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# Open CTI Developer Guide

Version 39.0, Spring '17





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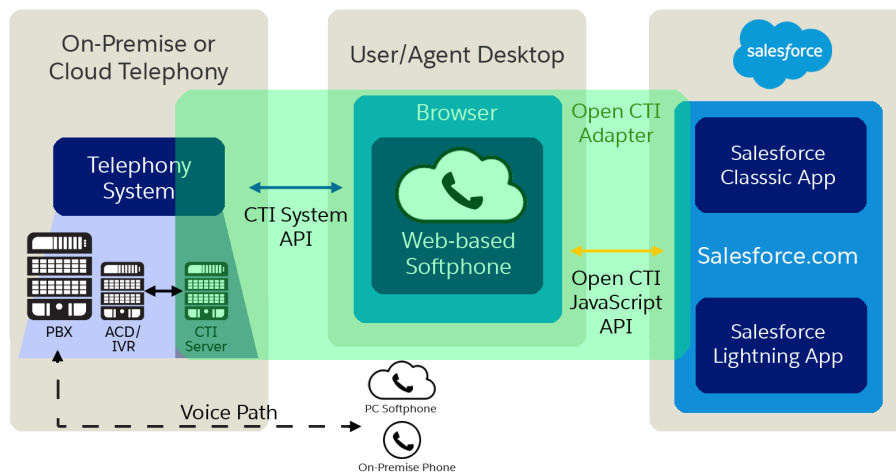
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## CHAPTER 1 Get Started with Open CTI

Build and integrate third-party computer-telephony integration (CTI) systems with Salesforce Call Center using a browser-based JavaScript API.

To display CTI functionality in Salesforce, Open CTI uses browsers as clients. With Open CTI, you can make calls from a softphone directly in Salesforce without installing CTI adapters on your machines. After you develop an Open CTI implementation, you can integrate it with Salesforce using Salesforce Call Center.

Here's how Open CTI connects to your telephony system.



### EDITIONS

Available in: Salesforce Classic and Lightning Experience

Available in: **Professional**, **Enterprise**, **Performance**, **Unlimited**, and **Developer** Editions

**Note:** The way you implement Open CTI depends on your org's user interface. There are separate Open CTI APIs for Salesforce Classic and Lightning Experience. You can't swap the two Open CTI APIs in custom JavaScript code because they behave and function differently. Make sure that you think about where you want to implement your CTI system before you begin developing.

With Open CTI, you can:

- Build CTI systems that integrate with Salesforce without the use of CTI adapters.
- Create customizable softphones (call-control tools) that function as fully integrated parts of Salesforce and the Salesforce console.
- Provide users with CTI systems that are browser and platform agnostic, for example, CTI for Microsoft® Internet Explorer®, Mozilla® Firefox®, Apple® Safari®, or Google Chrome™ on Mac, Linux, or Windows machines.

To implement Open CTI, it helps if you have a basic familiarity with: CTI, JavaScript, Visualforce, web services, software development, the Salesforce console, and the Salesforce Call Center.

Keep in mind that Open CTI is only available for use with JavaScript pages. The examples in this guide are in JavaScript. You can use Open CTI in JavaScript to embed API calls and processes.

[Why Your UI Matters—Open CTI for Salesforce Classic vs. Lightning Experience](#)

The way you implement Open CTI depends on your org's user interface. There are separate Open CTI APIs for Salesforce Classic and Lightning Experience.

[Method Parity Between Open CTI for Salesforce Classic and Lightning Experience](#)

The methods provided in the two APIs aren't always the same. Some Salesforce Classic methods aren't available in Lightning Experience and some have been renamed.

[Open CTI and Other Voice Solutions](#)

Open CTI integrates third-party CTI systems with Salesforce. But do you wonder what came before? Or what the difference is between Salesforce Voice?

[Customize Open CTI Functionality](#)

Your organization may have complex business processes that are unsupported by Open CTI functionality. Not to worry. When this is the case, the Force.com platform offers advanced administrators and developers several ways to implement custom functionality.

[Open CTI Support Policy](#)

The current release of Open CTI is the only version that receives enhancements.

## SEE ALSO:

[Salesforce Help: Salesforce Call Center](#)[Salesforce Help: Salesforce Console](#)[Salesforce Help: Supported Browsers](#)

## Why Your UI Matters—Open CTI for Salesforce Classic vs. Lightning Experience

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The way you implement Open CTI depends on your org's user interface. There are separate Open CTI APIs for Salesforce Classic and Lightning Experience.



**Important:** You can't swap the two Open CTI APIs in custom JavaScript code because they behave and function differently. Make sure that you think about where you want to implement your CTI system before you begin developing.

## What's the difference between the two Open CTI APIs?

- You connect to the API differently.

**In Salesforce Classic**

```
/support/api/39.0/interaction.js
```

**In Lightning Experience**

```
/support/api/39.0/lightning/opencti_min.js
```

- The input syntax for methods is different.

**In Salesforce Classic**

Input example:

```
sampleMethod(var1, var2...)
```

**In Lightning Experience**

Input example:

```
sampleMethod({  
  arg1 : value1,  
  arg2 : value2,  
  ...  
})
```

- The two APIs provide similar methods, but a few methods behave differently. The input and output for methods can be different.

## Which Open CTI API do I use?

Remember that the APIs can't be swapped. If your users plan to switch between user interfaces, make sure that they understand that the CTI system might behave or function differently depending on what user interface they're working in.

**Use Open CTI for Salesforce Classic if...**

- You want to make calls using a softphone in Salesforce Classic
- You want to make calls using a softphone in a Salesforce Classic console app

**Use Open CTI for Lightning Experience if...**

- You want to make calls using a softphone in Lightning Experience
- You want to make calls using a softphone in a Lightning Experience console app

## Are there any setup considerations?

To make calls in Lightning Experience, complete the following.

- Create a Lightning app and add the Open CTI Softphone to your utility bar.
- In the call center definition file, the `reqSalesforceCompatibilityMode` item must be set to *Lightning* or *Classic\_and\_Lightning*.

Open CTI for Lightning Experience works only in Lightning apps—it doesn't work in Salesforce Classic apps. Even though you can view Salesforce Classic apps in Lightning Experience, those apps are still Classic apps under-the-covers. To check if your app is a Lightning app, use the App Manager in Setup.

If you want your Open CTI implementation to work in Lightning Experience and in a console in Salesforce Classic, develop a unique implementation that uses both Open CTI for Salesforce Classic and Lightning Experience.

SEE ALSO:

[Method Parity Between Open CTI for Salesforce Classic and Lightning Experience](#)

## Method Parity Between Open CTI for Salesforce Classic and Lightning Experience

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The methods provided in the two APIs aren't always the same. Some Salesforce Classic methods aren't available in Lightning Experience and some have been renamed.

Salesforce Classic Method	Available in Lightning Experience?	Notes About Lightning Experience Support
<code>disableClickToDial()</code>	✓	Uses the same method name in Open CTI for Lightning.
<code>enableClickToDial()</code>	✓	Uses the same method name in Open CTI for Lightning.
<code>getCallCenterSettings()</code>	✓	Uses the same method name in Open CTI for Lightning.
<code>getDirectoryNumbers()</code>	✗	Not yet supported.
<code>getPageInfo()</code>	✓	The same functionality is provided in the Open CTI for Lightning method <code>getAppViewInfo</code> .
<code>getSoftphoneLayout()</code>	✓	Uses the same method name in Open CTI for Lightning.
<code>isInConsole()</code>	✗	Not yet supported.
<code>isVisible()</code>	✓	The same functionality is provided in the Open CTI for Lightning <code>isSoftphonePanelVisible</code> .
<code>notifyInitializationComplete()</code>	✗	Not yet supported.
<code>onClickToDial()</code>	✓	Uses the same method name in Open CTI for Lightning.
<code>onFocus()</code>	✓	The same functionality is provided in the Open CTI for Lightning method <code>onNavigationChange</code> .
<code>refreshPage()</code>	✓	The same functionality is provided in the Open CTI for Lightning method <code>refreshView</code> .
<code>refreshRelatedList()</code>	✓	The same functionality is provided in the Open CTI for Lightning method <code>refreshView</code> .
<code>reloadFrame()</code>	✓	The same functionality is provided in the Open CTI for Lightning method <code>refreshView</code> .
<code>runApex()</code>	✓	Uses the same method name in Open CTI for Lightning.
<code>saveLog()</code>	✓	Uses the same method name in Open CTI for Lightning.
<code>screenPop()</code>	✓	Uses the same method name in Open CTI for Lightning.



Salesforce Classic Method	Available in Lightning Experience?	Notes About Lightning Experience Support
<code>searchAndGetScreenPopUrl()</code>	✗	To recreate this functionality, use <code>searchAndScreenPop</code> in Open CTI for Lightning
<code>searchAndScreenPop()</code>	✓	Uses the same method name in Open CTI for Lightning.
<code>setSoftphoneHeight()</code>	✓	The same functionality is provided in the Open CTI for Lightning method <code>setSoftphonePanelHeight</code> .
<code>setSoftphoneWidth()</code>	✓	The same functionality is provided in the Open CTI for Lightning method <code>setSoftphonePanelWidth</code> .
<code>setVisible()</code>	✓	The same functionality is provided in the Open CTI for Lightning method <code>setSoftphonePanelVisibility</code> .

SEE ALSO:

[Why Your UI Matters—Open CTI for Salesforce Classic vs. Lightning Experience](#)

## Open CTI and Other Voice Solutions

Open CTI integrates third-party CTI systems with Salesforce. But do you wonder what came before? Or what the difference is between Salesforce Voice?

### What came before Open CTI?

Desktop CTI, also known as the CTI Toolkit, is the predecessor to Open CTI. Desktop CTI required adapters to be installed on each call center user's machine. With Open CTI, those user-side adapters are a thing of the past.



**Important:** Desktop CTI is retired and you must migrate to Open CTI. Work with your partners to create an Open CTI implementation.

### What about Salesforce Voice?

If you're confused between Salesforce Voice and Open CTI, don't be. Salesforce Voice provides a way to provision numbers and make calls directly from Salesforce. However, if you already have a telephony system in place, Open CTI is the way to go since it integrates to that existing system.

SEE ALSO:

[CTI Toolkit Retirement FAQ](#)

[Salesforce Help: Make and Receive Calls with Voice](#)

## Customize Open CTI Functionality

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Your organization may have complex business processes that are unsupported by Open CTI functionality. Not to worry. When this is the case, the Force.com platform offers advanced administrators and developers several ways to implement custom functionality.

Feature	Description
SOAP API	<p>Use standard SOAP API calls if you want to add functionality to a composite application that processes only one type of record at a time and does not require any transactional control (such as setting a Savepoint or rolling back changes).</p> <p>For more information, see the <a href="#">SOAP API Developer's Guide</a>.</p>
Visualforce	<p>Visualforce consists of a tag-based markup language that gives developers a more powerful way of building applications and customizing the Salesforce user interface. With Visualforce you can:</p> <ul style="list-style-type: none"> <li>• Build wizards and other multistep processes.</li> <li>• Create your own custom flow control through an application.</li> <li>• Define navigation patterns and data-specific rules for optimal, efficient application interaction.</li> </ul> <p>For more information, see the <a href="#">Visualforce Developer's Guide</a>.</p>
Salesforce Console Integration Toolkit	<p>The Salesforce Console Integration Toolkit lets you implement custom functionality for the Salesforce console. For example, you can use the Salesforce Console Integration Toolkit to display Visualforce pages or third-party content as tabs in the Salesforce console. The Salesforce Console Integration Toolkit is an API that uses browsers as clients to display pages in the console.</p> <p>For more information, see the <a href="#">Salesforce Console Integration Toolkit Developer Guide</a>.</p>
Apex	<p>Use Apex if you want to:</p> <ul style="list-style-type: none"> <li>• Create Web services.</li> <li>• Create email services.</li> <li>• Perform complex validation over multiple objects.</li> <li>• Create complex business processes that are not supported by workflow.</li> <li>• Create custom transactional logic (logic that occurs over the entire transaction, not just with a single record or object).</li> <li>• Attach custom logic to another operation, such as saving a record, so that it occurs whenever the operation is executed, regardless of whether it originates in the user interface, a Visualforce page, or from SOAP API.</li> </ul> <p>For more information, see the <a href="#">Apex Developer Guide</a>.</p>

## Open CTI Support Policy

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The current release of Open CTI is the only version that receives enhancements.

Previous versions might or might not receive fixes. When a new version is released, the previous version remains available.

### Backward Compatibility

Salesforce strives to make backward compatibility easy when using Open CTI.

### API Support

Salesforce is committed to supporting each Open CTI version for a minimum of three years from the date of its first release.

## Backward Compatibility

Salesforce strives to make backward compatibility easy when using Open CTI.

Each new Salesforce release consists of two components:

- A new release of platform software that resides on Salesforce systems
- A new version of the API

Open CTI matches the API version for any given release. For example, if the current version of SOAP API is 39.0, then there's also a version 39.0 of Open CTI.

We maintain support for each Open CTI version across releases of the platform. Open CTI is backward compatible in that an application created to work with a given Open CTI version will continue to work with that same Open CTI version in future platform releases.

Salesforce doesn't guarantee that an application written against one Open CTI version will work with future Open CTI versions: Changes in method signatures and data representations are often required as we continue to enhance Open CTI. However, we strive to keep Open CTI consistent from version to version with minimal changes required to port applications to newer Open CTI versions.

For example, an application written using Open CTI version 37.0, which shipped with the Summer '16 release, will continue to work with Open CTI version 37.0 on the Winter '17 release and on future releases. However, that same application might not work with Open CTI version 38.0 without modifications to the application.

## API Support

Salesforce is committed to supporting each Open CTI version for a minimum of three years from the date of its first release.

To improve the quality and performance of Open CTI, versions that are more than three years old might not be supported.

When a Open CTI version is scheduled to be unsupported, a no-longer-available notice will be given at least one year before support for the version ends. Salesforce will directly notify customers using Open CTI versions that will no longer be available.


## CHAPTER 2 Call Center Definition Files

A call center definition file specifies a set of fields and values that are used to define a call center in Salesforce for a particular softphone. Salesforce uses call center definition files to support the integration of Salesforce CRM Call Center with multiple CTI system vendors.

A call center in Salesforce CRM Call Center must have a call center definition file that works specifically with a softphone. If you build a custom softphone with Open CTI, you must write a call center definition file to support it. The first instance of a call center for a particular softphone must be defined by importing the adapter's call center definition file into Salesforce. Subsequent call centers can be created by cloning the original call center that was created with the import.

If your organization modifies a softphone or builds a new one, you must customize the softphone's call center definition file so that it includes any additional call center information that is required. For example, if you are building a softphone for a system that supports a backup server, your call center definition file should include fields for the backup server's IP address and port number. Softphones for systems that don't have a backup server, don't need those fields in their associated call center definition files.

Use a text or XML editor to define a call center definition file.

 **Important:** The way you implement Open CTI depends on your org's user interface. There are separate Open CTI APIs for Salesforce Classic and Lightning Experience. The `reqSalesforceCompatibilityMode` item in your call center definition file identifies the user interface you plan to use—Salesforce Classic, Lightning Experience, or both. If no value is specified, the default is *Classic*. This item is optional, but to make calls in Lightning Experience you must specify *Lightning* or *Classic\_and\_Lightning*.

### Call Center Definition File Format

A call center definition file consists of three XML elements: `callCenter`, `section`, and `item`.

### Required Call Center Elements and Attributes

The call center definition file must include the required `<item>` elements in the `<section>` element.

### Optional Call Center Elements and Attributes

The call center definition file can include optional `<item>` elements in the `<section>` element.

### Specify Values for `<item>` Elements

With the exception of the `reqInternalName` `<item>`, whose value must always be specified in a call center definition file, you can specify `<item>` values either in the call center definition file or in Salesforce once the definition file has been imported.

### Sample Call Center Definition File

Each call center definition file looks different. This example shows you what a call center definition file looks like for an org using Salesforce Classic and Lightning Experience.

### SEE ALSO:

[Salesforce Help: Set Up a Call Center](#)

[Salesforce Help: Creating a Call Center](#)

# Call Center Definition File Format

A call center definition file consists of three XML elements: `callCenter`, `section`, and `item`.

The following list provides details about the properties and attributes of each element:

## callCenter

This element represents a definition for a single call center phone system. At least one `<callCenter>` element must be included in every call center definition file. A `<callCenter>` element consists of one or more `<section>` elements.

## section

This element represents a grouping of related data fields, such as server information or dialing prefixes. When a call center is edited in Salesforce, fields are organized by the section to which they are assigned. A `<section>` element belongs to a single `<callCenter>` element, and consists of one or more `<item>` elements.

### Attributes:

Name	Type	Required?	Description
<code>sortOrder</code>	Positive Integer	Required	<p>The order in which the section should appear when the call center is edited in Salesforce. For example, a section with <code>sortOrder="1"</code> comes just before a section with <code>sortOrder="2"</code>.</p> <p>The values for <code>sortOrder</code> must be non-negative integers, and no numbers can be skipped within a single call center definition. For example, if there are three section elements in a call center definition file, one <code>&lt;section&gt;</code> element must have <code>sortOrder="0"</code>, one <code>&lt;section&gt;</code> element must have <code>sortOrder="1"</code>, and one <code>&lt;section&gt;</code> element must have <code>sortOrder="2"</code>.</p>
<code>name</code>	String	Required	<p>The internal name of the section as defined in the Salesforce database. You can use this value to refer to the section when writing custom adapter or SoftPhone code.</p> <p>Names must be composed of only alphanumeric characters with no white space or other punctuation. They are limited to 40 characters each.</p> <p>Names beginning with <code>req</code> are reserved for required Salesforce sections only (see <a href="#">Required Call Center Elements and Attributes</a>). Other reserved words that cannot be used for the <code>name</code> attribute include <code>label</code>, <code>sortOrder</code>, <code>internalNameLabel</code>, and <code>displayNameLabel</code>.</p>
<code>label</code>	String	Optional	<p>The name of the section when viewed in Salesforce. Labels can be composed of any string of UTF-8 characters. They are limited to 1000 characters each.</p>

**item**

This element represents a single field in a call center definition, such as the IP address of a primary server or the dialing prefix for international calls. When call centers are edited in Salesforce, each `<item>` element is listed under the section to which it belongs. You can have multiple `<item>` elements in a `<section>` element.

