Avaya CTI Adapter – Salesforce.com Integration

Installation and Configuration Guide

Document Change Control

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2.2	Update	25/05/10	Mike West	Icon menu. Listed config defaults.
2.3	Update	22/07/10	Mike West	Enhanced call log config items.

Preventing toll fraud

"Toll fraud" is the unauthorized use of your telecommunications system by an unauthorized party (for example, a person who is not a corporate employee, agent, subcontractor, or is not working on your company's behalf). Be aware that there can be a risk of toll fraud associated with your system and that, if toll fraud occurs, it can result in substantial additional charges for your telecommunications services.

Avaya fraud intervention

If you suspect that you are being victimized by toll fraud and you need technical assistance or support, call Technical Service Center Toll Fraud Intervention Hotline at +1-800-643-2353 for the United States and Canada. For additional support telephone numbers, see the Avaya Support Web site: http://www.avaya.com/support

Downloading documents

For the most current versions of documentation, see the Avaya Support Web site: http://www.avaya.com/support

Avaya support

Avaya provides a telephone number for you to use to report problems or to ask questions about your product. The support telephone number is 1-800-242-2121 in the United States. For additional support telephone numbers, see the Avaya Support Web site: http://www.avaya.com/support

Table of Contents

Avaya CTI Adapter Installation

This document will provide qualified Avaya associates and partners with the guidance to install and configure the Avaya CTI Adapter for Salesforce.com.

Scope

This document covers all elements of installation and configuration for the Avaya CTI driver for Salesforce.com.

References

CTI Toolkit Developer's Guide from Salesforce.com

Acronyms

ACD – Automatic Call Distribution

AES – Avaya Application Enablement Server

ANI – Automatic Number Identification (Caller ID)

APEX – Salesforce.com Application Exchange

CM – Avaya Communication Manager

CTI – Computer Telecommunication Integration

DNIS – Dialed Number Identification Service

SFDC – Salesforce.com

TSAPI – Telephony Services Application Programmer's Interface

UUI – User-to-User Information

Installation Prerequisites

This section contains procedures that must be followed before you begin installing, configuring, and administering the software.

The Avaya CTI Adapter for Salesforce.com is a client-resident application. It is an ActiveX application that exposes an ActiveX interface. The Salesforce.com application will search for and recognize the interface when present. If present, the Salesforce.com application will activate a softphone interface and use the Avaya CTI Adapter to interface with the switch.

This document includes a pre-install checklist along with instructions on installation into any agent desktop.

Environment Configuration

Pre Requisites Check List

This document assumes that the Application Enablement Services (AES) server has already been installed and that access has been provided by the customer to the server and that a client PC is available. The AES must be at least version 3.1.x or better. The following checklist should be used.

Pre Requisite	
AES TSAPI Client must be available	☐
IP address of your AES server that will be used	☐

NOTE: Make sure that any previous version of the Avaya CTI Adapter is not running.

Before installing the Avaya CTI Adapter, the AES TSAPI Client must be installed. It is recommended that the latest version of the TSAPI Client (currently 4.2.1 build 338) is used. During the installation, it will ask for your telephony server information. This is either the fully qualified domain name or IP address of your AES server that will be used. Enter that information, and then continue the installation. Other than that piece of information, all defaults may be selected.

This information is stored in a file named “TSLIB.INI”, which is stored in the TSAPI Client install directory. If the IP information was entered incorrectly, or eventually needs to be changed, the TSLIB.INI file can easily be changed. When changed, it will be necessary to restart the adapter application to reread the new value(s).

Once the TSAPI Client is installed, install the Avaya CTI Adapter for Salesforce. Run the setup program to install the Adapter. Simply selecting the defaults are sufficient. It will also install a shortcut into your Programs menu.

Aside from assigning the IP address of the AES server in the TSLIB.INI file (either through the install process of the AES TSAPI Client, or directly by editing the TSLIB.INI file), there is no configuration that needs to be done on the client desktop.

Beginning the Installation

Run the installation wizard from the path where the executable file was placed. You can run the installer by simply double clicking in the installation wizard icon named AvayaCTIAdapterInstaller.msi.

You will see the Welcome Setup screen below:

Insert Figure 01 - Welcome screen

Before start the installation select the Bin Folder where the driver will be located.

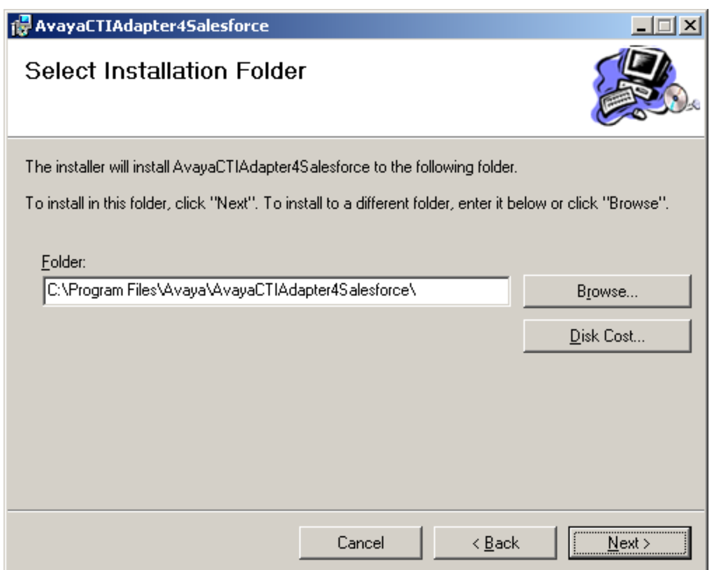


Figure 02 – Location of Installation Bin Folder

Then Select *"Next"* button. The Installation Destination Folder will be displayed. By default, C:\Program Files\Avaya\AvayaCTIAdapter4Salesforce\ path is set.

The "Next" button will say that the installer is ready to install all components of the solution.

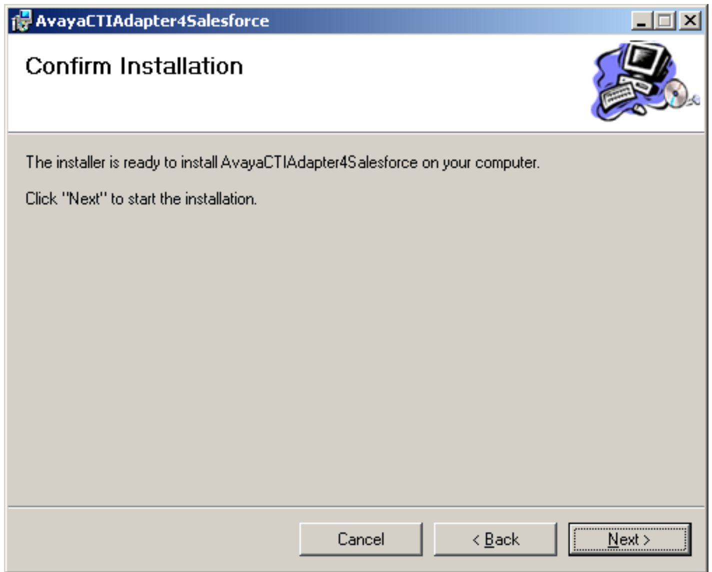
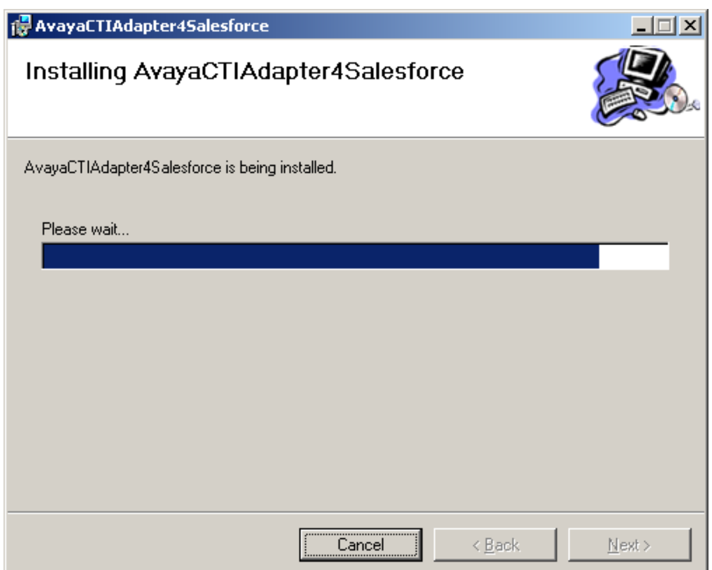


Figure 03 – Installer ready to start

A transition screen will be showed with the progress bar indicating the progress of the installation.



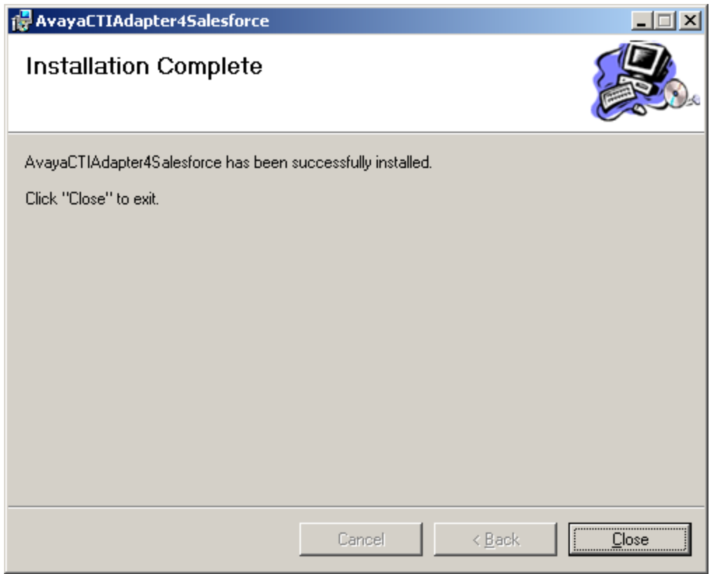


Figure 04 – The installation Complete

Click on the "Close" button to finish the installation

Firefox Support

To enable Firefox support for the CTI Adapter, run the batch file "sfdcffex.bat". This file will determine the Firefox root directory, register two DLLs, and invoke Firefox to register a plugin. When the final step occurs, Firefox will start and ask to register the plugin. Simply say "yes", and the plugin will register. When finished, anytime Firefox is started, a small version of the Salesforce.com icon will be shown in the far right corner of the Firefox status bar at the bottom of the application window.

The two DLLs are SFDCFirefoxConnectorPS.dll and SFDCFirefoxConnector.dll. The name of the plugin is sfdcffextension.xpi.

Now, the CTI Adapter can communicate with FireFox. FireFox must be version 3.5 or greater for this extension to work.

CTI Adapter Configuration

AES Setup

A CTI user must also be defined on the AES server. The configuration of the CTI Adapter assumes that a single CTI user will be defined for use by all users. This requires the user to have rights to all stations that will be controlled by an instance of the CTI Adapter. (Alternatively, rather than individually entering all of the stations to be used, the single user can be given unrestricted station control rights in the AES.)

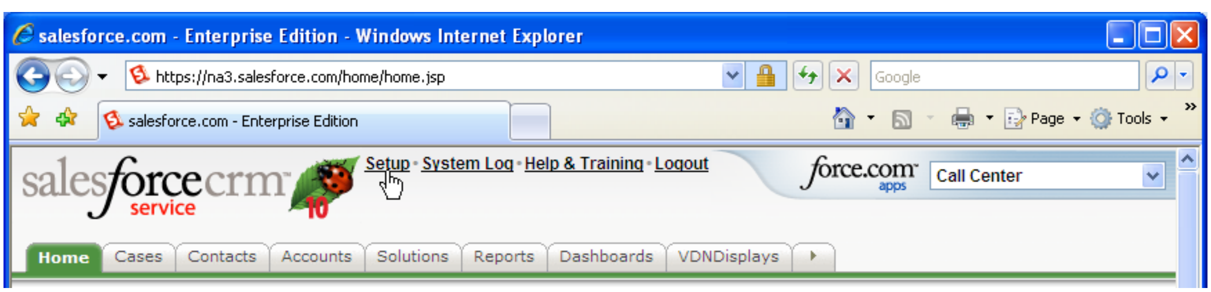
In addition, the "TLink" (which is a string that defines the link that the CTI Adapter will use to talk to a specific AES and CM combination) must be obtained from the AES. This value is used in the Salesforce.com configuration step.

Salesforce Setup

Along with the Avaya CTI Adapter setup file, an XML file is also provided. This XML file is used by the Salesforce application to configure site information for use with the CTI Adapter. Salesforce calls this site information "Call Center Configuration".

