



Excellence for all.

Job Title: Lead Systems and Network Engineer

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.

Basic Function:

Under the direction of the Director of Technology, leads, plans, organizes, controls, and performs activities related to the proper implementation, operation, monitoring, administration, and maintenance of PVSD's information technology infrastructure- including servers and network systems. Coaches, trains, and consults with staff on information technology issues; assures the smooth, efficient, and proper integration of hardware and software technologies; supports the use of information technology by all departments; recommends and implements changes to accomplish increased system productivity and efficiency.

Distinguishing Characteristics:

The Lead Systems and Network Engineer classification is the highest-level technical position in the Technology Services System Administration series and is the primary employee responsible for expert-level administration and support of data center systems and for making recommendations for future improvements. Employees in this classification provide leadership and work direction for all subordinate classifications in the Technology Services family. This position works closely with district leadership and administrative personnel to determine long-term district needs. This position requires expert knowledge of the district's applications, systems, and infrastructure. This position, along with the Lead Systems & Network Engineer, may fill in for the Director of Technology as required, providing guidance and technical insight to district executive leadership.

Representative Duties:

Essential Functions:

- Maintain District standards of excellent customer service and professional behavior in various and sometimes challenging situations.
- Access and monitor District email daily to receive important updates from school and District administration.
- Participate in staff development and in-service training programs as assigned.
- Provides planning, guidance, and advanced technical expertise for all district systems and network services-including future enhancements.
- Designs, configures and administers systems and servers related to district LAN and WAN (e.g., directory services, e-mail, DNS, DHCP, web filtering, proxies, routers, switches, security, network monitoring, backups) for the purpose of optimizing throughput, securing data, overseeing backup and recovery capabilities, and ensuring availability of services to authorized users.
- Coordinates systems and network hardware/software upgrades, changes and repairs for the purpose of minimizing risk and downtime and maintaining availability of services to authorized users.
- Routinely evaluates adequacy of existing networks based on user needs and traffic.
- Provides project leadership of technical staff in the implementation, installation, configuration, and technical support

of computer and network architecture.

- Coordinates projects with departments and external organizations and agencies.
- Configures, maintains and participates in the installation of directory structures, security applications and software.
- Provides technical leadership and participates with fellow staff in troubleshooting to resolve network hardware, systems, and operations problems, including but not limited to connectivity, internet access, electronic mail and file servers.
- Works with staff, vendors, and independent contractors to identify and resolve problems.
- Trains technicians in systems and network operations, network security, and troubleshooting of networked workstations.
- Updates existing security software on networks and workstations. Tests existing operating systems and personal computers for potential viruses and security problems.
- Establishes and implements protocols and procedural controls for operation of the network systems.
- Develops and maintains up-to-date documentation supporting assigned and related areas of responsibility; including network infrastructure, system blueprints and schematics, procedures and steps for equipment setup, helpdesk questions and answers, and inventory recording.
- Install, test, support, and update computer software, systems, databases, servers and applications. Assist with maintaining integrity and security of assigned computer systems. Implement, maintain, troubleshoot, and support single sign-on systems.
- Establish and maintain automated records and files, initiate queries, manipulate and format data, develop spreadsheets, create tables and generate various computerized documents and reports. Ensure accuracy of input and output data. Perform data cleanup procedures. Import, export, and upload data.
- Work with technical staff and district leadership to automate processes district-wide. Coordinate and participate in the development, testing, and implementation of new and existing computerized systems.
- Lead and provide work direction and support to subordinate technology staff. Provide input to administrator regarding staff performance, goals, and hiring.
- Prepare user manuals, guides and other documentation and user support materials to assist district personnel in using district systems.
- Operate a variety of office equipment, including networked personal computers, various software applications, mobile devices, printers and other peripheral equipment.
- Attend training, professional development and/or professional association meetings to remain current regarding trends and best practices.

Other Duties:

- Performs related duties as assigned.
- May act as Technology Services department lead in the absence of the Director of Technology.
- May be assigned out of class work as prescribed by Merit Rules and Regulations.

Knowledge and Abilities:

Knowledge of:

- District standards of excellent customer service, interpersonal skills using tact, patience and courtesy.
- Core networking technologies: TCP/IP, DHCP, DNS, VPN management
- Network hardware programming and configuration including switches, routers, firewalls (Cisco iOS)
- Windows server configuration and management
- Windows Active Directory management (including Group Policies), ADFS, SSO Systems
- Wireless network configuration and administration

- Virtual Server management (such as VMware, and/or Microsoft Hyper-V)
- Enterprise storage management and operations (SANs, NAS, Enterprise data backup systems and strategies)
- Client device operating systems: Windows, iOS, Chrome
- Microsoft 365 and Exchange Email systems
- Mobile Device Management solutions and strategies
- Anti-Virus solutions and malware protection strategies
- PowerShell and other scripting languages/tools
- SFTP, SCP and other file transfer protocols

Ability to:

- Understand and follow oral and written directions.
- Establish and maintain effective and cooperative working relationships with others.
- Communicate respectfully and effectively, both orally and in writing, with students, staff, and the public.
- Learn and incorporate new skills, techniques and/or industry trends.
- Maintain regular and consistent attendance.
- Perform technical work in design, installation, operation, maintenance, repair and diagnosis of computer networks.
- Provide technical user support assistance.
- Generate and maintain reports and related records.
- Troubleshoot and resolve network problems.
- Understand and follow oral and written instructions.
- Establish and maintain cooperative and effective working relationships with others and keep a positive attitude.
- Prepare and maintain records and reports.
- Plan and organize work.
- Meet schedules and time lines.
- Work independently with little direction.
- Maintain confidentiality and discretion regarding sensitive information.
- Interact positively, flexibly and patiently with coworkers, supervisors, community and vendors to maintain cooperative and effective working relationships.
- Lead and direct others' work.

Education and Experience: Any combination equivalent to sufficient education, experience, and/or training to demonstrate the knowledge and abilities listed above. Typically, this would be gained through: AA degree and a minimum of 5 years of experience in network and/or server operations, administration, and support. Bachelor's degree in technology or closely related field preferred. Successful completion of the Merit examination process is required.

Licenses and other requirements: Valid California driver's license. Preferred certifications: CCNA, MCSA, CCNP, CCDP

Working Conditions:

Environment: Indoor environment. Driving a vehicle to conduct work. Physical Demands: Dexterity of hands and fingers to operate a computer keyboard. Sitting for extended periods of time. Lifting, carrying, pushing or pulling moderately heavy computer equipment.

Physical Demand/Hazards: Dexterity of hands and fingers to operate a computer keyboard. Sitting for extended periods of time. Lifting, carrying, pushing, or pulling moderately heavy computer equipment.

Emergency Conditions: Pursuant to California Government Code Section 3100, all public employees are required to serve

as disaster service workers subject to such disaster service activities as may be assigned to them by their supervisor or by law.

Salary Range: 145

Approved by Personnel Commission: May 27, 2014

Revised: Standard Education/Exp language 9/27/17; Title change and revised job description 12/15/21

Personnel Commission Classification/Compensation Study Approved: July 12, 2023