

POSITION DUTY STATEMENT

DOT PM-0924 (REV 01/2025)

CLASSIFICATION TITLE Information Technology Specialist III	OFFICE/BRANCH/SECTION Application Development Services Div/Divison Office	
WORKING TITLE Cloud Application Architect	POSITION NUMBER 190-170-1415-924	REVISION DATE 06/19/2026

As a valued member of the Caltrans team, you make it possible to improve lives and communities through transportation.

GENERAL STATEMENT:

Under the administrative direction of the Division Chief (CEA), the Cloud Application Architect, Information Technology Specialist (ITS) III, is responsible for performing activities at the highest level in support of discovering, assessing, architecting, and delivering the most complex enterprise solutions. Assignments require an advanced level of organizational understanding to bridge the strategic intent and practical technical application. The Cloud Application Architect will advise leadership on formulating IT strategy, policy, and governance for Caltrans's current and emerging Cloud technology portfolio.

The Cloud Application Architect acts as a technical lead and solution architect, responsible for defining, designing, developing, documenting, coordinating, and integrating the products managed within the Division, implementing IT solutions to meet enterprise business objectives. The IT Specialist III possesses a wide and deep practical technical knowledge base, which includes emerging “cutting-edge” technologies. The IT Specialist III is recognized as a subject matter expert in their area of specialization, exhibits a mastery level of team leadership qualities and directs the most critical/complex projects.

The IT Specialist III performs duties related to the architecture, development, integration, operation, and maintenance of cloud applications including user research, user-centric design, development or configuration, testing, and implementation.

DOMAINS:

Software Engineering
Information Technology Project Management

CORE COMPETENCIES:

As an Information Technology Specialist III, the incumbent is expected to become proficient in the following competencies as described below in order to successfully perform the essential functions of the job, while adhering to and promoting the Department's Mission, Vision, Values, Strategic Imperatives and Goals. Effective development of the identified Core Competencies fosters the advancement of the following Leadership Competencies: Change Commitment, Risk Appetite, Self-Development/Growth, Conflict Management, Relationship Building, Organizational Awareness, Communication, Strategic Perspective, and Results Driven.

- **Creativity and Innovation:** Thinks beyond the confines of traditional models to recognize opportunities, seek creative solutions and take intelligent risks. (Safety, Equity, Climate Action, Prosperity, Employee Excellence - Collaboration, Equity, Innovation, Integrity, People First, Pride, Stewardship)
- **Dealing with Ambiguity (Risk):** Can comfortably handle risk and uncertainty, as well as make decisions to act without having the total picture. (Safety, Equity, Climate Action, Prosperity, Employee Excellence - Collaboration, Equity, Innovation, Integrity, People First, Pride, Stewardship)
- **Initiative:** Ability to identify what needs to be done and doing it before being asked or required by the situation. Seeks out others involved in a situation to learn their perspectives. (Safety, Equity, Climate Action, Prosperity, Employee Excellence - Collaboration, Equity, Innovation, Integrity, People First, Pride, Stewardship)
- **Problem-solving and Decision-making :** Identifies problems and uses logical analysis to find information, understand causes, and evaluate and select or recommend best possible courses of action. (Safety, Equity, Climate Action, Prosperity, Employee Excellence - Collaboration, Equity, Innovation, Integrity, People First, Pride, Stewardship)
- **Relationship Building:** The ability to develop and maintain internal and external trust and professional relationships, which includes listening and understanding to build rapport. (Safety, Equity, Climate Action, Prosperity, Employee Excellence - Collaboration, Equity, Innovation, Integrity, People First, Pride, Stewardship)
- **Organizational Awareness:** Contributes to the organization by understanding and aligning actions with the organization's strategic plan, including the mission, vision, goals, core functions, and values. (Safety, Equity, Climate Action, Prosperity, Employee Excellence - Collaboration, Equity, Innovation, Integrity, People First, Pride, Stewardship)
- **Interpersonal Effectiveness :** Effectively and appropriately interacts and communicates with others to build positive, constructive, professional relationships. Tailors communication style based on the audience. Provides and is receptive to feedback. (Safety, Equity, Climate Action, Prosperity, Employee Excellence - Collaboration, Equity, Innovation, Integrity, People First, Pride, Stewardship)

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- **Analytical Skills:** Approaches problems using a logical, systematic, and sequential approach. Weighs priorities and recognizes underlying issues. (Safety, Equity, Climate Action, Prosperity, Employee Excellence - Collaboration, Equity, Innovation, Integrity, People First, Pride, Stewardship)
- **Technical Expertise:** Depth of knowledge and skill in a technical area. (Safety, Equity, Climate Action, Prosperity, Employee Excellence - Collaboration, Equity, Innovation, Integrity, People First, Pride, Stewardship)

