

## **Access 2000 and Visual Basic 6**

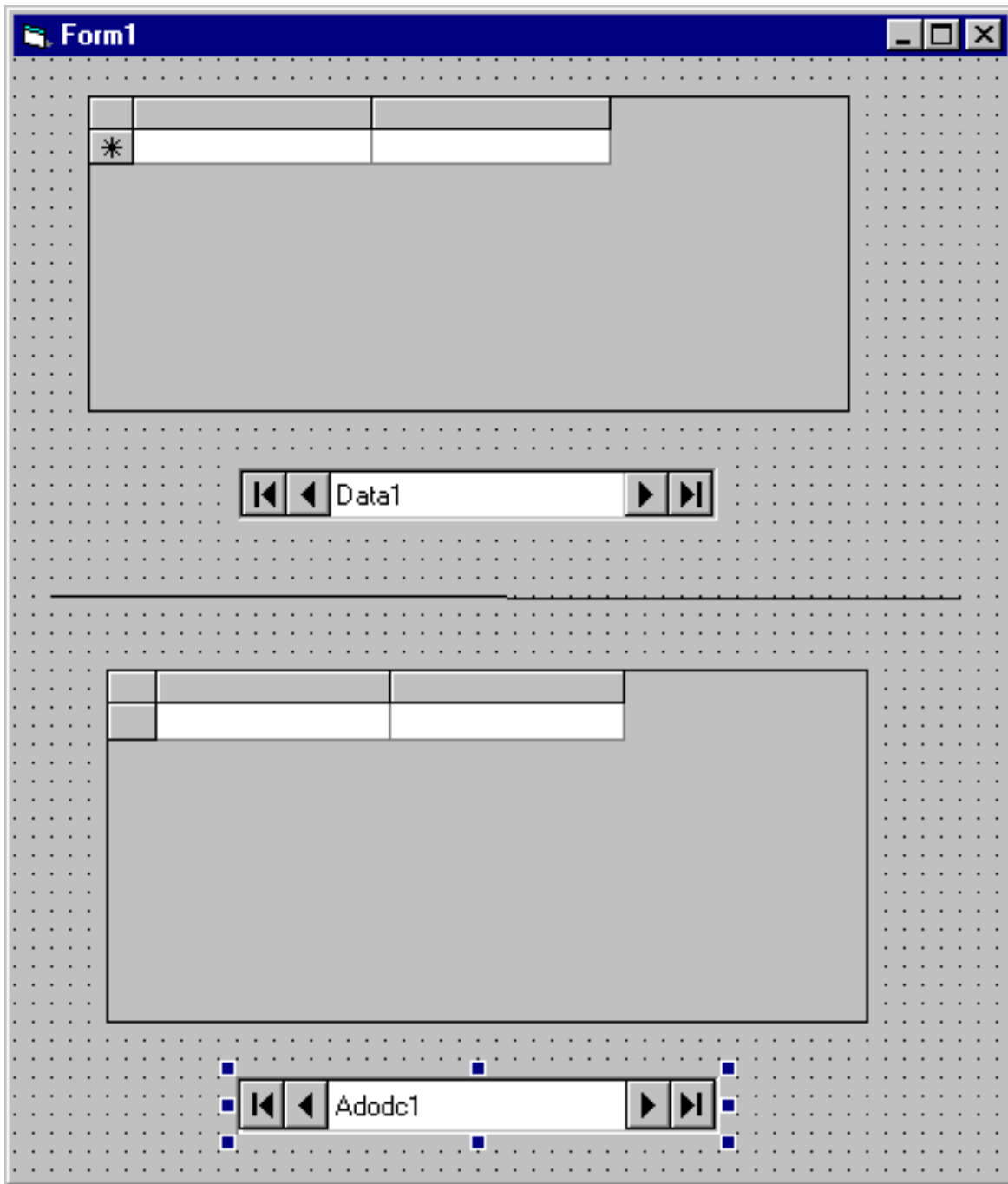
Since my book went to press, a number of readers have written to me telling me that they created databases using Access 2000, and that Visual Basic 6 can't read them!

This got me to thinking that rather than waiting until my December article to discuss the Access 2000 issue, I would combine November's article on using the ADO Data Control with the issue of Access 2000. So here it is!

### **Access 2000 Databases and Visual Basic 6**

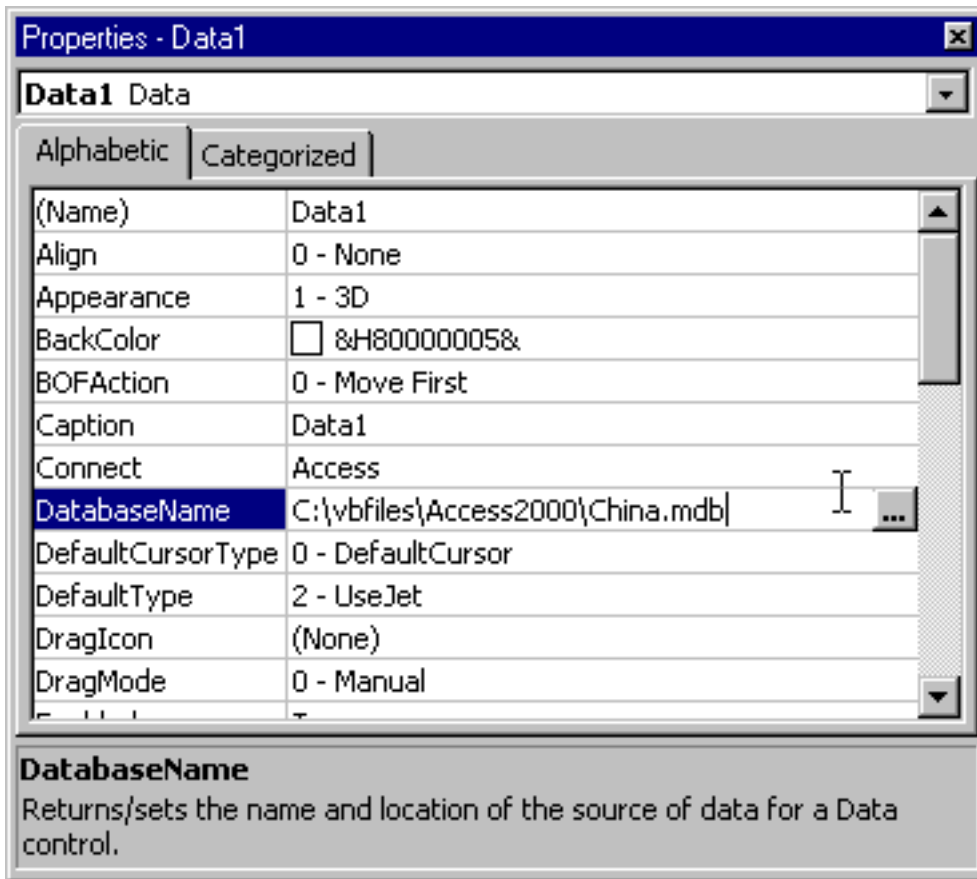
Can you open an Access 2000 Database using the DAO data control? What about with the ADO Data Control?

Let's check it out by creating a form with a DAO Data Control, the Microsoft Data Bound Grid Control 5.0 (which can only be used with the DAO Data Control found in the VB Toolbox), the ADO Data Control 6.0 and the Microsoft Data Grid Control 6.0 (which can only be used with the ADO Data Control).

