

Murach's ADO.NET 4 with C# 2010

Troubleshooting tips

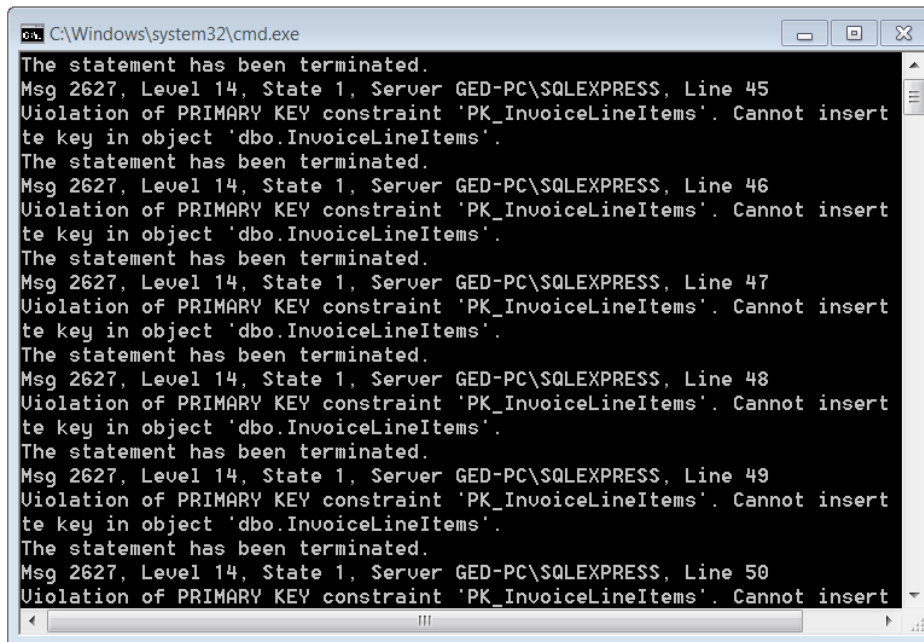
Appendix A in *Murach's ADO.NET 4 with C# 2010* tells you how to install the downloadable files and how to create the database for this book. On most systems, you won't have any problems with these procedures.

On some systems, though, you may encounter errors that aren't mentioned in the appendix. Then, these troubleshooting tips might help.

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How to deal with errors when you try to create and install the Payables database

When you install the Payables database as shown in figure A-4 of appendix A in the book, you run a batch file that starts a SQL Server script that creates the database. If this doesn't work, dozens of error messages may be displayed in the Command Prompt window as in this example:



```
C:\Windows\system32\cmd.exe
The statement has been terminated.
Msg 2627, Level 14, State 1, Server GED-PC\SQLEXPRESS, Line 45
Violation of PRIMARY KEY constraint 'PK_InvoiceLineItems'. Cannot insert
the key in object 'dbo.InvoiceLineItems'.
The statement has been terminated.
Msg 2627, Level 14, State 1, Server GED-PC\SQLEXPRESS, Line 46
Violation of PRIMARY KEY constraint 'PK_InvoiceLineItems'. Cannot insert
the key in object 'dbo.InvoiceLineItems'.
The statement has been terminated.
Msg 2627, Level 14, State 1, Server GED-PC\SQLEXPRESS, Line 47
Violation of PRIMARY KEY constraint 'PK_InvoiceLineItems'. Cannot insert
the key in object 'dbo.InvoiceLineItems'.
The statement has been terminated.
Msg 2627, Level 14, State 1, Server GED-PC\SQLEXPRESS, Line 48
Violation of PRIMARY KEY constraint 'PK_InvoiceLineItems'. Cannot insert
the key in object 'dbo.InvoiceLineItems'.
The statement has been terminated.
Msg 2627, Level 14, State 1, Server GED-PC\SQLEXPRESS, Line 49
Violation of PRIMARY KEY constraint 'PK_InvoiceLineItems'. Cannot insert
the key in object 'dbo.InvoiceLineItems'.
The statement has been terminated.
Msg 2627, Level 14, State 1, Server GED-PC\SQLEXPRESS, Line 50
Violation of PRIMARY KEY constraint 'PK_InvoiceLineItems'. Cannot insert
```

The most likely cause of this failure is that the SQL Server instance name in the batch file doesn't match the instance name of the computer that you're trying to install the database on. To fix that, change the instance name of the computer in the batch file as shown on page 696 of the book and run the batch file again.

Another problem that may cause this type of error is that the Payables database is already installed and is currently being used by an application. That will lock out the script that's trying to create the new version of the database. To fix this, close the application that's using the database and run the batch file again.

In some cases, the last error message in the Command Prompt window may indicate that the database already exists. One way to fix that is to navigate to the Payables.mdf and Payables_log.ldf files on your hard drive, delete them, and then run the batch file again. These files are usually located in this directory

C:\Program files\Microsoft SQL Server\MSSQL10.SQLEXPRESS\MSSQL\DATA

although the highlighted portion may vary.

How to use the SQL Server Management Studio to install the Payables database

If you continue to have problems installing the Payables database by running the create_database.bat file as shown in the appendix, you can use the SQL Server Management Studio (SSMS) to run the SQL script file directly. That gives you more control of what's going on.

To do that, you must first download the Express version of SSMS from Microsoft's web site. Then, if you have SQL Server 2008 Express installed, its instance will appear in the dialog box that's shown when you start SSMS. Once this connection is established, you can click on the New Query button in the SSMS menu to display a new query pane.

