
Amazon Connect CTI Adapter v2 for Salesforce

Setup and Installation Guide

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Abstract

This guide provides the steps to setup the integrations between Amazon Connect and Salesforce using the Amazon Connect CTI Adapter and Amazon Connect Lambda for Salesforce.

Introduction

The core functionality of the Amazon Connect CTI Adapter provides a WebRTC browser-based Contact Control Panel (CCP) within Salesforce. The Amazon Connect CTI integration consists of two components, a [managed Salesforce package](#) and a AWS Serverless application (need link) deployed to your AWS environment.

With those components, customers can build a deep integration between the Amazon Connect contact center platform and Salesforce, the leading customer relationship management (CRM) platform. The collection of pre-build utilities enables a rapid integration between these two platforms. The AWS Serverless application package contains a set of common Lambda functions to be used by Amazon Connect to interact with Salesforce,

The key benefits of the adapter:

- Agent state synchronization between Salesforce Omni and Amazon Connect
- Provide valuable information to the agent through configurable view of call attributes
- Utilize the Amazon Connect Call Campaign Object for automated outbound dialling
- Automatically create phone call tasks and relate it to the right Salesforce object
- Embed Amazon Connect Call Recordings in the Salesforce record
- Automatically clean-up open tabs to improve agent efficiency
- Easily enable lookup, create and update operations for different Salesforce objects, like Contacts and Cases, within Amazon Connect contact flows.
- Support Salesforce Sales and Service Console in Classic and Lightning

We recommend that you initially install the package into your Salesforce sandbox. After the package is installed, you can configure your Salesforce Call Center configuration within Salesforce.

The next step is to whitelist your Salesforce Visualforce domain within your Amazon Connect Application integration. This allows cross-domain access to your Amazon Connect instance.

We also have a trailhead available <https://sfdc.co/Amazon-Connect> (note, its still in process of being updated to support latest CTI Adapter features).

Requirements and Prerequisites

Before the Amazon Connect CTI package can be installed, the following prerequisites need to be fulfilled:

1. Salesforce Classic, Salesforce Console, or Lightning Experience
2. Create an Amazon Connect instance (<https://aws.amazon.com/connect/>)
3. Salesforce Omni-Channel must be activated in the Salesforce Org
(https://help.salesforce.com/articleView?id=omnichannel_enable.htm&type=0)

Browser Compatibility

Amazon Connect requires WebRTC to enable soft-phone voice media stream and Websockets to enable soft-phone signalling. Consequently, users are required to use the latest version of either Google Chrome or Mozilla Firefox. For more details, please see the Amazon Connect FAQ page (<https://aws.amazon.com/connect/faqs/>)

Lightning Support

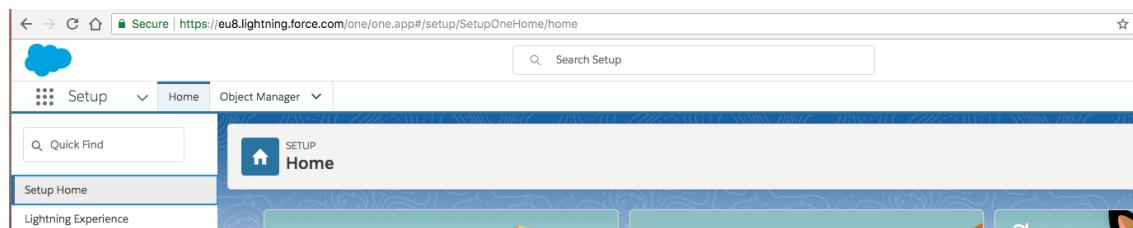
Please note that following features are currently not supported in Salesforce Lightning:

- Salesforce Omni Presence Synchronization
- Call Wrap-up: The Call Wrap-up page will always open as a primary tab and will not close after clicking on the “Save” button. The agent will have to close both tabs manually.
- Outbound Campaign Calls using Salesforce Omni can be routed to the agent, but the automated screen pops and the dialling of the phone number will not work. The agent will have to click on the record links to

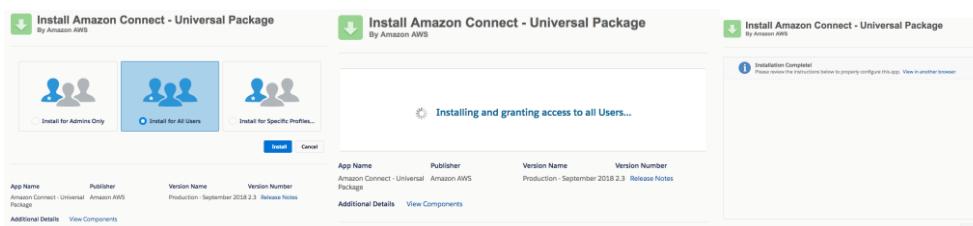
open the records and use Salesforce's Click-to-Dial feature to make the phone call.

Package Installation

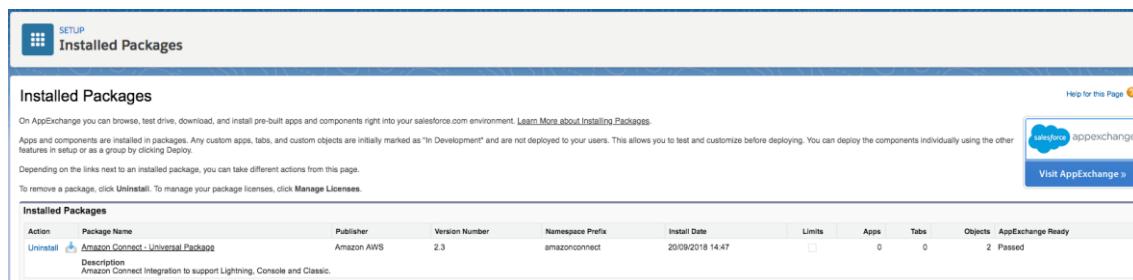
Log in into your Salesforce instance and open Setup:



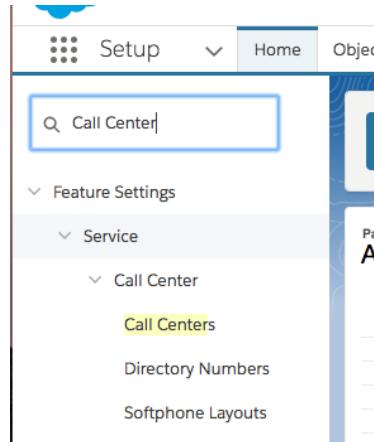
Open the AmazonConnectCTI Package URL and Install for All Users:



Click Done and Installed Packages page will open.



In the Quick Find box, type Call Center, then click on Call Centers:



All Call Centers

A call center corresponds to a single computer-telephony integration (CTI) system already in place at your organization. Salesforce.com users must be assigned to a call center before they can use any Call Center features.

| Action | Name | Version | Created Date | Last Modified Date |
|------------|--------------------------------------|------------------|------------------|--------------------|
| Edit Del | Amazon Connect CCP Adapter Classic | 23/05/2018 13:27 | 23/05/2018 13:27 | 23/05/2018 13:27 |
| Edit Del | Amazon Connect CCP Adapter Console | 23/05/2018 13:27 | 23/05/2018 13:27 | 23/05/2018 13:27 |
| Edit Del | Amazon Connect CCP Adapter Lightning | 23/05/2018 13:27 | 23/05/2018 13:27 | 23/05/2018 13:27 |

You should be able to see 3 Call Center configurations: Classic, Console and Lightning.

Next, create a default Softphone Layout:

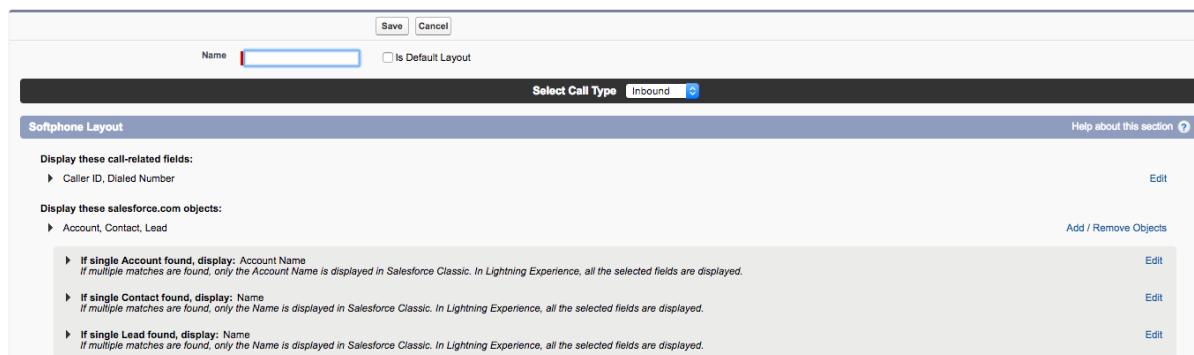
The screenshot shows the Salesforce Setup interface. In the top navigation bar, 'Setup' is selected. Below it, a search bar contains the text 'Softphone Layouts'. Under the 'Feature Settings' section, 'Service' is expanded, and 'Call Center' is further expanded. The 'Softphone Layouts' item is highlighted with a blue selection bar. On the right, the 'Softphone Layouts' page is displayed. It has a header with a gear icon and the title 'Softphone Layouts'. Below the header, there is a brief description of what a softphone is. At the bottom, there is a table with columns: Name, Default, Created By Alias, Created Date, Softphone Layout Assignment, Last Modified By Alias, and Last Modified Date. A note at the bottom left says 'No records to display.'

Click on the New button:

Softphone Layout Edit

[Help for this Page](#)

Each softphone layout allows you to customize the appearance of a softphone for inbound, outbound, and internal calls. Assign softphone layouts to user profiles by clicking Layout Assignment in the Softphone Layouts page.



The screenshot shows the 'Softphone Layout Edit' page. At the top, there are 'Save' and 'Cancel' buttons. Below them is a 'Name' input field containing 'AmazonConnectDefault' and a checked 'Is Default Layout' checkbox. A 'Select Call Type' dropdown is set to 'Inbound'. The main area is titled 'Softphone Layout' and contains sections for 'Display these call-related fields:' (Caller ID, Dialed Number) and 'Display these salesforce.com objects:' (Account, Contact, Lead). A detailed description for each object type is provided, including conditions for single or multiple matches. There are 'Edit' and 'Add / Remove Objects' buttons for each section.

Set Name (for example AmazonConnectDefault) and set Is Default Layout

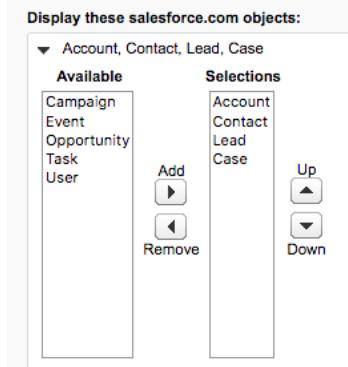
Softphone Layout Edit

Each softphone layout allows you to customize the appearance of a softphone for inbound, outbo



The screenshot shows the 'Softphone Layout Edit' page with the 'Name' field set to 'AmazonConnectDefault' and the 'Is Default Layout' checkbox checked. The rest of the interface is identical to the previous screenshot.

Expand “Display these salesforce.com objects” and select objects that CTI Connector would be able to search, for a screen-pop query. In this example, besides default selection, I’m adding “Case”, as I want to search and screen-pop by CaseID.



If necessary, configure the search behavior in case one or multiple records are found:

| | |
|--|------|
| ▶ If single Account found, display: Account Name If multiple matches are found, only the Account Name is displayed in Salesforce Classic. In Lightning Experience, all the selected fields are displayed. | Edit |
| ▶ If single Contact found, display: Name If multiple matches are found, only the Name is displayed in Salesforce Classic. In Lightning Experience, all the selected fields are displayed. | Edit |
| ▶ If single Lead found, display: Name If multiple matches are found, only the Name is displayed in Salesforce Classic. In Lightning Experience, all the selected fields are displayed. | Edit |
| ▶ If single Case found, display: Case Number If multiple matches are found, only the Case Number is displayed in Salesforce Classic. In Lightning Experience, all the selected fields are displayed. | Edit |

In this example, I'll keep default configuration. Click on the Save button:

Softphone Layout Edit

Each softphone layout allows you to customize the appearance of a softphone for inbound, outbound, a

Name Is Default Layout

Softphone Layouts

A softphone is a customizable call control tool that appears in the sidebar of every salesforce.com page if a user is assigned to a call center and is working on a machine on which a CTI adapter has been installed. Similar to page layouts, you can create custom softphone layouts and assign them to call center users based on their user profile.

| Action | Name | Default | Created By Alias | Created Date | Last Modified By Alias | Last Modified Date |
|----------------------|----------------------|---------|------------------|------------------|------------------------|--------------------|
| Edit | AmazonConnectDefault | ✓ | ASFDC | 23/05/2018 13:48 | ASFDC | 23/05/2018 13:48 |

Set Access Permissions

All users must have the permission set to access the Salesforce metadata included in this package. The Amazon Connect CTI integration package comes with two Permission Sets, one for agents and one for managers, which grants the users all necessary access to use the soft-phone.

1. Log in into your Salesforce Org.

a. Navigate to Setup > Manage Users > Permission Sets

The screenshot shows the 'Permission Sets' page in Salesforce. At the top, there's a header with a user icon and the word 'SETUP'. Below it, the title 'Permission Sets' is displayed. A sub-header 'Permission Sets' follows, with a note: 'On this page you can create, view, and manage permission sets.' and 'In addition, you can use the Salesforce mobile app to assign permission sets to a user. Download Salesforce from the App Store or Google Play: iOS | Android'. Below this is a toolbar with buttons for 'All Permission Sets', 'Edit', 'Delete', and 'Create New View'. A 'New' button is also present. The main area is a table with columns: 'Action', 'Permission Set Label', and 'Description'. It lists three entries: 'Clone' for 'Toolkit for Amazon Connect - Agent' with the description 'Permissions to all components that an agent would need to use the toolkit.', and two other 'Clone' entries for 'Toolkit for Amazon Connect - Manager' with the description 'Permissions required to access the toolkit reports.'

b. Click “Toolkit for Amazon Connect - Agent”

The screenshot shows the details for the 'Toolkit for Amazon Connect - Agent' permission set. At the top, it says 'Permission Set' and 'Toolkit for Amazon Connect - Agent'. Below is a search bar with 'Find Settings...' and buttons for 'Clone' and 'Manage Assignments'. The 'Permission Set Overview' section includes fields for 'Description' (Permissions to all components that an agent would need to use the toolkit.), 'License', and 'Session Activation Required'. To the right, 'API Name' is listed as 'Amazon_Connect_Toolkit_Agent' and 'Namespace Prefix' as 'amazonconnect'. A 'Manage Assignments' button is located at the bottom right.

2. Click “Manage Assignments”
3. Click “Add Assignments”
4. Select the appropriate users and then click “Assign”

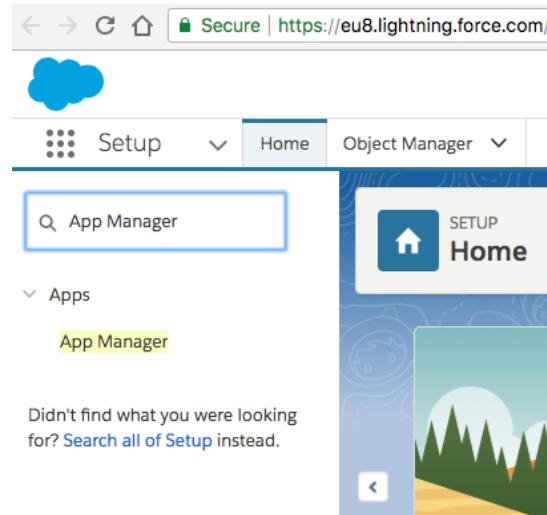
The screenshot shows the 'Assign Users' page. The title 'Assign Users' and 'All Users' are at the top. Below is a 'View:' dropdown set to 'All Users' with options 'Edit' and 'Create New View'. At the bottom right are 'Assign' and 'Cancel' buttons.

More information on assigning user permissions can be found here:

https://help.salesforce.com/articleView?id=perm_sets_mass_assign.htm&type=5

Configure Lightning Experience

For the Lightning experience, we are going to use Service Console application, but the procedure is the same for other applications. From the Setup screen, type App Manager in Quick Find field and select App Manager:



You will be able to see all applications that are available in your account.

| Lightning Experience App Manager | | | | | | |
|---|-----------------------|---|------------------|-----------|-------|--|
| 12 items • Sorted by App Name • Filtered by TabSet Type | | | | | | |
| APP NAME | DEVELOPER NA... | DESCRIPTION | LAST MODIFI... | APP... | VI... | |
| 1 App Launcher | AppLauncher | App Launcher tabs | 23/05/2018 12:57 | Classic | ✓ | |
| 2 Community | Community | Salesforce CRM Communities | 23/05/2018 12:57 | Classic | ✓ | |
| 3 Content | Content | Salesforce CRM Content | 23/05/2018 12:57 | Classic | ✓ | |
| 4 Marketing | Marketing | Best-in-class on-demand marketing automation | 23/05/2018 12:57 | Classic | ✓ | |
| 5 Platform | Platform | The fundamental Lightning Platform | 23/05/2018 12:57 | Classic | ✓ | |
| 6 Sales | Sales | The world's most popular sales force automation (SFA) solution | 23/05/2018 12:57 | Classic | ✓ | |
| 7 Sales | LightningSales | Manage your sales process with accounts, leads, opportunities, and more | 23/05/2018 12:57 | Lightning | ✓ | |
| 8 Sales Console | LightningSalesConsole | (Lightning Experience) Lets sales reps work with multiple records on one screen | 23/05/2018 12:57 | Lightning | ✓ | |
| 9 Salesforce Chatter | Chatter | The Salesforce Chatter social network, including profiles and feeds | 23/05/2018 12:57 | Classic | ✓ | |
| 10 Service | Service | Manage customer service with accounts, contacts, cases, and more | 23/05/2018 12:57 | Classic | ✓ | |
| 11 Service Console | LightningService | (Lightning Experience) Lets support agents work with multiple records across customer service channels on one screen | 23/05/2018 12:57 | Lightning | ✓ | |
| 12 Site.com | Sites | Build pixel-perfect, data-rich websites using the drag-and-drop Site.com application, and manage content and published... | 23/05/2018 12:57 | Classic | ✓ | |

Click on drop-down arrow associated to Service Console and select Edit:

| APP NAME | DEVELOPER NA... | DESCRIPTION | LAST MODIFI... | APP... | VI... | |
|--------------------|------------------|---|------------------|-----------|-------|--|
| 11 Service Console | LightningService | (Lightning Experience) Lets support agents work with multiple records across customer service channels on one screen | 23/05/2018 12:57 | Lightning | ✓ | |
| 12 Site.com | Sites | Build pixel-perfect, data-rich websites using the drag-and-drop Site.com application, and manage content and published... | 23/05/2018 12:57 | Classic | ✓ | |

The lightning App Builder opens

APP SETTINGS

App Details & Branding

App Options

Utility Bar

Select Items

Navigation Rules

Assign to User Profiles

App Details & Branding

Give your Lightning app a name and description. Upload an image and choose the highlight color for its navigation bar.

App Details

* App Name

* Developer Name

Description

App Branding

Image

Primary Color Hex Value

Org Theme Options Use the app's image and color instead of the org's custom theme

App Launcher Preview

 Service Console
(Lightning Experience) Lets support agents work with m...

On the left-hand side, select Utility Bar

APP SETTINGS

Utility Bar

App Details & Branding

App Options

Select Items

Navigation Rules

Assign to User Profiles

Utility Bar

Give your users quick access to common productivity tools.

Utility Bar Items **Add**

| | |
|-------------------------------|------------|
| <input type="radio"/> History | PROPERTIES |
| <input type="radio"/> Notes | History |

Click on the Add button and select Open CTI Softphone

Utility Bar Items **Add**

Search...

Standard (13)

-  Chatter Feed
-  Chatter Publisher
-  Flow
-  History
-  List View
-  Macros
-  Notes
-  Open CTI Softphone
-  Quip
-  Recent Items

Utility Bar

Give your users quick access to common productivity tools.

Utility Bar Items [Add](#)

PROPERTIES
Open CTI Softphone

Utility Item Properties

- Label: Phone
- Icon: call
- Panel Width: 340
- Panel Height: 480
- Load in background when app opens

[Cancel](#) [Save](#)

Change the Label in necessary and click on the Save button.

Lightning App Builder [App Settings](#) [Pages](#) Service Console [← Back](#)

APP SETTINGS

Utility Bar

Utility Bar

Give your users quick access to common productivity tools.

Utility Bar Items [Add](#)

PROPERTIES
Open CTI Softphone

Utility Item Properties

- Label: Phone
- Icon: call
- Panel Width: 340
- Panel Height: 480
- Load in background when app opens

Click on the Back button in the top-right corner (not browser's back button). In the Quick Find field, type Visualforce Pages and select Visual Force Pages:

The screenshot shows the Salesforce Setup interface. In the top left, there's a blue cloud icon. The top navigation bar includes 'Setup' (selected), 'Home', and 'Object Manager'. A search bar on the right says 'Search Setup'. On the left, a sidebar has a search field with 'visualforce' typed in. Below it are sections for 'Custom Code', 'Visualforce Components' (with 'Visualforce Pages' selected), and a global search section with the placeholder 'Didn't find what you're looking for? Try using Global Search.' The main content area is titled 'Visualforce Pages' and contains a sub-header 'Visualforce Pages provide a robust and easy to use mechanism to create new and exciting user experiences for'. Below this is a 'View' dropdown set to 'All' and a 'Create New View' button. The main table lists various Visualforce pages:

| Action | Label | Name | Namespace Prefix | Api Version |
|----------|----------------------------|----------------------------|------------------|-------------|
| Security | ACSFCCP_CallLogging_View | ACSFCCP_CallLogging_View | amazonconnect | 43.0 |
| Security | ACSFCCP_CallRecordingCase | ACSFCCP_CallRecordingCase | amazonconnect | 43.0 |
| Security | ACSFCCP_CallRecordingTask | ACSFCCP_CallRecordingTask | amazonconnect | 43.0 |
| Security | ACSFCCP_Console_2 | ACSFCCP_Console_2 | amazonconnect | 41.0 |
| Security | ACSFCCP_Lightning_2 | ACSFCCP_Lightning_2 | amazonconnect | 41.0 |
| Security | ACSFCCP_PostCallUpdateTask | ACSFCCP_PostCallUpdateTask | amazonconnect | 43.0 |
| Security | ACSFCCP_Classic_1 | ACSFCCP_Classic | amazonconnect | 39.0 |
| Security | ACSFCCP_Classic_2 | ACSFCCP_Classic_2 | amazonconnect | 42.0 |
| Security | ACSFCCP_Console_1 | ACSFCCP_Console | amazonconnect | 39.0 |
| Security | ACSFCCP_Lightning_1 | ACSFCCP_Lightning | amazonconnect | 39.0 |

As we are currently setting up the Lightning experience, click on ACSFCCP_Lightning_2 page

This screenshot shows the details for a Visualforce Page named 'ACSFCCP_Lightning_2'. The 'Page Detail' tab is selected. Key details include:

- Label:** ACSFCCP_Lightning_2
- Namespace Prefix:** amazonconnect
- Available for:** Lightning Experience, Lightning Communities, and the mobile app
- Description:** Amazon Connect Softphone page for Lightning Console, which is an extension to the Amazon Connect Open CTI Adapter.
- Created By:** DryRunTwo_SFDC
- Last Modified By:** DryRunTwo_SFDC
- Created Date:** 20/09/2018 14:47

Click on the Preview button. New browser tab will open with the URL of this page. It's going to be in this format:

`https://amazonconnect.sfcdInstance.visual.force.com/apex/ACSFCCP_Lightning`

This is what we are going to use as “Origin URL” in our Amazon Connect configuration. From AWS Console, select Amazon Connect service and then select your Amazon Connect instance:

The screenshot shows the 'Overview' section of the Amazon Connect console. On the left sidebar, 'Application integration' is selected. The main area displays the Instance ARN (arn:aws:connect:us-east-1:XXXXXXXXXX:instance/193a3ba0XXXXXX), Directory (XXXXXXXXXX-test10), and Login URL (https://XXXXXXXXXX-test10.awsapps.com/connect/login). A 'Login as administrator' button is also present.

Select “Application Integration” on the left-hand side:

The screenshot shows the 'Application integration' page. The left sidebar has 'Application integration' selected. The main content area contains a brief description of integration with CRM and WFM products, a link to 'Learn more', and a 'Approved origins' section. It includes a note about adding origins and a '+ Add origin' link.

Click on “Add origin” link and enter the origin URL

The screenshot shows a modal dialog titled 'Add origin'. It has a text input field labeled 'Enter origin URL' containing 'https://XXXXXXXXXX.visual.force.com'. At the bottom are 'Cancel' and 'Add' buttons.

Click “Add” button

Application integration

Amazon Connect can integrate with other products including Customer Relationship Management (CRM) and Workforce Management (WFM) products. Click on the link for details on how to set up integrations with Amazon Connect. [Learn more](#)

Approved origins

Once you integrated with a CRM product, add the origins (scheme + host + port) that Amazon Connect will need to have access to.

https://XXXXXXXXXX.visual.force.com [remove](#)

[+ Add origin](#)

Go to Salesforce and in the Setup page, type Call Center, then select Call Centers

The screenshot shows the Salesforce Setup interface. The top navigation bar includes 'Setup' (selected), 'Home', and 'Object Manager'. A search bar contains 'Call Center'. The left sidebar has sections like 'Feature Settings', 'Service', 'Call Center', and 'Call Centers' (which is selected). Below the sidebar, there are links for 'Directory Numbers' and 'Softphone Layouts'. A note says 'Didn't find what you were looking for? Search all of Setup instead.' The main content area is titled 'All Call Centers' and contains a table with three rows, each with an 'Edit | Del' link and a name: 'Amazon Connect CCP Adapter Classic', 'Amazon Connect CCP Adapter Console', and 'Amazon Connect CCP Adapter Lightning'.

Select “Amazon Connect CCP Adapter Lightning”

The screenshot shows the 'Call Center Detail' page for the 'Amazon Connect CCP Adapter Lightning' call center. The title is 'Amazon Connect CCP Adapter Lightning'. The URL is 'All Call Centers > Amazon Connect CCP Adapter Lightning'. The 'Call Center Detail' section shows the following configuration:

| | Value |
|-------------------------------|--|
| Internal Name | AmazonConnectSFCCPAdapterLightning |
| Display Name | Amazon Connect CCP Adapter Lightning |
| Description | Amazon Connect Call Center |
| CTI Adapter URL | /apex/amazonconnect__ACSFCCP_Lightning_2 |
| Use CTI API | true |
| Softphone Height | 400 |
| Softphone Width | 250 |
| Salesforce Compatibility Mode | Lightning |

Buttons for 'Edit', 'Delete', and 'Clone' are visible at the top right of the detail section.

Click on the Edit button. In the “Amazon Connect CCP URL” field, enter the name of your Amazon Connect instance in the following format:

<https://yourinstance-name.awsapps.com/connect/ccp>

For example:

<https://test10.awsapps.com/connect/ccp>

Click on the Save button. Click on the “Manage Call Center Users” button at the bottom of the page.

The screenshot shows a table titled "Call Center Users" with a single row. The row contains the text "Call Center Users by Profile" and "Total 0". A "Manage Call Center Users" button is located in the top right corner of the table header.

Click on the “Add More Users” button.

The screenshot shows a search interface titled "Amazon Connect CCP Adapter Lightning: Search for New Users". It includes a breadcrumb navigation: All Call Centers > Amazon Connect CCP Adapter Lightning > Manage Users > Search for New Users. Below the title, it says "Set the search criteria below and then click Search to find salesforce.com users who should be enabled as call center". There are several dropdown menus for filtering users, separated by "AND" clauses. Below the filters, there is a section titled "Filter By Additional Fields (Optional)" with instructions: "You can use "or" filters by entering multiple items in the third column, separated by commas.", "For date fields, enter the value in following format: 23/05/2018", and "For date/time fields, enter the value in following format: 23/05/2018 14:23". At the bottom right is a "Find" button.

Set filters and click on the Find button. Select the checkbox next to the user and click “Add to Call Center” button.

The screenshot shows a dialog box titled "Add to Call Center" with a "Cancel" button. It lists three users with checkboxes next to their names. The first user, "SFDCDryRun_AmazonConnect", has the checkbox checked. The other two users, "User_Integration" and "User_Security", have their checkboxes unchecked. To the right of each user are columns for "Role" and "Profile".

| Full Name | Alias | Username | Role | Profile |
|--|-------|---|------|----------------------------------|
| <input checked="" type="checkbox"/> SFDCDryRun_AmazonConnect | ASFDC | [REDACTED]@gmail.com | | System Administrator |
| <input type="checkbox"/> User_Integration | integ | Integration@00d0n000001bsn5uaa.com | | Analytics Cloud Integration User |
| <input type="checkbox"/> User_Security | sec | insightssecurity@00d0n000001bsn5uaa.com | | Analytics Cloud Security User |

Repeat the steps to add more users.

