



CalSAWS | Batch Memorandum for June 2021 CW Earned Income Disregard

Date: 04/14/2021	Regulation: ACL 19-76
Time: 1:30 -2:30	Meeting Called by: CalSAWS
Attendees: PPOCs, RMs, CW/CF Committee Memb	pers, CalSAWS

<u>Memorandum Purpose</u>

This memorandum is intended to convey the Batch EDBC scope, county actions and schedule for the 2021 Earned Income Disregard and IRT reevaluation for CalWORKs (CW), effective June 2021.

Scope

• CA-212912 | | CIV-106461

CalSAWS and C-IV increased the CW Disability Based Earned and Unearned Income Disregard from \$500 to \$550 as well as update the IRT Tier 2 to be based on the Assistance Unit (AU) Size rather than Family Unit Size, effective June 1, 2021. These updates were added into both systems on March 22, 2021.

CA-213719 | CIV-106463

On Saturday, May 08, 2021, CalSAWS and C-IV will process Batch EDBC to apply the new Earned and Unearned Income Disregard amounts, reevaluate IRT, and calculate benefits for CW/RCA programs for June 2021 benefit month.

Batch

In CalSAWS and C-IV, run Batch EDBC for CW/RCA programs that contain at least one active person with income effective June 2021 and/or contains an active Family Size Only ('FSO') or Financially Responsible – Included ('FRI') role for the benefit month of June 2021. The Batch EDBC will exclude cases from the targeted populations based on the following exceptions:

- a) The benefit month is past the latest RE due date for the program.
- b) The program has a SAR7 Due Month of 05/2021 and the report status is Sent, Received, or Incomplete.
- c) An EDBC has already been processed for the 06/2021 benefit month since the implementation of SCR CA-212912 / CIV-106461.

Journal Entry

In CalSAWS, one of the following standard Journal Entries will be created automatically when the EDBC batch is run, based on the following Sub Type codes:

CalSAWS



1) Cases that contain at least one person with income effective June 2021 will use Sub Type code = 'CT942-XX' - 'CW EID Update' with the following descriptions:

Short Description: Batch EDBC ran for <month, year>
Long Description: Batch EDBC Ran for <Effective Month, Year>. Batch EDBC processed for the <Program Name> program for following reasons: 'CW EID Update'

2) Cases that contain an active 'FSO' or 'FRI' role for the benefit month of June 2021 will use Sub Type code = 'CT942-C4' - 'CW IRT Update' with the following descriptions:

Short Description: Batch EDBC ran for <month, year>
Long Description: Batch EDBC Ran for <Effective Month>. Batch EDBC processed for the <Program Name> program for following reasons: 'CW IRT Update'

In C-IV, one of the following standard journals will be created by data change requests:

1) Cases that contain at least one person with income effective June 2021 will have a journal entry with the following information inserted:

Journal Category: Eligibility Journal Type: Batch EDBC

Short Description: Batch EDBC ran for [MONTH/YEAR].

Long Description: Batch EDBC Ran for < Effective Month, Year>. Batch EDBC processed

for the crogram> program for following reasons: 'CW EID Update'.

2) Cases that contain an active 'FSO' or 'FRI' member for the benefit month of June 2021 will have a journal entry with the following information inserted:

Journal Category: Eligibility
Journal Type: Batch EDBC

Short Description: Batch EDBC ran for [MONTH/YEAR].

Long Description: Batch EDBC Ran for < Effective Month, Year >. Batch EDBC processed

for the croaram> program for following reasons: 'CW IRT Update'.

NOAs

In CalSAWS, a data change request will update the effective month to June 2021 for SAR 2 forms to populate the latest IRT limit for the cases run through this stand-alone batch run.

CalSAWS



<u>List Details</u>

Lists will be posted for C-IV and CalSAWS to aid the counties to review the cases to verify accurate action was taken after Batch EDBC completes. The lists will be available to the counties at the following locations:

C-IV - CalSAWS Web Portal>System Changes> SCR and SIR Lists > 2021 >SCR CIV-106463 **CalSAWS** - CalSAWS Web Portal>System Changes> SCR and SIR Lists > 2021 > SCR CA-213719

The lists will display the standard columns:

- Case Name
- Case Number
- County
- Unit
- Unit Name
- Office Name
- Worker ID
 - List Name: Cases discontinued by the Batch EDBC process.
 Additional Column(s): Program Type, Program Closure Reason
 County Action: These are likely the result of household changes or ongoing data collection which was not yet processed through EDBC by the user. Since the purpose of this Batch EDBC process was not to close households, review these cases to verify the closure was accurate.
 - 2. List Name: Cases where the Batch EDBC process closed a person. Additional Column(s): Program Type County Action: These are likely the result of household changes or ongoing data collection which was not yet processed through EDBC by the user. Since the purpose of this Batch EDBC process was not to close persons, review these cases to verify the closure was accurate.
 - 3. List Name: Cases where the EDBC resulted in a benefit reduction Additional Column(s): Include additional columns to indicate each benefit reduction type in a separate column (Household/AU Size Change, Income Change, Proration Change, Over Payment Adjustment Change, Benefit Month). County Action: These are likely the result of household changes or ongoing data collection which was not yet processed through EDBC by the user. Review these cases to verify the benefit reduction was accurate.
 - 4. **List Name**: Cases which resulted in a read-only EDBC **Additional Column(s)**: Program Type, Read-Only Reason





County Action: Since Batch EDBC could not automatically apply the intended change to these cases, users may process EDBC to apply intended changes, if applicable.

5. **List Name**: Unprocessed cases where the Batch EDBC process skipped a program **Additional Column(s)**: Program Type, Skip Reason **County Action**: Since Batch EDBC did not automatically apply the intended change to these cases, users may process EDBC to apply intended changes, if applicable.

Please Note:

- Review cases included in the lists and take necessary action.
- Review the Batch Eligibility Report and action cases which could not be processed. This
 report is an on-request report available under Global: Reports > Local: On Request >
 Task: Administrative. If you do not see this report, please contact your Security
 Administrator for rights. To see cases not processed select a status of 'Not Processed' on
 the Reports Parameters pages.

Things to remember about EDBC batch processes

- All impacts from Defects and SCRs which have not been implemented will continue to occur during the batch processing.
- There are multiple reasons why a program may not be successfully run through Batch EDBC processing. Some examples include: No Worker Assigned, Overridden Program Case, and Pending Program/Person/Application. Please review tasks and the Batch Eligibility Report daily.
- The EDBCs will have an EDBC Source of 'Batch EDBC Rules'.
- When a user runs EDBC on a case where a prior pending month exists, the EDBC will have a type of Read-Only. When running Batch EDBC that restriction does not apply and these EDBCs will not be Read-Only.
- Any updates or lack of updates made/not made to cases will impact the Batch EDBC results. This means programs may be discontinued (due to non-compliances, etc.) unexpectedly.
- All notices will be generated normally.

Development Schedule

Task Date	Task Description
April 14, 2021	Review the Batch process schedule with counties (Memorandum Call)
April 23, 2021	Deliver the driving query and list queries to the System Test team
April 26, 2021 – May 7, 2021	System Testing
May 8, 2021	Run Batch EDBC in production for C-IV and CalSAWS





Schedule Considerations

- The C-IV System will not be available starting at 5:00 pm, Saturday, May 08, 2021.
- The CalSAWS System will remain available during batch processing on Saturday, May 08, 2021
- Batch jobs scheduled for each evening will run after the Batch EDBC process completes.
- Approximately 47,000 cases will be processed in C-IV for the benefit month of 06/2021.
- Approximately 51,000 cases will be processed in CalSAWS for the benefit month of 06/2021.

<u>Timeline</u>

• Expected CalSAWS and C-IV Batch EDBC processing date: 05/08/2021.





