

ExpertCAD™ ExpertCAM™

ExpertCAD 2008 Release Summary

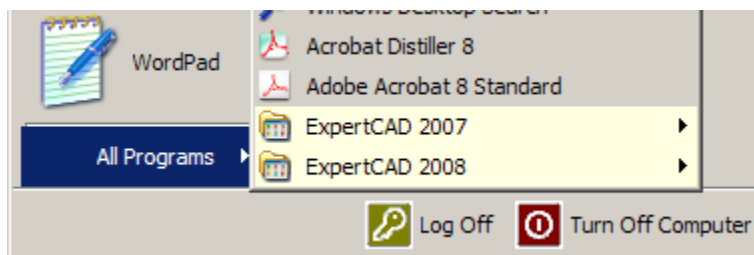
July 2008

Overview

ExpertCAD 2008 contains important software corrections for both ExpertCAD and ExpertCAM in addition to several new features and functions. This document will briefly review the new features and changes to the software. You can learn even more about the new features by choosing What's New from the Help menu in any of the applications.

Installation

ExpertCAD 2008 will not overwrite previous installations of ExpertCAD. It installs as though it was a new application program ignoring any previous versions you may have installed on your computer. As shown below, a new entry in the Windows Start menu is created to access the programs in this release.



By default, the software is installed in the directory c:\Program Files\ExpertCAD 2008. We recommend using this default. Note that you can continue to run older versions as well as ExpertCAD 2008 on the same computer. If you have no longer need or use older versions of the software, you can remove them using the Windows Add/Remove Programs feature.

Scrolling Icon Area

The icon area has been revised to allow the icons to scroll up or down. If there are icons below what can be shown on the screen due to the size of the window or the resolution of your monitor, the down arrow at the bottom of the icon area will be enabled.

You can click on the down arrow to scroll the icons to the next row.

Alternatively you can track into this area as though it were another icon to cause the icons to scroll.

The icons will continue to scroll while the cursor is inside the down arrow.

Once the icons have shifted at least 1 row, the up arrow will enable to allow the opposite scrolling direction. The up arrow functions the same way as the down arrow to scroll in the opposite direction.



Adobe PDF Output

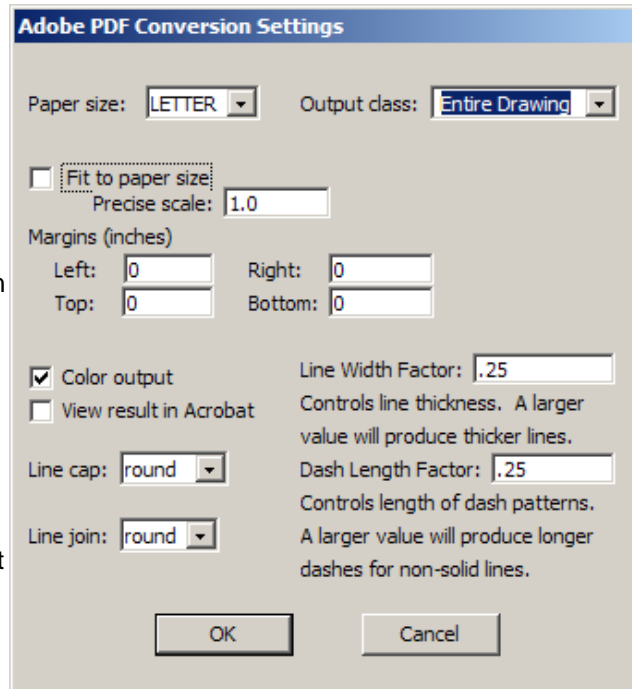
New Options for Conversion

In addition to fitting the drawing to the paper size, you now have the option to output the drawing to a precise scale. Disable the switch Fit to paper size and enter the scale you wish. Output will be sized accordingly and centered on the sheet.

Margins for the paper size can be specified in the conversion settings dialog.

Dash patterns and line widths are rendered by Adobe Acrobat whereas in previous releases the dashing and line widths were approximated by ExpertCAD. You can fine tune the both by adjusting the line width and dash length factors.

