

# Imaginator 8.0 New Features

April 5, 2006 - WLG

## ***Introduction:***

Imaginator 8.0 introduces the concept of unlimited, independent layers to the program. The previous “background”, “foreground” and “cut” have been replaced with any number of layers. The “Active” or currently selected layer acts like the previous “foreground” layer. This is the only part of the image that can be painted on for example. The layer just below it in rank acts like the “background” layer except that instead of using “paint from background” you simply paint with transparency (Alpha) on the active layer to reveal the layer below it. Unlike paint from background, this technique is non-destructive (does not change the color pixels on the top layer). The existing Mask icons also operate on the Alpha channel of a layer. The “cuts” are now just layers which can be manipulated (scaled, rotated, warped etc.) and do not ever have to be pasted. Of course you can still “paste” a layer down to the one below it by “Merging” layers if you wish.

A whole new set of icons have been added to the main (paint) menu as well as a new Layer Submenu to work with the layers.



Finally, these new layers are all saved in a new file type called “COOL” for Colorave Object Oriented Layers. The name hints at what’s available now and what is planned for future versions. The Cool files can be exported to Photoshop™ format keeping the layers intact in that program. And they can be exported to Tiff where a “flattened” image will be exported while keeping the layers separate in the Cool file. In addition, you can save the open Cool file as a Tile file to work on a flattened version of your file. You can easily build new Cool files by appending as many other Cool and/or Tile files as you like.

## ***File Menu:***

“COOL” Benefits of the new file format are:

1. Compound Document. A single physical file contains all of the layers and their preview and thumbnail images.
2. Layers can be appended, inserted, re-arranged and deleted without copying or re-writing the entire file.
3. Layer properties are stored using tags so that the file will always be forward and backward compatible with future versions of the software.
4. Format is extensible to be able to contain other types of objects in the future.

The existing TILE format is still fully supported and is used to transition to the new format and/or to store single layer images.

In the file menu, the file types are distinguished by a new mark in the upper left corner of the thumbnail image. A  represents a Tile file and a  represents a COOL file.

When you mark a file and click on the Open File icon, you will see that the dialog has changed a bit:



The first section display information about this image:

1. Image Image name (increased to 30 characters in this version)
2. Dimensions Image Dimensions in the user selected Units
3. Size File size in Mb (megabytes)
4. Color RGBM or CMYKM color model
5. Format Cool or Tile
6. Layer Number of layers in the file
7. Creation Date Date the file was created (not functional yet)
8. Last Update Date the file was last updated
9. Title Title for the image (Cool only)
10. Subject Subject of the image (Cool only)
11. Author Author / Artist / Owner (Cool only)
12. Keywords Keywords for later searching (Cool only)
13. Comments Other comments (Cool only)

The second section offers two options for opening the image. It can replace the currently open file (and all of its layers) or be appended to the open file as a layer or layers. NOTE you can append as many Cool and Tile images as you like!

Clicking OK (or sweep GO) opens the image and displays the preview (image scaled to fit the screen). You must then select a window to zoom in on just like previous versions. However, in 8.0 you cannot paint at the preview level so you MUST select a window and sweep GO to continue.

The File Save / Close dialog box has changed a bit:



The first option is the File Format. If you select Cool then all the LAYERS will be saved in a Cool file (existing file by default but you can type of the name to save as a new file). If you select Tile, all of the layers will be FLATTENED to one layer in the file. However, they will remain independent layers in memory unless you close the file.

Like before, you can type a new name in the Image Name field to create a new file (aka "Save As").

Layers displays the number of layers (not functioning yet).  
File Size displays the approximate amount of disk space the file will take up.

The Title, Subject, Author, Keywords and Comments fields allow you to imbed this type of “summary information” in the file.

The options are:

1. Update Only            The image file is updated (saved to disk) but remains in memory.
2. Update and Close      The image file is updated and removed from memory.
3. Close (Don't Save Changes) The image file is NOT updated but removed from memory.

The Import / Export dialog has been greatly simplified:



Action Options:

1. Import to Cool            (Not Functioning Yet)
2. Import to Tile            Import a Tiff image to Tile format (Tiff to Cool not functioning yet)
3. Export                      Export a Tile image to Tiff (Tile to Photoshop™ not functioning yet) OR export a Cool image to Photoshop™.
4. Delete                      Delete a Tiff or Photoshop™ file

Format Options:

1. Photoshop™              Write an Adobe Photoshop™ file maintaining layers (Read not functioning yet)
2. Tiff                         Read or Write a Tagged Image File Format.

Foreign Directory:

Type or browse to the location of the Tiff or Photoshop™ files.

