

DUTY STATEMENT

Employee Name:	Position Number: 580-151-1414-071
Classification: Information Technology Specialist II (System Engineering)	Tenure/Time Base: Permanent/ Full Time
Working Title: Cloud Developer and Database Administrator	Work Location: 1616 Capitol Ave., Sacramento, CA 95814
Collective Bargaining Unit: R01	Position Eligible for Telework (Yes/No): Yes
Center/Office/Division: Information Technology Services Division	Branch/Section/Unit: Application Technology and Support Branch/ Informatics Data Exchange & Applications Section

All employees shall possess the general qualifications, as described in California Code of Regulations Title 2, Section 172, which include, but are not limited to integrity, honesty, dependability, thoroughness, accuracy, good judgment, initiative, resourcefulness, and the ability to work cooperatively with others.

This position requires the incumbent to maintain consistent and regular attendance; communicate effectively (orally and in writing) in dealing with the public and/or other employees; develop and maintain knowledge and skill related to specific tasks, methodologies, materials, tools, and equipment; complete assignments in a timely and efficient manner; and, adhere to departmental policies and procedures.

All California Department of Public Health (CDPH) employees perform work that is of the utmost importance, where each employee is important in supporting and promoting an environment of equity, diversity, and inclusivity, essential to the delivery of the department's mission. All employees are valued and should understand that their contributions and the contributions of their team members derive from different cultures, backgrounds, and life experiences, supporting innovations in public health services and programs for California.

Competencies

The competencies required for this position are found on the classification specification for the classification noted above. Classification specifications are located on the [California Department of Human Resource's Job Descriptions webpage](#).

Job Summary

This position supports the California Department of Public Health's (CDPH) mission and strategic plan by creating customer focused solutions that are responsive and agile; supporting a modern infrastructure, tools, architecture, and standards; to effectively provide efficient services following service level agreements. The Information Technology Services Division (ITSD) leverages data and technology to create sustainability across CDPH by creating efficient solutions that meet customer expectations and reduce waste. As well as, creating innovative solutions, strengthening partnerships and collaborations, and embracing technology.

Under general direction of the Information Technology Manager (ITM) I, Chief, Informatics Data Exchange and Applications Section (IDEAS), the Information Technology Specialist (ITS) II serves as a solution architect developing and supporting multiple information technology (IT) systems, applications and databases, on-premises and cloud solution. The ITS II is responsible for planning, designing, developing, implementing, and supporting solution architectures for existing and new applications and databases, networking, data integrity and information security. The ITS II performs as an experienced cloud developer, develops new cloud solutions and/or existing solutions, migrates on-prem solutions to cloud, maintains and supports. The ITS II acts independently in a highly complex technical specialist position and leads IT systems support and projects. The ITS II maintains working knowledge of various industry trends and technology solutions.

The ITS II proactively learns new concepts, understands system-to-system relationships and interfaces, and maintains cooperative working relationships with business partners and the IT team to identify goals and objectives. The ITS II possesses strong organizational, analytical, and verbal/written communication skills; works both independently and in a team environment; participates in meetings, documentations, and provides status reports; and completes work assignments in an effective, accurate, and timely manner. The ITS II keeps up with current and industry trends, standards and best practices related to system engineering.

The ITS II ensures application architecture and enterprise-wide shared on-premise and cloud application services align with CDPH standards and vision by designing technology solutions that enable the department's ability to make key service decisions that are backed by data and are focused on public health outcomes, while ensuring the most complex/critical information interoperability is established between other CDPH programs, state departments, Federal programs, and external vendor Software as a Service (SaaS) service and in-cloud platform providers.

The ITS II performs duties within the Software Engineering, System Engineering, and Business Technology Management domains.

Special Requirements

- ☒ Conflict of Interest (COI)
- ☐ Background Check and/or Fingerprinting Clearance
- ☐ Medical Clearance
- ☐ Travel:
- ☐ Bilingual: Pass a State written and/or verbal proficiency exam in
- ☐ License/Certification:
- ☒ Other: This position will support mission critical production systems after hours and On-Call as required and carries a high degree of responsibility to maintain system uptime and to secure highly sensitive data.

