



Coding Corner

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Microsoft Agent 2.0

Have you ever had the pesky office assistant pop up while you were working with the Microsoft Office Suite? Did you know that you can add an assistant to your Visual Basic applications? While these assistants can be intrusive, they do have some good points. For example, you can pass a string of text to the assistant and tell it to "speak" the words contained in that string.

The Microsoft Agent allows you to programmatically control the assistant. This month, I will show you how to code a simple Visual Basic application that will invoke Microsoft Agent. The application will direct the Microsoft Agent to show the Merlin assistant and will also tell Merlin to speak a few words.

Have you ever had the pesky office assistant pop up while you were working with the Microsoft Office Suite?

REQUIREMENTS

You will need the following components to build this application on your machine:

- Microsoft Visual Basic. The example shown in this column uses Visual Basic .NET (version 7.0).
- The MS-Agent Active-X control. You can download this from www.microsoft.com/msagent/downloads.htm.
- One or more MS-Agent characters. To determine if you have an MS-Agent character, search for files named *.acs on your hard drive. You can download MS-Agent characters from www.microsoft.com/msagent/downloads.htm.

LET'S CODE

If you are using Visual Basic .NET, the following steps will probably work as coded. If you are using a different version of Visual

FIGURE 1: ADDING THE MICROSOFT AGENT TO THE TOOLBOX

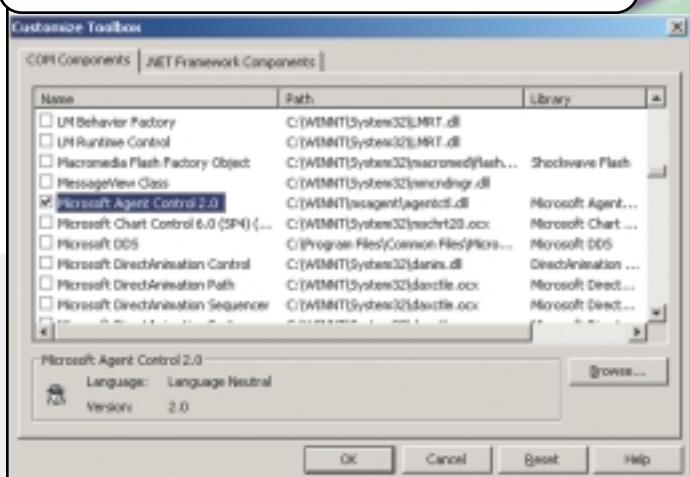


FIGURE 2: ADDING THE MICROSOFT AGENT TO THE VB FORM

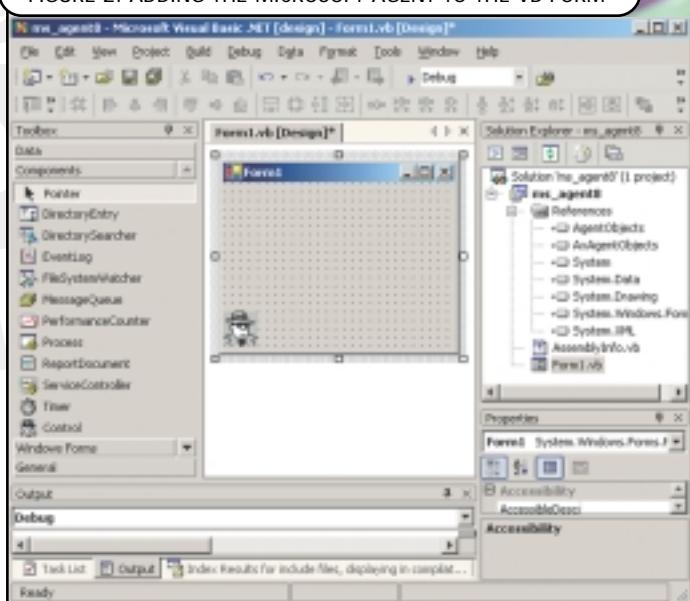


FIGURE 3: SIMPLE VB CODE TO MAKE MERLIN SPEAK

```
AxAgent1.Characters.Load("Merlin", DATAPATH)
Merlin = AxAgent1.Characters("Merlin")
Merlin.Show()
Merlin.Speak("Technical Support Magazine is the best.")
```

FIGURE 4: SIMPLE PROGRAM USING MICROSOFT AGENT

```

    ' Microsoft Visual Basic .NET [design] - Form1.vb
    ' File  DR  View  Insert  Build  Debug  Tools  Window  Help
    ' Form1.vb [Design]  Form1_Load
    ' Form1
    ' Inherits System.Windows.Forms.Form
    ' Dim Merlin As AgentObjects.IAgentCtlCharacterEx
    ' Const DATAPATH As String = "c:\winnt\msagent\chars\merlin.acs"
    ' Windows Form Designer generated code
    Private Sub Form1_Load(ByVal sender As System.Object, ByVal e As
        AxAgent1.CharacterEvents.Load("Merlin", DATAPATH)
        Merlin = AxAgent1.Characters("Merlin")
        Merlin.Show()
        Merlin.Speak("Technical Support Magazine is the best.")
    End Sub
    End Class

```

FIGURE 5: MERLIN SPEAKS!



