D-4.2-03 – IHSS CMIPS Detailed System Design (DSD) (R2025.03.01) Section 1-3

Version 1.0

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Table of Contents

DSD 1/Document Control

DSD 1/Document Control/Amendment Record

Version	Date	Status	Author	Comment
				All Amendment Record entries are located in DSD – Appendix B.

DSD 1/Document Control/References

Document	Author	Status	Version
CMIPS M&O Contract # 79031355	CalHHS OTSI	Approved	6/29/2018
Glossary and Acronyms CMIPShare List	CMIPS Project Staff	Active	N/A

DSD 1/Document Control/Terminology

Please refer to the IHSS_CMIPSII_Words Terms and Acronym Usage Guide.doc. This document can be found in the CMIPS II Project Workbook.

Term	Definition
ABA	American Banking Association
ACH	Automated Clearing House
AD	Automated Disbursement
ADNT	Auto Numbering
AP	Advance Pay
APD	Adult Program Division
APPR	Appropriation
ASCII	American Standard Code for Information Interchange
ATIN	Adoption Tax Payer Identification Number
BATCH RUN	Job Manager
Blue Book	Electronic Tape Claim Submission Requirements (SCO Division of Audits)
BAW	Business Automation Workflow
BSA	Balance Sheet Account
BTO	Business Technology Optimization
BUPP	Back-up Pilot Program
CAB	Cabinet
CACT	Customer Account
CAFR	Comprehensive Annual Financial Report
CalHHS OTSI	California Health and Human Services Agency, Office of Technology and Solutions Integration
CALSTARS	California State Accounting and Reporting System
CATG	Pay and Leave Category
CC	County Contractor
CDA	California Department of Aging
CDPH	California Department of Public Health
CDT	California Department of Technology
CDSS	California Department of Social Services
CHCK	Check Disposition
CHREC	Check Reconciliation
CLDT	Calendar Date
CM	Case Management
CMIA	Cash Management Improvement Act
CMIPS	Case Management, Information and Payrolling System
CNTAC	Contact
COTS	Commercial Off-the-Shelf
CPRM	Check Print Parameters
CR	Change Request
CSDD	COTS Software Design Description

CWD	County Welfare Department
CYCL	Cycle
DBA	Doing Business As
DC	Disbursement Correction
DDI	Design, Development and Implementation
DE1	Employer Registration Form
DE231L	Info-sheet for Household Employment
DE34	Employee Registration Form
DE44	California Employer's Guide 2009
DE678	Tax and Wages Adjustment Form
DE88	Payroll Tax Deposit Form
DE8829	Household Employer's Guide 2009
DE9	Quarterly Reconciliation Statement
DE9C	Quarterly Wage and Deduction Report
DED	Deliverable Expectation Document
DEPT	Department
DEPTFY	Department Fiscal Year
DEPTX	Extended Department
DEX	Data Exchange
DHCS	Department of Health Care Services
DIEC	Disability Insurance Elective Coverage
DISC	Disbursement Category
DISF	Disbursement Format
DISP	Disbursement Priority
DISPA	Disbursement Parameters
DISRQ	Disbursement Request
DMZ	Data Management Zone
DOB	Date of Birth
DOJ	Department of Justice
DOL	Department of Labor
DR	Disaster Recovery
DSD	Detailed System Design
DTS	Data Transformation Services
EBCDIC	Extended Binary Coded Decimal Interchange Code
EBIC	EDIRA Business Identifier Code
EDD	Employment Development Department
EDMS	Electronic Documentation Management System
EEO	Equal Employment Opportunity
EFT	Electronic Funds Transfer
EFTPS	Electronic Federal Tax Payment System
EIC	Earned Income Credit

