

Startelecom Universal CRM Connector - Salesforce Manual

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Install Salesforce Connector

Open the provided URL for the Salesforce connector package. The installation screen will show. Enter the provided password for the package and select installation type. Confirm that you want to install this package and finally click on the **Install** button.

The screenshot shows the Salesforce AppExchange installation interface for the 'Startelecom Salesforce Connector' by 'StarCon'. At the top, there's a green download icon and the app name. Below this, a warning message states 'This app is protected by an installation key.' with a password input field containing eight dots. Three installation options are presented: 'Install for Admins Only' (unselected), 'Install for All Users' (selected with a blue radio button), and 'Install for Specific Profiles...' (unselected). An orange warning banner indicates that the app is a non-Salesforce application not authorized for distribution. Below this, a checkbox is checked, acknowledging the warning. 'Install' and 'Cancel' buttons are visible. At the bottom, a table lists the app details.

App Name	Publisher	Version Name	Version Number
Startelecom Salesforce Connector	StarCon	version 1.0.0.0	1.0

Additional Details [View Components](#)

The current install password is: **STARTEL2022**

A screen to approve access to Genesys Pure Cloud servers will pop up. This is necessary for accessing Genesys Platform API from within Salesforce. Select the checkbox to confirm access and click on the **Continue** button.

Approve Third-Party Access

This package may send or receive data from third-party websites. Make sure you trust these websites. What if you are unsure?


Website	SSL Encrypted
api.apne2.pure.cloud	<input checked="" type="checkbox"/>
api.aps1.pure.cloud	<input checked="" type="checkbox"/>
api.cac1.pure.cloud	<input checked="" type="checkbox"/>
api.euw2.pure.cloud	<input checked="" type="checkbox"/>
api.mypurecloud.com	<input checked="" type="checkbox"/>
api.mypurecloud.com.au	<input checked="" type="checkbox"/>
api.mypurecloud.de	<input checked="" type="checkbox"/>
api.mypurecloud.ie	<input checked="" type="checkbox"/>
api.mypurecloud.jp	<input checked="" type="checkbox"/>
api.use2.us-gov-pure.cloud	<input checked="" type="checkbox"/>
api.usw2.pure.cloud	<input checked="" type="checkbox"/>
app.apne2.pure.cloud	<input checked="" type="checkbox"/>
app.aps1.pure.cloud	<input checked="" type="checkbox"/>
app.cac1.pure.cloud	<input checked="" type="checkbox"/>
app.euw2.pure.cloud	<input checked="" type="checkbox"/>
app.mypurecloud.com	<input checked="" type="checkbox"/>
app.mypurecloud.com.au	<input checked="" type="checkbox"/>


☒ Yes, grant access to these third-party web sites

Continue

Cancel

Installation of the package begins...

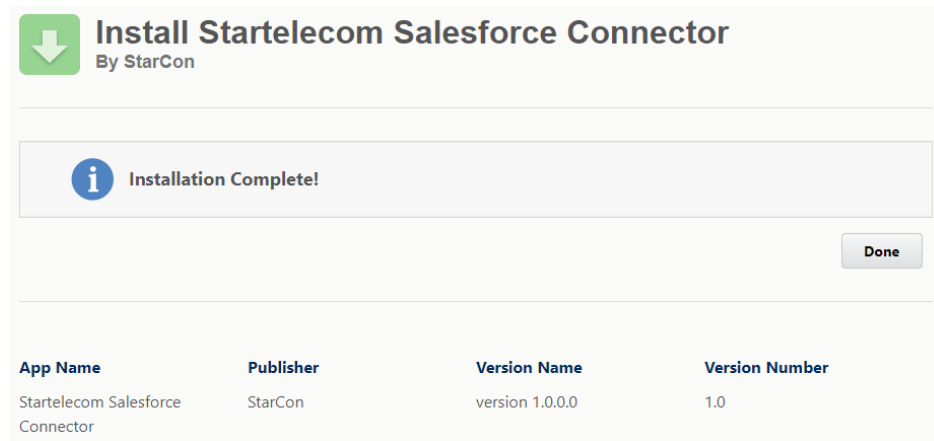
**Install Startelecom Salesforce Connector**
By StarCon

 **Installing and granting access to all Users...**

App Name	Publisher	Version Name	Version Number
Startelecom Salesforce Connector	StarCon	version 1.0.0.0	1.0

Additional Details [View Components](#)

Once completed a confirmation will be shown. Also, confirmation email will be sent to administrator. Click on **Done** button to complete the installation.

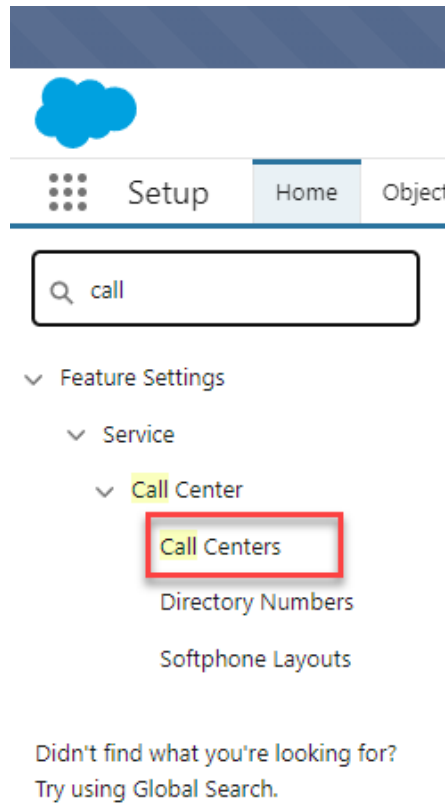


Import and Edit Call Center Definition

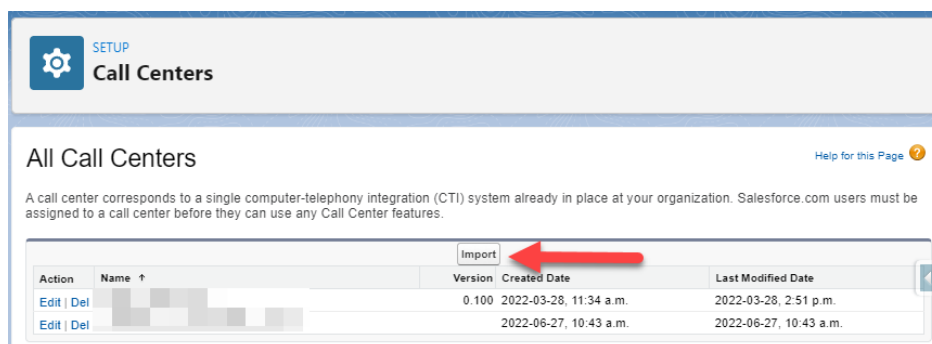
Download the latest Call Center definition file from:

- <https://ucc.startelecom.ca/assets/templates/StartelecomCallCenter.xml> if you are using a version of Startelecom connector from Genesys AppFoundry,
- <https://ucc.startelecom.ca/assets/templates/StartelecomCallCenterPrivate.xml> if you are using a Private Deployment.

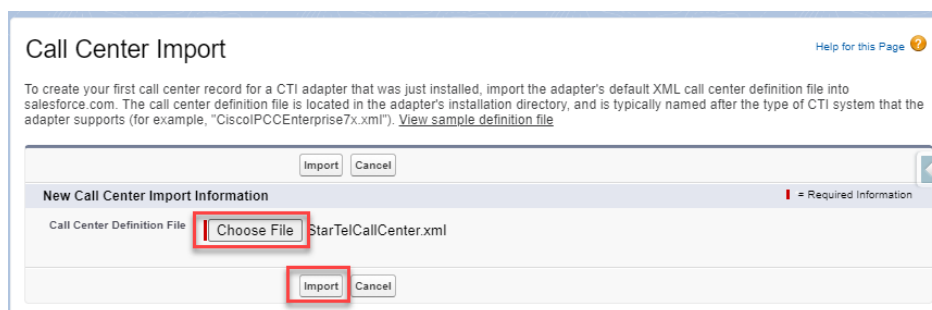
In Salesforce, from **setup** using the Quick Find box, search for and select Call Centers.