**Attributes:**

Name	Type	Required?	Description
<code>sortOrder</code>	Positive Integer	Required	<p>The order in which the item should appear when the call center is edited in Salesforce. For example, an item with <code>sortOrder="1"</code> comes just before an item with <code>sortOrder="2"</code>.</p> <p>The values for <code>sortOrder</code> must be non-negative integers, and no numbers can be skipped within a single call center definition. For example, if there are three item elements in a call center definition file, one <code>&lt;item&gt;</code> element must have <code>sortOrder="0"</code>, one <code>&lt;item&gt;</code> element must have <code>sortOrder="1"</code>, and one <code>&lt;item&gt;</code> element must have <code>sortOrder="2"</code>.</p>
<code>name</code>	String	Required	<p>The internal name of the item as defined in the Salesforce database. You can use this value to refer to the item when writing custom adapter or SoftPhone code.</p> <p>Names must be composed of only alphanumeric characters with no white space or other punctuation. They are limited to 40 characters each.</p> <p>Names beginning with <code>req</code> are reserved for required Salesforce sections only (see <a href="#">Required Call Center Elements and Attributes</a>). Other reserved words that cannot be used for the <code>name</code> attribute include <code>label</code>, <code>sortOrder</code>, <code>internalNameLabel</code>, and <code>displayNameLabel</code>.</p>
<code>label</code>	String	Optional	<p>The name of the item when viewed in Salesforce. Labels can be composed of any string of UTF-8 characters. They are limited to 1,000 characters each.</p>

## SEE ALSO:

[Salesforce Help: Call Center Definition Files](#)



[Why Your UI Matters—Open CTI for Salesforce Classic vs. Lightning Experience](#)


## Required Call Center Elements and Attributes

The call center definition file must include the required `<item>` elements in the `<section>` element.

**Important:** The way you implement Open CTI depends on your org's user interface. There are separate Open CTI APIs for Salesforce Classic and Lightning Experience. The `reqSalesforceCompatibilityMode` item in your call center definition file identifies the user interface you plan to use—Salesforce Classic, Lightning Experience, or both. If no value is specified, the default

is *Classic*. This item is optional, but to make calls in Lightning Experience you must specify *Lightning* or *Classic\_and\_Lightning*.

<item> Name	Description	Supported in Salesforce Classic	Supported in Lightning Experience
reqAdapterUrl	<p>Represents the location of where the CTI adapter or softphone is hosted. For example:</p> <pre>http://localhost:11000</pre> <p>Relative URLs are allowed for Visualforce pages. For example:</p> <pre>: /apex/softphone</pre> <p>If you add Force.com Canvas applications to Open CTI, those apps can trump <code>reqAdapterUrl</code> when specified.</p> <p> <b>Note:</b> To implement in a Lightning Experience org, use <code>https</code> in your URL.</p>	✓	✓
reqCanvasApiName	Represents the API name associated with any Force.com Canvas applications added to your call center. Required if you add canvas apps to Open CTI.	✓	✗ Not supported
reqCanvasNamespace	Represents the namespace associated with any Force.com Canvas applications added to your call center. Required if you add canvas apps to Open CTI.	✓	✗ Not supported
reqDisplayName	Represents the name of the call center as displayed in Salesforce. It must have a <code>sortOrder</code> value of 1. A value for <code>reqDisplayName</code> has a maximum length of 1,000 UTF-8 characters.	✓	✓
reqInternalName	Represents the unique identifier for the call center in the database. It must have a <code>sortOrder</code> value of 0, and its value must be specified in the call center definition. A value for <code>reqInternalName</code> must be composed of no more than 40 alphanumeric characters with no white space or other punctuation. It must start with an alphabetic character and must be unique from the <code>reqInternalName</code> of all other call centers defined in your organization.	✓	✓
reqSoftphoneHeight	<p>Represents the height of the softphone in pixels as displayed in Salesforce.</p> <p> <b>Note:</b> If you're using Open CTI for Lightning Experience, enter a number from 240 through 700. Value is in pixels (px).</p>	✓	✓

<item> Name	Description	Supported in Salesforce Classic	Supported in Lightning Experience
reqSoftphoneWidth	Represents the width of the softphone in pixels as displayed in Salesforce.   <b>Note:</b> If you're using Open CTI for Lightning Experience, enter a number from 200 through 1240. Value is in pixels (px).	✓	✓
reqUseApi	Represents that the call center is using Open CTI (true) or not (false).	✓	✓

If needed, you can add more <item> elements to this section.


SEE ALSO:


[Why Your UI Matters—Open CTI for Salesforce Classic vs. Lightning Experience](#)

## Optional Call Center Elements and Attributes

The call center definition file can include optional <item> elements in the <section> element.

In addition to the required elements, you can add optional elements to configure a softphone.

 **Important:** The way you implement Open CTI depends on your org's user interface. There are separate Open CTI APIs for Salesforce Classic and Lightning Experience. The `reqSalesforceCompatibilityMode` item in your call center definition file identifies the user interface you plan to use—Salesforce Classic, Lightning Experience, or both. If no value is specified, the default is *Classic*. This item is optional, but to make calls in Lightning Experience you must specify *Lightning* or *Classic\_and\_Lightning*.

<item> Name	Description	Supported in Salesforce Classic	Supported in Lightning Experience
reqSalesforceCompatibilityMode	Determines where the softphone is visible. If no value is specified, the default is <i>Classic</i> .   <b>Note:</b> <ul style="list-style-type: none"> <li>To display the softphone in Lightning Experience, specify <i>Lightning</i>.</li> <li>To display the softphone in Salesforce Classic, specify <i>Classic</i>.</li> <li>To display the softphone in both user interfaces, specify <i>Classic_and_Lightning</i>.</li> </ul>	✓	✓



<item> Name	Description	Supported in Salesforce Classic	Supported in Lightning Experience
reqStandbyUrl	Represents the location that hosts the secondary softphone. The standby softphone is used after the timeout period for the primary softphone has elapsed and the <code>notifyInitializationComplete()</code> for Salesforce Classic method hasn't been called within the required timeout period. When you specify a standby URL, you must also specify the <code>reqTimeout</code> field.	✓	✗
reqTimeout	Represents the time in milliseconds after which the standby URL is used to host the softphone. Before the timeout period has elapsed, the softphone displays a loading icon indicating that the softphone is initializing. When you specify a required timeout, you must also specify the <code>reqStandbyUrl</code> field.	✓	✗

## SEE ALSO:

[Why Your UI Matters—Open CTI for Salesforce Classic vs. Lightning Experience](#)

## Specify Values for <item> Elements

With the exception of the `reqInternalName` <item>, whose value must always be specified in a call center definition file, you can specify <item> values either in the call center definition file or in Salesforce once the definition file has been imported.

To specify a value for an <item> element in a call center definition file, place the value between the opening and closing tags of the <item>. For example:

```
<item sortOrder="0" name="reqInternalName" label="Call Center Internal Label">MyCallCenter</item>
```

sets the value of the `reqInternalName` <item> to `MyCallCenter`. Note that any <item> value other than the value for `reqInternalName` can be edited in Salesforce after the call center definition is imported.

## Sample Call Center Definition File

Each call center definition file looks different. This example shows you what a call center definition file looks like for an org using Salesforce Classic and Lightning Experience.

**Important:** The way you implement Open CTI depends on your org's user interface. There are separate Open CTI APIs for Salesforce Classic and Lightning Experience. The `reqSalesforceCompatibilityMode` item in your call center definition file identifies the user interface you plan to use—Salesforce Classic, Lightning Experience, or both. If no value is specified, the default is *Classic*. This item is optional, but to make calls in Lightning Experience you must specify *Lightning* or *Classic\_and\_Lightning*.

## Sample XML for an Org Using Salesforce Classic

```
<!--
  All sections and items whose name value begins with "req" are
  required in a valid call center definition file. The sortOrder
  and label attributes can be changed for all required sections
  and items except reqGeneralInfo, reqInternalName, and
  reqDisplayName, in which only the label attribute can be altered.

  Note that the value for the reqInternalName item is limited to
  40 alphanumeric characters and must start with an alphabetic
  character. reqInternalName must be unique for all call centers
  that you define.
-->
<callCenter>
  <section sortOrder="0" name="reqGeneralInfo" label="General Information">
    <item sortOrder="0" name="reqInternalName" label="InternalName">DemoAdapter</item>
    <item sortOrder="1" name="reqDisplayName" label="Display Name">Demo Call Center
Adapter</item>
    <item sortOrder="2" name="reqAdapterUrl" label="CTI Adapter
URL">https://domain:port/softphone</item>
    <item sortOrder="3" name="reqUseApi" label="Use CTI API">true</item>
    <item sortOrder="4" name="reqSoftphoneHeight" label="Softphone Height">300</item>
    <item sortOrder="5" name="reqSoftphoneWidth" label="Softphone Width">500</item>
    <item sortOrder="6" name="reqSalesforceCompatabilityMode" label="Salesforce
Compatibility Mode">Classic</item>
  </section>
  <section sortOrder="1" name="reqDialingOptions" label="Dialing Options">
    <item sortOrder="0" name="reqOutsidePrefix" label="Outside Prefix">9</item>
    <item sortOrder="1" name="reqLongDistPrefix" label="Long Distance Prefix">1</item>
    <item sortOrder="2" name="reqInternationalPrefix" label="International Prefix">01</item>

  </section>
</callCenter>
```

## Sample XML for an Org Using Lightning Experience

```
<callCenter>
  <section sortOrder="0" name="reqGeneralInfo" label="General Information">
    <item sortOrder="0" name="reqInternalName" label="InternalName">OpenCTI</item>
    <item sortOrder="1" name="reqDisplayName" label="Display Name">OpenCTI</item>
    <item sortOrder="2" name="reqAdapterUrl" label="CTI Adapter
URL">https://domain:port/softphone</item>
    <item sortOrder="3" name="reqUseApi" label="Use CTI API">true</item>
    <item sortOrder="4" name="reqSoftphoneHeight" label="Softphone Height">300</item>
    <item sortOrder="5" name="reqSoftphoneWidth" label="Softphone Width">500</item>
    <item sortOrder="6" name="reqSalesforceCompatibilityMode" label="Salesforce Compatibility
Mode">Lightning</item>
  </section>
  <section sortOrder="1" name="reqDialingOptions" label="Dialing Options">
    <item sortOrder="0" name="reqOutsidePrefix" label="Outside Prefix">9</item>
    <item sortOrder="1" name="reqLongDistPrefix" label="Long Distance Prefix">1</item>
    <item sortOrder="2" name="reqInternationalPrefix" label="International Prefix">01</item>
```

```
</section>  
</callCenter>
```

## SEE ALSO:

[Why Your UI Matters—Open CTI for Salesforce Classic vs. Lightning Experience](#)

## CHAPTER 3 Working with Open CTI

You can use Open CTI to increase agent efficiency, configure your softphone, and complete many more tasks.

With Open CTI, you can:

- Set the height or width of a softphone
- Enable or disable click-to-dial
- Return a call center definition file's settings
- Determine if a user is in the Salesforce console
- Show or hide a softphone in the Salesforce console
- Return information about a page
- Execute an Apex method from an Apex class that's exposed in Salesforce
- Save or update an object in Salesforce
- Search keywords in Salesforce and screen pop any matching records as defined in a softphone layout

Before developing an Open CTI implementation, learn how to connect to Open CTI and review the best practices.

### [Connect to Open CTI](#)

The first portion of any JavaScript code that uses the Open CTI must make the toolkit available to the JavaScript code. The syntax for this is different depending on whether you are embedding JavaScript in a Visualforce page or a page developed using any web technologies and served from a third-party domain.

### [Open CTI Demo Adapter](#)

We've put together a demo adapter package that lets you test drive Open CTI for Lightning Experience. The package provides a demo softphone that highlights and demonstrates the main features of Open CTI for Lightning Experience without even connecting to a phone system.

### [Asynchronous Calls with Open CTI](#)

Open CTI lets you issue asynchronous calls. Asynchronous calls allow the client-side process to continue instead of waiting for a callback from the server.

### [Sample HTML Page Using Open CTI](#)

Each implementation of Open CTI can look different. This example shows you how to add CTI functionality to the Salesforce user interface using an HTML page.

### [Work with Force.com Canvas](#)

To integrate Open CTI with external applications that require authentication methods, such as signed requests or OAuth 2.0 protocols, Salesforce recommends that you use Force.com Canvas.

### [Best Practices](#)

When working with Open CTI, keep the following best practices in mind.

## Connect to Open CTI

The first portion of any JavaScript code that uses the Open CTI must make the toolkit available to the JavaScript code. The syntax for this is different depending on whether you are embedding JavaScript in a Visualforce page or a page developed using any web technologies and served from a third-party domain.



**Tip:** The version of Open CTI is in the URL.

### For Visualforce Pages

For Visualforce pages or any source other than a custom `onclick` JavaScript button, specify a `<script>` tag that points to the Open CTI JavaScript library file.

#### In Salesforce Classic:

```
<apex:page>
    <script src="/support/api/39.0/interaction.js" type="text/javascript"></script>
    ...
</apex:page>
```

#### In Lightning Experience:

```
<apex:page>
    <script src="/support/api/39.0/lightning/opencti_min.js"
type="text/javascript"></script>
    ...
</apex:page>
```

For Visualforce, we recommend using a relative path to include `interaction.js` or `opencti_min.js`.

### For a Third-Party Domain

For third-party domains, specify an absolute URL to `interaction.js` or `opencti_min.js` to use the toolkit. If you can't determine the org's instance, you can access the toolkit library at the default instance. Contact Salesforce for the default instance's URL.

#### In Salesforce Classic:

```
<script src="https://c.<yourInstance>.visual.force.com/support/api/39.0/interaction.js"
type="text/javascript"></script>
```

#### In Lightning Experience:

```
<script
src="https://c.<yourInstance>.visual.force.com/support/api/39.0/lightning/opencti_min.js"
type="text/javascript"></script>
```

#### SEE ALSO:

[Why Your UI Matters—Open CTI for Salesforce Classic vs. Lightning Experience](#)

## Open CTI Demo Adapter

We've put together a demo adapter package that lets you test drive Open CTI for Lightning Experience. The package provides a demo softphone that highlights and demonstrates the main features of Open CTI for Lightning Experience without even connecting to a phone system.

To learn more about the demo adapter, go to [Lightning Open CTI](#). You can also check out the demo adapter code on [GitHub](#).

## Asynchronous Calls with Open CTI

Open CTI lets you issue asynchronous calls. Asynchronous calls allow the client-side process to continue instead of waiting for a callback from the server.

To issue an asynchronous call, you must include an extra parameter with the API call, referred to as a callback function. Once the result is ready, the server invokes the callback method with the result.

Asynchronous syntax:

**In Salesforce Classic:**

```
method('arg1', 'arg2', ..., callback_method);
```

**In Lightning Experience:**

```
method({callback : function})
```



**Example:**

**In Salesforce Classic:**

```
//Set softphone height
sforce.interaction.cti.setSoftphoneHeight(300, callback);
```

**In Lightning Experience:**

```
//Disable clickToDial
sforce.opencti.disableClickToDial({callback: callback});
```



**Note:** The call result depends on the execution context. For example, calling `setSoftphoneWidth()` in the standard Salesforce application has no effect, but calling `setSoftphoneWidth()` in the Salesforce console resizes the width of the softphone.


## Sample HTML Page Using Open CTI

Each implementation of Open CTI can look different. This example shows you how to add CTI functionality to the Salesforce user interface using an HTML page.

This example assumes that you've already imported a call center definition file into your Salesforce org.

1. Create an HTML page.
2. Cut and paste the following sample code into your HTML page.

This code demonstrates various functions of Open CTI.

 **Note:** Keep in mind that to make calls in Lightning Experience, you must first create a Lightning app and add the Open CTI Softphone utility.

### Sample Code for Salesforce Classic

```
<html>
<head>
  <!-- Imports Open CTI JavaScript library. Point to a valid Salesforce domain.
-->

  <script src="https://domain:port/support/api/39.0/interaction.js"></script>
  <script type="text/javascript">
    // Callback of API method: isInConsole
    var isInConsoleCallback = function (response) {
      // Returns true if method is executed in Salesforce console, false
      otherwise.

      if (response.result) {
        alert('Softphone is in Salesforce console.');
      }
      else {
        alert('Softphone is not in Salesforce console.');
      }
    };
    // Invokes API method: isInConsole
    function isInConsole() {
      sforce.interaction.isInConsole(isInConsoleCallback);
    }
    // Callback of API method: getCallCenterSettings
    var getCallCenterSettingsCallback = function (response) {
      // Result returns call center settings as a JSON string.
      if (response.result) {
        alert(response.result);
      }
      else {
        alert('Error retrieving call center settings ' +
response.error);
      }
    };
    // Invokes API method: getCallCenterSettings
    function getCallCenterSettings() {
sforce.interaction.cti.getCallCenterSettings(getCallCenterSettingsCallback);
    }
    // Callback of API method: setSoftphoneHeight
    var setSoftphoneHeightCallback = function (response) {
      // Returns true if SoftPhone height was set successfully, false
      otherwise.

      if (response.result) {
        alert('Setting softphone height to 300px was successful.');
      }
      else {
        alert('Setting softphone height failed.');
      }
    };
    // Invokes setSoftphoneHeight API method.
```

```

        function setSoftphoneHeight() {
            sforce.interaction.cti.setSoftphoneHeight(300,
setSoftphoneHeightCallback);
        }
        // Callback of API method: getPageInfo
        var getPageInfoCallback = function (response) {
            if (response.result) {
                alert(response.result);
            }
            else {
                alert('Error occured while trying to get page info: ' +
response.error);
            }
        }
        // Invokes API method getPageInfo
        function getPageInfo() {
            sforce.interaction.getPageInfo(getPageInfoCallback);
        }
    }
</script>
</head>
<body>
    <button onclick="isInConsole();">isInConsole</button><br/>
    <button onclick="getCallCenterSettings();">getCallCenterSettings</button><br/>

    <button onclick="setSoftphoneHeight();">setSoftphoneHeight(300)</button><br/>
    <button onclick="getPageInfo();">getPageInfo</button>
</body>
</html>

```

### Sample Code for Lightning Experience

```

<apex:page >
    <!-- Begin Default Content -->
    <h1>Congratulations!</h1>
    This is your sample page.
    <!-- End Default Content -->
</html>
<head>
    <!-- Imports Open CTI JavaScript library. Point to a valid Salesforce domain.
-->
    <script src="https://domain:port/support/api/39.0/opencti_min.js"></script>
    <script type="text/javascript">
        // Callback of API method: setSoftphonePanelHeight
        var setSoftphonePanelHeightCallback = function(response) {
            // Returns true if setSoftphonePanelHeight method is executed successfully,
            false otherwise
            if (response.result) {
                alert('setSoftphonePanelHeight is successfully executed.');
            }
            else {
                alert('setSoftphonePanelHeight failed.');
            }
        };
        // Invokes API method: setSoftphonePanelHeight
        function setSoftphonePanelHeight() {

