

# **DXFTool For CorelDRAW Standard Edition**

## **Release 1.6**

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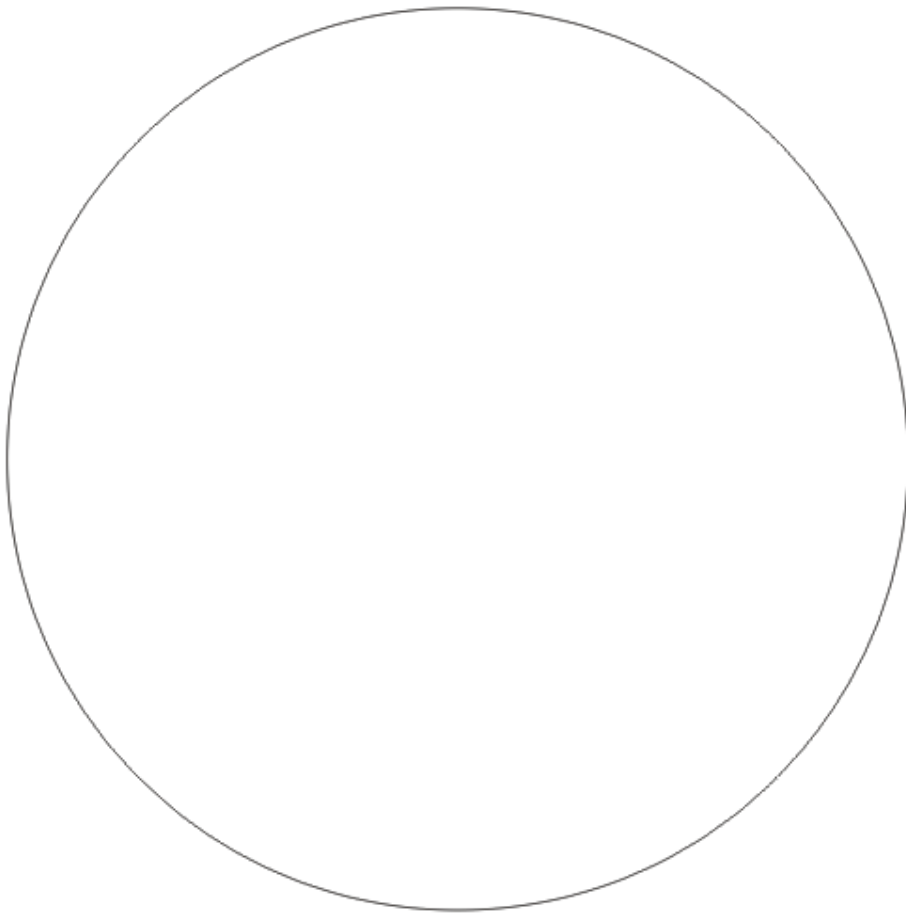
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## DXFTool For CorelDRAW Standard Edition

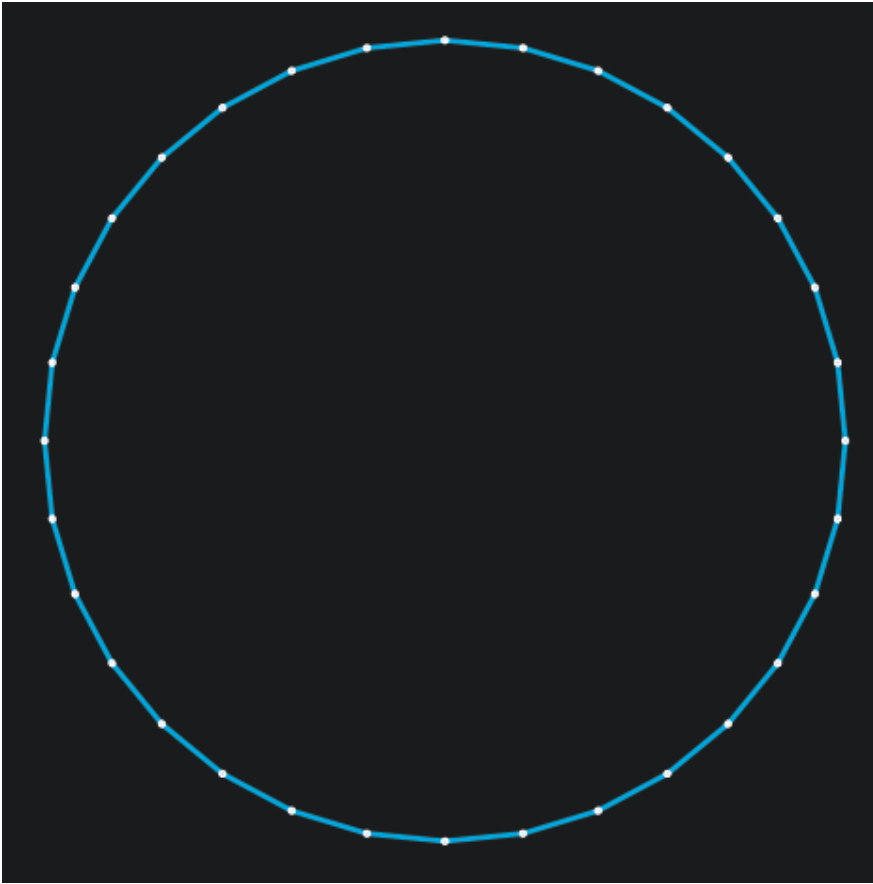
<http://www.LeonardCNCSoftware.com>

The DXFTool Standard Edition is a utility program that provides very high quality DXF files for use in CAD / CAM programs. They are also very useful for Laser and Vinyl cutting systems that use DXF files since text handling is optimized and you do NOT have to ever convert your drawing to curves. The advantages of this tool are provided by conversions of the bezier curves in CorelDRAW to LINE and ARC DXF entities only. What this means is that instead of a large number of very short lines the DXF file has as many smooth curves as can be made from the CorelDRAW shapes in your drawing.

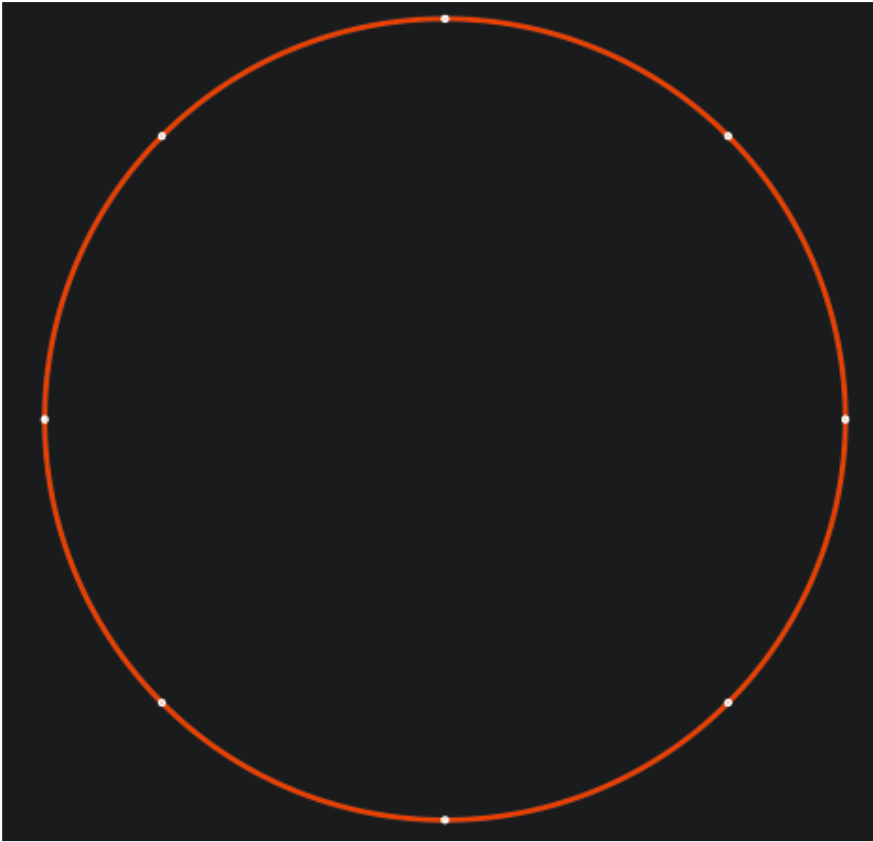
A simple circle can be hard to cut when it is many small lines instead of arcs as most CAD programs would make it. Here is a circle from CorelDRAW.



The CorelDRAW DXF export produces this result. It is NOT very friendly to most CNC systems. It is a series of lines as defined by the curve resolution inside CorelDRAW.



The DXFTool Standard Edition export is 8 arcs. This is a large reduction in node count and an even larger saving in cutting time if your CNC system stops at every end of line.



That's the reason we made the DXTool Standard Edition. CorelDRAW is a world class drawing program and now it also does CNC very well!

# **DXFTool For CorelDRAW Standard Edition**

Installation of the DXFTool Standard Edition is very simple. Just select the installer you want (V12, 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 V12, X3, X4 and X5 all installed together on my development laptop. In fact, you can install for all three and one license will work for all of them!

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.

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

If you want to change the toolbar that the DXFTool Standard Edition button appears on just edit the DxfToolStd.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.

For CorelDRAW X3 you can find the DxfToolStd.ini file at:

C:\Program Files\Corel\CorelDRAW Graphics Suite 13\Draw\DxfToolStd

For CorelDRAW X4 you can find the DxfToolStd.ini file at:

C:\Program Files\Corel\CorelDRAW Graphics Suite X4\Draw\DxfToolStd

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 DXFTool Standard Edition configuration file.