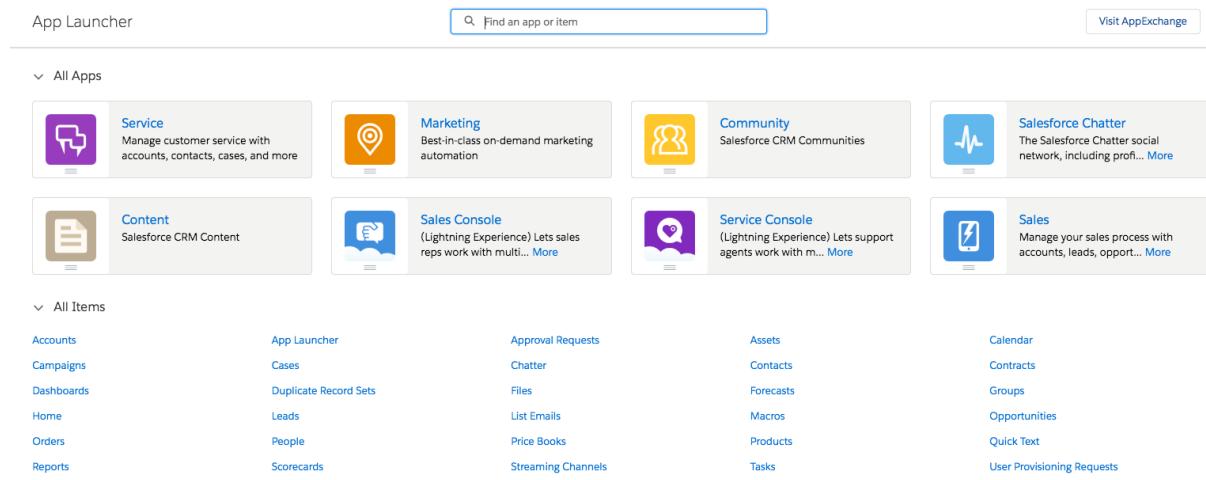
Call Center
Amazon Connect CCP Adapter Lightning: Manage Users

All Call Centers » Amazon Connect CCP Adapter Lightning » Manage Users

View: [All](#) [Create New View](#)

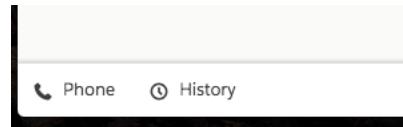
| | | Add More Users | Remove Users |
|------------------------|---------------------------|--------------------------------|------------------------------|
| Action | Full Name | Alias | Username |
| Remove | SFDCDryRun, AmazonConnect | ASFDC | acsfdcdryrun@gmail.com |

In the top-left corner, select the dot-matrix button to open the App Launcher.



The screenshot shows the Salesforce App Launcher interface. At the top, there's a search bar with the placeholder "Find an app or item" and a "Visit AppExchange" button. Below the search bar, there are sections for "All Apps" and "All Items". The "All Apps" section contains icons for Service, Marketing, Community, Salesforce Chatter, Content, Sales Console, Service Console, and Sales. The "All Items" section lists various Salesforce objects and features such as Accounts, Campaigns, Dashboards, Home, Orders, Reports, App Launcher, Cases, Duplicate Record Sets, Leads, People, Scorecards, Approval Requests, Chatter, Files, List Emails, Price Books, Streaming Channels, Assets, Contacts, Forecasts, Macros, Products, Tasks, Calendar, Contracts, Groups, Opportunities, Quick Text, and User Provisioning Requests.

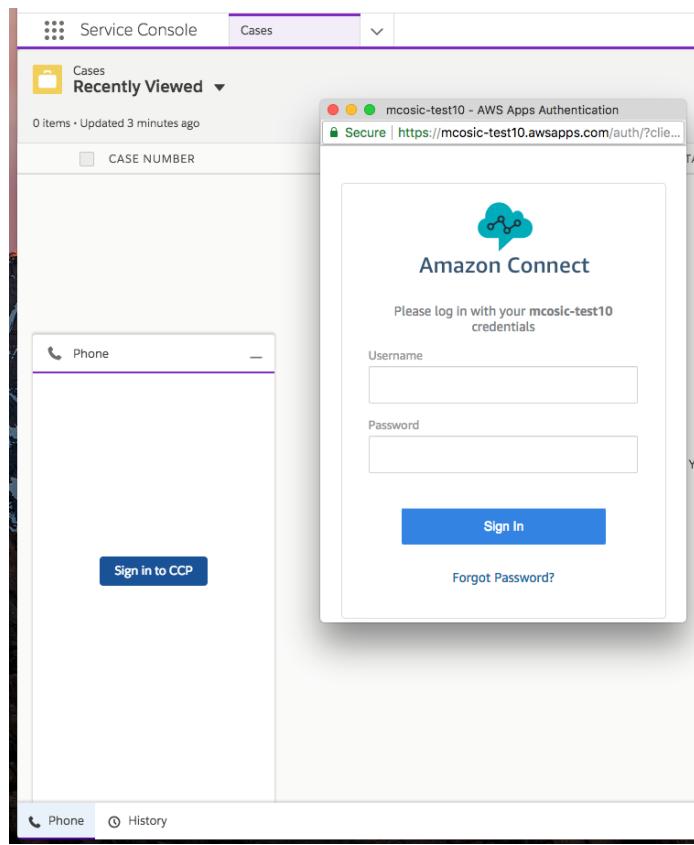
Select the Service Console application. The Phone button should be displayed in the bottom-right corner.



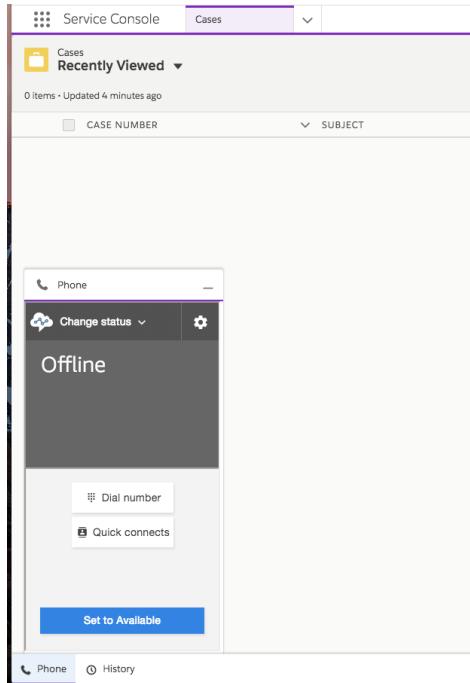
Click on the Phone button to open the softphone pop-up.



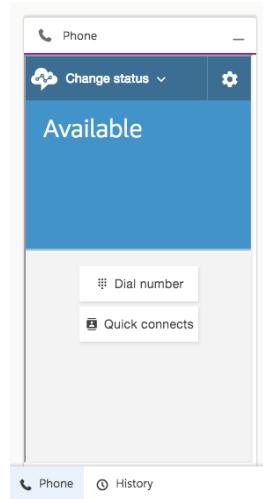
You will need to Sign in into your Amazon Connect CCP. Click on the Sign in to CCP button. A new modal pop-up will show, asking you to enter your credentials.



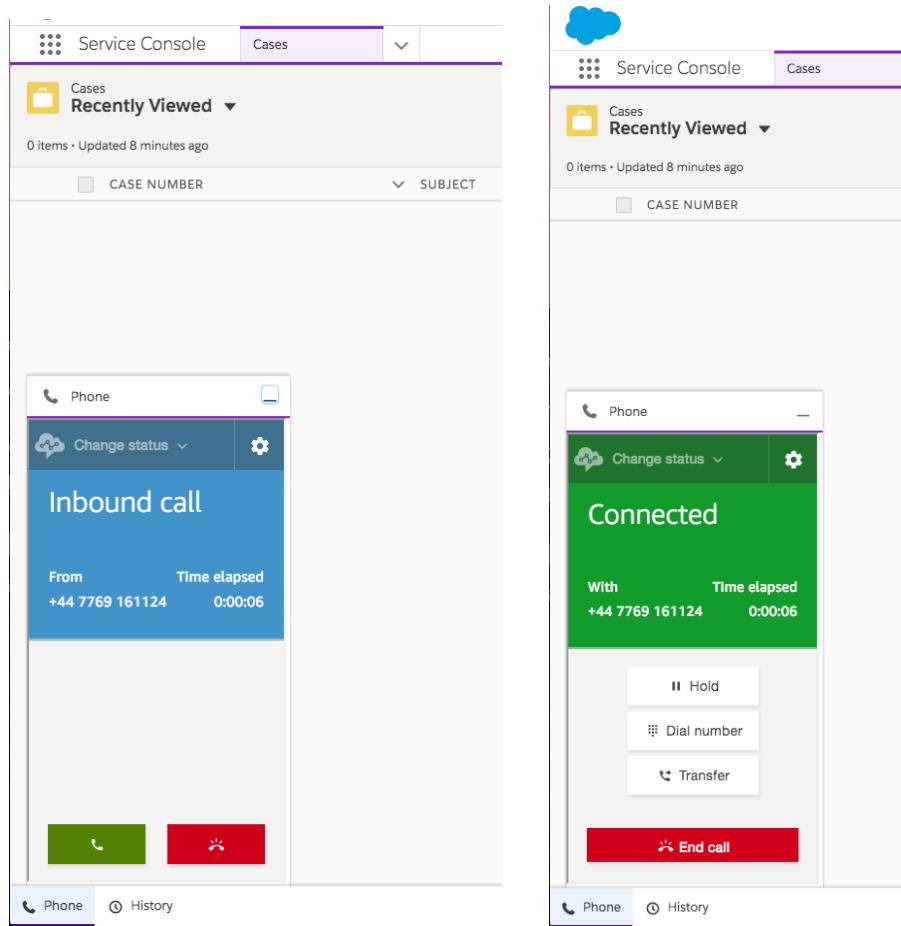
Enter your credentials and click Sign in. Allow Microphone access (if asked by browser). Once Login is successful, the pop-up window will automatically close.



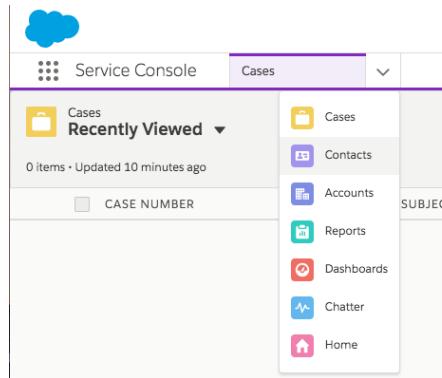
Select “Change status” and select “Available”.



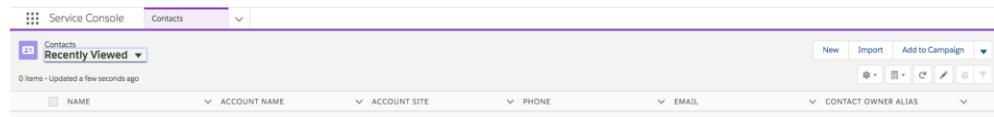
Make an inbound phone call to your Amazon Connect instance. The CCP is going to “ring” and you can answer the call.



At this time, I need to create a new Contact in Salesforce so that I can test a screen-pop by incoming phone number. Select Contacts from the dropdown menu:



Select New from top-right corner



Fill in the details and click on the Save button.

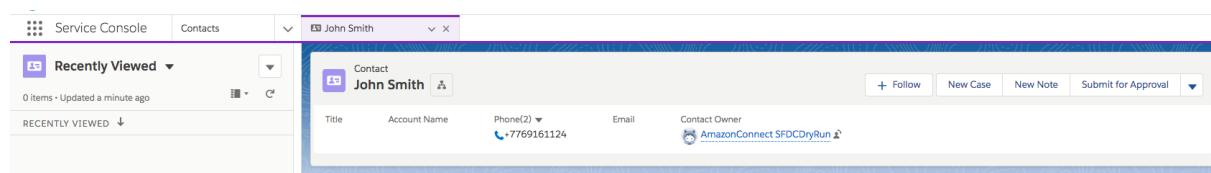
New Contact

Contact Information

| | |
|---|----------------------|
| Contact Owner AmazonConnect SFDCDryRun | Phone +7769161124 |
| *Name Salutation --None-- | Home Phone |
| First Name John | |
| *Last Name Smith | |
| Account Name Search Accounts... | Mobile |
| Title | Other Phone |
| Department | Fax |
| Birthdate | Email |
| Reports To Search Contacts... | Assistant |
| Lead Source --None-- | Asst. Phone |

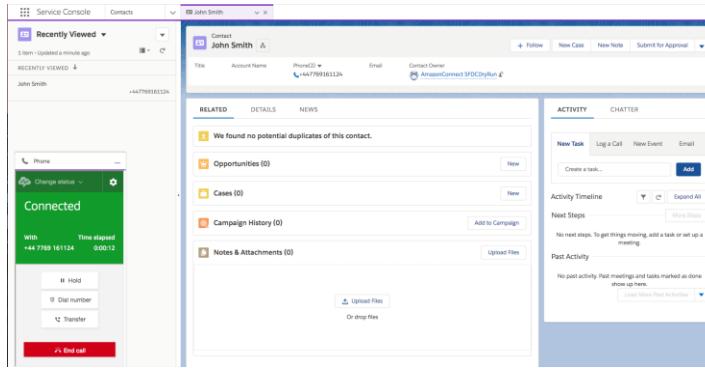
Address Information

[Cancel](#) [Save & New](#) [Save](#)



Close the Contact tab by clicking on the X next to the Name and drop the phone call.

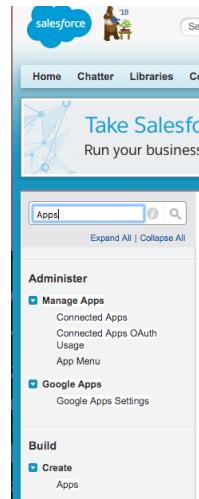
Set your state to Available and make another phone call. The new contact should automatically pop-up as it has been recognized by incoming phone number.



Configure Console Experience

For the Console experience, we are going to use Sample Console application, but the procedure is the same for other applications.

From the Setup screen, type Apps in Quick Find field and select Build>Create>Apps:



You will be able to see all applications that are available in your account.

| Apps | | | | | Quick Start | New | Reorder |
|--------|------------------------------------|-------------------------------------|--------------------------|---|-----------------------------|---------------------|-------------------------|
| Action | App Label | Console | Custom | Description | | | |
| Edit | App Launcher | <input type="checkbox"/> | <input type="checkbox"/> | App Launcher tabs | | | |
| Edit | Community | <input type="checkbox"/> | <input type="checkbox"/> | Salesforce CRM Communities | | | |
| Edit | Content | <input type="checkbox"/> | <input type="checkbox"/> | Salesforce CRM Content | | | |
| Edit | Marketing | <input type="checkbox"/> | <input type="checkbox"/> | Best-in-class on-demand marketing automation | | | |
| Edit | Platform | <input type="checkbox"/> | <input type="checkbox"/> | The fundamental Lightning Platform | | | |
| Edit | Sales | <input type="checkbox"/> | <input type="checkbox"/> | The world's most popular sales force automation (SFA) solution | | | |
| Edit | Salesforce Chatter | <input type="checkbox"/> | <input type="checkbox"/> | The Salesforce Chatter social network, including profiles and feeds | | | |
| Edit | Sample Console | <input checked="" type="checkbox"/> | <input type="checkbox"/> | (Salesforce Classic) Lets agents work with multiple records on one screen | | | |
| Edit | Service | <input type="checkbox"/> | <input type="checkbox"/> | Manage customer service with accounts, contacts, cases, and more | | | |
| Edit | Site.com | <input type="checkbox"/> | <input type="checkbox"/> | Build pixel-perfect, data-rich websites using the drag-and-drop Site.com application, and manage content and published sites. | | | |

Click “Edit” next to the Sample Console application.

Scroll to the bottom of the page and “Assign to Profiles”

| Assign to Profiles | | |
|-----------------------------------|-------------------------------------|----------------------------------|
| Profile | <input type="checkbox"/> Visible | <input type="checkbox"/> Default |
| Analytics Cloud Integration User | <input type="checkbox"/> | <input type="checkbox"/> |
| Analytics Cloud Security User | <input type="checkbox"/> | <input type="checkbox"/> |
| Contract Manager | <input type="checkbox"/> | <input type="checkbox"/> |
| Cross Org Data Proxy User | <input type="checkbox"/> | <input type="checkbox"/> |
| Custom: Marketing Profile | <input type="checkbox"/> | <input type="checkbox"/> |
| Custom: Sales Profile | <input type="checkbox"/> | <input type="checkbox"/> |
| Custom: Support Profile | <input type="checkbox"/> | <input type="checkbox"/> |
| Force.com - App Subscription User | <input type="checkbox"/> | <input type="checkbox"/> |
| Identity User | <input type="checkbox"/> | <input type="checkbox"/> |
| Marketing User | <input type="checkbox"/> | <input type="checkbox"/> |
| Partner App Subscription User | <input type="checkbox"/> | <input type="checkbox"/> |
| Read Only | <input type="checkbox"/> | <input type="checkbox"/> |
| Solution Manager | <input type="checkbox"/> | <input type="checkbox"/> |
| Standard Platform User | <input type="checkbox"/> | <input type="checkbox"/> |
| Standard User | <input type="checkbox"/> | <input type="checkbox"/> |
| System Administrator | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

[Save](#) [Save & New](#) [Cancel](#)

In this example, I’m assigning Sample console as Visible to System Administrator.

Click on the Save button. Next, we have to configure Amazon Connect integration. In the Quick Find field, type Visualforce Pages and select Visual Force Pages:

The screenshot shows the Salesforce Visualforce Pages interface. On the left, there's a sidebar with 'Visualforce Pages' and 'Build' sections. Under 'Build', 'Develop' is selected, and 'Visualforce Pages' is listed. To the right is a table of pages with their names and security details:

| Action | Label | Name |
|----------|----------------------------|----------------------------|
| Security | ACSFCCP_CallLogging_View | ACSFCCP_CallLogging_View |
| Security | ACSFCCP_CallRecordingCase | ACSFCCP_CallRecordingCase |
| Security | ACSFCCP_CallRecordingTask | ACSFCCP_CallRecordingTask |
| Security | ACSFCCP_Console_2 | ACSFCCP_Console_2 |
| Security | ACSFCCP_Lightning_2 | ACSFCCP_Lightning_2 |
| Security | ACSFCCP_PostCallUpdateTask | ACSFCCP_PostCallUpdateTask |
| Security | ACSFCCP_Classic_1 | ACSFCCP_Classic_1 |
| Security | ACSFCCP_Classic_2 | ACSFCCP_Classic_2 |
| Security | ACSFCCP_Console_1 | ACSFCCP_Console_1 |
| Security | ACSFCCP_Lightning_1 | ACSFCCP_Lightning_1 |

As we are currently setting up the Console experience, click on “ACSFCCP_Console_2” page

The screenshot shows the details for a Visualforce Page named "amazonconnect__ACSFCCP_Console_2". The page detail section includes:

- Page Detail tab
- Namespace Prefix: amazonconnect
- Label: ACSFCCP_Console_2
- Name: ACSFCCP_Console_2
- Description: Amazon Connect Softphone page, which is an extension to the Amazon Connect Open CTI Adapter.
- Available for Lightning Experience, Lightning Communities, and the mobile app checkbox (unchecked)
- Require CSRF protection on GET requests checkbox (unchecked)
- Preview button

Click on the Preview button. New browser tab will open with the URL of this page. It's going to be in this format:

https://amazonconnect.sfcdInstance.visual.force.com/apex/ACSFCCP_Console

This is what we are going to use as “Origin URL” in our Amazon Connect configuration. From AWS Console, select Amazon Connect service and then select your Amazon Connect instance:

Amazon Connect > mcosic-test10

The screenshot shows the 'Overview' tab selected on the left sidebar. The main content area displays the Instance ARN (arn:aws:connect:us-east-1:680944752362:instance/193a3ba0-286a-4d55-a4f2-5862c3cca611), Directory (mcosic-test10), and Login URL (<https://mcosic-test10.awsapps.com/connect/login>). A 'Login as administrator' button is also present.

Select “Application Integration” on the left-hand side:

Amazon Connect > mcosic-test10

The screenshot shows the 'Application integration' tab selected on the left sidebar. The main content area displays information about integrating with CRM and WFM products, and a section for 'Approved origins'. Below it, there is a note about adding origins and a '+ Add origin' link.

Click on “Add origin” link and enter the origin URL

The screenshot shows a modal dialog titled 'Add origin'. It contains a text input field labeled 'Enter origin URL' with the value 'https://[REDACTED]visual.force.com'. At the bottom right are 'Cancel' and 'Add' buttons, with 'Add' being highlighted.

Click “Add” button

Application integration

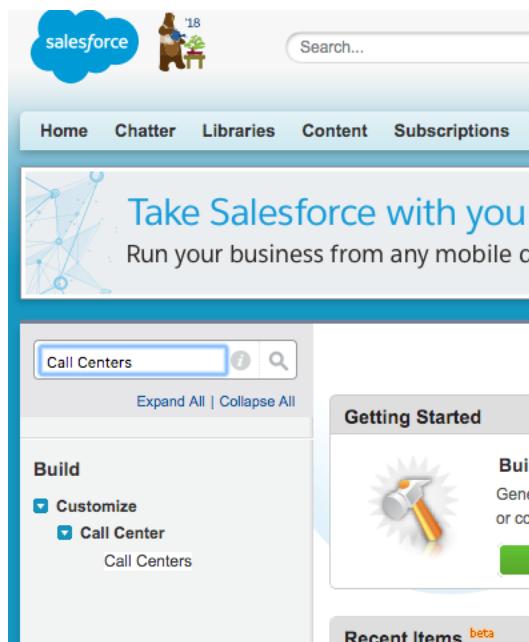
Amazon Connect can integrate with other products including Customer Relationship Management (CRM) and Workforce Management (WFM) products. Click on the link for details on how to set up integrations with Amazon Connect. [Learn more](#)

Approved origins

Once you integrated with a CRM product, add the origins (scheme + host + port) that Amazon Connect will need to have access to.

https://████████visual.force.com [remove](#)
[+ Add origin](#)

From the Salesforce Classic layout, select Setup then type Call Centers in the Quick Find field and select Call Centers.

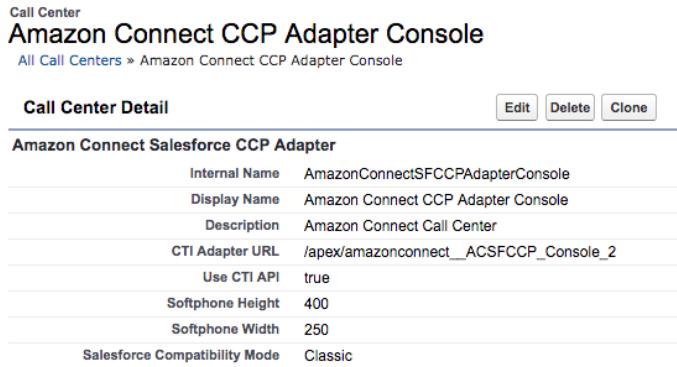


All Call Centers

A call center corresponds to a single computer-telephony integration (CTI) system already in place at your organization. Salesforce.com users must have the appropriate permissions to view and manage call centers.

| Action | Name ↑ | Import | Version |
|--|--|--------|---------|
| Edit Del | Amazon Connect CCP Adapter Classic | | |
| Edit Del | Amazon Connect CCP Adapter Console | | |
| Edit Del | Amazon Connect CCP Adapter Lightning | | |

Select “Amazon Connect CCP Adapter Console”



The screenshot shows the 'Call Center' section of the 'Amazon Connect CCP Adapter Console'. It displays the 'Call Center Detail' for the 'Amazon Connect Salesforce CCP Adapter'. The adapter has the following configuration:

| Amazon Connect Salesforce CCP Adapter | |
|---------------------------------------|--|
| Internal Name | AmazonConnectSFCCPAdapterConsole |
| Display Name | Amazon Connect CCP Adapter Console |
| Description | Amazon Connect Call Center |
| CTI Adapter URL | /apex/amazonconnect__ACSFCCP_Console_2 |
| Use CTI API | true |
| Softphone Height | 400 |
| Softphone Width | 250 |
| Salesforce Compatibility Mode | Classic |

Click on the Edit button. In the “Amazon Connect CCP URL” field, enter the name of your Amazon Connect instance in the following format:

<https://yourinstance-name.awsapps.com/connect/ccp>

For example:

<https://test10.awsapps.com/connect/ccp>

Click on the Save button. Click on the “Manage Call Center Users” button at the bottom of the page.



The screenshot shows the 'Call Center Users' page. At the top right, there is a 'Manage Call Center Users' button.

Call Center Amazon Connect CCP Adapter Console: Manage Users

All Call Centers » Amazon Connect CCP Adapter Console » Manage Users

View: [All](#) [Create New View](#)



The screenshot shows the 'Manage Users' page. At the top right, there are 'Add More Users' and 'Remove Users' buttons. Below them is a table with columns for 'Full Name', 'Alias', and 'Username'. A message at the bottom states 'No records to display.'

Click on the “Add More Users” button.

Call Center
Amazon Connect CCP Adapter Console: Search for New Users

All Call Centers » Amazon Connect CCP Adapter Console » Manage Users » Search for New Users

Set the search criteria below and then click Search to find salesforce.com users who should be enabled as call center agents.

| | | | |
|----------|----------|--|-----|
| --None-- | --None-- | | AND |
| --None-- | --None-- | | |

Filter By Additional Fields (Optional):

- You can use "or" filters by entering multiple items in the third column, separated by commas.
- For date fields, enter the value in following format: 23/05/2018
- For date/time fields, enter the value in following format: 23/05/2018 15:07

Set filters and click on the Find button. Select the checkbox next to the user and click “Add to Call Center” button.

| | | | | Add to Call Center | Cancel |
|--------------------------|--------------------------|-------|---|----------------------------------|---------|
| | Full Name | Alias | Username | Role | Profile |
| <input type="checkbox"/> | SFDCDryRun_AmazonConnect | ASfdc | [REDACTED]@gmail.com | System Administrator | |
| <input type="checkbox"/> | User_Integration | integ | integration@00d0n000001bsn5uua.com | Analytics Cloud Integration User | |
| <input type="checkbox"/> | User_Security | sec | insightssecurity@00d0n000001ban5uua.com | Analytics Cloud Security User | |

Repeat the steps to add more users.

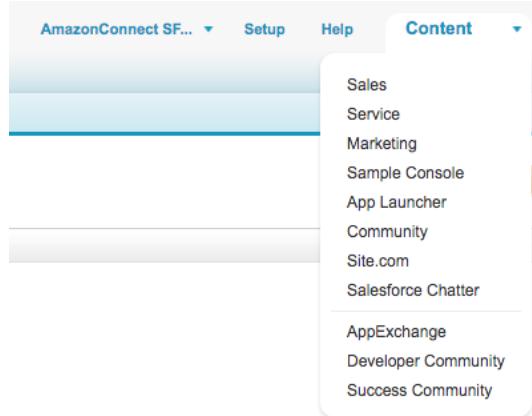
Call Center
Amazon Connect CCP Adapter Console: Manage Users

All Call Centers » Amazon Connect CCP Adapter Console » Manage Users

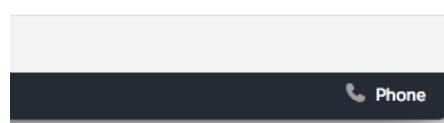
View: Create New View

| | | | Add More Users | Remove Users |
|---------------------------------|--------------------------|-------|----------------------|--------------|
| Action | Full Name | Alias | Username | |
| <input type="checkbox"/> Remove | SFDCDryRun_AmazonConnect | ASfdc | [REDACTED]@gmail.com | |

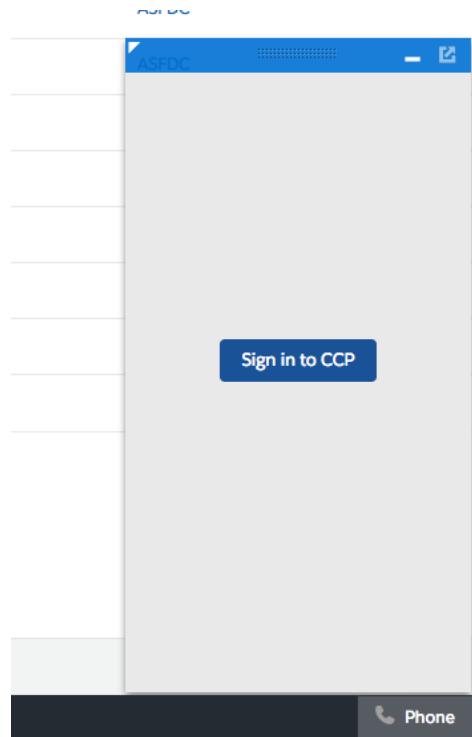
From the top-right corner, select Sample Console application.



