☐ Current   ☒ Proposed

Classification Title	Division/Unit
Information Technology Specialist II	Information Technology Division
Working Title	**IT Domain** (if applicable)
Database/ Application Architect	System Engineering
Position Number	**Effective Date**
363-175-1414-002	
Name	**Date Prepared**
	07/25/2019

CalHR Mission and Vision

The California Department of Human Resources (CalHR) is responsible for all issues related to employee salaries and benefits, job classifications, civil rights, training, exams, recruitment and retention. For most employees, many of these matters are determined through the collective bargaining process managed by CalHR.

Our Vision: To be the premier leader and trusted partner in innovative human resources management.

Our Mission: To provide exceptional human resources leadership and services with integrity, respect and accountability to state departments and all current and prospective employees.

General Statement

Under the general direction of the Information Technology Manager I (ITM I), the Information Technology Specialist II (ITS II) serves as the Database/ Application Architect for the Enterprise Human Resources (EntHR) Project, California Department of Human Resources (CalHR) and the State Personnel Board. The Enterprise Human Resources (EntHR) Project is a statewide cross-agency initiative with associated governance co-chaired by CalHR and State Controller's Office. The purpose of EntHR is to support Civil Service Improvement by strategically improving employee processes and data management through automation to enhance services to Californians.

This position creates and defines the framework for a large scale, statewide suite of applications that will provide a cohesive data management platform on an enterprise level. The incumbent is responsible for ensuring that industry, State and Department standards are utilized in designing solutions that serve the public, business partners and employees in an effective manner. The incumbent produces viable solutions meeting that are secure, scalable, supportable and stable. The incumbent works independently as well as collaboratively cross-organization in the assessment of business cases, appropriate solutions, and applications of the system development project life cycle to ensure successful solutions implementation with appropriate levels of communication, risk management, project planning and documentation.

The incumbent duties include utilization of skills in the areas of systems analysis; requirements definition; programming skills for all tiers including presentation, business, and data tiers; data architectures; databases; testing; reporting services; change management; problem management; incident management; troubleshooting; and security. The incumbent facilitates the implementation and management of commercial or modified commercial off the shelf solutions and associated support services for integral support products.

The incumbent performs duties associated with the operational aspects of an information technology environment in support of programming activities including planning, budgeting, oversight reporting, procurements, contracting and policy development. The incumbent acts as a technical and analytic lead for junior staff members. Duties include, but are not limited to, the following:

Job Functions

[Essential (E) / Marginal (M) Functions]:

35%   Database Architecture (E)

- Designs, implements, and maintains enterprise data architecture for statewide human resources (HR) related data to best align with multiple data sources, platforms and technology solutions.
- Administers and designs the methods of collection, storage, integration, and utilization of statewide HR data, and analyze existing database standards, models, and conceptual designs to develop strategies, performance metrics, and system monitoring practices for implementation.
- Facilitates cross-organization workgroups in the development of requirements and detailed specifications for the Data Governance and Management. Develops Data Management Roadmap, Data Governance for data ownership and classification at the enterprise level.
- Coordinates with data providers, data users and key stakeholders and develop and achieve various long term objectives for statewide data architecture.
- Develops and communicates data architecture policies, guidelines, standards, procedures and best practices for database usage at enterprise level.
- Performs due diligence (data classification, criticality analysis) and due care (data catalog, data schema change management, data retention, data auditing) with HR data to ensure alignment with the many privacy and security regulations.
- Prepares documents for data architecture and maintain knowledge on large data structure as well.
- Designs and provides support to all data management methodologies according to required standards.
- Performs publication of HR data to the public, with assurance that the data has sufficient quality and publication aligns with state and federal regulations.
- Designs enterprise reporting and business intelligence strategy and architecture.
- Provides review oversight for data architecture solutions that any project vendors and sub-contractors may submit.

30%   Database Administration (E)

- Serves as the primary Database Administrator for EntHR, ensuring databases run at optimal performance and provide reliable access to HR data. Design and build logical database structures such as: tables, indexes, views, triggers and stored procedures to meet the requirements.
- Works collaboratively with Department of Technology (CDT) staff to install, configure, implement and maintain databases in Development, Test, Pre-Prod and Production environments and ensure the data integration needs of the requirements is met.
- Creates documentation of data analysis and specifications using best practices/methodologies including but not limited to: business and system requirements, deliverables, physical and logical designs, entity relationship diagrams, detailed database designs and dictionary, DB scripts, system test specifications and results, work plans and schedules for assignments. Provides or updates existing documentation for modifications to the current EntHR databases, including installation and configuration procedures, regular project status and ad hoc reports per EntHR management request.
- Administers database tuning, backup, recovery, monitoring, and troubleshooting to enable the recovery of invalid or malfunctioning databases caused by physical device failure or database corruption. Also responsible for data export, import, transformation, extraction which may involve large and highly confidential data sets
- Performs data administration functions associated with responding to defects and change requests which includes but not limited to: resolving database installation, configuration,

software/application procedure problems, error and exception handling and defects encountered by the customers.