```



```

        sforce.opencti.setSoftphonePanelHeight({
            heightPX: 500,
            callback: setSoftphonePanelHeightCallback
        });
    }
    // Callback of API method: setSoftphonePanelWidth
    var setSoftphonePanelWidthCallback = function(response) {
        // Returns true if setSoftphonePanelWidth method is executed successfully,
        false otherwise
        if (response.result) {
            alert('setSoftphonePanelWidth is successfully executed.');
```

```

        }
        else {
            alert('setSoftphonePanelWidth failed.');
```

```

        }
    };
    // Invokes API method: setSoftphonePanelWidth
    function setSoftphonePanelWidth() {
        sforce.opencti.setSoftphonePanelWidth({
            widthPX: 500,
            callback: setSoftphonePanelHeightCallback
        });
    }
    // Callback of API method: setSoftphoneItemIcon
    var setSoftphoneItemIconCallback = function(response) {
        // Returns true if setSoftphoneItemIcon method is executed successfully,
        false otherwise
        if (response.result) {
            alert('setSoftphoneItemIcon is successfully executed.');
```

```

        }
        else {
            alert('setSoftphoneItemIcon failed.');
```

```

        }
    };
    // Invokes API method: setSoftphoneItemIcon
    function setSoftphoneItemIcon() {
        sforce.opencti.setSoftphoneItemIcon({
            key: 'call',
            callback: setSoftphoneItemIconCallback
        });
    }
    // Callback of API method: setSoftphoneItemLabel
    var setSoftphoneItemLabelCallback = function(response) {
        // Returns true if setSoftphoneItemLabel method is executed successfully,
        false otherwise
        if (response.result) {
            alert('setSoftphoneItemLabel is successfully executed.');
```

```

        }
        else {
            alert('setSoftphoneItemLabel failed.');
```

```

        }
    };
    // Invokes API method: setSoftphoneItemLabel
    function setSoftphoneItemLabel() {
```

```

        sforce.opencti.setSoftphoneItemLabel({
            Label: 'MySoftphone',
            callback: setSoftphoneItemLabelCallback
        });
    }
</script>
</head>
<body>
    <button
onclick="setSoftphonePanelHeight();">setSoftphonePanelHeight({heightPX:500})</button><br/>

    <button
onclick="setSoftphonePanelWidth();">setSoftphonePanelWidth({widthPX:500})</button><br/>

    <button
onclick="setSoftphoneItemIcon();">setSoftphoneItemIcon({key:'call'})</button><br/>
    <button
onclick="setSoftphoneItemLabel();">setSoftphoneItemLabel({label:'MySoftphone'})</button>
</body>
</html>
</apex:page>

```

After you create the HTML page, add the URL to the call center definition file. Your softphone is rendered on the left in Salesforce Classic, or in the footer in the Salesforce console or in Lightning Experience:

### Output of Sample HTML Page in Salesforce Classic

The screenshot displays the Salesforce Classic interface. The top navigation bar includes tabs for Home, Chatter, Profile, Groups, Files, Leads, Accounts, Contacts, Cases (selected), Opportunities, and Reports. The left sidebar contains buttons for 'isInConsole', 'getCallCenterSettings', 'setSoftphoneHeight(300)', and 'getPageInfo'. The main content area shows the 'Cases Home' page. It features a 'View: My Open Cases' dropdown menu with a 'Go!' button and links for 'Edit' and 'Create New View'. Below this is a 'Recent Cases' section with a 'New' button and a 'Recently Viewed' dropdown. The 'Recent Cases' table lists four cases:

Case Number	Subject	Date/Time Opened	Priority
<a href="#">00001000</a>	Sample Case: Our Widgets have not been delivered.	1/25/2016 3:21 PM	High
<a href="#">00001003</a>	-	1/25/2016 3:36 PM	Medium
<a href="#">00001009</a>	-	4/8/2016 9:59 AM	Medium
<a href="#">00001008</a>	-	4/8/2016 9:57 AM	Medium

## Output of Sample HTML Page in a Salesforce Classic Console App

The screenshot shows the Salesforce Classic Console interface. At the top is a blue header with the Salesforce logo, a search bar, and navigation icons. Below the header is a sidebar with a 'Cases' tab selected. The main content area displays a table of 'My Open Cases'. The table has columns: ACTION, CASE NUMBER, CONTACT NAME, SUBJECT, STATUS, PRIORITY, DATE/TIME OPEN..., and CASE OWNER ALL... The table contains 10 rows of data. A console overlay is visible on the right side of the table, showing a list of actions: isInConsole, getCallCenterSettings, setSoftphoneHeight(300), and getPageInfo. The bottom of the console shows '1-10 of 10' and '0 Selected'.

ACTION	CASE NUMBER	CONTACT NAME	SUBJECT	STATUS	PRIORITY	DATE/TIME OPEN...	CASE OWNER ALL...
	00001000	Amos, Jon	Sample Case: Our...	Escalated	High	1/25/2016 3:2...	TUser
	00001001	Stamos, Edward	Sample Case 2: Th...	New	High	1/25/2016 3:2...	TUser
	00001002	Stamos, Edward	Sample Case 3: C...	On Hold	Low	1/25/2016 3:21 P...	TUser
	00001003	-	-	New	Medium	1/25/2016 3:36 P...	TUser
	00001004	-	-	New	Medium	4/5/2016 10:11 P...	TUser
	00001005	-	-	New			
	00001006	-	-	New			
	00001007	-	-	New			
	00001008	-	-	New			
	00001009	-	-	New			

## Output of Sample HTML Page in a Lightning Experience App

The screenshot shows the Lightning Experience interface. At the top is a navigation bar with tabs: Accounts, Assets, Calendar, Campaigns, Cases (selected), Chatter, Contacts, and Contracts. Below the navigation bar is a section for 'All Open Cases' with a 'New' button. The table below shows 8 items, sorted by Case Number. The table has columns: CASE NUMBER, CONTACT NAME, SUBJECT, STATUS, and PRIORITY. A console overlay is visible on the left side of the table, showing a list of actions: Congratulations! This is your sample page., setSoftphonePanelHeight(heightPX:500), setSoftphonePanelWidth(widthPX:500), setSoftphoneItemIcon(key:call), and setSoftphoneItemLabel(label:MySoftphone). The bottom of the console shows 'Phone'.

CASE NUMBER	CONTACT NAME	SUBJECT	STATUS	PRIORITY
1 00001000	Jon Amos	Sample Case: Our Widgets...	Escalated	High
2 00001001	Edward Stamos	Sample Case 2: The widget...	New	High
		Sample Case 3: Cannot tra...	On Hold	Low
			New	Medium
			New	Medium
			New	Medium
			New	Medium
			New	Medium

SEE ALSO:


[Why Your UI Matters—Open CTI for Salesforce Classic vs. Lightning Experience](#)

## Work with Force.com Canvas

To integrate Open CTI with external applications that require authentication methods, such as signed requests or OAuth 2.0 protocols, Salesforce recommends that you use Force.com Canvas.

 **Important:** Open CTI for Lightning Experience doesn't support Force.com Canvas.

Force.com Canvas and Open CTI are similar—they're a set of tools and JavaScript APIs that developers can use to add third-party systems to Salesforce. However, one of the benefits of Force.com Canvas, is the ability to choose authentication methods.

 **Note:** For a canvas app to appear in a Salesforce console, you must add it to the console as a custom console component. For more information, see the *Canvas Developer Guide*.

When developing a canvas app, and you want to include functionality from Open CTI, do the following:

1. Include the Open CTI API in `index.jsp`.
2. Call `Sfdc.canvas.client.signedrequest()` to store the signed request needed by the console integration toolkit API. For example, if the Force.com Canvas method of authentication is a signed request, do the following:

```
Sfdc.canvas.client.signedrequest('<%=signedRequest%>')
```

If the Force.com Canvas method of authentication is OAuth, do the following in the callback function used to get the context, as shown in the *Canvas Developer Guide*:

```
Sfdc.canvas.client.signedrequest(msg)
```

Consider the following when working with Open CTI and canvas apps:

- The Open CTI API script depends on the signed request and should be added after the call to `Sfdc.canvas.client.signedrequest()` has executed. We recommend that you load the scripts dynamically.
- To retrieve the entity ID of the record that is associated with the canvas sidebar component, do the following:

```
// Get signedRequest
var signedRequest = Sfdc.canvas.client.signedrequest();
var parsedRequest = JSON.parse(signedRequest);
// get the entity Id that is associated with this canvas sidebar component.
var entityId = parsedRequest.context.environment.parameters.entityId;
```

- To retrieve the `entityId` for OAuth, do the following:

```
var entityId = msg.payload.environment.parameters.entityId;
```

To see an example on how to retrieve `msg.payload`, see the *Canvas Developer Guide*.

SEE ALSO:

[Salesforce Canvas Developer Guide: Getting Context in Your Canvas App](#)

[Salesforce Help: Add Console Components to Apps in Salesforce Classic](#)

## Best Practices

When working with Open CTI, keep the following best practices in mind.


- Since many of the methods in Open CTI are asynchronous and return their results using a callback method, Salesforce recommends that you refer to the documentation for each method to understand the information for each response.
- Errors generated by Open CTI are typically emitted in a way that doesn't halt JavaScript processing. We recommend that you use browser built-in developer tools to monitor the JavaScript console and to help you debug your code.
- If you plan on customizing, extending, or integrating the sidebars of the Salesforce console using Visualforce, review the online help for information about console components.

SEE ALSO:

[Salesforce Help: Customize a Console with Custom Components in Salesforce Classic](#)

## CHAPTER 4    Methods for Lightning Experience

If your org is using Lightning Experience, use methods that work with Lightning Experience.

 **Important:** The way you implement Open CTI depends on your org's user interface. There are separate Open CTI APIs for Salesforce Classic and Lightning Experience. You can't swap the two Open CTI APIs in custom JavaScript code because they behave and function differently. Make sure that you think about where you want to implement your CTI system before you begin developing.

[disableClickToDial\(\)](#) for Lightning Experience  
[enableClickToDial\(\)](#) for Lightning Experience  
[getAppViewInfo\(\)](#) for Lightning Experience  
[getCallCenterSettings\(\)](#) for Lightning Experience  
[getSoftphoneLayout\(\)](#) for Lightning Experience  
[isSoftphonePanelVisible\(\)](#) for Lightning Experience  
[onClickToDial\(\)](#) for Lightning Experience  
[onNavigationChange\(\)](#) for Lightning Experience  
[refreshView\(\)](#) for Lightning Experience  
[runApex\(\)](#) for Lightning Experience  
[saveLog\(\)](#) for Lightning Experience  
[screenPop\(\)](#) for Lightning Experience  
[searchAndScreenPop\(\)](#) for Lightning Experience  
[setSoftphoneItemIcon\(\)](#) for Lightning Experience  
[setSoftphoneItemLabel\(\)](#) for Lightning Experience  
[setSoftphonePanelHeight\(\)](#) for Lightning Experience  
[setSoftphonePanelIcon\(\)](#) for Lightning Experience  
[setSoftphonePanelLabel\(\)](#) for Lightning Experience  
[setSoftphonePanelVisibility\(\)](#) for Lightning Experience  
[setSoftphonePanelWidth\(\)](#) for Lightning Experience  
[Common Error Messages for Lightning Experience Methods](#)

### SEE ALSO:

[Why Your UI Matters—Open CTI for Salesforce Classic vs. Lightning Experience](#)  
[Method Parity Between Open CTI for Salesforce Classic and Lightning Experience](#)

## disableClickToDial() for Lightning Experience

---

### Usage

Disables click-to-dial. This method is available in API version 38.0 or later.

### Syntax

```
sforce.opencti.disableClickToDial({  
    callback: function //Optional  
})
```

### Arguments

Name	Type	Description
callback	function	JavaScript method executed when the API method call is completed.

### Sample Code–HTML and JavaScript

```
<html>  
  <head>  
    <script type="text/javascript"  
src="https://domain:port/support/api/39.0/lightning/opencti_min.js"></script>  
    <script type="text/javascript">  
      var callback = function(response) {  
        if (response.success) {  
          console.log('API method call executed successfully! returnValue:',  
response.returnValue);  
        } else {  
          console.error('Something went wrong! Errors:', response.errors);  
        }  
      };  
  
      function disableClickToDial() {  
        sforce.opencti.disableClickToDial({callback: callback});  
      }  
    </script>  
  </head>  
  <body>  
    <button onclick="disableClickToDial();">disableClickToDial()</button>  
  </body>  
</html>
```

## Response

This method is asynchronous. The response is returned in an object passed to a callback method. The response object contains the following fields.

Name	Type	Description
success	boolean	Returns <code>true</code> if the API method call was invoked successfully, <code>false</code> otherwise.
returnValue	object	This API method doesn't return this object. The <code>returnValue</code> is always <code>null</code> .
errors	array	If the API call was successful, this variable is <code>null</code> . If the API call failed, this variable returns an array of <a href="#">error messages</a> .

## enableClickToDial() for Lightning Experience

### Usage

Enables click-to-dial. This method is available in API version 38.0 or later.

### Syntax

```
sforce.opencti.enableClickToDial({  
  callback: function //Optional  
})
```

### Arguments

Name	Type	Description
callback	function	JavaScript method executed when the API method call is completed.

### Sample Code—HTML and JavaScript

```
<html>  
  <head>  
    <script type="text/javascript"  
src="https://domain:port/support/api/39.0/lightning/opencti_min.js"></script>  
    <script type="text/javascript">  
      var callback = function(response) {  
        if (response.success) {  
          console.log('API method call executed successfully! returnValue:',  
response.returnValue);  
        } else {  
          console.error('Something went wrong! Errors:', response.errors);  
        }  
      };  
    </script>  
  </head>  
</html>
```



```
function enableClickToDial() {  
    sforce.opencti.enableClickToDial({callback: callback});  
}  
</script>  
</head>  
<body>  
    <button onclick="enableClickToDial();">enableClickToDial()</button>  
</body>  
</html>
```

## Response

This method is asynchronous. The response is returned in an object passed to a callback method. The response object contains the following fields.

Name	Type	Description
success	boolean	Returns <code>true</code> if the API method call was invoked successfully, <code>false</code> otherwise.
returnValue	object	This API method doesn't return this object. The <code>returnValue</code> is always <code>null</code> .
errors	array	If the API call was successful, this variable is <code>null</code> . If the API call failed, this variable returns an array of <a href="#">error messages</a> .

## getAppViewInfo() for Lightning Experience

### Usage

Returns information about the current application view. This method is available in API version 38.0 or later.

### Syntax

```
sforce.opencti.getAppViewInfo({  
    callback: function  
});
```

### Arguments

Name	Type	Description
callback	function	JavaScript method executed when the API method call is completed.

## Sample Code—HTML and JavaScript

```
<html>
  <head>
    <script type="text/javascript"
src="https://domain:port/support/api/39.0/lightning/opencti_min.js"></script>
    <script type="text/javascript">
      var callback = function(response) {
        if (response.success) {
          console.log('API method call executed successfully! returnValue:',
response.returnValue);
        } else {
          console.error('Something went wrong! Errors:', response.errors);
        }
      };

      function getAppViewInfo() {
        sforce.opencti.getAppViewInfo({callback: callback});
      }
    </script>
  </head>
  <body>
    <button onclick="getAppViewInfo();">getAppViewInfo()</button>
  </body>
</html>
```

## Response

This method is asynchronous. The response is returned in an object passed to a callback method. The response object contains the following fields.


When you switch from a record detail page to a list view, this method returns:

- In Lightning Experience, only the `url`
- In Lightning Experience console apps, nothing is returned because the listener isn't invoked

Name	Type	Description
<code>success</code>	boolean	Returns <code>true</code> if the API method call was invoked successfully, <code>false</code> otherwise.
<code>returnValue</code>	object	Returns the URL of the current application view and includes any applicable record ID, record name, and object type. For example:

```
{
  "url":
  "https://yourInstance.salesforce.com/one/one.app#/sObject/500
D0000003tcchIAA / view ? t = 1459806689555 ",
  "recordId": "001x0000003DGQR",
  "recordName": "Acme",
  "objectType": "Account"
}
```

Invoking this API method on a person account object returns the following additional information.

Name	Type	Description
		<ul style="list-style-type: none"> <li>• <code>accountId</code> or <code>contactId</code>—The associated account or contact ID.</li> <li>• <code>personAccount</code>—Which is <code>true</code> if person accounts are enabled in your org, <code>false</code> otherwise.</li> </ul> <p>For example:</p> <pre>{   "url":     "http://<i>yourInstance</i>.salesforce.com/001x0000003DGQR",   "recordId": "001x0000003DGQR",   "recordName": "Acme Person Account",   "objectType": "Account",   "contactId": "003D000000QOMgg",   "personAccount": true }</pre> <p> <b>Note:</b> Since the URL structure of the <code>returnValue</code> might change in the future, we recommend that you don't build any logic based on it.</p>
<code>error</code>	array	If the API call was successful, this variable is <code>null</code> . If the API call failed, this variable returns an array of <a href="#">error messages</a> .

## getCallCenterSettings () for Lightning Experience

### Usage

Returns the call center settings associated with the current user. This method is available in API version 38.0 or later.

### Syntax

```
sforce.opencti.getCallCenterSettings({
  callback: function
});
```

### Arguments

Name	Type	Description
<code>callback</code>	function	JavaScript method executed when the API method call is completed.

### Sample Code—HTML and JavaScript

```
<html>
  <head>
    <script type="text/javascript">
```

```

src="https://domain:port/support/api/39.0/lightning/opencti_min.js"></script>
<script type="text/javascript">
  var callback = function(response) {
    if (response.success) {
      console.log('API method call executed successfully! returnValue:',
response.returnValue);
    } else {
      console.error('Something went wrong! Errors:', response.errors);
    }
  };

  function getCallCenterSettings() {
    sforce.opencti.getCallCenterSettings({callback: callback});
  }
</script>
</head>
<body>
  <button onclick="getCallCenterSettings();">getCallCenterSettings()</button>
</body>
</html>

```

## Response

This method is asynchronous. The response is returned in an object passed to a callback method. The response object contains the following fields.

Name	Type	Description
success	boolean	Returns <code>true</code> if the API method call was invoked successfully, <code>false</code> otherwise.
returnValue	object	If the API call is successful, the call center settings are returned.

```

{
  "/displayNameLabel": "Display Name Label",
  "/internalNameLabel": "Internal Name Label",
  "/reqDialingOptions/reqInternationalPrefix": "01",
  "/reqDialingOptions/reqLongDistPrefix": "1",
  "/reqDialingOptions/reqOutsidePrefix": "9",
  "/reqGeneralInfo/reqAdapterUrl": "http://localhost:8080",
  "/reqGeneralInfo/reqDescription": "Test Call Center",
  "/reqGeneralInfo/reqDisplayName": "Test Call Center",
  "/reqGeneralInfo/reqInternalName": "TestCallCenter",
  "/reqGeneralInfo/reqSalesforceCompatibilityMode":
"Lightning",
  "/reqGeneralInfo/reqSoftphoneHeight": "500",
  "/reqGeneralInfo/reqSoftphoneWidth": "400",
  "/reqGeneralInfo/reqStandbyUrl":
"http://localhost:8080/",
  "/reqGeneralInfo/reqUseApi": "true"
}

```

If the API call fails, null is returned.

Name	Type	Description
error	array	If the API call was successful, this variable is <code>null</code> . If the API call failed, this variable returns an array of <a href="#">error messages</a> .

## getSoftphoneLayout () for Lightning Experience

### Usage

Returns the softphone layout of the current user. This method is available in API version 38.0 or later.



**Note:** The Open CTI for Lightning Experience methods `screenPop()` and `searchAndScreenPop()` don't support `screenPopSettings`.

### Syntax

```
sforce.opencti.getSoftphoneLayout({
  callback: function
});
```

### Arguments

Name	Type	Description
callback	function	JavaScript method executed when the API method call is completed.

