ADMINISTRATION GUIDE

SHORETEL FOR SALESFORCE CONNECT

ShoreTel Advanced Applications

Introduction

ShoreTel for Salesforce enables a single-source view of all your business communications and customer interactions. This tight integration unifies voice and customer data and enhances the functionality of both the phone and CRM applications. It's easy to associate Salesforce records with any call, add comments to the user record, then transfer the call—with its associated data—to another agent. Users can create dashboards to track contacts, which can serve as an early indicator of sales, service or operational performance.

The ShoreTel for Salesforce Application and its Cloud Softphone integrates into Salesforce using Salesforce's Open CTI (Computer Telephony Interface). This application supports Citrix and Windows Terminal Services (WTS) environments and requires no desktop client software.

The ShoreTel Softphone is the customizable, browser-based Unified Communications (UC) tool embedded within Salesforce pages. Being browser and platform agnostic, the ShoreTel Softphone provides full feature capabilities across all internet browsers on all platforms. Don't confuse this Salesforce embedded "softphone" with the ShoreTel Connect client softphone. The ShoreTel Softphone features include:

- Compatible with Classic pages, Console pages and Lightning pages
- Make calls by dialing a number in the Softphone, choosing a number from the QuickDialer dropdown menu or by click-to-dial from a phone number on any Salesforce page
- View multiple active phone calls within the Softphone with automatic screen pop of the caller's contact detail and history
- Automatic display of Salesforce entities like contacts and accounts that are associated with calls based on a ShoreTel Contact Center call profile value (Connect ONSITE only), the caller's phone number, and called number
- Quick Dialer access to ShoreTel directory entries and Outlook contacts, as well as real-time telephony presence icons
- Full embedded call control features including answer, hold, hang-up, transfer, and initiate conference.
- Connect Availability State control (Not contact center agent status) and automatic synchronization with the Connect Client and IP phones
- Workgroup Agent Status control and automatic synchronization with the Connect client (Connect ONSITE only)
- Workgroup Agent Status integration with workgroup call handling and call log (Connect ONSITE only)
- Configurable Softphone call information displays

- Call log can be automatically saved in Salesforce Activity History with association to Salesforce entities
- Include custom Activity object fields on the ShoreTel softphone (requires Salesforce Enterprise edition or higher)
- Administrator configurable "Call Result" picklist to categorize inbound and outbound calls
- Quick links to retrieve call logs for the last 3 calls or calls for the day
- Support for Salesforce Workspace Transfer to make the current contact, case, account, etc. pop on another agent's browser when the call is transferred
- Push Page function which allows one user to make their current Salesforce page automatically appear on their colleague's browser during an internal call to each other
- For customers who have also deployed ShoreTel Call Recorder, click-to-play audio recordings automatically embedded in associated call activity records (Connect ONSITE only)

Requirements

The ShoreTel for Salesforce Application requires the following:

- ShoreTel Connect CLOUD or ShoreTel Connect ONSITE.
- ShoreTel ONSITE server(s) or an Edge-Gateway must provide a trusted certificate (e.g., root-signed) for secure communication (HTTPS) with the browser.
- A Salesforce.com account with Professional, Enterprise, or Performance Edition. Note that Salesforce Enterprise Edition or higher is required to load APEX package which enables advanced features.
- The *ShoreTel Applications Licensing Server* is required for Connect ONSITE deployments with either a trial or permanent license key for the ShoreTel for Salesforce application.
- Users on Connect CLOUD must have the Standard profile or above.
- A computing device on which to run the browser. This can be a Windows machine, Mac, iPad, iPhone, or Android.
- Application users must have one of the following supported operating systems and HTML 5 browsers:

OS	**IE 9**	**IE 10**	**IE 11**	**Edge**	**Chrome** version 28+	**Firefox** version 23+	**Safari** version 30+	**Mobile Safari**
Windows 7 SP1		√	√		√	√		
Windows 8, 8.1 (desktop version, non-metro UI)		√	√		√	√		
Windows 10			√	√	√	√		
Mac (10.7 or greater)					√	√	√	

iOS version 6+ (iPad, iPhone)					√			√
Android version 3.2 or greater[1]					√			
Linux					√[2]	√[2]		

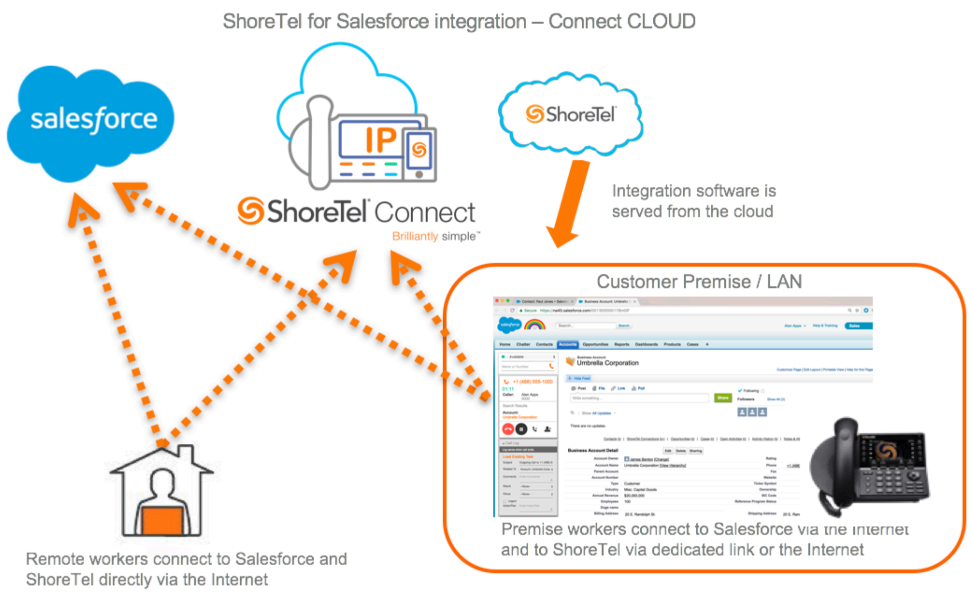
[1] Other versions of Android have not been validated but should work.

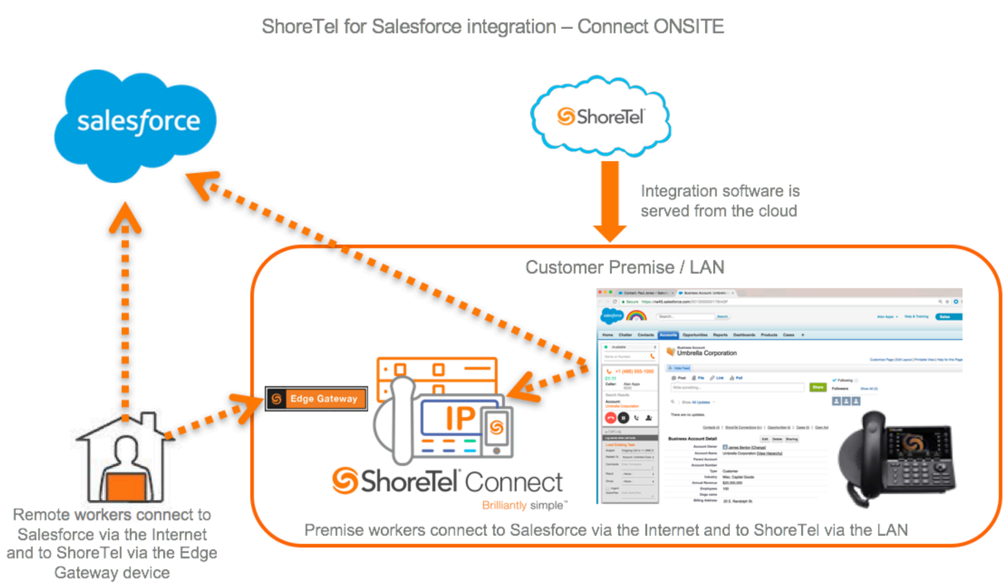
[2] These browser have not been validated on Linux but should work.

Table of Contents

Architecture and Overview

The graphic below depicts the ShoreTel for Salesforce Application architecture and interfaces between high level components. The ShoreTel for Salesforce Application has two major interfaces, one with Salesforce in the cloud over the internet and the other with either ShoreTel Connect CLOUD on the internet or ShoreTel Connect ONSITE within the customer intranet.





Domain and Network Port Access

The ShoreTel for Salesforce application requires browser access to Salesforce and to the following domains:

Domain	Port(s)
staasf.shoretelsky.com (softphone)	443
***.shoretel.com (CLOUD)**	443, 5448
HQ/DVS (ONSITE)	443, 5448

ShoreTel for Salesforce Implementation

Step 1 – Download the ShoreTel Call Center 5.3 XML configuration file

Telephony integration is configured and assigned to users using what Salesforce calls "Call Centers." The first step is for the Salesforce administrator to import the ShoreTel for Salesforce Call Center XML file to create the call center. The Call Center is a group of settings that allows Salesforce to find the Softphone code and to configure the various features of the softphone.

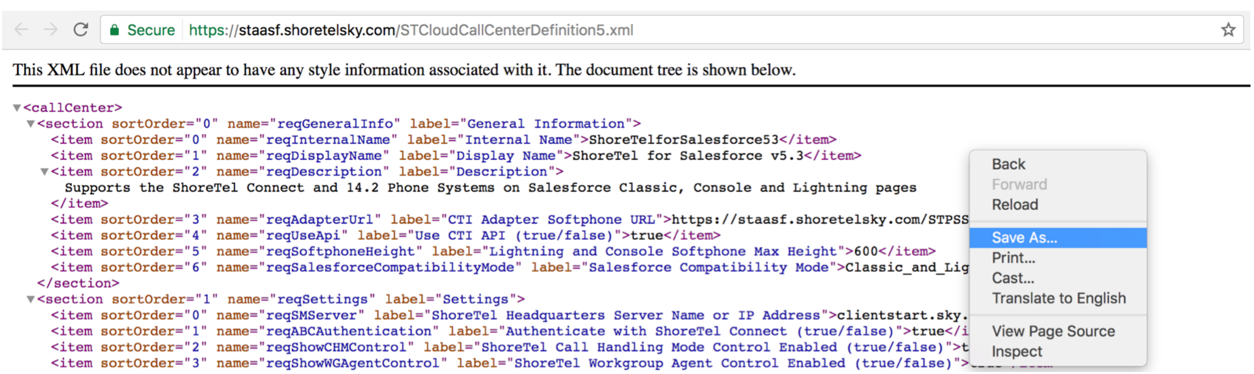
New users will want to download and import the XML file. Current users who are upgrading will want to download and import the updated XML file if they wish to take advantage of the new configuration options supported in the current Softphone.

Note: A Call Center only affects a Salesforce user when they are assigned to it. You can therefore import a new Call Center and adjust settings without affecting users on the system until you are ready to assign them to this new Call Center.

Click on this link to download the ShoreTel Call Center configuration file.

https://staasf.shoretelsky.com/STCloudCallCenterDefinition5.xml

Save the web page to the desktop by using the browser "Save As…" command. This can usually be accessed in the web browser by using pressing Ctrl+S from the keyboard as shown here:

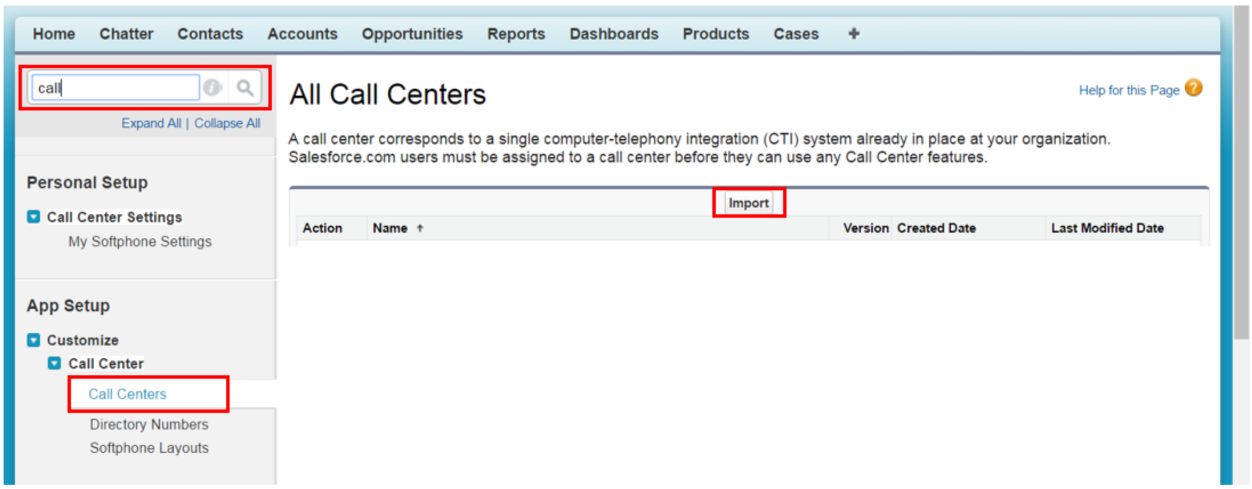


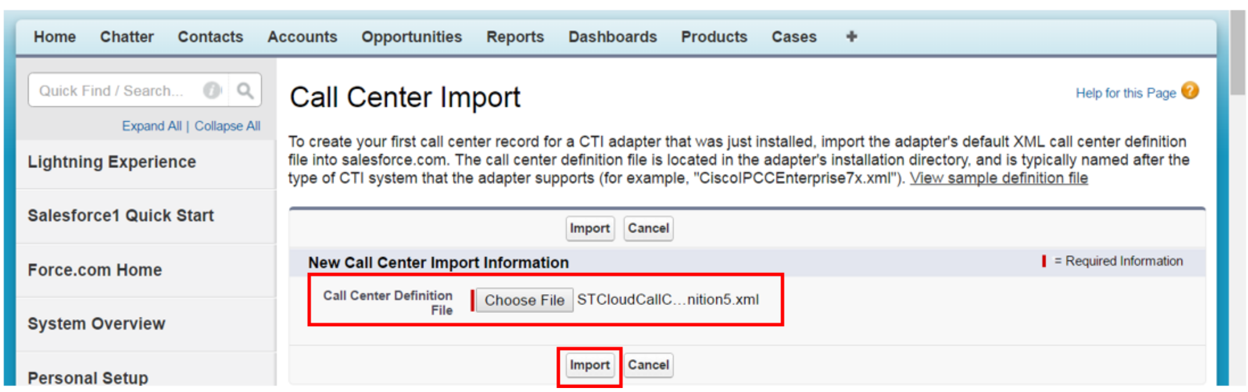
Select a location such as your desktop and click the Save button to save the file. The file name should default to "STCloudCallCenterDefinition5.xml".

Step 2 – Import the Call Center Definition into Salesforce

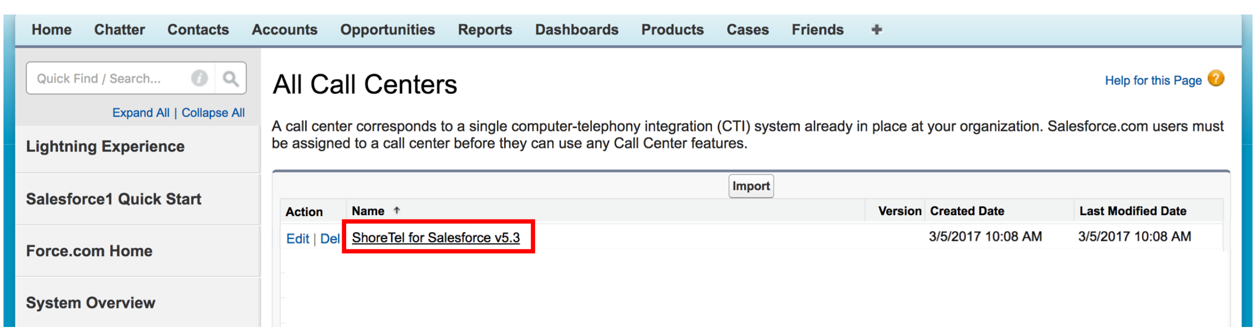
Log into Salesforce with administrator credentials and go to “Setup”. In the quick find box, type in “call”.

On the “All Call Centers” screen, click the Import button:





The below image shows the properly installed “**ShoreTel for Salesforce 5.3**” call center:

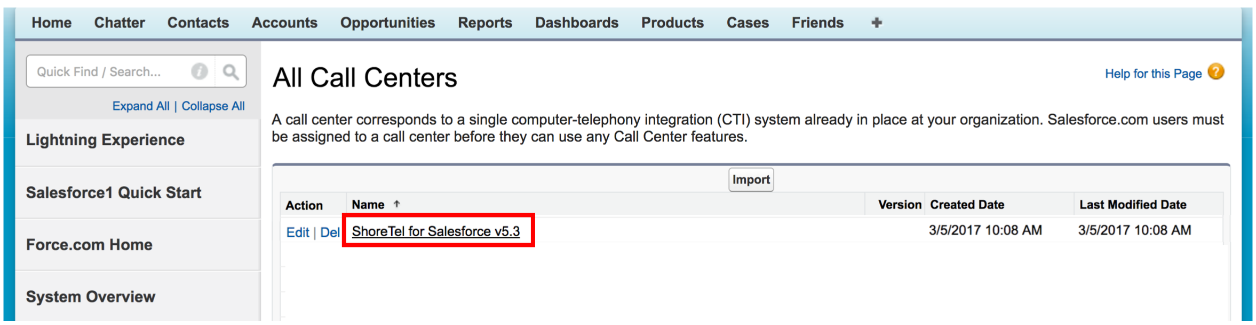


Step 3 – Configure the Call Center Definition

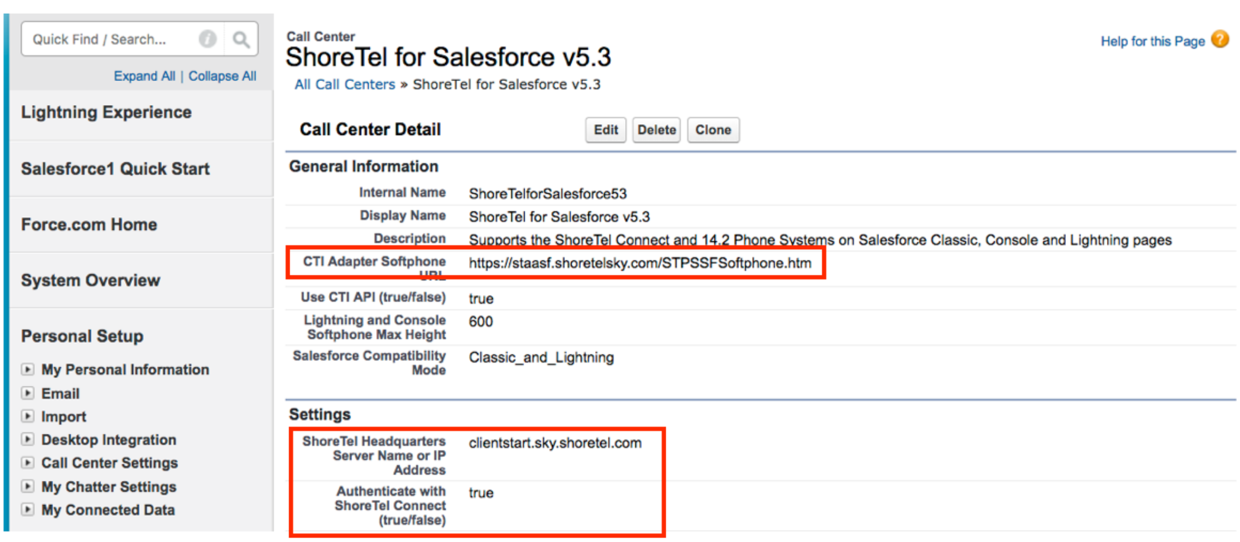
ShoreTel CTI Adapter URL and the ShoreTel Headquarters Server Address

Before the Softphone can function, a Salesforce administrator must configure several settings of the "ShoreTel Adapter Version 5.3" Call Center adapter. The Call Center adapter defines the settings used by the ShoreTel application. This Call Center adapter was installed by previous import procedure. The Salesforce administrator accesses the settings by navigating as follows:

1. In Salesforce, click ***Your Name*** ➤ **Setup** ➤ **Customize** ➤ **Call Center** ➤ **Call Centers**.
2. If the *Introducing Salesforce CRM Call Center* splash page appears, click **Continue**.
3. To view the settings, click on the "ShoreTel for Salesforce 5.3" link as highlighted in the screenshot below.



