**CITY OF BELLINGHAM**

**JOB DESCRIPTION**

**JOB TITLE:** **Network Operations Manager** **UNION: E-PLAN**
**SG:E2-12**
**DEPARTMENT:** **Information Technology Services** **CS:N**
**FLSA:N**
**EEO4CODE:TE**

## JOB SUMMARY:

Manages the Network Operations Division of the Information Technology Services Department. Responsible for the availability, operation, maintenance, and security of the City's computer networks. The City's networks are a mission critical part of the City's operation and provide services to over 30 staffed work-sites and to numerous critical non-staffed locations. Network Operations Division services include backup & recovery, cabling, data center/co-location management, firewall administration, integration and connectivity with multiple disparate networks, internet-related services, security and availability monitoring, server administration, storage management and planning, switching and routing, telecommunications, virtual environment management, and vulnerability management.

Serves as the Department's liaison with vendors and others in the acquisition, implementation, support and maintenance of complex network systems, telecommunications systems, and end user computers. Responsible for developing and recommending the division budget.

Assists the Director in developing programs to ensure City compliance with regulatory standards such as Criminal Justice Information (CJIS), Health Insurance Portability and Accountability Act (HIPAA) and Payment Card Industry Data Security Standard (PCI DSS), along with other security standards as applied to supported systems and procedures. Provides supervision and leadership to technical staff, to departments, and to third parties to ensure adherence to technology and security standards.

## SUPERVISORY RELATIONSHIP:

Reports directly to the Information Technology Services Department Director. Work is performed under general guidance and direction according to City and Department policies and procedures as well as federal regulations and standards. Supervises Network Operations Division Staff. Provides oversight and assistance to systems and technical staff in other departments. May regularly serve in an acting position in the absence of the Information Technology Services Department Director.

## ESSENTIAL FUNCTIONS OF THE JOB:

1. Ensures network is in operational status. Using a variety of enterprise monitoring tools, reviews anomalies, bulletins, and alerts as they may apply to the enterprise network. Advises other staff and enterprise clients of steps to take to mitigate security threats. If threat is imminent, determines risk of waiting to apply known fixes/patches as opposed to immediate implementation.

2. Responsible for managing the security of the network using best practices and security standards. Conducts and participates in network security audits.

3. Responds to internal/external requests regarding network expansion and additional services. Determines if requests meet City's requirements. Provides budgetary figures for implementation. Negotiates a network infrastructure design that meets connectivity and security requirements for all parties. Obtains signoff from requestor, implements and monitors solution. Collects feedback and makes necessary adjustments to meet requestor's requirements.

4. Works with Department Director to develop bi-annual budget. Budget will include requests for new equipment, applications, refreshes of existing equipment (routers, switches, servers, appliances, storage, telephony, and security initiatives).

5. Provides direction, procedures and security backdrop for supporting a mobile workforce. Administers VPN infrastructure.

6. Effectively hires, supervises, counsels, trains, and evaluates network operations staff by reviewing work and providing work direction and guidance to assigned staff; conducts performance evaluations; initiates and implements disciplinary action as appropriate; provides project and technical leadership; communicates issues, objectives, status and makes recommendations to the Director.

7. Maintains an up-to-date knowledge of current trends and practices in the data and telecommunications fields.

8. Orders, inventories, configures, installs and monitors new equipment to ensure compliance with operational and security requirements. Surpluses and properly dispose of retired equipment.

9. Maintains up-to-date accurate documentation of the enterprise network.

10. Ensures availability of 24/7 on-call network support, which includes determining severity of the problem and deciding the appropriate course of action.

11. Develops and implements network back-up and disaster recovery strategies, policies, and procedures by determining back-up schedules and retention periods of back-ups, archiving back-ups, and determining off-site storage for back-ups.

12. Develops ITSD procedures and contributes to the development of City policies related to technology and security. Provides training and communications related to policies, procedures, and standards.

13. Implements and monitors security practices, policies, and procedures which include generating and reviewing network logs to determine health of network, security breaches, mail delivery status, back-up and restore successes and failures, and determining corrective actions to rectify failures and inconsistencies.

14. Consults and advises technical staff by resolving problems presented by personnel and offering solutions and courses of action.

**ADDITIONAL WORK PERFORMED:**

1. Provides disaster recovery planning and emergency operations support for network and telecommunications.

2. Performs other related work of a similar nature and level.

**PERFORMANCE REQUIREMENTS (Knowledge, Skills, and Abilities):**

**TECHNICAL**

Knowledge of:
- Extensive knowledge of network applications and protocols.
- Extensive knowledge of operating systems, including Windows OS and Cisco IOS.
- Extensive knowledge of browsers, IE: Chrome.
- Extensive knowledge of Syslog and SIEM principles and procedures.
- Extensive knowledge of a multitude of monitoring and investigative tools.
- Extensive knowledge of a wide variety of computer language skills, including PowerShell and DOS.
- Extensive knowledge of Command Line Interface syntax and use.
- Thorough knowledge and awareness of regulatory and security standards and requirements including CJIS, WSP, HIPPA, CJIS, PCI, and CIS.