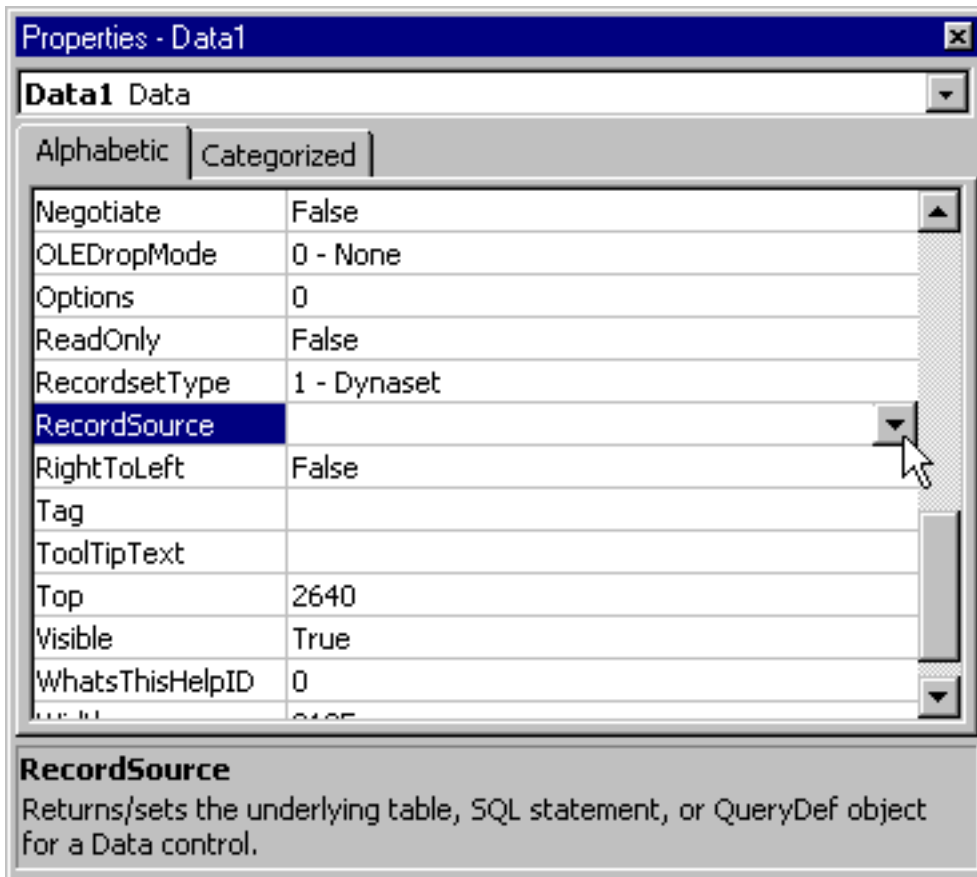


## What about the DAO Data Control

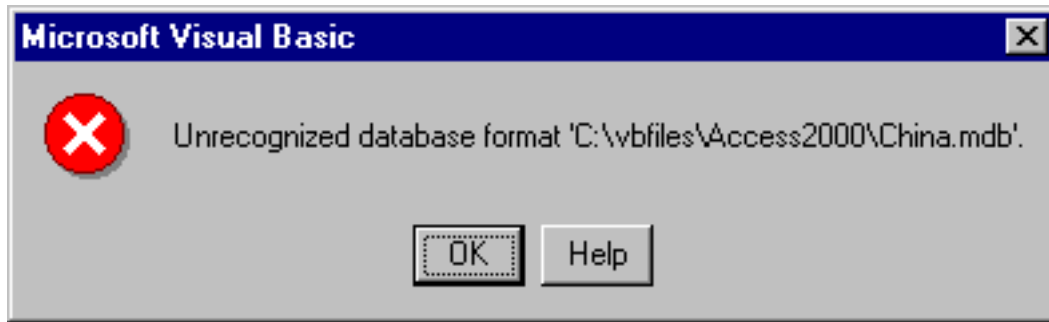
We can specify an Access 2000 Database as the source of the DatabaseName Property with no trouble...



but when you try to specify a RecordSource Property...



you'll receive this error.

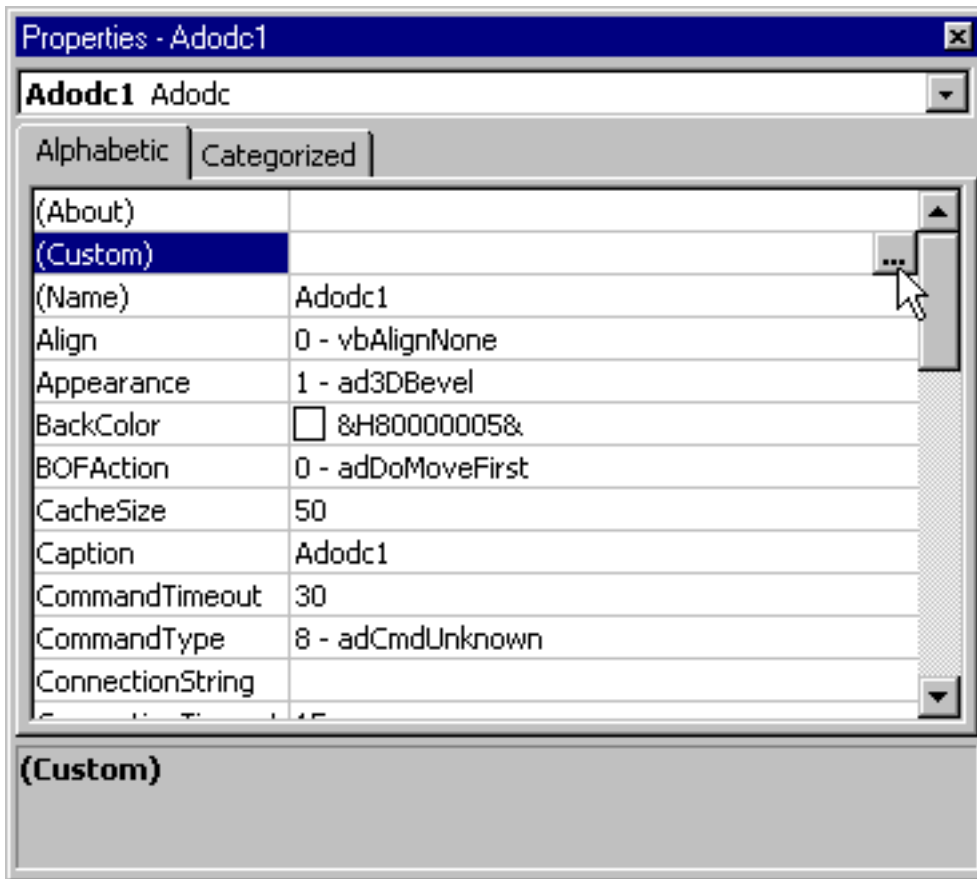


The problem?

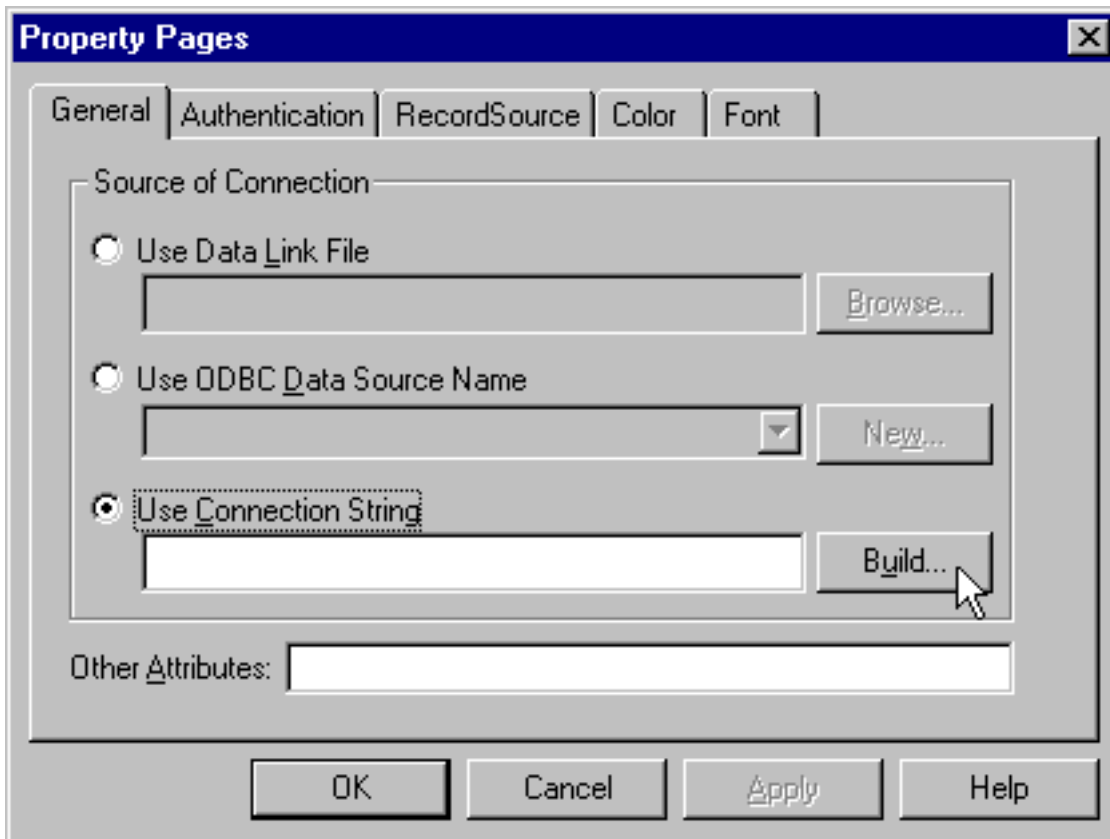
The DAO Data Control does not work, will it ever work, against an Access 2000 Database. Access 2000 uses the Jet 4.0 Database format, and the DAO Data Control recognizes only the Jet 3.51 format and earlier. However, if you absolutely must use the DAO Data Control with Access 2000 databases, there is a work around from Microsoft---but I must warn you it's very convoluted.