Line cap specifies the appearance of a line at the end points. Line join specifies how the line is to be rendered at the vertex of 2 adjoining line segments.

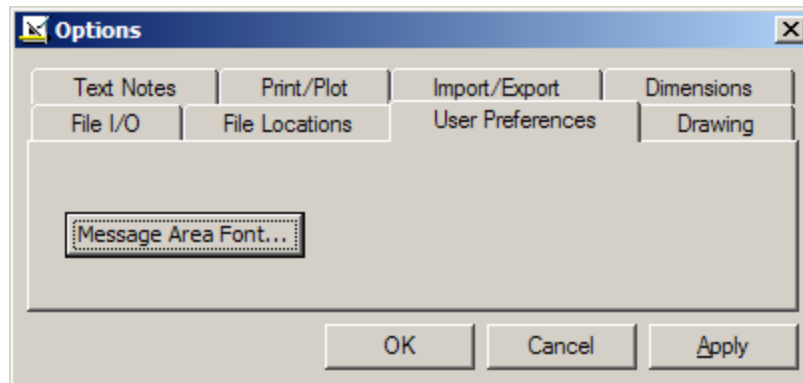


Maintenance

In certain cases the colors output for PDF files would not match the colors used in the drawing. This has been corrected such that the color definitions output to the PDF file will exactly match the current RGB settings for the colors currently in use when the drawing is output.

Options Dialog

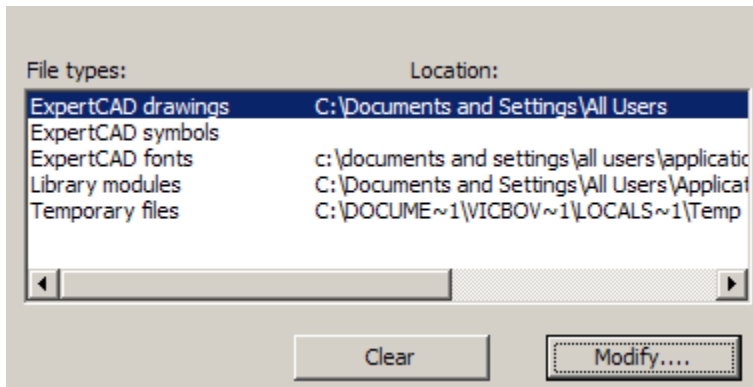
A new feature to set the font characteristics for the message area has been added to the Options/User Preferences dialog for both ExpertCAD and ExpertCAM:



This allows you to choose a different font, font style and size for the message area. Note that this does not affect dialog text or menu text; only the font for the message area is affected.

Several corrections have been made to both the ExpertCAD and ExpertCAM Options dialog to properly save specific settings to the configuration file. In some of these cases the setting was omitted or incorrectly recorded when written to disk.

A Clear button has been added to the File Locations tab of the Options dialog to allow a directory name to be set to an empty string.



The Clear is automatically disabled for those directory locations must have a valid setting (e.g. Temporary files).

Maintenance

General

The number of line colors supported has been expanded from 12 to 15.

The short command Ctrl-Tab has been added to sequence through the different banks of icons.

The Recent File menu has been revised to include files that were saved using the Save As feature.

A long text string (> 127 characters) in any cell of the status bar caused a segmentation violation in the 2007 version. This has been corrected so text strings greater than 127 characters are truncated before being displayed in the status bar.

After defining a new short command, the definition is correctly recorded to the configuration file for short commands.

The directory to change to when opening a file (set in the Options/File Locations dialog) would not always honor the specified directory. This would happen in the case where a default file name is supplied to the file dialog and that default file was not located in the specified directory. This has been corrected such that a default file name is never supplied if a path has been set in the Options dialog.

The ScriptLink command 'source' has been modified to accept multiple file names as arguments.

The before and after macro feature for ScriptLink panel-textbuf entities has been enabled. In the 2007 version, the macro(s) did not get called when focus moved into or out of a text box in a dialog.

