

## NETWORK ADMINISTRATOR

### Job Summary:

Under general supervision from the Information Technology Manager, provides support to city staff and works with vendors to implement, maintain, ~~repair~~ and support ~~microcomputer~~, telecommunication, LAN-Local Area Network and Wide Area Network (~~WAN~~) equipment.

### Essential Duties and Responsibilities:

(These functions are representative and may not be present in all positions in the class. Management reserves the right to add, modify, change or rescind related duties and work assignments.)

- ~~1.~~ Evaluates, ~~procures~~, installs, supports, and maintains ~~data networks~~ the City of Carson's Wide Area Network, Local Area Networks, and telecommunications systems.
- ~~2-1.~~ Supports local and wide area data and voice telecommunications networks which include (but not limited to): Routers, Switches, Firewalls, Proxies, Web Filters, SIEM, Load Balancers, Cellular Boosters, WIFI, PBX, etc.
- ~~3-2.~~ Evaluates, tests, installs, and implements new equipment, hardware and software technologies.
- ~~4-3.~~ Confers with departments, determines requirements, develops specifications and request for proposals, evaluates proposals, selects new products and manages project implementation resources and schedules.
- ~~5-4.~~ Trains technical staff and users of equipment and software.
- ~~6-5.~~ Provides support for communications problems and interacts with vendors to resolve problems and re-establish service. (T1's, MPLS, WIFI, fiber circuits, etc.).
- ~~7-6.~~ Designs and coordinates the installation of data/voice telecommunications cabling ~~for the City.~~
- ~~8-~~ Administers central telephone switches, key systems, voice and data circuits and telecom services. ~~cellular phones and pager resources.~~
- ~~9-7.~~ (voicemail). Performs telephone adds, moves and changes ~~to Nortel Phone Switch for City Hall, Corporate Yard and Once Civic Plaza~~ at all City of Carson sites.
- ~~10.~~ Provides communications solutions to departments to accommodate their business needs.
- ~~11.~~ Administers telecommunications and Manages network devices including but not limited to: Firewalls, Routers, Switches, WIFI equipment, PBX's, Voicemail and Intrusion Prevention Systems.
- ~~12-8.~~ Manages Security ~~security~~ services such as: VPN, SIEM, IDS/IPS, SPAM protection- (Sendio), WebSense, Firewall, etc.
- ~~13-9.~~ Responsible for documenting, organizing, and maintaining Network ~~network~~ IP Schemas ~~schema~~ for City.
- ~~14.~~ Administers and manages internal and external DNS
- ~~15-10.~~ Administers and ~~manages~~ DHCP.
- ~~16.~~ Administers and supports Virtual Server Farm (VMWare).
- ~~17.~~ Administers and supports Virtual Private Network (VPN) access.
- ~~18.~~ Administers and supports WIFI networks.
- ~~19.~~ Administer and support WebSense Web Content Filtering server.

~~20.11.~~ Administer and support 2 external computer network Labs networking component for the City's internal labs (Senior Lab at Community Center, Carson Park's computer lab and ONE STOP-Job Clearing House.)

~~21.~~ Performs related duties as required.

~~22.~~ Manages Data Telecom vendor support: T1's, MPLS, 5GB Fiber circuits,

~~23.12.~~ Responsible for all internal network data cable installation at the City.

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13. Helps administers and supports Virtual Server Farm (VMWare) and AD.

14. Performs related duties as required.

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#### **Qualification Guidelines:**

A typical way to obtain the requisite qualifications to perform the duties of this class is as follows:

#### **Education and/or Experience:**

Bachelor's degree in computer science, management information systems, telecommunications management or related field and ~~five~~<sup>three</sup> (35) years full-time paid experience in the design, repair, and maintenance of telecommunications, operating systems and computer systems. Experience and/or education in a related field may be substituted on a year for year basis.

#### **Knowledge of:**

- Design, installation, configuration, operation and maintenance of data and telecommunications networks including equipment and ~~software services such as:~~ Cisco switches, routers, hubs, bridges, firewalls, virtual private networks and gateways.
- Telecommunications systems and services including Avaya telephone switches; ~~voicemail~~<sup>Voicemail</sup> systems; cabling systems; voice, data and video circuits; and equipment and services from telecommunications providers.
- ~~Network systems and services including switches, routers, hubs, bridges, firewalls, virtual private networks and gateways.~~
- ~~Network data~~ services and protocols including (but not limited to ~~T1's and T3's circuit~~): T1, MPLS, BGP, OSPF, EGRP, etc.
- ~~New computer programs and systems.~~
- Basic electronics required for wiring terminals—and—, creating patch cables, RS232, installing—and—operating telecommunication and data network equipment upgrades and memory in devices, ports, etc.
- Operation of a variety of computers and related equipment (Windows Servers, Windows 10, AD, etc.)
- Knowledge of various network tools and sniffers (Puddy, Wireshark, etc.)
- WIFI knowledge of WAP's, Controllers, heat maps, channels, frequencies, etc.
- General record keeping practices.
- Basic purchasing practices and contract administration.
- ~~Cost analysis.~~
- ~~Training principles.~~
- Effective methods of report presentation.
- Office practices and procedures.
- ~~Research, statistical and analytical methods.~~
- City organization, operations, policies and objectives.

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**Skill and/or Ability to:**

- Evaluate telecommunication and computer hardware and software and make appropriate recommendations for purchase of equipment.
- Diagnose, troubleshoot and solve complex network and telecommunications equipment and software problems and repairs.
- Support complex telecommunications systems and services including telephone switches; voicemail systems; cabling systems; voice, data and video circuits, and equipment and services from telecommunication providers.
- Support complex systems and services including switches, routers, hubs, bridges, firewalls, virtual private networks and gateways.
- Provide effective customer service.
- Operate a variety of computers and peripheral equipment.
- Maintain accurate records and prepare clear and concise reports.
- Establish and maintain effective working relationships with others.
- Understand and carry out complex oral and written instructions.
- Maintain confidentiality.
- Identify and analyze problems and take effective corrective action.
- Compile, analyze and evaluate data.
- Effectively communicate orally and in writing.
- Establish and maintain effective working relationships with others.

**License:**

Possession of a valid California Class C driver's license. Employees in this classification will be enrolled in the Department of Motor Vehicles (DMV) Government Employer Pull Notice Program which confirms possession of a valid driver's license and reflects driving record.

**Physical Requirements and Working Conditions:**

Employee accommodations for physical or mental disabilities will be considered on a case-by-case basis. Positions in this class normally:

- Require vision (which may be corrected) to read small print.
- Require the mobility to stand, stoop, crouch, kneel, reach and bend.
- Require the mobility of arms to reach and dexterity of hands to grasp and manipulate small objects.
- Require the ability to stand for long periods.
- Perform work which involves the occasional lifting, pushing and/or pulling of objects which may weigh approximately 50 pounds and may occasionally weigh up to 100 pounds.
- May be required to work around electrical current and moving mechanical parts.
- Is subject to inside environment conditions.
- Required to work at a computer terminal for prolonged periods.
- May be required to attend periodic evening meetings and/or to travel within and out of city boundaries to attend meetings.
- May be required to drive city and/or personal vehicle in the scope of employment.
- May be required to work evenings and/or weekends.