

CADVANCE Release Notes for V13

This document describes what is new and improved for CADVANCE V13. It is intended for experienced users and does not currently include the updated Manuals, Helps files or SDK. These release notes should provide all the information needed to get you started with this release. Updated Manuals, SDK and Help files will be included with the release of CADVANCE V13.

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Build update history:

If your Build # is 13.22, update your CADVANCE V13 with Build 13.30.

If your Build # is less than 13.21, update your CADVANCE V13 with Build 13.21 update, (Build 13.21 contains Build 13.17, 13.18, 13.19 13.20, 13.21), followed by Build 13.30 update. (Build 13.30 contains Build 13.32 update. No Builds between 13.23 and 13.29.)

Build 13.30 for full version: <http://www.cadvance.com/furukawa/CV13Build1330.exe>

Build 13.30 for LiTe version: <http://www.cadvance.com/furukawa/CVLT13Build1330.exe>

Build 13.21 for full version: <http://www.cadvance.com/furukawa/CV13Build1321.exe>

Build 13.21 for LiTe version: <http://www.cadvance.com/furukawa/CVLT13Build1321.exe>

- Build 13.30.
 - Cad1.dll
 - CdiLoadFile to load image fiile when called by a macro program. Display dialog box only when DoDialog is TRUE. Values set in CDI_FILE_BMP_LOAD_CONFIG are now effective. Values in dialog box stay, i.e., unchanged for the next operation. Keep the rotation angle as input angle value.
 - Dwgxvwf.dll
 - Improvements for TT font in dwg to vwf translation. Smallest unit is always set for model space in dwg to vwf translation process. (If the input dwg was only paper space, the smallest unit was set 1/0 for model space.)
 - Strings.dll
 - Updated CDI_FILE_DWG_SAVE_CONFIG for V13.
 - Cv_assoc.dll
 - To eliminate crash when bad assoc. dim data left in vwf file.
- Build 13.22
 - Huge symbol process update for DWG to VWF translation.
 - Cad1.dll and dwgxvwf.dll update.
- Build 13.21
 - TT Font Ghost when zoomed up is eliminated.
 - Selection bar update with new functions Windows Crossing and Free Hand.
 - Cad1.dll, Mfctools.dll, and toolbar.txt update.
 - Note: If you have your own toolbar.txt file, please save it before Build 13.21 update and edit/update your toolbar.txt referring to the newly loaded toolbar.txt file.
- Build 13.20a
 - Any color #1 - #15 can be black or white, and changes Black or White if B/G color is white or black.
 - TrueTy[e Editor screen B/G is always white. It shows only if TrueTypeEditor is set ON in Options/System Variables settings
- Bld 13.19
 - Areafill under line update.
 - Image File Not Found error update.
 - Raster data loading dialog box update.
- Bld 13.18
 - Area Texture update
- Bld 13.17
 - Edit/Text/Cad format update

What's New and Improved in CADVANCE V13.

CADVANCE V13 contains several improvements over CADVANCE V12. The following is an outline of these new features:

Restrictions:

- Symbol name length limitations:
 - Although V13 has expanded the length of symbol name, there are two limitations in the length as follows.
 - VWF to DWG translation limits the CADVANCE symbol name length up to 30 characters, which is converted as Block name in the output dwg file.
 - Line Texture and Area Texture symbols name should be up to 8 characters.

Basic CADVANCE Features:

- Increased the initial maximum size of drawings from **8mb** to **128mb**.
- Increase maximum members of Symbols/Groups from **255** to **7,500** per Nesting level. Nesting level currently is defined to be 15 deep.
- Symbol names can now be up to 256 characters in length (Including path).
- TrueType Creation/Editing supports both the V12 TrueType dialog box and a new multi-feature Text Editor. The new Text Editor supports the RTF (Rich Text Format) specification with a built-in Spell Checker. The System Variable "TrueTypeEditor" selects which editor to use. Note: TrueType fonts use Paper Space Units when defining font size and word wrap. The Drawing Scale in Options/Units define the relationship between Design Units and Paper Space. For correct TrueType scaling the Drawing Scale must be set appropriately. (See notes at end of document.)
- TrueType text has been enhanced to provide additional features that are defined in the Windows RTF specification. One of the new features is the ability to show colors of the TrueType text. The System Variable "TrueTypeColors", selects if TrueType colors will be used or if the object color will override the TrueType colors (V12 compatible).
- Drawings now pack out deleted symbol/group definitions and their deleted members during drawing save.
- Query/Edit object has been combined to display object and size information in one dialog box.
- Edit/Properties now performs Edit/Properties on a single object or Edit/Properties on all objects on the OSL (Object Selection List). Edit/Properties is accessible via the Edit/Properties menu, Double clicking the object, or Properties on the B2 pop-up menu. If only one object is on the OSL then Edit/Properties displays a Dialog box for that particular object. If more then one object is on the OSL then Edit/Properties displays the Dialog box to modify all objects on the OSL.
- Double clicking any object will activate that object. If the object type is an OLE object then the application that created that object will be activated. If the object type is TrueType then the Text editor will be activated. If the object is CAD text then the Cad text dialog box will be presented. Other graphical objects will activate the Edit Properties dialog box for that object type and display information for the object.
- A new B2 popup menu will be presented when no objects are selected. This popup menu will provide a set of commonly used operations for faster access to those commands. (Feedback from our Beta Users on which Cadvance features should be included is welcome.)
- The Menu File/Reference has two additional features added for the handling of reference files. They are "Merge" and "Expand". The "Merge" feature allow for the merging of all attached reference file drawings that have visible objects to be added to the current drawing. The "Expand" feature provides the same as Merge but it includes all objects in the reference files.