## What about the ADO Data Control

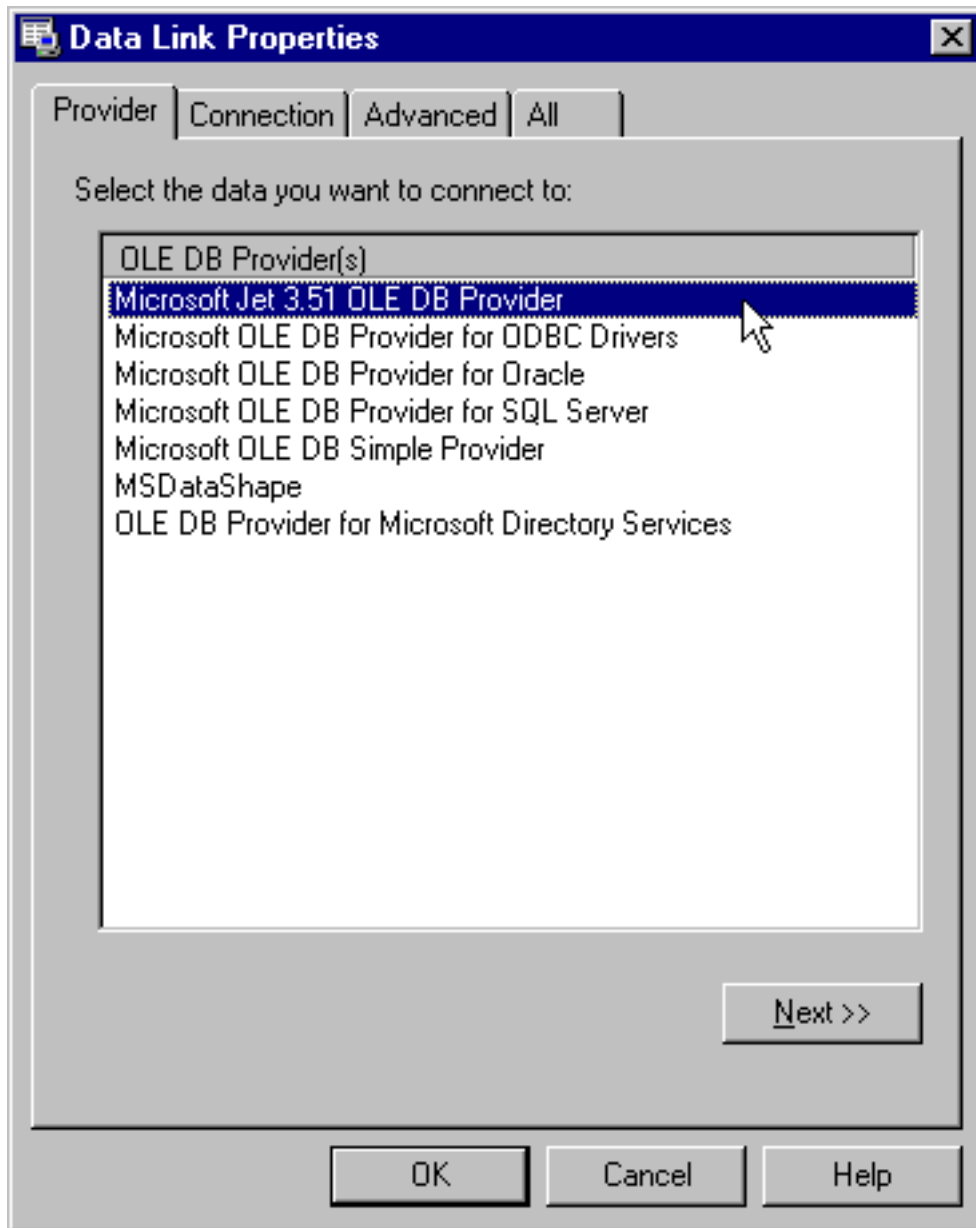
What about the ADO Data Control? Let's see. ADO connections are a little more complicated to set up. We start by clicking on the Custom Property in the ADO Data Control...



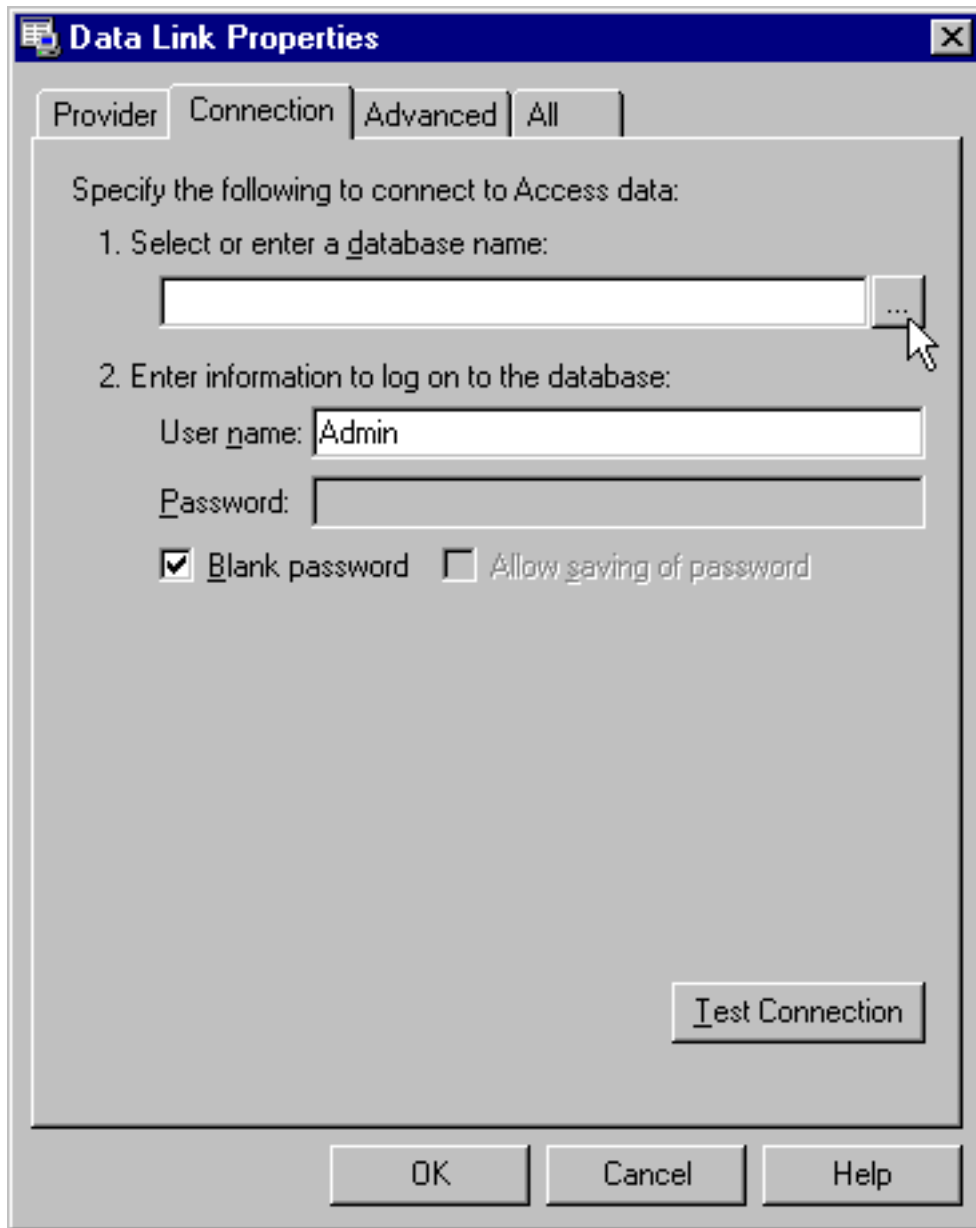
...then the Build Button...



