

## **CLASS SPECIFICATION**

### **Senior Systems/Database Administrator**

**Code Number: \_\_\_\_\_**

## **GENERAL PURPOSE**

Under general direction, administers and maintains operating stability and efficiency of the Commission's servers and network systems and infrastructure; tunes operating and network system performance and interoperability to enable section customers to meet their business needs through effective operations and sharing of information and applications; serves as technical lead on software development, enhancement and installation projects and provides guidance to staff; and performs related duties as assigned.

## **DISTINGUISHING CHARACTERISTICS**

A Senior Systems/Database Administrator is responsible for planning operations, maintenance and integration of computer platforms and networks to provide effective systems and systems availability, communication and computing support to meet the Commission's mission and goals. Assignments are usually given in terms of operational or project requirements and performance is measured in terms of overall performance and results. Supervision of work assigned depends on the size, extent of Commission impact and visibility of assigned projects.

Senior Systems/Database Administrator is distinguished from Senior Information Systems Analyst by the incumbent's responsibility for performing specialized systems and networks administration duties, in addition to those of applications development, enhancement and maintenance. An incumbent in this class provides technical guidance and direction to other section staff.

## **ESSENTIAL DUTIES AND RESPONSIBILITIES**

The duties listed below are intended only as illustrations of the various types of work that may be performed. The omission of specific statements of duties does not exclude them from the position if the work is similar, related or a logical assignment to this class.

Performs systems administration for the Commission's file servers, including administering system-level security procedures and protocols and performing backup and recovery processes; establishes and maintains user and other authorization files; installs, upgrades, customizes, tests, maintains and supports operating system and subsystem software in test and production environments; designs, installs and maintains the Commission's e-mail system; configures and integrates operating software across platforms; monitors system

performance; troubleshoots system-related ABENDS and installs program fixes; requests vendor support to resolve hardware problems.

Performs network administration functions for the Commission's LAN/WAN, including maintaining and enhancing network server functionalities; installs, upgrades, configures, integrates and maintains network control and management system software; installs, configures and supports network devices including hubs and routers; configures and installs network cards; installs and configures applications to network systems.

Monitors and manages network performance to achieve established service levels using applicable software, tools and utilities; troubleshoots network problems and performs problem analysis and determination; resolves or obtains outside vendor support to resolve hardware, software and communication line problems.

Participates in researching and evaluating new operating system and/or network software, hardware, methods and techniques to improve systems/network reliability and performance; plans and manages migration to new technologies.

Researches, diagnoses and resolves problems to minimize system downtime; documents system and network configuration and standards.

Participates in the design, development and administration of Commission enterprise databases and data repositories, including development of an enterprise data dictionary.

Works on and is responsible for applications development, conversion, installation and/or maintenance projects as assigned; analyzes and documents end user work process and systems requirements; develops or refines hardware, software and network specifications and assists in drafting requests for proposal; participates in evaluating and testing vendor products for conformance with Commission requirements and standards; participates in recommending the selection and purchase of hardware and software; serves as technical project lead on large-scale applications development, enhancement, installation and/or maintenance projects; assists in installing, testing and maintaining applications; advises and trains users on operating system characteristics and parameters; supports and trains users on programs and applications; develops and maintains system and user documentation.

## **OTHER DUTIES**

Performs troubleshooting of complex hardware and software problems which could not be resolved by help desk staff; resolves problems identified or arranges for their resolution by outside vendors or maintenance contractors.

Assists in preparing technology budget requests to meet Commission capacity requirements; participates in the development of Commission standards and policies for hardware and software.

Monitors trends and developments in systems, networking, multi-platform communication technologies.

Acts for the Information Systems Manager in that individual's absence.

## **DESIRED MINIMUM QUALIFICATIONS**

### **Knowledge of:**

Principles, methods and techniques in the design and operation of information systems for mid-range computers and platforms equivalent to those used by the Commission, including operating system architecture, characteristics and commands; principles, practices and methods of systems administration and maintenance; network architectures and theory and principles of design and integration, including topologies and protocols; principles, methods and practices of network administration and maintenance including configuration, performance tuning and diagnostic tools; relational database design concepts, methods and techniques; principles and practices of systems analysis and design; computer programming principles, techniques and procedures for business and technical system applications; standard programming languages and utilities similar to those used by the Commission; software development tools and utilities; project planning, prioritizing and scheduling techniques; systems troubleshooting principles and practices; basic accounting, statistical, business, office and technical procedures commonly supported by system applications; design, operations and requirements for standard financial software packages.

### **Ability to:**

Configure, maintain and manage the operations of an interoperating LAN/WAN infrastructure to achieve optimal technical performance and user support; analyze and define user requirements and recommend efficient, cost-effective hardware, software, network/communication and technical applications solutions; analyze complex problems, evaluate alternatives and make sound recommendations; organize, plan and complete projects efficiently and in accordance with Commission quality standards; prepare clear, concise and accurate program documentation, user guides, reports of work performed, and other written materials; troubleshoot network, hardware, software and technical applications problems and make or recommend modifications; make sound, independent decisions within established guidelines; communicate clearly and effectively orally and in writing; work collaboratively and effectively with other team members; establish and maintain effective working relationships with end users, vendors, consultants and others encountered in the course of work.

## **Training and Experience:**

A typical way of obtaining the knowledges, skills and abilities outlined above is graduation from a college or university with a major in computer science, mathematics, engineering or a closely related field; and five years of progressively responsible experience in systems and/or network analysis, design and administration; or an equivalent combination of training and experience.

## **PHYSICAL AND MENTAL DEMANDS**

The physical and mental demands described here are representative of those that must be met by an employee to successfully perform the essential functions of this class. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

### **Physical Demands**

While performing the duties of this class, employees are regularly required to sit; talk or hear, in person and by telephone; hear computer equipment warnings and annunciators; use hands repetitively to finger, handle, feel or operate standard office equipment; and reach with hands or arms. Employees are frequently required to walk and stand; regularly lift up to 10 pounds and frequently lift from 11 to 25 pounds.

Specific vision abilities required by this job include close vision, the ability to distinguish colors and shades and the ability to adjust focus.

### **Mental Demands**

While performing the duties of this class, employees are regularly required to use oral and written communication skills; read and interpret data, information and documents; analyze and solve problems; use math and mathematical reasoning; learn and apply new skills or information; perform highly detailed work on multiple, concurrent tasks; work under changing deadlines with frequent interruptions; work effectively as a team leader or member; and interact with Commission end users, employees, vendors and others encountered in the course of work.

## **WORK ENVIRONMENT**

The work environment characteristics described here are representative of those an employee encounters while performing the essential functions of this class. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

Employees typically work under normal office conditions, and the noise level is moderately quiet.