



# AltiAgent ActiveX Programmer's Guide

This document provides instructions on configuring and using ActiveX controls with AltiAgent. API reference information is also provided.

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## Related Documentation

- **AltiGen - AltiAgent Manual** - information on installation and configuration of the AltiAgent client system software.

## Using AltiAgent ActiveX Control Object

The AltiAgent ActiveX Control Object is an ActiveX Object. It will work with AltiAgent, getting call-related information from AltiAgent, which acts as a server, and implement actions based on the call information, for example, popping up corresponding customer information and logging caller ID into a database.

This document contains descriptions of AltiAgent ActiveX Control Object files and type library, followed by examples in VC++.

## Understanding Key Files

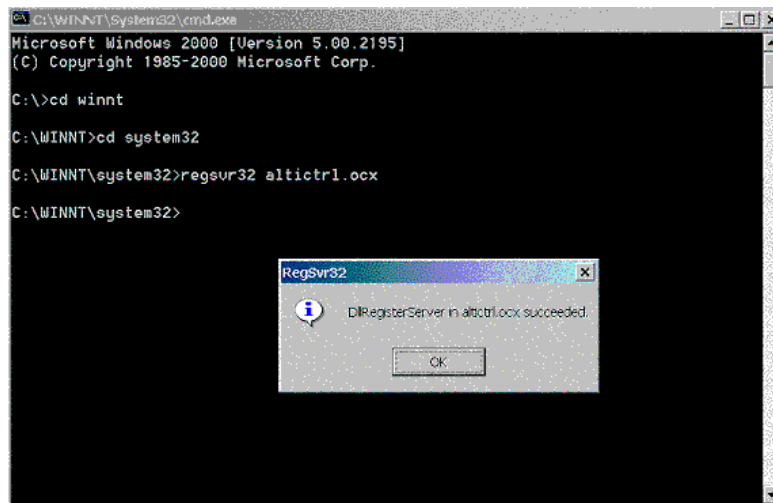
- **AltiCtrl.tlb**—this type library file contains functions within the AltiCtrl ActiveX Object. Methods contained in this type library need to be used directly by Visual C++ developers. In Visual Basic, type library functions are handled automatically at run time.
- **AltiCtrl.ocx**—third party applications use this ActiveX control module to develop applications. It needs to be registered before starting application development.

**Note:** Before using AltiAgent AltiCtrl to develop your application, you need to register AltiCtrl.ocx using RegSvr32.exe first. Because this object will work with AltiAgent, you need to run an AltiAgent client when you develop and run your application on the same machine.

## Basic Procedure of Using AltiAgent ActiveX

To use ActiveX control object with AltiAgent:

1. Make sure AltiAgent is installed on the client desktop PC.
2. Copy AltiCtrl.ocx file from AltiAgent API directory to Windows system32 (NT/2000) or system (98) directory.
3. Bring up command prompt and register altictrl.ocx



4. Edit VB or VC sample code to interface with destination client application.
5. Compile customized code to an executable file.
6. Copy that executable file to the same directory as AltiAgent.

## Using AppWizard to Create a Project

Use AppWizard to create a dialog based MFC project:

1. Choose **MFC AppWizard (exe)** and create a new win32 project named "**ExampleVc**"; press **Next**.
2. Set **Dialog based** as the type of the Application; press **Next**.
3. Keep **ActiveX Control** and **Windows Sockets** checkboxes checked.
4. The program uses shared MFC DLLs (AltiCtrl uses shared MFC DLLs).
5. Click **Finished** to create the project.

## Inserting AltiCtrl into dialog

AltiCtrl is an ActiveX Control without any GUI. It is invisible and can be inserted anywhere

1. Open the main dialog (IDD\_EXAMPLEVC\_DIALOG)
2. Click the right mouse button on the dialog and a context menu will display.
3. Choose **Insert ActiveX Control** to display the **Insert ActiveX Control** dialog box.
4. Select **AltiCtrl Control** and click **OK** to add it.
5. Place the control at a suitable location and size it as desired. Please note that the control is invisible at runtime.
6. Identify the control as **IDC\_ALTICTRLCTRL1** (default value).