Click **Import** button:



Click **Choose File** button and locate the StartelecomCallCenter.xml file. Click **Import** button:



Click **Edit** button. Change **Display Name** or Softphone height and width. Click **Save** button.

Call Center Edit
Startelecom for Salesforce Lightning
[All Call Centers](#) » Startelecom for Salesforce Lightning

Call Center Edit Save Cancel

General Info

Internal Name	StarTelCallCenter
Display Name	Startelecom for Salesforce L
Description	Startelecom for Salesforce L
Adapter URL	https://ucc.startelecom.ca/sa
Use Api	true
Salesforce Compatibility Mode	Classic_and_Lightning
Height	535
Width	340

Save Cancel

Click **Manage Call Center Users** > **Add More Users**. Click **Find** to view all available users or search for specific users in the search tool. Select applicable users. All intended Startelecom users must be assigned to this Call Center. Click on **Add to Call Center** button.

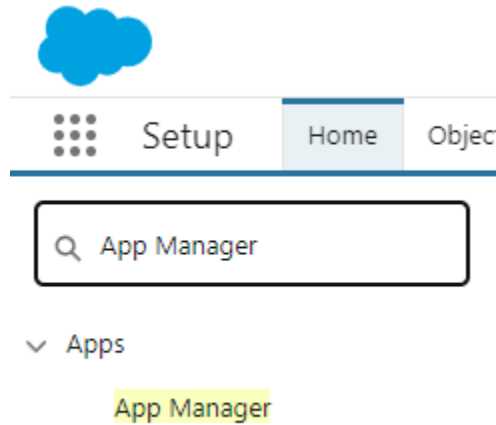
For more information on assigning users to a Call Center, see https://help.salesforce.com/articleView?id=cti_admin_manageagentsadd.htm.

Add Startelecom Universal CRM Connector to a Lightning App

Universal CRM Connector functions via the **Open CTI Softphone** component in a Lightning app. An existing app in your organization can be edited or a new one created.

Note: Navigation style cannot be changed on an existing app. If the existing app is not set to console navigation, a new app needs to be created to set the navigation style appropriately. For detailed instructions on creating a new lightning app, see https://help.salesforce.com/articleView?id=sf.dev_apps_lightning_create.htm.

From Setup using the Quick Find box, search for and select App Manager.



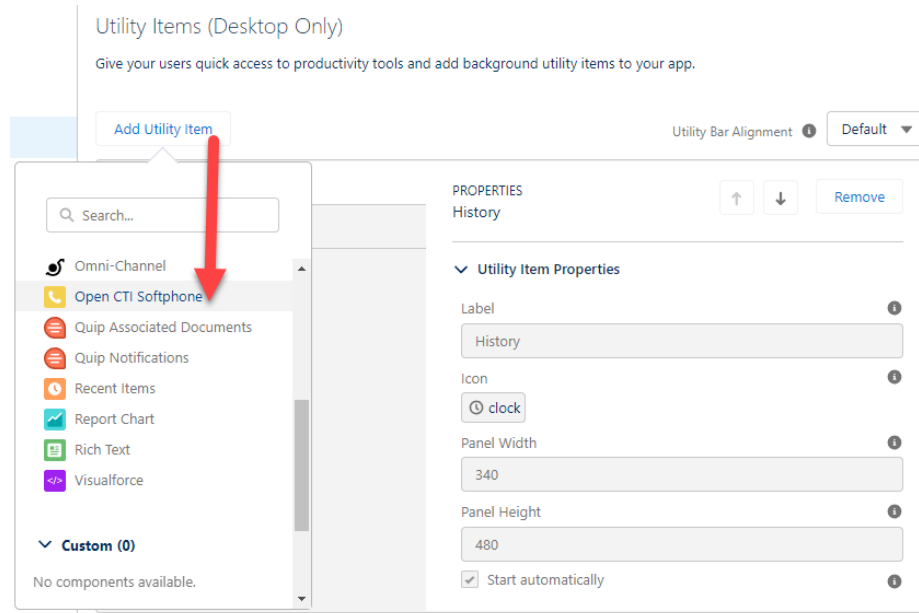
Click Edit in the drop-down menu next to your app.

Lightning Experience App Manager					
22 items • Sorted by App Name • Filtered by All app namespaces • TabSet Type					
App Name ?	Developer Name	Description	Last Modified Date	App Type	Visible
3 App Launcher	AppLauncher	App Launcher tabs	2022-02-14, 9:29 a.m.	Classic	✓
4 Bolt Solutions	LightningBolt	Discover and manage business solutions designed for your industry.	2022-02-14, 9:31 a.m.	Lightning	✓
5 Community	Community	Salesforce CRM Communities	2022-02-14, 9:29 a.m.	Classic	✓
6 Content	Content	Salesforce CRM Content	2022-02-14, 9:29 a.m.	Classic	✓
7 Data Manager	DataManager	Use Data Manager to view limits, monitor usage, and manage recipes.	2022-06-11, 9:58 a.m.	Lightning	✓
8 Digital Experiences	SalesforceCMS	Manage content and media for all of your sites.	2022-02-14, 9:29 a.m.	Lightning	✓
9 Lightning Usage App	LightningInstrumentation	View Adoption and Usage Metrics for Lightning Experience	2022-02-14, 9:29 a.m.	Lightning	✓
10 Marketing	Marketing	Best-in-class on-demand marketing automation	2022-02-14, 9:29 a.m.	Classic	✓
11 Platform	Platform	The fundamental Lightning Platform	2022-02-14, 9:29 a.m.	Classic	✓
12 Queue Management	QueueManagement	Create and manage queues for your business.	2022-02-14, 9:29 a.m.	Lightning	✓
13 Sales	Sales	The world's most popular sales force automation (SFA) solution	2022-02-14, 9:29 a.m.	Classic	✓
14 Sales	LightningSales	Manage your sales process with accounts, leads, opportunities, and more	2022-02-17, 9:03 p.m.	Lightning	✓
15 Sales Console	LightningSalesConsole	(Lightning Experience) Lets sales reps work with multiple records on one screen	2022-03-05, 4:13 p.m.	Lightning	✓
16 Salesforce Chatter	Chatter	The Salesforce Chatter social network, including profiles and feeds	2022-02-14, 9:29 a.m.	Classic	✓
17 Salesforce Scheduler Setup	LightningScheduler	Set up personalized appointment scheduling.	2022-02-14, 9:31 a.m.	Lightning	✓

In **App Options**, confirm the following options are selected and click **Next**.

- **Navigation style:** Console navigation
- **Supported Form Factor:** Desktop

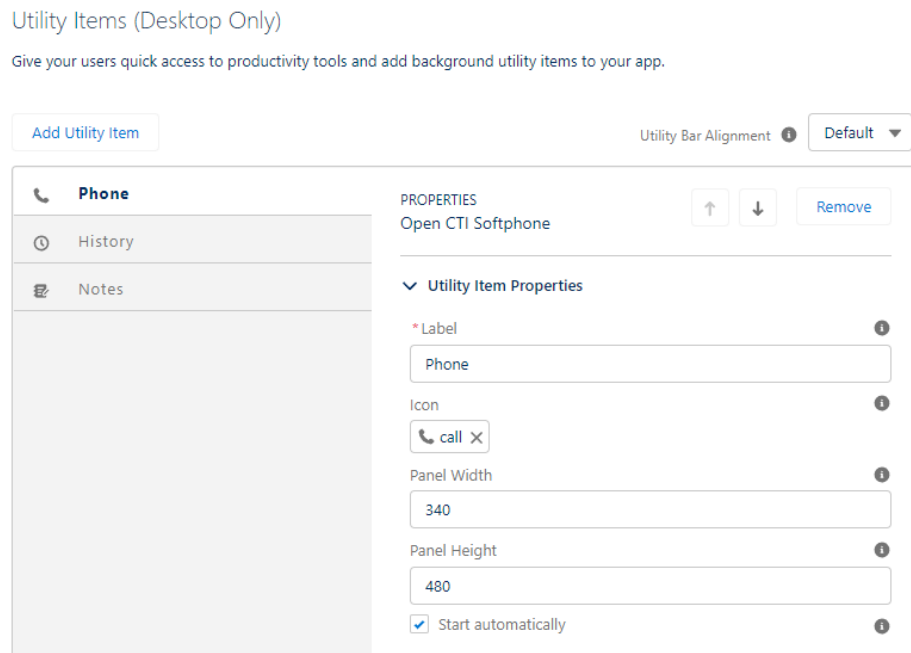
In Utility Items, click Add Utility Item and select **Open CTI Softphone**.



