Design Document

SCR 103540 – Customized Control Panel for Amazon Connect

	DOCUMENT APPROVAL HISTORY	
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	Reviewed By	[individual(s) from build and test teams that reviewed document]

DATE	DOCUMENT VERSION	REVISION DESCRIPTION	AUTHOR
6/14/2019	1.0	Initial	Gerald Limbrick
7/8/2019	1.1	Added On hold status	Gerald Limbrick

Table of Contents

1 OVERVIEW

C-IV is changing the contact center Interactive Voice Response system (IVR) from Cisco Finesse to Amazon Connect. The default Amazon Connect Call Control Panel (CCP), which is the interface used by contact center staff to receive and handle calls, does not have the features needed.

This SCR will create a customized Call Control Panel with features mirroring those in the Cisco Finesse interface.

An application will be installed on the user's desktop to open compatible browser windows. The CCP will open in a Chrome based window. The C-IV System will open in Internet Explorer.

1.1 Current Design

The default Amazon Connect CCP does not have the features needed by the contact center staff.

1.2 Requests

1) Recreate the functionality of Cisco Finesse as a customized CCP for Amazon Connect.
2) Update the C-IV system screen pop to Accept the Contact ID used by Amazon Connect.

1.3 Assumptions

1) Call routing is handled by the Amazon Connect IVR system (IVR) and is outside the scope of this SCR.
2) The Visual IVR portion of the CCP will be added in SCR# CIV-103672 including the Call Me functionality. Visual IVR functionality currently applies to San Bernardino county only.
3) The list of agent states will be retrieved from the IVR and is outside the scope of this SCR.
4) The list of speed dial contacts will be retrieved from the IVR Quick Connects and is outside the scope of this SCR.
5) The list of teams, and their corresponding lists of agents managed by a supervisor, is retrieved from a hierarchy defined in the IVR and is outside the scope of this SCR.
6) The CCP will use the same method for authorization as is used in the C-IV System.
7) Security will be administered through the C-IV system.
8) The CCP takes actions and makes changes by sending requests to the backend Amazon Connect IVR system. Error messages have been documented in the unlikely event of a failed request.
9) Separate migration SCRs have been created to transition call centers to this new CCP. Training will be documented with migration SCR's: CIV-103539 & CIV-103667 – 103677.

10) Call recording is not handled by the CCP. Call recordings will remain in place with Calabrio.

2 RECOMMENDATIONS

2.1 Call Log Detail Page (C-IV system)

2.1.1 Overview

The C-IV system currently accepts Screen Pop parameters from a Call Center Application. The C-IV system accepts a Router Call Key – Router Call Key Day which identifies a call center Customer Contact.

The new IVR solution used by this CCP will use a Contact ID field instead. The C-IV system will be updated to accept the new Contact ID field as an alternative to the Router Call Key– Router Call Key Day.

2.1.2 Description of Changes

1) Update the C-IV system to also accept an Amazon Connect Contact ID, in absence of the Router Call Key – Router Call Key Day, to identify a Customer Contact.

2.1.3 Page Location

Global: Tools

Local: Office

Task: Call Log > Add

2.2 Login Page

2.2.1 Overview

The Log In page will be used to validate that a user should be allowed to access the CCP Home screen.

2.2.2 Login Page Mockup

Figure 2.2.1 – Login Page

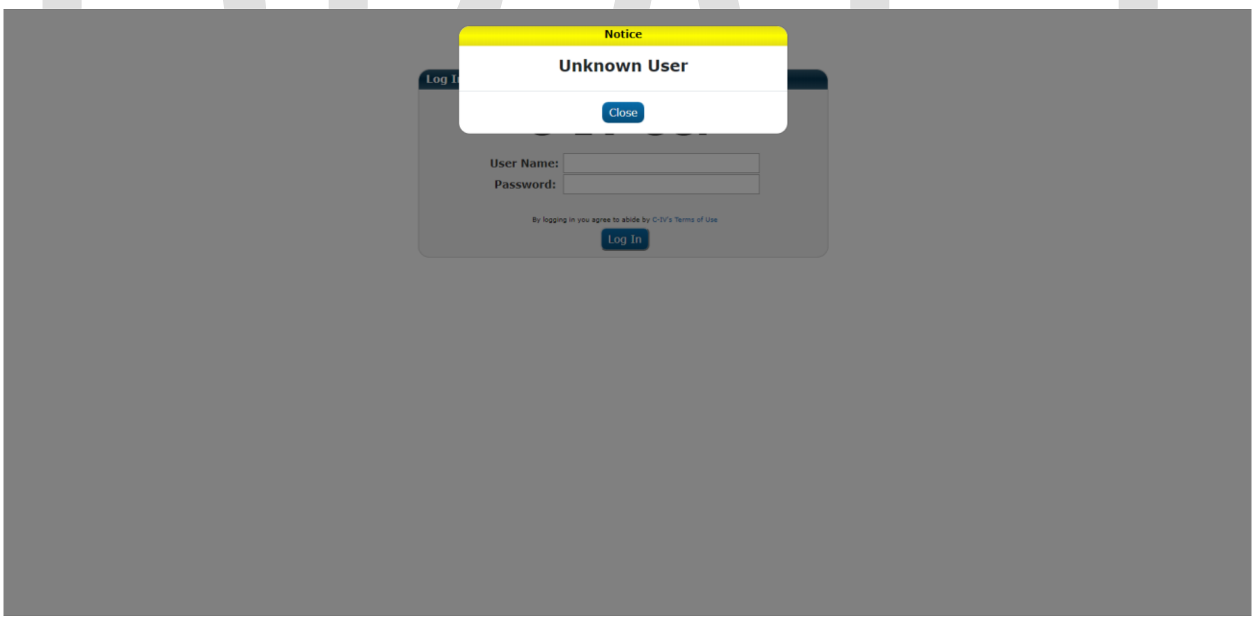

Figure 2.2.2 – Login Page – Unknown User

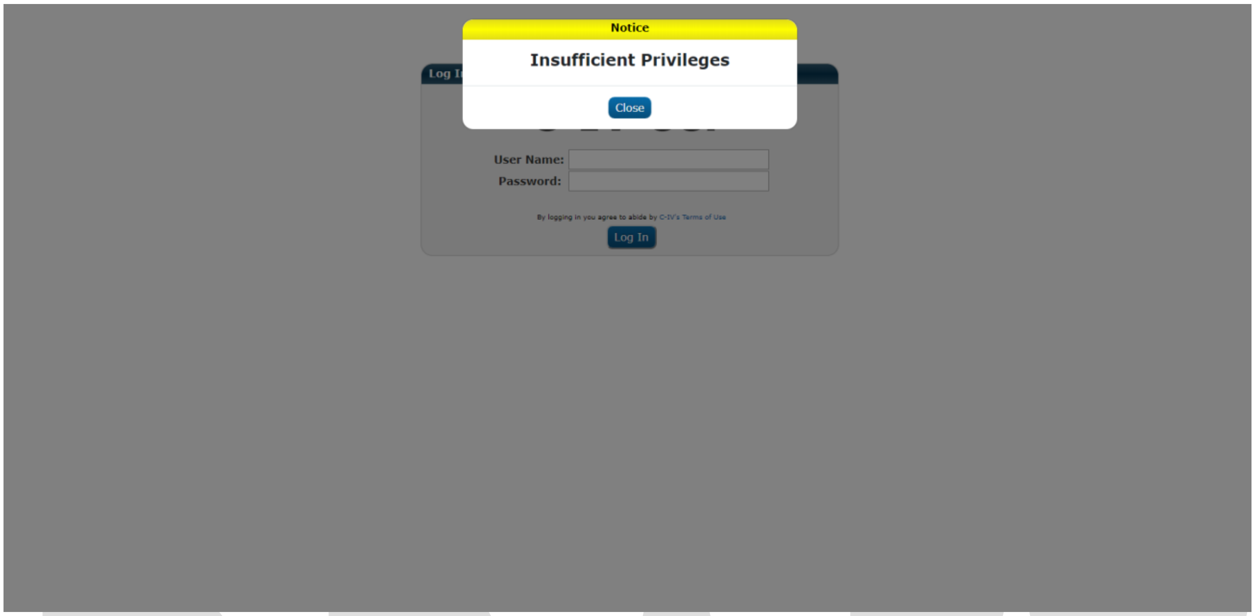

Figure 2.2.3 – Login Page – Insufficient Privileges

2.2.3 Description of Changes

1) Create a text field labeled: "User Name:".
2) Create a masked Password field labeled: "Password".
   a) Each character must be masked before the next character is entered if not sooner.
3) Access to the Login page will not be dependent on the user's security rights.
4) Add the "C-IV Terms of Use" label and link.
5) Add a 'Log In' button. This button will:
   a) Query a service to authenticate the user.
      i) If the user is not known to the system, show a Notice popup with text: "Unknown User".
   b) Query a service to retrieve the user's Rights.
      i) If the user does not have 'CCPAgent' rights, show a Notice popup with text: "Insufficient Privileges".
   c) Open the CCP Home page (if authorized) with the appropriate view:
      i) Users with 'CCPAgent' rights will have basic access to the CCP in Agent view, all CCP users must have 'CCPAgent' rights.
      ii) Users with the 'CCPSupervisor' rights will also be shown the 'Team Performance' Panel.
      iii) Users with the 'CCPMessageSender' rights will also be shown the Message Sender Panel.

