

# VaxVoIP

## SIP SOFTPHONE SDK

**SIP SOFTPHONE SDK**  
Apple iOS(iPhone, iPad, iPod)

**TECHNICAL DOCUMENTATION**  
**VERSION 5.8**

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## **INTRODUCTION AND QUICK START**

The VaxVoIP SIP softphone SDK is a software development kit which is used to quickly embed SIP (Session Initiation Protocol) based softphone features to web, software and mobile phone application. It provides full support to tailor the softphones features as desired like having your own GUIs or incorporating your brand name.

## **EXPORTED FUNCTIONS**

### **GetVersionFile()**

The GetVersionFile() method returns the current version of component file.

#### **Syntax**

```
string GetVersionFile()
```

#### **Parameters**

No parameters.

#### **Return Value**

The function returns the files/component file version number.

#### **Example**

```
GetVersionFile()
```

#### **See Also**

GetVersionSDK()

**GetVersionSDK()**

The GetVersionSDK() method returns the current version of SDK.

**Syntax**

```
string GetVersionSDK()
```

**Parameters**

No parameters.

**Return Value**

The function returns the SDK version number.

**Example**

```
GetVersionSDK()
```

**See Also**

GetVersionFile()



## AudioDeviceVU()

The AudioDeviceVU() activates VU (Volume Unit) functionality on a specific audio device (mic or spk). Such method can be used to develop VU meter.

### Syntax

```
boolean AudioDeviceVU(Activate, MicVU, SpkVU)
```

### Parameters

Activate(boolean)

The Activate parameter value can be 0 or 1. Assign value 1 to this parameter if you want to activate VU otherwise zero.

MicVU(boolean)

The MicVU parameter value can be 0 or 1. Assign value 1 to this parameter if you want to activate VU on MICROPHONE device otherwise zero.

SpkVU(boolean)

The SpkVU parameter value can be 0 or 1. Assign value 1 to this parameter if you want to activate VU on SPEAKER device otherwise zero.

### Return Value

The function returns a Non-zero value on its successful execution otherwise 0, a specific error code can be retrieved by calling GetVaxErrorCode() method.

### Example

```
AudioDeviceVU(1, 1, 0)
```

### See Also

OnAudioDeviceMicVU(), OnAudioDeviceSpkVU()

**GetAudioInDevTotal()**

The GetAudioInDevTotal() function provides the total count of input devices attached to device.

**Syntax**

```
integer GetAudioInDeviceTotal()
```

**Parameters**

No parameters.

**Return Value**

Total number of audio input devices.

**Example**

```
GetAudioInDeviceTotal()
```

**See Also**

GetAudioOutDevTotal()

**GetAudioOutDevTotal()**

The GetAudioOutDevTotal() function provides the total count of output devices attached to device .

**Syntax**

```
integer GetAudioOutDeviceTotal()
```

**Parameters**

No parameters.

**Return Value**

Total number of audio output devices.

**Example**

```
GetAudioOutDeviceTotal()
```

**See Also**

GetAudioInDevTotal()

**GetAudioOutDevName()**

The GetAudioOutDevName() function returns the name of output audio device for provided device id.

**Syntax**

```
string GetAudioOutDevName(DeviceId)
```

**Parameters**

DeviceId(integer)

This parameter value can be any number from zero to total number of input devices – 1. Each number corresponds to a particular audio output device.

**Return Value**

Device name for corresponding device id, otherwise empty string.

**Example**

```
GetAudioOutDevName(0)
```

**See Also**

GetAudioInDevName(), GetAudioOutDevTotal(), GetAudioInDevTotal()

**GetAudioInDevName()**

The GetAudioInDevName() function returns the name of input audio device for provided device id.

**Syntax**

```
string GetAudioInDevName(DeviceId)
```

**Parameters**

DeviceId(integer)

This parameter value can be any number from zero to total number of input devices – 1. Each number corresponds to a particular audio input device.

**Return Value**

Device name for corresponding device id, otherwise empty string.

**Example**

```
GetAudioInDevName(0)
```

**See Also**

GetAudioOutDevTotal(), GetAudioInDevTotal(), GetAudioOutDevName()

## Initialize()

The Initialize() function initializes the VaxVoIP component and once the component is successfully initialized, the user will be able to dial and receive phone calls.

### Syntax

```
boolean Initialize(  
    ListenIP,  
    ListenPort,  
    DisplayName,  
    UserName,  
    AuthLogin,  
    AuthPwd,  
    DomainRealm,  
    ServerAddr,  
    ServerPort,  
    ProxyAddr,  
    ProxyPort,  
    UseSoundDevice  
)
```

### Parameters

ListenIP(string)

The ListenIP parameter value specifies the IP address of machine on which VaxVoIP is running.

ListenPort(integer)

The ListenPort parameter specifies the port number for SIP softphone to receive the requests. The standard port is 5060 however any port can be dedicated for this purpose.

DisplayName(string)

This parameter value specifies the display name for user which is provided by IP-Telephony or VoIP service provider otherwise leave it blank.

UserName(string)

This parameter value specifies the user name which is provided by IP-Telephony or VoIP service provider otherwise leave it blank.

AuthLogin(string)

This parameter value specifies the user Login which is provided by IP-Telephony or VoIP service provider.

AuthPwd(string)

This parameter value specifies the password which is provided by IP-Telephony or VoIP service provider.

**DomainRealm(string)**

This parameter value specifies the IP/Domain address of the computer on which SIP server is running or provided by IP-Telephony or VoIP service providers.

**ServerAddr(string)**

This parameter value specifies the IP/Domain address of the computer on which SIP server is running or provided by IP-Telephony or VoIP service providers.

**ServerPort(integer)**

This parameter value specifies the port of the computer on which SIP server is running or provided by IP-Telephony or VoIP service providers, otherwise default port 5060 can be used.

**ProxyAddr(string)**

This parameter value specifies the IP/Domain address which is provided by IP-Telephony or VoIP service provider.

**ProxyPort(integer)**

This parameter value specifies the port of the computer on which SIP proxy server is running or provided by IP-Telephony or VoIP service providers, otherwise default port 5060 can be used.

**UseSoundDevice(boolean)**

The sound devices attached to the system can be captured during component initialization process by setting the value of UseSoundDevice parameter. This can be enabled/disabled by setting UseSoundDevice value 0 or 1.

**Return Value**

The function returns a Non-zero value on its successful execution otherwise 0, a specific error code can be retrieved by calling GetVaxErrorCode() method.

**Example**

```
Result = Initialize("", 5060, "8002", "8002", "8002", "1234",  
                  "sip.vaxvoip.com", "sip.vaxvoip.com", 5060, "", -1, true)  
  
If(Result == 0) GetVaxErrorCode()
```

**See Also**

UnInitialize(), GetVaxErrorCode(), GetVaxErrorMsg()

**UnInitialize()**

The UnInitialize() function releases all the memory/resources that were held during component initialization.

**Syntax**

```
UnInitialize()
```

**Parameters**

No parameters.

**Return Value**

No return value.

**Example**

```
UnInitialize()
```

**See Also**

Initialize()



**RegisterToProxy()**

The RegisterToProxy() function registers the client to SIP server. The registration with server is mandatory to receive calls however calls can be dialed without registration.

**Syntax**

```
boolean RegisterToProxy(Expire)
```

**Parameters**

Expire(integer)

The Expire parameter specifies the time interval after which the registration with server will be refreshed consequently server will remain updated about the present client status.

**Return Value**

The function returns a Non-zero value on its successful execution otherwise 0, a specific error code can be retrieved by calling GetVaxErrorCode() method.

**Example**

```
RegisterToProxy(1800)
```

**See Also**

UnRegisterToProxy(), GetVaxErrorCode()

**UnRegisterToProxy()**

The UnRegisterToProxy() function unregisters/disconnects the client from SIP server.

**Syntax**

```
boolean UnRegisterToProxy()
```

**Parameters**

No parameters.

**Return Value**

The function returns a Non-zero value on its successful execution otherwise 0, a specific error code can be retrieved by calling GetVaxErrorCode() method.

**Example**

```
UnRegisterToProxy()
```

**See Also**

RegisterToProxy(), GetVaxErrorCode()

## OpenLine()

The OpenLine() function opens a specific line to dial/receive call. As VaxVoIP supports multiple calls simultaneously so this function should be called prior to establishing connection, allowing user to dial/receive new calls on available free line.

### Syntax

```
boolean OpenLine(LineNo, RTPRxIP, RxAudioPortRTP, RxVideoPortRTP)
```

### Parameters

LineNo(integer)

This parameter value specifies the specific line. The LineNo value is a unique number to identify a specific line.

RTPRxIP(string)

The RTPRxIP parameter value specifies the IP address of computer on which VaxVoIP receives voice streams. The ListenIP and RTPRxIP can be different if a computer has multiple IP addresses.

RxAudioPortRTP(integer)

The RxAudioPortRTP parameter value specifies the port number to receive voice streams. The Listen ports should be in range of 1024 to 65535 for UDP based transmission and for RTP compliance port number should be even.

RxVideoPortRTP(integer)

The RxVideoPortRTP parameter value specifies the port number to receive video streams. The Listen ports should be in range of 1024 to 65535 for UDP based transmission and for RTP compliance port number should be even.

### Return Value

The function returns a Non-zero value on its successful execution otherwise 0, a specific error code can be retrieved by calling GetVaxErrorCode() method.

### Example

```
Result = OpenLine(2, "", -1, -1) // "" = auto, -1 = auto
if (Result==0) GetVaxErrorCode( )
```

### See Also

CloseLine(), GetVaxErrorCode()

## CloseLine()

The CloseLine() function closes the specific line which is no longer in use. This method can be called every time a call is disconnected to close the specific line or all open lines can be closed once at component uninitialization.

### Syntax

```
boolean CloseLine(LineNo)
```

### Parameters

LineNo(integer)

This parameter value specifies the specific line. The LineNo value is a unique number to identify a specific line.

### Return Value

The function returns a Non-zero value on its successful execution otherwise 0, a specific error code can be retrieved by calling GetVaxErrorCode() method.

### Example

```
OpenLine(2, "", -1, -1)  "" = auto, -1 = auto  
CloseLine(2)
```

### See Also

OpenLine(), GetVaxErrorCode()

**GetVaxErrorCode()**

The GetVaxErrorCode() method returns the error code for the last operation which is failed to execute.

**Syntax**

```
integer GetVaxErrorCode()
```

**Parameters**

No parameters

**Return Value**

The function returns error code.

**Example**

```
Result = Initialize("", 5060, "8002", "8002", "8002", "1234",  
                  "sip.vaxvoip.com", "sip.vaxvoip.com", 5060, "", -1, true)  
  
If(Result == 0) GetVaxErrorCode()
```

**See Also**

GetVaxErrorMsg()

## GetVaxErrorMsg()

The GetVaxErrorMsg() method returns the error text message for the last operation which is failed to execute.

### Syntax

```
string GetVaxErrorMsg()
```

### Parameters

No parameters

### Return Value

The function returns error message text.

### Example

```
Result = Initialize("", 5060, "8002", "8002", "8002", "1234",  
                  "sip.vaxvoip.com", "sip.vaxvoip.com", 5060, "", -1, true)  
  
If(Result == 0) GetVaxErrorMsg()
```

### See Also

GetVaxErrorCode()

## DialCall()

The DialCall() function sends call request to SIP server.

### Syntax

```
boolean DialCall(  
    LineNo,  
    CallerName,  
    CallerId,  
    DialNo,  
    InputDeviceId,  
    OutputDeviceId  
)
```

### Parameters

LineNo(integer)

This parameter value specifies the specific line. The LineNo value is a unique number to identify a specific line.

CallerName(string)

This parameter specifies the user name to be dialed.

CallerId(string)

This parameter specifies the user id to be dialed.

DialNo(string)

This parameter specifies the user name or phone number to be dialed.

InputDeviceId(integer)

This parameter specifies the id of specific input device to be connected upon dialing call however -1 value can be provided for default input device.

OutputDeviceId(integer)

This parameter specifies the id of specific output device to be used upon dialing call however -1 value can be provided for default output device.

### Return Value

The function returns a Non-zero value on its successful execution otherwise 0, a specific error code can be retrieved by calling GetVaxErrorCode() method.

**Example**

```
Result = DialCall(2, "John", "0019140000", "001914600518", -1, -1)
if(Result == 0) GetVaxErrorCode()
```

**See Also**

Disconnect(), GetAudioOutDevName(), GetAudioInDevName(),  
GetVaxErrorCode()



**DisconnectCall()**

The DisconnectCall() function disconnects the specific call in progress.

**Syntax**

```
boolean DisconnectCall(LineNo)
```

**Parameters**

LineNo(integer)

This parameter value specifies the specific line. The LineNo value is a unique number to identify a specific line.

**Return Value**

The function returns a Non-zero value on its successful execution otherwise 0, a specific error code can be retrieved by calling GetVaxErrorCode() method.

**Example**

```
Result = DisconnectCall(2)
if(Result == 0) GetVaxErrorCode()
```

**See Also**

DialCall(), Connect(), GetVaxErrorCode()

## AcceptCall()

The AcceptCall() function accepts the incoming call.

### Syntax

```
boolean AcceptCall(  
    LineNo,  
    CallId,  
    InputDeviceId,  
    OutputDeviceId  
)
```

### Parameters

LineNo(integer)

This parameter value specifies the specific line. The LineNo value is a unique number to identify a specific line.

CallId(string)

The CallId parameter value is a unique identifier for each incoming call. The value of This parameter is generated internally by the system (Incoming call-Id, please see OnIncomingCall() event details).

InputDeviceId(integer)

This parameter specifies the id of specific input device to be connected upon accepting call however -1 value can be provided for default input device.

OutputDeviceId(integer)

This parameter specifies the id of specific output device to be connected upon accepting call however -1 value can be provided for default output device.

### Return Value

The function returns a Non-zero value on its successful execution otherwise 0, a specific error code can be retrieved by calling GetVaxErrorCode() method.

### Example

```
Result = AcceptCall(0, "24c654c@192.168.0.119", -1, -1)  
if(Result == 0) GetVaxErrorCode()
```

### See Also

GetAudioOutDevName(), GetAudioInDevName(), RejectCall(),  
GetVaxErrorCode()

## RejectCall()

The RejectCall() function cancels/rejects the incoming call.

### Syntax

```
boolean RejectCall(CallId)
```

### Parameters

CallId(string)

The CallId parameter value is a unique identifier for each incoming call. The value of This parameter is generated internally by the system (Incoming call-Id, please see OnIncomingCall() event details).

### Return Value

The function returns a Non-zero value on its successful execution otherwise 0, a specific error code can be retrieved by calling GetVaxErrorCode() method.

