TECHNOLOGY SPECIALIST III
(Working Title – Network/Server Engineer)

DEFINITION

This is an advanced journey level classification tasked with the design, upgrade, maintenance, and overall support of the City's server and network infrastructure and City-wide information systems/applications.

SUPERVISION RECEIVED AND EXERCISED

Receives supervision from the Information Technology Director. May exercise functional and technical supervision over lower level technical staff, as related to server and network activities and projects.

ESSENTIAL FUNCTIONS STATEMENTS—Essential responsibilities and duties may include, but are not limited to the following:

1. Perform a variety of highly complex analytical duties in the planning, development, installation, implementation, integration, upgrade, maintenance, testing and evaluation of the City's computer server, network systems, and telecommunication hardware and software.

2. Perform builds, administration, performance tuning for servers and storage area networks in a VMWare and Windows environment.

3. Ensure the availability of networking services; coordinate with City staff to determine network system requirements; study the integrity and security of data to establish system configuration; monitor systems to control and support network traffic; devise and implement strategies for connection of independent networks through the use of switches, routers, firewalls, etc.

4. Investigate, analyze and resolve network-related problems; resolve compatibility problems across City networks; troubleshoot network failures, router problems and telecommunications and telecommuting/VPN problems; recommend and implement changes and improvements.

5. Measure volume and performance of network traffic; identify utilization and performance issues; design strategies and recommendations to improve network performance.

6. Develop computer internetworking and telecommunication systems engineering and design criteria, troubleshooting and analysis procedures and quality assurance processes for citywide systems.

7. Participate in evaluation of network protocols, hardware and software to determine their applicability to City network needs; assist in the selection process; coordinate the installation and maintenance of computers, circuits and data communications equipment; configure routers, switches, firewalls and wireless controllers and other devices, as needed.

8. Perform technical writing duties in the development and production of network system documentation, instructional and procedural manuals.

PERIPHERAL FUNCTIONS - Collaborates with other IT staff to provide help-desk support, application support and participation in developing strategic goals for the City's Information Technology Plan, as required.

- Other special assignments as provided by the Information Technology Director.
- Troubleshooting and training techniques for basic computer problems.

QUALIFICATIONS

Knowledge of:

- Operations, services and activities of computer network programs and telecommunication systems.
- Operational characteristics of local and wide area network systems.
- Operational characteristics of data networking equipment including routers, firewalls, switches, fiber optic multiplexors, network management systems and related equipment.
- Methods, techniques and operational characteristics of network and telecommunication systems diagnostic and testing equipment.
- Operational characteristics and capabilities of a variety of computer systems, applications, hardware, software and peripheral equipment.
- Principles, practices, methods, and techniques used in local and wide area network design, implementation, and administration.
- Network security - A variety of network operating systems. Data communication standards, protocols, hardware, software and network management practices. Methods and techniques of evaluating network performance. Principles and practices of local and wide area network security and administration.

Ability to:

- Provide highly technical support to City network and telecommunication systems.
- Provide support to complex local and wide area network and telecommunication system design, development and implementation projects.
- Provide support of physical as well as VMWare/virtual server environment.
- Enterprise Microsoft Windows 10 support and maintenance.
- Support data back-up, storage and recovery systems.
- Respond to requests and inquiries from system users.
- Communicate clearly and concisely, both orally and in writing.
- Establish and maintain effective working relationships with those contacted in the course of work.

Education and Experience Guidelines –

Any combination of experience and training that would likely provide the required knowledge and abilities is qualifying. A typical way to obtain the knowledge and abilities would be:

Education: Equivalent to a Bachelor's degree from an accredited college or university with major coursework in computer science, network engineering or a related field. Additional qualifying experience or training may be substituted for formal education.

Experience: Three years of increasingly responsible experience in the design and installation of servers, local and wide area network and telecommunication systems.

Licensing and certification: Possession of or ability to obtain an appropriate, valid California Driver's License. Any of the following certifications preferred: CCSP, CCNA, ServerPlus, Microsoft Windows, ITIL, etc.

WORKING CONDITIONS: Office environment; exposure to computer screens.

The following physical abilities and work environment: Ability to sit, stand, walk, kneel, crouch, squat, reach, twist, climb, lift 40 lbs., exposure to confining work space, electrical hazards, ability to travel to different sites and locations, unassisted.

MMCEA Bargaining Group
FLSA Status – Exempt
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