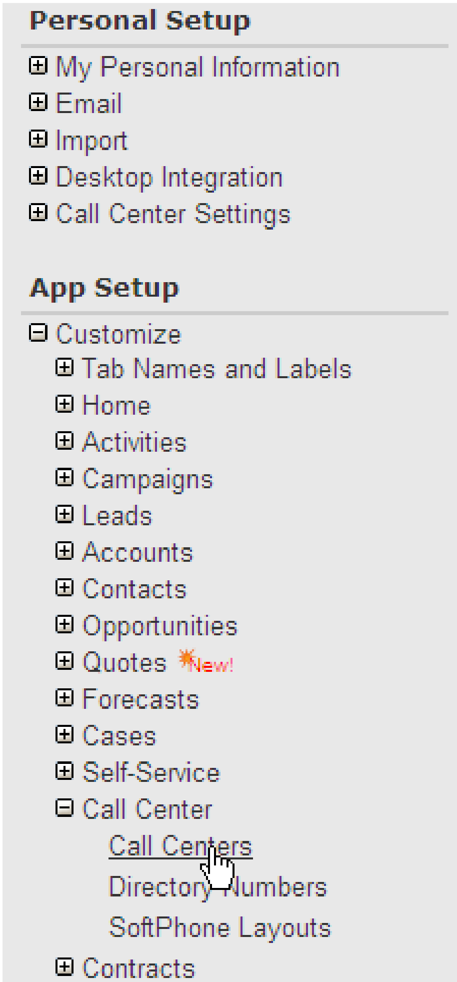
This is just the name used by Salesforce. This is not meant to imply that the Avaya CTI Adapter may only be used in a call center environment. In fact, it can be used whether a call center is configured in the Communication Manager or not.

To get the to the configuration screens, first click on the "Setup" option shown below:



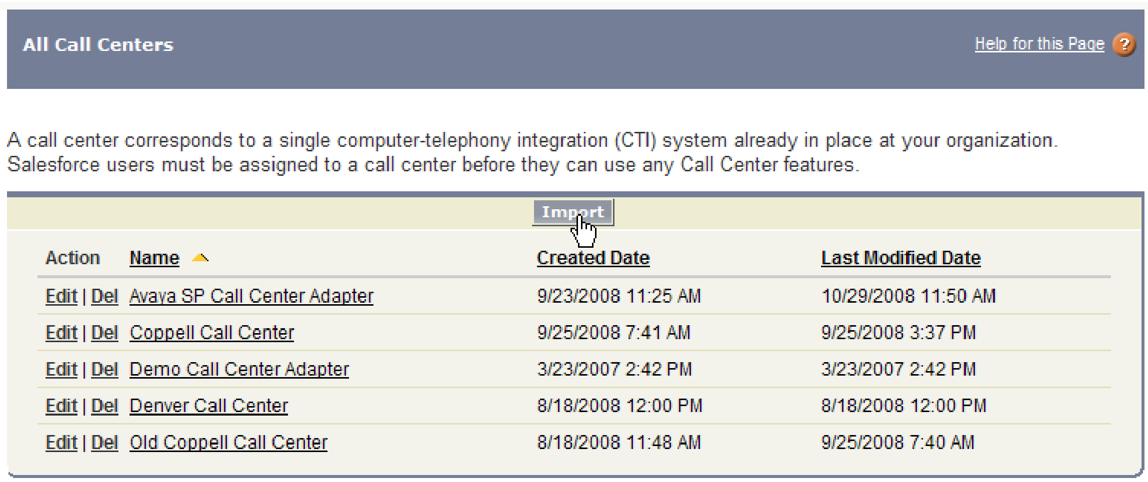
(Link is highlighted by cursor hand.)

This will change the whole screen to show the setup page. On the left side of the screen, as series of links are presented in a menu as shown below:



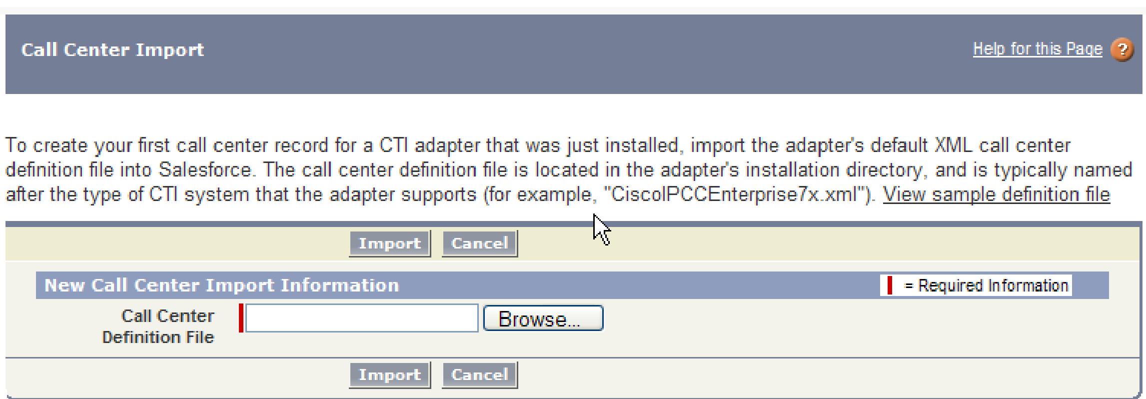
Go under “App Settings”, and use the “+” box to expand “Call Center”. Within the expanded options, select “Call Centers” as shown by the cursor hand.

Once this is selected, a list of currently defined call centers will be displayed. In the picture below, a list of currently configured call centers are listed. When configured for the first time, there will be no list shown.



Import

To create a new call center entry, click on the “Import” button shown above by the cursor hand. When clicked, an import screen will be shown:



Use the “Browse” button to search for the XML file provided to seed the call center information. Once the XML file is identified, click on the “Import” button.

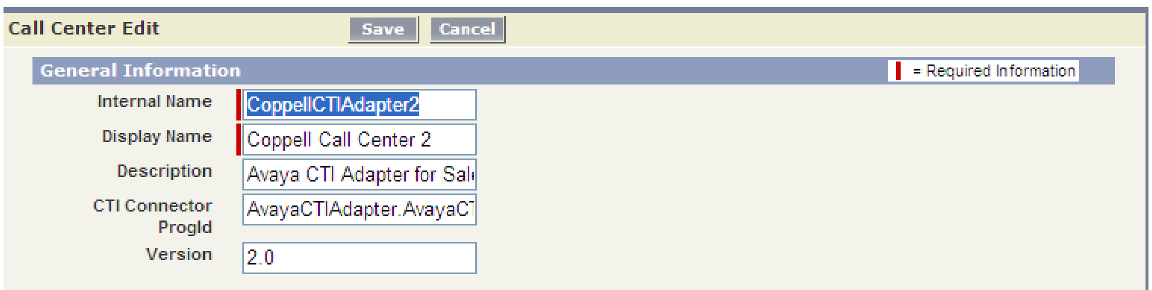
Edit

After the XML file is imported, the call center definition will be displayed in edit mode. This screen can be reached by clicking on the “Edit” link when the call centers are listed two pictures up. The call center information is displayed in several portions, each of which is dealt with individually below. (They are all presented on a single screen, but it is too long to show in one piece in this document.)

In all cases below, the only values that matter are those that are listed. If some other value is ever input, then that input is ignored, and the default value is used in its place. For all "Y/N" style questions, case does not matter. For entries that include label or database values, case does matter.

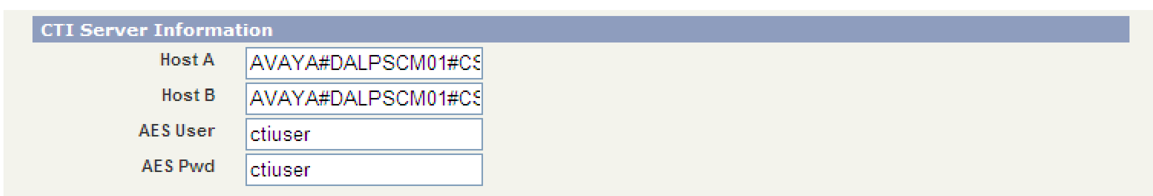
In the case of labels, if no entry is made, the default value will be used. For values that are provided through Salesforce.com, these default values will be internationalized. For values that are defined in only this CTI Adapter, the default values are only in English. For other languages to be displayed, the label values should have something appropriate in the desired language. Any label entry for an item that is only in this CTI Adapter will be noted in its description.

The first section is ***General Information***:



Change **Internal Name** and **Display Name** to reflect your circumstances. If more than one call center is to be defined, both of these entries must be unique from any other call center definition. The other three fields should be left with their default values.

The next section is ***CTI Server Information***:



Host A and **Host B** must be valid TLinks, as mentioned above in the AES Configuration section. The TLink strings must be exactly transcribed into these fields. If there are two AES servers configured to talk to the same Communication Manager, enter the two different TLinks for failover purposes. If there is only one AES, then enter the same TLink in both fields.

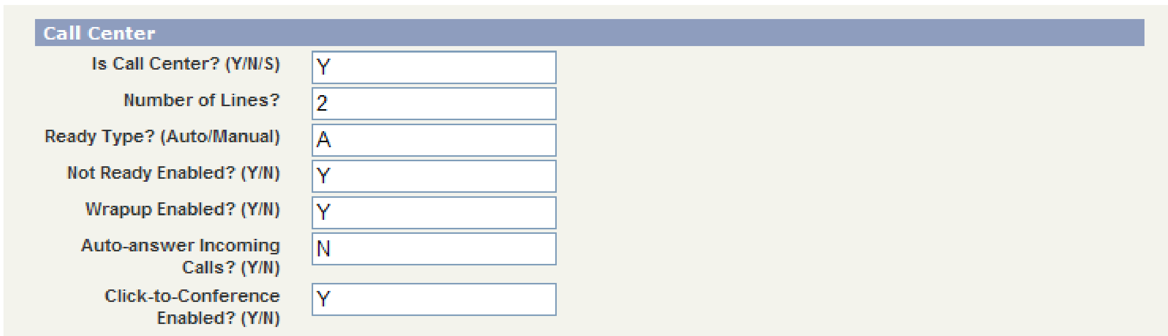
AES User and **AES Pwd** fields are set to be the AES CTI Username and Password values configured for the Adapter back in the AES Configuration section.

The next section is ***Dialing Options***:

Dialing Options	
Outside Prefix	9
Long Distance Prefix	1
International Prefix	011

These values are set to the dialing configuration determined from the Communication Manager.

The next section is ***Call Center***:



Call Center	
Is Call Center? (Y/N/S)	Y
Number of Lines?	2
Ready Type? (Auto/Manual)	A
Not Ready Enabled? (Y/N)	Y
Wrapup Enabled? (Y/N)	Y
Auto-answer Incoming Calls? (Y/N)	N
Click-to-Conference Enabled? (Y/N)	Y

These values determine the primary characteristics of the softphone.

Is Call Center defines if the call center uses an ACD. If set to “Y” or “S”, the users will be logged into the ACD station so that they can have calls automatically distributed to them. Setting “Y” means that Call Center Elite is being used. This is “skills-based routing” or “Advocate”. The user logs into a specific Agent ID, which defines the skills used. Setting “S” means that Call Center Basic is being used. This is “split” routing, where the user logs directly into a specific queue. If set to “N”, the users do not use an ACD, and only have telephony control over their phones. The default value is “N”.

Number of Lines defines the number of fixed lines that the softphone will have. It must have at least one, and it may have up to six. This number should match what has been defined for the physical stations. The default value is 1.

Ready Type defines whether the Adapter will use “Auto In” (by entering “A”) or “Manual In” (by entering “M”) when setting the agent to Ready. The default is “A”. (Note that this only applies if “Wrapup Reason Enabled” [see below] is set to “N”. If Wrapup Reason Enabled is set to “Y”, only “Manual In” will be used, overriding the default value.)

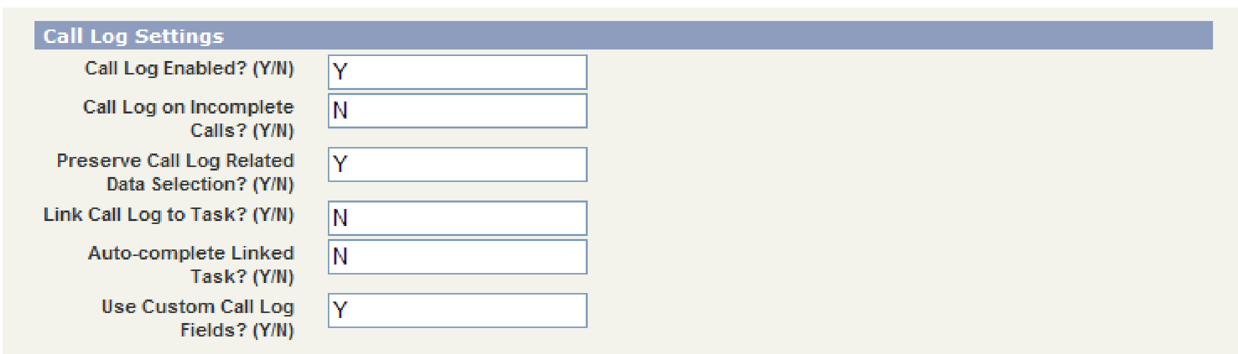
Not Ready Enabled defines whether the option for Not Ready is displayed in the drop-down list. A value of “N” means that the agent will not see the option. The default is “Y”.