Set the Utility Item Properties as follows:

- **Label:** Phone, or preferred unique name.
- Enable **Start automatically**.

Note: The panel width and height are not utilized. To control the size for the softphone, see [Import and edit call center settings](#).

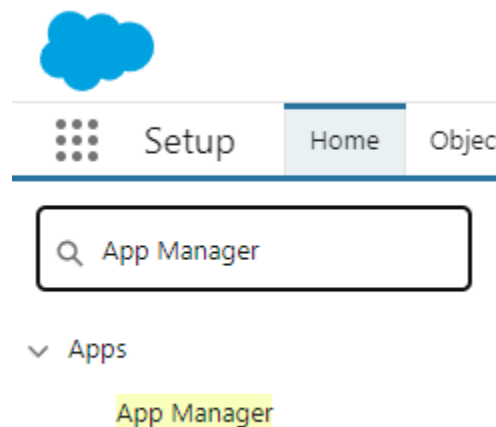


Add an Embedded Interaction Window to a Lightning App

By default, scripts, chats, emails, and messages open in a separate window in Salesforce. However, you can configure Salesforce to show scripts, chats, emails, and messages in an embedded interaction window. This embedded interaction window appears in the bottom toolbar along with the client and other embedded interaction windows (such as Omni-Channel in Service Cloud).

Note: If you run Genesys Cloud for Salesforce in multiple browser tabs, then you cannot use embedded interaction windows, because then the integration does not work properly.

From Setup using the Quick Find box, search for and select App Manager.



Click Edit in the drop-down menu next to your app.

In **App Options**, confirm the following options are selected and click **Next**.

- **Navigation style:** Console navigation
- **Supported Form Factor:** Desktop

In Utility Items, click Add Utility Item and select **StartelecomInteractionUtility**.

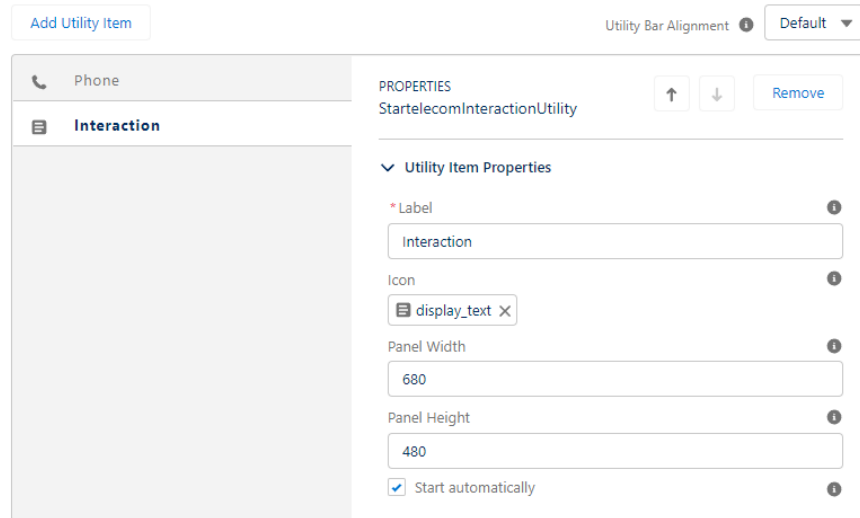
Set the Utility Item Properties as follows:

- **Label:** Interaction, or preferred unique name.
- **Icon:** leave default or change with your needs.
- **Width** and **Height:** depending on your needs or used Script template
- Enable **Start automatically**.

Click **Save**.

Utility Items (Desktop Only)

Give your users quick access to productivity tools and add background utility items to your app.

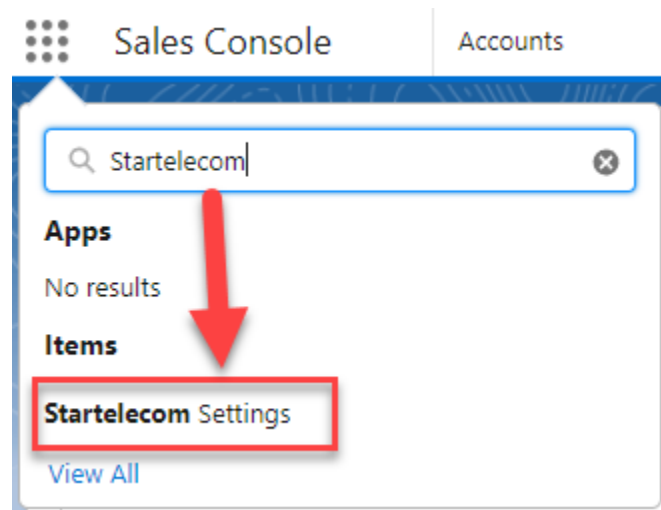


The embedded interaction window (StartelecomInteractionUtility) now appears on the lower-left or lower-right corner of certain Lightning Experience pages.

Configure Startelecom Settings

The settings page provides Startelecom Universal CRM Connector the connection between your Salesforce org and your Genesys Cloud org, as well as state synchronization and Salesforce flow triggers.

Go to App Launcher and locate **Startelecom Settings**:



Startelecom Settings are divided into 2 tabs: **Call Center Settings** and **General Settings**.

Salesforce ORG can have any number of Call Centers assigned to different users. Call Center Settings apply only to selected Call Center and must be set for each Call Center that is in use.

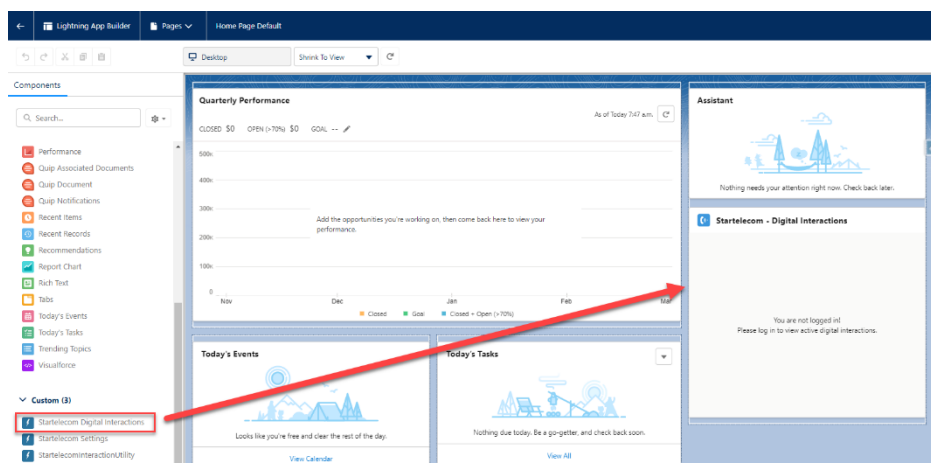
General Settings are shared settings and also apply for background tasks (triggers, automatic syncs, etc..).

Add Startelecom Digital Interactions Component to a Lightning App Pages

Startelecom Digital Interactions component allows you to handle multiple digital interaction types (SMS, Web Messaging, Emails, also integrations such as WhatsApp, Twitter, Facebook...) with one Salesforce native component which eliminates the need to show pop-ups or to handle such interactions in new browser window/tab.

Startelecom Digital Interactions component can be added to APP, Home or Record pages. To ensure easy access at all times, Startelecom recommends to embed Digital Interactions component on all record pages.