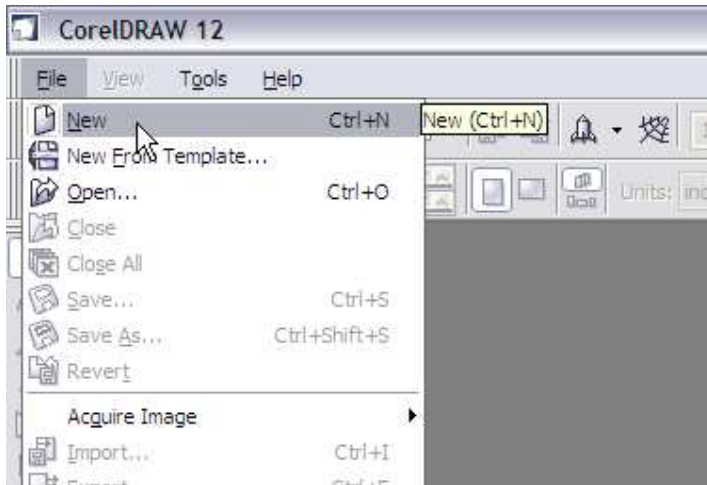
## CoreIDRAW Version 12 Special Instructions

The V12 installer does NOT install the workspace for DxfTool Standard Edition with the DXFTool button automatically. You will find an exported workspace in the DxfToolStd folder under the \Draw folder:

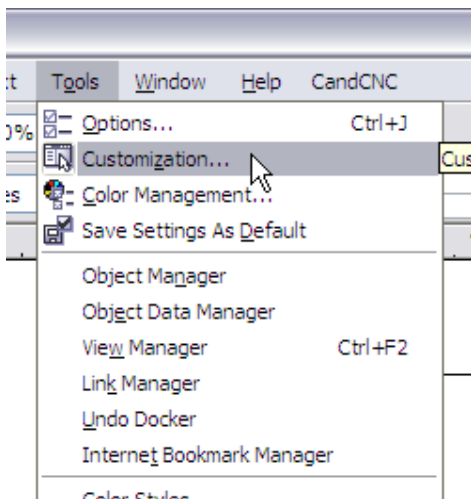
C:\Program Files\Corel\Corel Graphics 12\Draw\DxfToolStd\DxfToolStd.xslt

This workspace can be imported into CoreIDRAW 12 by these steps:

**01.** open or create a drawing. The CoreIDRAW menus you need will NOT appear until you do this.

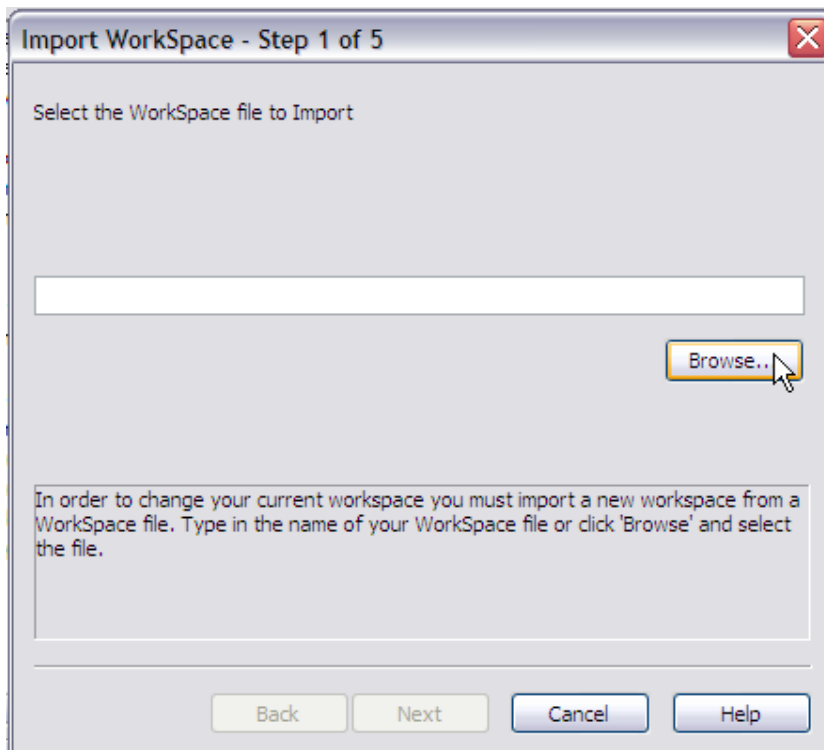
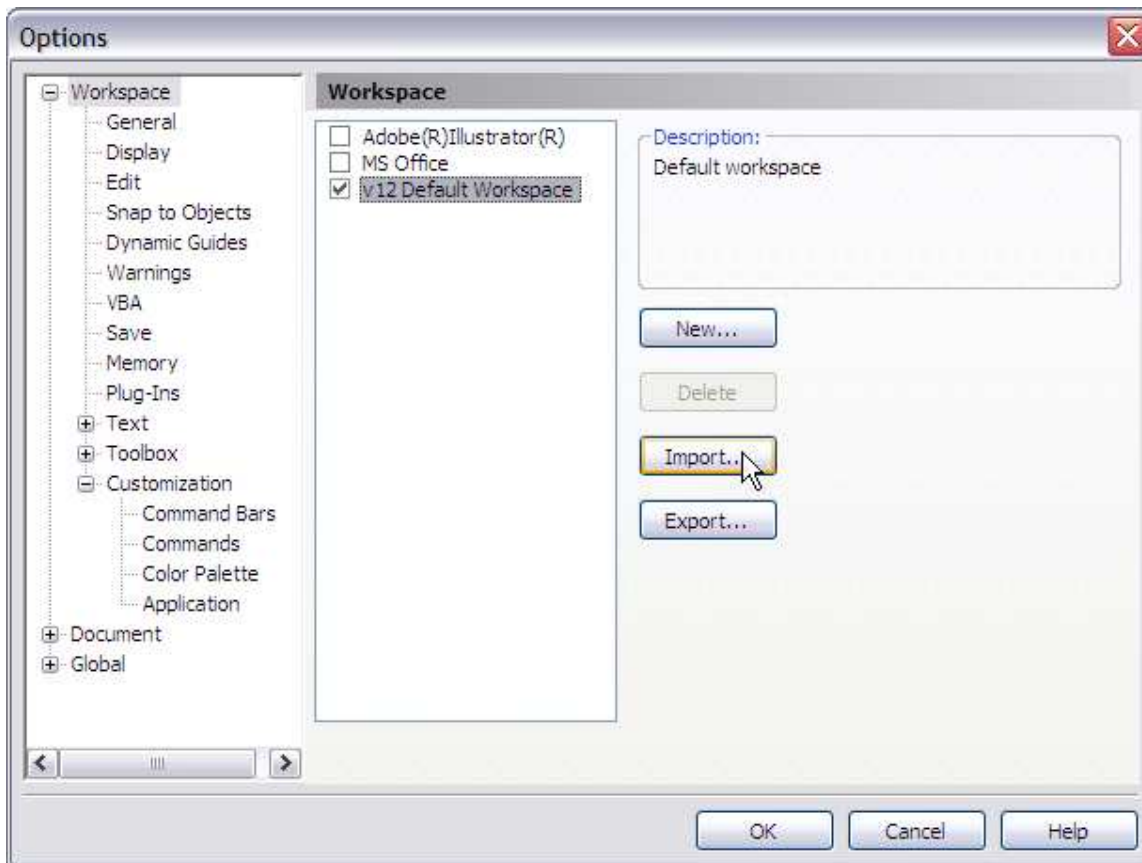


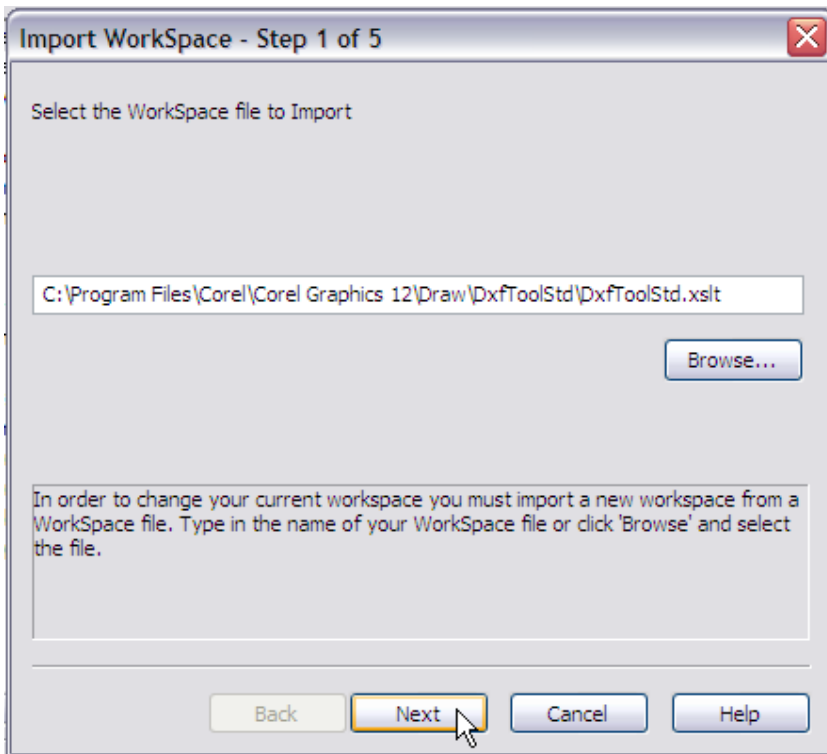
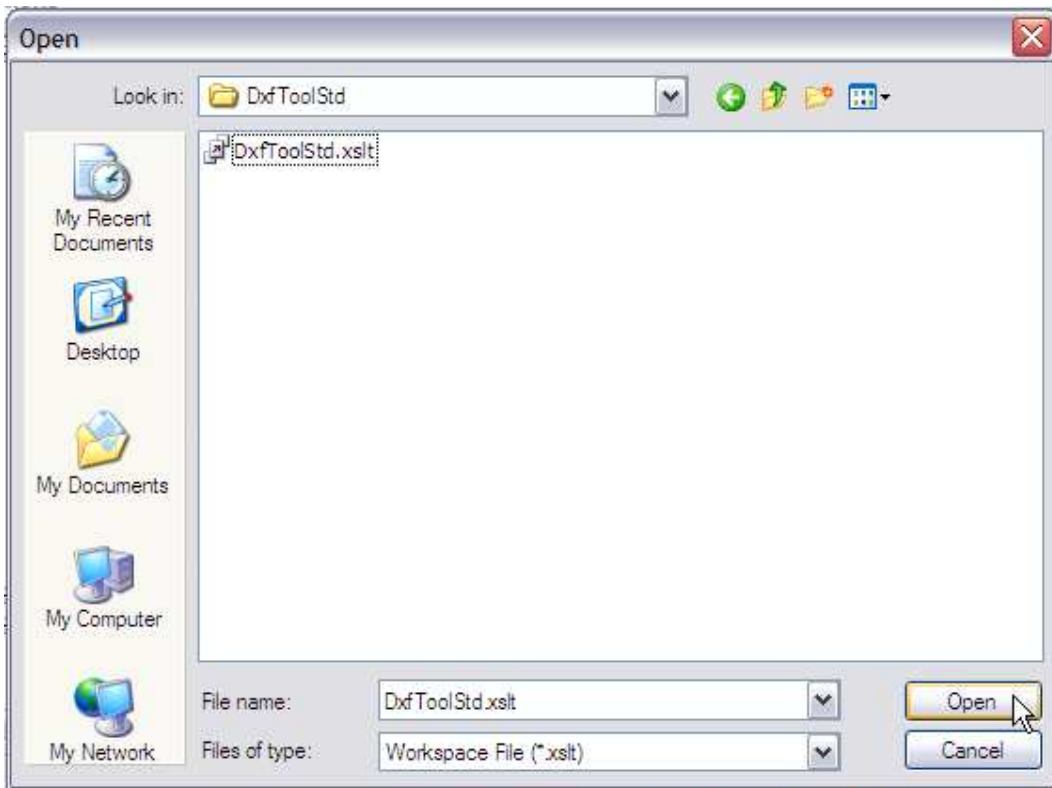
**02.** The menu item Tools->Customization->Workspace is where you customize V12 workspaces. Select the workspace that you want the DXFTool workspace to be based on when you create the new workspace.



