

# **Artwork Optimizer Standard Edition**

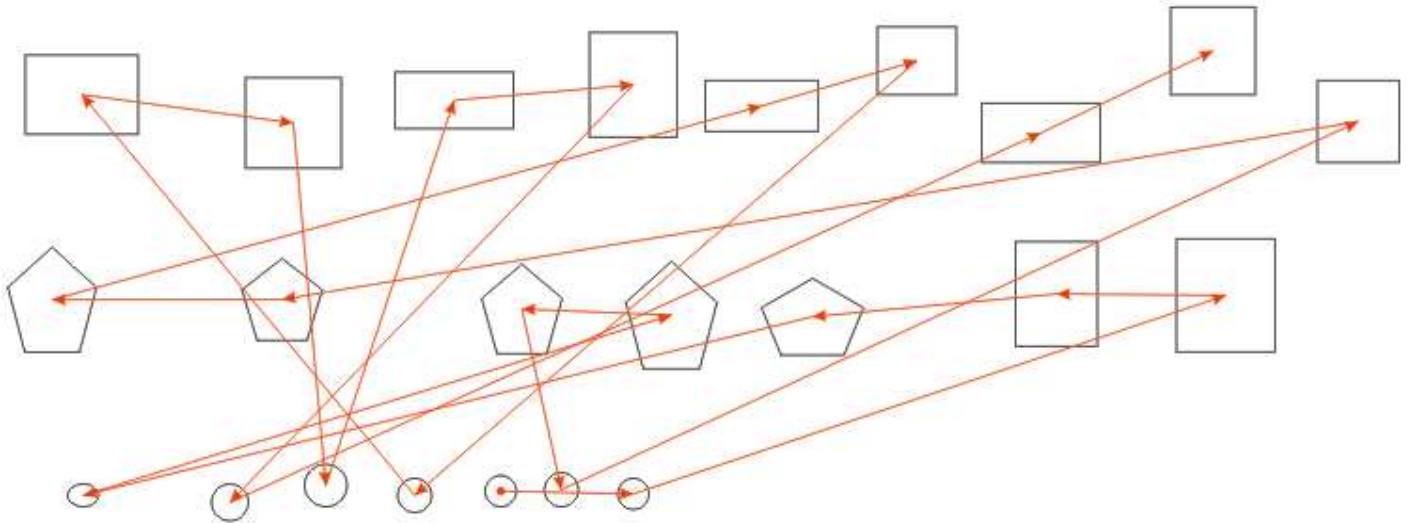
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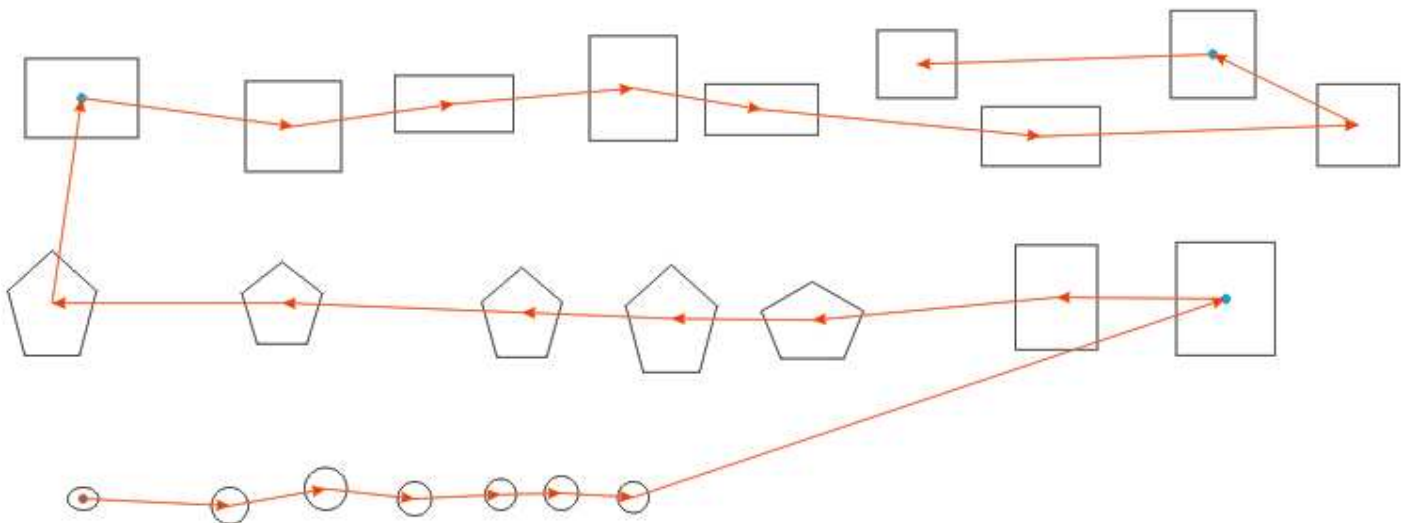
# Artwork Optimizer for CorelDRAW Standard Edition

<http://www.LeonardCNCSoftware.com>

The Artwork Optimizer Standard Edition performs sequence / stacking order optimization in CorelDRAW. What this means is it rearranges the objects in a drawing so they can be processed in the optimum order for cutting on a vinyl cutter, laser or CNC cutting system. The optimization of the cutting order speeds up cutting and in the case of the vinyl cutter also improves accuracy. Here is a sample drawing before optimization showing what can happen while a CorelDRAW drawing was being created. The objects become scattered in the stacking order due to cut-and-paste and other operations. The red lines and arrows show the sequence in which the drawing will be processed.



And here is the same drawing after being optimized:



The difference is pretty dramatic and was very easy to do. A drawing this small would also be easily rearranged / optimized by just dragging the objects around in the object manager. BUT what about 200 objects? 2000? 6000? The Artwork Optimizer has processed drawings as large as 12000 objects and the 6000 object drawing that it was developed with can be rearranged in just about 10 seconds.

Just try the Artwork Optimizer on your own drawings to see what improvements can be had.

# **Artwork Optimizer for CorelDRAW Standard Edition**

Installation of the Artwork Optimizer Standard Edition is very simple. Just select the installer you want (X3, X4 or X5) and run the 'Setup.exe' program that is in that ZIP file. We don't automatically detect which version you want since many people (myself included) have multiple versions. I have X3, X4 and X5 all installed together on my development laptop. In fact, you can install for any or all versions and the same license will work. If you cannot download the installation ZIP file because it has an EXE file in it then contact me at <http://www.CorelDRAWTools.com> (use the contact form please) and I will send you a special ZIP file and extra instructions.