## ***Paint Menu Changes:***

There are some new icons added to the paint (main) menu:

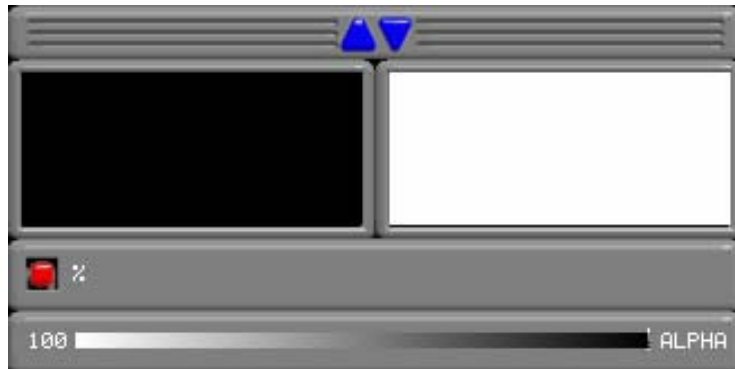


Paint Color and Alpha. “Alpha” is the transparency channel of a layer. Where the alpha is 100% (255 value), the layer will be completely transparent (shows the layer under it). Where it is 0% (0 value), the layer is fully opaque. Use this icon to paint with color and transparency simultaneously. Usually you would want to paint with 0% alpha over a transparent area when doing this.



Paint Alpha. Paint on the transparency channel of a layer. Where the alpha is 100% (255 value), the layer will be completely transparent (shows the layer under it). Where it is 0% (0 value), the layer is fully opaque.

When either of these icons are selected, the color icon brings up this dialog:



Move the slider to the left to paint with 0% alpha (makes the layer opaque) or towards the right to paint with transparency.

NOTE: The existing MASK icons currently affect the ALPHA channel and can be used to alter the transparency of a layer. There is NO masking ability in version 8.0. However the same effects can be achieved using layers without the ‘permanency’ of masks. “Automask” is particularly useful to knock out the background of a layer (silhouette).

NOTE: The “Paint From Background” icon is currently disabled. It will return in a later version with the ability to paint from any layer to another. The old functionality is simulated by painting alpha on the top layer, revealing the layer underneath.

## ***The New Layer Popup:***

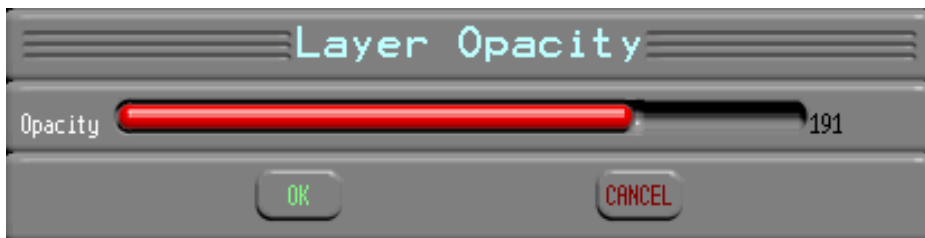
(Unless otherwise noted, all of these icons act on the single ACTIVE layer)



Update Undo      Update the undo buffer for the layer



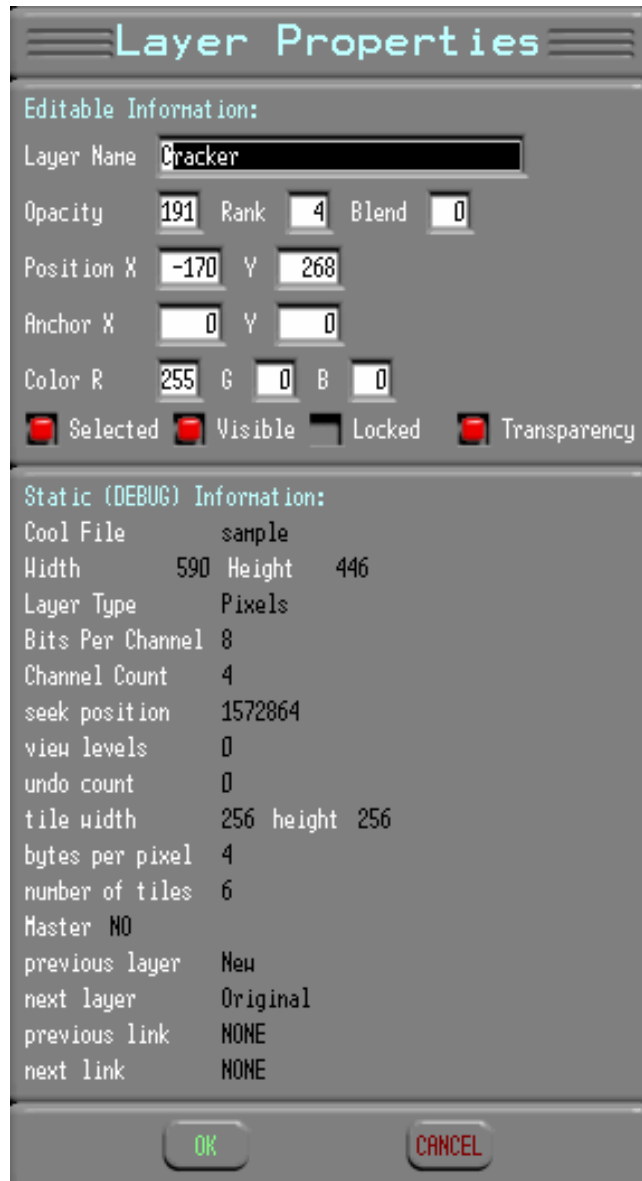
Set Layer Opacity      Sets the overall opacity of a layer using this dialog:



Where 0 is 0% opaque (i.e. totally transparent) and 255 is fully opaque.