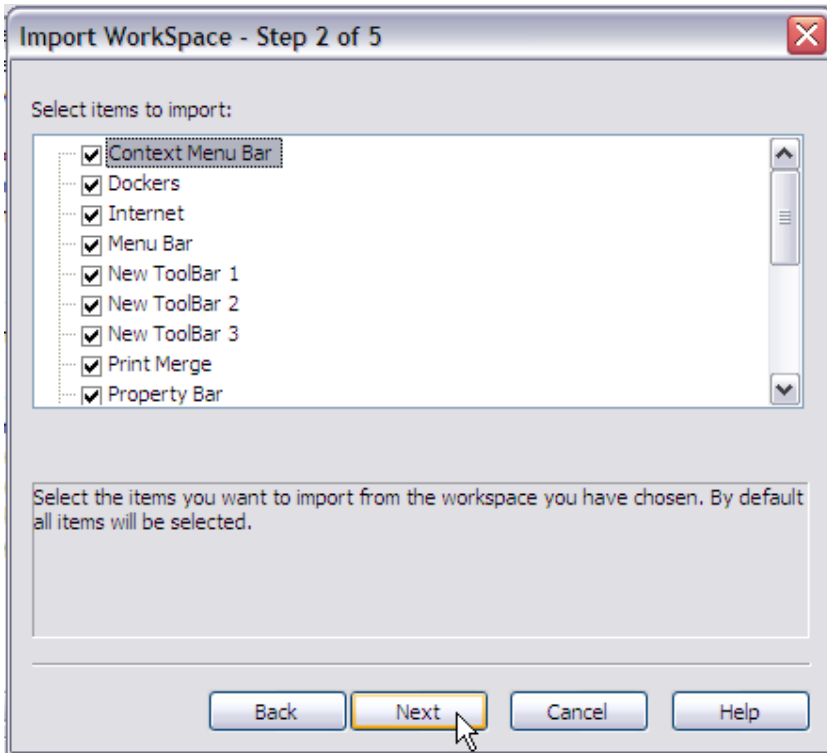
03. The panel on the right shows an 'Import' button. Press it and a screen will display that will allow you to browse for this workspace file in the \Draw\DxfToolStd folder. Browse to the file 'DxfToolStd.xslt'. You will find it at:

C:\Program Files\Corel\Corel Graphics 12\Draw\DxfToolStd\DxfToolStd.xslt

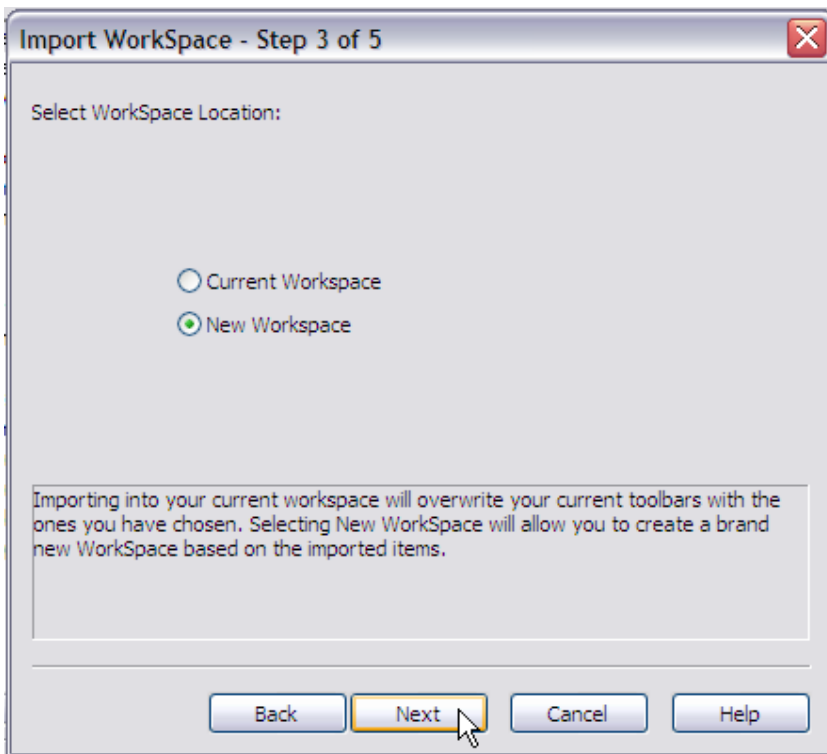




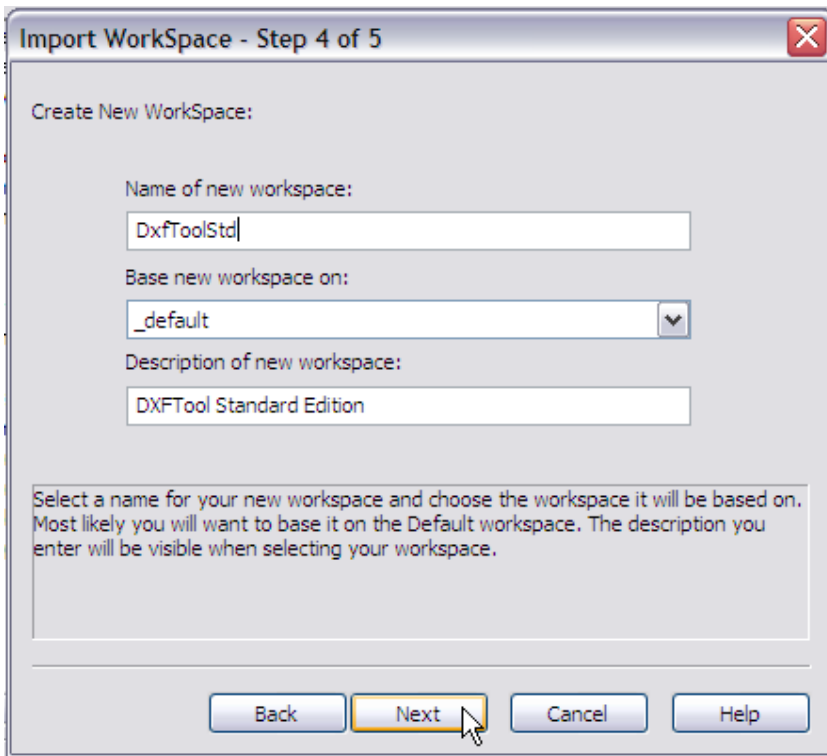
04. Press the 'Next' button and you will see a list of items to import. Just leave all the checkboxes checked and then press the 'Next' button again.



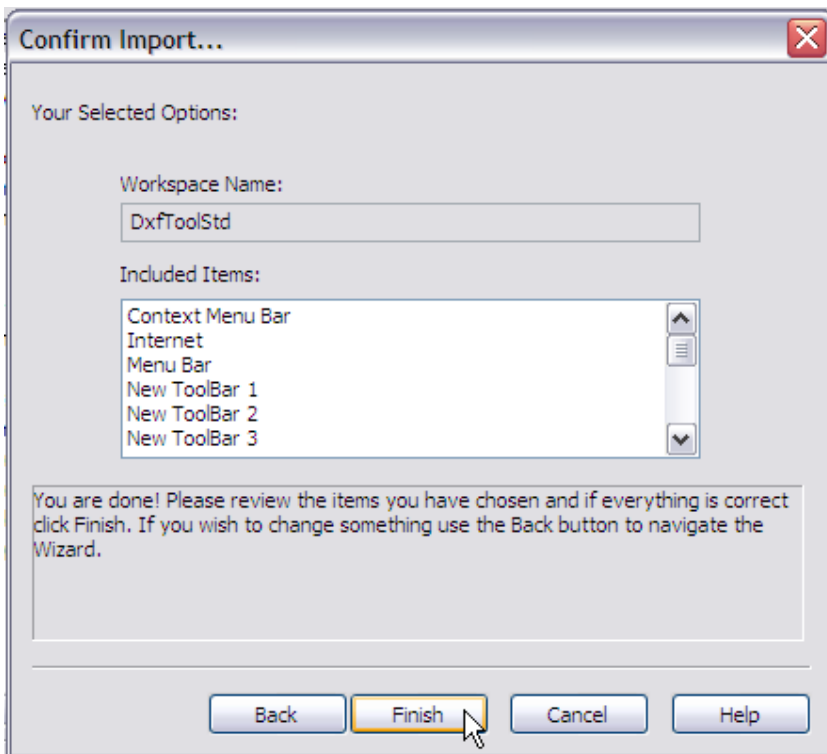
05. Select the 'New Workspace' radio button and then press 'Next'.

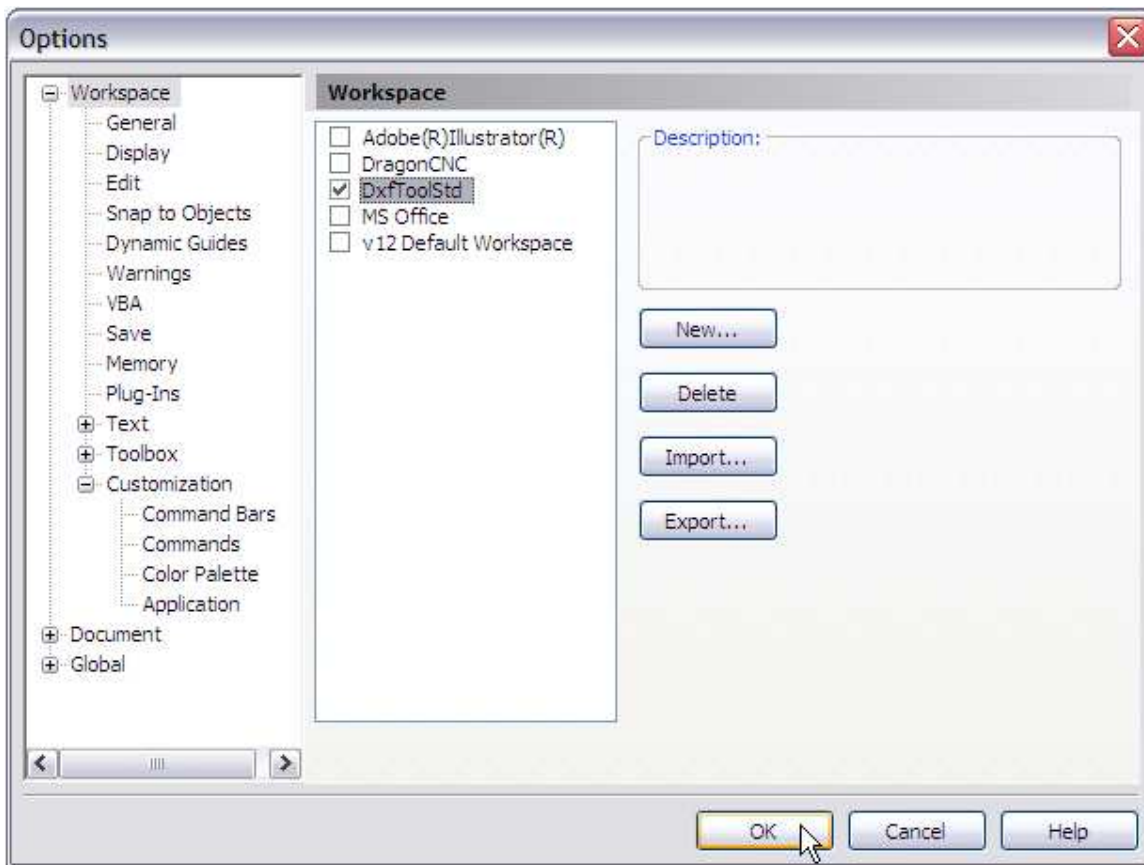


06. Name the new workspace 'DxfToolStd' then press 'Next'.



07. You will see a list of everything included in the new workspace. Just press 'Finish' and the DXFTool icon will appear on the standard toolbar.





