

AutoVue
Desktop Version 19.3.2
Installation and Administration Manual

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Introduction

Oracle's AutoVue Enterprise Visualization is the industry leading solution for viewing, reviewing, and collaborating on technical documents and information across the enterprise. With support for hundreds of document types, including 2D/3D CAD, EDA, image, and Office, the desktop version allows users within and beyond an organization to instantly and reliably view, markup, print and collaborate on documents, without requiring the original authoring application, and without altering document integrity. Organizations can extend the reach of technical information to a broader set of enterprise users and optimize internal business processes, driving innovation, operational efficiency and business excellence.

Installation

This chapter describes the recommended system requirements and installation procedures for AutoVue.

Note: If you have a network installation of AutoVue Desktop Version (i.e., accessing AutoVue Desktop Version over the network), you must install the Microsoft Visual C++ 2005 SP1 Redistributable Package on each of the machines accessing AutoVue over the network:

<http://www.microsoft.com/downloads/details.aspx?familyid=200b2fd9-ae1a-4a14-984d-389c36f85647&displaylang=en>

System Requirements

- Microsoft Windows 2003 32-bit, Windows XP 32-bit, or Vista 32-bit.
- A hard disk with at least 400 MB of hard disk space.

Note: The memory requirement is dependent on the size and complexity of files you try to view with AutoVue.

Installing AutoVue

If you have an older version of AutoVue installed on your computer, we recommend that you uninstall it before proceeding with the new installation.

Before uninstalling your previous version of AutoVue, make sure to save a backup copy of any specific settings and content that you would like to push forward into your new version. This can include the following:

- AutoVue settings from the "avwin.ini" file (located in the C:\windows directory by default)
- Custom translation .tra files (located in the \avwin directory of your AutoVue installation)
- Custom markup symbol libraries (located in the \avwin\Symbols directory of your AutoVue installation)
- Thumbnails Cache, if any (located in the \avwin\Folders directory of your AutoVue installation)

If you decide to move these settings/content forward to your new installation of AutoVue, they can for the most part be copied to the same relative locations in your new installation. However, for the AutoVue settings in "avwin.ini", it is best to manually copy the specific settings that you would like to keep, as the newer version of AutoVue may have important new settings.

To install AutoVue, do the following:

- 1 If you downloaded AutoVue from the web site, extract the contents of the zip file and run avsetup.exe. If you have the CD, run avsetup.exe from the CD.
- 2 The **InstallShield Wizard** dialog box appears.
- 3 Select the language of AutoVue you want to install, then click **Next**.

Note: You can also change the language of AutoVue after it is installed.

The **AutoVue Welcome** dialog appears.

- 4 Read the dialog, then click **Next**.
The **License Agreement** dialog appears.
- 5 Read the **License Agreement**, then click **Yes** to accept terms.

The **Customer Information** dialog appears.

- 6 Enter your **User Name** and **Company Name**, then click **Next**.

The **Destination Location** dialog appears.

- 7 The default directory where AutoVue will be installed is **C:\Program Files\av**. To accept this location, click **Next** in the **Destination Location** dialog.
Note: If you would like to install AutoVue elsewhere, click **Browse** and select the desired location, then click **Next** in the **Destination Location** dialog.
 The **Select Program Folder** dialog appears.
- 8 Enter a **Program Folder** that will contain AutoVue program icons or accept the default folder, then click **Next**.
 A dialog box appears indicating the progress of the installation.
- 9 Click **Finish** to complete the installation.

AutoVue Silent Installation

AutoVue can be set up to run in a “silent install” mode. All the parameters needed for the installation are specified in a file which when called upon runs the installation setup without the need for user input.

Setting up AutoVue for a Silent Installation on Client Machines

- 1 Go to the directory where **avsetup.exe** is located.
- 2 At the command prompt, enter **avsetup.exe -a -r**.

The AutoVue setup program is launched.

- 3 Continue the installation setup, answering all the prompts from AutoVue’s setup program. See [Installing AutoVue](#).

When the installation setup program is complete, the parameters file called **setup.iss** is stored in the Windows directory. This file contains the user input from the installation. If you wish to modify setup.iss after it is created, you can do so. Below table lists the keys that can be modified.

Where:

| | |
|------------------|---|
| szCompany | Name of the company |
| szDir | Directory where AutoVue is to be installed. |
| Lang | Default language for AutoVue. |

- 4 To run the silent install on the client machine, type the following line at the command prompt:
avsetup.exe -a -s -f1C:\windows\setup.iss

Note: Make sure you enter the number "1" after "f," not the letter L.

Uninstalling AutoVue

Note: AutoVue must be completely shutdown (verify the system tray as well) before uninstalling.

Interactive Uninstallation

You can uninstall AutoVue by selecting **Setup > UnInstall AutoVue** from the **AutoVue, Desktop Version** programs shortcut.

Non-Interactive Uninstallation

You can uninstall AutoVue in non-interactive mode. The uninstaller will not prompt the user for input when running in non-interactive mode. However, the installation progress will be displayed.

To uninstall AutoVue in non-interactive mode, run the following command:

```
avsetup.exe -csiUninstall -csiSilent
```

Release Notes

The Release Notes contain last minute information that may not be included in the manuals. You can access this file after running the installation procedure. Just select the Release Notes icon from the AutoVue group.

Help Features

AutoVue provides a **Help** menu that allows you to easily access information on how to use AutoVue.

From the **Help About** dialog box, you can see information about your current installation of AutoVue. Information such as the variation of AutoVue you are using, the version, the build number and the current language that AutoVue is running is displayed. You can also change the language of the AutoVue user interface.

Changing the Language of AutoVue

AutoVue supports different languages for the User Interface. If you wish to switch to a different language, you can do so from the **Help -> About** dialog. AutoVue supports the following languages:

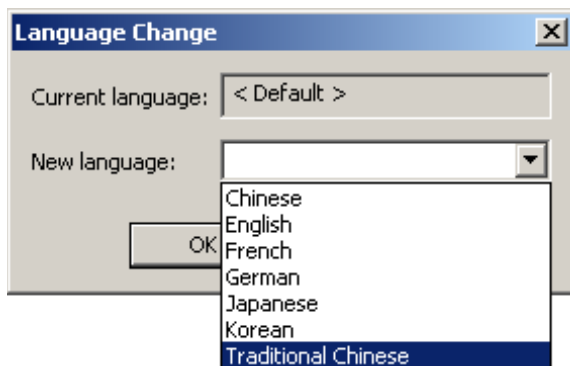
- English
- French
- German
- Simplified and Traditional Chinese
- Japanese
- Korean

Note: When you change from one language to another, all toolbar customizations are reset to their default settings.

Take the following steps to switch to a different language:

- 1 Select **Help > About** from the AutoVue main menu.
The **About** dialog appears.
- 2 Click **Change Language**.

The **Language Change** dialog appears.



- 3 From the **New Language** drop-down list, select the language you want to change to.
- 4 Click **OK**.
- 5 Click **OK** in the **About** dialog.
- 6 Restart AutoVue for the new language to take effect.

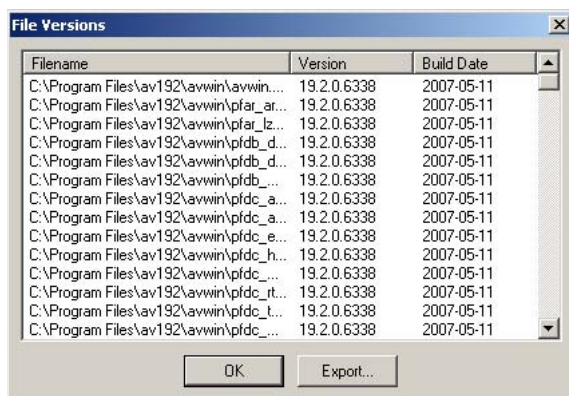
Viewing and Exporting File Versions Information

With AutoVue you can view the version, build number and date of the component .dll files, as well as export the results into a text file.

Viewing File Versions

- 1 Select **Help > About** from the AutoVue main menu.
The **About** dialog appears
- 2 Click **Version Info**.

The **File Versions** dialog appears.



- 3 When you finish viewing, click **OK**.

Exporting File Versions

- 1 Select **Help > About** from the AutoVue main menu.
The **About** dialog appears.
- 2 Click **Version Info**.
The **File Versions** dialog appears.
- 3 Click **Export**.
The **Export** dialog appears.
- 4 Navigate and select the directory you want to export the file to.
- 5 Enter a **File name** with the extension **.txt** or accept the default.
Note: The file can only be exported to text file.
- 6 Click **Save**.


The export result is exported to the selected directory.

Command Line Options

You may change the behavior of AutoVue on startup with Command Line options. Simply follow the instruction set corresponding to your computer's operating system.

Customizing AutoVue Startup

There are two possibilities:

- 1 Right-click the AutoVue icon  in the Windows group.
- 2 Select **Properties**.
- 3 Click the **Shortcut** tab.
- 4
- 5 Enter the Command Line options after the filename and path provided for you in the **Target** text box.
- 6 Click **Apply**.

or

- 1 Select **Run** from the **Start** menu.
- 2 Take one of the following steps:
 - Click **Browse** and browse to the location AutoVue (avwin.exe) is installed.
 - Enter the full path where AutoVue (avwin.exe) is installed.
For example: C:\Program Files\av\avwin.exe
- 3 Click **OK**.

Syntax

| Syntax | Description |
|--------------------|---|
| <angular brackets> | Indicate required entries, but are not included with the entered information. |
| {curly braces} | Indicate optional entries that may or may not to be included in the command. |
| [square brackets] | Are required syntactical elements and <i>should</i> be included in the command. |
| (parentheses) | Are required syntactical elements and <i>should</i> be included in the command. |
| Bold | Introduces a literal expression and must be entered exactly as shown. |
| <i>Italics</i> | Indicates a variable that must be replaced by the information you supply. |
| | Indicates a choice between two selections; this symbol is not entered. |
| ... | Indicates that information may be repeated; this symbol is not entered. |

Commands

| Command | Description |
|------------|---|
| {file1...} | Lists the files to show on startup: avwin [filename1][filename2] One or more filenames can be specified as startup parameters. These files will automatically be opened and viewed by AutoVue. |

| | |
|--|---|
| <code>{-c cfgfile}</code> or <code>{/c cfgfile}</code> | Specifies the path and configuration file to use: avwin -c inifilename |
| <code>{-lastfile=fname}</code> or <code>{/lastfile=fname}</code> | Writes the name of the last file viewed into the file name. |
| <code>{-hide}</code> or <code>{/hide}</code> | Does not display the AutoVue user interface on the desktop. |
| <code>{-maximizes}</code> or <code>{/maximizes}</code> | Displays a maximized AutoVue user interface on the desktop. |
| <code>{-minimizes}</code> <code>{/minimizes}</code> | Displays a minimized AutoVue user interface on the desktop. |
| <code>{-p [nnn-mmm] filename}</code> or <code>{/p [nnn-mmm] filename}</code> | <p>Prints the page range of the specified file from nnn to mmm. avwin -p [pagerange] filename</p> <p>Specifying the -p option makes AutoVue print the filename given with the current default print settings. The file is automatically opened, printed and closed. The pagerange argument is optional. If not specified, all pages are printed by default. The pagerange is in the format: n1 or n2-n3.</p> <p>Example:</p> <p>avwin -p [2-5] myfile.doc would print pages 2 to 5 both inclusive of the file "myfile.doc".</p> |
| <code>{-restore}</code> <code>{/restore}</code> | Displays the AutoVue user interface on the desktop at the original size. |
| <code>{-s scriptfile}</code> or <code>{/s scriptfile}</code> | <p>Specifies a script file to run on startup: Automatically executes the specified script file on startup.</p> <p>Example: avwin -s scriptfile</p> |
| <code>{-search}</code> <code>{/search}</code> | <p>The /search option automatically initiates a search on the filename given. If the string is found, the text is automatically scrolled to view and the found text is highlighted. Once the text has been found, you can use the F3 function key to find the next search hit within the document. avwin filename -search searchstring</p> |
| <code>{-f filename}</code> or <code>{/f filename}</code> | <p>The filename refers to a file that contains a list of files to which AutoVue has access. This file must be in ASCII text and spell out the path of the authorized files at the beginning of each line.</p> |

Initialization File Configuration

INI File Configuration

AutoVue stores its runtime settings in a configuration file. This file is by default located in the Windows directory and named **avwin.ini**. The name can be changed with the Command Line options. By presetting AutoVue's INI file, integrators can set up defaults for various operations. Examples include setting up defaults for conversion (output format, output file, etc.), setting up defaults for viewing and printing etc.

After AutoVue is installed and run for the first time on a workstation, this file is created under the Windows directory. The INI file has several sections. Each section heading is enclosed in square brackets. The sections that are listed in this chapter may be changed. Any other sections **must remain unchanged** for AutoVue to operate properly.

Creating an Alternative INI File

- 1 Open the **avwin.ini** file.
- 2 Create and name a copy of the file.

Example: avwin2.ini

Note: This is done so that the original **avwin.ini** file is available as a default file for AutoVue.

- 3 Open the file in any text editor, such as Notepad.
- 4 Locate the section heading corresponding to the changes you want to make. **Example:** [Markup Options]
- 5 Modify the command line if it already exists or add the new command line.

Example: INFO_USER=Name of Author

- 6 Save the changes to **avwin2.ini** and close the file.
- 7 Direct AutoVue to use **avwin2.ini** as the configuration file with the command line **-C avwin2.ini**.

AutoVueX INI File

AutoVueX, which is the ActiveX controller for AutoVue, stores its runtime settings in the configuration file, **avx.ini**. This file is by default located in the Windows directory. As with AutoVue's INI file, you can set up new defaults for various operations for AutoVueX's INI file (for example, a different background color). The path to the modified configuration can also be changed. To make these modifications you can do the following:

- 1 Set the windows system environment variable, **AUTOVUEX_INI**, to point to the full path of the modified AutoVueX INI file.

Example: AUTOVUEX_INI=C:\Temp\myavx.ini

- 2 Launch the ActiveX test container or sample.

ActiveX will read from the windows system environmental variable and load the configuration specified in **myavx.ini**.

Note: If the folder containing the modified AutoVueX INI file, **myavx.ini**, is read-only, ActiveX will revert to the default file and location, %WINDIR%\avx.ini.

ActiveX INI Options

Configure ActiveX INI options. The option section header is indicated in brackets [].

[Disable]

| Parameter | Description | Default |
|-----------|---|---------|
| Layers | Set to 1 to disable ShowLayersDialog method and layer icon from GUI. Set to 0 to enable. Syntax: [Disable] Layers=<0/1> | 0 |
| Blocks | Set to 1 to disable ShowBlocksDialog method and layer icon from GUI. Set to 0 to enable. Syntax: [Disable] Blocks=<0/1> | 0 |
| ZoomOnRMB | Enables or disables the Zoom Fit behavior of the right mouse button (RMB). Set to 1 to enable the Zoom Fit behavior of the RMB. Set to 0 to disable the Zoom Fit behavior of the RMB. Syntax: [Disable] ZoomOnRMB=<0/1> | 1 |

Network Configuration

When AutoVue is installed on a network, each user can specify his or her own configuration file. By default, a user's configuration file is named Avwin.ini and is located in the local Windows directory. The name and path to the configuration file can be changed so that each user has a configuration file. This is specified using the -C Command Line option.

Example:

Assuming that AutoVue is installed on a Network drive named U, two users could have their own settings and configuration files.

- User1 setting where **User1.ini** is the configuration file:

U:\AutoVue\avwin\avwin.exe -C C:\AutoVue\user1.ini

- User2 setting where **User2.ini** is the configuration file:

U:\AutoVue\avwin\avwin.exe -C C:\AutoVue\user2.ini

Note: Place paths with spaces between double quotation marks.

INI Options

In the following sections, option section headers are indicated in brackets []. Section headers in the INI file must be specified in brackets. The options for the section are discussed in the table below the section header.

Acrobat PDF Options

Configure Acrobat PDF file options.

[Options]

| Parameter | Description | Default |
|---|--|---------|
| PDFCACHELEVEL = <None Low Medium High> | Customize the level of caching of PDF font glyph bitmaps to improve performance. Specify one of the four caching levels: None - Fonts are not cached (least memory used). Low - Up to 2 fonts cached (up to 3 text sizes per font, up to 200KB of memory). Medium - Up to 4 fonts cached (up to 6 sizes per font, up to 800KB of memory). High - Up to 8 fonts cached (up to 6 sizes per font, up to 1.5MB of memory). The higher the level of caching, the faster the text displays; however memory usage is also higher. | Medium |
| PDFDPIRESOLUTION = <dpi> | Defines the dpi resolution (dots per inch) for rendering PDF pages on screen. It can be set to any value between 72 and 1224. | 360 |

Allegro Options

Configure options for Allegro files.

[ECAD]

| Parameter | Description | Default |
|----------------------------------|---|---------|
| ALLEGRO_USETRUETYPEFONTS = <0 1> | Set to 0 to use stroke font. Set to 1 to use true type font instead. | 0 |
| ECAD_3D_SHOWHOLES = <0 1> | Set to 1 if you want holes to be drawn in the 3D model. Set to 0 if you do not want holes to be drawn in the 3D model (increases performance). Currently only affects Allegro files. | 0 |

AutoCAD Options

Configure options for ACAD files.

[Options]

| Parameter | Description | Default |
|--|---|---------|
| ACAD_FAST3D = <0 1> | Set to 1 to improve rendering speed of AutoCAD 3D. Note: Setting this option to 1 means that layers will not be listed and AutoVue streams all meshes & extrusions in one body. Set to 0 will mean slower rendering of AutoCAD 3D. However, layer information is listed and each mesh is streamed in its own entity. | 1 |
| ACAD_MAXNUMLINETYPECYCLES = [0-1000] | Specifies the maximum number of times a line type pattern can be repeated for a particular entity segment. Note: Any entity segment that has more cycles than 1000 is drawn with a solid line type. | 256 |
| ACAD_PENSETTINGS AFFECT LINE WIDTH = <0 1> | Option is for AutoCAD drawings. When set to 0 , pen settings do not affect non-zero constant width polylines. When set to 1 , pen settings affect non-zero constant width polylines. | 0 |
| ACAD2004RGBCOLOR = <0 1> | If 1 , use RGB color. If 0 , use AIC (AutoCAD Indexed Color). Note: Should be set to 0 to be able to use pen settings for printing. Note: This is for AutoCAD files, version 2004 and later. | 1 |
| ACADDEFAULTFONT = fontname | This font is substituted if an 8-bit font is not located for AutoCAD drawings. | |
| ACADDEFAULTBIGFONT = big-fontname | This font is substituted if a 16-bit font is not located | |
| DRAWORDER = <0 1> | If 1 , draws sorted (ordered) entities from the last save of the DWG file, otherwise, entities are drawn in the order they were first created. | 1 |
| FIELDDISPLAY = <0 1> | Specify whether or not field backgrounds display. Set to 1 to display field background. Set to 0 to hide field background. Note: For AutoCAD 2005 and up. | 1 |
| LWDEFAULT = [1-100] | Set the default line weight. Specify a value between 1 (which corresponds to 0.01mm) and 100 (which corresponds to 1mm). Default value is 25 (which corresponds to 0.25mm). | 25 |
| LWDISPLAYSCALE = [0-100] | This option controls the display scale of line weights in the model space page for AutoCAD files version 14 and above. Set this option to [0-100]. <ul style="list-style-type: none"> For no line weight scaling, set this option to 25. For thicker lines, set this option above 25. For thinner lines, set this option below 25. | 25 |
| SHOWALLLAYERS = <0 1> | If 1 , turns on all the layers in the base and XRef files. | 0 |

Autodesk DWF Options

Configure options for DWF files.