Essential Functions (including percentage of time)

- 30% Serves as a senior developer on application software development, system administration, and security for new or existing on-prem and cloud systems at all stages and in all environments. Performs complex system analysis and design for new development and/or modifications to existing systems in compliance with departmental policies, guidelines, and standards. Gathers and develops business requirements, system and program specifications, use cases, test cases, and test reports. Provides technical support for critical systems hosted on-premises and cloud-based SaaS, IaaS and PaaS and other custom-built systems including, but not limited to, software installation and version upgrade, backup and restore, jobs setup and scheduling and various programming tasks. Reviews existing service monitoring tools, system health checks and alerts; updates as necessary and develops new health checks to further improve operations using scripting tools and platforms. Performs new and ongoing design & development, maintenance and operation (M&O) work using the Branch's suite of technology tools, platforms, and programming languages (e.g., APIM, Azure Data Factory, Azure App Services, Azure Functions, Azure Logic Apps, Azure DevOps, Azure Monitor, Application Insights, Snowflake, Databricks, SQL Server, Power BI, Linux and Windows Server, Visual Studio, ASP.NET, C#, Python, Ruby, PowerShell, Kusto, SQL).
- 25% Maintains expert working knowledge of industry technologies, best practices, and trends; makes recommendations to management on the adoption of new tools, platforms, processes, and procedures to improve operational efficiencies. Designs, configures, and manages standards of requirements for project plans for information technology projects, while ensuring adherence to budget, schedule, and scope. Reviews software architecture and makes recommendations regarding technical and operational feasibility. Conducts security analyses, and reports statuses to leadership; performs risk assessments and recommends information technology solutions on CDPH information security processes; analyzes incident-related data and determines the appropriate response; develops implementation plans including cost-benefit or return on investments. Writes technical documentation/end user training of complex systems, processes, and procedures with sufficient detail to enable other technical staff to support and maintain systems. Provides high-level technical expertise, leadership, communication, and mentoring support to project team members, technical staff, vendor consultants, and program customers aligning with technological modernization strategies in support of CDPH programs.
- 20% Serves as a senior database administrator in providing on-prem and cloud database administration including, but not limited to, database design, creation and implementation, installation/configuration of database servers and database software, resolution of complex technical problems, database security monitoring, database performance monitoring and tuning, database optimization, database backup and recovery, Linux and windows multi-node cluster, failover, ETL, and database problems troubleshooting and resolution. Develops, evaluates, and maintains standards and procedures related to database design, configuration management, quality assurance, database change control process, database integrity and security, database backup recovery and maintenance activities, implementation plan, installation of new enhancements and releases of software. Installs, configures, and supports various ETL and reporting database software.
- 10% Drives the analysis and re-engineering of existing business processes; identifies and develops the capability to use new tools; and identifies and leverages the enterprise's knowledge resources. Establishes and implements organizational goals, objectives, policies, and operating procedures. Manages and evaluates operational effectiveness and continuously implements process improvements. Continuously seeks improvements to the IT environment to include policy and procedures to achieve operational efficiency. Employs effective project management techniques and communication practices to attain project goals. Collaborate with vendors and

stakeholders to formulate solutions and evaluate compliance with vision, mission, objectives, and requirements of the project. Develop project documents such as project plans, schedules, procurement documents, reports, and other key project management documents. Assists in efforts to procure IT applications products and services. Develops vendor requirements and evaluates vendor proposals. Coordinates and communicates with IT staff via meetings and other communications that includes vendors and external entities, to evaluate products and services offered, to ensure conformity with departmental methods, standards, and best practices.

- 10% Serves as a subject matter expert in the maintenance and support of system server including but not limited to installation, configuration, security, and optimization to accomplish updates and interoperability between disparate systems. Configures and administers authentication protocols to protect data in all zones while allowing validated access for system users. Conducts routine maintenance including, but not limited to, server performance monitoring and fine-tuning, optimization, security patches, hot fix, backup, and disaster recovery testing. Responds to production incidents and calls; performs impact assessment; provides technical troubleshooting; and research, analyzes, and performs action to restore services and create mitigation plans. Ensures that management, program partners, help desk personnel, and internal and external stakeholders are kept informed with periodic updates on status of resolution. Conducts post incident root cause analysis. Provides end user training on a statewide basis on accessing and using the applications and reports generated from data obtained through systems. Develops and presents technical materials such as job aids, workbook.

Marginal Functions (including percentage of time)

- 5% Performs other job-related duties as assigned.

☐ I certify this duty statement represents an accurate description of the essential functions of this position. I have discussed the duties and have provided a copy of this duty statement to the employee named above.

☐ I have read and understand the duties and requirements listed above and am able to perform these duties with or without reasonable accommodation. (If you believe reasonable accommodation may be necessary, or if unsure of a need for reasonable accommodation, inform the hiring supervisor.)

Supervisor's Name:	Date	Employee's Name:	Date
Supervisor's Signature	Date	Employee's Signature	Date

HRD Use Only:

Approved By: D.S.

Date: 8/20/2026