

CALIFORNIA DEPARTMENT OF CORRECTIONS AND REHABILITATION

POSITION DUTY STATEMENT

☐ PROPOSED

☒ CURRENT

CDCR INSTITUTION OR HEADQUARTERS PROGRAM ENTERPRISE INFORMATION SERVICES		POSITION NUMBER (Agency-Unit-Class-Serial) 065-625-1414-002	
DIVISION / UNIT Enterprise Information Services Offender Management Solutions (Middle Tier/DevOps)		CLASSIFICATION TITLE INFORMATION TECHNOLOGY SPECIALIST II	
		WORKING TITLE PLATFORM / ENGINEER SPECIALIST	
		TIME BASE / TENURE FULL TIME / PERM	CBID R01
LOCATION Birkmont Drive, Rancho Cordova, CA		INCUMBENT	
		EFFECTIVE DATE 4/22/2025	
CDCR'S MISSION and VISION			
<p>Vision We enhance public safety and promote successful community reintegration through education, treatment and active participation in rehabilitative and restorative justice programs.</p> <p>Mission To facilitate the successful reintegration of the individuals in our care back to their communities equipped with the tools to be drug-free, healthy, and employable members of society by providing education, treatment, rehabilitative, and restorative justice programs, all in a safe and humane environment.</p>			
CALIFORNIA MODEL			
California Department of Corrections and Rehabilitation (CDCR) and the California Correctional Health Care Services (CCHCS) are proud to partner on the California Model which will transform the correctional landscape for our employees and the incarcerated. The California Model is a systemwide change that leverages national and international best practices to address longstanding challenges related to incarceration and institution working conditions, creating a safe, professional, and satisfying workplace for all staff, as well as rehabilitation for the incarcerated. Additionally, the California Model improves success of the decarcerated through robust re-entry efforts back into the community.			
COMMITMENT TO DIVERSITY, EQUITY, AND INCLUSION			
The California Department of Corrections and Rehabilitation (CDCR) and California Correctional Health Care Services (CCHCS) are committed to building and fostering a diverse workplace. We believe cultural diversity, backgrounds, experiences, perspectives, and unique identities should be honored, valued, and supported. We believe all staff should be empowered. CDCR/CCHCS are proud to foster inclusion and representation at all levels of both Departments.			
DIVISION OVERVIEW			
Enterprise Information Services (EIS) is the catalyst that drives transformation. We enhance safety, enable rehabilitation, and drive operation efficiency. EIS provides a full range of information technology (IT) services for the Department that includes Information Security, IT Procurement, Infrastructure, software development, implementation and support.			
GENERAL STATEMENT			
<p>Under general direction of the Information Technology Manager I in the Offender Management Solutions, the Information Technology Specialist II works independently as the recognized technical expert and specialist on the architecture, planning, development and maintenance of the CDCR Kubernetes Platform and acts as lead on projects involving the design and implementation of the platform, enterprise applications, data, and security configurations. Maintain a working level knowledge of security best practices and regulatory requirements.</p> <p>Work independently and as a workgroup leader to oversee security and all design and design review for new technology and/or service implementations and changes to existing infrastructure ensuring that all designs and implementations are done in accordance with industry and vendor best practices and in compliance with State security policies.</p> <p>The incumbents demonstrate a depth of leadership and expertise in Software, Device, Data Base, System and Information Security Engineering and perform a wide variety of tasks requiring innovative problem solving where guidance is not readily available, and the incumbent is expected to be at subject matter expert level in the functional technology domains. The Information Technology Specialist II will be expected to take projects from concept to operations using Agile methodology.</p>			
INFORMATION TECHNOLOGY DOMAINS – PLACE AN “X” ON ALL APPLICABLE DOMAINS			