- File/Reference/Setup now supports window clipping to include objects that cross the window when using the window option. Reference files also support the Area Fills under lines option in Options/Miscellaneous.
- A new clipboard feature: Edit/Copy with Basepoint, provides the ability to accurately copy objects to the clipboard and locate those objects onto the drawing at a specific location.
- Draw/Line and Draw/2Line include the ability to sketch lines freehand by using the mouse. Holding down the left button while moving the mouse sketches the lines onto the drawing.
- Object selection now includes two additional methods to select objects on the drawing. They are "Window Crossing" and "Polygon FreeHand". Window Crossing provides the ability to select objects with a rectangle and all objects that reside within or crossing that rectangle will be selected. Polygon FreeHand allows for the selection of objects using a sketching motion with the mouse to define the polygon. The Options/System variable "SelectionWindow" provides for selecting by Window or Window Crossing as the default in Point Select mode. In Point Select mode the default is "Window".
- Text extents now are displayed for the entire block during placement, not just the first line.
- When background is black, all black colored objects become white; when background is white, all white colored objects become black.
- A New Options/System Variables... dialog box provides operations that allow you to view and modify the system parameters and save them without accessing the ini file directly. It provides information about the system parameters and allowable values. It currently includes about 100 user settable variables and will be expanded as needed. There is an associated help .pdf file that describes the System Variables.
- New variables have been added to the ini file to allow usage of colors in TrueType (RTF) text blocks(System variable "TrueTypeColors"). Also a new variable "TrueTypeEditor" allows selection of either using the existing Dialog box to be use the new text editor for TrueType entry.

AutoCad DWG/DXF File Support:

- AutoCad 2007/2008 files can now be read and written directly by CADVANCE V13. CADVANCE will decompress/decrypt the AutoCad file on reading and will then compress/encrypt the file during saving to AutoCad in the selected format. CADVANCE now supports versions of AutoCad Drawings and DXF files from Release 2.5 through AutoCad 2007/2008.
- Cadvance now supports Windows RTF blocks in the translation to/from DWG/DXF files. Cadvance RTF blocks map to AutoCad's Mtext blocks. TrueType fonts will attempt to maintain the same names and there are no limits to the number of TrueType fonts that can exist in a VWF file (drawing).
- Color mapping is now available during the importing/exporting of DWG/DXF files to provide better control over the selection of how colors map between DWG/DXF files and CADVANCE colors. The file CAD.TRN now contains the options for loading and saving DWG/DXF files, the font mapping and the color mapping between Cadvance and AutoCad. This file is stored in the same format as a Windows .INI file for easy modification.
- The function Utility / Translate DWG SYM now translates AutoCad R2007/R2008 blocks (in DWG format) to CADVANCE Symbols (SYM files).
- Drawing scale information is now exchanged between Cadvance and AutoCad drawings. The Load AutoCad drawing dialog box allows modification of the drawing scale.
- Increase Symbol names to 256 characters. Truncation of the symbol names has been eliminated.
- Increase the size of Symbol/Group members from 255 to 7,500. per Nesting level. Nesting level currently is defined to be 15 deep.
- Numerous enhancements and bug fixes have also been included in the updated translator.

New features and improvements:

1. Resizable dialog box for file handling such as File/Open, Symbol/Place, etc.
2. File/Print --- Load/Save printer ini file.
When a new printer is selected, margins, color, pen width are updated per the selected printer.
When a new printer.ini file is loaded, color and pen width are updated.
3. Three icons are added. Please see bitmap folder in the V13 files.
4. TT font edit is now switched back to V12 style as a default, but if TT Font Edit is set ON in the cadvance.ini file, it changes to TT font edit screen.
A new TT font edit can be activated by setting On, Options/System variables/TrueTypeEditor.
5. Freehand line draw. Draw/Line/Sketch
6. Huge nested symbol/group problem is corrected.
7. Degree, Radius, and +- signs are translated properly from/to Acad.
8. Angle lock off for Move/Duplicate by setting OFF on AngleLock in System Variables.
9. Kind on/off. Set on or off on KindEnable in System Variables.
10. User can run his exe module from within CADVANCE. Refer to cadvance.ini and toolbar.txt files.
11. Double click object. Text shows text edit box, other object shows object property dialog box.
12. Help file is added which can be open from System Variables dialog box.