C-IV Calendar May 2021

SUN	MON	TUES	WED	THUR	FRI	SAT
						1
2	3	4 SAR7 Discontinuance	5	6	7	8 CIV-106463 2021 Earned Income Disregard Batch Run
9	10	11	12 NA 960X	13	14	15 CW/CF RE Packets
16	17	18	19 Ten-Day Discontinuan ce/NA RE X	20	21	22
23	24 Send SAR7/SAR2	25	26 Main Payroll	27	28	29 CW/CF Disc
30	31					





CalSAWS Calendar May 2021

SUN	MON	TUES	WED	THUR	FRI	SAT
						1
2	3 SAR7 Discontinuance	4	5 CF/CW RE Appointment 1	6 CF/CW RE Appointment 2	7	8 CA-213719 2021 Earned Income Disregard Batch Run
9	10	11	12 NA 960X	13	14	15
16	17	18	19 Ten-Day Discontinuan ce/NA RE X	20	21 Main Payroll	22
23	24	25	26 Send SAR7	27	28	29 CW/CF Disc
30	31					



Case Data Removal

		DOCUMENT APPROVAL HISTORY
Calsaws	Prepared By	Case Data Removal Strikeforce
CaisAirs	Reviewed By	Deb Saha, Frederick Gains, Henry Arcangel, Kristin Pepper, Don Coffey

DATE	DOCUMENT VERSION	REVISION DESCRIPTION	AUTHOR
7/23/2020	1.0	Initial Revision using CA-208415 Draft document as a starting point	Chris Paige
7/29/2020	1.1	Modify for Epic 1	Inder Kainth
8/17/2020	1.2	Modify for Epic 1	Evan Orman
8/17/2020	1.3	Modify for Epic 1 Sprint 1 Batch Program Design	Inder Kainth
8/17/2020	1.4	Updated Section 2.0	Pradeep Goel
8/19/2020	1.5	Added rule IPV type and program codes to section 2.3.2	Michael Wright
8/19/2020	1.6	Modified document to just cover overview and the details of what is being implemented in Sprint 1	Chris Paige
8/21/2020	1.7	Modified document to contain the Overall SCR and Sprint SCR information in the last section	Michael Wright
8/28/2020	1.8	Added each Case Data Removal Status to section 2.1.1	Michael Wright
9/10/2020	1.9	Updated for Case Data Removal Report Layout and Run Information	Inder Kainth
9/10/2020	1.10	Updated Upcoming Sprint features and removed all CR references from Supporting Documents section	Michael Wright
9/15/2020	1.11	Replaced 'Purge' with 'Data Removal' where applicable	Michael Wright
9/17/2020	1.12	Updated document based on review with Deb and Don	Chris Paige
9/30/2020	1.13	Updated document to contain Sprint 3 features	Michael Wright
10/2/2020	1.14	Addressed feedback from Consortium/QA Reviews	Chris Paige
10/8/2020	1.15	Updated entire list of Time Limit forms to retain	Michael Wright
10/21/2020	1.16	Updated document to contain Sprint 4 features	Pradeep Goel
11/10/2020	1.17	Updated document to contain Sprint 5 features	Michael Wright
11/30/2020	1.18	Updated document to contain Sprint 6 features	Michael Wright

DATE	DOCUMENT VERSION	REVISION DESCRIPTION	AUTHOR
1/4/2021	1.19	Updated document to contain Sprint 7 features	Michael Wright
1/5/2021	1.20	Added technical section	Pradeep Goel
1/26/2021	1.21	Updated document to contain Sprint 8 features	Michael Wright
2/16/2021	1.22	Updated document to contain Sprint 9 features	Michael Wright
2/17/2021	1.23	Update document for Sprint 9 features (Document Removal/Reports Update)	Chris Larson
3/10/2021	1.24	Update Document to contain Sprint 10 features and refactors.	Chris Larson
3/31/2021	1.25	Updated document to contain Sprint 11 Technical section updates	Michael Wright
4/2/2021	1.26	Added completion report and updated document removal.	Chris Larson

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1 OVERVIEW

California county welfare departments are generally governed by the Code of Federal Regulations (CFR) and State of California Welfare and Institutions (W&I) Code. In addition, the Department of Health Care Services and California Department of Social Services publish All County Welfare Directors Letters (ACWDLs), All County Letters (ACLs), and the CDSS Manual of Policies and Procedures (MPP) to give counties added guidance to meet regulations. The CalSAWS Data Retention Policy pertains to the data related to the eligibility programs administered by the Counties and stored within the

CalSAWS systems. This data retention policy was approved by Project Steering Committee members during the September 19, 2019 PSC meeting. This approval can be found in the following <u>Approved Meeting Minutes</u>.

The Case Data Removal feature for CalSAWS will first be implemented for the C-IV System. This will be done using the Agile methodology. This design document will be updated as features are deployed to Production at the conclusion of each of our planned three-week Sprints.

1.1 Current Design

• Case and Person level data is currently retained indefinitely within both the LRS/CalSAWS System and the C-IV System.

1.2 Requests

The following are the case record retention guidelines as approved by the Consortium:

- Identify and remove all Cases which have been closed for 6 years or more.
- There are multiple exceptions to the 6-year rule:
 - Retain cases that currently have open recovery accounts
 - Retain cases associated with a Special Investigation, Criminal, or Civil Litigation record for three years after the final claim is submitted for federal reimbursement.
 - Retain all cases that include one of the following programs, regardless of status:
 - Adoptions Assistance
 - Foster Care
 - Kin-GAP
 - Retain all cases currently under Federal, State, or County Audit until the audit(s) have been resolved.
 - o Retain all cases that included an Intentional Program Violation
- Warrant Register data will be retained indefinitely (as will all Scheduled Reports).
- Each removed case will remain in the System as a Shell Case. See Section 2.1.1 for details on what data will be retained in Shell Cases.
- Shell Case details will be added to this document during a future Sprint. These will include:
 - Lists of all database tables that will have records retained.
 - Page mockups of what a Shell Case will look like in the front-end application
- Case removal is permanent. Once a case has been removed, there will be no mechanism for retrieval of data removed from the System. I.e., Case Data Removal is NOT an Archive capability.
- Migration DDID 2261 ("The CONTRACTOR shall configure the imaging solution to permanently delete documents based on the approved CalSAWS Software document retention policies for all 58 Counties.") is in scope for this effort.

1.3 Overview of Recommendations

The following is a high-level overview of the features that will be implemented as part of the Case Data Removal functionality:

- Create a new page in the system for users to view the current dispensation of a
 Case with regards to whether it is eligible for Removal. This determination would
 likely be implemented as a batch job (frequency TBD)
- Create a report to show summary and detail information regarding Cases identified for Removal.
- Create a capability for users to override the Removal decision made by the user.
 This would also require the user to document a Reason for their override.
- Create a report for supervisors to see lists of Cases that have had their Purge decision overridden.
- Develop a series of batch processes responsible for removing branches of the CASE and PERS tables. PERS records would only be removed when the PERS was only associated to Removable Cases. The current target date for running the Data Removal batch jobs in the C-IV System is April 16, 2021.
- Remove Case and Person documents stored in the Document Storage system (Alfresco for C-IV, AWS S3 for CalSAWS) for each Removed Case/Person
- Remove Images from the imaging system for each removed case. The one
 exception is we will retain any Image with a Document Type = Time Limits.

1.4 Assumptions

- The ICT tables are not in scope for this effort as they do not have CASE as a
 parent table. I.e., Any removal of ICT data would be separate from the Case
 Data Removal.
- The Removal feature for CalSAWS will first be implemented for the C-IV System.
 This will be done using the Agile methodology. This design document will be
 updated as features are deployed to Production at the conclusion of each of
 our planned three-week Sprints.
- Once the entire Removal feature has been implemented for the C-IV System, we will have a Planning Sprint to determine the necessary modifications to port this functionality to the CalSAWS System
- CalWIN data retention is being implemented by DXC as part of Conversion and will be applied during each CalWIN Wave. The two teams are periodically checking in with each other to make sure both teams are on the same page with regards to overall approach.
- The contents of the CASE_PURGE and RPT_CASE_PURGE tables will be converted from C-IV to CalSAWS as part of the overall Migration conversion effort.
- CalSAWS legal counsel has reviewed details associated with the ongoing county litigation related to opioid addiction and found no impact to the current CalSAWS data retention policy.

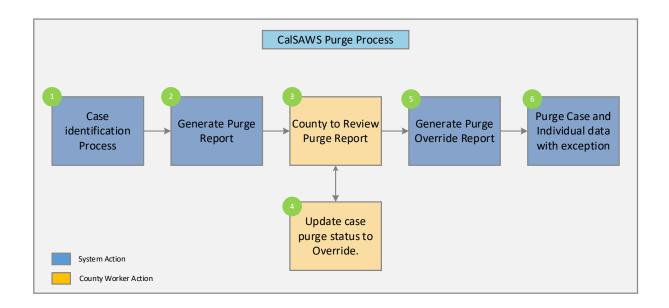
2 PROPOSED SOLUTION

2.1 Case Data Removal Process Overview

The removal process will remove dormant data that falls outside of the retention guidelines approved by the Consortium, leaving behind a shell case for those that have been removed. Initially, this process will be built for the C-IV System, given the direct impacts to C-IV conversion cutover activities and the length of time that C-IV has existed (since 2004 for the original four C-IV counties). Future sprints will then transform what was built for C-IV to work in the CalSAWS system, where it will run on some (undetermined) regular schedule as part of the ongoing operations of that System.

2.1.1 Case Data Removal

The following diagram defines the high-level 6-step process to remove a Case in the System:



- **Step** 1: Identify a list of removable cases based on the approved retention rules. The details of the case selection criteria are defined in Epic 1 of this document.
- **Step** 2: Generate a report containing list of removable cases selected in step 1 for the counties to review.
- **Step** 3: Counties to review the list and perform step 4 (as needed).
- **Step** 4: If the case needs to be excluded from the remove process, users with appropriate security rights will be able to override this decision
- **Step** 5: Generate a report containing a list of overridden cases. This list will be excluded from the Case Data Removal process.

Step 6: Execute Case Data Remove processes to delete data from database tables following the approved retention rules.

