PPM file format

Portable Pixmap File Format

One of the simplest formats:

- "P3" – A "magic number" for identifying the file type.
- Whitespace (blanks, TABs, CRs, LFs).
- A width, formatted as ASCII characters in decimal.
- Whitespace.
- A height, again in ASCII decimal.
- Whitespace.
- The maximum color-component value, again in ASCII decimal.
- Whitespace.
- Width $*$ height pixels, each three ASCII decimal values between 0 and the specified maximum value, starting at the top-left corner of the pixmap, proceeding in normal English reading order. The three values for each pixel represent red, green, and blue, respectively; a value of 0 means that color is off, and the maximum value means that color is maxxed out.
- Characters from a "#" to the next end-of-line are ignored (comments).
- No line should be longer than 70 characters.

Example

```
P3
# feep.ppm
4 4
15
 0   0 0      0   0   0      0   0   0     15    0 15
 0   0 0      0 15   7      0   0   0      0    0   0
 0   0 0      0   0   0      0 15   7      0    0   0
15   015      0   0   0      0   0   0      0    0   0
```

Variant: Rawbits

- The "magic number" is "P6" instead of "P3".
- The pixel values are stored as plain bytes, instead of ASCII decimal.
- Whitespace is not allowed in the pixels area, and only a single character of whitespace (typically a newline) is allowed after the maxval.
- The files are smaller and many times faster to read and write.
- Note that this raw format can only be used for maxvals less than or equal to 255. If you use the ppm library and try to write a file with a larger maxval, it will automatically fall back on the slower but more general plain format.

Some Unix Utilities

Converters
convert
giftoppm, ppmtogif
ppmtopict,
picttoppm
ppmtotga,
tgatoppm

Viewers
display
gqview