**NOTE:** CorelDRAW Version 12 treats a workspace modification as a drawing change. Please save the current drawing and then exit CorelDRAW to complete the process.

**NOTE:** If you want to add the DXFTool Standard Edition to your own workspace there is an icon at:

C:\Program Files\Corel\Corel Graphics 12\Draw\DxfToolStd\DxfToolStd.ico

## DXFTool For CorelDRAW Standard Edition

The DXFTool was originally written in CorelDRAW VBA. This was a good first step, but it had some disadvantages. The biggest one was the need to have VBA installed in your copy of CorelDRAW. Some people did not install VBA and some OEM versions of CorelDRAW (particularly X3) did NOT include VBA in the distribution.

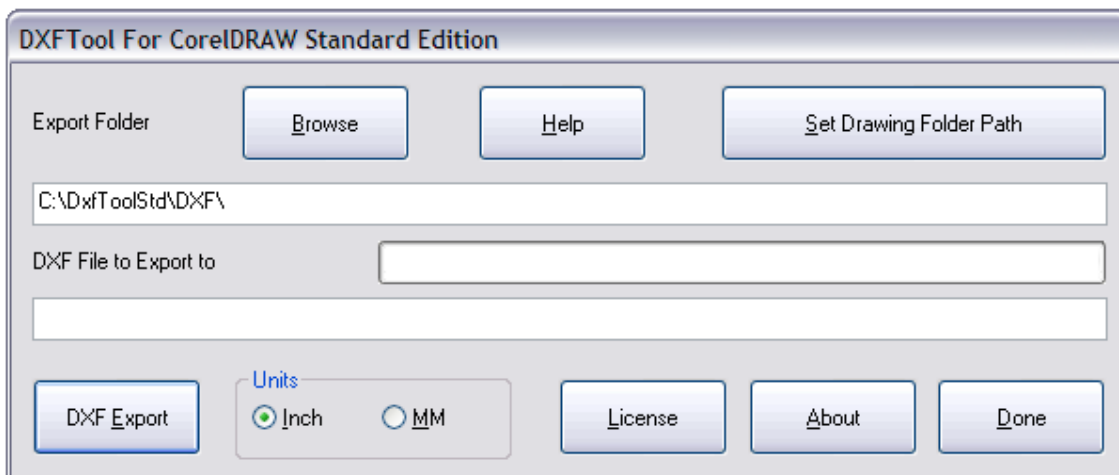
The new DXFTool Standard Edition has been rewritten in C++ to give many benefits. It is faster, better integrated with CorelDRAW and supports multiple versions with ease! The V12 version does still require VBA to start it but the X3, X4 and X5 versions run from a plugin. No custom workspace is needed for X3, X4 and X5, the plugin just adds a button to the standard toolbar when it starts up. The DXFTool Standard Edition icon is different, it is a red DXF with a wrench together so you know that you have 'tools'. Here is what it looks like on X4:



New features that were made possible by the rewrite are international languages and metric units (MM) .support.

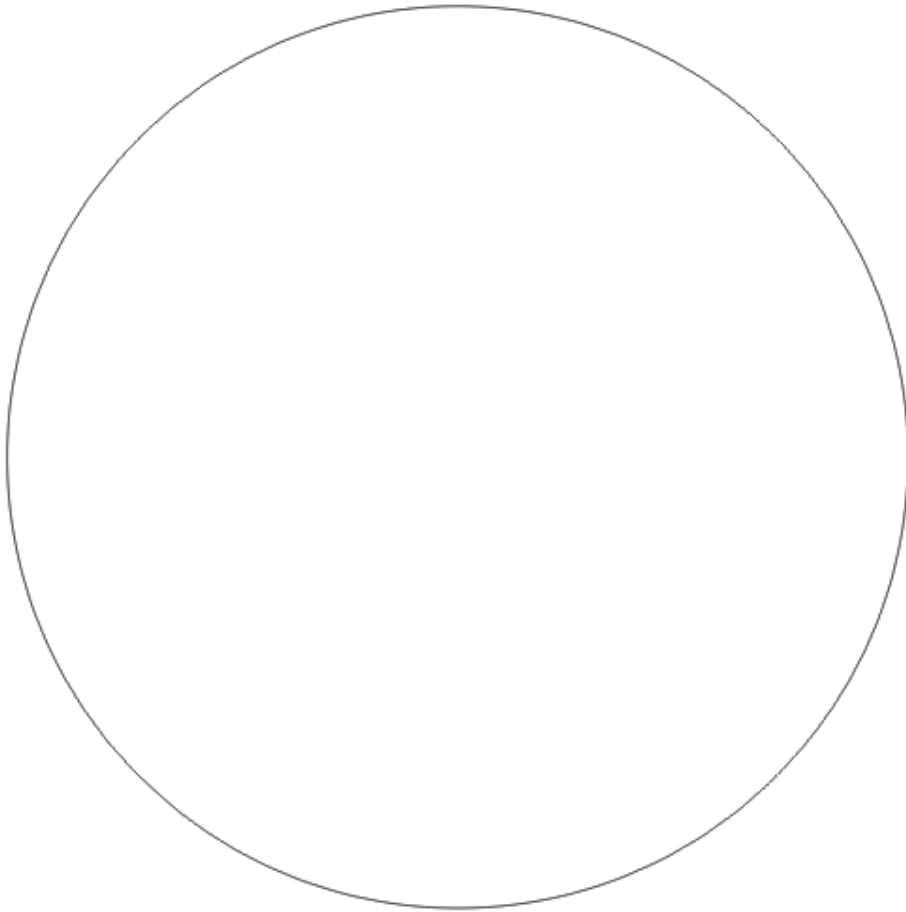
The DXFTool Standard Edition works on the bezier curves internally, there is NEVER any need to convert your drawing to curves, not even for text! This means that you can quickly make changes and export a new DXF file. You don't even have to save your drawing before exporting.

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

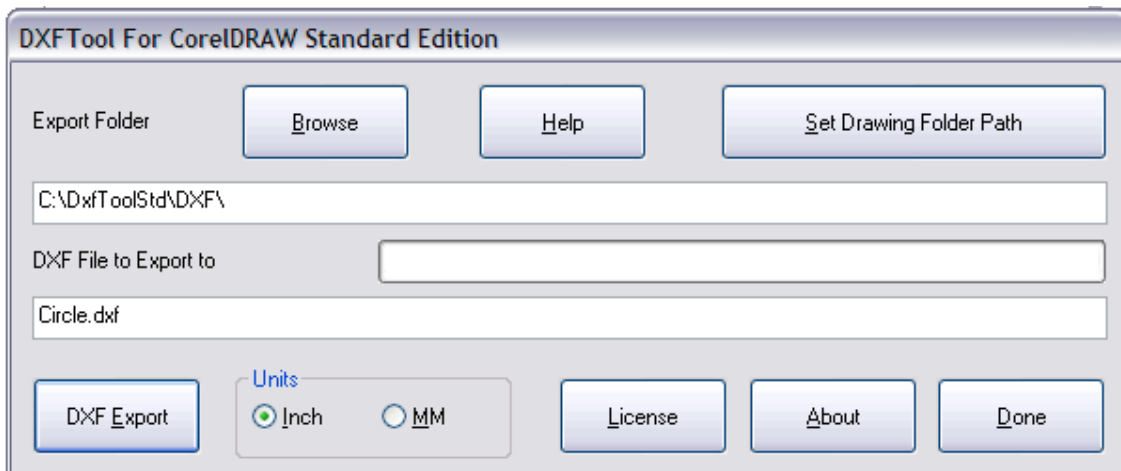


## DXFTool For CorelDRAW Standard Edition

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 DXFtool. Note that if you do not have the drawing that you want to export open then you must close the DXFTool main menu screen to open that drawing. The example we will use here is the simple circle.

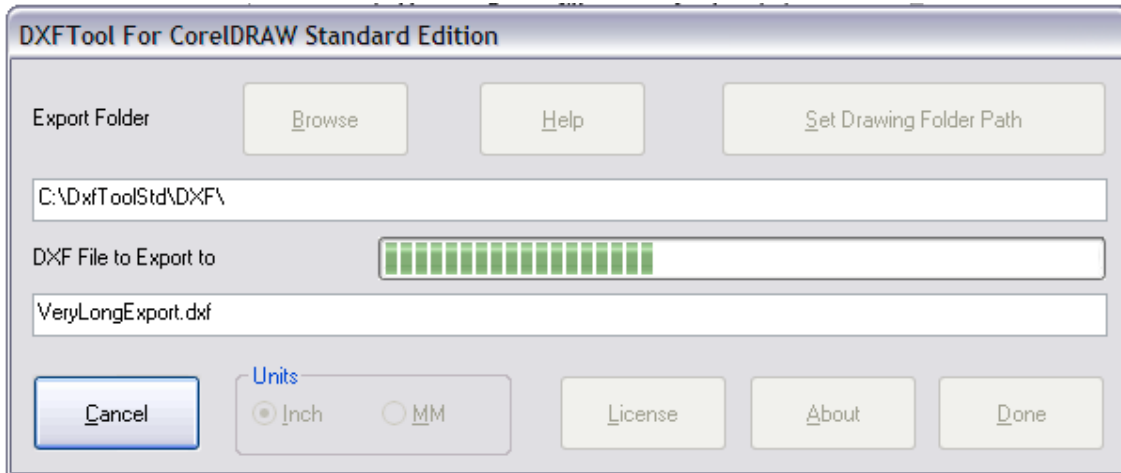


This is the DXFTool main menu screen that you will see when you have the 'Circle' example open. The circle itself is a 1.000 inch diameter circle drawn by the ellipse tool with the control key held down to constrain the operation to a true circle.

