



***AMENDED, RESTATED AND REVISED  
LEADER REPLACEMENT SYSTEM  
AGREEMENT***

***Attachment 6 (Statement of Work for Data Growth -  
Archiving Phase 1 & 2) to Change Notice Twenty-  
Eight, inclusive of***

***Attachment 5 (Pricing Schedules for Data Growth –  
Cost Avoidance: Archive Phase 1 & 2) to the  
Change Notice Twenty-Eight and***

***Schedule 30 of the Attachment 2 (CalSAWS M&O  
Pricing Schedules) to Schedule 1 (Statement of  
Work for CalSAWS Maintenance and Operations  
("M&O") Project) to Exhibit X***

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## **1. INTRODUCTION AND OVERVIEW**

For the purposes of this Attachment 6 (“SOW”) to Change Notice Twenty-Eight to Exhibit X of the Amended, Restated and Revised Leader Replacement System Agreement for a California Statewide Automated Welfare System ("Agreement") the meaning of all terms used in this SOW shall have those meanings as set forth in the Agreement, unless otherwise specified herein. Furthermore, all Work performed pursuant to this SOW shall be subject to the terms and conditions of the Agreement, unless otherwise expressly stated in this SOW.

The California Statewide Automated Welfare System (CalSAWS) Consortium has requested Accenture to provide the Archiving Phase 1 & 2 Projects as described in this SOW.

### **1.1 SCHEDULE**

The term of this SOW shall commence on March 1, 2023, and continue through July 31, 2025.

## **2. STATEMENT OF WORK**

2.1 Accenture will provide resources during the term of this SOW to assist the Consortium with creating a strategic path to move CalSAWS from the Oracle database to a cloud native database and migrate the core CalSAWS framework to Microservices implementation.

Phase 1 is to enable CalSAWS to archive data older than three years to a separate cloud native database (including correspondence).

Phase 2 is to move the data within specific CalSAWS functionality (Journal and MEDS Alerts) to a separate cloud native database, which is accessible by CalSAWS application components through the Microservices implementation. This Microservices implementation will be used as a pilot version to upgrade CalSAWS to the Microservices framework.

2.2. The scope of Work under this SOW is based upon the following assumptions:

- This SOW includes up to 4,695 hours for Phase 1 (Phase 1 targeting Eligibility CalHEERS, correspondence and fiscal tables) and 7,823 hours for Phase 2

(Phase 2 targeting Journal and MEDS Alerts) for Accenture resources to provide the design, development, and testing of new components for CalSAWS towards enabling cloud native database and Microservices implementation. This SOW includes up to 3,282 hours for maintenance and operational purposes of Archiving Phase 1, and up to 3,736 hours for maintenance and operational purposes of Archiving Phase 2. These hours will support the work described in this SOW for the time period referenced in Section 1.1 of this SOW.

- The work performed under this SOW will be tracked in a work plan, including actual hours worked on tasks, estimates to complete tasks, estimates at completion for tasks, and work variances. Accenture will provide the Consortium with access to that work plan.
- The work described in this SOW will be performed virtually/remotely.
- Nine environments are identified for this initiative; any additional environments identified would be outside of scope. Below is a list of the identified environments for this effort:
  - CalSAWS Dev (includes Unit Test DB1 and Priority Unit Test)
  - CalSAWS AT1
  - CalSAWS System Test 1
  - CalSAWS PAT
  - CalSAWS Staging
  - CalSAWS Perf Test
  - Production
  - Disaster and Recovery (DR)
- AWS Costs to account for database growth for both Archiving Phase 1 and 2 are not included in the SOW.

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- This estimate includes service charges only. It does not include hardware, software, or AWS Costs required to implement this work.
- Assumptions for Archiving Phase 1:
  - No requirement for report to have any additional infrastructure.
  - Secondary database will be sized at 10% of the current production.
  - Nine environments will need an Archival solution to be in place.
  - Each environment will need 2 Aurora PostgreSQL RDS (a total of 18 Aurora PostgreSQL RDS).
  - Each RDS storage will be sized at 10% of the Production Primary Oracle Database.
  - Each RDS compute will be sized at the current computing capacity of Production MISC Aurora MySQL RDS (db.r5.4xlarge).
  - Cyclic/Scheduled Batch jobs will be used to migrate the one off DCRs, which will create entries in the Primary database.
  - DDL sync between Primary and Archive database - Increased Operational work (Meds Alert).
  - One time migration will be performed to offload the data from primary to archive database.
  - Cyclic/Scheduled Batch jobs will continue to migrate the older data every month.
  - Less than 0.05% of transactions access data older than 3 years. ~100 requests per day.

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- The Archive database will be the future database for EDBC/Fiscal or Correspondence Microservices.
- Not expected to go through RWR (Release When Ready); expectation is that it will go through the standard release cycle.
- **Technical Architecture: Maintenance & Operations (M&O)** Support for first 2 months of new pipelines (deployment mechanism for build and deploy) (Total = 20 hours / month for 2 Months)
- **ForgeRock:** Support Release (Monthly); Application Programming Interfaces (API) leverages ForgeRock authentication; 1 Hour per month per environment (total of 8 environments); one environment is data base only and not supported by ForgeRock (thus, no cost estimated for ForgeRock under M&O). Security - Code Scan and Remediation (weekly) 0.5 Hours per environment (18). Production Monitoring and instrumentation support (Dynatrace, Splunk) (Total = 4 hours / month).
- **Database Administration (DBA):** Long Term data base support is estimated at 4 hours per month per instance with a total of 18 instances. This includes build support, environment support, monitoring, incident support, security activities, data refreshes, patching activities, and change management.
- **Application Development (Level 3 Support):** This archive is a new and first-time approach in CalSAWS due to which the Consortium and County users will reach out to Application Development via tickets, queries, and clarification. The inflow of tickets/queries will be high in the beginning before it gets to a stable state. The Maintenance & Operations (M&O) L3 Help Desk Support estimates for App Dev have been added accordingly.