- Open a page in the Lightning App Builder;
- Locate **Startelecom Digital Interactions** component (in the **Custom section**), and drag it to the desired location on the page:

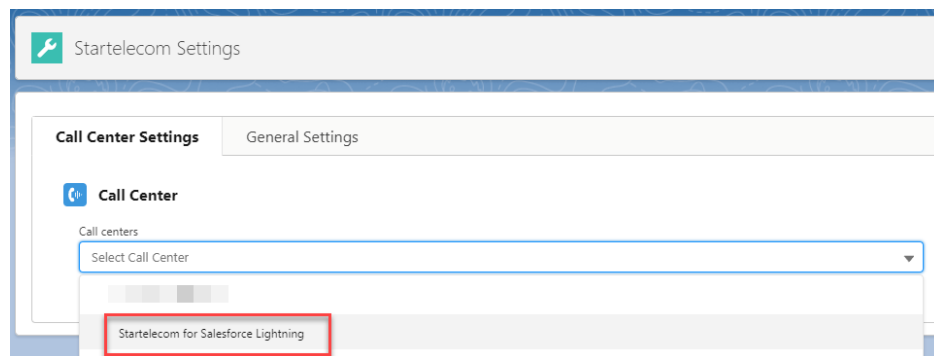


- Add, edit or remove any other components to change page's layout as desired.
- Click **Save**.

Note: Verify how the controls appear with other content on each page to ensure there is enough room to display the whole component.

Configure Call Center Settings

Click on **Call Center Settings** tab inside of Startelecom Settings page and select the **Startelecom for Salesforce Lightning** (default) or any other added Call Center name from the drop-down list.



Configure Client Settings

- **Enable Dedicated Login Window** allows you to use login providers that do not work in embedded windows.

This setting causes a separate login window to open. If you close this window, you can reopen it by clicking **Open Authentication Window** in the client. In this window, you sign in using Genesys Cloud credentials or credentials for other providers that you configured in your Genesys Cloud organization. To direct all agents to a single provider, use this setting with the **Auto Redirect to SSO**. For information about the single sign-on providers that Genesys Cloud supports, see [About single sign-on \(SSO\)](#).

- **Show Softphone on Alert** will pop-up embedded softphone on every alert, e.g. new incoming interaction. without this checked agent must manually raise softphone on alert sound to answer or decline interaction.
- **Enable Workspace Transfer** allows agents to transfer tabs when they transfer a call. The integration transfers the main tab that the agent is viewing and any subtabs for that record that the agent has open.

Note: Workspace transfers take precedence over other screen pop attributes (such as ST_ScreenPop_Url and ST_SearchAndScreenPop). If you select Enable Workspace Transfer in the call center settings and agents select Transfer Selected Tab when transferring a call, the integration ignores other screen pop attributes.

Client Settings

- ☒ Enable Dedicated Login Window
- ☒ Show Softphone on Alert
- ☒ Enable Workspace Transfer

Custom Interaction Attributes

Under **Custom Interaction Attributes** you can add custom interaction attributes.

This setting allows you to access and use data during an interaction. For example, after you add an attribute, you can then use the attribute in Architect flows or scripts to display knowledge articles about a particular topic to an agent or to screen pop information about contract deals for an agent to mention to a customer.

To add attribute, type attribute name, then click on Add Attribute button.

Custom Interaction Attributes

Add custom Interaction attribute

Add Attribute

ADDED CUSTOM INTERACTION ATTRIBUTES


my_custom_attribute	
---------------------	--

To remove attribute, click on **X** button on attribute you want to remove.

Contact Search

By default, when agents search for names or numbers before transferring an interaction or making a call, the client returns people and queues from your Genesys Cloud organization. It is possible to also include records from your Salesforce organization. As administrators, you can configure which entities the integration searches. You can also configure the integration to search external contacts in your Genesys Cloud organization.

- **Search Pure Cloud People** searches people in your Genesys Cloud organization. Selected by default.
- **Search Pure Cloud Queues** searches queues in your Genesys Cloud organization. Selected by default.
- **Search Pure Cloud External Contacts** searches external contacts in your Genesys Cloud organization.
- **Search Salesforce Records** searches all records in your Salesforce organization.




Contact Search


- ☒ Search Pure Cloud People
- ☒ Search Pure Cloud Queues
- ☐ Search Pure Cloud External Contacts
- ☐ Search Salesforce Records

Activity Logging

Activity logging controls logging of interactions within Salesforce.




Activity Logging



Activity Settings

- ☒ Enable Interaction Logs
- ☒ Create Activity Record
- ☒ Enable Auto-Association on Navigation



Activity Field Mapping

Interaction Attributes
Salesforce Fields

INTERACTION ATTRIBUTES	SALESFORCE FIELDS	
Interaction Attributes <input type="text" value="interaction.totalAcidDuration"/>	Salesforce Fields <input type="text" value="After Call Time"/>	<input type="button" value="X"/>
Interaction Attributes <input type="text" value="interaction.url"/>	Salesforce Fields <input type="text" value="Interaction URL"/>	<input type="button" value="X"/>
Interaction Attributes <input type="text" value="dialer.contactData.Lead_ID"/>	Salesforce Fields <input type="text" value="Lead ID"/>	<input type="button" value="X"/>

Activity Settings

- **Enable Interaction Logs** provides access to the interaction logs from the client. This option also enables Interaction Log editing, which allows agents to write and edit interaction logs in the client.

For more information, see [Interaction logs](#).

- **Create Activity Record** enables creation of Task Salesforce object for each interaction that saves activity history in Salesforce when the interaction connects. For more information, see [Interaction logs](#).

- **Enable Auto-Association on Navigation** associates the current Salesforce record automatically with the interaction's log as agents navigate while the interaction is connected.

Activity Field Mapping

The Universal CRM Connector gives you the option to synchronize interaction attributes with Salesforce activity records on inbound and outbound interactions. Synchronizing interaction attributes allows you to store any interaction attributes on Salesforce activity records. If interaction attributes change, even after disconnection, the data remains in sync between the interaction and the Salesforce activity record.

Notes:

- Lightning Experience does not allow Genesys Cloud for Salesforce to save interaction attributes to fields that the Salesforce user does not have access to. For example, you configure Genesys Cloud for Salesforce to save the queue name to a custom field but do not make the custom field visible to agents. As a result, Salesforce does not save the queue name to the custom field in reports.
- Although you can map interaction attributes *after* assigning users to a call center, follow the sequence described here of mapping interactions first and then assigning users. This sequence ensures that users do not receive unmapped interactions.

For each interaction attribute that you would like to map, create a custom field in Salesforce on the Activity object. See [Create Custom Fields](#) in the Salesforce documentation.

To remove mapping click on **X** button in the mapping you want to remove. You can also edit already added interaction attributes.

Note: For more information about available interaction attributes, see the data object format in [Startelecom Interaction Model](#).

Default fields in Salesforce

This table includes a list of data automatically captured for every interaction that an agent handles.

Field label	Description
Call Duration	Total duration of the interaction in seconds, from the time of connection to disconnection or transfer.
Call Object Identifier	Interaction ID key assigned to the interaction.

Call Result	Wrap-up code assigned after the interaction disconnects. See Wrap up an interaction .
Call Type	Indicates the interaction direction (Inbound or Outbound).
Comments	Empty field for any notes taken during the interaction.
Name	<p>Displays the name from the Salesforce record that pops when the interaction connects or the name from which a click-to-dial call was made, such as a contact or lead. If multiple records match, this field is a list in the client; the agent must select a record from the list.</p> <p>If the agent navigates to a different contact, lead, or person account record while the interaction is live, that record is dynamically added to the list.</p>
Related To	<p>Displays an associated record from the Salesforce record that pops when the interaction connects or the name from which a click-to-dial call was made, such as an account or opportunity.</p> <p>If the agent navigates to a different account, opportunity, campaign, case, or custom object record while the interaction is live, that record is dynamically added to the list; the agent must select a record from the list.</p> <p>Note: To ensure that interaction logs can be saved for custom objects, select Allow Activities when creating the custom object in Salesforce.</p>
Subject	<p>Displays the interaction type plus a date and time stamp. The date/time is formatted based on the browser's locale settings.</p> <p>Note: The interaction type for Genesys Cloud web messaging interactions is Chat.</p> <p>Example: Call 8/10/2015, 8:55:17 AM</p>
Type	<p>Indicates the interaction type. Values: Call, Chat, Email, Voicemail, and Message.</p> <p>Note: The interaction type for Genesys Cloud web messaging interactions is Chat.</p> <p>Tip: If the Type field is visible to agents, Genesys recommends adding these values to the Type picklist in Salesforce.</p>

Screen Flow Settings

Startelecom Universal CRM Connector leverages Salesforce's Process Automation Flows. Custom actions are used along with existing Salesforce actions to design flows that automate a business process. This allows you to use Genesys Cloud attributes and data to retrieve corresponding customer information from Salesforce.