### Example

```
Result = RejectCall("24c654c@192.168.0.119")  
if(Result == 0) GetVaxErrorCode()
```

### See Also

AcceptCall(), GetVaxErrorCode()

## TransferCallBlind()

The TransferCallBlind() function transfers the call from a specific line to a specific number or user. This function can be used to implement “unannounced/blind call transfer i-e transferring the call without notifying the desired party/extension of the impending call”.

### Syntax

```
boolean TransferCallBlind(  
    LineNo,  
    ToUserName  
)
```

### Parameters

LineNo(integer)

This parameter value specifies the specific line. The LineNo value is a unique number to identify a specific line.

ToUserName(string)

This parameter specifies the to user name or phone number to be dialed.

### Return Value

The function returns a Non-zero value on its successful execution otherwise 0, a specific error code can be retrieved by calling GetVaxErrorCode() method.

### Example

```
Result = TransferCallBlind(2, "00192600524")  
if(Result == 0) GetVaxErrorCode()
```

### See Also

AcceptCall(), GetVaxErrorCode()

## TransferCallConsult()

The TransferCallConsult() function sends transfer call consult request to SIP Server and SIP Server links both calls. This function can be used to implement the feature “announced/consult call transfer i-e notifying the desired party/extension of the impending call by putting the caller on hold and dialing the desired party/extension”.

### Syntax

```
boolean TransferCallConsult(  
                                LineNoA,  
                                LineNoB  
                                )
```

### Parameters

LineNoA(integer)

This parameter value specifies the specific line. The LineNo value is a unique number to identify a specific line.

LineNoB(integer)

This parameter value specifies the specific line. The LineNo value is a unique number to identify a specific line.

### Return Value

The function returns a Non-zero value on its successful execution otherwise 0, a specific error code can be retrieved by calling GetVaxErrorCode() method.

### Example

```
Result = TransferCallConsult (1, 3)  
if(Result == 0) GetVaxErrorCode()
```

### See Also

TransferCallBlind(), GetVaxErrorCode()

**HoldLine()**

The HoldLine() method puts a specific line on hold.

**Syntax**

```
HoldLine(LineNo)
```

**Parameters**

LineNo(integer)

This parameter value specifies the specific line. The LineNo value is a unique number to identify a specific line.

**Return Value**

The function returns a Non-zero value on its successful execution otherwise 0, a specific error code can be retrieved by calling GetVaxErrorCode() method.

**Example**

```
Result = HoldLine(3)
if(Result == 0) GetVaxErrorCode()
```

**See Also**

HoldLine(), GetVaxErrorCode()

## UnHoldLine()

The UnHoldLine() function unholds a specific line.

### Syntax

```
boolean UnHoldLine(LineNo)
```

### Parameters

LineNo(integer)

This parameter value specifies the specific line. The LineNo value is a unique number to identify a specific line.

### Return Value

The function returns a Non-zero value on its successful execution otherwise 0, a specific error code can be retrieved by calling GetVaxErrorCode() method.

### Example

```
Result = UnHoldLine(2)  
if(Result == 0) GetVaxErrorCode()
```

### See Also

HoldLine(), GetVaxErrorCode()

**IsOpenLine()**

The IsOpenLine() function returns open/close status of a specific line.

**Syntax**

```
boolean IsOpenLine(LineNo)
```

**Parameters**

LineNo(integer)

This parameter value specifies the specific line. The LineNo value is a unique number to identify a specific line.

**Return Value**

The function returns value 1 (true) if line is open otherwise zero.

**Example**

```
IsOpenLine(4)
```

**See Also**

OpenLine(), IsLineBusy()



**IsLineConnected()**

The IsLineConnected() function returns the status of already opened line i-e line is connected or free.

**Syntax**

```
boolean IsLineConnected(LineNo)
```

**Parameters**

LineNo(integer)

This parameter value specifies the specific line. The LineNo value is a unique number to identify a specific line.

**Return Value**

The function returns value 1 (true) if line is connected otherwise zero.

**Example**

```
IsLineConnected(4)
```

**See Also**

OpenLine(), IsOpenLine(), IsLineBusy()

**IsLineHold()**

The IsLineHold() method returns the HOLD status of a specific line.

**Syntax**

```
boolean IsLineHold(LineNo)
```

**Parameters**

LineNo(integer)

This parameter value specifies the specific line. The LineNo value is a unique number to identify a specific line.

**Return Value**

The function returns value 1 (true) if line is on hold otherwise zero.

**Example**

```
Result = IsLineHold(3)  
if(Result == 0) GetVaxErrorCode()
```

**See Also**

HoldLine(), GetVaxErrorCode()

**IsLineBusy()**

The IsLineBusy() function checks the status of already opened line i-e line is busy or free.

**Syntax**

```
boolean IsLineBusy(LineNo)
```

**Parameters**

LineNo(integer)

This parameter value specifies the specific line. The LineNo value is a unique number to identify a specific line.

**Return Value**

The function returns value 1 (true) if line is busy otherwise zero.

**Example**

```
IsLineBusy(4)
```

**See Also**

OpenLine(), IsOpenLine()

## **EnableKeepAlive()**

The EnableKeepAlive() function keeps the ports open for connection by sending “keep alive packets” periodically. It helps to keep the ports open at NAT/firewall end.

### **Syntax**

```
boolean EnableKeepAlive(Seconds)
```

### **Parameters**

Seconds(integer)

This Seconds parameter value specifies the time interval in seconds after which keep alive packets will be sent to keep the port open for connection.

### **Return Value**

The function returns a Non-zero value on its successful execution otherwise 0, a specific error code can be retrieved by calling GetVaxErrorCode() method.

### **Example**

```
OpenLine(2, "192.168.0.103", 7006, 7008)  
EnableKeepAlive(10)
```

### **See Also**

DisableKeepAlive(), GetVaxErrorCode()

**DisableKeepAlive()**

The DisableKeepAlive() method stops sending keep-alive packets i-e it disables the functionality of EnableKeepAlive() method.

**Syntax**

```
void DisableKeepAlive()
```

**Parameters**

No parameters.

**Return Value**

No return value.

**Example**

```
DisableKeepAlive()
```

**See Also**

EnableKeepAlive(), GetVaxErrorCode()

**SelectAllVoiceCodec()**

The SelectAllVoiceCodec() function selects all the voice codec.

**Syntax**

```
void SelectAllVoiceCodec()
```

**Parameters**

No parameters.

**Return Value**

No return value.

**Example**

```
SelectAllVoiceCodec()
```

**See Also**

DeselectAllVoiceCodec(), GetVaxErrorCode()

## SelectVoiceCodec()

The SelectVoiceCodec() function selects a voice codec for provided codec number. The function can be called multiple times to select more than one voice codec. Moreover the sequence of selection of voice codec decides the priority of codec i-e the voice codec selected first has higher priority than the codec selected afterward.

### Syntax

```
boolean SelectVoiceCodec(CodecNo)
```

### Parameters

CodecNo(integer)

This parameter value ranges from 0-4 and each value corresponds to a particular voice codec.

VaxVoIP SIP SDK supports the following voice codecs:

- 0 = G711 U-Law
- 1 = G711 A-Law
- 2 = GSM 6.10
- 3 = iLBC
- 4 = G729

### Return Value

The function returns a Non-zero value on its successful execution otherwise 0, a specific error code can be retrieved by calling GetVaxErrorCode() method.

### Example

```
DeselectAllVoiceCodec()  
  
SelectVoiceCodec(4)  
SelectVoiceCodec(1)  
SelectVoiceCodec(2)  
SelectVoiceCodec(3)
```

In this example G729 has the highest priority where as iLBC has Lowest priority.

### See Also

DeselectVoiceCodec(), GetVaxErrorCode()

**DeselectAllVideoCodec()**

The DeselectAllVideoCodec() function deselects all the video codec options.

**Syntax**

```
void DeselectAllVideoCodec()
```

**Parameters**

No parameters.

**Return Value**

No return value.

**Example**

```
DeselectAllVideoCodec()
```

**See Also**

SelectAllVideoCodec(), GetVaxErrorCode()



## DeselectVoiceCodec()

The DeselectVoiceCodec() function deselects a voice codec for provided codec number.

### Syntax

```
boolean DeselectVoiceCodec(CodecNo)
```

### Parameters

CodecNo(integer)

This parameter value ranges from 0-4 and each value corresponds to a particular voice codec.

VaxVoIP SIP SDK supports the following voice codecs:

- 0 = G711 U-Law
- 1 = G711 A-Law
- 2 = GSM 6.10
- 3 = iLBC
- 4 = G729

### Return Value

The function returns a Non-zero value on its successful execution otherwise 0, a specific error code can be retrieved by calling GetVaxErrorCode() method.

### Example

```
Result = DeselectVoiceCodec(1)  
if(Result == 0) GetVaxErrorCode()
```

### See Also

SelectVoiceCodec(), GetVaxErrorCode()

**SelectAllVideoCodec()**

The SelectAllVideoCodec() function selects all the VaxVoIP SDK's supported video codecs.

**Syntax**

```
void SelectAllVideoCodec()
```

**Parameters**

No parameters.

**Return Value**

No return value.

**Example**

```
SelectAllVideoCodec()
```

**See Also**

DeselectAllVideoCodec(), GetVaxErrorCode()

## SelectVideoCodec()

The SelectVideoCodec() function selects a video codec for provided codec number. The function can be called multiple times to select more than one video codec. Moreover the sequence of selection of video codec decides the priority of codec i-e the video codec selected first has higher priority than the codec selected afterward.

### Syntax

```
boolean SelectVideoCodec(CodecNo)
```

### Parameters

CodecNo(integer)

This parameter value ranges from 0-2 and each value corresponds to a particular video codec.

VaxVoIP SIP SDK supports the following video codecs:

0 = VP8  
1 = H263  
2 = H263+

### Return Value

The function returns a Non-zero value on its successful execution otherwise 0, a specific error code can be retrieved by calling GetVaxErrorCode() method.

### Example

```
DeselectAllVideoCodec()  
  
SelectVideoCodec(0)  
SelectVideoCodec(2)
```

In this example VP8 has the highest priority where as H263+ has lowest priority

### See Also

DeselectVideoCodec(), GetVaxErrorCode()

**DeselectAllVideoCodec()**

The DeselectAllVideoCodec() function deselects all the video codec options.

**Syntax**

```
void DeselectAllVideoCodec()
```

**Parameters**

No parameters.

**Return Value**

No return value.

**Example**

```
DeselectAllVideoCodec()
```

**See Also**

SelectAllVideoCodec(), GetVaxErrorCode()

## **DeselectVideoCodec()**

The DeselectVideoCodec() function deselects a video codec for provided codec number.

### **Syntax**

```
boolean DeselectVideoCodec(CodecNo)
```

### **Parameters**

CodecNo(integer)

This parameter value ranges from 0-2 and each value corresponds to a particular video codec.

VaxVoIP SIP SDK supports the following video codecs:

0 = VP8  
1 = H263  
2 = H263+

### **Return Value**

The function returns a Non-zero value on its successful execution otherwise 0, a specific error code can be retrieved by calling GetVaxErrorCode() method.

### **Example**

```
Result = DeselectVideoCodec(1)  
if(Result == 0) GetVaxErrorCode()
```

### **See Also**

SelectVideoCodec(), GetVaxErrorCode()

## DigitDTMF()

The DigitDTMF() function sends DTMF digit to the remote end SIP server. This method can also be used to play DTMF tones.

### Syntax

```
boolean DigitDTMF(  
                LineNo,  
                Digit  
                )
```

### Parameters

LineNo(integer)

This parameter value specifies the specific line. The LineNo value is a unique number to identify a specific line.

Digit(string)

This parameter value specifies any digit that has been pressed. (1, 2, 3, 4, 5, ..... 0, \*, #).

### Return Value

The function returns a Non-zero value on its successful execution otherwise 0, a specific error code can be retrieved by calling GetVaxErrorCode() method.

### Example

```
DigitDTMF(1,"3")
```

### See Also

SetVolumeDTMF(), GetVolumeDTMF()

## SetVolumeDTMF()

The SetVolumeDTMF() function adjusts the volume of DTMF tones.

### Syntax

```
boolean SetVolumeDTMF(Volume)
```

### Parameters

Volume(integer)

This parameter specifies the volume level for DTMF tones ranges between 0-250.

### Return Value

The function returns a Non-zero value on its successful execution otherwise 0, a specific error code can be retrieved by calling GetVaxErrorCode() method.

### Example

```
SetVolumeDTMF(6)
```

### See Also

DigitDTMF(), GetVolumeDTMF()

**GetVolumeDTMF()**

The GeVolumeDTMF() function returns the volume level of DTMF tones.

**Syntax**

```
integer GeVolumeDTMF()
```

**Parameters**

No parameters.

**Return Value**

The function returns the volume of DTMF tones ranges between 0-250.

**Example**

```
SeVolumeDTMF(6)  
GeVolumeDTMF()
```

**See Also**

DigitDTMF(), SeVolumeDTMF()



## ForceDigitDTMF()

The ForceDigitDTMF() function can be used to adjust the DTMF type.

### Syntax

```
boolean ForceDigitDTMF(  
    LineNo,  
    TypeId,  
    Enable  
)
```

### Parameters

LineNo(integer)

This parameter value specifies the specific line. The LineNo value is a unique number to identify a specific line.

TypeId(integer)

This parameter value specifies the Type Id.

The supported types are:

- 0 = RFC2833 TYPE
- 1 = SIP INFO TYPE
- 2 = INBAND or VOICE TYPE

Enable(boolean)

This parameter value enables/disables the DTMF type.

### Return Value

The function returns a Non-zero value on its successful execution otherwise 0, a specific error code can be retrieved by calling GetVaxErrorCode() method.

### Example

```
ForceDigitDTMF(1, 0, true)
```

### See Also

SetVolumeDTMF(), GetVolumeDTMF()

## MuteMic()

The MuteMic() function mutes the microphone. Call to MuteMic() method does not affect the Master Mute Control. It simply starts sending silence data.

### Syntax

```
boolean MuteMic(Mute)
```

### Parameters

Mute(boolean)

The Mute parameter value can be 0 or 1. Assign value 1 to This parameter to mute the microphone otherwise zero.

### Return Value

The function returns a Non-zero value on its successful execution otherwise 0, a specific error code can be retrieved by calling GetVaxErrorCode() method.

### Example

```
MuteMic(0)  
MuteMic(1)
```

### See Also

MuteSpk(), GetVaxErrorCode()

## MuteSpk()

The MuteSpk() function mutes the speaker. Call to MuteSpk() does not affect the Master Mute Control.

