3.0 Enhancing Images

The image enhancement tools are used to create a color composite image through color compression, or render regions of an image transparent.

The transparent colors functionality is particularly useful in creating mosaics, since you can hide portions of images that you do not need.

The following options are available:

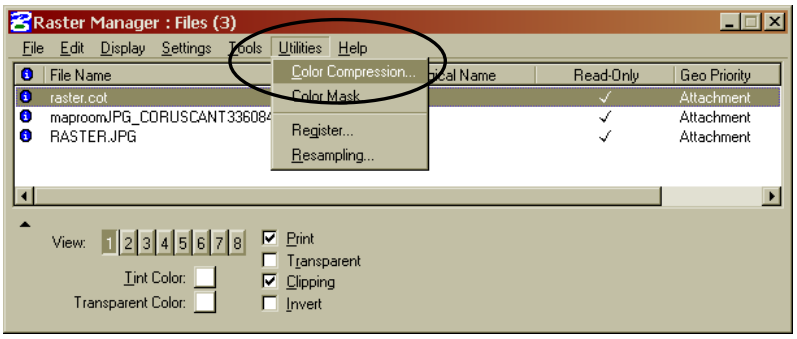
Color Compression

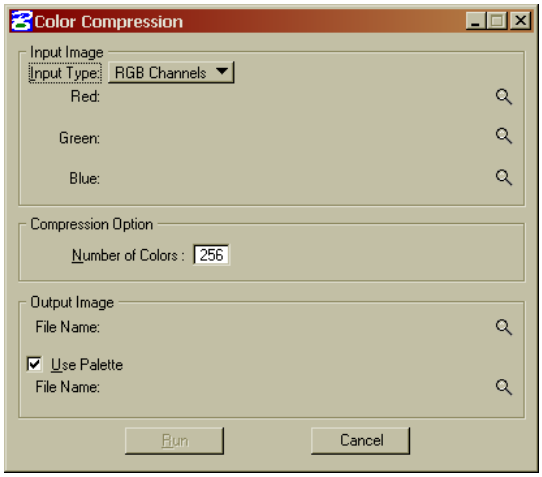
Transparency and Backfill Color

3.1 Color Compression dialog box

The Color Compression dialog box is used to enter the parameters for producing a color composite image through color compression. The output image can be a RGB combination of three input images as seen through red, green, and blue filters. It can also be the result of color compression applied to a single file.

To access the Color Compression dialog box, from the Raster Manager Utilities menu, select the Color Compression menu item.





Input Image
To select each of the input files, click the "Browse Location" buttons and use the Select Input Image dialog box.

When each of the input images has an appropriate contrast and displays with clarity, the color composite resulting from the color compression should be clear and correctly contrasted. Choose any valid type of file as input except Binary files.

Input Type

Choose the "RGB Channels" option if you want to produce a RGB combination of three input images.

Choose the "Single Channel" option if you want to apply a color compression on a single file.

If the "RGB Channels" is selected, the three files selected must be grayscale channels (R-G-B). The grayscale palette is also supported.

Compression Option

Use to select the Number of Colors of the output image.

Output Image

To specify the output file name, click the Browse Location button and use the Select Output Image dialog box. The file type, color mode and the data compression to be used can also be specified.

Use Palette

To use an existing palette, turn on the Use Palette toggle and use the Browse Location button to specify the raster file.

Run

The Run button can be accessed only when the parameters have been correctly entered. Click this button to create the output image with color compression. While the batch program is running, a Progress indicator displays.

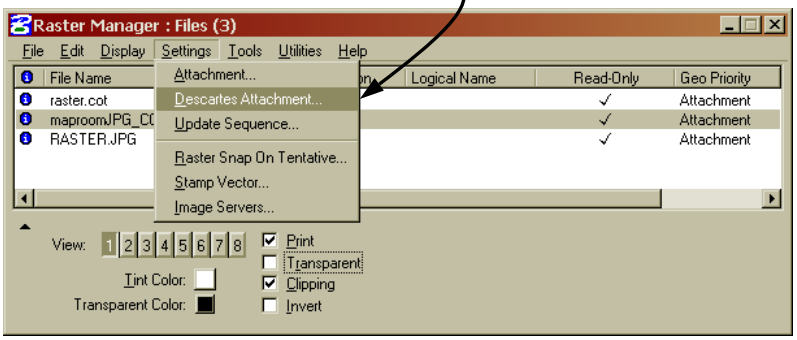
Cancel

If you decide not to use the present parameters, click Cancel and the dialog box then closes.