These Salesforce flows can be triggered via a Genesys Cloud Architect flow using unique **key:value pairs** on connect, on disconnect, and on acw.

Flow prerequisites

Salesforce Flows type must be the Screen Flow.

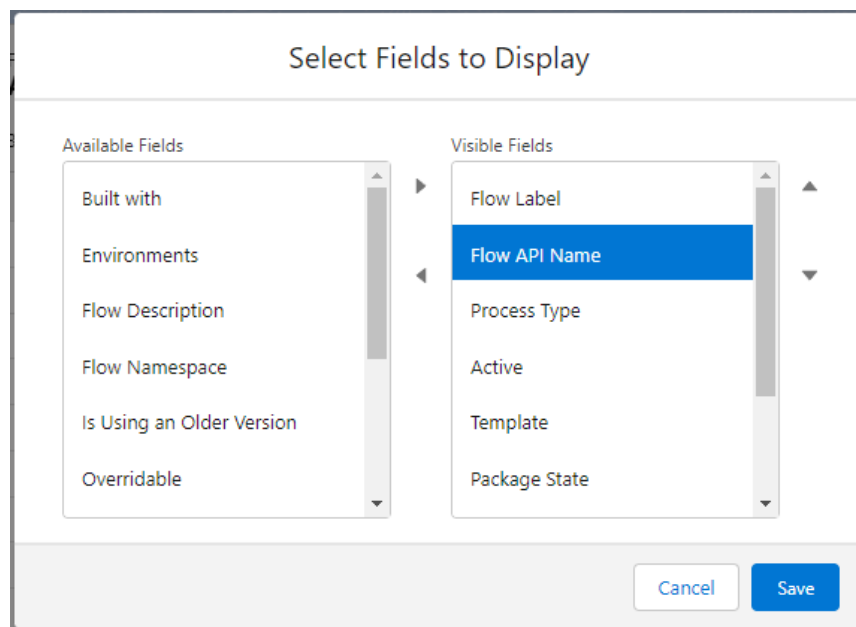
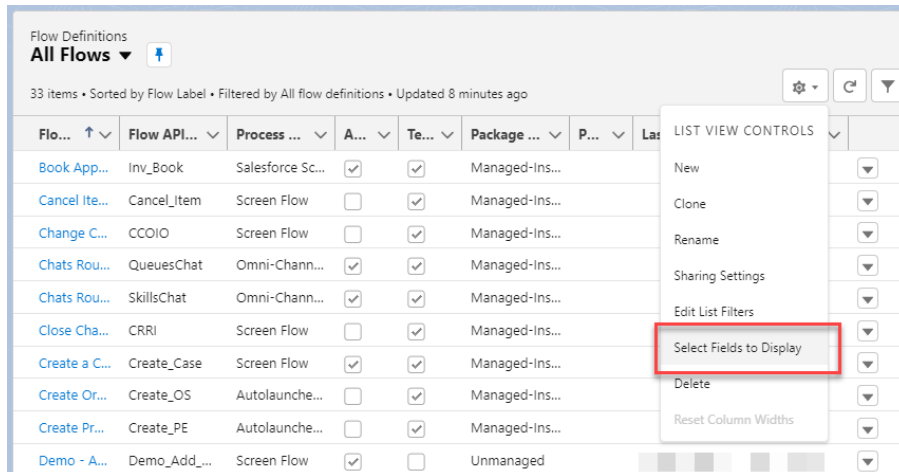
Connect Genesys Architect Flow to Salesforce Flows

Salesforce Flows are triggered by Genesys Cloud Architect using Universal CRM Connector attribute keys to connect to the API names of a Salesforce flow.

- In Genesys Cloud Architect, access your designated Inbound flow.
- Add a Set Participant Data block and set three attributes as follows:

Attribute Name	Value to Assign	Description
ST_Flow_Connected	API Name of your Salesforce Inbound Flow	Triggered when a interaction is connected.
ST_Flow_Disconnected	API Name of your Salesforce On Disconnected Flow	Triggered when a conversation is disconnected.
ST_Flow_Acw	API Name of your Salesforce On ACW Flow	Triggered when ACW is completed on a conversation. Note: Only applies to conversations with an ACW portion.

To easily see the API Names of your flows in Salesforce, add the **Flow API Name** column to the All Flows view.



Custom Actions

Custom actions are used along with existing Salesforce actions to design flows that automate a business process. These custom actions are supported when run in a Screen Flow triggered by Universal CRM Connector and/or a Lightning App Flow.

This connector provides following custom actions:

Action Name	Description
StartelecomOpenRecordAction	Pops a record in a primary tab or sub tab for the agent

StartelecomOpenRecordAction	Pops a Salesforce Screen Flow as a primary tab or sub tab for the agent
StartelecomOpenRecordAction	Pops a URL in a primary tab or sub tab for the agent
StartelecomOpenRecordAction	Replaces the tab running the flow with the specified URL

StartelecomOpenRecordAction

Pops a record as a primary tab or as a sub tab.

Applicable uses

- In a Screen Flow triggered by Universal CRM Connector.
- In a Lightning App Flow.

Inputs

- Object Type (required): The type of Salesforce object (e.g., Account).
- Record Id (required): The Salesforce record Id of the object to pop.
- Active (optional): If the popped primary tab should be in focus. Defaults to true.
- Open Record in Sub Tab (optional): If true opens record in Sub Tab.

Outputs

- Primary Tab Id: The Salesforce tab id of the popped primary tab

New Action

Filter By

Category ▼

- All**
- Users
- Group
- Work Plans
- Work Steps
- Sales leads
- Task
- Feed Item
- Chatbots
- Case
- Account

Action

StartelecomOpenRecordAction

Use values from earlier in the flow to set the inputs for the "StartelecomOpenRecordAction" core action. To use its outputs later in the flow, store them in variables.

* Label

* API Name

Description

Set Input Values

A₃ * Object Type - The type of Salesforce object, e.g. Account, Case, Contact...

Enter value or search resources... Q

A₃ * Record Id - The Salesforce record id of the object to pop

Enter value or search resources... Q

☐ Active - If true brings the popped primary tab into focus Don't Include

☐ Open Record in Sub Tab - If true opens record in Sub Tab Don't Include

A₃ Primary Tab Id Don't Include

Cancel
Done

StartelecomOpenFlowAction

Pops a Salesforce Screen Flow as a primary tab or as a sub tab.

Applicable uses

- In a Screen Flow triggered by Universal CRM Connector.

Inputs

- Flow API Name (required): The API name of the flow to pop.
- Active (optional): If the popped primary tab should be in focus. Defaults to true.
- Open Flow in Sub Tab (optional): If true opens record in Sub Tab.
- Parameter Name 1 (optional): The name of the argument to pass into the flow.
- Parameter Value 1 (optional): value of the argument that corresponds to the numbered name.
- Parameter Name 2 (optional): The name of the argument to pass into the flow.
- Parameter Value 2 (optional): value of the argument that corresponds to the numbered name.
- Parameter Name 3 (optional): The name of the argument to pass into the flow.

- Parameter Value 3 (optional): value of the argument that corresponds to the numbered name.
- Parameter Name 4 (optional): The name of the argument to pass into the flow.
- Parameter Value 4 (optional): value of the argument that corresponds to the numbered name.
- Parameter Name 5 (optional): The name of the argument to pass into the flow.
- Parameter Value 5 (optional): value of the argument that corresponds to the numbered name.

StartelecomOpenURLAction

Pops a URL as a primary tab or as a sub tab.

Applicable uses

- In a Screen Flow triggered by Universal CRM Connector.
- In a Lightning App Flow.

Inputs

- **Url (required):** The URL to pop.
- **Active (optional):** If the popped primary tab should be in focus. Defaults to true.
- **Open URL in Sub Tab (optional):** If true opens record in Sub Tab.

Outputs

- **Primary Tab Id:** The Salesforce tab id of the popped primary tab

New Action

Filter By
Category

All
Users
Group
Work Plans
Work Steps
Sales leads
Task
Feed Item
Chatbots
Case
Account

Action
StartelecomOpenURLAction

Use values from earlier in the flow to set the inputs for the "StartelecomOpenURLAction" core action. To use its outputs later in the flow, store them in variables.