### Syntax

```
boolean MuteSpk(Mute)
```

### Parameters

Mute(boolean)

The Mute parameter value can be 0 or 1. Assign value 1 to This parameter to mute the speaker otherwise zero.

### Return Value

The function returns a Non-zero value on its successful execution otherwise 0, a specific error code can be retrieved by calling GetVaxErrorCode() method.

### Example

```
MuteSpk(0)  
MuteSpk(1)
```

### See Also

MuteMic(), GetVaxErrorCode()

## MuteLineSpk()

The MuteLineSpk() method mutes output voice stream of specific line.

### Syntax

```
boolean MuteLineSpk(  
    LineNo,  
    Mute,  
    )
```

### Parameters

LineNo(integer)

This parameter value specifies the specific line. The LineNo value is a unique number to identify a specific line.

Mute(boolean)

The Enable parameter value can be 0 or 1. Assign value 1 to This parameter to mute output voice stream otherwise zero.

### Return Value

The function returns a Non-zero value on its successful execution otherwise 0, a specific error code can be retrieved by calling GetVaxErrorCode() method.

### Example

```
MuteLineSpk(2, 0)  
MuteLineSpk(2, 1)
```

### See Also

MuteLineMic(), GetVaxErrorCode()

## MuteLineMic()

The MuteLineMic() method mutes input voice stream of specific line.

### Syntax

```
boolean MuteLineMic(  
                LineNo,  
                Mute  
                )
```

### Parameters

LineNo(integer)

This parameter value specifies the specific line. The LineNo value is a unique number to identify a specific line.

Mute(boolean)

The Enable parameter value can be 0 or 1. Assign value 1 to This parameter to mute input voice stream otherwise zero.

### Return Value

The function returns a Non-zero value on its successful execution otherwise 0, a specific error code can be retrieved by calling GetVaxErrorCode() method.

### Example

```
MuteLineMic(2, 0)  
MuteLineMic(2, 1)
```

### See Also

MuteLineSpk(), GetVaxError

## AutoGainMic()

The AutoGainMic() method enables auto gain functionality on outgoing voice stream.

### Syntax

```
boolean AutoGainMic(  
    Enable,  
    Volume  
)
```

### Parameters

Enable(boolean)

This parameter value enables/disables AGC functionality.

Volume(integer)

This parameter value specifies volume level ranges between [0-255]

### Return Value

The function returns a Non-zero value on its successful execution otherwise 0, a specific error code can be retrieved by calling GetVaxErrorCode() method.

### Example

```
AutoGainMic(1, 150)
```

### See Also

AutoGainSpk(), GetVaxError

## AutoGainSpk()

The AutoGainSpk() method enables auto gain functionality on incoming voice stream.

### Syntax

```
boolean AutoGainSpk(  
    Enable,  
    Volume  
)
```

### Parameters

Enable(boolean)

This parameter value enables/disables AGC functionality.

Volume(integer)

This parameter value specifies volume level ranges between [0-255]

### Return Value

The function returns a Non-zero value on its successful execution otherwise 0, a specific error code can be retrieved by calling GetVaxErrorCode() method.

### Example

```
AutoGainSpk(0, 100)
```

### See Also

AutoGainMic(), GetVaxErrorCode()

## SetVolumeMic()

The SetVolumeMic() function sets the volume of input voice stream. The microphone volume ranges between 0-255(0 = Min Volume, 255 = Max Volume).

### Syntax

```
boolean SetVolumeMic(Volume)
```

### Parameters

Volume(integer)

This parameter value specifies volume level ranges between [0-255].

### Return Value

The function returns a Non-zero value on its successful execution otherwise 0, a specific error code can be retrieved by calling GetVaxErrorCode() method.

### Example

```
Result = SetVolumeMic(200)
if(Result == 0) GetVaxErrorCode()
```

### See Also

GetVolumeSpk(), SetVolumeSpk(), GetVolumeMic()



**GetVolumeMic()**

The GetVolumeMic() function returns the microphone volume. The microphone volume ranges between 0-255 (0 = Min Volume, 255 = Max Volume).

**Syntax**

```
integer GetVolumeMic()
```

**Parameters**

No parameters.

**Return Value**

The function returns microphone volume on its successful execution otherwise -1.

**Example**

```
GetVolumeMic()
```

**See Also**

GetVolumeSpk(), SetVolumeSpk(), SetVolumeMic()

## SetVolumeSpk()

The SetVolumeSpk() function sets the volume of output voice stream. The speaker volume ranges between 0-255(0 = Min Volume, 255 = Max Volume).

### Syntax

```
boolean SetVolumeSpk(Volume)
```

### Parameters

Volume(integer)

This parameter value specifies volume level ranges between [0-255].

### Return Value

The function returns a Non-zero value on its successful execution otherwise 0, a specific error code can be retrieved by calling GetVaxErrorCode() method.

### Example

```
Result = SetVolumeSpk(150)  
if(Result == 0) GetVaxErrorCode()
```

### See Also

GetVolumeSpk(), GetVaxErrorCode()

**GetVolumeSpk()**

The GetVolumeSpk() function returns the speaker volume. The speaker volume ranges between 0-255 (0 = Min Volume, 255 = Max Volume).

**Syntax**

```
integer GetVolumeSpk()
```

**Parameters**

No parameters.

**Return Value**

The function returns speaker volume on its successful execution otherwise -1.

**Example**

```
GetVolumeSpk()
```

**See Also**

MuteSpk(), SetVolumeSpk()

## SetLineVolumeSpk()

The SetLineVolumeSpk() function adjusts the output volume of a specific line without affecting the operating system master volume control.

### Syntax

```
boolean SetLineVolumeSpk(  
    LineNo,  
    Volume  
)
```

### Parameters

LineNo(integer)

This parameter value specifies the specific line. The LineNo value is a unique number to identify a specific line.

Volume(integer)

This parameter value specifies volume level ranges between [0-255].

### Return Value

The function returns a Non-zero value on its successful execution otherwise 0, a specific error code can be retrieved by calling GetVaxErrorCode() method.

### Example

```
Result = SetLineVolumeSpk(2, 200)  
if(Result == 0) GetVaxErrorCode()
```

### See Also

GetLineVolumeSpk()

**GetLineVolumeSpk()**

The GetLineVolumeSpk() function returns the output volume of a specific line. The speaker volume ranges between 0-255 (0 = Min Volume, 255 = Max Volume).

**Syntax**

```
integer GetLineVolumeSpk(LineNo)
```

**Parameters**

LineNo(integer)

This parameter value specifies the specific line. The LineNo value is a unique number to identify a specific line.

**Return Value**

The function returns speaker volume on its successful execution otherwise -1.

**Example**

```
GetLineVolumeSpk(2)
```

**See Also**

SetLineVolumeSpk(), SetVolumeSpk()

**EchoCancellation()**

The EchoCancellation() enables the significant suppression of echo and any background noise. By default this is enabled to provide high quality of output speech.

**Syntax**

```
boolean EchoCancellation(Enable)
```

**Parameters**

Enable(boolean)

This parameter value can be 0 or 1. Assign value 1 to enable the AEC or 0 to disable it.

**Return Value**

The function returns a Non-zero value on its successful execution otherwise 0, a specific error code can be retrieved by calling GetVaxErrorCode() method.

**Example**

```
EchoCancellation(1)
```

**See Also**

DonotDisturb(), GetVaxErrorCode()

**DonotDisturb()**

The DonotDisturb() enables don't disturb functionality.

**Syntax**

```
boolean DonotDisturb(Enable)
```

**Parameters**

Enable(boolean)

This parameter value can be 0 or 1.

**Return Value**

The function returns a Non-zero value on its successful execution otherwise 0, a specific error code can be retrieved by calling GetVaxErrorCode() method.

**Example**

```
DonotDisturb(1)
```

**See Also**

EchoCancellation(), GetVaxErrorCode()

**IsRecording()**

The IsRecording() function checks if recording is enabled or not on a specific line.

**Syntax**

```
boolean IsRecording(LineNo)
```

**Parameters**

LineNo(integer)

This parameter value specifies the specific line. The LineNo value is a unique number to identify a specific line.

**Return Value**

The function returns value 1(true) if recording is enabled on provided line otherwise 0(false).

**Example**

```
IsRecording(6)
```

**See Also**

StartRecording(), StopRecording(), GetVaxErrorCode()



## StartRecording()

The StartRecording() function starts recording voice stream on specific line.

### Syntax

```
boolean StartRecording(  
    LineNo,  
    FileName,  
    RecordVoice  
)
```

### Parameters

LineNo(integer)

This parameter value specifies the specific line. The LineNo value is a unique number to identify a specific line.

FileName(string)

This parameter value specifies wave file name to be saved.

RecordVoice(integer)

This parameter value specifies the recording mode. It can have three values and each value corresponds to a particular recording mode.

0=Record outgoing only

1=Record incoming only

2=Record both

### Return Value

The function returns a Non-zero value on its successful execution otherwise 0, a specific error code can be retrieved by calling GetVaxErrorCode() method.

### Example

```
StartRecording(3, , "test.wav", 2)
```

### See Also

IsRecording(), StopRecording(), GetVaxErrorCode()

## StopRecording()

The StopRecording() function stops the recording of voice stream on specific line.

### Syntax

```
boolean StopRecording(LineNo)
```

### Parameters

LineNo(integer)

This parameter value specifies the specific line. The LineNo value is a unique number to identify a specific line.

### Return Value

The function returns a Non-zero value on its successful execution otherwise 0, a specific error code can be retrieved by calling GetVaxErrorCode() method.

### Example

```
StopRecording(4)
```

### See Also

StartRecording(), IsRecording(), GetVaxErrorCode()

**IsWaveFilePlaying()**

The IsWaveFilePlaying() function checks whether the wave file playing is in progress or not on provided line.

**Syntax**

```
boolean IsWaveFilePlaying(LineNo)
```

**Parameters**

LineNo(integer)

This parameter value specifies the specific line. The LineNo value is a unique number to identify a specific line.

**Return Value**

The function returns value 1(true) if wave file is playing on provided line otherwise it returns 0(false).

**Example**

```
IsWaveFilePlaying(2)
```

**See Also**

PlayWaveOpen(), PlayWaveStart(), PlayWaveStop(), PlayWaveSkipTo(),  
GetVaxErrorCode()

## PlayWaveOpen()

The PlayWaveOpen() function makes the wave file ready/set to play int a call.

### Syntax

```
boolean PlayWaveOpen(  
    LineNo,  
    FileName  
)
```

### Parameters

LineNo(integer)

This parameter value specifies the specific line. The LineNo value is a unique number to identify a specific line.

FileName(string)

This parameter value specifies wave file name to be played.

### Return Value

The function returns a Non-zero value on its successful execution otherwise 0, a specific error code can be retrieved by calling GetVaxErrorCode() method.

### Example

```
Result = PlayWaveOpen(6, "test.wav")  
if(Result == 0) GetVaxErrorCode()
```

### See Also

IsWaveFilePlaying(), PlayWaveStart(), PlayWaveStop(), PlayWaveSkipTo(),  
GetVaxErrorCode()

## PlayWaveClose()

The PlayWaveClose() function vacates all the resources that were held by PlayWaveOpen() function.

### Syntax

```
boolean PlayWaveClose(LineNo)
```

### Parameters

LineNo(integer)

This parameter value specifies the specific line. The LineNo value is a unique number to identify a specific line.

### Return Value

The function returns a Non-zero value on its successful execution otherwise 0, a specific error code can be retrieved by calling GetVaxErrorCode() method.

### Example

```
PlayWaveOpen(6, "test.wav")  
Result = PlayWaveClose(6)  
if(Result == 0) GetVaxErrorCode()
```

### See Also

PlayWaveOpen(), PlayWaveStart(), PlayWaveStop(), PlayWaveSkipTo(),  
GetVaxErrorCode()

## PlayWaveSkipTo()

The PlayWaveSkipTo() function changes the position of playing cursor to the new position.

### Syntax

```
boolean PlayWaveSkipTo(  
    LineNo,  
    MilliSeconds  
)
```

### Parameters

LineNo(integer)

This parameter value specifies the specific line. The LineNo value is a unique number to identify a specific line.

MilliSeconds(integer)

This parameter value specifies the time in milli-seconds to be skipped of playing wave file.

### Return Value

The function returns a Non-zero value on its successful execution otherwise 0, a specific error code can be retrieved by calling GetVaxErrorCode() method.

### Example

```
Result = PlayWaveSkipTo(4, 1000)  
if(Result == 0) GetVaxErrorCode()
```

### See Also

PlayWaveOpen(), PlayWaveClose(), PlayWaveStop(), PlayWaveStart(),  
GetVaxErrorCode()

## **PlayWaveTotalTime()**

The PlayWaveTotalTime() function returns the total playing time of a wave file on provided line.

### **Syntax**

```
integer PlayWaveTotalTime(LineNo)
```

### **Parameters**

LineNo(integer)

This parameter value specifies the specific line. The LineNo value is a unique number to identify a specific line.

### **Return Value**

The function returns total playing time in milli-seconds of wave file otherwise 0.

### **Example**

```
Result = PlayWaveTotalTime(4)
```

### **See Also**

PlayWaveOpen(), PlayWaveClose(), PlayWaveStop(), PlayWaveStart(), PlayWavePause(), GetVaxErrorCode()

## **PlayWavePause()**

The PlayWavePause() method pauses the playing wave file on its current position.

### **Syntax**

```
boolean PlayWavePause(LineNo)
```

### **Parameters**

LineNo(integer)

This parameter value specifies the specific line. The LineNo value is a unique number to identify a specific line.

### **Return Value**

The function returns a Non-zero value on its successful execution otherwise 0, a specific error code can be retrieved by calling GetVaxErrorCode() method.

### **Example**

```
Result = PlayWavePause(1)  
if(Result == 0) GetVaxErrorCode()
```

### **See Also**

PlayWaveOpen(), PlayWaveClose(), PlayWaveStop(), PlayWaveStart(),  
PlayWaveSkipTo(), GetVaxErrorCode()



## PlayWaveStart()

The PlayWaveStart() method starts playing the already set wave file on provided line. The following sequence of execution starts playing the wave file.

- PlayWaveOpen()
- PlayWaveStart()
- 

It starts sending wave file data to the remote end, value listen = 1 starts sending and playing (on sound card) wave file data at the same time.

### Syntax

```
boolean PlayWaveStart(  
                    LineNo,  
                    Listen  
                    )
```

### Parameters

LineNo(integer)

This parameter value specifies the specific line. The LineNo value is a unique number to identify a specific line.

Listen(boolean)

This parameter value can be 0 or 1. To play wave file just to remote end set its value 0 or sets its value 1 to play wave file to both remote end and sound card.