[Options]

| Parameter | Description | Default | | | | | | | | | | | | | | | | | | |
|------------------------|--|---------|----------------|-------------|-----------------|---------|----------------|---------|----------------|-----------|-------------------|---------|----------------|-----------|-------------------|-----------|----------------|-------------|------------------|--|
| DWFRGBCOLOR = <0 1> | <p>If 1, use RGB color.</p> <p>If 0, use AIC (AutoVue Indexed Color).</p> <p>Note: Should be set to 0 to be able to use pen settings for printing.</p> | 1 | | | | | | | | | | | | | | | | | | |
| DWFCOLORTBL | <p>Option is applicable only when DWFRGBCOLOR = 0.</p> <p>Specify the path and the name to a color table. Specified color table overrides the palette stored in the DWF file.</p> <p>If no external palette is specified, the default palette stored in the DWF file will be used.</p> <p>Below are some of the common colors and their corresponding pen numbers:</p> <table><tr><td>0,0,0</td><td>/* 0, Black */</td></tr><tr><td>128,128,128</td><td>/* 248, Gray */</td></tr><tr><td>255,0,0</td><td>/* 190, Red */</td></tr><tr><td>0,255,0</td><td>/* 40 Green */</td></tr><tr><td>255,255,0</td><td>/* 251, Yellow */</td></tr><tr><td>0,0,255</td><td>/* 15, Blue */</td></tr><tr><td>255,0,255</td><td>/* 195, Violet */</td></tr><tr><td>0,255,255</td><td>/* 45, Cyan */</td></tr><tr><td>255,255,255</td><td>/* 225, White */</td></tr></table> | 0,0,0 | /* 0, Black */ | 128,128,128 | /* 248, Gray */ | 255,0,0 | /* 190, Red */ | 0,255,0 | /* 40 Green */ | 255,255,0 | /* 251, Yellow */ | 0,0,255 | /* 15, Blue */ | 255,0,255 | /* 195, Violet */ | 0,255,255 | /* 45, Cyan */ | 255,255,255 | /* 225, White */ | |
| 0,0,0 | /* 0, Black */ | | | | | | | | | | | | | | | | | | | |
| 128,128,128 | /* 248, Gray */ | | | | | | | | | | | | | | | | | | | |
| 255,0,0 | /* 190, Red */ | | | | | | | | | | | | | | | | | | | |
| 0,255,0 | /* 40 Green */ | | | | | | | | | | | | | | | | | | | |
| 255,255,0 | /* 251, Yellow */ | | | | | | | | | | | | | | | | | | | |
| 0,0,255 | /* 15, Blue */ | | | | | | | | | | | | | | | | | | | |
| 255,0,255 | /* 195, Violet */ | | | | | | | | | | | | | | | | | | | |
| 0,255,255 | /* 45, Cyan */ | | | | | | | | | | | | | | | | | | | |
| 255,255,255 | /* 225, White */ | | | | | | | | | | | | | | | | | | | |

Autodesk Inventor Options

Configure options for Autodesk Inventor files.

[Options]

| Parameter | Description | Default |
|------------------------|--|---------|
| AIBACKGROUND = <0 1> | If 1 , the Inventor decoder draws the background sheet. Otherwise, the decoder draws the outline only. This option applies to Autodesk Inventor 2D files. | 1 |
| AILOADNATIVE2D = <0 1> | If 1 , forces the 2D Inventor decoder to use native data. Otherwise, the DWF embedded image is used if it exists. If DWF information is not stored in the Inventor 2D file, then native support will be activated automatically. This option applies to Autodesk Inventor 2D files. | 1 |

Cadence Options

Configure options for Cadence HDL files.

[ECAD]

| Parameter | Description | Default |
|---------------------------------|--|---------|
| CADENCE_CONCEPTHDL ONLY = <0 1> | Set to 1 if you do not want PCB boards displayed. | 0 |
| CADENCE_CPMONLY = <0 1> | Set to 1 if you want only files listed in the CPM file displayed. | 1 |

Cadkey Options

Configure options for Cadkey files.

[Options]

| Parameter | Description | Default |
|-------------------------------------|---|---|
| PRTFONTMAP=fullpath_ to_prtfont.map | Specifies the full path to the Cadkey/PRT font map file. This file maps Cadkey/PRT fonts to TrueType fonts. | The file Prtfont.map in the program directory. (avwin) |

CATIA 4 Options

Configure options for CATIA 4 files.

[Options]

| Parameter | Description | Default |
|------------------------------------|--|---------|
| CATIAProjectFile | Specify the full path to the CATIA project file. Note: Option applies to CATIA 4 files only. | |
| LoadCatiaWires = <0 1> | Set to 0 to disable display of 3D wires for CATIA V4 3D files. | 1 |
| CatiaDefaultFont | Specify the default CATIA 4 native font to use if a font is not found. | |
| CATIAFILTERNONROOT = <0 1> | Set to 0 to display non-root entities for CATIA 4 3D. | 1 |
| CATIAFILTERNOSHWS = <0 1> | Set to 0 to display no-show entities for CATIA 4 3D. | 1 |
| CATIAIgnoreProjectionLayer = <0 1> | When set to 1 supports projected view visibility through draft view layer settings for CATIA 4 drawings. | 0 |
| CATIAProjectFilePath = <file path> | Specify the directory path for the location of project files. If the option is set, it will override the existing INI option CATIAProjectFile. Otherwise if the option is not set or project file(s) cannot be found in the specified directory, the old option (CATIAProjectFile) will be used. | empty |

Note: Mapping for CATIA 4 fonts is specified in file CATIAv4.fontmap located in the **<install directory>\avwin\fonts**. This font map is used to map font name to corresponding font resources so that text strings will be displayed properly with correct characters. A requirement for this font map to work properly is the existence of the CATIA 4 project file.

CATIA 5 Options

Configure options for CATIA 5 files.

[Options]

| Parameter | Description | Default |
|-----------------------|--|---------|
| Catia5ShowPMI = <0 1> | Set to 0 to hide PMI entities from display. Set to 1 to display PMI entities. | 1 |

| Parameter | Description | Default |
|---------------------------------------|--|---------|
| Catia5ShowPMIWithMesh = <0 1> | Specify if you wish to display PMI entities in mesh mode. Catia5ShowPMI should be set to 1 for this option to take effect. | 1 |
| Catia5BuildInvisibleCGMBodies = <0 1> | Set to 1 if you wish to process and display invisible BREP bodies. | 0 |
| CATIA5BuildCGMSets = <0 1> | Controls the display of Geometrical sets. Set to 1 to show geometrical sets structure in the Model Tree. | 1 |

CGM Options

Configure options for CGM files.

[Options]

| Parameter | Description | Default |
|------------------------|--|---------|
| CGMNOCLIP = <0 1> | Set to 0 to enable clipping. Some files may display as empty when the value is 0. Set to 1 to disable clipping and display the file. | 0 |
| SHOWBACKGROUND = <0 1> | If 1 , the background of CGM files is displayed with color. Set option to 0 if you have problems printing CGM files that contain large black or dark backgrounds. | 0 |

Excel Options

Configure options for Excel files.

[Options]

| Parameter | Description | Default |
|----------------------------|---|---------|
| DOCVIEW = <0 1> | If 1 , displays an Excel file in print preview mode, otherwise, displays as a regular spreadsheet. | 0 |
| DOCVIEWSHOWHEADERS = <0 1> | Set to 1 to display headers when the INI option DOCVIEW = 1 . | 0 |
| SSHIDESCROLLBARS = <0 1> | Set to 1 to disable scroll bars for spreadsheet files. Option will work for Excel, Archives and MS Access formats. | 0 |

Gerber Options

Configure options for Gerber files.

[Gerber Format]

| Parameter | Description | Default |
|---|---|---|
| APERTURE_FORMAT_FILEPATH= <i>file path</i> | Defines the file path for the aperture format file. | |
| INCREMENTALMODE = <0 1> | Enter 1 if data is in incremental mode. | 0 |
| NUMDECIMALS = <i>num</i> | Enter the number of decimals. Specify a value between 1 and 6. | 3 |
| NUMDIGITS = <i>num</i> | Enter the number of digits. Specify a value between 1 and 6. | 2 |
| TOOLFILEPATH = C:\temp\ default.too | Specifies the path to the aperture list file. | <install direc- tory>\avw in\default. too |
| TOOLFILETYPE = <0 1 2 3 4 5 6 7> | Specifies the type of aperture list file. 0 = CSI 1 = Orcad 2 = ECAM 3 = Protel 4 = Artwork 5 = Allegro 6 = Visula 7 = Autotrax | 0 |
| TRAILINGZEROS = <0 1> | Enter 1 if coordinate data is in trailing zeros format. | 0 |
| UNITS = <1 2> | Specifies the unit: 1 is for inches; 2 is for mm. | 1 |

| Parameter | Description | Default |
|-----------|--|---------|
| TOOL_UNIT | Specify the unit for the tool and aperture file if unit is different from the Gerber file. -1 = Unspecified file unit. Aperture file will adopt the same unit as the Gerber file. 1 = inches 2 = millimeters 12 = mils | -1 |

HPGL/HPGL2 Options

Configure options for HPGL/HPGL2 files.

[Options]

| Parameter | Description | Default |
|--|---|--|
| CODEPAGE = <i>num</i> | Forces text display of a specific language. Specify the codepage to use for hpgl files. For example, set CODEPAGE = 932 to display Japanese text in HPGL files. For a full lists of value, refer to the following Web sites: http://www.microsoft.com/globaldev/reference/cphone.mspx http://en.wikipedia.org/wiki/Code_page | |
| HPBACKGROUND = <0 1> | 0 = Do not draw page background 1 = draw page (applies to HPGL/HPGL2 files) | 0 |
| HPGLCOLORTBL = <i>path/hpglcol.tbl</i> | Specifies the path and filename of the color table file for HPGL/HPGL2 files. The color table file specifies the mapping between a pen number and a color. Note: This option is used only if the file does not explicitly specify pen colors with the HPGL PC command. | The file Hpgl-col.tbl in the program directory (avwin). |

IFC Options

Configure options for IFC 3D files.

[Options]

| Parameter | Description | Default | | | | | | | | | | |
|--------------------------|---|------------|---------|-----------|---------------|-------|-------------|-------------|---------------|------------|---------------|---|
| IFCColors | <p>Specify group element colors for IFC files.</p> <p>Syntax: [Options] IFCCOLORS=GROUP_ELEMENT_NAME(r,g,b) or IFCCOLORS=GROUP_ELEMENT_NAME(color_name) where GROUP_ELEMENT_NAME is the name of the group element. For example DOORS, WINDOWS, WALLS</p> <p>(r,g,b) is the RGB value for the color color_name is the string representing the color</p> <p>All color definitions should be on the same line and should be separated by spaces. For example: IFCCOLORS = WALLS(WHITE) DOORS(GREEN) WINDOWS(BROWN)</p> <p>Special element name OTHERS is used for all elements that are not in the color definition.</p> <p>Special color NONE is used when you want to use the 3d default element color for a group element.</p> <p>IFC pre-defined color extension is defined as below:</p> <table><tr><td>Color Name</td><td>(R,G,B)</td></tr><tr><td>LIGHTCYAN</td><td>(188,255,255)</td></tr><tr><td>BROWN</td><td>(205,91,69)</td></tr><tr><td>LIGHTYELLOW</td><td>(255,219,153)</td></tr><tr><td>CADETBBLUE</td><td>(122,197,205)</td></tr></table> | Color Name | (R,G,B) | LIGHTCYAN | (188,255,255) | BROWN | (205,91,69) | LIGHTYELLOW | (255,219,153) | CADETBBLUE | (122,197,205) | IFCCOLORS=WALLSTANDARD-CASES(255,255,255) CURTAIN-WALLS(255,255,255) DOORS(255,219,153)) OTHERS(0,255,255) SLABS(205,91,69) WALLS(255,255,255) WIN-DOWS(122,197,205) |
| Color Name | (R,G,B) | | | | | | | | | | | |
| LIGHTCYAN | (188,255,255) | | | | | | | | | | | |
| BROWN | (205,91,69) | | | | | | | | | | | |
| LIGHTYELLOW | (255,219,153) | | | | | | | | | | | |
| CADETBBLUE | (122,197,205) | | | | | | | | | | | |
| IFCColors_Mode=<0 1 2 3> | <p>Specify the mode of using default element colors.</p> <p>Set to 0 to turn off default element colors.</p> <p>Set to 1 to use default colors. File-defined colors are ignored.</p> <p>Set to 2 to use default colors for elements without file-defined colors.</p> <p>Set to 3 to use default colors for elements without file-defined colors, and to replace elements defined as black.</p> | 3 | | | | | | | | | | |
| IFCREADProperties=<0 1> | <p>Enable or disable loading of attributes for IFC files.</p> <p>Set to 1 to display all supported entity properties for an IFC file.</p> <p>Set to 0 to display only the default entity properties which are Display Mode, Name and Visibility.</p> | 1 | | | | | | | | | | |
| IFCLoadInvisibleSpaces | <p>Enable or disable loading of internal spaces boundary geometry.</p> <p>Set to 1 to enable loading of internal spaces boundary geometry.</p> <p>Set to 0 to disable loading of internal spaces boundary geometry.</p> | 1 | | | | | | | | | | |
| IFCWINDOW_TRANSPARENCY | <p>Specify the transparency level for windows in IFC files.</p> <p>Value is an integer between 0 (no transparency) and 100 (full transparency).</p> | 55 | | | | | | | | | | |

IGES Options

Configure options for IGES files.

[Options]

| Parameter | Description | Default |
|--------------------------------------|---|---------|
| IGESLoadDraftFirst = <0 1> | Set to 1 to display the 2D page first, display of the 3D page as a 2D projection of the 3D model, in IGES files. | 0 |
| IGESLoadSubFigureDefinitions = <0 1> | Set to 1 to display sub-figure definitions when sub-figure instances are not found. Option is for IGES 3D files. | 0 |

JPEG Options

Configure options for JPEG files.

| Parameter | Description | Default |
|---------------------|--|---------|
| JPGQUANTIZE = <0 1> | If 1 , JPEG images are quantized to 256 colors for quicker display. If 0 , true colors are used. | 1 |

JPEG 2000 Options

Configure options for JPEG 2000 files.

[Options]

| Parameter | Description | Default |
|--|---|---------|
| J2KRESOLUTION= [DYNAMIC HIGH MEDIUM LOW +num -num] | <p>Set to HIGH to display with a high resolution. This could cause a decrease in performance.</p> <p>Other values: LOW, MEDIUM, and DYNAMIC.</p> <p>You can also set J2KRESOLUTION values to +num or -num, where num is a number between 1 and 100.</p> <p>Setting the value to +num gives the same result as DYNAMIC but increases the resolution by a factor of num where num is a value from 1 to 100 (up to the maximum possible resolution of the image). Note that this will decrease performance.</p> <p>Setting to -num gives the same result as DYNAMIC but decreases the resolution by a factor of num where num is a value from 1 to 100 (down to the lowest possible resolution of the image). Note that this will increase performance.</p> | DYNAMIC |

ME10/OneSpace Designer Drafting Options

Configure options for ME10/OneSpace Designer Drafting files.

[Options]

| Parameter | Description | Default |
|--|---|--|
| ME10CONSTRUCTION GEOM = <0 1> | Set to 1 to toggle on construction entities for ME10 files. | 1 |
| ME10MULTIBYTE = <0 1> | This option sets the priority for glyph search in Multibyte/Singlebyte fonts. <ul style="list-style-type: none"> Set this option to 0 if the file does not contain any Multibyte fonts (Far Eastern Languages). Set this option to 1 if the file contains a mixture of Singlebyte/Multibyte fonts. | 0 |
| ME10RGBCOLOR = <0 1> | Determine the mode of colors for ME10 files. If 1 , use RGB colors. If 0 , use AIC (AutoVue Indexed Color). Note: When set to 0 , you can customize the file me10col.tbl to get the desired pen settings. | 1 |
| ME10SHOWVERTEX = <0 1> | Set to 1 to toggle on vertices for ME10 files. | 0 |
| MEFONTMAP = <i>fullpath_to_mefont.map</i> | Specifies the full path to the ME10/OneSpace Designer Drafting font map file. This file maps ME10/OneSpace Designer Drafting fonts to the appropriate native ME10/OneSpace Designer Drafting font files or TrueType fonts. To use native ME10/OneSpace Designer Drafting fonts, you need to provide the appropriate font files. This can be done: <ul style="list-style-type: none"> By specifying the path to them using the INI option XFONTPATH. | The file mefont.map in the program directory. (avwin) |

Microsoft Outlook Options

Configure options for Microsoft Outlook MSG files.

[Options]

| Parameter | Description | Default |
|----------------------|---|---------|
| OUTLOOKLINKFLAG | Enable or disable hyperlinks or attachments in Outlook MSG files. 0 – Hyperlink on, Attachment on 1 – Hyperlink on, Attachment off 2 – Hyperlink off, Attachment on 3 – Hyperlink off, Attachment off | 0 |
| DownloadWebResources | Enable or Disable download of images and other web images when viewing Outlook MSG files. | 1 |

MicroStation DGN7/DGN8 Options

Configure options for MicroStation DGN7/DGN8 files.

[AVPrintOptions]

| Parameter | Description | Default |
|---|--|---------|
| ThicknessScale = <i>thickness1</i> , <i>thickness2</i> , ..., <i>thicknessN</i> | Specify the mapping of MicroStation line weights to line thickness on paper. You can get this from the MicroStation config file, attribute weight_strokes. Example: ThicknessScale = 0.250, 0.375, 0.500, 0.625, 0.750, 0.875, 1.000, 1.125, 1.250, 1.375, 1.500, 1.625, 1.750, 1.875, 2.000, 2.125, 2.250, 2.375, 2.500, 2.625, 2.750, 2.875, 3.000, 3.125, 3.250, 3.375, 3.500, 3.625, 3.750, 3.875, 4.000, 4.125 | |

[Options]

| Parameter | Description | Default |
|--|--|---------|
| DGN_FAST3D | Set to 1 to improve rendering speed of MicroStation 8 files. Note: Setting this option to 1 means that layers will not be listed and AutoVue streams all meshes & extrusions in one body. Set to 0 will mean slower rendering of MicroStation 8 files. However, layer information is listed and each mesh is streamed in its own entity. | 1 |
| DGN8LSTYLERSC = <i>fullpath_to_style.rsc</i> | Specify the full path to a MicroStation linestyle resource file that will be used to render linestyles and multi-line patterns. | |
| DGN8LWDISPLAYSCALE = [0.0-1000.0] | Specify a floating point value, larger or equal to 0.0, representing the scaling factor which would be applied to all lineweights in the drawing. For example: Set to 0.0 : Reduces all lineweights to 0 (1 pixel width). Set to 1.0 : Lineweights remain at their default value. Set to 0.5 : Reduces all lineweights by half. Set to 2.0 : Multiplies all lineweights by 2. | 1.0 |
| DGN8XREFUNITS | Option applies to MicroStation version 8 files with AutoCAD XREFs. Specify the unit to use for AutoCAD XREFs when units information for the XREFs is not stored in the MicroStation drawing. The unit specified should be the same as the unit for the DWG specified in MicroStation. Consult the MicroStation help for a complete list of units. If the unit is not specified or an invalid value is specified, AutoVue reads the units from the AutoCAD XREF and hence, XREFs may not be scaled properly. Example: DGN8XREFUNITS = meters | |
| DGNARABICFONTS = <0 1> | Support for Arabic fonts for MicroStation. Set to 1 to specify right-to-left drawing. | |
| DGNCOLORTBL = <i>fullpath_to_color.tbl</i> | Option applies to MicroStation 7 files. Redirects the full path to a MicroStation DGN color table file. This option is used only if the MicroStation file does not have a color-table element in it. If a color-table element exists in the file, it will supersede this option. | |

| Parameter | Description | Default |
|--|--|--|
| DGNDEACTIVATELEV SYMB = <0 1> | Applies to MicroStation 7 and 8 files. When MicroStation's Settings\View settings\Level Symbology flag is set, all graphic entities are displayed using the level (the one the entity belongs to) settings for color, line style, and line width (the entity's symbology). This option was implemented to overwrite the Settings\View settings\Level Symbology flag and display a file using the individual entity's symbology. | 0 |
| DGNFONTMAP = <i>fullpath_ todgnfont.map</i> | Specify the full path to a MicroStation DGN font to TrueType mapping file. Note that native MicroStation fonts are supported and that this option is used only when the native fonts are unavailable. Note: Applies only to MicroStation 7. | The file dgn-font.map in the program directory. |
| DGNFONTRSC = <i>fullpath_to_ font.rsc;full2. . .</i> | Specify a semi-colon separated list of the full paths to fonts for the MicroStation font RSC files. | |
| DGNIRASB = <0 1> | If 0 , MicroStation raster hybrid files follow the I/RAS B conventions for raster extents. Use this option if you find that the raster components of MicroStation files appear stretched. | 0 |
| DGNLSTYLERSC = <i>fullpath_ _to_style.rsc</i> | Specify the full path to a MicroStation linestyle resource file that will be used to render linestyles and multi-line patterns. Note: Option applies to MicroStation 7 files. | |
| DGNREFCYCLECHECK = <0 1> | Option applies to MicroStation 8 files and corresponds to MicroStation v8.5 environment variable MS_REF_CYCLECHECK. When set to 1 , the decoder will check for circular references in reference paths. Circular references will not be displayed, except for the case where a given model references itself. When set to 0 , all references will be displayed, as long as nesting depth permits. | 1 |
| SHOWZEROLENGTHLINES = <0 1> | Option applies to MicroStation 7 files. If 1 , the MicroStation points (zero length lines) are displayed, otherwise, the points are hidden. | 0 |

NC-Drill Options

Configure options for NC-Drill files.

[ECAD]

| Parameter | Description | Default |
|------------------------------|---|---------|
| NCD_UNITS | Option applies to NC-Drill format. Specify units for NC-Drill files. 1 = inches 2 = millimeters | 1 |
| NCD_TRAILINGZEROSOMITED | Option applies to NC-Drill format. 0 = Coordinate data is trailing zero omitted 1 = Coordinate data is leading zero omitted 2 = Coordinate data is all digits present 3 = Coordinate data is explicit decimal point | 0 |
| NCD_COMMENTSYMBOL | Option applies to NC-Drill format. Specify the comment symbol. | ; |
| NCD_INCREMENTALMODE | Option applies to NC-Drill format. Set to 1 if data is in incremental mode. 0 = absolute mode 1 = incremental mode | 0 |
| NCD_NUMDIGITS | Option applies to NC-Drill format. Specify the number of digits. Specify a value between 0 and 6. Changing this value will affect the x, y coordinate. | 2 |
| NCD_NUMDECIMALS | Option applies to NC-Drill format. Specify the number of decimals. Specify a value between 0 and 6. Note: Changing this value will affect the x, y coordinate. | 4 |
| NCD_APERTURE_FORMAT_FILEPATH | Option applies to NC-Drill format. Complete path for Aperture format file. This file provides information on how to read the tool file | |
| NCD_TOOLFILEPATH | Complete path for Tool file. | |

OrCAD Layout Options

Configure options for OrCAD Layout files.