Doing so will display the "Call Center Details" for the ShoreTel for Salesforce Application as shown below. To edit the settings, click the **Edit** button at the top of the page. After making changes, click **Save** at the top or bottom of the page.



All of the settings are described later in the Detailed Configuration section of the document. However, before the integration can function, there are three key settings that must be set:

General Information - CTI Adapter Softphone URL and Standby Softphone URL

These tells Salesforce from where to load the softphone page when a user is using this call center definition. These URLs are hosted on a ShoreTel cloud server and must be configured to use HTTPS as shown below:

CTI Adapter Softphone URL: https://staasf.shoretelsky.com/STPSSFSoftphone.htm

NOTE: The shoretelsky.com servers are strictly a software repository for this solution.

Settings

ShoreTel Headquarters Server Name or IP Address

This is used by the integration to access the ShoreTel phone system. For ShoreTel Connect, the value is a hostname which depends on the deployment type:

- Connect CLOUD: **clientstart.sky.shoretel.com**
- Connect ONSITE: The fully qualified domain name (FQDN) of either the ShoreTel HQ server or Edge-Proxy.
  - Note that the ONSITE ShoreTel HQ (and DVS) server(s) must have a root-signed SSL cert from a recognized cert provider. The ShoreTel Connect ONSITE system generates self-signed certs when you install the software. While these self-signed certs will work for the Connect Client and the 400 series phones, workstation browsers do not honor self-signed certs by default and so will not allow the connection. The self-signed cert needs to be replaced with a root-signed cert using the process described in the ShoreTel Connect Administration Guide.

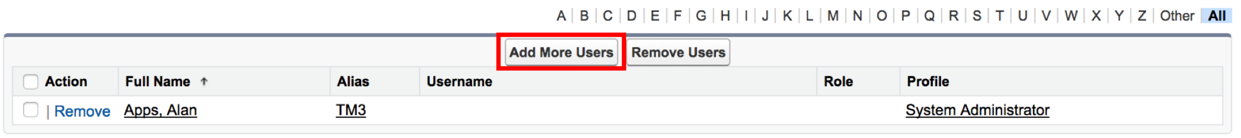
Authenticate with ShoreTel Connect

- This value must be set to **true**.

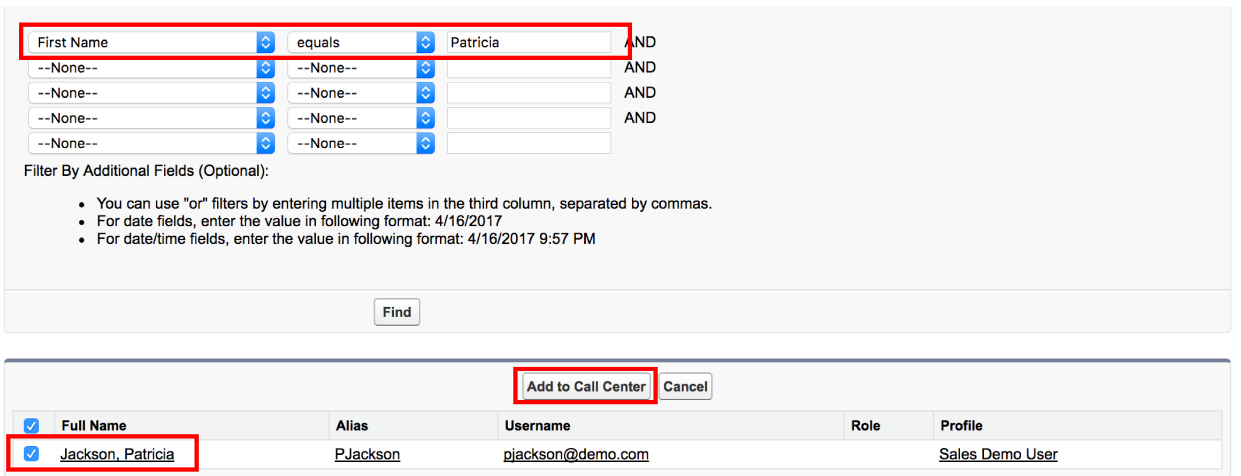
Step 4 – Assigning Users to the Call Center

In addition to the basic configuration of the Call Center, users must be assigned to use the ShoreTel Call Center. At the bottom of the page showing the details for the "ShoreTel for Salesforce 5.3" Call Center, click the Manage Call Center Users button. For additional details as well as how to set the Call Center when editing a user, see the Manage Call Center Users section.

Click [Add More Users]



Search for the specific user(s). Check the box next to their name(s). Click [Add to Call Center].

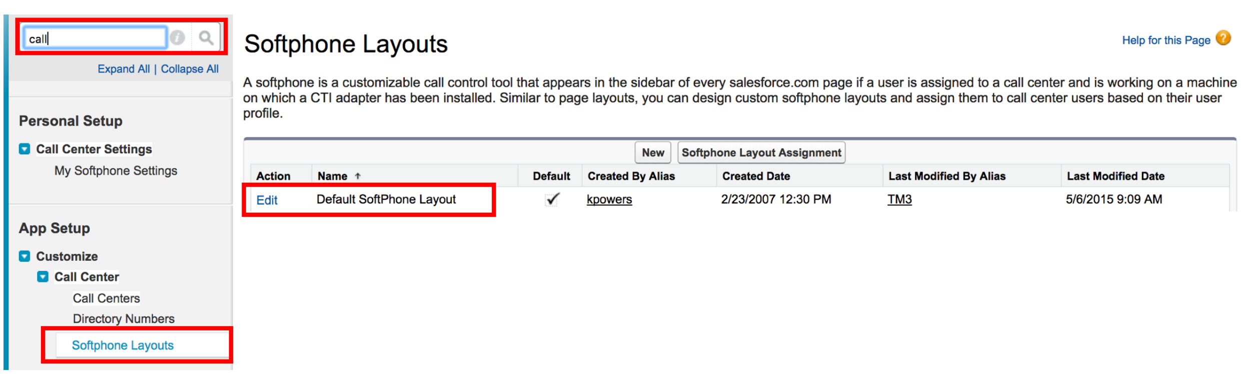


Note: To switch a user from an existing call center to a new one, you will need to first remove the user from the existing call center.

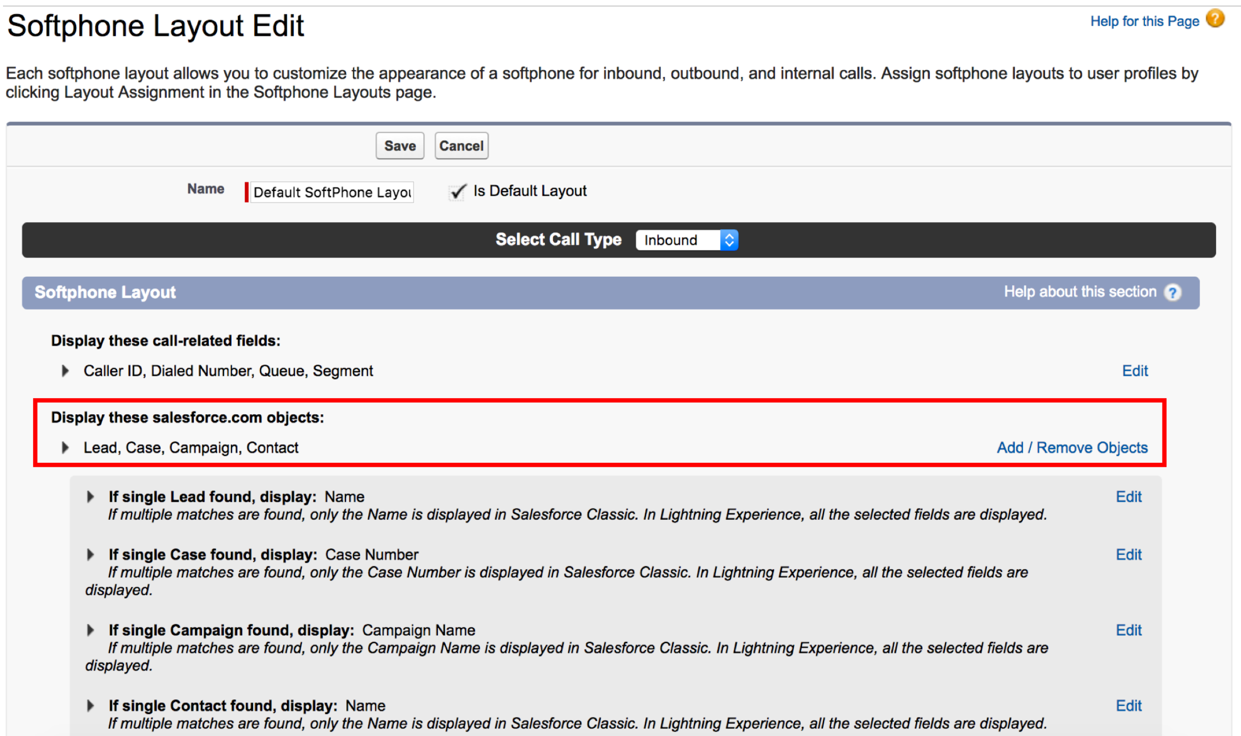
Step 5 – Creating a Softphone Layout and Associating Users

In addition to associating users with the ShoreTel Call Center, users must also be associated with a valid Softphone Layout. Go to "Setup". In the quick find box, type in "call".

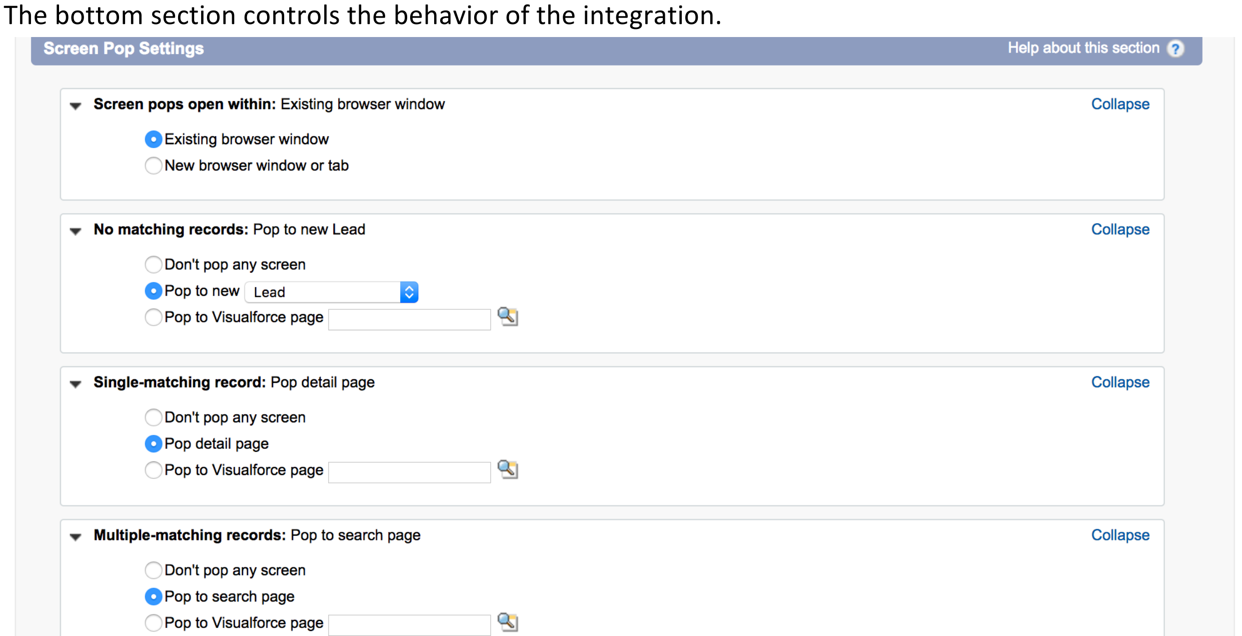
Click the Edit link next to the Default SoftPhone Layout.:



The top section controls the database objects that are searched when a call is received. The default configuration includes Lead, Contact and Account. If you need to include other database objects that contain phone number fields, click the Add/Remove Objects link.



The bottom section controls the behavior of the integration.



- **Screen pops open within** – Screen pops can occur in the current browser tab or open a new tab. The default is to pop within the existing tab**. If you are using the Classic pages, we recommend the "New browser window or tab" option. If you are using Lightning pages, we recommend the "Existing browser window" option.**

- **No matching records** – If no record with a matching phone number is found, the integration can do nothing, pop a new record (ex. a new Lead), or pop a custom Visualforce page. The default is to do nothing.

- **Single-matching record** – If the phone number of the caller is found on a single record, the integration can do nothing, pop the detail page where the phone number was found or pop a custom Visualforce page. The default is to pop the detail page.

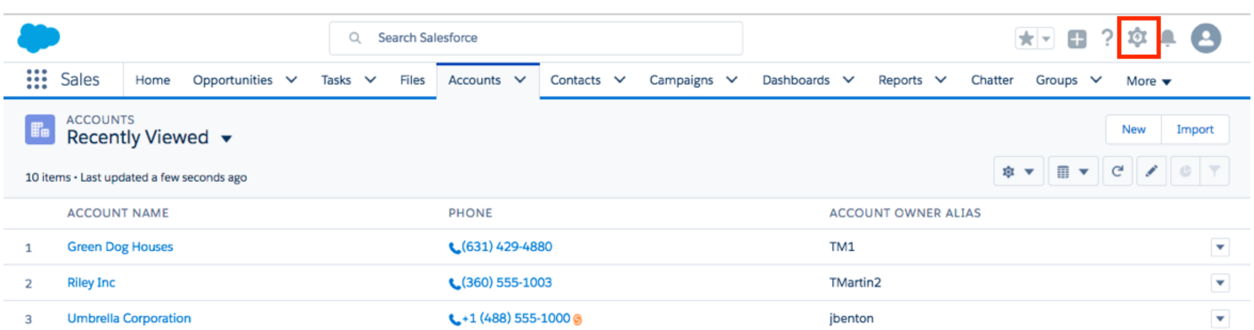
- **Multiple-matching records** – If the phone number of the caller is found on several records, the integration can do nothing, pop a search page listing or pop a custom Visualforce page. The default is to do nothing. **We recommend popping the search page.**

Note: The "Screen Pop Settings" portion of the Softphone Layout will only appear if the Salesforce administrator is assigned to the Call Center.

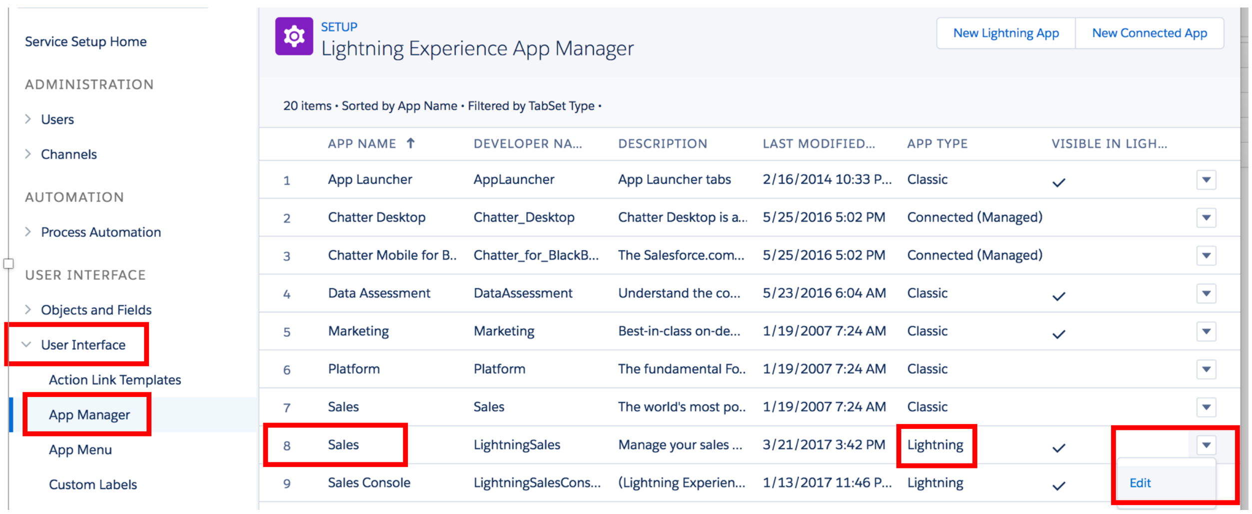
Step 6 – Adding the CTI Softphone to the Lightning Toolbar (Optional)

This step only applies if you wish to use the ShoreTel for Salesforce integration on Lightning. If not, please proceed to step 7.

