Notes about Mosaic Toolkit Plus

Version Date: Feb 7, 2010

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Copyright: "Copyright ©2005-2010"
Author: "LOtis Digital Art"
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Compiled with Vista compatible FilterMeister
version FM 1.0 beta 09d

Note: Only apply this filter to 8 bit RGB and Gray
scale images: SupportedModes:
RGBMode,GrayScaleMode

Below is an explanation of the styles, sliders,
and options available in this version of Mosaic
Tools.

Mosaic Toolkit Plus provides over a million possible mosaic combinations using the Slider bars, Style selections, cell tile Options, and methods for Blending the mosaic with the original image file.
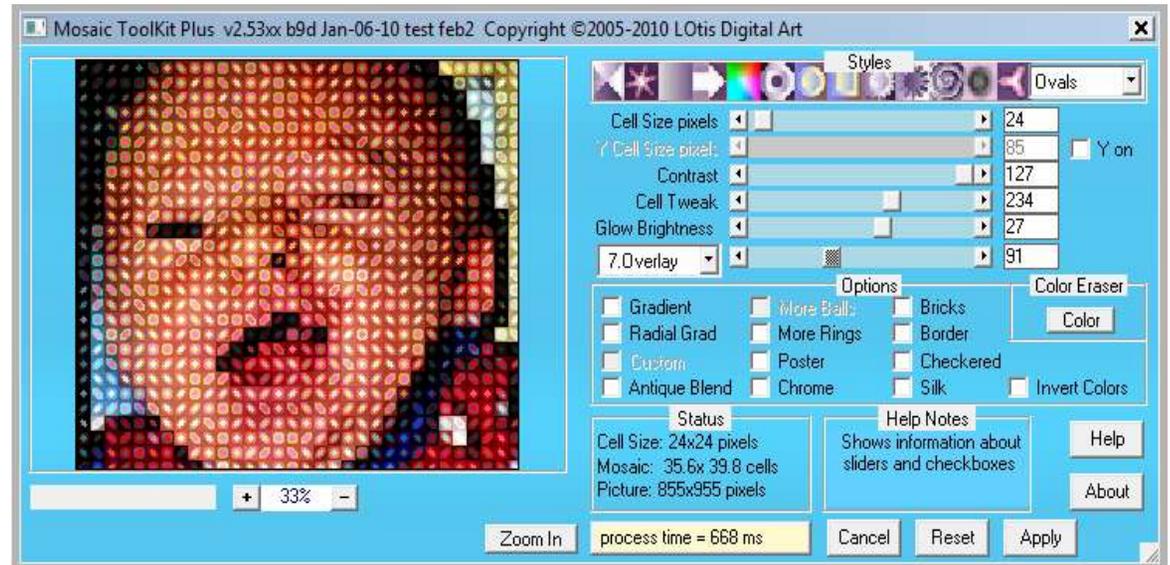
1. Styles:

The Styles COMBOBOX in the upper right-hand corner of the Dialog Box provides you with a pull-down menu of choices for the style of the Mosaic tiles. These styles are listed below. Styles have options for the Gradients, Brick, Chrome, Poster, plus a number of other options. See the Options list in section 3 below. Mosaic Toolkit Plus Styles Listing:

|					
Squares	Balls	Rings	Square Rings	Star Splash	Gears
Flowers	Diamonds	Triangles	Spirals	Bullet Hole	Octagons
Hexagons	Pyramids	Tile Images*	Triangles 2	Arrows	Ovals
Kaleidoscope	Parabolas	Crosses	Stars	Olives +**	Fractals
Fireworks	Maze	Candles	Spectrum	Weave	Tangle
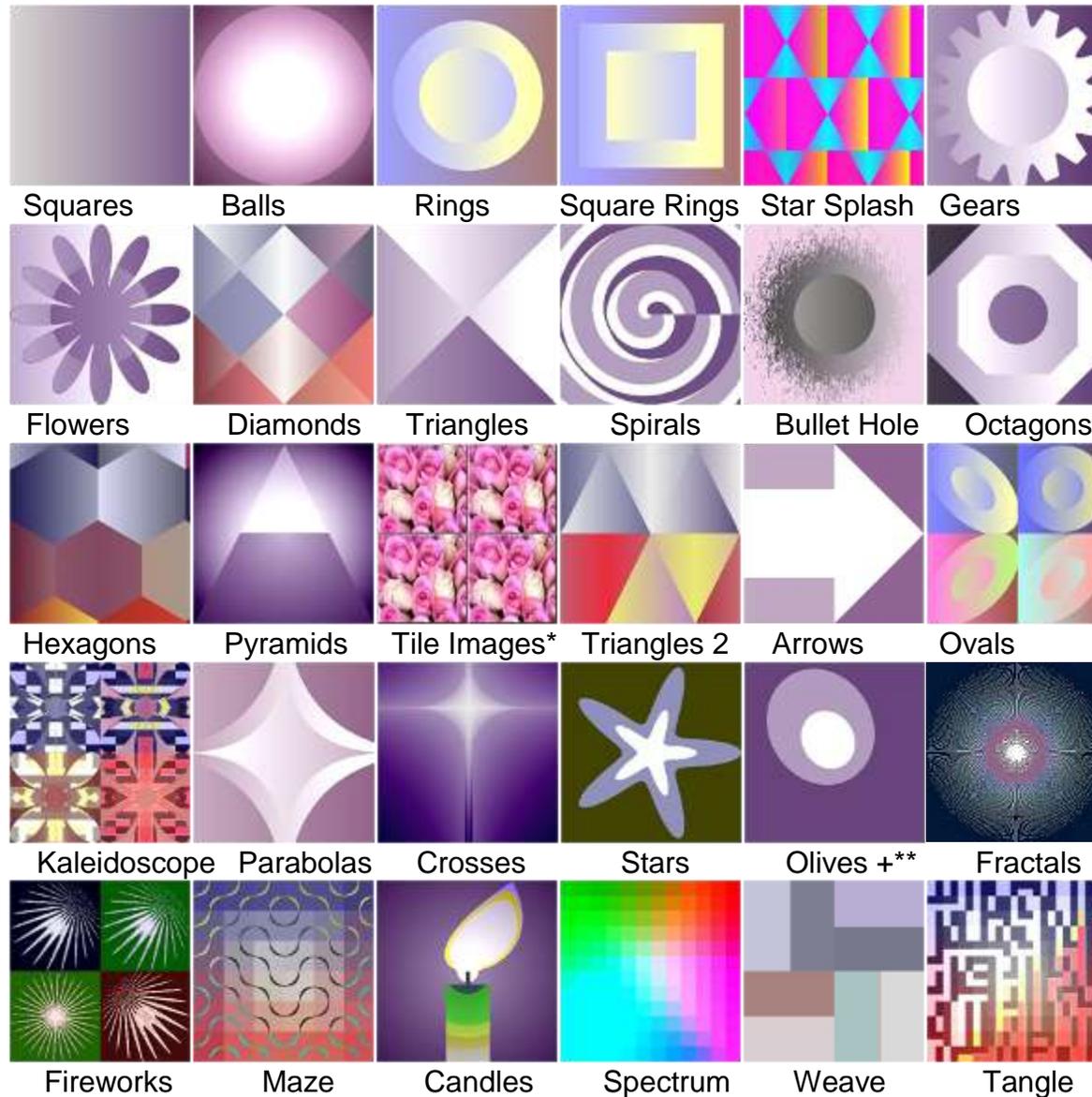
*   Image tiling includes
- self-tiling the source image listed as "This" on the Style menu.
- self-tiling the source image in a gaudy style
- tiling an external BMP file

Tile BMP File: Select a BMP file to tile and blend with the source file. Note that the maximum size of an external BMP file is 1600 x 1600 pixels. An example is seen on the right.

