

# **CHABOT-LAS POSITAS COMMUNITY COLLEGE DISTRICT**

---

## Class Specification

### **MANAGER, NETWORK SYSTEMS AND SERVICES**

#### **DEFINITION**

This is a management position with responsibility for managing the planning, development, and technical administration of District data communication systems and networked services. The Manager, Network Systems and Services will ensure that the District's network is reliable, scalable, and stable and capable of supporting the colleges' mission to students and the community. This position requires extensive knowledge of modern data communications technologies, local and wide-area networking, network server administration, user applications, extensive and comprehensive knowledge of the District's network design, technologies, devices, operational rules, testing and monitoring systems, network operating systems, network services, client operating systems and applications, as well as the ability to manage, direct, coordinate and evaluate the staff in the ITS Network Systems and Services Department. This position entails frequent interaction with District personnel, College staff, vendors, contractors, consultants and representatives of other agencies and businesses.

#### **REPRESENTATIVE DUTIES**

The Manager, Network Systems and Services, using standards, procedures, and guidelines that have been established by the Information Technology Services Department, will:

- Provide immediate management, direction, scheduling, coordination and evaluation of the District's Network Services staff, Help Desk/User Support staff, Webmaster, and Computer Operations staff.
- Resolve ongoing problems using his/her own initiative and the technical expertise of the ITS staff, and through consultation with ITS Management as appropriate for exceptional problems and policy issues.

The Manager, Network Systems and Services, has lead responsibility for duties in any of the following areas:

#### *A) Management of Data Network Infrastructure*

1. Is responsible for creating a strategic networking and LAN plan/program that supports business needs, ensuring there is a cooperative effort between functional business areas, ITS, and end users.
2. Leads the group that provides the long-term planning, support, implementation, and troubleshooting activities for desktop computing, enterprise applications (e.g., mail), and LAN/WAN components.
3. In conjunction with technical staff, performs analysis of LAN/WAN needs, designs and implements network architectures (equipment and cabling infrastructures), including LANs and WANs, LAN internetworking, and LAN-to-WAN connections. Defines network equipment and cabling standards.

4. Oversees all network management functions in support of ITS services related to the operation, performance, or availability of data and voice communications networks.
5. Analyzes network performance and recommends adjustments to a wide variety of complex network management functions with responsibility for overall performance and availability of networks. Is responsible for related network management and reporting.
6. Is responsible for establishing network related service expectations with end-user departments and maintaining these expectations unless circumstances occur beyond our control.
7. Manages interface to application engineering and understands/designs solutions that support distributed databases and that integrate with the LAN/WAN networks.
8. Is responsible for budget management of equipment procurement, ongoing maintenance contracts and other network costs.
9. Participates in various IT projects intended to continually improve/upgrade the telecommunications infrastructure.

#### *B) Network Server Duties*

1. Oversee the staff responsible for the operation of the District's NetWare, Windows, and Linux network servers, including system planning, development, operational control, monitoring, and security.
2. Develop District-wide standards for network server software, including operating systems, utilities, management software, and office automation applications.
3. Has overall responsibility and accountability for the design, development, release, and maintenance of GroupWise e-mail application delivery system and services for all administrative functions.
4. Coordinate/collaborate with customers, colleagues, and other stakeholders to identify and maximize opportunities to utilize NetWare and GroupWise services to improve business processes.
5. Manages, directs, and coordinates with technical staff to plan and execute upgrades, hardware migrations and enhancements. Advise end-users of upgrade schedules and outages.
6. Negotiates and manages maintenance contracts for network servers and related software.

#### *C) Help Desk/Web Duties*

1. Manages Help Desk staff to provide direction and attain support objectives.
2. Coordinates user and support issues among sites to ensure timely distribution of knowledge and positive impact on user satisfaction and productivity.
3. Develops reporting measures for Help Desk activity.
4. Develops IT end-user support procedures and trains/guides staff in their use.
5. Is proactive in establishing flexible processes and ongoing training to Help Desk staff to quickly incorporate changes (updates, new releases) to existing software and hardware into ITS support repertoire.
6. Maintains high degree of contact with users to respond quickly to their changing needs.
7. Has contact with vendors as necessary to ensure proper documentation and training is available to Help Desk staff.
8. Is responsible for maintaining high end-user service levels.
9. Plays a strategic role in communicating changes in processes and procedures to end users and Help Desk staff in a clear and timely manner.
10. Acts as liaison with College support groups in identifying support impacts to instructional and administrative systems performance.

11. Provides support for new Web Development for the District Services for Intranet communication and maintains these ITS Web sites.
12. Provides assistance to the District on Internet Web sites that are under the control of the Public Information Officer and participates in District-wide Web Committees.

*D) Network Security*

1. Has responsibility for developing, maintaining, and publishing ITS information security standards, procedures, and guidelines to safeguard information against accidental or unauthorized modification, destruction, or disclosure.
2. Provides technical guidance and training to staff and designs and implements programs for user awareness, compliance monitoring, and security compliance.
3. Manages, directs, and coordinates with technical staff to implement upgrades, repairs, modifications, and replacements of information security devices or software.
4. Manages staff to ensure appropriate security controls are in existence and in force throughout the enterprise.
5. Works with executive management to determine acceptable levels of risk for the enterprise.
6. Confers with management, programmers, risk assessment staff, auditors, facilities, and security departments, and other personnel to identify and plan for security for data, software applications, hardware, telecommunications, and computer installations.
7. Determines methods of implementing and enforcing security policies.

*E) Project Management for Network/Web Services*

1. Has overall responsibility for planning, directing, and coordinating activities pertaining to technology and business unit projects, on an enterprise level related to network infrastructure and Web sites.
2. Consults with management and reviews network project proposals to determine goals, time frame, funding limitations, procedures for accomplishing project, staffing requirements, and allotment of resources.
3. Develops project plans specifying goals, strategy, staffing, scheduling, risks, contingency plans, and allocation of available resources for network projects.
4. Formulates and defines technical scope and objectives of network and Web projects.
5. Is responsible for managing the team that develops and carries out ITS network and Web projects.
6. Ensures that network and Web projects are accomplished on time and within budget.
7. Coordinates the activities of engineers, consultants and contractors who provide assistance in ITS projects as part of Bond Measure "B".
8. Provides a contractual and relationship management role with vendors that provide services to the ITS organization.

*F) District Computer Operations*

1. Has overall responsibility for planning, directing, and coordinating activities pertaining to the Computer Operations schedules, workflow, operating instructions, priorities, and new procedures or policies.
2. Coordinates the execution of the jobs and output for the Production Systems installed on the District's central computers and manages the physical operation of those computers and related peripheral systems.
3. Plans, implements, and monitors systems to control the physical environment of the Computer Center, including locks, intrusion alarms, air conditioning systems, temperature alarms, fire alarms and fire control systems, uninterruptible power supplies, emergency lighting, and other systems as required.

4. Makes internal evaluation of malfunctions of the central computer systems and peripherals, communications equipment, and other support systems in coordination with the Network and Applications analysts and takes appropriate corrective action.
5. Coordinates maintenance contracts for the central computer system, communications equipment, peripherals, and other support systems.

#### *General Administrative Duties*

1. Manage staff in the Network area, Web and Help Desk Services area, and Computer Operations area of the District's ITS department, providing coaching/mentoring, direction, training, work assignments, and evaluations.
2. Coordinate/collaborate with the District Facilities Planning & Management department and the Maintenance & Operations department and their designated construction teams during the planning phase of projects involving changes to network infrastructure.
3. Perform complex systems analysis tasks required to administer and maintain the District's data communications systems, servers, and clients, including problem definition, analysis, and solution planning.
4. Coordinate installation, maintenance, and repair of network equipment by outside vendors;
5. Recommend strategies to maintain the technical currency of network systems, services, and equipment.
6. Make budget recommendations to ITS management concerning communications systems, software, and equipment, including specifications for related network hardware and software.
7. Provide regular liaison with College computing staff; coordinate systems and services as required.
8. Support all ITS activities for network infrastructure and equipment needs for large-scale technology initiatives like the Bond Measure "B".
9. Manage the District Data Center facility including the relocation to Las Positas as part of the Bond Measure "B".
10. Serve on District-wide Committees that relate to Network, Web, Help Desk, and Production Operations.
11. Oversees disaster recovery and business continuation planning.
12. Keep abreast of new technologies required to remain current in the field.
13. Act as District's representative at conferences, User-Group meetings and other meetings, as required.
14. Perform other job-related duties as assigned.

#### **MINIMUM QUALIFICATIONS**

##### **Knowledge of:**

1. Principles, practices and procedures required to design, develop, enhance and implement network (LAN/WAN), telecommunications, security for hardware and software.
2. Principles, practices and techniques used in the installation, maintenance and support of network, telecommunication, security hardware and software, desktops, and network management tools.
3. Principles and methods of TCP/IP network technology, design, security, and administration, including the OSI model, DNS/DHCP, routing (RIP/EIGRP/OSPF/BGP), sendmail, NFS, SMTP.

4. Specific equipment and technology experience with Cisco switches and routers in a TCP/IP/IPX multi-protocol environment, DSU/CSUs, videoconferencing equipment, PBXes and voicemail systems, Gigabit Ethernet equipment, wide area networking technologies, including serial, dedicated digital services, switched digital services, ISDN, T-1, T-3, ATM, SONET; RMON and SNMP management systems.
5. Operation of enterprise servers, Unix systems, microcomputers and peripheral equipment.
6. Principles and methods of Windows 2000/2003 Servers, Netware 5/6/6.5 and Linux network technology, design, and administration.
7. Current and future development of networking, telecommunication and security technology including wireless solutions where appropriate.
8. ITS procedures and processes for coordination on large-scale technology improvements such as the Bond Measure "B".
9. Specific equipment and technology experience with maintenance of IBM enterprise servers and related peripherals such as printers, tape drives, and disk drives.
10. Controls for physical environment of the Computer Center including but not limited to locks, alarms, HVAC, UPS, and other environmental factors.

**Skills in:**

1. Systems analysis and design techniques.
2. Principles of training, management and project management. Possess a proven track record of managing diverse technical staff and resources in multiple projects through all life-cycle phases in accordance with established direction and standards, where maintaining a high level of user trust and confidence in the group's knowledge of and concern for users' business needs is paramount.
3. Project management skills including estimating costs and scheduling work.
4. Budget preparation and control.
5. Oral and written communication skills to technical staff and upper management.
6. Technical problem solving methodology, logical reasoning.
7. Use of software for business communications (Word/Excel/PowerPoint/Project)
8. Use of software for network administration, management, and monitoring
9. Use of computer-assisted drawing software or other computer applications for network infrastructure documentation
10. Staff management and establishing and maintaining effective working relationships with individuals and departments.

**Education and Experience:**

Equivalent to completion of a Bachelors' degree in Computer Science or a related field, AND six years experience with technical network/server projects AND six years experience managing technical network and server operation teams.

An equivalent combination of education and experience that indicates possession of knowledge and skills required will be evaluated.

**License:**

Possession of a valid class C (autos and light trucks) California driver's license.

**PURPOSE OF CLASS:**

To effectively manage network and server systems design, implementation, and support teams as well as Web development/maintenance activities, Help Desk support, and Computer Operations.

**NOTE:** This class specification is not necessarily all-inclusive in terms of work detail.

tm

Adopted by the Board of Trustees 8/16/05; effective 8/17/05

Board Designation: Administrative

P:\Job Specs\Administrative\Manager Network Systems & Services.doc