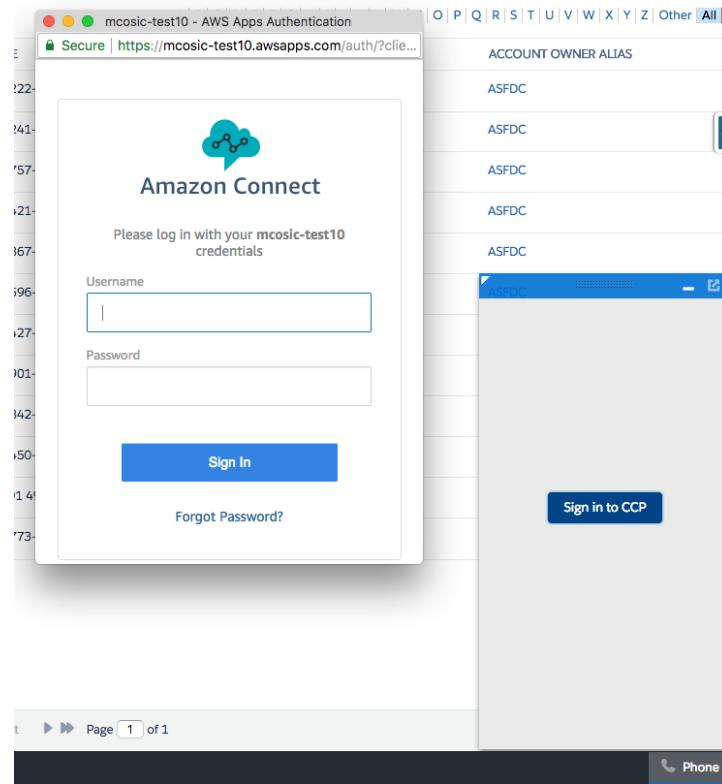
In the bottom-right corner, you will be able to see the Phone button.



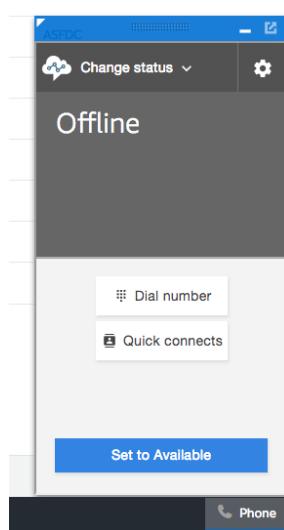
Click on the Phone button to open the softphone pop-up.



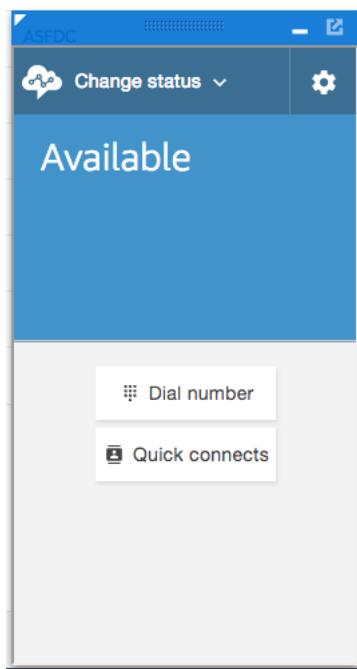
You will need to Sign in into your Amazon Connect CCP. Click on the Sign in to CCP button. A new modal pop-up will show, asking you to enter your credentials.



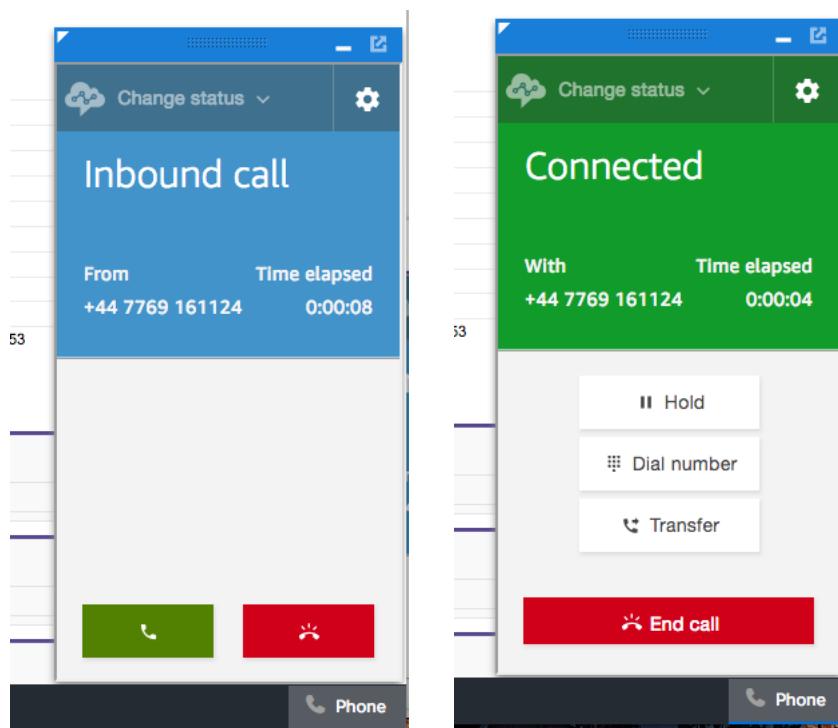
Enter your credentials and click Sign in. Allow Microphone access (if asked by browser). Once login is successful, the pop-up window will automatically close.



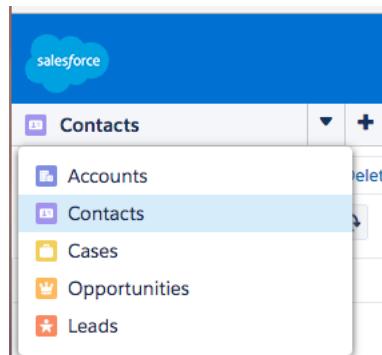
Select “Change status” and select “Available”.



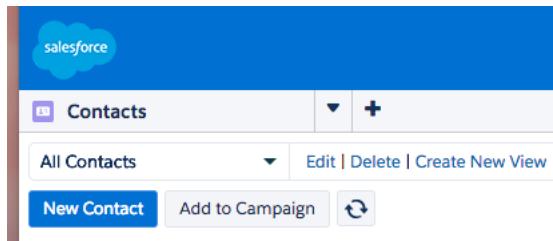
Make an inbound phone call to your Amazon Connect instance. The CCP is going to “ring” and you can answer the call.



At this time, I need to create a new Contact in Salesforce so that I can test a screen-pop by incoming phone number. Select Contacts from the dropdown menu:



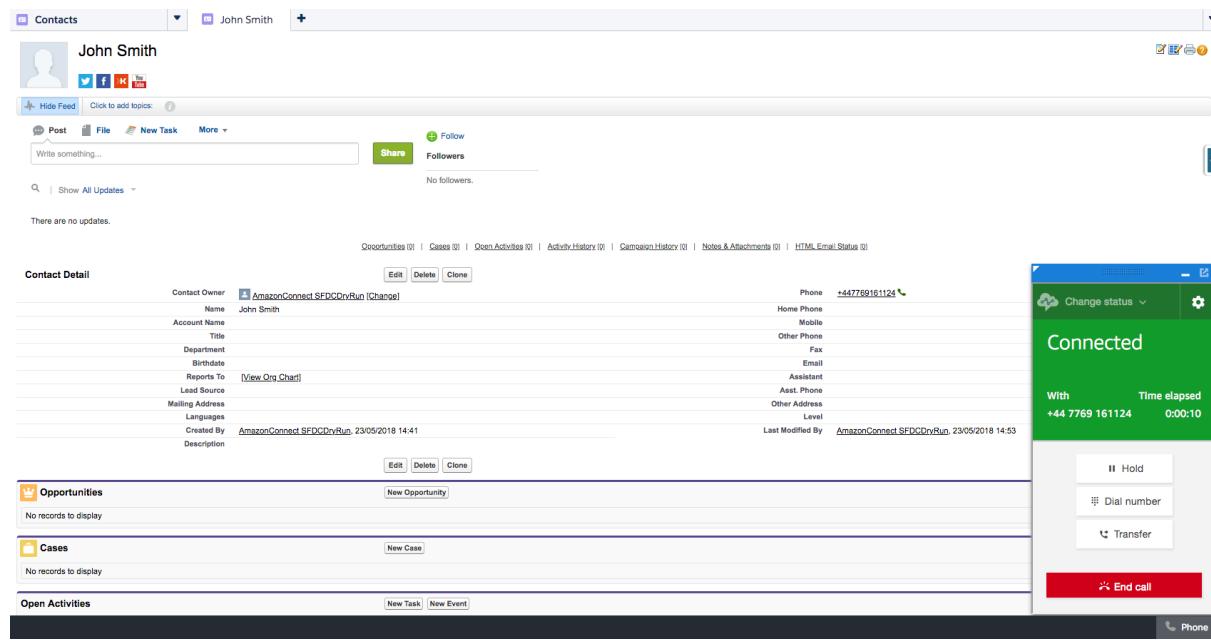
Select New from top-left corner



Fill in the details and click on the Save button.

Close the Contact tab by clicking on the X next to the Name and drop the phone call. Set your state to Available and make another phone call. This time, the new

contact should automatically pop-up as it has been recognized by incoming phone number.



Configure Classic Experience

The Salesforce Classic is the easiest to configure, but it has some limitations. Most important limitation is that, with Classic layout, there are no tabs and modal containers, so each time new object is selected, a full page reload occurs. This full reload causes softphone to be reloaded too, which could cause an issue in the voice call audio stream. Because of that, in the Classic environment, we have to run a separate instance of softphone (CPP) which will carry the audio, while embedded instance of CCP can be used for call control and screen-pop functionality.

First, we have to configure Amazon Connect integration.

In the Quick Find field, type Visualforce Pages and select Visual Force Pages:

The screenshot shows the Salesforce Visualforce Pages interface. On the left, there's a sidebar with 'Visualforce Pages' and 'Expand All | Collapse All' buttons. Below that is a 'Build' section with a 'Develop' checkbox checked, and under it, a 'Visualforce Pages' section. To the right is a table listing various pages:

| Action | Label | Name |
|--|--|----------------------------|
| Security Edit Download | ACSFCCP_CallLogging_View | ACSFCCP_CallLogging_View |
| Security Edit Download | ACSFCCP_CallRecordingCase | ACSFCCP_CallRecordingCase |
| Security Edit Download | ACSFCCP_CallRecordingTask | ACSFCCP_CallRecordingTask |
| Security Edit Download | ACSFCCP_Console_2 | ACSFCCP_Console_2 |
| Security Edit Download | ACSFCCP_Lightning_2 | ACSFCCP_Lightning_2 |
| Security Edit Download | ACSFCCP_PostCallUpdateTask | ACSFCCP_PostCallUpdateTask |
| Security Edit Download | ACSFCCP_Classic_1 | ACSFCCP_Classic_1 |
| Security Edit Download | ACSFCCP_Classic_2 | ACSFCCP_Classic_2 |
| Security Edit Download | ACSFCCP_Console_1 | ACSFCCP_Console_1 |
| Security Edit Download | ACSFCCP_Lightning_1 | ACSFCCP_Lightning_1 |

As we are currently setting up the Classic experience, click on ACSFCCP_Classic_2 page

The screenshot shows the 'Page Detail' page for the Visualforce Page 'amazonconnect_ACSFCCP_Classic_2'. The page includes fields for 'Label' (ACSFCCP_Classic_2), 'Namespace Prefix' (amazonconnect), and 'Name' (ACSFCCP_Classic_2). It also has a 'Where is this used?' button, a 'Preview' button, and a note indicating it's available for Lightning Experience, Lightning Communities, and the mobile app. There's also a checkbox for 'Require CSRF protection on GET requests'.

Click on the Preview button. New browser tab will open with the URL of this page. It's going to be in this format:

https://amazonconnect.sfcdInstance.visual.force.com/apex/ACSFCCP_Classic

This is what we are going to use as “Origin URL” in our Amazon Connect configuration. From AWS Console, select Amazon Connect service and then select your Amazon Connect instance:

The screenshot shows the Amazon Connect Overview page. On the left, there's a sidebar with navigation links: Overview (which is highlighted with an orange bar), Telephony, Data storage, Data streaming, Application integration, and Contact flows. The main content area has a title 'Overview' and displays the following information:

- Instance ARN:** arn:aws:connect:us-east-1:[REDACTED]instance/193a3ba0-286a-[REDACTED]
- Directory:** [REDACTED]test10
- Login URL:** https://[REDACTED]test10.awsapps.com/connect/login

At the bottom right, there's a button labeled 'Login as administrator'.

Select “Application Integration” on the left-hand side:

Amazon Connect > test10

Overview

Telephony

Data storage

Data streaming

Application integration

Contact flows

Application integration

Amazon Connect can integrate with other products including Customer Relationship Management (CRM) and Workforce Management (WFM) products. Click on the link for details on how to set up integrations with Amazon Connect. [Learn more](#)

Approved origins

Once you integrated with a CRM product, add the origins (scheme + host + port) that Amazon Connect will need to have access to.

+ Add origin

Click on “Add origin” link and enter the origin URL

Add origin

Enter origin URL

Cancel **Add**

Click “Add” button

Application integration

Amazon Connect can integrate with other products including Customer Relationship Management (CRM) and Workforce Management (WFM) products. Click on the link for details on how to set up integrations with Amazon Connect. [Learn more](#)

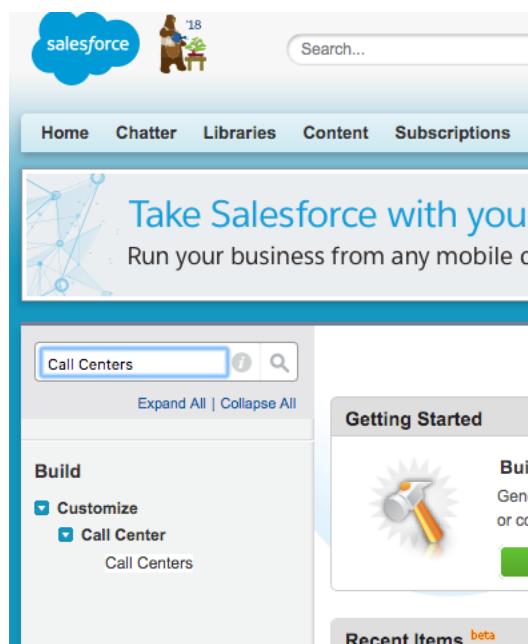
Approved origins

Once you integrated with a CRM product, add the origins (scheme + host + port) that Amazon Connect will need to have access to.

https://████████ visual.force.com [remove](#)

[+ Add origin](#)

From the Salesforce Classic layout, select Setup then type Call Centers in the Quick Find field and select Call Centers.



All Call Centers

A call center corresponds to a single computer-telephony integration (CTI) system already in place at your organization. Salesforce.com users must...

| Action | Name ↑ | Import | Version |
|--|--|--------|---------|
| Edit Del | Amazon Connect CCP Adapter Classic | | |
| Edit Del | Amazon Connect CCP Adapter Console | | |
| Edit Del | Amazon Connect CCP Adapter Lightning | | |

Select “Amazon Connect CCP Adapter Classic”

| | Internal Name | Display Name | Description | CTI Adapter URL | Use CTI API | Softphone Height | Softphone Width | Salesforce Compatibility Mode |
|--|----------------------------------|------------------------------------|----------------------------|--|-------------|------------------|-----------------|-------------------------------|
| | AmazonConnectSFCCPAdapterClassic | Amazon Connect CCP Adapter Classic | Amazon Connect Call Center | /apex/amazonconnect__ACSFCCP_Classic_2 | true | 400 | 250 | Classic |

Click on the Edit button. In the “Amazon Connect CCP URL” field, enter the name of your Amazon Connect instance in the following format:

<https://yourinstance-name.awsapps.com/connect/ccp>

For example:

<https://test10.awsapps.com/connect/ccp>

Click on the Save button. Click on the “Manage Call Center Users” button at the bottom of the page.

| Total | 0 |
|-------|---|
|-------|---|

Call Center Amazon Connect CCP Adapter Classic: Manage Users

All Call Centers » Amazon Connect CCP Adapter Classic » Manage Users

View: [All](#) [Create New View](#)

| Full Name ↑ | Alias | Username |
|------------------------|-------|----------|
| No records to display. | | |

Click on the “Add More Users” button.

Call Center

Amazon Connect CCP Adapter Classic: Search for New Users

All Call Centers » Amazon Connect CCP Adapter Classic » Manage Users » Search for New Users

Set the search criteria below and then click Search to find salesforce.com users who should be enabled as

| | | | | | |
|----------|----------|----------|----------|--|-----|
| --None-- | dropdown | --None-- | dropdown | | AND |
| --None-- | dropdown | --None-- | dropdown | | AND |
| --None-- | dropdown | --None-- | dropdown | | AND |
| --None-- | dropdown | --None-- | dropdown | | AND |
| --None-- | dropdown | --None-- | dropdown | | |

Filter By Additional Fields (Optional):

- You can use "or" filters by entering multiple items in the third column, separated by commas.
- For date fields, enter the value in following format: 23/05/2018
- For date/time fields, enter the value in following format: 23/05/2018 15:42

Set filters and click on the Find button. Select the checkbox next to the user and click “Add to Call Center” button.

| | | | | Add to Call Center | Cancel |
|--|-------|---|------|----------------------------------|--------|
| Full Name | Alias | Username | Role | Profile | |
| <input checked="" type="checkbox"/> SFDCDryRun_AmazonConnect | ASfdc | [REDACTED]@gmail.com | | System Administrator | |
| <input type="checkbox"/> User_Integration | integ | integration@00d0n000001bsn5uaa.com | | Analytics Cloud Integration User | |
| <input type="checkbox"/> User_Security | sec | insightssecurity@00d0n000001ben5uaa.com | | Analytics Cloud Security User | |

Repeat the steps to add more users.

Call Center

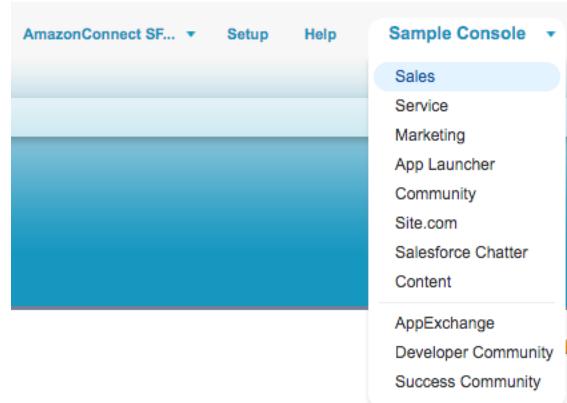
Amazon Connect CCP Adapter Classic: Manage Users

All Call Centers » Amazon Connect CCP Adapter Classic » Manage Users

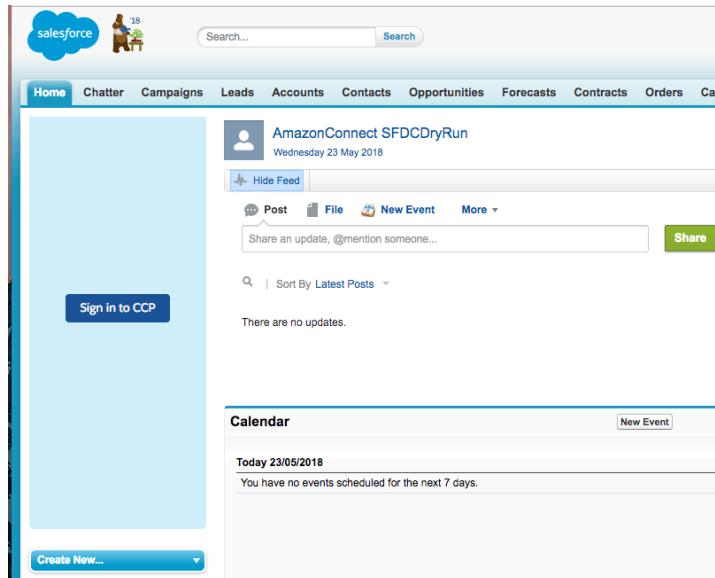
View:

| | | | Add More Users | Remove Users |
|---------------------------------|--------------------------|-------|-----------------------|--------------|
| Action | Full Name | Alias | Username | |
| <input type="checkbox"/> Remove | SFDCDryRun_AmazonConnect | ASfdc | acsfcdryrun@gmail.com | |

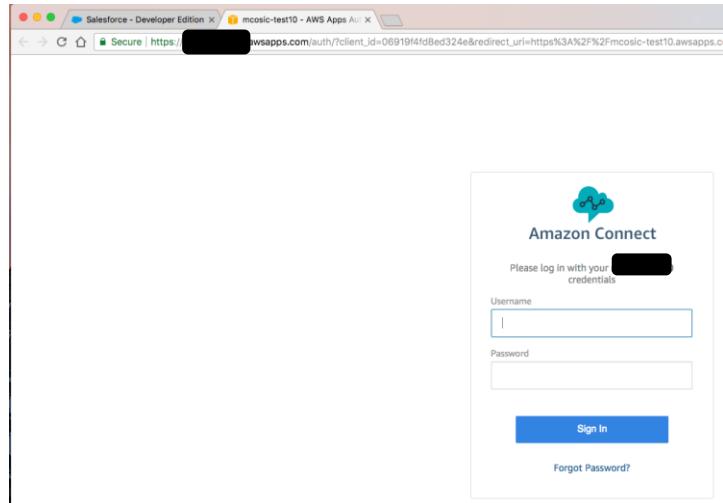
From the top-right corner, select Sales application.



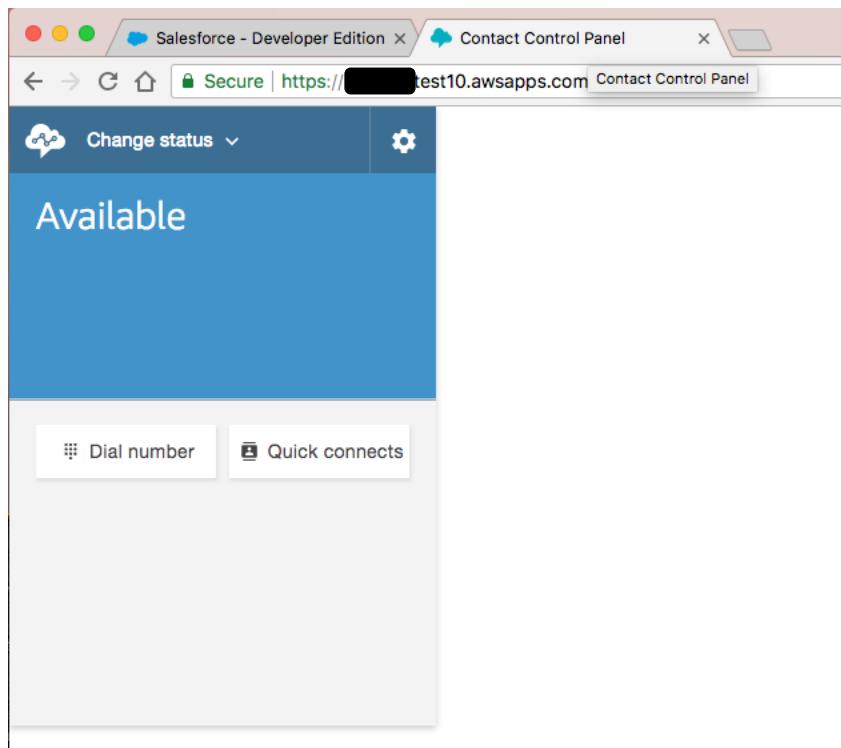
On the left-hand side, you will be able to see the Phone container.



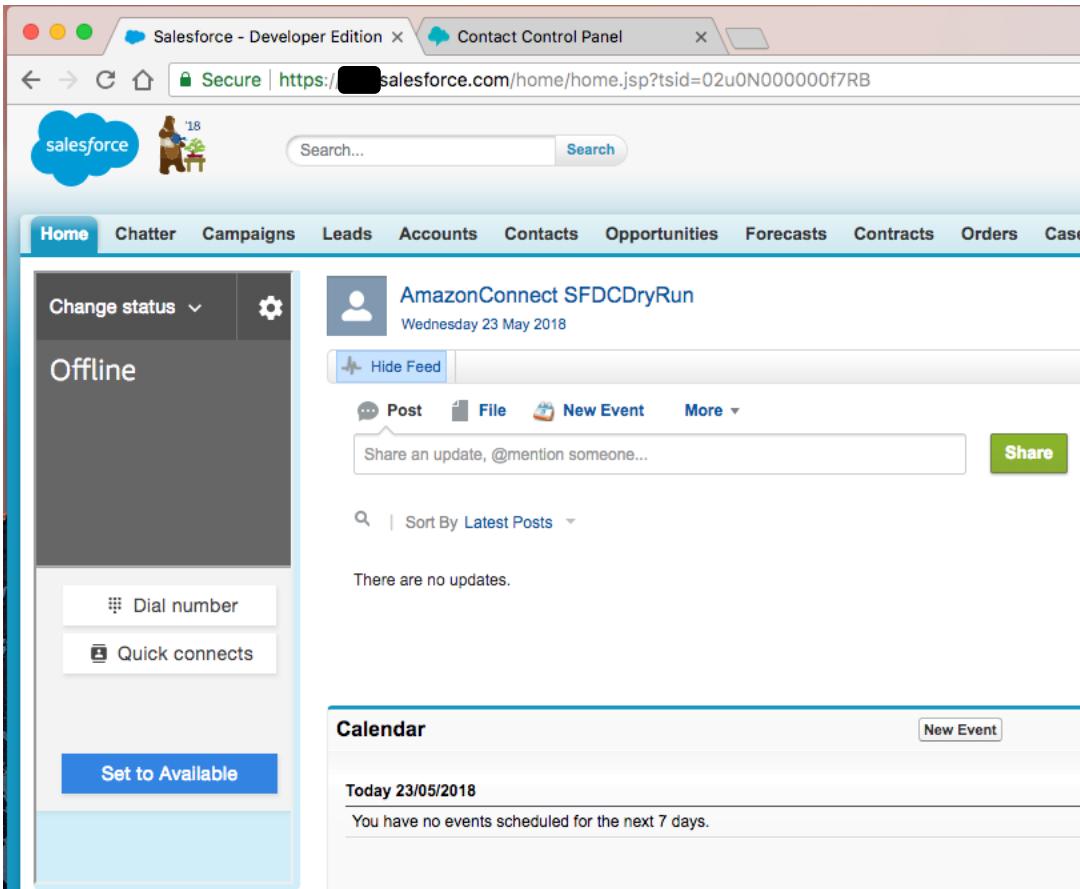
You will need to Sign in into your Amazon Connect CCP. Click on the Sign in to CCP button. A new browser tab will open, asking you to enter your credentials.



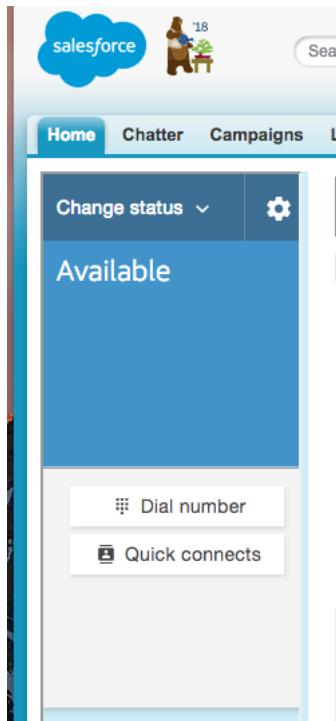
Enter your credentials and click Sign in. Allow Microphone access (if asked by browser). Once Login is successful, the new tab with CCP will stay open, as this tab is going to carry the audio for voice calls.



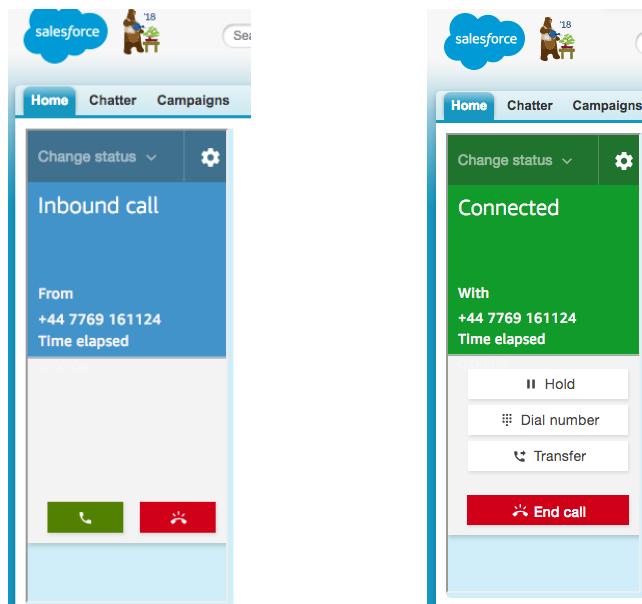
Switch back to Salesforce tab in your browser.



Select “Change status” and select “Available”.

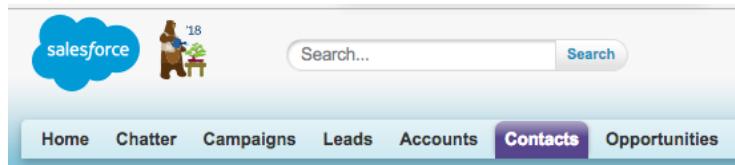


Make an inbound phone call to your Amazon Connect instance. The CCP is going to “ring” and you can answer the call.

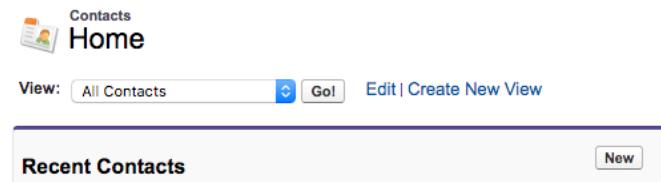


At this time, I need to create a new Contact in Salesforce so that I can test a screen-pop by incoming phone number.