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- **Technical Operations:** Build & Deployment (Monthly); Archival Build, Deployment and Code Merges, 1 hour effort, 10 deployments for 9 environments per month (90 hours). Support schedule archival data migration (Monthly); 2 hours per environment, per month (18 hours). Support Event driven Async processing and handle failovers (Monthly) 2 hours per environment, per month (18 hours).
- Assumptions for Phase 2:
  - No requirement for reports to have any additional infrastructure.
  - Secondary DB will be sized at 10% of the current production.
  - Nine environments will need an Archival solution to be in place.
  - Each environment will need 1 Aurora PostgreSQL RDS (a total of 9 Aurora PostgreSQL RDS).
  - Each environment will need 1 DynamoDB (a total of 9 DynamoDB).
  - Each RDS storage will be sized at 10% of the Production Primary Oracle Database.
  - Each RDS compute will be sized at the current computing capacity of Production MISC Aurora MySQL RDS (db.r5.4xlarge).
  - Cyclic/Scheduled Batch jobs will be used to migrate the one off DCRs, which will create entries in Primary database.
  - DDL sync between Primary and Archive database - Increased Operational work (Meds Alert).
  - One time migration will be performed to offload the data from primary to archive database.

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- Cyclic/Scheduled Batch jobs will continue to migrate the older data every month.
- Less than 0.05% of transactions access data older than 3 years. ~100 requests per day.
- DDL sync between Primary and Archive database - Increased Operational work.
- The Archive database will be the future database for EDBC/Fiscal or Correspondence Microservices.
- Not expected to go through RWR (Release When Ready); expectation is that it will go through the standard release cycle.
- **Explanation Highlighting the Complexity of Archive Phase 2 Microservices:** The Tech Arch delivery will require advanced RDS / Oracle skills to re-architect the data model to retrieve data correctly. One time effort will be required to integrate archival architecture pattern into IAC pipelines. Operational Readiness Testing will be performed against new architecture patterns to validate disaster recovery capability within existing RTO / RPO. Creating the archival Architecture to be able to gracefully scale / down up will require incremental skills are brought onto the CalSAWS program.
- **Technical Architecture:** Maintenance & Operations (M&O) Support for first 2 months of new pipelines (deployment mechanism for build and deploy) (Total = 20 hours / month @ 2 Months)
- **ForgeRock:** Support Release (Monthly); Application Programming Interfaces (API) leverage ForgeRock authentication; 1 Hour per month per environment (total of 8 environments); one environment is database only and not supported by ForgeRock (thus, no cost estimated for



ForgeRock under Maintenance & Operations (M&O)). Security - Code Scan and Remediation (weekly) 0.5 Hours per environment (18). Production Monitoring and instrumentation support (Dynatrace, Splunk) (Total = 4 hours / month).

- **Database Administration (DBA):** Long term database support is estimated at 4 hours per month per instance with a total of 18 instances. This includes build support, environment support, monitoring, incident support, security activities, data refreshes, patching activities, and change management.
- **Application Development (Level 3 Support):** This archive is a new and first-time approach in CalSAWS due to which the Consortium and County users will reach out to Application Development via tickets, queries, and clarification. The inflow of tickets/queries will be high in the beginning before it gets to a stable state. The Maintenance & Operations (M&O) Level 3 Help Desk Support estimates for Application Development have been added accordingly.
- **Technical Operations:** Build & Deployment (Monthly); Archival Build, Deployment and Code Merges, 1 hour effort, 10 deployments for 9 environments per month (90 hours). Support schedule archival data migration (Monthly); 2 hours per environment, per month (18) hours. Support Event driven Async processing and handle failovers (Monthly) 2 hours per environment, per month (18 hours).

### **3. PRICING**

Pricing details for the scope of this Statement of Work are defined:

- For the period from March 1, 2023, to May 31, 2023, for Data Growth – Cost Avoidance: Archive Phase 2 only, in Attachment 5 (Pricing Schedules for Data Growth – Cost Avoidance: Archive Phase 1 & 2) to the Change Notice Twenty-Eight to the Agreement.

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- For the period from June 1, 2023, through the end of this SOW, for Archive Phase 2 only, in schedule 3O of the Attachment 2 (CalSAWS M&O Pricing Schedules) to Schedule 1 (Statement of Work for CalSAWS Maintenance and Operations (“M&O”) Project) to Exhibit X of the Agreement.
- For the period from June 1, 2023, through the end of this SOW, Archive Phase 1 is funded under both Attachment 5 (Pricing Schedules for Data Growth – Cost Avoidance: Archive Phase 1 & 2) to the Change Notice Twenty-Eight to the Agreement and in schedule 3O of the Attachment 2 (CalSAWS M&O Pricing Schedules) to Schedule 1 (Statement of Work for CalSAWS Maintenance and Operations (“M&O”) Project) to Exhibit X of the Agreement. For avoidance of doubt, for the period of SFY 23-24, Archive Phase 1 is funded under both Attachment 5 (Pricing Schedules for Data Growth – Cost Avoidance: Archive Phase 1 & 2) to the Change Notice Twenty-Eight to the Agreement and in schedule 3O of the Attachment 2 (CalSAWS M&O Pricing Schedules) to Schedule 1 (Statement of Work for CalSAWS Maintenance and Operations (“M&O”) Project) to Exhibit X of the Agreement.