Next, navigate to the Database directory that you downloaded from our web site to your hard drive, and drag the create_database.sql file into the query pane. Note that it's the .sql file, not the .bat file that you need to drag. Then, click on the Execute button in the SSMS menu to run the script.

As the script runs, you should see a series of messages. Then, if the installation is successful, you will see a small white tick in a green circle at the bottom left of the Messages pane.

If the installation fails, SSMS will give you detailed error messages that are more useful than those that are displayed in the Command Prompt window. In most cases, the first few lines of the error message will point to the root cause of the problem, so you should look at those first.

If you run the create_database.sql file query twice in the same session, you will see this error message:

Cannot drop database "Payables" because it is currently in use.

This is because SSMS itself is using the database, so it won't let you drop (delete) it. If you really do need to run the sql file again, close SSMS, restart it, and run the script again.

Before I go on, I should add that you can use SSMS to attach the Payables database to a SQL Server instance other than the SQLExpress instance. If you do that, though, you will need to edit the connection strings in all the chapter and exercise applications so the strings point to your instance of SQL Server.

How to deal with this message: "Generating user instances in SQL Server is disabled"

If you're using Visual Studio 2010 Express and see the message above when you're using the Database Configuration Wizard to set up a connection to a database file, it's usually caused by having two or more instances of SQL Server on your machine: one for the SQLExpress instance and one or more for other instances. The easiest way to fix this is to start SQL Server Management Studio (SSMS) and use the initial dialog box to connect to the localhost\SQLExpress instance.

Then, click the New Query button in the top left of the SSMS window and enter the this text into the query pane

```
exec sp_configure 'user instances enabled', 1
```

and click on the Execute button. This should display a message like this in the Messages window:

```
Configuration option 'user instances enabled' changed from 0 to 1.  
Run the RECONFIGURE statement to install.
```

Next, replace the query in the query pane with this query

```
Configure
```

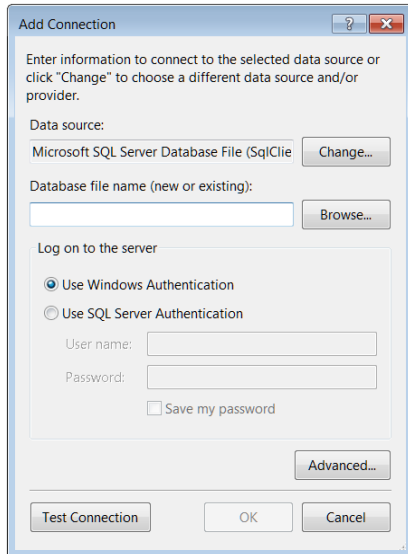
and click the Execute button again. This time you should see this message:

```
1 Command(s) completed successfully.
```

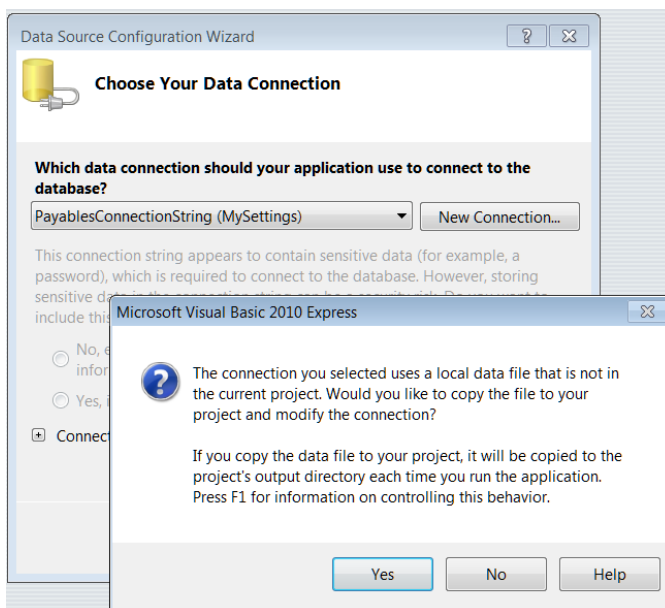
You can now return to the Database Configuration Wizard and create the connection to the Payables database.

How to deal with this message: "You don't have permission to open this file"

If you are using C# 2010 Express, you may see the error message above when you try to connect to the Payables database. An easy way to fix this problem (but not the only way) is to use the Browse button in the Add Connection dialog box shown below, navigate to the DATA directory for SQL Server on your hard drive (see the location near the bottom of page 2 of this document), and select the Payables.mdf file.



Then, when you see the message that's shown below, click Yes to add the database file to your project as a local file:



How to grant ASP.NET access to the database when using a remote IIS web server

If you try to run the web applications of chapters 11 through 14 on an IIS web server instead of the development (built-in VS) server, you may need to grant ASP.NET access to the Payables database. If you don't do that, you won't be able to run the applications.

To grant ASP.NET access to the database on a Windows XP or Windows/7 system (you shouldn't need to do this on a Vista system), you can run the `grant_access_xp.bat` file or the `grant_access_w7.bat` file in the Database directory that you downloaded from our web site. But before you do that, you must modify the `grant_access_xp.sql` or `grant_access_w7.sql` file that the batch file runs so it uses the name of your computer.

To do that, open the sql file in a text editor, and replace each occurrence of `[machineName]` with the name of your computer. Then, save and close this file, and run the appropriate batch file.