2.1.1.1 C-IV Application Case Data Removal Status:

- **Identified**: The Case has been identified as one that will have data removed from the System per Data Retention Policies
- In Process: The removal of data for this case has begun
- **Override**: Someone has decided to override the System's automated decision to removal this Case's data. The reason for this override will also be captured
- Complete: Data has been removed. This is now a Shell Case

2.1.1.2 Shell Case

While most of the case and individual data will be removed from the database tables, certain information related to the case and the individuals will be retained in the system. This information is called a shell case and will include the following:

- 1) Serial Number and Case Name will remain unchanged
- 2) The "All People Associated With the Case" section of the Case Summary page will be retained.
- 3) Case Confidentiality
- 4) Companion Case relationship
- 5) Time Limit data for all people associated to the case. This will include the following forms:

Form Number	Form Name
CF 377.11A	CalFresh Time Limit Notice for Expiration of Three Consecutive Months for ABAWDs
CF 377.11B	CalFresh Countable Month Letter
CF 377.11C	CalFresh Time Limit for ABAWDs
CF 377.11D	CalFresh Discretionary Exemption for Able-Bodied Adults Without Dependents (ABAWD)
CF 377.11E	CalFresh Able-Bodied Adult Without Dependents (ABAWD) Time Limit Exemption Screening Form
CW 61	Medical Report
CW 215	Notification of Intercounty Transfer
CW 2184	CalWORKs 48 Month Time Limit
CW 2186A	CalWORKs Time Limit Exemption Request

CW 2186B	CalWORKs Time Limit Exemption Determination
CW 2187	Your CalWORKS 48 Month Time Limit
CW 2188	Verification of Aid for the TANF Program
CW 2189	Notice of Your CalWORKs Time Limit at 42nd Month On Aid
CW 2190A	CalWORKs 48-Month Time Limit Extender Request Form
CW 2190B	CalWORKs 48-Month Time Limit Extender Determination Denial Form
CW 2191	Time on Aid Verification for CalWORKs 48-Month / TANF 60-Month Time Limits
CW 2192	Tracking Non-California TANF Assistance for the Time Limits
CW 2208	Your Welfare-To-Work 24-Month Time Clock
M40-107D	Time on Aid To Former CalWORKs Recipient
NA 840	Sanction / Removal from Aid of Participant Notice
NA 845	Removal of Second Parent Notice
NA 1276	Welfare-to-Work 24-Month Time Clock Limit Notice
PLAN 106 CIV	Family Plan
PLAN 112 CIV	Care of a Household Member Verification
TEMP CW 2186A	CalWORKs Time Limit Exemption Request
WTW 38	Welfare-To-Work 24-Month Time Clock Notice
WTW 43	Notice Of Your Welfare-To-Work (WTW) 24-Month Time Clock Ending Soon
WTW 44	Welfare To Work (WTW) 24-Month Time Clock Extension Request Form
WTW 45	Welfare To Work (WTW) 24-Month Time Clock Extension Determination
WTW 46	End Of Welfare-To-Work 24-Month Time Clock Review Appointment Letter
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- 6) Journal Entries (stored as a PDF attached to the case)
- 7) Issuance History (stored as a PDF attached to the case)
- 8) ADDR, PERS_ADDR, CH_TRANSACT_INFO, ICT_CIV_CASE, ICT_CIV_PERS table data will be retained. For CH_TRANSACT_INFO, we are currently exploring adding "ON DELETE SET NULL" to the PGM_ID foreign key.

The following tables under the CASE and PERS Trees will be retained during the Data Removal process:

CASE TABLES NOT BEING DELETED
CASE_PERS
COMPAN_CASE
CONFID
CONFID_DETL
CS_COLLECT
CS_OUT_TRANSACT
CS_OUT_TRANSACT_DETL
EDBC_PERS
KG_ISP
KG_RATE
KG_SPEC_CARE
KG_SUMM
KIN_GAP
KIN_GAP_PGM_PERS_QUES
TIME_LIMIT_AID
TIME_LIMIT_AID_DETL
TIME_LIMIT_DETL
TL_AID_CASE_TRANSACT
TL_AID_CS_COLLECT_XREF
TO_DO_LIST

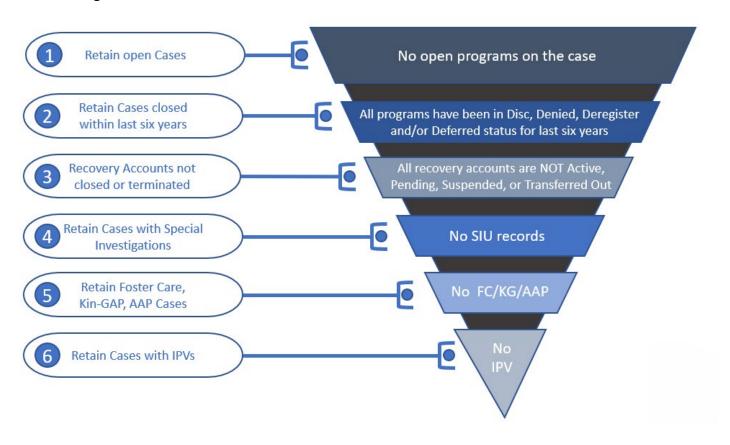
PERS TABLES NOT BEING DELETED					
C4Y_PERS					
CASE_PERS					
CITZ					
CITZ_PERS_DETL					

DUPL PERS
EDBC_PERS
KG ISP
KG RATE
KG SPEC CARE
KG SUMM
KIN_GAP_PGM_PERS_QUES
OTHER_PGM_ASSIST
OTHER_SSN
PERS_ADDR
PERS RELSHP
RECEIPT
RES
TIME_LIMIT
TIME_LIMIT_CASH_AID
TIME_LIMIT_CLOCKS
TIME_LIMIT_DETL
TIME_LIMIT_DIVERSN
TIME_LIMIT_EXCEPT
TIME_LIMIT_NON_CAL
TIME_LIMIT_NON_CAL_EXCEPT
TIME_LIMIT_PGM_PARTICPTN
VITAL_STAT
VITAL_STAT_BIRTH_CERT
VITAL_STAT_DOC
VITAL_STAT_REQ
VITAL_STAT_SENT
VLP_CASE_PERS
WDTIP_NON_CAL_PARTICPTN

2.2 Case Data Removal Identification

2.2.1 Overview

A batch job will identify cases eligible for removal based on the approved record retention guidelines:



2.2.2 Rules:

Case must meet **all** the following criteria in order to be considered removable:

- The Case must have no open programs
- All programs on the Case must be closed for more than six years. A program is defined as Closed if it is in one of the following statuses:
 - Discontinued (DS)
 - o Denied (DE)
 - Deferred (DF)
 - Deregistered (DG)

- If the Case has any recovery accounts, they must all be Closed. Open recovery accounts are defined as any that are currently in one of the following statuses:
 - Active (AC)
 - Transferred Out (TO)
 - o Pending (PE)
 - Suspended (SU)
- The Case cannot have any Special Investigation records (regardless of the status of those investigations).
- The Case cannot contain any of the following programs, regardless of status:
 - Foster Care (FC)
 - o Kin-GAP (KG)
 - Adoption Assistance (AA)
- The Case cannot have an open Federal or State audit. Federal/State audits are conducted within the first two years of Case closure and it may take up to a year to complete the investigation. Therefore, selecting cases that are closed for more than six years covers this rule without any additional automation.

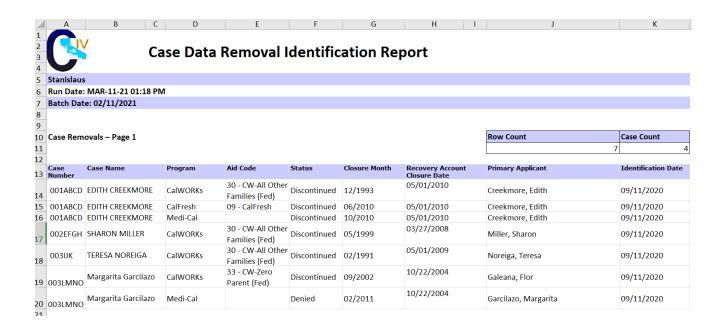
Please Note there are multiple types of audits that can be conducted on a case; and not every audit is necessarily captured in Cal SAWS. This could end up being a potential Override reason when that functionality is designed.

- The Case cannot have any Intentional Program Violations. The following types of IPV sanctions are considered:
 - o Child Support IPV (06)
 - o Cal Fresh IPV (24)

2.2.3 Case Data Removal Identification Report

The purpose of this report is to provide counties a list of which cases have been identified by the System as those that will have data removed during the next deletion batch ruin. The Report will be split into multiple sheets for counties with over 1M rows. Some highlights of items included in this report:

- Identification Date is the date the Case was selected for removal having met all the requirements outlined above.
- Closure Month represents the month the case program was closed (i.e., Denied, Discontinued, Deregistered, or Deferred).
- When possible, the Aid Code for the program in question will be displayed on the Report. This column is populated using the same method as the Aid Code that is displayed on the Case Summary page. For example, Medi-Cal aid codes exist at the person level and are not displayed on the Case Summary page. The same is true this report: All MC programs listed on the report will have the Aid Code blank.
- Recovery Account Closure Date reflects the latest Closed status date of any recovery accounts associated to the purged case.
- Navigation to the Report: Homepage > Reports > Scheduled > Case Activity > Title 'Case Data Removal Identification Report'



2.2.4 Batch Jobs

A new process (PB00P800) will be created to identify cases that can be removed. This module will search the C-IV database to identify data removal cases and insert into the purge table with an initial status of 'Identified'.