Wraup Enabled defines whether the option for Wrapup is displayed in the drop-down list. A value of “N” means that the agent will not see the option. The default is “Y”.

Auto-Answer Incoming Calls sets whether the incoming calls are automatically answered by the CTI Adapter. A value of “Y” indicates to automatically answer incoming calls. A value of “N” means the agent will answer calls manually. The default value is “N”. If the agent’s stations must be set to auto-answer incoming calls, it is important to let the CTI Adapter do this, rather than the Communication Manager. The reason is because the Communication Manager will answer the phone instantaneously, and not allow a screen pop to occur. When the auto-answer is performed by the CTI Adapter, enough time will be given to allow the screen pop to work.

Click-to-Conference Enabled sets whether clicking a phone link in Salesforce will create a conference. If the station is idle, and a phone link is clicked, a new cal will be placed from the user’s station. If this is set to “Y”, and the station is on a call, if a phone link is clicked a conference will be created from the existing call to the clicked number. If this is set to “N”, the click will be ignored any time the station is not idle. The default value is “Y”.

The next section is ***Call Log Settings***:



These settings control the behavior of the call log.

Call Log Enabled defines whether a call log is saved for each completed call. A value of “Y” means that call logs are saved; a value of “N” means no call logs are saved. The default is “N”.

Call Log on Incomplete Calls defines whether call logs are saved for unanswered (or abandoned) calls. A value of “Y” means these call logs are saved; a value of “N” means that only completed call logs are saved. The default is “N”. This should only be set to “Y” if it is known that this is a requirement.

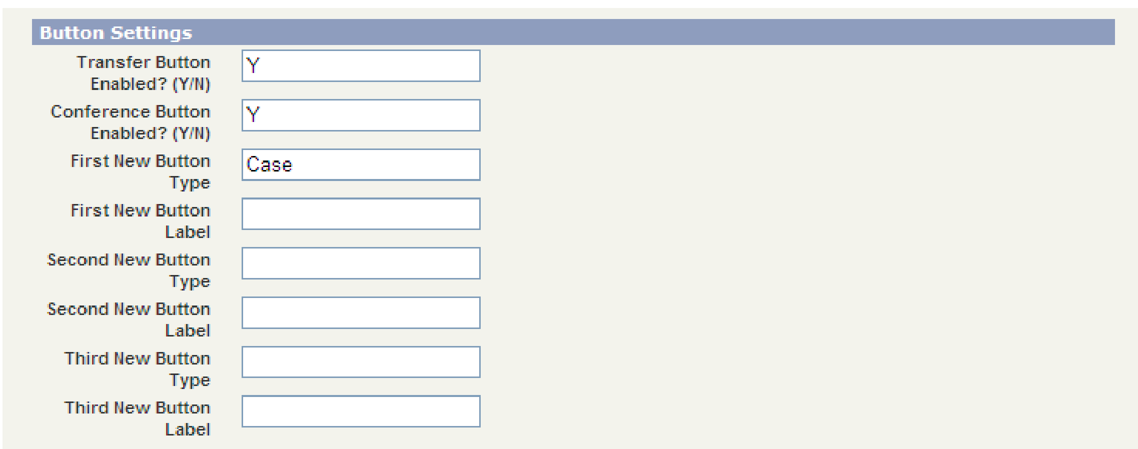
Preserve Call Log Related Data Selection defines how the default selection of items related to a call log is determined. The default behavior is that any time the user browses to an object, that object is related to the call log and is selected as the default object that will be used when the call ends and the call log is saved. This is the procedure that is chosen if the setting is “N”. A value of “Y” will cause the default object to remain with the first selected object. No matter to what object is browsed, the default selection will not change. The only way to change the default object is for the user to actively select a different object in the call log display. The default is “N”.

Link Call Log to Task sets whether calls generated from a task are hard linked to that task. A value of “Y” means that they are linked, effectively turning the task into the call log. A value of “N” means they remain separate items. The default is “N”. This should only be set to “Y” if it is known that this is a requirement.

Auto-complete Linked Task only has meaning if the prior item is set to “Y”. In that case, a value of “Y” means that the linked task/call log is set to “Complete” when the call ends. A value of “N” means that the linked task/call log has its status unchanged when the call ends. The default is “N”. Note that this only affects linked task/call logs. Ordinary call logs are still always set to a status of “Complete” when the call ends. So, if “Link Call Log to Task” is set to “N”, this value is not used.

Use Custom Call Log Fields specifies whether a preset set of custom fields in the call log is to be used. The custom fields are “Caller”, “Called”, and “UCID”. All three fields must all be present for this feature to work properly. These values are then stored in every call log. A value of “Y” means these fields are present and to be used; a value of “N” means that these fields are not defined and cannot be used. The default is “N”. This should only be set to “Y” if the fields are present. If set to “Y” without the fields present, no call logs will be saved.

The next section is ***Button Settings***:



Transfer Button Enabled defines whether the Transfer button is available. A value of “N” means that the button is not available to the agent. The default is “Y”.

Conference Button Enabled defines whether the Conference button is available. A value of “N” means that the button is not available to the agent. The default is “Y”.

First New Button Type defines whether a “New Item” button is displayed when a call is active, and what its type is. Possible values are “Case”, “Contact”, “Account”, “Task”, “Lead”, and “Opportunity”. If any are specified, a button will be shown, and when clicked, the screen needed to define that new item will be popped into the agent’s display. If any value but the above is entered, or if the field is left blank, no button will be displayed.

First New Button Label defines the label to use for the first "New Item" button. If not defined, the default label for that item will be used. This value is ignored if there is no type defined for this button. The "New Item" button label is an Avaya custom field, and as such the default string value is only in English. In any installation that will not be using English, it is very important that an appropriate string in the install language be entered in this field.

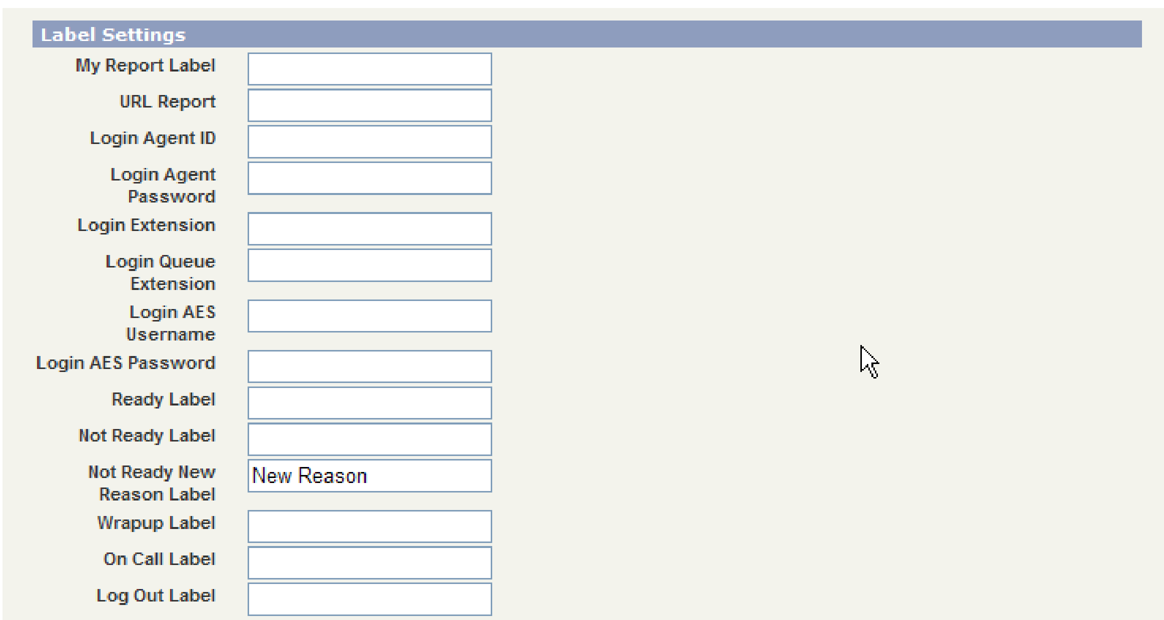
Second New Button Type defines whether a second "New Item" button is displayed. Its operation and available options are the same as the First New Button Type.

Second New Button Label defines the label to use for the second "New Item" button. Its operation is the same as the First New Button Label.

Third New Button Type defines whether a third "New Item" button is displayed. Its operation and available options are the same as the First New Button Type.

Third New Button Label defines the label to use for the third "New Item" button. Its operation is the same as the First New Button Label.

The next section is ***Labels Settings***:



My Report Label allows for a different label to be used for the Daily Reports link.

URL Report permits a complete custom URL to be specified for the reports link. The URL must be a full URL, not a partial URL.

Login Agent Name allows for a different label to be shown on the login screen for the "Agent Name" field.

Login Agent Password allows for a different label to be shown on the login screen for the "Password" field. Setting this to "--" (two hyphen characters) will prevent the Password field from being shown on the login screen. The user will only see the Agent Name field and the Extension field. (This is useful if the agent ids have no password assigned to them.)

Login Extension allows for a different label to be shown on the login screen for the "Extension" field.

Login Queue Extension allows for a different label to be shown on the login screen for the "Peripheral ID" field. This field will only be shown when the "Is Call Center" option is set to "S". This is the "queue extension" (or "hunt group extension") of the split into which the agent is logging.

Login AES Username allows for a different label to be shown on the login screen for the "CT Username" field.

Login AES Password allows for a different label to be shown on the login screen for the "CT Password" field.

Ready Label allows for a different label to be used in the agent state pull-down list. If left empty, the default value of "Ready for Calls" will be used.

Not Ready Label allows for a different label to be used in the agent state pull-down list. If left empty, the default value of "Not Ready for Calls" will be used.

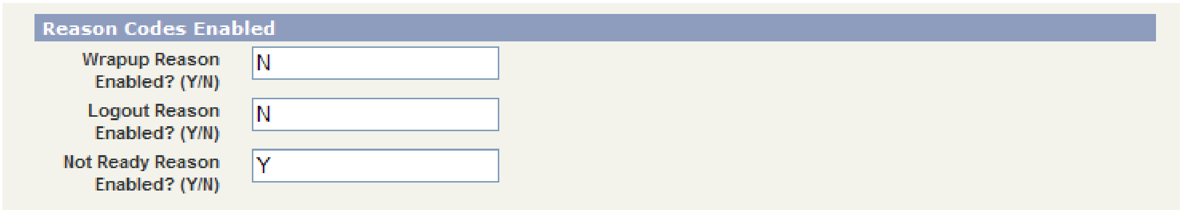
Not Ready New Reason Label allows for a different label to be used in the agent state pull-down list. If left empty, the default value of "Not Ready New Reason" will be used. Unlike the other ACD states in this section, Not Ready New Reason is an Avaya custom field, and as such the default string value is only in English. In any installation that will not be using English, it is very important that an appropriate string in the install language be entered in this field. (If the default strings are used in the other entries, Salesforce will take care of using the correct language.)

Wrapup Label allows for a different label to be used in the agent state pull-down list. If left empty, the default value of "Wrap Up" will be used.

On Call Label allows for a different label to be used in the agent state pull-down list. If left empty, the default value of "On a Call" will be used.

Log Out Label allows for a different label to be used in the agent state pull-down list. If left empty, the default value of "Log Out" will be used.

The next section is ***Reason Codes Enabled***:



If the particular set of reason codes is to be used, then the field should be set to “Y”. If not, then set them to “N”. Each of these settings is independent of the others; they do not need to have the same values. The default value for all three is “N”.

If one of these is set to “Y”, but no corresponding reason codes are defined, then this value is ignored, and the default of “N” is used. To collect reason codes the field must be enabled and at least one reason code must be defined.

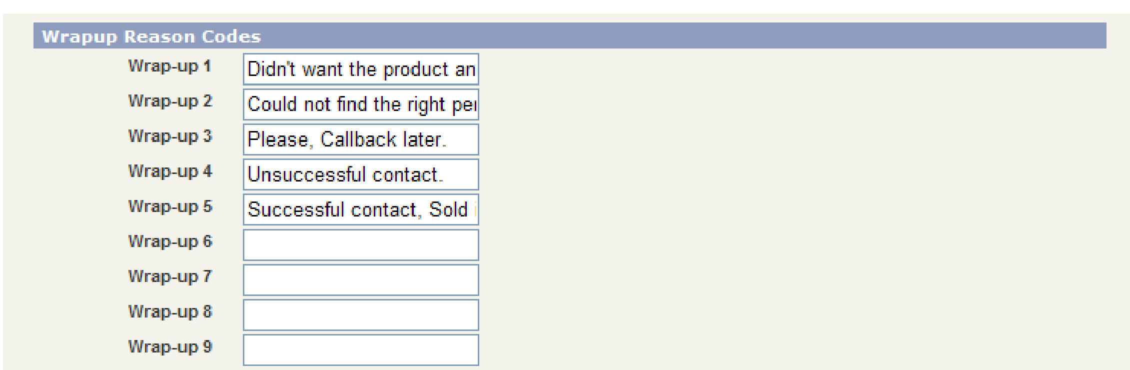
Wrapup Reason Codes are used when the call ends and the agent enters the Wrapup (i.e. after call work) state. Wrapup Reason Codes may be used regardless of the Is Call Center value. The display value given for the reason is saved in the Call Log for that call. (The number is simply to keep the possible values in order.) If the Call Log is not being used (i.e. the Call Log Enabled entry is set to “N”), then Wrapup Reason Codes may not be used, as there would be no where to store them.

