

# CalSAWS

California Statewide Automated Welfare System

## **Design Document**

SCR CA-207026 – Migrate C-IV Contact Center  
Functionality

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# 1 OVERVIEW

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The C-IV County Amazon Connect contact centers will be migrated to communicate with the CalSAWS application. This contact center solution will only be used by the 39 C-IV Counties.

## 1.1 Current Design

The C-IV County contact centers authenticate callers, and provides self service to customers by communicating with the C-IV application. All data dips are pulled from the C-IV Application database.

## 1.2 Requests

As part of the migration from the C-IV Application to CalSAWS, the Amazon Connect contact center will be modified to interact with the CalSAWS database.

## 1.3 Overview of Recommendations

The recommendations migrating the Amazon Connect contact center solution are as follows –

1. Update the Self Service Lambdas from Java to Node.js to communicate directly with the CalSAWS application database.
  - a. This includes updating the IVR PIN lambdas to accept 4 and 6 digit PINs.
  - b. Update Custom\_ResendFormWebserviceLambda to not allow reprinting of forms generated before 9/26/2021.
  - c. Add new Phone Number lookup lambda, and Get Case List lambda
- ~~2. Update the Custom CCP to validate user against Amazon Connect.~~
2. Update Custom CCP.
  - a. Update the CCPAgent, CCPSupervisor, and CCPMessageSender to CalSAWS Identity Provider roles.
  - b. Update the CCP Environment Variable to open CalSAWS rather than C-IV.
3. Update the Prompts to remove the "4 digit" IVR PIN reference, and update C4Yourself to BenefitsCal.
4. Modify the Authentication Method in the IVR to no longer require Case Number as CalSAWS case numbers contain letters.
  - a. See attached Call Flows for details.

## 1.4 Assumptions

- This only applies to the 39 C-IV Counties.
- The only update to the Call Flows is the removal of the mention of a "4 digit" IVR PIN.
- Users can authenticate with either a 4 or 6 digit PIN after the migration.
- Existing IVR PINS will remain 4 digit, but any PIN generated after the migration to CalSAWS will be 6 digit.
- Voice Authentication is not impacted by the authentication method change

## 2 RECOMMENDATIONS

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The Migration to CalSAWS will consist of the following actions

### 2.1 Update the Self Service Lambdas

The existing Self Service lambdas will be updated from Java to Node.js. They will also be updated to no longer interact with the IVR Web Service, but to gather the information from the CalSAWS database directly. This will require updating the Lambda to also include the business logic that resides in the IVR Web Service.

#### 2.1.1 List of Lambdas to update.

The following list are all the Self Service Lambdas currently in use

| Lamabda Name                            | Function  |
|---|---|
| Custom_CaseLookupWebserviceLambda       | Looks up case information after a successful Voice Authentication.                          |
| Custom_CaseValidationWebserviceLambda   | Validates the case number entered exists in the county called.                              |
| Custom_ChangePINWebServiceLambda        | Change existing IVR PIN   |
| Custom_DeleteVoiceprintWebserviceLambda | Send request to Nuance Servers to delete the voice print, and updates BVP_CODE column to N. |
| Custom_GenerateFormWebServiceLambda     | Generates Benefit history document (CFS 142).   |
| Custom_GetSentFormsInfoWebserviceLambda | Retrieves information on SAR7 and TMC form.   |
| Custom_ResendFormWebserviceLambda       | Requests to resend either SAR7 or TMC.  |

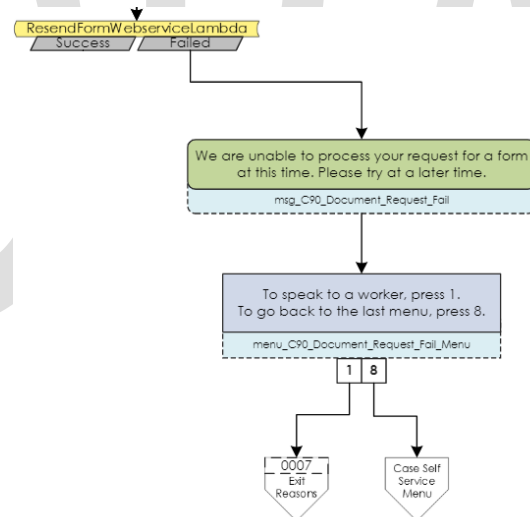
| Lamabda Name                                   | Function   |
|--|--|
| Custom_PersonLookupWebserviceLambda            | Checks if a caller has a Voice Print or not based on caller ID.                                |
| Custom_RequestPINWebserviceLambda              | Requests a new IVR PIN   |
| Custom_UpdateBvpInfoWebServiceLambda           | Updates BVP_CODE column to Y after successful voice enrollment.                                |
| Custom_ConfirmAppointmentWebserviceLambda      | Updates CONFIRM_IND column to Y  |
| Custom_GetAppointmentsWebserviceLambda         | Retrieves past and future appointments information.  |
| Custom_RescheduleAppointmentWebserviceLambda   | Reschedules a future appointment within the same month.  |
| Custom_LoginProcessorLambda                    | Invokes other lambdas for login in San Bernardino county only.                                 |
| Custom_GetEBTOrderReplacementWebserviceLambda  | Cancel existing EBT and submits request for a new one in San Bernardino county only.           |
| Custom_GetEBTPersonIdCaseByDOBWebserviceLambda | Get person ID and Case Information for EBT replacement via DOB for San Bernardino county only. |
| Custom_PredictiveHandlingLookupLambda          | Returns the PH_CODE for San Bernardino county callers.   |
| Custom_UpdateCallerResponseWebserviceLambda    | Updates CALLER_RESP to Y or N  |
| Custom_GetDistrictOfficeWebServiceLambda       | Get District Office ID for Riverside county only.  |