2.2.4 Page Location

NA

2.2.5 Security Updates

Security Rights

Security Right	Right Description	Right to Group Mapping
CCPAgent	Allows access to CCP Home page with the Agent view	CCP Agent
CCPSupervisor	Allows access to the 'Team Performance' panel	CCP Supervisor
CCPMessageSender	Allows access to the Message Sender panel	CCP Message Sender

Security Groups

Security Group	Group Description	Group to Role Mapping
CCP Agent	Users can use the Call Control Panel in a call center	Regional Call Center Staff
CCP Supervisor	Users can view and manage team performance in addition to having the use of the Call Control Panel in a call center	Regional Call Center Supervisor
CCP Message Sender	User can update the 'Message of the Day' in the Call Control Panel	

Note: Local Security administrators (LSA) will need to assign the above groups to appropriate staff and/or security roles.

2.3 CCP Home Page

The Call Control Panel (CCP) will be used to take calls from the Amazon Connect IVR (IVR).

2.3.1 Overview

The Home page will be the working area of the CCP used for agents to make and receive calls and view agent and queue statistics.

Calls will be routed to an agent and will either be auto accepted or will require the agent to choose to accept the call, based on each county's call flow configuration. When a call is accepted, the CCP will open the C-IV application pre-populated with the same call information as was populated when using the Cisco Finesse call center solution (when the data is available). The Person Search page will be opened if the information is not available, the same as the Cisco Finesse solution.

The CCP will also have functionality for authorized users to add a message which will be displayed for all CCP users.

The CCP will show a list of links commonly used by call center agents. The list of links is unique to each county. County workers will follow the same process as today to request the list of links for their county be updated.

Note: The CCP will send messages to the IVR and receive messages from the IVR including availability state changes. The CCP will change the displayed availability state based on messages received from the IVR. Some states such as the "Talking" and "Wrap" states cannot be set manually and are displayed to the agent based on these messages from the IVR.