Windows Vista Support:

Cadvance V13 supports Microsoft's Windows Vista operating system. Because of the new security requirements added to Vista, the following steps are needed to enable Cut/Paste operations in all versions of Cadvance.

1. From the Windows Start Menu select the Control Panel.
2. In the Control Panel select the User Accounts Icon.
3. Switch the user to Administrator mode.
4. The bottom icon in the list of operations is "Turn User Account Control on or off.
5. Select this Icon and select the square to turn off the "User Account Control" UAC.
6. Run Cadvance from this account and check that Copy/Paste is operational.
7. Log out of Cadvance and you can switch the UAC back on.

This operation only needs to be performed once after installing Cadvance. Cadvance then can run as a standard user if desirable.

New INI File variables:

- [System] TrueTypeEditor=ON/OFF ON - Use the V13 Text Editor, OFF – use the V12 Dialog box.
- [System] TrueTypeColors=ON/OFF ON - Display TrueType font colors, OFF – use color of object.
- [System] WindowSelection=0/1 0 – Use V12 TrueType Dialog Box, 1 – Use V13 TrueType Editor.

CADVANCE SDK Features:

Two new functions have been added to the CADVANCE SDK: CdiSelectbyKind(), and CdiObjElemXY(). The function CdiLoadFile() now includes the ability to load a Bitmap and insert it into the drawing at a specified location. The function CdiSaveFile() provides the ability to save the ini and toolbar file, just the ini file, or just the toolbar file. CdiZoom() has a new option for drawing fit: CDI_ZOOM_FIT'

- **Short CdiSelectbyKind** (*osl, kind*)

This routine will place all Visible/Selectable objects in the drawing with the given kind onto the specified OSL.

Parameter **Type/Description**

Os/ **Long (void *)** The OSL to use for this operation. If *osl* is NULL then the CADVANCE OSL will be used.

Kind **Short** The value for kind.

Return Value CDI_OK if successful, CDI_ABORT if B2 was selected, CDI_WARNING if nothing was selected, otherwise CDI_ERROR.

- **Short CdiObjElemXY**(*point, op, index, lineset*)

Retrieves the x and y coordinates of a vertex within a 2D lineset. (Can be used with reference files).

Parameter **Type/Description**

Point **CDI_DD_POINT** A two element structure specifying the (x,y) coordinates being retrieved. (RETURNED)

Op **Short (*)** The type of operation: CDI_MOVETO or CDI_DRAWTO

Index **Short** The index of the point to be retrieved. (See table 8.2)

Lineset **CDI_LINESET_BUFFER (*)** A buffer which defines the lineset, typically obtained through a call to CdiObjInfo().

Return Value CDI_OK if no error, otherwise CDI_ERROR.

- **Short CdiLoadFile** (*file_name, file_type, configuration*)

Loads the specified file. (see CADVANCE SDK Manual for function description and table 8.41 for File Types.)

file_name: **String (char *)** File name.
file_type: **Short** **CDI_FILE_BMP**
configuration: **Long (void *)** **CDI_FILE_BMP_LOAD_CONFIG**

The **CDI_FILE_BMP_LOAD_CONFIG** structure contains information that CADVANCE needs during a BMP file load operation.

```
typedef struct cdi_file_bmp_config {
    CDI_DD_POINT    position;
    double          scale_x;
    double          scale_y;
    double          rotation;
    short           layer;
    short           DoDialog;
} CDI_FILE_BMP_LOAD_CONFIG;
```

The **CDI_FILE_BMP_LOAD_CONFIG** structure contains the following fields:

<u>Field</u>	<u>Description</u>
Position	The lower left coordinates of the bitmap.
Scale_x	The x scale of the bitmap.
Scale_y	The y scale of the bitmap.
Rotation	The angle of rotation in degrees.
Layer	The layer of the bitmap.
DoDialog	CDI_TRUE to display a dialog box for the above values. CDI_FALSE to use the passed in parameters.

- **Short CdiSaveFile** (*file_name, file_type, configuration*)
Saves the specified file. (see CADVANCE SDK Manual for function description and table 8.49 for File Types.)

file_name: **String (char *)** File name.
file_type: **Short** **CDI_FILE_INI**
configuration: **Long (void *)** **CDI_FILE_INI_SAVE_CONFIG or Null**

The **CDI_FILE_INI_SAVE_CONFIG** structure contains information that CADVANCE needs during a INI file save operation.

```
typedef struct cdi_file_ini_save_config {
    short           option;
} CDI_FILE_INI_SAVE_CONFIG;
```

The **CDI_FILE_INI_SAVE_CONFIG** structure contains the following fields:

<u>Field</u>	<u>Description</u>
File_type	CDI_FILE_ALL saves the ini file and toolbar. CDI_FILE_INI_ONLY saves only the ini file. CDI_FILE_TOOLBAR_ONLY saves only the toolbar file.