

# ExpertCAD™

# ExpertCAM™

# ExpertView™



## ExpertCAD Release Summary

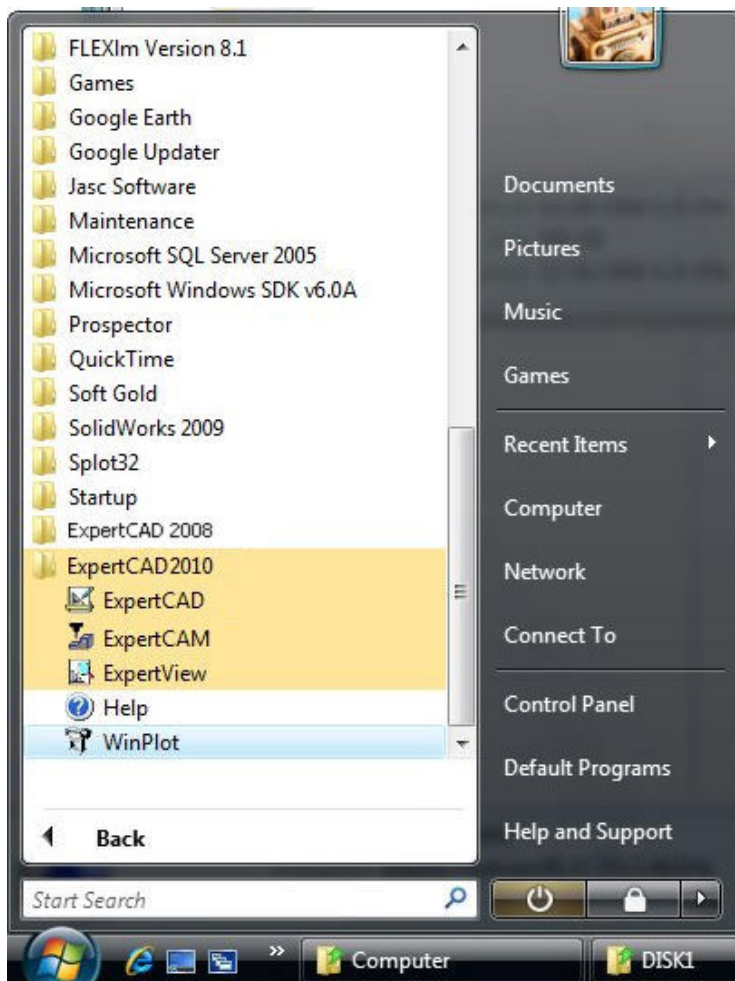
March 2010

### Overview

ExpertCAD 2010 is major release that includes significant enhancements as well as customer requested software modifications and corrections. This release summary describes the software changes.

### Installation

ExpertCAD 2010 is installed on your system as though it is a new application. It will not overwrite programs from a previous installation of ExpertCAD.




ExpertCAD 2010 is installed totally separate from previous installations.

On this computer, both ExpertCAD 2008 and ExpertCAD 2010 are installed.

Programs and program data installed in the Program Files directory are installed in the sub-directory ExpertCAD 2010.

If you are upgrading from a version prior to ExpertCAD 2008, we suggest you review the release summary for ExpertCAD 2008 in addition to this document because of the significant changes made for that release.

 Due to the many enhancements added to the applications for this release, the native binary format for files saved by ExpertCAD has changed. This means that older versions of the software will not be able to read data files written by the ExpertCAD 2010. As is always the case, the applications can read older versions of the native file formats.