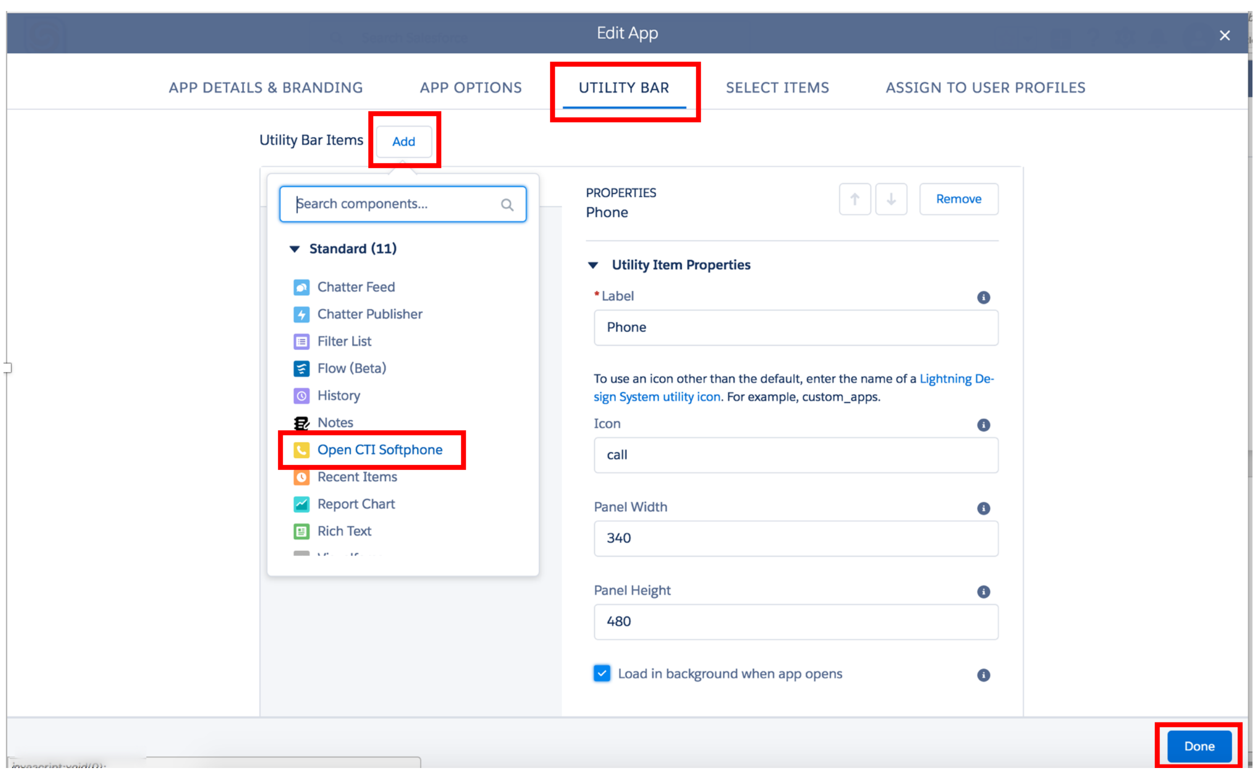
Switch to the Lightning Experience if not already there. Click the gear icon and select Setup.



Select User Interface > App Manager. Find the app that your team uses. For example, the Sales App (Note that this must be a Lightning type app). Click the down arrow on the right and select Edit.



Select the Utility Bar and click [Add]. Select the Open CTI Softphone and click Done.



Step 7 – Load APEX Package (Optional)

There are several additional optional features of ShoreTel for Salesforce that are enabled by installing an additional package containing mainly some additional Apex Classes. This package is required to enable the following features:

- Use an existing Task Activities to seed a call note when making calls from open Task Activities advantage and/or navigate to an existing open Task Activity record and use it to seed the current call note.
- Configure additional Salesforce Task Activity fields to show up in the call note areas of the softphone. This is described in the Advanced Call Logging section.
- Want to be able to potentially support application integration features as described in Appendix B.

NOTE: This package can only be installed in the Salesforce Enterprise Edition or higher. The package is not supported on the Salesforce Professional Edition.

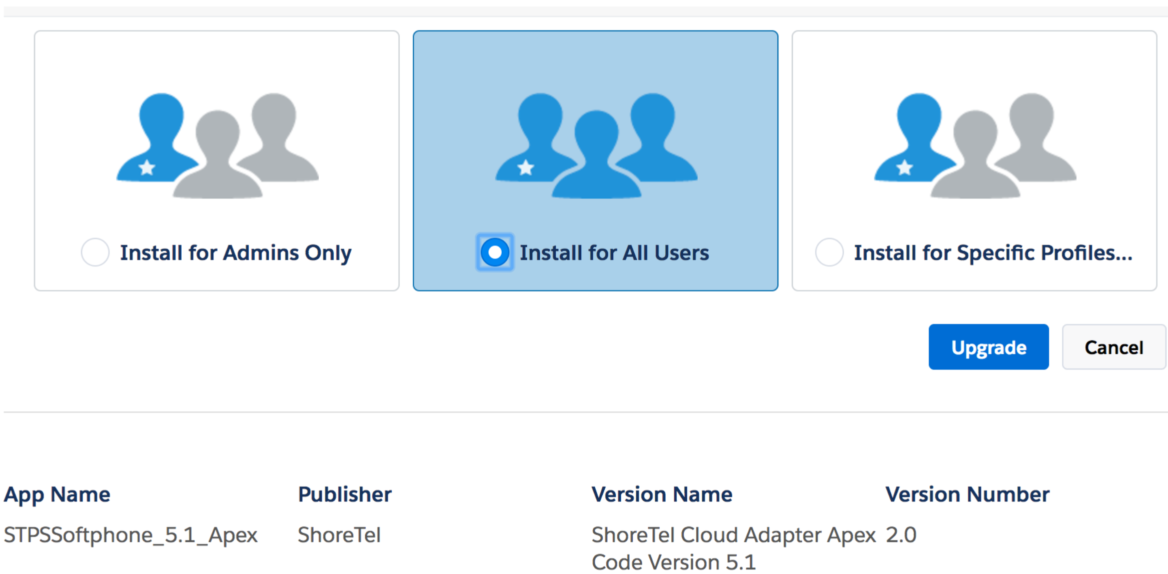
To install the package in the PRODUCTION instance, the customer's Salesforce Administrator will need to access this URL:

https://login.salesforce.com/packaging/installPackage.apexp?p0=04t50000000LlrT

To install the package in the SANDBOX instance, the customer's Salesforce Administrator will need to access this URL:

https://test.salesforce.com/packaging/installPackage.apexp?p0=04t50000000LlrT

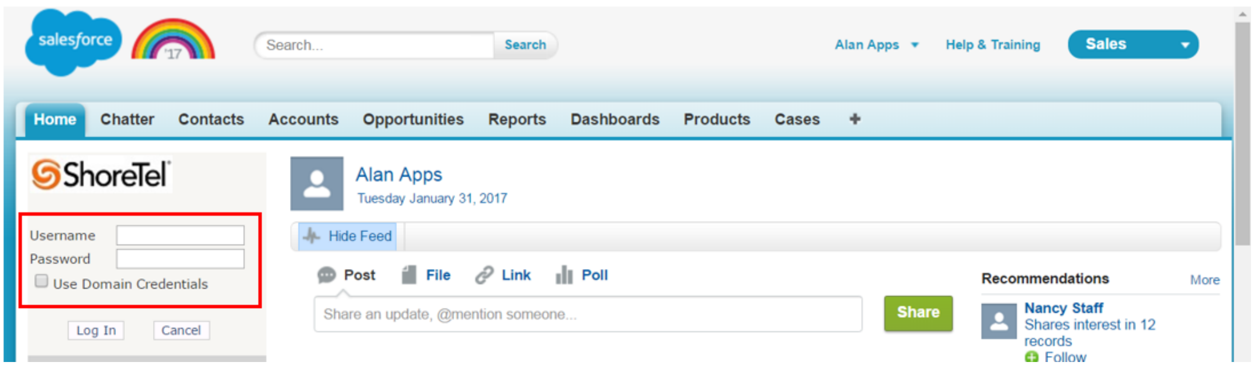
Follow the instructions. Permission should be granted to all users.



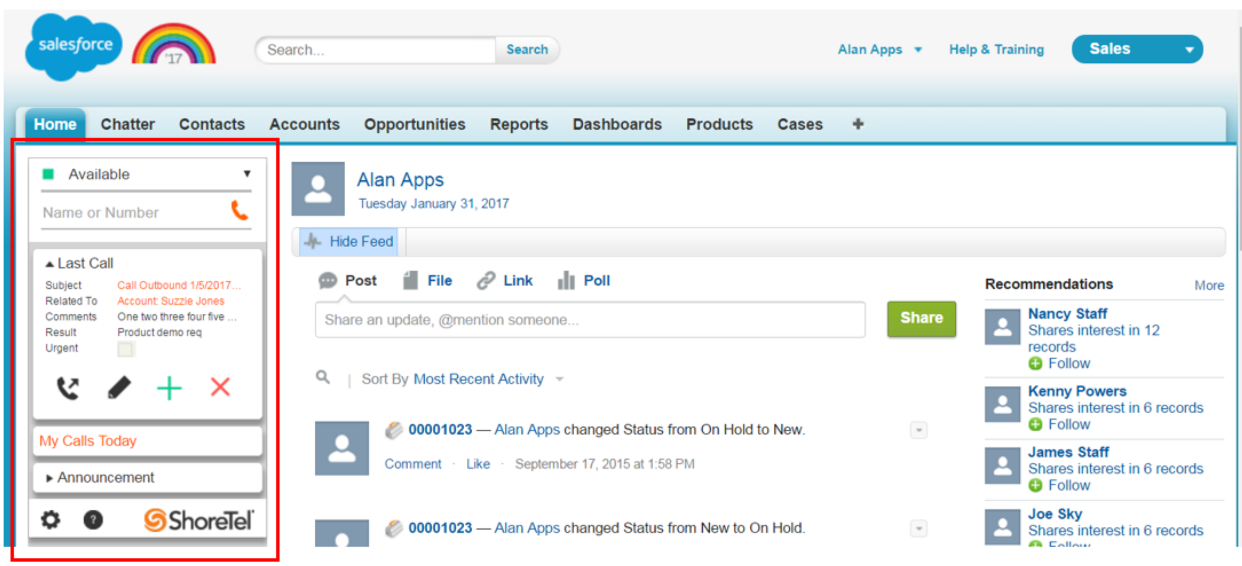
Step 8 – Test the Softphone

Upon logging into Salesforce, you will be prompted to enter your ShoreTel credentials. Use the same credentials as you use to log into the Connect Client.

Note: The "Use Domain Credentials" option allows you to login without entering your username/password. For this option to work, the ShoreTel user profile must be linked to an AD user account AND the user must be on the corporate network or have an active VPN connection. If the user is off-net, they should enter their username and password.



After entering your credentials, the softphone should display as follows:



Softphone Display Errors

Listed below are some of the common softphone display errors

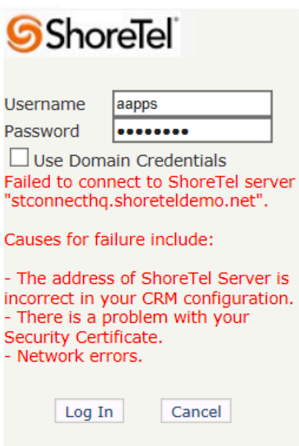
Softphone Does Not Load

This is usually caused by misconfiguring the "Softphone URL" URL in the Call Center Definition. Please verify the URL begins with "https".

Other Errors

Listed below are some of common causes for login failures:

- The ShoreTel server is incorrect in the Call Center Definition.
- Connect ONSITE - The certificate from the ONSITE server(s) or Edge-Gateway is not trusted. Note that when you install Connect ONSITE, it will generate a self-signed SSL cert. While the self-signed SSL cert will work fine for the Connect client and the 400 series IP phones, it will not be honored by the browsers. You must install a root-signed cert using Director as covered in chapter 4 of the ShoreTel Connect System Administration Guide.
- Network errors.

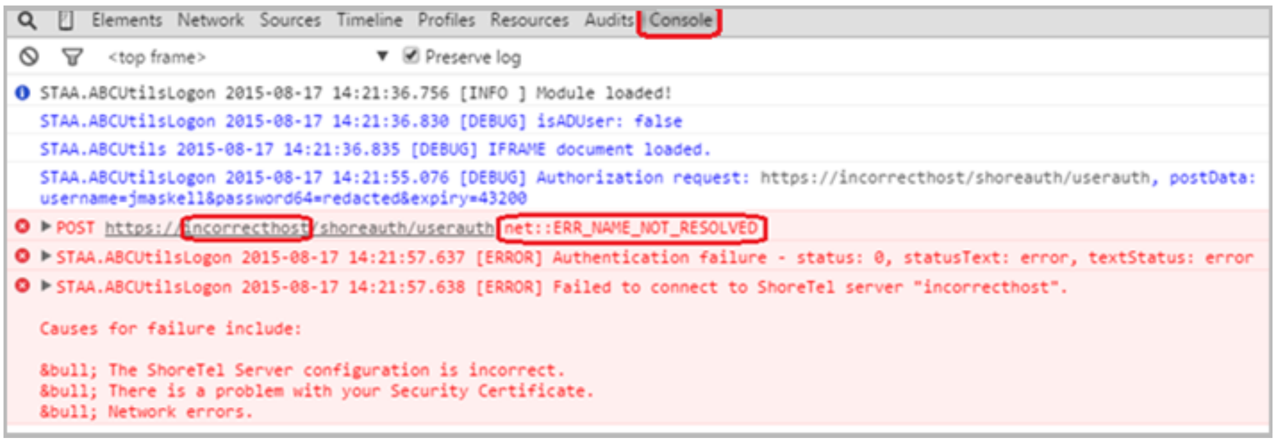


Troubleshooting Softphone Display Errors

The browser console can provide information on the cause for softphone display errors and can be opened by entering Cntl-F12 and selecting the console tab. The examples below use the Chrome browser.

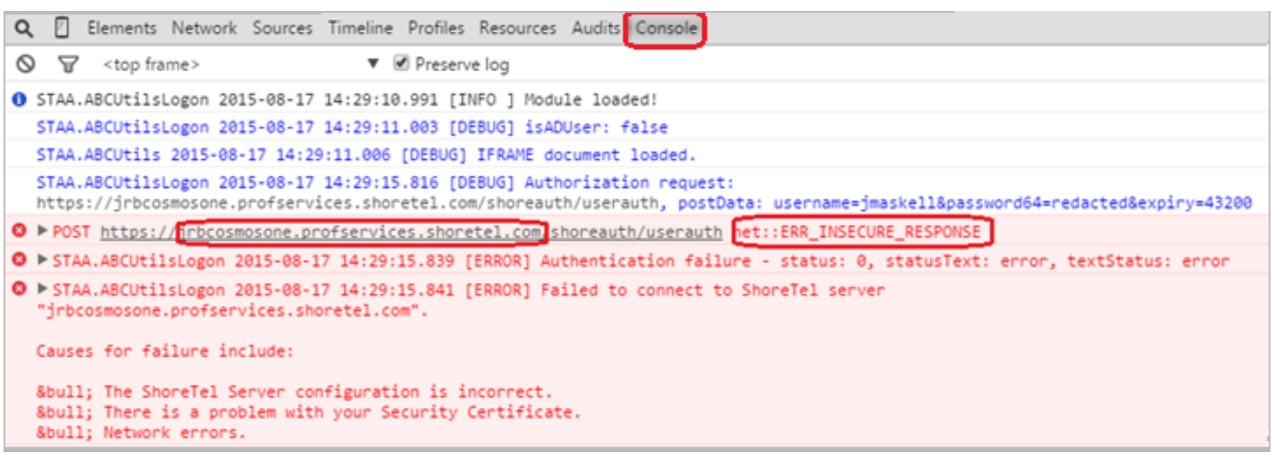
ShoreTel Server Configuration Error

Look for "POST" command to either "https://<server name>/shoreauth/userauth" or "https://<server name>/shoreauth/useradauth" with an error like "name not resolved". In the example below the server name "incorrecthost" is incorrect.



Certificate Error

Look for "POST" command to either "https://<server name>/shoreauth/userauth" or "https://<server name>/shoreauth/useradauth" with an error like "insecure response". In the example below the server "jrbcosmosone.profservices.shoretel.com" did not provide a trusted certificate.



Detailed Configuration

The ShoreTel Cloud Softphone is quite flexible in how it works. The key to this variability is via the configuration of two sets of settings, the Call Center configuration and the SoftPhone Layout configuration. Both settings are accessed by the **Salesforce administrator** via the Setup menu.

Each Salesforce user can be assigned to a specific Call Center. A group of users can be assigned to a specific SoftPhone Layout by security profile. By cloning the ShoreTel Cloud Adapter Call Center Definition and creating or cloning existing SoftPhone Layouts, different groups of users can have different configuration settings.

Call Centers Setting

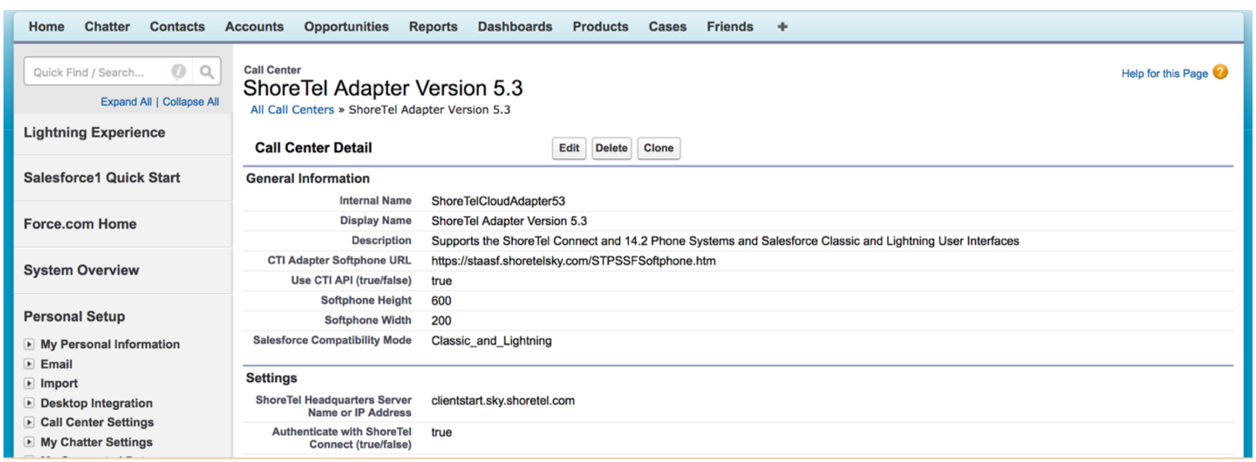
To work with the call center definition:

Click ***Your Name*** ➤ **Setup** ➤ **App Setup** ➤ **Customize** ➤ **Call Center** ➤ **Call Centers**.