[ECAD]

| Parameter | Description | Default |
|----------------------------------|---|---------|
| ORCAD_CUTOUT_COPPER_POUR = <0 1> | Set to 1 if you wish to display copper pour cutouts for OrCAD Layout files | 0 |

Pro/ENGINEER Options

Configure options for Pro/ENGINEER files.

[Options]

| Parameter | Description | Default |
|---|--|-----------|
| ProE2DLoadSavedDisplayLists = <0 1> | If set to 1 , the display list will be loaded instead of generating the 2D drawing from the 3D Model. If the display list does not exist, the 2D drawing will be generated from the 3D Model. Note: Option applies to Pro/ENGINEER 2D files. | 1 |
| ProE2DLoadPicture = <0 1> | Set to 1 to load the preview data for Pro/ENGINEER 2D Drawings. If preview does not exist, the 2D drawing will be generated from the 3D Model. | 0 |
| ProELang | Specify the native font to use for Pro/ENGINEER 2D drawings. Possible values are: Korean/Japanese/Chinese_cn/Chinese_tw/Hebrew/Russian Example: ProELang = Chinese_cn Font files to use should be defined in the proefont.map file located in the avwin\font subdirectory in the AutoVue installation directory. Refer to proefont.map for more instructions regarding font mapping. | |
| ProELoadCosmetics = <0 1> | Set to 0 to turn off display of datum cosmetics (coordinate system, datum planes and datum axes and datum points). | 1 |
| ProELoadCosmeticWires=<0 1> | Set to 0 to turn off display of cosmetic wires. | 1 |
| ProELoadPMIData = <0 1> | Set to 0 to disable display of PMI entities. | 1 |
| ProEMassPropUseMesh = <0 1> | Set to 1 to compute mass properties (volume, surface area, mass,...) using the mesh model. Default 0 , compute mass properties using the BRep model. | 0 |
| ProEPMIDIMTOLDisplay = <0 1> | Set to 1 to display tolerance for dimension entities for Pro/ENGINEER 3D files. | 1 |
| ProEShowHiddenLineDashed = <0 1> | This option controls the display and printing of hidden lines contained in Pro/ENGINEER drawings. Set to 1 to display and print hidden lines as dashed lines. Set to 0 to display and print hidden lines as solid lines. | 0 |
| ProE2DTanEdgeDefaultStyle = [0-4] | Specify the default line style for tangent edges if it is not saved in the native file. The possible styles are: 0 - Solid [Default] 1 - Disabled 2 - Control 3 - Phantom 4 - Dimmed | 0 |
| ProE2DViewDefaultStyle = [HIDDEN WIREFRAME SHADING NO HIDDEN] | Specify a default style to display 3D projected views: <ul style="list-style-type: none"> HIDDEN WIREFRAME SHADING NO HIDDEN (default) | NO HIDDEN |

SolidWorks Options

Configure options for SolidWorks files.

[Options]

| Parameter | Description | Default |
|--------------------|--|--------------|
| SWWIRECOLORVISIBLE | Specify color to use for drawing solidworks wireframe models for Solidworks drawings. Value should be an integer value specifying the RGB color. | 0 (Black) |

STEP Options

Configure options for STEP files.

[Options]

| Parameter | Description | Default |
|-------------------------|--|---------|
| STEPEdetailedTree = 0/1 | Set to 1 to show detailed tree for STEP files. | 0 |
| STEPFacePositiveColor | Option applies to STEP files. When set to 1, AutoVue uses either the color for “.BOTH” sides of the face if it is set or the color of the “positive” face side if it is set. When set to 0, AutoVue uses either the color for “.BOTH” sides of the face if it is set or selects the “positive” or “negative” face side color depending on the face sense. Syntax: [Options] STEPFacePositiveColor=<0/1> | 0 |
| STEPHideCG | Set to 1 to hide all construction geometry in the STEP file. Syntax: [Options] STEPHideCG=<0/1> | 0 |

Text Options

Configure options for text files.

[Options]

| Parameter | Description | Default |
|-----------------------|---|---------|
| CODEPAGE = <i>num</i> | Forces text display of a specific language. Specify the codepage to use for TXT files. For example, set CODEPAGE = 932 to display Japanese text in TXT files. For a full lists of value, refer to the following Web sites: http://www.microsoft.com/globaldev/reference/cphome.msp http://en.wikipedia.org/wiki/Code_page | |

TIFF Options

Configure options for TIFF files.

[Options]

| Parameter | Description | Default |
|--|---|---------|
| TIFF_ZERO_PIXEL = [BLACK WHITE FILE] | Specify how pixel values are interpreted in black and white TIFF files. Set to BLACK to force zero pixels to display black. Set to WHITE to force zero pixels to display white. Set to FILE to force zero pixels to display as the pixel color specified in the file. Note: This only applies to black and white TIFF images. | FILE |

Visio Options

Configure options for Visio files.

[Options]

| Parameter | Description | Default |
|------------------------------|---|---------|
| VISIODRAWINGPAGE = <0 1> | Specify if you want to display Visio files in drawing mode or in print mode. Set to 1 to display in print mode. | 0 |
| VISIOPAGE = <0 1> | Displays the page outline and background. 0 = Off 1 = On | 0 |
| VISIOPAGEBKCOLOR= <i>num</i> | Specify an integer that represents an RGB color (Red + 256 * Green + 65536*Blue). The values for Red, Green, and Blue range from 0 to 255. If set to -1 , there will be no background. Only the outline will be displayed if VISIOPAGE is on (=1). | -1 |

Word Options

Configure options for Microsoft Word files.

| Parameter | Description | Default |
|--------------------------------|--|-----------------------------------|
| CustomDocFontSubstitution | Specify the path of the font mapping file (docfont.map) to use for word documents. Syntax: [Options] CustomDocFontSubstitution=<path> The docfont.map contains font mapping information that identifies what font to use if a font is missing. If you wish to modify font mappings, update docfont.map | doc-font.map in avwin\fonts |
| DOC_SHOWTABLEGRIDLINES = <0 1> | Turn table grid lines on and off. Set to 1 to display table grid lines. Set to 0 to hide table grid lines. Unlike cell borders, gridlines never print. | 0 |

General Options

Configure a variety of general options that apply to parameters such as fonts, performance, color, and a whole lot more.

[Options]

| Parameter | Description | Default |
|------------------------------------|---|---------|
| 2DSELECTION_DIMLEVEL = [0.0 - 1.0] | Specify the dim level. The value corresponds to a percentage. For example 0.3 is 30%. Change takes effect whether you change it manually or through the GUI. | 0.5 |

| Parameter | Description | Default |
|--|--|---------|
| 3DMASSPROP_MESH_BEHAVIOR = [0 1 2] | Specify how to handle mesh when computing mass properties. This option can have of the following values: 0 – Exclude from mass property computation. 1 – Include in mass property computation. 2 – Handle selection: Include in mass property computation only if the selection is made fully with mesh bodies. | 1 |
| 3DMASSPROP_SHEET_BEHAVIOR = [0 1 2] | Specify how to handle sheet when computing mass properties. This option can have of the following values: 0 – Exclude from mass property computation. 1 – Include in mass property computation. 2 – Handle selection: Include in mass property computation only if the selection is made fully with sheet bodies. | 2 |
| AntiAlias = <0 1> | If 1 , enhances display of monochrome raster images. | 1 |
| ArcResolution = <i>num</i> | Indicates the degree increment used in rendering arcs. | 10 |
| Contrast = value | Applies contrast to monochrome raster images. The value can range from -0 (low contrast) to 100 (high contrast). | 0 |
| CustomFileFilter | Specifies a custom file filter for opening files with AutoVue. | *,* |
| DecimalDigits | Specify the number of decimals to display when measuring in AutoVue. | 4 |
| DefaultDocPageSize | Specify the page size in inches that AutoVue should use in order to properly display text files. Example: DefaultDocPageSize = 11.0,8.5 will force AutoVue to display text files at a page size of 11x8.5 inches. Note: This option is only for Text files and Microsoft Outlook Messenger files. | |
| DefaultFileUnits | Specify the unit to use if native file does not contain units information. Syntax: [Options] DEFAULTFILEUNITS=<1/2/4/5/7/8/9/10/11/12/13/14/15> where 1 - inches 2 - millimeters 4 - twips 5 - centimeters 7 - meters 8 - kilometers 9 - feet 10 - yards 11 - miles 12 - mils 13 - miles/10 14 - microns 15 - microinches | 1 |

| Parameter | Description | Default |
|---------------------------------|---|---------|
| DefaultUnits | Specify default unit for AutoVue. 1 - inches 2 - millimeters 5 - centimeters 7 - meters 8 - kilometers 9 - feet 10 - yards 11 - miles 12 - mils 14 - microns 15 - microinches | 1 |
| FASTDISPLAY = <0 1> | In 2D files, AutoVue renders the drawing, ignoring some details in order to speedup the rendering. If set to 0 , AutoVue performs a full rendering without any optimization of the drawing of the primitives. If set to 1 , AutoVue performs the following optimizations during the rendering of the files: <ul style="list-style-type: none"> • Draw small text as boxes. • Ignore the line-style for small primitives and draw them with plain style. • Ignore the point style for points and draw them in dot style. | 0 |
| FixPrinting=<0 1> | This option allows 3D overlays to be rendered on transparent DIBs when printing. This INI option affects 2D files containing 3D overlays and all 3D files. When set to 1 , print preview and printing results are exactly matched to the display. However there will be a decrease in print performance. When set to 0 , some overlay parts may not appear in the print results, but will provide better print performance. | 0 |
| FLIP = <0 1 2 3> | Specifies the flipping direction: 0 = none 1 = horizontal 2 = vertical 3 = both | 0 |
| FORCETOBLACK = <0 1> | Set to 1 to force all colors to black when displaying vector documents. | 0 |
| FullColorPrinterSupport = <0 1> | Enable color printing for some monochrome images. Set to 0 : Default AutoVue behavior; where some transparent monochrome images are not printed in color due to some printers that do not fully support transparency. Set to 1 : Enables certain monochrome images to be printed in color with color printers. This flag should not be set by default because it has some drawbacks and may cause some problems on some printers. Enabling option 1 could cause a decrease in performance: <ul style="list-style-type: none"> • The spool size is much larger because there is 8 to 24 times more information sent to the printer. • Not all printers fully support image transparency and using them with this option may yield incorrect results. | 0 |

| Parameter | Description | Default |
|----------------------------------|---|---------|
| GpsOutText = <0 1> | Set to 1 : When you run outtext.exe, it only reports the first level of Xrefs in the hierarchy with the fully resolved/qualified path to the Xrefs. Set to 0 : When you run outtext.exe, all Xref instances are reported and the path to the Xrefs is not fully qualified. | 0 |
| GUILOOK | Option supports different look and schemes for the AutoVue GUI (toolbars, menus, buttons and icons). Restart AutoVue to implement changes. Syntax: [Options] GUILOOK=<2000/2003/2005/XP> For example, when GUILOOK=2000, the look and feel of AutoVue matches the Windows 2000 theme. | 2005 |
| INVERT = <0 1> | Set to 1 to display monochrome raster images display inverted. | 0 |
| KEEPPORIGINALCOLORS = <0 1> | Set to 1 to preserve the original graphic colors, regardless of the background color. Set to 0 to change the color of graphics to black or white when the original color of the graphics are the same as the background color. Either white or black is chosen depending on which is more visible against the background. For example, yellow graphics on a yellow background change to black, or dark-blue graphics on a dark-blue background change to white. | |
| NEWCHILD = <0 1> | This option is only used for integrations. If 1 , new files are opened in their own window when AutoVue has been launched via the command line with a specified filename. Otherwise, the current window is replaced. | 0 |
| NOACCELERATION = <0 1> | Set to 1 to disable OpenGL acceleration. We recommend setting this option to 1 in the following cases: <ul style="list-style-type: none"> • If 3D files display blank, vector files do not display properly, or if markup entities are not completely visible. • If you have a poor graphics card. OpenGL acceleration could slow down performance for big 3D models. | 0 |
| NOLOGO = <0 1> | If 1 , the initial splash screen is not displayed. | 0 |
| NOSYMBOLTTF = <0 1> | Set to 1 to override the Charset of Symbol fonts. It will be replaced by the default Charset. This option applies to DWF and DWG files only. | 0 |
| NOWINARCS = <0 1> | Set to 1 : AutoVue does not use the Windows GDI functions to draw arcs. Set to 0 : Windows renders the arcs. This option is used for some HP print drivers that do not properly render arcs and circles. | 0 |
| OVERLAY_ROTATE_FLIP = <0 1> | Set to 1 to automatically rotate/flip overlay files when overlaying files with AutoVue. | 0 |
| RASTERFIT = <0 1> | If 1 , fits the initial display of raster images to the screen. Otherwise, full resolution is shown. | 1 |
| RASTERMEMLIMIT = <i>n_kbytes</i> | Swaps raster data to disk when the Windows global memory heap falls below <i>n_kbytes</i> . | 6000 |
| RASNOFORCETOBLACK = <0 1> | Set to 1 to disable Force to Black for raster overlays and for raster files. Option is applicable only when FORCETOBLACK = 1 . | 0 |

| Parameter | Description | Default |
|---------------------------|---|---------|
| ResetRotateAndFlip=<0 1> | <p>This option allows the user to choose rotation and flip settings when viewing files.</p> <p>Syntax: [Options] ResetRotateAndFlip=<0 1></p> <p>1 - render file with no rotation and no flipping. If native file itself is rotated or flipped, native file settings take precedence and file is rendered with saved rotation/flip.</p> <p>0 - render file with the rotation and flip settings defined in AutoVue GUI or in AutoVue INI file.</p> | 1 |
| ResLocateDLL | <p>Set this to the name of the custom resource resolution DLL with which you have defined your own localization callback.</p> <p>Syntax: [Options] ResLocateDLL= ExampleDLL.dll</p> | empty |
| ROTATE = <degrees> | Specifies the degrees of rotation as 0, 90, 180 or 270. | 0 |
| SHOWDIMENSION = <0 1> | If 1 , shows dimension entities. Otherwise, they are not shown. | 1 |
| SHOWFILL = <0 1> | If 0 , displays only the outlines of filled entities (solids, fat polylines etc.). Otherwise, these entities are shown as filled. | 1 |
| SHOWHATCHING = <0 1> | If 1 , the FILLMODE system variable (AutoCad) and the Hatch display are turned off, otherwise, Hatch entities are displayed. | 0 |
| SHOWLINESTYLE = <0 1> | <p>If 1, shows linestyle patterns</p> <p>If 0, linestyles are displayed as solid lines.</p> | 1 |
| SHOWLINEWEIGHT | <p>If 1, displays varying line thicknesses.</p> <p>If 0, displays no line weights for any lines (all lines appear equal).</p> | 1 |
| SHOWTEXT = <0 1> | If 1 , text entities are shown. | 1 |
| SHOWTREE | If 1 , tree is displayed. | 1 |
| SHOWXREFS = <0 1> | If 1 , external reference files are shown. | 1 |
| STARTINDIR | <p>If 1, File Open dialog always defaults to the directory specified in the "start in" option of the AutoVue shortcut.</p> <p>If 0, sets File Open dialog to the last open path.</p> | 0 |
| TextBitmapRendering=<0 1> | <p>If set to 1, render small text glyphs using bitmaps.</p> <p>If set to 0, text is not rendered using bitmaps.</p> <p>Note: This option may affect most text in PDF, TrueType text in ME10, and PostScript text in CATIA5.</p> | 1 |
| TILEMODE = <-1 0 1> | <p>Specifies:</p> <p>1 - model space</p> <p>0 - paper space</p> <p>-1 - automatic</p> | -1 |
| TRA_NAME | <p>Specify the name of the translation file to use. AutoVue UI will be launched in specified language.</p> <p>Example: TRA_NAME = fr.tra</p> <p>If fr.tra contains French resource files, AutoVue UI will startup in French.</p> | |

| Parameter | Description | Default |
|----------------------------------|--|---------|
| VECTORFIT = <0 1> | If 1 , causes Vector files to be "Auto-Fit" once they are loaded. | 0 |
| VECTORMEMLIMIT = <i>n_kbytes</i> | Swaps vector data to disk when the Windows global memory heap falls below <i>n_kbytes</i> . | 4096 |
| VECTORWINDOWSMETA = <0 1> | If 1 , uses Windows metafiles to store vector display lists, otherwise uses a custom high-performance display list. | 0 |
| XFONTPATHS = <i>paths</i> | Specifies a semicolon-delimited list of directories to search for external fonts. | |
| XREFPATHS = <i>paths</i> | Specifies a semicolon-delimited list of directories to search for external references in CAD drawings. | |

Base Font Options

The parameters in the following table only apply to text files.

[BaseFont]

| Parameter | Description | Default |
|-------------|--|--------------|
| Face | Specifies the font name. | Arial |
| Size | Specifies the font size. | 10 |
| Weight | Specifies the font weight. | 400 (Normal) |
| IsStrikeOut | If 1 , the text entity has a strikethrough. | 0 |
| IsUnderline | If 1 , the text entity is underlined. | 0 |
| IsItalic | If 1 , the text entity is italicized. | 0 |

UI Color Options

Configure options to specify background color for different file formats.

Note: For each color option, specify an integer that represents an RGB color (Red + 256 * Green + 65536*Blue). The values for Red, Green, and Blue range from **0** to **255**.

[UI Colors]

| Parameter | Description | Default |
|--------------------|---|---------|
| BKCOLORARCHIVE | Specify background color for archive files. | |
| BKCOLORCOLORRASTER | Specify background color for raster formats. | |
| BKCOLORDATABASE | Specify background color for database files. | |
| BKCOLORDOCUMENT | Specify background color for PDF formats. | |
| BKCOLOREDA | Specify background color for EDA files. | 0 |
| BKCOLORMONORASTER | Specify background color for monochrome raster formats. | |
| BKCOLORSPREADSHEET | Specify background color for spreadsheets. | |
| BKCOLORTHUMBNAILS | Specify background color for thumbnails. | |
| BKCOLORVECTOR | Specify background color for vector formats. | |

AutoVue Mobile Options

Configure the parameters for AutoVue Mobile.

[AutoVueMobile]

| Parameter | Description | Default |
|---------------------------------|--|---------|
| FileStreamEncryption=[RC4 3DES] | Specify Encryption algorithm for both Markup and Mobile Pack password protection. Syntax: [AutoVueMobile] FileStreamEncryption=<RC4/3DES> | RC4 |

3D Options

The parameters in the following table apply to 3D files.

