

CLASSIFIED MANAGEMENT JOB DESCRIPTION

PERRIS ELEMENTARY SCHOOL DISTRICT

SYSTEMS ENGINEER

Definition

Under the direction of the Director of Technology, performs a variety of duties related to District-wide operation of technology systems; ~~including installation, operation, repair, and diagnosis of telecommunications, networks, servers, storage systems, management services/consoles, and databases. Keeps district staff informed and up-to-date on software and hardware changes, developments, etc.; and assists the Director of Technology in the management of information systems and account security. Serves as a member of the District Technology Committee.~~

including analyzing, planning, implementing, maintaining, troubleshooting and enhancing large complex systems or networks consisting of a combination that may include firewalls, servers (physical and virtual), local area networks, wide area networks, wireless networks, fabrics, storage arrays, telecommunications and the physical and logical components that integrate these systems together as an enterprise networking backbone or platform.

Examples of Duties

- ~~1. Provides server support for various computer platforms; inclusive of Microsoft Windows, Apple Mac OS, *NIX, and other server platforms used. Includes cloud-based management.~~
- ~~2. Configure network equipment for efficient and resilient network operation.~~
- ~~3. Troubleshoots hardware, software, and network connectivity issues.~~
- ~~4. Performs preventative maintenance to maintain optimal system performance. Maintains network monitoring system.~~
- ~~5. Serves as a resource to administrators, teacher techs, teachers and staff. Develops district and department procedures and protocols for enterprise-level items.~~
- ~~6. Initializes, configures, deploys, and repairs physical and virtual servers in a high availability environment, including strategies for backup and recovery, failover, load balancing, and full redundancy.~~
- ~~7. Configuration and troubleshooting of telephony systems.~~
- ~~8. Maintains inventory documentation of all server, network, computer equipment, peripherals, and corresponding configurations.~~
- ~~9. Collaborates with vendors for software and hardware installations, troubleshooting, administration, and maintenance.~~
- ~~10. Maintains records in work order system.~~

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~~11. Installs printers on print server as required.~~

~~12. Prepares written and oral reports as required.~~

~~13. Maintains knowledge of current trends in computer support.~~

~~14. Assists in supervising and directing the work of the technical support staff assigned to technology services.~~

~~15. Attends and participates in Governing Board and other meetings as required or requested.~~

~~16. Performs related duties as assigned.~~

1. Initializes, configures, deploys, and repairs physical and virtual servers in a high availability environment, including strategies for backup and recovery, failover, load balancing, and full redundancy.
2. Provides server support and maintenance for various computer platforms; inclusive of Microsoft Windows, Apple Mac OS, *NIX, and other server platforms used. Includes cloud-based management.
3. Performs complex storage and server data backup, data migration and disaster recovery operations.
4. Design, install, configure and maintain a variety of complex, multi-vendor hardware and software systems in a network environment for efficient and resilient network operation, including routers, switches, and firewalls. (including guest network and access control)
5. Troubleshoot network problems involving routing, communications, network operating systems, printing, memory management, hardware and other applications.
6. Performs preventative maintenance to maintain optimal system performance. Maintains network monitoring system.
7. Design, configure, and deploy security measures such as multi-factor authentication, encryption protocols, and endpoint protection systems to safeguard network integrity and sensitive data.
8. Continuously monitor and analyze security alerts from firewalls, intrusion detection systems, and other security tools to identify and respond to potential threats and vulnerabilities in the technology infrastructure.
9. Implements changes to infrastructure servers and software to address security vulnerabilities and maintains security patches on district servers and software with the goal of enhancing performance and security to ensure compliance with cybersecurity policies and best practices.
10. Maintains inventory documentation of all server, network, computer equipment, peripherals, and corresponding configurations.
11. Write and maintain custom scripts to increase system efficiency and lower the human intervention time on any tasks.

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12. Configuration and troubleshooting of telephony systems.
13. Configures and troubleshoots software and hardware used throughout the different capacities within the organization.
14. Collaborates with vendors for software and hardware installations, troubleshooting, administration, and maintenance.
15. Maintain records of completed work.
16. Assist the Director of Technology in researching new products and technologies for possible implementation within the District and in the management of information systems and account security.
17. Assists in supervising the work of technical support staff when requested.
18. Serves as a technical resource to District staff and Administrators. Assists in developing district and department procedures and protocols for enterprise level items.
19. Prepares written and oral reports as required.
20. Maintain current knowledge of technological advances and industry trends.
21. Attends and participates in Governing Board and other meetings as required or requested.
22. Responds to system outages or other pertinent issues during and outside of District operating hours.
23. May require after hours (weekdays and weekends) system updates and patching.
24. Performs related duties as assigned.

