

Getting Colors from a PictureBox Control

""This only work in vb 6

A Picture Box control can display various kinds of graphics images. Using the technique presented here, you can determine the color at any point in the image.

The Point method returns the color at a specified X,Y location in a Picture Box control. To get the color under the mouse pointer, put the code in the MouseMove event procedure for the control. Because the MouseMove procedure is passed the current X,Y coordinates of the pointer, this code is simple:

```
Private Sub Picture1_MouseMove(Button As Integer, _  
    Shift As Integer, X As Single, Y As Single)  
  
    Dim rgb As Long  
    rgb = Picture1.Point(X, Y)  
  
End Sub
```

The value returned by the point method is a type Long that encodes the RGB value for the color. To be useful, this encoded value must be separated into the individual R, G, and B components, each of which is an integer in the range 0-255 decimal or 00-FF in hexadecimal. Expressed in hexadecimal notation, the value returned by Point is:

00BBGGRR

Hexadecimal notation makes it easy to perform the extraction. If rgb is the value returned by the Point method, this extraction is performed as follows:

```
red = rgb Mod &H100  
green = (rgb \ &H100) Mod &H100  
blue = (rgb \ &H10000) Mod &H100
```

The final MouseMove event procedure is shown here. To see this in action, create a Standard EXE project and place a Picture Box and a Text Box on the form. Load an image into the Picture Box then run the project. You'll see that when the mouse moves over the image the Text Box displays the RGB values of the underlying pixel.

```
Private Sub Picture1_MouseMove(Button As Integer, _  
    Shift As Integer, X As Single, Y As Single)
```

```
    Dim rgb As Long  
    Dim r As String, g As String, b As String
```

```
    rgb = Picture1.Point(X, Y)  
    r = CStr(rgb Mod &H100)  
    g = CStr((rgb \ &H100) Mod &H100)  
    b = CStr((rgb \ &H10000) Mod &H100)  
    Text1.Text = "R " & r & ", G " & g & ", B " & b
```

```
End Sub
```

You could place the same code in the MouseDown event procedure if you want to see the RGB values for only pixels that you click.