EIN	Employer Identification Number
ESP	Electronic Services Portal
ERMS	Electronic Records Management System
ESMT	Employee Status Maintenance
ETL	Extract, Transform and Load
ETT	Employment Training Tax
EWO	Earnings Withholding Order
EWOT	Earnings Withholding Order for Taxes
FASB	Financial Accounting Standards Board
FCHR	FLSA Hours
FCWK	FLSA Work Cycle
FEIN	Federal Employer Identification Number
FICA	Federal Insurance Compensation Act
FIPS	Federal Information Processing Standards
FIT	Federal Income Tax
FLPR	FLSA Profile
FLSA	Fair Labor Standards Act
FTE	Full-Time Equivalent
FTP	File Transfer Protocol
FTPS	File Transfer Protocol Secure
FUTA	Federal Unemployment Tax Act
FY	Fiscal Year
GAAP	Generally Accepted Accounting Principles
GAX	General Accounting Expenses
GOVBR	Government Branch
GRDE	Grade, or Pay Level
GSD	General System Design
GTN	Gross to Net Process (Payroll run in Advantage HRM)
HB	Health Benefits
HM	Homemaker
HRM	Human Resources Management
HTTP	Hypertext Transfer Protocol
HTTPS	Hypertext Transfer Protocol with Secure Socket
IAEC	International Address Element Code
ICR	Intelligent Character Recognition
IDD	Interface Design Description
IEEE	Institute of Electrical and Electronics Engineers
IEVS	Income and Eligibility Verification System
IHSS	In-Home Supportive Services
IHSS-R	In-Home Supportive Services – Residual
IHO	In-Home Operations

IP	Individual Provider
IPO	IHSS Plus Option Program
IPW	IHSS Plus Waiver Program
IRS	Internal Revenue Service
ITIN	Individual Tax Payer Identification Number
J2EE	Java 2 Platform, Enterprise Edition
JVA	Advanced Journal Voucher Note: (COTS package refers to this as JVA)
LDD	Logical Database Design
LDPR	Labor Distribution Profile
LPAR	Logical Partition
LTC	Long-Term Care
M&O	Maintenance and Operations
MACR	Maximum Allowable Contract Rate
MEDI	Medicare Insurance
MHP	Mental Health Plan
MHPP	Monthly, Hourly, Positive Paid Advance Pay Recipients
MPP	Manual of Policies and Procedures
MRE	Medi-Cal Recognized Expenses
MSSP	Multipurpose Senior Services Program
NDE	Net Disposable Earnings
NOA	Notice of Action
NPC	Non-profit Consortium
NPD	Net Pay Distribution
NYTI	New Year Table Initialization
OBJ	Object
OCAT	Object Category
OCR	Optical Character Recognition
OEA	Operating Environment Architecture
OGRP	Object Group
OOTB	Out-of-the-Box
OTDED	One-Time Deduction
OTYP	Object Type
PA	Public Authority
PAM	Payroll Accounting Management
PCSP	Personal Care Services Program
PDCHK	Paid Checks
PDD	Provider Direct Deposit
PDED	Pending Deduction
PDF	Portable Document Format
PEND	Pending Payment
PERD	Pay Period

PIN	Personal Identification Number/Program Identifier Number
PIT	Personal Income Tax
POS	Point-of-Sale
POS	Point of Service
PRLNP	Payroll Net Payment
PRLVP	Payroll Vendor Payment Request
PYCL	Pay Class
PYGP	Pay Group
PYNO	Payroll Number
PYRL	Payroll Accounting
QA	Quality Assurance
QRT	Query and Reporting Tool
RA	Remittance Advice
RMA	Refugee Medical Assistance/Restaurant Meals Allowance
RPT	Reporting Code
RVS	Requirements Validation Session
SAN	Storage Area Network
SBSA	Sub Balance Sheet Account
SCI	Statewide Client Index
SCO	State Controller's Office
SDI	State Disability Insurance
SEIN	State Employer Identification Number
SFTP	Secure File Transfer Protocol
SIT	State Income Tax
SLA	Service Level Agreement(s)
SME	Subject Matter Expert
SMMP	Semi-Monthly, Hourly, Positive Paid Providers
SOC	Share of Cost
SOPT	System Options
SPAR	Site Specific Parameter
SPEC	Special Accounts
SRI	Service Request Initiation
SSA	Social Security Administration
SSN	Social Security Number
STEP	Step (Associated with Grade)
STO	State Treasurer's Office
STRG	Supplemental Trigger
STTL	Sub Title
SUI	State Unemployment Insurance
SUNIT	Sub Unit
SW	Social Worker

SWS	Social Worker Supervisor
SyRS	System Requirements Specification
TADJ	Timesheet Adjustment
TAR	Treatment Authorization Request
TIN	Tax Identification Number
TITL	Title
TPF	Timesheet Processing Facility
TPS	Timesheet Processing Service
TTG	Time-to-Gross
UI	Unemployment Insurance
UNIT	Unit
VCC	Vendor Customer Creation
VCM	Vendor Customer Modification
VCUST	Vendor Customer
VSS	Vendor Self Service
W&IC	Welfare and Institutions Code
W-2	Wage and Tax Statement
W-4/DE4	Individual Provider's Deduction Certificate
W-5	Earned Income Credit Advance Pay Certificate
WAN	Wide Area Network
WCRE	Warrant Cross Reference
WDAY	Work Day
WKCY	Work Cycle
WPCS	Waiver Personal Care Services
XML	Extensible Markup Language

DSD 2/Executive Summary

The Detailed System Design (DSD) is the documentation of the design solution and a traceability of how CGI satisfies the validated System Requirements Specifications (SyRS) for CMIPS.