Select Contacts from the main menu bar:



Click on the New button



Fill in the details and click on the Save button.

A screenshot of the Salesforce Contact Edit page for a new contact. The title bar says "Contact Edit" and "New Contact". Below it is a message: "Contacts not associated with accounts are private and cannot be viewed by other users or included in reports." The main form is titled "Contact Information". It contains fields for Contact Owner (set to "AmazonConnect SFCDryRun"), Salutation (dropdown menu), First Name ("John"), Last Name ("Smith"), Account Name (dropdown menu), Title (text input), Department (text input), Birthdate (text input), Reports To (dropdown menu), and Lead Source (dropdown menu). To the right of these fields are additional fields: Phone (+4477...), Home Phone (text input), Mobile (text input), Other Phone (text input), Fax (text input), Email (text input), Assistant (text input), and Asst. Phone (text input). At the top right of the form are "Save", "Save & New", and "Cancel" buttons.

John Smith

Contact Owner: AmazonConnect SFDCDryRun [Change]

Name: John Smith

Account Name:

Title:

Department:

Birthdate:

Reports To: [View Org Chart]

Lead Source:

Mailing Address:

Languages:

Created By: AmazonConnect SFDCDryRun, 23/05/2018 14:41

Last Modified By: AmazonConnect SFDCDryRun, 23/05/2018 15:53

Go back to the Home page and drop the phone call.

Available

Dial number

Quick connects

AmazonConnect SFDCDryRun
Wednesday 23 May 2018

Hide Feed

Post File New Event More

Share an update, @mention someone...

Sort By Latest Posts

There are no updates.

Calendar

Today 23/05/2018

You have no events scheduled for the next 7 days.

Set your state to Available and make another phone call. This time, the new contact should automatically pop-up as it has been recognised by incoming phone number.

The page is fully reloaded, but the softphone preserved the audio stream, as another instance of CCP was running in the 2nd tab. If the 2nd tab is closed, the audio will be lost. The 2nd CCP instance can also run in a separate browser window, if preferred.

Go to Salesforce Setup page and type Call Centers in Quick Find, then select Call Centers.

All Call Centers

A call center corresponds to a single computer-telephony integration (CTI) system already in place at your organization. Salesforce.com users must

| Action | Name | Import | Version |
|------------|--------------------------------------|--------|---------|
| Edit Del | Amazon Connect CCP Adapter Classic | | |
| Edit Del | Amazon Connect CCP Adapter Console | | |
| Edit Del | Amazon Connect CCP Adapter Lightning | | |

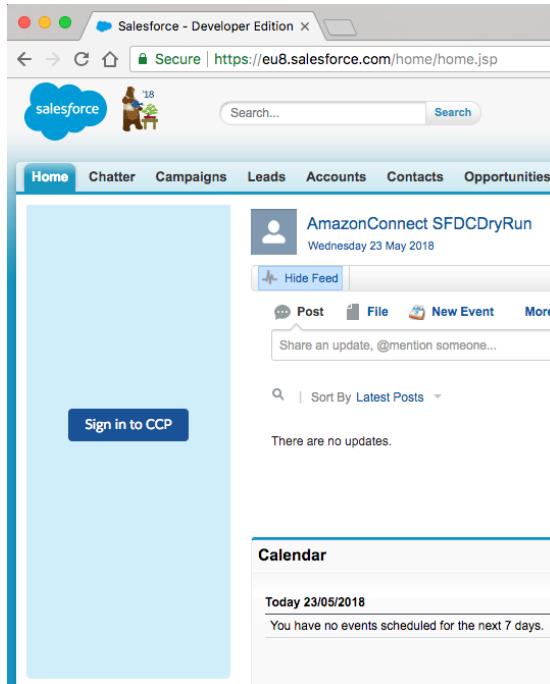
Select “Amazon Connect CCP Classic”

Call Center
Amazon Connect CCP Adapter Classic
[All Call Centers](#) » [Amazon Connect CCP Adapter Classic](#)

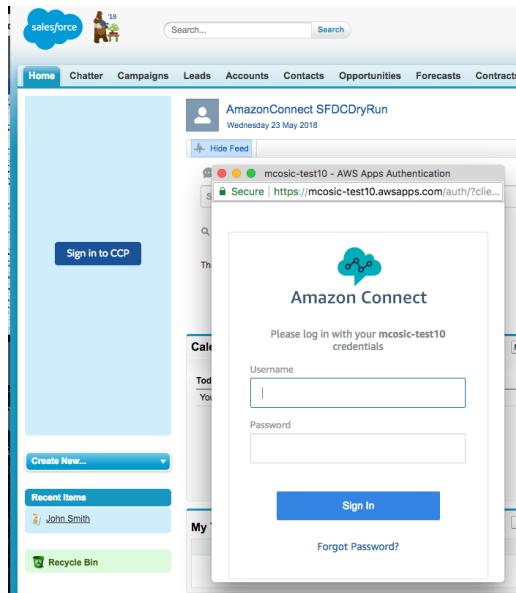
| Call Center Detail | |
|---|------------------------------------|
| Edit Delete Clone | |
| Amazon Connect Salesforce CCP Adapter | |
| Internal Name | AmazonConnectSFCCPAdapterClassic |
| Display Name | Amazon Connect CCP Adapter Classic |
| Description | Amazon Connect Call Center |
| CTI Adapter URL | /apex/ACSFCCP_Classic |
| Use CTI API | true |
| Softphone Height | 400 |
| Softphone Width | 250 |
| Salesforce Compatibility Mode | Classic |

Click on the Edit button and find the “Amazon Connect CCP Login Popup” field. By default, this field is set to “false”, which means that Login Popup will be opened in a 2nd tab. If we change this value to “true”, then Login Popup will be opened in a new browser window.

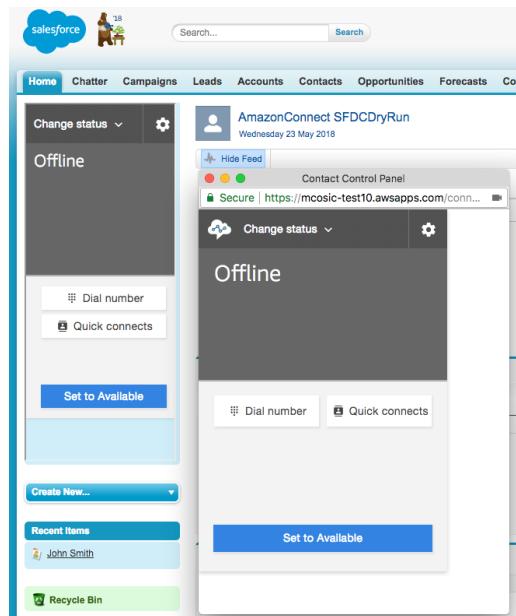
You may also notice that “Amazon Connect CCP Medialess” field is set to “true”. This basically means that embedded CCP instance will not carry any media. Set the value to “true” and click on the Save button. Go back to Sales application. If CCP is already logged in, please log out.



Click on the “Sign in to CCP” button and new browser window will open, asking you for credentials.



Enter your credentials and click Sign In. The CCP application will log in, but popup window will stay open and it will host the 2nd CCP which will carry the audio stream. This window can be minimized or moved to 2nd screen.



Amazon Connect SSO/SAML Support

Amazon Connect Salesforce CTI Adapter fully supports SSO/SAML integration. To configure your SSO integration, open Salesforce Setup page, type Call Centers in Quick Find and select Call Centers.

The screenshot shows the Salesforce Setup interface with the following details:

- Setup** tab selected in the top navigation bar.
- Call Centers** selected in the left sidebar under the **Call Center** section.
- All Call Centers** page displayed.
- A message at the top states: "A call center corresponds to a single computer-telephony integration (CTI) system already in place at your organization. Salesforce.com users must be..."
- A table lists three call center configurations:

| Action | Name | Version |
|------------|--------------------------------------|---------|
| Edit Del | Amazon Connect CCP Adapter Classic | |
| Edit Del | Amazon Connect CCP Adapter Console | |
| Edit Del | Amazon Connect CCP Adapter Lightning | |
- A note at the bottom left says: "Didn't find what you were looking for? [Search all of Setup instead.](#)"

Choose one of the Call Center configurations, based on your current environment. In this case, I'm going to select Lightning.

The screenshot shows the Call Center Detail page for the "Amazon Connect CCP Adapter Lightning" configuration:

- Call Center** header.
- Amazon Connect CCP Adapter Lightning** title.
- All Call Centers** > **Amazon Connect CCP Adapter Lightning**.
- Call Center Detail** section with **Edit**, **Delete**, and **Clone** buttons.
- Amazon Connect Salesforce CCP Adapter** settings table:

| | |
|-------------------------------|--|
| Internal Name | AmazonConnectSFCCPAdapterLightning |
| Display Name | Amazon Connect CCP Adapter Lightning |
| Description | Amazon Connect Call Center |
| CTI Adapter URL | /apex/amazonconnect__ACSFCCP_Lightning_2 |
| Use CTI API | true |
| Softphone Height | 400 |
| Softphone Width | 250 |
| Salesforce Compatibility Mode | Lightning |

Click Edit and find Amazon Connect CCP SSO URL and Amazon Connect CCP SSO Relay fields in the form.

The screenshot shows the **Amazon Connect Information** configuration form:

| Amazon Connect CCP URL | <input type="text" value="https://[REDACTED].test9.aw"/> |
|------------------------------|--|
| Amazon Connect CCP SSO URL | <input type="text"/> |
| Amazon Connect CCP SSO Relay | <input type="text"/> |

Amazon Connect CCP SSO URL has to be set to your IDP login page. In this example, I am using Microsoft AD Federation Service (ADFS), so the URL will be:

<https://sts.yourcorpdomain.com/adfs/ls/idpinitiatedsignon.aspx>

Amazon Connect CCP SSO Relay is used to open CCP automatically after the login. To create Relay string, you may use an online tool (for [example](#) <http://jackstromberg.com/adfs-relay-state-generator/>)

ADFS RelayState Generator

AD FS 2.0 (Rollup 2 and Greater) RelayState Generator for IDP Initiated Signon

IDP URL String

Relying Party Identifier

Relay State / Target App

IDP URL String is your IDP login URL
(<https://sts.yourcorpdomain.com/adfs/ls/idpinitiatedsignon.aspx>)

Relying Party Identifier should be set to: *urn:amazon:webservices*

IDP URL String

Relying Party Identifier

Relay State / Target App has to be set to Amazon Connect CCP URL in the following format:

<https://console.aws.amazon.com/connect/federate/instanceId?destination=%2Fconnect%2Fccp>

You Amazon Connect instanceId can be found in the AWS Console:



In my example, the instanceID is *foc669ee-21dc-43c3-b5b0-4e825dfc198b*. My final Target App URL is:

<https://console.aws.amazon.com/connect/federate/foc669ee-21dc-43c3-b5b0-4e825dfc198b?destination=%2Fconnect%2Fccp>

ADFS RelayState Generator

AD FS 2.0 (Rollup 2 and Greater) RelayState Generator for IDP Initiated Signon

| | |
|---|---|
| IDP URL String | <input type="text" value="https://sts.mcosiccorp.tk/adfs/ls/idpinitiatedsignon.aspx"/> |
| Relying Party Identifier | <input type="text" value="urn:amazonwebservices"/> |
| Relay State / Target App | <input type="text" value="https://console.aws.amazon.com/connect/federate/0c669ee-21dc-43c3-b5b0-4e825dfc198b?destination=%2Fconne"/> |
| <input type="button" value="Generate URL"/> | |

Click on the Generate URL:

Results:

```
https://sts.mcosiccorp.tk/adfs/ls/idpinitiatedsignon.aspx?
RelayState=RPID%3Durn%253Aamazon%253Awebservices%26RelayState%3Dhttps%253A
%252F%252Fconsole.aws.amazon.com%252Fconnect%252Ffederate%252F0c669ee-21dc-
43c3-b5b0-4e825dfc198b%253Fdestination%253D%25252Fconnect%25252Fccp
```

Amazon Connect CCP SSO Relay is going to be set to everything on the right side from “?” in the Result that we’ve got. In my example, that is:

```
RelayState=RPID%3Durn%253Aamazon%253Awebservices%26RelayState%3D
https%253A%252F%252Fconsole.aws.amazon.com%252Fconnect%252Ffeder
ate%252F0c669ee-21dc-43c3-b5b0-
4e825dfc198b%253Fdestination%253D%25252Fconnect%25252Fccp
```

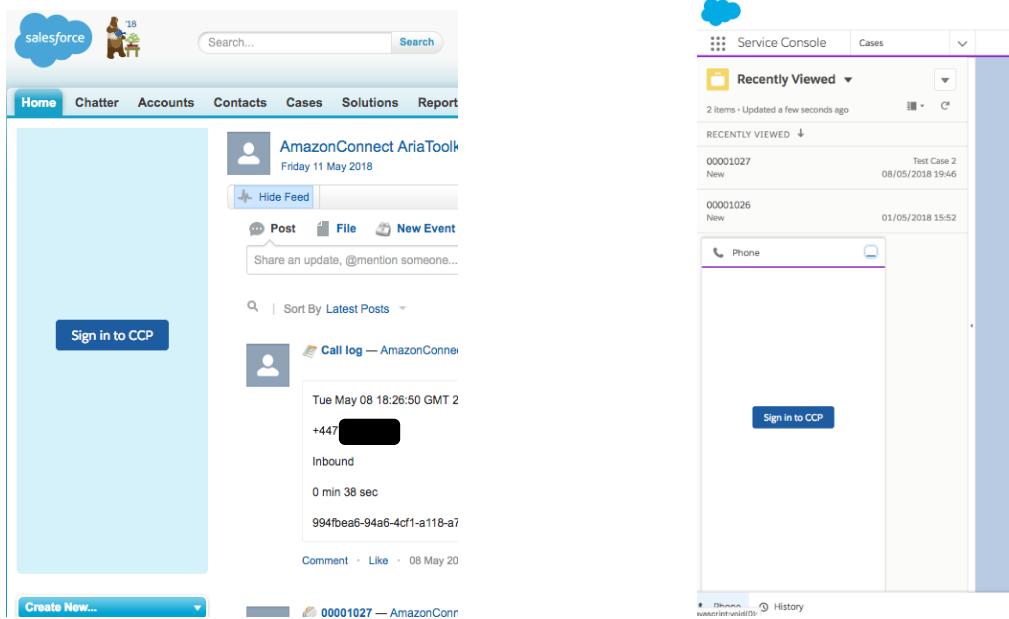
Once both fields are set, Click on the Save button:

| | |
|-----------------------------------|---|
| Amazon Connect Information | |
| Amazon Connect CCP URL | <input type="text" value="https://[REDACTED]test9.aw"/> |
| Amazon Connect CCP SSO URL | <input type="text" value="https://[REDACTED].t"/> |
| Amazon Connect CCP SSO Relay | <input type="text" value="RelayState=RPID%3Durn%253Dhttps%253A%252F%252Fconsole.aws.amazon.com%252Fconnect%252Ffederate%252F0c669ee-21dc-43c3-b5b0-4e825dfc198b%253Fdestination%253D%25252Fconnect%25252Fccp"/> |

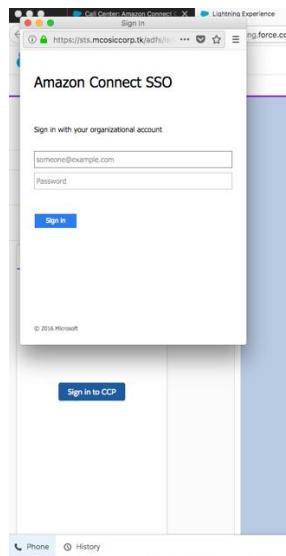
The final setup will look like this:

| Amazon Connect Information | |
|------------------------------|--|
| Amazon Connect CCP URL | https://test9.awsapps.com/connect/ccp |
| Amazon Connect CCP SSO URL | https://sts.amazonaws.com/federation/acslogon.aspx |
| Amazon Connect CCP SSO Relay | RelayState=RPID%3Durn%253Aamazon%253Aweservices%26RelayState%3Dhttps%253A%252Fconsole.aws.amazon.com%252Fconnect%252Ffederate%252Fccp%253Fdestination%253D%25252Fconnect%25252Fccp |

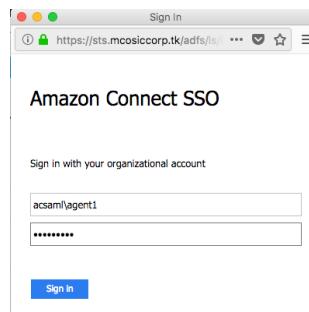
From this point, you can go back to your Salesforce application and open Softphone container. These are examples for Classic and Lightning environments.



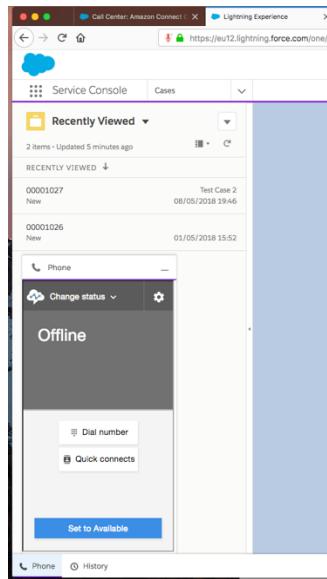
Once you click on “Sign in to CCP” button, a popup is presented, asking for credentials. This is the login page from your IDP.



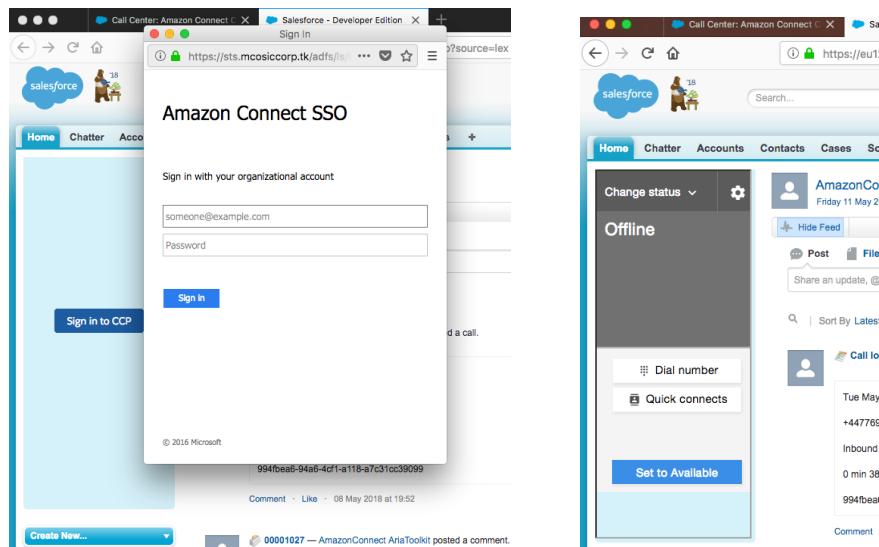
Enter domain credentials and click Sign in



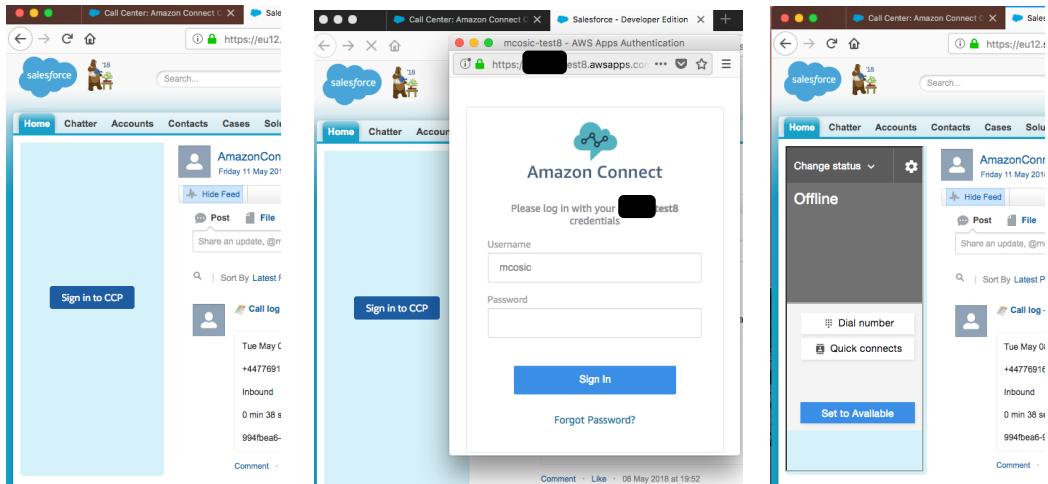
Once logged in, the login popup disappears and CCP shows up in the SFDC Phone container:



We have similar behaviour with Classic, with only difference that 2nd instance of CCP (popup window) stays open after login, as that instance will carry the audio stream from a voice call.



If the **Amazon Connect CCP SSO URL** filed on the Call Center configuration for is empty, SSO/SAML will not be enabled and Amazon Connect will use standard AWS login form.



Medialess CCP and VDI support

Amazon Connect CTI Connector supports VDI deployments, by allowing Medialess CCP instance to be embedded in the Salesforce. This instance will be used for call control and screen-pop only, while additional CCP instance carrying audio stream can run locally.

In the Call Center configuration forms, there are 3 parameters which enable a flexible configuration of embedded CCP (softphone).

| | |
|--------------------------------|-------|
| Amazon Connect CCP Medialess | true |
| Amazon Connect CCP Login Popup | true |
| Amazon Connect CCP Auto-Close | false |

Amazon Connect CCP Medialess will support VDI deployments, where the CCP instance running in Salesforce won't have voice media in it. It also supports Salesforce Classic environment.

Amazon Connect CCP Login Popup - when this parameter is set to true, we will have a login form in a popup window, whilst if it's set to false, the login form will be opened in a new tab. It supports both non-SSO and SSO deployments.

Amazon Connect CCP Auto-Close when this parameter is set to true, the popup window (or new tab) will be automatically closed upon login, otherwise it would stay opened.

For VDI deployments, we would set **Amazon Connect CCP Medialess = true** and **Amazon Connect CCP Auto-Close = true** while **Amazon Connect CCP Login Popup** can be either true or false (probably true).

This way, the browser hosting Salesforce would have a single CCP instance, without media, while another CCP instance would run locally with voice enabled.

For Salesforce Classic environments, we would set **Amazon Connect CCP Auto-Close** to false, so that we have a CCP instance carrying media, while agent is browsing through different pages in Salesforce Classic. That CCP instance can run in a separate tab (**Amazon Connect CCP Login Popup = false**) or in a separate popup window (**Amazon Connect CCP Login Popup = true**) – depending on the customer preference. Also, we would set **Amazon Connect CCP Medialess=true** so that CCP instance running in Salesforce doesn't carry voice media. Instead, media will go through CCP instance in new tab or popup window.

Auto-login feature

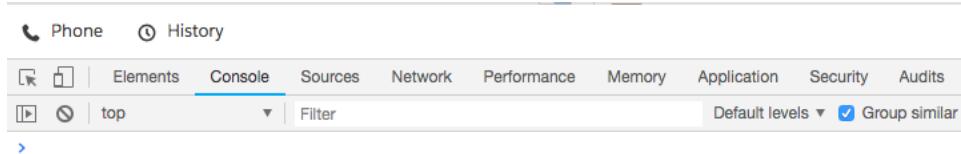
Amazon Connect CTI Connector supports the auto-login feature, by simulating the “Sign in to CCP” button click, upon logging in to the Salesforce. The behaviour is controlled by “Amazon Connect CCP Auto-login” parameter in the Call Center adaptor configuration.

Amazon Connect CCP Auto-Login 5

The parameter expects a number (integer), which determine the number of seconds to wait before the auto-login is executed. The default value is set to 5 (seconds), but this value can be increased or decreased, or it can be set to 0, which disables the auto-login.

The optimal value can be set by examining results from few load tests. The main idea is to login (simulate the Login button click) as soon as Salesforce page is loaded when a CCP user was not already logged in, but to prevent Login button click if a Salesforce page is reloaded when the CCP user is already logged in. In case when CCP user is already logged in and Salesforce page is refreshed, the Login button shows up for a couple of seconds and then CCP automatically loads up, so there is no need to login again.

To check how fast CCP loads in your environment, leave the default value of 5 seconds, login into the Salesforce, wait for 5 seconds for CCP to log in (enter the credentials if/when prompted) and wait for CCP to loads up completely. Open the Developer Tools in your browser and clean up the Console:



Refresh the page and wait for Salesforce and CCP to fully reload.

First, look for the following log record in you Console:

```
[2018-09-07T10:51:15.099Z] [INFO]: ConnectSFCCP:cbInConsole:connectAutoLogin=5000
```

This is the moment when timer for auto-login is initialised, in this case it's 10:51:15.099, and the timer value is 5 seconds (5000 ms).

The next message we need to find is:

```
[2018-09-07T10:51:17.759Z] [INFO]: ConnectSFCCP:onSoftphoneLoginSuccessful invoked
```

This indicates the moment when timer is stopped, because the CCP is already logged in and loaded.

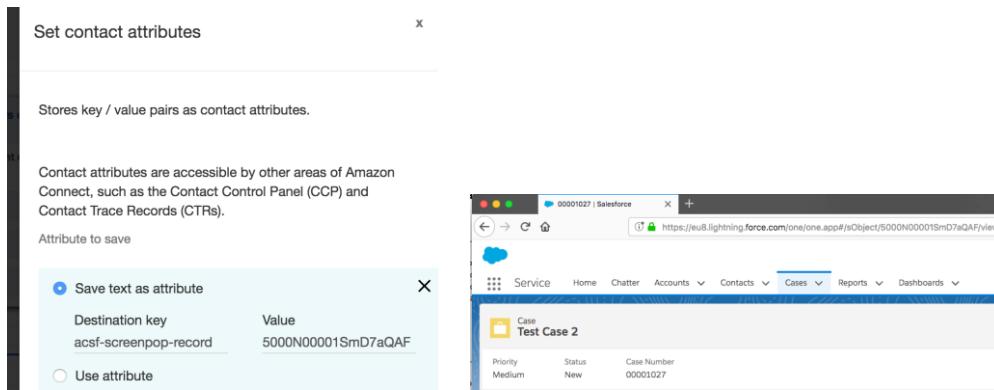
The time difference between the first message (10:51:15.099) and the second message (10:51:17.759) is just less than 3 seconds. That's the time needed for an already logged in CCP to load and the “Amazon Connect CCP Auto-Login” value should be longer than that. In this case, it would be possible to decrease the default value of 5 seconds to 4 seconds, but it's recommended that the test is repeated few times, on a representative agent's PC.

Enhanced search for screen-pop

There are a couple of special attributes that can be set to drive the screen pop behavior for the agent upon ringing of the call. The attributes are exclusive, meaning that only one attribute will be processed, while the other will be ignored. The following list describes the attributes in the order there are evaluated.

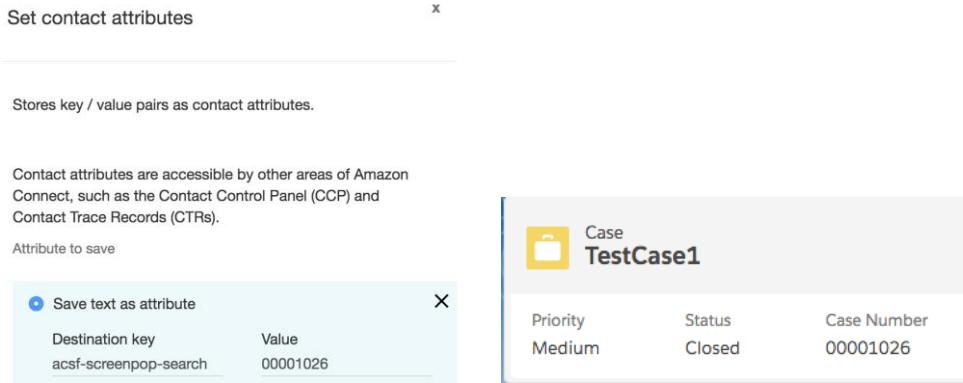
Search specific record: acsf-screenpop-record - To screen pop a specific Salesforce record, for example a case, the ID of that record needs to be stored in an attribute called “acsf-screenpop-record”. If present, the Softphone will screen pop this specific record when the call is assigned to the agent.

Please note that this is an internal object ID, for example internal case ID, not the Case Number that is displayed in the Salesforce application (internal ID is displayed in the URL). You can use ‘Set contact attributes’ in the Amazon Connect Contact Flow to set the value.



Full Search: acsf-screenpop-search - To search for a value other than the caller’s phone number, set that value in an attribute called “acsf-screenpop-search”. When the call is assigned to the agent, the Softphone will submit this value for search. The resulting screen pop will depend on your Softphone Layout configuration within Salesforce (you have to specify searchable objects in the Softphone Layout, like described in the first section of this document).

For example, you may search by Case Number that is displayed in the Salesforce application.



If neither of those two contact attributes are present, the Softphone will search for the caller's phone number in Salesforce. The resulting screen pop will depend on your Softphone Layout configuration within Salesforce.

