



POSITION DESCRIPTION
An Equal Opportunity Employer

Class Title:	Network Engineer	FLSA Status:	Exempt
Dept./Div.:	Communications	Civil Service Status:	Unclassified
Reports to:	Communications Superintendent	Employment Status:	Full-time
EEO Status:	Professional	Normal Work Hours:	Day Shift
Employee Name:		DOT/O*Net Code:	031.262-010 194.062-010

GENERAL DESCRIPTION:

Under direction, responsible for the design, upgrade, and maintenance of the Local-Area and Wide-Area Network Infrastructures of The City of Bryan. This includes the internal networks of municipal departments, the fiber shared-Ethernet network of Williams County, and the Cable-Modem HFC network providing Internet to Bryan residents and businesses. This position is also responsible for monitoring of and providing of technical and maintenance support of software and end-user work stations.

POSITIONS DIRECTLY SUPERVISED:

None.

EQUIPMENT OPERATED: (The following list is not intended to be all-inclusive.)

Computers, network analyzers, network hardware; and general office equipment.

JOB DESCRIPTION AND WORKER CHARACTERISTICS:

JOB DUTIES

ESSENTIAL FUNCTIONS OF THE POSITION: For purposes of 42 USC 12101:

1. Research, install, and maintain network monitoring tools to monitor network bandwidth, network errors, etc. and recommend upgrades and solutions when needed. This would include all Ethernet networks and the HFC Network; create scripts for general system administration and network monitoring.
2. Work closely with department heads to evaluate network infrastructure needs, then design and implement solutions. This would include the various SCADA systems implemented at the City of Bryan.
3. Keep current on new technologies relevant to the City of Bryan; train other employees in the installation, upgrade, and daily maintenance of all network infrastructures.
4. Maintain and upgrade all network infrastructure hardware such as routers, switches, and firewalls. This would include all edge equipment at the customer premise locations.
5. Assist with maintaining user cell phones. Responsible for overseeing and maintaining security system, phone recording system and cameras.
6. Assist with installing, configuring, maintaining and providing support for all desktop computers, related hardware, peripheral equipment and software; ensure desktop computers interconnect seamlessly with Microsoft file servers, email servers, application servers and administrative systems, work closely with Microsoft server support vendor to assure integration; work with other vendor support to resolve technical problems with desktop computing equipment and software; identify and resolve computer system malfunctions and operations problems; evaluate, install, and maintain remote administration software for all desktop computers. Ensures all records of software licenses, subscriptions, renewals, etc.; maintain LAN/WAN documentation and diagrams.
7. Operate all facilities in strict compliance with all applicable laws and regulations; ensure appropriate tests are conducted and maintain files of the results; develop work schedules and report progress.



8. Works closely with and communicates professionally and openly with coworkers, management and customers providing friendly and efficient external and internal customer service; responds to requests for information and assistance and meets commitments.
9. Conform with and abide by all written and non-written regulations, policies, work procedures and instructions; conform to all safety rules and use all appropriate safety equipment.
10. Demonstrates regular and predictable attendance.

OTHER DUTIES AND RESPONSIBILITIES:

Perform other duties as assigned. (i.e., assist other utility departments as needed; participate in required training; etc.)

MINIMUM ACCEPTABLE CHARACTERISTICS: (*indicates developed after employment)

Knowledge of: (181) computer programming; (185) network design layout program such as Visio; (190) layout and design of local and wide area networks; (191) TCP/IP and IP sub netting; (192) Cisco and other vender's network hardware such as routers, switches, firewalls, Cable Modem Termination Systems (CMTS), and cable modem communications; (193) computer systems and operations and advanced computer technology that is directly related to network and Internet Service Provider support; (194) Network Management and the Simple Network Management Protocol (SNMP) to facilitate monitoring the networks; (195) network server applications such as DNS, DHCP, SMTP, POP3, FTP, etc.; (261) employee handbook and union contract*; (263) Bryan Municipal Utilities policies and procedures*; (301) standard electrical and communications principles and practices; (477) proper safety practices applicable to the industry.