Skills in:
- Extensive skills with network connectivity for all workplace devices.
- Extensive skills with use of Command Line Interfaces (MS-DOS, Unix/Linux Shells, PowerShell)
- Extensive skills with data/telephony network design, configuration, protocols, routers, network management, systems administration, vulnerability management.
- Extensive skills with TCP/IP protocol stack and associated applications including Telnet / SSH / FTP (CRT), TFTP, DNS, DHCP.
- Extensive skills with Microsoft Windows domain networks; firewall management; active directory federation services; multi-factor authentication and VPN.
- Extensive skills with wired and Wi-Fi networking both on-site and remote; integration with and use of cloud-based resources including Azure and OneDrive and secure connections including SaaS and hosted application environments.
- Extensive skills in managing Microsoft 0365 e-mail services archiving and filters.
- Thorough skills in data storage, backup and recovery management, procedures and concepts; data center security requirements. Security incident response and management. CIS critical controls.
- Thorough skills in VOIP computer/telephony integration hardware and software.
- Extensive skills in administering, monitoring, tuning, and modifying network equipment including appliances, routers, switches, firewalls, telephony equipment, servers, virtual environments, and associated software.
- Thorough skills in communications protocols and file system structures.
- Extensive skills in network and desktop operations concepts; maintenance of tape library and external storage system.

Ability to:
- Maintain absolute confidentiality of sensitive files, data and materials accessed, discussed, or observed while working with City staff.
- Maintain security and confidentiality of systems and records while adhering to security policies and procedures.
- Extensive abilities with operating and monitoring complex and technical network and communications equipment.
- Thorough ability to read and interpret instruction manuals and troubleshoot and solve hardware and software problems.
- Thorough ability to maintain detailed and accurate documentation using appropriate tools.

**MANAGEMENT AND SUPERVISORY**

Skills in:
- Considerable skills and abilities in leadership qualities such as interpersonal sensitivity, adaptability, flexibility, and reasoning skills.
- Considerable skills in applying the principles and practices of leading, supervising, and training teams as well as advising technical staff and business leadership throughout the City.
- Considerable skills in monitoring and evaluating the performance of supervised staff; delegates, organizes, prioritizes, and assigns daily tasks.
- Considerable skills in developing and monitoring departmental budgets, as well as management of project budgets and staff resources.
- Considerable skills in interpretation and application of City and department policies and procedures including work processes and labor contract provisions for the workgroup.
- Thorough skills in interpretation and management of software licensing documents, related budgets, systems usage, and asset tracking.
- Considerable skills in motivating and encouraging staff, building teamwork, and fostering a results-oriented environment.

**COMMUNICATIONS**

Skill in:
- Thorough written communication skills for preparing reports, composing documentation, and corresponding with City employees and vendors.
- Thorough communication and interpersonal skills for interactions with co-workers, supervisors, managers, other City employees, and the general public.

**OTHER**

Skill in:
- Extensive organization, time management, problem solving, technical troubleshooting, and planning skills. Ability to work on several projects concurrently.
- Thorough skills and abilities to establish and maintain effective working relationships with other employees, City officials, representatives of other government agencies and community groups and the general public.

Ability to:
- Maintain absolute confidentiality of sensitive files, data and materials accessed, discussed or observed while working with City staff.
- Ability and willingness to demonstrate the Public Service Competencies of Service Orientation, Results Orientation, and Teamwork and Cooperation.
- Maintain consistent and punctual attendance.
- Physical ability to perform the essential functions of the job including:
  - Dexterity of hands and fingers to operate a computer keyboard;
  - May need to sit or stand for long periods of time;
  - Near distance visual acuity to assure proper operation of computers and software;
  - Ability to exchange verbal information in person and by telephone;
  - Occasionally transports components weighing up to 25 pounds.

**WORKING ENVIRONMENT:**

The work performed is in an office setting at a computer workstation with long periods of sitting or standing. May also be working for long periods of time in a climate-controlled data center environment.

Work environment incudes a normal range of noise and other distractions with low everyday risks working around standard office equipment. Work requires frequent visits to customer worksites. Work requires providing on-call support which includes determining severity of the problem and deciding the appropriate course of action. The work involves occasionally inspecting cables/equipment in floors and ceilings to identify and solve problems, which can require ascending/descending ladders, entering tunnels, using lifts, standing on roof to access equipment and cabling. Works with a variety of hand tools and computer diagnostic equipment to identify, repair and solve problems. Some travel to professional meetings is expected.

**EXPERIENCE AND TRAINING REQUIREMENTS:**

- Bachelor's degree in computer science, information systems management, business computer programming, mathematics, or related field required.
- Technical:
  - Six years of progressively responsible experience in network administration and support in a complex multi-site enterprise environment required.
  - Two years previous supervisory experience overseeing network services in a complex enterprise setting preferred.
- Successful completion of network management certifications, or verifiable on-the-job training preferred.
- An equivalent combination of education and experience sufficient to provide the applicant with the knowledge, skills and ability to successfully perform the essential functions of the job will be considered.

**NECESSARY SPECIAL REQUIREMENT:**

- Preferred certifications:
  - CCNA – Cisco Certified Network Associate
  - Security+, CISSP, or CISM
  - ShoreTel/Mitel administration
- Agreement to and signature of a Privileged Access Confidentiality Agreement is required.
- Employment contingent upon passing a criminal convictions check, local background check and fingerprinting. Subject to re-check every five years.
- Valid Washington State driver's license and good driving record. Must provide a three-year driving abstract prior to hire.
- Willingness and ability to work extra hours or change hours as needed and to respond to evening and weekend callouts for emergencies or when special circumstances require.

**PREPARED BY:** L. Hill (prior)
F. Anderson (prior)

M. Mulholland
L. McGowan-Smith
12/2018

**REVIEWED BY:** _____
Marty Mulholland, Director
Information Technology
Services