perform work independently without supervision, but also determine the seriousness of a problem that warrants escalation

Desirable Qualifications:

- MCP/MCSE, CCNP and other technical certifications preferred but not required
- Experience with school system application software
- Ability to effectively communicate in Spanish

Licenses and Certifications:

- Possess an appropriate California Driver's License with evidence of insurability