### **Microsoft Windows 7 Support**

ExpertCAD 2010 is compatible with both the 32-bit and 64-bit version of Microsoft Windows 7. This is the first release of ExpertCAD to provide support for the native Windows 7 operating system. The table below lists the supported operating systems for ExpertCAD 2010:

<b>Operating System</b>	<b>32-bit</b>	<b>64-bit</b>	<b>Revision Level</b>
Windows 7	✓	✓	All
Windows Vista	✓	✓	All
Windows Server 2008	✓	✓	All
Windows XP	✓	✓	All
Windows 2000	✓	✗	Service Pack 3 +

#### Operating System Notes:

- ExpertCAD 2010 will be the last release for Windows 2000. Although future releases may run without incident on Windows 2000, the software will not be tested on this operating system prior to release.
- Windows Vista, Windows Server 2008 and Windows 7 do not support parallel port dongles. Only USB dongles are supported for these operating systems.
- ExpertCAD 2010 includes the latest driver for the Aladdin USB dongles. The driver is automatically installed if the installation program detects that it is required to support the operating system that the software is being installed on.

### **Software Licensing**

#### Floating Licensing

ExpertCAD, ExpertCAM and ExpertVIEW have been upgraded to use the latest technology from Acreso Software - FLEXNet Version 11.7. FLEXNet replaces FlexLM for installation and administration of floating licenses.

If you are currently using FlexLM to license ExpertCAD, ExpertCAM or ExpertVIEW, you must upgrade to the new FLEXNet software concurrent with upgrading to Version 2010. The new FLEXNet software is included on the CD in the subdirectory FLEXNet.

Please refer to the installation guide in the online Help for ExpertCAD for more information about setup and administration of floating licenses:

# ExpertCAD™

# ExpertCAM™

# ExpertView™



■ On-Line Help

Licensing

[Floating License Installation & Configuration](#)  
[Troubleshooting Problems](#)

### USB Driver Update

As part of the software installation process, a new driver for the Aladdin HASP USB dongle will be installed if necessary. This new driver supports native Windows 7 and Windows Server 2008. If you choose to upgrade your computer to Windows 7, it may be necessary to upgrade the driver manually if it does not automatically update itself. To do this, run the program "hinstall" with the "-i" option from a command prompt window:

```
C:\>cd "c:\Program Files\ExpertCAD 2010\bin"  
C:\Program Files\ExpertCAD 2010\Bin>hinstall -i
```

### Updating USB & Parallel Port Dongle License Codes

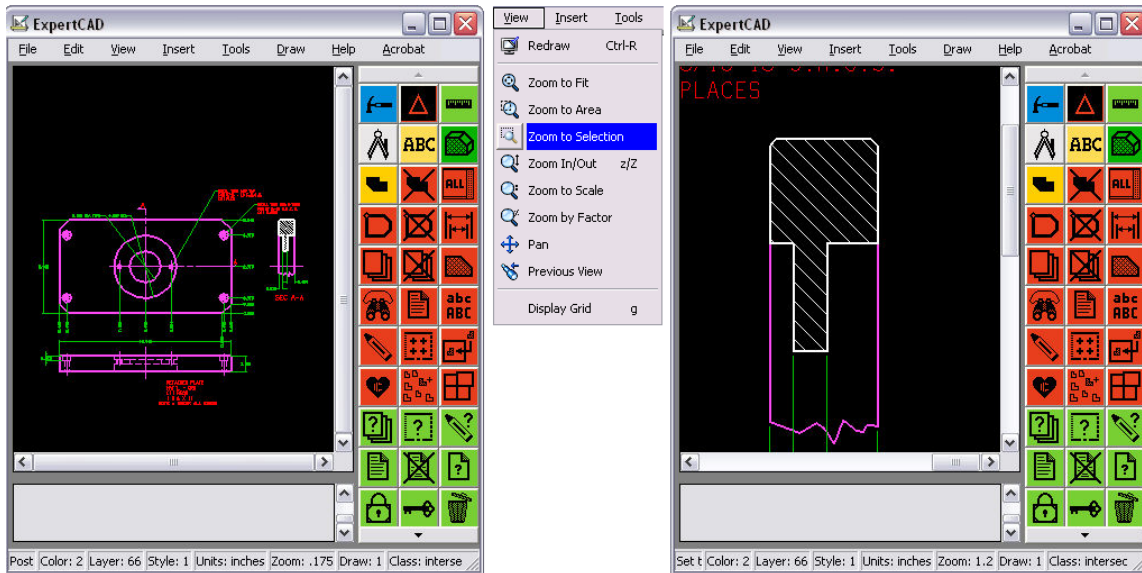
All versions of ExpertCAD, ExpertCAM and ExpertVIEW will require a new license code to run version 2010. Contact SofTech administrative services at 248-458-0359 if you wish to upgrade your license(s).