- Develops enterprise reporting and business intelligence using relevant reporting and analytics tools.
- Serves as a subject matter expert in database administration, and provides guidance and assistance to other Information Technology (IT) staff regarding proper and secure access of statewide data.
- Consults with management, stakeholders and other technical staff and advises and makes recommendations in cost development, resource planning, scheduling, prioritizing, reporting, and resolving data management issues.
- Tests patches and new releases of database management system software.

20%   Application Development (E)

- Performs application development functions including but not limited to analyzing requirements and assessing their feasibility; design, development, upgrades, monitoring, tuning, troubleshooting, and repairing application and database systems.
- Manage system change processes and integrate changes with the development, test and production environment. Work collaboratively with CDT staff to implement change requests and enhancements, conduct peer review of the Application Programming Interfaces(APIs) during the development, testing and launch phases of the SDLC to configure and release application code into Test, Pre-Prod and production environments.
- Develops complex detailed specifications that result in the applications and reports using ASP.NET and an SQL server platform.
- Analyze applications to identify and develop opportunities for improvements such as expanding capacity, reducing response time, and increasing effectiveness
- Design, develop, test, and maintain custom software solutions using modern development standards, best practices, frameworks, and technologies to ensure developed software meets business requirements.
- Coordinates application and database changes and enhancements with CDT using the change control process.
- Works closely with the project manager to properly plan and implement the scope, objectives and deliverables for the assigned project, task or change.

10%   Research & Development (M)
- Researches, develops configuration, and documents all aspects of infrastructure and software architecture support for a complex environment including but not limited to the following: physical and logical designs, hardware and software specifications, business and system requirements, project scope, deliverables, schedules and budgets, system test specifications and results, service definition, operations, process, procurement, policy, standards, training, asset inventory, and other documentation as required.
- Maintains skills to remain current with systems software trends and development and keep abreast of industry standards, processes, and procedures, and be able to mentor other staff as needed.
- Continues to develop technical skills by attending training, studying manuals and publications, and attending user groups, vendor fairs, and conferences.
- Analyzes, reviews, evaluates, and approves proposed vendor system solutions.

5%   Marginal Functions (M)
- Communicates effectively via phone or email with the data providers, customers, cross-organization stakeholders, and vendor(s). Documents and tracks all accomplishments, work in progress, and issues related to daily work. Performs other programming, project, analytical, and technical duties as required and consistent with the specification of this classification.

Supervision Received

The Information Technology Specialist II reports to Information Technology Manager I (ITMI), and receives the majority of assignments from the ITMI; however, direction and assignments may also come from other senior team members.

Supervision Exercised

None

Special Requirements / Desirable Qualifications

- Ability to communicate effectively within and cross-organization as demonstrated by strong written and verbal communication skills.
- Ability to consistently exercise good judgment in a cross-organization environment.
- Ability to work independently, cooperatively and in collaboration with staff at all levels.
- Ability to plan, organize, facilitate, and coordinate multiple projects operating under strict guidelines and timeframes.
- Proficient in navigating across all architecture domains (business, information, data, technology, application and security) in order to effectively provide recommendations that will utilize industry best practices, IT consolidation, shared services and business outcome driven projects.

Working Conditions

The duties of this position are performed indoors. The employee's workstation is located at 1515 "S" Street building and is equipped with standard or ergonomic office equipment, as appropriate. Travel may be required to attend meetings or training classes.

Attendance

Must maintain regular and acceptable attendance at such level as is determined at the Department's sole discretion. Must be regularly available and willing to work the hours the Department determines are necessary or desirable to meet its business needs.

I have read and understand the duties listed above and I can perform these duties with or without reasonable accommodation.* (If you believe reasonable accommodation is necessary, discuss your concerns with the hiring supervisor. If unsure of a need for reasonable accommodation, inform the hiring supervisor, who will discuss your concerns with the Personnel analyst.)

*A Reasonable accommodation is any modification or adjustment made to a job, work environment, or employment practice or process that enables an individual with a disability or medical condition to perform the essential functions of his or her job or to enjoy an equal employment opportunity.

Duties of this position are subject to change and may be revised as needed or required.

Employee Signature	Employee Printed Name	Date

I have discussed the duties of this position with and have provided a copy of this duty statement to the employee named above.

Supervisor Signature	Supervisor Printed Name	Date