[Options]

| Parameter | Description | Default |
|-------------------------------|--|---------|
| 3DPerformancePreference=<0 1> | This option orients the optimization in the product towards speed or memory. If set to 1 , the optimization is assigned to the speed performance. If set to 0 , the optimization is assigned to memory usage. This option impacts only the loading process of EDA-3D and CATIA 4, CATIA 5, Pro/ENGINEER, Autodesk Inventor, SolidDesigner, Mechanica Desktop, ACIS, IGES and STEP 3D models. | 1 |
| AxesSize = <i>value</i> | Enables you to resize the 3D axes. Example: If you set AxesSize=0 the default 3D axes will display. If you assign a value greater than 0, the size of the 3D axes will change accordingly. Suggested value=45. | 90 |
| BkImages | Displays a list of images in the 3D background. Can include a semi-colon separated list of images. Syntax: BkImages=path1, position1, stretch1; path2, position2, stretch2; ... Path values: May be absolute and relative to the start directory of the application or module directory. Position values: CENTER, TOP, BOTTOM, LEFT, RIGHT, TOP_LEFT, TOP_RIGHT, BOTTOM_LEFT, or BOTTOM_RIGHT. Stretch Values: NONE (no stretching), FILL (fills the screen and does not respect image ratio), UNIFORM (displays full image and respects image ratio), and UNIFORM_TO_FILL (fill the screen and respects image ratio). | |
| BkType | Specifies the type of 3D background. Three classes of values: <i>radial gradient</i> , <i>directional gradient</i> , and <i>plain color</i> (default value). Radial gradient values: CENTER, TOP, BOTTOM, LEFT, RIGHT, TOP_LEFT, TOP_RIGHT, BOTTOM_LEFT, or BOTTOM_RIGHT. Directional gradient values: An integer value (angle in degrees). Note that 0 is in the “3 o’clock” direction and that the angles rotate CCW. | PLAIN |
| DISPLAYMODE | Specify the default display mode. Display mode values: 1 - Shaded 2 - Wire Polygons 4 - Wireframe 8 - Hidden Line 16 - Silhouette 32 - Shade Wire | 1 |
| DYNAMICDISPLAY | Specify render mode for dynamic display. | 0 |
| FastPMIRendering=<0 1> | This option affects the rendering of PMI Text. If set to 1 , the rendering time of the PMI Text is decreased. The quality of the small text will be degraded somewhat since it is rendered just as box or line made on the contour of the text. As a result, performance is improved. If set to 0 , the rendering time remains the same. | 1 |

| Parameter | Description | Default |
|---------------------------------|---|---------|
| ForcePMIsZOrder = <0 1> | Invalidate the PMI_ATTRIB_RENDERABOVEMODEL generic attribute effect: 3D PMIs are not forced above the model and may be occluded by it, depending on its orientation. | 0 |
| JTRESOLUTION=<HI MED LO> | Option applies to JT format. This option enables users to load models in high, medium, or low resolution meshes. Setting the option to LOW results in faster loading of the model. However, this results in a loss of detail in the model display. | HI |
| LOADFACETEDDATA = <0 1> | Set to 1 if you wish to read Mesh data for 3D files. Set to 0 if you wish to read BRep data for 3D files. | 1 |
| MESHBUILDTOPOLGY = <0 1> | Set to 0 if you do not want to build the topology in mesh mode. Applies to the following file formats: <ul style="list-style-type: none"> • DWF 3D • Catia 5 • DirectModel (JT) • IFC • Pro/ENGINEER • SolidWorks • STL • Unigraphics Note: This option replaces the following INI options: SWBUILDMESHTOPOLGY, Catia5MeshBuildTopology and BUILDMESHTOPOLGY. | 1 |
| MESHRESOLUTIONDEFAULT = <0 1 2> | Configure default mesh resolution for 3D files: 0 - Medium 1 - Low 2 - High | 0 |
| SMOOTHSHADING = <0 1> | If 1 , smooth shading is turned on. | 1 |
| PERSPECTIVE = <0 1> | If 1 , enables the Perspective view. | 0 |
| PMITEXTRENDERINGSTYLE = <0 1 2> | Specify the text rendering style for PMI entities. 0 - Native Setting 1 - 3D 2 - Flat-to-screen | 0 |
| SHOWAXES = <0 1> | If 1 , shows Global Axes. | 1 |

[3D Color Options]

Configure options to specify color for 3D files.

Note: For each color option, specify an integer that represents an RGB color (Red + 256 * Green + 65536*Blue). The values for Red, Green, and Blue range from **0** to **255**.

[Options]

| Parameter | Description | Default |
|--------------------------|---|---------|
| BACKGROUND_COLOR | Specify color for background. | |
| ENTITY_DEFAULT_COLOR | Specify default color for 3D models. | |
| HIGHLIGHT_COLOR | Specify color for highlighting. | |
| DISTANCE_COLOR | Specify color for distance measurement. | |
| EDGE_COLOR | Specify color for highlighting edges. | |
| FACE_COLOR | Specify color for highlighting faces. | |
| VERTICES_COLOR | Specify color for highlighting vertices. | |
| SECTION_EDGE_COLOR | Specify section edge color. | |
| MINDIST_FIRST_SET_COLOR | Specify color for first set in minimum distance measurement. | |
| MINDIST_SECOND_SET_COLOR | Specify color for second set in minimum distance measurement. | |

3D Measurement Units

[3D Measurement Units]

| Parameter | Description | Default |
|------------------|---|---------|
| DisplayMassUnits | Specify display units for mass. Mass units values: 0 - Gram (g.) 1 - Kilogram (kg.) 2 - Milligram (mg.) 3 - Pound (lb.) 4 - Ton (US) 5 - Ton (UK - imperial system) 6 - Ounce (oz.) 7 - Slug | 0 |

| Parameter | Description | Default |
|-----------------------------------|--|------------|
| DisplayLengthUnits | Specify display units for length. Distance units values: 1 - Inch (in.) 2 - Millimeter (mm.) 5 - Centimeter (cm.) 7 - Meter (m.) 8 - Kilometer (km.) 9 - Feet (ft.) 10 - Yard (yd.) 11 - Mile (mi.) 12 - Thousandth of an inch (mil) 14 - Micron 15 - Microinch | 1 |
| DensityMassUnits | Specify density mass units. | 0 (Grams) |
| DensityLengthUnits | Specify density length units. | 1 (Inches) |
| Density | Specify density value | 1.0 |
| ApplyDefaultDensity ToAllParts | If 1 , density is to be applied to all parts. | 0 |
| MassPropsAccuracy | integer 2 = high accuracy Possible values: 0 = LOW 1 = MEDIUM 2 = HIGH 3 = VERY HIGH | 2 |
| InertiaTensorPosition | If 1 , computes Tensor of Inertia at Center of Gravity. If 0 , computes Tensor of Inertia at Output Coordinate System Origin. | 0 |

3D PMI Options

Configure the following options to control visibility of PMI entities for 3D files.

[Options]

| Parameter | Description | Default |
|------------------------------|--|---------|
| PMI_TREE_COORDINATE SYSTEM | Set to 1 to display datum coordinate system entities in the tree. Set to 0 to hide datum coordinate system entities from the tree. | 1 |
| PMI_VIEW_COORDINATE SYSTEM | Set to 2 to set the visibility of datum coordinate system entities to the last saved state in the native application. Set to 1 to display datum coordinate system entities. Set to 0 to hide datum coordinate system entities from the display. | 2 |
| PMI_TREE_DATUMFEATURE SYMBOL | Set to 1 to display datum feature symbol entities in the tree. Set to 0 to hide datum feature symbol entities from the tree. | 1 |

| Parameter | Description | Default |
|----------------------------------|--|---------|
| PMI_VIEW_DATUMFEATURE SYMBOL | Set to 2 to set the visibility of datum feature symbol entities to the last saved state in the native application. Set to 1 to display datum feature symbol entities. Set to 0 to hide datum feature symbol entities from the display. | 2 |
| PMI_TREE_DATUMTARGET | Set to 1 to display datum target entities in the tree. Set to 0 to hide datum target entities from the tree. | 1 |
| PMI_VIEW_DATUMTARGET | Set to 2 to set the visibility of datum target entities to the last saved state in the native application. Set to 1 to display datum target entities. Set to 0 to hide datum target entities from the display. | 2 |
| PMI_TREE_DIMENSION | Set to 1 to display dimension entities in the tree. Set to 0 to hide dimension entities from the tree. | 1 |
| PMI_VIEW_DIMENSION | Set to 2 to set the visibility of dimension entities to the last saved state in the native application. Set to 1 to display dimension entities. Set to 0 to hide dimension entities from the display. | 2 |
| PMI_TREE_FEATURECONTROL FRAME | Set to 1 to display datum feature control frame entities in the tree. Set to 0 to hide datum feature control frame entities from the tree. | 1 |
| PMI_VIEW_FEATURECONTROL FRAME | Set to 2 to set the visibility of datum feature control frame entities to the last saved state in the native application. Set to 1 to display datum feature control frame entities. Set to 0 to hide datum feature control frame entities from the display. | 2 |
| PMI_TREE_LINEWELD | Set to 1 to display lineweld entities in the tree. Set to 0 to hide lineweld entities from the tree. | 1 |
| PMI_VIEW_LINEWELD | Set to 2 to set the visibility of lineweld entities to the last saved state in the native application. Set to 1 to display lineweld entities. Set to 0 to hide lineweld entities from the display. | 2 |
| PMI_TREE_LOCATOR | Set to 1 to display locator entities in the tree. Set to 0 to hide locator entities from the tree. | 1 |
| PMI_VIEW_LOCATOR | Set to 2 to set the visibility of locator entities to the last saved state in the native application. Set to 1 to display locator entities. Set to 0 to hide locator entities from the display. | 2 |
| PMI_TREE_MEASUREMENT POINT | Set to 1 to display point measurement entities in the tree. Set to 0 to hide point measurement entities from the tree. | 1 |
| PMI_VIEW_MEASUREMENT POINT | Set to 2 to set the visibility of point measurement entities to the last saved state in the native application. Set to 1 to display point measurement entities. Set to 0 to hide point measurement entities from the display. | 2 |
| PMI_TREE_NOTE | Set to 1 to display note entities in the tree. Set to 0 to hide note entities from the tree. | 1 |

| Parameter | Description | Default |
|-----------------------------|---|---------|
| PMI_VIEW_NOTE | Set to 2 to set the visibility of note entities to the last saved state in the native application. Set to 1 to display note entities. Set to 0 to hide note entities from the display. | 2 |
| PMI_TREE_REFERENCE GEOMETRY | Set to 1 to display reference geometry entities in the tree. Set to 0 to hide reference geometry entities from the tree. | 1 |
| PMI_VIEW_REFERENCE GEOMETRY | Set to 2 to set the visibility of reference geometry entities to the last saved state in the native application. Set to 1 to display reference geometry entities. Set to 0 to hide reference geometry entities from the display. | 2 |
| PMI_TREE_SPOTWELD | Set to 1 to display spotweld entities in the tree. Set to 0 to hide spotweld entities from the tree. | |
| PMI_VIEW_SPOTWELD | Set to 2 to set the visibility of spotweld entities to the last saved state in the native application. Set to 1 to display spotweld entities. Set to 0 to hide spotweld entities from the display. | 2 |
| PMI_TREE_SURFACEFINISH | Set to 1 to display surface finish entities in the tree. Set to 0 to hide surface finish entities from the tree. | 1 |
| PMI_VIEW_SURFACEFINISH | Set to 2 to set the visibility of surface finish entities to the last saved state in the native application. Set to 1 to display surface finish entities. Set to 0 to hide surface finish entities from the display. | 2 |
| PMI_TREE_WIRE | Set to 1 to display wire entities in the tree. Set to 0 to hide wire entities from the tree. | 1 |
| PMI_VIEW_WIRE | Set to 2 to set the visibility of wire entities to the last saved state in the native application. Set to 1 to display wire entities. Set to 0 to hide wire entities from the display. | 2 |

EDA Options

Configure a variety of EDA options that apply to parameters for selections, Snap Box, Color.

[ECAD]

| Parameter | Description | Default |
|---|--|-----------|
| 2DSELECTION_DIMLEVEL = [0.0 - 1.0] | Specify the dim level. The value corresponds to a percentage. For example 0.3 is 30%. Change takes effect whether you change it manually or through the GUI. | 0.5 |
| ECAD_3D_BOARDCOLOR | Specify the color of the PCB board in 3D. | 25600 |
| ECAD_3D_COMPONENTCOLOR | Specifies the color of the PCB components in 3D. | 2631720 |
| ECAD_3D_DEFAULTBOARD THICKNESS = [0-1000] | Specifies the board thickness (in mils) for EDA 3D models. Note: Value cannot represent a thickness greater than 1 foot. | 40 (mils) |
| ECAD_3D_DEFAULTCOMPONENT THICKNESS = [0-1000] | Specifies the component thickness (in mils) for EDA 3D models. Note: Value cannot represent a thickness greater than 1 foot. | 40 (mils) |
| ECAD_3D_DEFAULTHIGHLIGHTSELECTION = <0 1> | Select either Highlight Selected or Dim Unselected as the default behavior when selecting entities. Set to 1 when Dim Unselected is selected. Set to 0 when Highlight Selected is selected. Option takes effect whether you change it manually or through the GUI. | 0 |
| ECAD_3D_DEFAULTTHICKNESS UNIT | Specify display units for thickness. Thickness units values: 1 - Inch (in.) 2 - Millimeter (mm.) 5 - Centimeter (cm.) 7 - Meter (m.) 8 - Kilometer (km.) 9 - Feet (ft.) 10 - Yard (yd.) 11 - Mile (mi.) 12 -Thousandth of an inch (mil) 14 - Micron 15 - Microinch | 12 |
| ECAD_3D_DEFAULTMESURE SNAPRADIUS | Specify snap radius for snap box to appear to select entity. Note: The snap radius is configured in pixels. | 5 |
| ECAD_CROSSPROBE_AUTOMATIC = <0 1> | Specifies whether the Automatic option is enabled or disabled when cross probing EDA files. Set to 1 to enable Automatic mode during an EDA cross probe. Set to 0 to disable Automatic mode during an EDA cross probe. | 1 |
| ECAD_CROSSPROBE_ZOOM = <0 1 2> | Specify entity selection behavior when crossprobing EDA files. This option can have one of the following values: 0 - Keep zoom level 1 - Zoom selected 2 - Zoom Fit | 1 |
| ECAD_LAYER_EXPANDCOLLAPSE_PHYSICAL = <0 1> | Expand or collapse the Physical Layers pane in the Layers dialog. Set to 0 to expand the Physical Layers pane. Set to 1 to collapse the Physical Layers pane. | 0 |

| | | |
|---|---|---|
| ECAD_LAYER_EXPANDCOLLAPSE_LOGICAL = <0 1> | Expand or collapse the Logical Layers pane in the Layers dialog. Set to 0 to expand the Logical Layers pane. Set to 1 to collapse the Logical Layers pane. | 1 |
| ECAD_LOAD_3D_PAGE=<0 1> | Enable or disable display of 3D models for EDA files. Set to 0 to disable display of 3D model. Set to 1 to enable display of 3D model. Option applies to the following PCB formats: <ul style="list-style-type: none"> • Altium Protel • Cadence Allegro • Cadence Specctra • IDF • Mentor BoardStation • Mentor Expedition • Zuken CADSTAR • OrCAD Layout • ODB++ • Zuken CADIF | 1 |
| EDASCHSCOPE = <0 1> | EDA entity searching scope. Set to 1 : the search scope is the entire design. Set to 0 : the search scope is current page. | 0 |

Markups

Configure a variety of Markup options that apply to parameters for the **Markup Information** dialog, the Markup file directory, the symbol directory and more.

Markup Options

The parameters in the following table can be configured for Markups.

[Markup Options]

| Parameter | Description | Default |
|--------------------------------------|---|--------------------|
| ARROW_SIZE | Set to a positive value (greater than 0.1) to create zoomable arrow heads when creating leader and measurement markup entities. If set to a negative value, arrow head is not zoomable. | between -7.2 and 0 |
| ATTACHMENT_MAX_SIZE | Specify the maximum size for attachment markup entities. When creating attachment markup entities, if attachment size exceeds, an error message appears to indicate that attachment size exceeds the limit. Syntax: [Markup Options] ATTACHMENT_MAX_SIZE=<value> value is in MegaBytes. | 0 (no limit) |
| CHILDNORESIZE | Set to 1 if you want to make sure that a child markup entity is not resized when its parent is resized | 0 |
| CONSOLIDATE_OPEN ASACTIVE = <0 1> | Set to 1 to toggle-on “Open as Active Markup” option in Markup Consolidation dialog. Set to 0 to turn off this option. | 1 |
| DEF_COLOR | Specify a Windows RGB color for default markup entity color. Other values: -1 - Assign layer color to markup entity. -2 - Hide markup entity. -3 - Assign line color (option applies to fill color only). | -1 (by layer) |
| DEF_LSTYLE | Specify the default linestyle for markup entities. Possible values are: 0 - Solid line 1 - Dashed line 2 - Dashed line (smaller dashes) 3 - Dash Dot 6 - Cloud linestyle 7 - Triangle linestyle | 0 |
| DEF_LWIDTH | Specify the default line width in pixels for markup entities. | 1 |
| DEF_FILLTYPE | Specify the fill type for filled entities. Possible values are: 0 - No Fill 1 - Solid Fill 2 - Transparent Fill | 0 |

| Parameter | Description | Default |
|--|--|--|
| DEF_FILLCOLOR | Specify a windows RGB color for default fill color. Other values: -1 - Assign layer color to markup entity -2 - Hide markup entity -3 - Assign line color (option applies to fill color only) | -1 |
| EnableOLEEntity=<0 1> | Allows you to re-enable the OLE markup entity. When set to 1 , open a 2D file and enter Markup mode. From the Markup menu, select Add Entity , and then select More . The OLE markup entity is visible. Select OLE to create an OLE markup entity. | 0 |
| FACTOR_EXTENSION = factor | Files with the indicated extension use the specified calibration factor when measuring distances in Markup mode. | 1.0 Example: FACTOR_TIF = 0.5 |
| INFO_USER = <i>title</i> | Specifies the title of the first field in the Markup Information dialog. | User Name |
| INFO_DEPT = <i>title</i> | Specifies the title of the second field in the Markup Information dialog. | Department |
| INFO_COMP = <i>title</i> | Specifies the title of the third field in the Markup Information dialog. | Company |
| INFO_LOC = <i>title</i> | Specifies the title of the fourth field in the Markup Information dialog. | Location |
| INFO_TEL = <i>title</i> | Specifies the title of the fifth field in the Markup Information dialog. | Tel# |
| LINETHICKNESS_ZOOMABLE | Set to 1 if you want markup entity line thickness to scale according to zoom level. | 0 |
| LINestyle_ZOOMABLE | Set to 1 if you want to maintain markup entity line style at all zoom levels. | 0 |
| NOTENAME_AUTOGENT | Set to 0 to disable automatic numbering of note entities. Set to 1 to enable numbering of note entities. | 1 |
| REDAUTOPATH = <0 1> | If 0 , the markup will be saved to the directory specified in USERREDLINE-PATH. If 1 , markups are saved in the avred sub-directory under the current directory. | 1 |
| REDLINEPATH = <i>directory</i> | Specifies the directory to use for Markup files. | The directory avred under the current directory |
| RESCALEMARKUP = 1 | If view extents of base document have changed since creating the Markup, set this option to 1 to scale Markups appropriately. | 0 |
| SIGNOFFFILE = <i>path_to_signoffbg</i> | Specify the full name and path for the background image for the Sign Off markup entity. | signoff-stamp.bmp in the AutoVue installation directory |
| SYMBOLPATH = <i>directory</i> | Specifies the directory to use for symbol files. | |

| Parameter | Description | Default |
|-----------------------------|--|---------|
| TRUECOLOR = <0 1> | If 0 , the Markup entity color is inverted when it matches the background color. If 1 , all entities are drawn with their actual color irrespective of the background color. Entities whose color matches or is close to the background color become invisible. | 1 |
| USERREDLINEPATH = directory | When specified, this directory takes precedence over the directory specified in REDLINEPATH for the Markup files. | |
| USERSYMBOLPATH = directory | When specified this directory takes precedence over the directory specified in SYMBOLPATH for the symbol files. | |

[Options]

| Parameter | Description | Default |
|---------------------------|--|---------|
| EnableOfficeMarkups=<0 1> | Enable/disable creation of markups for office documents. Set to 1 to enable markups for office formats. Set to 0 to disable markups for office formats. Syntax: [Options] EnableOfficeMarkups=1 | 0 |
| EnableOldMarkupOpen=<0 1> | Set to 1 if you want the Markup Open dialog to appear every time you enter Markup mode. | 0 |

Calibrate

Specify 2D mode measurement units.

[Calibrate]

| Parameter | Description | Default |
|---------------|---|---------|
| DistanceUnits | Specifies the default units for 2D Markup mode measurements. Distance units values: 0 - Pixels 1 - Inches 2 - Millimeters 4 - Twips 5 - Centimeters 7 - Meters 8 - Kilometers 9 - Feet 10 - Yards 11 - Miles 12 - Thousandth of an inch (mils) 13 - Ten Thousandth of an inch (mils/10) 14 - Microns 15 - Microinches | 1 |
| AreaUnits | Specifies the default units for 2D Markup mode area measurements. Area units values: 0 - Pixels sq. 1 - Inches sq. 2 - Millimeters sq. 4 - Twips sq. 5 - Centimeters sq. 7 - Meters sq. 8 - Kilometers sq. 9 - Feet sq. 10 - Yards sq. 11 - Miles sq. 12 - Thousandth of an inch (mils sq.) 13 - Ten Thousandth of an inch (mils sq./100) 14 - Microns sq. 15 - Microinches sq. | 1 |

Markup Font Options

[MrkFont]

| Parameter | Description | Default |
|-------------|---|---------|
| Face | Specifies the text entity font name. | Arial |
| Size | Specifies the text entity font size. | 10 |
| IsBold | If 1 , the text entity font appears in bold. | 0 |
| IsStrikeOut | If 1 , the text entity contains a strikethrough. | 0 |
| IsUnderLine | If 1 , the text entity is underlined. | 0 |
| IsItalic | If 1 , the text entity appears in italic. | 0 |

Streaming File Options

Configure the streaming file support options.

[Metafiles]

| Parameter | Description | Default |
|-----------------|--|---------|
| Enabled | Set to 1 to enable generation of streaming files. Streaming file format is developed by Oracle AutoVue to improve performance for subsequent loading of files. When enabled, when you open and close a file, AutoVue generates a streaming file. Subsequent rendering of this file reads the streaming file. Syntax: [Metafiles] Enabled=<0/1> | 0 |
| Folder | Specify path to the folder where streaming files will be stored. Syntax: [Metafiles] Folder=C:\AutoVue\StreamingFiles | None |
| ControlSize | Specify the size limit for the folder where streaming files will be stored. When set to 0, there is no size limit for the folder. When set to a number, this will be the size limit for the folder in MegaBytes. Syntax: [Metafiles] ControlSize=512 | 0 |
| WriteEnabled | Enable/disable the support for streaming file creation. When set to 1, streaming file writing (creation) and reading is allowed. When set to 0, streaming file writing is disabled and metafile reading is allowed. Syntax: [Metafiles] WriteEnabled=0 | 1 |
| WriteEnabledPDF | Enable/disable creation of streaming files for PDF format. When set to 0, streaming file will not be generated for PDF. When set to 1, streaming file will be generated for PDF. | 0 |

Note: Streaming file support is not enabled for Powerpoint 2007.