Logout Reason Codes are used when an agent tries to log out. **Not Ready Reason** Codes are used when the user goes to Not Ready (i.e. auxiliary work mode). Logout and Not Ready Reason Codes are saved by the Communication Manager in the Call Management System. Salesforce.com does not store or use these two types of reason codes. If Is Call Center is set to “N”, then Logout and AUX reason codes are not used, and these values are ignored, and both values default to “N”.

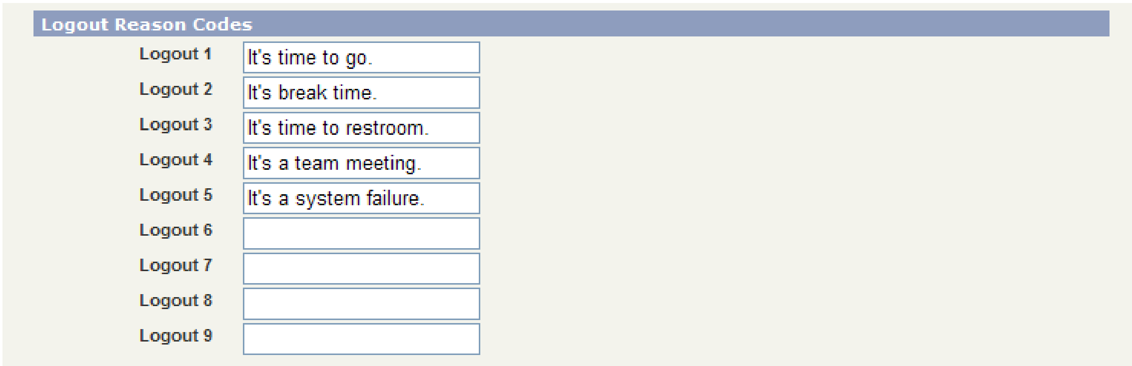
Only those entries with text supplied will be presented to the user. (So, in the example below for Wrapup Reason Codes, only five options would be presented to the user.)

The next three sections provide a means to give display messages for each type of reason code to be used.

First are the ***Wrapup Reason Codes*** descriptions:

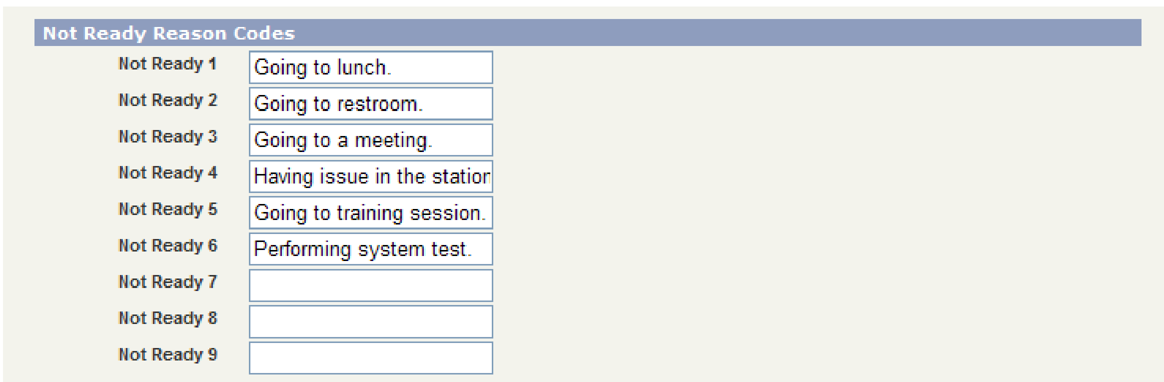


Next are the ***Logout Reason Codes*** descriptions:



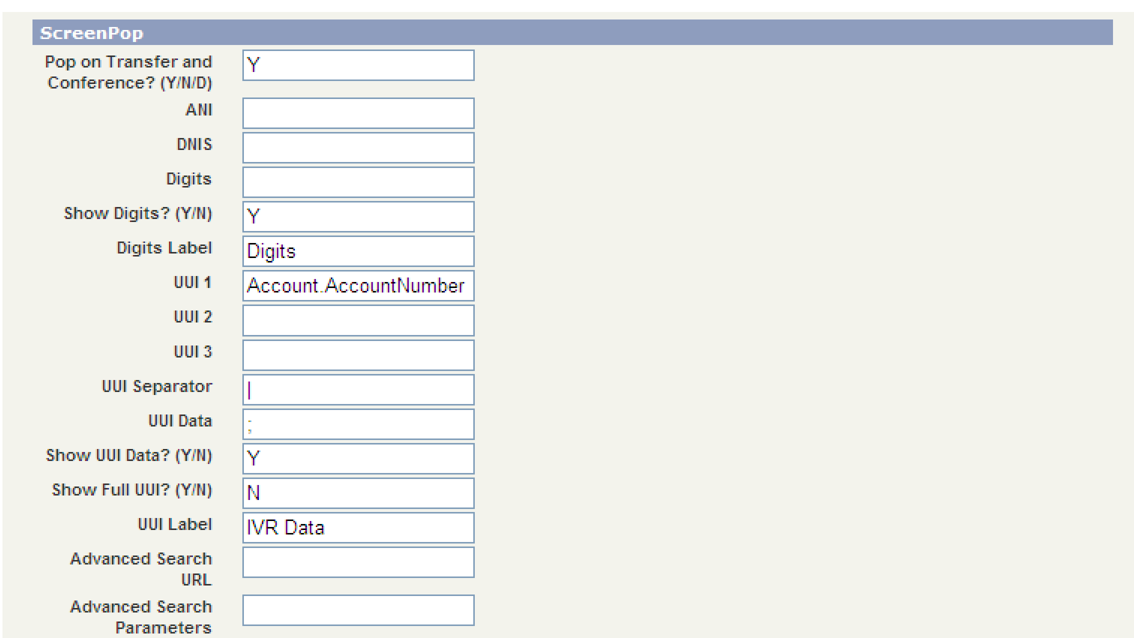
Logout Reason Codes	
Logout 1	It's time to go.
Logout 2	It's break time.
Logout 3	It's time to restroom.
Logout 4	It's a team meeting.
Logout 5	It's a system failure.
Logout 6	
Logout 7	
Logout 8	
Logout 9	

And third are the ***Not Ready Reason Codes*** descriptions:



Not Ready Reason Codes	
Not Ready 1	Going to lunch.
Not Ready 2	Going to restroom.
Not Ready 3	Going to a meeting.
Not Ready 4	Having issue in the statior
Not Ready 5	Going to training session.
Not Ready 6	Performing system test.
Not Ready 7	
Not Ready 8	
Not Ready 9	

The final section is ***ScreenPop***, where the screen pop behavior is configured:



ScreenPop	
Pop on Transfer and Conference? (Y/N/D)	Y
ANI	
DNIS	
Digits	
Show Digits? (Y/N)	Y
Digits Label	Digits
UUI 1	Account.AccountNumber
UUI 2	
UUI 3	
UUI Separator	|
UUI Data	;
Show UUI Data? (Y/N)	Y
Show Full UUI? (Y/N)	N
UUI Label	IVR Data
Advanced Search URL	
Advanced Search Parameters	

Screen pops can be generated from Caller Identification (ANI), the internal number used to enter the system (DNIS), CTI data information provided by another CTI-enabled system (UUI), or digits collected from vector steps in the Communication Manager (Digits). In all of these cases, the value placed in the fields is a table and field name from the Salesforce.com database. If the field is left empty, then no match attempt is made. (ANI is a special case.) If the field is filled, then the value received from the incoming call will be used to attempt to find a match in the specified object (table) and field in the Salesforce.com database. So, for example, in the image above, the first UUI field will be matched against the “Account Number” field of the “Account” object in the Salesforce database.

Sometimes it is not desired for a screen pop to occur on transfer and conference. To facilitate this, **Pop on Transfer and Conference** can be used to control this behavior. If the value is set to “Y”, then all transfers and conferences will automatically pop when the call arrives at the destination station. If the value is set to “N”, then the destination station will not receive a pop on a transfer or conference. If the value is set to “D”, then the pop on transfer and conference are delayed until the transfer or conference is completed. The default value is “Y”, and the default should be kept unless the alternative behavior is known to be a specific requirement.

Note that the “D” setting will only work properly if transfers and conferences are done through the Salesforce softphone. If calls are transferred or conferenced directly through the phone set, the screen pop will not operate correctly. Also, in this setting, if the call is answered prior to the transfer (or conference) being completed, the main screen will not pop. The user will need to click on the information link in the softphone to update the main screen.

UUI Separator and **UUI Data** are special characters used to allow for multiple items in the UUI. The separator character is used to separate the three values in the UUI. If there is additional data that is not to be popped on, that data is preceded by the data character. Any characters may be selected, but obviously the characters selected should not occur in the actual data. If UUI is not being used, then these values have no meaning.

By default, Salesforce.com will take the provided caller information and search all phone number fields in the system to try and find a match. The **ANI** only needs to be set if a non-default search for caller information is desired. This field will almost always be empty.

ANI also has a special use. Set the first two characters to “—“, and any digits that follow will be used to obfuscate the ANI. (If no digits follow the “—“, then the ANI will be obfuscated with “0000”.) The reason this might be done is to suppress the default ANI search. This search cannot be disabled, but by obfuscating the ANI value, the search will be prevented from succeeding. The extra characters change the form of the ANI to something that cannot be matched.

If the screen pop should be controlled based on the number the caller dialed, then **DNIS** is used.

If numeric data is collected using the “prompt and collect” capabilities of the Communication Manager, then **Digits** is used. If collected digits are to be used, an additional program called “**VDN Monitor**” will need to be used and configured to allow for collected digits to reach the agent station and be readable by CTI.

Show Digits will determine if the collected digits are shown regardless of any match when doing the pop search. If set to “Y”, then any collected digits are always shown as an info field no matter what. If set to “N”, then the default display is used, and the collected digits will only be seen when a successful match occurs. The default is “N”.

If the value of Show Digits is “Y”, then **Digits Label** contains the string that is used as the label for the collected digits info display. The default label is only in English, so this value must be defined for any other language if Show Digits is “Y”.

If the call contains CTI data information that is provided by another CTI-enabled system (for example, an interactive voice response system), then use the **UUI** fields (**UUI1**, **UUI2**, and **UUI3**). CTI data can be divided into up to three separate items for screen pop. In addition, there can be extra data that is not to be popped on, but needs to be in the CTI data. (The UUI string provided by the call record is divided up by the characters specified in the previously mentioned **UUI Separator** and **UUI Data**.)

Examples (assuming the UUI Separator is ‘|’, and the UUI Data is ‘;’):

There is some data to be popped on, followed by data that is not used for a pop:

“N32B877692;For something else”

Two separate pieces of data for a pop:

“FirstData|SecondData”

Three separate pieces of data for a pop, followed by data that is not used for a pop:

“First|Second|Third;Extra”

Data only shown as info, and not used for pop:

“;DisplayData”

Only one value with no display data:

“PopWithMe”

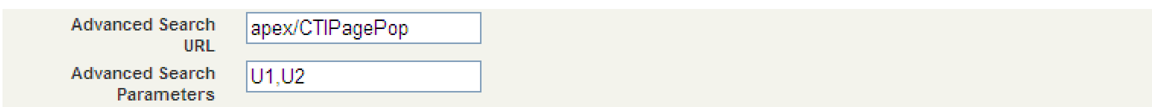
Show UUI Data will determine if the display only portion of the UUI string (everything that occurs after the character specified in **UUI Data**) is shown as an info field. If the value is “Y”, then it is shown. If the value is “N”, then it is never shown. Normally, it is expected that the UUI Data would always be shown. However, there could be cases where a configuration is desired such that the UUI Data is not shown, and it will be used by something later in the call chain after the call leaves the user's phone. The default is "N".

Show Full UUI will determine if the full UUI string is shown regardless of any match when doing the pop search. If set to "Y", then the full UUI string is always shown as an info field no matter what. If set to "N", then the full UUI is not show, and only the elements of the UUI that have achieved matches are shown. The default is "N".

If the value of Show Full UUI is "Y", then **UUI Label** contains the string that is used as the label for the full UUI info display. The default label is only in English, so this value must be defined for any other language if Show Full UUI is "Y".