2.3.2 Home Page Mockups

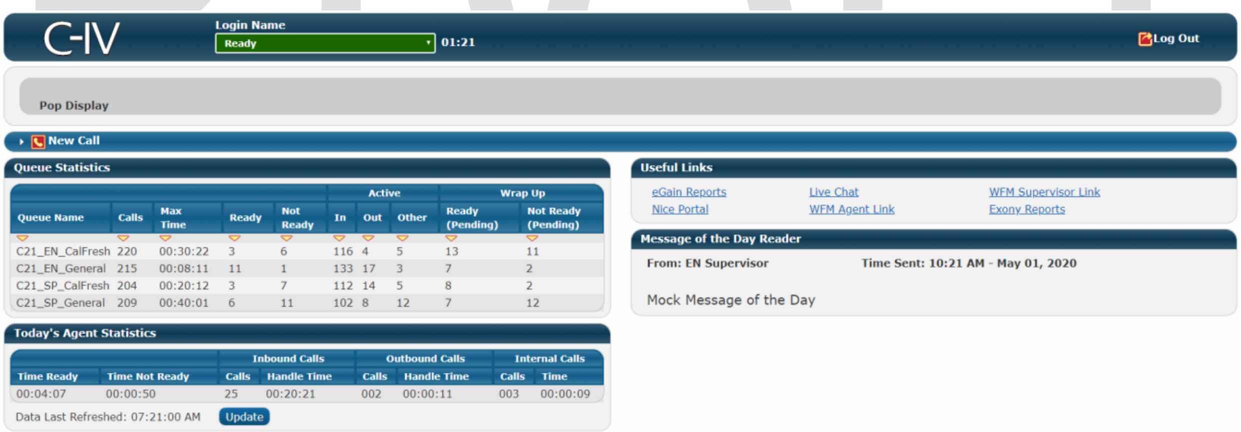

Figure 2.3.1 – Agent Ready

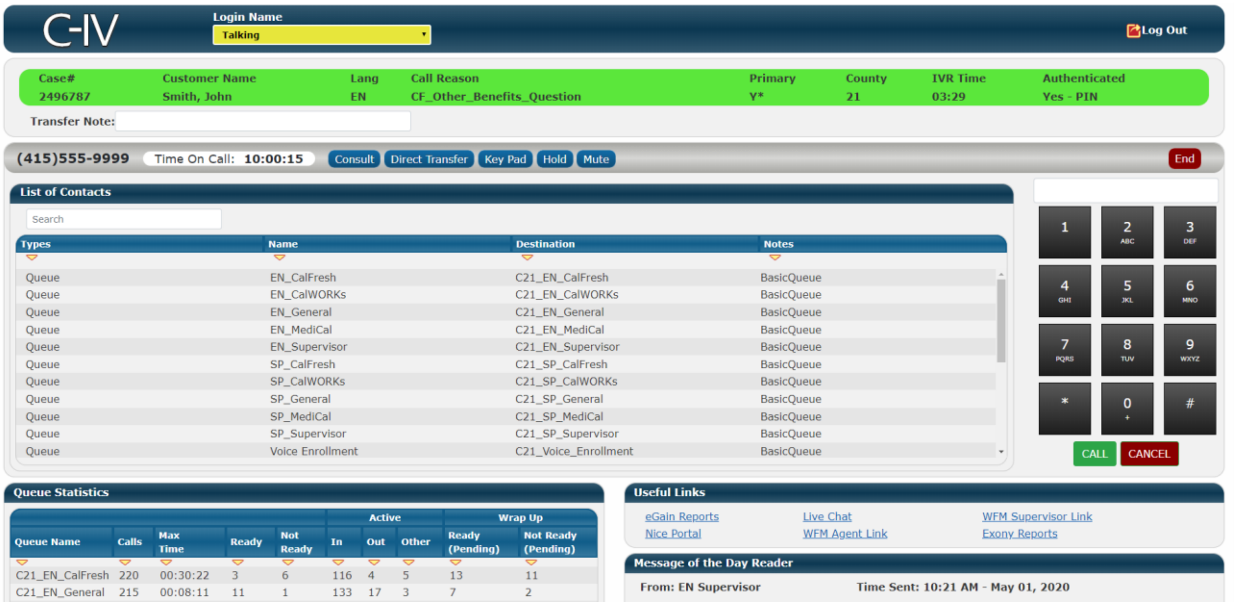

Figure 2.3.2 – Agent Phone Expanded Authenticated Talking

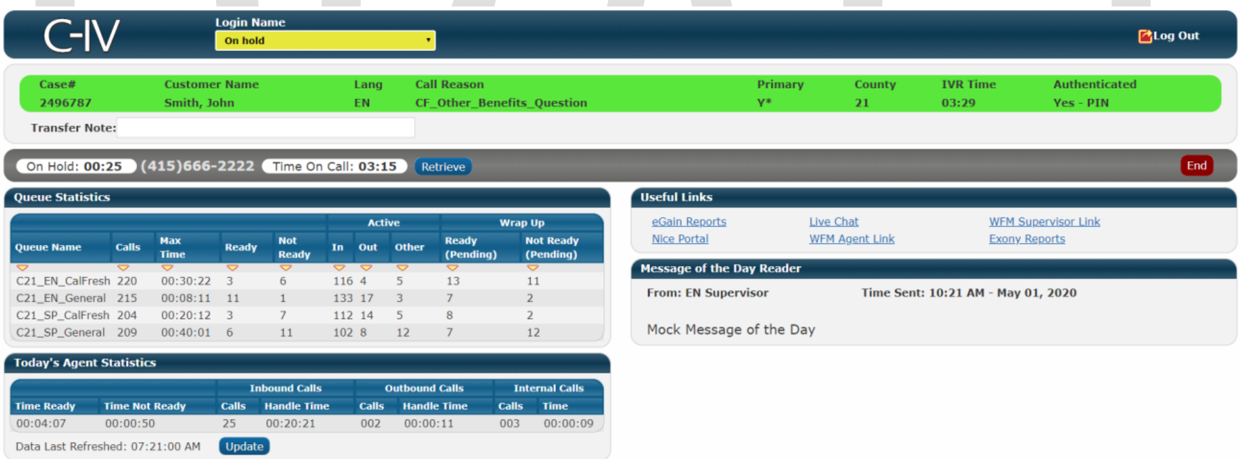

Figure 2.3.3 – Agent Call On Hold

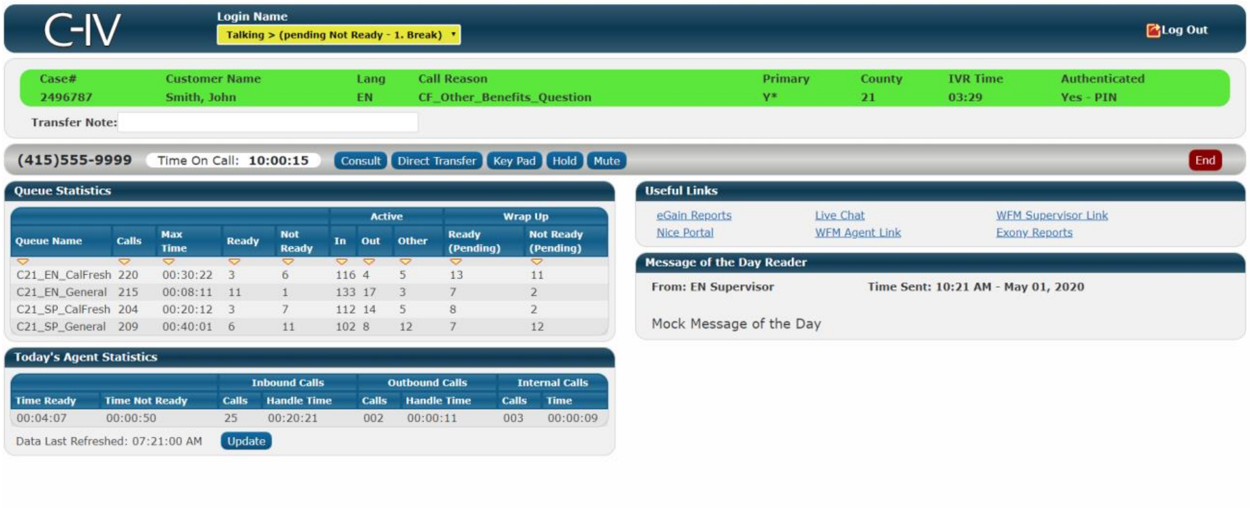

Figure 2.3.4 – Agent Pending State

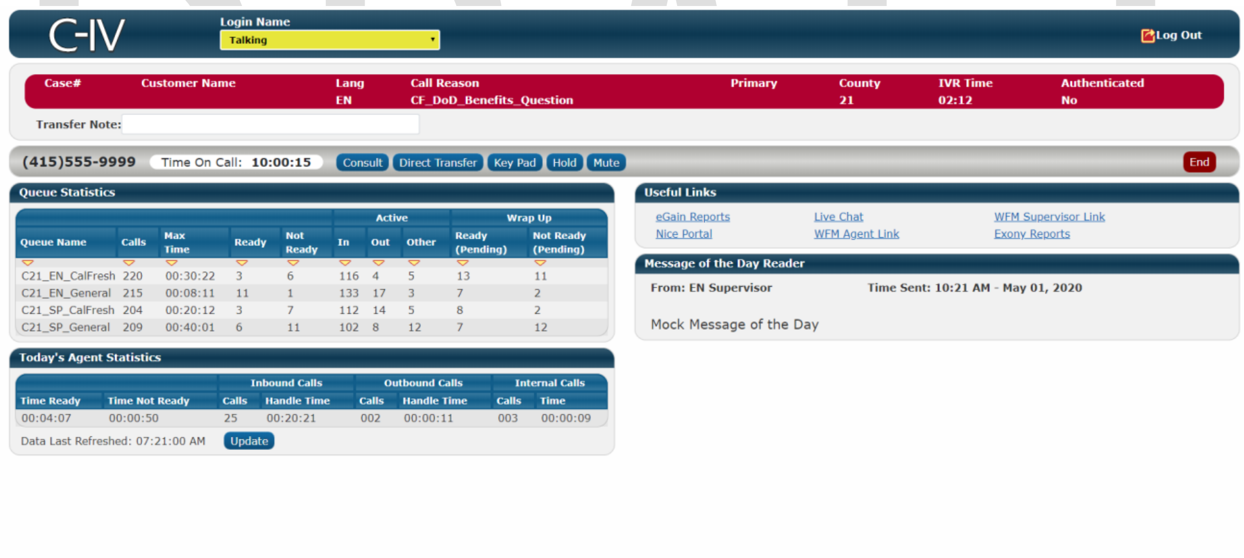

Figure 2.3.5 – Agent Not Authenticated Talking

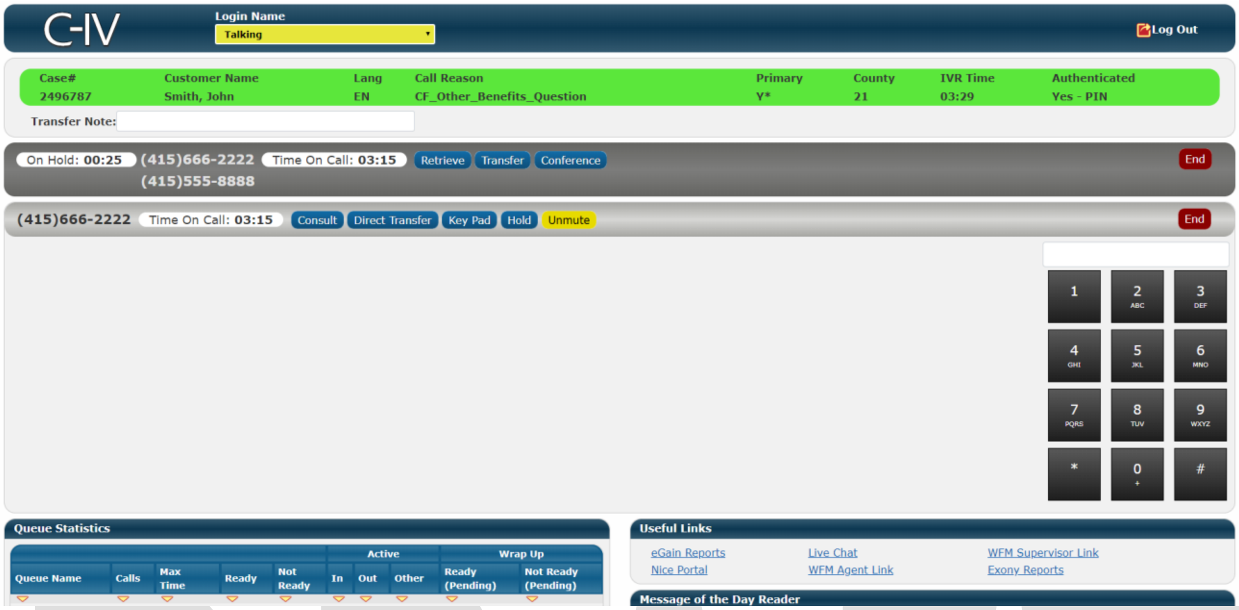

Figure 2.3.6 – Agent, Two Calls, Dialer Only

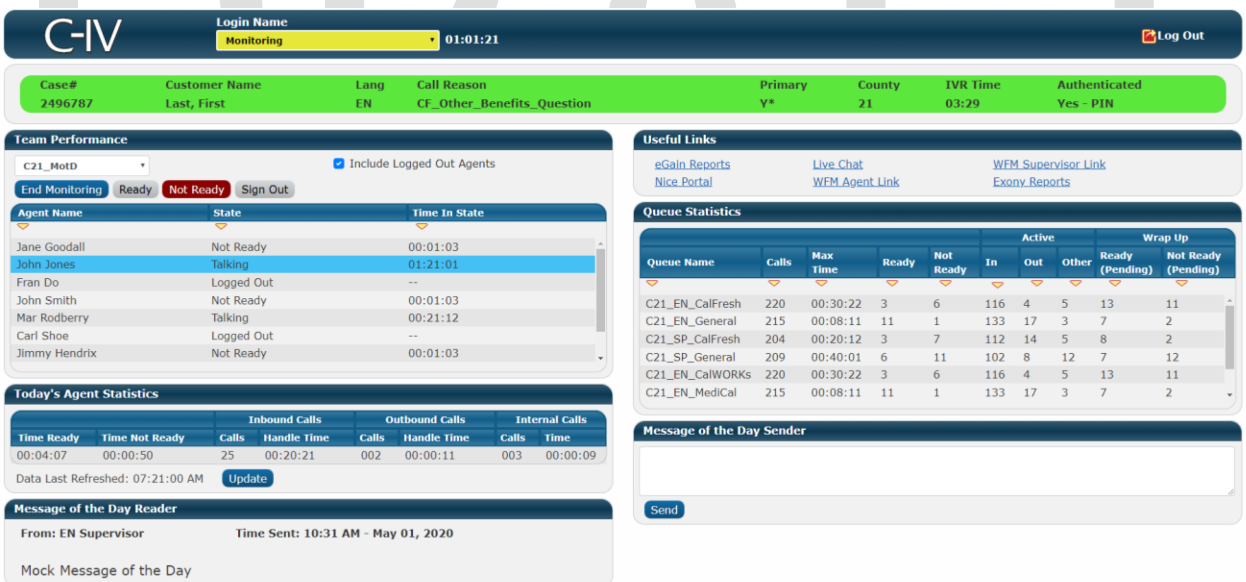

Figure 2.3.7 – Supervisor Monitoring

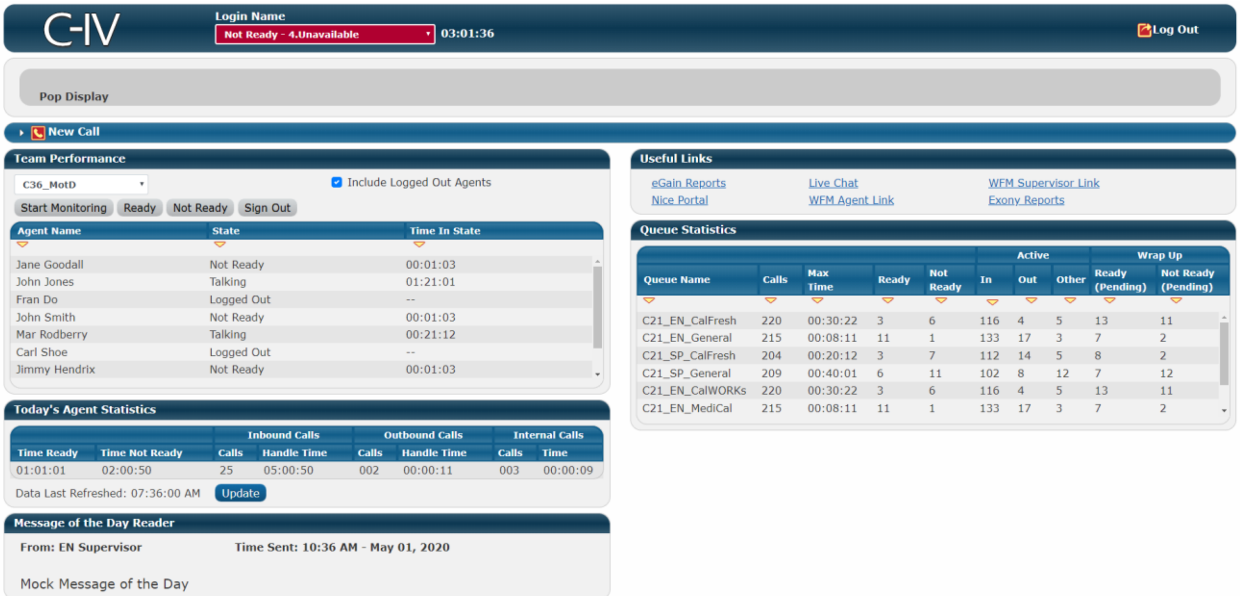

Figure 2.3.8 – Supervisor - Disabled Buttons No Message Sender Panel

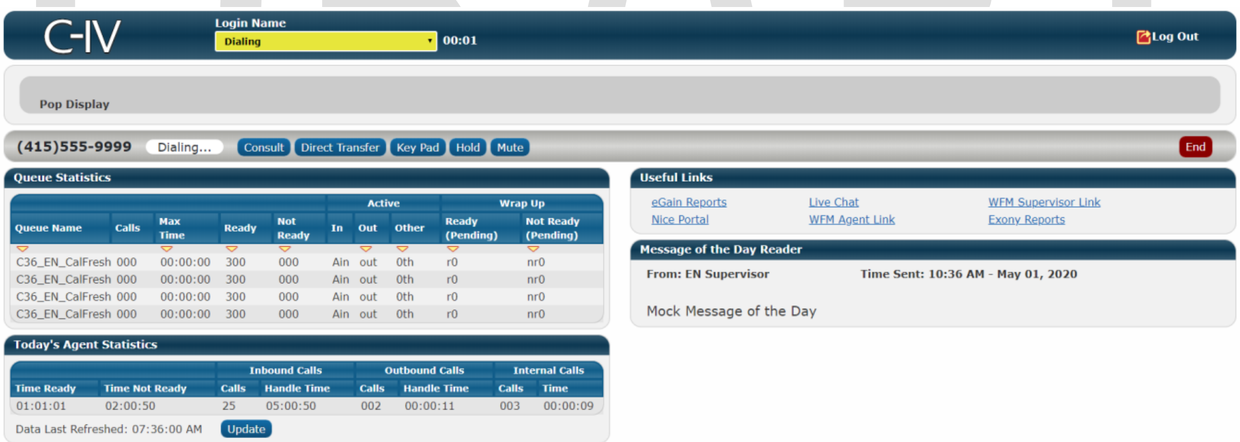

Figure 2.3.9 – Agent Dialing

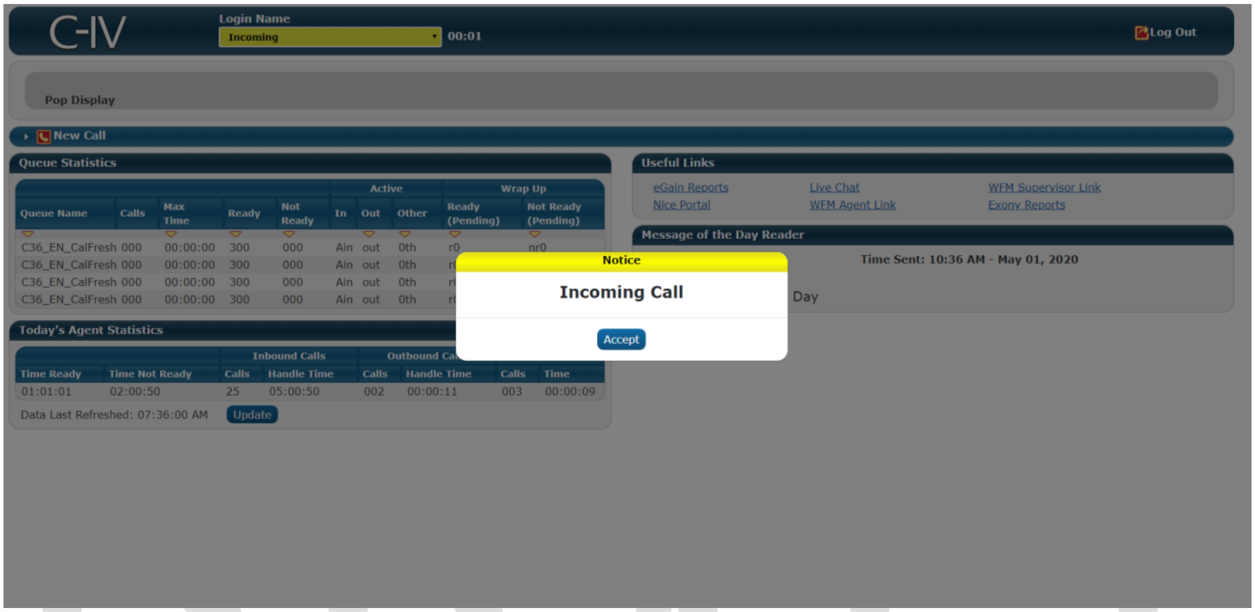

Figure 2.3.10 – Incoming Call

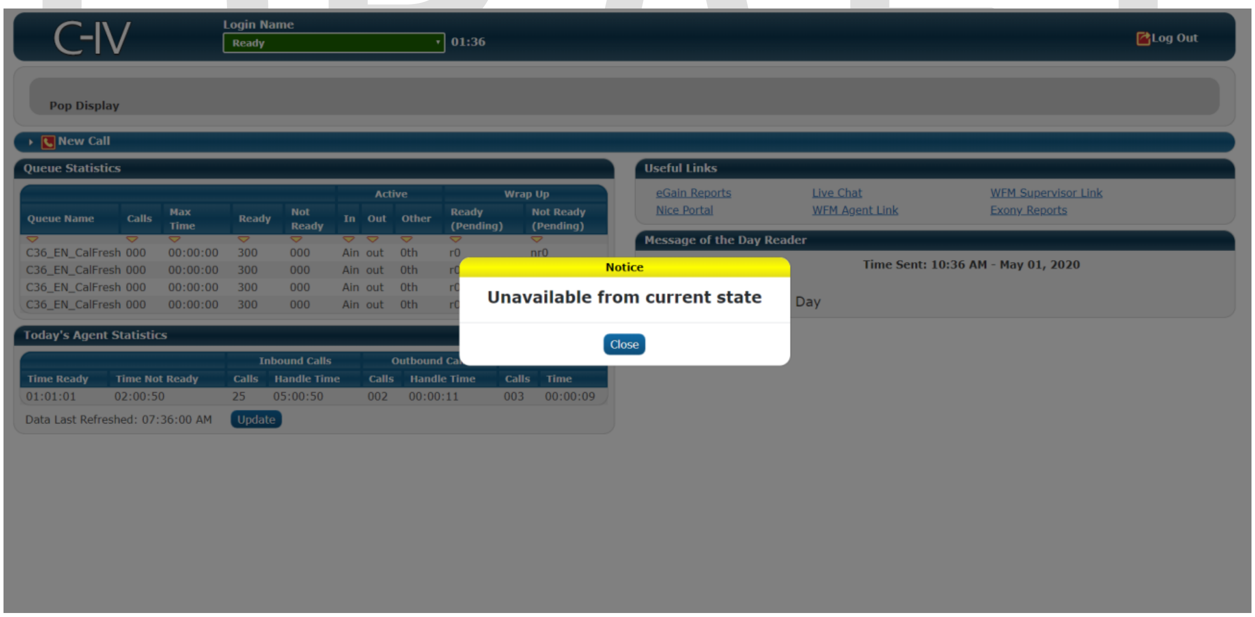

Figure 2.3.11 – Log Out Warning

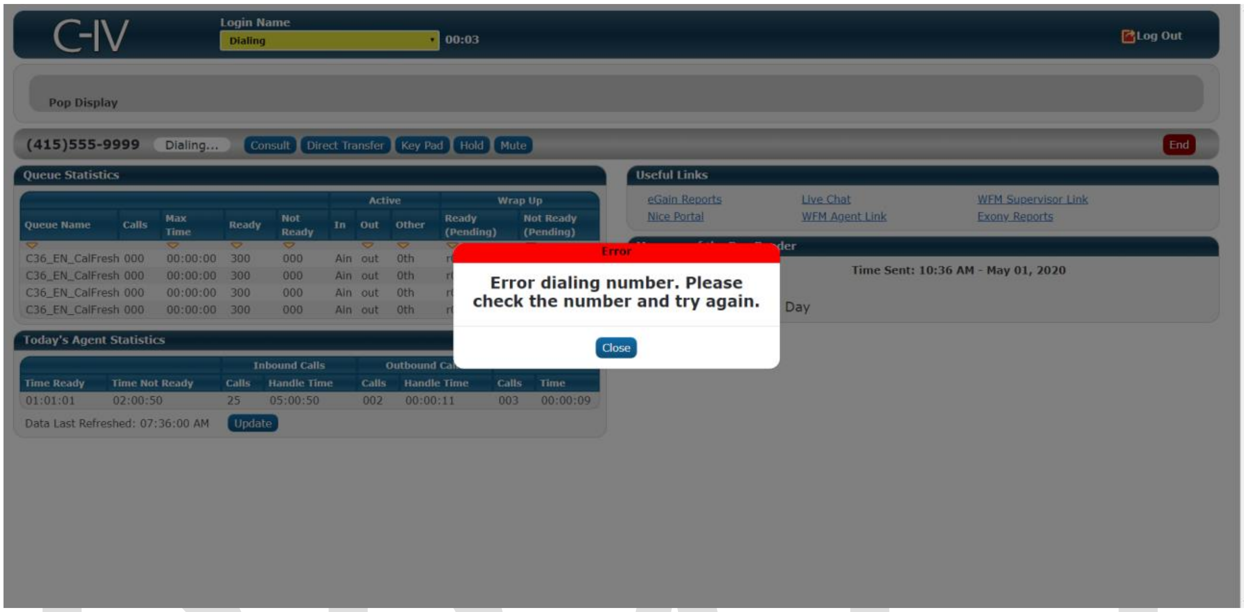

Figure 2.3.12 – Error Dialing

2.3.3 Description of Changes

1. The application will open a Chrome based browser. Due to the change to the Amazon Connect Computer based phones, set the browser with permission to use the microphone.
2. The default resolution for the CCP will be 1920 x 1080. The CCP will use the browser's resizing capabilities. Note: Resizing the browser window smaller will shift the elements on the page.
3. Create a Home page for the CCP.
   a) This page will be protected by the 'CCPAgent' rights. ('CCPAgent' rights will be given to agents rolled on by the counties.)
4. If a call comes in from a call flow that requires calls to be accepted, for example a call back queue (or based on county configuration):
   a) Show an Accept Call popup with the text: "Accept Call".
   b) Dismiss the popup if the agent state changes. Note: The agent state will be changed by the IVR if the agent does not accept the call.
   c) Add an 'Accept' button to accept the call and dismiss the popup.
   d) Disable other page functionality until the call is accepted.
   e) Note: User will not be able to perform any other actions on the page until the call is accepted.
5. When an incoming call is accepted:
   a) Connect the agent to the call.
      (1) If an error occurs while connecting the agent to the call:

(a) Show an Error popup with text: "Error connecting to the call." Note: The Amazon Connect IVR (backend system) can change the agent availability state based on errors. The call control panel will be monitoring for status changes and the CCP will update the State dropdown box (described below).

b) Use the call details received from the Amazon Connect IVR to:
  i) Open a C-IV system window, in Internet Explorer, as the available information allows.