### **Graphic Enhancements**

*Using the Mouse Wheel* - The behavior of the mouse wheel events has been updated for all the AMT applications to produce the same or similar results. This applies to ExpertCAD, ExpertCAM and ExpertView:



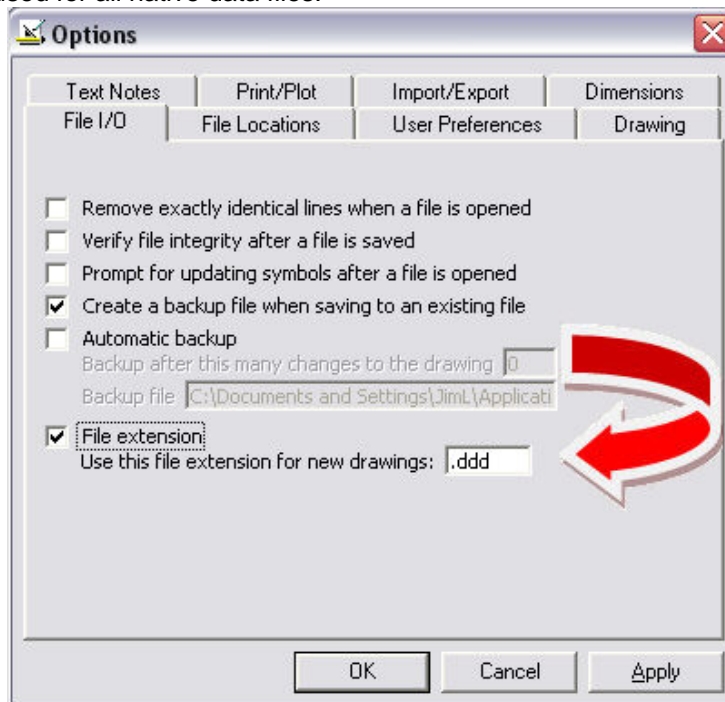
**Zoom to Selection** – This new viewing feature has been added to the view menu ExpertCAD:



Select the geometry you wish to zoom into then choose **Zoom to Selection** to fit the selected geometry to the current view.

## Importing & Exporting Data

**Automatic File Extensions** - An option has been added to the File I/O settings to allow for a file extension to be used for all native data files:



The file extension you specify will be added to any newly created data files saved from the application. This feature is available in ExpertCAD and ExpertCAM. This file extension is automatically added to the name of any newly created data file that is saved in the native file format that the application writes. It would not apply for example to exporting a file in AutoCAD format or if you open an existing file and later choose File / Save. Only newly created files automatically receive the extension.

*File Properties* - Data in the File/Properties dialog is now updated every time a file is saved.

*Saving Files* - File names typed into the file name text box for Save dialogs are now recognized. In some of the dialogs for different save operations, file names entered in this fashion would be ignored in previous releases.

*Line Styles in PDF* - Output in PDF format has been revised so dashed lines are more apparent by automatically switching end-cap styles when drawing dashed lines:

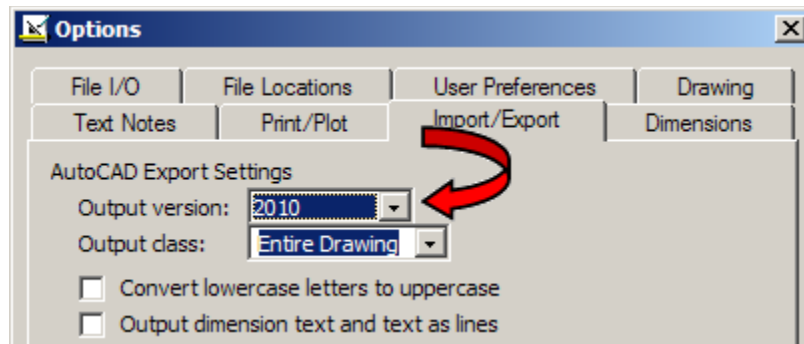


**Round end cap style tends to join together the dashes in this style 2 line.**



**Automatically switching to a butt end-cap style for dashed lines makes the dashing more apparent.**

*AutoCAD 2010 File Format Support* - The AutoCAD translators (acad2ddd and ddd2acad) have been upgraded to support AutoCAD 2010 data files. Previous versions could not import this new version of the AutoCAD file format.

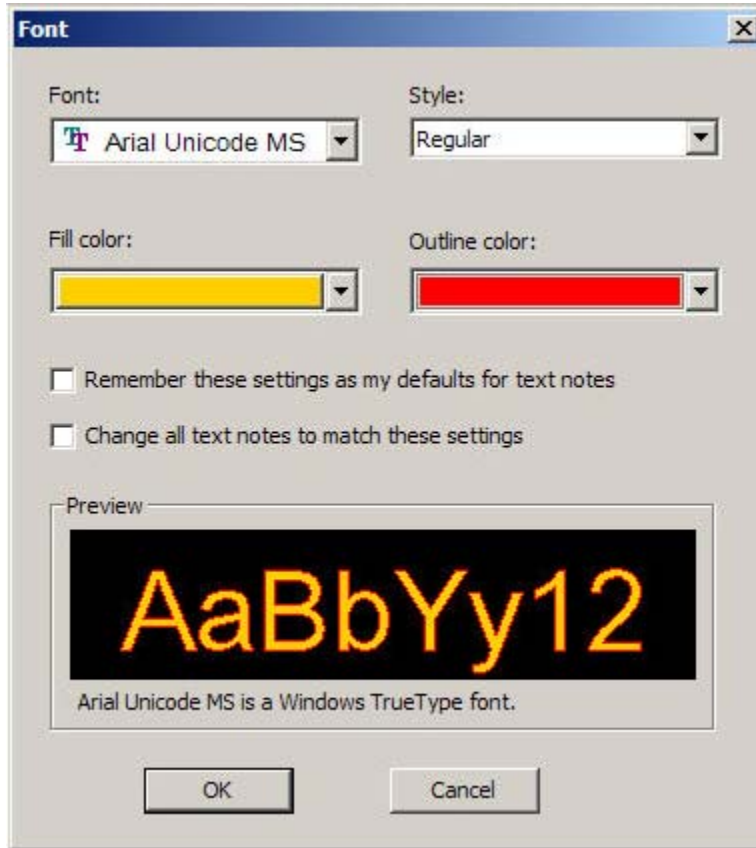


**Choose 2010 as the Output version in the Import/Export tab of the Tools/Options property sheet in ExpertCAD if you wish to write the 2010 version of the AutoCAD file format.**

*Import AutoCAD into ExpertCAM* - ExpertCAM has been modified to import AutoCAD data file directly. Choosing either a DXF or DWG file will invoke the AutoCAD translator to convert the data to ExpertCAM native format and import it. Only model space data is converted. Layouts (paper space) data set(s) in the file are ignored. All non-geometric data (annotation, dimensions, crosshatching, ...) is "flattened" into 2D sections.

## TrueType Fonts

Support for Microsoft TrueType fonts has been implemented for ExpertCAD and ExpertVIEW.



When using a feature that requests a font selection (e.g. change text font icon, change dimension font icon, ...), the Font dialog shown to the left is presented.

