STATE OF HAWAII POSITION DESCRIPTION

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

Approved by:

Signature of Appointing Authority or Authorized Representative

POSITION INFORMATION:

POSITION NUMBER: 124869 BAND: A - Entry/Independent Worker CAREER GROUP: Information Technology FUNCTIONAL TITLE: Database Analyst DEPARTMENT: [Dept] DIVISION: Office of the Deputy Director of Administration BRANCH: Administrative Services Office

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

PURPOSE OF POSITION:

The primary function of the System Analyst position is to maintain and support the Department's hardware and software technology resources to provide secure and reliable technology solutions. This position will engage in the planning, installation, administration, and end user support of Department technology systems and applications.

MAJOR DUTIES AND RESPONSIBILITIES:

A. Database Administration

- 1. Assists with database design 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 into physical data). [1][2][3]
- Evaluates, 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 the proper file/database organization (e.g., hierarchical 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]

70%

- 5. Follows recommended guidance in designing, configuring, testing, correcting, documenting, and implementing databases and its environments required to satisfy the requirement of a system, project and/or task while conforming to the State's programming standards, conventions, policies, procedures, and practices. [1][2][3]
- 6. Evaluates and applies the proper data access methods for client server, and/or Internet/Intranet (e.g., Structures Query Language [SQL], Extensible Markup Language [XML]). [1][2][3]
- 7. Configures/programs database that enable the programmers and/or users to create, populate, and manipulate data structure (e.g. Access, SQL Server, DB2, Orabel). [1][2][3]
- 8. Monitors and reviews database resource capacity (e.g., CPU cycles, number of users, transaction growth, and new development efforts) and recommends changes or adjusts resources according to usage patterns. [1][2][3]
- 9. Evaluates database performance issues and discusses requirements with appropriate personnel. Reviews causes of machines stoppages, recommending and implementing fixes as necessary. [1][2][3]
- 10. Implements, maintains, and monitors database backups to ensure data can be recovered and restore. Performs database back restores upon request. [1][2][3]
- 11. Provides ongoing user support to fulfill requests or address issues related to databases or databases clients.
- 12. Assists and training users as part of the implementation of new modified database systems. [1][2][3]
- 13. Develops proficiency in hardware and software operating system, utilities, and application that are currently use by the Department. [1][2][3]
- 14. Keeps current with new information processing technologies, terminology, and concepts. [1][2][3]
- 15. Participates in special project/functions as required. Depending upon project, this position maybe assigned to a project ream and/or serve as a consultant providing support. [1][2][3]

B. Work Unit and Administrative Activities

- Participates in the review of the development and maintenance of applications and databases to assure compliance with DLE's missions, goals, policies, procedures, performance criteria, and user requirements [1][2][3]
- 2. Assist in the reviews of policies and procedures regarding the development and implementation of revisions and additions. Assists in the development and maintenance of standards and guidelines required for department systems. [1][2]
- Apprises supervisor of the status of ongoing projects and concerns relating to the assigned projects.
 [1][2]
- 4. Participates in the review of requests for system development, maintenance services, hardware, and software in the technical consideration of database language and techniques, ease of modification and maintenance, and its adaptability to the existing environment. [1][2][3]
- 5. 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]
- 6. Guides and assists other IT areas, and/or consultants on projects or assignments involving databases. [1][2]
- 7. Assist in liaison activities with other Federal, State, City and County departments and agencies, and hardware/software vendors. [1]

C. Other Duties as Assigned

5%

25%

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:

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

<u>Work Experience</u>: 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.

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

<u>Tools, Equipment, & Machines:</u> 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.