| Lamabda Name                                   | Function  |
|--|---|
| Custom_LoginWebserviceLambda                   | Authenticates callers via Case Number and IVR PIN.                          |
| Custom_UpdateExitReasonForCallWebserviceLambda | Update IVR_EXIT_RSN column to match caller's reason for calling.            |
| Custom_GetCalFreshProgramInfoWebServiceLambda  | Invoked by LoginProcessor to retrieve CalFresh benefits information.        |
| Custom_GetCalWORKsProgramInfoWebServiceLambda  | Invoked by LoginProcessor to retrieve CalWORKs benefits information.        |
| Custom_GetMedicalProgramInfoWebServiceLambda   | Invoked by LoginProcessor to retrieve MediCal benefits information.         |
| Custom_GetWTWProgramInfoWebServiceLambda       | Invoked by LoginProcessor to retrieve Welfare to Work benefits information. |
| Custom_DoLoginWebServiceSBLambda               | Authenticates San Bernardino county callers with Case and PIN               |
| Custom_DoLoginWithSSNAndDOBWebServiceLambda    | Authenticates San Bernardino county callers with SSN and DOB.               |
| Custom_ValidateIVRESignatureWebServiceLambda   | Marks a document as e-signed  |
| Custom_CancelAppointmentWebServiceLambda       | Cancels upcoming appointment.   |
| Custom_OutboundResendFormWebServiceLambda      | Resends SAR7 document.  |

| Lamabda Name  | Function   |
|---|--|
| Custom_SetAppointmentReminderCompleteWebServiceLambda | Update the appointment reminder call as completed. |
| Custom_SetDocumentReminderCompleteWebServiceLambda    | Updates the document reminder call as completed.   |

### 2.1.2 Prevent Reprint of Converted Forms.

When a customer invokes the Custom\_OutboundResendFormWebServiceLambda, the IVR System needs to validate whether or not the requested form was converted or not. If the form has an original generation date before 9/26/2021, the system should proceed down the Failed path of the Lambda.



**Figure 2.1.2 – Request Reprint call flow.**

### 2.1.3 Add new Validate Caller and Get Case List Lambdas.

Create a new lambda that will validate a caller's identity when they enter their phone number, Social Security Number, Date of Birth, and/or IVR PIN. Once validated this lambda will return the customer's case number and IVR PIN. If the customer does not have an IVR PIN, the IVR will attempt to generate a new IVR PIN for the customer if they entered their Social Security number, otherwise they will be sent to a queue to speak to an eligibility worker.



If a customer is associated to more than one case, the get case list lambda will return a list of cases the customer is on where their person status is not "Out of Home". The customer will then be asked to choose from the list of cases which one they are calling about.

## 2.2 Update Custom CCP

When a contact center worker logs into the Custom CCP, the application checks what security permission the worker has. ~~This security check needs to be modified to interact with Amazon Connect rather than C-IV.~~ This security check needs to be modified to no longer exist in C-IV but as a CalSAWS Identity Provider role.

### 2.2.1 Update CCP security rights to CalSAWS Identity Provider Roles.

The CCPAgent, CCPSupervisor, and CCPMessageSender rights currently exist in C-IV. This functionality will be replicated as a CalSAWS Identity Provider role.

If an Amazon Connect agent exists in the CalSAWS Identity Provider they will have the CCPAgent automatically. If a supervisor needs access to the Team Performance Panel they will need to have the CCPSupervisor role applied to their account in the CalSAWS Identity Provider. If a manager needs access to the Message of the Day Sender panel, they will need the CCPMessageSender role applied to their account.

### 2.2.2 Update CCP Environment Variables.

When an authenticated call is delivered to an agent, the Custom CCP will open the Case Summary page. If an unauthenticated caller arrives, the Custom CCP will open the Person Search page.