TYPICAL DUTIES:

Percentage		Job Description
Essential (E)/Marginal (M) ¹		
40%	E	Cloud Application Architecture Expertise Provides technical leadership in planning, designing, and operating complex cloud-based services, with a particular focus on full-stack application development utilizing micro-services, event-driven workflows, and containerization. Full-stack development is integral in delivering end-to-end solutions that meet stakeholder requirements and support scalable, secure, and resilient applications across Caltrans' diverse programs. Consults with stakeholders to understand business needs within relevant laws and policies. Oversees cloud application initiatives from requirements to deployment and documentation. Drives architecture for scalable, secure, and resilient applications supporting Caltrans' diverse programs, such as real-time data processing and analytics. Responsibilities include collaborating with the IMD Cloud Architect to design cloud-native environments using automated deployment tools and container orchestration; developing secure data flows for ingesting, transforming, and analyzing both structured and unstructured data; and presenting technical solutions to stakeholders while supporting onboarding and change management efforts. Supports GenAI deployments like document summarization and predictive modeling, ensuring security and compliance.
30%	E	Technical Leadership Leads the planning and coordination of cloud application projects, including migrating legacy systems to cloud-based environments. Advises leadership on priorities, trade-offs, and deployment strategies. Ensures projects meet business goals within schedule and budget, upholding Software Development Life Cycle, DevSecOps, and cloud governance standards. Supports change management and project processes for successful cloud adoption. Participates in vendor selection and provides technical leadership to teams, monitoring compliance with contracts and best practices. Serves as a subject matter expert for risk assessment and mitigation, and documents lessons learned. Guides full-stack development, designing modular front-end/back-end components, modern APIs, and scalable cloud architectures.
10%	E	Communication and Working Relationships Maintains effective communications and working relationships with team members, business customers, multiple management levels, executive leadership, vendors, State control agency staff, and State and Federal government entities. Proficiently communicates intricate cloud infrastructure concepts and issues to executive leadership within the department and oversight agencies using easily understandable language. Skillfully incorporates updated specifications and requirements into cloud architecture, ensuring seamless integration and alignment with organizational objectives. Provides informed recommendations to leadership regarding the direction and use of cloud platforms, tools, and best practices, and helps shape strategy, policy, and governance to align with enterprise goals and technology modernization efforts.
10%	E	Product Owner / Manager As a leader in cloud application architecture, drives the vision and development of cloud-based solutions, and provides leadership in shaping cloud-native full-stack application capabilities, ensuring that user-facing and backend components evolve cohesively within the enterprise cloud environment. Offers Product Manager expertise with a focus on creating and optimizing application roadmaps for cloud-hosted data platforms and GenAI services. Continuously engages in professional development to stay abreast of the latest trends, tools, and methodologies in cloud application architecture, DevOps, and GenAI applications. Identifies and addresses training needs related to cloud technologies. Offers technical support, manages incidents and problems, and trains technical and support staff in the usage and configuration of cloud-hosted products and services. Understands business drivers and capabilities, both current and future, and determines the necessary cloud application designs and changes to achieve targeted business outcomes.

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10%	M	Performs Other Duties Performs other duties as required within the specifications of the classification, including but not limited to training, research, consulting, special projects and initiatives, attendance at industry forums and conferences. Provides leadership and expertise for establishing and maintaining standards, processes, and procedures (e.g., cloud platform standards, system build and configuration documents, incident management, configuration management, change management, user guides, etc.) for operations. Leverages established documentation to provide training to IT/Program professionals, users, and stakeholders.
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¹ESSENTIAL FUNCTIONS are the core duties of the position that cannot be reassigned.
MARGINAL FUNCTIONS are the minor tasks of the position that can be assigned to others.

SUPERVISION OR GUIDANCE EXERCISED OVER OTHERS

The incumbent has no direct supervisory responsibilities. However, this position may require the incumbent to lead very large multi-discipline teams to achieve common goals and objectives.