  ii) Open a C-IV system window, in Internet Explorer, to the Person Search page, if information was not available, or to the Call Log Detail page with the following information populated (as available).
    (1) Case number
    (2) Worker ID
    (3) Date/time
    (4) Language
    (5) County
    (6) Call Back number

c) Note: Counties have the option to opt in to auto connect in which case calls are automatically accepted, skipping the "Incoming" state.

6. Add a Header panel at the top of the page.
  a) Add the C-IV Logo, as an image, on the left end of the Header panel.
  b) Retrieve the User-Friendly Display Name (this is an Amazon Connect field) of the logged in agent from Amazon Connect and display it to the right of the logo image.
  c) Add a State dropdown box for the agent to set their availability state, and to display the agent's state, when it is changed by the IVR system.
    i) Position the dropdown below the user's name.
    ii) Pull the list of agent selectable states (Amazon Connect List) for the current call flow from Amazon Connect and display them in the dropdown. Note: The list of states is retrieved from the Amazon Connect IVR and is outside the scope of this SCR.
      (1) If an error is returned when retrieving states, show an Error popup with text: "Error retrieving list of states."
    iii) When the IVR does not allow user state changes, display a place holder "Pending" state. (The Amazon Connect IVR does not allow the user to change the state while actively on a call but the IVR will change the user to the "Wrap" state after a call allowing the CCP to update the state programmatically.)
      (1) Add logic to change dropdown box to a "Pending" state.
      (2) Display the state with a yellow background as: "Current_State > (Pending New_State), e.g. "Talking > (pending Not Ready – 1. Break)".
    iv) Add a suggestive background color to the dropdown box:
      (1) Add a green background for the "Ready" state.

(2) Add a red background for all “Not Ready” and “Error” states.
(3) Add a yellow background for the “Talking”, “On hold”, “Wrap” and all “Pending” states.

v) Show only the agent selectable states associated with the call flow in the dropdown list.

vi) Update the dropdown box with any new state received from the Amazon Connect IVR.

(1) If an error is returned when updating the agent state:

(a) Show an Error popup with text: “Error setting current availability state, please select an availability state.”
(b) Reset the dropdown, so it matches the actual state.

(2) If an error state is received from the IVR, show an Error popup with text: “Something went wrong. Please select an availability state.”

d) Add a Status timer showing the time in the current state.

i) Position the timer to the right of the State dropdown.