### Return Value

The function returns a Non-zero value on its successful execution otherwise 0, a specific error code can be retrieved by calling GetVaxErrorCode() method.

### Example

```
Result = PlayWaveStart(0, 0)  
if(Result == 0) GetVaxErrorCode()
```

### See Also

PlayWaveOpen(), PlayWaveClose(), PlayWaveStop(), PlayWaveSkipTo(),  
GetVaxErrorCode()

## PlayWaveStop()

The PlayWaveStop() function stops playing the wave file on provided line and change the position of playing cursor at the beginning of file.

### Syntax

```
boolean PalyWaveStop(LineNo)
```

### Parameters

LineNo(integer)

This parameter value specifies the specific line. The LineNo value is a unique number to identify a specific line.

### Return Value

The function returns a Non-zero value on its successful execution otherwise 0, a specific error code can be retrieved by calling GetVaxErrorCode() method.

### Example

```
Result = PlayWaveStop(2)  
if(Result == 0) GetVaxErrorCode()
```

### See Also

PlayWaveOpen(), PlayWaveClose(), PlayWavePause(), PlayWaveStart(),  
PlayWaveSkipTo(), GetVaxErrorCode()

## PlayWavePosition()

The PlayWavePosition() method gets the current position of playing cursor.

### Syntax

```
integer PlayWavePosition(LineNo)
```

### Parameters

LineNo(integer)

This parameter value specifies the specific line. The LineNo value is a unique number to identify a specific line.

### Return Value

The function returns current position in milli-seconds of playing cursor otherwise -1.

### Example

```
PlayWaveOpen(4, "test.wav")
PlayWaveStart(4, 0)

Result = PlayWavePosition(4)
if(Result == -1) GetVaxErrorCode()
```

### See Also

PlayWaveOpen(), PlayWaveClose(), PlayWaveStop(), PlayWaveStart(),  
PlayWaveSkipTo(), GetVaxErrorCode()

## GetOutboundCodec()

The GetOutboundCodec() gets the codec number for the outbound voice stream of provided line.

### Syntax

```
integer GetOutboundCodec(LineNo)
```

### Parameters

LineNo(integer)

This parameter value specifies the specific line. The LineNo value is a unique number to identify a specific line.

VaxVoIP SIP SDK support the following voice codecs:

- 0 = G711 A-Law
- 1 = G711 U-Law
- 2 = GSM 6.10
- 3 = iLBC
- 4 = G729

### Return Value

The function returns a codec number on its successful execution otherwise -1.

### Example

```
Result = GetOutboundCodec(1)
if(Result == -1) GetVaxErrorCode()
```

### See Also

GetInboundCodec(), GetVaxErrorCode()

## GetInboundCodec()

The GetInboundCodec() gets the codec number for the Inbound voice stream of provided line.

### Syntax

```
integer GetInboundCodec(LineNo)
```

### Parameters

LineNo(integer)

This parameter value specifies the specific line. The LineNo value is a unique number to identify a specific line.

VaxVoIP SIP SDK support the following voice codecs:

- 0 = G711 A-Law
- 1 = G711 U-Law
- 2 = GSM 6.10
- 3 = iLBC
- 4 = G729

### Return Value

The function returns a codec number on its successful execution otherwise -1.

### Example

```
Result = GetInBoundCodec(5)  
if(Result == -1) GetVaxErrorCode()
```

### See Also

GetOutboundCodec(), GetVaxErrorCode()

**SetSessionLostTick()**

The SetSessionLostTick() function sets the specific time interval to check whether voice session is still intact or lost.

*NOTE: Due to some reasons, if VaxVoIP does not receives the voice stream for a specific interval of time then it triggers OnAudioSessionLost() event.*

**Syntax**

```
void SetSessionLostTicket(Second)
```

**Parameters**

Second(integer)

This parameter value specifies the session lost time in seconds.

**Return Value**

No return value.

**Example**

```
SetSessionLostTick(2)
```

**See Also**

OnAudioSessionLost()

## SetUserAgentSIP()

The SetUserAgentSIP() function sets the user agent field of SIP packet.

### Syntax

```
boolean SetUserAgentSIP(UserAgentName)
```

### Parameters

UserAgentName(string)

This parameter value specifies the User agent Name.

### Return Value

The function returns a Non-zero value on its successful execution otherwise 0, a specific error code can be retrieved by calling GetVaxErrorCode() method.

### Example

```
Result = SetUserAgentSIP("abc")  
if(Result == 0) GetVaxErrorCode()
```

### See Also

GetUserAgentSIP(), GetVaxErrorCode()

**GetUserAgentSIP()**

The GetUserAgentSIP() function returns the user agent field of SIP packet.

**Syntax**

```
string GetUserAgentSIP()
```

**Parameters**

No parameters.

**Return Value**

The function returns the user agent name otherwise empty string.

**Example**

```
GetUserAgentSIP()
```

**See Also**

SetUserAgentSIP()



**SetSubjectSDP()**

The SetSubjectSDP() function sets the subject field of SIP packet.

**Syntax**

```
boolean SetSubjectSDP(SubjectSDP)
```

**Parameters**

SubjectSDP(string)

This parameter specifies the value that is to be set as subject of SIP packet.

**Return Value**

The function returns a Non-zero value on its successful execution otherwise 0, a specific error code can be retrieved by calling GetVaxErrorCode() method.

**Example**

```
SetSubjectSDP("xyz")
```

**See Also**

GetSubjectSDP()

**GetSubjectSDP()**

The `GetSubjectSDP()` function returns the subject field previously set by `SetSubjectSDP()` method.

**Syntax**

```
string GetSubjectSDP()
```

**Parameters**

No parameters.

**Return Value**

The function returns the subject.

**Example**

```
GetSubjectSDP()
```

**See Also**

`SetSubjectSDP()`

## ConfAllowLine()

The ConfAllowLine() function allows multiple users to speak/listen in conference. This feature of VaxVoIP componnet can be used for supervision of operators at call centers in real time.

### Syntax

```
boolean ConfAllowLine(  
    LineNo,  
    AllowListen,  
    AllowSpeak  
)
```

### Parameters

LineNo(integer)

This parameter value specifies the specific line. The LineNo value is a unique number to identify a specific line.

AllowListen(boolean)

This parameter value can be 0 or 1. To allow user on specific line to listen in conference sets This parameter value to 1 otherwise 0.

AllowSpeak(boolean)

This parameter value can be 0 or 1. To allow user on specific line to speak in conference sets This parameter value to 1 otherwise 0.

### Return Value

The function returns a Non-zero value on its successful execution otherwise 0, a specific error code can be retrieved by calling GetVaxErrorCode() method.

### Example

```
ConfAllowLine(1,0,1)  
ConfAllowLine(3,1,0)
```

### See Also

LineVoiceChannelSpk()

## LineVoiceChannelSpk()

The LineVoiceChannelSpk() function enables/disables the right and left speaker on specific line.

### Syntax

```
boolean LineVoiceChannelSpk(  
                                LineNo,  
                                Channel  
                                )
```

### Parameters

LineNo(integer)

This parameter value specifies the specific line. The LineNo value is a unique number to identify a specific line.

Channel(integer)

This parameter value specifies which speaker to be enabled /disabled.

- 0 = Enable Left Speaker
- 1 = Enable Right Speaker
- 2 = Enable both

### Return Value

The function returns a Non-zero value on its successful execution otherwise 0, a specific error code can be retrieved by calling GetVaxErrorCode() method.

### Example

```
Result = LineVoiceChannelSpk(2, 1)  
if(Result == 0) GetVaxtError()
```

### See Also

MuteSpk(), MuteLineSpk()

## **ChatAddContact()**

The ChatAddContact() methods adds a contact to receive contact present status e.g online, busy, idle etc.

### **Syntax**

```
boolean ChatAddContact(UserName)
```

### **Parameters**

UserName(string)

This parameter value specifies the user name to be added to chat.

### **Return Value**

The function returns a Non-zero value on its successful execution otherwise 0, a specific error code can be retrieved by calling GetVaxErrorCode() method.

### **Example**

```
Result = ChatAddContact("abc")  
if(Result == 0) GetVaxErrorCode()
```

### **See Also**

ChatRemoveContact(), GetVaxErrorCode()

## **ChatRemoveContact()**

The ChatRemoveContact() method removes a contact that was already added using ChatAddContact() method.

### **Syntax**

```
boolean ChatRemoveContact(UserName)
```

### **Parameters**

UserName(string)

This parameter value specifies the user name to be removed from chat.

### **Return Value**

The function returns a Non-zero value on its successful execution otherwise 0, a specific error code can be retrieved by calling GetVaxErrorCode() method.

### **Example**

```
ChatAddContact("abc")  
ChatRemoveContact("abc")
```

### **See Also**

ChatAddContact(), GetVaxErrorCode()

**ChatFindContact()**

The ChatFindContact() function returns if a user name has already been added through ChatAddContact() method.

**Syntax**

```
boolean ChatFindContact(UserName)
```

**Parameters**

UserName(string)

This parameter value specifies the user name.

**Return Value**

The function returns value 1 (true) if line is open otherwise zero.

**Example**

```
ChatFindContact("1010")
```

**See Also**

ChatAddContact()

## ChatSendMessageTyping()

The ChatSendMessageTyping() functions sends the typing status to remote end/user.

### Syntax

```
boolean ChatSendMessagingTyping(  
    UserName,  
    UserValue32bit  
)
```

### Parameters

UserName(string)  
This parameter value specifies the user name.

UserValue32bit(integer)  
This parameter value is a user specified 32 bit value.

### Return Value

The function returns a Non-zero value on its successful execution otherwise 0, a specific error code can be retrieved by calling GetVaxErrorCode() method.

### Example

```
ChatSendMessagingTyping("xyz", 3)
```

### See Also

ChatSendMessageText(), GetVaxErrorCode()



## ChatSendMessageText()

The ChatSendMessageText() function sends the chat message text.

### Syntax

```
boolean ChatSendMessageText(  
    UserName,  
    MsgText,  
    MsgType,  
    UserValue32bit  
)
```

### Parameters

UserName(string)

This parameter value specifies the user name.

MsgText(string)

This parameter value specifies the message text.

MsgType(integer)

This parameter value specifies the number 101 or 102 which corresponds to particular message type.

UserValue32bit(integer)

This parameter value is a user specified 32 bit value

### Return Value

The function returns a Non-zero value on its successful execution otherwise 0, a specific error code can be retrieved by calling GetVaxErrorCode() method.

### Example

```
ChatAddContact("abc")  
ChatSendMessageTyping("abc", 3)  
ChatSendMessageText("abc", "xyz", 101, 3)
```

### See Also

ChatSendMessageTyping(), GetVaxErrorCode()

## ChatSetMyStatus()

The ChatSetMyStatus() function sets the status of user for chat i-e online, offline, away, onphone or busy.

### Syntax

```
boolean ChatSetMyStatus(StatusId)
```

### Parameters

StatusId(integer)

This parameter value corresponds to particular user chat status.

- 0 = Online
- 1 = Offline
- 2 = Away
- 3 = On Phone
- 4 = Busy

### Return Value

The function returns a Non-zero value on its successful execution otherwise 0, a specific error code can be retrieved by calling GetVaxErrorCode() method.

### Example

```
ChatSetMyStatus(0)  
ChatSetMyStatus(3)
```

### See Also

ChatAddContact(), ChatRemoveContact(), ChatSendMessageText()

## VoiceChanger()

The VoiceChanger() functions changes the pitch of outgoing voice.

### Syntax

```
boolean VoiceChanger(Pitch)
```

### Parameters

Pitch(integer)

This parameter value can be -1 to disables the voice change or its value can be the pitch of the voice ranges between 0-20.

### Return Value

The function returns a Non-zero value on its successful execution otherwise 0, a specific error code can be retrieved by calling GetVaxErrorCode() method.

### Example

```
Result = VoiceChanger(4)  
if(Result == 0) GetVaxErrorCode()
```

### See Also

## ForwardCall()

The ForwardCall() function enables call forwarding.

### Syntax

```
boolean ForwardCall(  
                    Enable,  
                    ToUserName  
                    )
```

### Parameters

Enable(boolean)

This parameter value can be 0 or 1. Assign value 1 to enable the call forwarding to particular user or 0 to disable call forwarding.

ToUserName(string)

This parameter value specifies the user name/number to be forwarded.

### Return Value

The function returns a Non-zero value on its successful execution otherwise 0, a specific error code can be retrieved by calling GetVaxErrorCode() method.

### Example

```
Result = ForwardCall(1, "abc")  
if(Result == 0) GetVaxErrorCode()
```

### See Also

DialCall(), GetVaxErrorCode()

## PlayAddPCM()

The PlayAddPCM() adds the voice digital PCM data to internally created buffer of VaxVoIP component and VaxVoIP component plays it to the call and remote end listens it.

### Syntax

```
boolean PlayAddPCM(  
    LineNo,  
    DataPCM,  
    SizePCM  
)
```

### Parameters

LineNo(integer)

This parameter value specifies the specific line. The LineNo value is a unique number to identify a specific line.

DataPCM(data)

This parameter value specifies PCM data.

SizePCM(integer)

This parameter value specifies the size of PCM data.

### Return Value

The function returns a Non-zero value on its successful execution otherwise 0, a specific error code can be retrieved by calling GetVaxErrorCode() method.

### Example

```
Result = PlayAddPCM(1, DataPCM, 8)  
if(Result == 0) GetVaxErrorCode()
```

### See Also

PlayResetPCM()

**PlayResetPCM()**

The PlayResetPCM() method resets/clear VaxVoIP internally play PCM buffer.

**Syntax**

```
boolean PlayResetPCM(LineNo)
```

**Parameters**

LineNo(integer)

This parameter value specifies the specific line. The LineNo value is a unique number to identify a specific line.

**Return Value**

The function returns a Non-zero value on its successful execution otherwise 0, a specific error code can be retrieved by calling GetVaxErrorCode() method.

**Example**

```
Result = PlayResetPCM(1)  
if(Result == 0) GetVaxErrorCode()
```

**See Also**

PlayAddPCM()

## DetectAMD()

The DetectAMD() method enables/disables the detection of answering machine.

### Syntax

```
boolean DetectAMD(  
    LineNo,  
    Enable,  
    AnalysisTime,  
    SilenceTime,  
    SilenceCount  
)
```

### Parameters

LineNo(integer)

This parameter value specifies the specific line. The LineNo value is a unique number to identify a specific line.

Enable(boolean)

This parameter value can be 0 or 1. Assign value 1 to enable the answering machine detection on specified line or 0 to disable it.

AnalysisTime(integer)

This parameter value specifies the time interval (in millisecond )for detection of answering machine.

