**Displaying Images Using PictureBox Control**

In this lesson, you will learn how to use a [PictureBox](https://msdn.microsoft.com/en-us/library/system.windows.forms.picturebox(v=vs.90).aspx) control to display images and also how to display a picture as a background image on a form.

It is said that a picture is worth a thousand words, and, in fact, many programs use pictures to communicate information. There are several ways to display pictures in Visual Basic—the most common way is to use a [PictureBox](https://msdn.microsoft.com/en-us/library/system.windows.forms.picturebox(v=vs.90).aspx) control.

The [PictureBox](https://msdn.microsoft.com/en-us/library/system.windows.forms.picturebox(v=vs.90).aspx) control acts as a container for pictures; you choose the picture to be displayed by setting the [Image](https://msdn.microsoft.com/en-us/library/system.windows.forms.picturebox.image(v=vs.90).aspx) property. The [Image](https://msdn.microsoft.com/en-us/library/system.windows.forms.picturebox.image(v=vs.90).aspx) property can be set in the **Properties** window, or you can write code to tell the program which picture to display.

Some other useful properties for the [PictureBox](https://msdn.microsoft.com/en-us/library/system.windows.forms.picturebox(v=vs.90).aspx) control are the [AutoSize](https://msdn.microsoft.com/en-us/library/system.windows.forms.pictureboxsizemode(v=vs.90).aspx) property, which determines whether the [PictureBox](https://msdn.microsoft.com/en-us/library/system.windows.forms.picturebox(v=vs.90).aspx) will stretch to fit the picture, and the [SizeMode](https://msdn.microsoft.com/en-us/library/system.windows.forms.picturebox.sizemode(v=vs.90).aspx) property, which can be used to stretch, center, or zoom the image in the [PictureBox](https://msdn.microsoft.com/en-us/library/system.windows.forms.picturebox(v=vs.90).aspx) control.

Before you add a picture to a [PictureBox](https://msdn.microsoft.com/en-us/library/system.windows.forms.picturebox(v=vs.90).aspx) control, you will typically add the picture file to your project as a *resource*. Once you add a resource to your project, you can reuse it as many times as you want—for example, you might want to display the same picture in several locations.

TRY IT!

To add a picture as a resource

1. On the **File** menu, click **New Project**.
2. In the **New Project** dialog box, in the **Templates** pane, click **Windows Application**.
3. In the **Name** box, type Pictures and then click **OK**.

A new Windows Forms project opens.

1. In the **Solution Explorer** window, double-click the **My Project** node to open the **Project Designer**.
2. In the **Project Designer**, click the **Resources** tab.
3. Click **Add Resource**, and then select **Add Existing File** from the drop-down list.

The **Add existing file to resources** dialog box opens. If you don't see any picture files, browse to a folder that does contain pictures.

1. Select an image file (a file that has a .bmp, .gif, or .jpg file name extension), and then click **Open**. For this example, it is best to pick a small picture.

The picture is added to your project and will appear in the **Resource Manager** window.

1. Repeat the previous two steps to add a second picture to your project.
2. On the **File** menu, click **Close**. If asked to save changes, click **Yes**.

### To display pictures using a PictureBox control

1. In **Solution Explorer**, select **Form1.vb**, and then on the **View** menu, click **Designer**.
2. From the **Toolbox**, drag a [PictureBox](https://msdn.microsoft.com/en-us/library/system.windows.forms.picturebox(v=vs.90).aspx) control onto the form.
3. In the **Properties** window, click the **…** button next to the [Image](https://msdn.microsoft.com/en-us/library/system.windows.forms.picturebox.image(v=vs.90).aspx) property to open the **Select Resource** dialog box.
4. From the **Entry** list, select one of the pictures that you added, and then click **OK**.
5. Select the [SizeMode](https://msdn.microsoft.com/en-us/library/system.windows.forms.picturebox.sizemode(v=vs.90).aspx) property, and set it to **AutoSize**.

Notice how the [PictureBox](https://msdn.microsoft.com/en-us/library/system.windows.forms.picturebox(v=vs.90).aspx) control automatically resizes to fit the picture.