### Sample Code—HTML and JavaScript

```
<html>
<head>
  <script type="text/javascript"
src="https://domain:port/support/api/39.0/lightning/opencti_min.js"></script>
  <script type="text/javascript">
    var callback = function(response) {
      if (response.success) {
        alert(response.returnValue);
      } else {
        console.error(response.errors);
        alert(
          'Something went wrong. Please check error information in developer console.'
        );
      }
    };

    function getSoftphoneLayout() {
      sforce.opencti.getSoftphoneLayout({
```

```

        callback: callback
    });
}
</script>
</head>
<body>
    <button onclick="getSoftphoneLayout();" >Get Softphone Layout</button>
</body>
</html>

```

## Response

This method is asynchronous. The response is returned in an object passed to a callback method. The response object contains the following fields.

Name	Type	Description
success	boolean	If the API call is successful, the value <code>true</code> is returned and the softphone layout definition is returned in <code>returnValue</code> , false otherwise.
returnValue	object	<p>If the API call is successful, the softphone layout definition is returned. If the API call fails, <code>null</code> is returned.</p> <p>The returned object contains three elements that represent each of the call-types:</p> <ul style="list-style-type: none"> <li>"Internal"</li> <li>"Inbound"</li> <li>"Outbound"</li> </ul> <p>Each call-type contains three sub-sections:</p> <ul style="list-style-type: none"> <li>"callRelatedFields"—An array of call-related fields selected to display. Possible values are "ANI", "DNIS", "SEGMENT", and "QUEUE".</li> <li>"objects"—The set of Salesforce objects selected to display, along with the Field Label and Field Name (API name) selected to display from each object.</li> <li>"screenPopSettings"—This object contains a "screenPopsOpenWithin" field with a value of either "ExistingWindow" or "NewWindow".</li> </ul> <p>Additionally, it contains the settings for each of the screen pop match types: "NoMatch", "SingleMatch", "MultipleMatches". Each match type contains a corresponding "screenPopType" field and may also contain a "screenPopData" field.</p> <ul style="list-style-type: none"> <li>If "screenPopType" has a value of "PopToEntity", then "screenPopData" contains the name of the target object.</li> <li>If "screenPopType" has a value of "PopToVisualforce", then "screenPopData" contains the name of the target Visualforce page.</li> <li>If "screenPopType" has a value of "PopToSearch", then there won't be a "screenPopData" field.</li> </ul>

Name	Type	Description
------	------	-------------

The following is an example of a `returnValue`:

```
{
  "Internal" : {
    "callRelatedFields" : [
      "ANI",
      "DNIS",
    ]
    "objects" : {
      "User" : [ {
        "displayName" : "Name",
        "apiName" : "Name"
      }
    ]
  },
  "screenPopSettings" : {}
},
  "Inbound" : {
    "callRelatedFields" : [
      "ANI",
      "DNIS",
      "SEGMENT",
      "QUEUE"
    ],
    "objects" : {
      "Account" : [ {
        "displayName" : "Account Name",
        "apiName" : "Name"
      }
    ]
  },
  "screenPopSettings" : {
    "NoMatch" : {
      "screenPopType" : "PopToEntity",
      "screenPopData" : "Contact"
    },

    "SingleMatch" : {
      "screenPopType" : "PopToVisualforce",
      "screenPopData" : "Visualforce_Page_Name"
    },
    "MultipleMatches" : {
      "screenPopType" : "PopToSearch"
    }
  },
  "Outbound" : {
    "callRelatedFields" : [
      "DNIS"
    ],
    "objects" : {
```

Name	Type	Description
		<pre> "Account" : [ {   "displayName" : "Account Name",   "apiName" : "Name" } ], "screenPopSettings" : {} } </pre>
errors	array	If the API call was successful, this variable is <code>null</code> . If the API call failed, this variable returns an array of <a href="#">error messages</a> .

## isSoftphonePanelVisible() for Lightning Experience

### Usage

Use this method to return the visibility status of the softphone panel. Returns `true` if the softphone panel is visible and `false` if it's minimized. This method is available in API version 38.0 or later.

### Syntax

```

sforce.opencti.isSoftphonePanelVisible({
  callback: function
});

```

### Arguments

Name	Type	Description
callback	function	JavaScript method executed when the API method call is completed.

### Sample Code—HTML and JavaScript with a callback

```

<html>
  <head>
    <script type="text/javascript"
src="https://domain:port/support/api/39.0/lightning/opencti_min.js"></script>
    <script type="text/javascript">
      var callback = function(response) {
        if (response.success) {
          console.log('API method call executed successfully! returnValue:',
response.returnValue);
        } else {

```



```
        console.error('Something went wrong! Errors:', response.errors);
    }
};

function isSoftphonePanelVisible() {
    sforce.opencti.isSoftphonePanelVisible({callback: callback});
}
</script>
</head>
<body>
    <button onclick="isSoftphonePanelVisible();">isSoftphonePanelVisible()</button>
</body>
</html>
```

## Response

This method is asynchronous. The response is returned in an object passed to a callback method. The response object contains the following fields.

Name	Type	Description
success	boolean	Returns <code>true</code> if the API method call was invoked successfully, <code>false</code> otherwise.
returnValue	object	Contains the boolean property <code>visible</code> which indicates the visibility status of the softphone panel. It's <code>true</code> if the softphone is visible and <code>false</code> if it's minimized.
errors	array	If the API call was successful, this variable is <code>null</code> . If the API call failed, this variable returns an array of <a href="#">error messages</a> .

## onClickToDial() for Lightning Experience

### Usage

Registers a function to call when a user clicks an enabled phone number. This method is available in API version 38.0 or later.

### Syntax

```
sforce.opencti.onClickToDial({
    listener: function
})
```

### Arguments

Name	Type	Description
listener	function	JavaScript method called when the user clicks an enabled phone number.

## Sample Code—HTML and JavaScript

```
<html>
  <head>
    <script type="text/javascript"
src="https://domain:port/support/api/39.0/lightning/opencti_min.js"></script>
    <script type="text/javascript">
      var listener = function(payload) {
        console.log('Clicked phone number: ' + payload.returnValue.number);
      };

      // Register the listener.
      window.addEventListener('load', function() {
        sforce.opencti.onClickToDial({listener: listener});
      });
    </script>
  </head>
</html>
```

## Payload

The payload object passed to each call to the listener method contains the following fields.

Name	Type	Description
number	number	Provides the phone number clicked by the user.
recordId	string	Provides the ID of the record associated with the clicked phone number.
recordName	string	Provides the name of the record for the clicked phone number.
objectType	string	Provides the type of record associated with the clicked phone number.
accountId or contactId	string	If the clicked phone number belongs to a person account, the associated account or contact ID is provided.
personAccount	boolean	If the clicked phone number belongs to a person account, this property is <code>true</code> . If person accounts aren't enabled in your org, this field isn't included in the payload object.

## onNavigationChange() for Lightning Experience

---

### Usage

Registers a function to call when one of the following actions occur:

- The URL of the page changes
- In a standard app in Lightning Experience, a user navigates between browser tabs or windows and the document comes back into focus. If the document doesn't come back into focus, the listener isn't invoked.

- In a console app in Lightning Experience, a user navigates between primary tabs and subtabs in a console, or the document comes back into focus when a user navigates between browser tabs or windows.

For example, the listener is invoked when a user navigates away from a browser tab and then comes back to the tab.

This method is available in API version 38.0 or later.

## Syntax

```
sforce.opencti.onNavigationChange({  
    listener: function  
});
```

## Arguments

Name	Type	Description
listener	function	JavaScript method called upon a navigation change.

## Sample Code—HTML and JavaScript

```
<html>  
  <head>  
    <script type="text/javascript"  
src="https://domain:port/support/api/39.0/lightning/opencti_min.js"></script>  
    <script type="text/javascript">  
      var listener = function(payload) {  
        console.log('Navigation change occurred. Payload: ', payload);  
      };  
  
      // Register the listener.  
      window.addEventListener('load', function() {  
        sforce.opencti.onNavigationChange({listener: listener});  
      });  
    </script>  
  </head>  
</html>
```

## Payload

The payload object passed to each call to the listener method contains the following fields.

When you switch from a record detail page to a list view, this method returns:

- In Lightning Experience, only the `url`
- In Lightning Experience console apps, nothing is returned because the listener isn't invoked

Name	Type	Description
url	string	Provides the URL of the page the user navigated to.

Name	Type	Description
<code>recordId</code>	string	If the user navigated to a Salesforce record, such as an account or case, the loaded record ID is returned. Otherwise, the field is empty.
<code>recordName</code>	string	If the user navigated to a Salesforce record, the loaded record name. Otherwise, the field is empty.
<code>objectType</code>	string	If the user navigated to a Salesforce record, the loaded object type, such as an account or case. Otherwise, the field is empty.
<code>accountId</code> or <code>contactId</code>	string	If the page the user navigated to is the record home of a person account, the associated account or contact ID is returned.
<code>personAccount</code>	boolean	<p>Returned only if person accounts are enabled in your org and the user navigates to a person account.</p> <p>If the page the user navigated to is the record home of a person account, this field is <code>true</code>.</p> <p>If the page the user navigated to is not the record home of a person account, this field is <code>false</code>.</p> <p>If the page the user navigated to is a business account, this field along with the <code>accountId</code> and <code>contactId</code> fields aren't included in the payload.</p>

## refreshView() for Lightning Experience

### Usage

Returns `true` if view refresh is invoked, `false` otherwise. When this method is called within the Salesforce console, it refreshes the current active view. If any related lists are included in this tab, they're refreshed too. This method is available in API version 38.0 or later.

### Syntax

```
sforce.opencti.refreshView({
  callback: function
});
```

### Arguments

Name	Type	Description
<code>callback</code>	function	Optional. JavaScript method executed when the API method call is completed.

## Sample Code–HTML and JavaScript without a callback

```
<html>
<head>
  <script type="text/javascript"
src="http://domain:port/support/api/39.0/lightning/opencti_min.js"></script>
  <script type="text/javascript">
    var param = {};
    function refreshView() {
      sforce.opencti.refreshView(param);
    }
  </script>
</head>
<body>
  <button onclick="refreshView();">refreshView</button>
</body>
</html>
```

## Sample Code–HTML and JavaScript with a callback

```
<html>
<head>
  <script type="text/javascript"
src="http://domain:port/support/api/39.0/lightning/opencti_min.js"></script>
  <script type="text/javascript">
    var param = {};
    var callback = function(response) {
      if (response.success) {
        console.log('API method call executed successfully! returnValue:',
response.returnValue);
      } else {
        console.error('Something went wrong! Errors:', response.errors);
      }
    };
    param.callback = callback;

    function refreshView() {
      sforce.opencti.refreshView(param);
    }
  </script>
</head>
<body>
  <button onclick="refreshView();">refreshView</button>
</body>
</html>
```

## Response

This method is asynchronous. The response is returned in an object passed to a callback method. The response object contains the following fields.

Name	Type	Description
success	boolean	Returns <code>true</code> if the API method call was invoked successfully, <code>false</code> otherwise.
returnValue	object	This API method doesn't return this object. The <code>returnValue</code> is always <code>null</code> .
errors	array	If the API call was successful, this variable is <code>null</code> . If the API call failed, this variable returns an array of <a href="#">error messages</a> .

## runApex () for Lightning Experience

### Usage

Executes an Apex method from an Apex class that's exposed in Salesforce. This method is available in API version 38.0 or later.

### Syntax

```
sforce.opencti.runApex({
  apexClass:string,
  methodName:string,
  methodParams:string,
  callback:function //Optional
})
```

### Arguments

Name	Type	Description
args	object	<p>A JavaScript object containing the following:</p> <ul style="list-style-type: none"><li><code>apexClass</code> (string)—Specifies the Apex class of the method to execute.</li><li><code>methodName</code> (string)—Specifies the method to execute.</li><li><code>methodParams</code> (string)—Specifies the method parameters to pass. The string must include field value pairs and be formatted as a valid query string.</li></ul> <p>For example:</p> <pre>name=acme&amp;phone=(212) 555-5555</pre> <p>If the Apex method doesn't take any parameters, you can specify <code>methodParams</code> as <code>none</code> or an empty object, <code>{ }</code>.</p> <ul style="list-style-type: none"><li><code>callback</code> (function)—JavaScript method called upon completion of the method.</li></ul>

## Sample Code–HTML and JavaScript

1. In Setup, create an Apex class and Apex method.

```
global class AccountRetrieval{

webservice static String getAccount(String name) {
    List<Account> accounts = new List<Account>();
    for (Account account : Database.query('Select Id, Name, phone from Account where Name
like \'' + name + '%\'')){
        accounts.add(account);
    }

    String jsonString = JSON.serialize(accounts);
    return jsonString;
}
}
```

2. In Setup, click **Generate from WSDL** to expose the method and class so that a third-party softphone can call it.
3. Add your code to the softphone:

```
<html>
<head>
    <script type="text/javascript"
src="http://domain:port/support/api/39.0/lightning/opencti_min.js"></script>
    <script type="text/javascript">
        var callback = function(response) {
            if (response.success) {
                console.log('API method call executed successfully! returnValue:',
response.returnValue);
            } else {
                console.error('Something went wrong! Errors:', response.errors);
            }
        };
        function runApex() {
            var param = {apexClass: 'AccountRetrieval', methodName: 'getAccount',
methodParams: 'name=acme'};
            param.callback = callback;
            //Invokes API method
            sforce.opencti.runApex(param);
        }
    </script>
</head>
<body>
    <button onclick="runApex();">runApex</button>
</body>
</html>
```

4. Output is returned. In this example, one account named Acme was found:

```
{
  "success": true,
  "returnValue": {
    "runApex":
    "[{"attributes":{"type":"Account","url":"/services/data/v38.0/subjects/Account
```

```

/001xx000003DGawAAG\"}, \"Id\": \"001xx000003DGawAAG\", \"Name\": \"Acme\", \"Phone\": \"(212) 555-5555\"}]\"
    },
    \"errors\": null
}

```

## Response

Name	Type	Description
success	boolean	Returns <code>true</code> if the API method call was invoked successfully, <code>false</code> otherwise.
returnValue	object	A JavaScript object containing the result from executing the method from the specified Apex class. No specific format is returned. The format is determined by the value from the method that executed. For example: <div data-bbox="651 741 1406 865" data-label="Text"> <pre> { \"runApex\": \"[{ \"attributes\": { \"type\": \"Account\",   \"url\": \"/services/data/v39.0/objects/Account/001xx000003DGawAAG\"}, \"Id\": \"001xx000003DGawAAG\",   \"Name\": \"Acme\", \"Phone\": \"(212) 555-5555\"}]\"} </pre> </div>
errors	array	If the API call was successful, this variable is <code>null</code> . If the API call failed, this variable returns an array of <a href="#">error messages</a> .

SEE ALSO:

[Salesforce Help: Apex Code Overview](#)

## saveLog () for Lightning Experience

### Usage

Saves or updates an object in Salesforce. This method is available in API version 38.0 or later.

### Syntax

```

sforce.opencti.saveLog({
  value:{
    entityApiName:string, //Optional
    Id:string, //Optional
    param:value //Optional
  },
  callback:function //Optional
})

```

#### Note:


- To update using this method, include `Id`.



- To create using this method, include `entityApiName`.
- If you have person accounts enabled in your org, to create an account or a person account using this method, include the `recordType` ID of the account or person account. In the value argument, include `recordType: recordTypeId`. For example:

```
sforce.opencti.saveLog({value: {entityApiName:"Account", recordType:"012R00000004UOy",
  LastName:'PersonAccountLast'}, callback:callback});
```

## Arguments

Name	Type	Description
value	object	<p>Specifies the fields to save or update on the object.</p> <p>If the object's ID is specified, a record is updated. For example:</p> <pre>{Id:"00QR0000000yN5iMAE", LastName:"New lastname" }</pre> <p>If the object's ID isn't specified, a new record is created. For example:</p> <pre>{entityApiName:"Contact", LastName:"LastName" },callback:callback}</pre> <p> <b>Note:</b> To create a record, ensure all the required fields are specified.</p>
callback	function	JavaScript method executed when the API method call is completed.

## Sample Code—HTML and JavaScript

```
<html>
<head>
  <script type="text/javascript"
src="http://domain:port/support/api/39.0/lightning/opencti_min.js"></script>
  <script type="text/javascript">
    var callback = function (response) {
      if (response.result) {
        console.log('API method call executed successfully! returnValue:',
response.returnValue);
      } else {
        console.error('Something went wrong! Errors:', response.errors);
      }
    }
    function saveLog() {
      //Update an existing object with the ID specified
      sforce.opencti.saveLog({value:{Id:"00QR0000000yN5iMAE", LastName:"New lastname"
}, callback:callback});
      //Create a contact
      sforce.opencti.saveLog({value:{entityApiName:"Contact", LastName:"LastName"
},callback:callback});
      //Update a lead
      sforce.opencti.saveLog({value:{Id:"00QR0000000yN5iMAE", LastName:"New lastname"
```

```

},callback:callback));
    }
</script>
</head>
<body>
    <button onclick="saveLog();">saveLog</button>
</body>
</html>

```

## Response

This method is asynchronous. The response is returned in an object passed to a callback method. The response object contains the following fields.

Name	Type	Description
success	boolean	Returns <code>true</code> if the API method call was invoked successfully, <code>false</code> otherwise.
returnValue	object	ID of object if creating or updating the object was successful; <code>null</code> if creating or updating the object wasn't successful.
errors	array	If the API call was successful, this variable is <code>null</code> . If the API call failed, this variable returns an array of <a href="#">error messages</a> .

## screenPop () for Lightning Experience

### Usage

Pops to a new location as specified by the input type and parameters. This method is available in API version 38.0 or later.



**Note:** Open CTI for Lightning Experience doesn't support the softphone layout field `Screen pops open within` when the value is `New browser window or tab`. In Lightning Experience, the default value is `Existing browser window`.