CMIPS is based on reusable Commercial Off-the-Shelf (COTS) products with minimal custom code development to solve gaps between and around the COTS applications. The system is deployed using the open systems standard Java 2 Platform, Enterprise Edition (J2EE) framework and provides a modular system using open protocols, tools, techniques and industry best practices.

The five main functional component areas in CMIPS are:

1. *Case Management/Recipient Management/Provider Management/Forms Processing/Client Notices – contains a statewide database of Recipients with associated case information and Providers using the Cúram COTS package*
2. *Payroll Processing/Fund Source Management – calculates Provider's base and overtime payments from the hours worked for each Recipient, rate of pay, applicable taxes, benefit or labor organization deductions and applicable liens using the CGI Advantage COTS package*
3. *Timesheet Processing*
   a. *Timesheet Processing and Scanning Facility – receives hard copy timesheets, travel claims, and sick leave claims via United States Postal Service (USPS) delivery, then scans and validates Provider timesheet, travel claim, and sick leave claim data at a CGI management facility using the IBM Datacap Optical Character Recognition (OCR)/Intelligent Character Recognition (ICR) and IBML Database/File Server COTS packages*
   b. *Electronic Timesheet Entry – accepts online entry and submission of timesheet and sick leave claim data by a Provider and online Recipient approval of timesheet data. Timesheet and sick leave claim data entry is validated at submission and valid timesheet and sick leave claim submissions are accepted electronically and are processed for payment.*
4. *Management Reporting – supports the reporting of management information using the BusinessObjects XI - Crystal Reports, Cúram and Advantage COTS packages*
5. *Interfaces – facilitates the internal interfaces between Case Management and Payroll and manages the external interactions between CMIPS and external agencies and data exchange partners using the to IBM Business Automation Workflow (BAW) COTS package*

The application design is further broken down into five design tracks and 26 business process areas or topic areas. The following is a list of these tracks and topic areas:

Architecture

1. *Data Retention*

2. *Reporting Database*

3. *Data Download*

4. *Security*

5. *System Performance*

Case Management

6. *Online Search, Initial Contact, Intake Application*

7. *Service Eligibility*

8. *Final Determination, Assign Modes of Service*

9. *Provider Management*

10. *Time and Attendance*

11. *Case Maintenance*

12. *Program Management and Fraud*

13. *Payroll within Case Management*

14. *Internal Operations*

15. *Tasks and Notifications*

16. *Forms*

Reporting

17. *Reporting*

18. *Data Downloads*

19. *ETLs*

IHSS ESP

20. *Electronic Timesheets*

Payroll

21. Payroll Management

22. Provider Pay Rate

23. Advanced Pay

24. Tax and Contribution Management

25. Deductions

26. Warrant and Contractor Homemaker Management

27. Each of these topic areas are described in detail within this DSD document.

DSD 3/Overview

The overall architectural design for CMIPS is based on reusable COTS products with minimal custom code development to solve gaps between and around the COTS applications. The system is deployed using the open systems standard J2EE framework and provides a modular system using open protocols, tools, techniques and industry best practices.