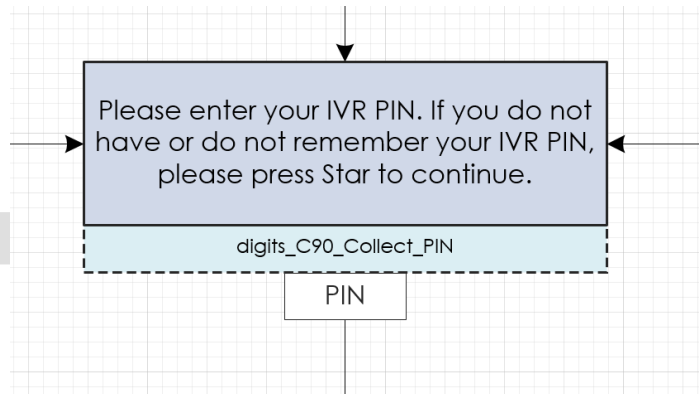
The CCP\_Screen\_Pop Environment Variable will be updated to the following.

<https://web.calsaws.net/c-iv/>

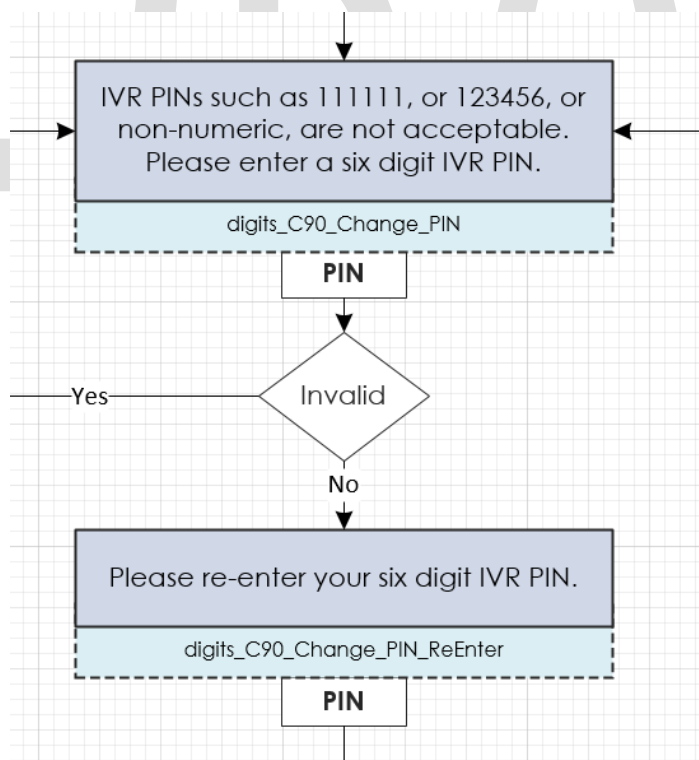
## 2.3 Update the ~~IVR PIN~~ Call Flow Prompts

CalSAWS currently uses a 6 digit IVR PIN, and C-IV Counties use a 4 digit PIN. Existing C-IV customers will still have an IVR PIN, but if they choose to change it, or a new PIN is requested, it will be a six digit PIN. The Call Flow needs to be updated to reflect this change. This change will impact all C-IV county call flows.

The IVR also mentions the C4Youself portal in multiple locations. These prompts will be updated to now direct the customer to BenefitsCal. For more information on the new prompts please see the attached Call Flows.



**Figure 2.3.1 – Collect PIN prompt.**



**Figure 2.3.2 – Change PIN Prompts.**

## 2.4 Modify IVR Authentication Method

New Cases generated in CalSAWS will contain letters as well as numbers. Customers will no longer be able to enter their case number if it contains letters, so the IVR will no longer prompt them to enter it.

The IVR will now prompt the customer to enter their phone number and their social security number. If the customer does not have, or doesn't know their social security number they will be prompted for their date of birth, and/or their IVR PIN. A customer will only be prompted for their date of birth or IVR PIN if the IVR is unable to narrow down the customer to a single person in the CalSAWS database.

For additional information please see the attached call flows.

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### 3 SUPPORTING DOCUMENTS

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| Number | Functional Area | Description                     | Attachment |
|--------|-----------------|---------------------------------|------------|
| 1      | IVR             | Butte County Call Flow          |            |
| 2      | IVR             | Humboldt County Call Flow       |            |
| 3      | IVR             | Kern County Call Flow           |            |
| 4      | IVR             | Kings County Call Flow          |            |
| 5      | IVR             | Marin County Call Flow          |            |
| 6      | IVR             | Monterey County Call Flow       |            |
| 7      | IVR             | Riverside County Call Flow      |            |
| 8      | IVR             | San Bernardino County Call Flow |            |
| 9      | IVR             | Shasta County Call Flow         |            |
| 10     | IVR             | Stanislaus County Call Flow     |            |
| 11     | IVR             | Sutter County Call Flow         |            |
| 12     | IVR             | Yuba County Call Flow           |            |
| 13     | IVR             | Non-CSC Call Flow               |            |

### APPENDIX

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Amazon Connect - <https://aws.amazon.com/connect/features/>