* Label

* API Name

Description

Set Input Values

A₀ * Url - The URL To pop
Enter value or search resources...

Active - If true brings the popped primary tab into focus

Open Url in Sub Tab - If true opens record in Sub Tab

Don't Include

Don't Include

> Advanced

Cancel Done

StartelecomReplaceCurrentTabAction

Replaces the tab running the flow with the specified URL.

Inputs

- **Url (required):** The URL to redirect this tab relative to tab running the flow (e.g. /0038c00002iGI6HAAS).

Apex Extension Point Settings

The Startelecom Genesys Embeddable Client integration exposes extension points (or interfaces) in Apex that you can use to develop methods that customize click-to-dial, screen pop, and processing interaction logs, or take custom actions on interaction Connected, Disconnected and Wrap-Up events.

To customize the client behavior, create a single Apex file with an Apex class that implements one or more of the following interfaces:

- `startel.StartelecomExtension.ClickToDial`: Defines the `onClickToDial` method that customizes click-to-dial behavior;
- `startel.StartelecomExtension.ScreenPop`: Defines the `onScreenPop` method that customizes screen pop behavior for incoming alerting interactions;
- `startel.StartelecomExtension.ProcessCallLog`: Defines the `onSaveLog` method that customizes saving interaction logs;
- `startel.StartelecomExtension.Connected`: Defines the `onCallConnected` method that you can use to define custom actions when interaction is connected;
- `startel.StartelecomExtension.Disconnected`: Defines the `onCallDisconnected` method that you can use to define custom actions when interaction is disconnected;
- `startel.StartelecomExtension.WrapUp`: Defines the `onCallWrapUp` method that you can use to define custom actions when interaction is wrapped-up;

If you implement more than one extension point (or interface), **place them all in the same Apex file**. Define the Apex class as **global** so the code can be called by the integration.

```
global class MyStartelExtension implements
    startel.StartelecomExtension.ClickToDial,
    startel.StartelecomExtension.ScreenPop,
    startel.StartelecomExtension.ProcessCallLog,
    startel.StartelecomExtension.Connected,
    startel.StartelecomExtension.Disconnected,
    startel.StartelecomExtension.WrapUp {

    public String onClickToDial(String data) {
        ...
    }

    public String onScreenPop(String data) {
        ...
    }

    public String onSaveLog(String data) {
        ...
    }

    public String onCallConnected(String data) {
        ...
    }

    public String onCallDisconnected(String data) {
        ...
    }

    public String onCallWrapUp(String data) {
        ...
    }
}
```

After you create an Apex class that implements one or more of the interfaces, configure settings in Salesforce to use this class.

Configure extension points

The Apex Extension Point Settings section allows you to configure extension points in the managed package to use an Apex class that you created to customize actions such as click-to-dial or screen pop in Genesys Cloud for Salesforce.

1. Click on **App Launcher**.
2. Search for **Startelecom Settings**.
3. Under **Call Centers**, select a version of the call center definition.
4. Under **Apex Extension Point Settings**, select the Apex class that you created.
5. Click **Save Configuration** in that section.

Use the extension points to customize click-to-dial

In Salesforce, create a single Apex file with an Apex class that implements the `startel.StartelecomExtension.ClickToDial` interface. Define the Apex class as global so the code can be called by the integration.

onClickToDial method initiates a phone call or an SMS message.

When Salesforce alerts the client about a click-to-dial event, the client performs the click-to-dial event based on parameters in your Apex code. The method can return data that changes the default click-to-dial behavior.

If the Apex code triggers an exception, then the integration performs the default click-to-dial behavior. If no value is returned, then the integration suppresses the click-to-dial behavior.

Input properties

The following properties are included in the JSON data that is passed to the method.

Name	Data Type	Description	Notes
number	String	Phone number that the integration calls.	
object	String	Type of object such as a contact or an account in Salesforce.	
objectId	String	ID of a relevant object such as a contact or an account to auto-associate with an activity.	objectId is only for a single record.
objectName	String	Name of the record in Salesforce.	

Output properties

The following properties are supported in the JSON data returned from the method.

Name	Data Type	Description	Notes
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number	String	See Input properties table.	
object	String	See Input properties table.	
objectId	String	See Input properties table.	
objectName	String	See Input properties table.	
attributes	Object	Key-value pairs of attributes to add to the interaction.	
queueId	String	ID of the queue to make a call on behalf of.	
autoPlace	Boolean	Integration automatically places a call (true), or the integration populates the Name or Number box with the phone number (false).	
type	String	Type of interaction.	Valid values: call, sms. If no type is provided, defaults to call.
callerIdName	String	Name displayed to recipients of your phone calls.	
callerId	String	Phone number displayed to recipients of your phone calls.	
associations	Array	List of Salesforce records to add to the Name or Related To box in the client.	

Example

```
global class MyStartelExtension implements startel.StartelecomExtension.ClickToDial {
    public String onClickToDial(String data) {
        Map<String, Object> clickToDialData = (Map<String, Object>)
JSON.deserializeUntyped(EncodingUtil.urlDecode(data, 'UTF-8'));
        clickToDialData.put('queueId', '8b0b438e-0952-447e-86b2-12415d56ee80');
        clickToDialData.put('callerIdName', 'John Smith');
        clickToDialData.put('callerId', '+13175550123');

        return JSON.serialize(clickToDialData);
    }
}
```

Use the extension points to customize screen pop

In Salesforce, create a single Apex file with an Apex class that implements the `startel.StartelecomExtension.ScreenPop` interface. Define the Apex class as global so the code can be called by the integration.

onScreenPop method is Used to drive screen pop logic.

This method is called for an inbound alerting interaction. `onScreenPop` is only called once for each agent for each alerting interaction. The method can return data that changes the default screen pop behavior.

If the Apex code triggers an exception, then the integration performs the default screen pop behavior. If no value is returned, then the integration suppresses the screen pop behavior.

Input properties

The following properties are included in the JSON data that is passed to the method.

Name	Data Type	Description	Notes
searchValue	String	Search value.	Example values: email address (for chat and email interactions), phone number (for voice and SMS interactions).
interaction	Object	Data object that represents interaction data.	For more information, see the data object format in Condensed conversation information.

Output properties

Important: Use only one of the following properties in the JSON data returned from the `onScreenPop` method.

Name	Data Type	Description	Notes
url	String	URL of a page in Salesforce.	Can be a standard Salesforce page, a Visualforce page, or a new record page with pre-populated data from an Architect flow.
searchValue	String	Value searched for in Salesforce records.	Can be a case number, a phone number, a contact name, or other items.

defaultScreenPop	Boolean	Performs a default screen pop (true) or does not perform a default screen pop (false).	
-------------------------	---------	--	--

Example

```
global class MyStartelExtension implements startel.StartelecomExtension.ScreenPop {
    public String onScreenPop(String data) {
        // Example: Find an Account by phone number. If not found, fall back to default screen
        pop behavior.
        Map<String, Object> screenPopData = (Map<String, Object>)
JSON.deserializeUntyped(EncodingUtil.urlDecode(data, 'UTF-8'));
        Map<String, Object> dataToReturn = new Map<String, Object>();

        if (String.isNotBlank(phoneNumber)) {
            List<Account> cases = [SELECT Id FROM Account WHERE Phone =: phoneNumber ORDER BY
LastModifiedDate DESC LIMIT 1];
            if (cases.size() > 0) {
                dataToReturn.put('url', cases.get(0).Id);
                return JSON.serialize(dataToReturn);
            }
        }

        dataToReturn.put('defaultScreenPop', true);
        return JSON.serialize(dataToReturn);
    }
}
```

Use the extension points to customize processing interaction logs

You can use the extension points to customize saving interaction logs in Genesys Cloud for Salesforce.

In Salesforce, create a single Apex file with an Apex class that implements the `startel.StartelecomExtension.ProcessCallLog` interface. Define the Apex class as global so the code can be called by the integration.

onProcessCallLog method is used to save interaction log information. This method is called whenever the integration detects a change in the interaction log at certain interaction or user events. The method receives unsaved interaction log data for a task record.

If the method saves the data successfully, then return the ID of the record. If the method does not save the data, then return an empty string or null.