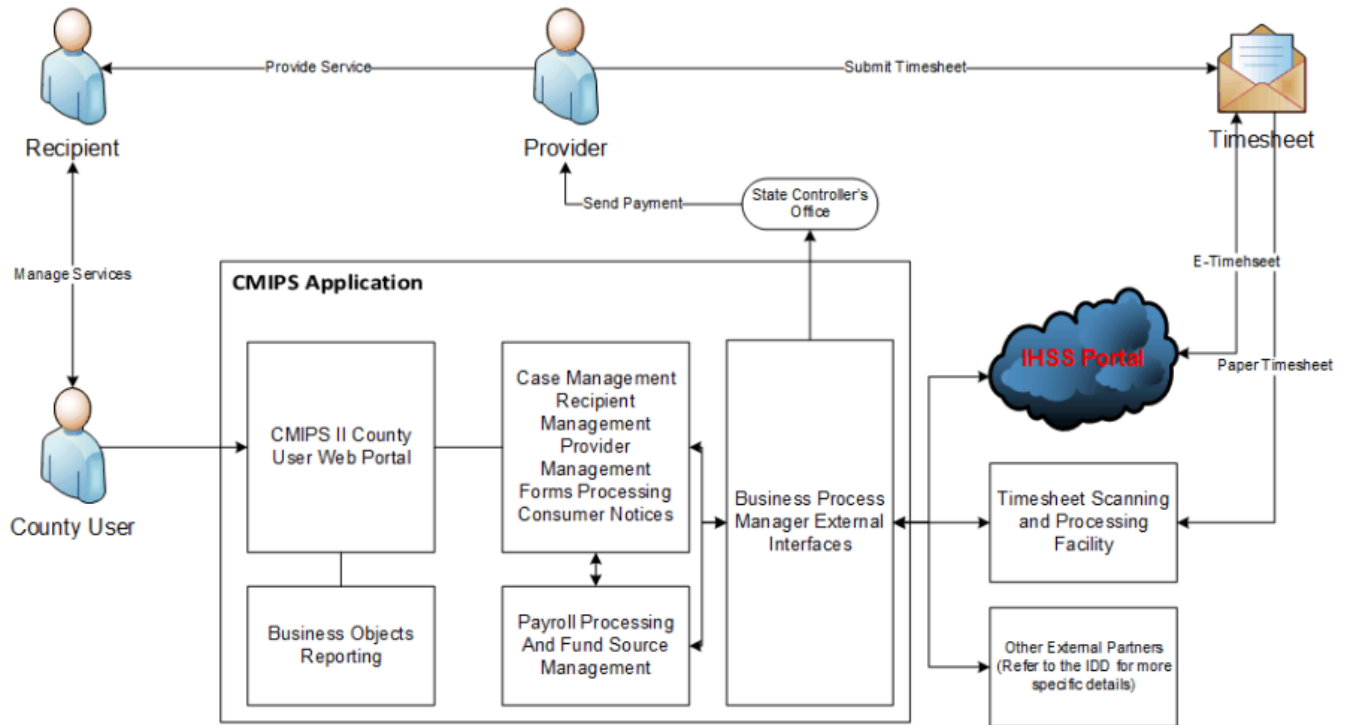The figures below provide a graphical representation of the CMIPS Business and Reference Architectures that are documented within the DSD.

