

“Photoshop” for the IIGs

KansasFest 2016

July 21, 2016

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Create new IIGs graphics

- Convert graphics
 - Support file formats unavailable on the IIGs
- Create graphics
 - Export (Save) to IIGs supported file format
 - Use sophisticated graphics editing features unavailable with IIGs graphics software

Agenda

- Download and Install GIMP components
- Ilgs graphic concerns
- Export picture to Ilgs native format

Why GIMP?

- Free
- Available on all major modern platforms
 - Windows, Linux, Solaris, BSD, MacOS
- Well supported
- Well documented
- Used by Juiced.GS

What is needed?

- GIMP
 - UNIX/Linux
 - Install from vendor or third party package repo
 - Windows/Mac
 - Download and install <https://www.gimp.org/downloads/>

What is needed?

- Python 2.6, 2.7, or 3.x
- UNIX/Linux/MacOS
 - Install from vendor repo
- Windows
 - Download and install from <https://www.python.org/downloads/windows/>

What is needed?

- GIMP plugin and palette file for making IIGs graphical images
- Download
 - <https://www.kansasfest.org/downloads/>

What is needed?

Install GIMP components (use correct version number, these are for 2.8)

- UNIX/Linux

- `~/gimp-2.8/palettes/Apple-II-SHR-640-Dither.gpl`
- `~/gimp-2.8/plug-ins/iigs_export.py`
- `chmod o+x ~/gimp-2.8/plug-ins/iigs_export.py`

- MacOS

- `~/Library/Application Support/GIMP/2.8/palettes/Apple-II-SHR-640-Dither.gpl`
- `~/Library/Application Support/GIMP/2.8/plug-ins/iigs_export.py`
- `chmod o+x ~/Library/Application Support/GIMP/2.8/plug-ins/iigs_export.py`

- Windows

- From http://en.wikibooks.org/wiki/GIMP/Installing_Plugins On Windows, go to the folder GIMP is installed in (usually somewhere in Program Files). Once in the GIMP's main folder navigate to `lib\gimp*version\` where as `*version*` represents the version of The Gimp. Copy `.gpl` file to palettes folder. Copy `.py` file to plug-ins folder.

Think IIGs graphics

- 320 x 200 Super Hi-res
 - 16 colors
 - Pixel ratio 10:12 (rectangular pixel)
- 640 x 200 Super Hi-res
 - 4 colors
 - Pixel ratio 5:12 (rectangular pixel)
- 640 x 200 Super Hi-res
 - Dithered 16 colors
 - Effective pixel ratio 10:12 (rectangular pixel)

Non-square pixels

- Steps in GIMP
- Uncheck menu item View → Dot for Dot
- Select Image menu and choose “Print Size...”
 - Break connecting link between X resolution and Y resolution
 - Divide Y resolution by 1.2 for 320 mode or Dithered 640 mode. Or Divide Y resolution by 2.4 for normal 640 mode.
- Select Image menu and choose “Scale Image...”
 - Break connecting link between Width and Height
 - Divide Height by 2.

Set Color palette

- 320 mode
 - Select Image → Mode → Indexed menu item
 - Maximum number of colors: 16
 - Color Dithering: Floyd-Steinberg (normal)
 - Click Convert

Set Color palette

- 640 mode
 - Select Image → Mode → Indexed menu item
 - Maximum number of colors: 4
 - Color Dithering: Floyd-Steinberg (normal)
 - Click Convert

Set Color palette

- 640 mode, dithered standard desktop colors
 - Select Image → Mode → Indexed menu item
 - Select Use Custom Palette
 - Select “Apple II SHR 640 Dither”
 - Uncheck “Remove unused colors from colormap”
 - Color Dithering: Floyd-Steinberg (normal)
 - Click Convert

Export to IIGS screen file

- Select File menu and choose “Export As...”
- Find widget “Select File Type (By Extension)”
- Choose “Apple IIGS SHR Screen PIC \$C0/\$0000”
- Enter filename with .pic extension
- Click Export button

Export to IIGS screen file

- Move file to IIGS
- Set the ProDOS file type to \$C0
- Set ProDOS auxiliary file type to \$0000
- View with IIGS picture viewer

Make new IIGs content

- Make new IIGs images
- Share pictures with others

- Questions?