### Syntax


```

sforce.opencti.screenPop({
    type: sforce.opencti.SCREENPOP_TYPE.*, //Review the arguments section.
    params: object //Depends on the SCREENPOP_TYPE. Review the arguments section.
});

```

## Arguments

Name	Type	Description
type	string	<p>The enumerated type to screen pop to. Use one of the following values:</p> <ul style="list-style-type: none"> <li>• <code>sforce.opencti.SCREENPOP_TYPE.SUBJECT</code></li> <li>• <code>sforce.opencti.SCREENPOP_TYPE.URL</code></li> <li>• <code>sforce.opencti.SCREENPOP_TYPE.OBJECTHOME</code></li> <li>• <code>sforce.opencti.SCREENPOP_TYPE.LIST</code></li> <li>• <code>sforce.opencti.SCREENPOP_TYPE.SEARCH</code></li> <li>• <code>sforce.opencti.SCREENPOP_TYPE.NEW_RECORD_MODAL</code></li> </ul>
params	object	<p>An object holding arguments depending on the type.</p> <ul style="list-style-type: none"> <li>• For <code>SUBJECT</code>:           <pre>params : { recordId: <b>string</b> }</pre> <p>Where <code>recordId</code>, is the ID of the standard or custom object in Salesforce.</p> </li> <li>• For <code>URL</code>:           <pre>params : { url: <b>string</b> }</pre> <p>The URL must be a relative parameter. For more information about the <code>URL</code>, see the <code>force:navigateToURL url</code> parameter in the <i>Lightning Components Developer Guide</i>.</p> </li> <li>• For <code>OBJECTHOME</code>:           <pre>params : { scope: <b>string</b> }</pre> <p>Pops to the home of an object or entity such as a case or account. For more information about the <code>scope</code>, see the <code>force:navigateToSObject recordID</code> parameter in the <i>Lightning Components Developer Guide</i>. Here's a sample input:</p> <pre>{ scope: "Account" }</pre> </li> <li>• For <code>LIST</code>:           <pre>{ listViewId: <b>string</b>, scope: <b>string</b> }</pre> <p>For more information about the <code>listViewId</code> and <code>scope</code> parameter, see <code>force:navigateToList</code> in the <i>Lightning Components Developer Guide</i>.</p> </li> <li>• For <code>SEARCH</code>:           <pre>params : { searchString: <b>string</b> }</pre> <p>Pops to the Top Results section of the search page. The string must be at least 3 characters in length.</p> </li> <li>• For <code>NEW_RECORD_MODAL</code>:           <pre>params : { entityName: <b>string</b> }</pre> </li> </ul>

Name	Type	Description
		<p>Required. The API name of the custom or standard object, such as Account, Case, Contact, or Lead.</p> <p> <b>Note:</b> For custom objects, the name for a new record model follows this format:</p> <p><b><i>objectName__c</i></b></p> <p>This name takes the default namespace. Notice that the separator includes 2 underscores.</p> <p>If your org has namespace enabled, you must prefix it for custom objects. Use this format:</p> <p>namespace__<b><i>objectName</i></b>__c</p> <p>To pop to a new person account model, use the input Account.</p>
callback	function	Optional. JavaScript method executed when the API method call is completed.

## Sample Code—HTML and JavaScript with a callback

```
<html>
<head>
  <script type="text/javascript"
src="http://domain:port/support/api/39.0/lightning/opencti_min.js"></script>
  <script type="text/javascript">
    var callback = function(response) {
      if (response.success) {
        console.log('API method call executed successfully! returnValue:',
response.returnValue);
      } else {
        console.error('Something went wrong! Errors:', response.errors);
      }
    };
    function screenPop() {
      sforce.opencti.screenPop({type: sforce.opencti.SCREENPOP_TYPE.OBJECTHOME,
params: {scope:"Account"}, callback: callback });
    }
  </script>
</head>
<body>
  <button onclick="screenPop();">screenPop</button>
</body>
</html>
```

## Response

This method is asynchronous. The response is returned in an object passed to a callback method. The response object contains the following fields.

Name	Type	Description
success	boolean	Returns <code>true</code> if the API method call was invoked successfully, <code>false</code> otherwise.
returnValue	object	This API method doesn't return this object. The <code>returnValue</code> is always <code>null</code> .
errors	array	If the API call was successful, this variable is <code>null</code> . If the API call failed, this variable returns an array of <a href="#">error messages</a> .

SEE ALSO:

[Lightning Components Developer Guide: force:navigateToURL](#)

[Lightning Components Developer Guide: force:navigateToSObject](#)

[Lightning Components Developer Guide: force:navigateToList](#)


## searchAndScreenPop () for Lightning Experience

### Usage

Searches objects specified in the softphone layout for a given string. Returns search results and screen pops any matching records. This method respects screen pop settings defined in the softphone layout. This method is available in API version 38.0 or later.

The `searchAndScreenPop ()` method for Lightning Experience works differently from the Salesforce Classic method.

- Open CTI for Lightning Experience doesn't support the softphone layout field `Screen pops open within` when the value is `New browser window or tab`. In Lightning Experience, the default value is `Existing browser window`.
- Open CTI for Lightning Experience provides a new argument called `deferred`.

 **Tip:** The `searchAndGetScreenPopUrl ()` method is not available in the Open CTI API for Lightning Experience. To accomplish the same functionality in Lightning, use the `deferred` parameter available in this method. Pass the value in `SCREEN_POP_DATA` from the return object into the `screenPop ()` method.

If you're noticing inconsistent behavior with the default settings of your softphone layout, edit your softphone layout to force the cache to refresh. From Setup, edit your softphone layout and save the changes. Then edit the layout again and reset the layout to the default settings.

### Syntax

```
sforce.opencti.searchAndScreenPop({
  searchParams:string //Optional
  queryParams:string, //Optional
  callType:sforce.opencti.CALL_TYPE.*, //Required. See arguments for more information.

  deferred:boolean //Optional
  callback:function //Optional
});
```

## Arguments

Name	Type	Description
searchParams	string	String to search.
queryParams	string	Specifies the query parameters to pass to the URL. Query parameters are only passed to the URL if the screen pop option is set to <code>Pop to Visualforce</code> .
callType	string	<p>Specifies the type of call, such as inbound, outbound, internal, or null. Per the settings in the softphone layout, the call type determines which objects to search for any matches.</p> <p>Specify the call type with one of the following values:</p> <ul style="list-style-type: none"> <li><code>sforce.opencti.CALL_TYPE.INBOUND</code></li> <li><code>sforce.opencti.CALL_TYPE.OUTBOUND</code></li> <li><code>sforce.opencti.CALL_TYPE.INTERNAL</code></li> </ul>
deferred	boolean	<p>Specifies whether the screen pop is performed immediately following the search or if it's performed later. If the screen pop is performed later, a JSON object is returned. This object must be passed unmodified to <code>sforce.opencti.screenPop</code> to perform the operation.</p> <ul style="list-style-type: none"> <li><code>False</code>—Default value. Indicates an immediate screen pop after the search is performed.</li> <li><code>True</code>—A JSON {object} is returned in the <code>SCREEN_POP_DATA</code> key. Return this object unmodified to <code>sforce.opencti.screenPop</code> for a screen pop.</li> </ul>
callback	function	JavaScript method executed when the API method call is completed.

## Sample Code—HTML and JavaScript

```
<html>
<head>
  <script type="text/javascript"
src="http://domain:port/support/api/39.0/lightning/opencti_min.js"></script>
  <script type="text/javascript">
    var callback = function(response) {
      if (response.success) {
        console.log('API method call executed successfully! returnValue:',
response.returnValue);
      } else {
        console.error('Something went wrong! Errors:', response.errors);
      }
    };
    function searchAndScreenPop() {
      //Invokes API method
      sforce.opencti.searchAndScreenPop({ searchParams : 'Acme',queryParams :
'Key1=value1&Key2=value2', callType : sforce.opencti.CALL_TYPE.INBOUND, deferred: false,
callback : callback });
    }
  </script>
</head>
</html>
```

```

    }
  </script>
</head>
<body>
  <button onclick="searchAndScreenPop();">searchAndScreenPop</button>
</body>
</html>

```

## Response

Name	Type	Description
success	boolean	Returns <code>true</code> if the API method call was invoked successfully, <code>false</code> otherwise.
returnValue	object	Returns a list of objects that match the search results. The search is performed on the objects specified in the softphone layout. For each object found, the object ID, object tab name, field names, and field values are returned as JSON objects.



**Note:** Make sure that you specify fields to return in your softphone layout. If you don't, nothing is returned.

The following is an example of searching for "Acme," and finding one Account and three Opportunity objects:

```

{
  "006x0000001ZcyG":{
    "Name":"Acme - 600 Widgets",
    "object":"Opportunity",
    "displayName":"Opportunity"
  },
  "001x0000003DGQR":{
    "Name":"Acme",
    "Type":"Analyst",
    "object":"Account",
    "displayName":"Company"
  },
  "006x0000001ZcyH":{
    "Name":"Acme - 200 Widgets",
    "object":"Opportunity",
    "displayName":"Opportunity"
  },
  "006x0000001ZcyF":{
    "Name":"Acme - 1,200 Widgets",
    "object":"Opportunity",
    "displayName":"Opportunity"
  }
}

```

Invoking this API method with a `deferred` parameter returns the following sample output without any screen navigation.

```

{
  "006x0000001ZcyG":{
    "Name":"Acme - 600 Widgets",

```

Name	Type	Description
		<pre>         "object": "Opportunity",         "displayName": "Opportunity"       },       SCREEN_POP_DATA : {} //an object. Do not modify it.       Pass it to screenPop() API to navigate.     } </pre> <p>Invoking this API method on a person account returns additional information.</p> <ul style="list-style-type: none"> <li>• <code>accountId</code> or <code>contactId</code>—The associated account or contact ID.</li> <li>• <code>personAccount</code>—<code>true</code> if person accounts are enabled in your org, <code>false</code> otherwise.</li> </ul> <p>For example:</p> <pre> {   "006x0000001ZcyG": {     "RecordName": "Acme Person Account",     "RecordType": "Account",     "PersonContactId": "003D000000QOMqg",     "IsPersonAccount": true   } } {   "url": "http://<i>yourInstance</i>.salesforce.com/001x0000003DGQR",    "RecordId": "001x0000003DGQR",   "RecordName": "Acme Person Account",   "RecordType": "Account",   "PersonContactId": "003D000000QOMqg",   "IsPersonAccount": true } </pre>
<code>errors</code>	array	If the API call was successful, this variable is <code>null</code> . If the API call failed, this variable returns an array of <a href="#">error messages</a> .

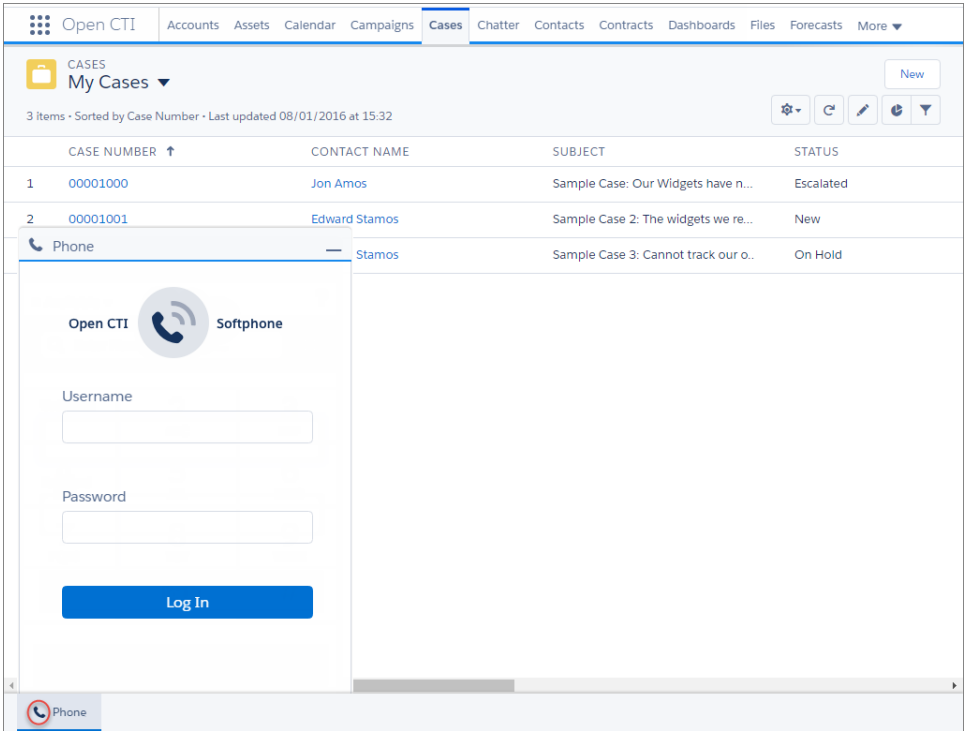
## setSoftphoneItemIcon() for Lightning Experience

### Usage

Sets the icon for the softphone item in the utility bar. Returns `true` if the function is successfully executed, and `false` when there is a failure. This method is available in API version 38.0 or later.

The softphone icon in the utility bar.





Syntax

```
sforce.opencti.setSoftphoneItemIcon({
  key: key,
  callback: function //Optional
});
```

Arguments

Name	Type	Description
key	string	The key corresponding to the icon in the Lightning Design System you want to use for the softphone icon in the utility bar.
callback	function	JavaScript method executed when the API method call is completed.

Sample Code–HTML and JavaScript

```
<html>
<head>
  <script type="text/javascript"
src="https://domain:port/support/api/39.0/lightning/opencti_min.js"></script>
  <script type="text/javascript">
    var callback = function(response) {
```

```
        if (response.success) {
            console.log('API method call executed successfully! returnValue:',
response.returnValue);
        } else {
            console.error('Something went wrong! Errors:', response.errors);
        }
    };

    function setSoftphoneItemIcon() {
        sforce.opencti.setSoftphoneItemIcon({key:"call", callback: callback});
    }
</script>
</head>
<body>
    <button onclick="setSoftphoneItemIcon();">setSoftphoneItemIcon()</button>
</body>
</html>
```

## Response

This method is asynchronous. The response is returned in an object passed to a callback method. The response object contains the following fields.

Name	Type	Description
success	boolean	Returns <code>true</code> if the API method call was invoked successfully, <code>false</code> otherwise.
returnValue	object	This API method doesn't return this object. The <code>returnValue</code> is always <code>null</code> .
errors	array	If the API call was successful, this variable is <code>null</code> . If the API call failed, this variable returns an array of <a href="#">error messages</a> .

SEE ALSO:

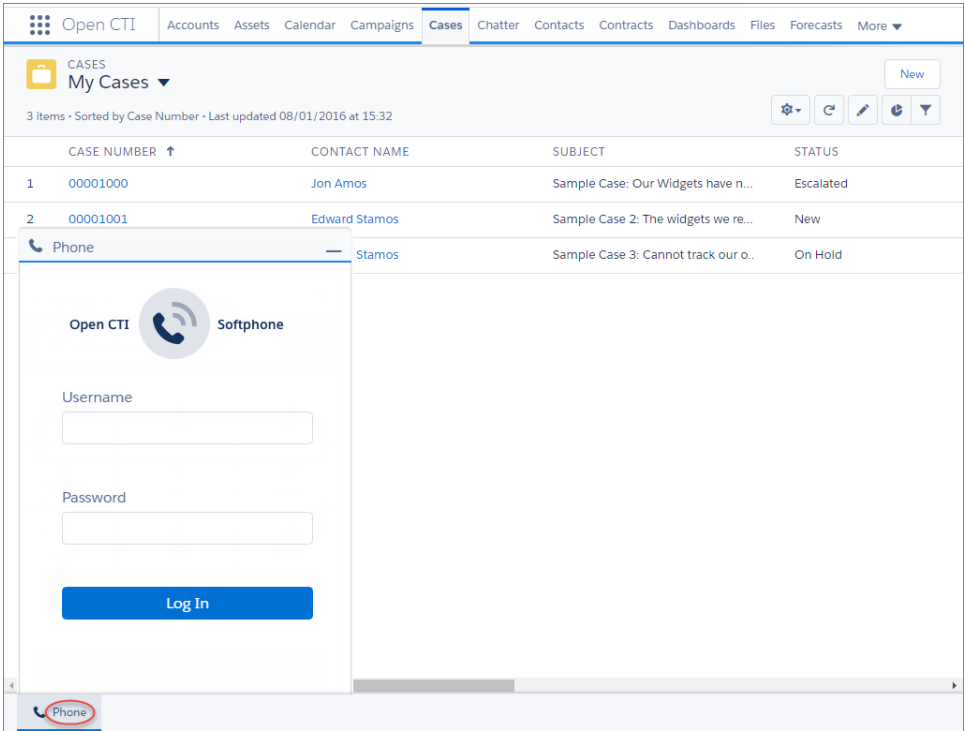
[Salesforce Lightning Design System: Utility Icons](#)

## setSoftphoneItemLabel () for Lightning Experience

### Usage

Sets the label for the softphone component item in the utility bar. Returns `true` if the function is successfully executed, and `false` when there is a failure. This method is available in API version 38.0 or later.

The softphone label in the utility bar.



Syntax

```
sforce.opencti.setSoftphoneItemLabel({
  label: string,
  callback:function //Optional
});
```

Arguments

Name	Type	Description
label	string	The string you want to use for the softphone label in the utility bar.
callback	function	JavaScript method executed when the API method call is completed.

Sample Code–HTML and JavaScript

```
<html>
  <head>
    <script type="text/javascript"
src="https://domain:port/support/api/39.0/lightning/opencti_min.js"></script>
    <script type="text/javascript">
      var callback = function(response) {
        if (response.success) {
```

```

        console.log('API method call executed successfully! returnValue:',
response.returnValue);
    } else {
        console.error('Something went wrong! Errors:', response.errors);
    }
};

function setSoftphoneItemLabel() {
    sforce.opencti.setSoftphoneItemLabel({label: "MySoftphone", callback: callback});
}
</script>
</head>
<body>
    <button onclick="setSoftphoneItemLabel();">setSoftphoneItemLabel()</button>
</body>
</html>

```

## Response

This method is asynchronous. The response is returned in an object passed to a callback method. The response object contains the following fields.

Name	Type	Description
success	boolean	Returns <code>true</code> if the API method call was invoked successfully, <code>false</code> otherwise.
returnValue	object	This API method doesn't return this object. The <code>returnValue</code> is always <code>null</code> .
errors	array	If the API call was successful, this variable is <code>null</code> . If the API call failed, this variable returns an array of <a href="#">error messages</a> .

## setSoftphonePanelHeight() for Lightning Experience

### Usage

Sets the softphone panel height in the utility bar. The height must be specified in pixels. This method is available in API version 38.0 or later.

### Syntax

```

sforce.opencti.setSoftphonePanelHeight({
    heightPX:height,
    callback:function //Optional
});

```

## Arguments

Name	Type	Description
heightPX	number	The softphone panel height in pixels. The height must be a number from 240 through 700.
callback	function	JavaScript method executed when the API method call is completed.

## Sample Code—HTML and JavaScript

```
<html>
  <head>
    <script type="text/javascript"
src="https://domain:port/support/api/39.0/lightning/opencti_min.js"></script>
    <script type="text/javascript">
      var callback = function(response) {
        if (response.success) {
          console.log('API method call executed successfully! returnValue:',
response.returnValue);
        } else {
          console.error('Something went wrong! Errors:', response.errors);
        }
      };

      function setSoftphonePanelHeight() {
        sforce.opencti.setSoftphonePanelHeight({heightPX: 400, callback: callback});
      }
    </script>
  </head>
  <body>
    <button onclick="setSoftphonePanelHeight();">setSoftphonePanelHeight()</button>
  </body>
</html>
```

## Response

This method is asynchronous. The response is returned in an object passed to a callback method. The response object contains the following fields.