- A new database table called CASE_PURGE will store the case ID and purge status, along with other information required for auditing and reporting.
- A new batch process (PB00P800) will execute the core SQL to identify cases and insert them into the purge table.
- After PB00P800, the Report Load Job PB00R800 is run to load the RPT_CASE_PURGE Table to facilitate Report Creation for each County.
 - The Identification Report as shown above is created by PBxxR801 Jobs for each of the 39 C-IV Counties.

2.2.5 Batch job Schedule

Specifics related to run frequency and schedule date/time will be determined during a later phase of the project. The present run frequency for PB00R800 and PBxxR801 is monthly on 11th of each month. Initially, PB00P800 ran on September 11, 2020 and all future runs will be determined at a later date (no earlier than the first run of the Deletion batch in the C-IV System, which is currently targeted for April 16, 2021)

2.2.6 Restart Logic

See section 2.5.6

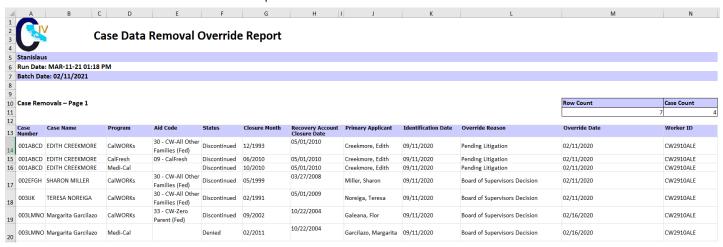
2.3 Case Data Removal Override

2.3.1 Case Data Removal Override Report

The purpose of this report is to provide counties a list of which cases have been overrode by users. The report will also display the Override Reason of why these cases should not have any case data removed on them. This report will contain each column contained in the Identification reports with three additional columns. The following bullets detail each of the additional columns on the Override report:

- Override Reason represents the reason for the Override, based on the agreed upon set of reasons across each County. These reasons are all situations that cannot be automatically identified by the System.
 - o The current Override reasons:
 - Board of Supervisors Decision
 - Hearing/Court Order
 - Pending Litigation
 - Under QA/QC Review
- Override Date represents the date the County Staff member switched the Data Removal Status from Identified to Override on the Case Data Removal detail page.
- Worker ID represents the ID of the County Staff member that switched the status from Identified to Override on the Case Data Removal detail page.
- Recovery Account Closure Date reflects the latest Closed status date of any recovery accounts associated to the purged case.

Navigation to the Report: Homepage > Reports > Scheduled > Case Activity > Title 'Case Data Removal Override Report'



2.3.2 Batch Jobs

The batch job (PB00P800) identifies cases that can be removed. This module will search the C-IV database to identify data removal cases and insert into the purge table with an initial status of 'Identified'

- The CASE_PURGE table will store the case ID and purge status, along with other information required for auditing and reporting.
- The batch job (PB00P800) will execute the core SQL to identify cases and insert them into the CASE PURGE table.
- After PB00P800, the Report Load Job PB00R800 is run to load the RPT_CASE_PURGE Table to facilitate Report Creation for each County.
- The Override Report as shown above is generated by the PBxxR802 Jobs for each of the 39 C-IV Counties. It will load the RPT_CASE_PURGE table cases that have a status of Override and populate the Override report in the application.

2.3.3 Batch job Schedule

Specifics related to run frequency and schedule date/time will be determined during a later phase of the project. The present run frequency for PB00R800, PBxxR801, and PBxxR802 is monthly on 11th of each month. Initially, PB00P800 ran on September 11, 2020 and all future runs will be determined at a later date (no earlier than the first run of the Deletion batch in the C-IV System, which is currently targeted for April 16, 2021).

2.3.4 Restart Logic

See section 2.5.6

2.4 Case Data Removal Online Page changes

2.4.1 Case Summary Page updates

For cases that have been identified for Case Data Removal only, the Case Summary page will now show Case Data Removal Status changes as we progress from Identified to Complete in the deletion process.

C-IV Application Case Data Removal Status:

- **Identified**: The Case has been identified as one that will have data removed from the System per Data Retention Policies
- In Process: The removal of data for this case has begun. This status will only be set once the Case Data Removal process has started on the case through the deletion batch process. Once this Status has been set, the user cannot Override it
- **Override**: Someone has decided to override the System's automated decision to remove this Case's data. The reason for this override will also be captured.

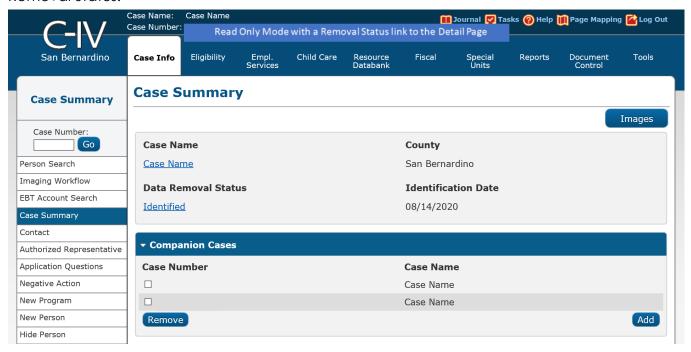
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- Please reference section 2.3.1 for the listing of current Override Reason Codes.
- Complete: Data has been removed. This is now a Shell Case. This status will only
 be set once the Case Data Removal process has completed on the case
 through the deletion batch process. Once this Status has been set, the user
 cannot Override it.

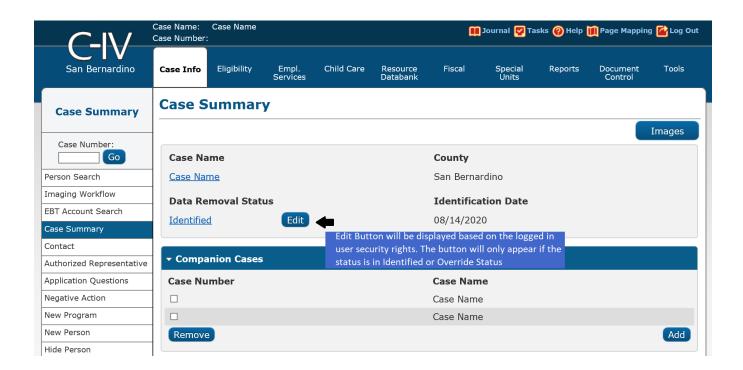
2.4.2 Case Data Removal Status on Case Summary Page

The C-IV Case Summary page will now show a Case Data Removal Status, which will be a hyperlink to display the current status in the Case Data Removal process. This link will also take you to the Case Data Removal Detail page when clicked.

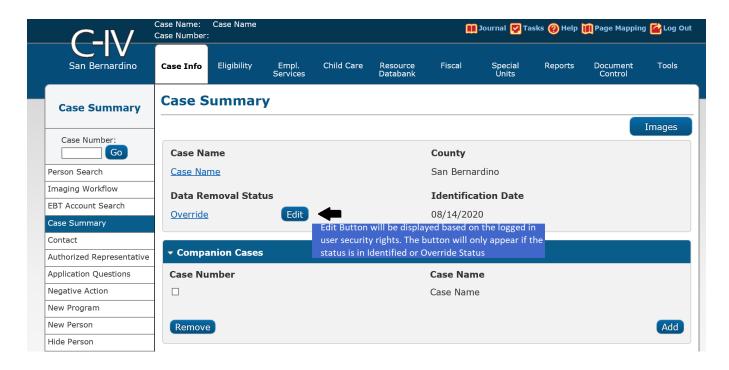
The following image represents the Identified Data Removal Status on the Case Summary page for a County Staff member that does not have rights to edit the Data Removal Status.



The following image represents the Identified Data Removal Status on the Case Summary page for a County Staff member that has rights to edit the Data Removal Status. The Case must also have a removal status of 'Identified' or 'Override' for this Edit button to appear.



The following image represents the Override Data Removal Status on the Case Summary page for a County Staff member that has rights to edit the Data Removal Status. The Case must also have a removal status of 'Identified' or 'Override' for this Edit button to appear.



