

STATE OF HAWAII  
**POSITION DESCRIPTION**

Effective Date: [Effective Date]  
 Approved Date: [Approved Date]

Approved by: Click here to enter e-signature.  
 Signature of Appointing Authority or Authorized Representative

**POSITION INFORMATION:**

POSITION NUMBER: 124868  
 BAND: B - Journey Worker/Project Lead/Subject Matter Expert  
 CAREER GROUP: Information Technology  
 FUNCTIONAL TITLE: Database Analyst  
 DEPARTMENT: [Dept]  
 DIVISION: Administration Division  
 BRANCH: Administrative Services Office

SUPERVISOR POSITION NO., CAREER GROUP, & WORKING TITLE:  
 124862, IT Band C – System Analyst, Senior

**PURPOSE OF THE POSTION:**

The purpose of this position is to provide overall direction and leadership in managing the Department’s IT unit. Duties and responsibilities include overseeing the department’s software, hardware, network, and information security. This position ensures the availability, continuity, and security of data and information technology services by analyzing computer and information needs of the department from an operational and strategic perspective and determining immediate and long-range personnel and equipment requirements and goals. The position provides management of information technology activities of highly complex enterprise information technology solution, which may require supervision of several project development teams.

**MAJOR DUTIES AND RESPONSIBILITIES:**

**A. Database Administration**

**70%**

1. Designs databases using design principles (e.g., normalization, redundancy, performance, and security) and techniques (e.g., Joint Application Development [JADs], data modeling, logical design, and physical design). [1][2][3]
2. Applies logical data modeling tools and techniques to document the structure relationships, and use of information within an organization (e.g., maps logical data models in physical data). [1][2][3]
3. Evaluates/determines, configures, tests, corrects, documents and implements database security techniques, practices and procedures (e.g., user access levels, permissions, audit trails) and data security (e.g., customized application security, third party security products, digital certificates, data encryption). [1][2][3]

4. Applies proper file/database organization (e.g., hierarchal and relational) and access techniques (e.g., sequential, indexed, and direct) on data storage device technologies (e.g., Storage Area Network and Automated Storage Tiering). [1][2][3]
5. Designs, configures, tests, corrects, documents and implements databases and its environment required to satisfy the requirements of a system, project and/or ask while conforming to the State's programming standards, conventions, policies, procedures, and practices. [1][2][3]
6. Evaluates and applies the proper data access tools for client server, and/or Internet/Intranet (e.g., Structured Query Language [SQL], Extensible Markup Language [XML]). [1][2][3]
7. Configures/programs database software that enable the programmers and/or users to create, populate, and manipulate data structures (e.g., Access, SQL Server, DB2, Oracle). [1][2][3]
8. Forecasts and plans capacity using estimates (e.g., CPU cycles, number of users, transaction growth and new development efforts) to determine computer systems resource needs. [1][2][3]
9. Plan, analyzes and evaluates computer performance problems and discusses requirements with appropriate personnel. Reviews causes of machines stoppages, recommending and implementing fixes as necessary. [1][2][3]
10. Develops, implements, and maintains database strategies to ensure data can be recovered and restored. [1][2][3]
11. Manages activities to assist and training users as apart of the implementation of new/modified systems. [1][2][3]
12. Develops and maintains proficiency in hardware and software operating system, utilities, and applications that are currently used by the Department. [1][2][3]
13. Keeps current with new information processing technologies, terminology, and concepts. [1][2][3]
14. Participates in special project/functions as required. Depending upon the project, this position may be assigned to a project team; to service as project manager and/or serve as a consultant support. [1][2][3]

**B. Work Unit and Administrative Activities**

**25%**

1. Participates in the review, development, and maintenance of applications to assure compliance with DLE's missions, goals, policies, procedures, performance criteria, and user requirements. [1][2][3]
2. Review and evaluates the adequacy and compliance of policies and procedures regarding data management and security. Assist in the development and maintenance of standards and guidelines for IT systems. [1][2]
3. Apprises ITS and DLE of the ongoing projects and concerns relating to assigned projects. [1][2]
4. Participates in the review and approval/disapproval of all requests for systems development, maintenance, and adaptability to the existing environment. Assesses the type, quantity, and cost/benefit of the products and services requested. [1][2][3]
5. Prepares, issues, and reviews invitations for bids, requests for proposals, and contracts for database development and maintenance projects. [1][2]
6. Identifies and coordinates the implementation of manual and automated (hardware and software) resources and training required for projects. [1][2]
7. Participates in post-implementation review of projects, including user requirement compliance, performance measurements, cost savings, realization and tangible and intangible benefits, and determination of additional user needs. [1][2]
8. Guides and assists other IT areas, and/or consultants on projects or assignments involving databases. [1][2]
9. Assist in liaison activities with other Federal, State, City and County departments and agencies and hardware/software vendors. [1]
10. Participates in training on database and IT topics. [1][2]

**C. Other Duties as Assigned****5%**

## Essential Duties Reasons:

1. The performance of this function is the reason that this job exists.
2. The number of other employees available to perform this function is limited.
3. The function is highly specialized, and employee is hired for special expertise or ability to perform this function.

Evidence Considered in Determining Essential Functions: Amount of time spent performing the function; consequences of not requiring a person in this job to perform a function; work experience of people who currently perform similar jobs (if applicable); and the nature of the work operations based on organizational and program structure.

**MINIMUM QUALIFICATION REQUIREMENTS****EDUCATION AND EXPERIENCE REQUIREMENTS:**

Education Experience: Graduation from an accredited four (4) year college or university with a bachelor's degree.

Work Experience: Zero (0) to two (2) years of professional IT work experience in at least one IT specialty area; or any equivalent combination of training and experience.

**COMPETENCIES:**

Incumbent must possess experience and/or training which demonstrated a basic understanding of at least some of the following competencies: Customer Focus, Initiative, Reading, Writing, Oral Communication, Decision Making, Problem Solving, Reasoning, Information Management, Interpersonal Skills, Technical Competence, Organizational Awareness, Supervisory Skills.

**SUPPLEMENTAL MINIMUM QUALIFICATIONS** (Includes licenses, certificates, tools, equipment, etc., required to perform the essential functions of the position):

Tools, Equipment, & Machines: Installation tools, servers and personal computers, computer components and peripherals.

**DESIRABLE QUALIFICATIONS:**

N/A

**WORKING CONDITIONS:**

There will be times that the working conditions will include work callback and/or night work to monitor, maintain, and troubleshoot systems.

Ability to lift and carry equipment and supplies (e.g. PCs, monitors, printers, scanners, etc.) weighing up to 50 pounds without assistance AND lift and carry heavier loads (e.g. network printers) weighing up to 100 pounds, with assistance.