

# PCBest Networks SIP SDK

PCBest Networks provides NO.1 Windows VOIP development kits to business customers. Its SIP SDK is the most powerful, stable and easy to use VOIP tool in Windows platform, and it is suitable for both SIP softphone and server applications. The SDK provides rich samples for all kinds of programmers, including .NET, C++, Borland C++, Delphi, VB6 and others. It is also stress tested and has no memory leaking, which makes it extremely good for server applications, especially Windows XP Embedded.

The softphone SDK package also has excellent sound quality, and supports G729 codec. An fantastical feature is it supports switching sound devices in a live call. This makes call-center agents switch from speaks to USB headset phone so easy without cutting off a call. Another good feature is it supports call recording, which enables service quality tracking available for agents.

Majorly the SDK provides four interfaces to programmers.

1. C++ headers and lib.
2. Standard DLL interface. (GTAPI\_Face2.h is for all interfaces functions)
3. .NET assembly for .NET programmers. (a .net dll to wrap standard dll interfaces, but it is made by c# with source code.)
4. An ActiveX(ocx) without any GUI.

All four above interfaces have similar methods and functions, so you can switch among them very easily, or you can choose one that mostly suits your development environment.

Try our software before you make any purchases. It is free to download, and free to try before you purchase.

We have customers, who tried or bought others, but finally stay with us because:

1. We provide excellent customer supports. Our experts will answer your all kinds of technical questions in first time, also provide solutions.
2. We are dedicated to our customers. We add new features that customers need.
3. Our software is more stable, and better for long run. It doesn't only work for a few of times. It always works, and has been tested with hundreds of hardware devices, SIP ITSP providers, and software.
4. Well designed and organized. Pure OOP and events driver designed. The SDK makes developments so easy, so customers can focus on their business logic, not always worrying about call status and struggling in SIP messages.
5. Rich features and samples, and can do all kinds of complex operations by just a simple command, function, or setting.

Our contact information for support:

Email: [support@pcbest.net](mailto:support@pcbest.net)

# Why Choose PCBest Networks SIP SDK

## 1. Pure OOP designed SDK. It is easy to learn and easy to integrated into big project.

We provide the base class for you to override, and write your own application. Not like other lib or solutions, you need to know many functions or structures, to make your program work. Our SIP sdk only provide you one class to deal with, that is GTAPIASM.GTAPIEnv. Look at the following code for our SIP PBX, you will see the power of OOP class:

```
public class GTSIPPBXEnv : GTAPIASM.GTAPIEnv //override a class from
GTAPIASM.GTAPIEnv
{
    public GTSIPPBXEnv()
    {
    }
    public override void On_RecvOffered(int ch, string sCaller, string sCallee, string
sDestAddr, string sViaAddr, string sFromIP, ushort nFromPort) //override the parent
virtual function for new incoming calls. This is usually implemented by C callback
function
    {
        base.On_RecvOffered(ch, sCaller, sCallee, sDestAddr, sViaAddr, sFromIP,
nFromPort);
        //code for a new incoming call
    }
    public override void On_RecvConnected(int ch)//override the parent virtual function
for new call connected. This is usually implemented by C callback function
    {
        base.On_RecvConnected(ch);
        //code for call connected
    }
    public override void On_RecvIdle(int ch)//override the parent virtual function for
call is done. This is usually implemented by C callback function
    {
        base.On_RecvIdle(ch);
        //code for call disconnected
    }
    public override void On_RecvRingng(int ch)//override the parent virtual function
for ringing. This is usually implemented by C callback function

    {
        base.On_RecvRingng(ch);
        //code for remote ringing
    }
    .....
}
```

}

PCBest SDK only has one layer of SDK, but with a lot of flexibilities to access low level functions, like accessing RTP stream, etc. For event handler, the SDK use events to tell above application status. *(We have also developed the class, and wrapped the events into virtual functions, so you only need to override the parent's virtual functions to handle events. This is a big difference between our SDK and others. Other SDKs leave customers to deal with the messages, and also status machines, even more, like Via header, Contact Header of SIP, IP address of RTP and port number, what to fill in SDP and audio.... This takes a lot of time to test, to make a mature stable SDK core. We have done all of those for you, and make it a pure OOP layer for above applications.)*

You can develop your threads to process the events, or even you don't have multithreading in your application, you can still finish your job by just override the parent virtual functions.

