

ToyViewer *Ver.2.6 (Feb. 1997)*

Dragging

Alt-Dragging selects a square area. Shift-Dragging steps 4 pixels at one time.

Size and position of selected area are displayed in the textfield of each window. You can set the origin of the coordinate at lower left corner or at upper left corner of the image with the preference.

Clipping and Copy

You can `copy' a part of the image selected by dragging as a tiff image. However, resolution and number of colors of the image depend on the environment.

Clipped image keeps same quality as original.

Clipping of EPS

Clipping an EPS image, only parameters of `BoundingBox' of the image are modified. So, all information out of the frame is still in the image file.

Transparent Color

ToyViewer can read/write tiff, eps, gif, or png files with transparent color. If transparent parts are included in a image they are displayed in white on the window. If you double-click, triple-click, or quadruple-click the image, the

transparent parts are displayed in gray or black. So, you can know where the transparent parts are.

Interlaced Image

ToyViewer can read and write interlaced (progressive) images in gif, png, or jpg. Interlaced images are displayed progressively, for example, on WWW clients. If you do not use your images for such purposes, interlaced format is without merit. In some cases, size of image data would be increased. Interlaced jpg format would not be so popular yet.

Save in JPG Format

JPG can achieve high compression, however, quality of the image is decayed. In general, high quality prevents good compression, and good compression spoils quality. The parameter of JPG can be set by the save panel.

JPG is recommended to apply to continuous color or monochrome 8bit images. Applying to other images, especially B/W images, will bring not only worse quality of images but also larger file size.

B/W images saved in bie(jbig) format can achieve higher compression ratio. Quality of images does not spoilt by jbig compression.

You can save images in interlaced(progressive) format, however, this format would not be so popular yet.

Format of TIFF Compression

When an image is saved in tiff, three formats of compression can be applied; No compression, LZW, or JPEG. However JPEG can achieve high compression, quality of the image is decayed. In general, high quality prevents good compression, and good compression spoils quality. The parameter of JPEG can be set by the save panel. Though compression ratio of LZW is inferior to JPEG, quality of the image is saved.

Color Reduction

When an image with more than 256 colors is saved as gif, color reduction should be done.

ToyViewer uses *Median Cut Algorithm* by Paul Heckbert for color reduction, which is also used in ppmquant (by Jef Poskanzer). However, as ToyViewer can select colors effectively, very nice images could be generated. ToyViewer also presents color reduction by quasi-half-tone and dithering methods.

EPS Files Made by Other Environments

Some EPS images, especially made by tools of X-Window, have illegal "%Page:" comments. Some EPS images used by Macintosh have unnecessary information at the beginning of and at the tail of the file. Reading in EPS images, ToyViewer tries to strip off unnecessary information. So, ToyViewer can display some files which cannot be displayed by

Preview.app or other applications. Once they can be displayed, save them as EPS file again. The files newly saved would be used also by other applications.

Note that ToyViewer cannot display every wrong EPS files.

Saving as EPS Files

If the image saved has EPS format, information in it is reserved. Otherwise, if it is a bitmap image, EPS file created has only a sequence of pixels. So, EPS files made from bitmap images are distorted by enlargement or shrinkage.

By the way, in ToyViewer2.5, the size of EPS files made from bitmap images is about 16KB smaller than earlier version.

Display All Window

Clicking "Windows / Display All Windows" of the menu, all windows are displayed in front one after another. Click the menu again to interrupt.

Position of Windows

There are two ways to display newly opened window. One is to open windows at various position (Auto), and the other is to open new window over the main window (Fix). You can choose the way to display windows with the preference. You can also choose third way in which Fix method is used only when a folder is auto-scanned.