The last two items in the Screen Pop section are **Advanced Search URL** and **Advanced Search Parameters**. If the first field is left empty, then the any configured normal search is performed, and these parameters are ignored. (Having a value in the second means nothing if there is no value in the first of the two.)

If the first field is set, then the normal searches are not performed, and instead an advanced search is used. This advanced search is provided in the form of a partial URL as shown below:



An example would be:

apex/CTIPagePop

The second parameter provides the list of call data that can be sent to the search. There are six options that can be used: A (ANI), D (DNIS), C (Collected Digits), U1 (first UUI field), U2 (second UUI field), and U3 (third UUI field). To set the field, simply list the desired elements listed above, each separated by a comma.

The designated data will be passed on to the URL so that it can be handled by this advanced search, rather than the normal search. The designated data will be added to the end of the configured URL. Assuming only the first two UUI fields are used, the resultant form would look like:

"?U1=12&U2=1234"

That means the full URL would end up looking like:

apex/CTIPagePop?U1=12&U2=1234

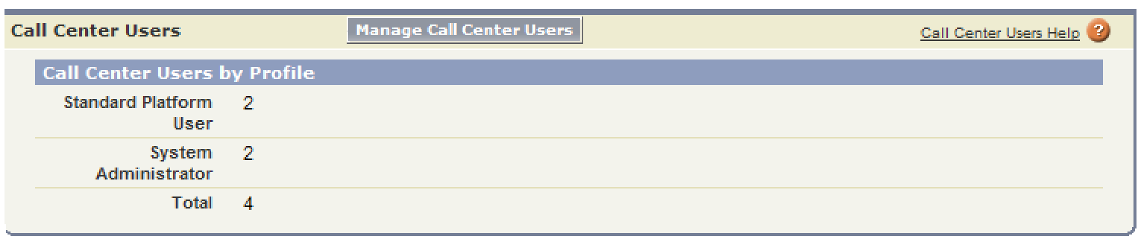
Note that the full list will be provided at every call, even if it contains no data. So, the page that the URL invokes needs to expect all of the specified parameters to be sent every time, and it needs to be able to handle empty values. As an example, if the only value present for a particular call is the first UUI field, the URL would look like:

apex/CustomerCTIPagePop?U1=12&U2=

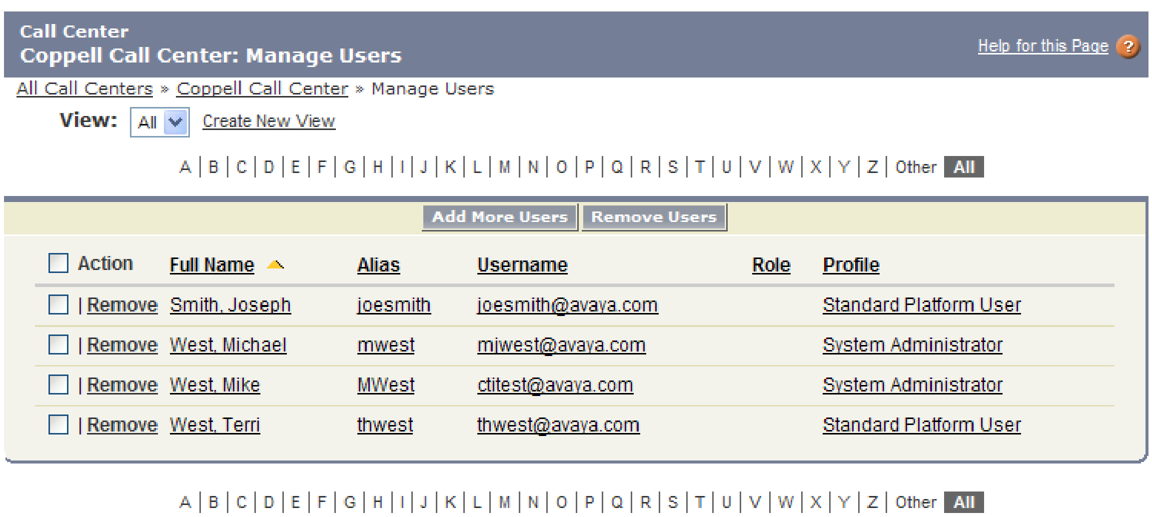
Finally, once all of the configuration data has been configured, click on the "Save" button to save the data.

Manage Users

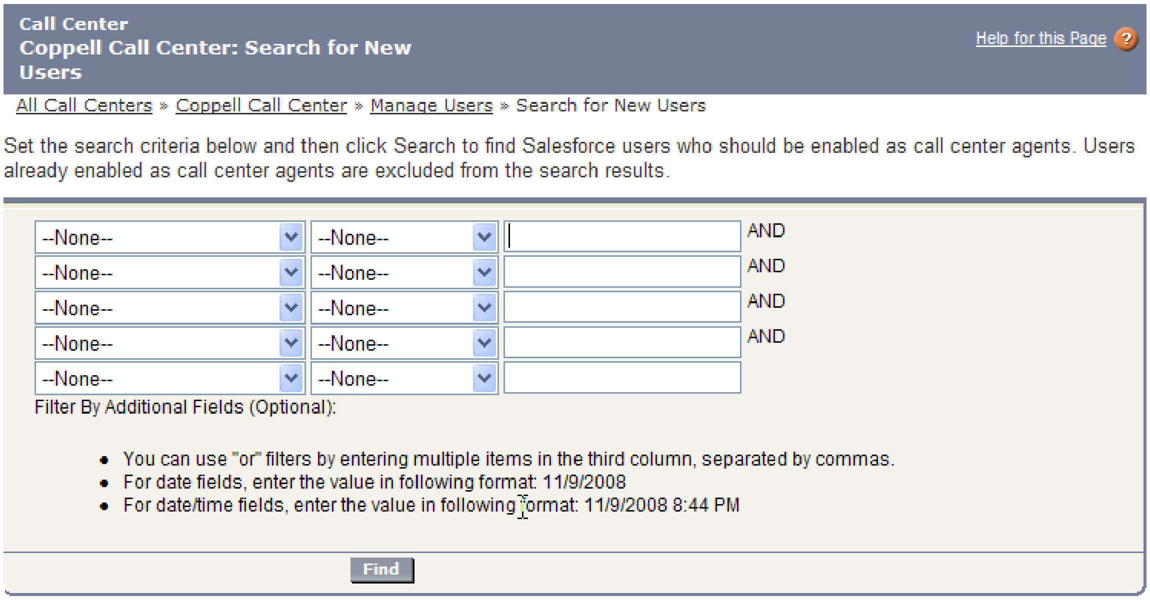
Next, specific users must be assigned to this call center. Now that the call center has been defined and saved, it will be presented in the list of call centers. Click on the name of the new call center. Scroll all the way to the bottom of the call center definition, and a new section will be seen:



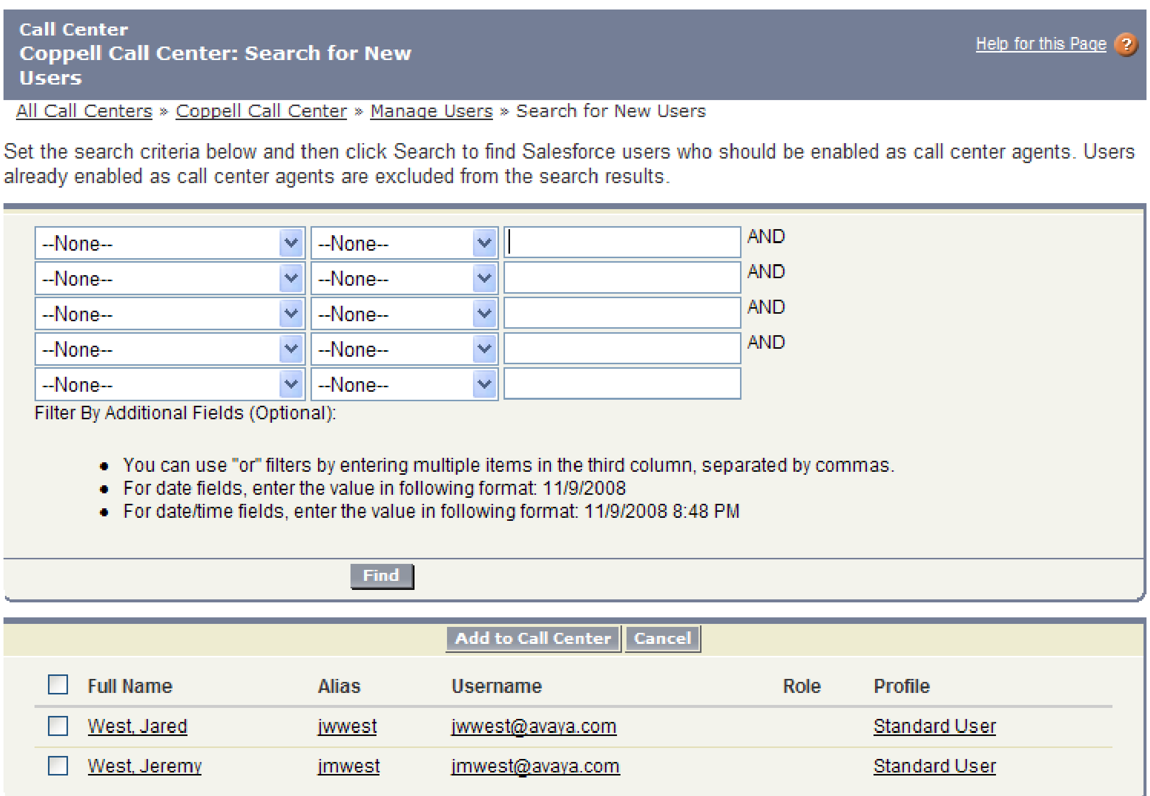
To manage the users, click on the "Manage Call Center Users" button. All of the currently configured users will be displayed:



To add more users (or add the first users if the above list is empty), click on the "Add More Users" button. Doing so will provide a display that allows for the search for users to be restricted in some manner:



Set any desired parameters (or leave them all unchanged for a default global search) and click on the “Find” button. This will display all currently unassigned users:

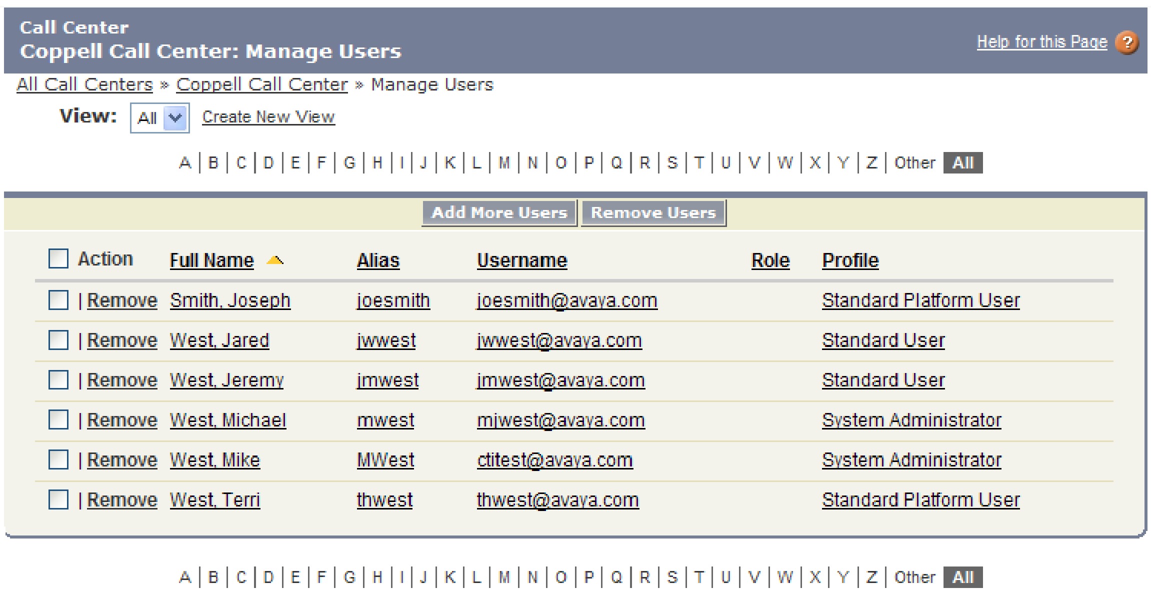


Only unassigned users will be shown. If a user must move call centers, the user must first be removed from the current call center assignment, making the user unassigned. Only then may the user be search for and subsequently added to the new call center.

Select the users to add to the call center:

And click the “Add to Call Center” button.