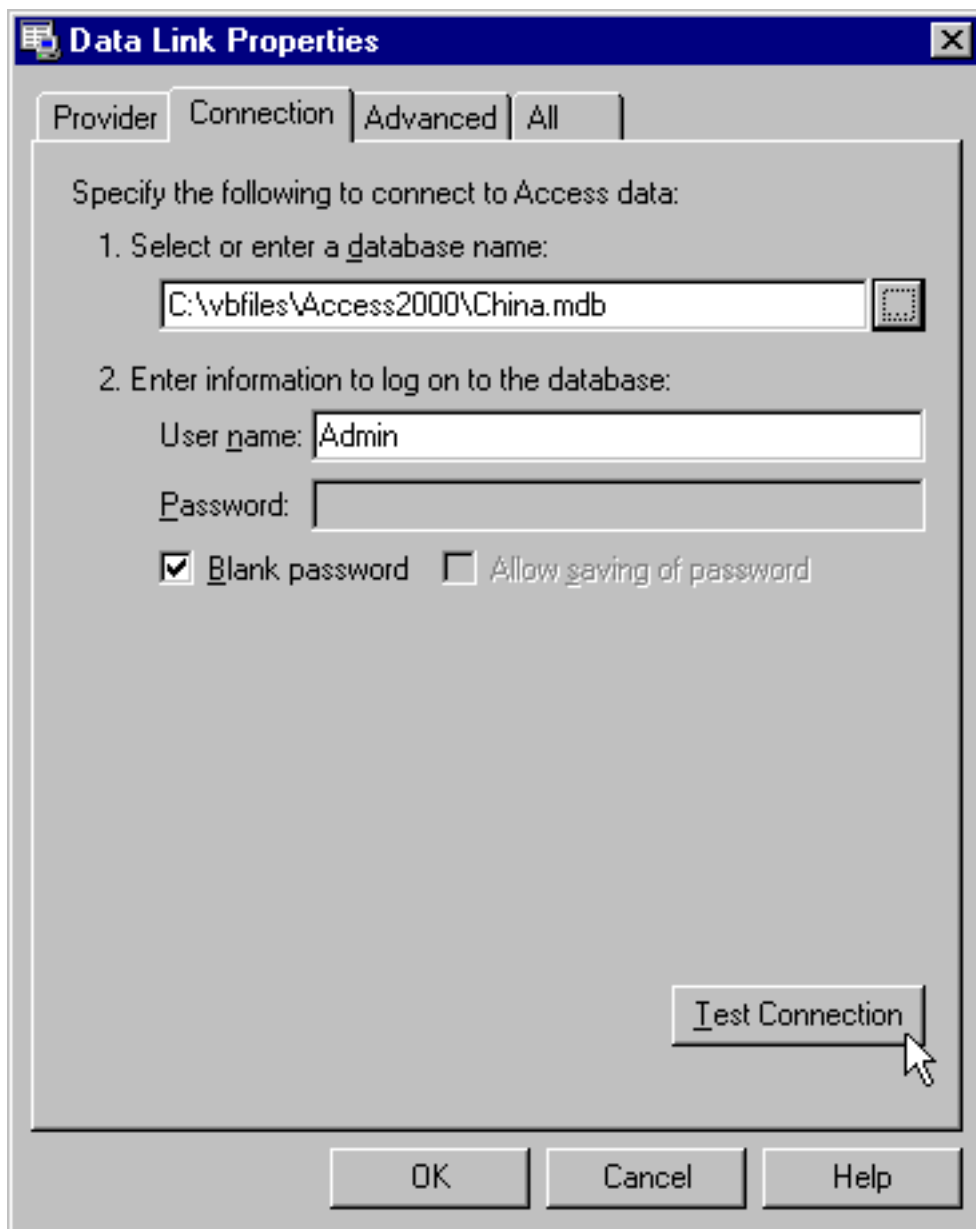
...now specify Jet 3.51 as the Database Provider and click on the Next button...



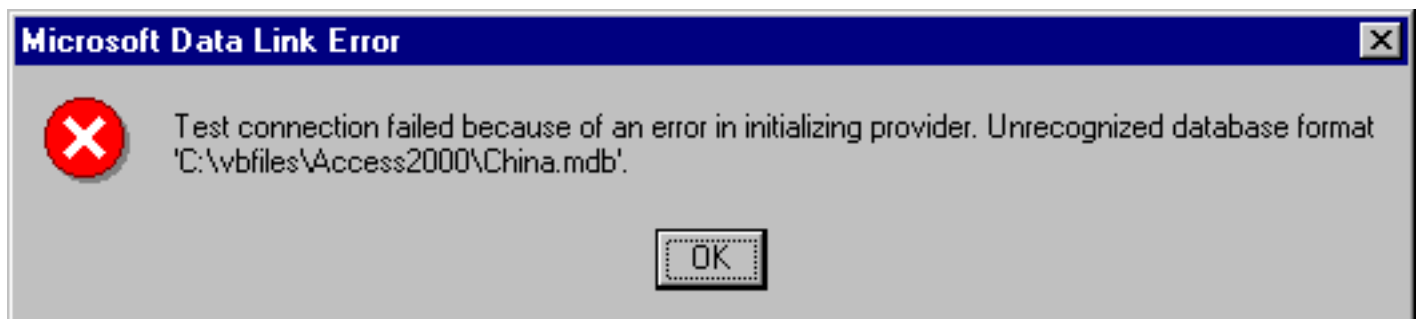
... then specify the Database by clicking on the Builder button...



and for good measure, test the connection by clicking on the Test Connection button...



But then we have the same problem...



What's the problem---does this mean that Visual Basic 6 cannot read an Access 2000 database?

Not at all--the problem is the Database Provider we specified. Remember, a little earlier I indicated that Access 2000 databases are in a Jet 4.0 format---we specified Jet 3.51 as our



Data Provider. We need to get the Jet 4.0 library in order to make the Data Connection work?

How do we do that?

You can get the Jet 4.0 library by downloading the Visual Basic 6 Service Pack. When you download the Service Pack, which you can find at this location

<http://msdn.microsoft.com/vstudio/sp/vs6sp3/vbdownload.asp?id=10>

you'll download 5 self-extracting executables

**vs6sp3b1.exe**

**vs6sp3b2.exe**

**vs6sp3b3.exe**

**vs6sp3b4.exe**

**vs6sp3s.exe**

Download each one of these files into a directory of their own---I chose Download. Once you have them downloaded, you'll need to expand each one of these files into a directory---I chose SERVICEPACK3.

