Make comparison between 'Raster' and 'Vector' graphics

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Raster and vector are how computers store images. I looked at the concepts of the two methods and looked at the differences.

The vector method is a method of constructing an image with a curve made by connecting points and points, and creates lines and faces by expressing an image with a mathematically calculated functional relationship. Since vectors only need to remember the location information of basic points, the size of the file is small, and even if the image is reduced or enlarged, it does not damage the image. However, it is difficult to express natural changes in color or detailed pictures, and the more diverse and more objects make up the image, the more graphic processing time it takes. Therefore, it is mainly used for illustration images such as simple icons and characters, and logo designs.

Raster graphics or bitmap images are a method of collecting hundreds of pixels with image information to form an entire image. Unlike vectors, bitmaps are elements in which each pixel's point forms an image, so the quality of the image varies depending on how many pixels containing different color information are used. It is mainly used to express photographs or paintings using various colors. However, in the case of high-resolution raster images, the computer has to store all the color information of each pixel, so the capacity is large, and when viewed larger than the original file size stored for the first time, the image quality is degraded.

To briefly summarize the differences between the two methods, the vector method is free to edit images with relatively small capacities. Instead, it is not suitable for complex tasks that require granular representation. On the other hand, the laster method is capable of elaborate descriptions, but it requires a relatively high capacity and degrades the quality when editing in enlargement and reduction. If you understand the characteristics of these two methods well, it will be useful in choosing the right method to work with.