

City of
EDMONDS
Washington

IT NETWORK SPECIALIST

Department:	Information Technology	Pay Grade:	NE-13
Bargaining Unit:	SEIU	FLSA Status:	Non Exempt
Revised Date:	October 2012	Reports To:	Information Systems Supervisor

POSITION PURPOSE: Under general direction, this position is responsible for installation, maintenance, and support services related to the City's network infrastructure, including: servers, workstations, firewalls, network routers, switches, hubs, wireless systems, plant control/instrumentation system communications, and all network cabling including fiber optic network; provides staff training and consultation to promote the reliable, effective and efficient use of the City's network infrastructure. This position supports the City's Windows Domain Controllers and Active Directory infrastructure, email, SPAM control system, and data backup and anti-virus/malware control systems; maintains records of network management and architecture and works on special projects as assigned, including: problem diagnosis, repair/adjustment and upgrades and updates to systems hardware and software.

ESSENTIAL FUNCTIONS AND RESPONSIBILITIES:

*The following duties **ARE NOT** intended to serve as a comprehensive list of all duties performed by all employees in this classification, only a representative summary of the primary duties and responsibilities. Incumbent(s) may not be required to perform all duties listed and may be required to perform additional, position-specific duties.*

- Installs network components in conformance with applicable City and industry standards and guidelines.
- Performs and assists in the installation, configuration, and maintenance of network enabled application, systems, hardware, and cabling (both copper and fiber). Uses a systems approach in adjusting and configuring hardware and software to reliably and efficiently inter-operate with City systems, applications, and network components.
- Performs configuration, monitoring and maintenance of firewalls, routers, switches, servers, cabling and patch panels, backup systems, user and group ids, and email systems.
- Monitors and maintains security systems for the City, including performance, configuration and updates, as well as involving testing network and application performance and security, reporting on results, and recommending improvements as appropriate.
- Monitors and manages assignment of internal and public IP space, manually and automatically with DNS, DHCP, & WINS.
- Uses Active Directory (LDAP) for users, email, groups and security policies.
- Maintains firewalls, security control software and virus-detection software taking remedial action as needed in response to threats to network and data security or integrity keeping management informed of all threats to network or data security and integrity.
- Maintains appropriate records of all intrusion attempts and incidents involving viruses, worms or other malicious or damaging software.
- Maintain the network servers, including: file, print, instrumentation, e-mail, database, intranet, and web servers, network printers and fax devices, user id and network logins, passwords, security certificates, security codes and e-mail addresses.

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- Provides Data Storage Management including: periodic data backup operations, verifying successful backup, and storing/restoring backup data in appropriate library locations. Takes action to restore and/or rollback lost, damaged, or compromised data as required keeping management advised of all threats to data integrity and all backup/restore operations and maintains appropriate records and logs.
- Monitors and reports on storage utilization and makes recommendations for balancing allocations, changes, additional storage and remedial action.
- Assists with database management software for both business and industrial control systems. Configures database software to ensure robust reliability, availability, and recoverability. Maintains backups and records to ensure reliable timely rollback/recovery/restart in event of hardware or software malfunction. Performs rollback/recovery/restart as needed. Maintains service incident logs for historical record and periodic analysis.
- Documents network architecture, records and diagrams using appropriate software tools; maintains records of network components and changes to the logical and physical network configuration.
- Maintains current software drivers for all network components, downloads appropriate driver versions; performs periodic software maintenance as needed and assists and participate in network design and upgrades.
- Assists other IT and departmental staff resolve network, application and database problems.
- Coordinates and works on scheduled projects, build new infrastructure, adds new services to existing systems related to network infrastructure for city-wide and departmental specific systems, including upgrades and updates to system hardware and software.
- Provides support to the Department on matters as directed, may serve as staff on a variety of committees, attends and participates in professional group meetings, maintains awareness of new trends and developments in the fields related to area of assignment and incorporates new developments as assigned.
- Provides training to City staff on basic networking principles, generally accepted networking standards and procedures and Edmonds-specific technical standards and procedures.
- Maintains an up-to-date technical knowledge and familiarity with hardware and software used by the City of Edmonds.
- Attends and participates in professional meetings and continuing-education seminars as reasonable and appropriate and uses self-study training materials to master skills necessary for effective performance of duties.

Required Knowledge of:

- Windows Server 2008 R2
- CISCO OS, Switches & Routers
- DESKTOP: WINDOWS 7 and XP PRO
- Exchange
- Active Directory, DNS, WINS, DHCP

Preferred knowledge and experience with following:

- Linux (Debian, RedHat, SUSE)
- Palo Alto Firewall
- CITIRX XenServer or other virtualization technology
- Storage Area Networks – iSCSI - HP-MSA and NetApp
- CISCO wireless controller
- ISA Server
- TCP/IP networking, equivalent to Microsoft Networking Essentials curriculum.
- Installation, configuration, operation, and troubleshooting medium-size route and switched networks as would be gained from a Cisco Certified Network Associate (CCNA) or similar training or classroom work.