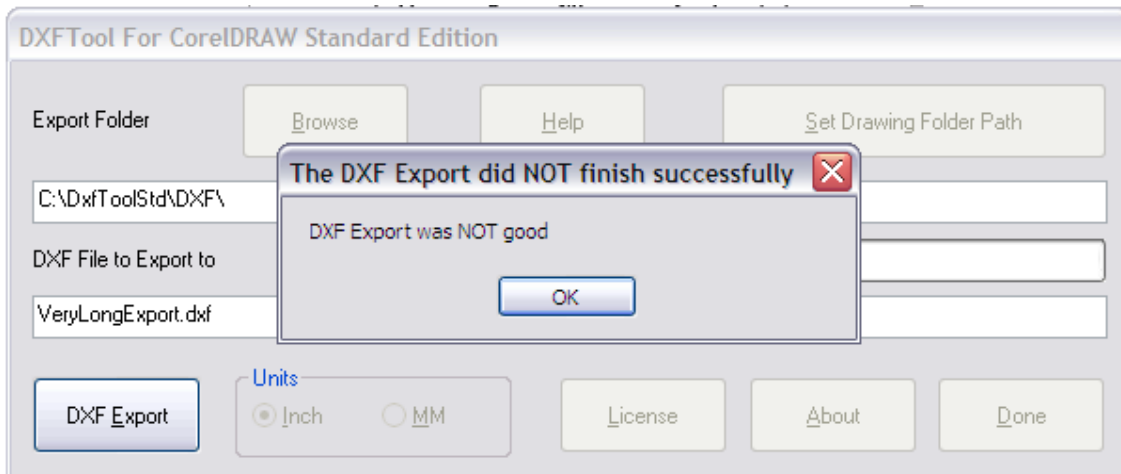


The dimensions of 1.000 diameter were entered on the property bar. Since this document is in inch units the 'Inch' radio button is automatically selected. If it was in millimeters the 'MM' button would be selected. Note that you can change the export units just by selecting the units that you want that DXF file to be created with. If the default export folder is not where you want the DXF file to end up then use the 'Browse' button to select a new folder. This will also be saved as the default for future sessions. The name of the DXF file will be the same as the drawing with a file extension '.dxf'. You can change the name of the file just by typing in a new name. Ok, now that you have confirmed that both of these settings are correct press the 'DXF Export' button and your DXF file will be created! It is simply that easy.

While the DXF file is being created all of the buttons will be grayed out (disabled) so that they cannot be pushed except the 'DXF Export' button. This button will change to 'Cancel'. This can be used to stop very long exports when problems may exist in the drawing being exported. Here is what the main screen will look like during an export:



If you push the 'Cancel' button a warning message box will pop up to remind you that the DXF file was not successfully created since the export was cancelled.



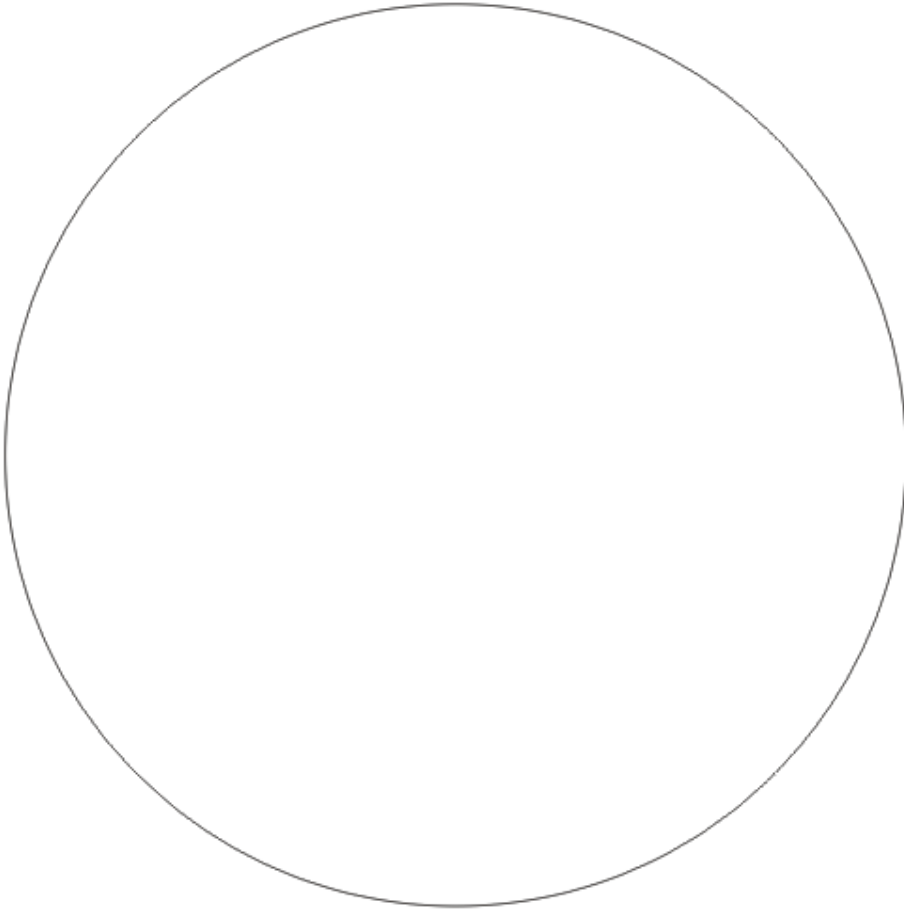
## DXFTool For CorelDRAW Standard Edition

There are several example drawings that are installed with the DXFTool. They can all be found in the folder C:\DxfToolStd\

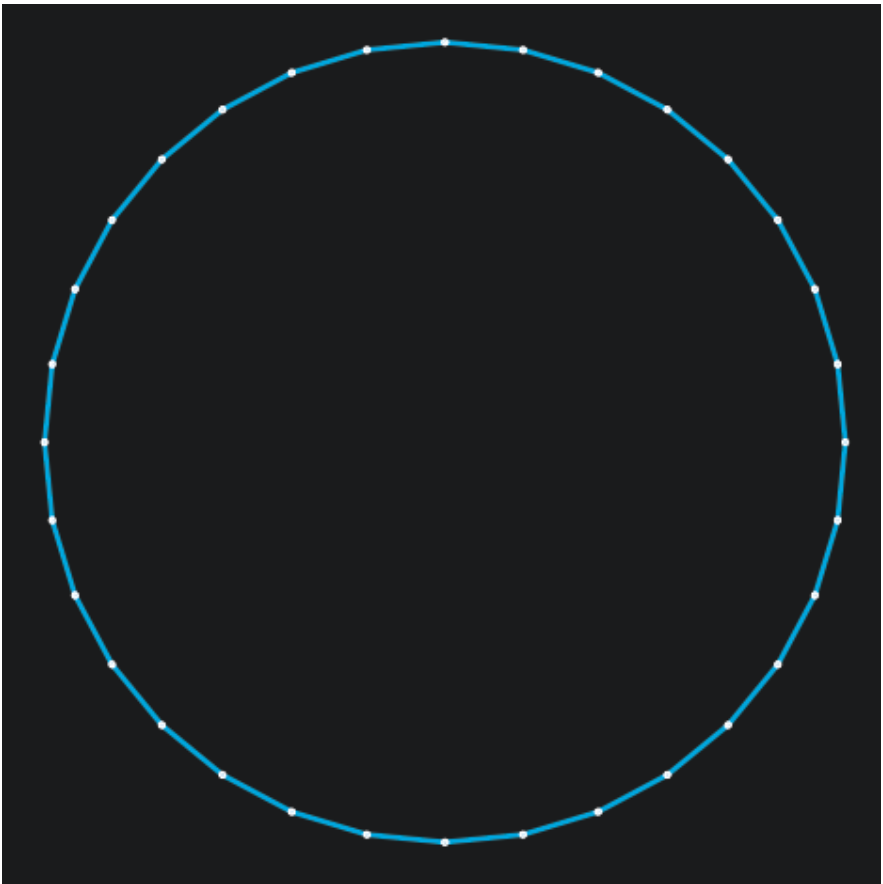
All of these screencaps were taken from CorelDRAW running a CorelDRAW based DXF visualizer. This tool displays LINE segments in BLUE and ARC segments in RED. The segments are separated by small WHITE dots so you can see what the DXF file really contains.

'Circle.cdr' is the simple circle used in the Introduction and Quick Start.

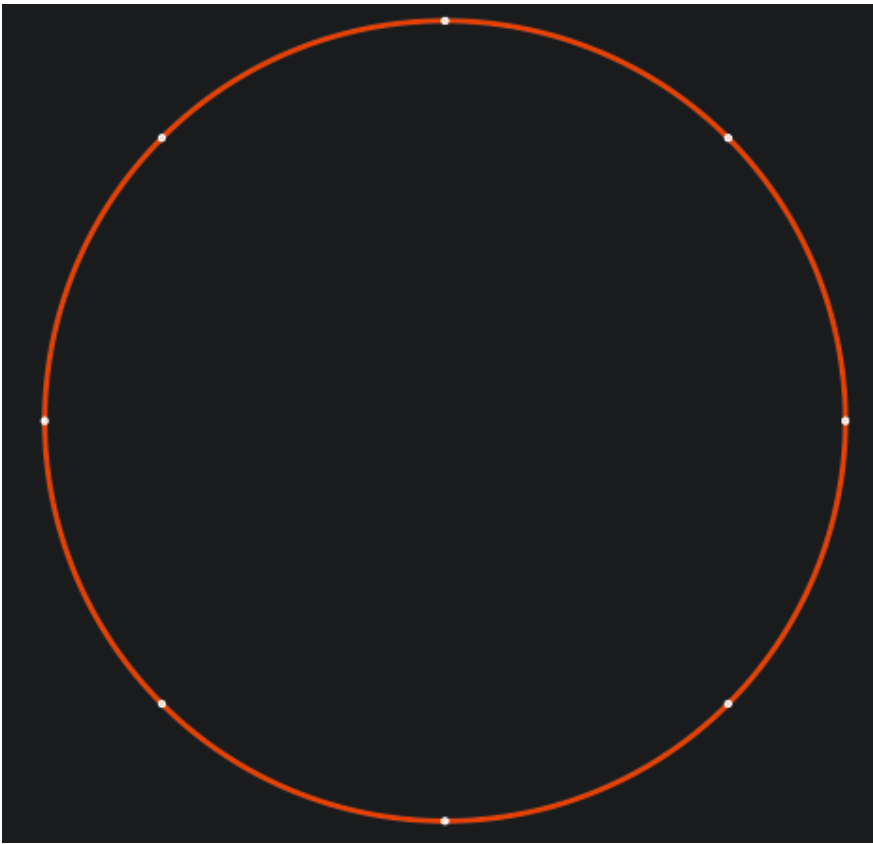
Here is the original image:



Here is the image made by the DXF file that was exported using CorelDRAW X4 and the R11 DXF filter.



Here is the image made by the DXF file that was exported using the DXFTool Standard Edition.