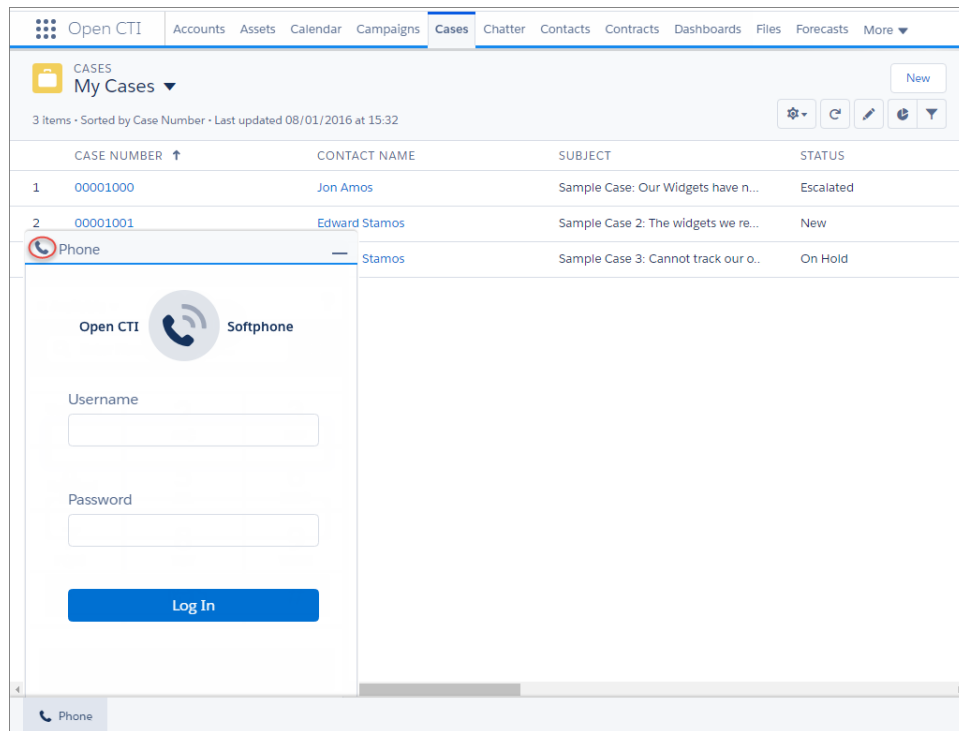
Name	Type	Description
success	boolean	Returns <code>true</code> if the API method call was invoked successfully, <code>false</code> otherwise.
returnValue	object	This API method doesn't return this object. The <code>returnValue</code> is always <code>null</code> .
errors	array	If the API call was successful, this variable is <code>null</code> . If the API call failed, this variable returns an array of <a href="#">error messages</a> .

## setSoftphonePanelIcon () for Lightning Experience

### Usage

Sets the icon for the softphone panel. Returns `true` if the function is successfully executed, and `false` when there is a failure. This method is available in API version 38.0 or later.

The softphone panel icon.



### Syntax

```
sforce.opencti.setSoftphonePanelIcon({
  key:key,
  callback:function //Optional
});
```

### Arguments

Name	Type	Description
key	string	The key corresponding to the icon in the Lightning Design System you want to use for the softphone panel icon.
callback	function	JavaScript method executed when the API method call is completed.

## Sample Code—HTML and JavaScript

```
<html>
  <head>
    <script type="text/javascript"
src="https://domain:port/support/api/39.0/lightning/opencti_min.js"></script>
    <script type="text/javascript">
      var callback = function(response) {
        if (response.success) {
          console.log('API method call executed successfully! returnValue:',
response.returnValue);
        } else {
          console.error('Something went wrong! Errors:', response.errors);
        }
      };

      function setSoftphonePanelIcon() {
        sforce.opencti.setSoftphonePanelIcon({key:"call", callback: callback});
      }
    </script>
  </head>
  <body>
    <button onclick="setSoftphonePanelIcon();">setSoftphonePanelIcon()</button>
  </body>
</html>
```

## Response

This method is asynchronous. The response is returned in an object passed to a callback method. The response object contains the following fields.

Name	Type	Description
success	boolean	Returns <code>true</code> if the API method call was invoked successfully, <code>false</code> otherwise.
returnValue	object	This API method doesn't return this object. The <code>returnValue</code> is always <code>null</code> .
errors	array	If the API call was successful, this variable is <code>null</code> . If the API call failed, this variable returns an array of <a href="#">error messages</a> .

SEE ALSO:

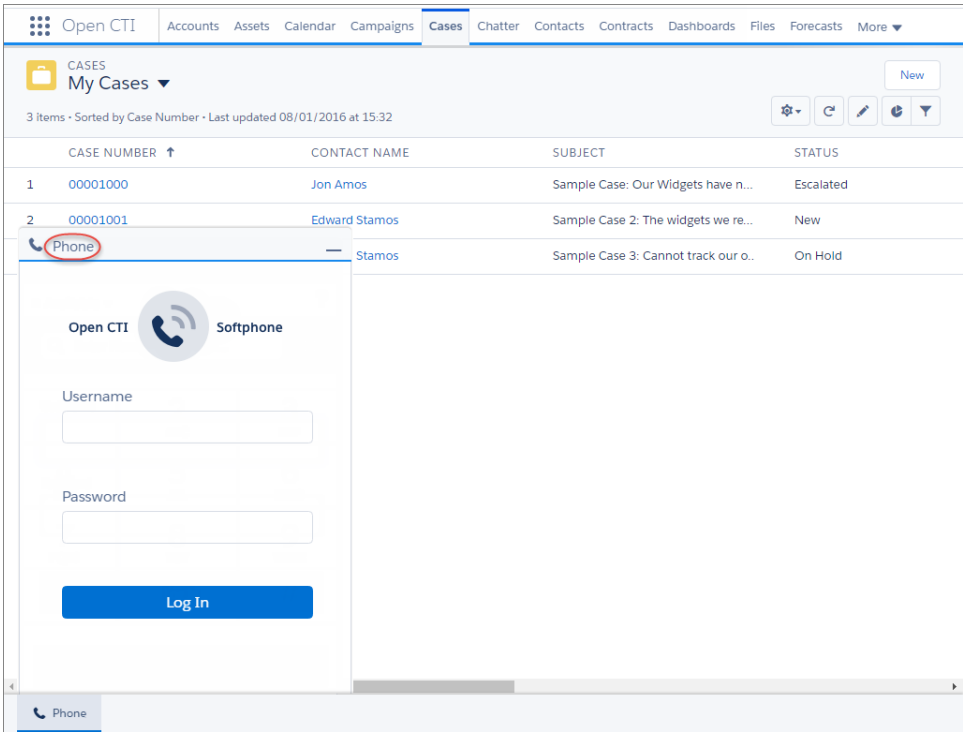
[Salesforce Lightning Design System: Utility Icons](#)

## setSoftphonePanelLabel() for Lightning Experience

### Usage

Sets the label for the softphone panel. Returns `true` if the function is successfully executed, and `false` when there is a failure. This method is available in API version 38.0 or later.

The softphone panel label.



### Syntax

```
sforce.opencti.setSoftphonePanelLabel({
  label: string,
  callback:function //Optional
});
```

### Arguments

Name	Type	Description
label	string	The string you want to use for the softphone panel label.
callback	function	JavaScript method executed when the API method call is completed.

### Sample Code–HTML and JavaScript

```
<html>
  <head>
    <script type="text/javascript"
src="https://domain:port/support/api/39.0/lightning/opencti_min.js"></script>
    <script type="text/javascript">
```



```

    var callback = function(response) {
        if (response.success) {
            console.log('API method call executed successfully! returnValue:',
response.returnValue);
        } else {
            console.error('Something went wrong! Errors:', response.errors);
        }
    };

    function setSoftphonePanelLabel() {
        sforce.opencti.setSoftphonePanelLabel({label: "Mysoftphone",callback: callback});
    }
</script>
</head>
<body>
    <button onclick="setSoftphonePanelLabel();">setSoftphonePanelLabel()</button>
</body>
</html>

```

## Response

This method is asynchronous. The response is returned in an object passed to a callback method. The response object contains the following fields.

Name	Type	Description
success	boolean	Returns <code>true</code> if the API method call was invoked successfully, <code>false</code> otherwise.
returnValue	object	This API method doesn't return this object. The <code>returnValue</code> is always <code>null</code> .
errors	array	If the API call was successful, this variable is <code>null</code> . If the API call failed, this variable returns an array of <a href="#">error messages</a> .

## setSoftphonePanelVisibility() for Lightning Experience

### Usage

Sets the visibility status of the softphone panel. When the `visible` parameter is passed as `true`, the softphone panel is displayed. When it's set to `false`, the panel is minimized. This method is available in API version 38.0 or later.

### Syntax

```

sforce.opencti.setSoftphonePanelVisibility({
    visible: true,
    callback: function //Optional
});

```

## Arguments

Name	Type	Description
visible	boolean	To dock (display) the softphone panel, set the value to <code>true</code> . To minimize (hide) the softphone panel, set the value to <code>false</code> .
callback	function	JavaScript method executed when the API method call is completed.

## Sample Code—HTML and JavaScript

```
<html>
  <head>
    <script type="text/javascript"
src="https://domain:port/support/api/39.0/lightning/opencti_min.js"></script>
    <script type="text/javascript">
      var callback = function(response) {
        if (response.success) {
          console.log('API method call executed successfully! returnValue:',
response.returnValue);
        } else {
          console.error('Something went wrong! Errors:', response.errors);
        }
      };

      function setSoftphonePanelVisibility() {
        sforce.opencti.setSoftphonePanelVisibility({visible: true, callback: callback});
      }
    </script>
  </head>
  <body>
    <button onclick="setSoftphonePanelVisibility();">setSoftphonePanelVisibility()</button>

  </body>
</html>
```

## Response

This method is asynchronous. The response is returned in an object passed to a callback method. The response object contains the following fields.

Name	Type	Description
success	boolean	Returns <code>true</code> if the API method call was invoked successfully, <code>false</code> otherwise.
returnValue	object	This API method doesn't return this object. The <code>returnValue</code> is always <code>null</code> .
errors	array	If the API call was successful, this variable is <code>null</code> . If the API call failed, this variable returns an array of <a href="#">error messages</a> .

## setSoftphonePanelWidth() for Lightning Experience

---

### Usage

Sets the softphone panel width in the utility bar. The width must be specified in pixels. This method is available in API version 38.0 or later.

### Syntax

```
sforce.opencti.setSoftphonePanelWidth({
  widthPX: width,
  callback: function //Optional
});
```

### Arguments

Name	Type	Description
widthPX	number	The softphone panel width in pixels. The height must be a number from 200 through 1240.
callback	function	JavaScript method executed when the API method call is completed.

### Sample Code—HTML and JavaScript

```
<html>
  <head>
    <script type="text/javascript"
src="https://domain:port/support/api/39.0/lightning/opencti_min.js"></script>
    <script type="text/javascript">
      var callback = function(response) {
        if (response.success) {
          console.log('API method call executed successfully! returnValue:',
response.returnValue);
        } else {
          console.error('Something went wrong! Errors:', response.errors);
        }
      };

      function setSoftphonePanelWidth() {
        sforce.opencti.setSoftphonePanelWidth({widthPX: 400, callback: callback});
      }
    </script>
  </head>
  <body>
    <button onclick="setSoftphonePanelWidth();">setSoftphonePanelWidth()</button>
  </body>
</html>
```

## Response

This method is asynchronous. The response is returned in an object passed to a callback method. The response object contains the following fields.

Name	Type	Description
success	boolean	Returns <code>true</code> if the API method call was invoked successfully, <code>false</code> otherwise.
returnValue	object	This API method doesn't return this object. The <code>returnValue</code> is always <code>null</code> .
errors	array	If the API call was successful, this variable is <code>null</code> . If the API call failed, this variable returns an array of <a href="#">error messages</a> .

## Common Error Messages for Lightning Experience Methods

An error object is returned as an array for all Lightning Experience methods.

The following fields are contained as part of the error object.

**code:** *string*

A constant string denoting an error code.

**description:** *string*

A description of the error code.

**details:** *object*

Typically undefined. This constant can contain details about the error object for the `saveLog` method.

Sample error object:

```
[{
  code: code1
  description: description1
  details: details1
},{
  code: code2
  description: description2
  details: details2
}]
```

Sample error object for the `INVALID_PARAM` error code:

```
[{
  code: "INVALID_PARAM",
  description: "An invalid value was passed to the parameter parameterName. A numeric value was expected, but undefined was found instead."
}]
```

Sample error object for the `GENERIC_PARAM` error code:

```
[{
  code: "GENERIC_ERROR",
  description: "An error occurred while calling the API method."
}]
```

Sample error object for the SERVER\_ERROR code:

```
[{
  code: "SERVER_ERROR",
  description: "A problem was encountered on the server."
}]
```

Sample error object for the SOFTPHONE\_CONTAINER\_ERROR code:

```
[{
  code: "SOFTPHONE_CONTAINER_ERROR",
  description: "Unable to execute sendPostMessage because the softphone container hasn't initialized yet."
}]
```

For the runApex method, if there is a server error, the description field provides "Could not load Apex class: apexClassName."


For the saveLog method, the details field provides information based on the type of error. For example:

```
[{
  code: "GENERIC_ERROR",
  description: "An error occurred while calling the saveLog() API method. Review the Details field in the error section.",
  details: [{
    message: "An error occurred while trying to update the record. Please try again.",

    pageErrors: [],
    fieldErrors: {
      Name: [{
        statusCode: "REQUIRED_FIELD_MISSING",
        message: "Required fields are missing: [Name]",
        fieldLabel: "Account Name",
        columnApiName: "Name"
      }]
    },
    potentialDuplicates: []
  }]
}]
```

## CHAPTER 5    Methods for Salesforce Classic

If your org is using Salesforce Classic, use methods that work with Salesforce Classic.

 **Important:** The way you implement Open CTI depends on your org's user interface. There are separate Open CTI APIs for Salesforce Classic and Lightning Experience. You can't swap the two Open CTI APIs in custom JavaScript code because they behave and function differently. Make sure that you think about where you want to implement your CTI system before you begin developing.

### [Methods for Salesforce Application Interaction](#)

Open CTI lets your CTI system interact with the Salesforce application, including elements on a Case Feed page.

### [Methods for Computer-Telephony Integration \(CTI\)](#)

Open CTI lets you integrate your CTI system with Salesforce.

SEE ALSO:


[Why Your UI Matters—Open CTI for Salesforce Classic vs. Lightning Experience](#)

[Method Parity Between Open CTI for Salesforce Classic and Lightning Experience](#)

## Methods for Salesforce Application Interaction

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Open CTI lets your CTI system interact with the Salesforce application, including elements on a Case Feed page.

 **Important:** The way you implement Open CTI depends on your org's user interface. There are separate Open CTI APIs for Salesforce Classic and Lightning Experience. You can't swap the two Open CTI APIs in custom JavaScript code because they behave and function differently. Make sure that you think about where you want to implement your CTI system before you begin developing.

[getPageInfo\(\)](#) for Salesforce Classic

[isInConsole\(\)](#) for Salesforce Classic

[isVisible\(\)](#) for Salesforce Classic

[notifyInitializationComplete\(\)](#) for Salesforce Classic

[onFocus\(\)](#) for Salesforce Classic

[onObjectUpdate\(\)](#) for Salesforce Classic

[refreshObject\(\)](#) for Salesforce Classic

[refreshPage\(\)](#) for Salesforce Classic

[refreshRelatedList\(\)](#) for Salesforce Classic

[reloadFrame\(\)](#) for Salesforce Classic

[runApex\(\)](#) for Salesforce Classic

[saveLog\(\) for Salesforce Classic](#)[screenPop\(\) for Salesforce Classic](#)[searchAndGetScreenPopUrl\(\) for Salesforce Classic](#)[searchAndScreenPop\(\) for Salesforce Classic](#)[setVisible\(\) for Salesforce Classic](#)**SEE ALSO:**[Why Your UI Matters—Open CTI for Salesforce Classic vs. Lightning Experience](#)[Method Parity Between Open CTI for Salesforce Classic and Lightning Experience](#)

## getPageInfo () for Salesforce Classic

### Usage

Returns information about the current page.

### Syntax

```
sforce.interaction.getPageInfo (callback: function) ;
```

### Arguments

Name	Type	Description
callback	function	JavaScript method executed when the API method call is completed.

### Sample Code—JavaScript

```
<html>
<head>
  <script type="text/javascript"
src="http://domain:port/support/api/25.0/interaction.js"></script>
  <script type="text/javascript">
    var callback = function (response) {
      if (response.result) {
        alert(response.result);
      } else {
        alert(response.error);
      }
    };
    function getPageInfo () {
      //Invokes API method
      sforce.interaction.getPageInfo (callback);
    }
  </script>
```

```

</head>
<body>
  <button onclick="getPageInfo();" >getPageInfo</button>
</body>
</html>

```

## Response

Name	Type	Description
result	string	<p>Returns the URL of the current page as a JSON string, and includes any applicable object ID, object name, object type, and for API version 33.0 or later, the object tab name. For example:</p> <pre>{   "url": "http://na1.salesforce.com/001x0000003DGQR",   "objectId": "001x0000003DGQR",   "objectName": "Acme",   "object": "Account",   "displayName": "Company" }</pre> <p>For API version 31.0 and later, invoking this API method on a PersonAccount object returns the following additional information.</p> <ul style="list-style-type: none"> <li>• accountId or contactId, the associated account or contact ID</li> <li>• personAccount, which is <code>true</code> if the object is a PersonAccount and <code>false</code> otherwise</li> </ul> <p>For example:</p> <pre>{   "url": "http://na1.salesforce.com/001x0000003DGQR",   "objectId": "001x0000003DGQR",   "objectName": "Acme Person Account",   "object": "Account",   "contactId": "003D000000QOMqg",   "personAccount": true }</pre>
error	string	<p>If the API call was successful, this variable is undefined. If the API call failed, this variable returns an error message.</p>

## isInConsole() for Salesforce Classic

### Usage

Indicates if the softphone is in the Salesforce console.



**Note:** If this method is used in a Salesforce console where multi-monitor components is turned on, any popped out softphone components are indicated as in the console.

### Syntax

```
sforce.interaction.isInConsole(callback: function)
```



## Arguments

Name	Type	Description
callback	function	JavaScript method executed when the API method call is completed.

## Sample Code–JavaScript

```
<html>
<head>
  <script type="text/javascript"
src="http://domain:port/support/api/25.0/interaction.js"></script>
  <script type="text/javascript">
    var callback = function (response) {
      if (response.result) {
        alert('User is in console.');
```

## Response

This method is asynchronous. The response is returned in an object passed to a callback method. The response object contains the following fields.

Name	Type	Description
result	boolean	<code>true</code> if the softphone was in the Salesforce console, <code>false</code> if the softphone wasn't in the Salesforce console.
error	string	If the API call was successful, this variable is undefined. If the API call failed, this variable returns an error message.

### SEE ALSO:

[Salesforce Help: Salesforce Console](#)

[Salesforce Help: Turn On Multi-Monitor Components for a Salesforce Console in Salesforce Classic](#)

## isVisible() for Salesforce Classic

### Usage

Returns `true` if the softphone is visible or `false` if the softphone is hidden.

### Syntax

```
sforce.interaction.isVisible(callback: function)
```

### Arguments

Name	Type	Description
callback	function	JavaScript method executed when the API method call is completed.

### Sample Code—JavaScript

```
<html>
<head>
  <script type="text/javascript"
src="http://domain:port/support/api/25.0/interaction.js"></script>
  <script type="text/javascript">
    var callback = function (response) {
      if (response.result) {
        alert('Softphone is visible');
      } else {
        alert('Softphone is not visible');
      }
    };
    function isVisible() {
      sforce.interaction.isVisible(callback);
    }
  </script>
</head>
<body>
  <button onclick="isVisible();">isVisible</button>
</body>
</html>
```

### Response

Name	Type	Description
result	boolean	<code>true</code> if the softphone is visible, <code>false</code> if the softphone isn't visible.
error	string	If the API call was successful, this variable is undefined. If the API call failed, this variable returns an error message.