If you can't unzip the distribution file(s) then you can download WinZIP from Corel:

<http://www.winzip.com/>

There is a free WinZIP alternative from:

<http://www.jzip.com/>

## ***Disk Drive Used***

If your computer does NOT have a C: drive then just install as usual. Substitute the drive letter you installed on for the C: in the examples in this document. For example, a system that only has an I: main disk drive will usually have CorelDRAW X3 installed here:

I:\Program Files\Corel\CorelDRAW Graphics Suite 13

## ***Windows Vista***

Windows Vista is only supported for CorelDRAW X3 and X4, since Corel only supports X3 and X4.

If you encounter difficulties installing on Vista, please try disabling the UAC temporarily and reinstalling.

## ***Windows 7***

Windows 7 is only supported for CorelDRAW X4 and X5, since Corel only supports X4 and X5.

## ***Customizing the Toolbar for CorelDRAW X3, X4 and X5***

If you want to change the toolbar that the Artwork Optimizer Standard Edition button appears on just edit the ArtworkOptimizerStd.ini file using NOTEPAD.EXE. Change the ToolBarName=Standard to whatever toolbar you would like to use. For example, if you have created a toolbar just to hold all the buttons from macros and other CorelDRAW addins you have acquired then use that name. The toolbar name MUST be EXACTLY the same as you see in the CorelDRAW customization screen.

You can find the ArtworkOptimizerStd.ini file at:

C:\LeonardCncSoftware\Artwork Optimizer Standard Edition

Please only use NOTEPAD (from the windows accessories menu) to do any editing. Other editors like Microsoft Word will make the file unusable as a Artwork Optimizer Standard Edition configuration file.

## ***CorelDRAW V12***

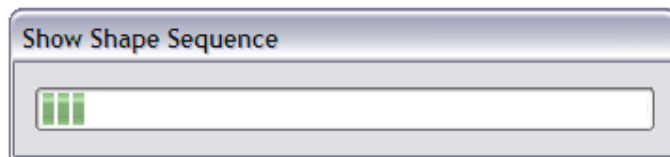
The Artwork Optimizer is not available for CorelDRAW V12 due to the use of advanced features that are only present in X3 and later releases of CorelDRAW.

# Artwork Optimizer for CorelDRAW Standard Edition

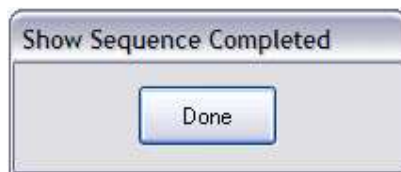
The main screen of the Artwork Optimizer Standard Edition shows the different options that are available. The 'Quick Start' section gives a simple workflow that will get you going ASAP.



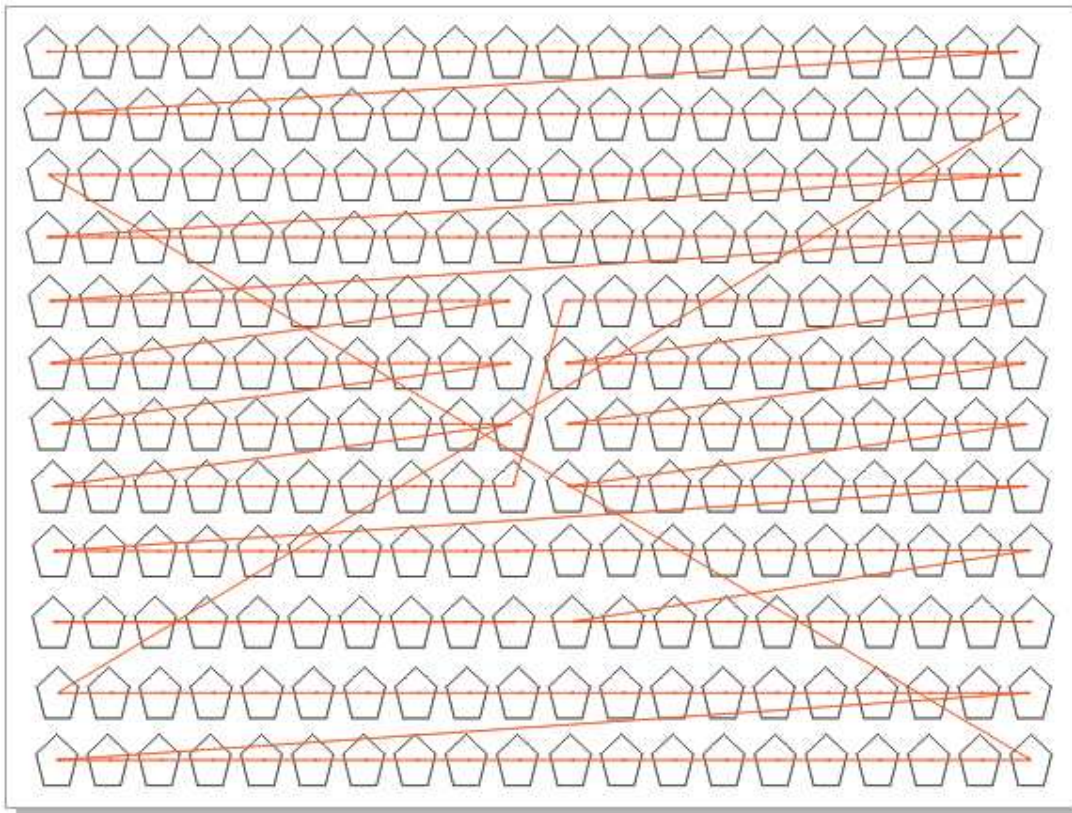
The 'Show Shape Sequence' screen allows you to preview the existing shape sequence / stacking order so you can see what problems may occur when you go to cut the drawing on your CNC router, laser or vinyl cutter. Just press the 'Show Seq' button and the tool will display a screen showing the sequence layout after displaying a screen with a progress bar for a short time.



The following screen will display while the existing drawing sequence is being shown:



Here is the existing sequence for the LaserSeq\_01.cdr drawing:



This is the screen that sets the parameters to rearrange the drawing sequence. You can choose any corner to be the starting point and either X Axis Traverse (Row) or Y Axis Traverse (Column) order. The center of the shape or the shape origin can be specified for the shape position to use. The Tolerance value is what determines what is a Row or a Column. All shapes whose positions fall within the tolerance (variance) will be in the row or column. Press the 'Review' button to perform the shape sequencing operation.

**Change Shape Sequence**

<b>Sequence Origin</b> <input checked="" type="radio"/> Lower Left <input type="radio"/> Lower Right <input type="radio"/> Upper Left <input type="radio"/> Upper Right	<b>Traverse Axis</b> <input checked="" type="radio"/> X <input type="radio"/> Y	<b>Review</b>
<b>Sequence Location</b> <input checked="" type="radio"/> Center <input type="radio"/> Origin		<b>Tolerance</b> 0.375
		<b>Done</b>

This screen will display after the sequencing operation has finished. It has both 'Accept' and 'Reject' buttons. If you Reject the sequencing operation no changes will be made to the current drawing. If you Accept the sequencing operation then the drawing will be modified according to which radio button was selected. The 'Apply the new stacking order to the existing shapes' is the default since it will probably be the most common choice.



