

HOWTO: Fix Non-square Resolution of a Single AtalaImage

At times, you may run into an image which has a "non-square" resolution - an image where the resolution of the X (width) axis of the image differs from the resolution of the Y (height) axis

The most common cause for such an image is that many older fax systems used to use a resolution of 204 DPI for the width but 196 DPI for the height.

Such images appear normal when viewed in the original orientation, but if rotated or opened in one of our viewers, these types of images often cause unwanted effects - distortion of an image when rotated or annotations that completely fail to line up / appear as intended.

NOTE: if you would like a means of detecting and fixing all such images in a multipage TIFF File please see

[Q10153 - HOWTO: Using TiffFile to resample FAX images with unequal resolutions in a multi-page TIFF](#)

Example Code:

```
///<summary>
/// Given the incoming AtalaImage, this method will determine if the
resolution is non-square
///
/// if it is not, the original image object is returned by reference
///
/// if it is, then the original image is resampled into a new image,
disposed of and a
/// totally new image representing the corrected square-resolution
version of the original
///
is returned.
///</summary>
///<param name="img"></param>
///<returns></returns>
```

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```
private static AtalaImage FixNonSquareResolution(AtalaImage img)

{

    AtalaImage returnImg = null;

    if ((int) Math.Floor(img.Resolution.X) != (int) Math.Floor(img.Resolution.Y))

    {

        // Do nothing:

        return img;

    }

    else

    {

        Size newSize = Size.Empty;

        ResampleCommand resamp = new ResampleCommand();

        Dpi newRes;

        // non square

        if (img.Resolution.X > img.Resolution.Y)

        {

            // most common: width stays the same, height gets recalculated

            newSize = newSize(img.Width, (int)((img.Height / img.Resolution.Y) *

img.Resolution.X));\

            newRes = new Dpi(img.Resolution.X, img.Resolution.X, img.Resolution.Units);

        }

        else

        {

            // should almost never see this

            newSize = newSize((int)((img.Width / img.Resolution.X) * img.Resolution.Y),

img.Height);

            newRes = new Dpi(img.Resolution.Y, img.Resolution.Y, img.Resolution.Units);

        }

    }

}
```

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```
}

resamp.DestSize = newSize;

returnImg = resamp.Apply(img).Image;

returnImg.Resolution = newRes;

// clean up - returnImg is a full new image - NOT a reference to
img - so dispose img now that we're done

img.Dispose();

return returnImg;

}

}
```

Original Article:

Q10425 - HOWTO: Fix Non-square Resolution of a Single AtalaImage

Atalasoft Knowledge Base

<https://www.atalasoft.com/kb2/KB/50075/HOWTO-Fix-Nonsquare-Resolution-of-a-...>