

MITEL

# Unified Communicator<sup>®</sup> Advanced



Software Development Kit  
Programmers Guide



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Software Development Kit  
Programmers Guide

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# UC Advanced SDK Programmers Guide

## About this Guide

This guide describes the programming environment of the Mitel Unified Communicator (UC) Advanced Software Development Kit (SDK). The SDK is an optional component of the UC Advanced Desktop Client. It is intended for programmers integrating UC Advanced into custom solutions.

If you have installed the UC Advanced SDK, the following documentation is available on your computer under Start – All Programs – Unified Communicator SDK – **Documentation**:

- The *UC Advanced SDK Reference* help, which provides reference information on classes and members of the API.
- This *UC Advanced SDK Programmers Guide*, part number 835.3248.

## About the UC Advanced SDK

The UC Advanced SDK is based on the Microsoft® .NET Framework 4.0 platform and exposes its classes and members through the Component Object Module (COM) platform. Therefore it can be used in both .NET and COM-compatible languages to develop custom solutions. This SDK is required for a solution to receive telephony events from and send dial commands to UC Advanced.

The SDK consists of a DLL, a deployment merge module, and sample applications for C#, VB.Net, and HTML.

## SDK Classes and Members

Table 1 describes the SDK classes and members.

Table 1. SDK Classes and Members

Class	Description
Commander	<p>Provides a method to dial from UC Advanced and force UC Advanced to raise its last telephony event.</p> <ul style="list-style-type: none"><li>• <b>Dial:</b> Given a number, causes UC Advanced to dial the number.</li><li>• <b>GetLastEvent:</b> Causes UC Advanced to raise its last telephony event. This method requires handlers to be assigned to the Listener interface.</li></ul>
Listener	<p>Raises telephony events as they occur in UC Advanced.</p> <ul style="list-style-type: none"><li>• <b>Connected:</b> The event is raised when UC Advanced becomes connected. The handler receives the other callers number and, if available, the name in the event arguments.</li><li>• <b>Disconnected:</b> The event is raised when UC Advanced becomes disconnected.</li><li>• <b>Ringback:</b> The event is raised while UC Advanced is calling out and is receiving ring back. The handler receives the other callers number and, if available, the name in the event arguments.</li><li>• <b>Offering:</b> The event is raised while UC Advanced is receiving an incoming call. The handler receives the other callers number and, if available, the name in the event arguments.</li></ul>

## Getting Started

The UC Advanced SDK's main tool is the **TelephonyProxy.dll** file located under Start – All Programs – Unified Communicator SDK – **Tools**. This file must be integrated into and deployed with your solution to send commands to or receive events from UC Advanced.

## Integration

If you are using Visual Studio, to integrate UC Advanced into your solution, add a reference to the `TelephonyProxy.dll` file. Refer to the documentation for your tool if you are not using Visual Studio.



## Usage

The TelephonyProxy namespace contains two classes:

- **Listener:** Monitors telephony events in UC Advanced.
- **Commander:** Sends commands to UC Advanced.

To dial from your custom application, first instantiate an instance of the Commander class, then call the new object's Dial method passing in the number you wish to dial.

```
TelephonyProxy.Commander commander = new TelephonyProxy.Commander();  
commander.Dial("9-412-5555");
```

To monitor telephony events that occur in UC Advanced, create an instance of the Listener class and subscribe to its events.

```
TelephonyProxy.Listener listener = new TelephonyProxy.Listener();  
listener.Connect += new ConnectEventHandler(OnConnect);  
listener.Disconnect += new DisconnectEventHandler(OnDisconnect);  
listener.Ringback += new RingbackEventHandler(OnRingback);  
listener.Offering += new OfferingEventHandler(OnOffering);
```

Mitel recommends that you call GetLastEvent on the Commander object after subscribing to the Listener events. This causes UC Advanced to rebroadcast its last telephony event, thereby ensuring that your application is aware of UC Advanced's current state.

## Deployment

If deployed as part of a .Net solution, bundle the TelephonyProxy.dll with your solution deployment package.

If the solution uses the COM API, the TelephonyProxy requires registration on the target computer. Register the TelephonyProxy for COM by running the following command:

```
C:\<deployment folder>regasm Telephony.dll /codebase
```

If you are using a Microsoft Windows® Installer Service-based installation package, you can integrate the SDK merge module into the deployment package. The merge module creates the necessary registry entries for access to the TelephonyProxy through its COM interface.

## Samples

The SDK contains three samples available from the Start menu. Use these samples to determine how the API is used, or use them to base your solution upon. The samples are packaged in cab file archives and must be extracted to another location. Also, you must restore the reference to TelephonyProxy.dll.





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