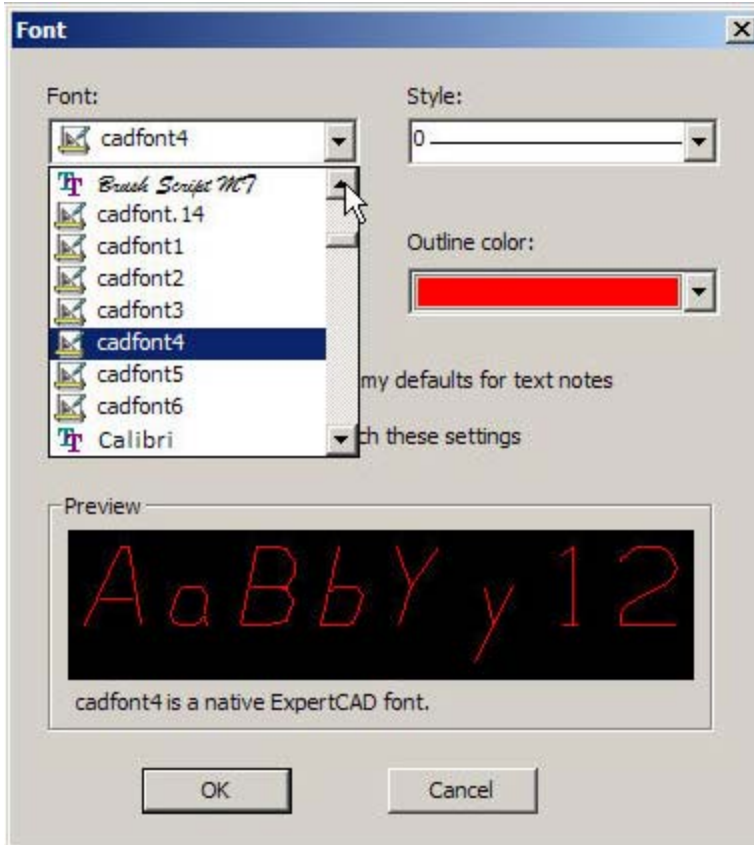
The Font combo-box control lists all the TrueType fonts as well as native SofTech stroked fonts available on your system.

If you choose a TrueType font, you will have the option to choose from the Style combo-box (Italic, Bold, ...) if alternate styles are available for that font.

Color for both the fill color and outline of the font can be set as well.

Some variations of the Font dialog will provide switches to remember your settings and/or make global changes to the current drawing or design.





The native SofTech fonts are also available in the font selection combo-box.

If you choose a native font, the Style combo-box lets you choose which line style you wish to use to draw with.

You can also choose an outline color but for obvious reasons, a fill color is not available.

If you are exporting data to a file format that doesn't support text or TrueType fonts, the text is automatically flattened into curves. For example, when importing data into Prospector in PDB format, any text will be output as continuous boundaries which can be very useful for scribe machining.