When the users are added, the display is returned to the user list, with the newly added users included:

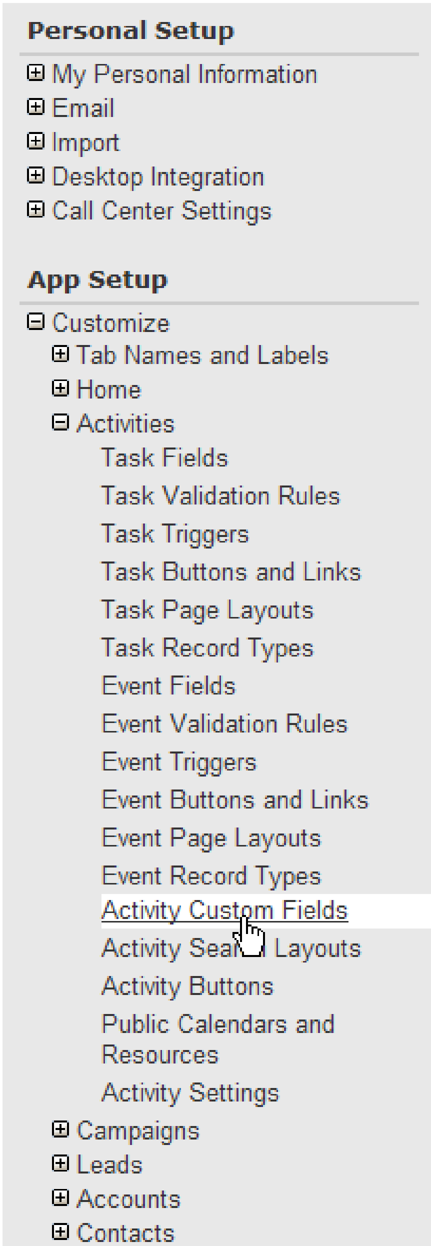


Now the call center is fully defined, and has users assigned to it.

Custom Activity Fields

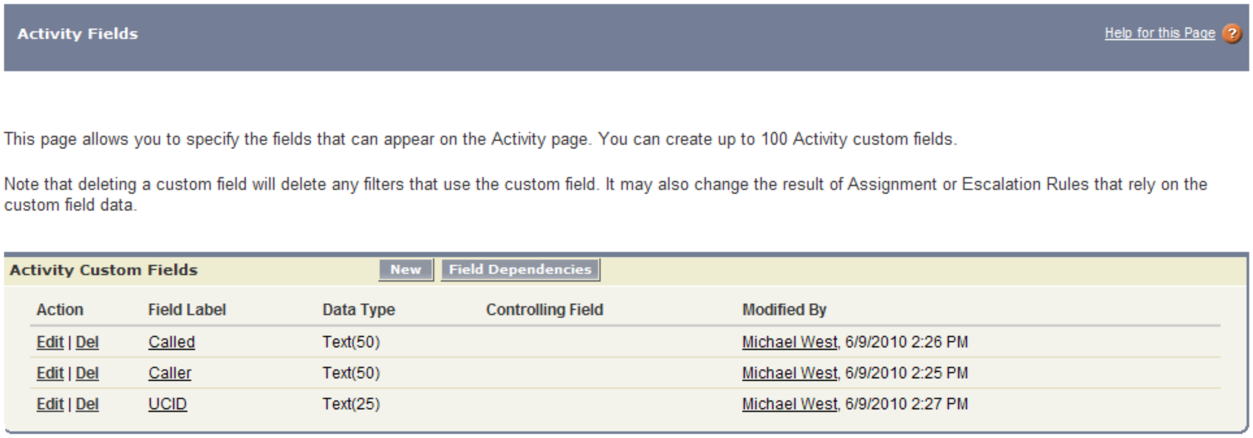
If the custom fields are used in the call log, they must be defined in the Salesforce configuration. These custom fields will store common call related fields that are not normally saved in the call log. Those fields are “Caller”, “Called”, and “UCID”. The Caller field contains the calling party of the call (also known as “ANI”). The Called field contains the called part of the call (also known as “DNIS”). The UCID field is the Avaya Universal Call ID which is a value that uniquely identifies the call in the Avaya Communication Manager over time and is often used for reporting purposes.

Go back to the series of links in the menu that is shown on the left side of the screen:



Go under “App Settings”, and use the “+” box to expand “Activities”. Select “Activity Custom Fields”, which is towards the bottom of the section.

Once this is selected, a list of all currently defined custom fields is displayed. Use the “New” button to create the custom fields. All three of these fields are of type “Text”. “Caller” and “Called” should be set to 50 characters in length. “UCID” should be set to 25 characters in length. Once the fields are created, you will see them when the listing screen is refreshed:

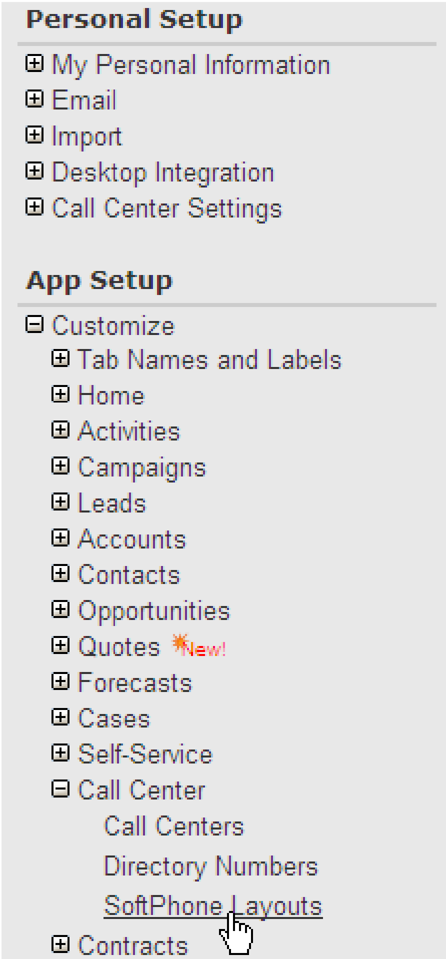


It is very important that the Field Label be entered exactly as shown above. If they don't match, the attempts to save the values will fail, and no call logs will be saved.

Softphone Layout

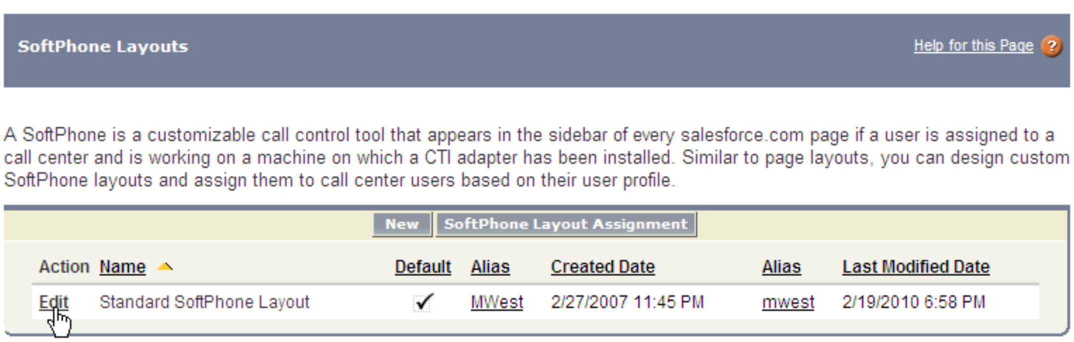
The Softphone Layout configuration determines how screen pops are performed. It defines what data elements are shown, what data elements are retrieved on a default ANI search, and how data is operated on with different search results.

Go back to the series of links in the menu that is shown on the left side of the screen:

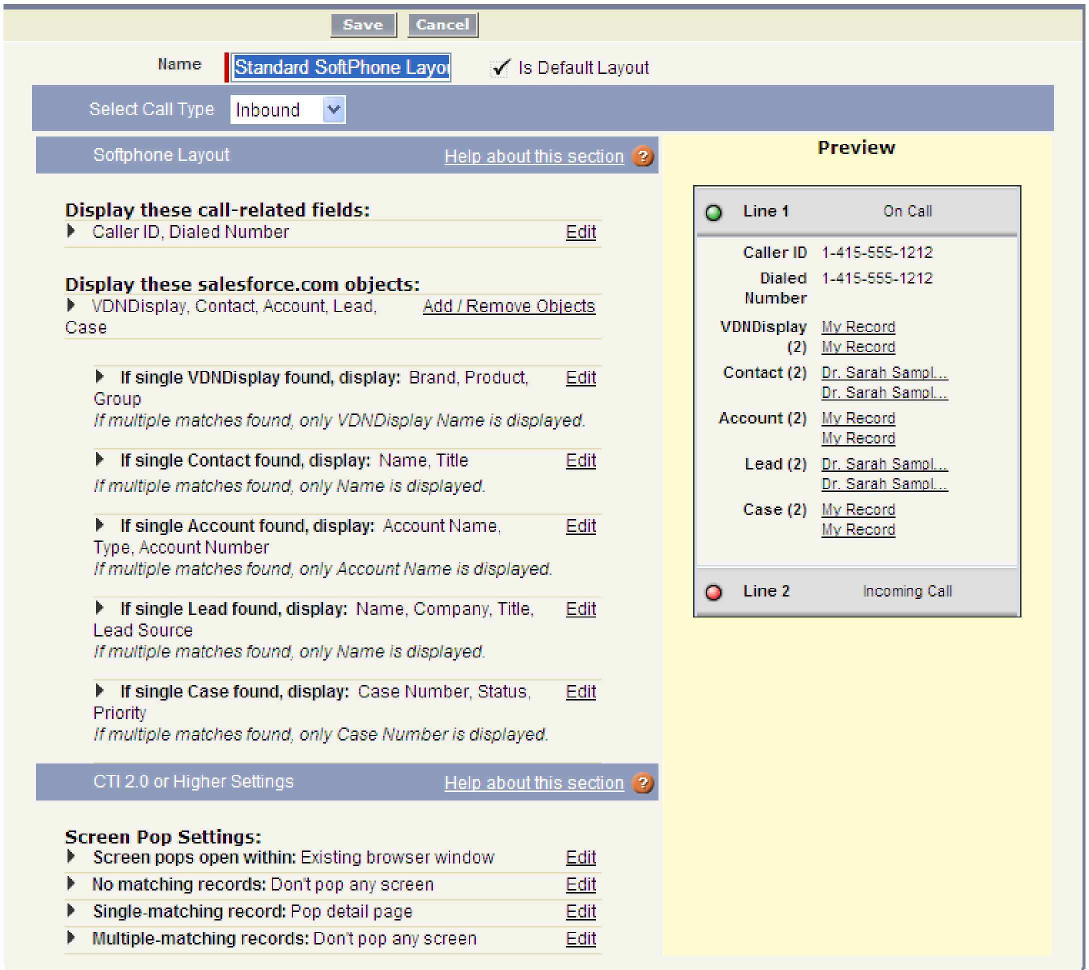


Go under "App Settings", and use the "+" box to expand "Call Center" (if it isn't still expanded). This time, select "SoftPhone Layouts", which is below "Call Centers" that we just finished using.

Once this is selected, a list of currently defined softphone layouts will be displayed. In the picture below, a list of currently configured softphone layouts are listed. When configured for the first time, there will only be the standard softphone layout.



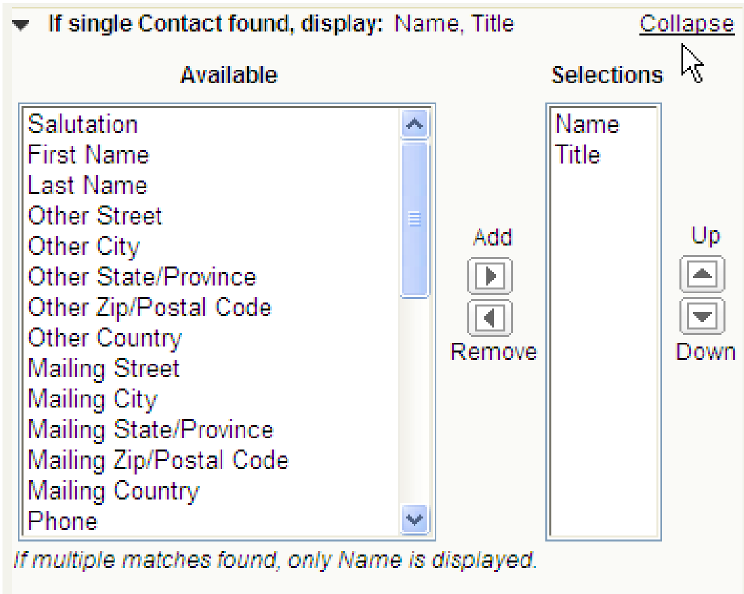
Click on the "Edit" link pointed to by the cursor in the picture above. This will show the full settings for this softphone layout:



There are several aspects of the softphone layout that may be modified. The first section controls what items will always be displayed for a call when the information is available. The second section controls what Salesforce database objects will be display on a successful screen pop, and what fields in those objects will be displayed. The third section is to configure the new screen pop features provided in the latest version of the CTI Adapter.

