

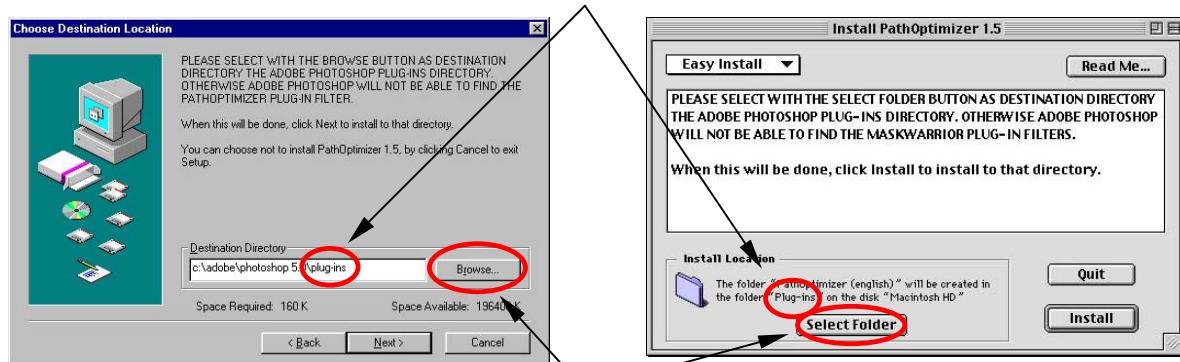
QuickStart

PathOptimizer is an Adobe Photoshop plug-in designed to convert automatically a mask into a path. It keeps the shape of the original selection while minimizing at the same time the number of vertexes. PathOptimizer will provide better paths in less time.

1. The installation

To install the program run “Install PathOptimizer” and follow the instructions. When you are asked where to install it, select the Adobe Photoshop’s “Plug-ins” directory as shown in Figure 1.

Confirm the installation in the Adobe Photoshop’s “Plug-ins” directory



Push this button to navigate and select the destination directory

Windows

Macintosh

Figure 1. PathOptimizer must be installed in the Adobe Photoshop’s “Plug- ins” directory.

If set up has been succesfull there will be a selection filter called “Mask to Optimized Path” inside the menus of Adobe Photoshop (see Figure 2).

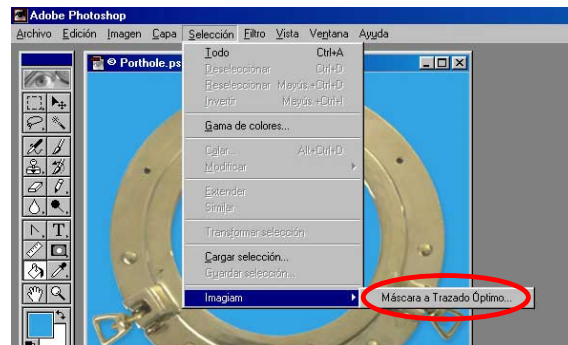


Figure 2. PathOptimizer filter location in Adobe Photoshop’s menus.

Troubleshooting

If you can not find the filter try the following:

1. Check Adobe Photoshop menus to verify once more that the filter is not there.
2. If it does not appear, restart Adobe Photoshop and check it again.
3. If still you can not find it, it could be that the application has not been installed in the Adobe Photoshop's "Plug-ins" directory. Adobe Photoshop only recognizes the filters included in this directory. If the name "PathOptimizer (English)" does not appear the installation has been incorrect. Uninstall it and install it again in the right directory.
4. If it still does not work, make sure you have Adobe Photoshop 4.0 or superior. PathOptimizer does not work with the 3.0 version and olders. Update it if necessary.
5. If you have more than one Adode Photoshop version, make sure you are running the one with the "Plug-ins" directory containing the PathOptimizer filter.
6. If you have chosen the plug-ins folder not to be selected by default by Photoshop "Preferences", make sure that the plug-in is installed in the folder of your choice.

If you can not still find the filters, consult with your dealer.