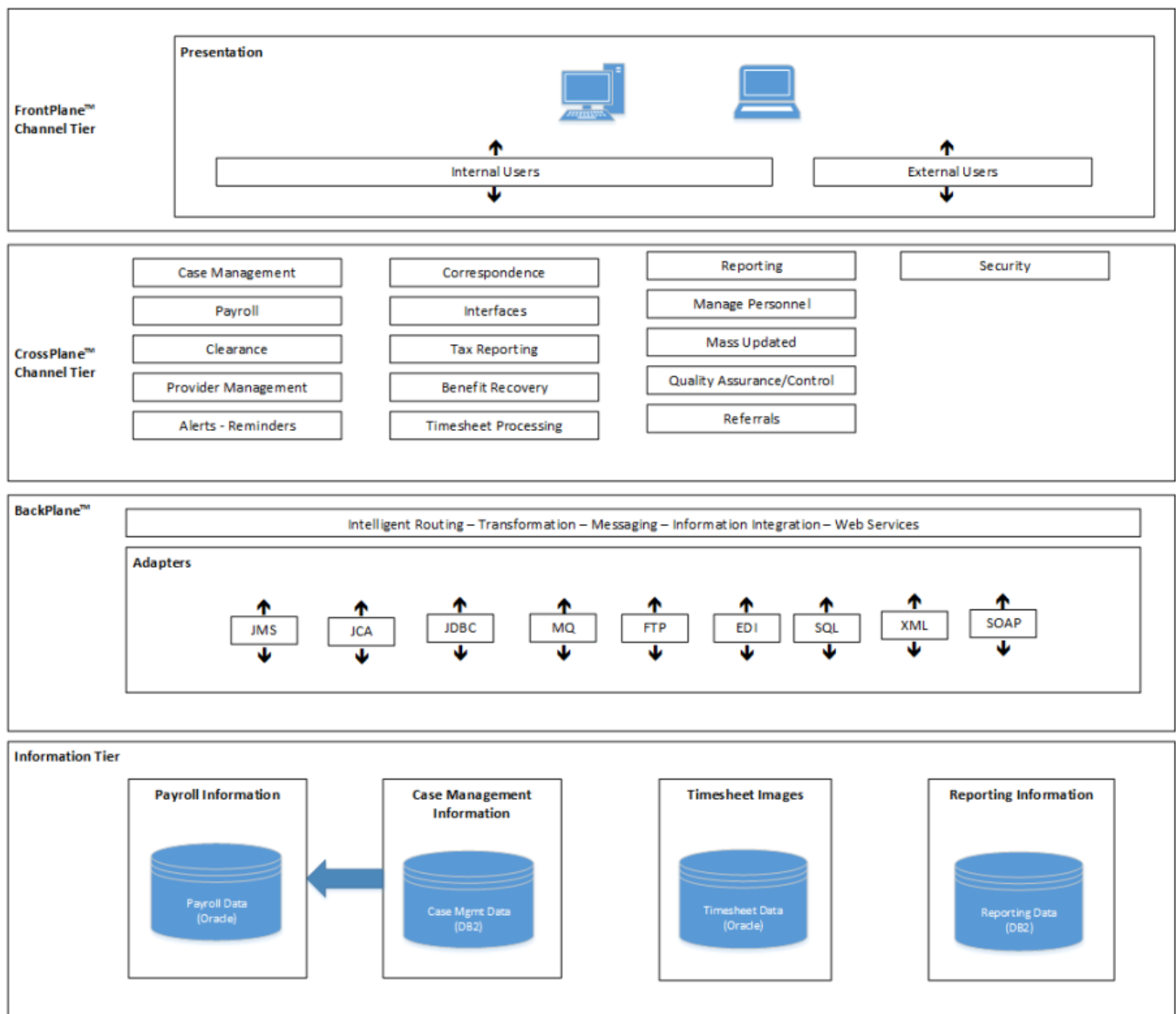**Figure – CMIPS Business Architecture**

Figure – CMIPS Reference Architecture

This document will provide an overview of the designs for following business functions:
Architecture-Automated Timesheet

- Automated Timesheet Entry Architecture
- Electronic Timesheet Entry Architecture

Architecture-Development and Test Systems

- Production Environment
- Disaster Recovery Environment
- Test Environments
- Development Environments

Architecture-Help Subsystem

- Help Subsystem Architecture

Architecture-Data Retention

- Data Retention Architecture

Architecture-Reporting Architecture

- On-demand Reports
- Daily Reports

- Weekly Reports
- Bi-weekly Reports
- Semi-monthly Reports
- Monthly Reports
- Quarterly Reports
- Yearly Reports
- Data Download
- Query and Reporting Tool (QRT)

Architecture-Security

- Security Administration
- User Roles
- Business Processes
- Reports
- Forms
- External Interfaces
- Single Sign-on
- IHSS ESP

Architecture-System Performance

- Availability
- Case Management
- Application Architecture
- Service Level Agreement (SLA)
- Weekend System Availability
- Provider Direct Deposit Help Desk
- Provider Help Desk to Answer Payroll Inquiries from Providers
- IHSS ESP

Case Management-Online Search, Initial Contact, Intake Application

- Person, Case and State Hearing Search
- Initial Contact and Intake Application
- Create Referral/Recipient
- Create Case
- Person Notes

Case Management-Service Eligibility

- Household Evidence
- Service Evidence
- Program Evidence
- Share of Cost (SOC) Evidence
- Medi-Cal Eligibility
- Contacts
- Disaster Preparedness

Case Management-Final Determination, Assign Modes of Service

- Final Determination and Assign Modes of Service

Case Management-Provider Management

- Enroll Provider
- Assign Provider
- Maintain Provider
- Maintain Provider Enrollment
- Terminate Provider
- Social Security Number (SSN) Verification
- Suspended/Ineligible Provider

Case Management-Time and Attendance

- Timesheet Processing Facility (TPF) Mailroom
- TPF Image Capture
- TPF OCR/ICR Recognition and Completion Staff
- TPF Address Change for Legacy Timesheets (for converted counties)
- TPF Storage (electronic and hardcopy)
- TPF Timesheet Data Validation
- Electronic Timesheet Data Validation
- Validate Timesheet for Business Rule Compliance and Medi-Cal Health Plan (MHP) Point of Service (POS) Eligibility
- Make Timesheet Image and Data Available to County
- Notify County of Exceptions
- Submit Timesheet to Payroll
- Key Timesheet
- Issue Timesheet
- Random Sampling of Timesheets
- Timesheets Flagged for Review