Assuming you have not renamed or copied the default call center definition then select the:

ShoreTel for Salesforce 5.3

This will display the settings as below:



- Email
- Import
- Desktop Integration
- Call Center Settings
- My Chatter Settings
- My Connected Data

App Setup

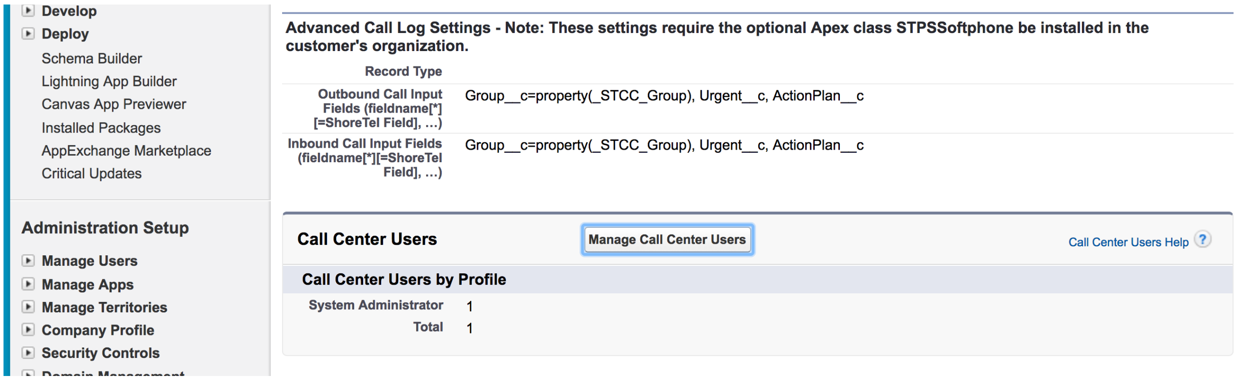
- Customize
  - Tab Names and Labels
  - Maps and Location
  - Home
  - Activities
  - Campaigns
  - Leads
  - Accounts
  - Contacts
  - Notes
  - Opportunities
  - Path
  - Quotes
  - Forecasts
  - Social Media
  - Cases
  - Entitlement Management
  - Self-Service
  - Call Center
    - Call Centers
    - Directory Numbers
    - Softphone Layouts
  - Console
  - Omni-Channel
  - Macros
  - Contracts
  - Orders
  - Solutions
  - Products
  - Price Books
  - Partners
  - Salesforce to Salesforce
  - Work.com
  - Chatter Answers
  - Ideas
  - Answers
  - Assets
  - Users
  - User Provisioning Requests
  - Agent Console
  - Salesforce Files
  - Tags
  - Reports & Dashboards
  - Search
  - Chatter
  - Topics
  - Email
  - User Interface
- Create

Settings

ShoreTel Headquarters Server Name or IP Address	clientstart.sky.shoretel.com
Authenticate with ShoreTel Connect (true/false)	true
ShoreTel Call Handling Mode Control Enabled (true/false)	true
ShoreTel Workgroup Agent Control Enabled (true/false)	true
ShoreTel Recorder Controls Enabled (true/false)	true
Click to Dial Enabled (true/false)	true
If only one record found on incoming call open the record automatically (true/false)	true
Show Softphone for New Calls in Lightning and Console (true/false)	true
Inbound Call Fields ({"label": "ShoreTel call field"}, ...})	{"Dialed": "called"}, {"DNIS": "dnis"}, {"From": "from"}
Outbound Call Fields ({"label": "ShoreTel call field"}, ...})	{"Caller": "caller"}
For Classic Interface only, New SF entity for unknown caller PHONE NUMBER form field ID	
For Classic Interface only, New SF entity for unknown caller NAME form field ID	
For inbound calls, search on dialed number (DNIS) in addition to caller's number (true/false)	true
Salesforce Service Console Users (true/false)	
Additional Options ("Option": Value, ...)	"LogSticky":"ClickToDial", "SearchOnConnect":true

Call Log Settings

Outbound Calls Logging Enabled (true/false)	true
Inbound Calls Logging Enabled (true/false)	true
Outbound Subject (Text and variables including {date}, {time}, etc.)	Call Outbound {date} {time}
Inbound Subject (Text and variables including {date}, {time}, etc.)	Call Inbound {date} {time}
Outbound Call Log Results ("Result 1", "Result 2", ...)	"New Lead - Req Proposal", "Existing Customer - New Order", "Left Message"
Inbound Call Log Results ("Result 1", "Result 2", ...)	"New Lead - Req Proposal", "New Lead - Placed order", "Existing Customer - New Order"
Missed Call Log Result	Missed Call
Custom Call Log Fields to Set ({"Salesforce field": "ShoreTel call field"}, ...)	{"dnis__c":"dnis"}, {"Workgroup__c":"from"}, {"CallerID__c":"conn-num"}, {"skyplatform__Call_Start_Date_Time__c":"datetime"}
For Classic Interface only, Follow Up Options Enabled on Save/Update (true/false)	false
Keep Call Logs Open after Call Disconnect (true/false/save)	false
Recent Call Logs Count	3



The settings are divided up into 4 areas. The follow section describes each setting and what it is used or:

General Information

General Information

Internal Name	ShoreTelforSalesforce53
Display Name	ShoreTel for Salesforce v5.3
Description	Supports the ShoreTel Connect and 14.2 Phone Systems on Salesforce Classic, Console and Lightning pages
CTI Adapter Softphone URL	https://staasf.shoretelsky.com/STPSSFSoftphone.htm
Use CTI API (true/false)	true
Lightning and Console Softphone Max Height	600
Salesforce Compatibility Mode	Classic_and_Lightning

Internal Name

Internal Name represents the unique identifier for the call center in the database. Internal Name must be composed of no more than 40 alphanumeric characters with no white space or other punctuation. It must start with an alphabetic character and must be unique from the Internal Name of all other call centers defined in your organization. Once a value for Internal Name has been saved for a call center, it cannot be changed. If you clone a definition you must make sure to provide a unique name before you can save the new definition. Adding new call center definitions allow different group of users to have different user interfaces.

Display Name

This is the name shown for the call center within Salesforce. If you clone the Salesforce Cloud Call Center Definition, you'll want to give a unique and distinctive name. For example: "ShoreTel Cloud Adapter 5.3 for Sales Agents" for a call center definition configured with settings specific to a Sales group. The Display Name has a maximum length of 1000 characters.

Description

This is a longer description of the Call Center Definition, 1000 characters maximum.

CTI Adapter Softphone URL

This is a key setting in call center definition configuration for ShoreTel login and Cloud Softphone page to show up on Salesforce screen. This is discussed in the Installation | General Information | CTI Adapter URL section. Review the section for details of how this setting is used.

Standby Softphone URL

This setting has been eliminated in 5.3

Use CTI API (true/false)

This should be set to true and should not be changed.

Softphone Height

On the Salesforce Console and Lightning pages, the Height controls the maximum height that is used for the softphone popup.

Salesforce Compatibility Mode

This should be set to Classic_and_Lightning.

Dialing Options

The dialing options section has been eliminated in 5.3.

Settings

Settings

ShoreTel Headquarters Server Name or IP Address	clientstart.sky.shoretel.com
Authenticate with ShoreTel Connect (true/false)	true
ShoreTel Call Handling Mode Control Enabled (true/false)	true
ShoreTel Workgroup Agent Control Enabled (true/false)	true
ShoreTel Recorder Controls Enabled (true/false)	true
Click to Dial Enabled (true/false)	true
If only one record found on incoming call open the record automatically (true/false)	true
Show Softphone for New Calls in Lightning and Console (true/false)	true
Inbound Call Fields ({"label": "ShoreTel call field"}, ...})	{"Dialed": "called"}, {"DNIS": "dnis"}, {"From": "from"}
Outbound Call Fields ({"label": "ShoreTel call field"}, ...})	{"Caller": "caller"}
For Classic Interface only, New SF entity for unknown caller PHONE NUMBER form field ID	
For Classic Interface only, New SF entity for unknown caller NAME form field ID	
For inbound calls, search on dialed number (DNIS) in addition to caller's number (true/false)	true
Salesforce Service Console Users (true/false)	
Additional Options ("Option": Value, ...)	

This section contains the core settings used by the softphone. Except for the ShoreTel Headquarters Server setting, the other settings control aspects of the softphone's user interface.

ShoreTel Headquarters Server Name or IP Address

Here is where you must specify ShoreTel Connect hostname which depends on the Connect deployment type:

- Connect CLOUD: **clientstart.sky.shoretel.com**
- Connect ONSITE: The fully qualified domain name (FQDN) of either the ShoreTel HQ server or Edge-Proxy.

Authenticate with ShoreTel Connect

This value must be set to "true".

ShoreTel Call Handling Mode Control Enabled (true/false)

This controls whether the softphone, when running, displays a control at the top to allow users to view and change their ShoreTel Availability State (formerly known as the Call Handling Mode). Changing the Availability State on the ShoreTel Softphone also updates the Availability State on the Connect client and the IP phone. If this setting set to false and the control is not shown, users can still view and change their Availability State using their phone or the ShoreTel Connect client. Refer to Usage | Exploring the Softphone Layout and Features | Availability State section for details.

ShoreTel Workgroup Agent Control Enabled (true/false)

Applies to Connect ONSITE only. This controls whether the softphone, when running, displays a control at the top to allow ShoreTel Workgroup agents to view and change their Workgroup agent status. If set to true and the user is a workgroup agent then the control is shown; otherwise the control is not shown. Note that even if the control is not shown, users who are workgroup agents can still view and change their Workgroup Agent status using their phone or the ShoreTel Connect client. Refer to Usage | Exploring the Softphone Layout and Features | ShoreTel Workgroup Agent Status Section for more details.

ShoreTel Call Recorder Controls Enabled (true/false)

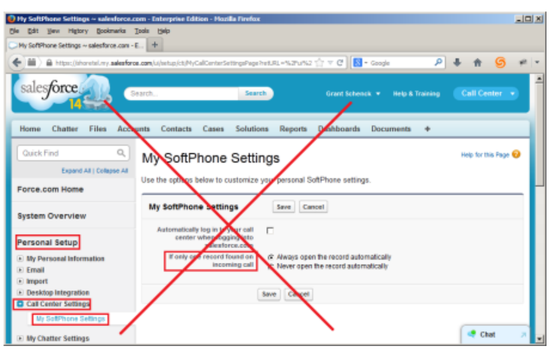
Applies to Connect ONSITE only. If the ShoreTel Call Recorder is installed and the recording profile settings allow the user to pause/resume, save/don't save, start recording, etc., this control determines if the pause/resume, save/don't save, etc. buttons should be shown in the ShoreTel for Salesforce integration.

Click to Dial Enabled (true/false)

If set to true, the phone number fields in Salesforce will become click to dial links.

If only one record found on incoming call open the record automatically (true/false)

This setting controls the automatic screen pop of the softphone. Note that it replaces the equivalently named Salesforce users setting (Personal Setup | Call Center Settings | My Softphone Settings) which is NOT used due to limitations in the Salesforce provided framework:



Show Popup for New Calls in Lightning and Console (true/false)

This setting is only used if the user is running the softphone on the Salesforce Service Console or on the Lightning pages. If the user is running on the Service Console or the Lightning pages and this setting is set to true, then the screen popup will automatically appear when a new call presents. If this setting is set to false, users must manually click the phone icon to show the softphone.

Inbound Call Fields ({"label": "ShoreTel call field"}, {...})

This setting is used to control the call related fields that are shown for **inbound** calls in the softphone. The format, as reflected in the field name, is a text label enclosed in quotes followed by a colon (':') and then the name of a ShoreTel call field also in quotes all surrounded in curly brackets for one field. So, for example, to display a label of "Caller" with a value of the call's "conn" field contents then you would set this field's value to:

{"Caller": "conn"}

If you want to display multiple fields then you would add additional label/value pairs separated by commas. For example, to display a Caller field and a DNIS field you would set this value to:

{"Caller": "conn"}, {"DNIS": "dnis"}

The ShoreTel fields available are as shown in the table below. If a field is not set or has no value then neither the label nor the value will be shown. For example, some fields may not be set for specific calls or all calls of a certain type such as dnis for outbound calls. In fact, you're free to reference any field name you want. Refer to Usage | Exploring the Softphone Layout and Features section for examples of resultant softphone displays. Note that more fields could be added in the future, or existing fields could be removed. ShoreTel for Salesforce Application Release Notes will document the revisions while this guide only documents the latest design.

ShoreTel Field	Contents
called*	Combines called-num-cannonical and called-name.
called-num	For inbound calls, the number called. For outbound calls, the number dialed.
called-num-canonical	The called number but formatted as a canonical formatted number.
called-name	The name associated with the called party.
caller*	Combines caller-num-canonical and caller-name.
caller-num	For inbound calls, the caller (ANI). For outbound calls, the calling party.
caller-num-canonical	The caller number but formatted as a canonical formatted number.
caller-name	The name associated with the caller party.
conn*	Combined conn-num-canonical and conn-name.
conn-num	The number of the party that the call is connected to or, for unconnected calls, the called party for outbound calls and the caller for inbound calls.
conn-num-canonical	The connected number but formatted as a canonical formatted number.
conn-name	The name associated with the connected party.

conn-im	Instant Message address of connected party.
conn-email	Email address of connected party.
dnis	DNIS friendly name supplied on the call.
Note	Call note.
Trunk	Trunk information string.
called-wg-name	If the call arrived via WG, the name of the original WG that was called.
data-conf-url	Participant URL of associated data conference, if any.
data-conf-leader-url	Leader URL of associated data conference, if user is the conference leader.
data-conf-web-callid	The call ID needed to associate the user with the extension in the data conference.
datetime	The date and time of the start of the call.
position	The call's stack position.
from*	Number and name field extract from the most recent route slip entry.
property(name)*	Special "field" that allows access to call's property (named-values). For example, the value of a call property named "_STCC_SERVICE" could be displayed using a ShoreTel field name of "property(_STCC_SERVICE)".

*** Indicates composite field formed using existing fields.**

To enter long string of custom fields, administrators may use Notepad to get the string ready, then copy and paste into this setting.

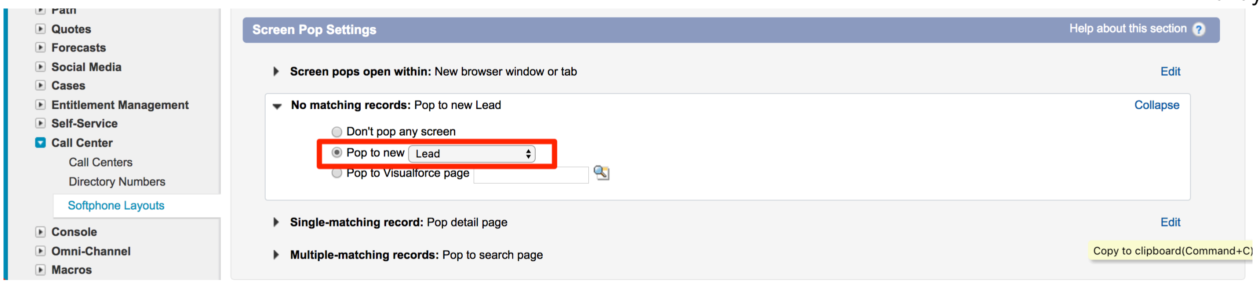
Outbound Call Fields ({"label": "ShoreTel call field"}, {...})

This setting is used to control the call related fields that are shown for **outbound** calls in the softphone. The format and the supported ShoreTel fields are identical to the previous Settings | Inbound Call Fields configuration details.

For Classic Interface only, New SF entity for unknown caller PHONE NUMBER form field ID &

New SF entity for unknown caller NAME form field ID

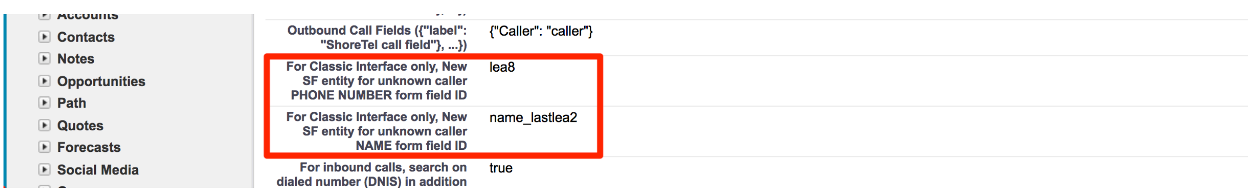
This setting allows the auto-populating of a phone number field and/or a name field on a new entity form that is opened when there is no matching phone number found. A new record page can be configured to open in the Softphone Layout:



This setting allows the configuration of the internal ID of the input field on the new entity form (the Contact in this example) which should have the caller's phone number and/or caller ID name automatically inserted. This value can be determined by opening the appropriate new entity form in Salesforce and then using the Browser's developer tool to inspect the appropriate field on the form and retrieve its value. These are the current values for the main Phone and Name fields of the common entity types in Salesforce:

Entity Type	Phone Number Field ID	Name Field ID
Contact	con10	name_lastcon2
Account	acc10	acc2
Lead	lea8	name_lastlea2

Using the values listed above, this would be the configuration for inserting the caller ID phone number in the phone field on the new lead page and the caller ID name in the last name field on the new lead page.



Note that this feature is only supported on Classic and Console pages, not on Lightning pages.

For inbound calls, search on dialed number in addition to caller's number (true/false)

This setting provides control over whether the number dialed by an inbound caller (commonly called the call's DNIS), if available, will be included when searching for matching records in the customer's Salesforce organization. For example, if you add a custom phone number field to the Campaign object and store a specific phone number for the campaign in that field, you can make Salesforce list the campaign when the call comes in on that specific phone number so that the agent knows that the caller is responding to that campaign.

Salesforce Service Console Users (true/false)

This setting provides control over whether users will be using the Service Console interface vs. the Classic or Lightning interface when using the ShoreTel client. If set to 'true' then only Service Console users will have the operational Softphone. If set to 'false' then only Standard users have the operational

Softphone. If unset then both the fully operational softphone will be available regardless of the type of user. If the softphone is disabled it will show up like this:

If left unset then the Salesforce administrator must take care that users don't use both interfaces at the same time with the softphone enabled in both as per Salesforce, this is an unsupported usage scenarios and users will experience issues. See the note in the Limitations section at the start of this document.

Additional Options ("Option": Value, ...)

This setting is used to enable and configure special options.

Salesforce Service Console Users (true/false)	
Additional Options ("Option": Value, ...)	"LogSticky":"ClickToDial", "SearchOnConnect":true, "AutoCreateCase":{"Enabled":true, "Fields":{"00N30000002f66z":"conn-num"}}
Call Log Settings	
Outbound Calls Logging Enabled (true/false)	true

These are the available options:

Keep Call Log Associations Static

The default behavior is for the Call Log to dynamically associate with the lead, contact, account, opportunity, etc. currently displayed in the main window. For example, if you are on a contact named John Doe, the call log will show **Name Contact: John Doe**. If you switch to Sally Jones, the log will update to **Name Contact: Sally Jones**. If you switch to the account page of the XYZ Company, the log will show **Related-To Account: XYZ Company**. The benefit of the dynamic association is that you are not locked into the first match found. However, in some use cases, this behavior is not ideal. In those cases, you can enter an option to keep the log association static.