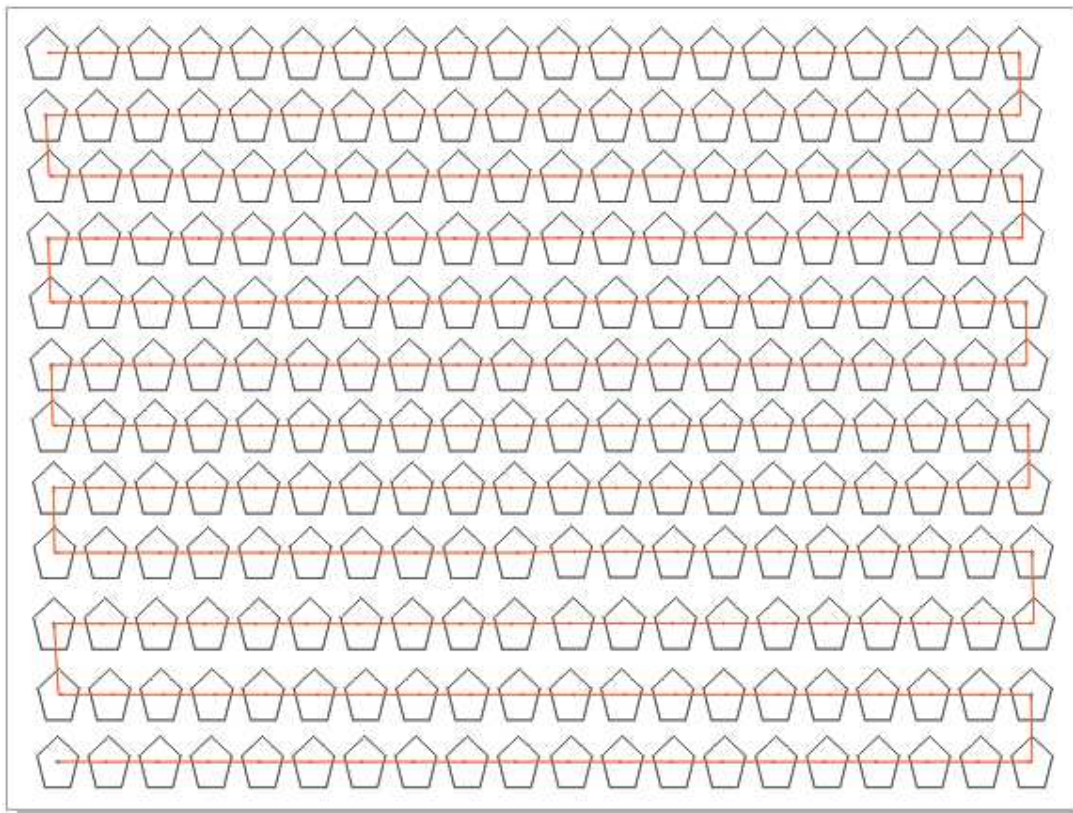
**Review**

Options

- ☒ Apply the new stacking order to the existing shapes
- ☐ Copy shapes to a new document with the new stacking order
- ☐ Copy shapes to a new layer with the new stacking order
- ☐ Copy shapes to a new page with the new stacking order

Accept Reject

Here is the revised sequence for the LaserSeq\_01.cdr drawing:



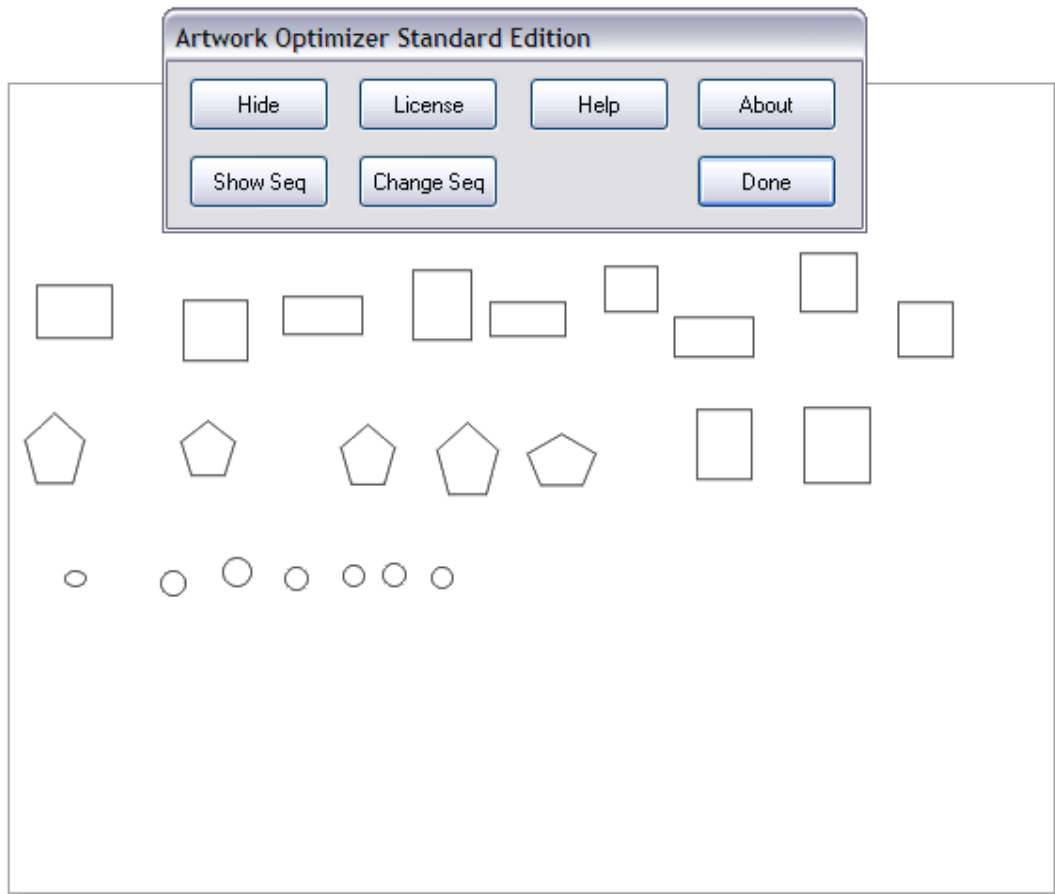
Note that after you press the Accept button you still need to save the drawing to make the changes permanent.