KNOWLEDGE, ABILITIES, AND ANALYTICAL REQUIREMENTS

Knowledge of: Emerging technologies and their applications to business processes; business or systems process analysis, design, testing, and implementation techniques; techniques for assessing skills and education needs to support training, planning and development; business continuity and technology recovery principles and processes; principles and practices related to the design and implementation of information technology systems; information technology systems and data auditing; the department's security and risk management policies, requirements, and acceptable level of risk; application and implementation of information systems to meet organizational requirements; project management life-cycle including the State of California project management standards, methodologies, tools, and processes; software quality assurance and quality control principles, methods, tools, and techniques; research and information technology best practice methods and processes to identify current and emerging trends in technology and risk management processes; and state and federal privacy laws, policies, and standards. Ability to: Recognize and apply technology trends and industry best practices; assess training needs related to the application of technology; interpret audit findings and results; implement information assurance principles and organizational requirements to protect confidentiality, integrity, availability, authenticity, and non-repudiation of information and data; apply principles and methods for planning or managing the implementation, update, or integration of information systems components; apply the principles, methods, techniques, and tools for developing scheduling, coordinating, and managing projects and resources, including integration, scope, time, cost, quality, human resources, communications, and risk and procurement management; monitor and evaluate the effectiveness of the applied change management activities; keep informed on technology trends and industry best practices and recommend appropriate solutions; foster a team environment through leadership and conflict management; effectively negotiate with project stakeholders, suppliers, or sponsors to achieve project objectives; and analyze the effectiveness of the backup and recovery of data, programs, and services.

RESPONSIBILITY FOR DECISIONS AND CONSEQUENCES OF ERROR

The incumbent must exercise good judgment, analyze problems, and take appropriate action. Poor decisions or recommendations could result in significant losses or departmental efficiencies through unnecessary delays, loss of data, equipment damage, loss of employee productivity, and user dissatisfaction.

PUBLIC AND INTERNAL CONTACTS

The incumbent will have frequent contacts with managers and staff in Caltrans, IT leaders throughout the state, private consultants, and vendor representatives concerning the needs and development of IT systems. The incumbent may initiate contacts with other departments, governmental agencies, or private companies concerning IT technology related to the performance of this position.

PHYSICAL, MENTAL, AND EMOTIONAL REQUIREMENTS

The incumbent may be required to sit for long periods of time using a keyboard, video display terminal and telephone and may be required to lift and move supplies and equipment from one location to another. The incumbent must be able to walk between multiple State buildings and have a thorough knowledge of Caltrans building locations. This is a fast-paced job with a lot of deadlines. Thus, the incumbent in this position will be required to multi-task, be open to change, adapt to changes in priorities and policies, and to complete tasks or projects with short notice. The incumbent must be able to sustain mental activity needed for problem solving which includes reading, writing, analyzing, understanding, interpreting, consulting, developing alternatives, drawing sound conclusions, and recommending, implementing and evaluating solutions. The incumbent must be able to exercise sufficient control over emotions to gain and maintain the confidence and respect of others, recognizing and acknowledging emotionally charged issues or problems and responding appropriately to them.

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WORK ENVIRONMENT

This position may be eligible for telework. The amount of telework is at the discretion of the Department and based on Caltrans's evolving telework policy. Caltrans supports telework, recognizing that in-person attendance may be required based on operational needs. Employees are expected to be able to report to their worksites with minimum notification if an urgent need arises. The selected candidate will be required to commute to the headquartered location as needed to meet operational needs. Business travel may be required, and reimbursement considers an employee's designated headquartered location, primary residence, and may be subject to CalHR regulations or applicable bargaining unit contract provisions. All commute expenses to the headquartered location will be the responsibility of the selected candidate.

If not working remotely, the employee will work in a climate-controlled office under artificial lighting using a personal computer. The employee may be required to work for extended periods of time in a computer room that maintains an approximate temperature of 70 degrees.

The employee may be required to travel. When available, a State vehicle will be provided. Possession of a valid driver's license is required when operating a State owned or leased vehicle. If the employee utilizes their own personal vehicle, they may be reimbursed for travel expenses.

Some weekend or after-hours may be required. The employee must carry a cell phone and respond to calls after hours.

Core Work Hours: Monday - Friday 8:00am-5:00pm

I have read, understand and can perform the duties listed above. (If you believe you may require reasonable accommodation, please discuss this with your hiring supervisor. If you are unsure whether you require reasonable accommodation, inform the hiring supervisor who will discuss your concerns with the Reasonable Accommodation Coordinator.)

I agree that by providing my electronic signature for this form, I agree to conduct business transactions by electronic means and that my electronic signature is the legal binding equivalent to my handwritten signature. I hereby agree that my electronic signature represents my execution or authentication of this form, and my intent to be bound by it.

EMPLOYEE (Print)

EMPLOYEE (Signature)	DATE
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I have discussed the duties with, and provided a copy of this duty statement to the employee named above.

SUPERVISOR (Print)

SUPERVISOR (Signature)	DATE
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