Note that the CorelDRAW DXF file is 9858 bytes and the DxfTool Standard Edition DXF file is 851 bytes

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'Birds.cdr' is a drawing that was traced from bitmap artwork. This is a service that we offer. Here is the original image:



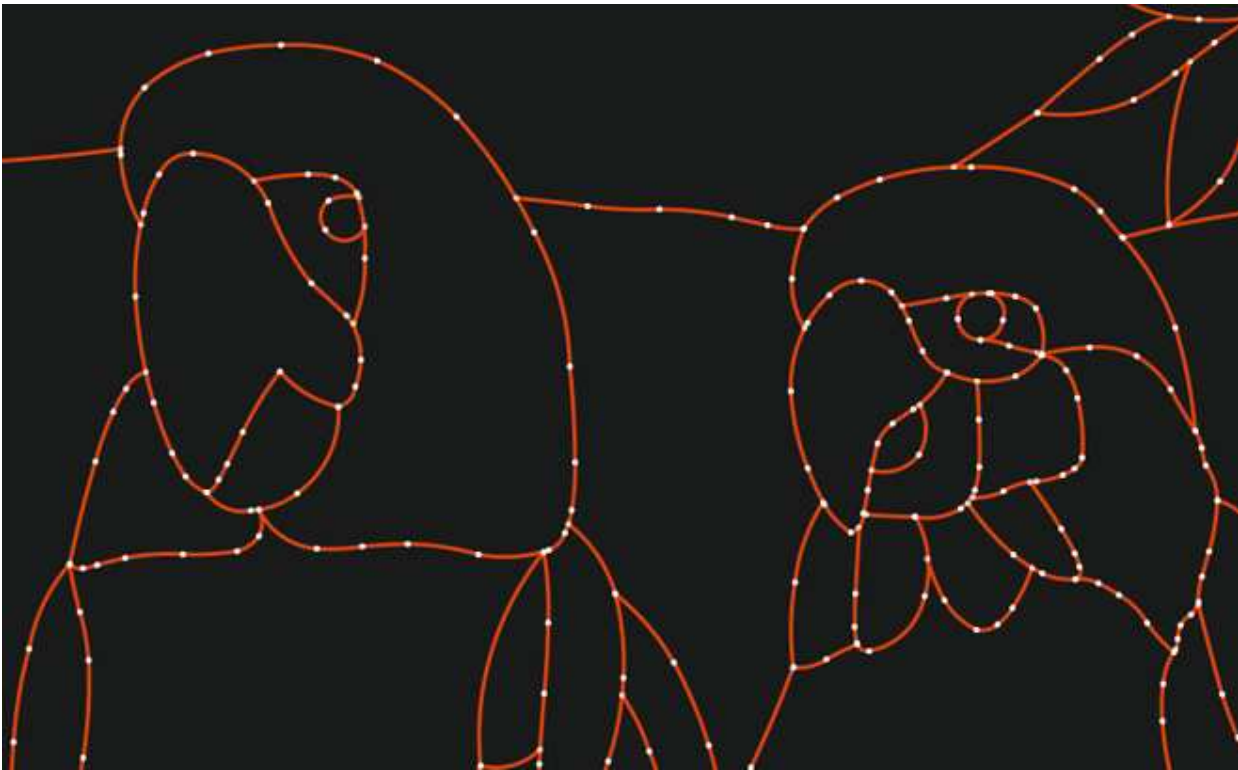
Here is the image made by the DXF file that was exported using CorelDRAW X4 and the R11 DXF filter.



Here is the image made by the DXF file that was exported using the DXFTool Standard Edition.



Here is a close up detail of the birds showing the beautiful flowing arcs and very small segment count.



Note that the CorelDRAW DXF file is 2,338,599 bytes and the DxfTool Standard Edition DXF file is 152,595 bytes

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'LCS-Sign01.cdr' is a drawing that shows the text handling capabilities of the DXFTool Standard Edition. Here is the original image:

# Leonard CNC Software Solutions For CorelDRAW

Drawing Management Systems

Custom Programming

VBA Macros

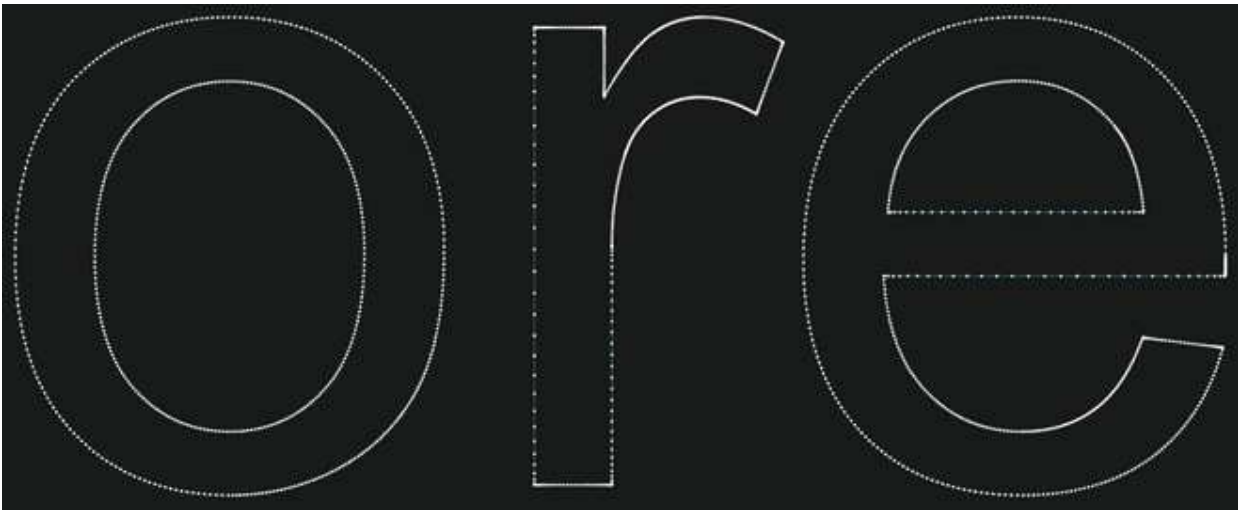
Plugins

Artwork Services

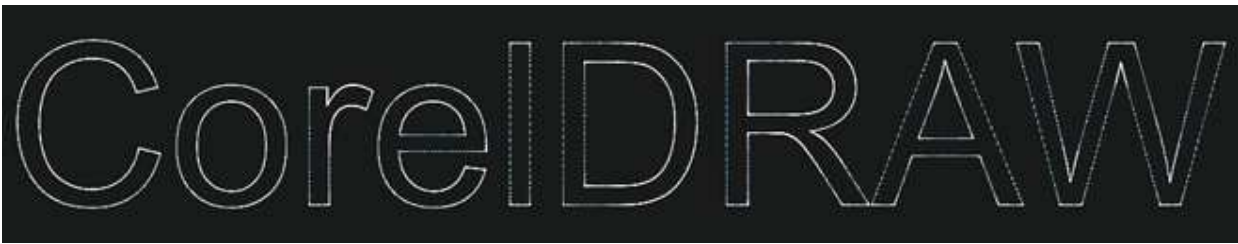
Artwork Collections

Product Development

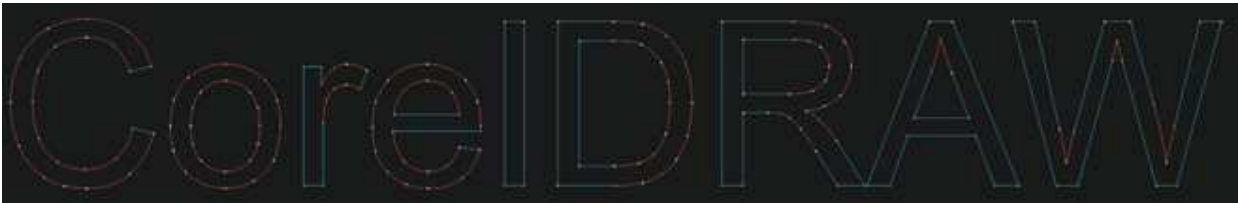
Here is the image made by the DXF file that was exported using CorelDRAW X4 and the R11 DXF filter. We are emphasizing the text and we also had to zoom in to 1800% to be able to see the EXTREMELY small lines that CorelDRAW makes for it's DXF files.



Another view



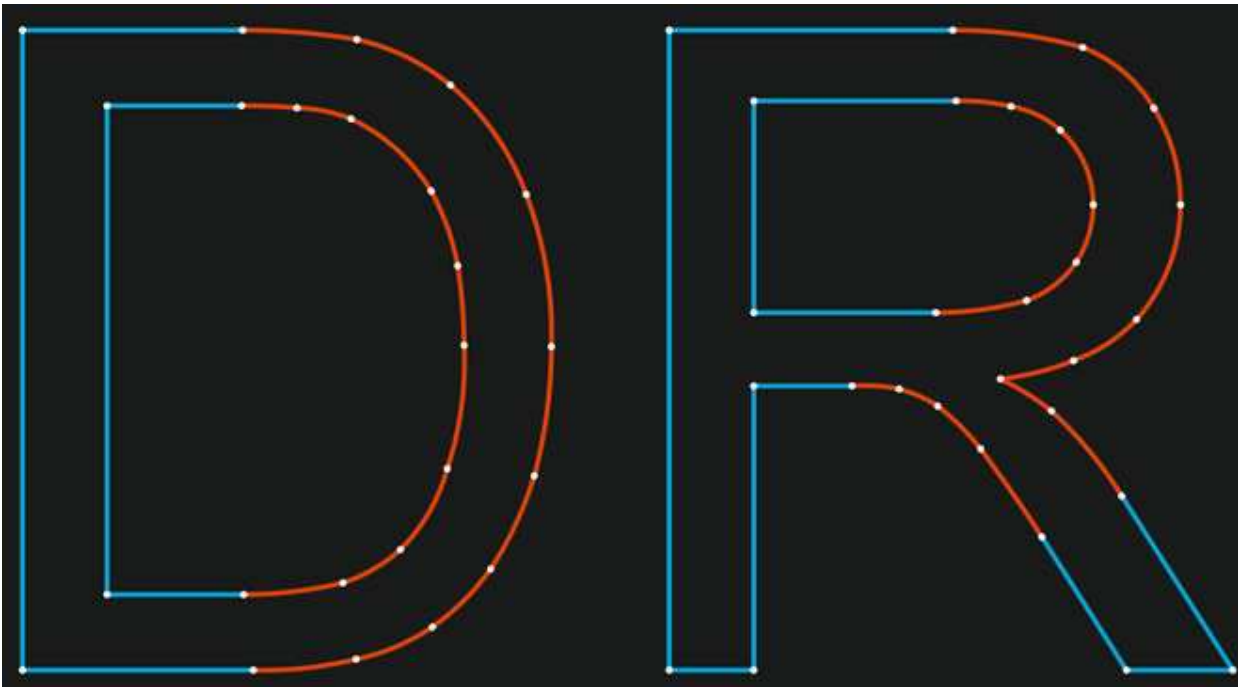
Here is the image made by the DXF file that was exported using the DXFTool Standard Edition.



This is the same closeup as the CoreIDRAW DXF, but it shows the small number of segments and the smooth arcs made by the DXFTool Standard Edition.