Applications Options

Configure Applications options that apply to application associations.

[Applications]

| Parameter | Description |
|--|--|
| NUMBER = <i>n</i> | Specifies the number of associations that can be defined by the INI option APPLICATION (see following option). |
| APPLICATION<nnn> = <[<i>extension</i>] [<i>description</i>][<i>command</i>]> | Specify an association between an active file and a related application. Any number of associations can be specified with nnn. Use INI option NUMBER (see previous option) to define the number of associations files can use. Default: No associations. Extension refers to the current active file. Example: APPLICATION001 = [.dwg][Start Acad][c:\ACAD\acad.exe] |

Compare Options

Configure Compare mode result display.

[Compare]

| Parameter | Description | Default |
|---------------|---------------------------|---------|
| ViewAdditions | If 1, displays additions. | 1 |
| ViewDeletions | If 1, displays deletions. | 1 |
| ViewUnchanged | If 1, displays unchanged. | 0 |

Overlay Options

Configure Overlay options that apply to laying files over the current active document.

[Overlay Options]

| Parameter | Description | Default |
|-------------|---|--|
| Auto | Automatic overlay. Files with the same name as the base file and the given extensions will be considered for automatic overlay when set to 1 . | 1 for raster files (tiff, cit, etc.); 0 for all other |
| OneToOne | When set to 1 , avoids scaling and offsetting the overlay file. | 0 |
| OverlayText | Specify the list of extensions supported for Auto overlay. Example: OverlayText = drw,dwg,dxf,dgn | drw,dwg,dxf |

Page Size Options in Inches

Configure the parameters for the page size in inches.

[PAGESIZEINCH]

| Parameter | Description | Default |
|------------------|---|-------------|
| A = WidthXHeight | | 8.5 x 11.0 |
| B = WidthXHeight | E.g., To set the Imperial page size to be 11.0" x 17.0", add the following section to the end of the configuration file named avwin.ini : [PageSizeInch] B = 11 x 17 | 11.0 x 17.0 |
| C = WidthXHeight | | 17.0 x 22.0 |
| D = WidthXHeight | | 22.0 x 34.0 |
| E = WidthXHeight | | 34.0 x 44.0 |

Page Size Options in Millimeters

Configure the parameters for the page size in millimeters.

[PAGESIZEMM]

| Parameter | Description | Default |
|-------------------|--|-----------|
| A4 = WidthXHeight | | 285 x 198 |
| A3 = WidthXHeight | E.g., To set the metric page size to be 396 mm x 273 mm, add the following section to the end of the configuration file named avwin.ini : [PageSizeMM] A1 = 396X273 | 396 x 273 |
| A2 = WidthXHeight | | 570 x 396 |
| A1 = WidthXHeight | | 817 x 570 |
| A0 = WidthXHeight | | 165 x 817 |

3D Export Options

Configure the parameters in the following table for 3D export options

[Export Options]

| Parameter | Description | Default |
|-----------------------|--|---|
| EXPORTTESSELLATIONTOL | Control the mesh density when converting to 3D STL. Meshes are more dense if tolerance value is smaller. Syntax: [Export Options] EXPORTTESSELLATIONTOL=val where val can be 0.01, 0.005, 0.001, 0.0001 | 0 |
| EXPORTREGION | Possible entries for bmp and tiff: “EXTENTS”, “DISPLAY”. Possible entries for STL: “SELECTED”, “ALL”. | EXTENTS for bmp and tiff. ALL for STL |
| EXPORTTO | STL, BMP, and TIFF | STL |

2D Output Options

Configure the output options that apply to parameters for 2D file conversion, color correction, page size, and many more.

[Output Options]

| Parameter | Description | Default |
|-------------|-----------------------------------|---------|
| CONVERTTO = | PCRS_TIF is the default format. | |
| PCRS_TIF | TIFF: This is the default format. | |
| PCRS_BMP | Windows Bitmap | |
| PCRS_GP4 | CALS GP4 | |
| PCRS_EPS | Encapsulated Postscript (Raster) | |
| PCRS_PCL | HP Laserjet Printer (PCL) | |
| PCRS_PCX | PCX Bitmap | |
| PCRS_RLC | Run Length RLC File | |

PenThicknessFname =
fname

Specify the name of the pen mapping file. The pen mapping file contains a mapping of pen index to width. The unit is preset to pixel.

Note: The pen color mapping is format dependent.

AutoCAD - The pen color mapping uses the AutoCAD color palette. You cannot modify the mapping.

HPGL - The pen color mapping is defined in hpglcol.tbl and can be modified by the user.

ME10 - The pen color mapping is defined in me10col.tbl and can be modified by the user.

DWF - The pen color mapping is defined in dwfcol.tbl and can be modified by the user.

Microstation drawings - The pen color mapping is shipped in a binary file, color.tbl. This mapping file can be modified using Microstation. The mapping files are located at <AutoVue Installation Directory> \bin.

| CONVERTTOSUB = | Subformat | Format |
|----------------|--------------|----------|
| 0 | Uncompressed | PCRS_TIF |
| CONVERTTOSUB = | Subformat | Format |
| 1 | PackBits | PCRS_TIF |
| 2 | Fax III | PCRS_TIF |
| 3 | Fax IV | PCRS_TIF |
| 0 | 75 dpi | PCRS_PCL |
| 1 | 150 dpi | PCRS_PCL |
| 2 | 300 dpi | PCRS_PCL |

[Options]

| Parameter | Description | Default |
|---|---|---|
| COLORDEPTH = <original number> | Set the number of bits for the image plane. | ORIGINAL |
| CONVERTAREA = <DISPLAY EXTENTS> | Indicates the portion of the drawing to be converted. If CONVERTAREA = EXTENTS , the file extents are printed. If DISPLAY is specified, the area given by the DISPLAY option is used. If the DISPLAY option is not set, the extents are printed. | DISPLAY |
| OUTPUTPAGESIZE = <A B C D E A4 A3 A2 A1 A0 U MAX1 MAX2> | Specifies the current page size. | A |
| DEFAULTHEIGHT = <i>height</i> | Specifies the default height (in pixels) used when converting from vector to raster formats. | 480 |
| DEFAULTWIDTH = <i>width</i> | Specifies the default width (in pixels) used when converting from vector to raster formats. | 640 |
| FLIPPING = <NONE VERTICAL HORIZONTAL BOTH> | Specifies the flipping direction(s). | NONE |
| HEIGHT = <i>height</i> | Specify the height in pixels. | 0 (in pixels) |
| INPUTFILE = <i>fname</i> | Specifies the name and path of the input file. | No default |
| LAYER<index> = <0 1> | For drawings containing layers, only the layers which are equal to 1 are converted. Example: LAYER1 = 0 | 1 for all layers |
| NCOLORS = <i>num</i> | This specifies the number of colors to generate in the output image. The string True Color is used to generate true color images. If the converter does not support the number specified, the closest supported number is used. | The highest number of colors supported for the target format. |
| NUMLAYERS = <i>num</i> | Specifies the number of layers that exist. | |

| | | |
|--|--|--|
| ORIGIN = <i>unitsX;unitsY</i> | Both X and Y are given in the current UNITS. This specifies the X and Y offset. | X=0 and Y=0 |
| OUTPUTFILE = <i>fname</i> | Specifies the output file name. | No default |
| OVERLAY< <i>index</i> > = [<i>filename</i>][<i>offsetx</i> . <i>offsety</i> , <i>offsetz</i>] [<i>basex</i> , <i>basesy</i> , <i>basesz</i>] [<i>scalex</i> , <i>scaley</i> , <i>scalez</i>] [<i>dpix</i> , <i>dpiy</i> , <i>dpiz</i>] | Specify a file to overlay. Any number of overlay files can be specified by making multiple entries with different indexes. | No default |
| OVERRIDE THICK LINES = <0 1> | Set to 1 , AutoVue will print as per pen settings. Set to 0 , AutoVue applies pen settings only to thin lines. Thick lines print with their original thickness. Note: Option only applies if pen settings are defined. | 1 |
| PAGES = <0 1 2> | Specifies which page(s) to convert for a multi-page input file. Pages are numbered starting at 1. 0 = All pages 1 = Page range 2 = Current page | 1 |
| REDLINEFILE = <i>filename</i> | Specifies a Markup file to overlay. | No default |
| ROTATION = <0 90 180 270> | Specifies the angle (in degrees) that the drawing is rotated. | 0 |
| SCALING = <FIT FAC- TOR> | Indicates the scaling factor for a drawing. | FIT |
| SCALINGFACTOR = X;Y | This indicates the scaling factor by specifying that X input units must correspond to Y output units. | X=1 and Y=1 |
| SKIPMODE = <AUTO AND OR SKIP> | Specifies how to delete raster lines when an image's size is reduced. SKIP: suitable for color images. AND: for monochrome images with a light background. OR: for images with a dark background. AUTO: causes AutoVue to determine the best mode based on the image's characteristics. | SKIP |
| TILESIZE X | Specifies the number of pixels in tile X. | 96 |
| TILESIZE Y | Specifies the number of pixels in tile Y. | 96 |
| TRUEEXTENTS = <i>X0,Y0;X1,Y1</i> | Specifies the true extents of the input file. Used by the conversion when CONVERTAREA = EXTENTS . If not specified, the conversion evaluates the true extents. | No default |
| UNITS = <PIXEL INCH MM> | Specifies the units to be used when printing or converting a file. | PIXEL |
| WIDTH = <i>width</i> | Specify the width in pixels. | 0 |
| XResolution YResolution | Specify the resolution of the output device - in this case the output bitmap. They are used when we have thick lines and we need to compute the output line thickness in pixels so it will match the desired line thickness when the bitmap is shown/printed in this resolution. These options will not affect files with no thickness. | Screen resolution is used if no value is specified |

[PCRS_BMP]

| Parameter | Description | Default |
|--|--|---------|
| STEPSPERINCHX = <i>num</i> STEPSPERINCHY = <i>num</i> | Specifies the conversion factor between device units and inches. | 72 |

[PCRS_EPS]

| Parameter | Description | Default |
|--|--|---------|
| STEPSPERINCHX = <i>num</i> STEPSPERINCHY = <i>num</i> | Specifies the conversion factor between device units and inches. | 720 |

[PCRS_PLC-1]

| Parameter | Description | Default |
|--|--|---------|
| STEPSPERINCHX = <i>num</i> STEPSPERINCHY = <i>num</i> | Specifies the conversion factor between device units and inches. | 75 |

[PCRS_PLC-2]

| Parameter | Description | Default |
|--|--|---------|
| STEPSPERINCHX = <i>num</i> STEPSPERINCHY = <i>num</i> | Specifies the conversion factor between device units and inches. | 150 |

[PCRS_PLC-3]

| Parameter | Description | Default |
|--|--|---------|
| STEPSPERINCHX = <i>num</i> STEPSPERINCHY = <i>num</i> | Specifies the conversion factor between device units and inches. | 300 |

[PCRS_PCX]

| Parameter | Description | Default |
|--|--|---------|
| STEPSPERINCHX = <i>num</i> STEPSPERINCHY = <i>num</i> | Specifies the conversion factor between device units and inches. | 300 |

[PCRS_RLC]

| Parameter | Description | Default |
|--|--|---------|
| STEPSPERINCHX = <i>num</i> STEPSPERINCHY = <i>num</i> | Specifies the conversion factor between device units and inches. | 200 |

[PCRS_TIF]

| Parameter | Description | Default |
|--|---|---------|
| STEPSPERINCHX = <i>num</i> STEPSPERINCHY = <i>num</i> | Specifies the conversion factor between device units and inches. | 200 |
| PREVIEW = <0 1> | Specifies if a preview image should be generated. If PREVIEW = 1 , then a 128x128 preview image is generated as the first page of the destination file. | 1 |
| TILING = <0 1> | If 1 , tiles the image; otherwise stripes the image. | 1 |
| NSTRIPS = <0 1> | If 1 , defines the number of stripes for an image. | 1 |
| TILESIZE X = <i>num</i> | Specifies the number of pixels in tile X. | |
| TILESIZE Y = <i>num</i> | Specifies the number of pixels in tile Y. | |

Pen Mapping Options

Configure the pen mapping options that apply to pen color, thickness and speed.

[Pen Mapping]

| Parameter | Description |
|---|---|
| PENS_starting_pen_number- ending_pen_number = [color, thickness, speed] | Specifies the numerical index for the pen color, thickness (in inches) and speed (in inches per second). The starting pen number must be a multiple of 8; the ending pen number must equal the starting pen number plus 7. Example: PENS16-23 = [16, 0.0100, 36] [17, 0.0100, 36] [18, 0.0100, 36] [19, 0.0100, 36] [20, 0.0100, 36] [21, 0.0100, 36] [22, 0.0100, 36] [23, 0.0100, 36] |

Disable Options

Configure the Disable options parameters to disable options such as **Browse**, **Next**, or being able to change print settings.

[Disable]

| Parameter | Description | Default |
|-----------------------------|--|---------|
| BatchPrint = <0 1> | If 1 , disables batch printing. | 0 |
| Browse = <0 1> | If 1 , disables the File menu's Browse , Next , and Previous options. | 0 |
| Launch = <0 1> | If 1 , disables the File menu's Launch option. | 0 |
| Markup = <0 1> | If 1 , disables Markup mode. | 0 |
| Mail = <0 1> | If 1 , disables the Mail option in View mode's File menu. If 1 , also disables the Notify option found in the Save and Save As dialog as in Markup mode. | 0 |
| Print = <0 1> | If 1 , disables printing. | 0 |
| PrintSettings = <0 1> | If 1 , disables changing listed print settings - margins, watermark, headers/footers, pen settings and stamps. | 0 |
| PrintToFile = <0 1> | If 1 ,disables option to print to file. | 0 |
| PrintMargins = <0 1> | If 1 , disables changing Print-Margins. | 0 |
| PrintHeadersFooters = <0 1> | If 1 , disables changing Print Headers and Footers. | 0 |
| PrintWatermarks = <0 1> | If 1 , disables changing the Print-Watermark. | 0 |
| PrintStamps = <0 1> | If 1 , disables changing the Print-Stamps. | 0 |
| PrintPenSettings = <0 1> | If 1 , disables changing the Print-Pen settings. | 0 |
| MarkupForceToBlack = <0 1> | If 1 , disables printing Markups in black when the print option AvPrintOptions ForceToBlack is set to 1. | 1 |
| Thumbnails = <0 1> | If 1 , disables the creation of Thumbnails. | 0 |
| Convert = <0 1> | If 1 , disables converting. | 0 |
| Clipboard = <0 1> | If 1 , disables copying to the clipboard. | 0 |
| SystemTray = <0 1> | If 1 , disables the AutoVue system tray icon. | 0 |

OEM Options

Configure the OEM options parameters to customize the title of the product.

[OEM]

| Parameter | Description | Default |
|---------------------|--|--------------------------------|
| PRODUCT = <Name> | Name of product to appear on title bar. | AutoVue |
| NICKNAME = <Name> | Short name of product to appear on title bar. | avwin |
| LONGNAME = <Name> | Long name of product to appear on title bar. | AutoVue, Desktop Version |
| VERSION = <Version> | Version number of product to appear in the Help menu's About dialog. | 19.3 |
| COPYRIGHT = <Name> | Copyright notice to appear in the Help menu's About dialog. | © Oracle 2008 |

Thumbnail Options

[ThumbNails]

| Parameter | Description | Default |
|----------------------|--|------------------------|
| ImageSize | Specify the size of the thumbnails image. | 64 (64 x 64 pixels) |
| Spacing = <i>num</i> | Specify the spacing between thumbnails. Value should be between 2 and 20 pixels. | 10 |
| Details = <0 1 2> | Specify the details of file display. 0 = None 1 = Partial 2 = Full | 1 |
| FOLDERPATH | Specify the folder where the thumbnails info is stored. | |
| FOLDERCONFIG | Specify the name of the configuration file for the thumbnail database. | folders.cfg |

Printing Options

Watermark

Set the Watermark parameters used to define how watermarks print on your documents.

[AvPrintWatermark]

| Parameter | Description | Default |
|------------------------|--|---------|
| Facename = <i>font</i> | Specify the font for the printed watermark text. | |

| Parameter | Description | Default |
|--|---|---------|
| Layout = 0 | Specify WaterMark Orientation: 0 - Diagonal 1 - Horizontal 2 - Vertical | |
| LogFont = - 21,0,0,0,400,0,0,0,3,2,1,34 | Specify the font size, height, style as per the windows logfont structure. | |
| Text = <i>watermark_text</i> | Specifies the text to be printed as a watermark. Carriage returns are indicated by \n. | |
| TextColor = 192,192,192 | Specifies WaterMark text color. | |

Stamp

Each stamp parameter is defined by a number according to the following options. Set the Stamp parameters used to define how a stamp will print with your documents.

[AvPrintStamp]

| Parameter | Description | Default |
|--|--|---------|
| NumberOfStamp = <i>total_number_of_stamps</i> | Specifies the total number of defined stamps. | 0 |
| Stamp_entry_Unit_ <i>n</i> = <0 1> | Specifies the units used to position stamps. If 1 , millimeters, otherwise, inches. The n represents which stamp is being configured. | 0 |
| Stamp_entry_Posx_ <i>n</i> | Indicates the position of X in the upper left corner of the stamp file. The n represents which stamp is being configured. | |
| Stamp_entry_Posy_ <i>n</i> | Indicates the position of Y in the upper left corner of the stamp file. The n represents which stamp is being configured. | |
| Stamp_entry_Sizex_ <i>n</i> | Specifies the width of the stamp image. The n represents which stamp is being configured. | |
| Stamp_entry_Sizey_ <i>n</i> | Specifies the height of the stamp image. The n represents which stamp is being configured. | |
| Stamp_entry_Filename_ <i>n</i> = fname | Specifies the name and path of the file printed as a stamp. | |

General Print Options

Set the parameters that define various aspects of how your documents print, including pen and pixel thickness, printing notes and orientation.

[AvPrintOptions]

| Parameter | Description | Default |
|----------------------------|---|---------|
| AdjustResolution = <0 1> | If 1 , scales the line pixel thickness by the ratio of the printer dpi to the screen dpi. This option produces the same line thickness as when printing with MicroStation. | 1 |
| Area = <0 1 2 3> | Specify page area to print: 0 - print file extents 1 - print displayed area 2 - print limits (only for AutoCAD files) 3 - print selected area | 0 |
| AutoOrientation = <0 1> | If 1 , Office format document pages are landscape oriented if the page width is greater than the page length. | 1 |
| Factor1 = <i>num</i> | When the INI option Scaling = 1 , Factor1 specifies the number of pixels for the scaling factor. | |
| Factor2 = <i>num</i> | When the INI option Scaling = 1 , Factor2 specifies the number of units to which the specified number of pixels are scaled. | |
| ForceToBlack = <0 1> | If 1 , the file is printed in black and white. If 0 , in color. | 0 |
| FromPage = <i>num</i> | Indicates the starting page number of the print range. | |
| OneNotePerPage = <0 1> | If 1 , one note per page is printed. | 0 |
| Orientation = <1 2> | If 1 , the file is printed as portrait. If 2 , landscape. | 1 |
| OverrideThickLines = <0 1> | Setting this option to 1 applies the pen-thickness settings when printing files of formats such as DGN and HPGL. | 0 |
| Pages = <i>total_num</i> | Indicates whether to print all the pages in a document, the current page, or a range of pages. 0 = All 1 = Current 2 = Range | 0 |
| PaperFormname = dmFormname | Specifies the name of the form of paper to use, such as "Letter" or "Legal". Retrieve the list of possible values for a particular printer from the print dialog. | |
| PaperSize = dmPaperSize | Refer to PRINT-OPTION PAPERSIZE. | |

| Parameter | Description | Default |
|-------------------------------------|---|---------|
| PenThicknessFname = <i>fname</i> | Specify the name of the pen mapping file. The pen mapping file contains a mapping of pen index to width. Note: The pen color mapping is format dependent. AutoCAD - The pen color mapping uses the AutoCAD color palette. You cannot modify the mapping. HPGL - The pen color mapping is defined in hpglcol.tbl and can be modified by the user. ME10 - The pen color mapping is defined in me10col.tbl and can be modified by the user. DWF - The pen color mapping is defined in dwfcol.tbl and can be modified by the user.. Calcomp PCI - The pen color mapping is defined in pcicol.tbl and can be modified by the user. Microstation drawings - The pen color mapping is shipped in a binary file, color.tbl. This mapping file can be modified using Microstation. The mapping files are located at <AutoVue Installation Directory> \bin. | |
| PenThicknessUnits = <0 1> | 0 = inches 1 = mms | 0 |
| PrinterName = PrintName | Name of the Printer device | |
| PrintNotes = <0 1> | If 1 , notes are printed. | 0 |
| PrintOnly1stPrPg = <0 1> | If 1 , limits output to one printer page when the scaling options selected causes a single page to span over several pages. | 0 |
| PrintToFile | If 1 , prints to file. | 0 |
| Scaling = <0 1 2> | Specifies the scaling factor: 0 = fit 1 = scaling factor 2 = scaling percentage | 0 |
| ScalingFactor = <i>percentage</i> | When the INI option Scaling = 2 , ScalingFactor specifies the percentage to which the image is scaled. | |
| SSNoPrintRowHeader = <0 1> | If 1 , row headers are not printed for spreadsheet formats. | 0 |
| SSNoPrintColHeader = <0 1> | If 1 , column headers are not printed for spreadsheet formats. | 0 |
| THICKNESSSCALEUNITS = <mm inch dot> | Specify the unit to use for the thickness scale. Option only applies to MicroStation files when ThicknessScale is set. | |
| ToPage = <i>num</i> | Indicates the ending page number of the print range. | |
| Units = <0 1 2> | Specifies the scaling factor units: 0 = pixels 1 = inches 2 = millimeters | 1 |
| WaterMarkOnTop = <0 1> | If 1 , prints the watermark on top of the drawing. | 0 |

Headers and Footers

Set the parameters for document headers and footers used to define how headers/footers print on your documents.