Skill in: (905) computer operation; (958) motor vehicle operation; (960) use or operation of the full suite of office applications.

Ability to: (602) issue and follow detailed oral and written instructions; (604) interpret extensive variety of technical material in books, journals, and manuals; (609) recognize unusual and threatening conditions and take corrective action; (611) define problems, collect data, establish facts, and draw valid conclusions; (633) calculate fractions, decimals, and percentages; (654) prepare accurate documentation; (684) communicate effectively; (685) train or instruct others; (704) understand technical manuals and/or verbal instructions; (708) read and understand broadband, electrical, electronic and mechanical schematics, drawings, blueprints, and technical data instructions; (709) read meters and charts accurately; (724) maintain records according to established procedures; (742) cooperate with co-workers on group projects; (745) establish and maintain effective working relationships with associates, supervisors, officials, and general public; (755) work with high level of professionalism; (756) be consistently at work and on time, follow instructions, respond to management direction, and solicit feedback to improve performance; (779) safeguard information of a sensitive or confidential nature; (781) work evenings, nights, holidays, and weekends.

QUALIFICATIONS: An example of acceptable qualifications:

Position prefers bachelor's degree in Network Administration, Computer Science; five to seven years of experience in Cisco network hardware, TCP/IP, internet service provider support and network design and experience in troubleshooting Ethernet and TCP/IP networks using tools such as network analyzers; or an equivalent combination of education and experience which provides the knowledge, skills and abilities needed to perform essential functions of position.

LICENSURE OR CERTIFICATION REQUIREMENTS:

Valid state driver's license.

WORKING CONDITIONS:

Facility and Work Area:

The work is performed in an office setting with good working conditions, however, is often exposed to noise, dust, heat and other elements when job duties require incumbent to go to visit department projects or field work.

Physical and Environmental Characteristics:

The physical demands described here are representative of those that must be met by an employee to successfully perform the essential functions of this job. Reasonable accommodations may be made to enable individuals with



disabilities to perform the essential functions. This is primarily an office position with employee working in a controlled office environment with employee periodically performing his/her duties in the field at work projects.

The employee:

- Is required to see color and distinguish letters, numbers and symbols. Frequently required to sit, stand, walk, talk, hear, bend and reach. Ability to reach with hands and arms.
- Answers telephone calls and occasionally bends, reaches, and pushes and pulls file drawers to file records and reports.
- Moves within and outside of the building to collect, deliver, and copy data and documents.
- Uses a computer terminal to access, input, and retrieve data.
- Moderate amount of physical demand; frequent lifting or moving of lightweight materials, or periodic lifting of or moving of average weight materials or occasional lifting or moving of heavy weight materials.
- Exposed to noise, dust, heat and other elements but with none continuously present to the extent of being disagreeable.
- Intense concentration sustained much or all of the time.
- Note: In accordance with the U.S. Department of Labor physical demands strength ratings, this is considered sedentary work.
- In cases of emergency, unpredictable situations, and/or department needs, the employee may be required to lift, push, pull, and/or carry objects heavier than D.O.L. strength ratings recommend.

The position description does not constitute an employment agreement between the employer and employee and is subject to change by the employer as the needs of the employer and requirements of the job change. This position description in no way states or implies that these are the only duties to be performed by the employee(s) incumbent in this position. Employee(s) will be required to follow any other job-related instructions and to perform any other job-related duties requested by any person authorized to give instructions or assignments.

The position description in no manner states or implies that these are the only duties and responsibilities to be performed by the position incumbent. The duties listed in this document are intended only as illustrations of the various types of work that may be performed. The omission of specific statements of duties does not exclude them from the position if the work is similar, related or a logical assignment to the position.

This document does not create an employment contract, implied or otherwise, and may be amended at any time.

My signature below signifies that I have reviewed my position description and that I understand the contents of my position description.

Supervisor Signature

Date

Employee Signature

Date