



# Information Technology Classification Consolidation Project

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**Category:** Cross-Boundary Collaboration & Partnerships

**State:** California

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**Project Initiated:** January 2014

**Project End:** July 2018

## Executive Summary:

Under the leadership of the Government Operations Agency (GovOps) and the California Department of Human Resources (CalHR), the state consolidated 36 IT classifications down to nine service-wide classifications. Even though the concept of consolidation and streamlining goes back decades, the IT Classification Consolidation Project began as recently as 2014 – part of CalHR’s Strategic Plan. Effective January 31, 2018, more than 10,000 civil service positions were reallocated and transitioned into this new, streamlined system. This modernization of the state’s decades-old IT classification system – now offering greater clarity about job qualifications and opportunities – improved California’s ability to attract and retain those highly sought employees who possess essential technical skills.

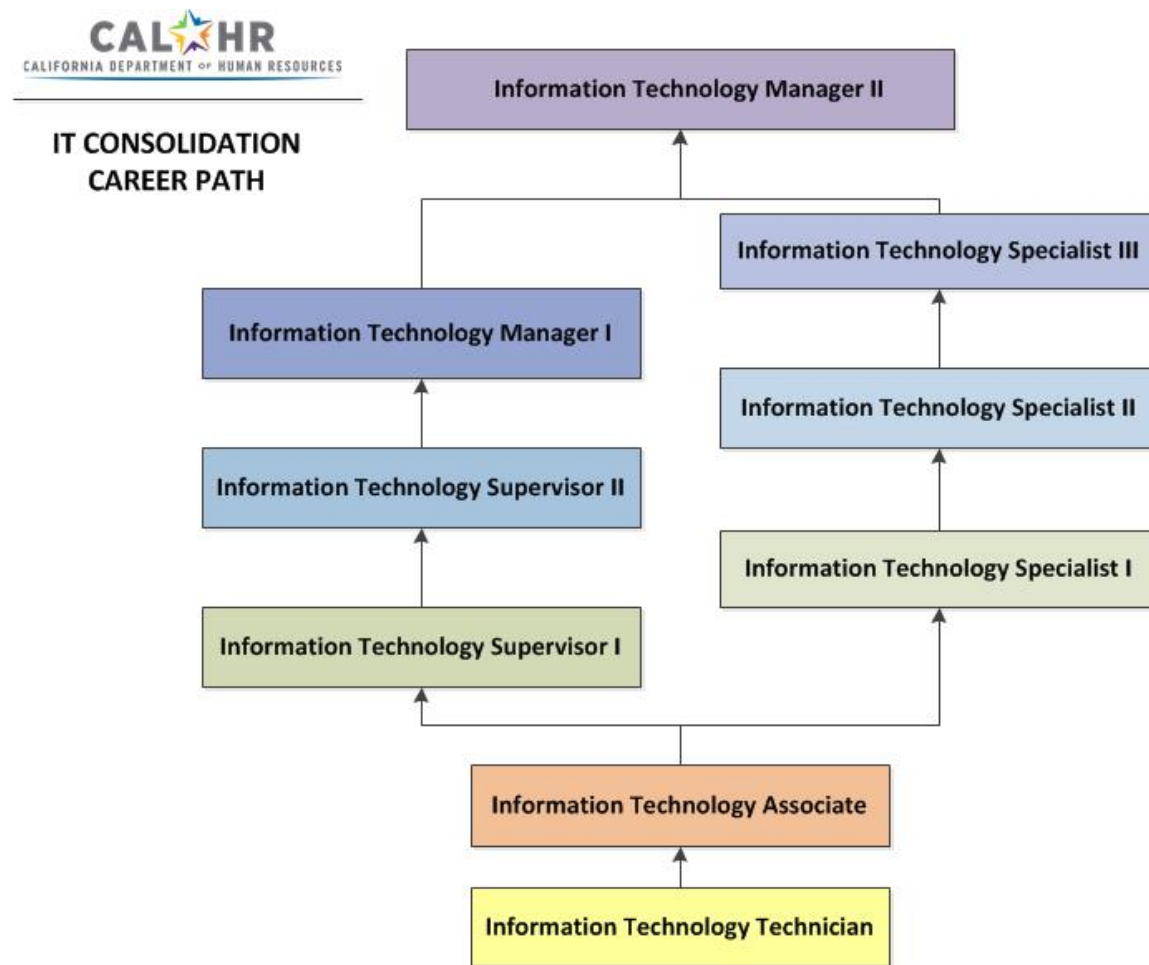


Figure 1: California State IT Classification Structure – Post Consolidation January 2018

