

San Jose · Evergreen Community College District Classified Job Description

Position: Network Engineer Department: Information Technology Services &

Support (ITSS)

POSITION PURPOSE

This position reports to the Network Technology Manager or assigned administrator in ITSS. The purpose of the position is to establish and maintain a high level of network performance throughout the District. The Network Engineer addresses a broad range of networking projects that address critical organizational needs, such as enterprise converged networks, IT security, VoIP, telecommunications, video conferencing and surveillance systems.

DISTINGUISHING CHARACTERISTICS

This position will help design, implement, troubleshoot, analyze, and maintain converged networks. This position will interface with a variety of users, contractors and vendors.

KEY DUTIES AND RESPONSIBILITIES:

- 1. Assist in the design and implementation of LAN/WAN converged networks and network upgrades from cabling design to switching, routing, enterprise wireless and security protection.
- 2. Configure, test, and maintain LAN/WAN, VoIP, video, security, software defined networks and related services.
- 3. Identify, diagnose, and resolve network problems using the OSI model for troubleshooting.
- 4. Create and maintain comprehensive documentation for all implemented networks.
- 5. Provide pre- and post- installation and technical support.
- 6. Assist in preparation of network related proposals and solution presentations.
- 7. Maintain and support LAN/WAN environment and ensure all network equipment has the latest security patches.
- Utilize various network monitoring tools to monitor the network and to respond to network incidents.
- 9. Provide network services for Windows and Linux server environment, DHCP and DNS services, and IP configuration.
- 10. Provide daily maintenance and problem resolution, operating system patches and software upgrades, and routine hardware configuration.
- 11. Obtain and maintain required certifications for partnership with key vendors.
- 12. Stay up to date with evolving industry standards for networking technologies, standards and practices.
- 13. Perform other duties as assigned.

Knowledge of:

- 1. Network design and security practices (e.g. networks segmentation, layered defense strategies).
- 2. Implementing and administrating network devices, setting and maintaining policies and rights/security within a Windows Server environment.
- 3. Network cabling design standards.
- 4. Firewalls, network switching, network routing protocols, VPN, enterprise wireless access, enterprise server platforms, Windows Server Active Directory, desktop and laptop installation and problem resolution.
- 5. Common network monitoring and security utilities.
- 6. The OSI network model, Ethernet, and TCP/IP networking.

Skills and Ability to:

- 1. Learn new technologies and maintain industry knowledge.
- 2. Ability to lift, carry and move all components of PC workstations, servers, network equipment, peripherals, and other ancillary equipment.
- Prioritize and multitask.
- 4. Apply language skills to read, analyze and utilize procedural manuals, instructional and software manuals, textbooks and needed resources on learning strategies.
- 5. Read and understand construction documents and drawings pertaining to telecommunications and structured cabling.
- 6. Effectively present information and respond to questions from groups of faculty, students and the general public.
- 7. Effectively communicate and interact with persons of diverse backgrounds and abilities.
- 8. Establish and maintain effective and cooperative working relationships with those contacted during the course of work.
- 9. Work independently and exercise good judgment.

Experience and Education:

- 1. Education equivalent to a Bachelor's degree (preferably in computer science, network administration, information technology or related field).
- 2. Three years of experience in network administration of converged networks (e.g. data, voice, video, control systems, etc.).
- 3. Experience implementing and administrating network devices (e.g. routers, firewalls, switches, appliances, VoIP, etc.).
- 4. A practical level of experience implementing and administering common TCP/IP based services, including DNS, DHCP, HTTP, FTP, SSH, SMTP, etc.

Job Description: Network Engineer Page 2

5. Demonstrated sensitivity, knowledge, and understanding of the diverse academic, socioeconomic, gender, cultural, disability, and ethnic backgrounds of the individuals we serve and sensitivity to and knowledge and understanding of groups historically underrepresented, and groups who may have experienced discrimination.

License and Certificates:

1. Networking certificates such as Cisco CCNP or other related certification are required or must be obtained within one year of employment.

WORKINGS CONDITIONS

Environment:

1. Indoor environment.

Physical Demands:

- 1. Hearing and speaking to exchange information and make presentations.
- 2. Dexterity of hands and fingers to operate a variety of equipment.
- 3. Working on ladders and in telecommunications closets and underground vaults/tunnels.

Board Approved: 5/14/13, 4/28/15, 8/30/16

Revised: 4/17/15 with new range, 7/27/16, 8/30/16 certificates

Salary Range: 150

EEO Category: 2B2 - Other Professionals

Job Description: Network Engineer Page 3