CEA ACTION PROPOSAL

Per California Code of Regulations, title 2, section 548.5, the following information will be posted to CalHR's Career Executive Assignment Action Proposals website for 30 calendar days when departments propose new CEA concepts or major revisions to existing CEA concepts. Presence of the department-submitted CEA Action Proposal information on CalHR's website does not indicate CalHR support for the proposal.

A. GENERAL INFORMATION

1. Date: 04/05/2016

2. Department: Department of Technology

3. Organizational Placement (Division/Branch/Office Name)

Office of Technology Services/CalCloud Services Division

4. CEA Position Title

Deputy Director, CalCloud Services Division

5. Summary of proposed position description and how it relates to the program's mission or purpose. (*2-3 sentences)*

The California Department of Technology is requesting approval to create the California Cloud (CalCloud) Services Division Deputy Director at the CEA category. The new CEA is responsible for improving the efficiency and effectiveness of California State government's use of Information Technology (IT) services as mandated by Technology Letter 14-04 Cloud Computing Policy. The policy establishes the strategy and obligation of State departments to utilize the Office of Technology Services (OTech's) Cloud Services, and the CEA is tasked with developing statewide policy and IT solutions to enable compliance.

6. Reports to: (*Class Title/Level*)

Assistant Chief, CEA C

7. Relationship with Department Director (*Select one)*

☑ Member of department's Executive Management Team, and has frequent contact with director on a wide range of department-wide issues.

☐ Not a member of department's Executive Management Team but has frequent contact with the Executive Management Team on policy issues.

(*Explain*):

8. Organizational Level *(Select one)*

☐ 1st ☐ 2nd ☑ 3rd ☐ 4th ☐ 5th (mega departments only - 17,001+ allocated positions)

B. SUMMARY OF REQUEST

9. What are the duties and responsibilities of the CEA position? Be specific and provide examples.

The CEA will be responsible for the CalCloud Services Division and participates as a member of the department's Executive Staff. The CEA's responsibilities include managing the OTech Statewide Information Technology (IT) infrastructure and services that comprise the California Cloud (CalCloud) Services offerings. This includes development and maintenance of high level policy affecting all facets of cloud-based IT for the State, development and implementation of IT policy governing existing and future cloud IT systems, and establishing Statewide IT standards for cloud technologies, services, security policy implementation and project oversight.

The CEA will direct the planning, development, implementation and maintenance of a comprehensive cloud IT infrastructure that continuously meets customers' dynamic business needs. The CEA will establish high-level statewide and department policies that impact day-to-day cloud services' IT operations at every level and that affect the people of California. The incumbent will ensure all CalCloud Services adhere to the State Information Security policies, National Institute of Standards and Technology (NIST), and other security and operational requirements. The incumbent is responsible for guiding and directing the implementation of Statewide enterprise cloud services, such as e-mail, secure file transfer, software-as-a-service, platform-as-a-service, infrastructure-as-a-service, and vendor-hosted subscription services.

The CEA will advise, communicate and collaborate with the Department of Technology Executives, the State Chief Information Officer (CIO), the Governor's Office, customer departments, the federal government and other key stakeholders for implementation of California's IT Strategic Plan. As a member of the Executive Staff, the CEA will participate directly in setting and implementing policies that affect OTech and its customers Statewide. The incumbent will be required to forge strong partnerships with customers' Chief Information Officers (CIOs), Agency Information Officers (AIOs), directors, and executive staff to understand their business objectives, and strive to meet those objectives through the use of cloud technology. The CEA will advise the Executive Staff and customers on all cloud systems and solutions that best meet customers' business needs. The CEA will meet with customers to establish business requirements and initiate project planning for new or additional 'as-a-service' capabilities that meet State, Federal, and security standards.

The CEA will resolve high-level risk and issues associated with IT applications and systems utilizing the State's cloud technology infrastructure and any cloud-based technology service statewide. The CEA will identify, express and resolve any impacts to the CalCloud Service offerings that result from customer needs or other external stakeholders.

B. SUMMARY OF REQUEST (continued)

10. How critical is the program's mission or purpose to the department's mission as a whole? Include a description of the degree to which the program is critical to the department's mission.

- ☑ Program is directly related to department's primary mission and is critical to achieving the department's goals.
- ☐ Program is indirectly related to department's primary mission.
- ☐ Program plays a supporting role in achieving department's mission (i.e., budget, personnel, other admin functions).