# Concept

In January 2014, the statewide, interjurisdictional Cybersecurity Taskforce invited the California Department of Human Resources (CalHR) to participate on the Workforce Development and Education Subcommittee. Cybersecurity Taskforce members from the California Department of Technology (CDT) shared information with CalHR about the growing threat landscape in the world of cybersecurity and explained that in order to meet that threat with qualified state IT staff, the state would need to explicitly incorporate cybersecurity work into the state's IT classification system and begin hiring for those skill sets as soon as possible. The problem was that the state's IT classification system was composed of dozens of overlapping classifications, many of which were originally established more than 40 years prior, and none of which referenced modern cybersecurity work or really any modern IT concepts at all. As a result of these embarassingly outdated job class descriptions, the state had a historical problem of not being able to attract enough people with sufficiently modern skill sets to perform IT work, and as a result, frequently contracted out for highly skilled IT workers at a premium price.

Systems Software Specialist	Data Processing Manager	Programmer Analyst	Project Manager	Health and Welfare Agency	DCS	POST
Information Systems Technician	Computer Operators	Programmer	Information Systems Analyst			
1358 - SYSTEMS SOFTWARE SPECIALIST II (SUPERVISORY)	1387 - DATA PROCESSING MANAGER IV		7580 - PROJECT MANAGER (INFORMATION TECHNOLOGY)			
1359 - SYSTEMS SOFTWARE SPECIALIST III (SUPERVISORY)	1388 - DATA PROCESSING MANAGER III		7581 - SENIOR PROGRAMMER ANALYST (SUPERVISOR)			
1358 - SYSTEMS SOFTWARE SPECIALIST II (SUPERVISORY)	1389 - DATA PROCESSING MANAGER II	1584 - SENIOR PROGRAMMER ANALYST (SUPERVISOR)	1340 - SENIOR INFORMATION SYSTEMS ANALYST (SUPERVISOR)	7741 - SENIOR PROGRAM SYSTEMS ANALYST (SUPERVISOR)		1388 - MANAGER, ELECTRONIC DATA PROCESSING ACQUISITION
	1391 - DATA PROCESSING MANAGER I	1583 - STAFF PROGRAMMER ANALYST (SUPERVISOR)	1316 - STAFF INFORMATION SYSTEMS ANALYST (SUPERVISOR)			1389 - SENIOR ELECTRONIC DATA PROCESSING ACQUISITION SPECIALIST (SUPERVISORY)
			1471 - ASSOCIATE INFORMATION SYSTEMS ANALYST (SUPERVISOR)			
1407 - INFORMATION SYSTEMS TECHNICIAN SUPERVISOR I	1350 - COMPUTER OPERATIONS SUPERVISOR II					
1408 - INFORMATION SYSTEMS TECHNICIAN SUPERVISOR I	1351 - COMPUTER OPERATIONS SUPERVISOR I					
1367 - SYSTEMS SOFTWARE SPECIALIST II (TECHNICAL)		1583 - SENIOR PROGRAMMER ANALYST (SPECIALIST)	1337 - SENIOR INFORMATION SYSTEMS ANALYST (SPECIALIST)	7740 - SENIOR PROGRAM SYSTEMS ANALYST (SPECIALIST)		1368 - SENIOR ELECTRONIC DATA PROCESSING ACQUISITION SPECIALIST (TECHNICAL)
1373 - SYSTEMS SOFTWARE SPECIALIST II (TECHNICAL)		1581 - STAFF PROGRAMMER ANALYST (SPECIALIST)	1332 - STAFF INFORMATION SYSTEMS ANALYST (SPECIALIST)			1361 - STAFF ELECTRONIC DATA PROCESSING ACQUISITION SPECIALIST
1387 - SYSTEMS SOFTWARE SPECIALIST I (TECHNICAL)		1579 - ASSOCIATE PROGRAMMER ANALYST (SPECIALIST)	1470 - ASSOCIATE INFORMATION SYSTEMS ANALYST (SPECIALIST)	7757 - ASSOCIATE PROGRAM SYSTEMS ANALYST		2960 - SENIOR INSTRUCTIONAL SYSTEMS ENGINEER, COMMISSION ON PACE OFFICER STANDARDS
1385 - ASSOCIATE SYSTEMS SOFTWARE SPECIALIST (TECHNICAL)		1383 - PROGRAMMER II	1479 - ASSISTANT INFORMATION SYSTEMS ANALYST RANGE C			2949 - INSTRUCTIONAL SYSTEMS ENGINEER, COMMISSION ON PACE OFFICER STANDARDS AND TRAINING
1357 - INFORMATION SYSTEMS TECHNICIAN SPECIALIST II	1363 - COMPUTER OPERATIONS SPECIALIST II					2947 - INSTRUCTIONAL DESIGNER (TECHNOLOGY), COMMISSION ON PACE OFFICER
1362 - INFORMATION SYSTEMS TECHNICIAN SPECIALIST I	1360 - COMPUTER OPERATIONS SPECIALIST I	1382 - PROGRAMMER I	1479 - ASSISTANT INFORMATION SYSTEMS ANALYST RANGE A & B			
1360 - INFORMATION SYSTEMS TECHNICIAN	1353 - COMPUTER OPERATOR					