After the 5 files have been extracted, you should see a file called

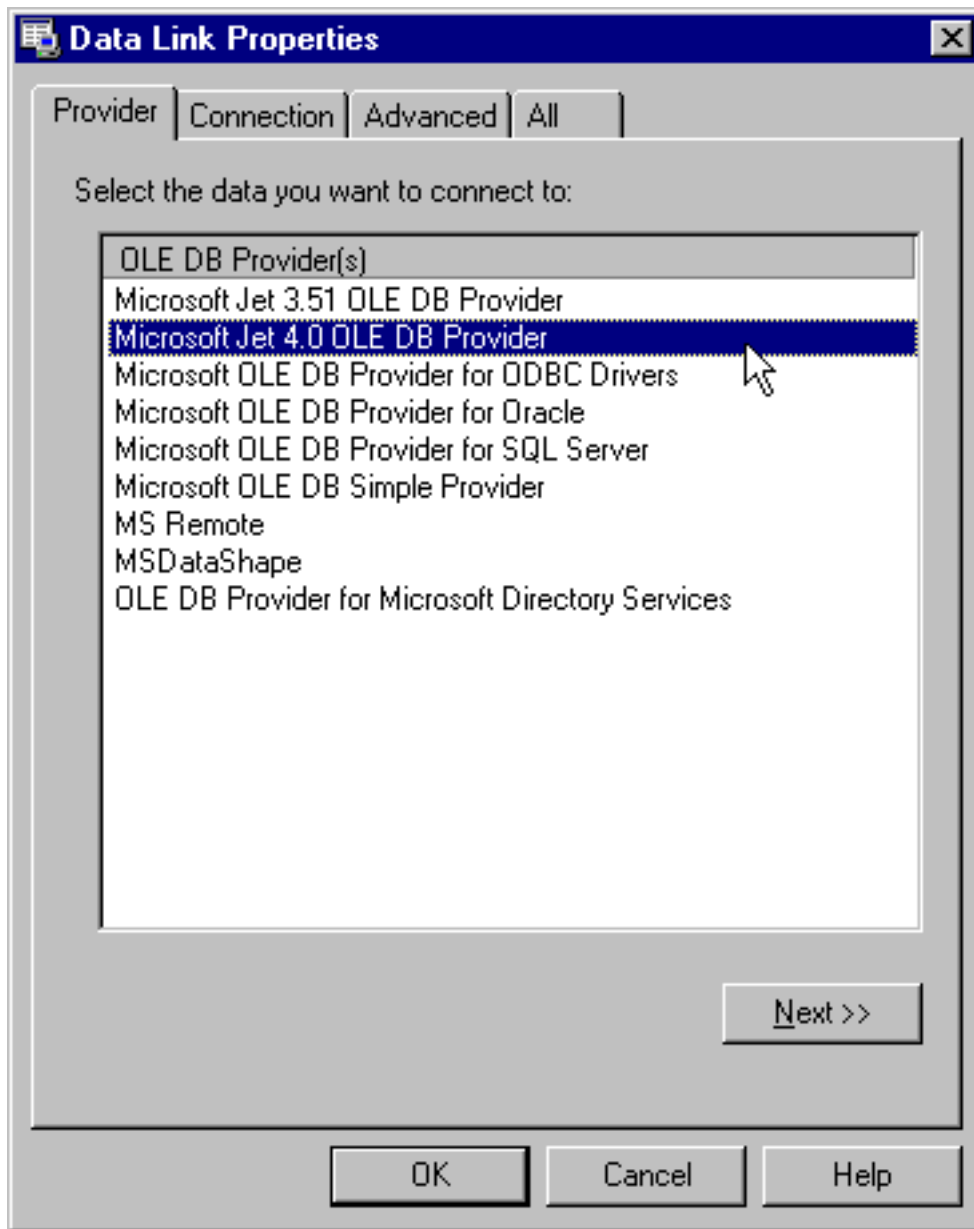
**mdac\_typ.exe**

Double click on it, and this will start you on your way toward installing Service Pack 1 of MDAC 2,1 (Microsoft Data Access Components), which contains the Jet 4.0 Data Provider. You'll need to reboot, and after that, you'll be set. The ADO connection to the Access 2000 Database will work (I'll show you that in a minute). However, since you've come this far, don't forget to install Service Pack 3 of Visual Basic which you can do by double-clicking on the file

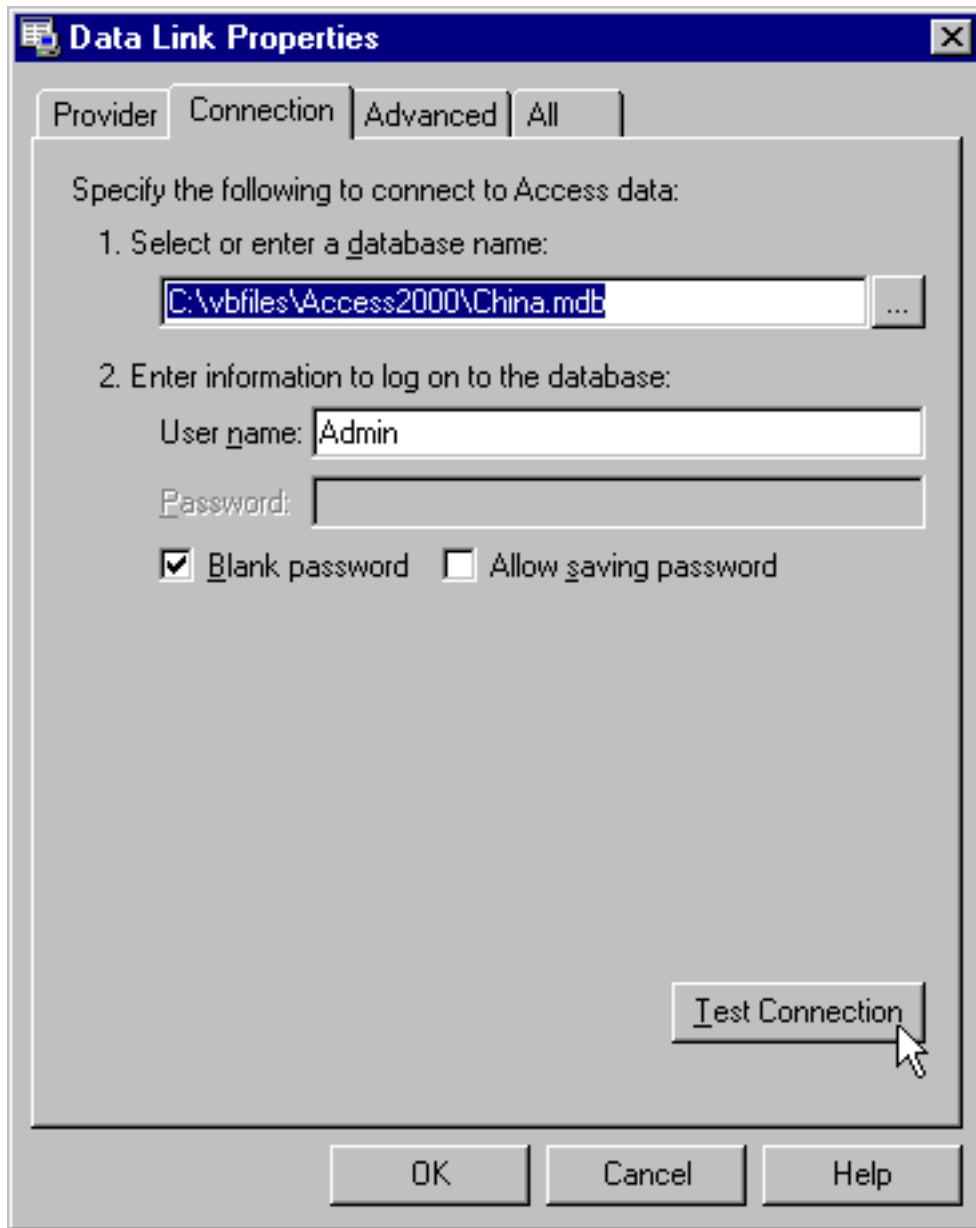
**setupsp3.exe**

It's not necessary to install Service Pack 3 to gain access to Jet 4.0---but it's always a good idea to be current with the Service Pack. By the way, if you install Service Pack 3, but don't see the Jet 4.0 Data Provider in the Data Provider window, that means you didn't install Service Pack 1 of MDAC---you'll need to do that separately.

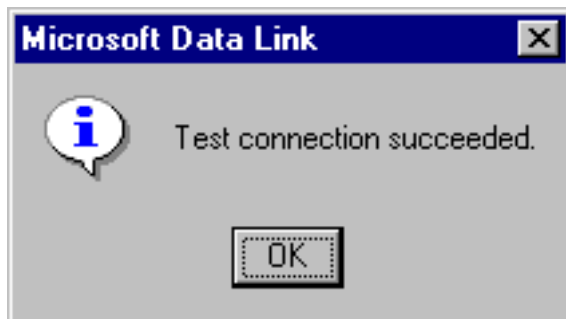
Let's go through the process of setting that ADO Connection again. Once again, click on the Custom Property of the ADO Data Control, and click on the Build Button. This time, when the Provider Window appears, you'll see Microsoft Jet 4.0...