SilenceTime(integer)

This parameter value specifies the time interval (in millisecond) for silence.

SilenceCount(integer)

This parameter value specifies the number of count for silence interval.

### Return Value

The function returns a Non-zero value on its successful execution otherwise 0, a specific error code can be retrieved by calling GetVaxErrorCode() method.

### Example

```
DetectAMD(2, True, 6000, 300, 2)
```

### See Also

OnDetectAMD(), GetVaxErrorCode()

## AddCustomHeader()

The AddCustomHeader() function can be used to add custom header fields in the SIP packets of different SIP requests.

Some of the SIP requests; REGISTER, INVITE

### Syntax

```
boolean AddCustomHeader(  
    LineNo,  
    ReqId,  
    Name,  
    Value  
)
```

### Parameters

LineNo(integer)

This parameter value specifies the specific line. The LineNo value is a unique number to identify a specific line.

ReqId(integer)

This parameter specifies a unique identification of a SIP request. Supported ReqId values are;

0 = INVITE

1 = REFER

Name(string)

This parameter specifies the name of custom header field.

Value(string)

This parameter specifies the value of custom header field.

### Return Value

On successful execution this function returns non-zero value otherwise it returns 0 value and specific error code can be retrieved by calling GetVaxErrorCode() method.

### Example

```
AddCustomHeader(0, 1, "Call_Info", "WaitingTime = 0")
```

### See Also

RemoveCustomHeader(), RemoveCustomHeaderAll()



## RemoveCustomHeader()

The RemoveCustomHeader() function removes the custom header fields added by using AddCustomHeader() function.

### Syntax

```
boolean RemoveCustomHeader(  
                                ReqId,  
                                Name  
                                )
```

### Parameters

ReqId(integer)

This parameter specifies a unique identification of a SIP request. Supported ReqId values are;

0 = INVITE

1 = REFER

Name(string)

This parameter specifies the custom header field.

### Return Value

On successful execution this function returns non-zero value otherwise it returns 0 value and specific error code can be retrieved by calling GetVaxErrorCode() method.

### Example

```
RemoveCustomHeader(0, "Call_Info")
```

### See Also

AddCustomHeader(), RemoveCustomHeaderAll()

## **RemoveCustomHeaderAll()**

The RemoveCustomHeaderAll() function removes all custom header fields added by using AddCustomHeader() function.

### **Syntax**

```
boolean RemoveCustomHeaderAll(ReqId)
```

### **Parameters**

ReqId(integer)

This parameter specifies a unique identification of a SIP request. Supported ReqId values are;

0 = INVITE

1 = REFER

### **Return Value**

On successful execution this function returns non-zero value otherwise it returns 0 value and specific error code can be retrieved by calling GetVaxErrorCode() method.

### **Example**

```
RemoveCustomHeaderAll(0)
```

### **See Also**

AddCustomHeader(), RemoveCustomHeader()

**GetCountPacketLost()**

During the call conversation, GetCountPacketLost() returns the number of UDP/RTP (voice stream) packets lost of a specific line.

**Syntax**

```
integer GetCountPacketLost(LineNo)
```

**Parameters**

LineNo(integer)

This parameter value specifies the specific line. The LineNo value is a unique number to identify a specific line.

**Return Value**

The function returns a Non-zero value on its successful execution otherwise 0.

**Example**

```
Result = GetCountPacketLost(1)
if(Result == -1) GetVaxErrorCode()
```

**See Also**

GetSizeJitterBuffer()

**GetSizeJitterBuffer()**

During voice conversation, The GetSizeJitterBuffer() returns the size of jitter buffer of a specific line.

Jitter buffers are used to smooth delay variations in received audio by buffering the packets and adjusting their rendering. The result is a smoother delivery of audio to the user.

**Syntax**

```
integer GetSizeJitterBuffer(LineNo)
```

**Parameters**

LineNo(integer)

This parameter value specifies the specific line. The LineNo value is a unique number to identify a specific line.

**Return Value**

The function returns a Non-zero value on its successful execution otherwise 0.

**Example**

```
Result = GetSizeJitterBuffer(1)
if(Result == -1) GetVaxErrorCode()
```

**See Also**

GetCountPacketLost()

**GetVideoDevTotal()**

The GetVideoDevTotal() function provides the total number of attached video devices.

**Syntax**

```
integer GetVideoDevTotal()
```

**Parameters**

No parameters

**Return Value**

Total number of video devices.

**Example**

```
GetVideoDevTotal()
```

**See Also**

GetVideoDevName()

**GetVideoDevName()**

The GetVideoDevName() function provides the name of specific video device attached to computer.

**Syntax**

```
string GetVideoDevName(DeviceId)
```

**Parameters**

DeviceId(integer)

This parameter value can be any number from zero to total number of video devices - 1. Each number corresponds to a particular video device.

**Return Value**

Device name for corresponding device id, otherwise empty string.

**Example**

```
GetVideoDevName(-1)
```

**See Also**

GetVideoDevTotal()

## OpenVideoDev()

The OpenVideoDev() function opens a specific video device attached to computer.

### Syntax

```
boolean OpenVideoDev(  
    DeviceId,  
    Quality  
)
```

### Parameters

DeviceId(integer)

This parameter value can be any number from zero to total number of video devices - 1. Each number corresponds to a particular video device.

Quality(integer)

This parameter value specifies the quality.

0 = LOW  
1 = STANDARD  
2 = MEDIUM  
3 = HIGH  
4 = MAX

### Return Value

On successful execution this function returns non-zero value otherwise it returns 0 value and specific error code can be retrieved by calling GetVaxErrorCode() method.

### Example

```
Result = OpenVideoDev(0, 3)  
if(Result == 0) GetVaxErrorCode()
```

### See Also

CloseVideoDev()

**CloseVideoDev()**

The CloseVideoDev() function closes a specific video device previously opened by using OpenVideoDev() function.

**Syntax**

```
void CloseVideoDev(DeviceId)
```

**Parameters**

DeviceId(integer)

This parameter value can be any number from zero to total number of video devices - 1. Each number corresponds to a particular video device.

**Return Value**

No return value

**Example**

```
CloseVideoDev(0)
```

**See Also**

OpenVideoDev()



## CryptCOMM()

The CryptCOMM() function enables encrypted communication through VaxVoIP tunneling.

### Syntax

```
boolean CryptCOMM(  
    Enable  
    RemoteIP  
    RemotePort  
)
```

### Parameters

Enable(boolean)

This parameter value enables/disables crypted communication through VaxVoIP Tunneling Server.

RemoteIP(string)

This parameter value specifies the IP address of the computer on which VaxVoIP Tunneling Server is running.

RemotePort(integer)

This parameter value specifies the listen port number of the computer on which VaxVoIP Tunneling Server is running.

### Return Value

The function returns a Non-zero value on its successful execution otherwise 0, a specific error code can be retrieved by calling GetVaxErrorCode() method.

### Example

```
Result = CryptCOMM(1, "66.77.88.99", 8891)  
if(Result == 0) GetVaxErrorCode()
```

**BackgroundMode()**

The BackgroundMode() function enables the VaxVoIP integrated softphone work in the background.

**Syntax**

```
boolean BackgroundMode(Enable)
```

**Parameters**

Enable(boolean)

This parameter value enables/disables the background mode.

**Return Value**

The function returns a Non-zero value on its successful execution otherwise 0, a specific error code can be retrieved by calling GetVaxErrorCode() method.

**Example**

```
Result = BackgroundMode(1)
if(Result == 0) GetVaxErrorCode()
```

**See also**

SpeakerPhone(), IsSpeakerPhone()

## SpeakerPhone()

The Speakerphone() function enables voice output through device speakers.

### Syntax

```
boolean SpeakerPhone(Enable)
```

### Parameters

Enable(boolean)

This parameter value enables/disables device speaker.

### Return Value

The function returns a Non-zero value on its successful execution otherwise 0, a specific error code can be retrieved by calling GetVaxErrorCode() method.

### Example

```
Result = SpeakerPhone(1)  
if(Result == 0) GetVaxErrorCode()
```

### See also

BackgroundMode(), IsSpeakerPhone()

**IsSpeakerPhone()**

The IsSpeakerphone() function returns if the device speaker is enabled or not.

**Syntax**

```
boolean IsSpeakerPhone()
```

**Parameters**

No Parameter.

**Return Value**

The function returns 1 if speaker is activated otherwise 0.

**Example**

```
Result = SpeakerPhone()
```

**See also**

BackgroundMode(), SpeakerPhone()

## DialCallToREC()

The DialCall() function sends call request to SIP REC server.

### Syntax

```
boolean DialCallToREC(  
    LineNo,  
    DialNo,  
    )
```

### Parameters

LineNo(integer)

This parameter value specifies the specific line. The LineNo value is a unique number to identify a specific line.

DialNo(string)

This parameter specifies the user name or phone number to be dialed.

### Return Value

The function returns a Non-zero value on its successful execution otherwise 0, a specific error code can be retrieved by calling GetVaxErrorCode() method.

### Example

```
Result = DialCallToREC(2, "000")  
if(Result == 0) GetVaxErrorCode()
```

### See Also

OpenLineREC()

## OpenLineREC()

The OpenLineREC() function opens a specific line to connect call to SIP REC server. As VaxVoIP supports multiple calls simultaneously so this function should be called prior to establishing connection, allowing user to dial/receive new calls on available free line.

### Syntax

```
boolean OpenLineREC(LineNo, RTPRxIP, AudioPortRTP)
```

### Parameters

LineNo(integer)

This parameter value specifies the specific line. The LineNo value is a unique number to identify a specific line.

RTPRxIP(string)

The RTPRxIP parameter value specifies the IP address of computer on which VaxVoIP receives voice streams. The ListenIP and RTPRxIP can be different if a computer has multiple IP addresses.

AudioPortRTP(integer)

The AudioPortRTP parameter value specifies the port number to receive voice streams. The Listen ports should be in range of 1024 to 65535 for UDP based transmission and for RTP compliance port number should be even.

### Return Value

The function returns a Non-zero value on its successful execution otherwise 0, a specific error code can be retrieved by calling GetVaxErrorCode() method.

### Example

```
Result = OpenLineREC(2, "", -1) ; //-1 = auto, "" = auto  
if (Result==0) GetVaxErrorCode( )
```

### See Also

CloseLine(), GetVaxErrorCode()

## RegisterToProxyREC()

The RegisterToProxyREC() function registers VaxVoIP integrated softphone/app to SIP REC server.

### Syntax

```
boolean RegisterToProxyREC(  
    bRegister,  
    Expire,  
    UserName,  
    LoginId,  
    LoginPwd,  
    DisplayName,  
    DomainRealm,  
    ProxySIP  
)
```

### Parameters

bRegister(boolean)

The register parameter specifies user is register or not.

Expire(integer)

The Expire parameter specifies the time interval after which the registration with server will be refreshed consequently server will remain updated about the present client status.

UserName(string)

This parameter value specifies the user name which should exist on SIP REC server side.

LoginId(string)

This parameter value specifies the user Login id, which must be added on SIP REC server side.

LoginPwd(string)

This parameter value specifies the password.

DisplayName(string)

This parameter value specifies the display name of user.

DomainRealm(string)

This parameter value can be the IP address of the SIP REC server.

ProxySIP(string)

This parameter value is the IP address of the SIP REC server.

**Return Value**

The function returns a Non-zero value on its successful execution otherwise 0, a specific error code can be retrieved by calling `GetVaxErrorCode()` method.

**Example**

```
RegisterToProxyREC(False, 1, "198.168.0.103", 5060, "8002", "8002",  
                  "1234", "sip.abc.com", 5)  
if(Result == 0) GetVaxErrorCode()
```

**See Also**

`UnRegisterToProxyREC()`, `GetVaxErrorCode()`



**UnRegisterToProxyREC()**

The UnRegisterToProxyREC() function unregisters/disconnects the VaxVoIP from SIP REC server.

**Syntax**

```
boolean UnRegisterToProxyREC()
```

**Parameters**

No parameters.

**Return Value**

The function returns a Non-zero value on its successful execution otherwise 0, a specific error code can be retrieved by calling GetVaxErrorCode() method.

**Example**

```
UnRegisterToProxyREC()
```

**See Also**

RegisterToProxyREC(), GetVaxErrorCode()

**DialRingEnable()**

The DialRingEnable() function enable the dial ring.

**Syntax**

```
boolean DialRingEnable(FileName)
```

**Parameters**

FileName(string)

This parameter value specifies wave file name to be played as dial ring.

**Return Value**

The function returns a Non-zero value on its successful execution otherwise 0, a specific error code can be retrieved by calling GetVaxErrorCode() method.

**Example**

```
DialRingEnable("DialRing.wav")
```

**See Also**

DialRingDisable(), GetVaxErrorCode()

**DialRingDisable()**

The DialRingDisable() function disables the dial ring functionality.

**Syntax**

```
boolean DialRingDisable()
```

**Parameters**

No Parameter.

**Return Value**

The function returns a Non-zero value on its successful execution otherwise 0, a specific error code can be retrieved by calling GetVaxErrorCode() method.

**Example**

```
DialRingDisable()
```

**See Also**

DialRingEnable(), GetVaxErrorCode()

## **BusyRingEnable()**

The BusyRingEnable() function enables the busy tone functionality.

### **Syntax**

```
boolean BusyRingEnable(FileName)
```

### **Parameters**

FileName(string)

This parameter value specifies wave file name to be played as busy tone.

### **Return Value**

The function returns a Non-zero value on its successful execution otherwise 0, a specific error code can be retrieved by calling GetVaxErrorCode() method.

### **Example**

```
BusyRingEnable("Busy.wav")
```

### **See Also**

BusyRingDisable(), GetVaxErrorCode()

**BusyRingDisable()**

The BusyRingDisable() function disables the busy tone functionality.

**Syntax**

```
boolean BusyRingDisable()
```

**Parameters**

No Parameter.

**Return Value**

The function returns a Non-zero value on its successful execution otherwise 0, a specific error code can be retrieved by calling GetVaxErrorCode() method.

**Example**

```
BusyRingDisable()
```

**See Also**

BusyRingEnable(), GetVaxErrorCode()

## EnableVideo()

The EnableVideo() function can be used to start or stop video streaming during the call or prior to dialing or receiving the call.

### Syntax

```
boolean EnableVideo(  
    LineNo,  
    Outbound,  
    Inbound  
)
```

### Parameters

LineNo(integer)

This parameter value specifies the specific line. The LineNo value is a unique number to identify a specific line.

Outbound(boolean)

This parameter value enables/disables the outbound video streaming.

Inbound(boolean)

This parameter value enables/disables the inbound video streaming.

