

# How to capture screen programmatically in Windows Phone 7

This article explains how to capture the screen from within your Windows Phone 7 app.

## Introduction



There does not appear to be any way on Windows Phone 7 to write a screen capture application to capture the UI of another application. However it is possible to capture the screen of your own application - a process which is covered in this article.



## Implementation

We use `WriteableBitmap` to capture the screen. Its `Render` method takes two parameters, `UIElement` and `Transform`. We specify the `LayoutRoot` (the root element for the UI defined in XAML) as the `UIElement` which renders the whole UI into the bitmap. The second parameter is the `MatrixTransform` which is applied to elements before they are drawn into the bitmap - we specify an empty transform in this case so that elements are drawn as they would be to the device screen.

Here is the code snippet:

```
private void ApplicationBarIconButton_Click(object sender, EventArgs e)
{
    var fileName = String.Format("WmDev_{0:}.jpg", DateTime.Now.Ticks);
    WriteableBitmap bmpCurrentScreenImage = new WriteableBitmap((int)this.ActualWidth, (int)this.ActualHeight);
    bmpCurrentScreenImage.Render(LayoutRoot, new MatrixTransform());
    bmpCurrentScreenImage.Invalidate();
    SaveToMediaLibrary(bmpCurrentScreenImage, fileName, 100);
    MessageBox.Show("Captured image " + fileName + " Saved Successfully", "WmDev Capture Screen", MessageBoxButton.OK);

    currentFileName = fileName;
}

public void SaveToMediaLibrary(WriteableBitmap bitmap, string name, int quality)
{
    using (var stream = new MemoryStream())
    {
        // Save the picture to the Windows Phone media library.
        bitmap.SaveJpeg(stream, bitmap.PixelWidth, bitmap.PixelHeight, 0, quality);
        stream.Seek(0, SeekOrigin.Begin);
        new MediaLibrary().SavePicture(name, stream);
    }
}
```

After rendering all the `UIElements` on the `WriteableBitmap`, we call the `Invalidate()` method to force it to redraw its contents and display properly. Then the capture image is saved in media library using the `SaveToMediaLibrary()` method which takes three parameters `WriteableBitmapObject`, `filename`, `quality` of JPEG photo.