## Handle AltiCtrl Events

To add an event process function:

1. Open **Class Wizard** and go to **Message Maps** page.
2. Set **CExampleVcDlg** as current class.
3. Set **IDC\_ALTICTRLCTRL1** as current selection of "*Object Ids*" list box and all AltiCtrl Events will be displayed in **Message** list box.
4. Add member functions for the events you would like to handle.
5. Add code for these member functions.

## AltiCtrl Methods

When adding a function to handle an AltiCtrl Event, you don't need to worry about how and when the function is called. AltiCtrl will perform the event call back for you.

When using the AltiCtrl properties of getting and setting methods, you can use AltiCtrl to set or monitor a Call property. Before doing so, you must add a member variable associated with this control.

To add a member variable associated with this control:

1. Open **Class Wizard** and go to **Member Variables** page.
2. Set **CExampleVcDlg** as current class.
3. Double-click **IDC\_ALTICTRLCTRL1** of **Control Ids** list box and a message box will be displayed to prompt you to add the ActiveX Control **AltiCtrl** into the project. Click **OK** to have **Developer Studio** generate a C++ wrapper class.
4. When the **Confirm Classes** dialog box appears, set **CAltiCtrl** as the class name and click **OK**.

5. In the **Add Member Variable** dialog, create a member variable named **m\_altictrl**.
6. Click **OK** to add it to the class. **m\_altictrl** is now a member of **CAltictrl**.

Now, VC has created a member in class **CExampleVcDlg** which can be used as a general object.

## AltAgent ActiveX Control API Reference

### StartAltictrl

#### Description

Start Altictrl on the client. This is the first step to use this Altictrl.

#### VC++ Syntax

```
BOOL StartAltictrl()
```

#### VB++ Syntax

```
object.StartAltictrl()
```

#### Return type

BOOL TRUE if connect to AltAgent successfully; otherwise FALSE.

#### Remark

This function is the key of using Altictrl. Client cannot call the method or get any event from AltAgent if this function call fails.

#### VC++ Example

```
BOOL bstart= m_altictrl.StartAltictrl();
```

#### VB Example

```
Dim bstart as bool  
bstart = Altictrl1.StartAltictrl()
```

## Altictrl Event

### CallNotify

#### Description

When AltView/AltAgent 5.0 receives a call event from Altiserv, Altictrl will send the event to your application, each call will have an unique session ID, each call may several events with its unique session ID.

#### Syntax

```
OnCallNotifyXXXXX (long ulSessionID, short uStatus, LPCTSTR  
szCallerID, LPCTSTR szCallerName, LPCTSTR szCallDNIS, LPCTSTR  
szWorkgroup, LPCTSTR pszDateTime, LPCTSTR pszDuration)
```

**Parameters**

|                     |                                   |
|---------------------|-----------------------------------|
| <i>ulSessionID</i>  | = <i>Session ID</i>               |
| <i>uStatus</i>      | = <i>Call Status</i>              |
| <i>szCallerID</i>   | = <i>Caller ID</i>                |
| <i>szCallerName</i> | = <i>Caller Name</i>              |
| <i>szCallDNIS</i>   | = <i>DNIS</i>                     |
| <i>pszDateTime</i>  | = <i>Call start date and time</i> |
| <i>pszDuration</i>  | = <i>Conversation duration</i>    |

**Remark**

Call status value:

|                                  |    |
|----------------------------------|----|
| LINECALLSTATE_IDLE               | 0  |
| LINECALLSTATE_OFFERING           | 1  |
| LINECALLSTATE_ACCEPTED           | 2  |
| LINECALLSTATE_DIALTONE           | 3  |
| LINECALLSTATE_DIALING            | 4  |
| LINECALLSTATE_RINGBACK           | 5  |
| LINECALLSTATE_BUSY               | 6  |
| LINECALLSTATE_SPECIALINFO        | 7  |
| LINECALLSTATE_CONNECTED          | 8  |
| LINECALLSTATE_PROCEEDING         | 9  |
| LINECALLSTATE_ONHOLD             | 10 |
| LINECALLSTATE_CONFERENCED        | 11 |
| LINECALLSTATE_ONHOLDPENDCONF     | 12 |
| LINECALLSTATE_ONHOLDPENDTRANSFER | 13 |
| LINECALLSTATE_DISCONNECTED       | 14 |
| LINECALLSTATE_AA                 | 15 |
| LINECALLSTATE_VM                 | 16 |
| LINECALLSTATE_PARK               | 17 |
| LINECALLSTATE_UNKNOWN            | 18 |
| LINECALLSTATE_MUSICONHOLD        | 19 |
| LINECALLSTATE_PLAYVOICEMAIL      | 20 |
| LINECALLSTATE_CALLPENDING        | 21 |

## AltCtrl Methods

### SetUserData

#### Description

Set user data for existing call. User data is used for AltAgent to describe a call information, for example "This call is urgent" and so on. It can be any information defined by user.