For details on how to configure screen pops using Salesforce's Softphone Layout feature, please visit:

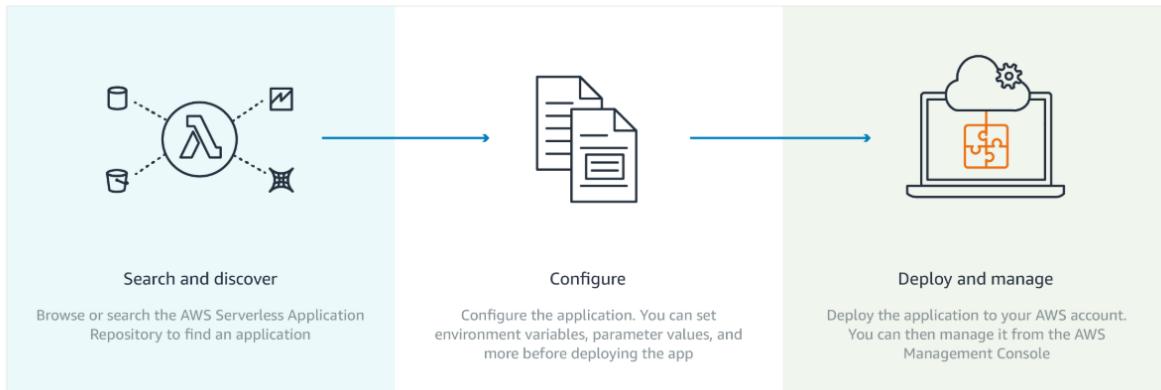
https://help.salesforce.com/articleView?id=cti_admin_phonelayoutscreate.htm&type=5

Installing the Amazon Connect Salesforce Lambda package

This section will guide you through the installation process of Amazon Connect Salesforce Lambda package, which is hosted in AWS Serverless Application Repository.

The AWS Serverless Application Repository enables you to quickly deploy code samples, components, and complete applications. Each application is packaged with an AWS Serverless Application Model (SAM) template that defines the AWS resources used. There is no additional charge to use the Serverless Application Repository - you only pay for the AWS resources used in the applications you deploy.

How it works: Deploying applications



Prerequisites

Determine your production Environment

In your installation notes, enter the value for “Production Environment” as “true” or “false”, depending on whether the Salesforce environment that you are deploying the package into is a production or a sandbox. For Production, enter “true”. For Sandbox enter “false”.

Determine your Consumer Key and Secret

To leverage the full potential of the integration, Salesforce data needs to be accessed from AWS environment. The AWS Serverless package comes with a set of pre-built queries to lookup, update and create Salesforce objects within Amazon Connect Contact Flows, in form of AWS Lambda functions.

The Lambda function access Salesforce using the Salesforce REST API. To get access to the environment, a Connected App must be configured with OAuth settings enabled.

1. Log in to Salesforce
2. Navigate to Setup > Create > Apps

Apps

An app is a group of tabs that work as a unit to provide functionality. Users can switch between apps using the app drop-down menu at the top-right corner of every page.

You can customize existing apps to match the way you work, or build new apps by grouping standard and custom tabs.

Custom apps work in conjunction with User Profile Tab Visibility settings. [View User Profiles now.](#)

| Action | App Label | Console | Custom | Description | Quick Start | New | Reorder | App Help |
|--------|--------------------|-------------------------------------|--------------------------|---|-------------|-----|---------|----------|
| Edit | App Launcher | <input type="checkbox"/> | <input type="checkbox"/> | App Launcher tab | | | | |
| Edit | Community | <input type="checkbox"/> | <input type="checkbox"/> | Salesforce CRM Communities | | | | |
| Edit | Content | <input type="checkbox"/> | <input type="checkbox"/> | Salesforce CRM Content | | | | |
| Edit | Marketing | <input type="checkbox"/> | <input type="checkbox"/> | Best-in-class on-demand marketing automation | | | | |
| Edit | Platform | <input type="checkbox"/> | <input type="checkbox"/> | The fundamental Lightning Platform | | | | |
| Edit | Sales | <input type="checkbox"/> | <input type="checkbox"/> | The world's most popular sales force automation (SFA) solution | | | | |
| Edit | Salesforce Chatter | <input type="checkbox"/> | <input type="checkbox"/> | The Salesforce Chatter social network, including profiles and feeds | | | | |
| Edit | Sample Console | <input checked="" type="checkbox"/> | <input type="checkbox"/> | (Salesforce Classic) Lets agents work with multiple records on one screen | | | | |
| Edit | Service | <input type="checkbox"/> | <input type="checkbox"/> | Manage customer service with accounts, contacts, cases, and more | | | | |
| Edit | Site.com | <input type="checkbox"/> | <input type="checkbox"/> | Build pixel-perfect, data-rich websites using the drag-and-drop Site.com application, and manage content and published sites. | | | | |

Subtab Apps

| Action | App Label | Description | Subtab Apps Help |
|--------|------------------|--|------------------|
| Edit | Profile (Others) | The table displayed when users view someone else's profile | |
| Edit | Profile (Self) | The table displayed when users view their own profile | |

Connected Apps

| Action | Connected App Name | Description | Connected Apps Help |
|--------|--------------------|-------------|---------------------|
| New | | | |

3. Click on the “New” button for the Connected Apps at the bottom of the page
4. In the following form, fill out the Connected App Name, API Name and Contact Email with values of your choice. We recommend “Amazon Connect Integration” as the Connected App Name and the default value for the API name.

New Connected App

[Save](#) [Cancel](#)

Basic Information

| | |
|--------------------|----------------------------|
| Connected App Name | Amazon Connect Integration |
| API Name | Amazon_Connect_Integration |
| Contact Email | |

5. Select the checkbox next to “Enable OAuth Settings” as shown below.

API (Enable OAuth Settings)

Enable OAuth Settings

6. Ensure the Callback URL is set to
<https://www.salesforce.comhttps://www.salesforce.com>

API (Enable OAuth Settings)

| | |
|------------------------|---|
| Enable OAuth Settings | <input checked="" type="checkbox"/> |
| Enable for Device Flow | <input type="checkbox"/> |
| Callback URL | https://www.salesforce.com |

7. Ensure Selected OAuth Scopes has the following values selected:
 - a. Access and manage your data (api)

- b. Access your basic information (id, profile, email, address, phone)

8. Select the checkbox “Require Secret for Web Server Flow”



9. Click “Save” at the bottom of the screen.

10. New Connected App

Allow from 2-10 minutes for your changes to take effect on the server before using the connected app.

[Continue](#) [Cancel](#)

11. Once the app has been created, on the app’s detail screen, please copy the “Consumer Key” value to your installation notes

12. Select “Click to reveal” next to Consumer Secret and record this value to “Consumer Secret” in your installation notes.

13. Click “Manage” at the top of the page

Connected App Name

Amazon Connect Integration

[« Back to List: Custom Apps](#)

[Edit](#) [Delete](#) [Manage](#)

14. On the page that appears, click “Edit Policies”

15. Set “Permitted Users” to “Admin approved users are pre-authorizes”



16. Click “OK” on the pop-up dialog:



17. Set “IP Relaxation” to “Relax IP restrictions”



18. Click “Save”

Determine your Username, Password and Security Token

The authentication of the Lambda Functions requires valid user credentials. It is a common practice to create an API user account for this purpose.

1. Log in to Salesforce
2. Navigate to Setup > Manage Users > Profiles
3. Click “New Profile”
4. Enter the Profile Name (i.e. “API Only”)
5. Select the existing profile to clone (The integration user's access to just those objects required for the integration)

The screenshot shows a 'New Profile' creation dialog. At the top, a note says 'You must select an existing profile to clone from.' Below are fields:

- Existing Profile: System Administrator
- User License: Salesforce
- Profile Name: API Only

At the bottom are 'Save' and 'Cancel' buttons.

NOTE: You're advised to use a full Salesforce License for the user to be able to set the below permissions and have full access to avoid any other errors.

6. Click “Save”

New Profile is created:

Profile
API Only
< Back to List: Profiles

Users with this profile have the permissions and page layouts listed below. Administrators can change a user's profile by editing that user's personal information.

If your organization uses Record Types, use the Edit links in the Record Type Settings section below to make one or more record types available to users with this profile.

Login IP Ranges | Enabled Apex Class Access | Enabled Visualforce Page Access | Enabled External Data Source Access | Enabled Named Credential Access | Enabled Service Presence Status Access | Enabled Custom Permissions

Profile Detail

| | | | | | |
|--------------|------------|----------------------|-----------------------|------------------------|----------------------------|
| Name | API Only | Edit | Clone | Delete | View Users |
| User License | Salesforce | | | | |
| Description | | | | | |

Custom Profile

7. Scroll down to “Password Policies” and click Edit:

Password Policies

| | |
|--|---------------------------------------|
| User passwords expire in | 90 days |
| Enforce password history | 3 passwords remembered |
| Minimum password length | 8 |
| Password complexity requirement | Must mix alpha and numeric characters |
| Password question requirement | Cannot contain password |
| Maximum invalid login attempts | 10 |
| Lockout effective period | 15 minutes |
| Obscure secret answer for password resets | <input type="checkbox"/> |
| Require a minimum 1 day password lifetime | <input type="checkbox"/> |
| Don't immediately expire links in forgot password emails | <input type="checkbox"/> |

[Edit](#) [Clone](#) [Delete](#) [View Users](#)

8. Set User password expire in “Never expires”

Password Policies

| | |
|--|--|
| User passwords expire in | Never expires |
| Enforce password history | No passwords remembered |
| Minimum password length | 8 |
| Password complexity requirement | Must mix alpha and numeric characters |
| Password question requirement | Cannot contain password |
| Maximum invalid login attempts | 10 |
| Lockout effective period | 15 minutes |
| Obscure secret answer for password resets | <input type="checkbox"/> |
| Require a minimum 1 day password lifetime | <input type="checkbox"/> |
| Don't immediately expire links in forgot password emails | <input type="checkbox"/> i |

Important: Failure to do this may lead to production outages.

9. Under Administrative Permissions, please make sure "Lightning Experience User" is unchecked

Lightning Experience User

10. Click “Save”

11. Navigate to Setup > Manage Apps > Connected Apps

12. Select the app you have created in the previous step (i.e. Amazon Connect Integration)

Connected Apps

Manage access to apps that connect to this Salesforce organization.

| App Access Settings | |
|---|--|
| <input checked="" type="checkbox"/> Allow users to install canvas personal apps | |

View: [All](#) [Create New View](#)

| Action | Master Label |
|----------------------|----------------------------|
| Edit | Amazon Connect Integration |

13. Click “Manage Profiles”

| Profiles | |
|---------------------------------------|--|
| Manage Profiles | |
| No profiles associated with this app. | |

14. Ensure the “API Only” profile is selected:

Application Profile Assignment

[« Back to Connected App Detail](#)

Select the appropriate profiles to choose which users have access to this application.

| Select | Profiles |
|-------------------------------------|--|
| <input type="checkbox"/> | Analytics Cloud Integration User |
| <input type="checkbox"/> | Analytics Cloud Security User |
| <input checked="" type="checkbox"/> | API Only |

15. Click “Save” at the bottom of the page.

16. Navigate to Setup > Manage Users > Users.

17. Click “New User”

All Users

On this page you can create, view, and manage users.

In addition, download SalesforceA to view and edit user details, reset passwords, and perform other administrative tasks from your mobile devices: [iOS](#) | [Android](#)

View: [All Users](#) [Edit](#) | [Create New View](#)

The screenshot shows the 'All Users' page. At the top right are three buttons: 'New User', 'Reset Password(s)', and 'Add Multiple Users'. Below the buttons is a search bar with fields for 'Action', 'Full Name', 'Alias', and 'Username'. A dropdown arrow is positioned between 'Full Name' and 'Alias'.

18. Set necessary fields: Last Name, Alias, Email, Username, Nickname

New User

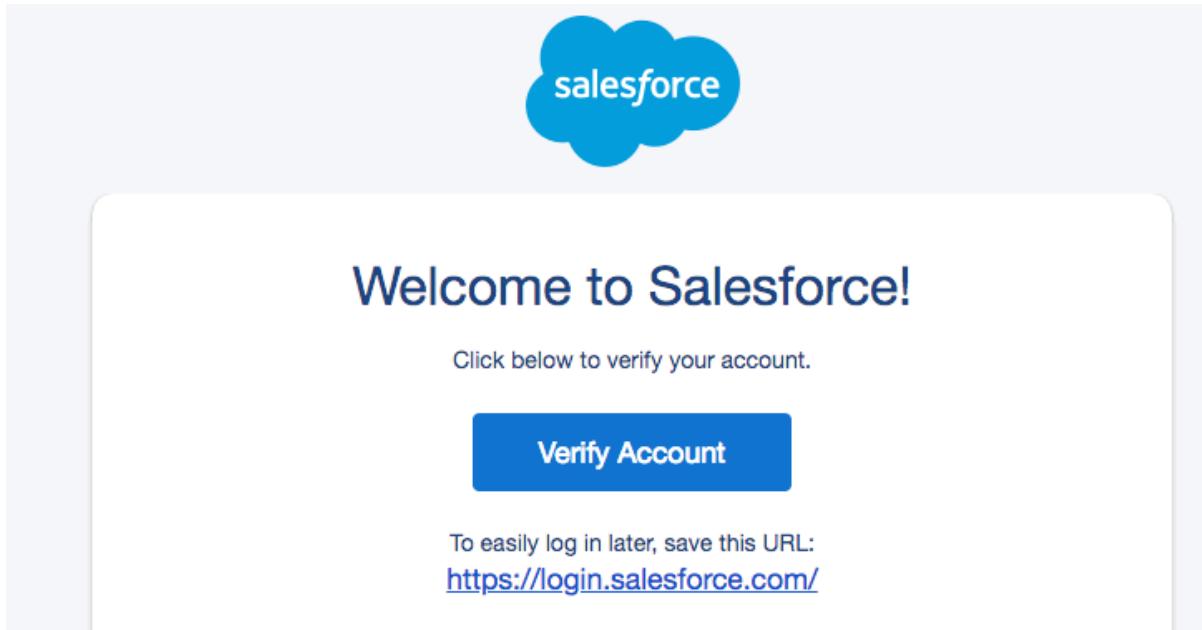
The screenshot shows the 'User Edit' form under the 'General Information' tab. It includes fields for First Name, Last Name (set to 'APIUser'), Alias (set to 'apiuser'), Email, Username (set to 'apiuser'), Nickname (set to 'apiuser'), Title, Company, Department, and Division. Each field has a small info icon to its right.

19. On the right-hand side, set the User License and Profile

The screenshot shows the 'User Edit' form with three dropdown menus on the right: 'Role' (set to '<None Specified>'), 'User License' (set to 'Salesforce'), and 'Profile' (set to 'API Only'). Each menu has a small info icon to its right.

20. Click “Save”

21. A confirmation email will be sent, with an activation link. Click the link to activate your user.



22. Change (set) a password for apiuser (Considered a strong that contains at least 20 random characters):

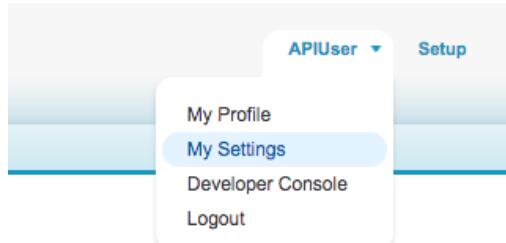
A screenshot of a "Change Your Password" form. At the top is a blue cloud icon with the word "salesforce". Below it, the text "Change Your Password" is displayed in a dark blue font. The form contains the following fields:

- A note: "Enter a new password for apiuser@acsfdcdryrun.com. Your password must have at least: "
- Three radio buttons for password requirements:
 - 8 characters
 - 1 letter
 - 1 number
- A field labeled "* New Password" with a text input box containing a single vertical bar character.
- A field labeled "* Confirm New Password" with an empty text input box.
- A "Security Question" section with a dropdown menu showing "In what city were you born?"
- A "Answer" field with an empty text input box.
- A "Change Password" button at the bottom.

At the very bottom of the form, a small note says "Password was last changed on 18/09/2018 17:29."

23. Click “Change Password”

24. Access the apiuser personal settings by selecting the username in the top right corner, then “My Settings”.



25. Type “Security Token” in the Quick Find box and click “Reset My Security Token”.

[Reset My Security Token](#)

When you access Salesforce from an IP address that isn't trusted for your company, and you use a desktop client, you must reset your security token.



26. Your security token will be emailed to you

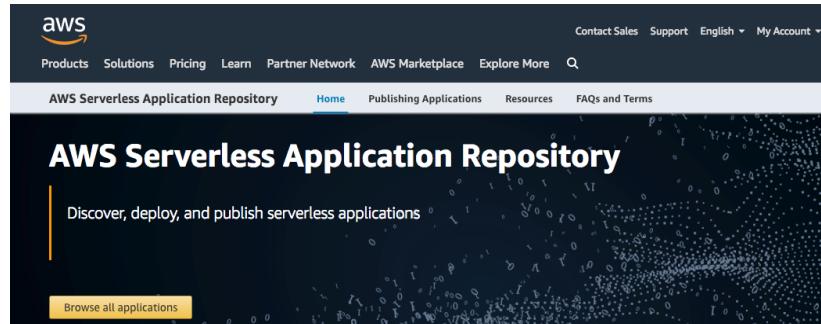
[Reset My Security Token](#)
[Check Your Email](#)



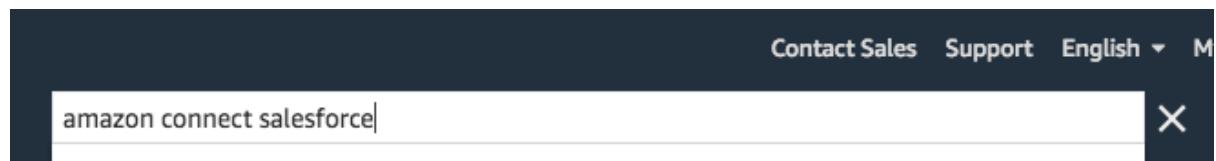
27. Copy the security token from the email in to your installation notes for the “Access Token” value.

Install the Amazon Connect Salesforce Lambda package

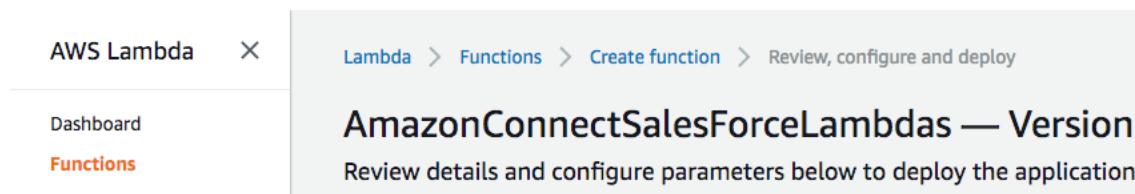
1. Log in into your AWS Account.
2. Navigate AWS Serverless Application Repository (<https://aws.amazon.com/serverless/serverlessrepo/>)



3. Click on the Search (magnifying glass) and type in Amazon Connect Salesforce



4. Select AmazonConnectSalesForceLambdas and click “Deploy”



5. Fill in the fields in “Configure application parameters”. All values should be available in your installation notes:

Configure application parameters

Application name
The stack name of this application created via AWS CloudFormation

SalesforceAccessToken
The security token of the Salesforce API user account used above.

SalesforceConsumerKey
Your Salesforce consumer key

SalesforceConsumerSecret
Your Salesforce consumer secret is available in Salesforce immediately to the right of your Salesforce Consumer Key

SalesforceHost
Your Salesforce Host

SalesforcePassword
The password of a valid Salesforce API account for your environment. This account must be the same one as entered in the "Salesforce API Configuration Username" parameter above.

SalesforceProduction
True for Production Environment, False for Sandbox

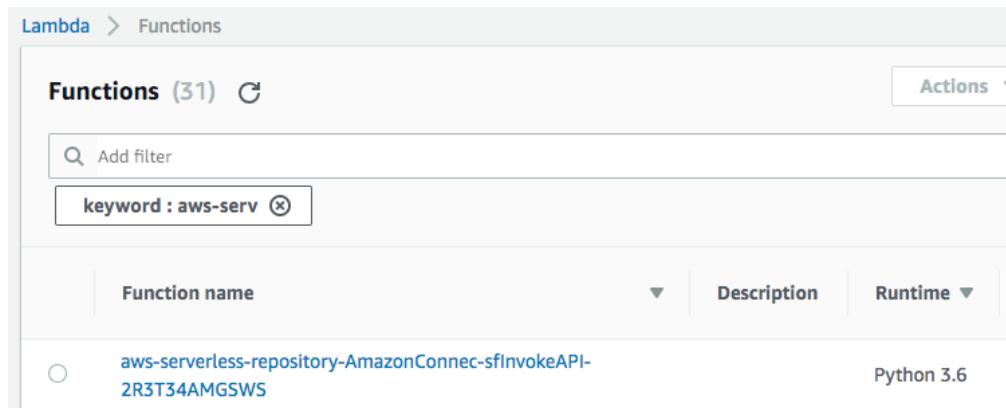
SalesforceUsername
The username of a valid Salesforce API account for your environment. For example, user@domain.com

SalesforceVersion
To find the Salesforce Edition and API Version please visit <https://help.salesforce.com/articleView?id=000199268&type=1>

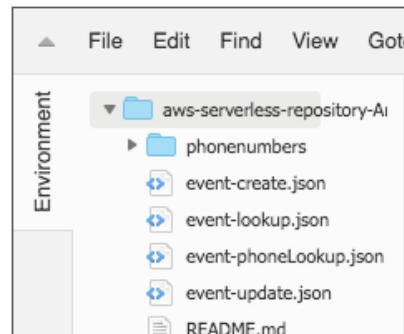
[Cancel](#) [Previous](#) **Deploy**

6. Once completed, click “Deploy”

- Once completed, you will be able to see the newly created Lambda function:



- The package provides a single Lambda function (sfInvokeAPI) that supports multiple operations, like lookup, create and update. For the initial validation, sample events are provided within the function. Click on the function name and check the list of files in the editor.



- To validate a phone number lookup, double-click on event-phoneLookup.json file and copy the text in your clipboard.

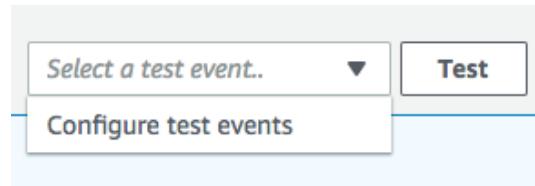
The screenshot shows the AWS Lambda function editor displaying the contents of the 'event-phoneLookup.json' file. The code is as follows:

```

1 {
2   "Details": {
3     "Parameters": {
4       "sf_operation" : "phoneLookup",
5       "sf_phone": "+441122334455",
6       "sf_fields": "Id, Name, Email"
7     }
8   }
9 }

```

- In the top-right corner, click the drop-down arrow next to the “Test” button and select “Configure test events”



11. Select “Create new test event”, set Event name (i.e. phoneLookup) and paste the JSON payload you’ve copied in the previous step.

Configure test event X

A function can have up to 10 test events. The events are persisted so you can switch to another computer or web browser and test your function with the same events.

Create new test event
 Edit saved test events

Event template
Hello World

Event name
eventLookup

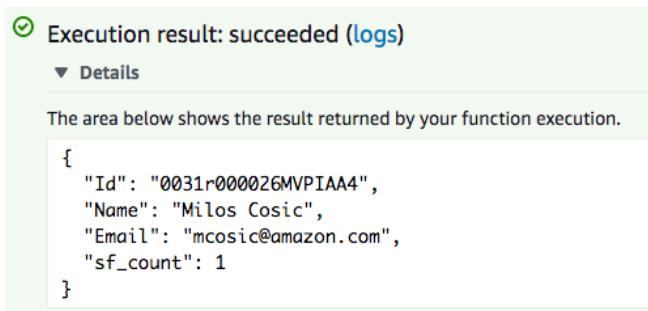
```
1 ~ [{}  
2 ~ "Details": {  
3 ~ "Parameters": {  
4 ~ "sf_operation": "phoneLookup",  
5 ~ "sf_phone": "+44112233455",  
6 ~ "sf_fields": "Id, Name, Email"  
7 ~ }  
8 ~ }  
9 ~ }
```

12. Click “Create” button

13. From the drop-down list, select your “eventLookup” and click “Test” button

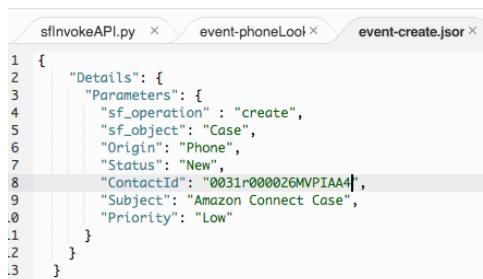


14. If successful, the result will contain fields defined in “sf_fileds” parameter in the invocation event



The screenshot shows the execution results of a Lambda function. A green checkmark icon indicates success, followed by the text "Execution result: succeeded (logs)". Below this, a "Details" section is expanded, showing the JSON response: { "Id": "0031r000026MVPAA4", "Name": "Milos Cosic", "Email": "mcosic@amazon.com", "sf_count": 1 }.

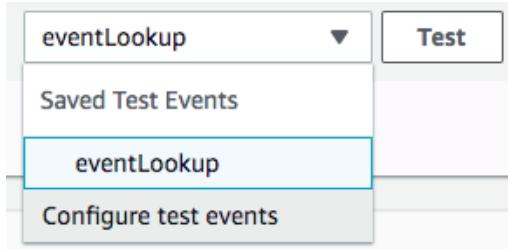
15. As a next step, we are going to use the ContactId provided and create a Case in Salesforce. Double-click on “event-create.json” file and set the ContactId value from the previous step. Copy the JSON text into your clipboard.



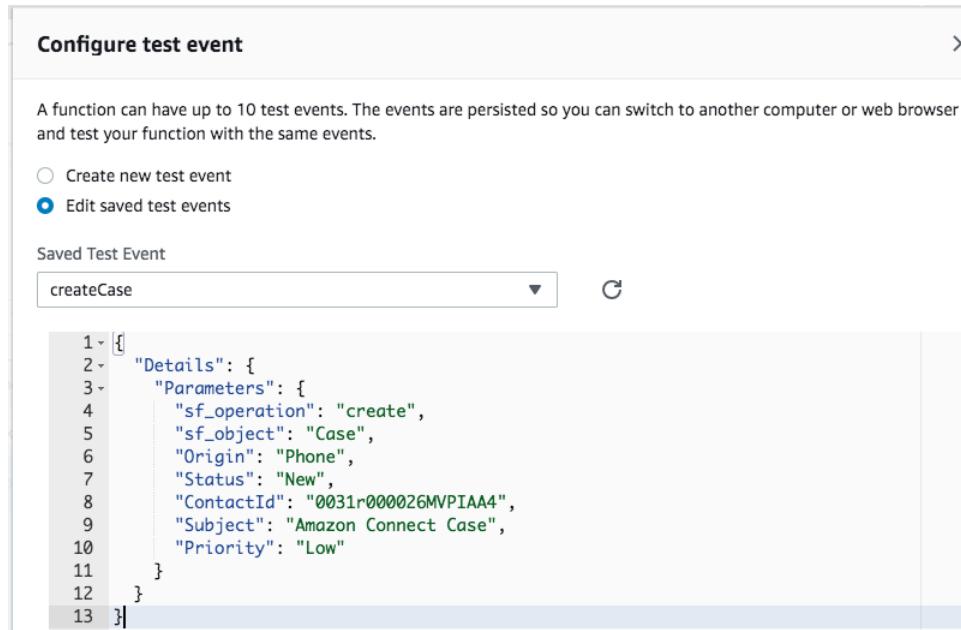
The screenshot shows a code editor with three tabs: sfInvokeAPI.py, event-phoneLookup, and event-create.json. The event-create.json tab is active, displaying the following JSON code:

```
1 {
2   "Details": {
3     "Parameters": {
4       "sf_operation": "create",
5       "sf_object": "Case",
6       "Origin": "Phone",
7       "Status": "New",
8       "ContactId": "0031r000026MVPAA4",
9       "Subject": "Amazon Connect Case",
.0       "Priority": "Low"
.1     }
.2   }
.3 }
```

16. In the top-right corner, click the drop-down arrow next to the “Test” button and select “Configure test events”



17. Select “Create new test event”, set Event name (i.e. createCase) and paste the JSON payload you’ve copied in the previous step.



18. Click “Create” button

19. From the drop-down list, select your “createCase” and click “Test” button



20. If successful, the result will contain a Case Id for newly created case:

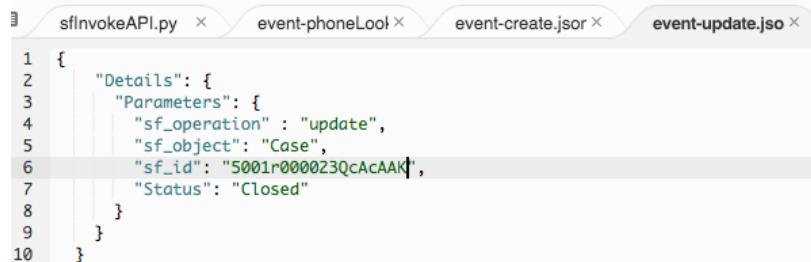
Execution result: succeeded ([logs](#))

▼ Details

The area below shows the result returned by your function execution.