** Olives+ includes a number of odd forms accessed by moving the Tweak slider:
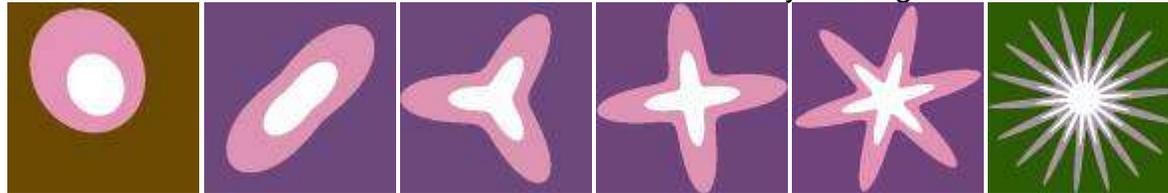
2. Sliders:

Cell Size pixels: sets the size of the square Mosaic Cell or Tile. Starting size Cell Size is 1/10 of the minimum of image Height or Width. If the Y slider is activated, it is the X Cell Size Slider and sets the Horizontal X Cell Size pixels.

Contrast: Sets the color contrast of the Mosaic. Moving right increases contrast.

Cell Tweak: Samples colors in a 360 degree arc in the cell for determining up to three colors to be displayed in the cell. It is also used to vary Chrome and Silk effects.

Glow Brightness: Brightens certain aspects of the cell image depending on the cell style.

Y Cell Size pixels: If Activated, sets the Vertical Cell Size. Activate via the "Y on" Checkbox.

Blend Slider: Based on the blend options, blends the mosaic with the original image. 0= none, 255 = all of original. Specific blend options are listed in section 3.
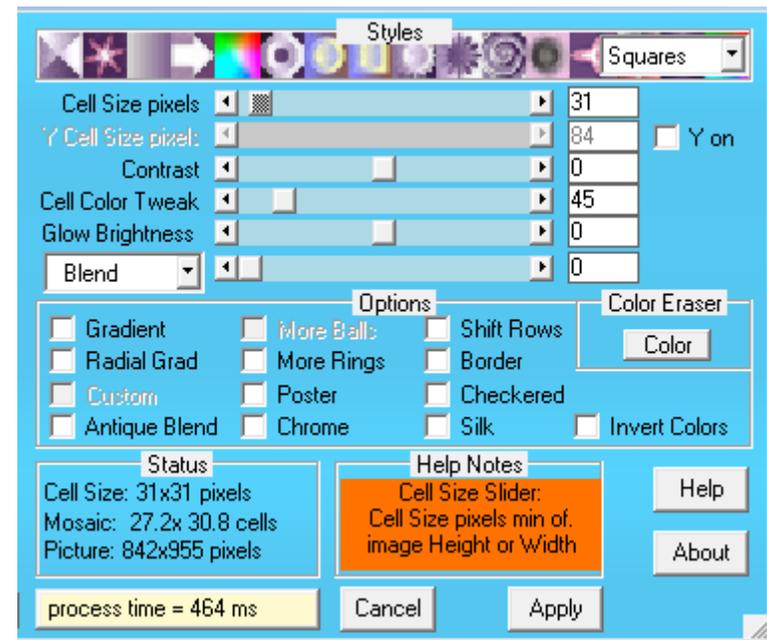
3. Options:

Checkered CHECKBOX applies the effect in a checked pattern over the source image.

Border CHECKBOX applies one cell tile around the outside of the source image.

Sample border designs are shown at the right. This just a few of the over a million combinations of style, sliders, options, and blends that can achieved.
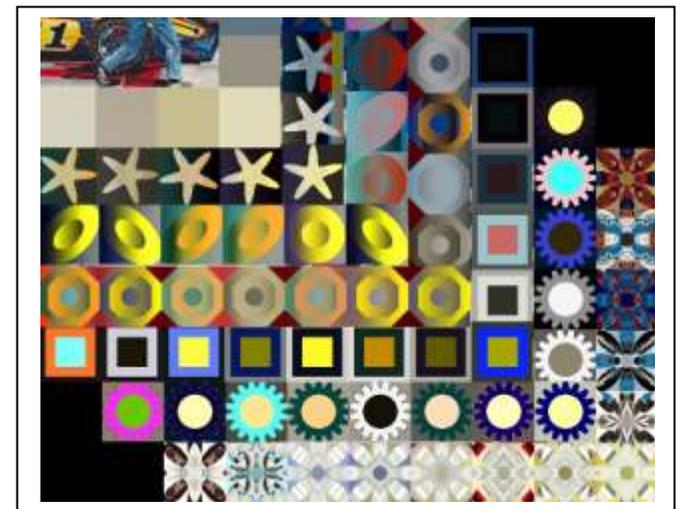
Options shown in the figure to the right starting in the upper left-hand corner: Checkered, Border, Poster, Color invert, Bricks or shift rows, Radial Gradient, Linear Gradient, Chrome, Silk, More balls, More Rings, and Antique.