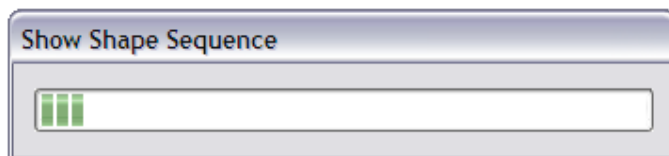
## Artwork Optimizer for CorelDRAW Standard Edition

To get started, just push the toolbar button that was installed for your version of CorelDRAW. This will display the main menu screen for the ArtworkOptimizer. Note that if you do not have the drawing that you want to optimize open then you must open it now.

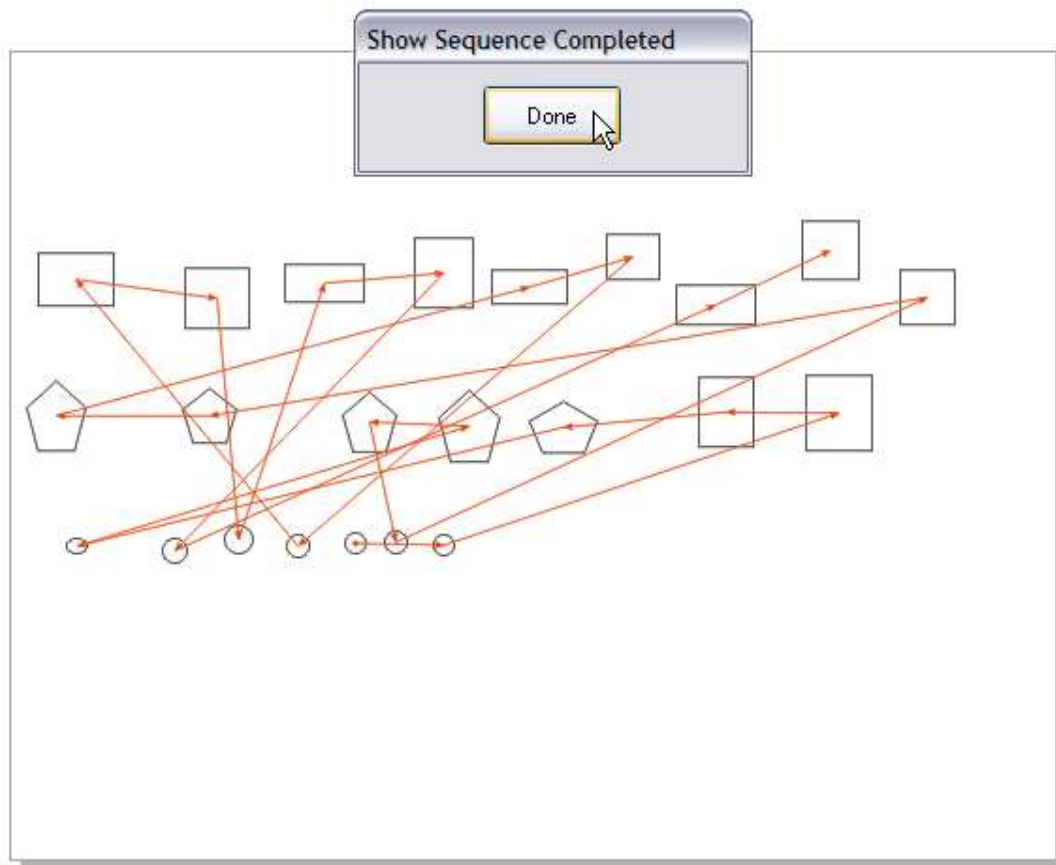
This is the ArtworkOptimizer main menu screen that you will see when you have the 'seq\_test\_01' example open.



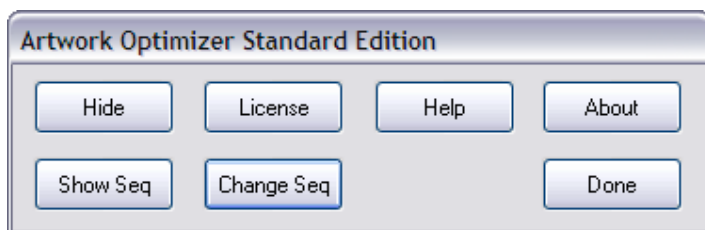
Use the 'Show Seq' button to display the 'Show Shape Sequence' screen with the progress bar.



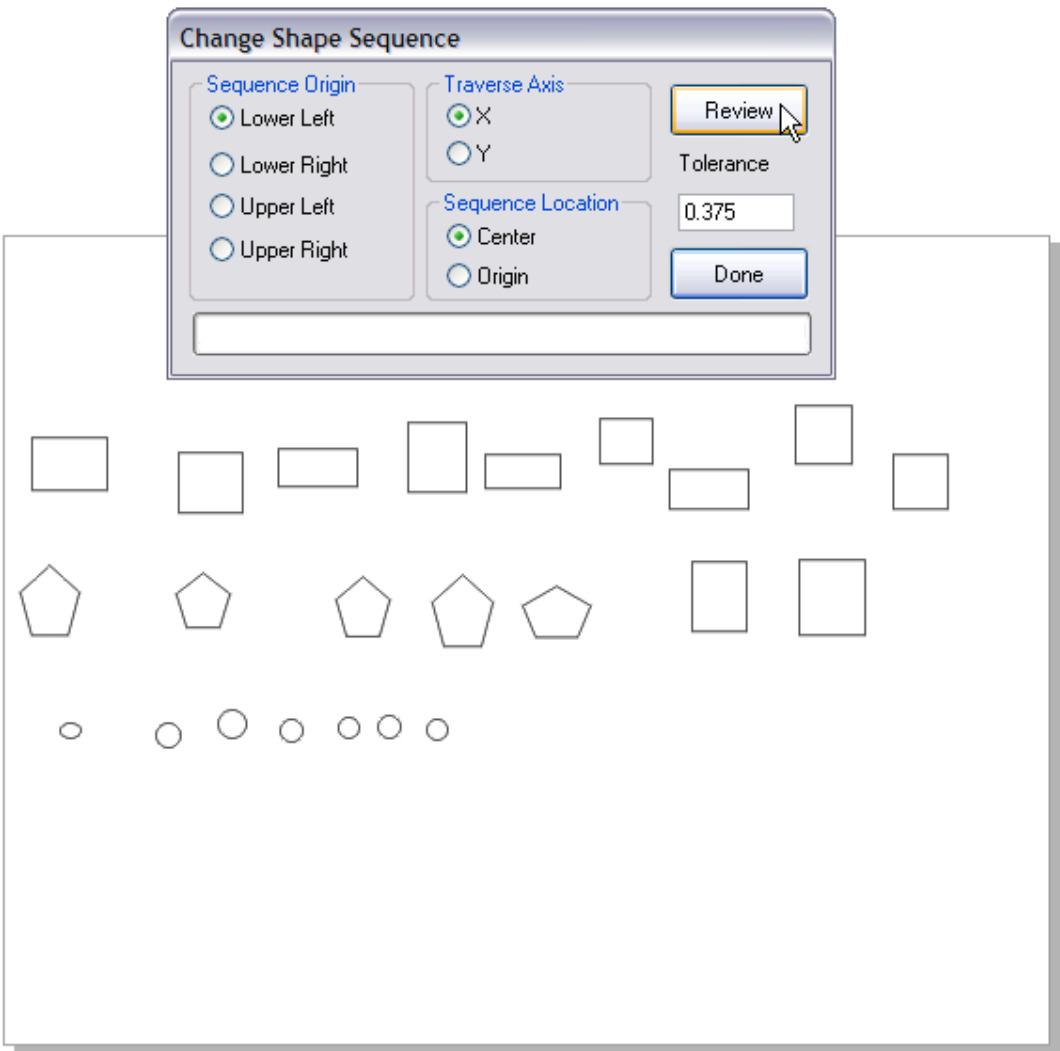
The existing stacking order will display along with the 'Show Sequence Completed' screen. When you press the 'Done' button this screen will disappear and so will the red sequence arrows and lines.