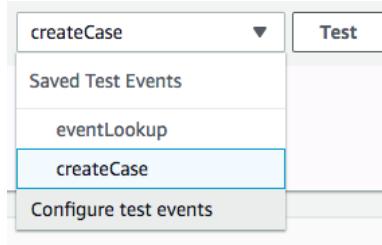
```
{  
    "Id": "5001r000023QcAcAAK"  
}
```

21. As defined in the event payload, Status is “New” and Priority is “Low”. We are going to use the update operation to close the case. Copy the Case Id provided in the previous step, then double-click on “event-update.json” file and paste the Case Id in “sf_id” parameter:



```
1 {  
2     "Details": {  
3         "Parameters": {  
4             "sf_operation": "update",  
5             "sf_object": "Case",  
6             "sf_id": "5001r000023QcAcAAK",  
7             "Status": "Closed"  
8         }  
9     }  
10 }
```

22. In the top-right corner, click the drop-down arrow next to the “Test” button and select “Configure test events”



23. Select “Create new test event”, set Event name (i.e. closeCase) and paste the JSON payload you’ve copied in the previous step.

Configure test event

A function can have up to 10 test events. The events are persisted so you can switch to another computer or web browser and test your function with the same events.

Create new test event
 Edit saved test events

Saved Test Event

closeCase

```

1 - [
2 -   "Details": {
3 -     "Parameters": {
4 -       "sf_operation": "update",
5 -       "sf_object": "Case",
6 -       "sf_id": "5001r0000023QcAcAAK",
7 -       "Status": "Closed"
8 -     }
9 -   }
10 ]

```

24. Click “Create” button

25. From the drop-down list, select your “closeCase” and click “Test” button



26. If successful, the result will be HTTP code 204 (“No Content” success code):

Execution result: succeeded ([logs](#))

▼ Details

The area below shows the result returned by your function execution.

204

27. Log in to Salesforce and search for Case and it’s details. The Case status should be “Closed”.

Invoking the Amazon Connect Salesforce Lambda from Contact Flows

The Amazon Connect Contact Flow defines the routing behavior within Amazon Connect, allowing contact center administrators to customize call flow behavior such as playing prompts, invoking Lambda functions for data lookup, and sending the call to different queues based on various conditions. As a result, Contact Flows are expected to be highly customized for each organization.

While the Adapter package does not provide any Contact Flows, there are some best practices that are worth highlighting when utilizing the Adapter.

The key element that enables Contact Flow integration is the AWS Lambda function. A Lambda function is a serverless piece of code that is invoked by the Contact Flow. Typically, Lambda functions are used to update or retrieve information from databases or APIs, as well as integrating with other systems. Lambda function can return any data processed to the Contact Flow where it can be used for decision making.

Since Salesforce is highly customizable, the same Salesforce object in a different environment may have different fields associated with it. As a result, we can expect objects to have different requirements for how they are retrieved, updated and created. The CTI Adapter was built to be able to query Salesforce objects regardless of how they have been customized. The user of the Adapter must therefore ensure they are passing the appropriate parameters to the Lambda functions provided as part of the Adapter.

The Lambda function supports different operations, based on the mandatory input parameter “sf_operation”.

Salesforce Lookup

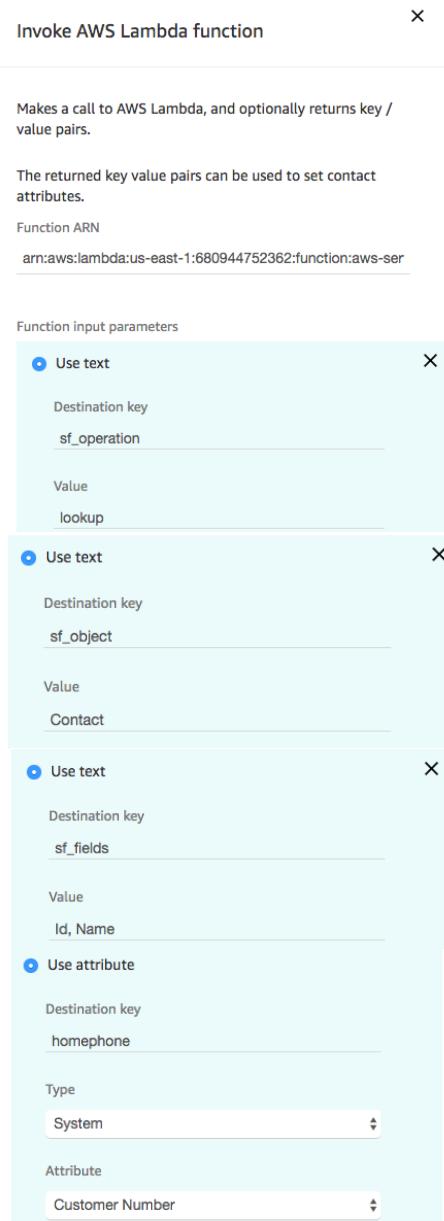
This operation is invoked by setting “sf_operation” to “lookup”. In this case, the Lambda function queries Salesforce for objects based on the parameters passed to it.

- “**sf_object**” parameter contains Salesforce Object, like Case, Contact etc.

- “**sf_fields**” parameter contains a set of fields to be returned in a result. For example, if we are querying Case, we might specify “Id, IsClosed, Subject”, or if we are querying Contact, we might specify “Id, Name, Email”
- Specify a conditional parameter, for example “CaseNumber” or “homephone”. Multiple values may be sent and they will be applied with “AND” operator.

In the Amazon Connect Contact Flow Designer, add *Integrate > Invoke AWS Lambda function* block. Set ‘sfInvokeAPI’ Lambda ARN and make sure you have granted Amazon Connect to invoke the Lambda Function.

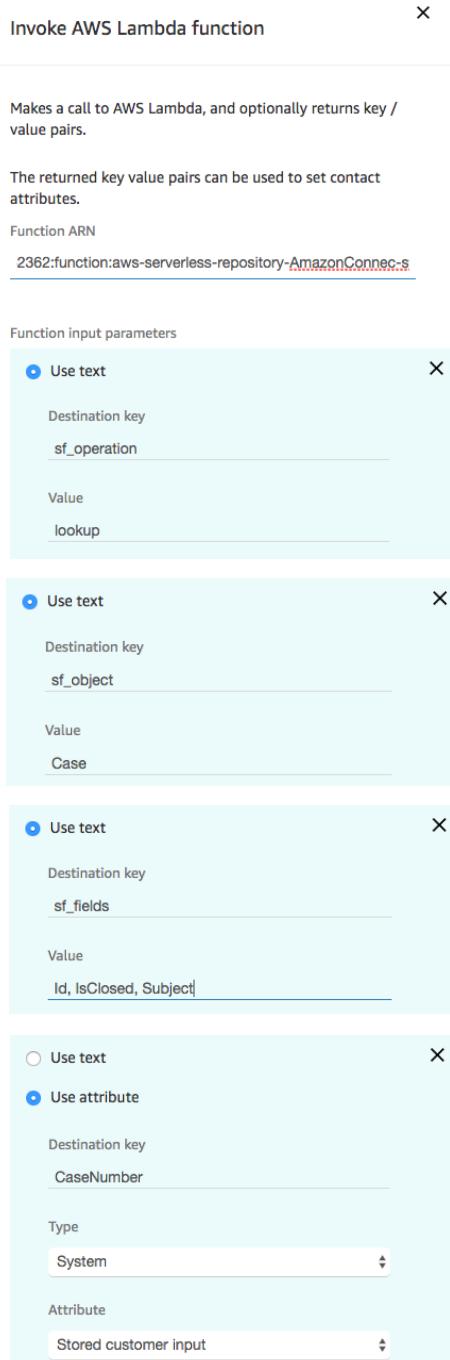
Example for phone number lookup:



A result example:

```
"ExternalResults": {  
    "Id": "0031r000026MVPIAA4",  
    "sf_count": "1",  
    "Name": "Milos Cosic"  
}
```

Example for Case lookup:



A result example:

```
    "ExternalResults": {  
        "Id": "5001r000023QcAcAAK",  
        "IsClosed": "true",  
        "sf_count": "1",  
        "Subject": "Amazon Connect Case"  
    }
```

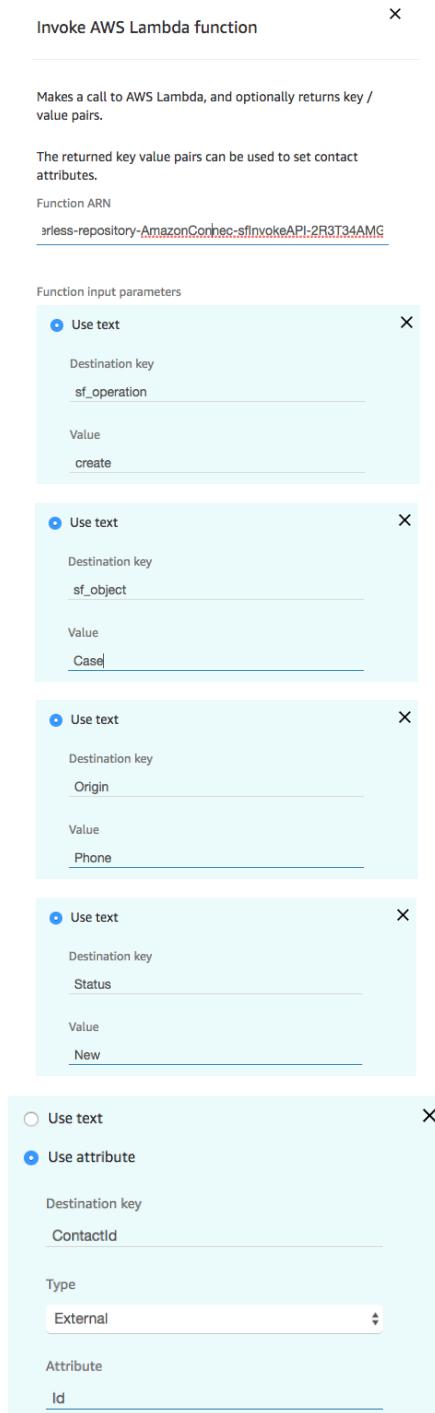
Salesforce Create

This operation is invoked by setting “sf_operation” to “create”. In this case, the Lambda function creates a Salesforce object based on the parameters passed to it.

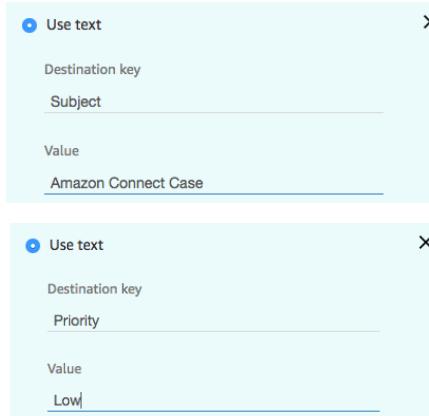
- “sf_object” parameter contains Salesforce to be created, like Case.
- Specify additional parameters for the Salesforce object to be created. Please be sure to include all parameters required to create the Salesforce object.

In the Amazon Connect Contact Flow Designer, add *Integrate > Invoke AWS Lambda function* block. Set ‘sfInvokeAPI’ Lambda ARN and make sure you have granted Amazon Connect to invoke the Lambda Function.

An example for Case creation:



Contact Id is usually received as a result of a previous phone lookup, but it can be also stored as an Attribute (i.e. sf_contact_id)



A result example (providing the newly created Case Id):

```
"ExternalResults": {  
    "Id": "5001r000023QfhPAAS"  
},
```

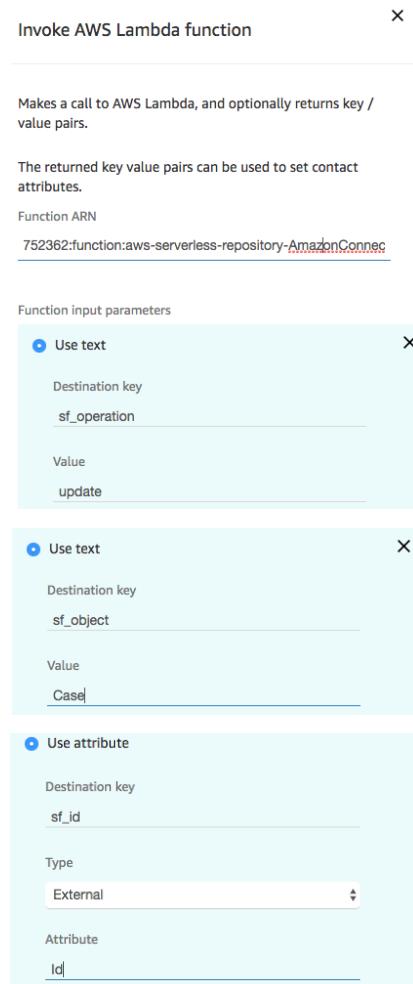
Salesforce Update

This operation is invoked by setting “sf_operation” to “update”. In this case, the Lambda function updates a Salesforce object based on the parameters passed to it.

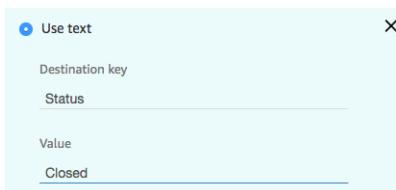
- “**sf_object**” parameter contains Salesforce to be updated, like Case.
- Specify additional parameters for the Salesforce object to be created. Parameters must include `sf_object` and `sf_id`.

In the Amazon Connect Contact Flow Designer, add *Integrate > Invoke AWS Lambda function* block. Set ‘sfInvokeAPI’ Lambda ARN and make sure you have granted Amazon Connect to invoke the Lambda Function.

An example for Case update:



Case Id is usually received as a result of a previous case lookup, but it can be also stored as an Attribute (i.e. sf_case_id)



A result example (HTTP Status Code):

```
"ExternalResults": {
    "Status": "204"
```

204 is “No Content” success code

Salesforce Phone Lookup

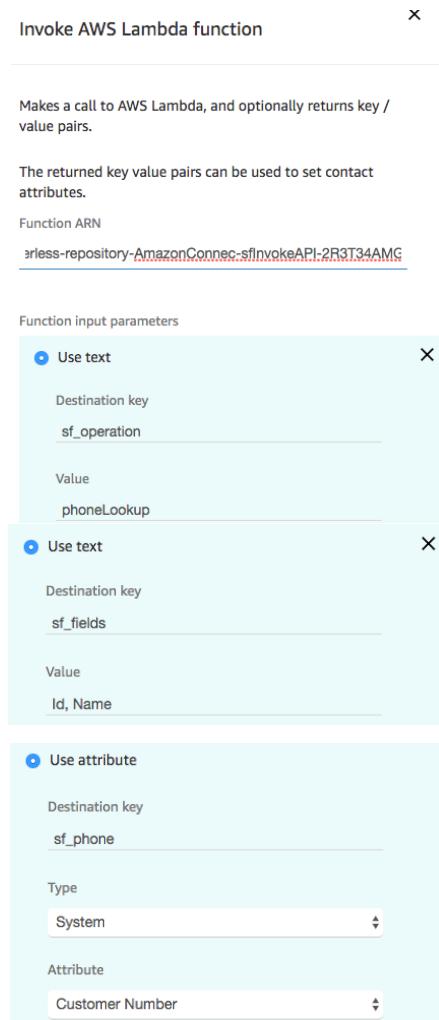
This operation is invoked by setting “sf_operation” to “phoneLookup”. In this case, the Lambda function queries Salesforce for Contacts based on the parameter passed to it.

It uses the Salesforce Object Search Language (SOLS) to construct text-based search queries against the search index, which gives significant performance improvement when searching phone number fields.

- “**sf_phone**” parameter contains the phone number to search.
- “**sf_fields**” parameter contains a set of fields to be returned in a result. As it searches for Contacts, we might specify “Id, Name, Email”

In the Amazon Connect Contact Flow Designer, add *Integrate > Invoke AWS Lambda function* block. Set ‘sfInvokeAPI’ Lambda ARN and make sure you have granted Amazon Connect to invoke the Lambda Function.

Example for phone number lookup:



A result example:

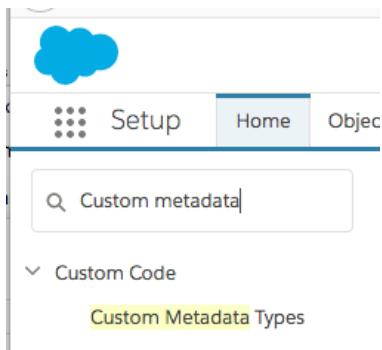
```
"ExternalResults": {  
    "Id": "0031r000026MVP1AA4",  
    "sf_count": "1",  
    "Name": "Milos Cosic"  
}
```

Contact Attributes Display

Amazon Connect allows for user defined Contact Attributes to be attached to a phone call within Contact Flows. This can be used to track caller inputs, IVR selections, outcomes of an interaction with Amazon Lex, or data lookup from backend systems through Lambda. Some of those values can be useful to be displayed to the agent to speed up data input or skip processes such as authenticating the customer.

To configure a contact attribute for display within embedded CCP:

1. Log in to your Salesforce Org.
2. Navigate to **Setup** then in type *Custom Metadata* in Quick Find



3. Click the “Manage Records” link next to the “Call Attributes Configuration” label

All Custom Metadata Types

Custom metadata types enable you to create your own setup objects whose records are metadata rather than data. These are typically used to define application configurations. Rather than building apps from data records in custom objects or custom settings, you can create custom metadata types and add metadata records, with all the manageability of standard objects.

| New Custom Metadata Type | | | | | |
|--------------------------|-------------------------------|------------------------------------|------------------|------------|---|
| Action | Label | Installed Package | Namespace Prefix | Visibility | Api Name |
| Manage Records | Call Attributes Configuration | Amazon Connect - Universal Package | amazonconnect | Public | amazonconnect_Call_Attributes_Configuration_mdt |

4. The CTI Adapter contains a sample attribute, “special_attr”. Click the “New” button on the list view.

Call Attributes Configurations

| View: All | | Create New View |
|-----------|------------------------------|------------------------------------|
| Action | Label ↑ | Call Attributes Configuration Name |
| Edit | special_attr | special_attr |

5. This will open the “New Call Attribute Configuration” form as seen below

Call Attributes Configuration

| Call Attributes Configuration Edit | | Save | Save & New | Cancel |
|---|--|------|------------|--------|
| Information | | | | |
| Label | <input type="text"/> | | | |
| Call Attributes Configuration Name | <input type="text"/> i | | | |
| Amazon Connect Attribute Name ? | <input type="text"/> | | | |
| CCP Attribute Label ? | <input type="text"/> | | | |
| <input type="button" value="Save"/> <input type="button" value="Save & New"/> <input type="button" value="Cancel"/> | | | | |

6. The following table describes the fields that are displayed inside the form

| Field Name | Valid Values | Description |
|------------------------------------|---|---|
| Label | Any string including spaces | The label of the record |
| Call Attributes Configuration Name | Any string following the API naming guidelines. | The Salesforce API name of the record. This value must be unique among all records. |
| Amazon Connect Attribute Name | Any string including spaces | The name of the attribute as it is defined in the Amazon Connect Contact Flow. |
| CCP Attribute Label | Any string including spaces | The label as it will be displayed to the agent. |

7. An example of attribute is given below:

Call Attributes Configuration

The screenshot shows the 'Call Attributes Configuration Edit' screen. At the top right are three buttons: 'Save', 'Save & New', and 'Cancel'. Below this is a section titled 'Information' with the following fields:

| | |
|------------------------------------|-------------------|
| Label | Authentication |
| Call Attributes Configuration Name | Authentication |
| Amazon Connect Attribute Name | authenticated |
| CCP Attribute Label | Is Authenticated? |

At the bottom right are three buttons: 'Save', 'Save & New', and 'Cancel'.

8. Click the “Save” button

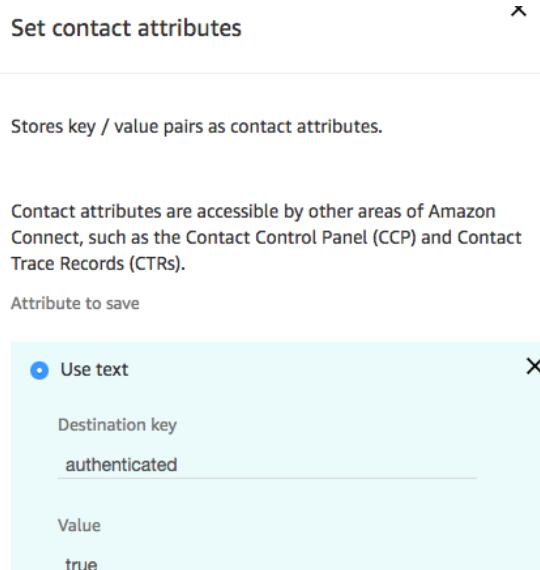
Call Attributes Configuration

[« Back to List: Users](#)

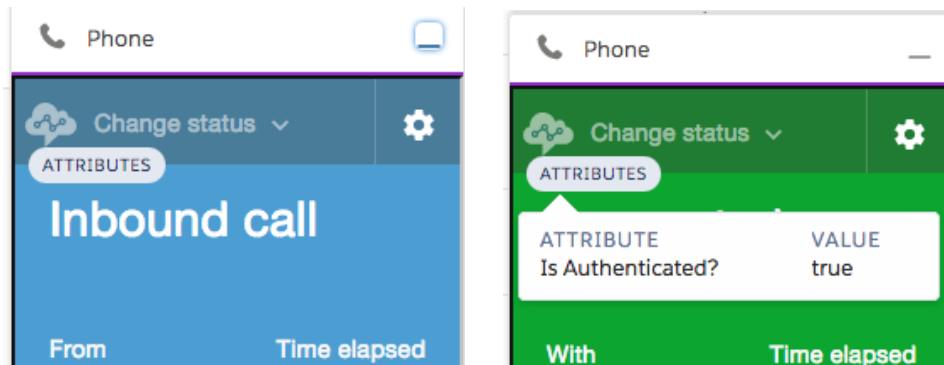
The screenshot shows the 'Call Attributes Configuration Detail' screen. At the top right are three buttons: 'Edit', 'Delete', and 'Clone'. Below this is a table with the following data:

| Label | Authentication |
|------------------------------------|-------------------|
| Call Attributes Configuration Name | Authentication |
| Amazon Connect Attribute Name | authenticated |
| CCP Attribute Label | Is Authenticated? |

9. Open the Amazon Connect Contact Flow Designer and drop *Set > Set Contact Attributes* block to your Contact Flow. Set the attribute based on your business logic. For example:



10. Place an inbound call and ask to speak with an agent. Accept the incoming call and check if Contact Attribute is displayed in the embedded CCP.



Call Wrap-up and Call Disposition Codes

Upon the completion of a call, Amazon Connect puts the agent into the “After Call Work” state. As part of the Adapter, a “Call Wrap-Up” screen will be triggered within Salesforce. The screen requires the user to associate the call activity with a Contact, or Lead, and then relate it to an Account or alternate Salesforce Object available in the drop-down list. Once the desired object is selected, the user clicks on the “Look-up” list icon to find and associate the desired record to the call. The Comments box allows for free-form text to be added.

The Call Result field allows the user to specify the result of the call from a drop-down list. When the user clicks on “Save” the Salesforce tab and sub-tabs popped with the call and the Wrap-Up screen are closed and the user is automatically put into an “Available” state (please see the limitations in Lightning environment).

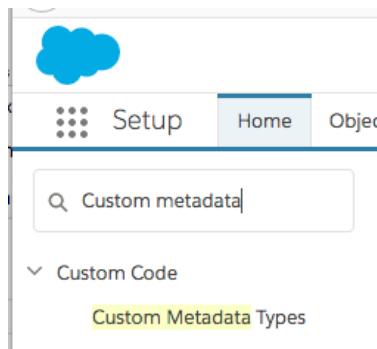
Salesforce logs phone calls in a Task record. The Task record contains many standard fields associated to call information, which are not included in the Task layout by default. One of the fields is called *CallDisposition*, and the Adapter will ensure that a value is provided in this field for every call it logs.

The *CallDisposition* field is a free-form text field, which makes it difficult to report on the values agents may enter as those are most likely not going to be

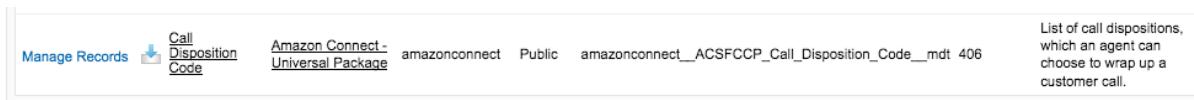
consistent. For this purpose, the Adapter comes with a way to configure a list of valid values to be used for the *CallDisposition* field when wrapping up a call.

To add, update or remove *Call Disposition Codes*:

1. Log in to your Salesforce Org
2. Navigate to **Setup** then in type *Custom Metadata* in Quick Find



3. Click the “Manage Records” link next to the “Call Disposition Codes” label



4. The CTI Adapter contains a sample code, “Completed”. Click the “New” button on the list view.

| Call Disposition Codes | | |
|---|---------------------------|----------------------------|
| View: All Create New View | | |
| Action | Label ↑ | Call Disposition Code Name |
| Edit | Completed | Completed |

While this code cannot be removed, it can be deactivated by clicking the “Edit” button and then unselecting the “Active” checkbox. Save the record to finalize the change.

5. To create a new disposition code, click “New” button on the list view. This will open the New Call Disposition Code form as seen below:

Call Disposition Code

The screenshot shows a software interface for editing a 'Call Disposition Code'. At the top, there's a title bar with 'Call Disposition Code Edit' and buttons for 'Save', 'Save & New', and 'Cancel'. Below this is a tabbed section with 'Information' selected. Inside this tab, there are four input fields: 'Label' (empty), 'Call Disposition Code Name' (empty), 'Disposition Code' (empty), and 'Active' (a checked checkbox). At the bottom of the form are three more buttons: 'Save', 'Save & New', and 'Cancel'.

6. The following table describes the fields that are displayed inside the form

| Field Name | Valid Values | Description |
|----------------------------|---|--|
| Label | Any string including spaces | The label to be displayed to the agent for selection on the call wrap-up screen. |
| Call Disposition Code Name | Any string following the API naming guidelines. | The Salesforce API name of the record. This value must be unique among all records. |
| Disposition Code | Any string including spaces | The actual value to be added to the CallDisposition field of the Task record representing a call. |
| Active | Checked or unchecked | When unchecked, the disposition code will not be offered to the agent for selection during a call wrap-up. |
| Protected Comment | Checked or unchecked | This field is not used. Please leave unchecked. |

7. An example of Call Disposition Code is given below:

Call Disposition Code

The screenshot shows the 'Call Disposition Code Edit' screen. At the top right are 'Save', 'Save & New', and 'Cancel' buttons. Below them is a section titled 'Information' with the following fields:

- Label:** Customer Not Home
- Call Disposition Code Name:** Customer_Not_Home
- Disposition Code:** CustomerNotHome
- Active:** checked

At the bottom right are 'Save', 'Save & New', and 'Cancel' buttons.

- Click the “Save” button

Call Disposition Code

[« Back to List: Users](#)

The screenshot shows the 'Call Disposition Code Detail' screen. At the top right are 'Edit', 'Delete', and 'Clone' buttons. Below them is a table with the following data:

| Label | Customer Not Home |
|----------------------------|-------------------|
| Call Disposition Code Name | Customer_Not_Home |
| Disposition Code | CustomerNotHome |
| Active | ✓ |

- Place and inbound call and ask to speak with an agent. Accept the incoming call and then hang up. The Call Disposition form should be displayed, allowing you to store the outcome of the call. You are able to select Contact and Account related to the call.

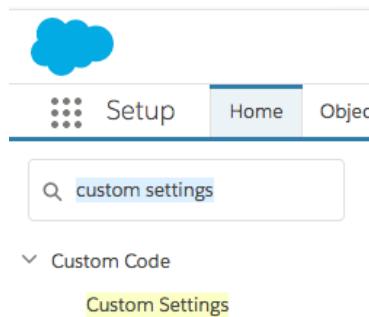
The screenshot shows the 'Call Disposition' form. At the top left are dropdowns for 'John Smith' and 'Salesforce - Develo...'. In the center is a 'Save' button. Below it is a 'Subject' field containing 'Inbound - BasicQueue - +447769161124'. There are two dropdowns: 'Name' set to 'Contact' and 'Related To' set to 'Account'. A 'Comments' text area is below. At the bottom is a 'Call Result' section with a dropdown showing 'Completed' and 'Customer Not Home' selected. A final 'Save' button is at the bottom right.

Call Recording Link for Task

The Adapter comes with a Visualforce component that provides users with the ability to download a call recording created within Amazon Connect from a Salesforce page.