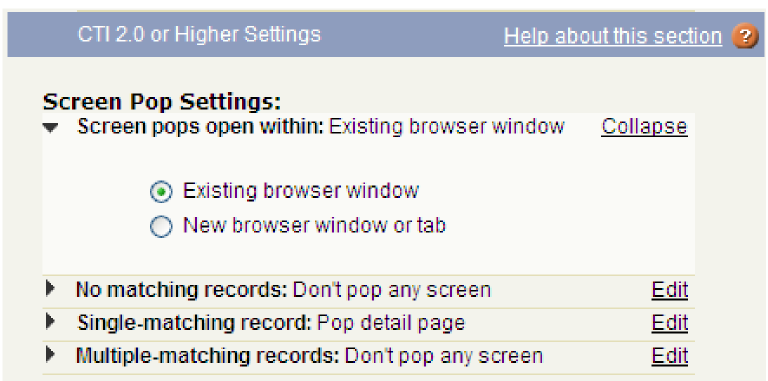
The basic call detail fields that are to always be displayed for a call are configured in the first piece. The default should always be used, as the other two data elements that can be configured are not used by the Avaya CTI Adapter.

The Salesforce object to be searched and displayed on screen pops is also defined for the softphone layout. For every object included on the screen pop searches, a list of fields to display is also defined. For example, the options for the Contact object are shown below:

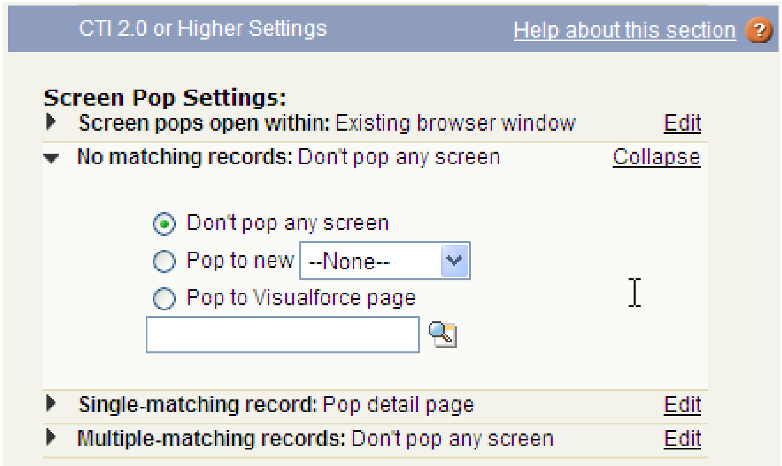


In this case, only the Name and Title fields are to be shown. But, any of the other fields in the Contact object can be selected and shown, too.

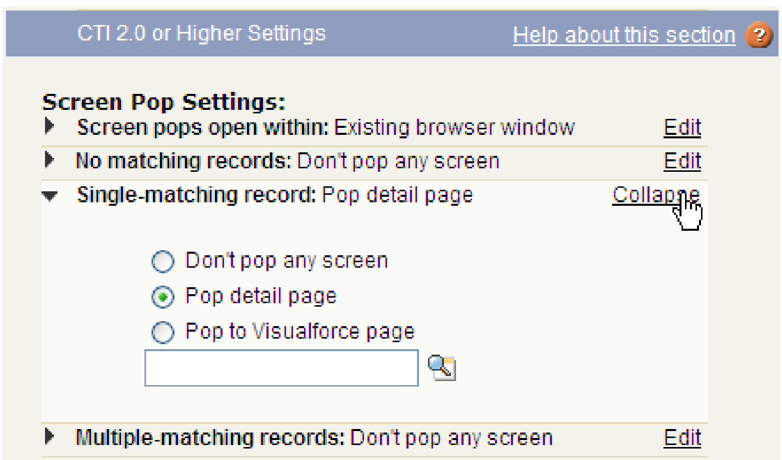
The Screen Pop Settings allow more definition in how screen pops are shown.



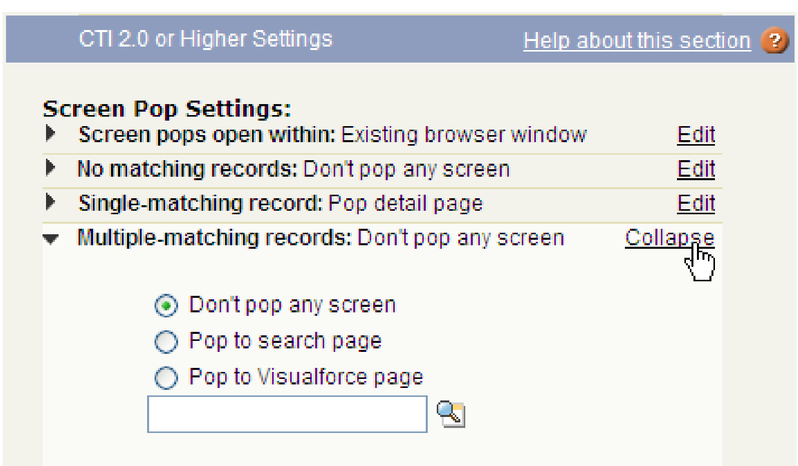
The first option determines where the screen pop will occur. It can pop within the existing browser window, or it can pop into a new browser tab. (If the browser being used does not support tabs, it can pop into a new browser window instead.)



The second option determines what will be done if no matches are found. The choices are to have no pop at all, to pop to a new Salesforce object (e.g. a new case), or to pop to a VisualForce page.



The third option determines what to do with a unique match. The choices are to not pop at all, pop into the detail page, or pop to a VisualForce page.

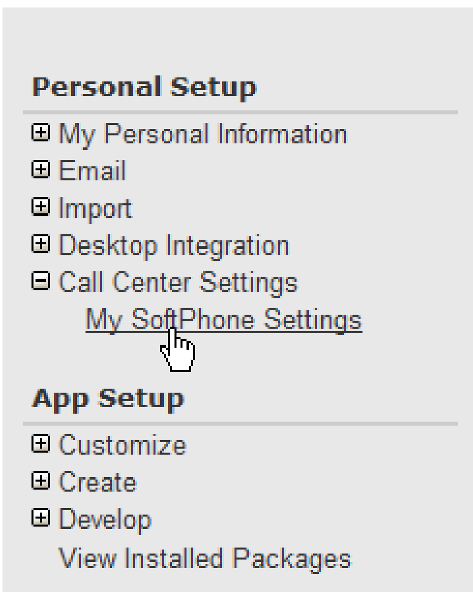


The last option determines what to do when multiple matches have been found. The choices are to not pop at all, pop to a search page, or pop to a VisualForce page.

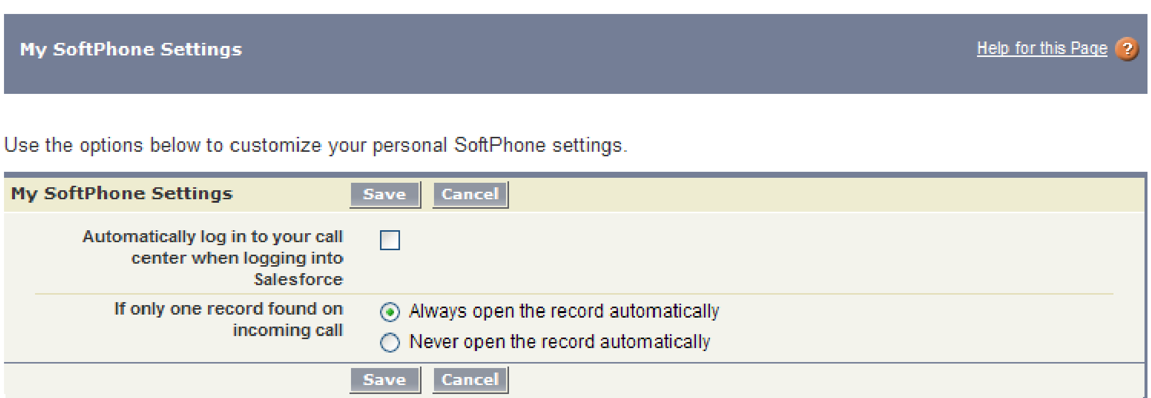
The last three options allow for configuring a different VisualForce page for each of the three options. Also, a VisualForce page could be used for only a single condition, and not for the others. This is different than the Advanced Search option in the Call Center definition. Advanced Search will always use a single VisualForce page in all cases, and will be used instead of the normal pop mechanism. However, it also provides a greater amount of flexibility in passing the data to it.

Personal Setting

There are a couple of additional settings that are managed on an individual user level. To access these, use the same Setup menu bar as shown above, but go into the Personal Setup portion:



Clicking on “My SoftPhone Settings” will bring up the options available for users to set:



If the first box is checked, after the user successfully logs in, the user will be automatically logged into the softphone using the same settings each time.

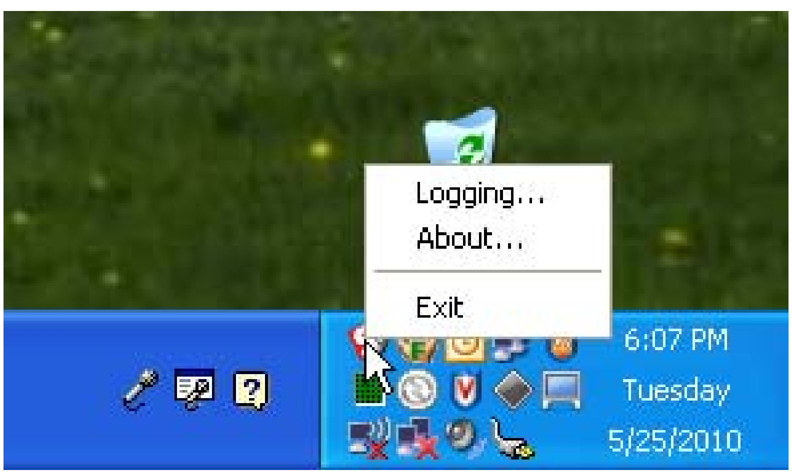
The second option determines whether the screen pop will be performed or not. Even if the matched record is not automatically popped, any matched records are always presented as a link on the softphone. Clicking on such a link will bring up the record.

CTI Adapter Use

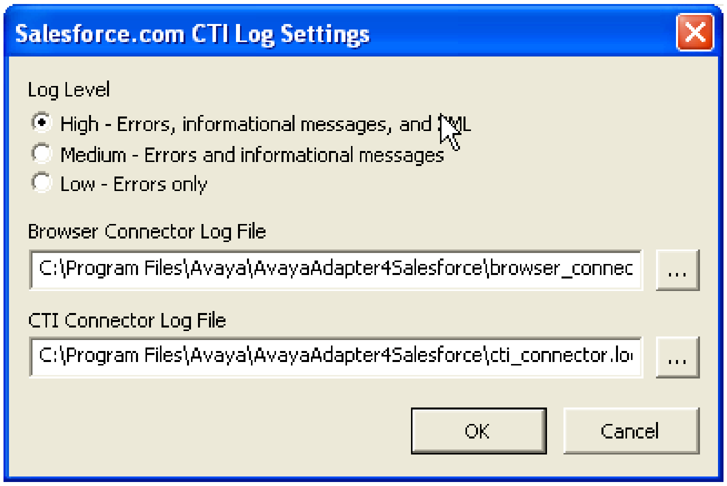
Running

To use the Avaya CTI Adapter, the adapter program must be started on the client desktop. This can be done manually by using the shortcut provided in the Windows "Start" menu, or by copying the shortcut into the "Startup" folder. Once started, its icon will appear in the Windows system tray.

When running, right-clicking on the icon in the Windows system tray will bring up a small context menu.



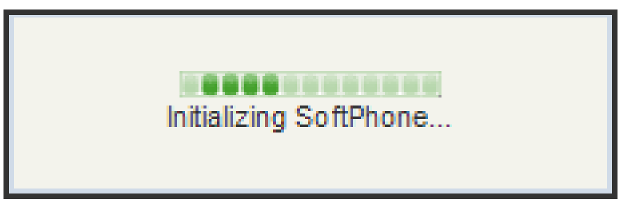
This menu allows the manual termination of the CTI Adapter (using the 'Exit' menu option), showing versioning information, and setting the logging levels and the location of the log files.



By default, the log files will always be located in the installation directory. If they need to be located somewhere else, change the entries for the log files. It is recommended, however, to leave them in the installation directory.

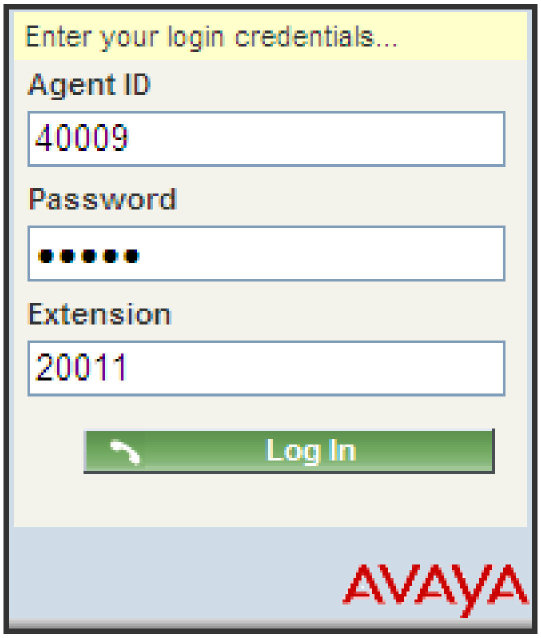
The Log Level determines how much information is stored in the log files. It is highly recommended that the log level be kept to "Low" unless a specific issuing is being investigated. Setting the log level to "High" will cause the log file to grow very quickly.