Poster CHECKBOX Applies poster colors to the blended mosaic tiles.

Invert Colors CHECKBOX inverts colors green to magenta, red to cyan, black to white,etc.

Bricks or Shift Rows CHECKBOX Shifts alternate rows for a brick effect.

Radial Grad CHECKBOX applies a Radial gradient to each cell.

Gradient CHECKBOX applies a Horizontal gradient to each cell

Chrome CHECKBOX applies a grayscale chrome effect to the blended mosaic tiles. Use the Glow slider to enhance the effect.

Silk CHECKBOX applies a colored shiny silk effect to the blended mosaic tiles. Use the Glow slider to enhance the effect.

More Balls CHECKBOX adds more balls to certain Styles. It is grayed-out when not active.

More Rings CHECKBOX More Rings are added based on Glow Slider setting.

Antique Blend CHECKBOX Applies custom dissolve to Blendings .

Blend options COMBOBOX: provides a list of possible blend options for blending the Mosaic with the original image. This sets the blend options and the slider sets the blend strength. Most of these blend modes are part of the FilterMeister compiler package used to make this plug-in. The best way to see what these do is to try them. See this page for more information on blending modes: Blending

1.Normal	12.Darken
2.Dissolve	13.Lighten
3.Threshold	14.Exclusion
4.Threshold 2	15.Difference
5.Multiply	16.NegDif 1
6.Screen	17.NegDif 2
7.Overlay	18.Subtract
8.Soft Light	19.Add
9.Hard Light	20.Expose
10.Dodge	21.Erase a Color: make it transparent
11.Burn	22.GroutLines outlines tiles

Y on CHECKBOX Activates/Deactivates the Y Cell Size (vertical) pixels slider.

Custom CHECKBOX Applies custom color palette to Rings and SquareRings and custom effects to certain styles or options such as custom display of tiled source and external files. The checkbox is grayed-out when not active.

Color Eraser Button allows you to view or select a background color to erase. Once a color is selected, you can turn erase on/off with the Color button. You must set a erase strength using the blend slider, see Blend Option 21. Color Eraser results in erasing the style and effects from the area with the selected color. In the picture on the right, yellow was selected to have the mosaic effect erased from the background. Note: Color Eraser is not active for Chrome or Silk options.

4. Help tips:

The **Help Notes** box shows information about sliders and checkboxes, when selected.

The **Status** box shows the Mosaic Cell Size in Pixels, the Mosaic Dimensions in Pixels, and the Picture Dimensions in Pixels. The Scale Factor may affect Preview colors and Status data.

Why Make Mosaics?

Many reasons, for the sake of art is one reason. Salvador Dali's Lincoln is an example. Dali painted "Gala Contemplating the Mediterranean Sea" in 1976, which at 30 meters becomes the portrait of Abraham Lincoln. Google's Picasa provides tools to make photo mosaics from many different photos. Mosaic design can also be used for wallpaper, ceramic tile layout, rug design, and is an easy way to scale up a small image into larger image as a set of tiles.

University of Washington (Seattle) graduate Chuck Close is well known for his large portraits of faces that are mosaics made from multiple small geometric forms. The individual elements of the images are very visible when viewed close up, but merge when seen at a distance. Mosaic Toolkit builds a mosaic from one image, somewhat like Chuck Close, using the Ovals style. Here is a close up of one of Chuck Close's paintings and below is a mosaic of a similar subject made in a few minutes with Mosaic Toolkit and Corel's Paint Shop Pro X2. Lotis Digital Arts also has a separate plug-in called the "Chuck Effect Toolkit" for advanced application of this effect.