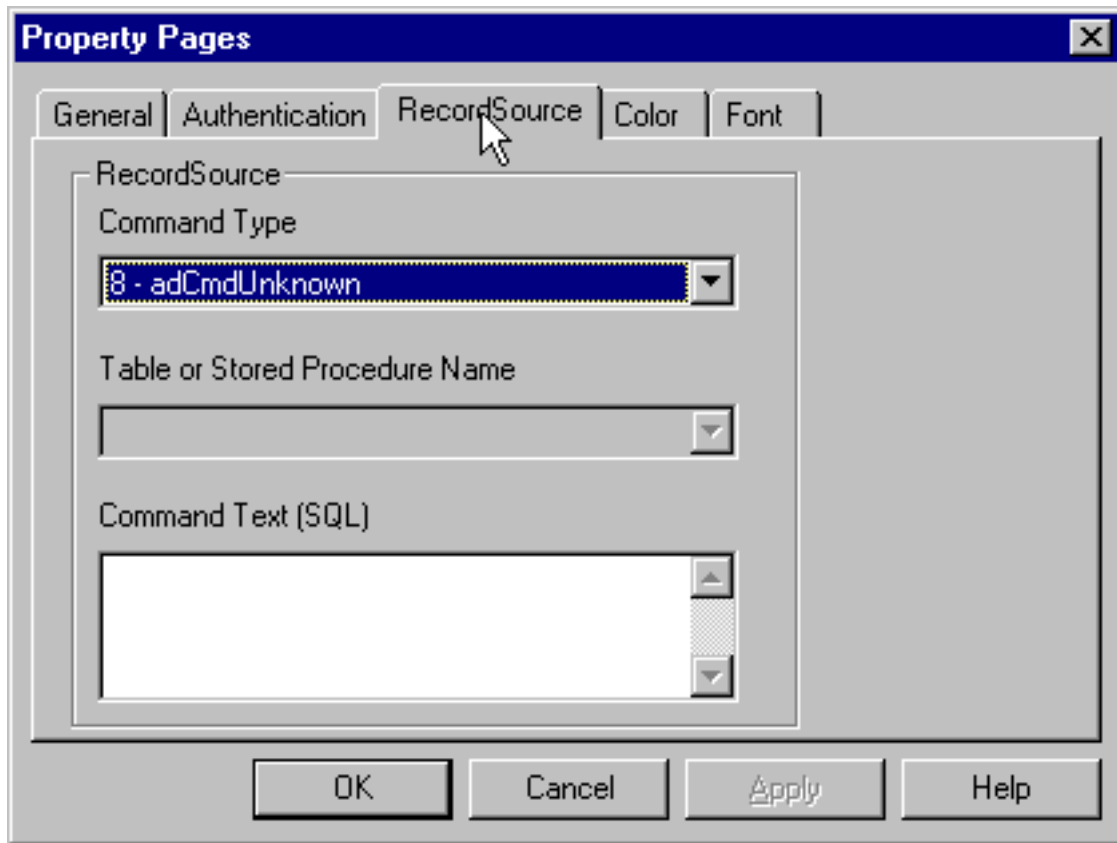
Select it, then click on the Next button. Once again, as we did previously, use the Builder button to locate and select the database to which you wish to connect, and then click on the Text Connection button.



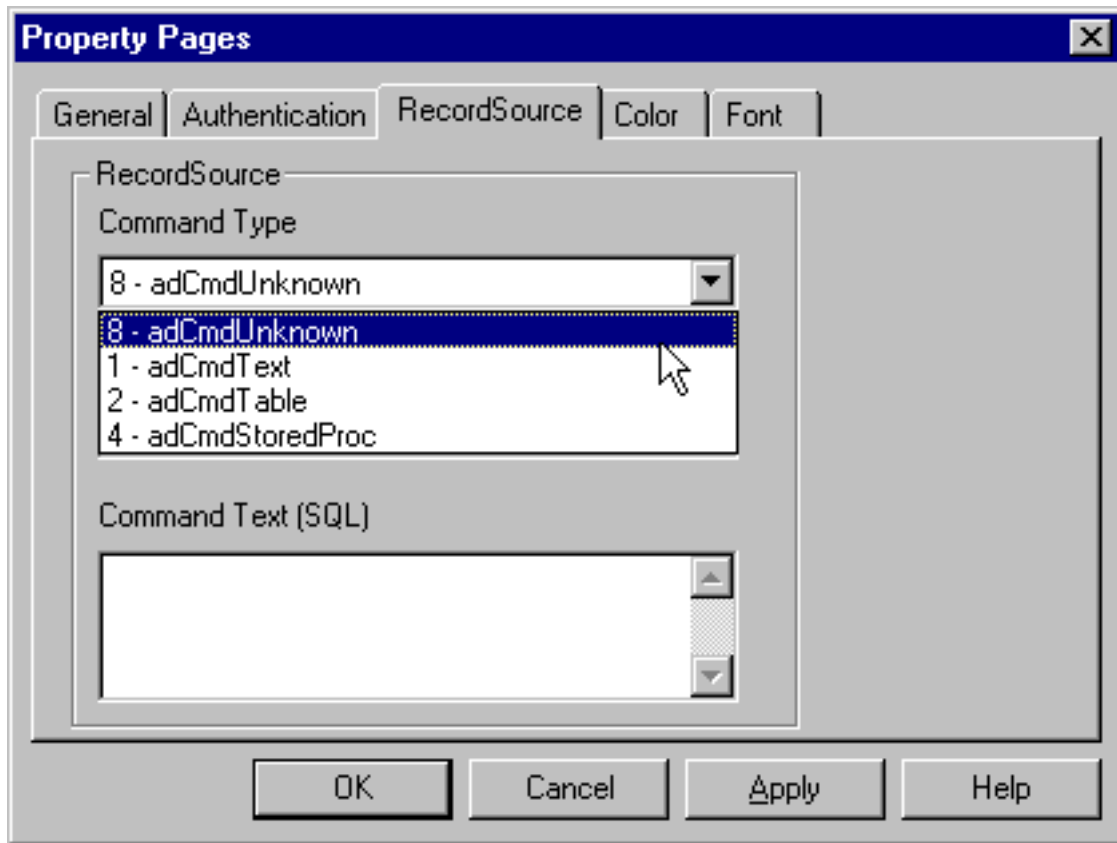
This is where the process failed earlier---but this time it works fine



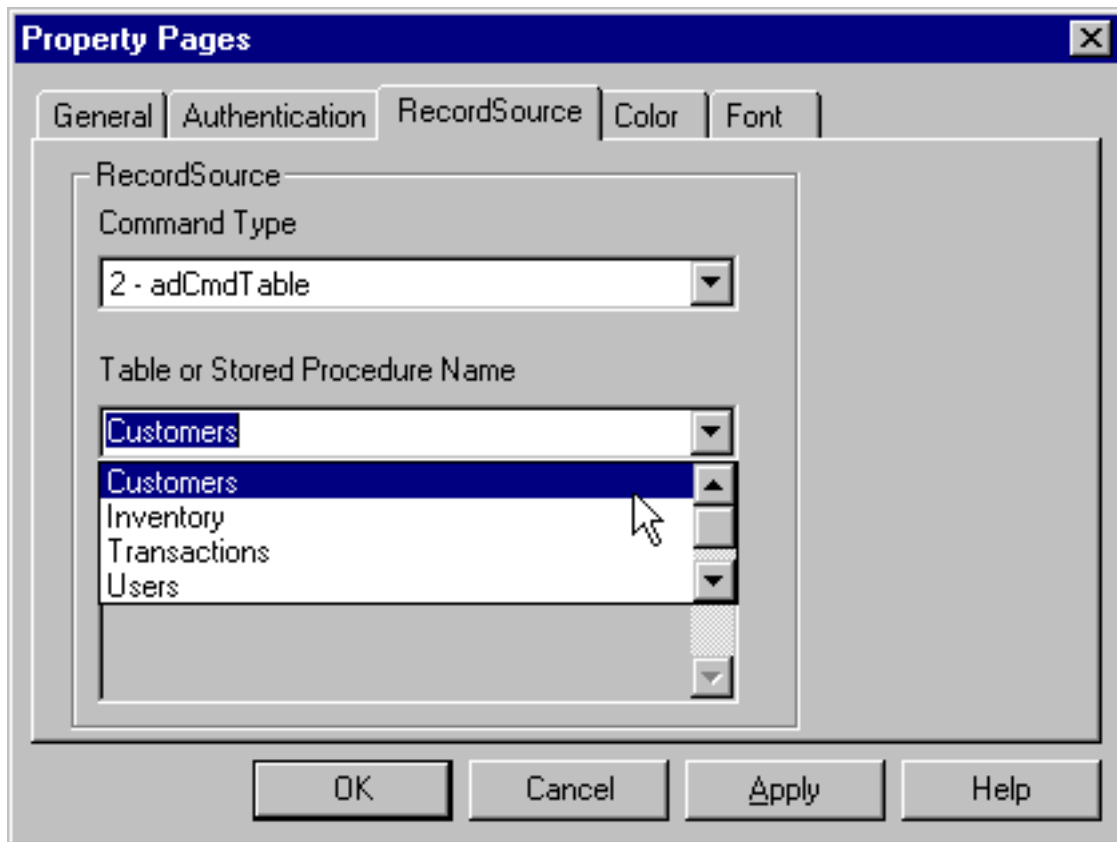
Now click on the OK button to close the Data Link Properties, and select the RecordSource Tab of the Property Pages Window for the Data Control...