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- PC hardware and operating system software, equivalent to Microsoft A+ certification.
- PD Desktop installation and configurations using imaging tools such as GHOST, CITIRX, or Microsoft Tools.
- PC, Server, and Network hardware and software, including configuration, maintenance, repair, and debugging. Preferably: Windows Server 2008R2, Windows 7, and Linux.
- Network protocols and their configuration and maintenance in running systems, and command line familiarity, prefer experience with CISCO 2900, 3750E, 4500, 6500 including BGP and MPLS.
- Firewalls (creating and maintaining up to layer 3 rules), virus-checking software, common security threats from viruses, worms, and Trojan horse programs. Prefer experience with Palo Alto Firewalls and VIPRE antivirus.
- Setup and administer Exchange Server (prefer Exchange 2003 or later). Set up and troubleshoot DHCP, WINS, Active Directory, and DNS configurations.
- Must be able to use Microsoft Word, Excel, Visio (or equivalents) to accomplish work tasks.
- Programming or scripting languages. Prefer PowerShell, BASH, PHP, HTML, XML, VB, and SQL.
- Project management techniques and principles such as working independently and exercising prudent judgment within established policies, seeking advice and authorization when appropriate, meet schedules and timelines by planning and organizing work, prioritizing tasks and using time effectively.
- Organization, functions, and IT needs of City departments.
- Research methods and report presentation and records management.
- Trouble shooting and problem solving, especially common networking problems.
- Federal, state, and local laws, rules, and regulations related to assigned activities and programs relevant to assigned functions and be able to interpret and apply federal, state and local policies, laws and regulations related to assigned work.
- Effective oral and written communication principles and practices so as to communicate technical information clearly to both technical and non-technical audiences as well as with other IT staff, PC users, instrument technicians, plant operators, office workers.
- Interpersonal skills using tact, patience and courtesy so as to establish and maintain effective working relationships with staff, management, vendors, outside agencies, community groups and the general public.

Preferred knowledge and experience with following:

- Linux (Debian, RedHat, SUSE)
- Palo Alto Firewall
- CITIRX XenServer or other virtualization technology
- Storage Area Networks – iSCSI - HP-MSA and NetApp
- CISCO wireless controller
- ISA Server

Required Skill in:

- Providing technical support to users in assigned area.
- Troubleshooting common networking problems and network equipment.
- Analyzing problems and recommend appropriate solutions including explaining and summarizing objectives, alternatives and reasons for recommending a particular course of action.
- Understanding, utilizing, and maintaining network infrastructure systems.
- Meeting schedules and timelines by planning and organizing work, handling complex multiple tasked by prioritizing and using time effectively.
- Adapting to changes in technology.

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MINIMUM QUALIFICATIONS:

Education and Experience:

Associates Degree in Information Technology, Computer Science, or related field and three years of experience in network engineering that includes experience in network maintenance and management, systems configuration, setup, troubleshooting, project implementation, and end user support; preferably on a Windows Server Active Directory Infrastructure; OR an equivalent combination of education, training and experience to demonstrate the ability to perform the duties of the position.

Required Licenses or Certifications:

Valid State of Washington Driver's License.

Comptia A+ computer technician certification.

Must be able to successfully complete pass a background check.

WORKING CONDITIONS:

Environment:

- Indoor work environment.
- Constant interruptions.
- Driving a vehicle to conduct work.
- This position works a regular schedule; however incumbents may be required to work some holiday, evening and/or weekend hours to respond to emergencies and/or to implement specific projects.

Physical Abilities:

- Hearing, speaking or otherwise communicating to exchange information and make presentations in person or on the phone.
- Operating/using a computer keyboard or other office equipment.
- Reading and understanding a variety of materials.
- Sitting, standing or otherwise remaining in a stationary position for extended periods of time.
- Bending at the waist, reaching overhead, above the shoulders and horizontally, stooping, kneeling, crouching, crawling, or otherwise positioning oneself to accomplish tasks.
- Lifting/carrying or otherwise moving or transporting PC's, monitors and associated equipment during the installation or maintenance of such equipment up to 50 pounds.

Hazards:

- Prolonged exposure to glare from computer monitors.
- Exposure to heavy dust in some work areas.
- Occasional exposure to toxic or caustic chemicals, i.e. copier toner.

Incumbent Signature: _____

Date: _____

Department Head: _____

Date: _____