Input properties

The following properties are included in the JSON data that is passed to the method.

Name	Data Type	Description	Notes
eventName	String	Represents the state that triggered onSaveLog.	Values: interactionChanged, interactionDisconnected, interactionChangedAfterDisconnect, interactionACWCompleted, interactionRemoved, openCallLog, appDisconnected.
interaction	Object	Represents the state of the interaction.	For more information, see the data object format in Condensed conversation information .
callLog	Object	Interaction log data with changed values for the activity fields defined in Salesforce.	Only provides portions of the integration log that changed.

Country Code Settings

This section allows you to modify country codes for the integration to use in searches and screen pops.

The Startelecom Universal CRM Connector integration run Screen Pop extension searches Salesforce for phone numbers and then screen pops records based on these phone numbers. It removes country code prefix from all inbound phone numbers before searching Salesforce for the number based on Country Code Settings table.

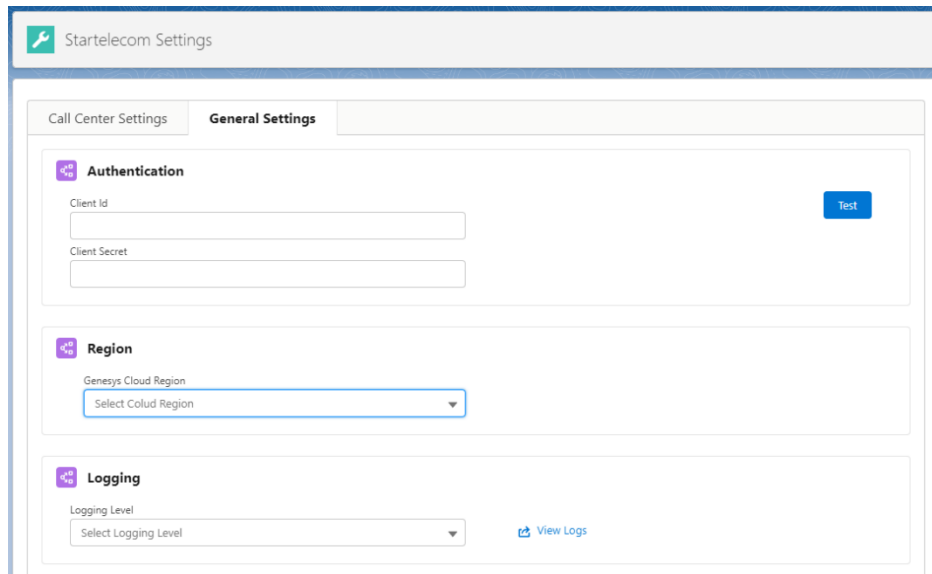
To add country codes, follow these steps:

1. Select a country from the flag menu. Do one of the following:
 - Type the country name.
 - Scroll through the list.
2. Click **Add**.
3. Repeat for each country code that you want to add.

You can delete configured Country Codes by clicking on a **X** icon beside each added Country Code.

Configure General Settings

Click on **General Settings** tab inside of Startelecom Settings page. You can configure the following settings there:



The screenshot shows the 'Startelecom Settings' interface with the 'General Settings' tab selected. The page is divided into three main sections: Authentication, Region, and Logging. The Authentication section contains fields for 'Client Id' and 'Client Secret', with a 'Test' button. The Region section has a dropdown menu for 'Genesys Cloud Region' with the text 'Select Colud Region'. The Logging section has a dropdown menu for 'Logging Level' with the text 'Select Logging Level' and a 'View Logs' link.

Configure Authentication

This section allows you to add your OAuth credentials. Go to your Genesys Cloud browser window and go to **Admin > OAuth**. Click on **Universal CRM Connector OAuth Client** created by Genesys premium app install process. Copy the **Client ID** and **Client Secret** to Authentication fields in **Startelecom Settings** in Salesforce.

Configure Region

Select your Genesys Cloud region. This must match the region configured in the call center settings.

Configure Logging

This section allows you to configure the amount of detail that the diagnostic logs generate and to view logs to help troubleshoot problems.

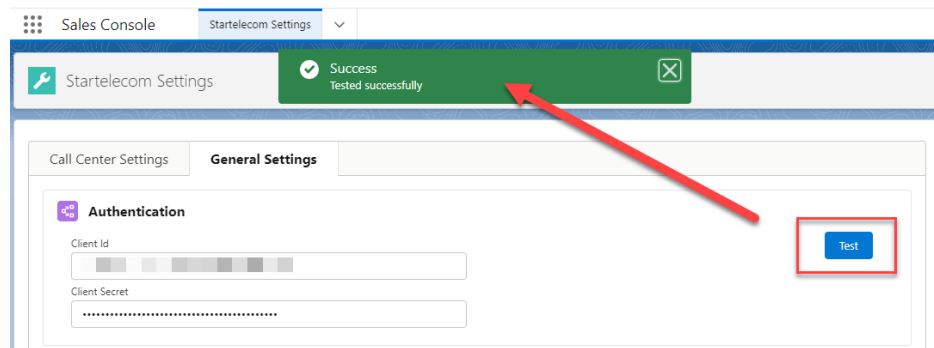
Logging Level: Determines the amount of detail that the diagnostic logs generate.

By default, Logging Level returns basic information for ERROR. If you want to expand the amount of detail that the logs return, select **WARN**, **INFO**, or **DEBUG**. The information returned increases with each level; ERROR provides the least detailed information and DEBUG provides the most detailed information.

Logs appear in your **browser console** that you can use to troubleshoot issues.

Testing Authentication

Save General Settings by clicking on Save Configuration button on the bottom of the page. Then click on Test button in Authentication section. If everything is set correctly you should get the information that the test is passed:



Startelecom Interaction Model

The Startelecom Universal CRM Connector provides a minimized version of the full conversation model. Use this Interaction model information to develop richer integrations using Extension Points or to map fields to Screen Flow input variables and CRM activity records.

Interaction attribute	Screen Flow input variable name	Interaction type	Data type	Description
call.ani	call_ani	Call, Callback	String	Phone number of the caller.
call.calledNumber	call_calledNumber	Call, Callback	String	Phone number dialed (DNIS or SIP addresses for queues).
call.callbackNumbers	call_callbackNumbers	Call, Callback	String[]	The phone number(s) to use to place the callback.
call.isInternal	call_isInternal	Call, Callback	Boolean	Indicates whether the call is an internal interaction.
call.subscriberPhone	call_subscriberPhone	Call, Callback	String	Remote phone of the active interaction. This phone number is digits only, cleared from all special characters and country codes.

call.uuiData	call_uuiData	Call, Callback, Outbound Dialing	String	Data received from inbound calls or sent with outbound calls. For more information, see About User to User Information (UUI) and the IETF UUI specification .
chat.transcript	chat_transcript	Chat	String	Transcript object ID of a chat interaction. Startelecom recommends using a lookup relationship custom field. Warning?: Transcripts greater than 131,072 characters fail to save.
crm.externalRoutedWorkItem	crm_externalRoutedWorkItem	Open message	String	Work item ID of the Salesforce chat that was routed and handled externally through Genesys Cloud.
dialer.campaignId	dialer_campaignId	Outbound dialing	String	Genesys Cloud ID for an outbound dialing campaign.
dialer.contactId	dialer_contactId	Outbound dialing	String	Genesys Cloud ID for a contact in a contact list associated with an outbound dialing campaign.
dialer.contactListId	dialer_contactListId	Outbound dialing	String	Genesys Cloud ID for a contact list associated with an outbound dialing campaign.
dialer.contactData.[ColumnName]	dialer_contactData_[ColumnName]	Outbound dialing	String	Column name in campaign management contact list
email.isThirdPartyEmail	email_isThirdPartyEmail	Email	Boolean	Indicates whether the interaction is a non-Genesys Cloud email interaction.
email.subject	email_subject	Email	Boolean	Subject line in the email.
id	id	All*	String	Genesys Cloud ID of the conversation.
interaction.acwDuration	interaction_acwDuration	All*	Number	Total time in seconds spent on wrap-up work, from the disconnection of the interaction to the completion of wrap-up work.
interaction.connectedTime	interaction_connectedTime	All*	String	Time when an agent was connected to an interaction. <i>Date time is represented as an ISO-8601 string, for example: yyyy-MM-ddTHH:mm:ss.SSSZ.</i>
interaction.direction	interaction_direction	All*	String	Direction of the interaction (Inbound or Outbound).
interaction.disconnectedTime	interaction_disconnectedTime	All*	String	Time when an agent was disconnected from an interaction. <i>Date time is represented as an ISO-8601 string, for example: yyyy-MM-ddTHH:mm:ss.SSSZ.</i>

