

# Revision History

257522\_PixelRule.tiff ↵

## Fixes as of October 10, 1991

paste.tiff ↵ PNM converters now handle comments. Oh-Ah.

709287\_paste.tiff ↵ The GIF converter now handles truncated files. The problem was with filling the blank pixels via a call to memset and not always having 8 bit pixels. This was fixed by explicitly filling the extra pixels with the background color.

378653\_paste.tiff ↵ Conversions to 1 bit now work all the time. (Well, most of the time. Something obscure still happens on odd cases [I think only 1 in 8.]) There was a mistake in the manual about internal formatted that led me to believe that 1 bit per sample images would not be padded at the end of the line. This is not so, and I was misled because my original test image's width was divisible by 8.

887019\_paste.tiff ↵ Previously unknown fixes to

ImageControl object with messed RGB values. It seems that I was getting the R and B values swapped. This has been fixed for RGB, I can't swear what'll happen with CMYK. I think you'll get C <> K and M <> Y, but I have no images to test with.

562320\_paste.tiff → Behavior of Save panels corrected.

836179\_paste.tiff → TIFF saving under JPEG will now drop to LZW when appropriate, *i.e.*, with images of less than 4 bits per sample. (Conserves space and prevents exceptions to the JPEG routines.)

245773\_paste.tiff → Added Convert To menu items.

Currently, only conversion to BW and 12 Bit Color are implemented. I hope to fix the rest soon. Note that the conversion of less < 4 bits per sample are a little flaky in that a value of 3 expands to 12, not 15 like it should. I'm working on it.

943046\_paste.tiff → Added pretty colors to the title in the help pages. BTW, you can only do this in vi, by hand. Yech.

## Fixes and Additions as of December 5, 1991

- 145246\_paste.tiff → This time I really did fix the bug in ImageControl when dealing with meshed images. It seems I was putting R in G, G in B, B in Alpha, and shift Alpha ways. Oops.
- 427855\_paste.tiff → Added support for copyright notices.
- 705271\_paste.tiff → Added error handling to the converters.
- 918309\_paste.tiff → Added custom views for open panels. This is so people could load a <sup>a</sup>raw<sup>o</sup> bitmap.
- 46059\_paste.tiff → Made the help panel much nicer. You may have noticed.
- 292033\_paste.tiff → Touched up the Info panel a bit.
- 530468\_paste.tiff → Check some of my spelling, just some, mind you.
- 569135\_paste.tiff → Added <sup>a</sup>version<sup>o</sup> control to the converter object. This means that an controlling object, like NXBitmapImageRepControl, could ask a converter it's protocol version, and make sure to not send messages that the converter won't understand. I hope

this won't be necessary, but just in case, I want to make sure existing converters won't break.

745205\_paste.tiff → Added support for reading JFIF (jpg) files.

189883\_paste.tiff → Made GraphicsWorkshop a .app program, so that I could hide the help pages.

794939\_paste.tiff → Figured out how to link a library or multiple source files into a converter object. See *programming* for more details.

## **Fixes and Additions as of February 16, 1992**

71644\_paste.tiff → Problem conversion to 12 bit kind of fixed. It still needs a little work, since scaling is not properly handled. However, it will convert to a recognizable image.

469547\_paste.tiff → Conversion to 24 bits added. This shares 12 bits scaling problem.

768906\_paste.tiff → Some additional error handling added

736117\_paste.tiff → Accessory views in save/open panels are not over-ridden, rather they are incorporated into my

own accessory views.

192500\_paste.tiff → Added support for making index files.

421705\_paste.tiff → Made the install script much more robust, especially for people without a complete development environment.

831814\_paste.tiff → Wrote a lot of more complete documentation, however, none of it has been proof read, so I expect there's quite a few errors.

469577\_paste.tiff → Flushed out error handling in the converters some.

714056\_paste.tiff → Attempted to allow multiple converters to be linked simultaneously, however, this failed with strange linker errors. Due to this, only one converter per program can be linked. This may get fixed in the future.

483404\_paste.tiff → Fixed miscellaneous bugs that popped up. Most of these were caused by me breaking things while adding features.

16592\_paste.tiff → Some minor things with cut and paste were fixed, but you probably never noticed these.

507075\_paste.tiff → I've also played around with a command line version that allows you to copy a bitmap

to the pasteboard from a terminal window, however, this only works if you happen to be in the NeXTstep desktop when copying.

91846\_paste.tiff → All but the Strip Alpha conversion now work.

## **Fixes and Additions as of May 28, 1992**

756983\_paste.tiff → Added two methods to read and write bitmaps to streams in the NXBitmapImageRepControl object.

817420\_paste.tiff → Revamped the menu structure.

78563\_paste.tiff → Added an inspector panel that now show image information and the available conversions. This should get more functionality as time goes on.

887810\_paste.tiff → Conversions now support adding or removing alpha to an image. When adding alpha to a new image, all values will be set to full opaqueness. Also, converting to one bit always removes alpha, because I didn't want to image the effects of a Floyd Steinberg ditherizing on alpha information.

646787\_paste.tiff → Printing now works. It will scale an image correctly, frame it, and put the name and path to the image underneath it.

979553\_paste.tiff → There's now a Page Layout Panel.

672681\_paste.tiff → Many parts of the interface were modified to use loadable nibs.

381620\_paste.tiff → The make index option had another memory leak plugged, but it still may occasionally crash the program.

651487\_paste.tiff → The NXBitmapImageRepControl program will now link all converters at start up. This shouldn't be a problem to users, but causes programmers to need to be careful, since they must subclass the converter object and make sure that their format name is unique from any others.

75309\_paste.tiff → It will now work with tif and jpeg extensions. These are the same as tiff and jpg, but used less commonly. Also, it will work with capitalized extensions.

729229\_paste.tiff → NXBitmapImageRepControl was cleaned up a bit when adding changes.

96830\_paste.tiff → The ImageControl object was cleaned up a bit and had the shearing bug fixed. This *has not* been fixed with GetXYPixel, so don't use this function on images that might cause shearing.

223469\_paste.tiff → Check out the Documentation subdirectory in the source distribution. This has nicely written docs for all objects used by GraphicsWorkshop. It's done in the style of the NeXT documentation.

## **Fixes and Additions as of January 15, 1993**

659271\_paste.tiff → Yeah, JFIF files can now be written.

917346\_paste.tiff → Support for reading and writing PCX files.

682017\_paste.tiff → Converter app into a more 3.0 compliant app.

812017\_paste.tiff → Added all this really nifty help panel stuff, and deleted the old help panel.

## **To Do List**



- 724964\_paste.tiff → Get services working and the revert to save menu option working.
- 169144\_paste.tiff → Make sure read and write multiple images at least return something in all converters.
- 594888\_paste.tiff → Make error handling more robust in the images.
- 282542\_paste.tiff → Add image cropping and compositing.
- 177696\_paste.tiff → Add gamma correction.
- 523024\_paste.tiff → Start on other image enhancements.
- 457966\_paste.tiff → Make it possible to write < 256 color PCX files.
- 484586\_paste.tiff → Work a bit more on the XBM converter. It seems to be having some problems, and it can occasionally enter an infinite loop.
- 874248\_paste.tiff → Proof read all this online help :-).