ii) Format the timer with hours, minutes and seconds as hh:mm:ss hiding hours until/unless the timer reaches into hours.
iii) Reset the timer each time the state changes, unless the new state is a “Pending” state e.g. “Talking > Pending Not Ready – 1. Break”.
iv) Hide this timer when the agent is in the “Talking” or “On hold” states.

e) Add a Log Out icon and text: “Log Out”, as a link, at the right end of the header panel.

i) This link will close the application when the user is in a “Not Ready” state.
ii) This link will show a Notice popup when the agent is in any state other than a “Not Ready” state.

(1) Show the text: “Unavailable from current state” in the popup.
(2) Add a “Close” button to dismiss the popup.

7. Add a Details panel with no title bar.

a) Display this panel across the width of the page.
b) Position this panel below the Header panel.
c) Retrieve the call details from Amazon Connect when an incoming call is accepted.

i) If an error is returned when retrieving the call details, show an Error popup with text: “Error retrieving call details.”

d) Add an inner IVR Information panel with no title bar, to show the call details received from the IVR.

i) Show a green background, when an incoming call has been authenticated thru the IVR.
ii) Show a red background, when an incoming call is not authenticated.
iii) Show a dark grey background, when no incoming call is active.
iv) Note: The Visual IVR portion of the CCP, including the Call Me functionality, will be added in SCR # CIV-103672. Visual IVR functionality currently applies to San Bernardino county only.

        v) Show the text: “Pop Display”, when no call Information is available.
        vi) Add the following labels and fields, from left to right, with the labels above the data fields:
            (1) “Case#”
            (2) “Customer Name”
            (3) “Lang”
            (4) “Call Reason”
            (5) “Primary”
            (6) “County”
            (7) “IVR Time”
            (8) “Authenticated”
        vii) When a part of the IVR information is unavailable, display the label over an empty data field.
    e) Add a “Transfer Note:” label and text input box, inside of the Details panel.
        i) Position the label below the IVR Information, to the far left of the panel, with the text input box to the right of the label.
        ii) Add any incoming Transfer Note to this text input box.
        iii) Send any new or edited Transfer Note to Amazon Connect as a call attribute, when a call is transferred.
            (1) If an error is returned when adding the Transfer Note show an Error popup with text: “Error adding Transfer Note.” The call will transfer without the note.
        iv) The Transfer Note label and text input box will be hidden when there is no active call.