	Business Technology Management		Client Services	X	Information Security Engineering
X	Information Technology Project Management	X	Software Engineering	X	System Engineering
% of time performing duties	Indicate the duties and responsibilities assigned to the position and the percentage of time spent on each. Group related tasks under the same percentage with the highest percentage first.				
30%	<p>PLATFORM ENGINEERING</p> <p>Provides technical leadership to the application development teams, guiding the design of enterprise applications and collaborating with stakeholders across the organization. Attends development team meetings and design/code review sessions, applying enterprise-wide application design standards and ensuring architectural alignment with business requirements. Identifies technical design risks and develops mitigation strategies. Participates in estimating effort levels for technical aspects of solutions and designs. Maximizes the value of enterprise applications by fully utilizing their features and implementing platforms according to their optimal design. Utilizes agile methodologies to deliver scalable, high-performance solutions quickly, supporting the transformation of applications to meet business objectives. Platform Engineer is a technical professional responsible for designing and developing comprehensive platform solutions that align with specific business needs, by translating business requirements into technical solutions, collaborating with development teams to implement those designs, and ensuring the overall system architecture is efficient and scalable; they typically possess a strong understanding of various software technologies, solution computing, and project management principles to guide the development process strategically. Duties include but are not limited to:</p> <ul style="list-style-type: none"> • Design, implement, and manage scalable containerized applications using Docker and Kubernetes. • Develop and maintain CI/CD pipelines for the platform's deployment and automation. • Monitor and optimize the platform's performance, ensuring high availability and stability. • Support development teams working on the Vue3/Vuetify and Node stacks, assisting with platform integration and deployment. • Provide platform support, including troubleshooting, issue resolution, and proactive improvements. • Design scalable, reliable infrastructure to support application workloads. • Use observability tools to monitor system performance, identify issues and apply fixes proactively. • Evaluate new tools and integrate them into the platform for continuous improvement. • Work collaboratively with other Enterprise Architects to develop interfaces with other systems, security appliances, servers, devices (virtual & hardware), and databases. • Create architecture and design diagrams and other required documentation. • Technical Expertise in modern mobile application languages and tools including JavaScript, TypeScript, Vue.js, React.js, Node.js, Express.js, and NoSQL database systems. • Monitor and assesses security controls, conducts security impact analyses, and reports system security statuses. • Performs risk assessments and recommends IT solutions; analyze incidents and determines the appropriate response; design and adopt new technologies, architectures, and solutions to support security requirements • Function as a leader for security for the Platform Engineering Team and works with CDCR and CDT ISO organizations to provide input when necessary. • Responsible for secure design, best practices and application hardening to ensure system integrity. • Expertise in Agile Development Methodology, responsible for ensuring adherence to the methodology. • Responsibility to maintain the code repositories, currently the GitHub Enterprise implementation. • Develop and evolve CI/CD and release management processes and procedures. • Responsibility to maintain the GHE DevOps implementations. • Provide leadership, continuity, and escalation path to resolve issue and ensure forward momentum of projects. • Coordinate data maintenance and data quality efforts. • Identify opportunities for process improvement in the current applications and take the necessary 				