#### VC++ Syntax

```
BOOL SetUserData(int SessionID , CString string)
```

#### VB Syntax

```
object.SetUserData(SessionID, string)
```

#### Parameters

SessionID [In] - unique ID for a call

String [In] - set user data for a call; maximum length is 256 bytes

#### Return Type

Bool - if successful TRUE; otherwise FALSE

#### Remark

SessionID - Session ID received from OnCallNotify event needs to be provided as input to this function. This Session ID is valid in ring event and connect event. After Disconnect event, it is no longer valid.

#### VC++ Example

```
CString data = _T("user data");  
m_altictrl. SetUserData (ulSessionID, data);
```

#### VB Example

```
Dim data As String  
Data = "user data"  
If (AltCtrl1.SetUserData (ulSessionID, data) = False) Then  
...  
Else  
...  
End If
```

### GetUserData

#### Description

Get user data for existing call.

#### VC++ Syntax

```
CString GetUserData(int SessionID)
```

**VB Syntax**

```
object.GetUserData(SessionID)
```

**Parameters**

SessionID - [In]: unique ID for a call

**Return Type**

String user data for a call; maximum length is 256 bytes.

**Remark**

SessionID - Session ID received from OnCallNotify event needs to be provided as input to this function. This Session ID is valid in ring event and connect event. After Disconnect event, it is no longer valid.

**VC++ Example**

```
CString data;
data = m_altictrl.GetUserData (ulSessionID);
```

**VB Example**

```
Dim data As String
Data = Altictrl1.GetUserData (ulSessionID)
```

**SetIVRData****Description**

Set IVR data for existing call (used only in Web call). IVR data is the format of "name=value" pairs, which can be used in Web Call and Auto Atendant; for example:

"FirstName=John&LastName=Anny&Password=hello1234" and so on.

**Note**

SetIVRData is a reserved API.

**VC++ Syntax**

```
BOOL SetIVRData(int SessionID, CString string)
```

**VB Syntax**

```
object.SetIVRData(SessionID, string)
```

**Parameters**

SessionID [In]: unique ID for a call

String [In]: Set IVR data for a call, maximum length is 256 bytes

**Return Type**

Bool if successful TRUE; otherwise FALSE.

**Remark**

SessionID - Session ID received from OnCallNotify event needs to be provided as input to this function. This Session ID is valid in ring event and connect event. After Disconnect event, it is no longer valid.

### VC++ Example

```
CString data = _T("ivr data");  
m_altictrl.SetURLData (ulSessionID,data);
```

### VB Example

```
Dim data As String  
Data = "ivr data"  
If (AltICtrl1.SetURLData (ulSessionID, data) = False) Then  
...  
Else  
...  
End If
```

## GetIVRData

### Description

Get IVR data for existing call.

### VC++ Syntax

```
CString GetIVRData (int SessionID)
```

### VB Syntax

```
object.GetIVRData (SessionID)
```

### Parameters

SessionID [In]: unique ID for a call

### Return Type

String IVR data for a call; maximum length is 256 bytes.

### Remark

SessionID - Session ID received from OnCallNotify event needs to be provided as input to this function. This Session ID is valid in ring event and connect event. After Disconnect event, it is no longer valid.

### VC++ Example

```
CString data;  
data = m_altictrl.GetIVRData (ulSessionID);
```

### VB Example

```
Dim data As String  
Data = AltICtrl1.GetIVRData (ulSessionID)
```

## SetURLData

### Description

Set URL data for existing call (used only in Web call). When a call comes to a Web site, it can contain URL data such as "http://www.altigen.com," so that user application can know where this call comes from.

### Note

SetURLData is a reserved API.