interaction.displayAddresses	interaction_displayAddresses	Call, Callback, Outbound dialing, Email, SMS and WhatsApp messages	String	Remote address of the active interaction (phone number for call, callback, outbound dialing, SMS and WhatsApp messages, and ACD voicemail interactions; email address for email interactions). <i>Note: Startelecom recommends not using this attribute for call logs with callback interactions.</i>
interaction.duration	interaction_duration	All*	Number	Total duration in seconds that an agent spends on an interaction. Indicates how long the interaction has been connected, from the time of connection to disconnection or wrap-up completion.
interaction.flagged	interaction_flagged	Call, Callback, Outbound dialing, ACD voicemail interactions	String	Voice interactions (call, callback, outbound dialing, and ACD voicemail interactions) flagged for quality issues such as deteriorated audio, unexpected disconnections, or failed transfers.
interaction.hasJourneyContext	interaction_hasJourneyContext	All*	Boolean	Indicates whether the interaction has a journey context.
interaction.isCallback	interaction_isCallback	All*	Boolean	Indicates whether the interaction is a callback interaction.
interaction.isChat	interaction_isChat	All*	Boolean	Indicates whether the interaction is a chat interaction.
interaction.isCoBrowsing	interaction_isCoBrowsing	All*	Boolean	Indicates whether the interaction is currently part of a co-browse session.
interaction.isConference	interaction_isConference	All*	Boolean	Indicates whether the interaction is currently part of a conference session.
interaction.isConnected	interaction_isConnected	All*	Boolean	Indicates whether the interaction is connected.
interaction.isDialer	interaction_isDialer	All*	Boolean	Indicates whether the interaction is an outbound dialing interaction.
interaction.isDialerPreview	interaction_isDialerPreview	All*	Boolean	Indicates whether the interaction is a dialer preview interaction.
interaction.isDisconnected	interaction_isDisconnected	All*	Boolean	Indicates whether the interaction is disconnected.
interaction.isDone	interaction_isDone	All*	Boolean	Indicates whether the interaction is finished.
interaction.isEmail	interaction_isEmail	All*	Boolean	Indicates whether the interaction is an email interaction.
interaction.isMessage	interaction_isMessage	All*	Boolean	Indicates whether the interaction is a message interaction.

interaction.isSharingScreen	interaction_isSharingScreen	All*	Boolean	Indicates whether the interaction is currently part of a screen share session.
interaction.isVoicemail	interaction_isVoicemail	All*	Boolean	Indicates whether the interaction is a voicemail interaction.
interaction.name	interaction_name	All*	String	Raw remote name associated with the active interaction. For a remote name without special characters, see <code>remoteName</code> .
interaction.participantData.[CustomFieldName]	interaction_participantData_[CustomFieldName]	Call, Callback, Email, message, ACD voicemail	String	Custom field name that is assigned by using Set Participant Data in an Architect flow.
interaction.participantId	interaction_participantId	All*	String	Unique ID for each agent associated with a particular interaction. For example, an interaction that is transferred from one agent to another agent produces two participant IDs. One ID is for the original agent. A second ID is for the agent that received the transfer.
interaction.participantPurpose	interaction_participantPurpose	All*	String	Participant type of the interaction.
interaction.phone	interaction_phone	All*	String	Raw remote address of the active interaction. For a remote address without special characters or SIP information, see <code>displayAddress</code> .
interaction.queueName	interaction_queueName	All*	String	Name of the queue that the interaction routes to or from.
interaction.recordingState	interaction_recordingState	All*	String	On update, 'paused' initiates a secure pause, 'active' resumes any paused recordings; otherwise indicates state of conversation recording. <i>Valid values:</i> ACTIVE, PAUSED, NONE.
interaction.remoteName	interaction_remoteName	All*	String	Remote name for the active interaction. <i>Note:</i> For SMS messages, this attribute returns the display address for the active interaction. For Genesys Cloud web messaging, this attribute returns Guest.
interaction.socialUserName	interaction_socialUserName	All*	String	The user name for the communication.
interaction.startTime	interaction_startTime	All*	String	Time when the first participant joined the interaction. <i>Date time is represented as an ISO-8601 string, for example, yyyy-MM-ddTHH:mm:ss.SSSZ.</i>
interaction.state	interaction_state	All*	String	State of the interaction (for example, ALERTING, CONNECTED, DISCONNECTED, HELD).

interaction.summary.summaryId	interaction_summary_summaryId	All*	String	The id of the summary.
interaction.summary.language	interaction_summary_summaryId	All*	String	The language code of the conversation.
interaction.summary.summary.text	interaction_summary_summary_text	All*	String	The text of the summary.
interaction.summary.summary.score	interaction_summary_summary_score	All*	String	The AI confidence value.
interaction.summary.headline.text	interaction_summary_headline_text	All*	String	The text of the summary (headline).
interaction.summary.headline.score	interaction_summary_headline_score	All*	String	The AI confidence value (headline).
interaction.summary.reason.text	interaction_summary_reason_text	All*	String	The text of the summary (headline).
interaction.summary.reason.score	interaction_summary_reason_score	All*	String	The AI confidence value (reason).
interaction.summary.resolution.text	interaction_summary_resolution_text	All*	String	The text of the summary (resolution).
interaction.summary.resolution.score	interaction_summary_resolution_score	All*	String	The AI confidence value (resolution).
interaction.totalAcDuration	interaction_totalAcDuration	All*	String	Total time in seconds that an interaction spends being routed to an agent. Does not include IVR time. Example scenario: An interaction spends 30 seconds in an initial queue before a tier-one agent picks up the interaction. The agent transfers the interaction to a tier-two agent. The interaction spends 60 seconds in a queue before a tier-two agent picks up the interaction. TotalAcTime: 90 second
interaction.totalIvrDuration	interaction_totalIvrDuration	All*	String	Total time in seconds that an interaction spends in an IVR before being connected to an agent. Includes secure IVR time. Does not include ACD time. Example scenario: An interaction spends 30 seconds in an initial IVR flow before a tier-one agent picks up the interaction. The agent transfers the interaction to a tier-two agent. The interaction spends 60 seconds in an IVR flow before a tier-two agent picks up the interaction. TotalIvrTime: 90 seconds.
interaction.url	interaction_url	All*	String	Genesys Cloud URL to information about the interaction.

interactionLog.notes	interactionLog_notes	All*	String	Interaction log notes that agents add to the interaction. <i>Note?: The Interaction Log Notes attribute only appears if agents add interaction logs to the interaction in the client.</i>
message.transcript	message_transcript	Message	String	Transcript object ID of a message interaction (Facebook Messenger, LINE Messaging, SMS, Twitter Direct Message, WhatsApp, Genesys Cloud web messaging). Genesys recommends using a lookup relationship custom field. <i>Warning?: Transcripts greater than 131,072 characters fail to save.</i>
message.type	message_type	Message	String	Type of message interaction. <i>Values?: facebook, line, sms, twitter, whatsapp, webmessaging.</i>
message.username	message_username	Message	String	User name associated with Twitter Direct Message messages. Nothing returned for Facebook Messenger, LINE Messaging, SMS, WhatsApp, or Genesys Cloud web messaging messages.
message.userId	message_userId	Message	String	User ID associated with Facebook Messenger, LINE Messaging, Twitter Direct Message, and Genesys Cloud web messaging messages. Phone number associated with WhatsApp messages. Nothing returned for SMS messages.
voicemail.id	voicemail_id	ACD voicemail	String	Genesys Cloud ID of a voicemail interaction.
wrapUp.code	wrapUp_code	All*	String	Wrap-up code for an interaction made from or to a queue.
wrapUp.name	wrapUp_name	All*	String	Wrap-up name for an interaction made from or to a queue.

* All refers to call, callback, outbound dialing, chat, email, message, and ACD voicemail interaction types.