## notifyInitializationComplete() for Salesforce Classic

### Usage

Notifies Salesforce that the softphone initialization is complete and that Salesforce should not switch to a standby URL. While the softphone initializes, a loading icon displays in the SoftPhone area. To use a standby URL, you must specify it in the call center's definition file. For more information, see [Optional Call Center Elements and Attributes](#) on page 12.

### Syntax

```
sforce.interaction.cti.notifyInitializationComplete()
```

### Arguments

None.

### Sample Code

```
<html>
<head>
<script src="http://domain:port/support/api/29.0/interaction.js"></script>
<script type="text/javascript">
    // Invokes API method
    sforce.interaction.cti.notifyInitializationComplete();
</script>
</head>
<body>
The interaction framework has been notified that the CTI initialization is complete.
</body>
</html>
```

### Response

None.

## onFocus () for Salesforce Classic

### Usage

Registers a function to call when the browser focus changes. In the Salesforce console, the browser focus changes when a user navigates between primary tabs or the navigation tab.

### Syntax

```
sforce.interaction.onFocus( listener: function );
```

## Arguments

Name	Type	Description
listener	function	JavaScript method called when the browser focus changes.

## Sample Code–JavaScript

```
<head>
  <script type="text/javascript"
src="http://domain:port/support/api/25.0/interaction.js"></script>
  <script type="text/javascript">
    var callback = function (response) {
      if (response.result) {
        alert(response.result);
      }
    };

    function onFocus() {
      //Invokes API method
      sforce.interaction.onFocus(callback);
    }
  </script>
</head>
<body>
  <button onclick="onFocus();">onFocus</button>
</body>
```

## Response

This method is asynchronous. The response is returned in an object passed to a callback method. The response object contains the following fields.

Name	Type	Description
result	string	Returns the URL of the page in focus as a JSON string and includes any applicable object ID, object name, object type, and for API version 33.0 or later, the object tab name. For example:

```
{ "url": "http://salesforce.com/001x0000003DGQR",
  "objectId": "001x0000003DGQR", "objectName": "Acme",
  "object": "Account", "displayName": "Company" }
```

If the page isn't focused on an object, the object ID, object name, and object will be empty.

For API version 31.0 and later, invoking this API method on a PersonAccount object returns the following additional information.

- accountId or contactId, the associated account or contact ID
- personAccount, which is `true` if the object is a PersonAccount and `false` otherwise

Name	Type	Description
		For example: <pre>{ "url": "http://na1.salesforce.com/001x0000003DGQR",   "objectId": "001x0000003DGQR", "objectName": "Acme Person Account",   "object": "Account", "contactId": "003D000000QOMqg",   "personAccount": true }</pre>
error	string	If the API call was successful, this variable is undefined. If the API call failed, this variable returns an error message.

SEE ALSO:

[Salesforce Help: Salesforce Console](#)

[Salesforce Help: Turn On Multi-Monitor Components for a Salesforce Console in Salesforce Classic](#)

## onObjectUpdate () for Salesforce Classic

### Usage

Registers a function to call when case fields, the feed, or related list data have changed on records that are displayed with a feed-based layout.



**Note:** Use this method with Visualforce pages you want to use as custom publishers in Case Feed.

### Syntax

```
sforce.interaction.entityFeed.onObjectUpdate(callback: function)
```

### Arguments

Name	Type	Description
callback	function	JavaScript method executed when the API method call is completed.

### Sample Code—JavaScript

```
<apex:page standardController="Case">
  <apex:includeScript value="/support/api/26.0/interaction.js"/>
  <script type="text/javascript">
    var callback = function(response) {
      alert('Case was updated. Fields = ' + response.fieldsUpdated +
        ' Related lists = ' + response.relatedListsUpdated + ' Feed = ' +
        response.feedUpdated);
    };
  </script>
</apex:page>
```

```
//Invokes API method
sforce.interaction.entityFeed.onObjectUpdate(callback);
</script>
</apex:page>
```

## Response

This method is asynchronous. The response is returned in an object passed to a callback method. The response object contains the following fields.

Name	Type	Description
fieldsUpdated	boolean	true if one or more case fields were updated.
relatedListsUpdated	boolean	true if one or more case related lists were updated.
feedUpdated	boolean	true if the case feed was updated.

## refreshObject () for Salesforce Classic

### Usage

Notifies a page that uses a feed-based layout, that fields, the feed, or related list data has changed, and forces an update of these on the page.



**Note:** Use this method with Visualforce pages you want to use as custom publishers in Case Feed.

### Syntax

```
sforce.interaction.entityFeed.refreshObject (
    objectId:string,
    refreshFields:boolean,
    refreshRelatedLists:boolean,
    refreshFeed:boolean, callback:function)
```

### Arguments

Name	Type	Description
objectId	string	The record ID of the case object.
refreshFields	boolean	Indicates that one or more fields on the case have changed.
refreshRelatedLists	boolean	Indicates that one or more case-related lists have changed.
refreshFeed	boolean	Indicates that the case feed has changed.
callback	function	JavaScript method executed when the API method call is completed.

## Sample Code–JavaScript

```
<apex:page standardController="Case">
  <apex:includeScript value="/support/api/26.0/interaction.js"/>
  <a href="javascript:void(0);"
  onclick="sforce.interaction.entityFeed.refreshObject('{!case.id}', true, true, true,
  function(response) {alert('Case was updated: ' + response.result);});">Refresh Case</a>
</apex:page>
```

## Response

This method is asynchronous. The response is returned in an object passed to a callback method. The response object contains the following fields.

Name	Type	Description
result	boolean	true if the Case Feed page was successfully updated, false if it was not.

## refreshPage () for Salesforce Classic

### Usage

Returns true if page refresh is invoked, false otherwise. When this method is called within the Salesforce console, it refreshes the current active tab. This method is only available in API version 28.0 or later.

### Syntax

```
sforce.interaction.refreshPage(callback: function);
```

### Arguments

Name	Type	Description
callback	function	JavaScript method executed when the API method call is completed.

## Sample Code–JavaScript

```
<html>
<head>
  <script type="text/javascript"
  src="http://domain:port/support/api/28.0/interaction.js"></script>
  <script type="text/javascript">
    var callback = function (response) {
      if (response.result) {
        alert('Page refresh has been invoked.');
      } else {
        alert('Page refresh has not been invoked.');
      }
    }
  </script>
```

```
    }  
  };  
  function refreshPage() {  
    sforce.interaction.refreshPage(callback);  
  }  
</script>  
</head>  
<body>  
  <button onclick="refreshPage();">refreshPage</button>  
</body>  
</html>
```

## Response

Name	Type	Description
result	boolean	Returns <code>true</code> if page refresh has been invoked, <code>false</code> otherwise.
error	string	If the API call was successful, this variable is undefined. If the API call failed, this variable returns an error message.

## refreshRelatedList() for Salesforce Classic

### Usage

Returns `true` if the related list with the given `listName` is refreshed, `false` otherwise. When this method is called within the Salesforce console, only the related list with the given list name in the currently focused view will be refreshed. This method is only available in API version 28.0 or later.

### Syntax

```
sforce.interaction.refreshRelatedList(listName:string, callback:function)
```

### Arguments

Name	Type	Description
listName	string	The name of the related list to refresh. For example, Contact for Contacts related list or Activity for Open Activities related list.  Note that to refresh a custom related list created from a custom lookup field, <code>listName</code> must specify the ID of the custom lookup field.
callback	function	JavaScript method executed when the API method call is completed.



## Sample Code–JavaScript

```

<html>
<head>
  <script type="text/javascript"
src="http://domain:port/support/api/28.0/interaction.js"></script>
  <script type="text/javascript">
    function checkRefreshResult(result) {
      if (result.result) {
        alert('The related list is refreshed!');
      } else {
        alert('Cannot refresh the related list with the given listName! Make
sure the listName is correct and the related list is on the page.');

```

## Response

Name	Type	Description
result	boolean	Returns true if the related list with the given name is refreshed, false otherwise.
error	string	If the API call was successful, this variable is undefined. If the API call failed, this variable returns an error message.

## Notes

- This method cannot refresh related lists created from `<apex:relatedList>`.
- This method cannot refresh a related list from an overridden Visualforce page in the Salesforce console.
- If called from within the Salesforce console, this method will only search for the related list to refresh in the currently focused view.

## reloadFrame () for Salesforce Classic

### Usage

Reloads the frame that contains the page making the call. This method is available only if the record is displayed with a feed-based layout. This method is available in API version 34.0 or later.

### Syntax

```
sforce.interaction.entityFeed.reloadFrame()
```

### Arguments

None.

### Sample Code—JavaScript

```
<apex:page standardController="Case">
  <apex:includeScript value="/support/api/34.0/interaction.js"/>
  <a href="javascript:void(0); onclick="sforce.interaction.entityFeed.reloadFrame();">
    Reload</a>
</apex:page>
```

### Response

None.

## runApex () for Salesforce Classic

### Usage

Executes an Apex method from an Apex class that's exposed in Salesforce.

### Syntax

```
sforce.interaction.runApex(apexClass:string, methodName:string, methodParams:string,
(optional) callback:function)
```

## Arguments

Name	Type	Description
apexClass	string	Specifies the Apex class of the method to execute.
methodName	string	Specifies the method to execute.
methodParams	string	Specifies the method parameters to pass. The string must include field value pairs and be formatted as a valid query string. For example: name=acme&phone= (212) 555-5555.
callback	function	JavaScript method executed when the API method call is completed.

## Sample Code–JavaScript

1. An administrator creates an Apex class and Apex method:

```
global class AccountRetrieval{

    webservice static String getAccount(String name) {
        List<Account> accounts = new List<Account>();
        for (Account account : Database.query('Select Id, Name, phone from Account where Name
        like \'' + name + '%\')){
            accounts.add(account);
        }

        String jsonString = JSON.serialize(accounts);
        return jsonString;
    }
}
```

2. In the location where you've created the Apex class and method in Salesforce, click **Generate WSDL** to expose the method and class so that a third-party softphone can call it.
3. Add your code to the softphone:

```
<html>
<head>
    <script type="text/javascript"
src="http://domain:port/support/api/25.0/interaction.js"></script>
    <script type="text/javascript">
        var callback = function (response) {
            if (response.result) {
                alert(response.result);
            } else {
                alert(response.error);
            }
        };
        function runApex() {
            //Invokes API method
            sforce.interaction.runApex('AccountRetrieval', 'getAccount', 'name=acme',
callback);
        }
    </script>
```

```

</head>
<body>
    <button onclick="runApex();">runApex</button>
</body>
</html>

```

4. Output is returned. In this example, one account named, Acme, was found:

```

[{"attributes":{"type":"Account",
"url":"/services/data/v25.0/objects/Account/001x0000003DGQRAA4"},
"Id":"001x0000003DGQRAA4","Name":"Acme","Phone":"(212) 555-5555"}]

```

## Response

Name	Type	Description
result	string	Returns the result from executing the method from the specified Apex class.  No specific format is returned. The format is determined by the value from the method that was executed.
error	string	If the API call was successful, this variable is undefined. If the API call failed, this variable returns an error message.

SEE ALSO:

[Salesforce Help: Apex Code Overview](#)

## saveLog () for Salesforce Classic

### Usage

Saves or updates an object in Salesforce.

### Syntax

```
sforce.interaction.saveLog(object:string, saveParams:string, (optional)callback:function)
```

### Arguments

Name	Type	Description
object	string	The name of the object to save or update.
saveParams	string	Specifies the fields to save or update on the object.  If the object's ID is specified, a record is updated. For example: Id=001D000000J6qIX&Name=Acme&Phone=4154561515. If the object's

Name	Type	Description
		ID isn't specified, a new record is created. For example: Name=Acme&Phone=4154561515.
callback	function	JavaScript method executed when the API method call is completed.

## Sample Code–JavaScript

```
<html>
<head>
  <script type="text/javascript"
src="http://domain:port/support/api/25.0/interaction.js"></script>
  <script type="text/javascript">
    var callback = function (response) {
      if (response.result) {
        alert(response.result);
      } else {
        alert(response.error);
      }
    }
    function saveLog() {
      //Invokes API method
      sforce.interaction.saveLog('Account', 'Name=NewAccountName&Phone=4155551212',
callback);
    }
  </script>
</head>
  <button onclick="saveLog();">saveLog</button>
</html>
```

## Response

Name	Type	Description
result	boolean	true if saving or updating the object was successful, false if saving or updating the object wasn't successful.
id	string	The Id of the newly created object.
error	string	If the API call was successful, this variable is undefined. If the API call failed, this variable returns an error message.

## screenPop () for Salesforce Classic

### Usage

Pops to a target URL, which must be relative.

## Syntax

```
sforce.interaction.screenPop(url:string, force:boolean, (optional) callback:function)
```

## Arguments

Name	Type	Description
url	string	A relative URL, which specifies the location of the screen pop.
force	boolean	Set value to <code>true</code> to force a screen pop, <code>false</code> otherwise. This argument is only available in API version 28.0 and later.
callback	function	JavaScript method executed when the API method call is completed.

## Sample Code–JavaScript

```
<html>
<head>
  <script type="text/javascript"
src="http://domain:port/support/api/28.0/interaction.js"></script>
  <script type="text/javascript">
    var callback = function (response) {
      if (response.result) {
        alert('Screen pop was set successfully.');
```


## Response

Name	Type	Description
result	boolean	<code>true</code> if the screen pop was successful, <code>false</code> if the screen pop wasn't successful.
error	string	If the API call was successful, this variable is undefined. If the API call failed, this variable returns an error message.

## searchAndGetScreenPopUrl () for Salesforce Classic

### Usage

Searches objects specified in the softphone layout for a given string. Returns search results and the relative URL to be screen popped. Note that this method does not perform an actual screen pop. This method respects screen pop settings defined in the softphone layout. This method is only available in API version 28.0 or later.

 **Tip:** This method is not available in the Open CTI API for Lightning Experience. To accomplish the same functionality in Lightning, use the `deferred` parameter available in the [searchAndScreenPop \(\) for Lightning Experience](#) method.

### Syntax

```
sforce.interaction.searchAndGetScreenPopUrl(searchParams:string, queryParams:string, callType:string, callback:function)
```

### Arguments

Name	Type	Description
searchParams	string	String to search.
queryParams	string	Specifies the query parameters to pass to the URL.
callType	string	Specifies the type of call, such as inbound, outbound, internal, or null. Per the settings in the softphone layout, the call type determines which objects to search for any matches.  If <code>callType</code> is null, searches are inbound by default. If <code>callType</code> is internal or outbound, no screen pops occur.
callback	function	JavaScript method executed when the API method call is completed.

### Sample Code–JavaScript

```
<html>
<head>
  <script type="text/javascript"
src="http://domain:port/support/api/33.0/interaction.js"></script>
  <script type="text/javascript">
    var callback = function (response) {
      if (response.result) {
        alert(response.result);
      } else {
        alert(response.error);
      }
    };
    function searchAndGetScreenPopUrl () {
      //Invokes API method
      sforce.interaction.searchAndGetScreenPopUrl ('Acme',
```

```
'Key1=value1&Key2=value2', 'inbound', callback);
    }
</script>
</head>
<body>
    <button onclick="searchAndGetScreenPopUrl();">searchAndGetScreenPopUrl</button>
</body>
</html>
```

## Response

Name	Type	Description
result	string	<p>Returns a list of objects that match the search results and the URL to the screen pop (screenPopUrl). The search is performed on the objects specified in the softphone layout. For each object found, the object ID, field names, field values, and for API version 33.0 or later, object tab name are returned as a JSON string.</p> <p>The following is an example of searching for "Acme," and finding one account and three opportunity objects:</p> <pre>{ "006x0000001ZcyG": { "Name": "Acme - 600 Widgets", "object": "Opportunity", "displayName": "Opportunity" }, "001x0000003DGQR": { "Name": "Acme", "Type": "Analyst", "object": "Account", "display Name": "Company" }, "006x0000001ZcyH": { "Name": "Acme - 200 Widgets", "object": "Opportunity", "displayName": "Opportunity" }, "006x0000001ZcyF": { "Name": "Acme - 1,200 Widgets", "object": "Opportunity", "displayName": "Opportunity" }, screenPopUrl: "/search/SearchResults?searchType=2&amp;str=Acme" }</pre> <p>For API version 31.0 and later, invoking this API method on a PersonAccount object returns additional information:</p> <pre>{ "001D000000Jn5C5": { "Name": "PersonAccount", "contactId": "003D000000QQCEu", "Type": "Analyst", "object": "Account", "displayName": "Account", "personAccount": true }, "screenPopUrl": "/001D000000Jn5C5" }</pre>
error	string	If the API call was successful, this variable is undefined. If the API call failed, this variable returns an error message.

SEE ALSO:

[Salesforce Help: Designing a Custom Softphone Layout](#)

## searchAndScreenPop () for Salesforce Classic

### Usage

Searches objects specified in the softphone layout for a given string. Returns search results and screen pops any matching records. This method respects screen pop settings defined in the softphone layout.



## Syntax

```
sforce.interaction.searchAndScreenPop(searchParams:string, queryParams:string,
callType:string, (optional) callback:function);
```


## Arguments

Name	Type	Description
searchParams	string	String to search.
queryParams	string	Specifies the query parameters to pass to the URL.
callType	string	Specifies the type of call, such as inbound, outbound, internal, or null. Per the settings in the softphone layout, the call type determines which objects to search for any matches.  If <code>callType</code> is null, searches are inbound by default. If <code>callType</code> is internal or outbound, no screen pops occur.
callback	function	JavaScript method executed when the API method call is completed.

## Sample Code—JavaScript

```
<html>
<head>
  <script type="text/javascript"
src="http://domain:port/support/api/33.0/interaction.js"></script>
  <script type="text/javascript">
    var callback = function (response) {
      if (response.result) {
        alert(response.result);
      } else {
        alert(response.error);
      }
    };
    function searchAndScreenPop() {
      //Invokes API method
      sforce.interaction.searchAndScreenPop('Acme', 'Key1=value1&Key2=value2',
'inbound', callback);
    }
  </script>
</head>
<body>
  <button onclick="searchAndScreenPop();">searchAndScreenPop</button>
</body>
</html>
```

## Response

Name	Type	Description
result	string	<p>Returns a list of objects that match the search results. The search is performed on the objects specified in the softphone layout. For each object found, the object ID, field names, field values, and for API version 33.0 or later, object tab names are returned as a JSON string.</p> <p> <b>Note:</b> If multiple matches are found, only a single field is returned.</p> <p>The following is an example of searching for "Acme," and finding one account and three opportunity objects:</p> <pre>{   "006x0000001ZcyG" : {"Name" : "Acme - 600 Widgets",     "object" : "Opportunity", "displayName" :     "Opportunity"},   "001x0000003DGQR" : {"Name" : "Acme", "Type" :     "Analyst", "object" : "Account", "displayName" :     "Company"},   "006x0000001ZcyH" : {"Name" : "Acme - 200 Widgets",     "object" : "Opportunity", "displayName" :     "Opportunity"},   "006x0000001ZcyF" : {"Name" : "Acme - 1,200 Widgets",     "object" : "Opportunity", "displayName" : "Opportunity"} }</pre> <p>For API version 31.0 and later, invoking this API method on a PersonAccount object returns additional information:</p> <pre>{ "001D000000JWAW8" : {"Name": "Acme", "contactId": "003D000000QNwDB",   "Type": "Analyst", "object": "Account", "personAccount": true} }</pre>
error	string	If the API call was successful, this variable is undefined. If the API call failed, this variable returns an error message.


