## JOB SUMMARY

Provide a brief description as to the primary purpose of this job (no more than three to five sentences):

The IT Network Engineer performs a large range of duties with both support and design/architecture responsibilities related to the City’s in-house data, voice and wireless network services. This role is also the primary resource for the Information Technology department in troubleshooting network related issues.

The City has adopted a “cyber-security by design” approach and this position is responsible for review, recommendations and implementations of on-going system hardening as well as being on the incidence response team. This position is part of an IT team consisting of in house and contracted Help Desk technical support. Together, this team manages all hardware and software for the City’s information systems infrastructure. Position oversees the operations of the network and system infrastructure for the City including servers, network equipment, personal computers and user accounts.

## ESSENTIAL JOB DUTIES/WORK PERFORMED

List essential job functions that comprise the job; describe in terms of actions (verbs) and desired outcomes in order of most important first:

- Respond to trouble reports from users and carriers, vendors and partners
- Document information related to network issues
- Configure, update/upgrade, troubleshoot and install network electronics and system devices
- Coordinate warranty and service as needed on hardware and software, equipment and systems
- Investigate and evaluate new network management applications hardware and software solutions
- Configure, maintain, install and troubleshoot edge switch gear and core and border routing equipment
- Utilize network integrity analysis tools and interpret resulting information of moderate complexity
- Monitor and review cyber-security reports and events providing ongoing maintenance, analysis and recommendations/solutions
- Assist with budget planning for forecasted projects during annual budget process
- Evaluate and recommend hardware and software solutions
- Interact with peer organizations to discuss technologically current or emerging network solutions and best practices
- Respond to cyber-security incidents
- Respond to network communications problems, network related security events and other events reported by monitoring systems and customer issues
- Develop and implement solutions for direct recovery remedies
- Participate in domain name and DHCP services as host master
- Participate in equipment and labor requirements definition and cost identification for assigned projects
- Design, implement, and maintain the City networks to meet functional requirements and standards
- Utilize network security by design and a defense in depth strategy including wireless network architecture design
- Utilize advanced knowledge of current and emerging network management applications and networking technologies as it applies to network designs
- Participate in continuation of operations planning
- Participate in disaster recovery planning, monitoring and recovery
- Provide advanced physical infrastructure and switching support
- Configure, maintain and troubleshoot all network services technologies for the City’s networks
• Deploy and administer network monitoring tools
• Create solutions to resolve both tactical and strategic problems
• Troubleshoot complex network-related problems that have a significant impact
• Escalate service outages as appropriate to IT management
• Configure, maintain and troubleshoot fiber optical transport equipment
• Create, update, maintain and review all network documentation
• Review and validate network vendor support and contract information
• Participate in network standards, procedures and policy review for IT Management and organizational approval
• Plan and participate in network scheduled and unscheduled network outages for maintenance, upgrades and break/fix support
• Participate in discussions with current and potential vendors
• Participate in the development of network policies and standards
• May provide functional supervision
• May initiate purchasing requests for supplies and equipment
• Function as a technical resource on and/or may lead network services projects
• Assist in development of models and procedures for installation and support of networking services
• Participate in IT Security related activities such as monitoring, design and investigation
• Provide direction, assignments, feedback, coaching and counseling to assure outcomes are achieved
• Function as technical expert and/or project lead for network services projects
• Develop models and procedures for installation and support of networking services
• Represent the City of Marion in pertinent local, state, regional and national contexts and relationships
• Assist in budget development; providing projections and recommendations

REQUIRED KNOWLEDGE, ABILITIES AND SKILLS

List key dimensions (measurements for success) for this position:

• Thorough knowledge of network routing, switching
• Experience configuring and troubleshooting firewalls and security appliances
• Experience with 802.11 wireless and cellular communications
• Defense in depth cyber-security implementation and/or architecture/design experience
• Documented work experience applying IT security best practices and standards
• Experience supporting backup and disaster recovery systems
• Ability to be accurate, thorough and punctual while maintaining records and preparing reports
• Ability to express ideas clearly and concisely in both oral and written form
• Ability to maintain confidentiality
• Ability to multi-task
• Ability to prioritize

ESSENTIAL FUNCTIONS

List key relationships (to whom and the nature of the relationship) and leadership received and from whom associated with this position:

• Requires the following, with or without reasonable accommodation:
  Ability to read, speak, write and understand English to effectively communicate with citizens, City Council and employees by telephone, in written form, or face to face
  Ability to sit for long periods
  Attends work regularly at the designated place and time
  Ability to communicate effectively and maintain working relationships with other City employees, elected officials, department heads, and the public
  Must not pose a direct threat to the health or safety of other individuals in the work place or citizens encountered during work
**QUALIFICATIONS**

*Minimum requirements to be considered for this position:*

- **Preferred education:** Bachelor’s degree in Computer Science, Information Technology or related field and/or Cisco CCNP certification
- 3 to 5 years of experience in a network engineering position
- Experience with Cisco networking in LAN/WAN environments
- Experience with copper and fiber optics end to end hardware and communications support
- Experience with 802.11 wireless and cellular communications
- Experience with network firewalls
- Experience with virtualized datacenter technologies using VMware solutions
- Experience supporting Windows server Domain, Active Directory, DNS and related technologies
- Experience with Microsoft Exchange in both On-Premise and Office 365 environments
- Experience implementing technical controls to meet compliances such as HIPPA, CJIS and PCI-DSS
- Must have valid Iowa driver’s license

*Desirable experience and qualifications*

- Experience supporting information systems for law enforcement
- An industry recognized IT security certification
- Experience with advanced “Next Generation” Firewall security systems
- Defense in depth cyber-security implementation and architecture/design experience
- Experience with cyber-security incident response procedures
- Moderate knowledge of VOIP and voice communications
- Experience with mobile dispatch systems
- Experience supporting x86 Server and SAN hardware

**WORKING CONDITIONS**

*List working conditions for this position:*

- Works in an office environment
- Works a standard work week
- May be required to work some overtime upon demand of workload

**REQUIRED BACKGROUND CHECKS**

*List working conditions for this position:*

- Sex Offender Registry
- Criminal History
- Drug Screening
- Driving Record
- Pre-Employment Physical