[AvPrintHeadersFooters]

| Parameter | Description | Default |
|----------------------------|--|--|
| Facename = <i>font</i> | Specifies the font used for the printed headers and footers. | |
| LeftHeader = <i>text</i> | Specifies the text for the left header. | |
| CenterHeader = <i>text</i> | Specifies the text for the center header. | Full path of the current document |
| RightHeader = <i>text</i> | Specifies the text for the right header. | |
| LeftFooter = <i>text</i> | Specifies the text for the left footer. | |
| CenterFooter = <i>text</i> | Specifies the text for the center footer. | |
| RightFooter = <i>text</i> | Specifies the text for the right footer. | Page X (current page number) of Y (total number of document pages) |

Printing Batch Pages

Set the parameters for printing specific pages for file formats defined by AutoVue.

[BatchPrintPages]

| Parameter | Description | Default |
|---------------------|---|---------|
| FORMAT1 = pagerange | Specify the format and the range of pages to print. Note that the format should be the same as identified by AutoVue. Example: Microsoft Excel 95 = 8-10 | 1 |

Margins

Set the Margin parameters used to define how margins print on your documents.

[AvPrintMargins]

| Parameter | Description | Default |
|-----------|---|---------|
| Units | Specify the units: 0 - inches 1 - millimeters | 0 |
| Left | Left margin. | 0.25 |
| Top | Top margin. | 0.25 |
| Right | Right margin. | 0.25 |
| Bottom | Bottom margin. | 0.25 |

| Parameter | Description | Default |
|-----------|--|---------|
| IgnoreMin | Ignore printer minimum margins. If 1 , the printer minimum margins are merged into the page margins specified by the user. e.g if printer min. margin is 0.25in and the margin set by the user is 1inch, the printout will be 1inch from the edge of the page if the option is true and 1.25 inches if it is false. | 0 |

Notes

Set the Note parameters used to define how notes print on your documents.

[AvPrintNotes]

| Parameter | Description | Default |
|----------------|---|---------|
| Units | Specify the units: 0 - inches 1 - millimeters | 0 |
| Left | Left margin. | 0.25 |
| Top | Top margin | 0.25 |
| Right | Right margin. | 0.25 |
| Bottom | Bottom margin. | 0.25 |
| OneNotePerPage | If 1 , one note per page is printed. | 0 |

Markup Measurement Options

It is possible to configure default units and the default symbol for measurements with AutoVue. Configure below options in **avwin.ini**.

Area Measurements

Configure default symbol and list of symbols for 2D/EDA Area measurements.

[UDE_AREA]

| Parameter | Description | Default |
|------------------------------|---|---------|
| DefaultSymbolArea | Specify the default symbol (in unicode) for 2D Markup mode area measurements. | |
| SymbolList = <i>alphanum</i> | Specifies a comma-separated list of symbols (in unicode) for area measurements. Example: u0398, u2221, u2248. | |

Arc Measurements

Configure default symbol and list of symbols for 2D/EDA/3D arc measurements.

[UDE_ARCD]

| Parameter | Description | Default |
|------------------------------|--|---------|
| DefaultSymbolArcDiameter | Specify the default symbol (in unicode) for diameter for arc measurements. | |
| DefaultSymbolArcRadius | Specify the default symbol (in unicode) for radius for arc measurements. | |
| SymbolList = <i>alphanum</i> | Specifies a comma-separated list of symbols (in unicode) for arc measurements. Example: u0398, u2221, u2248. | |

Angle Measurements

Configure default symbol and list of symbols for 2D/EDA/3D angle measurements.

[UDE_ANGD]

| Parameter | Description | Default |
|------------------------------|--|---------|
| DefaultSymbolAngle | Specify the default symbol (in unicode) for angle measurements. | |
| SymbolList = <i>alphanum</i> | Specifies a comma-separated list of symbols (in unicode) for angle measurements. Example: u0398, u2221, u2248. | |

Distance Measurements

Configure default symbol and list of symbols for 2D/EDA distance and cumulative distance measurements.

[UDE_DIS] or [UDE_CDIS]

| Parameter | Description | Default |
|------------------------------|---|---------|
| DefaultSymbolDist | Specify the default symbol (in unicode) for distance measurements. | |
| SymbolList = <i>alphanum</i> | Specifies a comma-separated list of symbols (in unicode) for distance measurements. Example: u0398, u2221, u2248. | |

3D Distance Measurements

Configure default symbol and list of symbols for 3D distance measurements.

[UDE_LDIM]

| Parameter | Description | Default |
|------------------------------|--|------------|
| DefaultSymbolDist | Specify the default symbol (in unicode) for diameter for 3D distance measurements. | |
| DistanceUnits | Specify the default unit for 3D distance measurements. | 1 (inches) |
| SymbolList = <i>alphanum</i> | Specifies a comma-separated list of symbols (in unicode) for 3D distance measurements. Example: u0398, u2221, u2248. | |

Calibrate Measurements

Specify the default units for measurements.

[Calibrate]

| Parameter | Description | Default |
|---------------|---|----------------|
| AreaUnits | Specify the default unit for area measurements. | 1 (inches sq.) |
| DistanceUnits | Specify the default unit for distance measurements. | 1 (inches) |

The following table lists units and the integer value that represents the unit in the INI file:

| Unit | value |
|-------------|-------|
| pixels | 0 |
| inches | 1 |
| feet | 2 |
| yards | 3 |
| miles | 4 |
| millimeters | 5 |
| centimeters | 6 |
| meters | 7 |
| kilometers | 8 |
| twips | 9 |
| microns | 10 |
| mils | 11 |
| mils/10 | 12 |
| microinches | 13 |

Watermark in View Mode

With AutoVue it is possible to display watermarks in View mode.

[WATERMARK]

| Parameter | Description | Default |
|-----------|--|---------|
| TEXT | Specify watermark text. Example , TEXT=AutoVue 19.3. | |
| FONTNAME | Specify font to be used for the watermark. Example , FONTNAME=Times New Roman. | |
| FONTSTYLE | Specify the font style for the watermark. 0 – Plain 1 – Bold 2 – Italic 3 – Bold and Italic Example , FONTSTYLE=3. | |
| FONTSIZE | Specify font size. Example , FONTSIZE=24. | |
| XFACTOR | Specify watermark x position on the applet window. Value should range from 0 to 1. Example , XFACTOR=0.05. | |
| YFACTOR | Specify watermark y position on the applet window. Value should range from 0 to 1. Example , YFACTOR=0.90. | |
| COLOR | Specify a valid color value. Example , COLOR=0xFF. | |
| ALPHA | Specify the transparency level of the text. Value can range from 0x00 (not visible) to 0xFF (opaque). Example , ALPHA=0x80. | |

Note: To disable the watermark you must either remove the whole [WATERMARK] section, remove the TEXT option, or assign an empty string to the TEXT option.

Script and DDE Commands

AutoVue registers itself as a Dynamic Data Exchange (DDE) server under the name **AVWINSERVER**. Commands should be sent using the topic **SYSTEM**. AutoVue can be launched from the command line with the **/s scriptfilename** option to automatically execute the specified script on startup. Below is a full listing and description of the available scripting commands. The scriptfile itself is an ASCII text file, containing scripting commands.

The pound (#) character is used to add comments to the scriptfile. Any text after the pound character to the end of the line is ignored. Also, the backslash (\) character at the end of a line can be used to continue a long line to the next line.

Script Syntax Diagrams

The description of script commands follows certain conventions which may vary from other parts of the Administrator Guide:

| Command | Description |
|--------------------|---|
| <angular brackets> | Indicates required entries but are not to be included in the entered information. |
| {curly braces} | Indicates optional entries but are not to be included in the entered information. |
| [square brackets] | Required syntactical elements. |
| (parentheses) | Required syntactical elements. |
| bold | Introduces a literal expression which must be entered exactly as shown. |
| <i>italics</i> | Indicates a variable which must be replaced by information you provide |
| | Symbol indicates an either-or type of choice. |
| ... | Ellipsis indicates that information may be repeated. |

Window Commands

These are the standard Windows messages. They apply to the frame window as a whole.

Message

WINDOW HIDE

WINDOW SHOW

WINDOW POSITION x y width height

WINDOW RESTORE

WINDOW MINIMIZE

WINDOW MAXIMIZE

WINDOW TILE

WINDOW CASCADE

Child Commands

These are the standard Windows MDI child commands.

Command

CHILD CLOSE

CHILD HIDE

CHILD MINIMIZE

CHILD MAXIMIZE

CHILD NEW

CHILD POSITION x y width height

CHILD RESTORE

CHILD SELECT n - Activates the nth child window -- where n is a 1-indexed number
(not zero-indexed).

CHILD SHOW

CHILD SHOWONE - If no child exists, creates a new one.

General Commands

| Command | Description |
|--|---|
| BREAK = <ON OFF> | Controls interruptibility. When set to ON , interruptible. |
| CHDIR <dirname> | Changes the working directory. |
| PAUSE <nn> | Pauses for nn milliseconds. |
| QUIT | Terminates the application. |
| VIEW <filename> | Open file <filename>. |
| WRITEPROFILE "section" "entry" "value" | Writes the entry/value under the specified section into AutoVue's INI file. |

File Commands

| Command | Description |
|----------------------------------|---|
| BROWSE | Activates the Browse dialog. |
| COMPARE <filename> | Compares the file in the active window with “filename”. |
| FILE OPEN {filename} | Same as VIEW , except that if {filename} is not supplied it displays the File Open dialog. |
| FILE-NEXT | Goes to the next file. |
| FILE-PREVIOUS | Goes to the previous file. |
| OVERLAY <filename> {<x, y> {sf}} | Overlays the specified file over the current file (base drawing). The point (x, y) is the offset for the overlaid file expressed in base drawing units. The origin of raster images is in the top left, and for vector images it is in the bottom left. It (sf) is the scaling factor for the overlay. Default values of (0.0, 0.0) and 1.0 are used for the base point and scaling factor. |
| PROPERTIES | Displays the Properties dialog. |
| SEARCH = <string to search for> | Finds and highlights the search string. |

Export BOM Commands

| Command | Description |
|----------------------|--|
| EXPORT3DBOM FileName | Specify the output file into which to export 3D BOM results. |

EXPORTEDABOM Filename ["format=XXX|scope=YY|attributes=Aaaaa,Bbbbb,Ccccc"]

Filename: Specify the file name of the exported BOM.

format: Specify whether the export file format is either **CVS** or **PDX**. Default value is **CVS** if nothing is specified.

scope: Specify either **CP** (current page) or **ED** (entire design). Default is **CP** if nothing is specified.

attributes: Specify the attribute names of Component Instances. Separate attribute names by commas. If no attributes are specified, the default BOM attribute names are used. If there are no default BOM attribute names, the command does nothing.

Note: Attributes are case sensitive.

Note: The vertical line symbol used in the second parameter ("|") is an actual symbol needed and used as a separator, not the logical symbol used to specify that only one of the parameters can be used.

Printing Commands

| Command | Description |
|----------------------------------|--|
| PRINT-OPTION <i>option=value</i> | Specify the print option and value. |
| PRINT | Using the current print options, prints the file in the active window. |

Print Options

| Command | Description |
|---|--|
| AREA = <DISPLAY EXTENTS> | Specify print area (extents or display). |
| CF = <i>string</i> | Center footer text. |
| CH = <i>string</i> | Center header text. |
| LF = <i>string</i> | Left footer text. |
| LH = <i>string</i> | Left header text. |
| RH = <i>string</i> | Right header text. |
| RF = <i>string</i> | Right footer text. |
| COPIES = <number of copies> | Specify number of copies. |
| PAGERANGE = <from page nnn-to page mmm> | Specify page range. |
| PAGERANGE CURRENT | Prints current page. |
| SCALE = <FIT <i>nn.nn</i> / <i>n%</i> > | Set <i>n%</i> to the scale value. Example: PRINT-OPTION SCALE = 60% Set <i>nn.nn</i> to a scale factor. |
| UNITS = <INCH MM PIXEL> | Specify units. |
| WATERMARK "watermark-text" | Specify watermarking text. |
| FORCETOBLACK = <0 1> | Specify if you want to force all colors to black |
| ORIENTATION [L P] | Specify orientation. Set L for landscape or P for portrait. |

| | |
|-----------------------------|--|
| PRINTDRIVER "drivername" | Specify the print device to use, e.g. "Epson Stylus Color 750." |
| PENMAPFILE "penmapfilename" | Specify the penmapping file to use. |
| PAPERSIZE "nPaperSize" | <p>Specify the paper size, where nPaperSize is a value from the nPaperSize column in the following table. The specified paper size specified must be supported by your printer.</p> <p>Note: For updated paper size values, refer to <i>wingdi.h</i> that is part of the MSDN distribution.</p> |

| Name | nPaperSize | Description |
|-------------------------|------------|---------------------------|
| DMPAPER_LETTER | 1 | Letter 8 ½ x 11 in |
| DMPAPER_LETTERSMA LL | 2 | Letter Small 8 ½ x 11 in |
| DMPAPER_TABLOID | 3 | Tabloid 11 x 17 in |
| DMPAPER_LEDGER | 4 | Ledger 17 x 11 in |
| DMPAPER_LEGAL | 5 | Legal 8 ½ x 14 in |
| DMPAPER_STATEMENT | 6 | Statement 5 ½ x 8 ½ in |
| DMPAPER_EXECUTIVE | 7 | Executive 7 ¼ x 10 ½ in |
| DMPAPER_A3 | 8 | A3 297 x 420 mm |
| DMPAPER_A4 | 9 | A4 210 x 297 mm |
| DMPAPER_A4SMALL | 10 | A4 Small 210 x 297 mm |
| DMPAPER_A5 | 11 | A5 148 x 210 mm |
| DMPAPER_B4 | 12 | B4 (JIS) 250 x 354 |
| DMPAPER_B5 | 13 | B5 (JIS) 182 X 257 |
| DMPAPER_FOLIO | 14 | Folio 8 ½ x 13 |
| DMPAPER_QUARTO | 15 | Quarto 215 x 275 mm |
| DMPAPER_10X14 | 16 | 10 x 14 in |
| DMPAPER_11X17 | 17 | 11 x 17 in |
| DMPAPER_NOTE | 18 | Note 8 ½ x 11 in |
| DMPAPER_ENV_9 | 19 | Envelope #9 3 7/8 x 8 7/8 |
| DMPAPER_ENV_10 | 20 | Envelope #10 4 1/8 x 9 ½ |
| DMPAPER_ENV_11 | 21 | Envelope #11 4 ½ x 10 3/8 |
| DMPAPER_ENV_12 | 22 | Envelope #12 4 276 x 11 |
| DMPAPER_ENV_14 | 23 | Envelope #14 5 x 11 ½ |
| DMPAPER_CSHEET | 24 | C size sheet |
| DMPAPER_DSHEET | 25 | D size sheet |
| DMPAPER_ESHEET | 26 | E size sheet |
| DMPAPER_ENV_DL | 27 | Envelope DL 110 x 220 mm |
| DMPAPER_ENV_C5 | 28 | Envelope C5 162 x 229 mm |
| DMPAPER_ENV_C3 | 29 | Envelope C3 324 x 458 mm |
| DMPAPER_ENV_C4 | 30 | Envelope C4 229 x 324 mm |

| | | |
|---------------------------------|----|-------------------------------------|
| DMPAPER_ENV_C6 | 31 | Envelope C6 114 x 162 mm |
| DMPAPER_ENV_C65 | 32 | Envelope C65 114 x 229 mm |
| DMPAPER_ENV_B4 | 33 | Envelope B4 250 X 353 mm |
| DMPAPER_ENV_B5 | 34 | Envelope B5 176 x 250 mm |
| DMPAPER_ENV_B6 | 35 | Envelope B6 176 x 125 mm |
| DMPAPER_ENV_ITALY | 36 | Envelope 110 x 230 mm |
| DMPAPER_ENV_MONARCH | 37 | Envelope Monarch 3.875 x 7.5 in |
| DMPAPER_ENV_PERSONAL | 38 | 6 ¾ Envelope 3 5/8 x 6 ½ in |
| DMPAPER_ENV_FANFOLD_US | 39 | US Std Fanfold 8½ x 12 in |
| DMPAPER_ENV_FANFOLD_STD_GERMAN | 40 | German Std Fanfold 8½ x 12 in |
| DMPAPER_ENV_FANFOLD_LGL_GERMAN | 41 | German Legal Fanfold 8½ x 13 |
| DMPAPER_ISO_B4 | 42 | B4 (ISO) 250 x 353 mm |
| DMPAPER_JAPANESE_POSTCARD | 43 | Japanese Postcard 100 x 148 mm |
| DMPAPER_9X11 | 44 | 9 x 11 in |
| DMPAPER_10X11 | 45 | 10 x 11 in |
| DMPAPER_15X11 | 46 | 15 x 11 in |
| DMPAPER_ENV_INVITE | 47 | Envelope Invite 220 x 220 mm |
| DMPAPER_RESERVED_48 | 48 | RESERVED--DO NOT USE |
| DMPAPER_RESERVED_49 | 49 | RESERVED--DO NOT USE |
| DMPAPER_LETTER_EXTRA | 50 | Letter Extra 9 ½ x 12 in |
| DMPAPER_LEGAL_EXTRA | 51 | Legal Extra 9 ½ x 15 in |
| DMPAPER_TABLOID_EXTRA | 52 | Tabloid Extra 11.69 x 18 in |
| DMPAPER_A4_EXTRA | 53 | A4 Extra 9.27 x 1.69 in |
| DMPAPER_LETTER_TRANSVERSE | 54 | Letter Transverse 8 ½ x 11 in |
| DMPAPER_A4_TRANSVERSE | 55 | A4 Transverse 210 x 297 mm |
| DMPAPER_LETTER_EXTRA_TRANSVERSE | 56 | Letter Extra Transverse 9 ½ x 12 in |

| | | |
|-----------------------------------|----|---------------------------------------|
| DMPAPER_A_PLUS | 57 | SuperA/SuperA/A4 227 x 356 mm |
| DMPAPER_B_PLUS | 58 | SuperB/SuperB/A3 305 x 487 mm |
| DMPAPER_LETTER_PLU S | 59 | Letter Plus 8.5 x 12.69 in |
| DMPAPER_A4_PLUS | 60 | A4 Plus 210 x 330 mm |
| DMPAPER_A5_TRANSV ERSE | 61 | A5 Transverse 148 x 210 mm |
| DMPAPER_B5_TRANSV ERSE | 62 | B5 (JIS) Transverse 182 x 257 mm |
| DMPAPER_A3_EXTRA | 63 | A3 Extra 322 x 445 mm |
| DMPAPER_A5_EXTRA | 64 | A5 Extra 174 x 235 mm |
| DMPAPER_B5_EXTRA | 65 | B5 (ISO) Extra 201 x 276 mm |
| DMPAPER_A2 | 66 | A2 420 x 594 mm |
| DMPAPER_A3_TRANSV ERSE | 67 | A3 Transverse 297 x 420 mm |
| DMPAPER_A3_EXTRA_ TRANSVERSE | 68 | A3 Extra Transverse 322 x 445 mm |
| DMPAPER_DBL_JAPAN ESE_POSTCARD | 69 | Japanese Double Postcard 200 x 148 mm |
| DMPAPER_A6 | 70 | A6 105 x 148 mm |
| DMPAPER_JENV_KAKU 2 | 71 | Japanese Envelope Kaku #2 |
| DMPAPER_JENV_KAKU 3 | 72 | Japanese Envelope Kaku #3 |
| DMPAPER_JENV_CHOU 3 | 73 | Japanese Envelope Chou #3 |
| DMPAPER_JENV_CHOU 4 | 74 | Japanese Envelope Chou #4 |
| DMPAPER_LETTER_RO TATED | 75 | Letter Rotated 11 x 8 1/2 11 in |
| DMPAPER_A3_ROTATE D | 76 | A3 Rotated 420 x 297 mm |
| DMPAPER_A4_ROTATE D | 77 | A4 Rotated 297 x 210 mm |
| DMPAPER_A5_ROTATE D | 78 | A5 Rotated 210 x 148 mm |
| DMPAPER_B4_JIS_ROTA TED | 79 | B4 (JIS) Rotated 364 x 257 mm |
| DMPAPER_B5_JIS_ROTA TED | 80 | B5 (JIS) Rotated 257 x 182 mm |