ExpertCAM

The 2007 version of ExpertCAM could occasionally output floating point numbers in scientific notation:

```
_ DATE/103007 TIME/14:54:14
$CAM/
INCH/
SECTION/ 1 1 3 1 1
SPA/ 3.55271e-015 2.9976e-015 -0.572039
SPA/ 14.2308 -0.923077 1
SPA/ 3.55271e-015 2.9976e-015
```

Numeric values in this format could not be read into back into ExpertCAM. ExpertCAD 2007 also had the same problem when writing data in ExpertCAM format. Both ExpertCAM and ExpertCAD have been corrected to ensure that floating point numbers are never output using scientific notation format.

Feed rate and spindle speed calculation for drilling has been corrected to produce the proper values.

A program crash when saving a file or exiting after using the functions INX and CPY in a program has been corrected.

The File/Save As function has been corrected to always save the history file to the designated file name.

The file backup feature has been corrected to honor the setting in the Options/General dialog. The 2007 version would always create the backup file regardless of the setting of the switch.

Backup files are created only in cases where the specified file name already exists on disk and is not an empty file. The previous versions would needlessly create backup file of zero bytes when the specified file name did not already exist.

Certain dialogs posted at the same time that a prompt was issued in the message area have been made modeless to allow entry of data from the dialog in response to the prompt.

ExpertCAD

A default font (cadFont1) will be used in cases where a drawing has text notes that use a font that is either not available on the computer or the font file is corrupt.

Crosshatching using the automatic boundary feature was frequently failing to find and create the proper boundary for crosshatching an interior area. This defect also affected the Measure/Area feature. This defect has been corrected for this release.

An option has been added in the Options/User Preferences dialog to disable the coordinate display of the cursor location in the status bar.

Printing has been corrected to honor scale sizes other than 1.0.

Importing AutoCAD drawings with mirrored dimension text is now supported.

Importing AutoCAD drawings with ANSI standard radial dimension that have straight dimension lines will correctly convert the dimension. Previous versions produced a segmentation error.

Text buffers stored with a drawing that have invalid names are ignored when the drawing is opened.

The predefined dimension character '&' (degrees, minutes and seconds) is always associated with the system of units used by the drawing regardless of the definition stored in the file.

The analyze function for the parametric drawing module has been corrected to produce proper solutions. The 2007 version would frequently fail to find the proper point to begin the analysis process.

The Edit/Paste feature has been revised to paste the contents of the clipboard at each location of the current line. Previous versions would use just the current point to create a single instance of the clipboard content.

The offset function for the current line has been corrected to work properly for discrete conditions where small circles were being offset

Platform Support

Supported platforms for ExpertCAD & ExpertCAM 2008 are:

Computer	Operating System	Revision Level
Sun SPARC	Solaris	2.5 through Solaris 10
Hewlett Packard PA-RISC	HP-UX	11
Intel & AMD 32-bit Computers	Windows 2000	Service Pack 3 or higher
Intel & AMD 32-bit Computers	Windows XP	All
Intel & AMD 64-bit Computers	Windows XP x64 Edition	All
Intel & AMD 32-bit Computers	Windows Vista 32-bit Edition	All
Intel & AMD 64-bit Computers	Windows Vista 64-bit Edition	All

Important Notes about Platform Support

1. Windows XP x64, Windows Vista 32-bit & 64-bit require the use of the USB style security key. Parallel port security keys are not supported on these operating systems.
2. If you are installing on Windows 2000, you must make sure you have Windows 2000 Service Pack 3 or later installed before you attempt to install ExpertCAD. The software will not install correctly nor will it run if you are not at this level of the operating system.

Closed Track IDs

The following is a list of closed customer and internally generated software enhancements, corrections and modifications included in this release with a synopsis of the problem or enhancement that has been addressed.