Once the CTI Adapter is running on the desktop, it is available for use with the Salesforce application. Start your web browser, go to the Salesforce.com login page and log in. When logged in, the softphone application will be seen starting up.



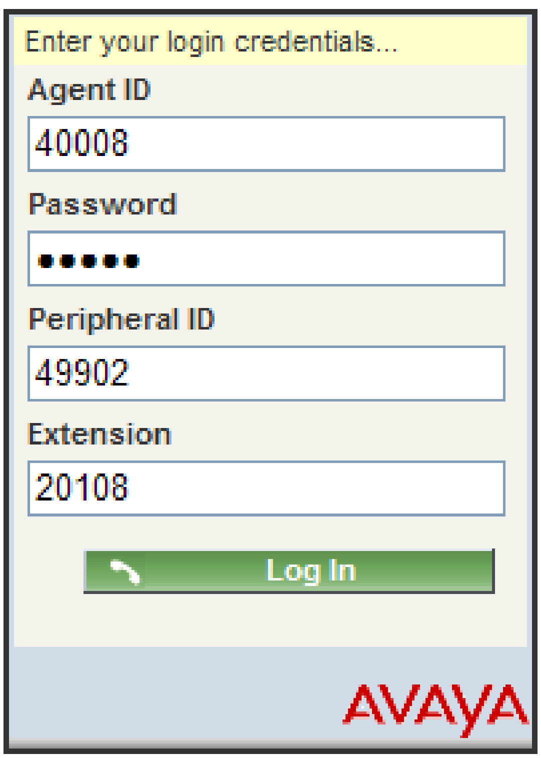
Login

After a few moments, the softphone login screen will be seen. If configured for a full call center, then the login screen will ask for three pieces of information:



Agent ID is the numeric ID used to log the agent into the ACD, and **Password** is the numeric password associated with the ID. Password can be blank if no password is assigned in the agent definition. If Agent ID is blank, then the user is logged in as if there is no call center.

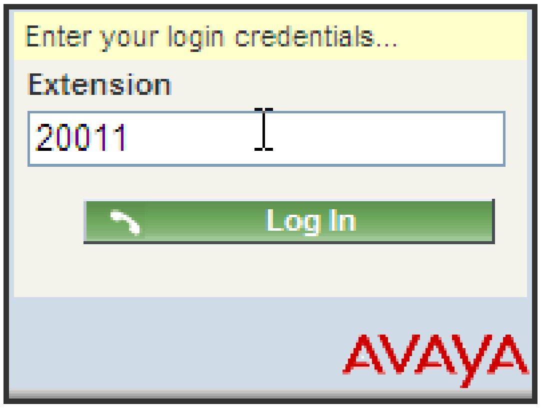
If configured for a basic call center, an additional piece of information is displayed:



With a basic call center, the user is logging directly into a split. The Peripheral ID is the "hunt group extension" for the split. An agent may only log into a single split; multi-split logins are not supported by the CTI Adapter.

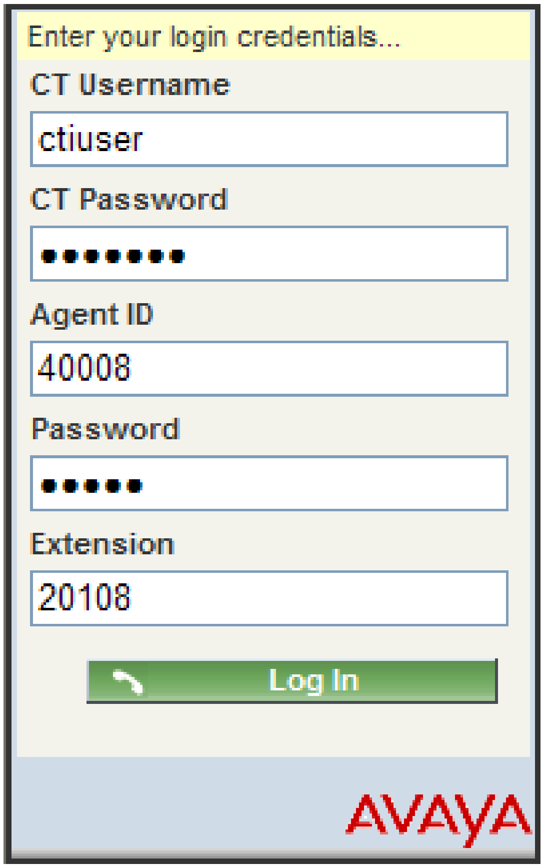
Agent ID is the BCMS ID created for the user. Password is the password for the BCMS ID. Both fields could be blank, depending on whether a BCMS ID is defined, or if the BCMS ID has a password specified.

Whereas, if this is not in a call center, only one piece of information will be required:



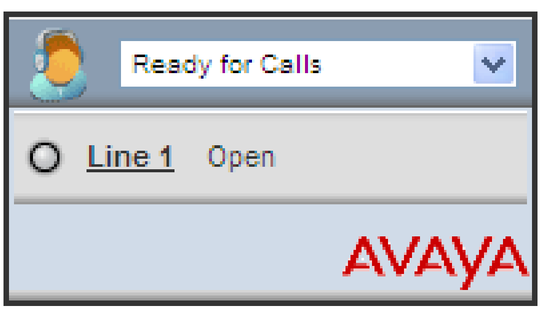
Extension is the extension number of the physical station at which the user will receive their calls. This is true regardless of what login screen is presented to the user.

Finally, if the CT Username and Password are not defined in the Call Center definition, the user will be prompted to provide those pieces of information on the login screen:



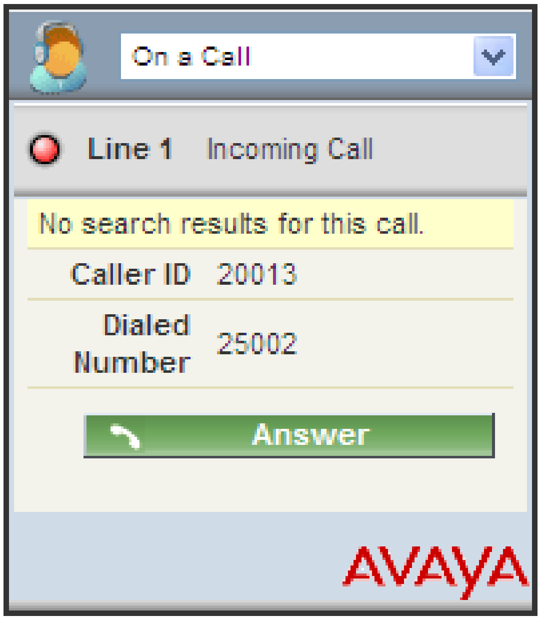
In this case **CT Username** is the username used to authenticate against the AES, and **CT Password** is the associated password. Note that this is showing them with the Call Center login information, but they can be used with any of the above possible login dialogs.

Once the user logs in, they will see the softphone in its idle state:

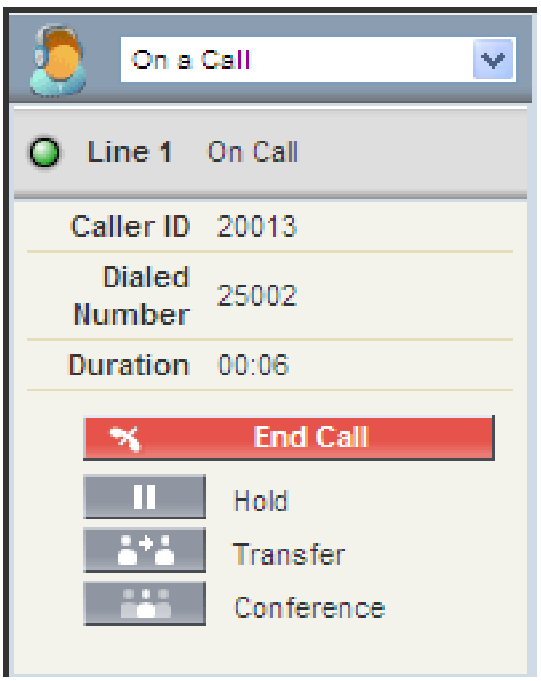


Calls

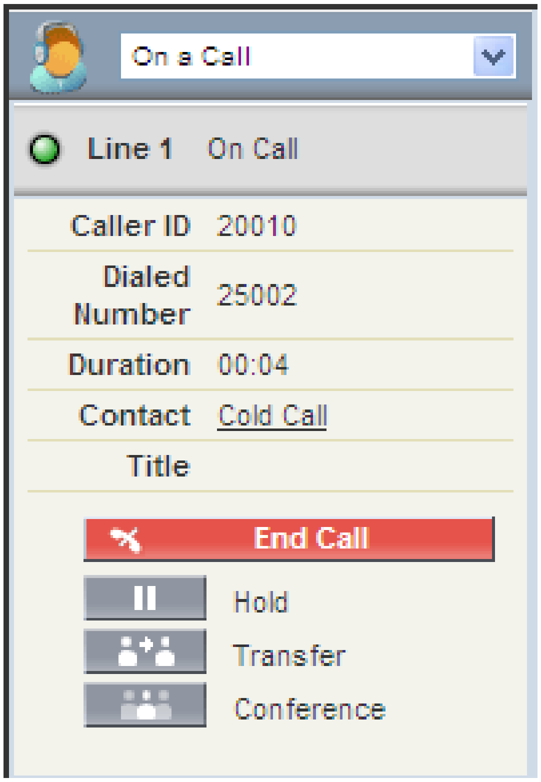
When a call comes in, the softphone will show the calling party, and allow the call to be answered:



If answered, the softphone will change to allow for further control of the now connected call:



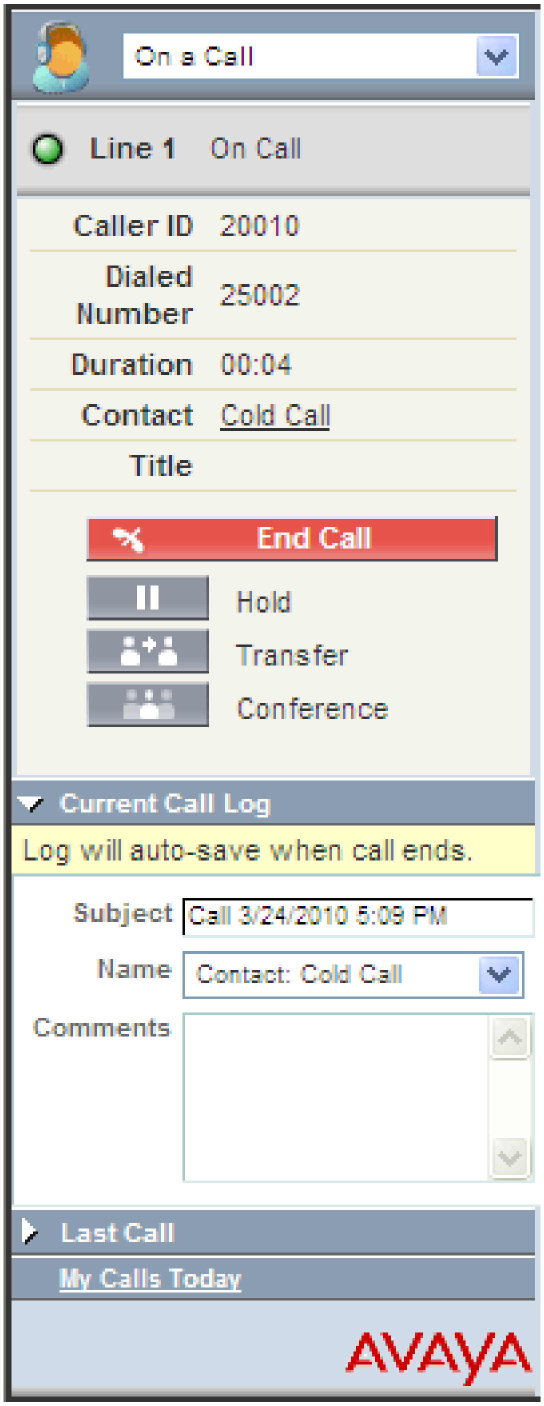
If the incoming call gets a match, then the matching information is shown in the softphone:



In this case, the matching information is for a Contact named "Cold Call". This information is fully clickable, and the name can be clicked to display the matching contact. (This is only necessary if the user has been configured to not automatically pop the match. If the user was configured to automatically pop unique matches, the contact will already be presented to the user.)

Call Log

Whenever a call has been completed, the Call Log information is displayed as part of the softphone:



The last object view during this call will be saved as an associated record for the call in the call log. Also, there is a comment area where the user can enter free-form text for this call.