Description:

The mission of the California Department of Technology is to support programs and departments in the delivery of state services and information to constituents and businesses through agile, cost-effective, innovative, reliable, and secure technology. California's IT community aspires to be a trusted, recognized partner and technology provider that enables government to be accessible to citizens and to deliver services and information with excellence and creativity.

In order for the State's IT Projects and existing systems to comply with the IT Policy Letter 14-04, and more importantly achieve the cost savings and increased efficiencies available through use of Cloud services and technologies, OTech must establish a comprehensive program of Cloud Services that meets this demand. Currently, Cloud Services are provided through a series of individual ad-hoc solutions, including email, contract subscriptions to vendor-hosted private cloud software services, on premise computing infrastructure, and several other cloud-style service offerings. Through statewide policy and program development, the CEA will unify existing Cloud Services, establish policy for statewide use of Cloud Computing, and establish new cloud services to meet current and future demand. Adding this CEA position to the CalCloud program will position the State of California to more effectively manage the successful delivery of IT Projects through the use of Cloud Computing technology. This service area and associated delivery will meet the Governor's Office and the Legislature's expectation of reliable IT services, strategic direction and a new delivery structure.

B. SUMMARY OF REQUEST (continued)

11. Describe what has changed that makes this request necessary. Explain how the change justifies the current request. Be specific and provide examples.

AB 2408 was passed by the legislature to improve government efficiency through consolidation of departments as well as technology resources. One cornerstone of IT consolidation is the adoption of cloud computing technologies, which enables the sharing of a pool of configurable computing resources such as networks, servers, storage, applications and services. To this end, the Department of Technology established IT Policy Letter 14-04 Cloud Computing Policy, which set forth the high-level directive to all State departments to understand and utilize cloud computing models in IT Projects. The Department of Technology also established the Cloud Computing Reference Architecture, to explain the new paradigm and establish a standard framework for the IT community. Essentially, cloud computing is multi-dimensional, comprised of at least six service models and four deployment models, each with specific characteristics that achieve IT computing efficiencies and outcomes for subscribers of each.

These specific changes in policy and priority have driven the Department to implement new technologies to better serve customers, to keep pace with industry, and improve efficiencies and cost savings that are the promise of Cloud computing. These new directives require technology changes, process changes and organizational changes affecting staff at all levels of OTech. Examples of changes include:

• Business Model Changes -- IT staff no longer purchase and build physical server hardware, but instead set-up and maintain unified hardware that is shared by multiple operating systems and customers.
• New IT Skills -- IT staff must learn new software technologies and delivery methodologies to keep pace with the change in customer demands resulting from this paradigm shift.
• New IT Security Model -- IT security becomes much more complex when computing resources are shared, and requires new skills and knowledge be brought into the organization.
• Increased Customer Collaboration -- To achieve ‘on demand’ purchase of computing resources by customers, OTech must establish and maintain stronger governance by its customers than was required in the past; customers will share computing services that they previously purchased as stand-alone equipment.
• Broader Vendor Participation – Adoption of Cloud computing models requires greater public-private partnerships to deliver industry capability to public sector entities, in a secure and cost-effective manner.

C. ROLE IN POLICY INFLUENCE

12. Provide 3-5 specific examples of policy areas over which the CEA position will be the principle policy maker. Each example should cite a policy that would have an identifiable impact. Include a description of the statewide impact of the assigned program.

The CalCloud Services Division CEA will be the principle policymaker over the following areas, and these policy responsibilities will have statewide impact in several program areas:

1. IT Security – IT Security Policy for CalCloud services must be set in accordance with statewide policy and at the same time will require updates and changes to Statewide policy. This program must comply with all necessary State Administrative Manual (SAM) and Statewide Information Management Manual (SIMM) policies, including Technology Recovery assessments and applicability, as well as all Federal security requirements for data and information contained in services and systems that comprise cloud computing. Without appropriate and sufficient policy, confidential state-owned data is at risk of loss.

2. Cloud Procurement, Contracts and Rates – Procurement policy will require adaptation in order to implement the necessary public-private partnerships inherent in the delivery of CalCloud Services. This program element will develop and implement the contracts, the appropriate sourcing model (e.g., in house, vendor provided, public/private partnership, etc.) and the associated rates to customers. Through this program, the CEA and OTech will enhance, modify, and create, as necessary, new SAM and SIMM policies to ensure understanding and compliance to the developed procurement policy. Further, the CEA will oversee development of standard templates and language for Request for Quote/Proposal/Offer to ease compliance and adherence to these standards. Without appropriate policy, each State department must perform this function on its own, without benefit of shared knowledge and reuse of standards that properly and securely enable the use of cloud services vendors. Without statewide policy leadership in this area, many state entities will be unable to properly leverage cloud services without unacceptably high risk.