Qualifications

Knowledge of:

- ~~1. Server hardware and software configurations~~
- ~~2. Server operating systems (Microsoft and Apple OS)~~
- ~~3. Google Apps for Education, user and administrative usage~~
- ~~4. Google Chromebook initialization, configuration, and usage.~~
- ~~5. Apple iPad initialization, configuration, and usage.~~
- ~~6. AirWatch Mobile Device Manager~~
- ~~7. Microsoft Windows Domain Services~~
- ~~8. Xerox printer interface and installation~~
- ~~9. Inventory and documentation practices~~
- ~~10. Network topology, routing, troubleshooting, protocols, design and implementation; including Cisco ASA firewalls and structured cabling standards~~

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~~11. Organizational skills~~

~~12. General technical terminology~~

~~13. Higher level math and development of logic flow and algorithms.~~

~~14. Relational database management systems, methodologies and techniques, and related reporting tools.~~

~~15. Familiarity with technology components that meet the federal requirements specific to California K12~~

~~16. Current development languages allowing for creation of complex scripts~~

1. Network topology, routing, troubleshooting, protocols, design and implementation; including Palo Alto firewalls, Aruba switching, Clearpass access control and structured cabling standards.
2. Microsoft domain management including Active Directory, DHCP, DNS, Radius
3. Modern Server and desktop virtualization hardware and software configurations including VMware and HyperV.
4. Relational database management systems, methodologies and techniques, and related reporting tools.
5. Current development languages allowing for creation of complex scripts
6. Cyber-security incident management and response using modern security platforms.
7. Google Apps for Education, user and administrative usage
8. Google Chromebook initialization, configuration, and usage.
9. Computer workstation and network operating systems including but not limited to Microsoft Windows Server 2012 and later, Windows 10 and later, and Linux.
10. Server maintenance, backup and disaster recovery procedures.
11. Microsoft Windows Domain Services.
12. Computer hardware, printers, portable devices, telecommunication equipment.
13. Organizational and time management skills.

Ability to:

1. Learn and effectively use hardware and software specific to District needs
2. Train or assist in providing training to end users
3. Troubleshoot hardware, software and advanced network connectivity problems
4. Work independently with minimal or no supervision
5. Communicate effectively both orally and in writing
6. Establish and maintain cooperative and effective working relationships with others

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7. Project a mature, constructive, stable, and healthy attitude in a learning environment
8. Learn pertinent procedures and functions quickly and apply them without close and immediate supervision
9. Demonstrate good interpersonal skills to work with students, teachers, administrators, supervisors, co-workers, and vendors
10. Learn new skills to keep current with technology trends
11. Instruct others in the use and care of technology hardware and software
12. Adapt to changing technologies and learn functionality of new equipment and systems
13. Handle multiple projects and multi-task while maintaining patience and flexibility. Manage time effectively
14. Perform multiple technical tasks with frequent need to upgrade skills due to changing job conditions and requirements.

Education and Experience

- BA/BS degree from an accredited university in Computer Science, Information Systems, or equivalent preferred.

OR

- A combination of education and/or certifications/experience and at least four years of progressively responsible technology experience in the technology field.
- ~~A combination of demonstrated education and experience considered to provide the ability to perform successfully in the position.~~

AND

- Six (6) years' experience in the Information Technology field. At least three (3) years' experience working in a direct role as a network/server technician/engineer which must have included responsibility as the primary manager/support for an enterprise local or wide area network and server virtualization configuration and management.
- ~~Six (6) years' experience in the Information Technology field. Two (2) years' experience of Windows hardware/software server support in a corporate or educational network environment. Two (2) years' experience with network management. Two (2) years' experience with database management.~~

License and Other Requirements

- Valid California Driver's License and Proof of Insurance

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- Network+, Security+, CCNA or MCSA certification preferred
- ACCA (Aruba Certified ClearPass Associate) or ACCP (Aruba Certified ClearPass Professional) certification preferred
- PCNSE (Palo Alto Networks Certified Network Security Engineer) certification preferred
- VMware Cloud, Data Center, or Network Virtualization certification preferred

- A+, Network+, Security+, CCNA, ACSA, or MCSA certification preferred Google Certified Educator preferred

PHYSICAL DEMANDS AND WORKING ENVIRONMENT

The conditions herein are representative of those that must be met by an employee to successfully perform the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential job functions.

Physical: Primary functions require sufficient physical ability and mobility to work in an office setting; to stand or sit for prolonged periods of time; to occasionally stoop, bend, kneel, crouch, reach, and twist; to lift, carry push, and/or pull light to moderate amounts of weight; to operate office equipment requiring repetitive hand movement and fine coordination including use of a computer keyboard; and to verbally communicate to exchange information.

- Hearing and speaking to exchange information.
- Seeing to read a variety of materials and see computer screens.
- Dexterity of hands and fingers to operate a computer keyboard.
- Sitting and standing for extended periods of time.
- Walking to diagnose computer problems.
- Climbing ladders to diagnose problems.
- Lifting objects up to 50 pounds.

Vision: See in the normal visual range with or without correction.

Hearing: Hear in the normal audio range with or without correction.

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Hazard:

- Working at heights requiring ladders
- Extended viewing of computer monitor
- Exposure to dust and dirt

Personal Qualities: Maturity, good work habits, patience, pleasant and friendly demeanor, integrity, confidentiality, adaptability, flexibility, good judgement, dependability, ability to work effectively and efficiently under pressure, ability to work independently, motivated, and reliable.

SALARY/COMPENSATION:

245 Work Days

Job Description: Classified Management/Systems Engineer
Classified Management Salary Schedule 201

Row 1: \$7,523.00-\$9,829.00/Monthly

OR

Row 1.5: \$8,424.00-\$10,241.00/Monthly with BA/BS

~~\$6,850.00-\$9,019.00/Monthly~~

~~Board Approved: February 9, 2017~~