SEE ALSO:

[Salesforce Help: Designing a Custom Softphone Layout](#)

## setVisible() for Salesforce Classic

### Usage

Shows or hides the softphone in the Salesforce console.

 **Note:** If this method is used in a Salesforce console where multi-monitor components is turned on, an error will be returned.

## Syntax

```
sforce.interaction.setVisible(value:boolean, (optional) callback:function)
```

## Arguments

Name	Type	Description
value	boolean	Set value to <code>true</code> to show the softphone or set value to <code>false</code> to hide the softphone.
callback	function	JavaScript method executed when the API method call is completed.

## Sample Code—JavaScript

```
<html>
<head>
  <script type="text/javascript"
src="http://domain:port/support/api/25.0/interaction.js"></script>
  <script type="text/javascript">
    var callback = function (response) {
      if (response.result) {
        alert(response.result);
      } else {
        alert(response.error);
      }
    };
    function setVisible(value) {
      sforce.interaction.setVisible(value, callback);
    }
  </script>
</head>
<body>
  <button onclick="setVisible(false);">hide softphone</button>
</body>
</html>
```

## Response

Name	Type	Description
result	boolean	<code>true</code> if showing or hiding the softphone succeeded, <code>false</code> if showing or hiding the softphone didn't succeed.

Name	Type	Description
<code>error</code>	string	If the API call was successful, this variable is undefined. If the API call failed, this variable returns an error message.

SEE ALSO:

[Salesforce Help: Salesforce Console](#)

[Salesforce Help: Turn On Multi-Monitor Components for a Salesforce Console in Salesforce Classic](#)

## Methods for Computer-Telephony Integration (CTI)

Open CTI lets you integrate your CTI system with Salesforce.



**Important:** The way you implement Open CTI depends on your org's user interface. There are separate Open CTI APIs for Salesforce Classic and Lightning Experience. You can't swap the two Open CTI APIs in custom JavaScript code because they behave and function differently. Make sure that you think about where you want to implement your CTI system before you begin developing.

[disableClickToDial\(\) for Salesforce Classic](#)

[enableClickToDial\(\) for Salesforce Classic](#)

[getCallCenterSettings\(\) for Salesforce Classic](#)

[getDirectoryNumbers\(\) for Salesforce Classic](#)

[getSoftphoneLayout\(\) for Salesforce Classic](#)

[onClickToDial\(\) for Salesforce Classic](#)

[setSoftphoneHeight\(\) for Salesforce Classic](#)

[setSoftphoneWidth\(\) for Salesforce Classic](#)

SEE ALSO:

[Why Your UI Matters—Open CTI for Salesforce Classic vs. Lightning Experience](#)

[Method Parity Between Open CTI for Salesforce Classic and Lightning Experience](#)

### **disableClickToDial()** for Salesforce Classic

#### Usage

Disables click-to-dial.

#### Syntax

```
sforce.interaction.cti.disableClickToDial( (optional) callback: function )
```

## Arguments

Name	Type	Description
callback	function	JavaScript method executed when the API method call is completed.

## Sample Code–JavaScript

```
<html>
<head>
  <script type="text/javascript"
src="http://domain:port/support/api/25.0/interaction.js"></script>
  <script type="text/javascript">
    var callback = function (response) {
      if (response.result) {
        alert('Click to dial was disabled.');
```

## Response

This method is asynchronous. The response is returned in an object passed to a callback method. The response object contains the following fields.

Name	Type	Description
result	boolean	true if click-to-dial was disabled, false if click-to-dial wasn't disabled.
error	string	If the API call was successful, this variable is undefined. If the API call failed, this variable returns an error message.

## enableClickToDial () for Salesforce Classic

### Usage

Enables click-to-dial.

## Syntax

```
sforce.interaction.cti.enableClickToDial( (optional) callback:function )
```

## Arguments

Name	Type	Description
callback	function	JavaScript method executed when the API method call is completed.

## Sample Code–JavaScript

```
<html>
<head>
  <script type="text/javascript"
src="http://domain:port/support/api/25.0/interaction.js"></script>
  <script type="text/javascript">
    var callback = function (response) {
      if (response.result) {
        alert('Click to dial was enabled.');
```

## Response

This method is asynchronous. The response is returned in an object passed to a callback method. The response object contains the following fields.

Name	Type	Description
result	boolean	true if click-to-dial was enabled, false if click-to-dial wasn't enabled.
error	string	If the API call was successful, this variable is undefined. If the API call failed, this variable returns an error message.

## getCallCenterSettings () for Salesforce Classic

### Usage

Returns the call center settings in the call center definition file as a JSON string. For more information, see [Call Center Definition Files](#).

### Syntax

```
sforce.interaction.cti.getCallCenterSettings (callback: function)
```

### Arguments

Name	Type	Description
callback	function	JavaScript method executed when the API method call is completed.

### Sample Code—JavaScript

```
<html>
<head>
  <script type="text/javascript"
src="http://domain:port/support/api/25.0/interaction.js"></script>
  <script type="text/javascript">
    var callback = function (response) {
      alert(response.result);
    }

    //Calls getCallCenterSettings
    sforce.interaction.cti.getCallCenterSettings (callback);
  </script>
</head>
<body></body>
</html>
```

### Response

This method is asynchronous. The response is returned in an object passed to a callback method. The response object contains the following fields.

Name	Type	Description
result	string	If the API call was successful, the call center settings definition is returned as a JSON string. If the API call failed, null is returned.
error	string	If the API call was successful, this variable is undefined. If the API call failed, this variable returns an error message.

## getDirectoryNumbers () for Salesforce Classic

### Usage

Returns the list of phone numbers from the call center's directory. This method is only available in API version 31.0 or later.

### Syntax

```
sforce.interaction.cti.getDirectoryNumbers(isGlobal:boolean, callCenterName:String,
(optional) callback:function, (optional) resultSetPage:Integer, (optional)
resultSetPageSize:Integer)
```

### Arguments

Name	Type	Description
isGlobal	boolean	Set the value to <code>true</code> to return a directory number from the global call center name, or set the value to <code>false</code> to return a directory number that is specific to a call center.
callCenterName	string	Specifies the call center name on which to return directory numbers. If <code>isGlobal</code> is set to <code>false</code> , and this field is not specified, all directory numbers are returned.
callback	function	JavaScript method executed when the API method call is completed.
resultSetPage	integer	Represents the page number of the list of results to return. This number starts at 0.
resultSetPageSize	integer	Sets the maximum number of phone numbers to retrieve, which is defaulted to 5000 and has a maximum number of 10000. If <code>hasNext</code> returns <code>true</code> in the <code>callback</code> , use this argument with <code>resultSetPage</code> to get the next page of results. For example, if <code>resultSetPageSize</code> is set to 5000, and <code>resultSetPage</code> is set to 0, the first 5000 phone numbers are returned. If <code>resultSetPage</code> is set to 1, the next 5000 phone numbers are returned.

### Sample Code—JavaScript

```
<html>
<head>
  <script src="https://domain:port/support/api/31.0/interaction.js"></script>
  <script type="text/javascript">
    var callback = function (response) {
      if (response.result) {
        alert(response.result);
      } else {
        alert(response.error);
      }
    };

    var isGlobal = false; //Do not return directories from the global call center
    var callCenterName = 'My Call Center'; //Call center name of directory numbers to
```



```

return

    function getDirectoryNumbers() {
        sforce.interaction.cti.getDirectoryNumbers(isGlobal, callCenterName,
        callback);
    }
</script>
</head>
<body>
    <button onclick="getDirectoryNumbers();" >Get Directory Numbers</button>
</body>
</html>

```

## Response

Name	Type	Description
result	string	Returns a JSON string that represents the list of phone numbers from the specified call center name. Each phone number element contains a call center name, phone, and description. For example: <div data-bbox="649 882 1445 1228" data-label="Text"> <pre> { directoryNumbers:   [     {callCenterName:'Demo Call Center', name:'Sales Cloud', phone:'415-555-1212', description:'Sales Cloud additional number'},     {callCenterName:'Demo Call Center 2', name:'Service Cloud', phone:'415-555-3434', description:'Service Cloud additional number'},   ],   hasNext: false } </pre> </div>
error	string	If the API call was successful, this variable is undefined. If the API call failed, this variable returns an error message.

## getSoftphoneLayout () for Salesforce Classic

### Usage

Returns the softphone layout as a JSON string. This method is only available in API version 27.0 or later.

### Syntax

```
sforce.interaction.cti.getSoftphoneLayout (callback: function);
```

## Arguments

Name	Type	Description
callback	function	JavaScript method executed when the API method call is completed.

## Sample Code—JavaScript

```
<html>
<head>
  <script type="text/javascript"
src="http://domain:port/support/api/27.0/interaction.js"></script>
  <script type="text/javascript">
    var callback = function (response) {
      alert(response.result);
    }
    // Calls getSoftphoneLayout
    sforce.interaction.cti.getSoftphoneLayout(callback);
  </script>
</head>
<body></body>
</html>
```

## Response

This method is asynchronous. The response is returned in an object passed to a callback method. The response object contains the following fields.

Name	Type	Description
result	string	<p>If the API call was successful, the softphone layout definition is returned as a JSON string. If the API call failed, null is returned.</p> <p>The returned JSON string contains three elements that represent each of the call types:</p> <ul style="list-style-type: none"> <li>"Internal"</li> <li>"Inbound"</li> <li>"Outbound"</li> </ul> <p>Each call-type contains three subsections:</p> <ul style="list-style-type: none"> <li>"callRelatedFields"—An array of call-related fields selected to display. Possible values are "ANI", "DNIS", "SEGMENT", and "QUEUE".</li> <li>"objects"—The set of Salesforce objects selected to display, along with the Field Label and Field Name (API name) selected to display from each object.</li> <li>"screenPopSettings"—This object contains a "screenPopsOpenWithin" field with a value of either "ExistingWindow" or "NewWindow". Additionally, it contains the settings for each of the screen pop match types: "NoMatch",</li> </ul>

Name	Type	Description
		<p>"SingleMatch", "MultipleMatches". Each match type contains a corresponding "screenPopType" field and may also contain a "screenPopData" field. If "screenPopType" has a value of "PopToEntity", then "screenPopData" contains the name of the target object. If "screenPopType" has a value of "PopToVisualforce", then "screenPopData" contains the name of the target Visualforcepage. If "screenPopType" has a value of "PopToSearch", then there won't be a "screenPopData" field.</p> <p>The following is an example of a JSON response:</p> <pre> "Internal" : {   "callRelatedFields" : [     "ANI",     "DNIS",   ]   "objects" : {     "User" : [ {       "displayName" : "Name",       "apiName" : "Name"     }   ] }, "screenPopSettings" : {} }, "Inbound" : {   "callRelatedFields" : [     "ANI",     "DNIS",     "SEGMENT",     "QUEUE"   ],   "objects" : {     "Account" : [ {       "displayName" : "Account Name",       "apiName" : "Name"     }   ] }, "screenPopSettings" : {   "NoMatch" : {     "screenPopType" : "PopToEntity",     "screenPopData" : "Contact"   },   "SingleMatch" : {     "screenPopType" : "PopToVisualforce",     "screenPopData" : "Visualforce_Page_Name"   },   "MultipleMatches" : {     "screenPopType" : "PopToSearch"   } } </pre>

Name	Type	Description
		<pre>     }   } }, "Outbound" : {   "callRelatedFields" : [     "DNIS"   ],   "objects" : {     "Account" : [ {       "displayName" : "Account Name",       "apiName" : "Name"     }   ] }, "screenPopSettings" : {} } } </pre>
error	string or undefined	If the API call was successful, this variable is undefined. If the API call failed, this variable returns an error message.

## SEE ALSO:

[Salesforce Help: Designing a Custom Softphone Layout](#)

## onClickToDial () for Salesforce Classic

### Usage

Registers a function to call when a user clicks an enabled phone number.

### Syntax

```
sforce.interaction.cti.onClickToDial( listener: function )
```

### Arguments

Name	Type	Description
listener	function	JavaScript method called when the user clicks a phone number.

### Sample Code—JavaScript

```
<html>
<head>
```

```

<script type="text/javascript"
src="http://domain:port/support/api/25.0/interaction.js"></script>
<script type="text/javascript">
    var listener = function (response) {
        if (response.result) {
            alert('User clicked on a phone number.' + response.result );
        }
    };
    //Invokes API method
    sforce.interaction.cti.onClickToDial(listener);
</script>
</head>
</html>

```

## Response


This method is asynchronous. The response is returned in an object passed to a callback method. The response object contains the following fields.

Name	Type	Description
result	string	<p>Returns the phone number, object ID, the name of the object, and for API version 33.0 or later, the object tab name from where the click was initiated as a JSON string. For example:</p> <pre>{ "number": "4155551212", "objectId": "001x0000003DIGj", "objectName": "Account", "displayName": "Company" }</pre> <p>For API version 33.0 or later, invoking this API method on a PersonAccount object returns the following additional information.</p> <ul style="list-style-type: none"> <li>• accountId or contactId, the associated account or contact ID</li> <li>• personAccount, which is <code>true</code> if the object is a PersonAccount and <code>false</code> otherwise</li> </ul> <p>For example:</p> <pre>{ "number": "4155551212", "object Id": "001D000000JWVvP", "objectName": "Howard Jones", "object": "Account", "personAccount": true, "contactId": " 003D000000QOBPX" }</pre>
error	string	<p>If the API call was successful, this variable is undefined. If the API call failed, this variable returns an error message.</p>

## setSoftphoneHeight () for Salesforce Classic

### Usage

Sets the softphone height in pixels.

 **Note:** If this method is used in a Salesforce console where multi-monitor components is turned on, an error will be returned because resizing multi-monitor component is not allowed.

## Syntax

```
sforce.interaction.cti.setSoftphoneHeight(height:number, (optional) callback:function)
```

## Arguments

Name	Type	Description
height	number	Softphone height in pixels. The height should be a number that's equal or greater than 0.
callback	function	JavaScript method executed when the API method call is completed.

## Sample Code—JavaScript

```
<html>
<head>
  <script type="text/javascript"
src="http://domain:port/support/api/25.0/interaction.js"></script>
  <script type="text/javascript">
    var callback = function (response) {
      if (response.result) {
        alert('Height was set successfully.');
```

## Response

Name	Type	Description
result	boolean	true if the height was set successfully, false if setting the height wasn't successful.

Name	Type	Description
error	string	If the API call was successful, this variable is undefined. If the API call failed, this variable returns an error message.

SEE ALSO:

[Salesforce Help: Salesforce Console](#)

[Salesforce Help: Turn On Multi-Monitor Components for a Salesforce Console in Salesforce Classic](#)

## setSoftphoneWidth () for Salesforce Classic

### Usage

Sets the softphone width in pixels for the Salesforce console.



**Note:** If this method is used in a Salesforce console where multi-monitor components is turned on, an error will be returned because resizing multi-monitor component is not allowed.

### Syntax

```
sforce.interaction.cti.setSoftphoneWidth(width:number, (optional) callback:function)
```

### Arguments

Name	Type	Description
width	number	Softphone width in pixels. The width should be a number that's equal or greater than 0.
callback	function	JavaScript method executed when the API method call is completed.

### Sample Code—JavaScript

```
<html>
<head>
  <script type="text/javascript"
src="http://domain:port/support/api/25.0/interaction.js"></script>
  <script type="text/javascript">
    var callback = function (response) {
      if (response.result) {
        alert('Width was set successfully.');
```

```
</head>
<body>
  <button onclick="sforce.interaction.cti.setSoftphoneWidth(100, callback);">
    set softphone width to 100px
  </button>
</body>
</html>
```

## Response

This method is asynchronous. The response is returned in an object passed to a callback method. The response object contains the following fields.

Name	Type	Description
result	boolean	<code>true</code> if the width was set successfully, <code>false</code> if setting the width wasn't successful.
error	string	If the API call was successful, this variable is undefined. If the API call failed, this variable returns an error message.

### SEE ALSO:

[Salesforce Help: Salesforce Console](#)

[Salesforce Help: Turn On Multi-Monitor Components for a Salesforce Console in Salesforce Classic](#)



# CHAPTER 6 Other Resources

In addition to this guide, there are other resources available for you as you learn how to use Open CTI.

[Open CTI Typographical Conventions](#)

Typographical conventions are used in our code examples. Learn what Courier font, italics, and brackets mean.

SEE ALSO:

- [Salesforce Help: Salesforce Call Center](#)
- [Salesforce Help: Salesforce Console](#)
- [Salesforce Help: Glossary](#)
- [Salesforce Developers: Getting Started with Salesforce App Cloud](#)
- [Salesforce University: Training](#)

## Open CTI Typographical Conventions

Typographical conventions are used in our code examples. Learn what Courier font, italics, and brackets mean.

Convention	Description
Courier font	<div>In descriptions of syntax, monospace font indicates items that you should type as shown, except for brackets. For example: <pre>Public class HelloWorld</pre></div>
Italics	<div>In descriptions of syntax, italics represent variables. You supply the actual value. In the following example, three values need to be supplied: <i>datatype variable_name [= value]</i>; If the syntax is bold and italic, the text represents a code element that needs a value supplied by you, such as a class name or variable value: <pre>public static class <b><i>YourClassHere</i></b> { ... }</pre></div>
Bold Courier font	<div>In code samples and syntax descriptions, bold courier font emphasizes a portion of the code or syntax.</div>
< >	<div>In descriptions of syntax, less-than and greater-than symbols (&lt; &gt;) are typed exactly as shown. <pre>&lt;apex:pageBlockTable value="{!account.Contacts}" var="contact"&gt;      &lt;apex:column value="{!contact.Name}"/&gt;</pre></div>

Convention	Description
	<pre>&lt;apex:column value="{!contact.MailingCity}"/&gt; &lt;apex:column value="{!contact.Phone}"/&gt; &lt;/apex:pageBlockTable&gt;</pre>
{ }	<p>In descriptions of syntax, braces ({ }) are typed exactly as shown.</p> <pre>&lt;apex:page&gt;   Hello {!\$User.FirstName}! &lt;/apex:page&gt;</pre>
[ ]	<p>In descriptions of syntax, anything included in brackets is optional. In the following example, specifying <b>value</b> is optional:</p> <pre><b>data_type variable_name</b> [ = <b>value</b>];</pre>
	<p>In descriptions of syntax, the pipe sign means “or”. You can do one of the following (not all). In the following example, you can create a new unpopulated set in one of two ways, or you can populate the set:</p> <pre>Set&lt;<b>data_type</b>&gt; <b>set_name</b>   [= new Set&lt;<b>data_type</b>&gt; ();]     [= new Set&lt;<b>data_type</b>&gt;{<b>value</b> [, <b>value2</b>. . .] };]     ;</pre>

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