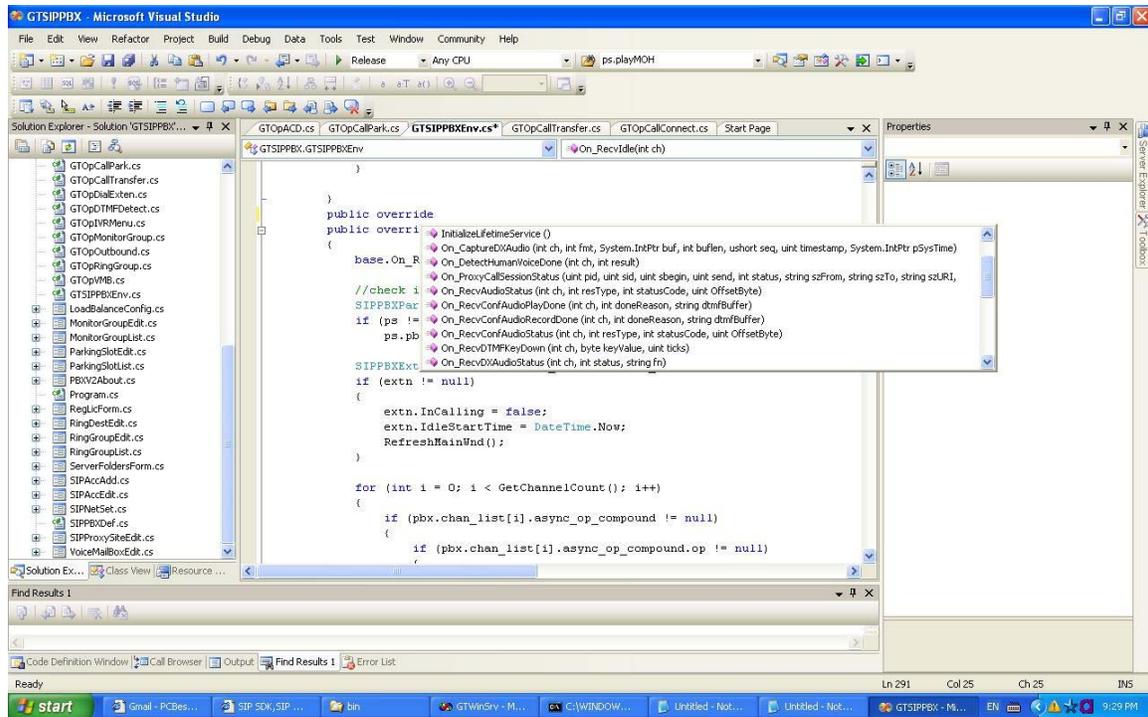
## **2. Complete .NET solution, not always ActiveX.**

PCBest SIP SDK provides you a .NET assembly(DLL) as a reference to your .NET project. Once you set the reference to it, you will be able to use the classes and structures in the reference DLL just like native class. The name space of PCBEST SIP SDK is GTAPIASM. Not like other SIP libs or solutions, they still use old ActiveX interfaces for everything. Our SDK also has an ActiveX for programmer, but it is only for old compiler like vb6, delphi, BCB. You can see from above sample, it is pure .NET and OOP like programming.

## **3. Easy to start and learn, but still with flexibilities.**

Because there is only one class to deal with, and PCBest wrapped callback function as virtual functions in the base class, so it is pretty much easy to learn and start to work on. See the following picture, you can override an event just by writing override, the Visual Studio will list all the possible functions to override.

With ease to use, PCBest SIP SDK is also flexible to do other powerful features like accessing RTP audio directly, conference, and call bridge.



#### 4. Very good customer support service.

We provide NO.1 support service to our customers. Our professional engineers and developers will answer your technical questions directly, and even can make a patch for your special application. Look at our partner page <http://www.pcbest.net/partner.htm>. We can give the contact person's email address of those companies. They will for sure give an excellent reference for PCBest.

#### 5. Stress tested, and no memory leak. It is very good for server application and long run.

Most of our customers are using our SIP SDK to develop server application, like IVR, PBX, or Message Broadcasting, IP Gateway servers. Two samples to demonstrate that it is good for server application:

The DTMF detection of SDK is excellent because it completely support 4 types of DTMF detection methods(Inband audio, SIP INFO, RFC 2833, and auto). Most softphone SIP SDK only support sending DTMF, not DTMF detection, or cannot support DTMF detection so well. Again, I have to emphasis here that handling DTMF detection is also easy by using our SIP sdk, because you just need to override one of three virtual functions(On\_RecvDTMFKeyUp, On\_RecvDTMFKeyDown, On\_RecvDTMFDone) from base class.

It is easy to play and record audio. The SDK fully supports .wav, .au files, or raw audio file. SIP SDK designed for softphone applications usually doesn't have a good support for playing and recording audio files. Our playing and recording audio functions can even start from the specific byte offset of the audio file, because that is an enhanced feature asked by our customers.

## **6. Competitive and reasonable price**

This may not be important for you, but sometimes it matters. Our SIP SDK is free to download, free to try, and free to integrate into your application first. Once you get your projects done, then you pay the license. We don't charge you anything first for downloading SDK or using our SDK.