### Return Value

The function returns a Non-zero value on its successful execution otherwise 0, a specific error code can be retrieved by calling GetVaxErrorCode() method.

### Example

```
EnableVideo(1, 1, 0)
```

### See Also

OnVideoDeviceFrameRGB(), OnVideoRemoteFrameRGB()

**GetCallId()**

The GetCallId() function returns Call-Id field value of a SIP packet.

**Syntax**

```
string GetCallId(LineNo)
```

**Parameters**

LineNo(integer)

This parameter value specifies the specific line. The LineNo value is a unique number to identify a specific line.

**Return Value**

The function returns a string value on its successful execution otherwise empty string, a specific error code can be retrieved by calling GetVaxErrorCode() method.

**Example**

```
GetCallId(0)
```

**See Also**

GetVaxErrorCode()

**IsNetworkAvailable()**

The IsNetworkAvailable() function returns the status of the network.

**Syntax**

```
boolean IsNetworkAvailable()
```

**Parameters**

No Parameter.

**Return Value**

The function returns a Non-zero if the network is available otherwise 0

**Example**

```
IsNetworkAvailable()
```

**See Also**

OnNetworkReachability(), NetworkReachability()



**NetworkReachability()**

The NetworkReachability() function activates/deactivates the notification about network availability.

**Syntax**

```
boolean NetworkReachability(Enable)
```

**Parameters**

Enable(boolean)

This parameter value enables/disables the notification.

**Return Value**

The function returns a Non-zero if the network is available otherwise 0

**Example**

```
NetworkReachability(1)
```

**See Also**

OnNetworkReachability(), IsNetworkAvailable()

## AutoRegistration()

The AutoRegistration() function activates/deactivates the auto-registration functionality.

### Syntax

```
boolean AutoRegistration(Enable, TickCountLimit, TickSeconds)
```

### Parameters

Enable(boolean)

This parameter value enables/disables the functionality.

TickCountLimit(integer)

This parameter value specifies total number of auto-registration tries.

TickSeconds(integer)

This parameter value specifies the time period of auto-registration.

### Return Value

The function returns a Non-zero value on its successful execution otherwise 0, a specific error code can be retrieved by calling GetVaxErrorCode() method.

### Example

```
AutoRegistration(true, -1, 10) // (-1 = there is no limit)
```

### See Also

OnFailToRegister(), GetVaxErrorCode()

## VideoCodecBitRate()

The VideoCodecBitRate() function can be used to set the video codec compression rate.

### Syntax

```
boolean VideoCodecBitRate(CodecNo, Quality)
```

### Parameters

CodecNo(integer)

This parameter value ranges from 0-2 and each value corresponds to a particular video codec.

VaxVoIP SIP SDK supports the following video codecs:

0 = VP8  
1 = H263  
2 = H263+

Quality(integer)

This parameter value specifies the quality.

0 = LOW  
1 = STANDARD  
2 = MEDIUM  
3 = HIGH  
4 = MAX

### Return Value

The function returns a Non-zero value on its successful execution otherwise 0, a specific error code can be retrieved by calling GetVaxErrorCode() method.

### Example

```
VideoCodecBitRate(0, 1) // (VP8 codec bitrate to standrad)
```

### See Also

OpenVideoDev(), CloseVideoDev(), GetVaxErrorCode()

## **EXPORTED EVENTS**

### **OnInitialized()**

The OnInitialized() event notifies that VaxVoIP component has initialized successfully.

#### **Syntax**

```
void OnInitialized()
```

#### **Parameters**

No parameters

#### **Example**

```
OnInitialized()  
{  
}
```

#### **See Also**

Initialize(), OnUnInitialized()

**OnUnInitialized()**

The OnUnInitialized() event notifies that VaxVoIP component has uninitialized successfully.

**Syntax**

```
void OnUnInitialized()
```

**Parameters**

No parameters

**Example**

```
OnUnInitialized()  
{  
}  
}
```

**See Also**

UnInitialize(), OnInitialized()

**OnConnectingToRegister()**

VaxVoIP triggers OnConnectingToRegister() event when VaxVoIP starts connecting to the SIP server to start registration process.

**Syntax**

```
void OnConnectingToRegister()
```

**Parameters**

No parameters

**Example**

```
OnConnectingToRegister()  
{  
}  
}
```

**See Also**

OnTryingToRegister()

**OnTryingToRegister()**

VaxVoIP triggers OnTryingToRegister() event when client sends the register request to SIP server and request is in process on server end.

**Syntax**

```
void OnTryingToRegister()
```

**Parameters**

No parameters.

**Example**

```
OnTryingToRegister()  
{  
}  
}
```

**See Also**

OnTryingToUnRegister(), OnFailToRegister(), OnSuccessToRegister(), RegisterToProxy(), UnRegisterToProxy()

## OnFailToRegister()

The OnFailToRegister() event triggers when client failed to register with server or registration request has not completed successfully.

### Syntax

```
void OnFailToRegister(  
    StatusCode,  
    ReasonPhrase  
)
```

### Parameters

StatusCode(integer)

This parameter specifies SIP response status code (486, 404 etc).

ReasonPhrase(string)

This parameter specifies SIP response reason phrase (Unauthorized, Not Found etc).

### Example

```
OnFailToRegister(StatusCode, ReasonPhrase)  
{  
}
```

### See Also

OnFailToUnRegister(), OnFailToRegister(), OnSuccessToRegister(), RegisterToProxy(), UnRegisterToProxy()



**OnSuccessToRegister()**

The OnSuccessToRegister() event triggers when client successfully registered with SIP server.

**Syntax**

```
void OnSuccessToRegister()
```

**Parameters**

No parameters.

**Example**

```
OnSuccessToRegister()  
{  
}
```

**See Also**

OnTryingToRegister(), OnFailToRegister(), OnTryingToUnRegister()  
RegisterToProxy(), UnRegisterToProxy()

**OnConnectingToReRegister()**

VaxVoIP triggers OnConnectingToReRegister() event when VaxVoIP starts connecting to the SIP server to start re-registration process.

**Syntax**

```
void OnConnectingToReRegister()
```

**Parameters**

No parameters

**Example**

```
OnConnectingToReRegister()  
{  
}  
}
```

**See Also**

OnTryingToReRegister()

**OnTryingToReRegister()**

OnTryingToReRegister() event triggers when client sends re-register request to SIP server and request is in process at server end.

It notifies that sip server is processing the re-register request.

**Syntax**

```
void OnTryingToReRegister()
```

**Parameters**

No parameters.

**Example**

```
OnTryingToReRegister()  
{  
}  
}
```

**See Also**

OnSuccessToReRegister(), OnFailToReRegister(), RegisterToProxy(),  
UnRegisterToProxy()

## OnFailToReRegister()

The OnFailToReRegister() event triggers when client failed to re-register with server or re-registration request has not completed successfully.

### Syntax

```
void OnFailToReRegister(  
                        StatusCode,  
                        ReasonPhrase  
                        )
```

### Parameters

StatusCode(integer)

This parameter specifies SIP response status code (486, 404 etc).

ReasonPhrase(string)

This parameter specifies SIP response reason phrase (Unauthorized, Not Found etc).

### Example

```
OnFailToReRegister(StatusCode, ReasonPhrase)  
{  
  
}
```

### See Also

OnTryingToReRegister(), OnSuccessToReRegister(), RegisterToProxy(),  
UnRegisterToProxy()

**OnSuccessToReRegister()**

The OnSuccessToReRegister() event triggers when client successfully re-registered with SIP server.

**Syntax**

```
void OnSuccessToReRegister()
```

**Parameters**

No parameters.

**Example**

```
OnSuccessToRegister()  
{  
}  
}
```

**See Also**

OnTryingToReRegister(), OnFailToReRegister(), RegisterToProxy(),  
UnRegisterToProxy()

**OnTryingToUnRegister()**

The OnTryingToUnRegister() event triggers when client sends the unregister request to SIP server and request is in process at server end.

**Syntax**

```
void OnTryingToUnRegister()
```

**Parameters**

No parameters.

**Example**

```
OnTryingToUnRegister()  
{  
}  
}
```

**See Also**

OnTryingToRegister(), OnFailToRegister(), OnSuccessToRegister()  
RegisterToProxy(), UnRegisterToProxy()

## **OnFailToUnRegister()**

The OnFailToUnRegister() event triggers when client failed to unregister with server or unregister request has not been completed successfully.

### **Syntax**

```
void OnFailToUnRegister()
```

### **Parameters**

No parameters.

### **Example**

```
OnFailToUnRegister()  
{  
}  
}
```

### **See Also**

OnSuccessToUnRegister(), OnSuccessToRegister(), OnTryingToUnRegister()  
RegisterToProxy(), UnRegisterToProxy()

### **OnSuccessToUnRegister()**

The OnSuccessToUnRegister() events triggers when client request to unregister with server is successfully completed.

#### **Syntax**

```
void OnSuccessToUnRegister()
```

#### **Parameters**

No parameters.

#### **Example**

```
OnSuccessToUnRegister()  
{  
}  
}
```

#### **See Also**

OnFailToUnRegister(), OnSuccessToRegister(), OnTryingToUnRegister()  
RegisterToProxy(), UnRegisterToProxy()



## **OnTryingToRegisterREC()**

VaxVoIP triggers OnTryingToRegisterREC() event when client sends the register request to SIP REC server and request is in process at server end.

### **Syntax**

```
void OnTryingToRegisterREC()
```

### **Parameters**

No parameters.

### **Example**

```
OnTryingToRegisterREC()  
{  
}  
}
```

### **See Also**

OnTryingToUnRegisterREC(), OnFailToRegisterREC(),  
OnSuccessToRegisterREC(), RegisterToProxyREC(), UnRegisterToProxyREC()

## OnFailToRegisterREC()

The OnFailToRegisterREC() event triggers when client failed to register with REC server or registration request has not completed successfully.

### Syntax

```
void OnFailToRegisterREC(  
                        StatusCode,  
                        ReasonPhrase  
                        )
```

### Parameters

StatusCode(integer)

This parameter specifies SIP response status code (486, 404 etc).

ReasonPhrase(string)

This parameter specifies SIP response reason phrase (Unauthorized, Not Found etc).

### Example

```
OnFailToRegisterREC(StatusCode, ReasonPhrase)  
{  
}
```

### See Also

OnFailToUnRegisterREC(), OnFailToRegisterREC(), OnSuccessToRegisterREC(), RegisterToProxyREC(), UnRegisterToProxyREC()

**OnSuccessToRegisterREC()**

The OnSuccessToRegisterREC() event triggers when client successfully registered with SIP REC server.

**Syntax**

```
void OnSuccessToRegisterREC()
```

**Parameters**

No parameters.

**Example**

```
OnSuccessToRegisterREC()  
{  
}
```

**See Also**

OnTryingToRegisterREC(), OnFailToRegisterREC(), RegisterToProxyREC(),  
OnTryingToUnRegisterREC(), UnRegisterToProxyREC()

**OnTryingToReRegisterREC()**

OnTryingToReRegisterREC() event triggers when client sends re-register request to SIP REC server and request is in process at server end.

It notifies that SIP REC server is processing the re-register request.

**Syntax**

```
void OnTryingToReRegisterREC()
```

**Parameters**

No parameters.

**Example**

```
OnTryingToReRegisterREC()  
{  
}  
}
```

**See Also**

OnSuccessToReRegisterREC(), OnFailToReRegisterREC(),  
RegisterToProxyREC(), UnRegisterToProxyREC()

## OnFailToReRegisterREC()

The OnFailToReRegisterREC() event triggers when client failed to re-register with REC server or re-registration request has not completed successfully.

### Syntax

```
void OnFailToReRegisterREC(  
    StatusCode,  
    ReasonPhrase  
)
```

### Parameters

StatusCode(integer)

This parameter specifies SIP response status code (486, 404 etc).

ReasonPhrase(string)

This parameter specifies SIP response reason phrase (Unauthorized, Not Found etc).

### Example

```
OnFailToReRegisterREC(StatusCode, ReasonPhrase)  
{  
  
}
```

### See Also

OnTryingToReRegisterREC(), OnSuccessToReRegisterREC(),  
RegisterToProxyREC(), UnRegisterToProxyREC()

**OnSuccessToReRegisterREC()**

The OnSuccessToReRegister() event triggers when client successfully re-registered with SIP REC server.

**Syntax**

```
void OnSuccessToReRegisterREC()
```

**Parameters**

No parameters.

**Example**

```
OnSuccessToRegisterREC()  
{  
}
```

**See Also**

OnTryingToReRegisterREC(), OnFailToReRegisterREC(),  
RegisterToProxyREC(), UnRegisterToProxyREC()

**OnTryingToUnRegisterREC()**

The OnTryingToUnRegisterREC() event triggers when client sends the unregister request to SIP REC server and request is in process at server end.

**Syntax**

```
void OnTryingToUnRegisterREC()
```

**Parameters**

No parameters.

**Example**

```
OnTryingToUnRegisterREC()  
{  
}  
}
```

**See Also**

OnTryingToRegisterREC(), OnFailToRegisterREC(), OnSuccessToRegisterREC()  
RegisterToProxyREC(), UnRegisterToProxyREC()

**OnFailToUnRegisterREC()**

The OnFailToUnRegisterREC() event triggers when client failed to unregister with REC server or unregister request has not been completed successfully.

**Syntax**

```
void OnFailToUnRegisterREC()
```

**Parameters**

No parameters.

**Example**

```
OnFailToUnRegisterREC()  
{  
}  
}
```

**See Also**

OnSuccessToUnRegisterREC(), OnSuccessToRegisterREC(),  
RegisterToProxyREC(), OnTryingToUnRegisterREC(), UnRegisterToProxyREC()



### **OnSuccessToUnRegisterREC()**

The OnSuccessToUnRegisterREC() events triggers when client request to unregister with REC server is successfully completed.

#### **Syntax**

```
void OnSuccessToUnRegisterREC()
```

#### **Parameters**

No parameters.

#### **Example**

```
OnSuccessToUnRegisterREC()  
{  
}  
}
```

#### **See Also**

OnFailToUnRegisterREC(), OnSuccessToRegisterREC(),  
OnTryingToUnRegisterREC(), RegisterToProxyREC(), UnRegisterToProxyREC()

## OnDialCallStarted()

The OnDialCallStarted() events triggers when DialCall() method executes.

### Syntax

```
void OnDialCallStarted(  
    LineNo,  
    CallerName,  
    CallerId,  
    DialNo  
)
```

### Parameters

LineNo(integer)

This parameter value specifies the specific line. The LineNo value is a unique number to identify a specific line.

CallerName(string)

This parameter value specifies the caller name which is provided by IP-Telephony or VoIP service provider.