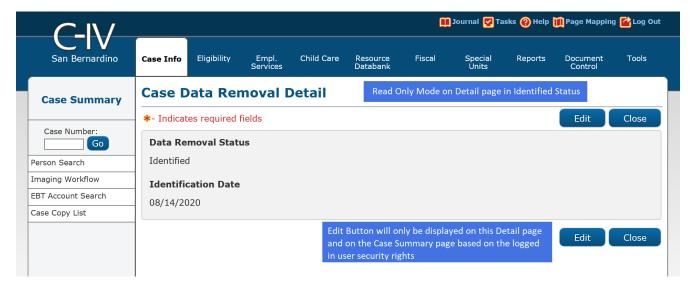
2.4.3 Case Data Removal Detail page

The Case Data Removal Detail page is where County Staff members with the appropriate rights can update the Status from 'Identified' to 'Override', or back to 'Identified' from 'Override'. If the Status on this detail page is changed from the original Status of 'Identified' (as determined by the Data Removal Identification batch job) to the 'Override' status, the case will be excluded from having any case data removed. If the status is left in 'Identified' status, the case will have case data removed once the Deletion Batch is executed [Note that the run date of the first execution of the Deletion Batch is currently TBD, no earlier than January 2021].

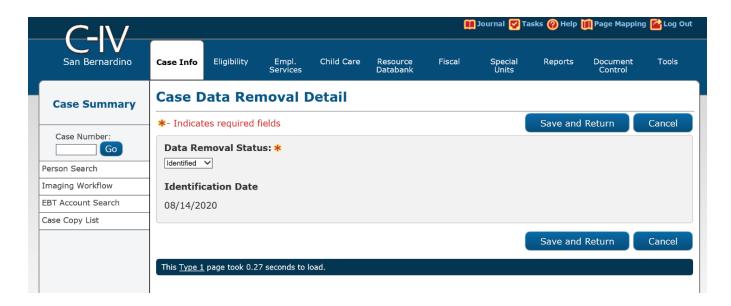
Security Group for Edit functionality:

The Case Data Removal Detail page Edit functionality is accessible for users who are joined to the new 'Case Data Removal Edit' security group. This also applies to the Edit button on Case Summary, next to the status, for those cases having a Case Data Removal status of 'Identified' or 'Override'. The 'Case Data Removal Edit' group, which contains the 'CaseDataRemovalEdit' right, is not assigned to any security role. The local Security Administrators will need to add the approved users to this new security group.

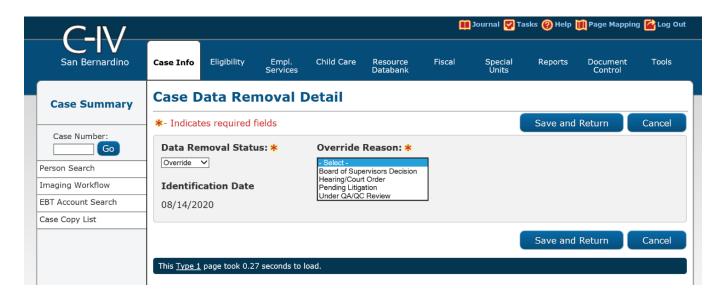
The following image represents the Case Data Removal Detail page in Read Only mode when left in 'Identified' status.



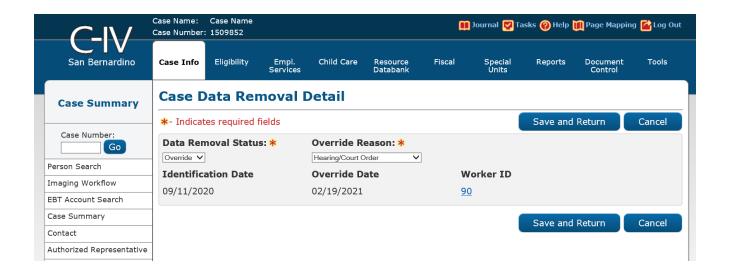
The following image represents the Case Data Removal Detail page in Edit Mode when left in 'Identified' status.



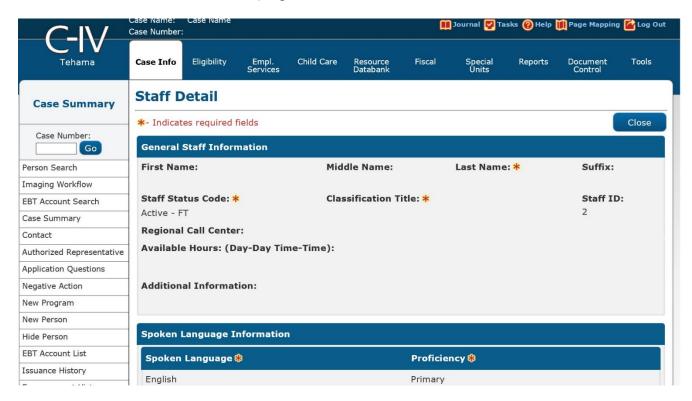
The following image represents the Case Data Removal Detail page in Edit Mode when changing from 'Identified' status to 'Override' status. This status change allows the 'Override Reason' field to display (see Section 2.3.1 for a list of Override Reasons).



The following image represents the Case Data Removal Detail page in Edit Mode when the status has already been updated to 'Override'. The County Staff member will be able to see the Override Date the Override was made in addition to the Worker ID that made the change.



When the Worker switches the Data Removal status between both Identified and Override status, that Worker's ID gets captured on the Detail page as a hyperlink. Clicking on that hyperlink takes you to the Staff Detail page of that Worker that made the change. Once you click the Close button on the Staff Detail page it will route you back to the Data Removal Detail page.



2.5 Case Verification

Workers have been given time, since the original reporting run date of September 11 2020, to evaluate identified cases before the purge is performed. During this time, it is possible that changes on identified cases will make them no longer eligible for the case purge process. The nightly Re-Verification Job (PB00P803) will evaluate identified cases to confirm their eligibility for the purge.

The Re-verification batch process will execute the same query criteria (section 2.2.2 criteria rules) used in the PB00P800 (case Identification) job. This is a standalone job that will run daily in Production to identify any of the cases in the CASE_PURGE table that no longer meet the criteria and will remove those cases from the table. Cases removed from this table will not be picked up in any downstream case-purge process.

A batch scheduler change request will deactivate the Re-Verification batch job after the final set of data deletions have taken place in April 2021.

Once this batch job runs in Production and removes the cases from the CASE_PURGE table the following will occur in the C-IV application:

- These cases will have their Case Data Removal status section on Case Summary removed and they will not have a Detail page
- For the Case Data Removal Reports, these cases will drop off from the next version of the reports (generated on the 11th business calendar date of each month), decreasing the overall record counts and total case counts

2.6 Data Deletion Process

The final purge of data associated to identified cases has been split into four separate batch jobs.

- 1) PDF Generation for Journals and Issuances
- 2) Removing NOAs and Forms
- 3) Removing Imaged documents
- 4) Remove case data

2.6.1 PDF Creation Batch Job - PB00P802

The PDF batch process will write each of the records for the Issuance and Journal History to a separate file for each case and store them to the file server. For cases that have historic information, these PDF files will be accessible on the Case Data Removal Detail page as hyperlinks. These hyperlinks will appear on the page after the case data deletion process has processed the case (reference section 2.3.3 for Batch Deletion

Schedule). Further information and examples of each PDF type can be found below in section 2.6.

The initial steps of the Batch Deletion process are to check each case originally identified for deletion still meets the criteria. If so, the System will generate PDFs to capture any Journal and Issuance History prior to deleting any case data. If there is no data for the PDF in question (e.g., if no Issuance History exists for a case), then no PDF will be generated. The generation of each PDF file will be processed through a batch job (reference section 2.5.1.1 for the batch jobs) that will retrieve data from the following C-IV pages per PDF type.

2.6.1.1 Issuance History PDF

This PDF will retrieve the same data from the Issuance Search Detailed Results Page for every issuance record on that case. An example of the Issuance History PDF is shown below:



Issuance History

Date created: 11-09-2020 5:01 PM

Case Number	A000002
Case Name	Case Name

The Issuance History PDF captures each section from the Issuance Search
Detailed Results page by Case Number

