Alaska Court System Class Specification

DATABASE ADMINISTRATOR I

Range: 20 EEO4: 02 SOC: 15-1244

Class Code: C0194

Definition:

Under general direction, a Database Administrator I performs the full range of activities required to support multiple court databases. The incumbent installs the Database Management System (DBMS) and related systems software; designs, implements, and maintain databases; defines, stores, and secures data in the DBMS; optimizes performance of the DBMS; analyzes problems; provides consultation to users; determines long-term requirements; and develops operational guidelines.

Distinguishing Characteristics:

This class is distinguished from the Programmer Analyst series in that focus is placed on maintaining and supporting DBMS software, data structures, and users; while the latter designs, codes, and maintains application software. This class is further differentiated by the primary clientele. Programmer Analysts principally serve the court's business needs while Database Administrators primarily support users' needs for databases.

Complexity of Tasks: This position requires a thorough understanding and expertise in all facets of DBMS software. The incumbent typically support court applications used by courts in different departments that require statewide access to shared data stored in a DBMS. May support the DBMS used by a specific court or district where expertise in data management and access within the district is an ongoing concern.

Supervision Received: A Database Administrator I works under the general supervision of the Applications Manager. Supervision and evaluation is based on the overall production and efficiency of work performed.

Supervision Exercised: This class may be assigned lead level responsibilities.

Independent Judgment: This position requires a high degree of independent judgment in maintaining the integrity, availability, security, and efficiency of databases on a Wide Area Network (WAN). This requires making recommendations to resolve complex and often conflicting user requirements for membership and access to data.

Examples of Duties:

Identify the need for multipurpose programs to aid in maintaining the DBMS.

Set up user accounts for employees that require access to a database and maintain all database-specific user accounts.

Maintain and update user accounts when personnel changes occur.

Analyze situations and technical errors to locate and correct DBMS, operational, and application problems.

Assist agency programmer analysts with file and table design methods of accessing the DBMS for efficiency, and system and program design.

Make recommendations for the optimal layout of databases and files for performance.

Educate court staff in the concepts and usage of the DBMS.

Train users in the use of prepared forms, views, and reports.

Responsible for the creation, document action, and management of views.

Analyze databases to ensure minimum data redundancies, correct usage of indexes or keys, and maximum operational efficiency.

Work with programmer analysts to install software upgrades for DBMS related system software.

Define and ensure compliance with standards created for all the court's local and statewide databases.

Assist in the creation and maintenance of security profiles within the database. Verify adherence to security policies.

Document new features, consequences of changes, and how to use new products and new releases of software. Keep supervisors and managers aware of changes in order to minimize any negative impact.

Recommend methods of database distribution including replicated, central, and distributed databases.

Analyze long-term database requirements.

Plan upgrades and new releases of DBMS and related system software. Implement plans under the direction of the Applications Manager.

Establish and maintain procedures for protecting the database against both deliberate and/or inadvertent unauthorized access/destruction of data.

Monitor usage of the DBMS and other associated software responding to changes in performance and/or user requirements, including monitoring efficiency of database software.

Evaluate and consolidate redundant data.

Assist programmer analysts with client/server application decisions and how to access distributed data through network software.

Develop procedures and standards for implementing DBMS software, its repository or data dictionary, and the backup of the DBMS.

Knowledge, Skills, Abilities:

The Database Administrator I requires knowledge of:

- Operating system concepts where the DBMS resides and proficiency in the utilities and commands of the particular operating system.
- Principles and techniques of DBMS including database object creation and dependencies, data element definition, data dictionary use, and physical storage layout.
- Logical concepts of relational, inverted list, hierarchical, and networked approaches to databases including relational design and techniques for implementing data relationships within a DBMS.
- Native DBMS programming language to include Cobol, Access, SQL, Progress, Informix, Oracle, etc.

The Database Administrator I requires skill in order to:

- Identify, define, and resolve problems.
- Use help desk application software to solve a variety of complex network and system problems.
- Communicate verbally and in writing.
- Deal with situations requiring tact, flexibility, and good judgment. •
- Analyze help desk information and make appropriate recommendations. •

The Database Administrator I requires the ability to:

- Function effectively in crisis situations and under pressure; analyze basic/moderate/complex technical problems or situations and apply logical problem determination skills to develop effective solutions.
- Establish and maintain cooperative relationships with and convey precise, understandable information to management, IS staff, users, and others, both orally and in writing.
- Monitor database performance trends and tune the databases for efficiency. •
- Research and recommend methods to improve application system performance. •

Minimum Qualifications:

Two years of database administration experience using a recognized, robust database, of which one year was with a database on a WAN.

AND

Two years of work experience in job-specific languages, operating system(s) and database(s) or in system development/maintenance using relational databases and associated languages (SQL, C, etc.).

Substitution:

A bachelor's degree in computer science or a closely related field may be substituted for up to two years of the required four years of experience.

Database Administrator II: This is a flexibly-staffed job class. The incumbent may be advanced to Range 22 upon meeting established criteria.

Note: This position is in the partially exempt service; incumbents serve "at-will" to the hiring authority.

01/02 – Original 03/14 – Revised 05/15 – Change SOC Code 09/18 – Change SOC Code