JUNIOR NETWORK AND SYSTEMS ADMINISTRATOR

Approved: April 2024
FLSA: Non-Exempt
Unit: SEIU

CITY OF MENLO PARK

Definition
Under general direction of supervisors, assists in support and maintenance of operations, and duties in support of the City's information technology network; supports, maintains and analyzes all components of the network infrastructure and data infrastructure that includes firewalls, network switches, physical and virtual servers, data storage, cybersecurity and security applications; research, installs, configures, deploys, upgrades, and maintains the enterprise software systems to avoid interruptions in services and ensures data integrity; coordinates assigned activities with other departments and outside agencies; provides troubleshooting, resolution and reporting on business applications issues; and performs related duties as assigned.

Supervision received and exercised
Receives general supervision from the Network and Systems Administrators. Exercises no direct supervision of staff but may provide guidance to lower level technical staff in a lead capacity.

Class characteristics
This is a single-position class responsible for support and maintenance of network and data infrastructure, including hardware, operating systems, and voice and desktop/network applications. Responsibilities include support of network firewalls, routers, switches, cybersecurity, administering the e-mail system, and providing technical support to City staff. This includes interacting with users to deploy and troubleshoot complex technical problems; testing and rolling-out enterprise solutions. The Junior Network and Systems Administrator is expected to provide general desktop support to ensure customer satisfaction. This classification is distinguished from the Systems Administrator in that the latter primarily manages and exercises responsibilities for enterprise software application infrastructure management across departments. This classification is also distinguished from the Network Administrator in that the latter primarily designs, manages and exercises responsibilities for network infrastructure management across departments.

Examples of typical job functions (illustrative only)
Management reserves the right to add, modify, change, or rescind the work assignments of different positions and to make reasonable accommodations so that qualified employees can perform the essential functions of the job.

- Support and maintenance of all network hardware and software, including switches, routers, and firewalls, for functionality and security.
- Troubleshoots network connectivity problems; monitors the performance of the network system; tracks possible problem areas affecting response time and prepares recommendations for correction of problems and improvement in performance.
- Support and maintain system backups and recovery.
- Maintains and troubleshoots networks, systems, and applications to identify and correct malfunctions and other operational problems.
- Identifies opportunities for improving service delivery methods and procedures; reviews with appropriate management staff and implements improvements.
- Troubleshoots network connectivity problems; monitors the performance of the network system; tracks possible problem areas affecting response time and prepares recommendations for correction of problems and improvement in performance.
- Use cybersecurity tools to analyze for new cyber threats; make recommendations to implement mitigations to cybersecurity and server infrastructure to address identified vulnerabilities.
- Monitor inbound email for malicious trends; remediation recommendations to minimize malware/ransomware risks to the organization; recommend adjustments to email security rules to mitigate phishing attempts against the organization.
- Support and maintain virtual and physical server application infrastructure; analyze configure and maintain systems and application infrastructure.
- Monitor current infrastructure capacity (CPU, memory, and storage) and report to Supervisors for adjustments and corrections.
- Perform database tuning, job scheduling, and migrations.
- Provides end-user application support and assist other team members as needed.
- Perform administrative tasks, such as computer inventory, software-licensing inventory, review support agreements, etc.

- Play a supporting role for software applications for various departments. These activities include software configuration, and implementation/reimplementation; collaborate testing configurations with personnel of affected departments; and communicate with internal customers, and Network and Systems Administrators.
- Document procedures, applications interfaces, and other methodologies related to applications systems.
- Collaborate in the testing of applications; communicate and work with internal IT staff, vendors, and software developers to ensure quality assurance and fulfillment of contractual obligations.
- Compile and maintain an inventory of all applications software and system assets and document system configurations and change management.
- Support and maintain a secure information technology environment for software applications; security administration, update processes, and schedules; notify users of any potential service interruptions.
- Provide technical assistance and support for incoming helpdesk tickets and issues related to computer systems, software, and hardware.
- Ability to adapt to rapidly changing technology, learn, and implement new products, which may be substituted for the products listed here (Cisco, VMWare, Microsoft, Nutanix, Security, etc.).
- Performs other duties as assigned.

Qualifications

Knowledge of
- Principles and practices of information technology network administration, network security policies and procedures, backup procedures, and information systems pertaining to City departments.
- Windows server and desktop operating systems, client-server, web-based, cloud-based applications.
- Various database systems management, report writing, application interfaces, and data import/export methodologies.
- Design, operations, properties, and capabilities of networks and network cabling.
- Principles and practices of application system information security and best practices.
- Modern principles and practices of installing, configuring, maintaining, troubleshooting, and monitoring application, network, server, and systems infrastructure.
- Physical and virtual network and server infrastructure including hardware, software, real-time monitoring tools, peripherals, and devices.
- VMware and Hyper-V virtualization software.
- Office procedures, methods, and equipment, including computers and applicable software applications such as word processing, spreadsheets, and databases.
- Applications system security principles and best practices for ongoing system security, including related concepts of user applications roles/passwords, single sign-on, and directory services.

Ability to
- Monitor and analyze network and server performance; review system event/audit logs; and perform root cause analysis.
- Analyze problems; identify alternative solutions; and make recommendations of proposed actions to management staff.
- Communicate ideas clearly and concisely, both orally and in writing.
- Understand and communicate ideas in a technical but user-friendly language.
- Perform duties appropriate to classified system privileges, including maintaining professional handling and protection of confidential and secure information.
- Organize own work, set priorities, and meet critical deadlines; manage projects in a timely manner.
- Work with information system users under challenging conditions and short deadlines.
- Set priorities based on value to the organization.
- Operate office equipment, including computers and related word processing, presentation, spreadsheet, and database applications.

Education and experience

Any combination of training and experience that would provide the required knowledge, skills, and abilities is qualifying. A typical way to obtain the required qualifications would be:
- Equivalent to graduation from an accredited four-year college or university with major course work in computer science, information technology, business administration or a related field; and
- Two (2) years as of experience in a role responsible for supporting a broad range of network and datacenter infrastructure, departmental applications systems, including business process improvement, application administration, implementation, cybersecurity, and upgrades.
- Possession of industry certification is highly desirable (Cisco, VMWare, Microsoft, Nutanix, Security,

Virtualization, or a closely related certification*).

Licenses and certifications

Possession of, or ability to obtain a valid California Driver license by time of appointment.

Physical demands

Must possess mobility to work in a standard office setting and use standard office equipment, including a computer; vision to read printed materials and a computer screen; and hearing and speech to communicate in person and over the telephone. Standing in and walking between work areas is frequently required. Finger dexterity is needed to access, enter, and retrieve data using a computer keyboard or calculator and to operate standard office equipment. Positions in this classification frequently bend, stoop, kneel, and reach to perform assigned duties, as well as push and pull drawers open and closed to retrieve and file information. Employees must possess the ability to lift, carry, push and pull materials and objects up to 30 pounds with the use of proper equipment.

Environmental elements

Employees work in an office environment with moderate levels, controlled temperature conditions, and no direct exposure to hazardous physical substances. Employees may interact with upset staff and/or members of the public.