**REDUCE**

REDUCE

**REUSE**

REUSE

**RECYCLE**

RECYCLE

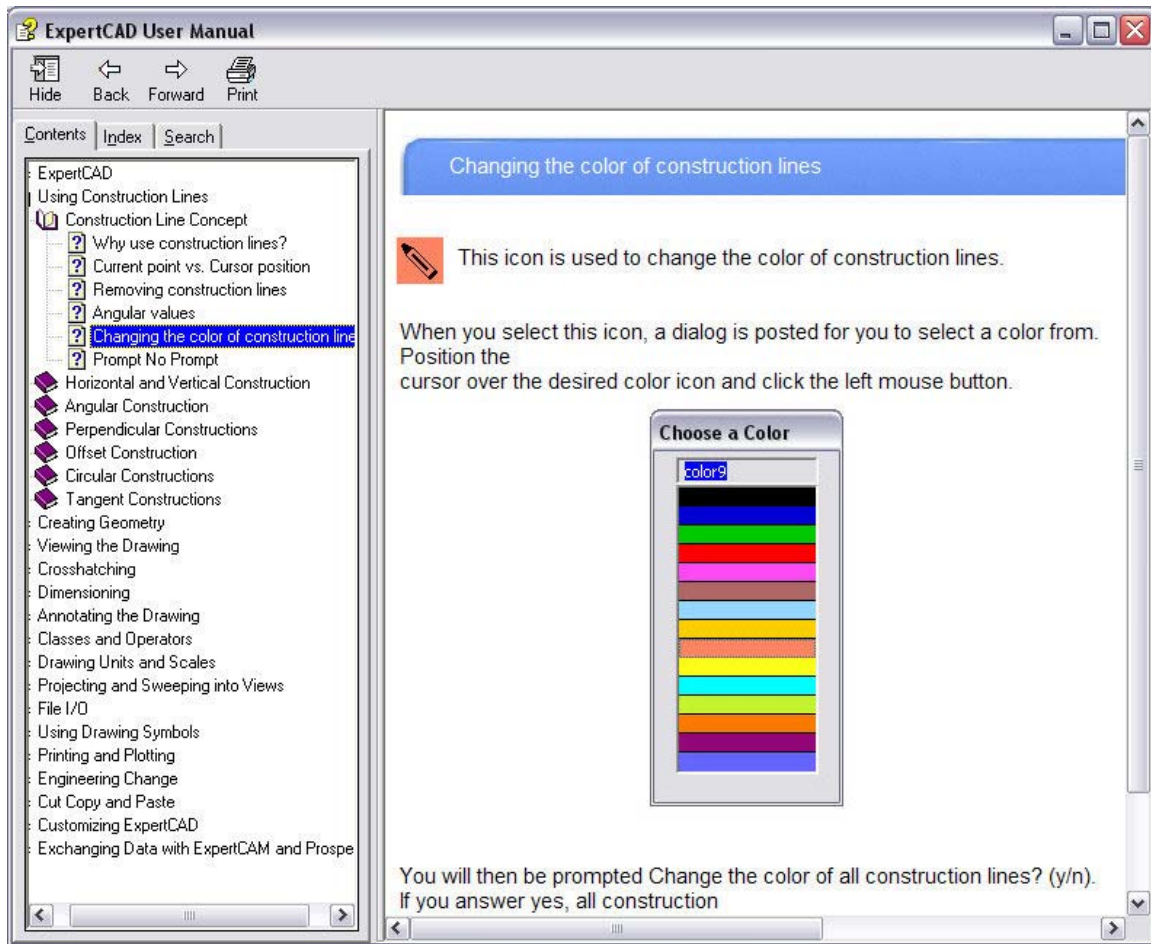
TrueType font used for text in ExpertCAD 3D.

On import to Prospector via PDB, the outline of the font is converted to curves for machining.

In similar fashion, choosing the Flatten class operation in ExpertCAD will reduce annotation that uses TrueType fonts to continuous curves.

## Updated Help

Many of the user and reference help documents have been rewritten for this release:



The new format is compiled **HTML** help (.chm files) instead of Adobe PDF. The content has been thoroughly revised and edited to reflect all the software updates. This on-going process will continue with future releases to address all documentation distributed with the application software.

## Maintenance

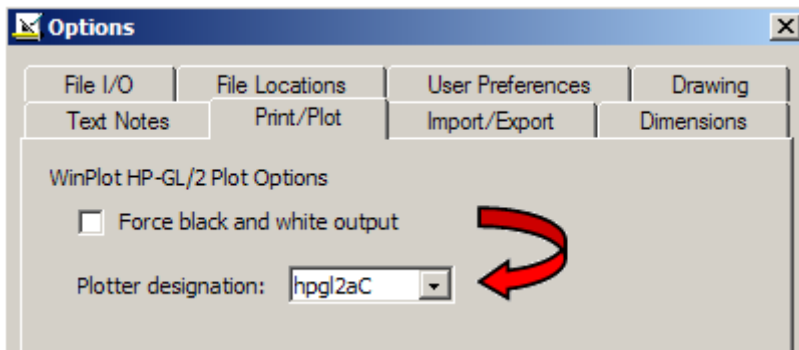
Keyboards with separate numeric keyboards will correctly enter numbers when using the Type In Text at the Cursor feature in ExpertCAD. Previous versions would confuse the '0' key for the short command '0' and the 2,4,8 and 6 for the arrow keys.