- Keep outbound log name and related-to associations based on the record from which you click-to-dial. Inbound log associations remain dynamic.
  - "LogSticky": "ClickToDial"
- Keep outbound log name association based on the record from which you click-to-dial. The related-to association remains dynamic on outbound calls. Inbound log associations remain dynamic.
  - "LogNameSticky": "ClickToDial"
- Keep both inbound and outbound log association set to the first value (first match on inbound calls and click to dial origin on outbound calls). User can manual change the values using the pick list.
  - "LogSticky": true

Search and Pop record when call is answered instead of ringing

The default behavior is for the integration to search and, if found, pop the matching record as soon as the phone starts ringing. In some use cases, it is preferable to delay the search and pop function until the call is answered. For example, if the call presents to multiple extensions in a simultaneous ring pattern (a hunt group), it is better for the caller's information to only pop for the agent that answered the call rather than on every workstation in the group. To enable this delayed search, enter:

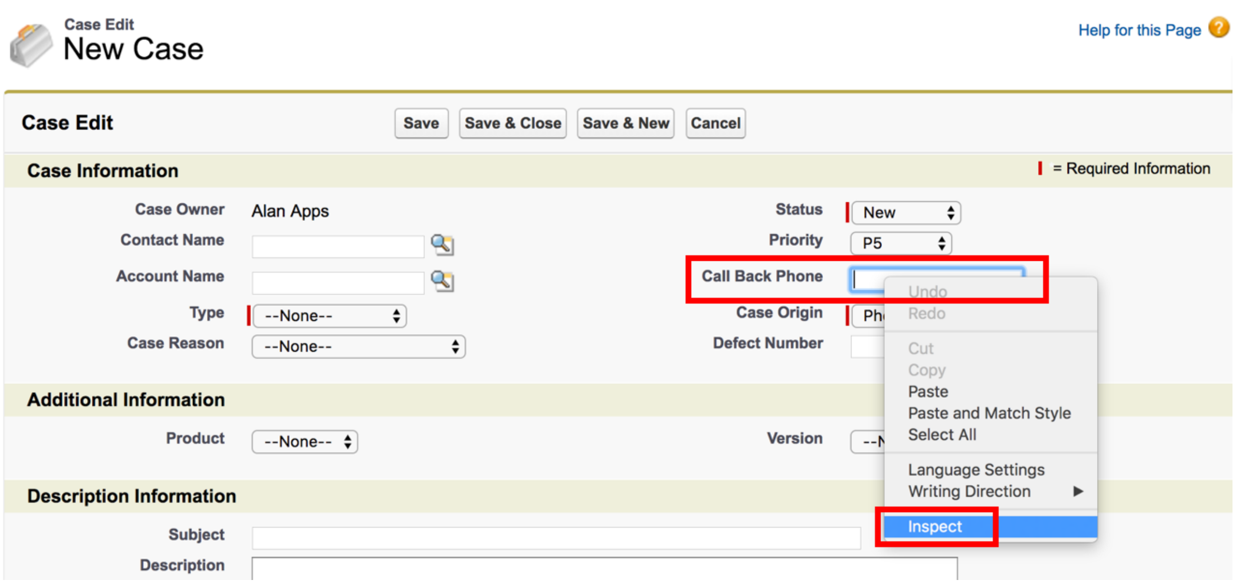
- "SearchOnConnect":true

Pop a new case when a call is received (Account matches only)

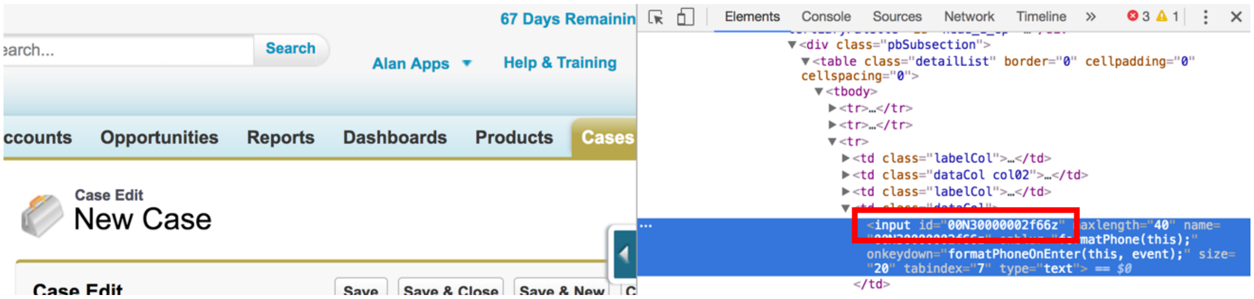
This option allows you to make the integration auto generate a new case if the incoming call phone number matches a number on an account. The configuration optionally allows you to populate fields on the new case form.

- "AutoCreateCase": {"Enabled": true,"Fields": {"SalesforcePageField1": "ShoreTelField1", "SalesforcePageField2": "STProperty(_ST_PROP1)"}}

The SalesforcePageField refers to the web page field name on the new case page, not the database field name. In the following example, we want to populate the custom field called "Call Back Number". Right click on the desired field and select Inspect.



This will reveal the underlying field name



To populate the field with the incoming phone number, we will use the ShoreTel field “conn-num” (see page 26-27 for a list of available fields). Here is our configuration:

- "AutoCreateCase":{"Enabled":true, "Fields":{"00N30000002f66z":"conn-num"}}

Call Log Settings

Call Log Settings

Outbound Calls Logging Enabled (true/false)	true
Inbound Calls Logging Enabled (true/false)	true
Outbound Subject (Text and variables including {date}, {time}, etc.)	Call Outbound {date} {time}
Inbound Subject (Text and variables including {date}, {time}, etc.)	Call Inbound {date} {time}
Outbound Call Log Results ("Result 1", "Result 2", ...)	"Existing Acct - Req proposal", "Existing Acct - Req addl info", "New Lead - Req Proposal", "New Lead - Req addl info", "New Lead - Referral", "Product support issue", "Product demo req", "Left Message"
Inbound Call Log Results ("Result 1", "Result 2", ...)	"Existing Acct - Req proposal", "Existing Acct - Req addl info", "New Lead - Req Proposal", "New Lead - Req addl info", "New Lead - Referral", "Product support issue", "Product demo req"
Missed Call Log Result	Missed Call
Custom Call Log Fields to Set ({"Salesforce field": "ShoreTel call field"}, ...)	{"dnis__c":"dnis"}, {"Workgroup__c":"from"}, {"CallerID__c":"conn-num"}
For Classic Interface only, Follow Up Options Enabled on Save/Update (true/false)	false
Keep Call Logs Open after Call Disconnect (true/false)	false
Recent Call Logs Count	3

Log Outbound Calls (true/false)

This setting controls whether the softphone will create a Call Log for the call in the Softphone in response to <u>outbound</u> external calls. It should be set to either ‘true’ or ‘false’.

Log Inbound Calls (true/false)

This setting controls whether the softphone will create a Call Log for the call in the Softphone in response to <u>inbound</u> external calls. It should be set to either ‘true’ or ‘false’.

Outbound Subject (Text and variables including {date}, {time}, etc.) & Inbound Subject (Text and variables including {date}, {time}, etc.)

These setting controls the subject generated for outbound and inbound calls respectively. Each is a combination of static text plus variables that are replaced with information associated with the call and the related Salesforce entities. The following variables are supported:

{date}	Date the call started such as 10/23/2013.
{time}	Time the call started in 12 hour format such as 2:23 PM.
{time24}	Time the call started in 24 hour format such as 14:23.
{phone}	Phone number of the caller or called party such as (203) 261-1234.
{length}	Length of the call in seconds. Note that this field is not set until the call disconnects.
{name}	Salesforce entity name (typically a Contact or Lead) associated with the call. Note that this field is not set until the call log is saved.
{nametype}	Salesforce entity type such as "Contact" or "Lead". Note that this field is not set until the call log is saved.
{relatedto}	Salesforce entity this call is related to such as an Account. Note that this field is not set until the call log is saved.
{relatedtotype}	Salesforce entity type that this call is related to such as "Account", "Case", etc. Note that this field is not set until the call log is saved.
{callresult}	The call result set for the call. Note that this field is not set until the call log is saved.

As an example, a subject of "Call {date} {time} {phone} {length} {name} {relatedto} {callresult}" might be converted to "Call 10/24/2013 9:10 AM (650) 450-8810 21 Contact: Liz D'Cruz Case: 00001023 Outbound Call Result 2".

Inbound Call Log Results (Result 1, ...)

If set, this setting causes the softphone to display the call result selection control as part of the call log for <u>inbound</u> external calls. This allows the user to categorize the nature or outcome of the call which can then drive reports or dashboards. The specific results can be specified as a list of enclosed quotes separated by commas. For example, to specify three call results, Inbound Call Result 1, Inbound Call Result 2, and Inbound Call Result 3, you would set this value to:

"Inbound Call Result 1", "Inbound Call Result 2", "Inbound Call Result 3"

Refer to Usage | Making a phone call section for its usage.

Outbound Call Log Results (Result 1, ...)

If set, this setting causes the softphone to display the call result selection control as part of the call log for <u>outbound</u> external calls. This allows the user to categorize the nature or outcome of the call which can then drive reports or dashboards. It has the same format and function as the Inbound Call Log Results setting. Refer to Usage | Answering an external incoming call section for its usage.

Missed Call Log Result

This setting controls whether the softphone will create a Call Log for the call in the Softphone in response to inbound external calls that are not answered. If call logs are desired for missed calls, this field should be set to a phrase to be used as the Call Result for unanswered inbound calls. For example, if the Missed Call Log Result is set to "**Missed Call**," then call logs will be created when unanswered inbound calls disconnect, and the Result will be automatically set to 'Missed Call'. The call log will be automatically closed regardless of the setting of the "Keep Call Logs Open after Call Disconnect". Refer to Usage | Missing an external incoming call section for more details.

If no call log is desired for missed calls, the field should be left blank.

Note: Missed calls will only be logged when the user is logged into Salesforce. As such, the intent of this function is to log calls when the user has stepped away from their desk so that they can return the call when they return.

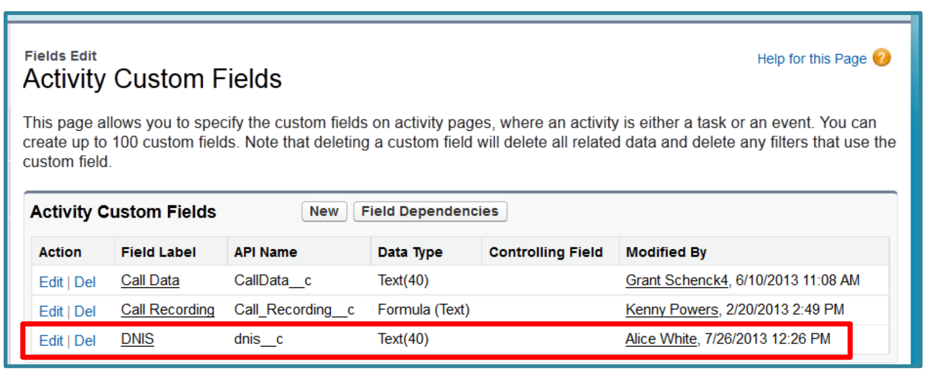
Custom Call Log Fields to Set ({Salesforce field: ShoreTel field}, …)

This allows setting custom call log field(s) to the value of ShoreTel field(s). The format is a quoted Salesforce field name (the field must be a defined Salesforce Task field) followed by a colon (':') followed by a ShoreTel call field or a ShoreTel call property, also in quotes. The available ShoreTel call fields are those shown in the Inbound Call Fields section except for caller, called, conn and from.

As an example, to add a custom field named dnis__c to your Salesforce Task definition an administrator would first create the custom filed at

Your Name **➤ Setup ➤ App Setup ➤ Customize ➤ Activities ➤ Activity Custom Fields ➤ New**

Select "Text" for Data Type, click Next, enter **Field Label**, **Length**, and **Field Name** as "dnis", click Next to complete the creation of the custom filed, with Salesforce API Name of dnis__c, as below.



Then, you would enter the custom filed to the Softphone Custom Call Log Fields to automatically populate the field with ShoreTel dnis field when DNIS (dialed number) is available for the inbound call using this format:

{"dnis__c": "dnis"}

If you want to also set the custom field named accountId__c to the value of the call property named "_ST_ACCOUNT_ID" your setting would look like this:

{"dnis__c": "dnis"}, {"accountId__c": "property(_ST_ACCOUNT_ID)"}

Follow Up Options Enabled on Save/Update (true/false)

This setting controls whether the softphone will immediately save or update an open call note when the save/update button is clicked or instead provide a dropdown menu of choices to update save/update the call note and optionally create a follow-up task or event. If set to true the button text will read "Save…" or "Update…" vs. "Save" or "Update" to indicate that additional input will be requested via the dropdown menu.

Keep Call Logs Open after Call Disconnect

This setting controls whether the softphone will keep call logs open after the call disconnects or, for workgroup calls, after the agent moves back to ready-for-calls. It should be set to either 'true', 'false' or 'save'.

- **true** – The call log will stay open in edit mode and offer the user the option to [Save] which will make an entry in the Salesforce Activity History or [Discard] which will delete the call log and not make an entry in Salesforce.

- **false** – The call log will automatically close and create the Activity History entry in Salesforce. The user will still have the option to edit the call log notes and other settings by clicking the pencil icon. If they click the pencil icon, the options will be [Update] to update the Activity History entry already created in Salesforce or [Cancel] to close the log and disregard any changes made.

- **save** – The call log will automatically close and create the Activity History entry in Salesforce. However, the call log will stay open in edit mode with the options [Update] to update the Activity History entry already created in Salesforce or [Cancel] to close the log and disregard any changes made.

Recent Call Logs Count

This setting controls the maximum number of recently closed call logs that will be shown in the softphone. It should be set to a number between 0 and 10. These call log titles show up under Last n Calls, at the bottom of the softphone under any active calls and their call logs. Please note that this count will be ignored if the number open call logs is greater than this value. Users should save their call logs in a timely fashion in order to avoid having lots of call logs cluttering up their users interface. If a call log is discarded then it will not be shown.

Advanced Call Log Settings

Note: These settings require the optional Apex class STPSSoftphone be installed in the customer's organization.

Advanced Call Log Settings - Note: These settings require the optional Apex class STPSSoftphone be installed in the customer's organization.

Record Type	
Outbound Call Input Fields (fieldname[*][=ShoreTel Field], ...)	Group__c, Urgent__c, ActionPlan__c
Inbound Call Input Fields (fieldname[*][=ShoreTel Field], ...)	Group__c=property(_STCC_Group), Urgent__c="True", ActionPlan__c="Do Something"

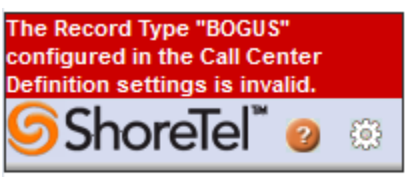
These settings are only available when the customer is using the 5.1+ version of the Call Center settings. If your organization ShoreTel Adapter's Call Center settings don't show this section then you'll need to import and configure the current 5.3 version of the Call Center XML. In addition to the 5.3 version of the Call Center settings, the customer will also need to install Apex classes required to support these optional features discussed earlier in this guide.

Record Type

This field is used to enter the optional name of a Task Activity Record Type to be used by the adapter. If set this Record Type is used for two purposes:

- The Activity Task's RecordType field is set to the value when the record is saved. This is optional. If left blank, the RecordType will default to "Call".
- Any picklist displayed in the call note UI that are tied to Task Activity fields (see the next two settings) will be filtered to only show the valid values based on the Record Type. In addition the default choice for the picklist will reflect the Record Type specific default if any.

Note that if an invalid Record Type is specified the adapter will not function and will display an error until corrected:



Outbound Call Input Fields (fieldsname[*][=ShoreTel Field], ...)

This allows Call Notes for outbound calls to show and allow the editing of additional Task Activity fields beyond the standard Subject, Comment, Name, Related To and Call Result and have those settings saved as part of the call note. Specifically, essentially any Task Activity field can be shown in the Softphone's Call Note pane. This includes both standard and custom fields. Currently this support is limited to the following Salesforce field data types:

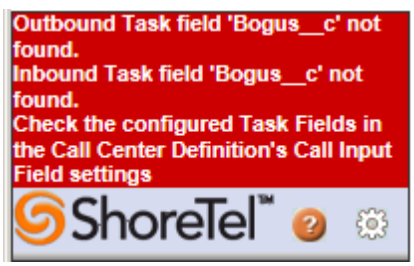
- Text
  Shown as text edit fields when the note is in edit mode and or as text strings with ellipsis if

needed when the note is not in edit mode. The current Subject is an example of a how a string field would be handled.

- TextArea
  Shown as five line edit fields when the note is in edit mode and as text strings with ellipsis if needed when the note is not in edit mode. The current Comment field is an example of how a textarea field would be handled.
- Checkboxes
  Shown as check boxes in edit mode and as a display only checkbox in view mode.
- PickList
  Shown as multi-selection dropdowns when the call note is in edit mode and as a text string with ellipsis if needed when the call note is not in edit mode. The current Call Result field is an example of a how a picklist field would be handled. Note that the choices shown in the picklist may be filtered based on the Record Type setting if set.

Note: Some field types are not supported such as Date fields and Dependent PickLists.

When set this setting consists of one or more Salesforce Task Activity field names separated by commas. The fields are shown in the order entered at the bottom of the softphone's call note panes under the Call Result fields. If a field entered does not match a known field in the customer's task activity record then the adapter will not function and will display an error until the settings are corrected:



In addition to determining which fields are valid Task fields, the softphone will also determine the valid picklist values, the default value for fields, the help for field (displayed as a popup when hovering over a field when the call note is in edit mode) and for Text and TextArea fields, the maximum allowed length. **Note however that due to limitations of the Salesforce Apex API we cannot determine the default value for Checkbox fields.** Checkbox fields will always default to false (unchecked). However, see below for the syntax that allows setting of default values through this setting.

In addition, the syntax of this setting allows one or both of two additional aspects to be controlled:

- Required by the Softphone:
  If a field is required by Salesforce then the softphone will always require that users enter the field before the record can be saved. However, if the field is not a required field then optionally, it can be configured as required by the softphone. To do so, an asterisk character ('*') is appended to the end of the name. For example, if a custom field named "Life_Story__c" was

being shown and you wanted to make it required by the softphone you would enter "Life_Story__c*" as the field name.

