DEFINITION

Under the direction of the Manager, Technical Services, or assigned manager, install and maintain server operating systems (such as UNIX, AIX, and LINUX) and perform senior level network administration activities; monitor systems; maintain security; resolve hardware and software problems; design and write code; work with vendors; provide technical advice and training.

DISTINGUISHING CHARACTERISTICS

The Systems Administrator is responsible for the technical design, planning, implementation, and the highest level of performance tuning and recovery procedures for mission critical enterprise servers and systems and for serving as a technical expert in the area of systems administration for complex operating systems. The Systems Administrator position works with Systems Programmers and Database Administrators to complete assigned duties.

EXAMPLE OF DUTIES

1. Perform system administration activities; coordinate and manage the installation and configuration of host servers; ensure network connectivity and security; install and test application and operating system upgrades.

2. Provide technical support and problem resolution related to networks, servers, desktop connectivity, database management software, operating systems, and ERP application software.

3. Implement system and user security; administer access to systems and data using approved Information Technology security policies, procedures, and standards; maintain and monitor database stability.

4. Design, test, and implement system and database backup and recovery procedures; maintain tape and other offline data libraries; develop system documentation and configurations.

5. Participate in computer audits and perform testing for disaster recovery processes, ensuring a secure processing environment that protects the integrity and availability of information.

6. Monitor and tune system software and third party software products; test software systems to insure proper functioning; provide statistical reporting; coordinate with development staff to solve operating problems.

7. Maintain and document operating systems and related software; monitor the effects of users and transactions on system and database performance; adjust performance.

8. Install security patches and respond to security incidents. Maintain security systems; control the issue of passwords; create, manage, and delete user profiles.

9. Design, install, and test connections among computer systems with different operating systems and applications software.

10. Configure systems to intercommunicate; run programs to test connections; establish connections with computers in other departments and external agencies.

11. Recommend acquisition of software and hardware; assist in the selection, evaluation, and testing of new computer hardware and software.

12. Perform related duties as assigned.
DESIRABLE QUALIFICATIONS

Knowledge:
- Computer backup and restore procedures under UNIX, AIX, or LINUX.
- Computer programming languages, such as C, Java, SQL, and specific control languages.
- District organization, operations, policies, and objectives.
- English syntax and language mechanics.
- Oral and written communication skills.
- Performance management and capacity planning.
- Principles and practices of data processing using client, server, and cloud facilities.
- Principles and practices of system design, development, implementation, and user support.
- Principles and practices of work direction, supervision, and training.
- Record-keeping techniques.
- TCP/IP and networking.
- Technical aspects of field of specialty.

Skills and Abilities:
- Analyze problems and take corrective action in a professional manner.
- Communicate effectively both orally and in writing.
- Coordinate functions and activities between the Information Technology Department and end-user departments.
- Develop standards for the operation of system hardware and software.
- Establish and maintain effective working relationships with others.
- Maintain records and prepare reports.
- Meet schedules and time lines.
- Plan and organize work.
- Work independently and set priorities.

Training and Experience:
- Any combination of training and experience equivalent to: a Bachelor’s degree in computer science, engineering, or related field and four years of data processing experience, including three years in UNIX, AIX, or LINUX systems administration or three years in database administration in a UNIX environment.

WORKING CONDITIONS

Physical Requirements:
- Category III. Physical skill is required for keyboarding, mouse operation, and use of peripheral equipment.

Environment:
- Work environment includes typical computer related noise levels and paper printing equipment.
- Exposure to computer monitors occurs on a regular basis.