	<p>steps to have them evaluated and/or implemented.</p> <ul style="list-style-type: none"> • Develop impact assessments of proposed executive and legislative changes. • Provide technical expertise to projects in the CDCR and advise CDCR management in the planning, development, and implementation of complex IT solutions. <p>30%</p> <p>APPLICATION ARCHITECTURE & INFORMATION SECURITY</p> <p>The IT Specialist II is expected to maintain a high level of knowledge and skills in identifying and recommending technology solutions to improve processes or enhancing technology. These responsibilities include but are not limited to:</p> <ul style="list-style-type: none"> • As the expert in Progressive Web App (PWA) applications ensure security and industry best practices are reviewed and implemented where appropriate. • Work with strategic vendors and partners to review and influence product roadmaps, strategies, run proof of concepts, and identify gaps and solutions. • Evaluate, test and recommend new technology solutions and services for inclusion into the CDCR service catalog. • Making informed choices regarding technology selection, system design patterns, and architectural best practices. • Research, analyze, recommend and select technical approaches to address challenging development and integration problems with solution environments. • Perform research activities to identify emerging technologies and trends that may affect the enterprise. • Maintain awareness of vendor/product industry developments, regulations and trends and identify potential impacts to the enterprise. • Serve as the lead for the guidance of technical staff and coordination of scheduling and completion of work. • Participate in Change Control Board (CCB) meetings and Release Control Meetings. • Actively participate in the development and review of Request for Proposals (RFP), Feasibility Study Reports (FSRs), Post-Implementation Evaluations & Reviews (PIERs). • Ensure that data classification and categorization follow ISO policies and procedures. • Develop and maintain business continuity through design and architecting high availability and disaster recovery with the appropriate technology recovery plan. <p>As the technical expert provide best practices to build secure and high-performance Middle Tier interfaces that can be easily maintained.</p> <p>30%</p> <p>PLATFORM AND APPLICATIONS TECHNICAL SUPPORT</p> <ul style="list-style-type: none"> • Provide technical support for current platform/applications and serve as coordinator for development of new applications including infrastructure components. • Analyze, troubleshoot, and resolve the most complex platform infrastructure and security issues. Train and mentor staff to troubleshoot. • Monitor GHE CI/CD implementations to ensure adequate levels of performance and security are maintained and support development staff with any issues related to CI/CD processes. • Conduct root cause analysis to implement or recommend implementation of solutions • Implement change requests and resolve related problems of the most complex nature. • Develop documentation and submit Change Requests for platform and applications as required. • Demonstrate strong analytical and problem-solving skills. • Participate in formal and informal training programs to strengthen analytical skills and enhance knowledge of software tools and packages, which would prove beneficial to end-users. • Participate in Budget Change Proposals (BCP) for Data Security, Application Vulnerability/ Patch Management and Disaster Recovery (DR) and Business Continuity. <p>10%</p> <p>MENTORING AND TRAINING</p> <p>IT Specialist II is expected to possess advanced level knowledge and skills in solutioning and technologies. It is the responsibility of the IT Specialist II to train and mentor junior level CDCR staff to elevate the overall functional level of proficiency within the team. These duties include:</p> <ul style="list-style-type: none"> • Provide technical and professional leadership and coach more junior level CDCR staff.
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- Foster an innovative culture, promoting an open and proactive approach to collaboration and mentoring.
- Develop training material and test environments for CDCR staff.
- Assist in the Review, prepare and maintain the Technology Recovery Plan (TRP)
- Participate in development of division-wide methodologies and standards.
- Participate in project or unit staff meetings, including assuming backup responsibilities to the unit manager.
- Participate in mobile application user training activities.

This duty statement attempts to identify the most significant responsibilities but acknowledges that there may be other activities as required that make up the balance and totality of the job.

SPECIAL PERSONAL CHARACTERISTICS

- Influence, change, and strengthen the community. Set an example each day through positive and pro-social role modeling, utilizing dynamic security concepts through observation and building rapport.
- Willingness to play a significant role in the collaborative efforts toward rehabilitation and public safety enhancement.
- Ability to facilitate conversations as a coach and mentor, engaging in a respectful and understanding manner.
- Ability to build trust, improve communication, and assist with the transformation of correctional culture.

SPECIAL REQUIREMENTS

- CDCR does not recognize hostages for bargaining purposes. CDCR has a "NO HOSTAGE" policy and all prison inmates, visitors, nonemployees and employees shall be made aware of this.

CONSEQUENCE OF ERROR

- The consequence of error at the Specialist II level may have statewide and enterprise-wide impacts. Consequences include lost funding, project failure, failed business strategy, poor customer service and performance, risk exposure, loss of business continuity, missed business opportunities, and budget implications. Consequences also include error in making decisions or giving advice that would have a serious detrimental effect on the operating efficiency of the undertaking or function.

To be reviewed and signed by the supervisor and employee:

EMPLOYEE'S STATEMENT:

- *I HAVE DISCUSSED THE DUTIES AND RESPONSIBILITIES OF THE POSITION WITH MY SUPERVISOR AND RECEIVED A COPY OF THIS DUTY STATEMENT.*

EMPLOYEE'S NAME (Print)

EMPLOYEE'S SIGNATURE

DATE

SUPERVISOR'S STATEMENT:

- *I CERTIFY THIS DUTY STATEMENT REFLECTS CURRENT AND AN ACCURATE DESCRIPTION OF THE ESSENTIAL FUNCTIONS OF THIS POSITION*
- *I HAVE DISCUSSED THE DUTIES AND RESPONSIBILITIES OF THE POSITION WITH THE EMPLOYEE AND PROVIDED THE EMPLOYEE A COPY OF THIS DUTY STATEMENT.*

SUPERVISOR'S NAME (Print)

SUPERVISOR'S SIGNATURE

DATE