Edit Layer Properties      Displays various information about the layer,  
SOME of which is editable from this dialog:



Editable Information (all of which is editable using various icons as well):

1. Layer Name The name of the layer
2. Opacity Overall Layer Opacity
3. Rank The layer ordinal number
4. Blend Blend Mode (not yet functional)
5. Position X, Y pixel position relative to the Master Layer's magnet point.
6. Anchor The Anchor point (which is set to the position)
7. Color Not yet functional
8. Selected Checked if this is the Active layer
9. Visible Checked if this layer is visible
10. Locked Checked if this layer is locked
11. Transparency Checked if the layer is showing transparency

Static (Debug) Information - Various technical information about the layer.



Toggle Layer Visibility      Hide / Show the layer.



Toggle Layer Transparency Display      Hide / Show the transparency (Alpha) of a layer.



Show Hide Other Layers      Switches between showing ALL the layers and just showing the active layer. (Also Alt-B hotkey).



Push Layer Down      Push the layer down one level in rank.



Pull Layer Up      Pull the layer up one level in rank.



Delete Layer      Delete the current layer (with confirmation)



Merge Layer Down (paste)      Flatten two layers (paste Active layer onto the one below it).



Select a Layer      Use the pen / mouse to select a layer to activate (hold down CTRL key and pen down for the same effect).

### ***Layer Manipulation Popup:***

You are probably familiar with most of these icons already except that they now act on the active layer instead of a Cut or Foreground image. New Icons:





Crop / Extend layer (not functioning yet)



Move the Layer Click and drag ANY layer (hold down SHIFT key and pen down/move for the same effect).

## ***New Create New Layer Popup***

The first three icons are recognizable as the old “cut” icons except now they always keep the alpha of the image it was cut from and they create a new separate layer.

New Icons:



Copy Layer Copy the active layer to a new layer



Create a blank layer Create a new layer by defining a rectangle for the size.

## ***New Layer Submen:***



Select this icon to go to the layer menu.

The layer menu shows thumbnails of each layer in the image. The left-most layer represents the bottom layer and the right-most layer is the top layer. The Active layer's name is displayed in blue type. There are several 'marks' which can appear in the upper left corner of the layer's thumbnail:

- Represents the Master layer (not functioning yet – currently the bottom-most layer is always the master layer).
- Represents a hidden layer.
- Represents a locked layer (cannot be painted on or manipulated).
- Represents a linked layer (not functioning yet).

New Icons:



Save Layer(s)

Save marked layer(s) to separate Tile file(s).



Select Layer

Select the marked layer (make it active).



Rename Layer

Change a Layer's name.



Delete Layer(s)

Delete marked layer(s) (after confirmation). Note: layer(s) are deleted from memory but not from the file until the file is updated.



Layer Properties

Displays various information about the marked layer.



Toggle Layer Visibility

Hide / Show the marked layer(s).



Set the Master Layer

Set's which layer the others are relative to (not functional yet – the first layer is always the master currently).



Push Layer(s) Down

Push the marked layer(s) down one level in rank.



Pull Layer(s) Up

Pull the marked layer(s) up one level in rank.



Swap Layers

Swap two marked layers (in rank).



Merge Layers

Flatten all marked layers.



Copy Layer(s)

Copy the marked layer(s)



Lock/Unlock Layer(s)

Toggle the lock state of the marked layers. A locked layer cannot be painted or manipulated in any way.



Link Layers

Link the marked layers together. When any of the layers in the chain are manipulated (scaled, rotated, moved, copied, deleted etc.) the ALL the layers in the chain are manipulated in the same way. (not functional yet).



Unlink Layer(s)

Remove the marked layer(s) from their chain.

### ***New Hot-Keys:***

There are a few new hot-keys added for the layers:

Home	Press to select the Bottom layer
End	Press to select the Top layer
Left Arrow	Press to select the previous (lower) layer in rank.
Right Arrow	Press to select the next (higher) layer in rank.
Delete	Delete the active layer (with confirmation)
Insert	“Flash” the active layer
Up Arrow	Press the Up Arrow to Pull the active layer up in rank.
Down Arrow	Press the Down Arrow to Push the active layer down in rank.
Ctrl + Pen Down	Hold the CTRL key down and pen/mouse down on a layer to select it.
Shift + Pen Down	Hold the SHIFT key down and pen or mouse down on a layer to select it and move the pen/mouse while it's down (drag) to move the layer.
ALT-B	Toggle Single Layer display