8. Add a ‘New Call’ bar below the Details panel.
    a) This bar will span the width of the page.
    b) This bar will be hidden when the agent is on a call (replaced by the Call Controls bar described below).
    c) Set this bar as a link to expand or collapse the Phone expandable section (described below).
    d) Add a dropdown indicator icon to the far left of this bar.
        i) Show an Arrow Pointing Right icon when the Phone expandable section is collapsed.

        -OR-

        ii) Show an Arrow Pointing Down icon when the Phone expandable section is expanded.
    e) Add a Phone icon to the right of the dropdown indicator followed by the text: “New Call”.
9. Add a Phone expandable section.
    a) This section will span the width of the page.
    b) Display this expandable section as a panel, with the ‘New Call’ bar appearing as a title bar.
    c) Add an inner ‘List of Contacts’ panel to the Phone expandable section.

i) Position the ‘List of Contacts’ panel at the left side of the expandable section.
ii) Add a title bar labeled: “List of Contacts”.
iii) Add a ‘Search’ text input box.
    (1) Add place holder text: “Search”.
    (2) Filter the list of contacts (described below) to show only items with matching text in one of the fields.
    (3) Execute the search as the user types.
    (4) Reset the ‘Search’ box when the Phone expandable section is collapsed.
iv) Add a List of Contacts table.
    (1) Add the table column headers:
        (a) “Type”
            (i) This is the Type of the contact (from the Amazon Connect IVR) e.g. External or Queue.
        (b) “Name”
            (i) This is the Name of the contact (from the Amazon Connect IVR).
        (c) “Destination”
            (i) This is the phone number of the contact or the name of the call flow.
        (d) “Notes”
            (i) This column will display the Description of the contact (from the Amazon Connect IVR).
    (2) Add sortable column indicator icons below each header.
    (3) Retrieve the contacts for the agent from the IVR and add them to the table. Note: The list of contacts will be retrieved from the Amazon Connect IVR Quick Connects and is outside the scope of this SCR.
        (a) If an error is returned when retrieving contacts, show an Error popup with text: “Error retrieving table data.”
    (4) The ‘List of Contacts’ panel and table will expand vertically to show up to a maximum of 11 rows. After 11 rows are shown, a scroll bar will appear on the right side of the panel to allow the user to view the additional table rows.
v) The ‘List of Contacts’ panel will be hidden when the Phone expandable section is opened with the ‘Key Pad’ button.

d) Add a Telephone Number input box at the top right of the Phone expandable section (not inside of the ‘List of Contacts’ panel).
    i) This input box will accept characters from the keyboard (when this input box is selected) or from the Dialer buttons (described below).
    ii) Add phone Dialer buttons below the Telephone Number input box. Display the buttons in a 3 x 4 grid. Display the alphabetical characters, or a plus sign (+), represented by each number below it in smaller font:

        - 1
        - 2 ABC
        - 3 DEF
        - 4 GHI
        - 5 JKL
        - 6 MNO
        - 7 PQRS
        - 8 TUV
        - 9 WXYZ
        - *
        - 0 +
        - #
    iii) Add the number or primary character represented by the button to the Telephone Number input box, when the button is clicked.
    iv) Add logic to send only dialable characters entered in this box to the phone call i.e. if a non-dialable character is entered do not use it as part of the dialed sequence. Note: Dialable characters are numbers, "*" and "#".
        (1) If the expandable section was opened thru the 'Key Pad' button, send each character as it is entered in the Phone Number input box immediately as they are entered (as touch tones).
        (2) If the expandable section was not opened from the 'Key Pad' button, delay sending the characters until the 'Call' or 'Transfer' button is clicked, or the enter button (on the user's keyboard) is pressed (when the Phone Number input box is selected).

e) Add a 'Call' button below the Dialer buttons. This button will:
    i) Update the agent state to "Dialing".
    ii) Dial a new call using the dialable characters in the Phone Number input box.
        (1) If an error is returned when dialing the call, show an Error popup with text: "Error dialing number. Please check the number and try again."
        (2) If any error is returned after the call is dialed, show an Error popup with text: "Error with call. Please check the number and try again."
    iii) Collapse the Phone expandable section.
    iv) Hide/remove the 'New Call' bar (if not already hidden) and add/show a Call Controls bar for the call (if not already showing).
    v) This button will be hidden when the Phone expandable section was opened with the 'Key Pad' button or the 'Direct Transfer' button (described below).

f) Add a 'Transfer' button (inside the Phone expandable section). This button will:
    i) Update the agent state to 'Dialing'.
    ii) Dial the number in the Phone Number input box.

        (1) If an error is returned when dialing the number, show an Error popup with text: “Error dialing. Please check the number and try again.”
    iii) If successfully dialed:
        (1) Immediately conference the previous call(s)with this new call and release the agent from the call.
            (a) If an error is returned when transferring the call, show an Error popup with the text: “Error transferring call. Please try again.”
        (2) If the transfer is successful:
            (a) Clear the Phone Number input box and collapse the Phone expandable section.
    iv) This button will only display when the user opened the Phone expandable section with the ‘Direct Transfer’ button.
  g) Add a ‘Cancel’ button. This button will:
    i) Clear the Phone Number input box.
    ii) Collapse the expandable section.
    iii) This button will be hidden when the Phone expandable section was opened from the ‘Key Pad’ button.

10. Add a Call Controls bar below the Details panel.
  a) Add logic to darken this bar when the call is on hold.
  b) This bar will be hidden unless the agent is on a call (replaced by the ‘New Call’ bar).
  c) Add an “On Hold" label and timer at the far left of this bar.
    i) Restart and display this timer each time the call is placed on hold.
    ii) Display these only when the call is on hold.
  d) Add the phone number of the call to the right of the “On Hold” timer.
  e) Add a “Time On Call” label and timer to the right of the phone number.
    i) When the call request has been sent to the IVR but is not yet connecting display text: “Dialing…”, in place of the label and timer.
  f) When the call is connecting display the text: “Connecting…”, in place of the label and timer.
  g) Add a group of buttons to the right of the “Time On Call” label and timer. From left to right:
    i) Add a ‘Consult’ button. This button will:
        (1) If a Phone expandable section associated with another call is open, collapse it.
        (2) If the Phone expandable section associated with this call is open, reset it with the ‘List of Contacts’ panel showing and the ‘Call’ and ‘Cancel’ buttons showing (other elements described below).
        (3) If no Phone expandable section is open, expand the Phone expandable section for this bar (with the ‘List of Contacts’ panel and the ‘Call’ and ‘Cancel’ buttons showing, and ‘Transfer’ button hidden).
        (4) This button will be hidden when the call is on hold.

ii) Add a 'Direct Transfer' button. This button will:
    (1) If a Phone expandable section associated with another call is open, collapse it.
    (2) If the Phone expandable section associated with this call is open, reset it (with the 'List of Contacts' panel and the 'Transfer' and 'Cancel' buttons showing).
    (3) If no Phone expandable section is open, expand the Phone expandable section for this bar (with the 'List of Contacts' panel and the 'Transfer' and 'Cancel' buttons showing, and 'Call' button hidden).
    (4) This button will be hidden when the call is on hold.

iii) Add a 'Key Pad' button. This button will:
    (1) If a Phone expandable section associated with another call is open, collapse it.
    (2) If the Phone expandable section associated with this call is open, reset it (with the 'List of Contacts' panel hidden and the 'Call', 'Transfer' and 'Cancel' buttons hidden).
    (3) If no Phone expandable section is open, expand the Phone expandable section for this bar (with the 'List of Contacts' panel hidden and with the 'Call', 'Transfer' and 'Cancel' buttons hidden).
    (4) This button will be hidden when the call is on hold.
    (5) Note: There is no 'Cancel' button available when the Phone expandable section was opened with the 'Key Pad' button. The user can either scroll down to access the lower areas of the page or press the 'Consult' or 'Direct Transfer' buttons to access the 'Cancel' button.

iv) Add a 'Hold' button. This button will:
    (1) Put the call on hold triggering this Call Controls bar to darken and the availability state to change to "On hold".
        (a) If an error is returned when placing the call on hold, show an Error popup with text: "Error with Hold. Please try again."
    (2) This button will be hidden when the call is on hold.

v) Add a 'Mute' button. This button will:
    (1) Mute all calls.
        (a) If an error is returned when muting, show an Error popup with text: "Error with Mute. Please try again."
    (2) This button will be hidden when the call is on hold and/or when calls are muted.

vi) Add an 'Unmute' button. This button will:
    (1) Unmute all calls.
        (a) If an error is returned when unmuting, show an Error popup with text: "Error with Mute. Please try again."