| | | |
|---------------------------------------|-----|---|
| DMPAPER_JAPANESE_POSTCARD_ROTATED | 81 | Japanese Postcard Rotated 148 x 100 mm |
| DMPAPER_DBL_JAPANESE_POSTCARD_ROTATED | 82 | Double Japanese Postcard Rotated 148 x 200 mm |
| DMPAPER_A6_ROTATED | 83 | A6 Rotated 148 x 105 mm |
| DMPAPER_JENV_KAKU2_ROTATED | 84 | Japanese Envelope Kaku #2 Rotated |
| DMPAPER_JENV_KAKU3_ROTATED | 85 | Japanese Envelope Kaku #3 Rotated |
| DMPAPER_JENV_CHOU3_ROTATED | 86 | Japanese Envelope Chou #3 Rotated |
| DMPAPER_JENV_CHOU4_ROTATED | 87 | Japanese Envelope Chou #4 Rotated |
| DMPAPER_B6_JIS | 88 | B6 (JIS) 128 x 182 mm |
| DMPAPER_B6_JIS_ROTATED | 89 | B6 (JIS) Rotated 182 x 128 mm |
| DMPAPER_12X11 | 90 | 12 x 11 in |
| DMPAPER_JENV_YOU4 | 91 | Japanese Envelope You #4 |
| DMPAPER_JENV_YOU4_ROTATED | 92 | Japanese Envelope You #4 Rotated |
| DMPAPER_P16K | 93 | PRC 16K 146 x 215 mm |
| DMPAPER_P32K | 94 | PRC 32K 97 x 151 mm |
| DMPAPER_P32KBIG | 95 | PRC 32K(Big) 97 x 151 mm |
| DMPAPER_PENV_1 | 96 | PRC Envelope #1 102 x 165 mm |
| DMPAPER_PENV_2 | 97 | PRC Envelope #2 102 x 176 mm |
| DMPAPER_PENV_3 | 98 | PRC Envelope #3 125 x 176 mm |
| DMPAPER_PENV_4 | 99 | PRC Envelope #4 110 x 208 mm |
| DMPAPER_PENV_5 | 100 | PRC Envelope #5 110 x 220 mm |
| DMPAPER_PENV_6 | 101 | PRC Envelope #6 120 x 230 mm |
| DMPAPER_PENV_7 | 102 | PRC Envelope #7 160 x 230 mm |
| DMPAPER_PENV_8 | 103 | PRC Envelope #8 120 x 309 mm |
| DMPAPER_PENV_9 | 104 | PRC Envelope #9 229 x 324 mm |
| DMPAPER_PENV_10 | 105 | PRC Envelope #10 324 x 458 mm |
| DMPAPER_P16K_ROTATED | 106 | PRC 16K Rotated |
| DMPAPER_P32K_ROTATED | 107 | PRC 32K Rotated |

| | | |
|-------------------------|-----|---------------------------------------|
| DMPAPER_P32KBIG_ROTATED | 108 | PRC 32K(Big) Rotated |
| DMPAPER_PENV_1_ROTATED | 109 | PRC Envelope #1 Rotated 165 x 102 mm |
| DMPAPER_PENV_2_ROTATED | 110 | PRC Envelope #2 Rotated 176 x 102 mm |
| DMPAPER_PENV_3_ROTATED | 111 | PRC Envelope #3 Rotated 176 x 125 mm |
| DMPAPER_PENV_4_ROTATED | 112 | PRC Envelope #4 Rotated 208 x 110 mm |
| DMPAPER_PENV_5_ROTATED | 113 | PRC Envelope #5 Rotated 220 x 110 mm |
| DMPAPER_PENV_6_ROTATED | 114 | PRC Envelope #6 Rotated 230 x 120 mm |
| DMPAPER_PENV_7_ROTATED | 115 | PRC Envelope #7 Rotated 230 x 160 mm |
| DMPAPER_PENV_8_ROTATED | 116 | PRC Envelope #8 Rotated 309 x 120 mm |
| DMPAPER_PENV_9_ROTATED | 117 | PRC Envelope #9 Rotated 324 x 229 mm |
| DMPAPER_PENV_10_ROTATED | 118 | PRC Envelope #10 Rotated 458 x 324 mm |

PRINT-OPTION PAPERTRAY
"nPaperTray"

Specify the paper tray, where **nPaperTray** is a value from the **nPaperTray** column in the following table. The specified paper tray must be supported by your printer.

| Name | nPaperTray |
|-----------------|------------|
| DMBIN_UPPER | 1 |
| DMBIN_ONLYONE | 1 |
| DMBIN_LOWER | 2 |
| DMBIN_MIDDLE | 3 |
| DMBIN_MANUAL | 4 |
| DMBIN_ENVELOPE | 5 |
| DMBIN_ENVMANUAL | 6 |
| DMBIN_AUTO | 7 |
| DMBIN_TRACTOR | 8 |
| DMBIN_SMALLFMT | 9 |

| | |
|---------------------|--|
| DMBIN_LARGEFORMAT | 10 |
| DMBIN_LARGECAPACITY | 11 |
| DMBIN_CASSETTE | 14 |
| DMBIN_FORMSOURCE | 15 |
| DMBIN_LAST | DMBIN_FORMSOURCE |
| DMBIN_USER | 256 /* device-specific bins start here |

Conversion Commands

| Command | Description |
|--------------------------------------|---|
| CONVERT | Converts the file in the active window using the current convert options. |
| CONVERT-OPTION <i>option = value</i> | Specify the convert option and value. |

Convert Options

| Command | Description |
|----------------------------|--|
| AREA = <DISPLAY EXTENTS> | Specify convert area (display or extents). |
| SCALE = <0 1> | Converts the output file to the set scale. Set to 1 to enable scaling. Set to 0 to disable scaling. Default is 0. |
| SCALINGFACTOR = <value> | Specify a range from 0% to 100% . Default is 100%. Affects the scaling size when INI option SCALE = 1 (see previous option). |
| FORMAT = <i>format</i> | Where <i>format</i> specifies an output driver. Available output drivers: <ul style="list-style-type: none"> • PCRS_BMP: windows bitmap • PCRS_EPS: Encapsulated PostScript (raster) • PCRS_GP4: CALG Group IV Type 1 • PCRS_PCL: HP/PCL output • PCRS_PCX: Paintbrush PCX • PCRS_RLC: RLC format • PCRS_TIF: TIFF format • PC3D_STL: 3D format to STL |
| SUBFORMAT = <i>n</i> | Some of the output drivers support several subformats. The value <i>n</i> specifies which subformat to use. |
| PCRS_PCL | HP/PCL output. Subformat: 0 - 75 DPI 1 - 150 DPI 2 - 300 DPI |
| PCRS_TIF | TIFF format. Subformat: 0 - Uncompressed 1 - Packbits compressed 2 - Group III compressed 3 - Group IV compressed |
| OUTPUT = <i>filename</i> | Specifies output filename. If not specified, the default name is used. |

| | |
|----------------------------|--|
| PAGESIZE = <i>pagesize</i> | <p>For certain formats (e.g. plotter formats) the output size is specified as a page size. In this case, page size can be:</p> <p>A B C D E A4 A3 A2 A1 A0</p> |
| SIZE = <i>width height</i> | <p>Specifies the size of the converted output.</p> <p>See <i>CONVERT OPTION PAGESIZE</i></p> |
| STEPSPERINCH = <i>n</i> | <p>Certain formats (e.g. plotter formats) allow a resolution factor to be set.</p> |
| UNITS = <INCH MM> | <p>Specifies the output units. This option applies only for vector output formats. Raster output units are always assumed to be in pixels.</p> |

View Commands

| Command | Description |
|---|---|
| ANTI-ALIAS <ON OFF> | Controls the anti-aliasing (scale-to-grey) for monochrome raster images. |
| BLOCK { <i>blockname</i> } | Displays the specified block If no blockname is given, the Blocks dialog appears. |
| CONTRAST [LIGHT NORMAL DARK DARKEST] | Controls the contrast for monochrome raster images. The default setting is NORMAL. |
| FLIP <NONE HORZ VERT BOTH> | Flips the image as specified. |
| LAYER (ALL) <ON OFF> | Turns all layers either on or off. |
| LAYER < <i>layername1</i> { ... } (ON OFF)> | Turns the specified layers on or off. |
| NAMEDVIEW { <i>viewname</i> } | Sets the view to the specified named view. If no viewname is given, the Named Views dialog appears. |
| PAGE n | Goes to the specified page. |
| PAGE-NEXT | Goes to the next page. |
| PAGE-PREV | Goes to the previous page. |
| PAN < <i>fromx fromy tox toy</i> > | Pans the image from (fromx, fromy) to (tox, toy), in World Coordinates. |
| PAN < <i>x-diff y-diff</i> > | Pans the image by the specified amount, in World Coordinates. |
| REFRESH | Redraws the image. |
| ROTATE <0 90 180 270> | Rotates the image by the specified amount. |
| SHELL { <i>command</i> } | Executes the specified command. If no command is given, starts a command shell. |
| TILEMODE <AUTO OFF ON> | This option only applies to AutoCAD drawings. Sets the tilemode to the value in the drawing file, or to Paperspace or Modelspace, respectively. |
| VPOINT <i>x y z</i> | Changes the viewpoint of a 3D image. |
| ZOOM <i>minx miny maxx maxy</i> | Zooms into the box specified by (minx, miny) (maxx, maxy). The values are given in World Coordinates. This command will set view extents without considering file scale and offset. |
| ZOOM <i>percent</i> | Zooms by the specified percentage. |
| ZOOM-FIT | Fits the image to the window. |
| ZOOM-FITHORZ | Fits the image horizontally. |
| ZOOM-FITVERT | Fits the image vertically. |
| ZOOM-FULLRES | This option only applies if the image being viewed is a raster file. Displays the image at full resolution. |
| ZOOM-INWORLD <i>minx miny maxx maxy</i> | Draw a zoom box using world (drawing) coordinates. |

Markup Commands

| Command | Description |
|---|--|
| MARKUP { <i>ID</i> } | Selects a Markup file to display over the current file. If no ID is given, displays the Select-Markup dialog. |
| MARKUPQUIT | Quits Markup mode. |
| MARKUPSETACTIVE <Extension of Markup to active> | Specify extension of the Markup to be made active. Example: 001, 002 |

Option Commands

| Command | Description |
|---|---|
| OPTION MENU <ON OFF> | Indicates whether the top menu displays. |
| OPTION MENU DELETE < <i>N</i> > | Deletes the Nth menu item. The menus are numbered from 0 to nMenus-1 |
| OPTION MENUITEM DELETE < <i>N M</i> > | Deletes, disables or enables the Mth menu item in the Nth menu. Both the menus and menu items are numbered, starting at zero. |
| OPTION TOOLBAR <ON OFF> | Indicates whether the top toolbar displays. |
| OPTION STATUSBAR <ON OFF> | Indicates whether the status-bar area displays. |
| OPTION TEXT <ON OFF> | Indicates whether text displays. |
| OPTION LINSTYLES <ON OFF> | Indicates whether the linestyles display. |
| OPTION DIMENSIONS <ON OFF> | Indicates whether dimensions display. |
| OPTION FILLING <ON OFF> | Indicates whether filling displays. |
| OPTION XREF <ON OFF> | Indicates whether external references display. |
| OPTION RASTERDISPLAY <FULL FIT> | Sets the default for the initial display of raster files (at full resolution or fit to the window). |
| OPTION BASEFONT <i>fontname</i> {normal bold italic bold-italic} <i>pointsize</i> | Sets the default base font for text-and number-based files. This font is used if actual font is not specified in the file itself. |
| OPTION BGCOLOR { <i>red green blue</i> } | Sets the background color for the view window. Specify the color as an RGB triplet, each index ranging from 0 to 255. |

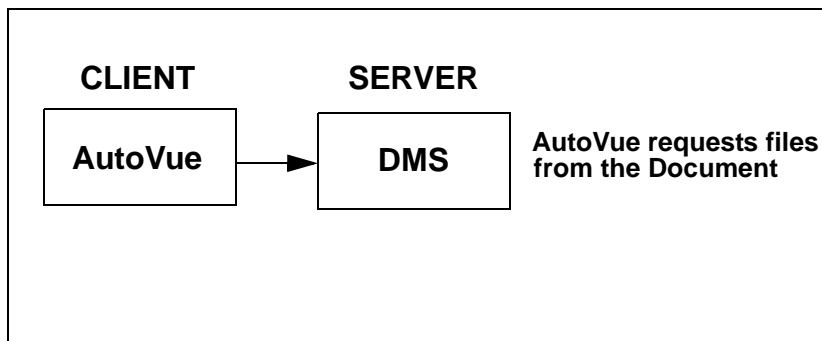
Integration

Extend the functionality of your existing applications by integrating with AutoVue.

The added practicality will result in savings for both you and your organization in terms of time and money. To learn more, continue reading the contents of this chapter.

Defining Integration

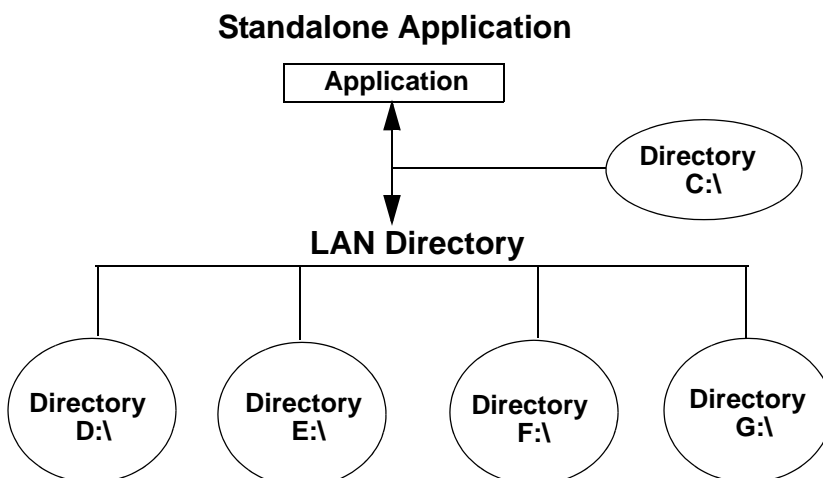
Integration is a way of connecting an existing application – the host/server – with applications that have unique areas of expertise thereby enhancing the host application by expanding its abilities.



There are two main benefits of integration:

- **Interoperability:** AutoVue's technology enables you to share data and resources from a vast array of applications since AutoVue displays more than 450 different file formats.
- **A consistent user interface:** The existing software application's graphic interface is always present other than when the AutoVue graphic interface appears to provide the additional viewing capabilities. This minimizes retraining requirements since you only have to learn how to use the new abilities that have been merged with your existing software.

Integration is achieved via scripting, Object Linking and Embedding (OLE) automation, Dynamic Data Exchange (DDE) and Dynamic-Link Library (DLL). In addition, there are interfaces that can be used through Visual Basic and ActiveX technologies.



AutoVue currently allows you to view over 450 file formats including engineering, graphics and desktop file formats. In addition, you can mark up these files to communicate your ideas and observations. Often, to mark up a file it is necessary to recreate a file if you don't have a version of the authoring application. With AutoVue you can immediately mark up the document while preserving the original document since Markups are stored in their own file that is tightly linked to the original document. Another benefit is that external references are clearly visible on the active drawing and they are accessible just as with the original application.

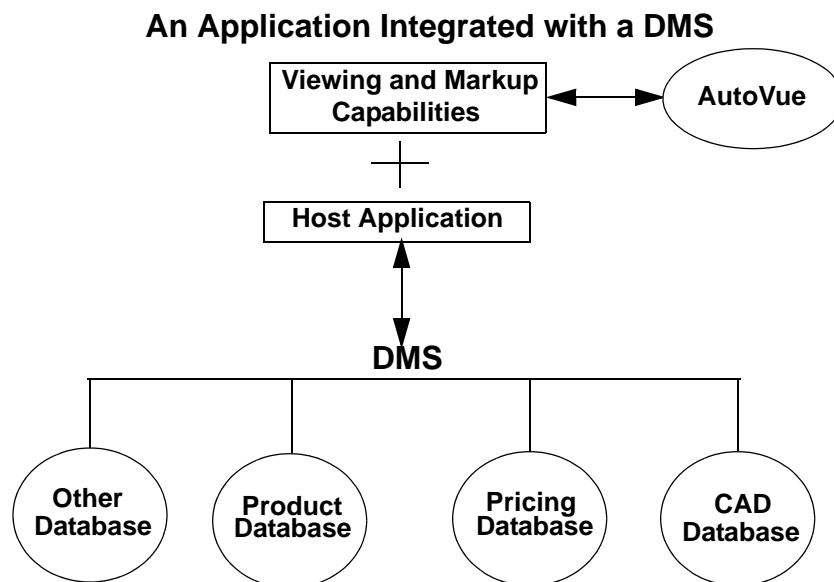
Integrating with AutoVue

There are three ways to integrate AutoVue with various host applications:

- Using Oracle's out-of-the-box integrations available for most major document management systems. These are marketed under the name of VueLink.
- Performing a custom integration. Oracle's products are developed with an open API allowing for ease of custom integration with various host systems.
- Third party value-added integrations are available in several cases between some of the more popular document management systems on the market.

AutoVue integrates with all types of host systems including the following:

- DM (Document Management)
- EDM (Electronic Data Management)
- PDM (Product Data Management)
- TDM (Technical Data Management).
- ASPs (Application Service Providers) and corporate portals
- ERP (Enterprise Resource Planning)
- CMMS (Computerized Maintenance Management Systems)



When AutoVue is integrated with a DMS, the documents and their associated Markup files are easily accessible for all individuals who have access to the DMS since files are registered in the DMS repository and are accessed through AutoVue's **File** menu. Markup files are returned to the DMS repository with AutoVue's **Save As** option. AutoVue is designed to work under established workflow procedures and its integration with DM, EDM and PDM systems supports access controls and different user privileges. Advanced features such as Master Markups and Consolidated Markups are also provided. Furthermore, AutoVue's Web plug-in enables access to literally thousands of sources of data.

- **Quick Viewing:** AutoVue is integrated with Windows Explorer to allow you to view numerous other file formats than would otherwise be available to you as a Windows user.

There are two types of integration that are immediately available after installing AutoVue on your system: DDE Integration and DLL Integration.

DDE Integration

DDE is a popular mechanism that allows applications to communicate with each other. Using DDE, the same commands that are available through scripting can be transmitted so that AutoVue can be dynamically controlled at runtime by an external application. AutoVue registers itself as a DDE server under the name “**AVWINSERVER.**” Commands should be sent using the topic “**SYSTEM**”.

A sample DDE C++ client application is provided in the AutoVue installation directory under the subdirectory `integrat\dde`.

The DDE Commands should be sent using the “**XTYP_EXECUTE**” method and data sent as text (**CF_TEXT**). The set of commands available is identical in syntax and semantics to those available for scripting and OLE Automation. For a full listing and description of the available scripting commands, see [AutoVue Command Summary](#).

DLL Integration

AutoVue’s API provides a DLL wrapper around its DDE interface. This allows programming languages that do not support DDE but are able to call exported Windows DLL functions to access AutoVue’s DDE functionality. Programmers who do not want to code low-level DDE client/server code can also use the DLL wrapper—the wrapper library handles the details.

The DLL wrapper comprises:

- **avlink.dll:** The wrapper DLL
- **avlink.lib:** The Microsoft-compatible import library for `avlink.dll`
- **avlink.h:** A C/C++ header file for the DLL entry points

The following entry points are defined:

| Entry Point | Description |
|--|--|
| <code>#define PCALLBACK_far _pascal __export __loadds</code> | |
| <code>BOOL PCALLBACK AVLINK_Start(LPRECT rcPos)</code> | Starts up AutoVue, positioning AutoVue in the rectangle specified by <code>rcPos</code> . |
| <code>BOOL PCALLBACK AVLINK_End(void)</code> | Terminates AutoVue. |
| <code>BOOL PCALLBACK AVLINK_TransmitCommand(LPCSTR szCommand)</code> | Sends the command, <code>szCommand</code> , to AutoVue. The same set of commands used in DDE can be used here. |
| <code>BOOL PCALLBACK AVLINK_Activate(int nChild)</code> | Activates the <i>n</i> th child window of AutoVue. Similar to the <code>CHILD AVTIVATE</code> command. |
| <code>BOOL PCALLBACK AVLINK_Compare(LPCSTR szFileName)</code> | Initiates a file comparison with the specified file. Similar to the <code>FILE COMPARE</code> command. |
| <code>BOOL PCALLBACK AVLINK_Markup(LPCSTR szMarkupID)</code> | Initates Markup mode. Similar to the <code>MARKUP</code> command. |
| <code>BOOL PCALLBACK AVLINK_Overlay(LPCSTR szMarkupID)</code> | Initates Markup mode. Similar to the <code>OVERLAY</code> command. |
| <code>BOOL PCALLBACK AVLINK_Properties(void)</code> | Displays the File Properties dialog. |

| Entry Point | Description |
|--|--------------------------------------|
| BOOL PCALLBACK AVLINK_ShowWindow(BOOL fShow) | Shows/hides the AutoVue application. |
| BOOL PCALLBACK AVLINK_ShowViewWindow(BOOL fShow) | Shows/hide the active MDI child. |
| BOOL PCALLBACK AVLINK_View(LPCSTR szFileName) | Opens and views the specified file. |

Sample DLL client applications in “C” and Visual Basic are provided in the AutoVue installation directory under the subdirectory **integrat\dll**.