CallerId(string)

The CallerId parameter value specifies the CallerId

DialNo(string)

This parameter specifies the user name or phone number to be dialed.

### Example

```
OnDialCallStarted(LineNo, CallerName, CallerId, DialNo)  
{  
}
```

### See Also

OnDialingCall(), OnDialCallFailed()

## OnDialingCall()

The OnDialingCall() events triggers when client dial a call started with server

### Syntax

```
void OnDialCallStarted(  
                        LineNo,  
                        StatusCode,  
                        ReasonPhrase  
                        )
```

### Parameters

LineNo(integer)

This parameter value specifies the specific line. The LineNo value is a unique number to identify a specific line.

StatusCode(integer)

This parameter specifies SIP response status code (100, 180 etc).

ReasonPhrase(string)

This parameter specifies SIP response reason phrase (Trying, Ringing etc).

### Example

```
OnDialingCall(LineNo, StatusCode, ReasonPhrase)  
{  
}  
}
```

### See Also

OnDialCallStarted(), OnDialCallFailed()

## OnDialCallFailed()

The OnDialCallFailed() events triggers when dialed call fails and SIP server sends a failure response.

### Syntax

```
void OnDialCallFailed(  
    LineNo,  
    StatusCode,  
    ReasonPhrase  
    Contact  
)
```

### Parameters

LineNo(integer)

This parameter value specifies the specific line. The LineNo value is a unique number to identify a specific line.

StatusCode(integer)

This parameter specifies SIP response status code (486, 404 etc).

ReasonPhrase(string)

This parameter specifies SIP response reason phrase (Unauthorized, Not Found etc).

Contact(string)

This parameter value specifies the contact where SIP server will redirect the call in case of call-forwarding is enabled on SIP server side.

### Example

```
OnDialCallFailed(LineNo, StatusCode, ReasonPhrase, Contact)  
{  
}
```

### See Also

OnDialCallStarted(), OnDialingCall()

## OnConnectedCall()

The OnConnectedCall() events triggers when a call gets connected successfully.

### Syntax

```
void OnConnectedCall(  
    LineNo,  
    ToRTPIP,  
    ToRTPPort  
)
```

### Parameters

LineNo(integer)

This parameter value specifies the specific line. The LineNo value is a unique number to identify a specific line.

ToRTPIP(string)

This parameter specifies the RTP IP address of remote end.

ToRTPPort(integer)

This parameter specifies the RTP port number of remote end.

### Example

```
OnConnectedCall(LineNo, ToRTPIP, ToRTPPort)  
{  
}
```

### See Also

OnHungupCall()

**OnHungupCall()**

The OnHungupCall() events triggers when remote party hangup the call.

**Syntax**

```
void OnHungupCall(LineNo)
```

**Parameters**

LineNo(integer)

This parameter value specifies the specific line. The LineNo value is a unique number to identify a specific line.

**Example**

```
OnHungupCall(LineNo)
{
}
```

**See Also**

OnConnectedCall()

## OnIncomingCallStarted()

The OnIncomingCallStarted() event triggers when component receives a call request.

### Syntax

```
void OnIncomingCall(  
    CallId,  
    CallerName,  
    CallerId,  
    DialNo,  
    FromURI,  
    ToURI  
)
```

### Parameters

CallId(string)

The CallId parameter value is a unique identifier for each incoming call. The value of This parameter is generated internally by the system.

CallerName(string)

This parameter value specifies the caller name.

CallerId(string)

This parameter value specifies the callerId.

DialNo(string)

This parameter specifies the user name or phone number to be dialed.

FromURI(string)

This parameter specifies FromURI in incoming SIP call request.

ToURI(string)

This parameter specifies ToURI in incoming SIP call request.

### Example

```
OnIncomingCall(CallId, CallerName, CallerId, DialNo, FromURI, ToURI)  
{  
}
```

### See Also

AcceptCall(), RejectCall(), HoldLine()

**OnIncomingCallEnded()**

The OnIncomingCallEnded() event triggers when remote end cancels the call request.

**Syntax**

```
void OnIncomingCallEnded(CallId)
```

**Parameters**

CallId(string)

The CallId parameter value is a unique identifier for each incoming call. The value of This parameter is generated internally by the system.

**Example**

```
OnIncomingCallEnded(CallId)  
{  
}  
}
```

**See Also**

AcceptCall(), RejectCall(), HoldLine()



## OnRingToneStarted()

The OnRingToneStarted() event notifies VaxVoIP integrated application about to start playing ringtone wave file.

### Syntax

```
void OnRingToneStarted(CallId)
```

### Parameters

CallId(string)

The CallId parameter value is a unique identifier for each incoming call. The value of This parameter is generated internally by the system.

### Example

```
OnRingToneStarted(CallId)  
{  
}  
}
```

### See Also

OnRingToneEnded()

**OnRingToneEnded()**

The OnRingToneEnded() event notifies VaxVoIP integrated application to stop the playing of ringtone wave file.

**Syntax**

```
void OnRingToneEnded(CallId)
```

**Parameters**

CallId(string)

The CallId parameter value is a unique identifier for each incoming call. The value of This parameter is generated internally by the system.

**Example**

```
OnRingToneEnded(CallId)  
{  
}  
}
```

**See Also**

OnRingToneStarted()

## **OnTransferCallAccepted()**

The OnTransferCallAccepted() event triggers when SIP server acknowledge/ accepts the call transfer request.

### **Syntax**

```
void OnTransferCallAccepted(LineNo)
```

### **Parameters**

LineNo(integer)

This parameter value specifies the specific line. The LineNo value is a unique number to identify a specific line.

### **Example**

```
OnTransferCallAccepted(LineNo)  
{  
}
```

### **See Also**

OnTransferCallFailed()

## OnTransferCallFailed()

The OnTransferCallFailed() event triggers when call transfer process fails and SIP Server sends an error response.

### Syntax

```
void OnTransferCallFailed(  
    LineNo,  
    StatusCode,  
    ReasonPhrase  
)
```

### Parameters

LineNo(integer)

This parameter value specifies the specific line. The LineNo value is a unique number to identify a specific line.

StatusCode(integer)

This parameter specifies SIP response status code (486, 404 etc).

ReasonPhrase(string)

This parameter specifies SIP response reason phrase (Unauthorized, Not Found etc).

### Example

```
void OnTransferCallFailed(LineNo, StatusCode, ReasonPhrase)  
{  
  
}
```

### See Also

OnTransferCallAccepted()

## OnPlayWaveDone()

The OnPlayWaveDone() event triggers on the completion of playing of a wave file.

### Syntax

```
void OnPlayWaveDone(LineNo)
```

### Parameters

LineNo(integer)

This parameter value specifies the specific line. The LineNo value is a unique number to identify a specific line.

### Example

```
OnPlayWaveDone(LineNo)  
{  
}
```

### See Also

PlayWaveOpen(), PlayWaveClose(), PlayWaveStart(), PlayWaveStop()

## OnDigitDTMF()

The OnDigitDTMF() event triggers when remote end pressed any key/DTMF.

### Syntax

```
void OnDigitDTMF(  
                LineNo,  
                Digit  
                )
```

### Parameters

LineNo(integer)

This parameter value specifies the specific line. The LineNo value is a unique number to identify a specific line.

Digit(string)

This parameter value specifies any digit that has been pressed.  
(1, 2, 3, 4, 5, ..... 0, \*, #)

### Example

```
OnDigitDTMF(LineNo, Digit)  
{  
}
```

### See Also

DigitDTMF(), SetVolumeDTMF(), GetVolumeDTMF()

**OnMsgNOTIFY()**

The OnMsgNOTIFY() event triggers when client/softphone receives SIP NOTIFY message from the SIP server.

**Syntax**

```
void OnMsgNOTIFY(Msg)
```

**Parameters**

Msg(string)  
This parameter specifies SIP request packet data.

**Example**

```
OnMsgNOTIFY(Msg)  
{  
}
```

**See Also**

OnVoiceMailMsg()

## OnVoiceMailMsg()

The OnVoiceMailMsg() event triggers when VaxVoIP component receives voice mail notification from SIP server. This event only works if voice mail message service is enabled on SIP server side.

### Syntax

```
void OnVoiceMailMsg(  
    MsgWaiting,  
    NewMsgCount,  
    OldMsgCount,  
    NewUrgentMsgCount,  
    OldUrgentMsgCount,  
    MsgAccount  
)
```

### Parameters

MsgWaiting(boolean)

This parameter value specifies whether some messages are in waiting state or not.

NewMsgCount(integer)

This parameter specifies total count for new messages.

OldMsgCount(integer)

This parameter specifies total count for old messages.

NewUrgentMsgCount(integer)

This parameter value specifies total count for new urgent messages.

OldUrgentMsgCount(integer)

This parameter value specifies total count for old urgent messages.

MsgAccount(string)

This parameter value specifies message account.

### Example

```
OnVoiceMailMsg(bIMsgWaiting,NewMsgCount,OldMsgCount,  
    NewUrgentMsgCount,OldUrgentMsgCount, MsgAccount)  
{  
}
```

### See Also

OnMsgNOTIFY()



## OnIncomingDiagnostic()

The OnIncomingDiagnostic() event triggers when VaxVoIP receives a SIP packet. This event can be use for logging and monitoring of inbound SIP messages.

### Syntax

```
void OnIncomingDiagnostic(  
    MsgSIP,  
    FromIP,  
    FromPort  
)
```

### Parameters

- MsgSIP(string)  
This parameter value specifies the SIP packet message.
- FromIP(string)  
This parameter value specifies the from IP address.
- FromPort(integer)  
This parameter specifies the from port number.

### Example

```
OnIncomingDiagnostic(MsgSIP, FromIP, FromPort)  
{  
}
```

### See Also

OnOutgoingDiagnostic()

## OnOutgoingDiagnostic()

The OnOutgoingDiagnostic() event triggers when VaxVoIP sends a SIP packet. This event can be use for logging and monitoring of outbound SIP messages.

### Syntax

```
void OnIncomingDiagnostic(  
    MsgSIP,  
    ToIP,  
    ToPort  
)
```

### Parameters

- MsgSIP(string)  
This parameter value specifies the SIP packet message.
- ToIP(string)  
This parameter value specifies the to IP address.
- ToPort(string)  
This parameter specifies the to port number.

### Example

```
OnOutgoingDiagnostic(MsgSIP, ToIP, ToPort)  
{  
}
```

### See Also

OnIncomingDiagnostic()

**OnAudioSessionLost()**

The OnAudioSessionLost() triggers only when client has already enabled session lost through SetSessionLostTick() and has not received any voice data for specified interval of time.

**Syntax**

```
void OnAudioSessionLost(LineNo)
```

**Parameters**

LineNo(integer)

This parameter value specifies the specific line. The LineNo value is a unique number to identify a specific line.

**Example**

```
OnAudioSessionLost(LineNo)
{
}
```

**See Also**

SetSessionLostTick()

## **OnSuccessToHold()**

The OnSuccessToHold() event triggers when a call is successfully placed on hold.

### **Syntax**

```
void OnSuccessToHold(LineNo)
```

### **Parameters**

LineNo(integer)

This parameter value specifies the specific line. The LineNo value is a unique number to identify a specific line.

### **Example**

```
OnSuccessToHold(LineNo)  
{  
}
```

### **See Also**

OnTryingToHold(), OnFailToHold(), HoldLine(), UnHoldLine(), IsLineHold()

## OnTryingToHold()

The OnTryingToHold() event triggers when client sends the hold request for specific line to SIP server and request is in process on server end.

### Syntax

```
void OnTryingToHold(LineNo)
```

### Parameters

LineNo(integer)

This parameter value specifies the specific line. The LineNo value is a unique number to identify a specific line.

### Example

```
OnTryingToHold(LineNo)  
{  
}
```

### See Also

OnSuccessToHold(), OnFailToHold(), HoldLine(), UnHoldLine(), IsLineHold()

## **OnFailToHold()**

The OnFailToHold() event triggers when hold request to server has not been completed successfully.

### **Syntax**

```
void OnFailToHold(LineNo)
```

### **Parameters**

LineNo(integer)

This parameter value specifies the specific line. The LineNo value is a unique number to identify a specific line.

### **Example**

```
OnFailToHold(LineNo)  
{  
}
```

### **See Also**

OnSuccessToHold(), OnTryingToHold(), HoldLine(), UnHoldLine(),  
IsLineHold()

**OnSuccessToUnHold()**

The OnSuccessToUnHold() event triggers when request to unhold a specific line is completed successfully.

**Syntax**

```
void OnSuccessToUnHold(LineNo)
```

**Parameters**

LineNo(integer)

This parameter value specifies the specific line. The LineNo value is a unique number to identify a specific line.

**Example**

```
OnSuccessToUnHold(LineNo)
{
}
```

**See Also**

OnTryingToUnHold(), OnFailToUnHold(), HoldLine(), UnHoldLine(),  
IsLineHold()

**OnTryingToUnHold()**

The OnTryingToUnHold() event triggers when client sends the unhold request for specific line to SIP server and request is in process at server end.

**Syntax**

```
void OnTryingToUnHold(LineNo)
```

**Parameters**

LineNo(integer)

This parameter value specifies the specific line. The LineNo value is a unique number to identify a specific line.

**Example**

```
OnTryingToUnHold(LineNo)
{
}
```

**See Also**

OnSuccessToUnHold(), OnFailToUnHold(), HoldLine(), UnHoldLine(), IsLineHold()



## **OnFailToUnHold()**

The OnFailToUnHold() event triggers when unhold request to server has not been completed successfully.

### **Syntax**

```
void OnFailToUnHold(LineNo)
```

### **Parameters**

LineNo(integer)

This parameter value specifies the specific line. The LineNo value is a unique number to identify a specific line.

### **Example**

```
OnFailToUnHold(LineNo)  
{  
}
```

### **See Also**

OnTryingToUnHold(), OnSuccessToUnHold(), HoldLine(), UnHoldLine(), IsLineHold()

## OnChatContactStatus()

The OnChatContactStatus() event triggers when remote party/user changes the status e.g. busy, away etc.

### Syntax

```
void OnChatContactStatus(  
                        UserName,  
                        StatusId  
                        )
```

### Parameters

UserName(string)

This parameter value specifies the user name.

StatusId(integer)

This parameter value corresponds to particular user chat status.

0 = Online  
1 = Offline  
2 = Away  
3 = On Phone  
4 = Busy  
5 = Unknown

### Example

```
void OnChatContactStatus(UserName, StatusId)  
{  
}  
}
```

### See Also

ChatSetMyStatus(), ChatAddContact()

## OnChatSendMsgTextSuccess()

The OnChatSendMsgTextSuccess() event triggers when chat text message is sent successfully.