        (2) This button will be hidden when the call is on hold and/or not muted.
    vii) Add a 'Retrieve' button. This button will:
        (1) Place any other active call on hold.
            (a) If an error is returned when taking the call off hold, show an Error popup with text: "Error with Hold. Please try again."
        (2) This button will be hidden unless the call is on hold.
    viii) Add a 'Transfer' button. This button will:
        (1) Transfer the call to the other active calls. Note: This will Conference all active calls together and release the agent from the call.
            (a) If an error is returned when transferring the call show an Error popup with the text: "Error Transferring Call".
        (2) This button will be hidden unless both the call is on hold and another call is active.
    ix) Add a 'Conference' button. This button will:
        (1) Conference all calls together.
            (a) If an error is returned when conferencing the call show an Error popup with the text: "Error conferencing call. Please try again."
            (b) Close any open Phone expandable section.
        (2) This button will be hidden unless both the call is on hold and another call is active.
h) Add an 'End' button to the far right of the Call Controls bar. This button will:
    i) Hang up/release the call associated with the Call Controls bar or cancel a call that is dialing.
        (1) If an error is returned when ending or canceling the call, show an Error popup with text: "Error Canceling or Ending the call, please try again."
    ii) Hide/remove this Call Controls bar.
i) Add any phone number(s) of conferenced calls as a new row (or rows) under the existing phone number(s) inside the Call Controls bar.
j) Note: When only a single call is active, and it is on hold, the only button available on the Call Controls bar is the 'Retrieve' button. In this case, the call must be taken off hold if a new conference or transfer is needed.

11. Add an additional Call Controls bar and Phone expandable section (collapsed to start) for any new call(s) not conferenced with the others.
12. Add the following panels below the Phone expandable section. Show these panels in two columns, each spanning half the page width.
    a) Agent view, from top to bottom:
        i) Agents will see the Queue Statistics and Agent Statistics panels in the left column.
        ii) Agents will see the Useful Links and Message Reader panels in the right column.
    b) Supervisor view:

i) In addition to the Agent view panels, Supervisors will see the Team Performance' panel as the top left-most panel.

c) Message Sender view:

i) In addition to the Agent view panels, Message Senders will see the Message Sender panel as the bottom right-most panel.

13. Add a 'Team Performance' panel.

a) This panel will only show for the Supervisor view and will be protected by the 'CCPSupervisor' rights. The supervisor rights will be given to users when they are rolled on by the counties.

b) Add a title bar labeled: "Team performance".

c) Add a Team dropdown box for the list of teams to be managed by the supervisor.

i) Allow multiple selections from this dropdown box.

ii) Retrieve the List of teams managed by this supervisor from Amazon Connect and add the list of teams to the dropdown box. Note: the list of teams comes from a hierarchy defined in the Amazon Connect IVR and is outside the scope of this SCR.

(1) If no teams are assigned to the supervisor, add the text "None", in the dropdown box.

(2) If an error is returned when retrieving the list of teams, show an Error popup with text: "Error retrieving Teams."

iii) Update the Agents table (described below) to reflect the selected team(s).

d) Add an "Include Logged Out Agents" checkbox and label, right of and above the group of buttons below.

i) Show the label to the right of the checkbox.

ii) Default the status of the checkbox to Selected.

iii) Remove agents in the state "Logged Out" if the checkbox is unselected.

e) Add a group of buttons below the Team dropdown box. From left to right:

i) Add a 'Start Monitoring' button, to allow the Supervisor to listen to the current call of the selected agent. This button will:

(1) Start a monitoring session for the selected agent's current call, triggering the 'New Call' bar to be hidden.

(a) If an error is returned when monitoring the call, show an Error popup with text: "Error Monitoring the call, please try again."

(2) Note: The monitoring session will end if the call ends while monitoring.

(3) Change the state of the supervisor to "Monitoring".

(4) Hide the 'Start Monitoring' button and display the 'End Monitoring' button.

(5) This button will be disabled unless the selected agent is in the "Talking" status.

ii) Add an 'End Monitoring' button. This button will:

(1) End the monitoring session.
(2) This button will be hidden unless a call is being monitored.
(a) If an error is returned when ending the Monitoring session show an Error popup with text: "Error Canceling or Ending the call, please try again."

iii) Add a 'Ready' button. This button will:
(1) Change the state of the selected agent to "Ready".
(2) This button will be disabled unless the selected agent is in the "Wrap" status or any of the "Error", or "Not Ready" statuses.

iv) Add a 'Not Ready' button:
(1) This button will be disabled when the selected agent is in a "Not Ready" state.

v) If an error is returned when updating the agent's state, show an Error popup with text: "Error setting the agent's availability state, please try again." Add a 'Sign Out' button: This button will:
(1) Change the state of the selected agent to "Logged Out".
(2) This button will be disabled if the selected agent is in the "Logged Out" state.

f) Add an Agents table:
i) Add the table column headers:
(1) "Agent Name"
(a) This column shows the User-Friendly Display Name of the agent.
(2) "State"
(a) This is the status of the agent.
(3) "Time In State"
(a) This is a timer showing how long the agent has been in the status.
(b) Do not show a timer for logged out agents.

ii) Add sortable column indicator icons below each column header.

iii) Retrieve and update the list of agents from the Amazon Connect IVR based on the Teams dropdown box. Note: The agents included are based on a hierarchy defined in the Amazon Connect IVR and are outside the scope of this SCR.
(1) If an error is returned when retrieving list of agents, show an Error popup with text: "Error Retrieving Table Data."

iv) The 'Team Performance' panel and the Agents table will expand vertically to show up to a maximum of 7 rows. After 7 rows are shown, a scroll bar will appear on the right side of the panel to allow the user to view the additional table rows.

v) Add logic to refresh the data in the table every 15 seconds or less.

14. Add an Agent Statistics panel.
a) Add a title bar labeled: "Today's Agent Statistics"
b) Add an Agent Statistics table, to show statistics for the current user.
i) Add table column headers:

(1) Add a blank header spanning two sub-headers:
   (a) “Time Ready”
      (i) This is the total time the agent has been in the “Ready” state.
   (b) “Time Not Ready”
      (i) This is the total time the agent has been in any “Not Ready” state.
(2) Add an “Inbound Calls” header spanning two sub-headers:
   (a) “Calls”
      (i) This is the number of inbound calls the agent has taken.
   (b) “Handle Time”
      (i) This is the Inbound Calls handle time.
(3) Add an “Outbound Calls” header spanning two sub-headers:
   (a) “Calls”
      (i) This is the number of outbound calls the agent has made.
   (b) “Handle Time”
      (i) This is the Outbound Calls time.
(4) Add an “Internal Calls” header spanning two sub-headers:
   (a) “Calls”
      (i) This is the number of internal calls the agent has made or received.
   (b) “Time”
      (i) This is the Internal Calls time.

ii) Retrieve the Agent statistics data from the IVR and add it to the table.
iii) Add logic to refresh the data in the table every 15 minutes.

c) Add the time of the latest refresh below the Agent Statistics table on the left side of the Agent Statistics panel.
   i) Add the text: “Data Last Refreshed:” followed by the time the statistics data was refreshed.
   ii) Format the time as hh:mm:ss followed by “AM” or “PM”.
   iii) Reset the time as the data is refreshed.
d) Add an ‘Update’ button to the right of the time. This button will:
   i) Refresh the Agent Statistics table data on demand (with the latest data available).
      (1) If an error is returned when retrieving the table data, show an Error popup with text: “Error retrieving table data.”

15. Add a Message Reader panel.
   a) Add a title bar labeled: “Message of the Day Reader”.
   b) Add a header row.
      i) Add the sender labeled as, “From:”, followed by the name of the message sender. Position these on the left side of the header row.
      ii) Add the time sent labeled as, “Time Sent:” followed by the time and date the message was sent, on the right side of the header row.
   c) Add the message body below the header row.