Control Number	Payee	Program	Month	Category	Method	Issue Date	Status Date	Status	Amount
A64510012	John, Smith	CalFresh	10/2008	Supplemental Benefit	EBT	12/04/2008	12/04/2008	Issued	\$154.00
A64510012	John, Smith	CalFresh	11/2008	Supplemental Benefit	EBT	12/04/2008	12/04/2008	Issued	\$533.00
A64510012	John, Smith	CalFresh	12/2008	Supplemental Benefit	EBT	12/04/2008	12/04/2008	Issued	\$533.00
A580012	John, Smith	Welfare to Work	11/2005	Service Payment	Warrant	08/02/2006	08/23/2006	Paid	\$101.22
A61240012	John, Smith	CalFresh	03/2006	Monthly Benefit	EBT	03/01/2006	02/22/2006	Issued	\$363.00
A61220012	John, Smith	CalWORKs	03/2006	Monthly Benefit	EBT	03/01/2006	02/22/2006	Issued	\$540.00
A390012	John, Smith	Welfare to Work	01/2006	Service Payment	Warrant	02/08/2006	02/16/2006	Paid	\$40.50
A61160012	John, Smith	CalFresh	02/2006	Monthly Benefit	EBT	02/01/2006	01/25/2006	Issued	\$363.00
A61130012	John, Smith	CalWORKs	02/2006	Monthly Benefit	EBT	02/01/2006	01/25/2006	Issued	\$540.00
A360012	John, Smith	Welfare to Work	12/2005	Service Payment	Warrant	01/11/2006	01/20/2006	Paid	\$25.50
A61050012	John, Smith	CalWORKs	01/2006	Monthly Benefit	EBT	01/01/2006	12/21/2005	Issued	\$600.00
A61070012	John, Smith	CalFresh	01/2006	Monthly Benefit	EBT	01/01/2006	12/21/2005	Issued	\$373.00
A340012	John, Smith	Welfare to Work	11/2005	Service Payment	Warrant	12/14/2005	12/20/2005	Paid	\$40.50
A6960012	John, Smith	CalWORKs	12/2005	Monthly Benefit	EBT	12/01/2005	11/22/2005	Issued	\$600.00
A6990012	John, Smith	CalFresh	12/2005	Monthly Benefit	EBT	12/01/2005	11/22/2005	Issued	\$373.00
A310012	John, Smith	Welfare to Work	10/2005	Service Payment	Warrant	11/17/2005	11/23/2005	Paid	\$40.50
A6950012	John, Smith	CalWORKs	11/2005	Supplemental Benefit	EBT	11/01/2005	11/02/2005	Issued	\$600.00

The County, Date Created, Case Number and Case Name will display at the top portion of the document for each file generated.



Issuance History



Case Number	A000002
Case Name	Case Name

he data in this PDF is identical to the Issuance Search Detailed Results age. When in the PDF you can search for each data element and it will be ighlighted throughout the document as shown below, for Control Number.

Control Number	Payee	Program	Month	Category	Method	Issue Date	Status Date	Status	Amount
A64510012	John, Smith	CalFresh	10/2008	Supplemental Benefit	EBT	12/04/2008	12/04/2008	Issued	\$154.00
A64510012	John, Smith	CalFresh	11/2008	Supplemental Benefit	EBT	12/04/2008	12/04/2008	Issued	\$533.00
A64510012	John, Smith	CalFresh	12/2008	Supplemental Benefit	EBT	12/04/2008	12/04/2008	Issued	\$533.00
A580012	John, Smith	Welfare to Work	11/2005	Service Payment	Warrant	08/02/2006	08/23/2006	Paid	\$101.22
A61240012	John, Smith	CalFresh	03/2006	Monthly Benefit	EBT	03/01/2006	02/22/2006	Issued	\$363.00
A61220012	John, Smith	CalWORKs	03/2006	Monthly Benefit	EBT	03/01/2006	02/22/2006	Issued	\$540.00
A390012	John, Smith	Welfare to Work	01/2006	Service Payment	Warrant	02/08/2006	02/16/2006	Paid	\$40.50
A61160012	John, Smith	CalFresh	02/2006	Monthly Benefit	EBT	02/01/2006	01/25/2006	Issued	\$363.00
A61130012	John, Smith	CalWORKs	02/2006	Monthly Benefit	EBT	02/01/2006	01/25/2006	Issued	\$540.00
A360012	John, Smith	Welfare to Work	12/2005	Service Payment	Warrant	01/11/2006	01/20/2006	Paid	\$25.50
A61050012	John, Smith	CalWORKs	01/2006	Monthly Benefit	EBT	01/01/2006	12/21/2005	Issued	\$600.00
A61070012	John, Smith	CalFresh	01/2006	Monthly Benefit	EBT	01/01/2006	12/21/2005	Issued	\$373.00
A340012	John, Smith	Welfare to Work	11/2005	Service Payment	Warrant	12/14/2005	12/20/2005	Paid	\$40.50
A6960012	John, Smith	CalWORKs	12/2005	Monthly Benefit	EBT	12/01/2005	11/22/2005	Issued	\$600.00
A6990012	John, Smith	CalFresh	12/2005	Monthly Benefit	EBT	12/01/2005	11/22/2005	Issued	\$373.00
A310012	John, Smith	Welfare to Work	10/2005	Service Payment	Warrant	11/17/2005	11/23/2005	Paid	\$40.50

All data elements within the document are searchable using the 'Find' option within the PDF application, as shown above.

2.6.1.2 Journal History PDF

This PDF will retrieve the same data from the Journal Detail page results for each journal entry on that case. An example of the Journal History PDF is shown below:



Journal History

San Bernardino Date created: 11-09-2020 5:01 PM

Case Number	A000002	
Case Name	Case Name	

The Journal History PDF contains data for each of the sections listed below

Entry Date	Entry type	Short Description	Long Description	Append Journal Entry	Worker ID	Method of Contact
05/17/2020	Activity	Updated Spousal Support Agreement/Modification Date for end dated Spousal Support Income/Expense.	The Spousal Support Agreement/Modification Date for Johanna Casillas Spousal Support Income/Expense record that ended prior to 1/1/2019, was updated to the same date as the begin date from a one-time data change.	Program(s) reassigned: MC. Previous Worker 36LS75HH	A6LS75HHZ2	Verbal
03/06/2009	Document	MC 176S - Medi-Cal Status Report	Created by batch process		A034Z2	Verbal
03/02/2009	Notice of Action	NOA - Discontinuance			A6LS75HHZ2	Verbal
03/02/2009	Narrative	MC - Alert 6006	Case discontinued as customer has nother case in San Bernardino County and Riverside County. Child never received aid under this case number.	Program(s) reassigned: MC. Previous Worker 36LS75HH	A6LS75HHZ2	Verbal
03/02/2009	Narrative	MC - Case DISC/ open on another case	Child Raymond is open on another case here and in Riverside County. Child has never received aid under this case number. Negative action completed for 10/2008-03/2009.	Program(s) reassigned: MC. Previous Worker 36LS75HH	A6LS75HHZ2	Verbal
01/14/2009	Document	ADM 101 CIV - New Worker Letter	36LS7590		A6LS7590Z2	Verbal
01/14/2009	Assignment	Assignment Worker Initiated	Program(s) reassigned: MC. Previous Worker 36LS75HH		A6LS7590Z2	Verbal
01/08/2009	Conversion	FSWR registration created	SB County FSET Program has been waived effective 01/01/09. FSET Work Registration end dated 12/31/08, corresponding FSWR Work Registration created effective 01/01/09		A6LS75HHZ2	Verbal
01/08/2009	Conversion	FSWR registration created	SB County FSET Program has been waived effective 01/01/09. FSET Work Registration end dated 12/31/08, corresponding FSWR Work Registration created effective 01/01/09		A6LS75HHZ2	Verbal
	_					

The County, Date Created, Case Number and Case Name will display at the top portion of the document for each file generated.



Date created: 11-09-2020 .5:01 PM

Case Number	A000002	
Case Name	Case Name	

Journal History



An example of an Entry Date that can be used to search throughout the PDF

Entry Date	Entry type	Short Description	Long Description	Append Journal Entry	Worker ID	Method of Contact
05/17/2020	Activity	Updated Spousal Support Agreement/Modification Date for end dated Spousal Support Income/Expense.	The Spousal Support Agreement/Modification Date for Johanna Casillas Spousal Support Income/Expense record that ended prior to 1/1/2019, was updated to the same date as the begin date from a one-time data change.	Program(s) reassigned: MC. Previous Worker 36LS75HH	A6LS75HHZ2	Verbal
03/06/2009	Document	MC 176S - Medi-Cal Status Report	Created by batch process		A034Z2	Verbal
03/02/2009	Notice of Action	NOA - Discontinuance			A6LS75HHZ2	Verbal
03/02/2009	Narrative	MC - Alert 6006	Case discontinued as customer has nother case in San Bernardino County and Riverside County. Child never received aid under this case number.	Program(s) reassigned: MC. Previous Worker 36LS75HH	A6LS75HHZ2	Verbal
03/02/2009	Narrative	MC - Case DISC/ open on another case	Child Raymond is open on another case here and in Riverside County. Child has never received aid under this case number. Negative action completed for 10/2008-03/2009.	Program(s) reassigned: MC. Previous Worker 36LS75HH	A6LS75HHZ2	Verbal
01/14/2009	Document	ADM 101 CIV - New Worker Letter	36LS7590		A6LS7590Z2	Verbal
01/14/2009	Assignment	Assignment Worker Initiated	Program(s) reassigned: MC. Previous Worker 36LS75HH		A6LS7590Z2	Verbal
01/08/2009	Conversion	FSWR registration created	SB County FSET Program has been waived effective 01/01/09. FSET Work Registration end dated 12/31/08, corresponding FSWR Work Registration created effective 01/01/09		A6LS75HHZ2	Verbal
01/08/2009	Conversion	FSWR registration created	SB County FSET Program has been waived effective 01/01/09. FSET Work Registration end dated 12/31/08, corresponding FSWR Work Registration created effective 01/01/09		A6LS75HHZ2	Verbal