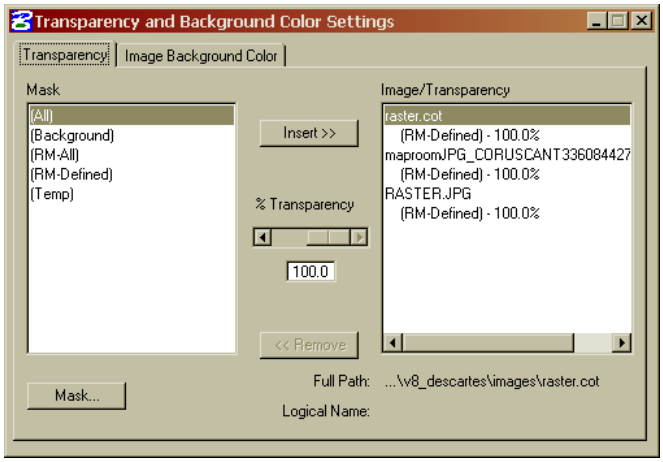
3.2 Transparency and Background Color Settings dialog box

This dialog is used to change the default background color and to apply transparency to images. In both tabs, the right section display the image opened in Raster Manager. This dialog is modeless and therefore this list is synchronized with the Raster Manager list.

To access the Transparency and Background Color Settings dialog box, from the Raster Manager Settings menu, choose Descartes Attachment.



3.2a Transparency tab



This tab is used to set transparency on images. Color masks are used to set colors as transparent. More than one mask can be assigned to an image. Each mask is applied with a percentage of transparency. If more than one mask is assigned to an image and the same color is set as transparent by more than one mask, the last mask applied to the image has priority.

The ***(All)*** mask is used to add all colors from the target image to the mask. This mask is a system mask and cannot be modified or deleted.

The ***(Background)*** mask is used to specify the color to be used for background operations (Erase, rotate,

etc.). The background color can be set under the “Image Background Color” tab. This is a system mask. It can be modified but cannot be deleted.

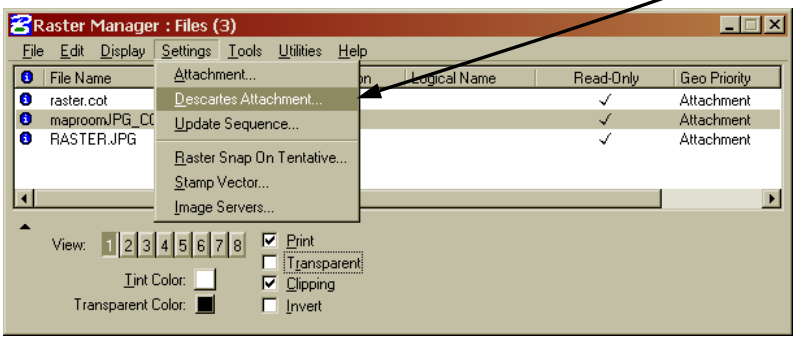
The ***(Temp)*** mask is used to temporarily add/subtract colors. It simply avoids creating a new mask for temporary usage. This is a system mask. It can be modified but cannot be deleted.

It is possible to assign the same mask to several images in one step. Multiple selections are supported in the image list. When using multiple selections, it is not possible to mix binary images with other image types. When binary images are selected, only two masks are available:

- “(Foreground)” – Redefines Raster Manager foreground color for binary images.
- “(Background)” – Redefines Raster Manager background color for binary images.

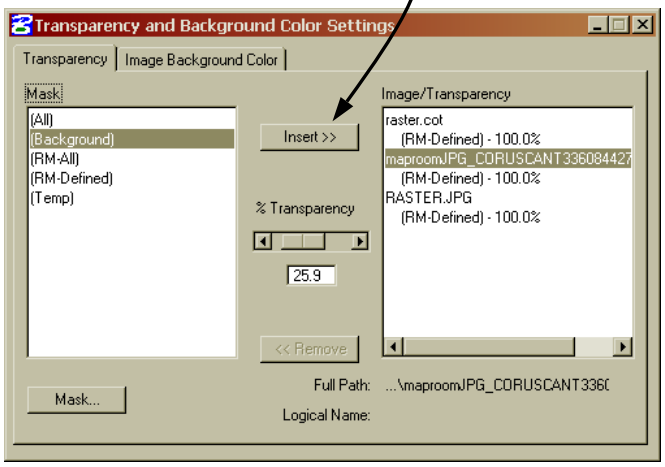
To open the Transparency and Background Color Settings dialog box:

1. From the Raster Manager Settings menu, select *Descartes Attachment*.



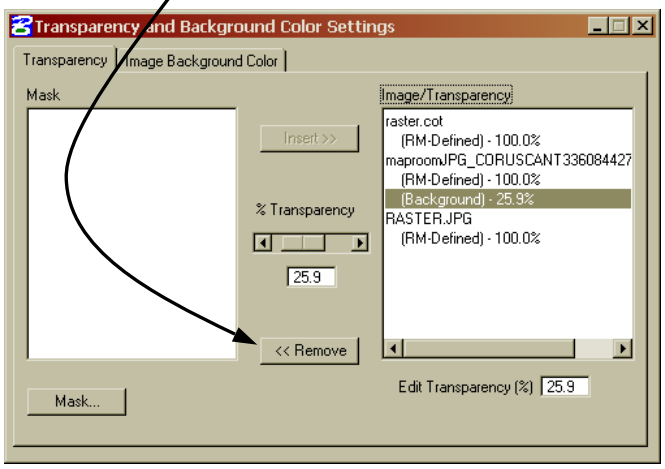
To assign a Mask and Transparency percentage to images:

1. From the Image/Transparency list, select the image(s) to which the mask will be assigned.
2. From the Mask list, select the mask to be assigned.
3. Set the percentage of transparency
4. Click on the Insert>> button.



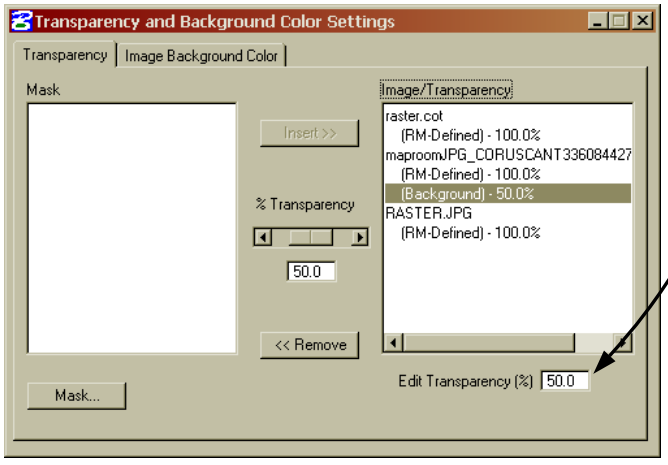
To remove a mask:

1. From the Image/Transparency list, find the image for which you want to remove a mask assignment and select the mask to be removed.
2. Click on the <<Remove button.



To modify the percentage of transparency of an assigned mask:

1. From the Image/Transparency list, find the image and select the mask you want to modify.
2. Change the percentage in the Edit Transparency field at the bottom right of the dialog.
3. Click Enter on the keyboard.



To modify the order masks are applied to the same image:

1. From the Image/Transparency list, select the image you want to modify and select the mask to be moved.

2. Right-click on the mask and select Move Up or Move Down.

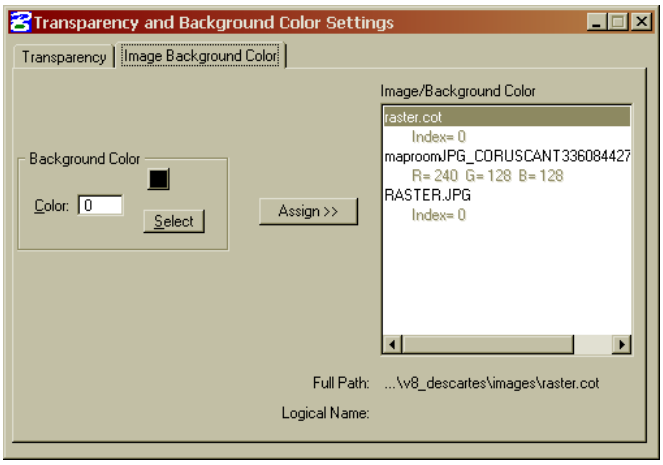
To add a new mask in the Mask list:

1. Click on the Mask… button on the lower left of the dialog. This will open the Color Mask dialog.

2. In the Color Mask dialog, select Tools > New Mask

3. Name the mask and press the enter key.

3.2b Image Background Color tab



When processing images, it is often necessary to define the background color. Images that are from different sources or scale may not all share the same background color value. Hence, it becomes tedious to set a different background color for each image included in a mosaic.

The background color can be assigned at the beginning of a workflow, by using a specific RGB color. This color will be used by Bentley Descartes whenever the background pixels need editing. By doing so, once a mosaic is completed, all the images will have the same background color.

The Image Background Color is used to assign a background color to an image. The background color is use by several Bentley Descartes tools. For example, when the Erase tool is used, all erased colors are replaced with the background color.

The default background color is assigned to all images.

- For binary images, the default is the Background color as defined by Raster Manager.
- For grayscale images, the default color is black (0,0,0)
- For 8-bit color images, the default is index 0.
- For 16 and 24-bit images, the default color is black (0,0,0)

Because color choices are different depending of the selected image, it is only possible to change one background color at a time.

To change a background color:

1. Select an image from the Image/Background Color list.

2. Select the color from the Background Color section and click the “Assign >>” button.

Once the background color is set, a background mask can be applied to make the background transparent. By doing so, an image will have its background automatically set as transparent.