16. Add a 'Useful Links' panel.
    a) The add the list of links for the specific user's county to the panel.
    b) Clicking a link will open the referenced site in a new window.
17. Add a 'Queue Statistics' panel.
    a) Add a title bar labeled: "Queue Statistics".
    b) Add a Queue Statistics table.
        i) Add table column headers:
            (1) Add a blank header spanning five sub-headers:
                (a) "Queue Name"
                    (i) This is the name of the queue.
                (b) "Calls"
                    (i) This is the number of calls currently in the queue.
                (c) "Max Time"
                    (i) This is the longest time a current call has been waiting in the queue.
                (d) "Ready"
                    (i) This is the number of agents in a the "Ready" state for the queue.
                (e) "Not Ready"
                    (i) This is the number of agents in any "Not Ready" state for the queue.
            (2) Add an "Active" header spanning three sub-headers:
                (a) "In"
                    (i) This is the number of inbound calls currently in the queue.
                (b) "Out"
                    (i) This is number of outbound calls currently in the queue.
                (c) "Other"
                    (i) This is the number of calls that are not inbound or outbound currently in the queue.
            (3) Add a "Wrap Up" header spanning two sub-headers:
                (a) "Ready (Pending)"
                    (i) This is the number of agents pending "Ready" for the queue.
                (b) "Not Ready (Pending)"
                    (i) This is number of agents pending "Not Ready" for the queue.
        ii) Retrieve the Queue statistics data from the IVR and add it to the table.
            (1) If an error is returned when retrieving the queue statistics, show an Error popup with text: "Error Retrieving Table Data."
        iii) The 'Queue Statistics' panel and table will expand vertically to show up to a maximum of 6 rows. After 6 rows are shown, a scroll bar will appear on the right side of the panel to allow the user to view the additional table rows.
        iv) Add logic to refresh the data in the table every 15 seconds or less.
18. Add a Message Sender panel.

a) This panel will be protected by the 'CCPMessageSender' rights and will be hidden if the user does not have these rights.
b) Add a title bar labeled: "Message of the Day Sender".
c) Add a Message text input area.
    i) The Message area should span the width of the panel.
    ii) Add a 'Send' button below the Message area, on the left side of the panel. This button will:
        (1) Send the message to the Amazon Connect IVR.
            (a) If an error is returned when adding the message show an Error popup with text: "Error adding message."
        (2) Constrain the Message text input area to 500 characters.
        (3) Filter out these characters: "<", ">", "/", "\" and "&".

2.3.4 Page Location

NA

2.3.5 Security Updates

Security Rights

Security Right	Right Description	Right to Group Mapping
CCPAgent	Allows access to CCP Home page with the Agent view	CCP Agent
CCPSupervisor	Allows access to the 'Team Performance' panel	CCP Supervisor
CCPMessageSender	Allows access to the Message Sender panel	CCP Message Sender

Security Groups

Security Group	Group Description	Group to Role Mapping
CCP Agent	Users can use the Call Control Panel in a call center	Regional Call Center Staff
CCP Supervisor	Users can view and manage team performance in addition to having the use of the Call Control Panel in a call center	Regional Call Center Supervisor
CCP Message Sender	User can update the 'Message of the Day' Call Control Panel	

Note: Local Security administrators (LSA) will need to assign the above groups to appropriate staff and/or security roles.

3 SUPPORTING DOCUMENTS

Number	Functional Area	Description	Attachment
1	Security	Security Matrix	SCR 103540 - Security Matrix.xls

4 MIGRATION IMPACTS

SCR # CA-208919 has been created to address this new migration gap.

5 APPENDIX

5.1 Element styles

1) Leave the Home page background white.
2) Panels, unless noted:
   a) Will have a light grey background.
   b) Will have rounded corners.
3) The Header panel:
   a) Will have a dark-blue gradient background.
   b) Will have a white, bold, 16pt font, unless noted.
4) IVR Information panel:
   a) Will have a 16pt bold font.
   b) Will have black font when showing a green background.
   c) Will have white font when showing a red background.
5) Message Reader panel:
   a) The Header row:
      i) Will have black, bold 16pt font.
   b) The Message Body:
      i) Will have black 20pt regular font.
6) Transfer Note label:
      d) Will have black, bold, 16pt font.
7) Buttons, unless noted:
   a) Will have rounded corners, the buttons should be noticeably less rounded than the panels.
   b) Will have a blue gradient background.
   c) Background color of buttons will change to a lighter color when the user hovers the mouse pointer over the button.
   d) Will have a white 16pt regular font.
8) Key Pad buttons:
   a) Will NOT have rounded corners.
   b) Will have a black gradient background.
   c) Will have a black border.
   d) Will have white font.
   e) The Main font will be a 20px font.
   f) The smaller font will be set to 50% of the main font size.
9) Call button:
   a) Will have a green background.
   b) Will have only slightly rounded corners.
   c) Will have white, 12pt font.

10) Cancel button:
    a) Will have a dark-red background.
    b) Will have only slightly rounded corners.
    c) Will have white, 12pt font.
11) Transfer button (inside the Phone expandable section)
    a) Will have a green background.
    b) Will have only slightly rounded corners.
    c) Will have white, 12pt font.
12) End button:
    a) Will have a dark-red background.
13) Unmute button:
    a) Will have a yellow background and black text.
14) Ready button:
    a) Will have a dark-green background.
15) Not Ready button:
    a) Will have a dark-red background.
16) Sign Out button:
    a) Will have a dark-red background.
17) Text input boxes:
    a) Corners will be rounded. These should be slightly less rounded than the buttons.
18) State dropdown box:
    a) The unexpanded dropdown will have a white border.
    b) The dropdown will have bold font.
    c) Corners of dropdown boxes will be rounded. These should be slightly less rounded than the buttons.
    d) The background color of the options should show for the expanded or unexpanded view of the dropdown.
    e) When: red or green background, use a white font.
    f) When: yellow background, use a black font.
19) Title bars, unless noted:
    a) Will have a dark-blue gradient background.
    b) Will have white, bold, 16pt font.
20) New Call bar:
    a) Will have a blue gradient background.
    b) Will have a white, bold, 16pt font.
21) Table column headers:
    a) Will have a blue gradient background.
    b) Will have white, bold, 16pt font.
22) Labels, unless noted:
    a) Will have the same background color as the containing element.
    b) Will have a black 16pt font.
23) On Hold label:
    a) Will have a white, rounded background
    b) Will have a black, regular 18pt font.

24) On Hold timer:
    a) Will have a white, rounded background.
    b) Will have a black, bold 18pt font.
    c) Will be formatted with hours, minutes and seconds as: hh:mm:ss with the hours hidden until/unless the timer reaches into hours.
25) Time on Call label and timer:
    a) Will display in the same format as the 'On Hold' label and timer.
26) Text fields, unless noted:
    a) Will have the same background color as the containing element.
    b) Will have a black 16pt font.
27) Text input fields, unless noted:
    a) Will have a white background.
28) Phone Number (inside Call Controls bar)
    a) Will have a bold, 20pt font.
29) Useful Links:
    a) Will show as underlined text.
    b) Note: The list of Useful links will be retrieved from the Amazon Connect IVR instance associated with the user's county and is outside the scope of this SCR.
30) Popups:
    a) Will have rounded corners.
    b) Will have a title bar with the label centered and formatted with black, bold 16pt font.
    c) Will show over a masking overlay with all other page elements disabled. (clicking the overlay will not close the popup).
    d) Will show message body text in a panel colored background with a black, bold 18pt font.
31) Accept Call popup:
    a) Will have a title bar with a yellow gradient background labeled: "Notice".
    b) Will have an 'Accept Call' button to accept the call and close the popup.
32) Notice popups, unless noted:
    a) Will have a title bar labeled: "Notice" with a yellow gradient background.
    b) Will have the text: "Notice", centered in a black, bold, 16pt font.
    c) Will have a 'Close' button to close the popup.
33) Error popups:
    a) Will have a title bar with a red background labeled: "Error".
        i) Will have a 'Close' button to dismiss the popup.

5.2 Sortable Columns

1) Sortable Columns:
    a) Will show the Sortable Column icon for a column when the table is sorted by that column.
    b) Will show the Sortable Column Empty icon for a column when the table is not sorted by that column.

c) Sort the table by the column in ascending order when the user clicks the icon the first time.
d) Toggle the sort order, either ascending or descending, if the icon is clicked again.

5.3 Icons

Icon Referenced as:	Icon image:	File Name:
C-IV Logo	C-IV	civ_logo_trimmed.png
Log Out		icon_logout.png
Phone		icon_calllog.png
Arrow Pointing Right		icon_arrowWhiteClosed.png
Arrow Pointing Down		icon_arrowWhiteOpen.png
Sortable Column		icon_sortDescending.png
Sortable Column Empty		icon_sortDescendingEmpty.png

5.4 Useful Links

Note: The URLs will change when c-iv.net is migrated to the cloud. The validity of the links should be checked at the time of this SCR going into production.

County	URL	Link Text
All Counties	https://vim.c-iv.net/portal	eGain Reports
All Counties	https://webchat01.c-iv.net/default/	Live Chat
All Counties	http://paqmwb01a.c-iv.ivr/cwfo/	Calabrio One

Stanislaus	http://ollie/stanworks/internal-processes/csc-processes/	CSC Processes
Stanislaus	http://ollie/stanworks/journal-entry-templates/	Journal Entry Templates
Stanislaus	http://ollie/stanworks/community-resources	Resource & Referrals