### Syntax

```
void OnChatSendMsgTextSuccess(  
                                UserName,  
                                MsgText,  
                                UserValue32bit  
                                )
```

### Parameters

UserName(string)  
This parameter value specifies the user name.

MsgText(string)  
This parameter value specifies the message text.

UserValue32bit(integer)  
This parameter value is a user specified 32 bit value.

### Example

```
void OnChatSendMsgTextSuccess(UserName, MsgText, UserValue32bit)  
{  
}  
}
```

### See Also

OnChatSendMsgTextFail(), ChatSendMessageText()

## OnChatSendMsgTextFail()

The OnChatSenMsgTextFail() event triggers when message sending to remote end failed.

### Syntax

```
void OnChatSendMsgTextFail(  
    UserName,  
    StatusCode,  
    ReasonPhrase,  
    MsgText,  
    UserValue32bit  
)
```

### Parameters

UserName(string)

This parameter value specifies the user name.

StatusCode(integer)

This parameter specifies SIP response status code.

ReasonPhrase(string)

This parameter specifies SIP response reason phrase (Trying, Ringing etc).

MsgText(string)

This parameter value specifies the message text.

UserValue32bit(integer)

This parameter value is a user specified 32 bit value.

### Example

```
void OnChatSendMsgTextFail(UserName, StatusCode, ReasonPhrase,  
    MsgText, UserValue32bit)  
{  
}
```

### See Also

OnChatSendMsgTextSuccess(), ChatSendMessageText()

## OnChatSendMsgTypingSuccess()

The OnChatSendMsgTypingSuccess() event triggers when typing status is sent successfully.

### Syntax

```
void OnChatSendMsgTypingSuccess(  
                                UserName,  
                                UserValue32bit  
                                )
```

### Parameters

UserName(string)

This parameter value specifies the user name.

UserValue32bit(integer)

This parameter value is a user specified 32 bit value.

### Example

```
void OnChatSendMsgTypingSuccess(UserName, UserValue32bit)  
{  
}  
}
```

### See Also

OnChatSendMsgTypingFail(), ChatSendMessageTyping()

## OnChatSendMsgTypingFail()

The OnChatSenMsgTypingFail() event triggers when typing status sending to remote end failed.

### Syntax

```
void OnChatSendMsgTypingFail(  
    UserName,  
    StatusCode,  
    ReasonPhrase,  
    UserValue32bit  
)
```

### Parameters

UserName(string)

This parameter value specifies the user name.

StatusCode(integer)

This parameter specifies SIP response status code.

ReasonPhrase(string)

This parameter specifies SIP response reason phrase (Trying, Ringing etc).

UserValue32bit(integer)

This parameter value is a user specified 32 bit value.

### Example

```
void OnChatSendMsgTypingFail(UserName, StatusCode, ReasonPhrase,  
    UserValue32bit)  
{  
}
```

### See Also

OnChatSendMsgTypingSuccess(), ChatSendMessageTyping()

## OnChatRecvMsgText()

The OnChatRecvMsgText() event triggers when VaxVoIP component receives a text message.

### Syntax

```
void OnChatRecvMsgText(  
    UserName,  
    MsgText  
)
```

### Parameters

UserName(string)  
This parameter value specifies the user name.

MsgText(string)  
This parameter value specifies the message text.

### Example

```
OnChatRecvMsgText(UserName, MsgText)  
{  
}
```

### See Also

OnChatSendMsgTextSuccess(), ChatSendMessageText()

## **OnChatRecvMsgTypingStart()**

The OnChatRecvMsgTypingStart() event triggers when a user at remote end starts typing a text message.

### **Syntax**

```
void OnChatRecvMsgTypingStart(Username)
```

### **Parameters**

Username(string)  
This parameter value specifies the user name.

### **Example**

```
OnChatRecvMsgTypingStart(Username)  
{  
}
```

### **See Also**

OnChatSendMsgTypingFail(), ChatSendMessageTyping(),  
OnChatSendMsgTypingSuccess(), ChatSendMessageTyping()



## **OnChatRecvMsgTypingStop()**

The OnChatRecvMsgTypingStop() event triggers when a user at remote end stops typing a text message.

### **Syntax**

```
void OnChatRecvMsgTypingStop(Username)
```

### **Parameters**

Username(string)  
This parameter value specifies the user name.

### **Example**

```
OnChatRecvMsgTypingStop(Username)  
{  
}
```

### **See Also**

OnChatSendMsgTypingSuccess(), ChatSendMessageTyping(),  
OnChatSendMsgTypingFail(), ChatSendMessageTyping()

## OnVoiceStreamPCM()

The OnVoiceStreamPCM() event triggers when VaxVoIP component receives the incoming voice stream PCM on specific line.

### Syntax

```
void OnVoiceStreamPCM(  
    LineNo,  
    DataPCM,  
    SizePCM  
)
```

### Parameters

LineNo(integer)

This parameter value specifies the specific line. The LineNo value is a unique number to identify a specific line.

DataPCM(data)

This parameter value specifies PCM data (Digital voice).

SizePCM(integer)

This parameter value specifies the size of PCM data.

### Example

```
void OnVoiceStreamPCM(LineNo, DataPCM, SizePCM)  
{  
}
```

### See Also

CaptureStreamPCM()

## OnDetectAMD()

The OnDetectAMD() event triggers when request for detection of answering machine on specific line is successfully completed.

### Syntax

```
void OnDectecAMD(  
                LineNo,  
                IsHuman  
                )
```

### Parameters

LineNo(integer)

This parameter value specifies the specific line. The LineNo value is a unique number to identify a specific line.

IsHuman(boolean)

This parameter value can be 0 or 1. The value 1 corresponds to human voice and value 0 corresponds to answering machine.

### Example

```
void OnDetectAMD(LineNo, IsHuman)  
{  
}  
}
```

### See Also

DetectAMD()

**OnHoldCall()**

The OnHoldCall() event triggers if VaxVoIP component receives hold request from the SIP Server.

**Syntax**

```
void OnHoldCall(LineNo)
```

**Parameters**

LineNo(integer)

This parameter value specifies the specific line. The LineNo value is a unique number to identify a specific line.

**Example**

```
void OnHoldCall(LineNo)
{
}
}
```

**See Also**

OnUnHoldCall()

**OnUnHoldCall()**

The OnUnHoldCall() event triggers if VaxVoIP component receives unhold request from the SIP Server.

**Syntax**

```
void OnUnHoldCall(LineNo)
```

**Parameters**

LineNo(integer)

This parameter value specifies the specific line. The LineNo value is a unique number to identify a specific line.

**Example**

```
void OnUnHoldCall(LineNo)
{
}
}
```

**See Also**

OnHoldCall()

**OnVideoRemoteStarted()**

The OnVideoRemoteStarted() event triggers when VaxVoIP component starts receiving the video frames from remote end.

**Syntax**

```
void OnVideoRemoteStarted(LineNo)
```

**Parameters**

LineNo(integer)

This parameter value specifies the specific line. The LineNo value is a unique number to identify a specific line.

**Example**

```
void OnVideoRemoteStarted(LineNo)
{
}
}
```

**See Also**

OnVideoRemoteEnded(), OnVideoRemoteFrameRGB()

## **OnVideoRemoteEnded()**

The OnVideoRemoteEnded() event triggers when VaxVoIP component stops receiving the video frames.

### **Syntax**

```
void OnVideoRemoteEnded(LineNo)
```

### **Parameters**

LineNo(integer)

This parameter value specifies the specific line. The LineNo value is a unique number to identify a specific line.

### **Example**

```
void OnVideoRemoteEnded(LineNo)
{
}
}
```

### **See Also**

OnVideoRemoteStarted(), OnVideoRemoteFrameRGB()

## OnVideoRemoteFrameRGB()

The `OVideoRemoteFrameRGB()` event triggers when VaxVoIP component receives a video frame.

### Syntax

```
void OnVideoRemoteFrameRGB(  
    LineNo,  
    FrameRGB,  
    FrameSize,  
    FrameWidth,  
    FrameHeight  
)
```

### Parameters

`LineNo(integer)`

This parameter value specifies the specific line. The `LineNo` value is a unique number to identify a specific line.

`FrameRGB(integer)`

Frame data in the form of RGB.

`FrameSize(integer)`

Specifies the Frame data size.

`FrameWidth(integer)`

Specifies the Frame width.

`FrameHeight(integer)`

Specifies the Frame height.

### Example

```
void OnVideoRemoteFrameRGB(LineNo, FrameRGB, FrameSize,  
    FrameWidth, FrameHeight)  
{  
  
}
```

### See Also

`OnVideoDeviceFrameRGB()`, `OnVideoRemoteStarted()`



## OnVideoDeviceFrameRGB()

The `OVideoDeviceFrameRGB()` event triggers when VaxVoIP component receives a video frame from camera device for preview purposes.

### Syntax

```
void OnVideoDeviceFrameRGB(  
    DeviceId,  
    FrameRGB,  
    FrameSize,  
    FrameWidth,  
    FrameHeight  
)
```

### Parameters

`DeviceId(integer)`

This parameter value can be any number from zero to total number of video devices - 1. Each number corresponds to a particular video device.

`FrameRGB(integer)`

Frame data in the form of RGB.

`FrameSize(integer)`

Specifies the Frame data size.

`FrameWidth(integer)`

Specifies the Frame width.

`FrameHeight(integer)`

Specifies the Frame height.

### Example

```
void OnVideoDeviceFrameRGB(DeviceId, FrameRGB, FrameSize,  
    FrameWidth, FrameHeight)  
{  
  
}
```

### See Also

`OnVideoRemoteFrameRGB()`, `OpenVideoDev()`

## OnServerConnectingREC()

The OnServerConnectingREC() event triggers when VaxVoIP component sends call connection request to SIP REC server and SIP REC server starts sending any provisional responses.

### Syntax

```
void OnServerConnectingREC(  
    LineNo,  
    StatusCode,  
    ReasonPhrase  
)
```

### Parameters

LineNo(integer)

This parameter value specifies the specific line. The LineNo value is a unique number to identify a specific line.

StatusCode(integer)

This parameter specifies SIP response status code (100, 180 etc).

ReasonPhrase(string)

This parameter specifies SIP response reason phrase (Trying, Session progress etc).

### Example

```
OnServerConnectingREC(LineNo, StatusCode, ReasonPhrase)  
{  
}
```

### See Also

OnServerConnectedREC(), OnServerFailedREC(), OnServerHungupREC()

**OnServerConnectedREC()**

The OnServerConnectedREC() event triggers when SIP REC server accepts the call connection request.

**Syntax**

```
void OnServerConnectedREC(LineNo)
```

**Parameters**

LineNo(integer)

This parameter value specifies the specific line. The LineNo value is a unique number to identify a specific line.

**Example**

```
OnServerConnectedREC(LineNo)  
{  
}
```

**See Also**

OnServerConnectingREC(), OnServerFailedREC(), OnServerHungupREC()

## OnServerFailedREC()

The OnServerFailedREC() event triggers when SIP REC server rejects call connection request by sending a SIP failure response.

### Syntax

```
void OnServerFailedREC(  
    LineNo,  
    StatusCode,  
    ReasonPhrase  
)
```

### Parameters

LineNo(integer)

This parameter value specifies the specific line. The LineNo value is a unique number to identify a specific line.

StatusCode(integer)

This parameter specifies SIP response status code (504, 505 etc).

ReasonPhrase(string)

This parameter specifies SIP response reason phrase (Bad Gateway, Service Unavailable etc).

### Example

```
OnServerFailedREC(LineNo, StatusCode, ReasonPhrase)  
{  
}
```

### See Also

OnServerConnectingREC(), OnServerConnectedREC(), OnServerHungupREC()

## **OnServerHungupREC()**

The OnServerHungupREC() event triggers when SIP REC server close/hangup the call session.

### **Syntax**

```
void OnServerHungupREC(LineNo)
```

### **Parameters**

LineNo(integer)

This parameter value specifies the specific line. The LineNo value is a unique number to identify a specific line.

### **Example**

```
OnServerHungupREC(LineNo)
{
}
```

### **See Also**

OnServerConnectingREC(), OnServerConnectedREC(), OnServerFailedREC()

## OnAddCallHistory()

The OnAddCallHistory() event triggers when component notifies about the call info for call history purposes.

### Syntax

```
void OnAddCallHistory(  
    OutboundCallType,  
    CallerName,  
    CallerId,  
    DialNo,  
    StartTime,  
    EndTime,  
    Duration,  
    HistoryTypeId  
)
```

### Parameters

Outbound(boolean)  
This parameter value is call type (outbound or inbound).

CallerName(string)  
This parameter specifies the Caller-Name.

CallerId(string)  
This parameter specifies the Caller-Id.

DialNo(string)  
This parameter specifies the dialer number.

StartTime(integer)  
This parameter specifies the start time of the call.

EndTime(integer)  
This parameter specifies the end time of the call.

Duration(integer)  
This parameter specifies the total duration of the call.

HistoryTypeId(integer)  
This parameter specifies the history type of the call.

- 0 = Outbound call type
- 1 = Inbound call type
- 2 = Missed call type
- 3 = Rejected call type

**Example**

```
OnAddCallHistory(Outbound, CallerName, CallerId, DialNo, StartTime,  
                EndTime, Duration, HistoryTypeId)  
{  
}
```

**See Also**

OnConnectedCall(), OnHungupCall()

**OnNetworkReachability()**

The OnNetworkReachability() event notifies the network availability.

**Syntax**

```
void OnNetworkReachability(Available)
```

**Parameters**

Available(boolean)

This parameter value can be 0 or 1.

**Example**

```
OnNetworkReachability(Available)  
{  
}
```

**See Also**

IsNetworkAvailable(), NetworkReachability()



**OnAudioDeviceMicVU()**

The OnAudioDeviceMicVU() event notifies the microphone's VU level.

**Syntax**

```
void OnAudioDeviceMicVU(LevelVU)
```

**Parameters**

LevelVU(boolean)

This parameter specifies the VU value (0 to 100).

**Example**

```
OnAudioDeviceMicVU(LevelVU)  
{  
}  
}
```

**See Also**

OnAudioDeviceSpkVU(), AudioDeviceVU()

**OnAudioDeviceSpkVU()**

The OnAudioDeviceSpkVU() event notifies the speaker's VU level.

**Syntax**

```
void OnAudioDeviceSpkVU(LevelVU)
```

**Parameters**

LevelVU(boolean)

This parameter specifies the VU value (0 to 100).

**Example**

```
OnAudioDeviceSpkVU(LevelVU)  
{  
}  
}
```

**See Also**

OnAudioDeviceMicVU(), AudioDeviceVU()