Figure 2: California State IT Classification Structure – Prior to Consolidation in January 2018

CalHR concluded that it would be ineffective to amend any of the existing outdated state classifications with references to modern cybersecurity tasks. To make meaningful change that would allow state departments to recruit and hire the experts needed in cybersecurity and other modern IT domains, CalHR would have to tackle the much larger project of overhauling the state's decrepit IT classification system.

This was no small task as the effort would impact more than 10,000 state employees at virtually every state department and would require significant cross-boundary collaboration and partnership between user departments, multiple control agencies, unions and other stakeholders. In fact, two prior major efforts to modernize the state's IT classifications had been undertaken and had failed within the prior 15 years.

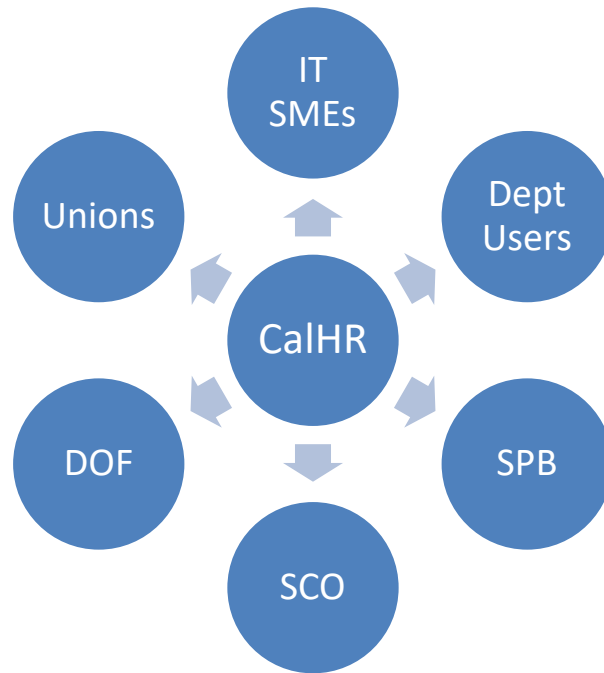


Figure 3: Cross-boundary Stakeholders on the IT Classification Consolidation Project

## Significance

Later in 2014, then Governor Edmund G. Brown Jr. via the Government Operations Agency (GovOps), launched the Civil Service Improvement (CSI) initiative, a broad, multi-faceted effort to update the state's civil service system. Classification consolidation is a foundational part of that CSI initiative and aims to produce a sleek, modern classification system that allows departments to find and quickly hire the best candidates through a fair and merit-based process. Classification consolidation:

- Aligns state job descriptions with current and projected workforce needs;
- Increases clarity to applicants outside and inside of government about what positions are available and what skills, knowledge and abilities are required of a person hired into those positions; and
- Reduces the number of hurdles to employment by minimizing the number of examinations a person must take to get a state job or make career advancements.

CalHR determined that classification consolidation under CSI was the perfect vehicle for overhauling the state's IT classifications and incorporated the IT Classification Consolidation Project into its 2014-2018 Strategic Plan. In January 2015, CalHR began holding data collection meetings with a core group of subject matter experts consisting of Human Resources and Information Technology professionals and CalHR's Personnel Management Division (PMD) staff. This cross-departmental core team consisted of nearly 50 experts and represented 13 departments and five agencies. Together, lead by CalHR PMD staff, the core team designed an IT classification concept that replaced 36 outdated, overlapping IT classifications with a single nine-class series with a clear career path and modern scope comprising six domains. Seven other old IT classes were also identified to be phased out upon attrition of the incumbents as part of the IT Classification Consolidation Project.

The concept identified and defined six broad domains covering all Information Technology work.

- Business Technology Management
- Client Services
- Information Security Engineering
- Information Technology Project Management
- Software Engineering
- System Engineering

The domains were intended to capture current and emerging technology and provide the classifications with flexibility that will last the state for the foreseeable future as technology continues to evolve. The new series classification specification is designed to cover the entire spectrum of IT work.