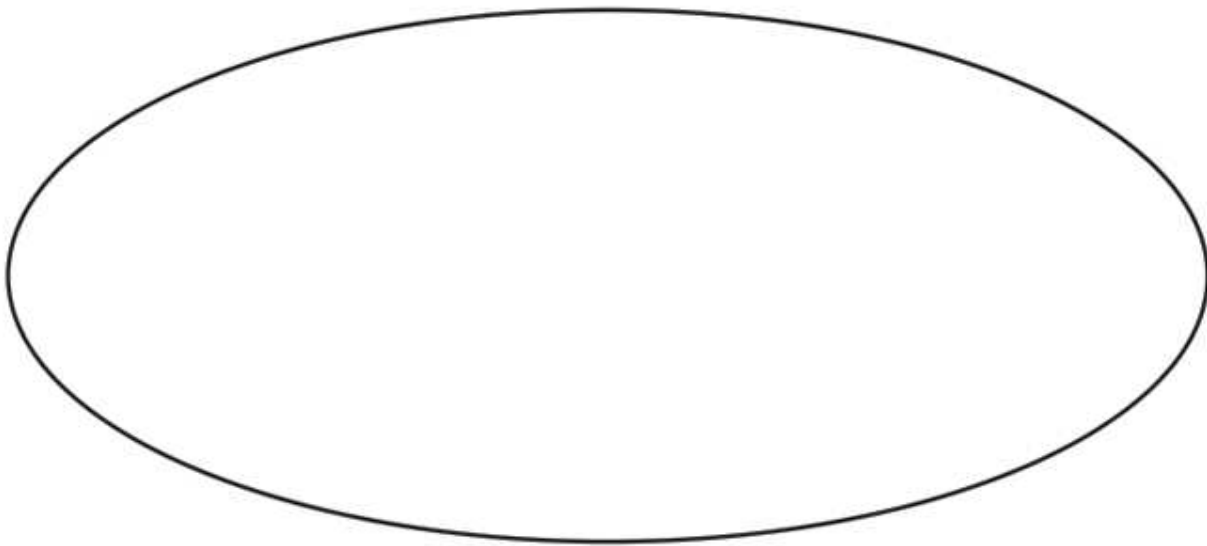
Now the letters 'D' and 'R' - very beautiful!



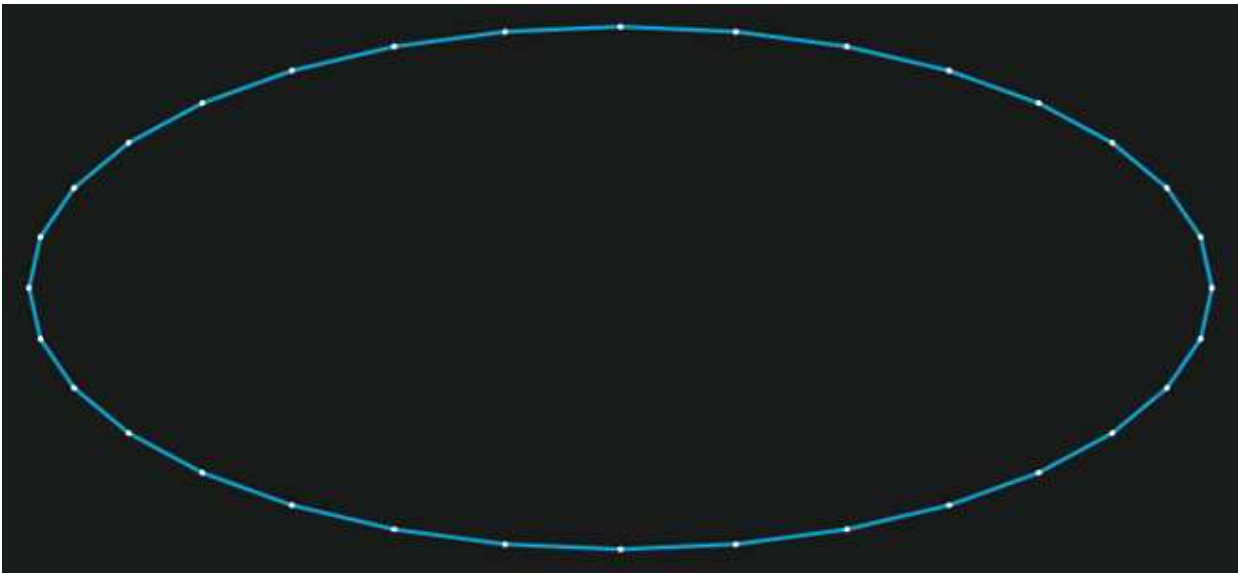
Note that the CorelDRAW DXF file is 10,114,748 bytes and the DxfTool Standard Edition DXF file is 241,474 bytes

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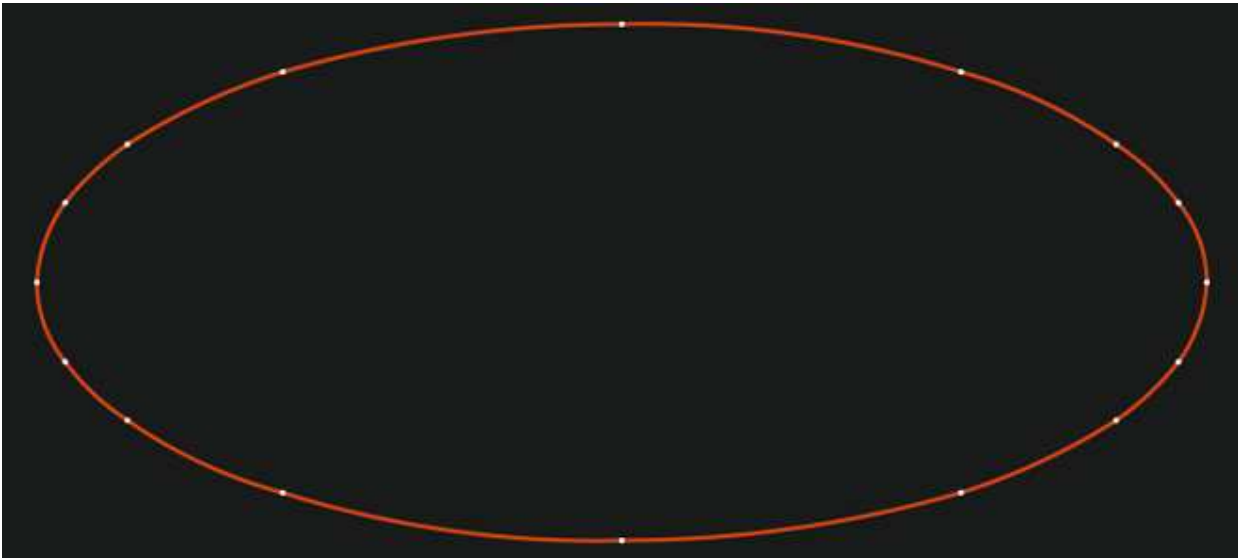
'Ellipse' is a simple ellipse, but this is one of the most difficult shapes to cut on a CNC system. Here is the original image:



Here is the image made by the DXF file that was exported using CorelDRAW X4 and the R11 DXF filter.



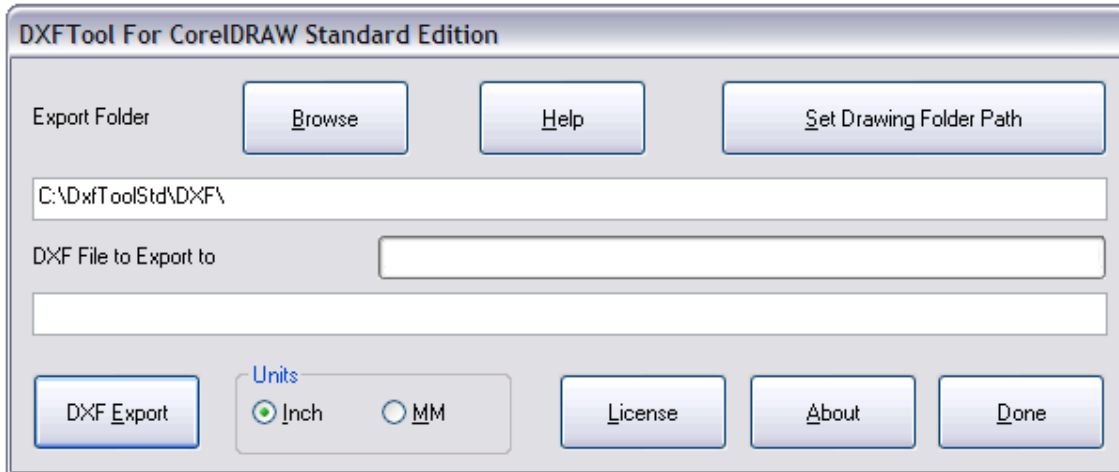
Here is the image made by the DXF file that was exported using the DXFTool Standard Edition.



Note that the CorelDRAW DXF file is 9,824 bytes and the DxfTool Standard Edition DXF file is 1,519 bytes

## DXFTool For CorelDRAW Standard Edition

The new user interface has a number of shortcut keys that are shown on the buttons with an underline character under them. To use the shortcuts hold down the ALT key then press the letter that is underlined. The result will be the same as if you had pushed the button with the mouse pointer.



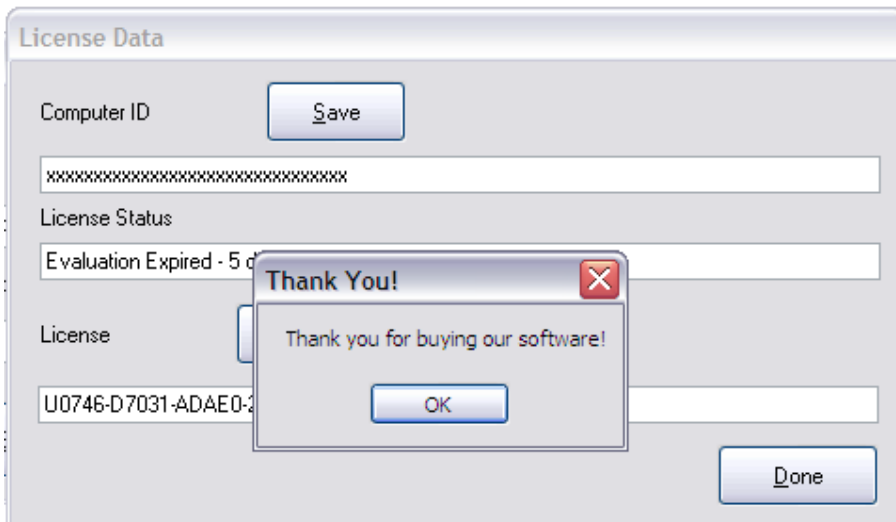
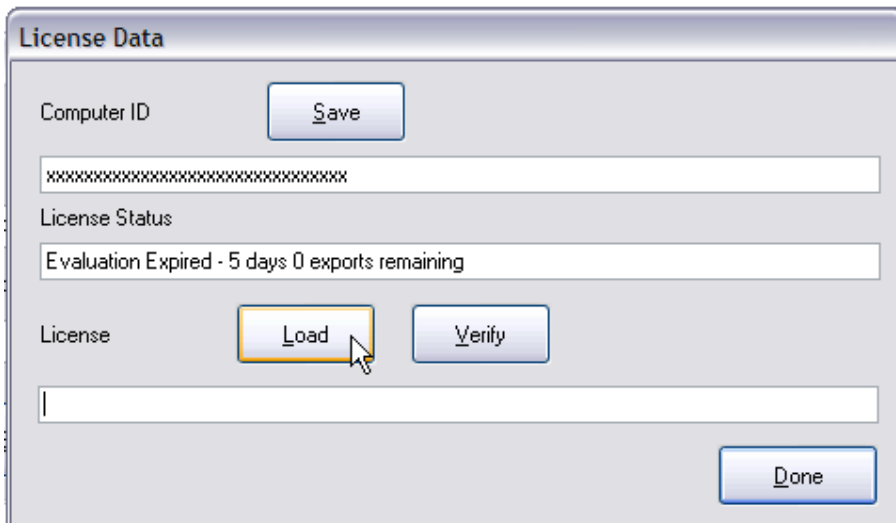
In addition, the 'DXF Export' button is now the default button, so you can just press the ENTER key to do the export operation.