ID	Synopsis
1810	Add an option to set a precise scale when writing the design as a PDF file.
2663	Add options to set margins, line caps & joins and use Adobe PDF line drawing.
2672	Use a default font in cases where a custom font is unavailable or the font file is corrupt.
2675	Dimension text style in the Options dialog is not being set to the chosen value.
2679	The path setting in the Options dialog for macro libraries is not being saved.
2681	After defining a new short command the definition is not being saved to the configuration file.
2682	Output format for numbers is sometimes done using the scientific notation format (e.g. 1.5e-8) when writing ExpertCAM files. This format is invalid for ExpertCAM output files.
2683	Crosshatch fails to find and create the correct outer boundary.
2684	Certain ExpertCAM dialogs must be posted as modeless dialogs to function properly.
2685	Output format for numbers is sometimes done using the scientific notation format (e.g. 1.5e-8) when writing ExpertCAM files. This format is invalid for ExpertCAM output files.
2686	Drawing does not print. A segmentation violation error is generated.
2689	The dialog to configure the hatch pattern for electrical insulation does not work.
2691	The Goto directory feature does not work when a default file name is supplied.
2692	The Save dialog will use the last default file name when no default file name is wanted.
2693	The 800 telephone number for support in the Help/About dialog is wrong.
2700	The "Fixed text size" switch in the Options/Text Notes dialog is not working properly.
2702	The hide command does not erase the entities in the specified class unless a redraw occurs.
2703	Add an option to disable the cursor location coordinate display in the status bar.
2704	Add Ctrl-TAB short command to tab through the different sets of icons.
2707	Revise implementation of Cut/Copy/Paste to allow it to work between 3D and 2D.
2708	Revise the Paste function to paste the data at each point of the current line.
2709	If any cell in the status bar is > 127 characters, a segmentation violation occurs.
2710	ExpertCAM will crash when doing a write or exit after this file has been opened.
2711	The Recent Files list should update to include files saved using Save As.
2713	Printing to a specific scale other than 1.0 does not honor the specified scale.
2714	The "source" command should allow multiple file names as arguments.

2717	The dialog for changing the working layer does not work correctly.
2718	The setting for leading zero for dimensions in the Options dialog is not working properly.
2723	Allow for the use of 15 different line colors instead of 12.
2727	The line offset features fails on some of the .126 diameter circles in this drawing.
2728	Incorrect colors for some lines on this drawing are used when writing to PDF format.
2729	Crosshatch fails to find and create the correct outer boundary.
2730	Add a guide for short key and cursor stroke commands to the ExpertCAD user guide.
2731	The setting for leading zero for dimensions in the Options dialog is not working properly.
2733	Add a way to clear a directory specified in the Options/File Locations dialog.
2734	AutoCAD drawings with dimensions that have mirrored text do not translate properly.
2735	Ignore text buffers with invalid names from being restored when a drawing is opened.
2736	The dimension character '&' for degrees/minutes/seconds should always use the same system of units as the drawing regardless of how it was defined or saved to a file.
2737	The create circle by diameter/radius is not working properly in ExpertCAM.
2738	The "Allow upside-down text" switch in the Options dialog is not working correctly.
2739	Incorrect colors for some lines on this drawing are used when writing to PDF format.
2740	This DXF file written from ExpertCAD can't be read back into ExpertCAD.
2741	Can't import this DWG file into ExpertCAD.
2743	The Measure Area feature in ExpertCAD is failing in this example.
2745	The analyze function for the parametrics module fails to produce a solution.
2748	Add an option to change the font and font size for the message area.
2751	The default setting for line width for printing is missing.
2753	The ExpertCAM function for calculating feed rate and spindle speed for drilling is broken.
2754	Incorrect colors for some lines on this drawing are used when writing to PDF format.
2756	Point snap in the Options dialog of ExpertCAM does not honor settings other than auto.
2757	Add scrolling capability to the icon area.
2758	The before/after macro feature of panel-textbufs is being ignored.
2759	The file backup feature in ExpertCAM can't be turned off.
2760	The File/Save As feature does not save the history file created in ExpertCAM.
2761	An ExpertCAM backup file (#<file>) shouldn't be created if the file didn't exist previously.