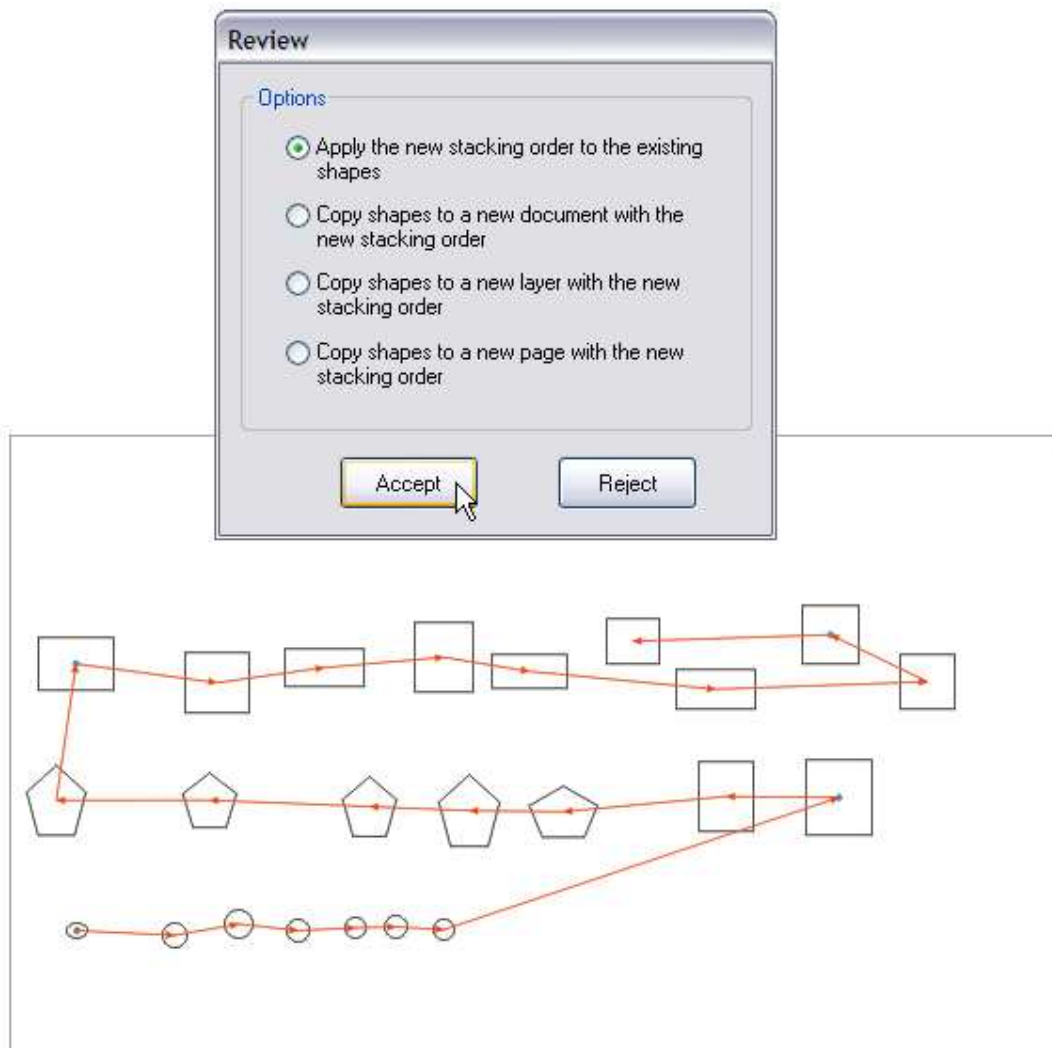
To change the shape sequence press the 'Change Seq' button on the main menu screen:



The 'Change Shape Sequence' screen will appear. Press the 'Review' button to perform the shape sequencing.



After the sequencing is finished the 'Review' screen will display and you can either Accept or Reject the new sequence that is displayed. You can choose one of four options for accepting the new sequence.