The 'DXF File to Export to' will now have the filetype 'dxf' added to the filename if it was accidentally deleted while typing a new name for the DXF file.

# DXFTool For CorelDRAW Standard Edition

Licensing the DXFTool 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 DXFTool. Press the 'Save' button and a file 'DxfToolStdID.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 'DxfToolStd.lic'. Copy this file to your computer's desktop screen, then press the 'Load' button on the DXFTool 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 exports!



# DXFTool For CorelDRAW Standard Edition

The drawing does not have to be saved, but this is advisable.

Only the visible layers will be exported. If any shapes are selected on a drawing, only those shapes will be exported.

The X3, X4 and X5 versions do NOT require VBA to be installed. The V12 version does require VBA.

The options that are used on startup are in the 'DxfToolStd.ini' file which is in the DxfToolStd subfolder of the 'Draw' folder. On a normal installation of X4 this is:

```
C:\Program Files\Corel\CorelDRAW Graphics Suite X4\Draw\DxfToolStd
```

The 'DxfToolStd.ini' file contains these items for a StdUSEnglish installation:

```
[Options]
DefaultDxfFolder=C:\DxfToolStd\DXF
LangDll=StdUSEnglish.dll
Units=INCH
ToolBarName=Standard
InstallDisk=C:
```

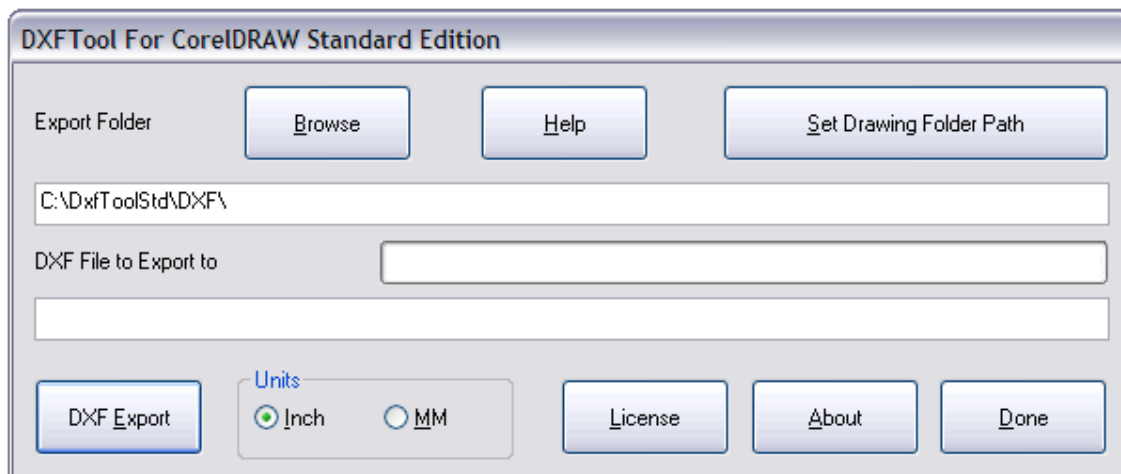
```
[Debug]
LogFile=N
```

The only options that would ever be changed manually are 'LogFile=N' and 'ToolBarName=Standard'.

'LogFile=N' would be changed to 'LogFile=Y' and you would install a special DLL we would provide to you in the event that problems needed to be diagnosed and they could not be reproduced here.

'ToolBarName=Standard' would be changed to 'ToolBarName=MyToolBar' where 'MyToolBar' is the name of a ToolBar / CmdBar that you created. This will make the DXFTool Standard Edition button appear on 'MyToolBar'.

The buttons on the main screen are used for:



'Browse' displays a folder browse dialog that lets you select the folder that the DXF file will be exported to.

'Help' displays the online help system for the DXFTool Standard Edition

'Set Default Folder Path' sets the DXF export folder to the same folder that the drawing is in.

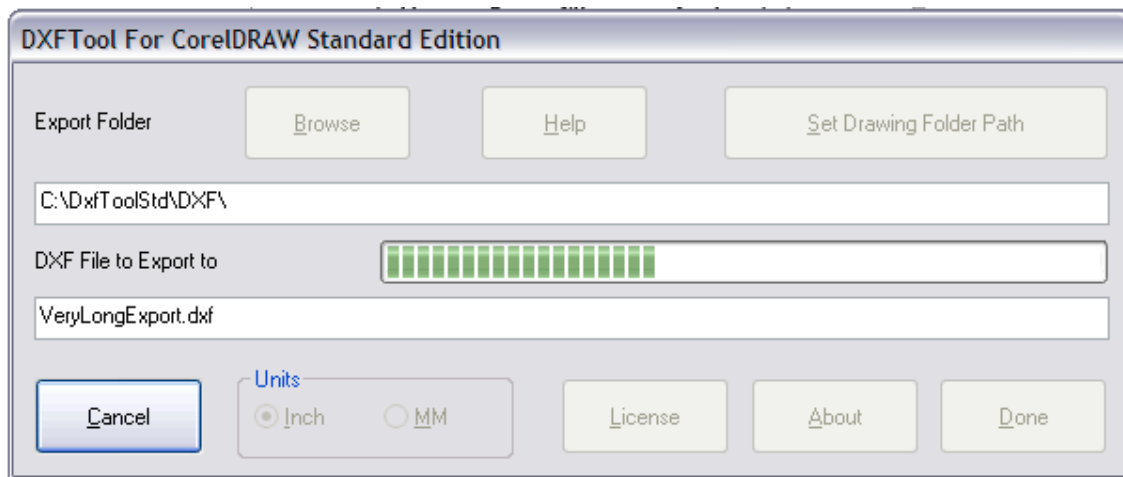
'DXF Export' perform the export fo the drawing to the DXF file.

'License' displays the license information / entry / verification screen.

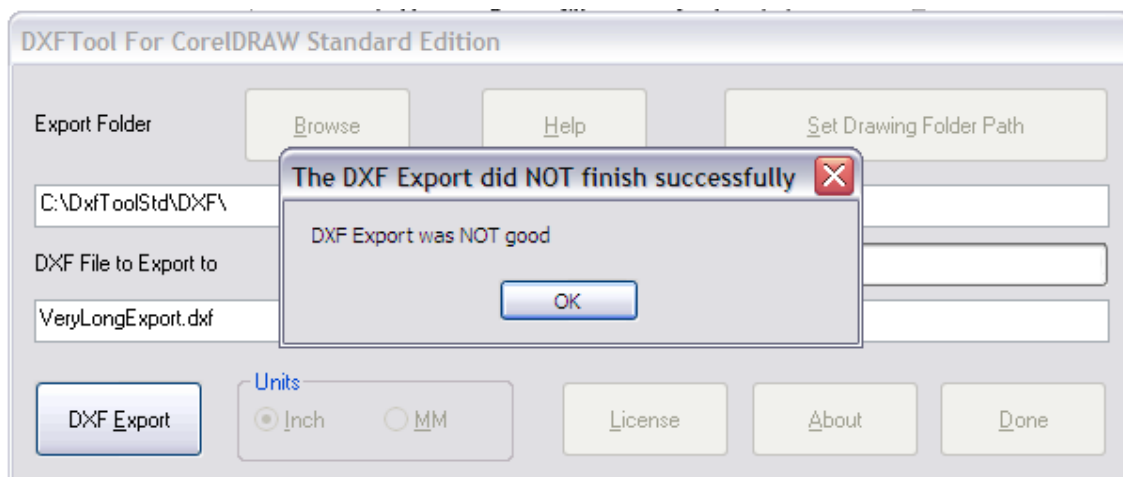
'About' displays information about the DXFTool Standard Edition.

'Done' exits the DXFTool Standard Edition.

While the DXF file is being created all of the buttons will be grayed out (disabled) so that they cannot be pushed except the 'DXF Export' button. This button will change to 'Cancel'. This can be used to stop very long exports when problems may exist in the drawing being exported. Here is what the main screen will look like during an export:



If you push the 'Cancel' button a warning message box will pop up to remind you that the DXF file was not successfully created since the export was cancelled.



## **DXFTool 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 DXFTool 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.

New language translations are being added as they are requested. If you want support for your native language, please inquire and mention if you can assist with translations of the user interface and the help file / manual.

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

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

Birds.cdr is a sample of artwork that we can make for you on contract. We will also have collections of this artwork for sale with DragonCNC, our full CAD / CAM system for CorelDRAW.

# DXFTool For CorelDRAW Standard Edition

The DXFTool will now be available in two versions, the Standard Edition and the Professional Edition. The Standard Edition will be maintained and any problems that are discovered will be fixed. The Professional Edition will get all the new features going forward.

## **The Standard Edition release 1.3 has the following fixes and changes:**

Fixed the problem with using mapped drive shares as a DXF file output location for the DXFTool.

Changed the Button Text 'Set Default Folder Path' to 'Set Drawing Folder Path' since this is what it actually does. It makes the export folder the same as where the drawing is located.

Made the 'DXF Export' button the default button so you can just open the DXFTool Standard Edition and press return to repeat the prior export.

Added keyboard accelerators / shortcuts to all the buttons. These MUST be in the language localization satellite DLLs also.

Forced the export file extension to be '.dxf'.

Added a 'The DXF already exists - do you want to replace it?' message and yes / no decision (message box).

Changed the method used to generate ARCs from a CorelDRAW curve to a Building Block Software library method that works VERY much better.

Improved the progress bar timing - added progress bar updating to the segment processing loop and removed it from the subpath processing loop. This gives a more regular and smoother progress indication.

The size of the DXF files has been reduced many times. Files that were 12KB are now 1.5KB. This means a HUGE reduction in file transmittal time over a serial link.

Enhanced the installer and DLL to allow installs on systems that do not have a C: drive.

## **The Standard Edition release 1.4 has the following fixes and changes:**

Fixed the 'Application not responding' and the progress bar stopping when the main window was moved during an export.

Set all of the buttons to disabled during an export and changed the 'DXF Export' button to 'Cancel'. This can be used to cancel a very long export. An error window will pop up to remind you the export was cancelled and that the DXF file is not good.

Fixed crashes being caused by items that cannot be exported being present in the drawing. The biggest problems were caused by bitmaps and embedded OLE objects.

Enhanced the export to correctly convert CorelDRAW Symbols to objects and then export them.

## **The Standard Edition release 1.5 has the following fixes and changes:**

Fixed an error in the group iterator that caused infinite looping

Added support for handling locked objects in drawings

Added the correct StdUSEnglish language dll to the installer. The one that was being distributed did not have the 'not ok' message after a cancelled export resulting in an empty message box

**The Standard Edition release 1.6 has the following fixes and changes:**

Improved handing of small fonts

Improved error detection during processing

CoreIDRAW X5 support was added