- Default value:
  If a field has a default value defined in Salesforce then this value will be used as the initial value of the field when the call note is shown. However, via this setting's syntax it is possible to provide a different default setting. To do so you would append and equal sign followed by the value of the field. This value can be any of the valid ShoreTel fields listed above in the section describing the Inbound Call Fields or it can be a specific value enclosed in double quotes. For example, if you wanted to show a Task Checkbox field named 'Workgroup_Call__c' and have it default to true you would add this to the list of fields: 'Workgroup_Call__c="true"'. If a default value is used in conjunction with the required asterisk the equal sign should follow the asterisk.

Call Log Field Example

As an example, this shows an example setting for the Outbound Call Fields:

> ACCOUNT__c*=property(_ST_ACCOUNT), Income_Range__c="$100K or more", Life_Story__c*, Workgroup_Call__c="true"

From the Saleforce setup's Activity Fields pane we see the fields in question:

Activity Custom Fields New | Field Dependencies

Action	Field Label	API Name	Data Type
Edit | Del	Account ID	ACCOUNT__c	Text(10)
Edit | Del	Call Recording	Call_Recording_del__c	Formula (Text)
Edit | Del	DNIS	DNIS__c	Text(20)
Edit | Del	GUID	GUID__c	Text(40)
Edit | Del | Replace	Income Range	Income_Range__c	Picklist
Edit | Del	Life Story	Life_Story__c	Text Area(255)
Edit | Del | Replace	Outcome	Outcome__c	Picklist
Edit | Del | Replace	Role	Role__c	Picklist
Edit | Del	Workgroup Call	Workgroup_Call__c	Checkbox

This is configured to show four fields:

- ACCOUNT__c*=property(_ST_ACCOUNT)
  This is a Text field. Because of the asterisk, we're requiring that it have a value before the note can be saved. The last part is setting its initial value to the contents of the ShoreTel Call property named _ST_ACCOUNT that may be attached to the call.
- Income_Range__c="$100K or more"
  This is a PickList field. We're setting its default value to "$100K or more".
- Life_Story__c*
  This is a TextArea field. Because of the asterisk, we're requiring that it have a value before the note can be saved.

- Workgroup_Call__c="true"
  This is a Checkbox field. We're setting the default value to true (checked).

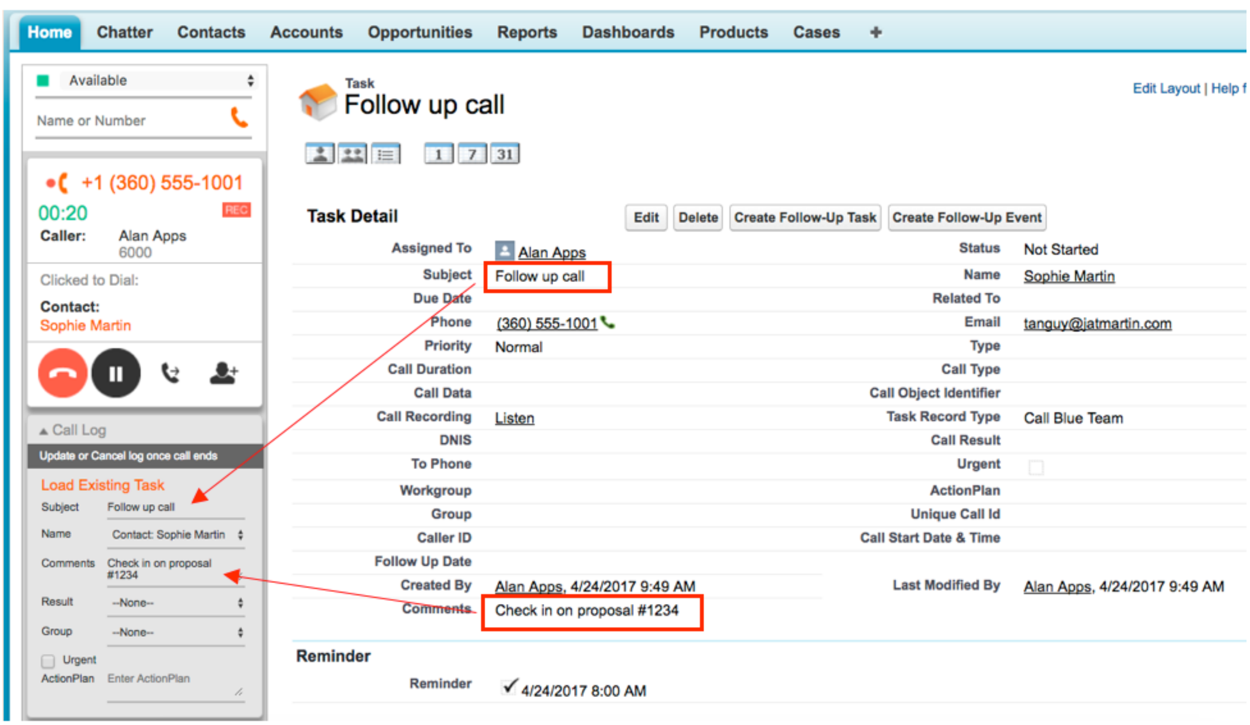
Outbound Call Input Fields (fieldsname[*][=ShoreTel Field], ...)

This field is the same as the Input Call Input Fields setting except it controls the fields editable and shown for outbound vs. inbound calls.

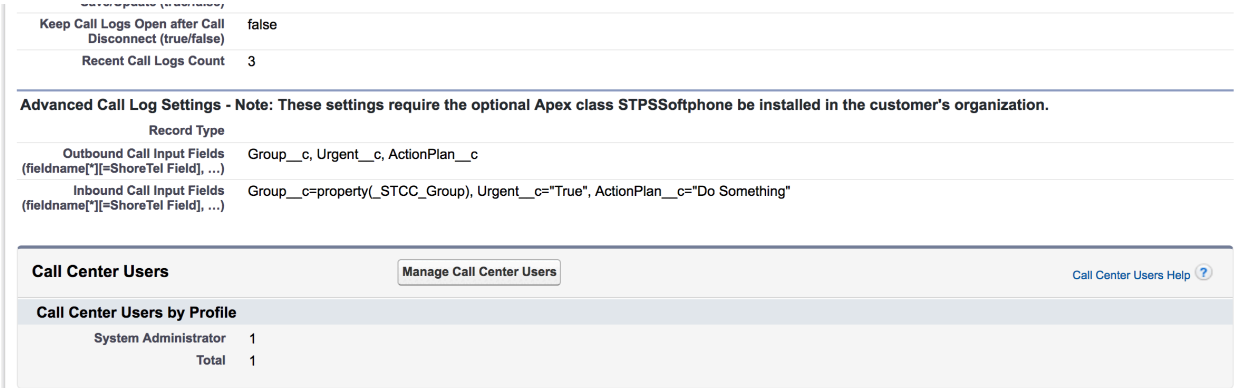
Enhanced Task Activity/Call Note Integration

When the Apex package is installed, in addition to the features configured here and the Application Integration features described in Appendix B, two additional capabilities are enabled which integrate Task Activities with the Softphone Call Notes:

- Calls placed from an Open Task Activity will open a call note showing details of the existing Task's details instead of creating an empty call note. The user will be able to Update instead of Save any changes they make. This feature allows a user to initiate a call from an open task and close out the task automatically once the call ends.
- While on a call the call note area will show a "Load Existing Task" button that if clicked will check if the current page is an open Task Activity and if so, load the details from the Task into the call note as shown here:



Manage Call Center Users



Keep Call Logs Open after Call Disconnect (true/false)	false
Recent Call Logs Count	3

Advanced Call Log Settings - Note: These settings require the optional Apex class STPSSoftphone be installed in the customer's organization.

Record Type	
Outbound Call Input Fields (fieldname[*][=ShoreTel Field], ...)	Group__c, Urgent__c, ActionPlan__c
Inbound Call Input Fields (fieldname[*][=ShoreTel Field], ...)	Group__c=property(_STCC_Group), Urgent__c="True", ActionPlan__c="Do Something"

Call Center Users Manage Call Center Users Call Center Users Help

Call Center Users by Profile

System Administrator	1
Total	1

This shows the total number of users assigned to use this call center. Clicking at Mange Call Center Users shows who are the users currently using this call center definition and allows administrators to assign users to or remove users from this call center. To switch a user from an existing call center to a new one, you will need to first remove the user from the existing call center and then assign him or her to the new one. Alternatively, an administrator can reassign a user's call center at the user side by

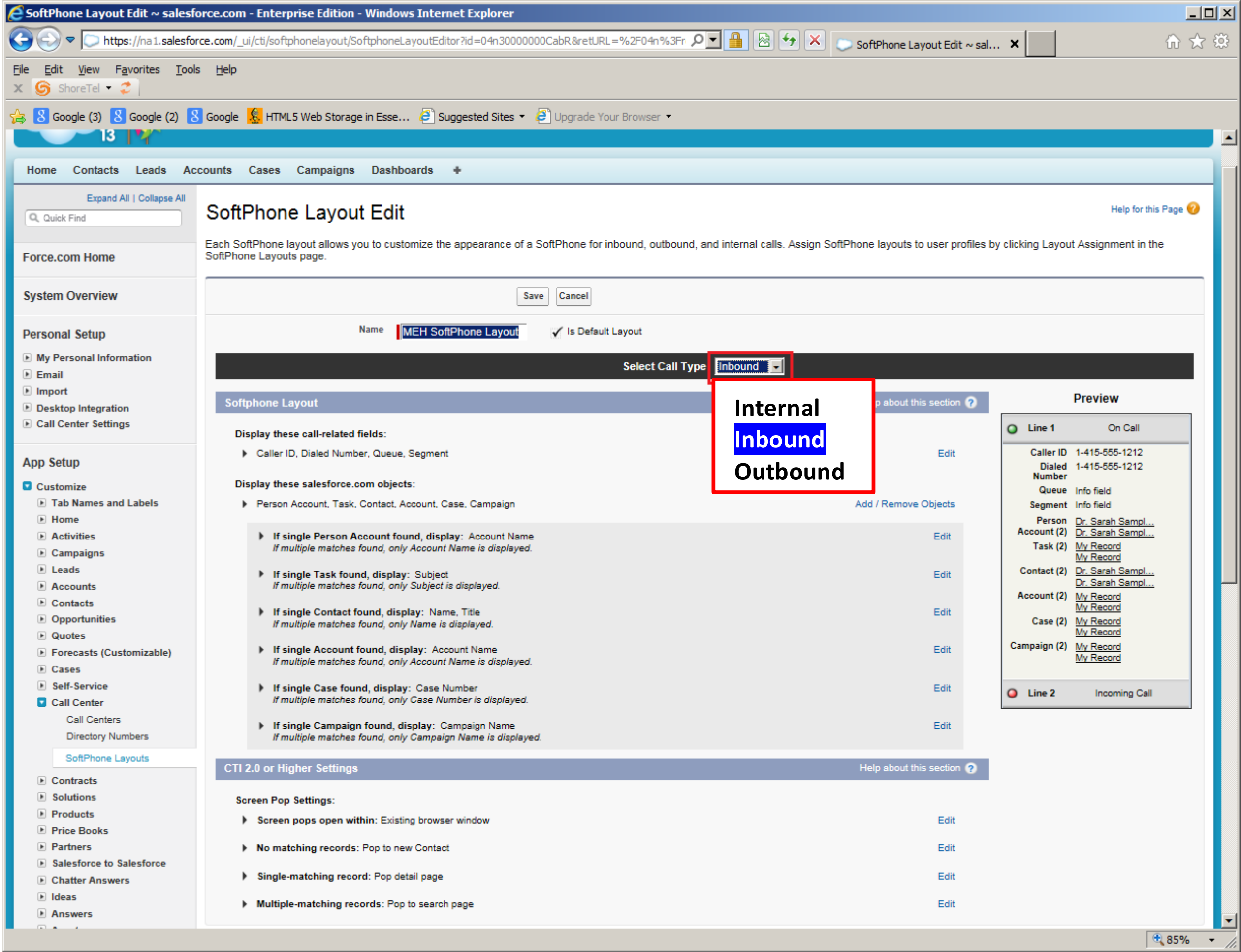
> Clicking **Manage Call Center Users** ➤ User's Full Name ➤ **Edit** User Detail ➤ modify the "Call Center" field with the Lookup function.

Softphone Layouts

To work with the softphone layouts:

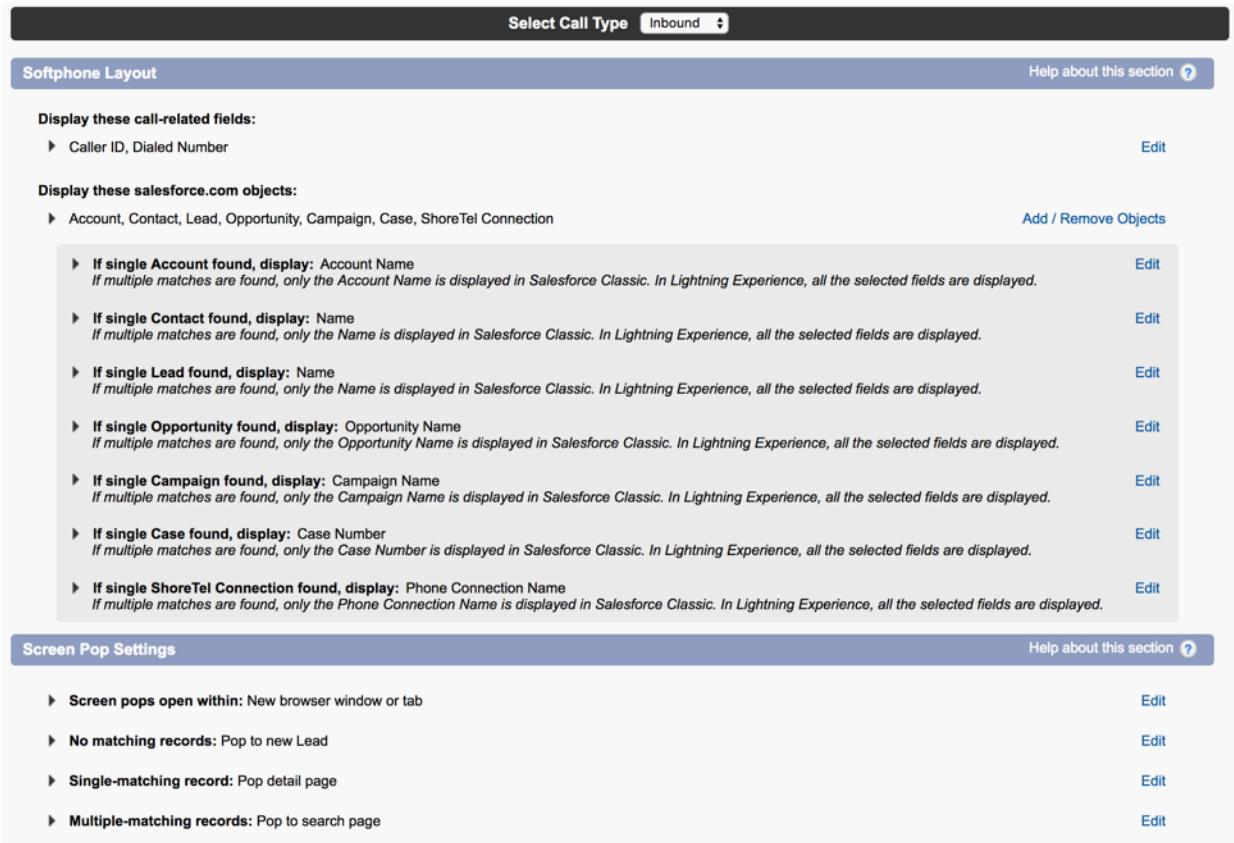
> Click ***Your Name*** ➤ **Setup** ➤ **Customize** ➤ **Call Center** ➤ **SoftPhone Layouts** ➤ **Edit**.

You should have a softphone layout but if not, select **New** to create one. Screenshot below displays an sample softphone layout for inbound calls with Select Call Type set to Inbound:



For inbound calls, there are Softphone Layout shown at the top and Screen Pop Settings at the bottom. The ShoreTel Softphone User Interface and Layout for a given user is controlled by a combination of the Call Center Definition Settings and the Softphone Layout settings assigned to that user. There are different softphone layout settings for Internal, Inbound, and Outbound calls via the Select Call Type dropdown window. Only the layout for inbound calls provides access to the Screen Pop Settings. The Softphone Layout section described below is the same for Inbound and Outbound call types. Internal call type has a similar but shorter softphone layout.

Softphone Layout:

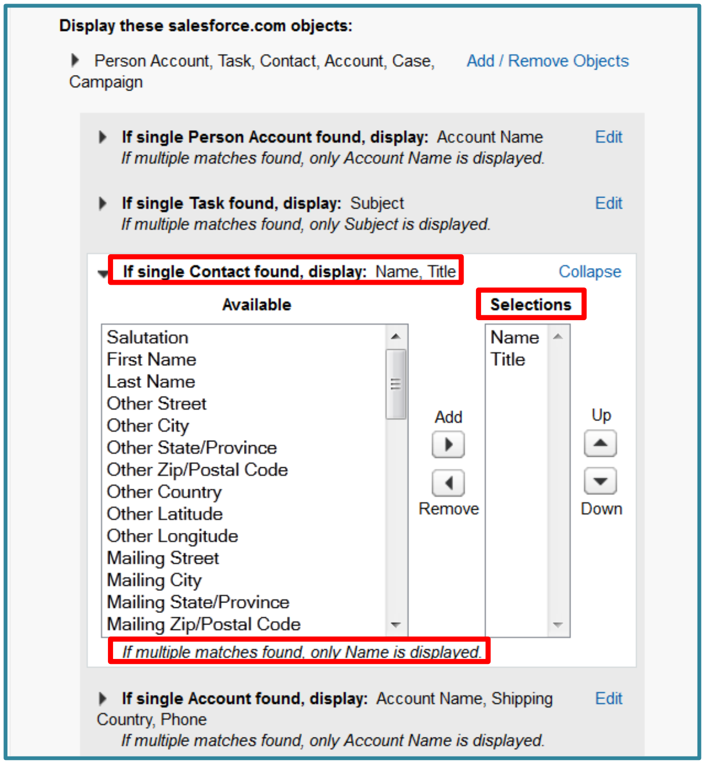


Display these call-related fields:

This setting is not used. The display fields are controlled by the Call Center’s Inbound and Outbound Call Fields settings.