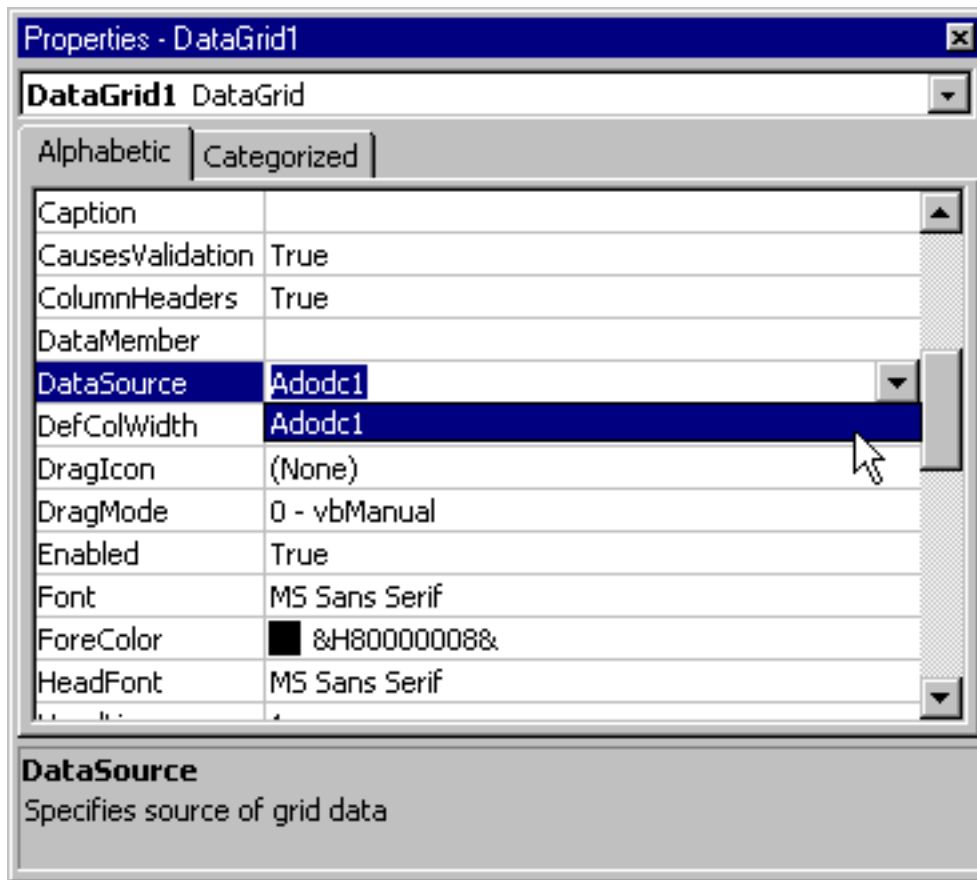
Those of you who read my Database book, *Learn to Program with Visual Basic Databases* may be a little lost at this time, as this is where the DAO Data Control and ADO Data Control really take a divergent path. The ADO Data Control takes a little longer to set-up, but it's not too bad at all. We need to specify a Command Type parameter. There are four parameters, **adCmdUnknown**, **adCmdText**, **adCmdTable** and **adCmdStoresProc**...



which excluding **adCmdUnknown** which has no counterpart in the world of DAO correspond to a SQL type Recordset, a Table type Recordset, and a Dynaset type Recordset based on an Access query. Lets select **adCmdTable** here...



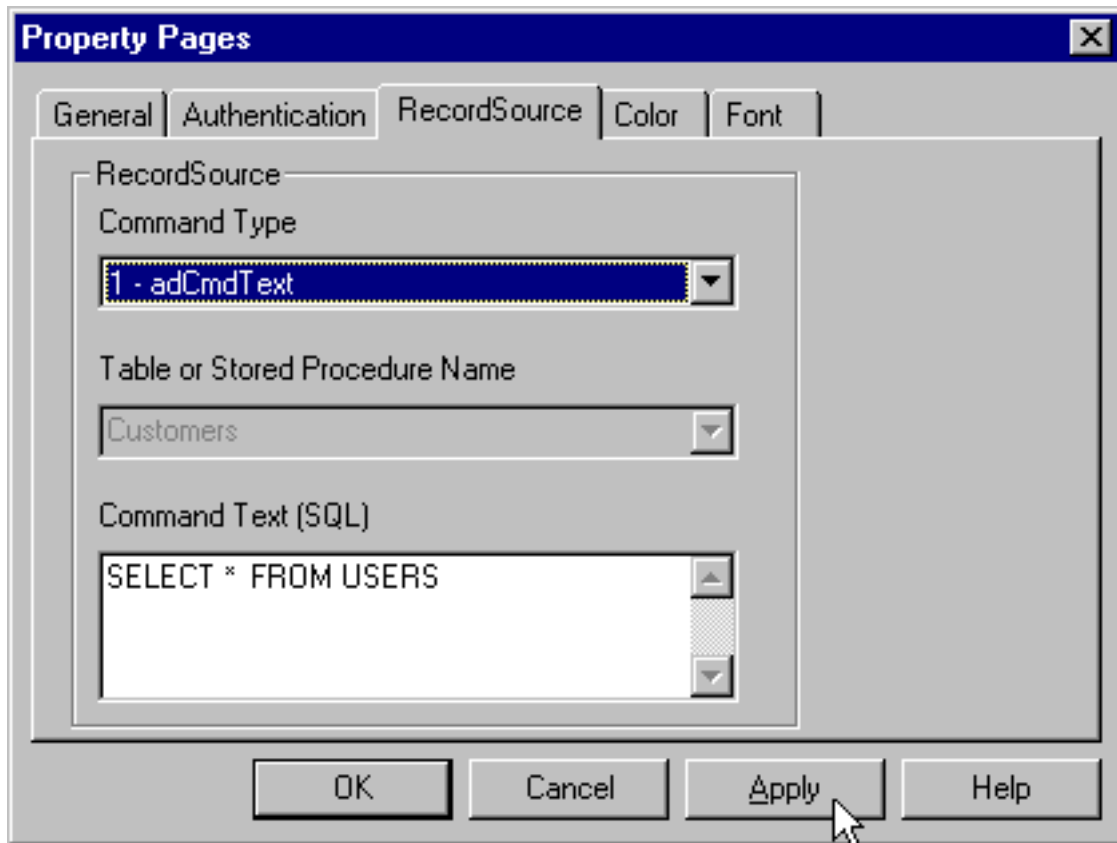
and then select the Customers table from the Table or Stored Procedure Name ListBox below that. If we then click on the OK button, and then specify the ADO Data Control as the Data Source for the Microsoft Data Grid...



we're in great shape. Run the program now, and you'll see the data from an Access 2000 database in a Microsoft Data Grid Control 6.0...

CustId	FirstName	MI	LastName
1	MARION	H	HOBSON

By the way, if you want to use a SQL statement in an ADO Data Control, just set the Command Type parameter to adCmdText, and enter your SQL statement into the Command Text Listbox. Then click on the Apply button which will validate it...



then click on the OK Button. If we run the program, once again we'll have data in the Microsoft Data Grid Control 6.0.