Text buffers stored in ExpertCAD files that relate to critical file paths are ignored when those files are edited. For example when reading a file with the text buffer FONT\_PATH (file path to use to find native font files) in it, the text buffer will be ignored. Previous versions would restore these paths which may or may not be correct for your software installation resulting in odd results such as not being able draw text and dimensions because the software was unable to locate the correct font files.

Plotting (plotting to HPGL/2 plotters from the WinPlot application) has been revised to use a uniform intermediate plot file. Regardless of the plotcap entry ultimately used, the same format of the plot file is used as input to WinPlot. In previous versions, 2 different formats were supported



depending on which plotcap entry was going to be used (i.e. color-aware entries vs. line-style aware entries). In addition to this change, you can now specify the plotcap entry to be used in WinPlot from the Print/Plot page of the Tools/Options property sheet:



The choice you make in this dialog will be the default when the WinPlot application is started to plot the drawing. By setting your choice for the plotter in this dialog, the software can make certain optimizations to the intermediate plot file to speed the plotting process. Of course you can still change the plotter designation from WinPlot if you change your mind and want to plot to a different plotter.

If the default font you specify in ExpertCAD is a native SofTech font, that font will be loaded from disk when a new session is started. This ensures that if you did customize a font (e.g. cadFont1), your custom font will get loaded instead of using the default SofTech provided cadFont1 font embedded in the software itself.

ExpertCAM has been revised to be more responsive to an interrupt (Esc key) when replaying sequences. Hitting the Esc key will cause the replay to be abandoned immediately.

A discrete problem with a "Stack Full" error in ExpertCAM has been corrected.

Several discrete problems with translating AutoCAD data files to ExpertCAD format have been addressed in this release.

### **Closed Track IDs**

Track is the electronic database system that records all customer and internally generated requests for corrections and enhancements. When you report a problem or request an enhancement, our customer service representatives will input your request into the Track system and give you a Track ID number. When we complete a release, we set the status on all records in the Track database that have been addressed to closed. In the table below is a listing of all Track items addressed by this release:

<b>ID</b>	<b>Synopsis</b>
42	The plotcap entry for LJ400a is incorrect in the file plotcap.txt.
43	If you type the file name to plot into the text box instead of using Browse, WinPlot doesn't plot the file.
61	The mouse wheel should zoom in when you roll the wheel towards you and zoom out when you roll the wheel away from you.
568	Add the ability for the user to specify an extension that will automatically be added during save operations.
842	ExpertCAM Reference Manual cannot be located on disk for Windows edition.
1486	Update the relevant user information in the File/Properties dialog automatically when a file is saved.
1365	Revise plotting to use a uniform format for the neutral plot file regardless of the plotcap entry that will ultimately be used to plot a drawing.