2.6.1.3 History PDF Hyperlinks in the C-IV Application

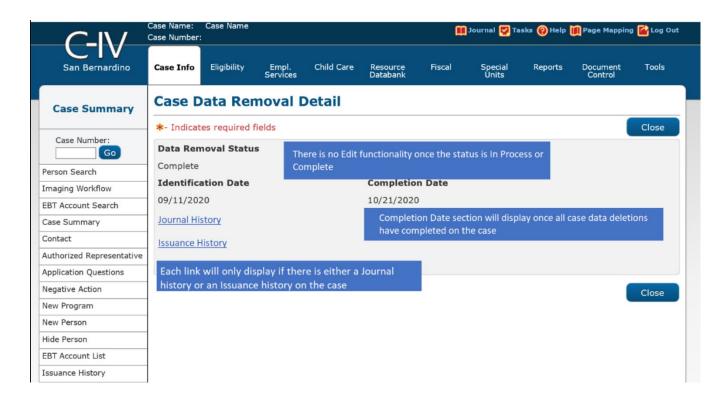
The PDF files behind the hyperlink targets will be stored on the AWS S3 storage after the PB00P802 job completes per each case. Each file will be unique and will exclusively contain journal and issuance history data specific to the case processed. The file names, as created on the file storage, are generated as follows:

- journalEntry.pdf
- issuance.pdf

They are stored in the following folder structure:

- CasePurge/[county name]/[case_id]/journalEntry.pdf
- CasePurge/[county name]/[case_id]/issuance.pdf

The Journal and Issuance History PDF hyperlinks will display on the Case Data Removal Detail page if there is data to export from the C-IV database for the case. These hyperlinks will display in the application only after the case deletions batch process has completed for a given case. The following screenshot shows where each hyperlink will display on the Detail page.



2.6.2 Document Removal - PB00P804

The Document Removal batch job (PB00P804) will remove generated notice of actions (NOAs) and forms from the file management system passing in the identified set of

cases. It considers records discovered by the Case Identification batch (PB00P804) that are not in either a "Complete" or "Overridden" status. This job will remove all generated NOAs and forms, with the following exceptions:

- 1) Retain all documents outlined under section 2.1.1.2, which describes what data remains in the shell case.
- 2) Retain all documents associated to a person who is associated to a case not eligible for case purge. This may occur when a person is associated to multiple cases in the SAWS system. A case is not considered eligible for case purge if:
 - a. The case was not discovered by the Case Identification batch (PB00P800).
 - b. The case has been overridden in the case purge process (a.k.a. that Case Purge status is set to "Override").

After removing all eligible documents, this job will update the Document Status on the associated case purge record to indicate that documents have been removed for the case by setting CASE_PURGE.DOC_STAT_IDENTIF = 'Y'.

A small percentage of documents this job attempts to remove from the file store will be unavailable, due to broken links between the database and the document. Two batch properties are used to set an error threshold, which allows for some broken links but will terminate the job if too many are missing (potentially indicating a connection issue with the file store):

- maxErrorPercentage: Compare the number of records processed vs the number of records missing. If the percentage of number of records missing is greater than the maxErrorPercentage, the job will terminate. The following property will make sure that the job won't terminate if the first case happens to be missing documents. This threshold is currently set to 5%.
- 2) minErrorCount: The minimum number of errors that occur before the job terminates. This sets an error threshold, where the job won't terminate until we reach the minimum number of errors. This threshold is currently set to 100 errors.

2.6.3 Image Removal – PB00P806

The Image Removal Job (PB00P806) removes all images associated to the case people eligible for the purge associated to the case.

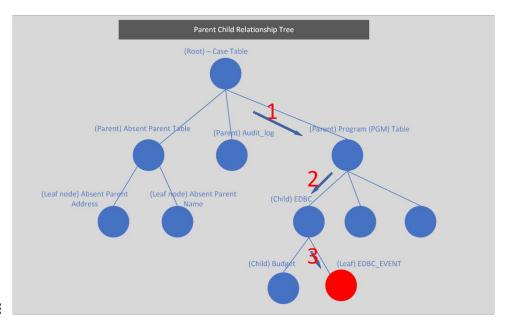
This job reports all Identified cases to the Imaging system that have neither been overridden or already reported to the Imaging server. The imaging system will then execute scripts (invoking third party software's APIs) to remove all images associated to the identified records. Time Limit documents are retained.

The Image Removal batch will also review the status of people and cases who were reported to the imaging system in prior runs. Once processed, this job will update the associated CASE_PURGE record with an IMG_STAT_IDENTIF of "Y" to signify that the image removal is complete.

2.6.4 Data Deletion Batch Job - PB00P801

Data Deletion is an Oracle procedure that physically deletes the data from the database tables for a given Case. The procedure uses configuration tables, defined in the below section, to traverse through the tree to find the leaf node, build the delete SQL statement based on the table key to uniquely identify the data, and execute the SQL statement to physically delete the data. Once the data is deleted from the table, it moves up in the hierarchy to find the next leaf and repeat the process.

The list of database tables that are identified for deletion is loaded into the configuration tables (described in detail in technical design document) with parent and child relationships and appropriate keys to identify unique data. The process reads the configuration tables and will traverse through the relationship to find the leaf node (lowest child). Once the leaf node is identified, it starts deleting the data and moves up the hierarchy until the data from parent table is deleted. An example of the parent and child relationship (tree structure) and traversing logic is defined in the following diagram.



OBJ

The above diagram represents the parent and child relationship of database tables in a tree structure. This structure is used to traverse through the branches to find the children (leaf node) to start deleting the data. The highlighted steps in red describe how the deletion leaf node logic identifies the child tables at a high level.

- 1) When a Case is selected from the CASE_PURGE table, Program IDs associated to the Case are selected from the PGM table
- 2) Based on the Program ID, appropriate records from the EDBC table are selected
- 3) As we traverse through the EDBC tables, the EDBC_EVENT table is a leaf node, and hence the data from EDBC_EVENT table can be deleted

4) After deleting the data, the logic flow is moved up to find the next child and the leaf node

A new batch process (section 2.5.3) will be created to delete the case data from the database tables. This module will perform the following steps to remove the data:

- Once the Case is verified to still meet all the deletion criteria (section 2.5.1 batch job), the initial step of the PDF Generation batch job will update the Status to 'In Process' and the PDF creation module is called to create PDF files for Journal Entries and Issuance history data.
- Upon successful creation of PDFs, the data deletion module is called to delete the data from identified tables.
- Upon successful deletion of Case data, the process updates the Case Data Removal Status to 'Complete' and will begin processing the next Case for deletion.

2.6.4.1 Configuration table

The data deletion logic will be driven by two configuration tables. The first configuration table lists the immediate child of the root and the second table contains children of the parent and their level, as noted in section 2.6.4. The details of these configuration tables are defined in a technical configuration document.

2.6.4.2 Deletion Logging Mode

The batch deletion process will have an option to turn the deletion logging on or off by passing a parameter in the main batch job. When the logging mode is on, the data deletion module will start logging every action performed in the function, including table name where data is being deleted with the Case ID, Person ID and other key columns to identify a unique record in the table.

2.6.5 Batch Dependencies

The Case Deletion batch (PB00P801) must wait for the PDF Generation (PB00P802) and Document Deletion (PB00P804) to complete processing a case before it can move forward with removing that case's data. It does not wait on the Image Deletion (PB00P806) job. This allows the case data and image removal to occur in parallel.

2.6.6 Batch Process Load Balancing

The PDF creation, Document Deletion and Case Deletion processes each work in single modules. For the April 2021 C-IV run, there are approximately 1.78 million cases up for purge with their respective program records to be processed. Using a single flow to process this many cases will take a significant amount of time and is not feasible. To process a large volume of cases in a reasonable window, we have added a multi-threading capability for both the PDF creation and the case deletion modules.

The following batch properties are available to configure our multi-threading approach for the Case Delete (PB00P801), Generate PDFs (PB00P802) and Delete Documents (PB00P804) batch jobs:

- 1) restrictStatuses: Used in testing environments to limit which records are processed by the job. Normally, the job pulls all records where the status on the case purge record is set to either null or "N". When restrictStatuses=Y, the job will exclude any records where the status is null and instead only process records where the status is explicitly set to "N".
- 2) verbose: Adds additional logging that tracks which documents are removed and which documents are skipped, along with the skip reason. This property should be left off in production, since it results in much larger log files.
- 3) numOfThreads: This job employs multiple threads to allow for parallel processing. In test environments we default the thread count to 15, while in production we will default to 100.
- 4) max.workload.size: Since this job may run for millions of records, this property allows us to set the size of the "chunks" of data being considered at a given time. Increasing the size of the max workload will reduce the amount of time spent waiting for threads to complete, at the trade-off of increasing the amount of memory required to run the job.

2.6.7 Exception Logging

A standard batch framework is used to log all exceptions encountered in the data deletion process. These exceptions will be monitored as part of standard batch operations. Depending on the reason for the exception, Defects or Changes will be logged and tracked in Jira.