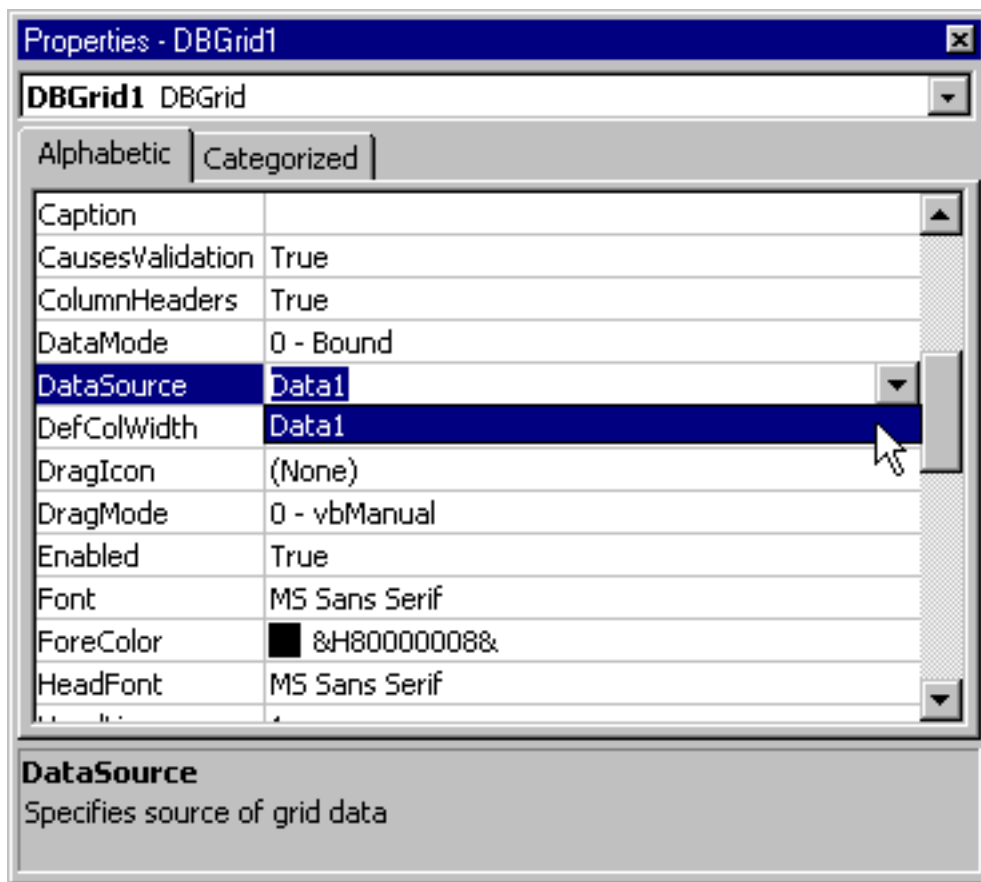


UserId	Password
ADMINISTRATOR	061883
CUSTOMERS	030655

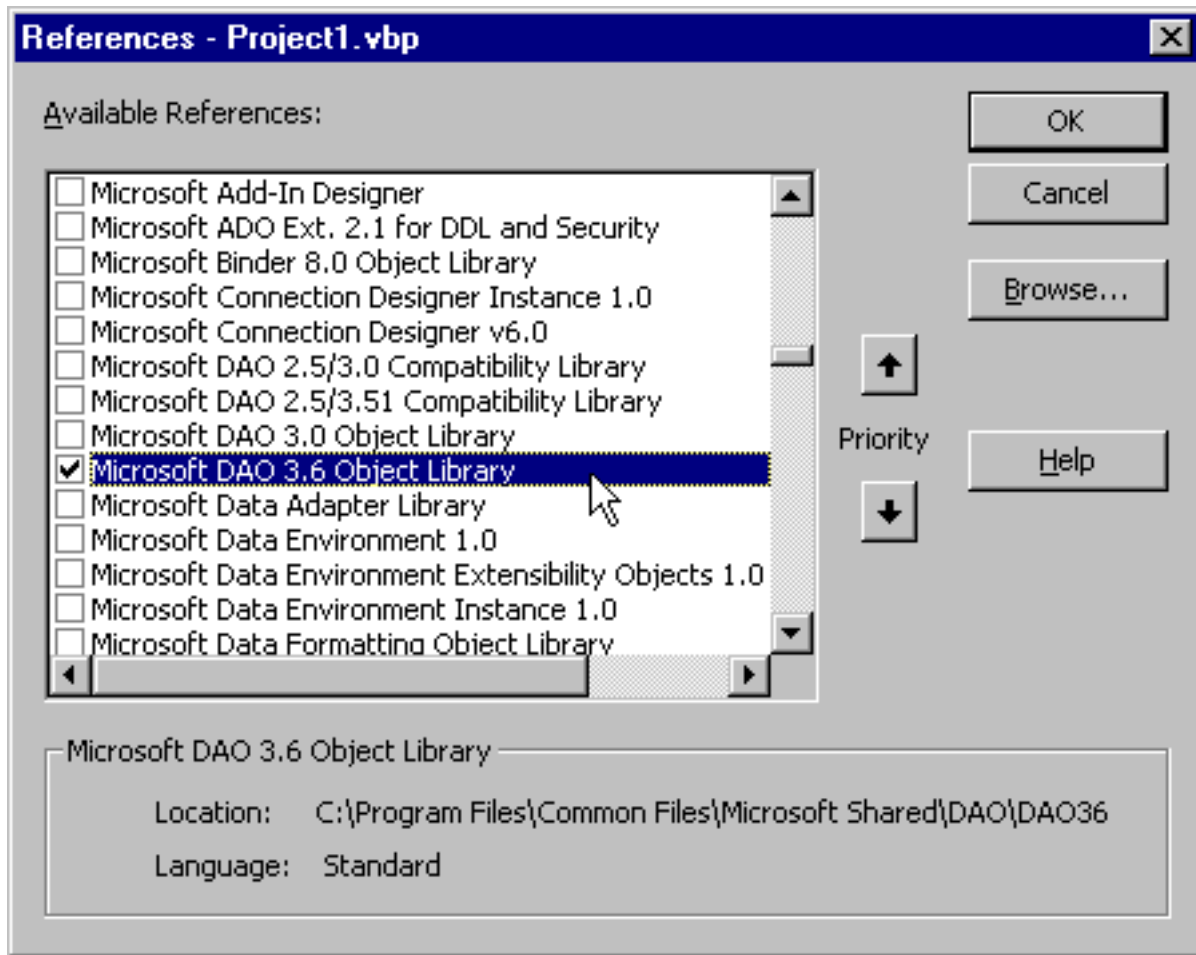
However, still no luck with the DAO Data Control and the Data Bound Grid Control 5.0. Is there anything that we can do?

The answer is yes--but it's a bit circuitous. Here's what we need to do. Microsoft suggests that we first create a virtual DAO 3.6 Recordset (we covered virtual Recordset and Data Objects in Chapter 8 of my Database book), and then use the Set Statement to assign that Recordset to the DAO Data Control's Recordset.

Let's start by setting the DataSource Property of the Data Bound Grid Control 5.0 to the DAO Data Control, something we didn't get a chance to do yet.



Now we need to add a reference to the DAO 3.6 Object Library...



Now place this code in the General Declarations Section of the Form...

**Option Explicit**

**Private daoDB36 As Database**

**Private rs As DAO.Recordset**

**Dim sPath As String**

and this code in the Load Event Procedure of the form (by the way, this code is directly out of the Knowledge Base Article

<http://support.microsoft.com/support/kb/articles/Q238/4/01.ASP>

**Private Sub Form\_Load()**

**sPath = "C:\VBFILES\ACCESS2000\CHINA.MDB"**

**Set daoDB36 = DBEngine.OpenDatabase(sPath)**  
**Set rs = daoDB36.OpenRecordset("Customers")**

```
Set Data1.Recordset = rs
```

```
End Sub
```

If we now run the program, we'll see Access2000 data in the Data Bound Grid Control 5.0 ...

The screenshot shows a window titled "Form1" containing two data-bound grid controls. The top grid is connected to a data control named "Data1" and displays a single record with the following data:

CustId	FirstName	MI	LastName
	MARION	H	HOBSON

The bottom grid is connected to a data control named "Adodc1" and displays the same record with the following data:

CustId	FirstName	MI	LastName
1	MARION	H	HOBSON

We've done it---we've used both the DAO and the ADO Data Control to connect to an Access 2000 Database.

## Summary

Here's what you need to remember to work with an Access 2000 Database.

1. You cannot directly use a DAO Data Control to connect to an Access 2000 Database---you must create a DAO 3.6 Recordset first, and then use the Set Statement to set the DAO Data Control's Recordset to the DAO 3.6 Recordset
2. You can use the ADO Data Control, if you select Jet 4.0 as your Data Provider. If Jet 4.0 doesn't appear in your list of providers, download Visual Studio Service Pack 3 from this location

<http://msdn.microsoft.com/vstudio/sp/vs6sp3/vbdownload.asp?id=10>

and install Service Pack 1 of MDAC 2.1.