The new classification series also improved the administrative structure by making supervisory and managerial roles and reporting relationships much clearer. The nine new classifications comprise two managerial levels, two supervisory, one expert consultant level, and four specialist and working levels. Three of the new classes are deep classes, with alternate ranges that provide for employee retention by increasing levels of work experience and compensation without requiring repetitive examinations.

Once the core team had outlined the new high level concept, CalHR PMD staff lead the core team on six subcommittees covering each of the identified broad domains of modern IT work. CalHR PMD, in partnership with the core team experts, convened workgroups with more than 100 additional subject matter experts to identify the tasks, knowledge, skills and abilities relevant to each of the six major IT work domains. CalHR PMD staff then turned that subject matter expert data into a survey, which had more than 2,200 respondents. The survey data was part of the IT occupational analysis and was eventually used in the development of new online exams for the new IT class series. It served to validate the job-related nature of the tasks, knowledge, skills and abilities that had been identified by the smaller subject matter expert groups.

The Minimum Qualifications for each of the classifications were developed to allow for the recruitment of a wide range of individuals with a core of Information Technology education or experience. These qualifying patterns balance work experience with formal education. The Information Technology field is unique because many qualified individuals can learn the skills required on their own or through working tech jobs instead of through college or trade school courses.

Aside from the expert core team, CalHR discussed this project with many stakeholders, such as CalHR's Labor Relations Division, Selection Division, and Office of Civil Rights; the Department of Finance; the State Controller's Office; the Department of Technology; and the Government Operations Agency. CalHR also discussed the concept with the Association of California State Supervisors, and it met with SEIU Local 1000 more than a dozen times over the course of two years. The State Personnel Board, which has constitutional authority over the state's classification plan, approved the IT class consolidation at its January 11, 2018 meeting.

However, the cross-boundary collaboration did not stop with the adoption of the new classification series in January 2018. CalHR PMD staff continued to collaborate with partner stakeholders such as the State Controller's Office and user departments statewide to implement the change to more than 10,000 state employees.

To implement this massive change for departments, CalHR:

- Held six change management sessions over the course of three days in late January 2018, providing education about the change to employees, hiring managers and human resources shops;
- Published a pay letter on January 31, 2018, consistent with the implementation date and in coordination with our partners at State Controller's Office (SCO), who also published a complementary payroll letter providing detailed instruction to departments on what transactions would be handled in an automated mass update and which ones would have to be manually handled by departmental staff;
- Made the new IT exams live and available for use on January 31, 2018;
- Coordinated with our Selections and IT divisions so that departments could begin posting job openings for the new classes on the January 31, 2018 effective date;
- Published website content including the change management forum slide presentation, new class specifications, new Alternate Range Criteria, new pay ranges, as well as extensive and detailed allocation guides and Frequently Asked Questions to further assist hiring managers and HR shops with the new classifications;
- Provided written direction to departments, including templates for mandatory implementation reporting that we agreed to provide the union;
- Set up a central inbox and answered over 500 questions from departments;

As the employee organizations were very concerned about the outcome for incumbents, CalHR staff collected data from all user departments regarding incumbent promotions

and alternate range changes, reporting this information back to the union by their requested deadline in July 2018. Here are some aggregate highlights of the report:

- 10,148 employees were reallocated from the old classes to the new classes on January 31, 2018
- 2,499 employees also received a secondary range placement due to the new deep class alternate ranges (resulting in a salary increase)
- 138 promotions occurred in the last six months
- 349 new hires

## Impact

Since the January 2018 adoption of the new nine-class IT series, CalHR has received very positive feedback on the modernized IT classes from state IT leaders. Managers and supervisors love the flexibility and the modernized scope of the series. We have heard anecdotes that hiring managers are receiving significantly more applications for IT positions that previously garnered little interest, resulting in larger, deeper candidate pools. Employees have benefitted from a clearer career path, fewer required examinations and the automatic movement associated with the new deep classes. Some employees have enjoyed pay increases as a result of their reallocation and secondary movement into higher alternate ranges based on standard salary rules.

The modernized system dramatically improves civil service IT positions – both for the people in the jobs and for the State of California, which is better able to attract, and keep, employees with vital technical skills. The IT Classification Consolidation Project provides:

- Greater clarity for IT workers on what jobs they can qualify, and apply, for and how to advance their careers.
- Greater ability for the state to hire the best-qualified candidates by giving experience equal weight to education.
- Greater clarity of reporting relationships and managerial roles.
- Flexibility for the state to adapt to IT industry advances and changes.
- Modernized domain and job descriptions that better reflect current jobs and the skills and experience needed to do them.