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# Bria 3 *for Windows API*

## Developer Guide

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This manual corresponds to Bria 3.1 *for Windows*.

# The CRM API

The CRM (customer relationship management) API provides functions that let another application log information about calls made using Bria. This API can be used along with the CLI API (next page) to manage phone calls.

For example, your application may have a web page that provides information about customers for your employees to phone.

- The employee clicks on the customer phone number, which invokes a function from the CLI API to place the phone call via Bria.
- As soon as the call is placed, a back-end component of your application (which is subscribing to Bria events via the CRM API) will receive information about the call from Bria.
- The employee will manage the call using Bria: the employee can put the call on hold, transfer the call, mute the call, and so on.
- When the call ends, the back-end component will receive notification that the call has ended.

## Receiving Call Events from Bria

To receive call events from Bria:

1. Implement an interface to listen for the WM\_COPYDATA message that is passed in the Msg parameter of the Win32 SendMessage() function.
2. To listen to Bria:
  - Register for the Request Listener message by calling RegisterWindowMessage(), passing in a pointer to the string “CP\_REQUEST\_LISTENER”.
  - Register for the Listener Confirmed message by calling RegisterWindowMessage(), passing in a pointer to the string “CP\_LISTENER\_CONFIRMED”.
  - Implement an interface to listen for messages that are handled by WndProc. Listen for both Win32.WM\_COPYDATA and CP\_LISTENER\_CONFIRMED.
  - Call PostMessage() with the CP\_REQUEST\_LISTENER message as the Msg parameter and your application’s hWnd handle as the hWnd parameter.

Your application should receive a CP\_LISTENER\_CONFIRMED WndProc message from Bria confirming that the listener is now the destination for Bria call messages.

3. When an event occurs on Bria, Bria calls SendMessage(), passing:
  - The hWnd (originally passed in PostMessage()).
  - WM\_COPYDATA in the Msg parameter.
  - A pointer to the APIMESSAGE structure in the lParam’s COPYDATASTRUCT. This APISTRUCTURE contains all the information for the call event. See the next page.

## APIMESSAGE

The structure of the APIMESSAGE is as follows (in C#):

```
public struct APIMESSAGE
{
    public int messageType;
    [MarshalAs(UnmanagedType.ByValTStr, SizeConst = 1024)]
    public string localUri;
    [MarshalAs(UnmanagedType.ByValTStr, SizeConst = 1024)]
    public string remoteUri;
    [MarshalAs(UnmanagedType.ByValTStr, SizeConst = 1024)]
    public string message;
}
```

- messageType is an enum for either outgoing call, incoming call, and call ended messages. (More messages will be implemented in the future.)

```
public enum MessageTypeEnum
{
    callOut = 0,
    callIn = 1,
    callEnd = 2,
}
```

- localUri is the local account URI which Bria used to place or receive the call.
- remoteUri is the remote party's URI.
- Message has content only for messageType CallEnd. It contains the duration of the call in seconds in this field. For an unanswered call, the duration is 0 seconds.

# The CLI API

The CLI (command line interface) API lets you execute Bria from a command line.

## From the Command Line

Currently, the API supports the following actions:

- Bria3.exe -action=call?to=<remoteuri>
- Bria3.exe -action=videocall?to=<remoteuri>
- Bria3.exe -action=IM?to=<remoteuri>
  
- Bria3.exe -action=add?contact=<contact URI>
- Bria3.exe -action=add?group=<name>
- Bria3.exe -action=delete?contact=<contact URI>
- Bria3.exe -action=delete?group=<name>
- Bria3.exe -action=importcsv?file=<file path>
- Bria3.exe -action=exportcsv?file=<file path>
  
- Bria3.exe -action=getstatus?file=<file path>
- Bria3.exe -action=setstatus?status=<status>
- Bria3.exe -action=quit;

## From a Hyperlink

In addition you can start calls from URL links via the MIME type "sip:". For example:

<a href = "sip:jsantos@domainA.com">

Where jsantos@domainA.com is a SIP address.