- Timesheets Received Before the End of the Pay Period
- Timesheets with Excessive Pay in the First Pay Period
- Supplemental Timesheets

Case Management-Case Maintenance

- Reassessment and Renewals
- Waiver Personal Care Services (WPCS) Hours
- County Contractor
- Homemaker
- Workplace Hours
- State Hearings
- Inter-County Transfer
- Recipient Case Leave, Terminate, Rescind and Reactivate
- Unannounced Home Visits
- Medi-Cal Share of Cost Point of Service Spend-down Processing
- Forms and Correspondence
- Case Notes
- Session Warning Message and Case Note Auto Save

Case Management-Program Management and Fraud

- Maintain Organization
- Re-assign Case
- Re-assign Group of Cases
- Task Management
- Notification Management
- Case Approval Processing
- Department of Health Care Services (DHCS) Interface Processing
- Quality Assurance Reporting
- Targeted Mailing

IHSS ESP

- Website Registration and Function
- Electronic Timesheets

Payroll within Case Management

- View Payment Information
- Request Stop Payment
- Request Warrant Replacement
- Request Warrant Re-issuance
- Process Redeposit of Undeliverable Warrants
- Request Copies of Cashed Warrant
- Process Forged Endorsement Affidavit
- Request Special Transactions
- Request Payment Corrections
- Set-up and Collect Overpayment Recoveries

Payroll-Payroll Management

- Set-up and Maintenance of the Recipient and Provider
- Calculating Pay
- Correcting Pay
- Electronic Funds Transfer (EFT)
- Earnings Statement

Payroll-Provider Pay Rate

- Provider Pay Rate
- Calculate Pay
- Process Pay
- Provider Pay Rate Adjustment
- Fair Labor Standards Act (FLSA) Calculation

Payroll-Advance Pay

- Create and Maintain Advance Pay Recipient and Provider
- Advance Pay Processing
- Advance Pay Withholding
- Advance Pay Timesheet Issuance

Payroll-Tax and Contribution Management

- Tax Setup & Maintenance
- State Setup Tax Processing
- Federal Tax Processing
- Tax Reporting
- Tax Adjustments

Payroll-Deductions:

- Deduction Set-up
- Deduction Processing
- Deduction Adjustments
- Deduction Reporting

Payroll-Warrant and Contractor Homemaker Management

- Create and Maintain Fund
- Vendor Maintenances
- Warrant Processing
- Electronic Claim File
- Daily Payroll Reconciliation
- Reconciliation of Tax Filing
- Replacement and Reissue Warrants
- Stop Payment and Redeposit Warrants
- Stale Dated Warrants
- Warrant/Funds Management Warrant Cross Reference
- County Contractor
- Homemaker
- General Ledger
- Funding Management
- Fiscal Year Fund Management

DSD 3/Overview/General Roles and Responsibilities

This section will contain the roles and responsibilities of various stakeholders related to the DSD.

The CMIPS project consists of several stakeholder organizations. These organizations include the following:

- California Department of Social Services (CDSS)
- California Health and Human Services Agency, Office of Technology and Solutions Integration (CalHHS OTSI)
- CMIPS project vendor, CGI
- County In-Home Supportive Services (IHSS) staff
- CMIPS Payroll (Advantage) CGI

Each of these organizations played a critical role in the successful design, development and implementation of the CMIPS Application. With the application now in the Maintenance and Operation (M&O) Phase the roles and responsibilities associated with the Detail System Design (DSD) have shifted.

All changes to the CMIPS application are managed by change control and are documented in an appropriate ASR, PSR or SSR. As changes move into the Production application the DSD and other impacted deliverables are updated and reconciled with the details of all changes within the release.

The following resources will be responsible for reviewing or approving the updated details in this document:

Role/Agent	Responsibilities
CMIPS Project Vendor	The Project Vendor is responsible for updating and reconciling changes to the Detailed System Design for the CMIPS Application.
California Department of Social Services (CDSS) Subject Matter Expert (SME)	The CDSS SME is responsible for verifying that the DSD document contains the system design information based on the contents of the approved SSRs and ASRs.
CalHHS OTSI SME	The CalHHS OTSI SME is responsible for verifying that the DSD document contains the system design information based on the content of the approved SSRs and ASRs.
CalHHS OTSI Project Director	The CalHHS OTSI Project Director is responsible for providing approval of the updated version of the DSD document.