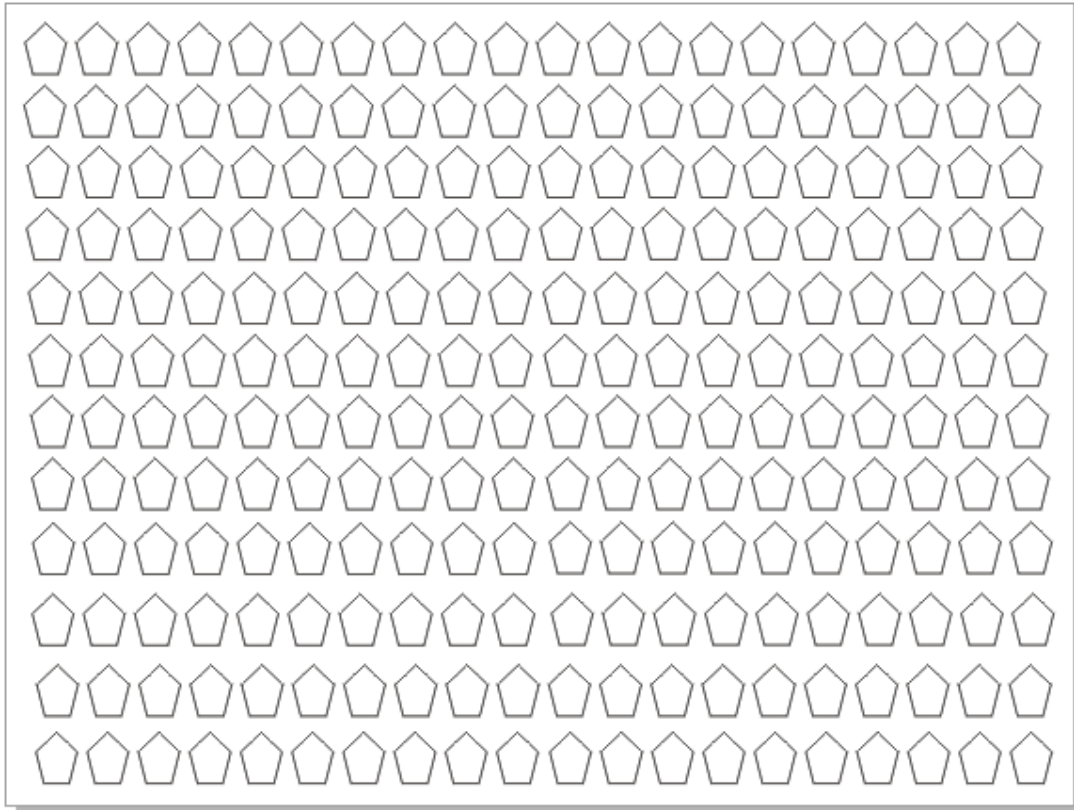


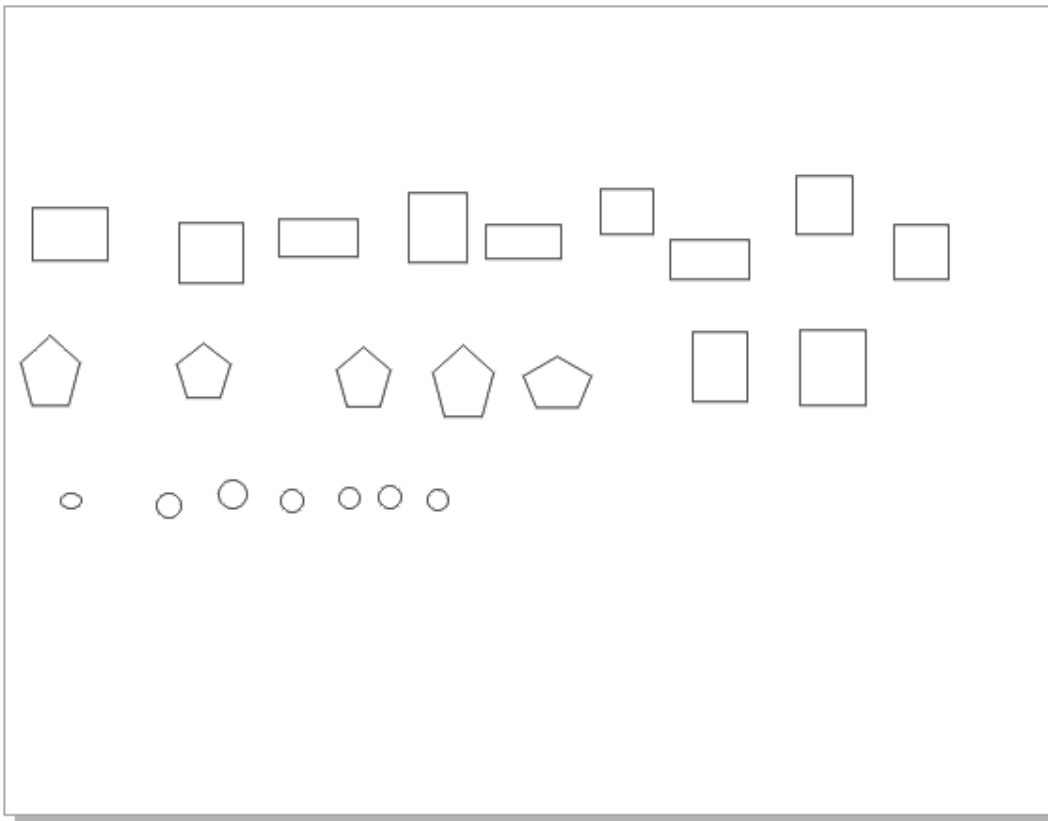
Be sure to save the drawing after accepting or all changes will be lost.

## Artwork Optimizer for CorelDRAW Standard Edition

There are two example drawings that are installed with the ArtworkOptimizer. They can all be found in the folder C:\LeonardCncSoftware\Artwork Optimizer Standard Edition\SampleDrawings.

LaserSeq\_01.cdr



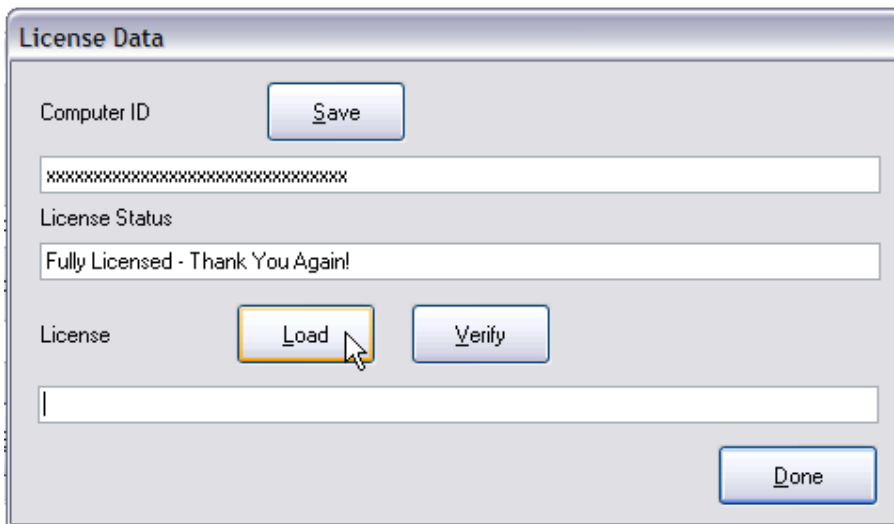


These are the drawings that were used in the documentation. They are saved in X3 format so they can be used with X3, X4 or X5.

## Artwork Optimizer for CorelDRAW Standard Edition

Licensing the Artwork Optimizer Standard Edition after the end of the evaluation period (or before!) is easy. Press the 'License' button on the main screen and you will see the license screen. The Computer ID is at the top. This string of characters uniquely identifies the computer you want to license for the Artwork Optimizer. Press the 'Save' button and a file 'ArtworkOptimizerStdID.uid' will be created on your computers desktop screen. Just email this file us at 'license@leonardcncsoftware.com' and then pay us with PayPal.