OLE Automation

OLE Automation is a popular successor to DDE. OLE Automation integration methods are available in a wide variety of products including Visual Basic and the Microsoft Office product line. It is a powerful, yet simple interface. Many developers use it since modules that are developed can be reused by other applications. Again, all the functionality that is available through Scripting and DDE is available through OLE Automation — in fact, the commands available are the same, making the transition from DDE/Scripting to OLE Automation a more straightforward task for programmers.

OLE Automation offers you the opportunity of taking OLE's integration capabilities one step further — you can now automate tasks as you would from a DDE script file, but from within your target or container application, using a simple macro language and pre-existing DDE script commands. OLE embedding, as provided by AutoVue, provides the end user with a great way to compose what is called compound documents using objects from a variety of different types. Still, that method of integration is fairly static, limiting its use to the production of presentation documents.

An OLE Automation client should connect to the object:

- **AutoVue.Application**

AutoVue's OLE Automation exposes two methods:

- **TransmitCommand** ("*command-string*")
- **Execute** ("*command-string*")

The methods are synonymous — either one can be used by the client application. The set of commands available is identical in syntax and semantics to that available for scripting and DDE. For a full listing and description of the available scripting commands, see **AutoVue Command Summary**

OLE Automation is ideally suited for the BASIC dialect used to program Microsoft Word or Excel, but is also easy to use with any OLE 2.0-compliant application. Let us look at an example of OLE automation using Microsoft Excel:

OLE Automation Example:

```
; Declare the OLE Automation Object
Dim OleObj As Object

; Function: Create the Ole automation object. Must be called once when your program starts up.
Sub LoadOleObj()
    ' Create the OLE Automation Object
    Set OleObj = CreateObject("AutoVue.Application")
End Sub

; Function: Destroy the Ole automation object.
; Must be called once when your program exits. Performs necessary
; cleanups.
Sub UnloadOleObj()
    If (IsObject(OleObj)) Then
        ' Close the window
        OleObj.Execute ("CHILD CLOSE")
    End If
```

```

' Clean up
Set OleObj = Nothing
End Sub

; Function: This sample function accessed
; to OLE Automation object and performs several operations.
; You should put in your own code here.
Sub ExecuteOleObj()
    If (IsObject(OleObj)) Then
        ' Copen file
        'OleObj.Execute ("FILE OPEN C:\AV19.1\samples\Desktop-Office\Word.doc")
        OleObj.Execute ("FILE OPEN ""C:\AV19.1\samples\3d\3D
Compare\Component_V1\Component.SLDASM""")
        OleObj.Execute ("COMPARE ""C:\AV19.1\samples\3d\3D
Compare\Component_V2\Component.SLDASM""")

        ' Display window: The Application is, by default, hidden
        OleObj.Execute ("WINDOW SHOW")
        'OleObj.Execute ("CHILD SHOW")
        ' Display another file
        'OleObj.Execute ("FILE OPEN c:\autoexec.bat")
        ' Print the file
        ' OleObj.Execute ("PRINT")
        OleObj.Execute ("COMPARE ""C:\AV19.1\samples\3d\3D
Compare\Component_V2\Component.SLDASM""")
    End If
End Sub

```

Using this syntax, OLE automation can be achieved in an easy and seamless manner. For more information on the available commands refer to the section [AutoVue Command Summary](#).

Several sample OLE Automation applications are provided in the AutoVue installation directory under the subdirectory **integrat\oleauto**.

EDAT: Drawing Information Extraction

EDAT (Engineering Drawing Access Technology) is an OEM technology available from Oracle Corp. A limited subset of this technology is available through AutoVue allowing users to query CAD drawings (AutoCAD DWG, DXF and MicroStation DGN) and extract entity information (geometry/extended data/attribute tags).

AutoVue's User Interface under the **Analysis** menu contains three **Drawing Information** menu items:

- **Select Single Entity:** Allows the user to select an entity and displays detailed information about the entity in a dialog.
- **List Tags/Attributes:** Allows the user to select an entity and displays detailed information about the entity in a dialog.
- **Entity Information:** Allows the user to select a rectangle, and a dialog displays entity information for all entities contained in the rectangle.

AutoVue allows the user interface to be bypassed, namely the entity selection process and the dialog that appears. Instead the drawing-information query can be performed directly and the resulting data saved in a text file. This text file can later be used by the calling application.

For more information, refer to the topic "EDAT/Drawing Information Commands" in [AutoVue Command Summary](#). It describes three API commands: EDAT ATT, EDAT INFO and EDAT LIST.

VCET API

AutoVue is built using Cimmetry Systems's VCET (Viewing and Conversion Enabling Technology) library. VCET is the engine behind AutoVue that includes the file decoding/parsing technologies (PAFS), the rendering engines, the printing engines and the conversion engines. AutoVue itself is a user interface that sits on top of VCET. The VCET API is a Windows messaging-based API that is open, allowing developers to build custom interfaces (in the programming language of their choice). Further information on the VCET API can be found in the Docs directory of your AutoVue CD. Examples of integrations using the VCET API can be found in the Integrat directory of the AutoVue CD.

Markup API

AutoVue's Markup component is based on CSI's Markup Library Toolkit. Like VCET, it has a message-based API. Using the Markup API, developers can easily Markup-enable their applications. In addition to graphical Markup elements, the API also supports sticky-note objects and powerful hyperlinking features. In addition, the Markup file format used by AutoVue and the Markup Library Toolkit is fully documented, allowing developers to write custom import/export filters and to directly modify Markup elements. Used in conjunction with the VCET API, developers can quickly prototype and develop powerful viewing and Markup solutions that fit specific needs. Further information on the Markup API can be found in the Docs directory of your AutoVue CD. Examples of integrations using the Markup API can be found in the Integrat directory of the AutoVue CD.

AutoVue Command Summary

The description of AutoVue's command syntax follows certain conventions, which may vary from other parts of the Administrator Guide. The command summary that follows applies to AutoVue's Scripting, DDE, DLL and OLE Automation API's. A common scripting language is used for these methods of integration

Syntax Summary

| Syntax | Description |
|--------------------|---|
| <angular brackets> | Indicates required entries but are not to be included in the entered information. |
| {curly braces} | Indicates optional information. |
| [square brackets] | Required syntactical elements. |
| Bold | Introduces a literal expression which must be entered exactly as shown. |
| <i>Italics</i> | Indicates a variable which you must replace by information you provide. |
| | Indicates an either-or type of choice. |
| ... | Indicates that information may be repeated. |

General Commands

| Command | Description |
|---------------------------------|-----------------------------|
| CHDIR { <i>directory_name</i> } | Changes working directory. |
| PAUSE { <i>nn</i> } | Pauses for nn milliseconds. |
| QUIT | Terminates application. |

File Commands

| Command | Description |
|--|---|
| VIEW { <i>filename</i> } | Displays the specified file. If no <i>filename</i> is supplied it displays the File-Open dialog. |
| FILE OPEN { <i>filename</i> } | Same as VIEW. |
| FILE-NEXT | Goes to the next file. |
| FILE-PREVIOUS | Goes to the previous file. |
| BROWSE | Activates the Browse dialog. |
| COMPARE { <i>filename</i> } | Compares the file in the active window with the filename. |
| OVERLAY { <i>filename</i> { <i>x</i> , <i>y</i> { <i>scale</i> }} | Overlays the specified file over the current file (base drawing). The point (x, y) is the offset for the overlaid file expressed in base drawing units. The origin of raster images is in the top left, and for vector images it is in the bottom left. Scaling is the scaling factor for the overlay. Default values of (0.0, 0.0) and 1.0 are used for the base point and scaling factor. |

PROPERTIESDisplays the Properties dialog.

View Commands

| Command | Description |
|---|---|
| ANTI-ALIAS [ON OFF] | Controls the anti-aliasing (scale-to-gray) for monochrome raster images. |
| BLOCK { <i>blockname</i> } | Views the specified block. If no blockname is given, display the Blocks dialog. |
| CONTRAST [LIGHT NORMAL DARK DARKEST] | Controls the contrast for monochrome raster images. The default setting is NORMAL. |
| FLIP [NONE HORZ VERT BOTH] | Flips the image as specified. |
| LAYER ALL [ON OFF] | Turns all layers either ON or OFF. |
| LAYER [<i>layername</i>] { <i>layername2...</i> } [ON OFF] | Turns the specified layers ON or OFF. |
| NAMEDVIEW { <i>view_name</i> } | Sets the view to the specified named view. If no view-name is given, makes the Named Views dialog appear. |
| PAGE { <i>n</i> } | Goes the specified page. |
| PAGE-NEXT | Goes to the next page. |
| PAGE-PREV | Goes to the previous page. |
| PAN [<i>from-x from-y to-x to-y</i>] | Pans the image from (from-x, from-y) to (to-x, to-y), in World Coordinates. |
| PAN { <i>x-delta y-delta</i> } | Pans the image by the specified amount, in World Coordinates. |
| REFRESH | Redraws the image. |
| ROTATE [0 90 180 270] | Rotates the image by the specified amount. |
| SHELL { <i>command</i> } | Executes the specified command. If no command is given, start a command shell. |
| TILEMODE [AUTO OFF ON] | This option only applies to AutoCAD drawings. Set the tile mode to the value in the drawing file, or to Paperspace, or to Modelspace, respectively. |
| VPOINT { <i>x y z</i> } | Changes the viewpoint of a 3-D image. |
| ZOOM [<i>min-x min-y max-x max-y</i>] | Zooms into the box specified by (min-x, min-y) (max-x, max-y). The values are given in World Coordinates. |
| ZOOM [<i>percent</i>] | Zooms by the specified percent. |
| ZOOM-FIT | Fits the image to the window. |
| ZOOM-FITHORZ | Fits the image horizontally. |
| ZOOM-FITVERT | Fits the image vertically. |
| ZOOM-FULLRES | This option only applies if the image being viewed is a raster file. Displays the image at full resolution. |

Printing Commands

| Command | Description |
|---|---|
| PRINT | Using the current print options, print the file in the active window. See below for available print options. |
| PRINT-OPTION [<i>option</i> = <i>value</i>] | The next section describes available script options. |

Print Options

| Command | Description |
|------------------------------------|---|
| AREA=[DISPLAY EXTENTS] | Specify print area (extents or display) |
| SCALE=[FIT <i>scale-factor</i>] | Specify scale factor. |
| UNITS=[INCH MM PIXEL] | Specify units. |
| LH=[<i>string</i>] | Left header text. |
| LH=[<i>string</i>] | Center header text. |
| RH=[<i>string</i>] | Right header text. |
| LF=[<i>string</i>] | Left footer text. |
| CF=[<i>string</i>] | Center footer text. |
| RF=[<i>string</i>] | Right footer text. |

Conversion Commands

| Command | Description |
|---|--|
| CONVERT | Converts the file in the active window using the current convert options. See below for available conversion options. |
| CONVERT-OPTION [<i>option</i> = <i>value</i>] | The following section describes the available script options. |

Convert Options

| Command | Description |
|--------------------------|---|
| AREA=<DISPLAY EXTENTS> | Specify convert area (display or extents). |
| FORMAT=[<i>format</i>] | Where format specifies an output driver. |
| SUBFORMAT=[<i>n</i>] | Some of the output drivers support several sub-formats. The value <i>n</i> specifies which sub-format to use. |
| PAGES=<0 1 2> | Specify if you wish to convert All pages (0) (for TIFF only), Current Page (2) or range of pages (1). |

| | |
|-------------------------------|---|
| ToPage n | Specify the range of pages to convert when PAGES=1. |
| OUTPUT=[<i>filename</i>] | Specifies output filename. If not specified, the default name is used. |
| SIZE=[<i>width height</i>] | Where format specifies an output driver.Specifies the size of the converted output. |
| STEPSPERINCH=[<i>n</i>] | Certain formats (e.g. plotter formats) allow a resolution factor to be set. |
| PAGESIZE=[<i>page-size</i>] | For certain formats (e.g. plotter formats) the output size is specified as a page size. In this case, page size can be one of: A, B, C, D, E, A4, A3, A2, A1, A0. |
| UNITS=[INCH MM] | Specifies the output units. This option applies only for vector output formats. Raster-output units are always assumed to be in pixels. |

The following table summarizes the available formats and their sub-formats:

| Format | Description |
|------------|----------------------------------|
| Sub-Format | Sub-Format Description |
| PCRS_BMP | Windows bitmap |
| PCRS_EPS | Encapsulated PostScript (raster) |
| PCRS_PCL | HP/PCL output |
| 0 | 75 DPI |
| 1 | 150 DPI |
| 2 | 300 DPI |
| PCRS_PCX | Paintbrush PCX |
| PCRS_RLC | RLC Format |
| PCRS_TIF | TIFF Format |
| 0 | Uncompressed |
| 1 | Packbits compressed |
| 2 | Group III compressed |
| 3 | Group IV compressed |

Markup Commands

| Command | Description |
|----------------------|--|
| MARKUP { <i>ID</i> } | Selects a Markup file to display over the current file. If no ID is given, displays the Select-Markup dialog. |
| MARKUPQUIT | Quits Markup mode. |

Option Commands

| Command | Description |
|---|---|
| OPTION MENU <ON OFF> | Indicates whether the top menu displays. |
| OPTION MENU DELETE < <i>N</i> > | Deletes the <i>N</i> th menu item. The menus are numbered from 0 to nMenus-1. |
| OPTION MENUITEM DELETE < <i>N M</i> > | Deletes, disables or enables the <i>M</i> th menu item in the <i>N</i> th menu. Both the menus and menu items are numbered, starting at zero. |
| OPTION TOOLBAR <ON OFF> | Indicates whether the top toolbar displays. |
| OPTION STATUSBAR [ON OFF] | Indicates whether the status-bar area displays. |
| OPTION TEXT [ON OFF] | Indicates whether text displays. |
| OPTION LINSTYLES <ON OFF> | Indicates whether the linestyles display. |
| OPTION DIMENSIONS [ON OFF] | Indicates whether dimensions display. |
| OPTION FILLING [ON OFF] | Indicates whether filling displays. |
| OPTION XREF [ON OFF] | Indicates whether external references display. |
| OPTION RASTERDISPLAY [FULL FIT] | Selects the default for the initial display of raster files (at full resolution or fit to the window). |
| OPTION BASEFONT <i>fontname</i> {normal bold italic bold-italic} <i>pointsize</i> | Selects the default base font for text- and number-based files. This font is used if the actual font is not specified in the file itself. |
| OPTION BGCOLOR { <i>red green blue</i> } | Sets the background color for the view window. Specify the color as an RGB triplet, each index ranging from 0 to 255. |

Window Commands

These are the standard Windows messages. They apply to the frame window as a whole.

| Command | Description |
|-----------------|---------------------------------------|
| WINDOW HIDE | |
| WINDOW SHOW | |
| WINDOW POSITION | [<i>x y</i> { <i>width height</i> }] |
| WINDOW RESTORE | |
| WINDOW MINIMIZE | |

WINDOW MAXIMIZE

WINDOW TILE

WINDOW CASCADE

Child Commands

These are the standard Windows MDI child commands.

| Command | Description |
|--|---|
| CHILD CLOSE | |
| CHILD HIDE | |
| CHILD MINIMIZE | |
| CHILD MAXIMIZE | |
| CHILD NEW | |
| CHILD POSITION [x y {width height}] | |
| CHILD RESTORE | |
| CHILD SELECT [n] | Activates the nth child window where n is a 1-indexed number. |
| CHILD SHOW | |

EDAT/Drawing Information Commands

The following commands extract drawing information from CAD files (AutoCAD DWG, DXF and MicroStation DGN) and save the extracted data in a user-specified text file.

| Command | Description |
|---|---|
| EDAT ATT [<i>filename</i> [x, y]] | Extracts Attribute/extended data/attribute tag information from the currently viewed document. If specified, the extracted data is stored in filename; otherwise a dialog displays the information. If the point (x,y) is specified, the entity closest the (x,y) in World Coordinates is queried. Otherwise, the user is prompted to select a point. |
| EDAT INFO [<i>filename</i> [x, y]] | Extracts detailed Entity information from the currently viewed document. If specified, the information is stored in filename, otherwise a dialog will display the information. If the point (x,y) is specified, the entity closest the (x,y) in World Coordinates is queried. Otherwise, the user is prompted to select a point. |
| EDAT LIST [<i>filename</i> [x0, y0, x1,y1]] | Extracts entity information for all entities contained within a bounding box from the viewed document. If specified, the extracted data is stored in filename; otherwise a dialog displays the information. If the bounding box (x0,y0 -> x1,y1) is specified then all entities contained in the bounding box, in World Coordinates are queried. Otherwise, the user is prompted to select a rectangle. |

ActiveX Control

This section lists the following ActiveX controls for AutoVue:

- [AutoVueX Control](#)
- [AvMarkupX Control](#)
- [AvPrintX Control](#)
- [AutoVue CompareX Control](#)

For the most up-to-date information about these controls, refer to **[autovuex.htm](#)**.

AutoVueX Control

Properties

| Property | Description |
|--|--|
| <i>BSTR</i> SRC | Source file path. |
| <i>boolean</i> ShowScrollBars | Flag that indicates whether or not to show Scrollbars. |
| <i>boolean</i> ShowMainToolBar | Flag that indicates whether or not to show Main Toolbar. |
| <i>boolean</i> ShowAuxiToolBar | Flag that indicates whether or not to show Auxiliary Toolbar. |
| <i>boolean</i> ShowStatusBar | Flag that indicates whether or not to show Status Bar. |
| <i>boolean</i> EnablePopupMenu | Flag that indicates whether or not to enable Popup Menu. |
| <i>boolean</i> MrkMainToolBar | Flag that indicates whether or not to show Markup MainToolBar. |
| <i>boolean</i> MrkPensToolBar | Flag that indicates whether or not to show Markup PensToolBar. |
| <i>boolean</i> MrkEntitiesToolBar | Flag that indicates whether or not to show Markup EntitiesToolBar. |
| <i>boolean</i> MrkColorsToolBar | Flag that indicates whether or not to show Markup ColorsToolBar. |
| <i>BSTR</i> MrkFileLocation | Directory where Markup files are stored. |
| <i>OLE_COLOR</i> BgColor | Background color. |
| <i>short</i> Rotate | Specifies current rotation value. Can be only 0,90, 180, 270. |
| <i>short</i> Flip | 0 - No flipping 1 - Flip horizontal 2 - Flip vertical 3 - Flip both |
| <i>short</i> Page | Specifies current page. |
| <i>short</i> Extents | 0 - Unchanged 1 - Fit 2 - Fit Width 3 - Custom |

The following 4 properties are used to determine the extents:

| Property | Description |
|------------------------------|---------------------------------|
| <i>double</i> ExtMinX | Minimal X coordinate of extents |
| <i>double</i> ExtMinY | Minimal Y coordinate of extents |
| <i>double</i> ExtMaxX | Maximal X coordinate of extents |
| <i>double</i> ExtMaxY | Maximal Y coordinate of extents |

Methods

| Method | Description |
|--------|-------------|
|--------|-------------|

| | |
|--|---|
| <i>void SetContrast(long contrast Value)</i> | Set the image contrast to be the specific value; this only applies to raster files. |
| <i>void GetContrast()</i> | Return the image contrast value. The value for the raster file can be one of the following: CONTRAST_LIGHT (-50) CONTRAST_MEDIUM (0) CONTRAST_DARK (66) CONTRAST_DARKER (100) |
| <i>void SetAntiAlias()</i> | Scale to gray. Enhances the raster file image details that are viewed at less than 100% zoom. |
| <i>void ShowLayersDlg()</i> | Display the Layers dialog. |
| <i>void ShowBlocksDlg()</i> | Display the Blocks dialog. |
| <i>void ShowNamedViewsDlg()</i> | Display the named view dialog. |
| <i>void ShowXRefDlg()</i> | Display the XReference dialog. |
| <i>void ZoomFit()</i> | Zoom to fit. |
| <i>void ZoomPrevious()</i> | Undo last zoom operation. |
| <i>void ZoomWidth()</i> | Zoom to fit width. |
| <i>void ZoomHeight()</i> | