

**NETWORK SYSTEMS SPECIALIST****DEFINITION**

Under supervision, installs, configures, monitors and maintains the City's data networking infrastructure; analyzes and modifies overall network operations to ensure the highest level of uptime, integrity and security.

**SUPERVISION RECEIVED/EXERCISED**

Receives supervision from the Information Services Supervisor. Receives lead direction from the Senior Network Systems Specialist. This class does not exercise supervision.

**DISTINGUISHING CHARACTERISTICS**

Network Systems Specialist is a working level class in the Information Services Department. Incumbents monitor and control the data network, identify and resolve operating system issues, provide technical assistance to City departments, provide network design recommendations and analyze overall network performance and security. This class differs from the Programmer Analyst series in that incumbents of the latter develop and implement computer programs. The incumbent may be assigned to work on-call, weekends or holidays for after-hours support.

**EXAMPLES OF IMPORTANT AND ESSENTIAL DUTIES**

(May include but are not limited to the following.)

Configures, tests, installs, maintains, diagnoses and repairs local area network/wide area network equipment and related services.

Provides technical assistance and may act as a technical advisor to Information Services Department staff or other City staff providing the same level of support.

Performs operating systems backups, ensures capacity planning and data backup integrity for various systems including architecture and engineering design systems.

Monitors the network daily to ensure network security including virus/malware protection at all levels of server, firewall, internet, email and client workstations.

Ensures functionality of all virtual, physical and wireless networks and verifies that networking equipment contains appropriate levels of security, configuration and connectivity.

Assists in evaluating networking hardware/software requests and prepares appropriate recommendations.

Conducts research of evolving technological developments for the purpose of recommending procedures and/or purchases of hardware and/or software to keep the City's networking infrastructure up-to-date with appropriate technological advances.

Ensures secure end user Internet systems connectivity according to established policies and procedures.

Responds to urgent technological matters as needed.

Performs related duties as required.

## **JOB RELATED AND ESSENTIAL QUALIFICATIONS**

### **Knowledge of:**

Implementation, troubleshooting and design of data networking and telecommunications systems.

Local area networks/wide area networking technology.

Networking technologies and protocols including TCP/IP, UDP, VPN, VOIP, Secure Tunneling.

Server based hardware technologies and operating systems including virtualization, clustering, security, user configuration.

Linux and Unix Operating Systems including, but not limited to: RedHat, SuSE, CentOS, Solaris.

Microsoft Server Operating Systems included, but not limited to: Server, Exchange, SharePoint, and Lync.

Network infrastructure technologies such as Cisco switches, routers, firewalls.

Network security and related concepts.

### **Ability to:**

Analyze functional requirements and specifications for computer hardware.

Install, maintain, troubleshoot and repair network systems and equipment.

Establish and maintain effective working relationships with co-workers and representatives of user departments.

Communicate effectively, both orally and in writing with the ability to explain technical details to non-technical staff or end users.

**Skill in:**

Troubleshooting, customer service and organizational skills.

**MINIMUM QUALIFICATIONS**

**Experience**

Three years of experience gained as a Computer Systems Specialist with the City of Fresno

OR

**Education and Experience:**

Graduation from an accredited college or university with a Bachelors Degree in computer science, management information systems, computer engineering or a related field, and

Three years of experience in the installation, maintenance, troubleshooting and design of networking equipment, network communications, servers, computer data storage and back-up systems. Additional qualifying experience may be substituted for the required education on a year-for-year basis.

**Special Requirement(s):**

Possession of a valid California Driver's License at time of appointment.

Eligibles certified for consideration for hire will be required to pass an extensive pre-employment background investigation.

APPROVED: \_\_\_\_\_  
Director of Personnel

DATE: \_\_\_\_\_

TJ:ar 10/15/13