FIGURE 6: ADDING A TEXT BOX AND A BUTTON TO THE VB FORM

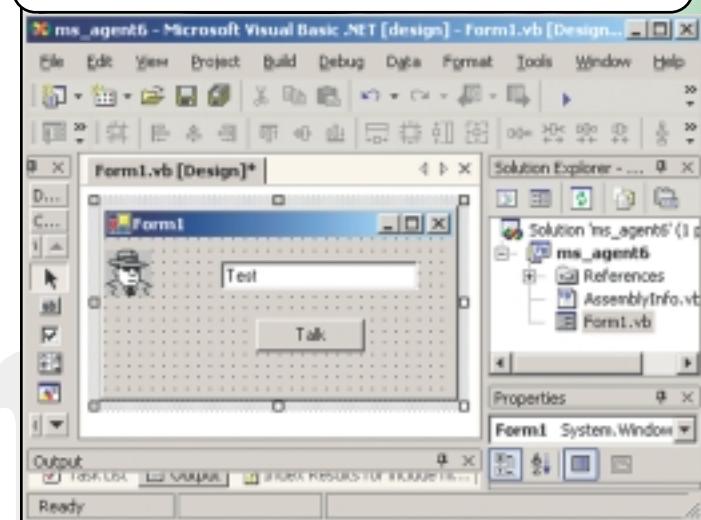
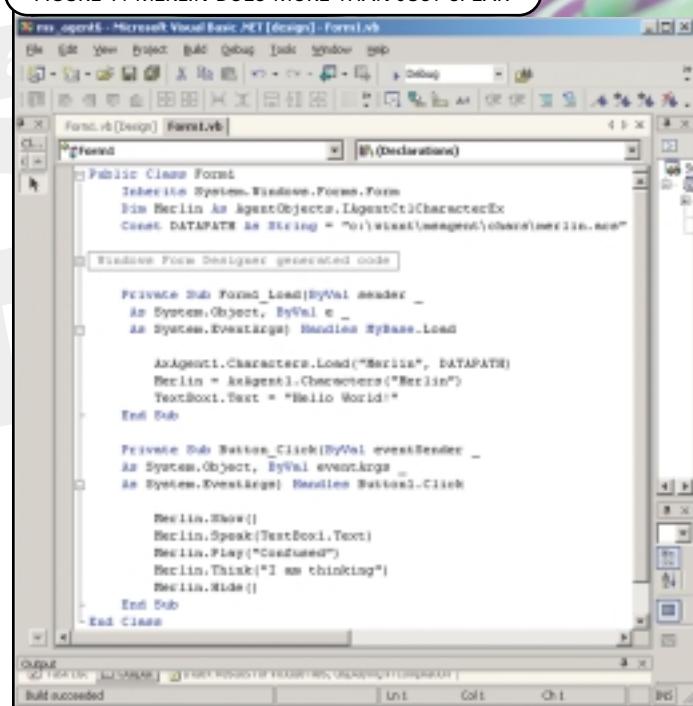


FIGURE 7: MERLIN DOES MORE THAN JUST SPEAK



Basic, you may need to tinker around a bit to get the code samples working. From Visual Basic, perform the following:

1. Click on Tools > Customize Toolbox and then on “Microsoft Agent Control 2.0” to add the Microsoft Agent Control to the Toolbox.
 2. Click on OK, as shown in Figure 1.
 3. To start a new project, choose Visual Basic Projects > Windows Application.
 4. Enter a Name and Location for your project, and click OK. You should see a blank VB form on your screen.
 5. From the Toolbox, click on Components, and then drag the Control component to the form. Your screen should look like Figure 2.
 6. Double-click on the form to edit the code.
 7. After the “Inherits” statement, enter the following lines of code:
- ```

 Dim Merlin As AgentObjects.IAgentCtlCharacterEx
 Const DATAPATH As String = "c:\winnt\msagent\chars\merlin.acs"

```
8. After the “Private Sub Form1\_Load” statement, enter the lines of code shown in Figure 3. Your screen should look like Figure 4.
  9. Build and then run your project.

If all goes according to plan, Merlin (as shown in Figure 5) should pop up on your screen and speak the words “Technical Support Magazine is the best.” If you want to get a bit fancier, you can add a text box and a button to make Merlin say whatever words you type into the text box. Figures 6 and 7 illustrate this fancier version of the application.

## CONCLUSION

As I was investigating the Microsoft Agent, several pieces of documentation stated that a “text to speech engine” was required for this type of application. I did not install this engine and the application worked. If Merlin fails to speak for you, you can try downloading the text to speech engine from the link specified in the “Requirements” section.

The assistant can do more than just talk. It can also:

- think
- look up
- look down
- blink
- look confused
- look sad
- look surprised
- perform magic

For more information on the Microsoft Agent, please refer to:

[www.freevbc.com/](http://www.freevbc.com/) or

[www.microsoft.com/products/msagent/default.htm](http://www.microsoft.com/products/msagent/default.htm).



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