

Job Description/Title: Network Engineer

Approved, Bargaining Unit President: Reclassification Committee 4/14/15

Approved, MPC Associate Dean, Human Resources: 4/14/15

Board Approved: 6/24/15

MONTEREY PENINSULA COLLEGE

NETWORK ENGINEER

JOB SUMMARY

Under general direction, research, identify, and provide hardware and /or software solutions for the District to include installation, upgrade and repair. Act as project leader, when assigned, with little or no supervision. Develop, update and archive network and systems configuration documentation. Conduct training for other technical support staff and network system users regarding issues related to the college network and systems. Test and perform maintenance on network infrastructure and systems. Provide network and systems review, design and implementation assistance to college staff. Anticipate potential network and systems problems and implement corrective measures

EXAMPLES OF FUNCTIONS

Primary Responsibilities

1. Install, configure, maintain, troubleshoot, and repair a variety of campus network equipment to include, but not limited to: Cisco routers and switches, Layer 1 through Layer 4 management to include VLANs, enterprise-grade firewalls, wireless infrastructure including controllers and access points, and cabling infrastructure including Ethernet, single-mode fiber and multi-mode fiber.
2. Install, configure, maintain, troubleshoot and repair a variety of campus systems to include, but not limited to: a multiple site Microsoft Active Directory (AD), student, faculty and staff network account management, internal and external Domain Naming System (DNS), Dynamic Host Configuration Protocol (DHCP), and server administration to include Windows and Linux Operating Systems.
3. Install, configure, maintain, troubleshoot, and repair a variety of campus communication and collaboration systems to include, but not limited to: Voice over Internet Protocol (VOIP) telephony, unified messaging to include voicemail and instant messaging, email, and video conferencing.
4. Install, configure, maintain, troubleshoot and repair networking and systems monitoring notification systems to include, but not limited to: network performance software, anti-virus, malware and anti-spam software, intrusion detection systems, intrusion prevention systems, and hardware and system health.
5. Install, configure and maintain the infrastructure, software and technologies required for virtual environments used for Virtual Desktop Infrastructure (VDI), virtual servers, private cloud and virtualized networks.
6. Integrate and maintain on premises information systems with vendor and state cloud applications.
7. Install, configure and maintain variety of Storage Area Networks (SANs) environments.
8. Install, configure and maintain campus emergency alerting systems, including but not limited to: voice, text messaging, email and web.

9. Assist in the development of strategies for a disaster recovery plan of campus technology and data. Implement and maintain current recovery technologies. Research and plan new options for improving efficiencies in data and systems disaster recovery.
10. Participate as a team leader in campus technology projects focused on the improvement of the overall student experience and learning environment.
11. Participate in the writing of procedures documenting network resource testing, monitoring, configuration, and maintenance.
12. Analyze technical literature and assist in the design and development of network assets.

Other Duties

13. When appropriate, modify hardware, or replace various internal components to correct problems or enhance performance or functionality of college information systems assets.
14. Provide support, under direction of the Director of Information Systems, as a liaison between the District and various hardware and software vendors.
15. Communicate with hardware/software vendors; make recommendations that may include writing specifications for equipment purchases.
16. Provide training for other technical support staff focusing on the development of efficient PC and network hardware/software troubleshooting techniques.
17. Provide input toward the development and maintenance of IT Department budgets.
18. Participate in college help-desk staffing, management and documentation.
19. Identify technical training needs of support staff and work with Director of Information Systems to implement and maintain a routine technical development cycle.
20. Serve on college committees as assigned.
21. Perform other related duties as assigned.

EMPLOYMENT STANDARDS

Education and Experience

Any combination of six years of education and/or experience, which would demonstrate the possession of the required knowledge, skills and abilities listed herein. For example, a Bachelor's Degree in computer science or related field and two years of experience or an AA Degree with four years of related experience.), Microsoft Systems certifications (MCSA, MCSE), Cisco networking certifications (CCNA, CCNP), Comptia Security +, and/or other industry standard certification are preferred.

Knowledge

Knowledge of: modern operating systems (Windows, Linus, OSX), server administration (Windows, Linux), virtualization technologies (VmWare and Hyper V), Cisco IOS and wireless, Cisco VoIP and collaboration, basic network design knowledge, OSI Model Layers 1-7, TCP/IP, firewall systems (IDS/IPS, VPNs), unified message systems, SANs technologies, modern hardware configurations and repair, and system monitoring software.

Abilities

Ability to: train technical staff and end users; display expert and innovative use of concepts and principles as a computer generalist; successfully apply specialized knowledge to practical applications; analyze system performance; correctly interpret and resolve complex computer problems; design analyze, implement, and maintain advanced Network and Systems architectures; use appropriate and correct English spelling, grammar, and punctuation; communicate effectively in both oral and written form; perform arithmetical calculations with speed and accuracy; establish and maintain effective work relationships with those contacted in the performance of required duties; demonstrate an understanding of, sensitivity to and appreciation for, the academic, ethnic, socio-economic, disability and gender diversity of students and staff attending or working on a community college campus.

PHYSICAL EFFORT/WORK ENVIRONMENT

Moderate to heavy physical effort; occasional standing, walking kneeling, bending; stooping; periodic handling of moderate to heavy equipment or supplies up to 50 lbs. Primarily an indoor work environment.