### VC++ Syntax

```
BOOL SetURLData(int SessionID, CString string)
```

### VB Syntax

```
object.SetURLData(SessionID, string)
```

### Parameters

SessionID [In]: unique ID for a call

String [In] Set URL data for a call; maximum length is 256 bytes.

### Return Type

Bool if successful TRUE; otherwise FALSE

### Remark

SessionID - Session ID received from OnCallNotify event needs to be provided as input to this function. This Session ID is valid in ring event and connect event. After Disconnect event, it is no longer valid.

### VC++ Example

```
CString data = _T("url data");
m_altictrl.SetURLData (ulSessionID, data);
```

### VB Example

```
Dim data As String
Data = "url data"
If (AltiCtrl1.SetURLData (ulSessionID, data) = False) Then
...
Else
...
End If
```

## GetURLData

### Description

Get URL data for existing call

### VC++ Syntax

```
CString GetURLData(int SessionID)
```

## VB Syntax

```
object.GetURLData (SessionID)
```

## Parameters

SessionID [In]: unique ID for a call

## Return Type

String URL data for a call; maximum length is 256 bytes.

## Remark

SessionID - Session ID received from OnCallNotify event needs to be provided as input to this function. This Session ID is valid in ring event and connect event. After Disconnect event, it is no longer valid.

## VC++ Example

```
CString data;  
data = m_altictrl.GetURLData (ulSessionID);
```

## VB Example

```
Dim data As String  
Data = Altictrl1.GetURLData (ulSessionID)
```

## SetCallerName

### Description

Set Caller Name for existing call

### VC++ Syntax

```
BOOL SetCallerName (int SessionID ,CString string)
```

### VB Syntax

```
object.SetCallerNameData (SessionID, string)
```

### Parameters

SessionID [In]: unique ID for a call

String [In] Set URL data for a call, max-length is 256 bytes

### Return type

Bool The value is TRUE if successful; otherwise FALSE

### Remark

SessionID - Session ID received from OnCallNotify event needs to be provided as input to this function. This Session ID is valid in ring event and connect event. While after Disconnect event, it is no longer valid.

### VC++ Example

```
CString name = _T("Tom");  
m_altictrl.SetCallerName (ulSessionID, name);
```

**VB Example**

```

Dim data As String
Data = "Tom";
If (AltiCtrl1.SetCallerName(ulSessionID, data) = False) Then
...
Else
...
End If

```

**GetExtNumber****Description**

Get extension number which AltiAgent had been logged in.

**VC++ Syntax**

```
CString GetExtNumber()
```

**VB++ Syntax**

```
object.GetExtNumber()
```

**Return type**

String extension number for the AltiAgent login is 256 bytes.

**VC++ Example**

```
CString data = m_altictrl.GetExtNumber();
```

**VB Example**

```

Dim data as String
data = AltiCtrl1.GetExtNumber()

```

**MakeCall****Description**

Make a call through AltiAgent.

**VC++ Syntax**

```
long MakeCall(LPCTSTR pszDialNumber);
```

**VB++ Syntax**

```
object.MakeCall(string)
```

**Parameters**

pszDialNumber [In]: Destination telephone number, less than 32 digits

**Return type**

0 - Make call command is sent successfully

- 1 - Unknown error occurs
- 2 - Disconnect AltiAgent
- 999 - Exception occurred

### VC++ Example

```
BOOL bstart= m_altictrl. MakeCall("101");
```

### VB Example

```
Dim Result as Integer  
Dim dirNum As String  
dirNum = "101"  
Result = AltiCtrl1.MakeCall(dirNum)
```

## GetTrunkAccessCode

### Description

Get default trunk access code set in AltiAgent.

### VC++ Syntax

```
CString GetTrunkAccessCode ();
```

### VB++ Syntax

```
object. GetTrunkAccessCode()
```

### Return type

Default trunk access code set in AltiAgent

### VC++ Example

```
CString strTrunkAccess= m_altictrl. GetTrunkAccessCode ();
```

### VB Example

```
Dim data As String  
Data = AltiCtrl1.GetIVRData(ulSessionID)
```

**Note:** The ctrl will show a window in client application. To hide window, using the following code

### VC++ Example

```
m_altictrl.ShowWindow(SW_HIDE);
```

### VB Sample

```
AltiCtrl1.Visible = TRUE
```

I