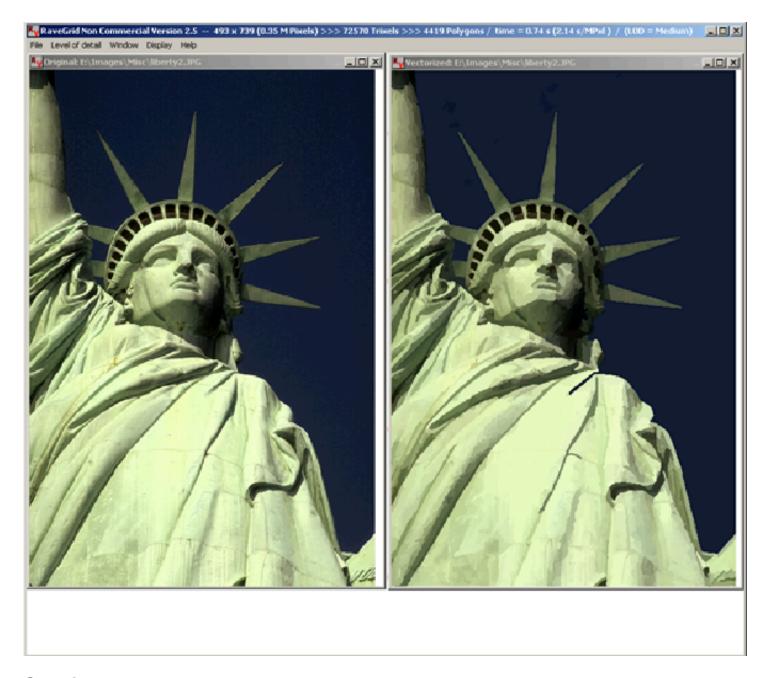
Introduction to RaveGrid 2.5



Overview

RaveGrid surpasses in the following aspects of image vectorization:

- · Support Scalability
- · Preserve Visual Quality
- $\cdot \ \text{Achieve Compression} \\$
- $\cdot \ \text{Handle Complexity} \\$
- · Perform Efficiently

RaveGrid Approach Employs:

- · Edge detection to obtain image cues
- · Delaunay triangulation to obtain regional correspondences among contours
- · Color sampling of triangles to obtain an image-adaptive trixelTM representation
- · Perceptual filtering of trixel edges based on proximity, continuity, color separation, etc.

- · Agglomeration into polygons of trixels whose common edges are filtered out
- · Vectorized representation of polygons via vertex coordinates and fill color

RaveGrid's computational complexity is linear in the number of image pixels.

System Requirements, Installation, and Uninstallation

System Requirements:

Pentium 3 1.7 GHz 256 MB RAM Windows 2000 or better OpenGL 1.1 compatible graphics driver

System Recommendations

P4 3.0 GHz 512_MB RAM Windows XP with all updates OpenGL 1.1 compatible graphics driver 128 MB Video RAM

RaveGrid Installation

RaveGrid installation has three key components: RaveGrid.exe, cedges.dll and imageVISTA.dll. On downloading RaveGrid 2.5, double click on the archived file and read the dialog and license agreement screen. If you understand and accept the terms, run the RaveGrid.exe executable file.

RaveGrid Uninstallation

Locate the directory RaveGrid is installed <u>in</u> and delete all three files, RaveGrid.exe, cedges.dll, and imageVISTA.dll.

Using RaveGrid 2.5

Welcome screen

When opening RaveGrid 2.5, the welcome screen will be displayed. There will be a countdown of the program verifying all libraries and OpenGL confirmations.



File Menu

Open

The open menu item will display the file management window to access a raster file for conversion.

Save as SVGZ

The SVGZ menu item will save the converted vector file as a scalable vector graphic file as *.svgz.

Save as EPS.GZ

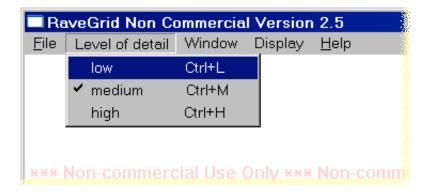
The EPS.GZ menu item will save the converted vector file as an EPS file that can more easily be used in other graphic edit applications. The file name will be saved as *eps.gz



*Please note that the windows environment will not recognize *.eps.gz as a readable EPS file unless you view "all files" in the open file dialog window of a graphic edit program.

Level of detail Menu

This menu selects the number of polygons to be displayed within the vector display. The lower the detail, the faster the processing time. The level of detail is not controlled by specifying a number of polygons. Rather, it is controlled by an internally set threshold that allows edges above the threshold strength to survive and subsequently contribute to the construction of polygons. Each of the levels of detail invokes a corresponding preset threshold value.



Window Menu

Original Menu Item

This function will make the original (raster) image window active and selected.

Vectorized Menu Item

This function will make the vectorized image window active and selected.



Display Menu

Report Statistics Menu Item

This window displays information regarding conversion time and the number of polygons created to vectorize the image.

Original View Menu Item

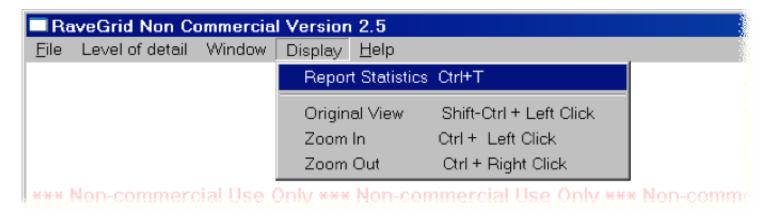
Rescales the viewable area back to the original zoom level (100%)

Zoom In Menu Item

Zooms both original and vectorized windows (can only be executed while vector window is active).

Zoom Out Menu Item

Zoom both original and vectorized windows (can only be executed while vector window is active).



Help Menu

About Menu Item

Displays opening splash screen for RaveGrid.

How to Use RaveGrid Menu Item

Links to the RaveGrid website for user manual, contact details and more information on RaveGrid technology.