3. VHSS Expansion – New procurement and security policies and standards are required to expand the fledgling program element of Vendor Hosted Subscription Service (VHSS), which is highly desired by public State entities. All aspects of customer adoption and usage of these VHSS solutions will be managed by this program element, including standards, policies, procedures and costs, to ensure ease of customer adoption and transition, and reduce overall risk.

4. Technology Roadmap – The CEA is responsible for implementing technology and architectural standards and policy for all aspects of CalCloud program elements, many of which are listed above. These policies will ensure that the State uses industry best practices and has continuous improvement reviews of these policies. The CEA will lead and maintain a collaborative Enterprise Architecture Board comprised of State customer entities, to ensure customer-focused governance for CalCloud Services technology policy.

5. Adoption and Capacity Planning – Through policy development and implementation, the CEA will define the process and mechanisms that enable increased adoption of Cloud technologies by State departments implementing IT Projects. By setting and communicating policy to the State IT leadership community, the CalCloud CEA enables appropriate and effective use of CalCloud services through the project approval lifecycle, and IT project implementation. The CEA will collaborate with the highest executive levels of the Department of Finance, customer AIOs and CIOs, VHSS providers, and cloud infrastructure services to implement appropriate and effective policy to support increased adoption of cloud technologies.

C. ROLE IN POLICY INFLUENCE (continued)

13. What is the CEA position's scope and nature of decision-making authority?

The scope for the CalCloud Services Division CEA position includes the setting of statewide IT architecture policy, governance and standards through the SAM and the SIMM. In doing so, the incumbent serves as a strategic executive, subject matter expert and policymaker in the establishment and execution of Cloud computing services for the State of California public sector organizations. The incumbent oversees and approves architecture and security standards for cloud services provided by OTech, as well as any software considered for partnerships with vendors under a hybrid-cloud service delivery model. Through the CEA, the California Department of Technology consolidates the variety of services delivered through the cloud computing service models under one policy and operational leader. Focused leadership and expertise at the executive level within the State will improve the planning, quality, value and likelihood of success for technology projects undertaken by the State of California that conform to the Cloud First and related executive policy. The Cloud First operating model is designed to achieve standardized architecture, costing and software options for use by departments and agencies when assessing their IT projects, program business and technology needs. This updated IT business model will reduce the need for “one off” (non-standard) IT solutions, and provide a repeatable process for faster execution of IT application components to meet business needs. As additional CalCloud technologies, delivery methods and strategies become established within the domain, the CEA will be responsible for updating, deleting, or adding new SAM and SIMM sections to communicate the new policies and guidelines as appropriate.

The specific policy scope and authority resides in SAM Sections 4819.2, 4981, 4983, and Chapters 5100 and 5300, which introduces cloud computing definitions, a “Cloud First” policy, and includes federal IT processing standards as well as security policy. Contained in the SIMM is 58C, 58D, 66B, 5305A, 5310A and B, 5325A and B, 5330A, B and C, 5340A, B and C, and 5360B, which defines the Cloud Computing Reference Architecture for the state, and incorporates social media and security policy overall. The purpose of architecture standards, as well as standardized platform and software service delivery, is to ensure that the delivered product, service or result meets the customer’s requirements, is delivered on time and within budget, and does this in a way that maximizes the use of shared computing resources. A standardized approach to service delivery methodology improves the quality of project planning, thus improving the likelihood of project success during execution phase.

14. Will the CEA position be developing and implementing new policy, or interpreting and implementing existing policy? How?

The CEA will be developing new high-level statewide and departmental policies for all aspects of CalCloud program elements which will impact how departments utilize and manage IT infrastructure and cloud services. The CEA will establish statewide IT architecture policy, governance and standards through the SAM and SIMM. Department's establishment of IT Policy Letter 14-04 Cloud Computing Policy, directed all State departments to understand and utilize cloud computing models in IT projects. Further policy development is required as new technologies are implemented and process changes are made to improve CalCloud services to customers.

The development of new statewide and departmental policies will also necessitate revision to existing policy in areas such as IT Security, Cloud Procurement, Contracts and Rates, Vendor Hosted Subscription Services (VHSS) expansion, and Adoption and Capacity Planning.