Chuck Close
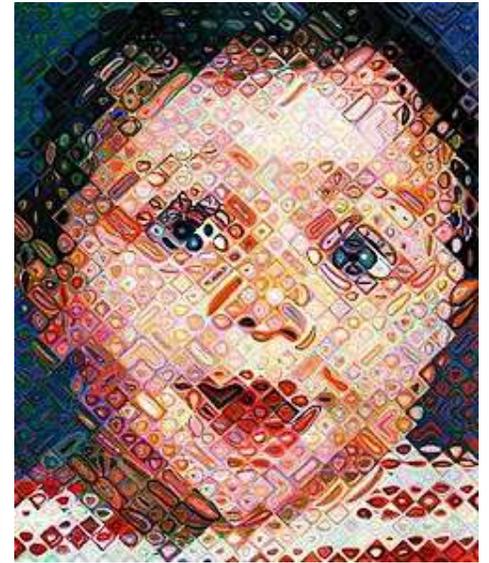
A Simple Guide for Making a Mosaic:

1. You need a host image editing application such as Photoshop, Paint Shop Pro, or Irfanview to use this plug-in. The Plug-in Site: http://thepluginsite.com/knowhow/tutorials/plugin/MakingAvailable.htm provides installation tutorials for some hosts.

2. Copy the plug-in 8bf file and the accompanying Lotis Digitals Arts Mosaic pdf help file to the same host plug-in directory. A separate subdirectory for Lotis Digital Art plug-ins is suggested.

3. Start your host image editing program and select an image of any type, e.g. JPG, Tiff, etc. supported by the host program. This is the Source image.

4. Select the Mosaic Toolkit plug-in in the host program. Selection varies from host-to-host. See the "Image/Effects" menu option in Irfanview. See the "Effects/Plug-ins" menu option in Paint Shop Pro.

5. When you start the Mosaic Toolkit Program the first time, you should see a standard square mosaic tiling of your source image in the Preview Window. You can change the styles of the tiling by selecting a style from the STYLE combo box in the upper right hand corner of the plug-in Dialog. There are 18 different styles in the Oct 2009 version 2.4 edition.

You can change the size of the tile cell using the cell size slider. The default is a square tile cell. If you want to change to a rectangular cell, select the "Y on" check box which activates the Y cell size slider. 'X' is horizontal, "Y' is vertical.

With the exception of the external BMP image tile style, cell tile colors are based on the underlying colors of the source file in the same region.

You can change the look of the tile cells by selecting from the options check boxes, e.g.: Gradient. You can also change the look of the tile cells using the "Contrast", "Tweak", and "Glow Brightness" sliders.

So far with the blend slider all the way to the left you see only the Mosaic. By using the blend slider you can blend the source file with the Tiled Cells. You can change the method of blending by selecting from the blend option combo box to the left of the blend slider. Many of these Blend Selections are based on traditional photography methods such as DODGE, BURN & OVERLAY. There are also some new blend methods such as "Erase Color". This blend selection allows you to select a file cell color to make transparent. This is useful if you want to see part of the Source image peaking through certain sections of your tile cells. This is particularly useful when tiling with external BMP files. See the bees and flower example in Section 1.

Loading external files to blend with the source file:

Select the Tile BMP file Style and follow the dialog to find and select a file. BMP files are the only type that can be used. Other file types such as JPG require a set of compression routines normally supplied as a "codecs". You can modify the type of an existing file from JPG to BMP by using and one of a number of inexpensive programs such as IRFANVIEW. Maximum BMP file size is 1600 x 1600 pixels.

Using an external file with a transparent background:

BMP files do not have a transparent layer, however, you can select a color to be transparent via one of the blend options "Erase Color". Tile the external file then with the blend slider all the way left select a color you want to erase by right clicking your mouse at the selected color position on the Preview Window. Move the blend slider to the right to strengthen the effect. If you make your own BMP files to load, a good approach is to use a Kelly Green background or a bright blue background to be used as the transparent color. Select a background color that is not part of the foreground otherwise you will have transparent areas in the foreground. It is tricky to create a BMP image of flowers that have both green and bright colors in the foreground, try and create a background color that is the negative of the foreground (e.g., orange background for a green foreground).

Troubleshooting and bugs:

Memory error messages appear sometimes. Typically when performing a number of options simultaneously on a complex Style with very many, very small, tiles or attempting to make a few very big tiles (e.g. tiles 3000x3000 pix). This is a bug. We are open to suggestions, we are working on it. Sometimes clicking the Reset Button will help. To contact us, kindly email us at: lotis666@gmail.com.