2.6.8 Batch Restart

Restartability for all jobs is managed by records inserted and updated in the CASE_PURGE table. Should a job terminate unexpectedly, it should be resubmitted with restart.mode=false. It will continue from the last commit of the previous run.

2.7 Case Completion Report

The Case Completion report lists all cases that have successfully completed the case purge process. It will display the following information:

Case Number: Case that has completed the case purge.

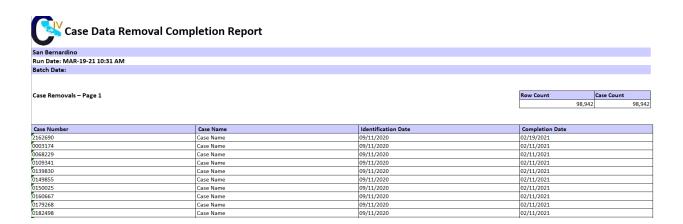
Case Name: Name associated to the Case.

Identification Date: The date the case was originally identified for the case purge

process.

Completion date: Date that the case was purged from the system.

Navigation to the Report: Homepage > Reports > Scheduled > Case Activity > Title 'Case Data Removal Completion Report'



2.7.1 Batch Job

The PBxxR803 job will be run on-demand once the case deletion process is complete.

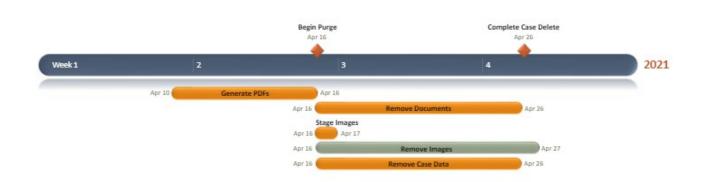
2.8 What's Next

The following is a list of pending scope that will be developed in the upcoming sprints. These sprints will focus on implementing the change for C-IV counties. Changes required to accommodate LRS will be implemented in future releases.

Now that all Sprint code features have been delivered to Production, the scheduling of these jobs will be created by BSCR's.

Our planned timeline for scheduling of these jobs are shown below. The Completion Report will be scheduled to run in Production after the final case has completed through Data Removal.

Scheduling Recommendations

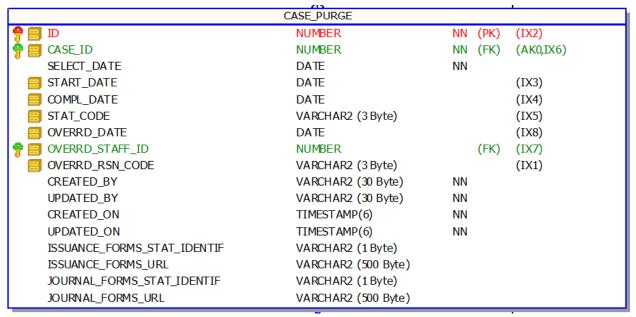


3 TECHNICAL DESIGN

3.1 Delete Process

The case purge process is driven primarily off the CASE_PURGE and the CASE_PURGE_DEL_TABLE_CONF tables. The Case Purge table identifies the list of cases to be deleted from the C-IV database tables and the Case Purge Configuration table identifies the list of tables where case data will be deleted. The tables logical structure is as follows:

Case Purge table structure:



CASE_PURGE_DEL_TABLE_CONF:

	CASE_PURGE_DEL_TABLE_CONF
TABLE_GRP	VARCHAR2 (50 Byte)
DEL_SEQ	INTEGER
PARENT_TABLE	VARCHAR2 (50 Byte)
CHILD_TABLE	VARCHAR2 (50 Byte)
DML_ACTION	VARCHAR2 (2 Byte)
FOREIGN_KEY	VARCHAR2 (50 Byte)
CHILD_TABLE_KEY	VARCHAR2 (50 Byte)
DML_QUERY	VARCHAR2 (500 Byte)

As part of the deletion process, two batch jobs (PB00P801 and PB00P802) along with a PL/SQL stored procedure have been developed, as defined in section 2.5.1 and 2.5.2. The batch job (PB00P801) picks up all the cases that are identified for deletion (CASE_PURGE) and calls the PL/SQL stored procedure for each case to delete the case/person data from the database tables. The procedure uses the configuration table, list of tables where case/person data can be deleted, to drive the deletion process as defined in section 2.5.

The attached spreadsheet contains two tab pages – Delete Tables and Do not Delete Tables. The first tab page contains list of tables configured in CASE_PURGE_DEL_TABLE_CONF table for data deletion. The second tab page contains the list of tables where case/person data will be retained. For example – Time tracking data.



To support the deletion process we have created a series of DBCR's to perform On Delete Set to Null value operations for the following tables:

- On Delete Set EXPNGMNT ID to Null on ISSUANCE table
- On Delete set PGM_ID to NULL on CH_TRANSACT_INFO table
- On Delete set ISSUANCE_ID to NULL on ISSUANCE table
- On Delete set RELATED_TRANSACT_ID to NULL on RECOV_ACCT_TRANSACT table
- On Delete set PGM PERS ID to Null on TIME LIMIT DETL table
- On Delete set TEMP_EDBC_SRC_PGM_ID to Null on PGM table
- On Delete set PGM ID to Null on GENERATE DOC table
- On Delete set SERV ARRGMT ID to Null on GENERATE DOC table

3.2 Stage Document Utility

Testing environments do not include copies of forms and NOAs from the production environment. References to forms and documents stored in GENERATE_DOC end up as broken links since the documents don't exist in the testing file management system.

The Stage Documents Utility (PB00P805) will resolve these broken links by mocking files in the testing file management system. This ultimately allows for more accurate testing of the Document Removal batch (PB00P804).

The Stage Documents utility is also capable of storing mocked image files for the ImageNow system. You can control whether mocked forms or mocked images are generated with the following batch properties:

- 1) generateDocuments: Set to "Y" if you would like to generate documents.
- 2) generateImages: Set to "Y" if you would like to generate images.

Generating images also requires setting the following property:

1) sampleImagePath: The filepath of a sample .TIF image file. Note: it is best to keep the filesize of this image relatively small, since the job will generate several thousand copies of the image.

The Stage Documents Utility will identify all generated documents for a given case ID. Case IDs can be provided to the utility in two ways:

- 1) caseld: Set this property to match a single case ID which contains documents you would like to mock.
- 2) caseListPath: You may provide a list of Case IDs to feed into the utility by employing the caseListPath property. First, you need to create a text file that contains all the case IDs you would like to mock with each case ID on its own line. You'll need to upload this file to the batch server, then provide the file's path as the caseListPath parameter. For example: caseListPath=" /export/batch/scripts/CaseList.txt".

Mocked files will appear on the testing file management system under the casePurge/mockedForms. Mocked images will appear under the server's output_agent directory under eict_import.

Note: This utility cannot (and should not) be run in production. All batch properties associated to this job have been labeled as test properties, which prevents the job's execution on production batch servers.

4 REQUIREMENTS

4.1 Project Requirements

DDID	Description	Notes
CIV-105446	Monthly Batch job - case data removal – Discontinued / Inactive cases.	The scope of this DDID is covered in SCR-107763.
CA-208415	Monthly Batch job - case data removal - Discontinued / Inactive cases.	

5 MIGRATION IMPACTS

It was determined to start with building a C-IV Case Data Removal process first, due to the large amount of data that would get removed from that database. Deletion of a large amount of data will help with the conversion cutover window when C-IV migrates to CalSAWS. The current timeline of the planned Sprints has been confirmed to dovetail nicely with the Conversion timeline.

6 SUPPORTING DOCUMENTS

Number	Functional Area	Description	Attachment
107763	SCR	Create Case Data Removal Functionality	
107825	SCR	Implement Case Data Removal Sprint 1 Features	
107834	SCR	Implement Case Data Removal Sprint 2 Features	
107924	SCR	Implement Case Data Removal Sprint 3 Features	
107957	SCR	Implement Case Data Removal Sprint 4 Features	

108104	SCR	Implement Case Data Removal Sprint 5 Features	
108106	SCR	Implement Case Data Removal Sprint 6 Features	
108107	SCR	Implement Case Data Removal Sprint 7 Features	
108108		Implement Case Data Removal Sprint 8 Features	
108109	SCR	Implement Case Data Removal Sprint 9 Features	
108110	SCR	Implement Case Data Removal Sprint 10 Features	
108111	SCR	Implement Case Data Removal Sprint 11 Features	
108215	SCR	Data Change - Sutter County - Override 2014 cases from data removal per Board of Supervisors Decision	
220458	SCR (CalSAWS)	Create CASE_PURGE table and Codes Table references to align with C-IV	
224147	SCR (CalSAWS)	Update CASE_PURGE table to include deletion status fields for documents and images to align with C-IV	
108554	SCR	Tehama County - Data Retention Flag Due to Opioid Litigation	
108616	SCR	Case Data Removal Sprint 9 On Delete Set Null CR's	
108630	SCR	Case Data Removal Sprint 10 On Delete Set Null CR's	