1. In the form, double-click the [PictureBox](https://msdn.microsoft.com/en-us/library/system.windows.forms.picturebox(v=vs.90).aspx) control to open the **PictureBox1\_Click** event handler in the Code Editor.
2. Add the following code to the **PictureBox1\_Click** event handler.

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| **Note:** |
| You will have to replace "MyPictureName2" with the actual name of the second picture that you added earlier. |

1. VB
2. PictureBox1.Image = My.Resources.MyPictureName2
3. Press F5 to run your program. When the form appears, click the picture to make the second picture appear.

Displaying a Background Image on the Form

In addition to displaying a picture in a [PictureBox](https://msdn.microsoft.com/en-us/library/system.windows.forms.picturebox(v=vs.90).aspx) control, you can also display a picture as the background for the form. The [BackgroundImage](https://msdn.microsoft.com/en-us/library/system.windows.forms.control.backgroundimage(v=vs.90).aspx)property of a form is used to display a picture that will appear behind any other controls on the form, much the same as wallpaper on the Windows desktop.

Just as Windows enables you to choose whether wallpaper is centered, tiled, or stretched to fill the screen, the [BackgroundImageLayout](https://msdn.microsoft.com/en-us/library/system.windows.forms.control.backgroundimagelayout(v=vs.90).aspx) property can be used to do the same for a form.

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| **Tip:** |
| Many of the other controls, such as the [Panel](https://msdn.microsoft.com/en-us/library/system.windows.forms.panel(v=vs.90).aspx), [GroupBox](https://msdn.microsoft.com/en-us/library/system.windows.forms.groupbox(v=vs.90).aspx), and even the [Button](https://msdn.microsoft.com/en-us/library/system.windows.forms.button(v=vs.90).aspx) control also have a [BackgroundImage](https://msdn.microsoft.com/en-us/library/system.windows.forms.control.backgroundimage(v=vs.90).aspx) property. Try them and see! |

## [**Try It!**](javascript:void(0))

### To display a background image on a form

1. In **Solution Explorer**, select **Form1.vb**, and then on the **View** menu, click **Designer**.
2. Select the form by clicking it anywhere outside the [PictureBox](https://msdn.microsoft.com/en-us/library/system.windows.forms.picturebox(v=vs.90).aspx).
3. In the **Properties** window, click the **…** button next to the [BackgroundImage](https://msdn.microsoft.com/en-us/library/system.windows.forms.control.backgroundimage(v=vs.90).aspx) property to open the **Select Resource** dialog box.
4. From the **Entry** list, select one of the pictures that you added earlier, and then click **OK**.

Notice that the picture is displayed on the form behind the [PictureBox](https://msdn.microsoft.com/en-us/library/system.windows.forms.picturebox(v=vs.90).aspx) and is tiled by default.

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| **Note:** |
| If the picture in the [PictureBox](https://msdn.microsoft.com/en-us/library/system.windows.forms.picturebox(v=vs.90).aspx) control is too large, you may not be able to see the background picture. In this case, select the [PictureBox](https://msdn.microsoft.com/en-us/library/system.windows.forms.picturebox(v=vs.90).aspx)control, and drag it to the bottom of the form to move it out of the way. |

1. Select the [BackgroundImageLayout](https://msdn.microsoft.com/en-us/library/system.windows.forms.control.backgroundimagelayout(v=vs.90).aspx) property, and set it to [Stretch](https://msdn.microsoft.com/en-us/library/system.windows.forms.imagelayout(v=vs.90).aspx).

Notice how the picture stretches to fill the whole form.

1. Double-click the form to open the Code Editor.
2. Make certain that **Form1 Events** is selected in the left-hand drop-down box, and then click **Click** in the right-hand drop-down box.
3. Add the following code to the **Form1\_Click** event handler

VB

If Me.BackgroundImageLayout = ImageLayout.Stretch Then

Me.BackgroundImageLayout = ImageLayout.Center

Else

Me.BackgroundImageLayout = ImageLayout.Stretch

End If

1. Press F5 to run your program. When the form appears, click it to change the layout.