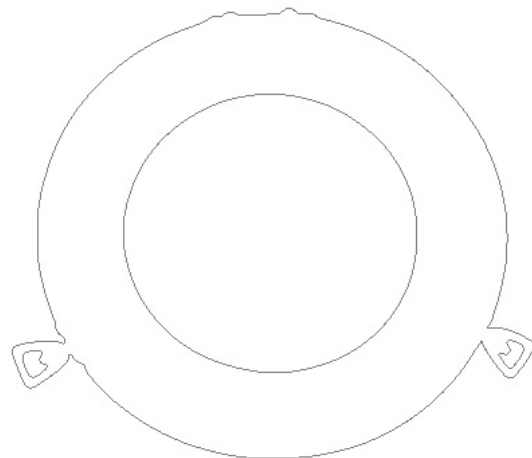
2. What is PathOptimizer?

PathOptimizer is a program made of a selecting filter:

- "Mask to Optimized Path" turns the original selection into a totally reliable path (see Figure 3).



Selection



Path

Figure 3. PathOptimizer turns a selection into a perfect path.

3. Why PathOptimizer?

Most of the time, the generation of a mask by an automasking tool is faster than a manual method. The Photoshop menu option "Selection>Colour range" can eliminate a monochrome background of a figure in seconds. The final result is a selection, but sometimes it has to be converted into a path, e.g. to export it to QuarkXPress.

Conversions from mask to path with Photoshop show a loss of quality in relation to the original selection and they are cumbersome. Paths have too many vertexes and some postscript interpreters can not analyze them. As a consequence paths must be hand made losing time and money.

PathOptimizer sorts out these problems delivering a perfect path with just a click. Thus PathOptimizer paths:

1. Have fewer vertexes and as a consequence any postscript interpreter will accept them.
2. They approach better the original profile as shown in Figure 4.

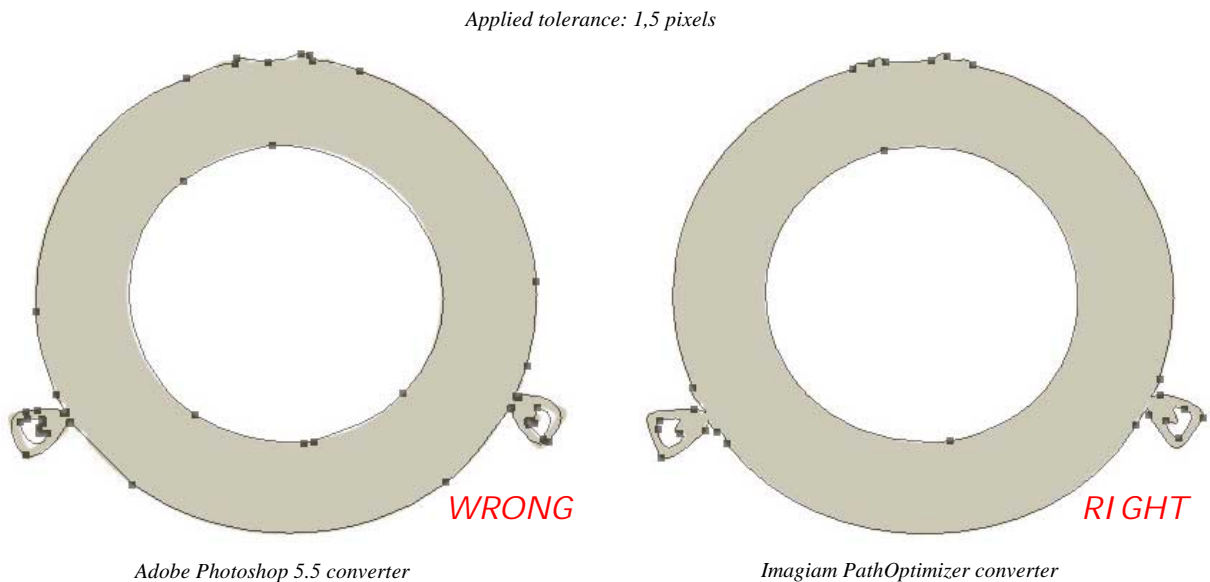


Figure 4. PathOptimizer paths (right) are better than Photoshop's (left). PathOptimizer respects the original figure profile with fewer vertexes. Photoshop's result is poor.

4. How does it work?

1. Select the object you want to cut.



Figure 5. Initial selection.