To configure Call Recording links:

1. Log in to your Salesforce Org
2. Navigate to **Setup** then in type *Custom Settings* in Quick Find



3. Click on the “Manage” link next to the “Toolkit for Amazon Connect” custom setting

Custom Settings

Use custom settings to create and manage custom data at the organization, profile, and user levels. Custom settings data is stored efficiently, without the cost of repeated queries. Custom settings data can be used by formula fields, Visualforce, Apex

A screenshot of the 'Custom Settings' page in Salesforce. At the top, there are buttons for 'View: All' and 'Create New View', and a 'Get Usage' button. Below that is a navigation bar with letters A through N. The main area is a table with columns: Action, Label, Visibility, Settings Type, Namespace Prefix, and Description. There is one row in the table:

| Action | Label | Visibility | Settings Type | Namespace Prefix | Description |
|------------------------|--|------------|---------------|------------------|---|
| Manage | Toolkit for Amazon Connect | Public | Hierarchy | amazonconnect | Configuration settings of the Toolkit for Amazon Connect. |

4. Next, click on the “New” button on the top of the page, which will create the Default Organization values.

Custom Setting

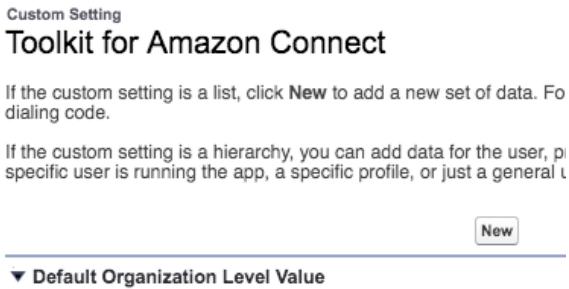
Toolkit for Amazon Connect

If the custom setting is a list, click **New** to add a new set of data. For dialing code.

If the custom setting is a hierarchy, you can add data for the user, a specific user is running the app, a specific profile, or just a general level.

New

▼ Default Organization Level Value



5. On the following page, provide the URL to your Amazon Connect instance without path information. The value of the URL field would be in the form of <https://yourinstancename.awsapps.com>.

Toolkit for Amazon Connect Edit

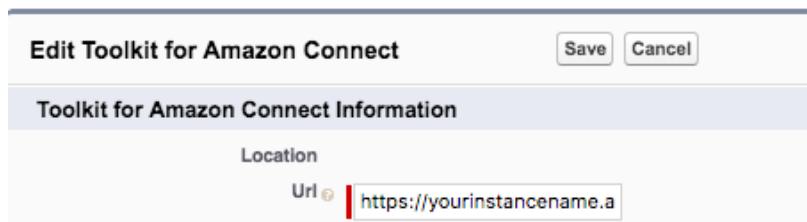
Provide values for the fields you created. This data is cached with the application.

Edit Toolkit for Amazon Connect **Save** **Cancel**

Toolkit for Amazon Connect Information

Location

Url

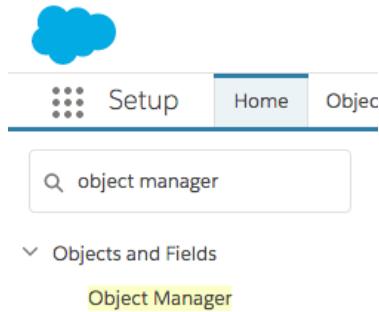


The Adapter creates a Task in Salesforce for every phone interaction received by an agent. This Task will always be linked to the phone call via the Amazon Connect Contact ID. If Amazon Connect is configured to record the phone calls, the recording can be made available on the Task details page.

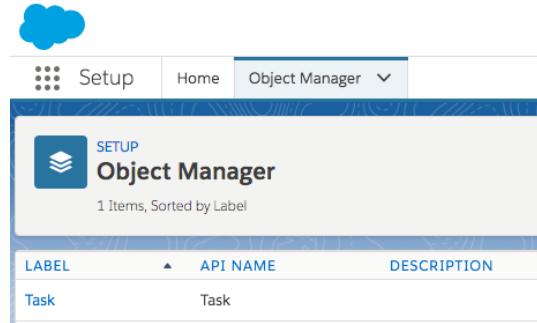
To illustrate the setup for the Task Page Layout, the Adapter comes with a sample Task Page Layout called “*CTI Adapter for Amazon Connect - Task Layout*”. It is an extension to the default Task Page Layout, which exposes more fields related to phone calls. Please refer to the Call Details section of the screen shot below. The Visualforce Page for the call recording is already added to this Layout. The recommended height is 70px.

To edit the sample Task Page Layout, please follow the steps:

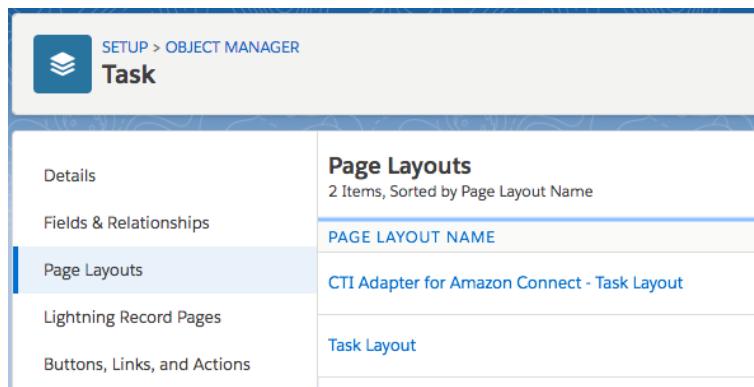
1. Log in to your Salesforce Org
2. Navigate to **Setup** then in type *Object Manager* in Quick Find



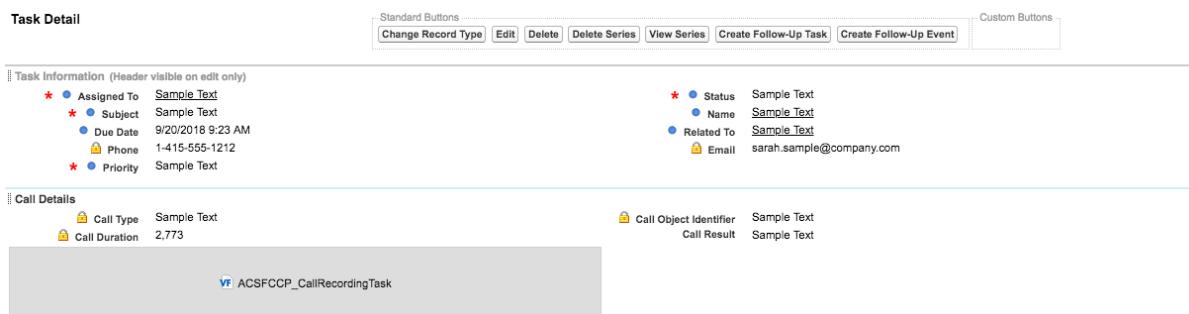
3. Click on the “Task” object



4. Click on the “Page Layouts”



- Click on the “*CTI Adapter for Amazon Connect - Task Layout*” and the layout designer will open



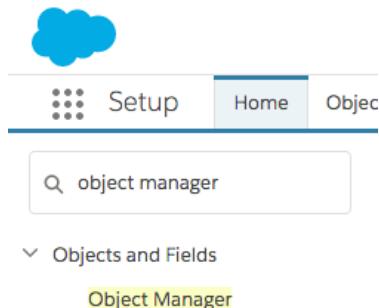
- To have that information show up on the agent's screen, you can either create a similar configuration in your existing Page Layout or assign the Page Layout provided by the Adapter to the appropriate Profiles of your users. The following screenshot shows how the Call Details section looks when using the “*CTI Adapter for Amazon Connect - Task Layout*”.
- To have access to the recording, the user must have an active session with Amazon Connect. This can be achieved by either logging in to the CCP softphone, or by logging in to Amazon Connect outside of Salesforce. After the session is established, a page refresh should make the player appear.

Call Display on the Account Page

The Adapter comes with a Visualforce Page that displays all phone calls made using Amazon Connect for an Account. It differs from the standard Activity Related List because it filters all other activities out and focuses on the phone calls only.

To show the recent calls on the Account details page, add the “ACSFCCP_CallLogging_View” Visualforce Page to the Account Page layout. It is recommended to create a dedicated section with a 1-Column layout for this purpose, and to make the Visualforce Page scrollable.

1. Log in to your Salesforce Org.
2. Navigate to **Setup** then in type *Object Manager* in Quick Find.



3. Click on the “Account” object.

A screenshot of the Salesforce Object Manager page. The title bar says 'SETUP Object Manager' and indicates '34 Items, Sorted by Label'. The main area is a table with three columns: 'LABEL', 'API NAME', and 'DESCRIPTION'. There is one row visible for the 'Account' object, which is highlighted in blue.

| LABEL | API NAME | DESCRIPTION |
|---------|----------|-------------|
| Account | Account | |

4. Click on the “Page Layouts”.

The screenshot shows the Salesforce Object Manager interface for the 'Account' object. The left sidebar has sections: Details, Fields & Relationships, Page Layouts (which is selected and highlighted in blue), Lightning Record Pages, Buttons, Links, and Actions, Compact Layouts, Object Limits, and Record Types. The main content area is titled 'Page Layouts' and shows a list of four items: 'Account (Marketing) Layout', 'Account (Sales) Layout', 'Account (Support) Layout', and 'Account Layout'. Each item is a link.

5. Click on the “Account layout” and the layout designer will open.

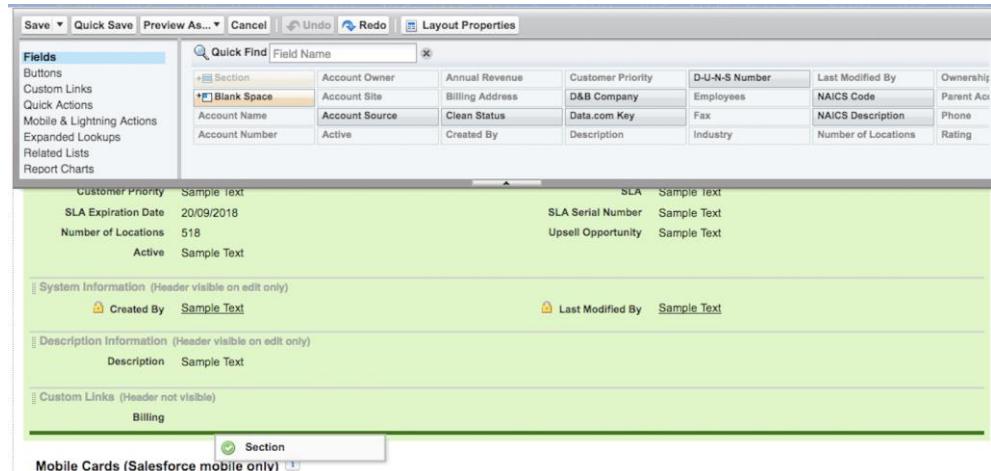
The screenshot shows the Salesforce Layout Designer for the 'Account' layout. The left sidebar has sections: Details, Fields & Relationships, Page Layouts (selected), Lightning Record Pages, Buttons, Links, and Actions, Compact Layouts, and Object Limits. The main content area shows a table of fields with a 'Layout Properties' toolbar above it. The table includes columns for Field Name, Type, and various properties like 'Section' and 'Blank Space'. Fields listed include Account Owner, Annual Revenue, Customer Priority, D-U-N-S Number, Last Modified By, Ownership, Account Site, Billing Address, D&B Company, Employees, NAICS Code, Account Name, Account Source, Clean Status, Data.com Key, Fax, NAICS Description, Account Number, Active, Created By, Description, Industry, and Number of Locations.

6. From the left-hand side menu, select “Fields”

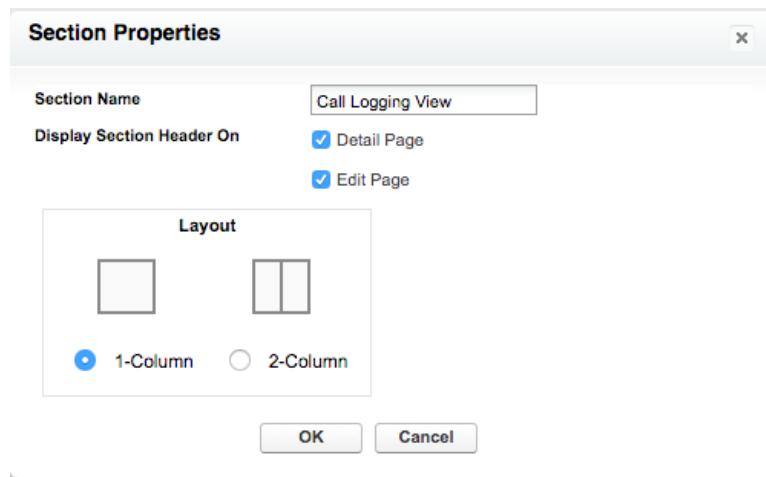
The screenshot shows the Salesforce Layout Designer with the 'Fields' section selected in the left sidebar. The main content area displays a table of fields with a 'Layout Properties' toolbar at the top. The table includes columns for Field Name, Type, and various properties. Fields listed include Account Owner, Annual Revenue, Customer Priority, D-U-N-S Number, Last Modified By, Ownership, Account Site, Billing Address, D&B Company, Employees, NAICS Code, Account Name, Account Source, Clean Status, Data.com Key, Fax, NAICS Description, Account Number, Active, Created By, Description, Industry, and Number of Locations.

7. Drag and Drop “Section” item to add a new section on the layout

The screenshot shows the Salesforce Layout Designer with the 'Fields' section selected in the left sidebar. A 'Section' item is being dragged from the sidebar into the layout area. A red 'X' icon appears over the 'Section' item, indicating it cannot be dropped at that location. The main content area shows a table of fields with a 'Layout Properties' toolbar at the top.



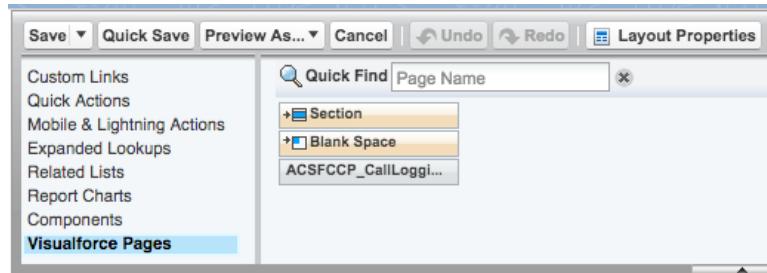
- On the pop-up form, set Section Name (“Call Logging View”) and 1-Column Layout



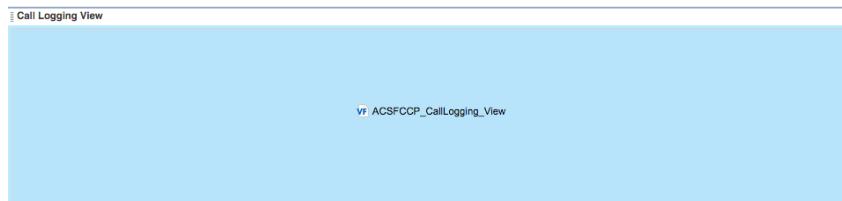
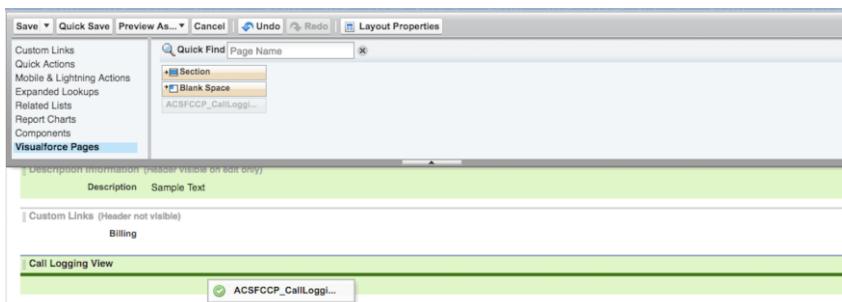
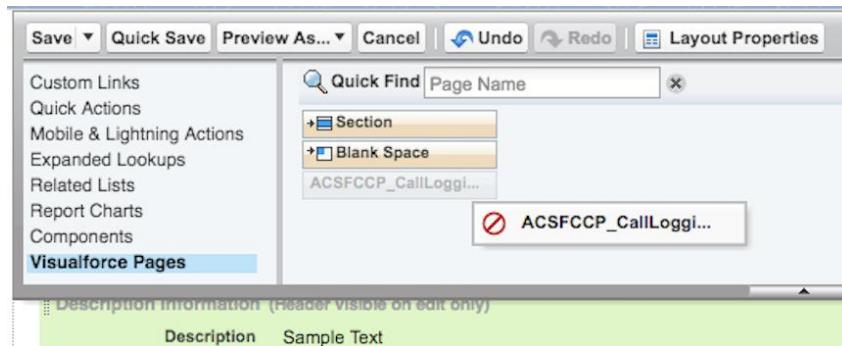
- Click “OK”



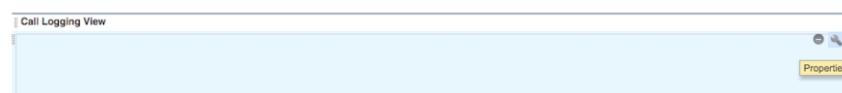
- From the left-hand side menu, select Visualforce Pages:



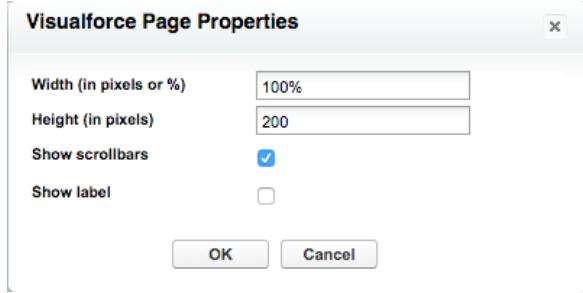
11. Drag and drop “ACSFCCP_CallLogging_View” item to the “Call Logging View” section



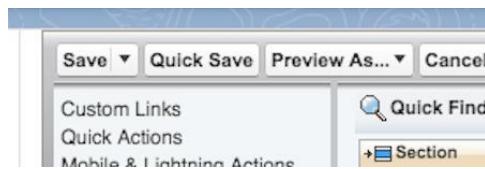
12. Hover the newly added component and click on the “Setting” icon



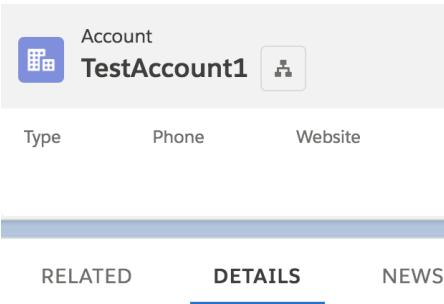
13. Check “Show scrollbars” and click “OK”.



14. Click the “Save” button in the top-left corner



15. Make some phone calls, ask to speak with an agent. Open the Account, then select “Details” tab



16. Scroll down the Details page until you see the “Call Logging View” section

| Call Logging View | | | | |
|------------------------------|---------------|-----------|---------------------|--------------------------------------|
| CALL DATE | PHONE NUMBER | CALL TYPE | PHONE CALL DURATION | CALL IDENTIFIER |
| Thu Jun 07 16:59:54 GMT 2018 | +447769161124 | Inbound | 0 min 31 sec | 805f8089-3646-4f9b-ae73-be9236aa26a1 |
| Thu Jun 07 08:17:07 GMT 2018 | +447769161124 | Inbound | 0 min 23 sec | a0a42712-6d3d-4700-b650-d6b8aae189cc |
| Thu May 17 06:55:21 GMT 2018 | +447769161124 | Inbound | 0 min 10 sec | 37491b40-85a7-4feb-a388-fd2c69ea8eb2 |
| Tue May 08 18:26:50 GMT 2018 | +447769161124 | Inbound | 0 min 38 sec | 994fbea6-94a6-4cf1-a118-a7c31cc39099 |
| Tue May 08 18:00:11 GMT 2018 | +447769161124 | Outbound | 0 min 4 sec | 40c6ad53-429a-42a2-b4c0-d46b20c109b6 |

For more information on how to add a Visualforce Page to a Page layout, please visit:

https://trailhead.salesforce.com/en/modules/visualforce_mobile_salesforce1/units/visualforce_mobile_salesforce1_layouts_cards

Outbound Campaign Calls

The package allows for running Outbound Call Campaigns using Salesforce Omni Channel routing and Amazon Connect. To enable outbound campaigns, the Custom Object called Amazon Connect Call Campaign, which comes bundled with the Toolkit, must be configured to be routed by Salesforce Omni.

Outbound call campaigns are a feature of the package that utilizes Omni-Channel routing and Amazon Connect. To use the Call Campaigns, we must first configure the following items:

1. Create a Queue for users to manage a workload and configure it for the custom object.
2. Create a Service Channel and configure it for the custom object.
3. Create a Routing Configuration.
4. Associate the Routing Configuration with the Agents and the Queue.
5. Create a Presence Status and Configuration and assign it to the Users.

Create a Queue

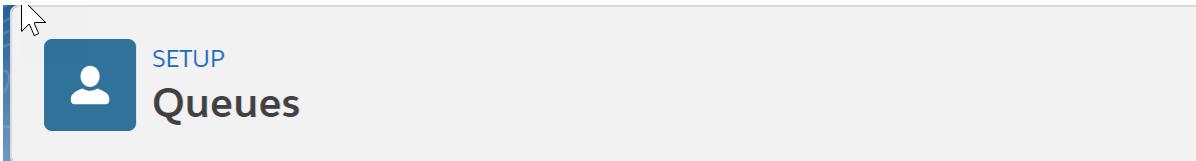
First, go to Setup in your instance. In the search box, type “queue”. Click on “Queues”.

The screenshot shows the Salesforce Setup interface. At the top, there is a blue cloud icon, a search bar labeled "Search Setup", and navigation tabs: "Setup" (selected), "Home", and "Object Manager". Below the tabs is a search bar with the placeholder "queues". A sidebar on the left has sections for "Users" and "Queues", with "Queues" being the active section, indicated by a yellow highlight and a cursor icon pointing to it. A message in the center says "Didn't find what you're looking for? Try using Global Search." The main content area is titled "Queues" and contains a brief description: "Queues allow groups of users to manage a shared workload more effectively. A queue is a location where records can be routed to await processing by a group member. The records remain in the queue until a user accepts them for processing or they are transferred to another queue. You can specify the set of objects that are supported by each queue, as well as the set of users that are allowed to retrieve records from the queue." Below the description are "View:" buttons for "All" and "Edit | Create New View".

You may see some entries if you are already using Omni-Channel for other things in your instance. We want to create a new queue for the purpose of handling these outbound call campaigns.

The screenshot shows the "Queues" list screen in the Salesforce Setup interface. The title bar includes a "SETUP" icon, the word "Queues", and a "Help for this Page" link. Below the title is a brief description of what queues are used for. The main area is a table with columns: "Action", "Label", "Queue Name", "Queue Email", and "Supported Objects". A red arrow points to the "New" button at the bottom right of the table header. The "Supported Objects" column lists various objects: "Amazon Connect Historical Report Data; Amazon Connect Call Campaign; Agent Work; Case; Goal; Knowledge Article Version; Lead; Live Agent Session; Live Chat Transcript; Macro; Metric; Order; Quick Text; Scorecard; User Provisioning Request; User Presence; Coaching; Feedback; Feedback Question; Feedback Question Set; Feedback Request; Feedback Template; Performance Cycle". The table also includes "Modified By" and "Last Modified" columns. At the bottom of the table, there are "Edit | Del" links for the row containing "TestChatQueue" and the date "15/09/2018".

On the Queues screen, we need to click “New”. Complete the required fields for Label and QueueName will autopopulate. Move down the screen until you see “Supported Objects”. Select the Amazon Connect Call Campaign object and click the “Add” button.



The screenshot shows the AWS Lambda function configuration interface. At the top, there's a blue header bar with the text "Lambda Function Configuration" and a "Create New Function" button. Below the header, the function name "AWSLambdaFunction" is displayed, along with its ARN and Region. The main area is titled "Handler" and contains a single line of code: "exports.handler = require('aws-lambda').log;". There are tabs for "Code", "Environment", "Triggers", and "Logs".

Scroll down to the Queue members to select the members of the queue. You can assign the queue by Public Groups, Roles, Roles and Subordinates, or Users. If you need to wade through many users, groups, or roles, feel free to use the “Find” feature.

Once you have found the entity you'd like to add, select it and click add, just like we did with the object in the previous step.

The screenshot shows the 'Queues' setup page in the AWS Lambda interface. At the top left is a blue icon with a person silhouette and the word 'SETUP'. Below it is the title 'Queues'. On the left, a sidebar lists several items: User Presence, Coaching, Feedback, Feedback Question, Feedback Question Set, Feedback Request, Feedback Template, and Performance Cycle. To the right of the sidebar is a large empty white area with a 'Remove' button at the top. Below the sidebar is a section titled 'Queue Members'.

Queue Members

To add members to this queue, select a type of member, then choose the group, role, or user from the "Available Members" list. If the Queue is Public Read/Write/Transfer, you do not need to assign users to the queue, as all users already

Search: for:

Available Members

User:
User:
User:
User:

Selected Members

--None--

Add Remove

Red numbered arrows indicate the steps: 1 points to the 'User:' entry in the Available Members list; 2 points to the 'Add' button; 3 points to the 'Selected Members' list.

Now, our queue has been created and assigned to users.

The screenshot shows the 'Queues' section under the 'SETUP' tab. A search bar at the top contains the text 'Queues'. Below it is a table with columns: Action, Label ↑, Queue Name, Queue Email, and Supported Objects. There is one entry: 'Edit | Del Call Campaign Call_Campaign Amazon Connect Call Campaign'. The table has a green header row and a light gray background for the body rows. At the bottom of the table, a note reads: 'Amazon Connect Historical Report Data; Amazon Connect Call Campaign; Agent Work; Case; Goal;'. Navigation links at the top include 'Help for this Page' and letters from A to Z.

Create a Service Channel

Click into the Setup search box in the left navigation panel and type “Service Channel”. Then click “Service Channels”.

The screenshot shows the 'Service Channels' section under the 'SETUP' tab. A search bar at the top contains the text 'service channel'. Below it is a tree view with nodes: Feature Settings, Service, and Omni-Channel. The 'Service Channels' node is highlighted with a yellow background and a cursor icon pointing to it. A message below says: 'Didn't find what you're looking for? Try using Global Search.' To the right, there is a 'Queues' section with a table showing a single queue entry: 'Edit | Del Call Campaign Call_Campaign Amazon Connect Call Campaign'. The table has a green header row and a light gray background for the body rows. Navigation links at the top include 'Help for this Page' and letters from A to Z.

Click “New” to create our new Service Channel.

SETUP

Service Channels

Service Channels let you turn any Salesforce object—such as a case, lead, SOS session, or even a custom object—into a work record. Omni-Channel then plucks these work items from their queues—like flowers from the garden of agent productivity—and routes them to your agents in real time.

Does your organization use Live Agent for chats or SOS for video calls? If so, you'll notice that Salesforce creates those Service Channels for you automatically, so you can get up and running using Live Agent and SOS with Omni-Channel right away.

Show diagram

Let's get this party started and create a new Service Channel. After you create a Service Channel, [create a Routing Configuration](#) to determine how work items are pushed to your agents.

View: All ▾ [Create New View](#)

| Action | Service Channel Name | Developer Name |
|--------|----------------------|----------------|
| Edit | Live Agent | [REDACTED] |

A | B | C | D | E | F | G | H | I | J | K | L | M | N | C



Service Channels

Service Channels let you turn any Salesforce object—such as a case, lead, SOS session, or even a custom object—into a work record. Omni-Channel then plucks these work items from their queues—like flowers from the garden of agent productivity—and routes them to your agents in real time.

Show me an example

After you create a Service Channel, [create a Routing Configuration](#) to determine how work items are pushed to your agents.

We have resources that will help you up Omni-Channel for your organization.

Create Service Channels
Need help creating your first Service Channel? Get started with this guide.

Service Channel Settings
Learn more about what individual service channels can do.

Set Up Omni-Channel - Implementation Guide
Snuggle up with a cup of cocoa and end-to-end process of setting up Omni-Channel.

Basic Information

| | | |
|---------------------------------|---|---|
| Service Channel Name | Call Campaign Channel <input type="text"/> | 1 |
| Developer Name | Call_Campaign_Channel | |
| Salesforce Object | Amazon Connect Call Campaign <input type="button" value="▼"/> | 2 |
| Custom Console Footer Component | <input type="text"/> <input type="button" value="🔍"/> | |

3

In the new Service Channel form, enter your desired Service Channel Name (step 1). The Developer Name field will autopopulate based on the Service Channel Name content. Then, select the Amazon Connect Call Campaign object (step 2). Finally, save the new Service Channel (step 3).