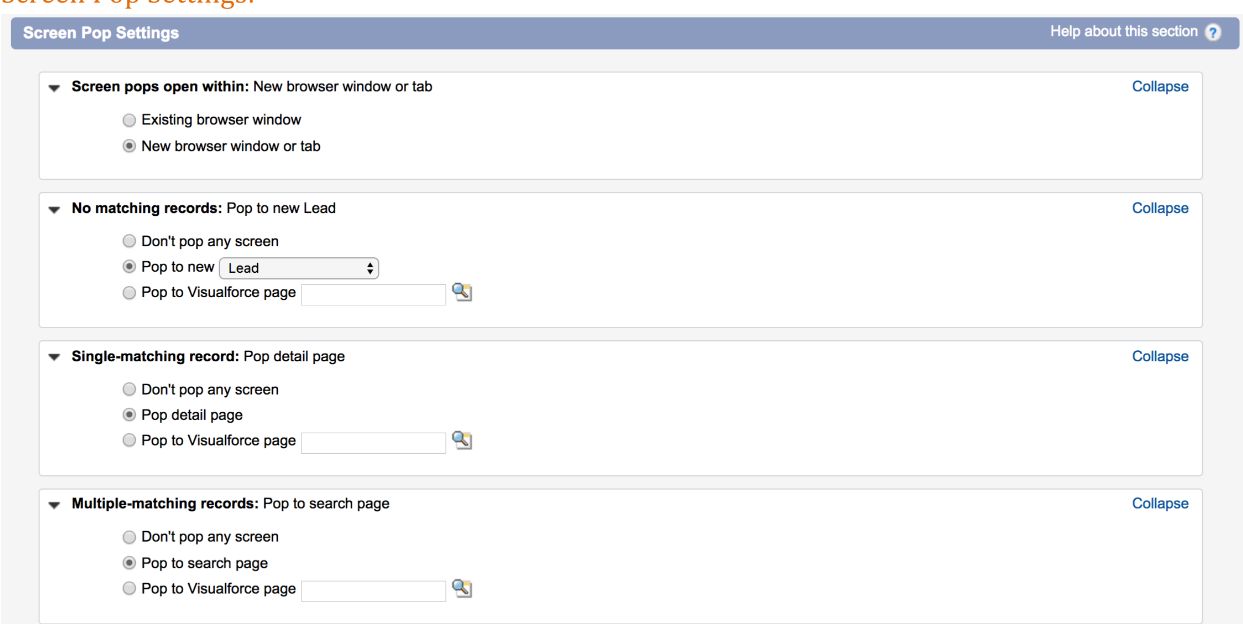
Display these Salesforce objects:

These settings control which Salesforce objects are searched and potentially displayed if a match is found. For each object, a default field is shown if multiple matches are found. If a single match is found the user can configure which fields they wish to show. In general you should ensure that you use the default field as the first or only field displayed if a single match is found. Softphone tries to display all selected objects with values for single match. Note that the order of the objects and the order of each objects fields controls the related aspect of the softphone display, and in the backend, also controls the order of the search criteria of Salesforce search. Any change in the Selections section will be reflected in the next softphone display. However, the change in the search criteria will take 30 seconds or more to take effect.



Note: While you can add the User to be searchable for internal calls, Salesforce's current search does not find records with matching numbers in the extension fields. This means that if you get an internal inbound call from an internal party, the corresponding caller will not be found even if the caller's extension is set for the user. You can set the caller's extension in another phone field including a custom phone field and the search will find it and screen pop will work on internal inbound call.

Screen Pop Settings:



These settings control some additional aspects of the user interface with regards to external inbound calls as Select Call Type is set to Inbound.

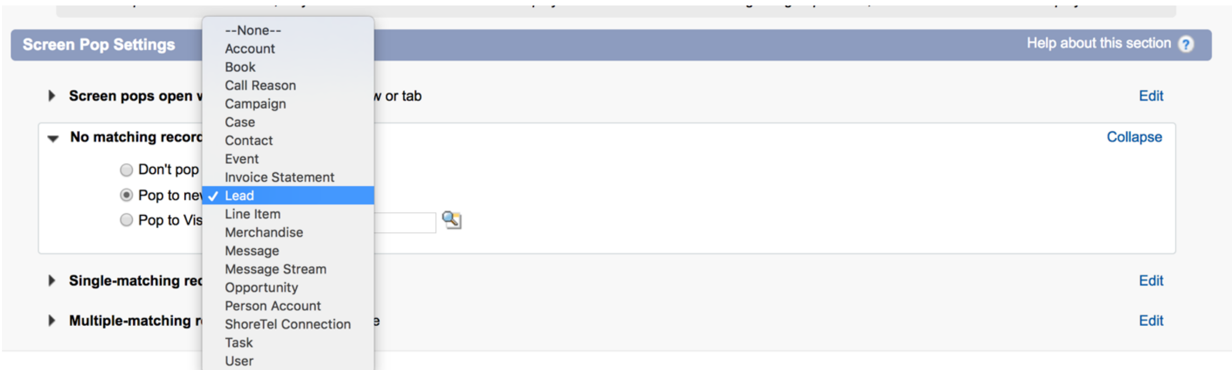
Screen pops open within

This allows the configuration of how the application responds to a new external inbound call, specifically if it screen pops to a new browser or tab or to the current browser.

Note: Popping to the existing browser window may cause you to lose unsaved work. If you select the option to pop in a new browser window or tab, the tab you were on will be left unchanged. In version 5.3.x, you may now open unlimited numbers of tabs.

No matching records

This controls how the softphone responds if there is no match for an external inbound call. Options are: Don't pop, pop to a specific new entity page such as a Contact, or pop to a Visualforce page.



Single-matching record

This controls how the softphone responds if there is one matching record for an external inbound call. Options are: Don't pop, pop to a detail page, or pop to a Visualforce page.

When popping a page, any and all call information and call properties are passed as query parameters with the URL. The possible query parameters set will depend on the information associated with the call and can include any and all of the items listed above in the *Settings | Inbound Call Fields ({"label": "ShoreTel call field"}, {…})* section above. In addition to those listed, two additional properties may be set to support existing Visual Force page CTI conventions. They are:

- ANI
  The same as the 'conn-num' field.
- DNIS
  The same as the 'dnis' field.

This Salesforce link explains how a Visual Force page can access the query parameters:

https://www.salesforce.com/us/developer/docs/pages/Content/pages_quick_start_query_params_getting.htm

Multiple-matching records

This controls how the softphone responds if there are multiple matching records for an external inbound call. Options are: Don't pop, pop to a search page, or pop to a Visualforce page. We recommend selecting the "Pop to search page" option.

Previewing SoftPhone Layouts

By default, the Preview image shows the SoftPhone layout if more than one call-related record is found. When this occurs, only the name of each record is displayed in the SoftPhone. To preview the SoftPhone layout if only one matching record is found, hover your mouse over the row that lists this object in the If an exact match is found, display these fields section.

Assigning SoftPhone Layouts to Users

To assign a custom SoftPhone layout to a user profile:

1) Click **Your Name ➤ Setup ➤ Customize ➤ Call Center ➤ SoftPhone Layouts**.
2) Click **Layout Assignment**.
3) For each user profile that appears on the page, select the SoftPhone layout that the profile should use. Profiles are only listed in this page if they include users that are currently assigned to a call center, or if they have already been assigned a custom SoftPhone layout. The number in parentheses shows the number of call center users who are assigned to that profile.
4) Click **Save**.

Directory Numbers

This feature is not used in ShoreTel for Salesforce application.

Appendix A: ShoreTel Call Recorder Integration

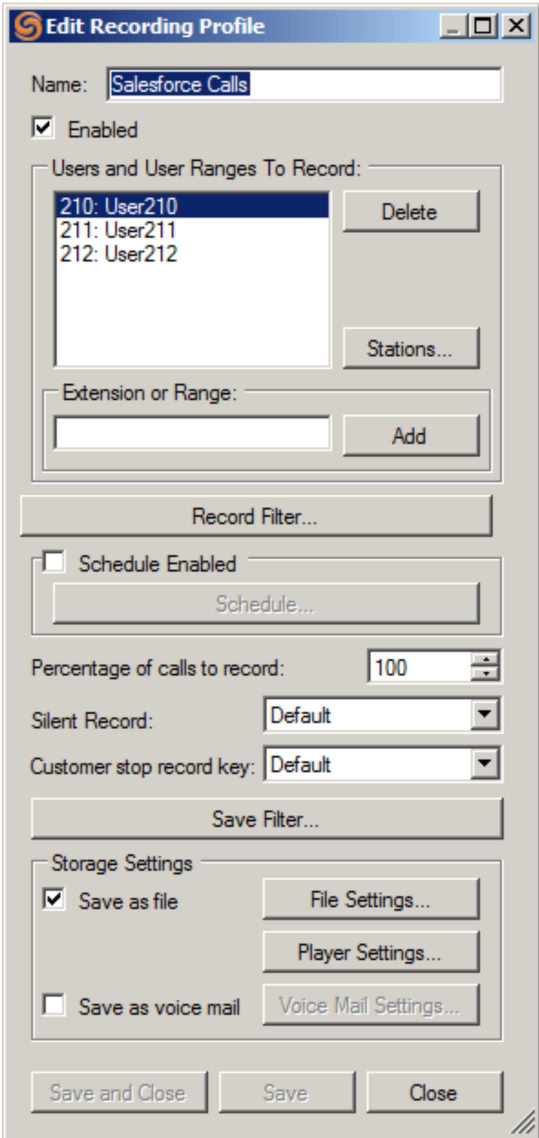
Applies to Connect ONSITE systems only.

This appendix provides instructions for customers who purchased the ShoreTel Call Recorder application and wish to integrate it with the ShoreTel Salesforce application. Specifically, if configured correctly, call notes created by this application can automatically contain a link that allows a recording of the associated call to be accessed and listened to using the Call Recorder Player web application by simply clicking within the Salesforce call note.

Configure the ShoreTel Call Recorder to record the calls

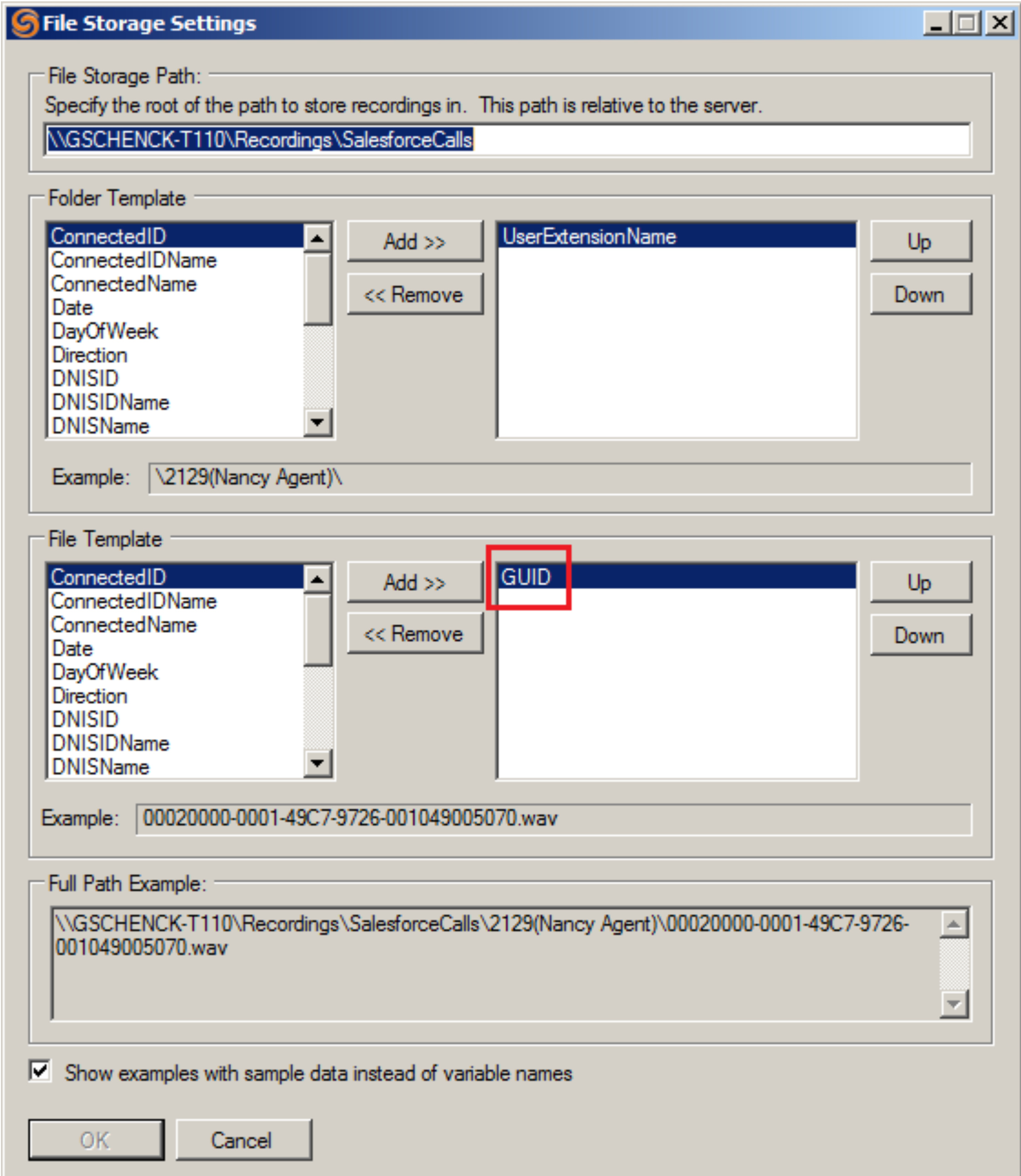
A key requirement for the integration to work is for the call recording made by the call recorder to include the call's GUID as part of the file name. This will allow the ShoreTel Salesforce client to be able to store the same GUID as part of the call activity record allowing the Call Recorder Player to be able to locate the recording at a later point. This example assumes you are creating a recording profile explicitly for recording of Salesforce calls. You could or course leverage an existing recording profile assuming it saves the call's GUID as part of the file name and that it allows users to see at least their own recordings in the player settings.

This shows the settings for a simple recording profile:

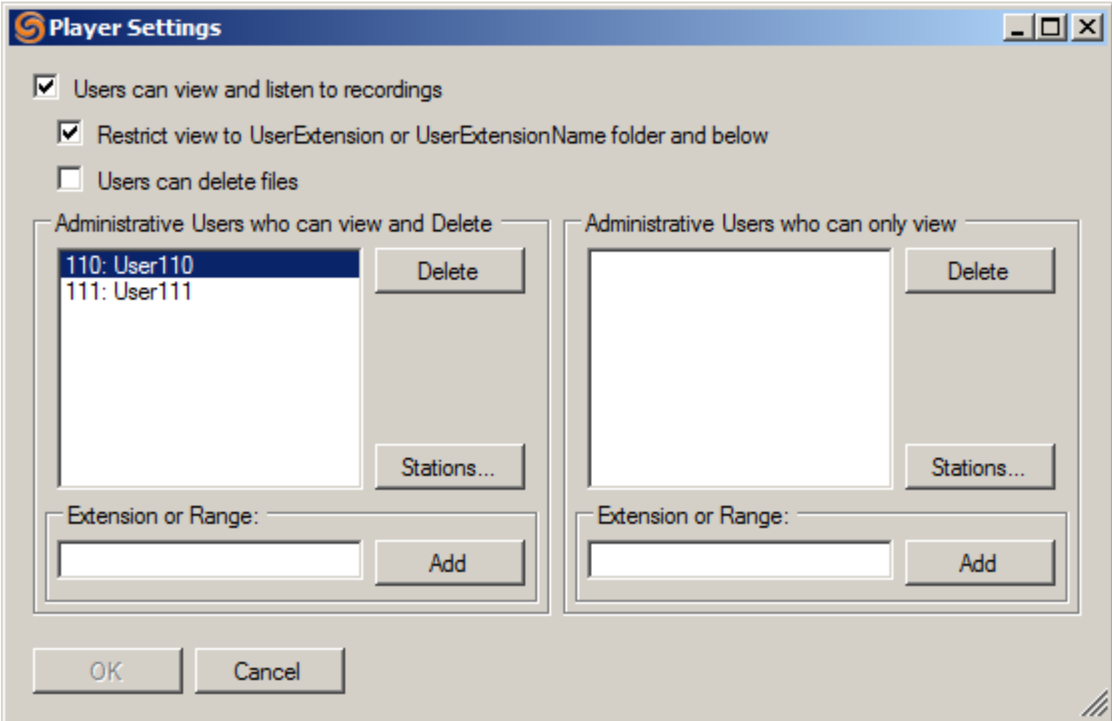


The Record Filter is set to record all inbound and outbound calls.

Under the Storage Settings, the File Settings are storing each user's recordings in a folder based on the extension and name of the user and with a file name of just the call's GUID:



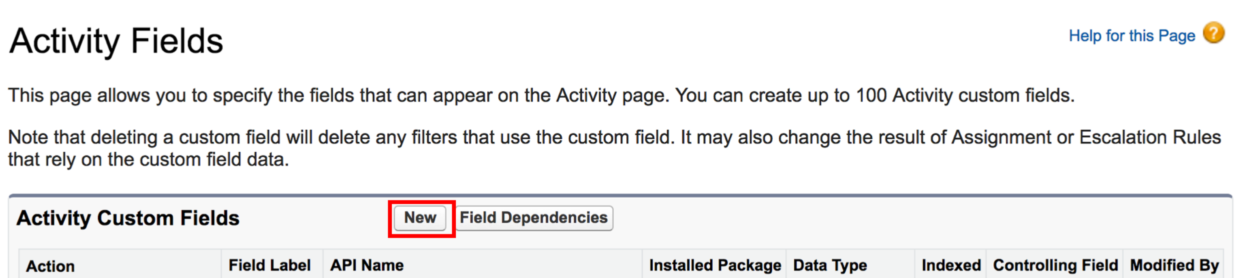
Finally the player settings allow each user to see the recordings in their folder but not in other user's folders:



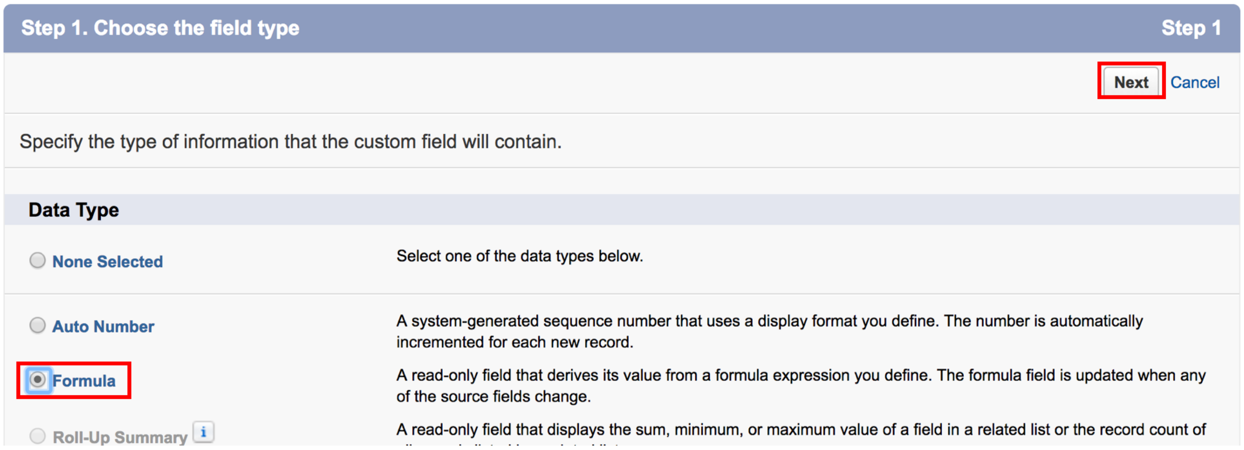
Create the custom field to hold the Call Recorder Player Link

Now we need to add a new custom field to provide a link to the ShoreTel Call Recorder Player to cause it to open the call recording with a GUID matching the CallObject.