1544	Add an option to plotting for both 2D and 3D that will produce a monochrome plot regardless of the plotcap entry that is used to plot the drawing.
1549	Add the ability for the user to specify an extension that will automatically be added during save operations.
1738	The create line tangent to two arcs function in ExpertCAD 3D fails for this discrete case.
1810	In addition to fitting to the paper, allow for a precise scale (full size, half size, ...) to be set when generating a PDF file from 2D or 3D.
1917	Add support for True Type fonts to ExpertCAD.
2435	Revise plotting to use a uniform format for the neutral plot file regardless of the plotcap entry that will ultimately be used to plot a drawing.
2513	Add support for True Type fonts to ExpertCAD.
2606	Add "Zoom To Selection" as an option for the View menu for 2D and 3D to zoom into the area of the currently selected entities.
2666	Add "Read-Only" to the title bar next to the file name when opening a file that has read-only permissions.
2676	The grid in ExpertICON gets scrambled if the window is moved.
2690	The ScriptLink text buffer LAST_COMMAND doesn't get set after a cursor stroke.
2720	When you plot this drawing from ExpertCAD the circles do not plot completely.
2762	In ExpertCAM the Esc key does not interrupt the replay of a machining sequence.
2778	Add a ScriptLink command ".echo" similar to "echo" that will process Windows file name character strings (e.g. c:\B\X.ddd) as literal characters.
2786	The micro symbol is not being translated correctly from AutoCAD to ExpertCAD.
2792	The graphic debugging functions for the parametrics module in ExpertCAD sometimes don't draw correctly.
2804	The type-in text at the cursor location icon in ExpertCAD and entering digits from the number pad on the keyboard does not work for certain numbers.
2808	Add Shift and Ctrl key modifiers for the mouse wheel to pan left/right, up/down in both 2D and 3D.
2812	This AutoCAD DXF file will not translate.
2813	Some attributes (text notes) in this DXF file are translated as hidden however they are visible in AutoCAD.
2818	The type-in text at the cursor location icon in ExpertCAD and entering digits from the number pad on the keyboard does not work for certain numbers.
2820	Add the ability to retrieve the holder description in the ExpertCAM lathe module.
2821	The horizontal lines for the top and bottom of the shaft are missing when this AutoCAD DXF file is translated to ExpertCAD.
2822	Warning message from AutoCAD to ExpertCAD translator for invalid entities doesn't print the entity name.
2823	The character cloning function for ExpertFONT is not honoring a character entered as a hex number.
2824	The text buffer CACHE_DIR is not being saved to the setup file ExpertCAD-Setup.cfg.
2828	The "big" and "small" ScriptLink commands should do nothing if the application is running in the background mode.
2829	Don't save the default font with the savestate of ExpertCAD or ExpertCAD 3D. The fonts should be loaded at run-time in case they were customized.
2831	Dimensions do not update when the "Scale arrows ..." switch in the Options/Dimens.. property sheet is changed in ExpertCAD.
2832	The Zoom In/Out entry on the View pull-down menu does not dynamically zoom in and out in ExpertCAD.
2833	The origin (0.000) for a vertical ordinate dimension in ExpertCAD should never include a tolerance.
2834	This AutoCAD DWG file will not translate.
2835	There are circles in this AutoCAD DWG file that are not being converted to circles.
2836	A -V in a filename will cause ExpertCAD to check for the wrong software license.
2839	The partial line erase feature in ExpertCAD in the Drawing Xtras menu will cause ExpertCAD to fail in this example.
2840	Ignore the setting of the text buffer FONT_PATH if it was saved inside a 2D or 3D file. Always use the path specified in Tools/Options.

2843	Use the text buffer DRAWN_BY to set the Author field for PDF files instead of LOGIN.
2844	Output for the date primitive is incorrect when using numeric values to choose a different format.
2846	An incorrect version of the macro file "view" is shipped with ExpertCAD.
2847	The error message for the primitive defmenu is incorrect.
2850	Automatically switch to butt endcaps when drawing dashed lines for PDF output so the dashing is more clearly evident in the output.
2852	In ExpertICON the Paste feature does not work.
2853	In ExpertCAM you get the error "Stack Full" when replaying this machining sequence.
2854	When plotting an ExpertCAD file from either ExpertCAD or ExpertCAD 3D directly from WinPlot, the colors may not be same as what is on the screen.
2855	ExpertCAM will generate a "Stack Full" error when replaying the sequences in this file.
2856	The primitive make-boundary in ExpertCAD is returning incorrect results using this file.
2858	The getkey primitive can't be interrupted by hitting the Esc key.
2859	If the getkey ScriptLink primitive terminates prematurely, the cursor isn't restored.
2860	If you invert the screen to white and start a new session of ExpertVIEW the icon colors are incorrect.
2861	If you draw in color 0 then do a Copy or Cut, the raster on the clipboard uses the incorrect color.
2864	Customer supplied DWG files will cause the translator to abort abnormally.
2452	Add the capability for ExpertCAM to import AutoCAD DXF and DWG data.
2578	Allow the user to specify a file extension to be used for all newly created data files.
2868	Customer supplied DWG files will cause the translator to abort abnormally.
2599	AutoCAD dwg format file will not translate.