# ClubRunner

Help Articles > Website Guides > Stories & Online Editor > How does ClubRunner store images?

# How does ClubRunner store images?

Omar S. - 2021-03-05 - Stories & Online Editor

Whenever an image is uploaded to ClubRunner servers, ClubRunner does its best to optimize the image for web viewing. We do this so web pages load faster across all devices.

There are a few things we do to uploaded images, these are based on the type of image and any special properties that they may have.

# How ClubRunner optimizes images

#### Large images

Any images that are **over 1980 pixels** wide or tall will be resized down to 1980 pixels, respecting the *aspect ratio* (the relationship between width and height). As an example, an image that was 4000 pixels wide by 2000 pixels tall would be resized down to 1980 wide and 990 pixels tall.

## Images from mobile devices (orientation)

Many mobile devices take photos and store information about the image *orientation*, as either portrait (tall) or landscape (wide). If our system detects that a photo has this information inside the file, it tries to display the photo with this proper orientation. Most of the time the image should be displayed in the proper orientation. However sometimes images will be rotated incorrectly because we can't read this embedded information properly, or because the 'orientation' information does not exist. This may need to be fixed using dedicated photo editing software.

# File Types:

#### IPG

When uploading JPG images, our system optimizes it to try to reduce its file size. The two images side by side in most cases should be visually identical (same sharpness, etc.).

### PNC

When uploading a PNG image, we also do an optimization on it to try to reduce its file size. The two images side by side in most cases should be visually identical. Any special PNG image features such as transparency should also be preserved.

### GIF

GIF images are handled in a special way. If the GIF image has no special features such as transparency or animation, our system will convert it to a JPG and follow the JPG optimization guidelines. If the GIF image is animated, or if the GIF image has transparency, or both, it will be preserved as is, and no further steps are taken.