



If we want to use an image as background in a J2ME application, we have the problem that we must to have one image for each different size screen. Another approach is to have only one image and fit it to all screen sizes.

In this article I will describe an algorithm to do that.

Method Specification

Method Name	CreateScaledImage
Parameters	
<i>imgOldImage</i>	Image that we have to fit
<i>iNewWidth</i>	The new width of the image
<i>iNewHeight</i>	The new height of the image
Return Value	
New image with the new size	

Source file

```
public static Image CreateScaledImage( Image imgOldImage, int iNewWidth, int iNewHeight )
{
    Image imgNewImage = null;
    final int iOldWidth = imgOldImage.getWidth();
    final int iOldHeight = imgOldImage.getHeight();

    int iOldRGBArray[] = new int[iOldWidth * iOldHeight];

    iOldRGBArray = imgOldImage.getRGB( iOldRGBArray, 0, iOldWidth, 0, 0, iOldWidth, iOldHeight);

    int iNewRGBArray[] = new int[iNewWidth * iNewHeight];

    for (int yy = 0; yy < iNewHeight; yy++)
    {
        int dy = yy * iOldHeight / iNewHeight;

        for (int xx = 0; xx < iNewWidth; xx++)
        {
            int dx = xx * iOldWidth / iNewWidth;

            iNewRGBArray[(iNewWidth * yy) + xx] = iOldRGBArray[(iOldWidth * dy) + dx];
        }
    }
}
```

How_to_Fit_an_Image_to_the_Screen_Size

```
}

imgNewImage = Image.createRGBImage(iNewRGBArray, iNewWidth, iNewHeight, true);

return imgNewImage;

}
```

Example

We could use this method in a Canvas Object in this way:

```
public class MyCanvas extends GameCanvas
{
    private Image objBKGImage = null;

    public void paint(Graphics g)
    {

        iViewH = this.getHeight();
        iViewW = this.getWidth();

        // load the background image
        if (objBKGImage== null)
        {
            try
            {

                objBKGImage = Image.createImage("/res/Logo_150_53.png");

                objBKGImage = CreateScaledImage(objBKGImage, iViewW, iViewH)

            } catch (IOException ex)
            {
                ex.printStackTrace();
            }
        }

        // draw background
        if (objBKGImage!= null)
            g.drawImage(objBKGImage,
                (int)iViewW / 2,
                (int)iViewH / 2,
                Graphics.VCENTER | Graphics.HCENTER );

    }
}
```

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