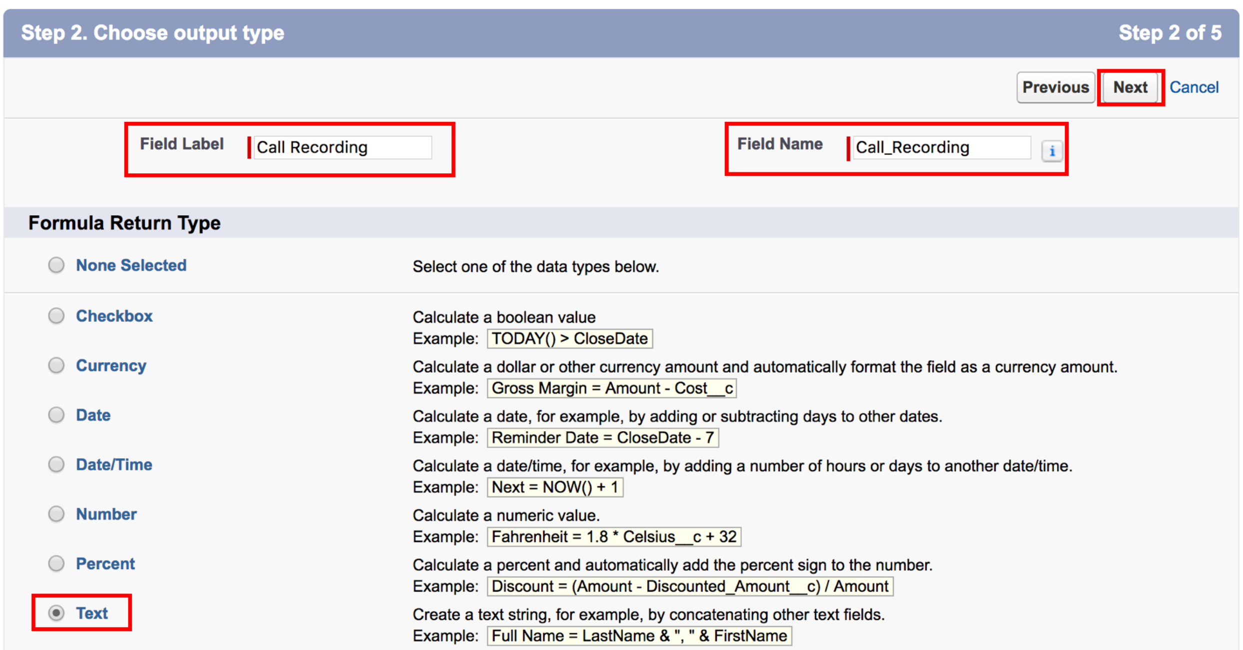
> ***Your Name*** **➤ Setup ➤ App Setup ➤ Customize ➤ Activities ➤ Activity Custom Fields ➤ New**



Select Formula. Click [Next]

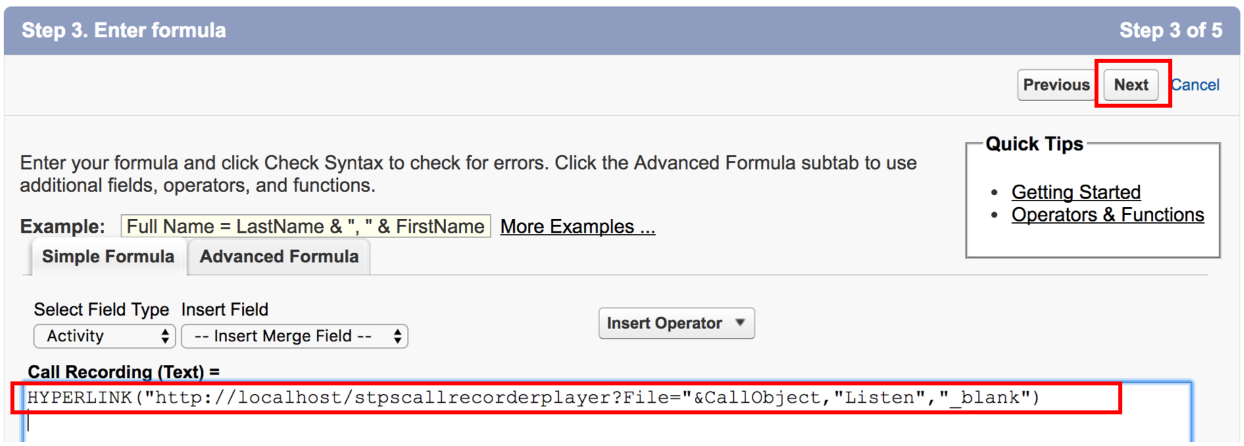


Set the Field Label to "Call Recording" and the Field Name to Call_Recording. Select Formula Return Type Text. Click [Next]

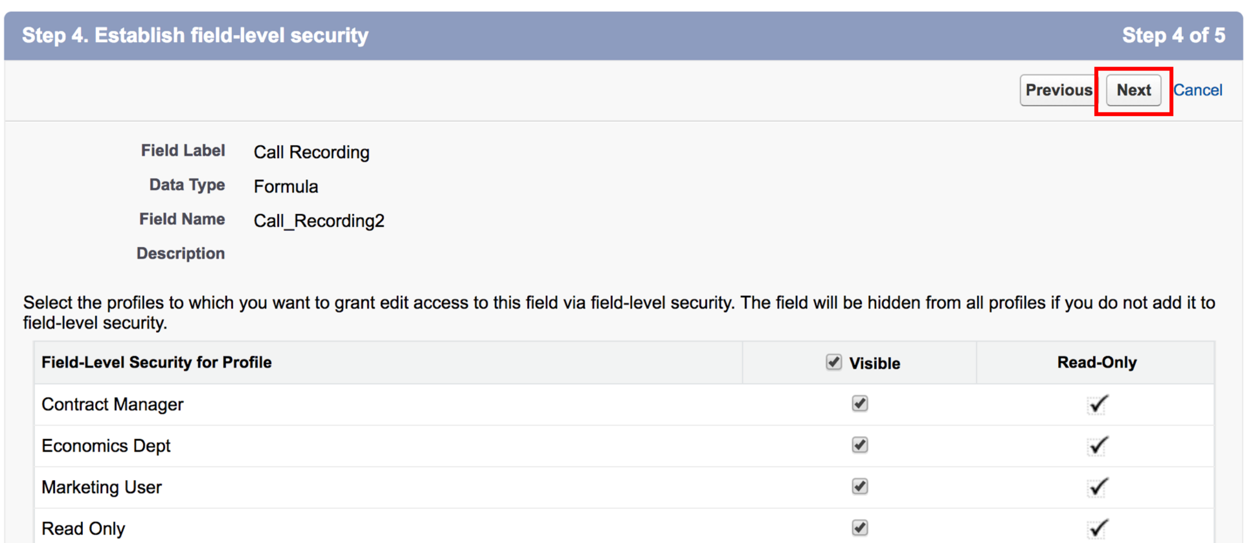


Enter the following formula replacing “localhost” with the IP or FQDN of your ShoreTel Connect ONSITE HQ server. Click [Next]

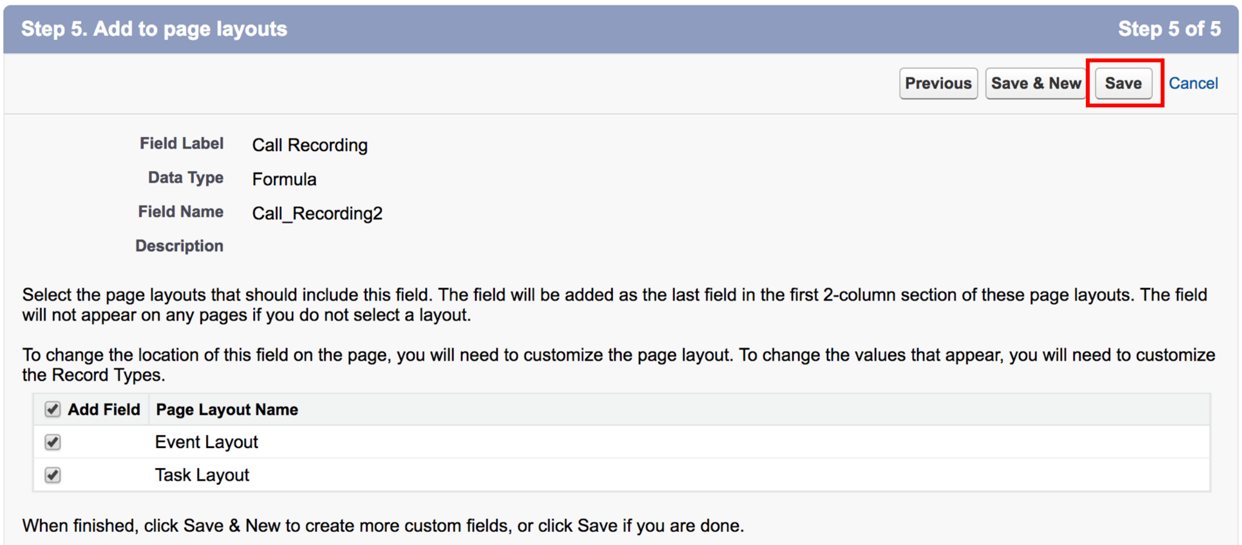
```
HYPERLINK("http://localhost/stpscallrecorderplayer?File="&CallObject,"L
isten","_blank")
```



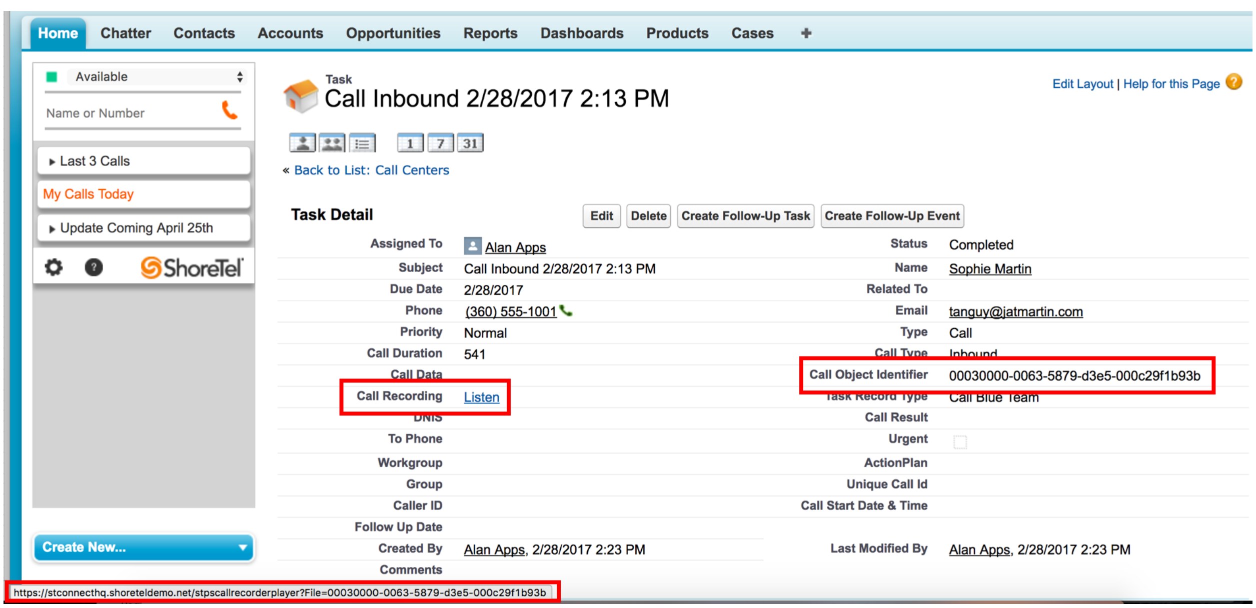
The default security settings are typically fine. Click [Next].



The default page layout change is typically fine. You can edit the page layout separately if desired. Click [Save].



You can verify that the field has been added correctly by open any existing call activity record and mouse over the Listen link and check the URL at the bottom of the screen as shown here:

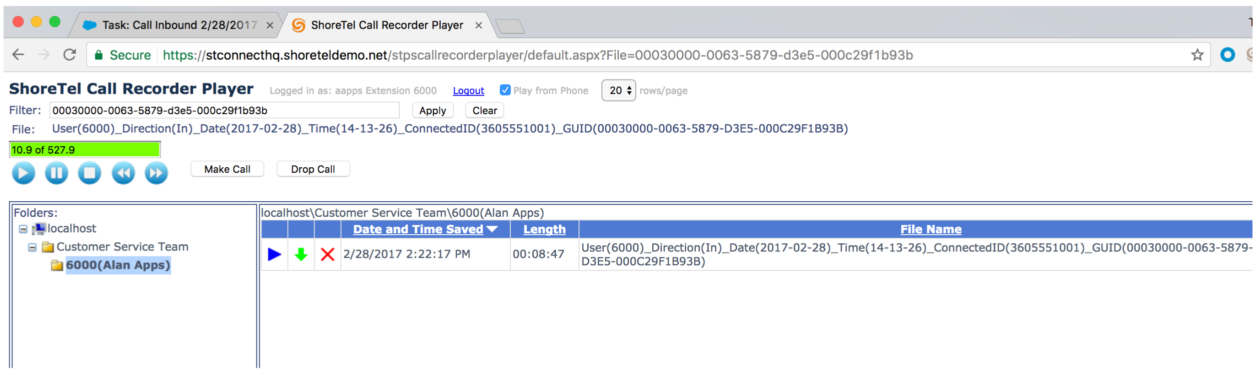


Recording playback

Assuming you've carried out the previous steps you are now ready to run a test.

Now place or receive an external call to or from the user running the ShoreTel Salesforce Softphone. Connect the call and type a comment into the call log area of the Softphone such as "Testing…". Wait for several seconds and then hang up the call.

Locate and open the call activity record, click at the Listen link, the call recorder player should open and if you aren't currently logged in you'll need to supply your login credentials. Once you log in the player could open, locate the underlying recording and play it back:



Appendix B: Application Integration Features

Applies to Connect ONSITE systems only.

Note: While previously described, these features are in fact only available now as part of the optional Apex support package described in deployment guide.

Built into the ShoreTel Adapter are features intended to ease integration with ShoreTel Contact Center, interactive voice response (IVR), automatic call distribution (ACD) and other applications. These features are available to be used by programmers developing custom solutions using the ShoreTel COM, TAPI, or Web Services SDKs available through the ShoreTel Developer Network. For details on the ShoreTel Developer Network or to sign up, please contact ShoreTel Advanced Applications. In addition, ShoreTel Advanced Applications can take advantage of these features in delivering custom solutions to partners and customers. If this is an option that you might want to consider, please contact ShoreTel Advanced Applications.

Note: These procedures require that the customer or partner performing the integration be familiar with the ShoreTel SDK and in particular with how to use the Browser to verify call properties. We will provide support with integration issues involving these features when a paid consulting engagement with ShoreTel Advanced Applications is in place.

When a call presents to the Adapter, it is examined for ShoreTel call properties starting with the prefix "_ST_SF" or "_STCC_SF." ShoreTel call properties are named values which can be attached to a call using methods in the ShoreTel TAPI or COM object interfaces. An application could attach properties before sending the call to the extension the Adapter is controlling. For example, an IVR application using a ShoreTel route point could:

- Receive an inbound call at the route point and automatically answer it
- Play a prompt to solicit a Salesforce case number.
- Attach the case number to the call as a ShoreTel call property
- Transfer the call to a user running the Softphone.
- When the call presents, the Softphone would automatically show the case link and possibly automatically show the associated case details.

You will more than likely want to join the Salesforce developer program (see Test Salesforce Account above) to obtain developer information, including valid object and field names available for use.

Displaying Call Related Records

When a call arrives, the ShoreTel Adapter searches Salesforce for any related records. It first searches based on data attached to the call, such as an account number that was entered by the caller during an IVR session. If that search fails, the CTI connector then searches based on the automatic number identification (ANI, the phone number from which the caller is dialing) and the DNIS (Dialed Number Identification System). Any related records that are found during either of these searches are displayed in the user interface of the line containing the call.

Handling Attached Data

NOTE: If you have used the previous version of the ShoreTel Salesforce client you will note that this feature is somewhat more limited. Specifically, we currently only support a single attached call properties.

This ShoreTel Adapter uses the following mechanism in handing data attached to calls. If you are writing an IVR you should make sure to follow these conventions. The attached data is passed in the form of key-value pair as ShoreTel call property attached to the call. The key should be of the form _ST_SF.Object.FieldName, where:

- "_ST_SF." is a required prefix to allow the client to recognize properties related to Salesforce integration.
- Object corresponds to the developer name of an object in the Apex API, and FieldName corresponds to the developer name of a field on that object. For example, Case.CaseNumber would be a valid key.
- The values should correspond to the format of the field in Salesforce. For example, Case.CaseNumber, "00001001" would be a valid value. Note: Values must be exact matches for the Salesforce record. For example, if "1001" is specified but the case number is actually "00001001," the record is not returned.

Passing Data from Enterprise Contact Center

Starting with Version 5.0 of The ShoreTel Enterprise Contact Center, ECC Call Profile User Fields can now be stored as ShoreTel Call Properties. This allows any TAPI application including the ShoreTel Adapter to access those properties. The convention followed by ECC is to store these name the properties it creates with a prefix of "_STCC_". Therefore, to accommodate the ECC prefix, when the Adapter is looking for attached properties it also looks for a prefix of "_STCC_SF" and handles these properties in the same way as _ST_SF. So, for example, an ECC script could gather a customer Salesforce case number and then set this user field of the call profile:

    SF.Case.CaseNumber=00001001

This would result in the ECC system adding a ShoreTel call property of the form:

    _STCC_SF.Case.CaseNumber=00001001

Examples of Attached Data Search Queries

Salesforce Call Center Edition uses attached data to generate an Sforce Object Query Language (SOQL) query. For example, if the attached data contains _STCC_SF.Case.CaseNumber="00001001", Call Center Edition generates and executes the following query:

    SELECT <name> FROM Case WHERE CaseNumber='00001001'

Where <name> is the entity's record name field value.