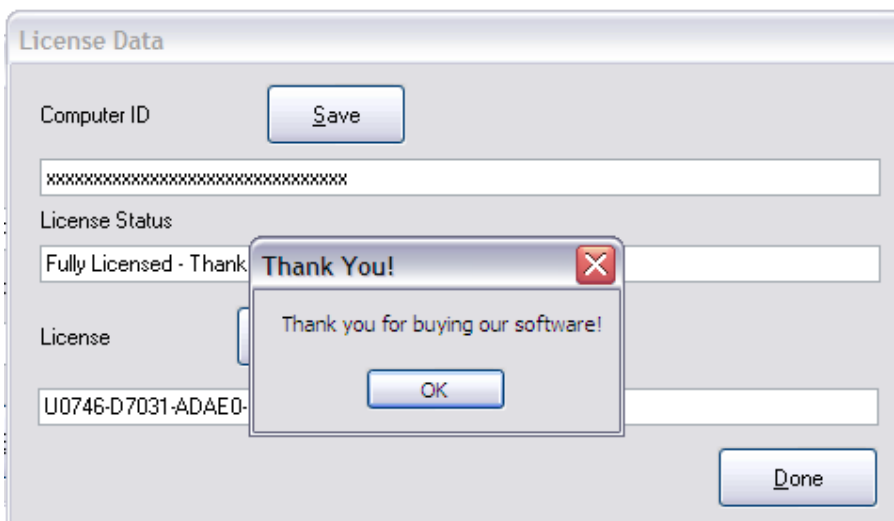
We will return another file to you which is 'ArtworkOptimizerStd.lic'. Copy this file to your computer's desktop screen, then press the 'Load' button on the Artwork Optimizer license screen. The license key will appear. Now press the 'Verify' button and our 'Thank you' message will appear. You are now licensed for unlimited drawing optimizations!



The 'License Data' dialog box contains the following elements:

- Computer ID:** A text field with a 'Save' button to its right. The field contains a string of 20 'x' characters.
- License Status:** A text field containing the text 'Fully Licensed - Thank You Again!'.
- License:** A text field with a 'Load' button to its right. The field is empty.
- Buttons:** A 'Verify' button is located to the right of the 'Load' button. A 'Done' button is located at the bottom right of the dialog.

You should see the 'Thank you for buying our software' popup if all was well.



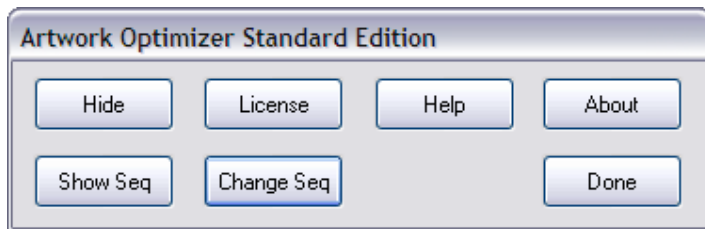
This screenshot shows the 'License Data' dialog box with a 'Thank You!' popup window overlaid on top. The popup contains the text 'Thank you for buying our software!' and an 'OK' button. The background dialog box shows the following state:

- Computer ID:** Same as the previous screenshot.
- License Status:** Same as the previous screenshot.
- License:** The text field now contains the license key 'U0746-D7031-ADAE0-'. The 'Load' button is highlighted.
- Buttons:** The 'Verify' button is still present. The 'Done' button is at the bottom right.

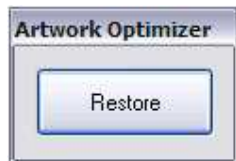


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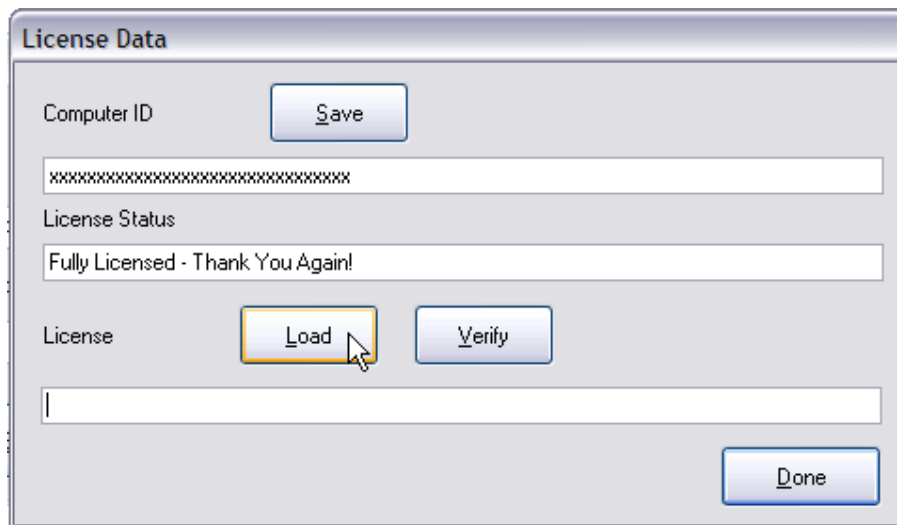
The Artwork Optimizer main menu has seven buttons that are used for different features.



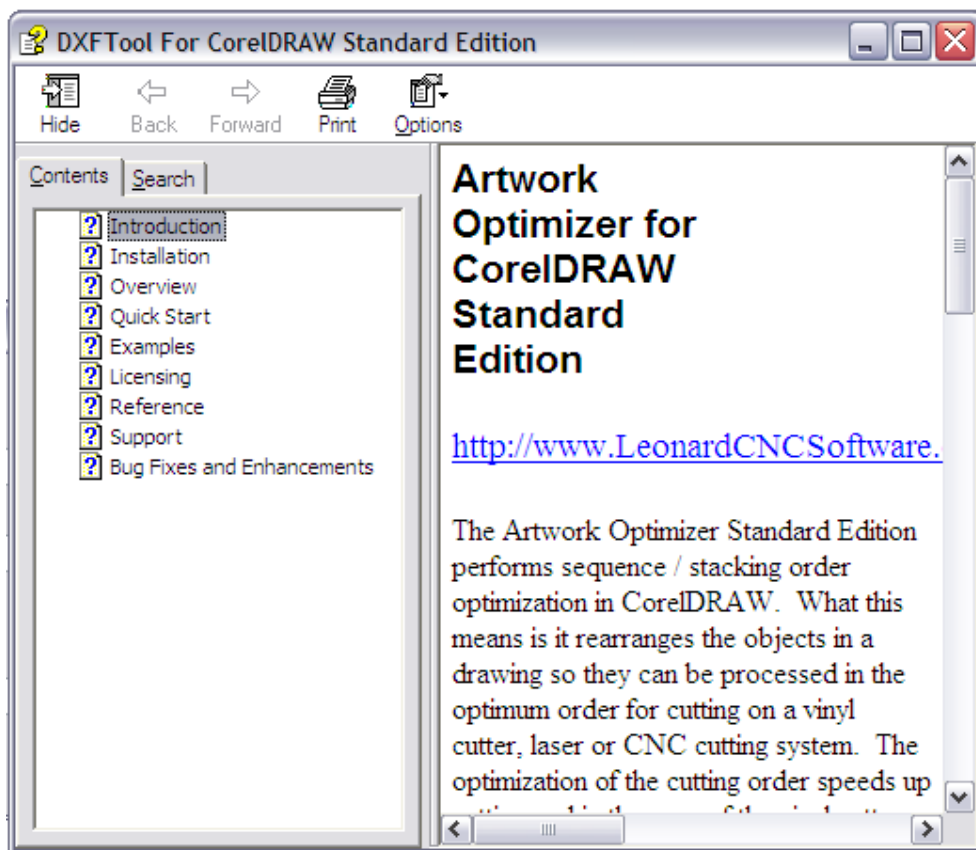
The 'Hide' button hides the main menu and displays a place holder screen that takes up very little space and can be placed off the CorelDRAW work area for maximum visibility.