Carry out the selection by the best available method of your choice. For instance, the selection in Figure 5 has been done with Adobe Photoshop's "*Selection>Colour range*" method, adequate to eliminate monochromatic backgrounds.

2. Select the menu option "*Selection >Imagiam>Mask to Optimized Path*". The dialog shown in Figure 6 will appear to introduce the filter arguments.

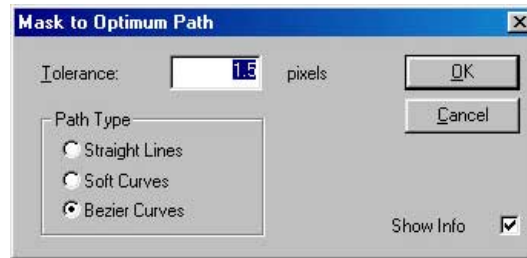


Figure 6. Arguments dialog of "*Mask to Optimized Path*".

3. Introduce the arguments:

➤ **Tolerance**

"*Tolerance*" indicates the maximum error margin between the profile of the original selection and the achieved path. Typically, values in the 1-2 range approach perfectly well the profile.

➤ **Path type**

- "*Straight lines*" generates a path made of a succession of small segments, which cannot be distinguished from the original selection in images consisting on more than 2000 pixels.
- "*Soft curves*" plots in the first place a "*Straight Line*" path, and in a second phase it bends the small segments to give a better approach to the profile, thus reducing the error margin.
- "*Bezier curves*" generates directly a curved path. It is the method giving the lower number of anchor points.

Each method has its advantages depending on the circumstances. Check section 5.

➤ **Show info**

It reports the conversion statistics of the final path: "*number of anchor points*", "*memory*" occupied by the path, and the "*CPU time*" employed to carry out the conversion.

4. Press "*OK*".

PathOptimizer will turn the mask into a totally editable path left as "*Working path*" (see Figure 7).

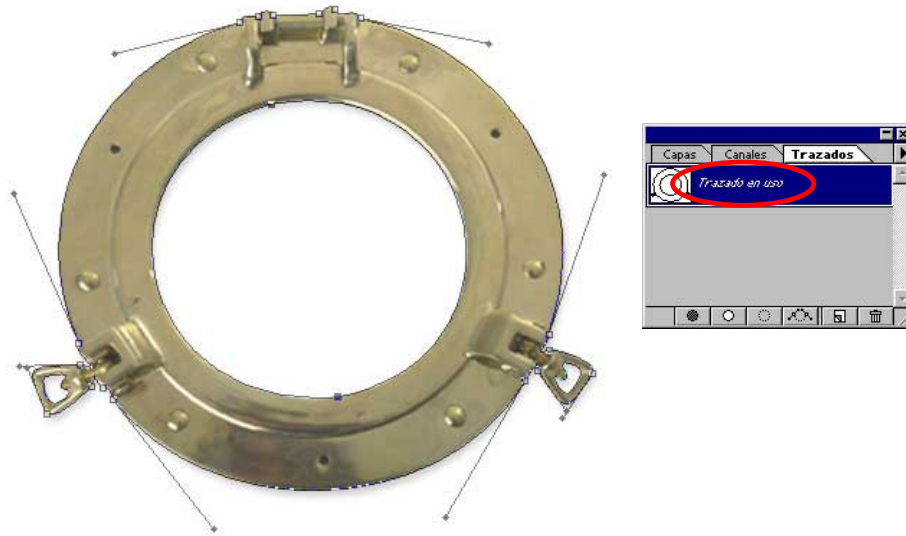


Figure 7. Selection turned into a path.

5. What type of path is advisable?

When the postscript interpreter receives a cutting path to print, Bezier curves are converted into long successions of small segments. The number of vertexes increases several orders of magnitude. Some computers can not cope with it and there are memory errors and overflow. In these circumstances “*Straight line*” is advisable.

If the cutting path consists only on straight lines the interpreter will accept it as it is with no further problems. In addition to that, as the straight lines generated by “*PathOptimizer*” are not perceived by the human eye, the quality of the final work is excellent.

In all the other circumstances, “*Soft curves*” or “*Bezier curves*” are advisable even preferable.

6. Are the path generated by PathOptimizer editable?

Yes, use the usual Photoshop tools to edit the paths.