The screenshot shows the 'Service Channels' setup page. At the top left is a blue button labeled 'SETUP' with a gear icon. Below it is a section titled 'Service Channels' with a back-link '« Back to List: Service Channels'. Underneath is a 'Basic Information' table:

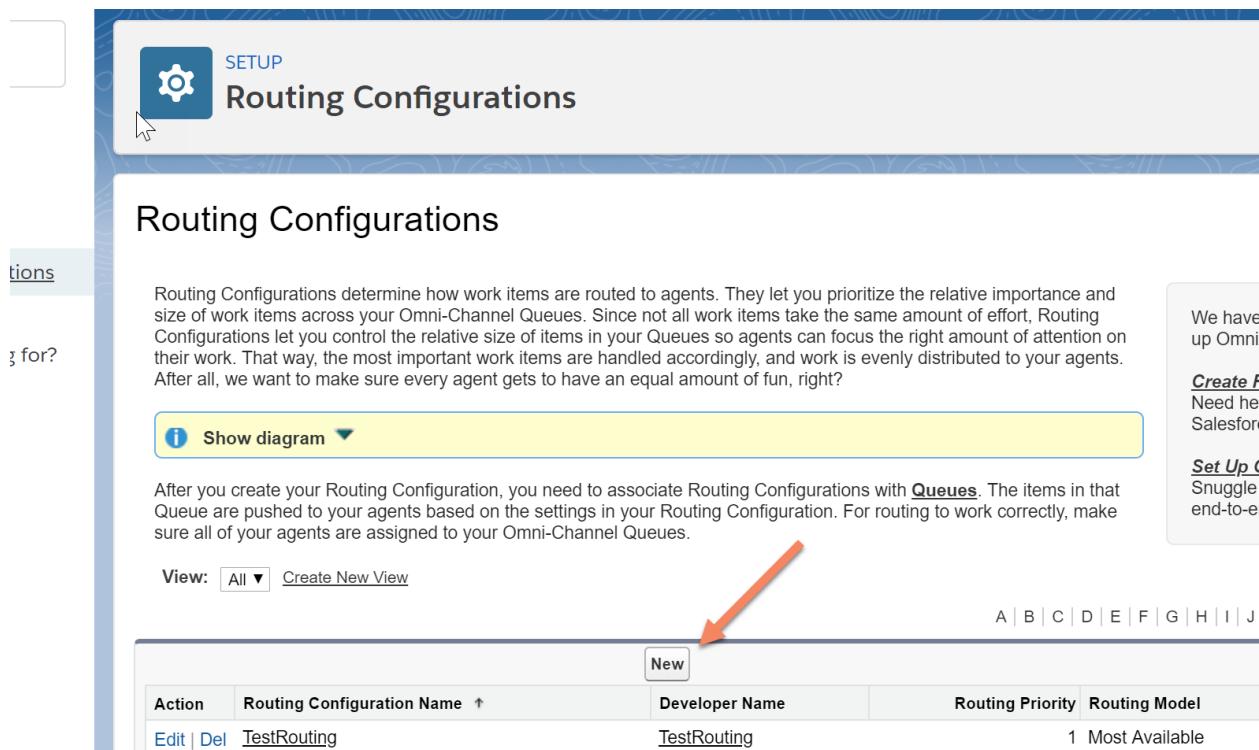
| | |
|----------------------|------------------------------|
| Service Channel Name | Call Campaign Channel |
| Developer Name | Call_Campaign_Channel |
| Salesforce Object | Amazon Connect Call Campaign |

At the bottom of the table is a note: 'Custom Console Footer Component'. There are 'Edit' and 'Delete' buttons at the top right of the table.

Create a Routing Configuration

Now, we need to create a routing configuration. Enter “routing” into the search box in the left navigation and click “Routing Configurations”.

The screenshot shows the 'Routing Configurations' page. The left sidebar has a search bar with 'routing' typed in. Below it is a tree view with nodes: Feature Settings, Service, Omni-Channel, and Routing Configurations. The 'Routing Configurations' node is highlighted with a yellow glow and has a cursor pointing at it. A message at the bottom says: 'Didn't find what you're looking for? Try using Global Search.' To the right is a 'Service' setup page with sections for 'Basic Information' and 'Custom Console Footer Component'.



SETUP

Routing Configurations

Routing Configurations determine how work items are routed to agents. They let you prioritize the relative importance and size of work items across your Omni-Channel Queues. Since not all work items take the same amount of effort, Routing Configurations let you control the relative size of items in your Queues so agents can focus the right amount of attention on their work. That way, the most important work items are handled accordingly, and work is evenly distributed to your agents. After all, we want to make sure every agent gets to have an equal amount of fun, right?

Show diagram ▾

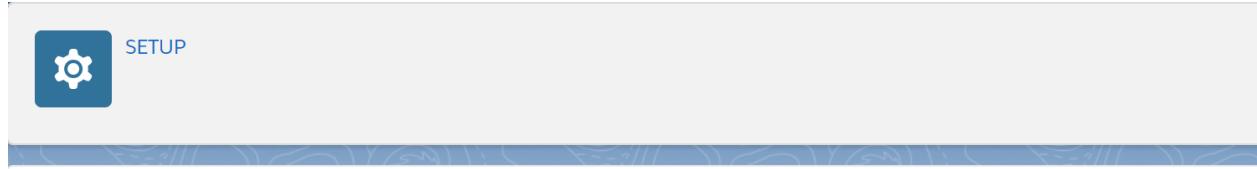
After you create your Routing Configuration, you need to associate Routing Configurations with [Queues](#). The items in that Queue are pushed to your agents based on the settings in your Routing Configuration. For routing to work correctly, make sure all of your agents are assigned to your Omni-Channel Queues.

View: All ▾ [Create New View](#)

| Action | Routing Configuration Name ↑ | Developer Name | Routing Priority | Routing Model |
|--|------------------------------|-----------------------------|------------------|----------------|
| Edit Del | TestRouting | TestRouting | 1 | Most Available |

A | B | C | D | E | F | G | H | I | J

On the Routing Configurations landing page, click “New”.



Routing Configurations

Routing Configurations determine how work items are routed to agents. They let you prioritize the relative importance and size of work items across your Omni-Channel Queues. Since not all work items take the same amount of effort, Routing Configurations let you control the relative size of items in your Queues so agents can focus the right amount of attention on their work. That way, the most important work items are handled accordingly, and work is evenly distributed to your agents. After all, we want to make sure every agent gets to have an equal amount of fun, right?

[Show diagram ▾](#)

After you create your Routing Configuration, you need to associate Routing Configurations with [Queues](#). The items in that Queue are pushed to your agents based on the settings in your Routing Configuration. For routing to work correctly, make sure all of your agents are assigned to your Omni-Channel Queues.

We have resources up Omni-Chan

[Create Routing Configuration](#)
Need help creating a Routing Configuration? See the Salesforce help documentation.

[Routing Configuration](#)
Learn more about Routing Configurations.

[Set Up Omni-Channel Queues](#)
Snuggle up with our guide to setting up Omni-Channel Queues for end-to-end processing.

Basic Information

Routing Configuration Name: Call Campaign Routing Co 1

Developer Name: Call_Campaign_Routing_C

Overflow Assignee: ⚠ If you don't give the overflow assignee access to the object types in your queues and set an overflow limit, assignments won't work.

User Optional

Routing Settings

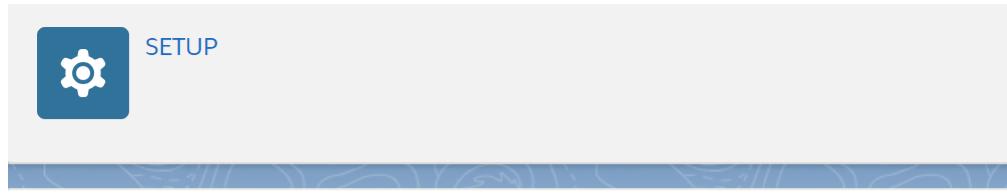
The routing priority determines the order in which work items across your Omni-Channel queues get pushed to your agents. Lower-priority items are pushed first.

The routing model determines how to evenly distribute work items to your agents. It acts as a tiebreaker if two or more agents qualify to take care of the fewest number of open work items. Most Available routes to the agent with the most open capacity in proportion to their set capacity.

Enter the Routing Configuration Name (step 1), and the Developer Name will autopopulate. If you'd like to set an Overflow Assignee, you can optionally do that at this point. The overflow assignee will receive work if your organization reaches its Omni-Channel limits. This setting has no effect until the limits are reached.

The screenshot shows the 'Routing Settings' configuration page. At the top, there is a 'User' dropdown and a search bar. Below the header, the 'Routing Settings' section is titled 'Routing Settings'. It contains three input fields: 'Routing Priority' (set to 2), 'Routing Model' (set to 'Most Available'), and 'Push Time-Out (seconds)' (empty). Orange arrows numbered 1, 2, and 3 point from right to left above the first three input fields respectively. Below this, the 'Work Item Size' section is titled 'Work Item Size'. It contains two input fields: 'Units of Capacity' (set to 5) and 'Percentage of Capacity' (empty). An orange arrow numbered 4 points from right to left above the 'Units of Capacity' field. At the bottom right of the form are 'Save' and 'Cancel' buttons.

Next, you must configure the Routing Settings. First, (step 1) enter the priority of the work across the Omni-Channel queues. Second (step 2), select the model to use to act as the tie-breaker between agents. Third, (step 3) specify the units of capacity or percentage of capacity of the work items in the queue. Finally, (step 4), click “Save”.



Routing Configurations

[« Back to List: Routing Configurations](#)

Basic Information

[Edit](#) [Delete](#)

Routing Configuration Name Call Campaign Routing Config

Developer Name Call_Campaign_Routing_Config

Overflow Assignee

▼ Routing Settings

Routing Priority 2

Routing Model Most Available

Push Time-Out (seconds)



Units of Capacity 5.00

Percentage of Capacity

▼ Related Queues

| Label | Queue Name |
|-------|------------|
|-------|------------|

You have created your Routing Configuration.

Now, we need to assign the Routing Configuration to our queue.

The screenshot shows the AWS Lambda Queue Management interface. At the top left is a search bar with the query "queues". To its right is a navigation menu with "Users" and "Queues" items, where "Queues" is underlined and has a red arrow pointing to it, labeled "1". The main content area has a title "SETUP Queues" with a user icon. Below the title is a section titled "Queues" with the following text:

Queues allow groups of users to manage a shared workload more effectively. A queue is a location where records can be routed to await processing until a user accepts them for processing or they are transferred to another queue. You can specify the set of objects that are supported and allowed to retrieve records from the queue.

View: All ▾ Edit | Create New View

A | B | C | D | E | F | G | H | I | J | K | L | M

| Action | Label | Queue Name | Queue Email | Supported Objects |
|------------|---------------|---------------|-------------|---|
| Edit Del | Call Campaign | Call Campaign | | Amazon Connect Call Campaign |
| Edit Del | TestChatQueue | TestChatQueue | [REDACTED] | Amazon Connect Historical Report Data; Amazon Connect Call Campaign; Agent Worklog; Knowledge Article Version; Lead; Live Agent Session; Live Chat Transcript; Macro; Message; Text; Scorecard; User Provisioning Request; User Presence; Coaching; Feedback; Feedback Question Set; Feedback Request; Feedback Template; Performance Cycle |

Go to the left nav and search for “queues”. Then, click on “Queues” (step 1). Finally, click on the “Edit” link next in the row of our Queue (step 2).

Enter the name of the queue and the email address to use when sending notifications (for example, `queue@mycompany.com`). When an object is assigned to a queue, only the queue members will be notified.

| | |
|-----------------------|--|
| Label | <input type="text" value="Call Campaign"/>  |
| Queue Name | <input type="text" value="Call_Campaign"/>  |
| Queue Email | <input type="text"/> |
| Send Email to Members | <input checked="" type="checkbox"/> |

Configuration with Omni-Channel Routing

If your organization uses Omni-Channel, you can link queues to a routing configuration. This Configurations.

| | | |
|------------------------------|----------------------|---|
| Routing Configuration | <input type="text"/> |  |
|------------------------------|----------------------|---|

Use the magnifying glass button to search for our new Routing Configuration.

 **Lookup**

Go!

You can use "*" as a wildcard next to other characters to improve your search results.

Search Results

| Routing Configuration Name | Developer Name | Routing Priority | Routing Model | Units of Capacity | Percentag |
|------------------------------|--|------------------|----------------|-------------------|-----------|
| TestRouting | TestRouting | 1 | Most Available | 5.00 | |
| Call Campaign Routing Config | Call_Campaign_Routing_Config | 2 | Most Available | 5.00 | |

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Select our Routing Configuration from the Lookup window.

The screenshot shows the 'Queue Edit' page for a 'Call Campaign'. The 'Label' field contains 'Call Campaign'. The 'Queue Name' field contains 'Call_Campaign'. The 'Queue Email' field is empty. Below these fields is a checkbox labeled 'Send Email to Members'. The 'Save' button is highlighted with a red arrow. The 'Cancel' button is also visible.

Queue Edit

Queue Name and Email Address

Enter the name of the queue and the email address to use when sending notifications (for example, when a contact is assigned to a queue). When an object is assigned to a queue, only the queue members will be notified.

Label: Call Campaign

Queue Name: Call_Campaign

Queue Email:

Send Email to Members:

Configuration with Omni-Channel Routing

If your organization uses Omni-Channel, you can link queues to a routing configuration. This will push work from the queue to the routing configuration.

Routing Configuration: Campaign_Routing_Config

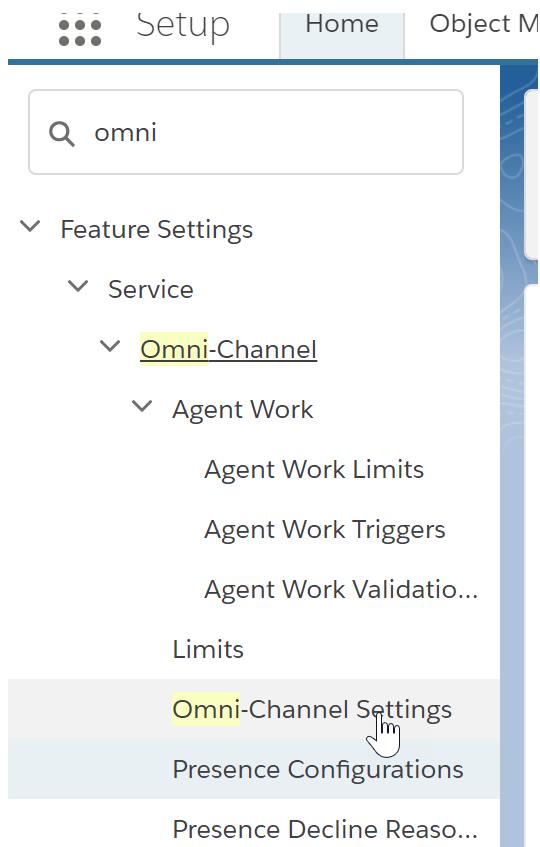
Supported Objects

Click “Save” to store our changes.

Omni-Channel Presence Syncing

In order to sync your Connect User status with your Omni-Channel agent status, you must configure Omni-Channel Presence Syncing. This will make your Omni-Channel presence status match your Amazon Connect Agent Status and vice versa.

First, we must enable omni-channel



Enter “omni” into the left navigation search box in Setup in your SalesForce instance.

Select “Omni-Channel Settings” from the menu.

The screenshot shows the 'Omni-Channel Settings' page under the 'SETUP' tab. On the left, there's a sidebar with various navigation items. The main content area has a heading 'Omni-Channel Settings' and a sub-heading 'Welcome to Omni-Channel!'. It describes Omni-Channel as a customer service solution that lets contact centers push work to agents. It also mentions that Omni-Channel integrates seamlessly into the Salesforce console. Below this, there's a button labeled 'Show diagram' with a dropdown arrow. A note says 'First, you need to enable Omni-Channel. Then, [create Service Channels](#)'. At the bottom of the main content area, there's a configuration section with two checkboxes. The first checkbox is checked and highlighted with an orange arrow pointing to it, with the text 'This must be checked' written next to it. The second checkbox is unchecked. At the very bottom right, there are 'Save' and 'Cancel' buttons.

Enable Omni-Channel This must be checked

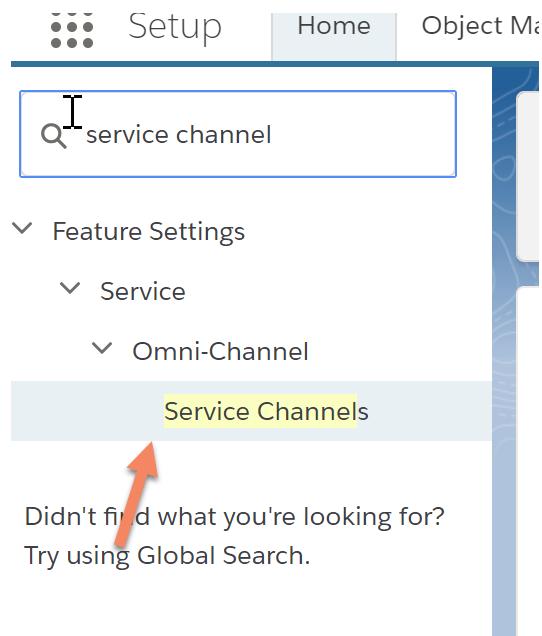
Use Skills-Based Routing

Save Cancel

Place a check in the checkbox for “Enable Omni-Channel”.

Create a Service Channel

Next, for Omni-Channel (we will use Live Chat), we need to create a Service Channel.



Search in the left navigation for “service channel” and select “Service Channels” when it appears.

| Action | Service Channel Name | Developer Name |
|--|-----------------------|-----------------------|
| Edit Del | Call Campaign Channel | Call_Campaign_Channel |

Select new from the Service Channel page

The screenshot shows the 'Service Channels' setup page. At the top, there's a 'SETUP' button with a gear icon. Below it, a section titled 'Service Channels' is described: 'Service Channels let you turn any Salesforce object—such as a case, lead, SOS session, or even a custom object—into a work record. Omni-Channel then plucks these work items from their queues—like flowers from the garden of agent productivity—and routes them to your agents in real time.' A 'Show me an example' button is present. The main area displays a 'Basic Information' form with the following fields:

| Field | Value |
|---------------------------------|----------------------|
| Service Channel Name | Live Agent |
| Developer Name | sfdc_liveagent |
| Salesforce Object | Live Chat Transcript |
| Custom Console Footer Component | |

At the bottom of the form are 'Save' and 'Cancel' buttons. A red arrow points to the 'Live Agent' input field, which is highlighted with a blue border.

Add a name to your Service Channel and select the Salesforce Object that coincides with your new Service Channel. Life Agent is selected as the default object when you add the Service Channel. Add a routing config as we did above for the Outbound Call Campaign. Add Presence Statuses that map to what you have in Connect.

SETUP

Presence Statuses

Presence Statuses indicate how “present” your agents are to receive work while they’re signed into Omni-Channel. You can create different statuses to indicate whether an agent is away or available to receive incoming work items. Salesforce creates an offline status for you automatically, so you don’t have to create it yourself.

Presence Statuses are associated with one or more service channels. Agents who are signed in with those statuses can receive work items from those channels. If you have agents who can handle different work items at the same time, those agents can log in with a Presence Status that’s associated with both of those channels.

Additionally, you can create specialized statuses for agents to use when they’re busy, such as when they’re at lunch or in training.

Show me an example ▾

After you create a Presence Status, you must assign it to your agents through a [Profile](#) or [Permission Set](#) so that they have access to it. After that, you need to create a [Presence Configuration](#) to determine the Omni-Channel settings that are assigned to your agents.

View: All ▾ [Create New View](#)

| Action | Status Name ↑ | Developer Name |
|--------|----------------------------------|----------------|
| Edit | Available | Available |
| Edit | Available - Chat | Available_Chat |
| Edit | Busy | Busy |
| Edit | Day_Dreaming | Day_Dreaming |
| Edit | Offline | Offline |
| Edit | On Break | On_Break |

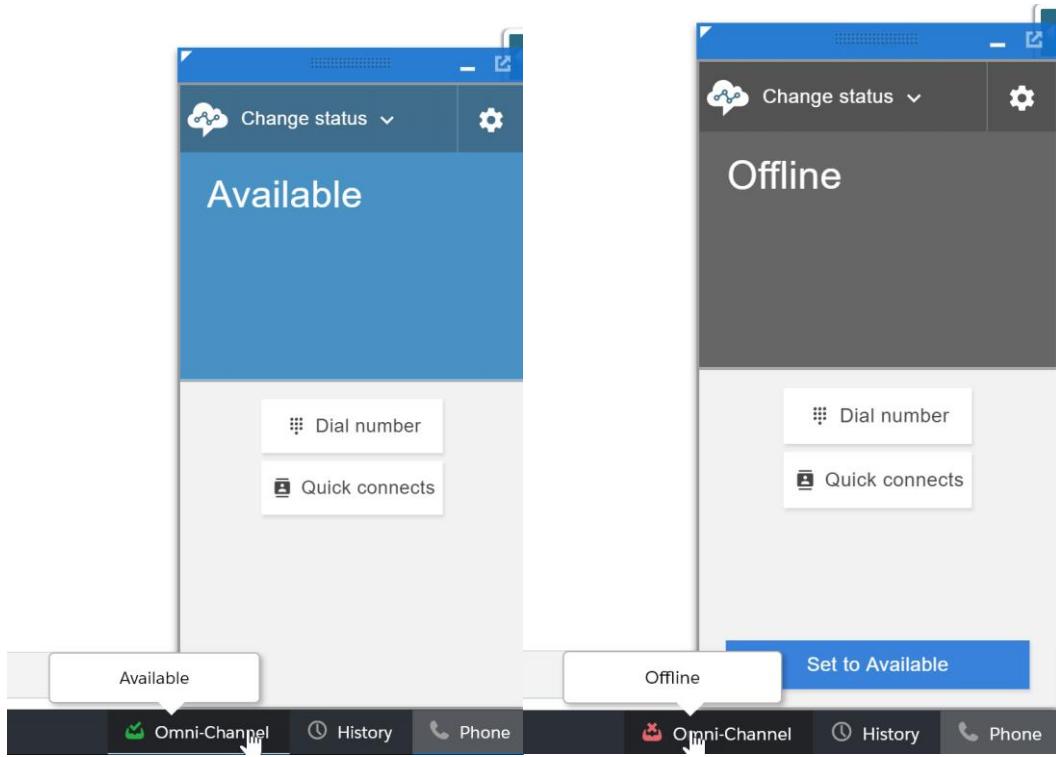
We can assign access to these statuses by going to Profiles in the left navigation and ensuring that the agent will be able to access the statuses that map to their Connect statuses.

The screenshot shows the AWS Lambda Profiles setup page under the 'Profiles' tab. It includes sections for StdExceptionTemplate, Unauthorized, UnderConstruction, Enabled External Data Source Access, Enabled Named Credential Access, and Enabled Service Presence Status Access.

In the Enabled Service Presence Status Access section, a red box highlights the 'Service Presence Status Name' dropdown, which contains four options: Available, Day_Dreaming, Offline, and On Break. An orange arrow points from the text 'Matches Connect Statuses' to the 'Edit' button in this section.

| Service Presence Status Name |
|------------------------------|
| Available |
| Day_Dreaming |
| Offline |
| On Break |

When you are finished, the omni-channel widget and the Phone will synchronize their statuses, depending on what the user is doing.



Queue Edit

Queue Name and Email Address

Enter the name of the queue and the email address to use when sending notifications (for When an object is assigned to a queue, only the queue members will be notified).

| | |
|-----------------------|--|
| Label | <input type="text" value="Call Campaign"/> |
| Queue Name | <input type="text" value="Call_Campaign"/> |
| Queue Email | <input type="text"/> Optional |
| Send Email to Members | <input type="checkbox"/> Optional |

Configuration with Omni-Channel Routing

If your organization uses Omni-Channel, you can link queues to a routing configuration. To Configurations.

Routing Configuration

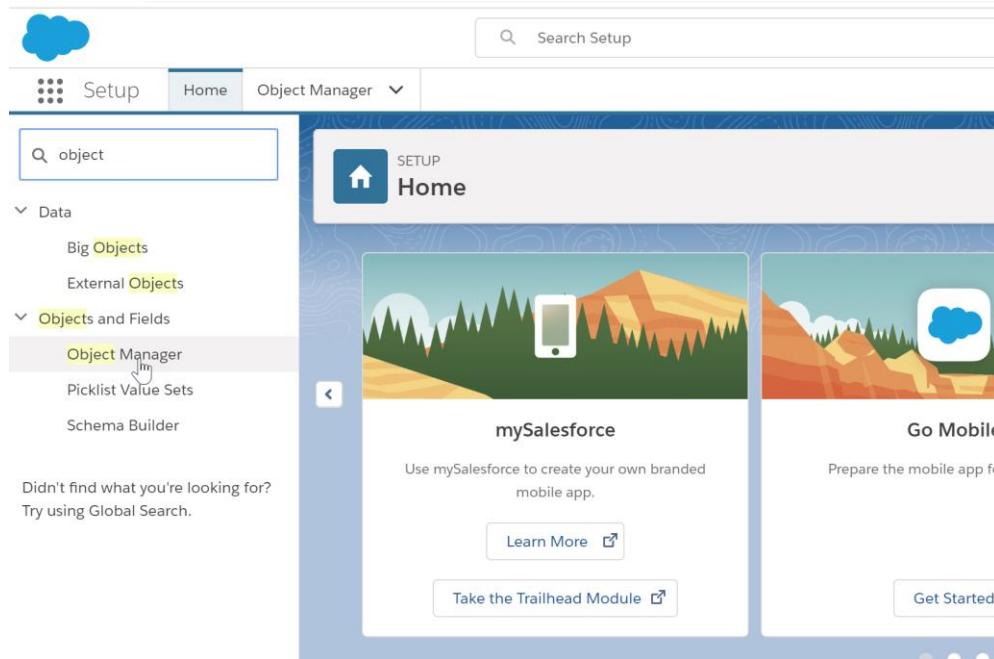
Supported Objects

We'll come back to this

Select the objects you want to assign to this queue. Individual records for those objects ca

| | |
|--|-----------------------------------|
| Available Objects | Selected Objects |
| <input type="checkbox"/> Amazon Connect Historical Report Data <input type="checkbox"/> Agent Work <input type="checkbox"/> Amazon Connect Call Campaign | <input type="checkbox"/> --None-- |

First, go to Setup in our instance. In the search box in the upper left of the screen, type object.



Click on “Object Manager”.

Setting up Salesforce Omni to route the Custom Object requires the following configurations to be in place:

- Create Salesforce Queue for Custom Object and Assign to Users • Create Service Channel for Custom Object
- Create Routing Configuration
- Associate Routing Configuration with Agents and Queue
- Create Presence Status and Configuration and Assign to Users

More information on how to set up Salesforce Omni can be found at the following link:

https://help.salesforce.com/articleView?id=omnichannel_create_objects.htm&type=o

After the configuration is in place to route the Custom Object, a process needs to be set up to insert records of the “Amazon Connect Call Campaign” object and assigns those to the queue that was created in the previous steps.

The following table describes all fields of the Custom Object, their possible values, and the behavior that the agent will experience when receiving a call.

| Field API Name | Type | Mandatory | Valid Values | Description |
|------------------------|-------------|------------|-----------------------------|--|
| Name | Auto Number | Do not set | | This field will automatically be filled when a new record is created. |
| OwnerId | Id | Yes | Salesforce User or Queue ID | Set this value to the Queue that is configured to route the records using Salesforce Omni. |
| Phone_Number__c | Phone | Yes | Valid Phone Number | This will be the phone number the Toolkit will attempt to dial automatically when the record was accepted by the agent. |
| Account__c | Id | No | Salesforce Account ID | The account associated with this call record. The account will automatically be screen popped when the record was accepted by the agent. |
| Contact__c | Id | No | Salesforce Contact ID | The contact associated with this call record. The contact will automatically be screen popped and focused when the record was accepted by the agent. |
| Opportunity__c | Id | No | Salesforce Opportunity ID | The opportunity associated with this call record. The opportunity will automatically be screen popped when the record was accepted by the agent. |
| Lead__c | Id | No | Salesforce Lead ID | The lead associated with this call record. The lead will automatically be screen popped and focused when the record was accepted by the agent. |
| Case__c | Id | No | Salesforce Case Id | The case associated with this call record. The case will automatically be screen |

was accepted by the agent.

Please note that only the ID/Lookup fields can differ between records, and only the fields that contain a value will be screen popped. If a Contact is provided, the Contact Tab will always be in focus. If no Contact, but a Lead is provided, the Lead Tab will be in focus. If neither a Contact or a Lead will be provided, the Amazon Connect Call Campaign record details page will remain in focus.

- Amazon Connect Call Campaign records can be created in various ways.

Following is a list of common methods that can be used to create records for an outbound call campaign:

- A Process Builder Flow can create a campaign either instantly or delayed based on record changes. This can be useful for follow up calls that are not required to be done by a specific individual.
- Apex Scheduled Job can query records in the Salesforce org on a nightly basis and create call campaign records for the coming day.
- Create a Custom Button to convert a Salesforce Campaign and its members into call campaign records.
- Use Salesforce Data Loader to create call campaign records from a CSV file

Further Reading

For additional information, see the following:

- Amazon Connect CTI Adapter for Salesforce:
<https://appexchange.salesforce.com/appxListingDetail?listingId=a0N3A00000EJH4yUAH>
- Amazon Connect User Guide:
<https://docs.aws.amazon.com/connect/latest/userguide/using-amazon-connect.html>
- Amazon Connect Admin Guide:
<https://docs.aws.amazon.com/connect/latest/adminguide/what-is-amazon-connect.html>
- Amazon Connect API Reference (Outbound, User Management)
<https://docs.aws.amazon.com/connect/latest/APIReference/Welcome.html>
- Amazon Connect Release Notes:
<https://docs.aws.amazon.com/connect/latest/adminguide/amazon-connect-release-notes.html>

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

Document Revisions

| Date | Description |
|-----------------------|---|
| September 2018 | First release of CTI Adapter v2 documentation |