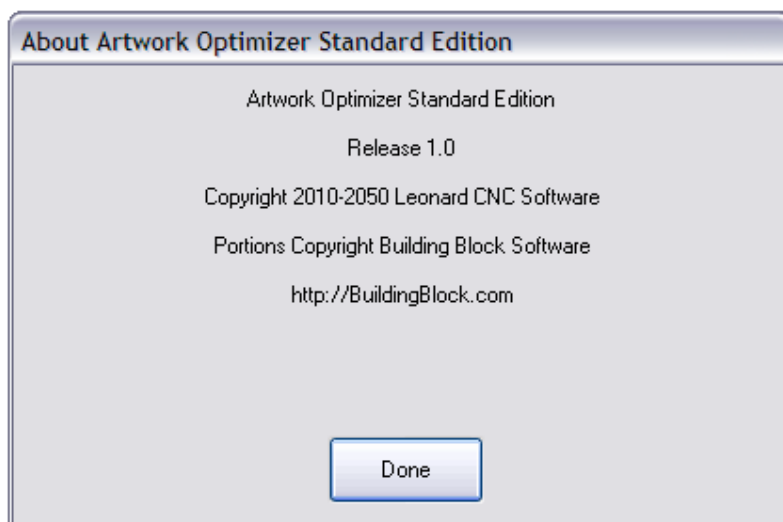
The 'License' button displays the license screen.



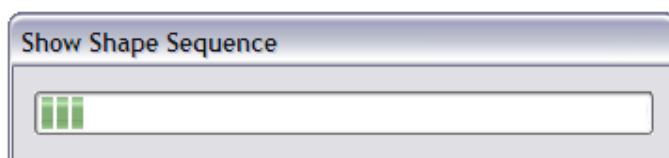
The 'Help' button displays the HTML help system with all of these instructions in a convenient place.



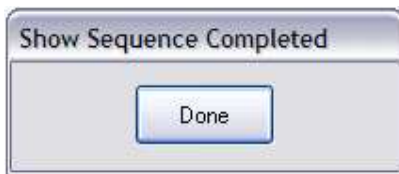
The 'About' button displays the About Artwork Optimizer screen.



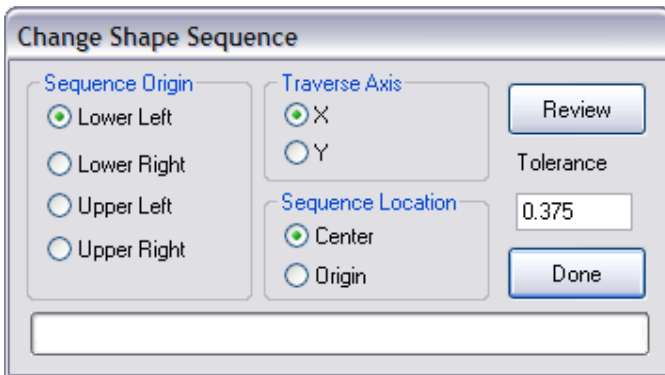
The 'Show Seq' button displays the 'Show Shape Sequence' screen.



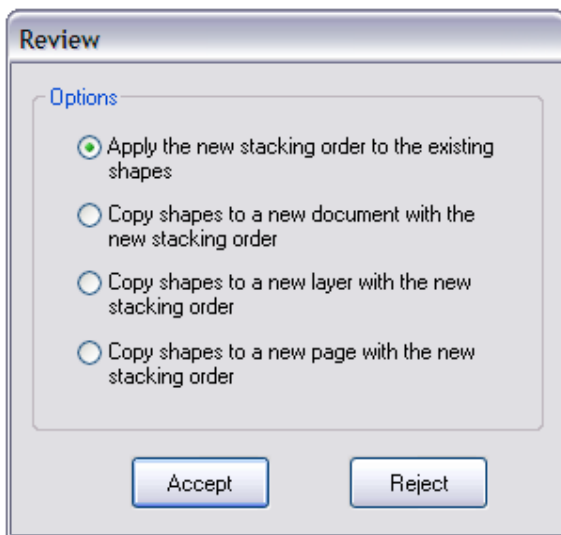
When the Show Sequence is completed the 'Show Sequence Completed' screen will display.



The 'Change Seq' button displays the 'Change Shape Sequence' screen.



When the Change Shape Sequence is completed the 'Review' screen is displayed.



The 'Done' button closes the Artwork Optimizer main menu screen.

# Artwork Optimizer for CorelDRAW Standard Edition

Support is available through email and at our CNC software forum

<http://www.leonardcncsoftware.com/phpBB3/>

Contact us on the web at <http://www.leonardcncsoftware.com>

Portions of the Artwork Optimizer Standard Edition are copyright Building Block Software - <http://BuildingBlock.com> - This is a world class computational geometry library that we are also using in our full CAD / CAM program DragonCNC. This library enables us to write solutions beyond what the CorelDRAW Object Model can do in VBA. Please inquire as to any custom programming for CorelDRAW that you may need.

Reseller arrangements are available. Two levels of commission payments are available. Please inquire.

Bulk / Site licenses are available and the technology inside the Artwork Optimizer can be licensed for use in your own systems. A non-competition agreement is necessary for this.

# **Artwork Optimizer for CorelDRAW Standard Edition**

This is release 1.0 of the Artwork Optimizer Standard Edition. Future releases will have bug fixes and enhancements to the software documented here.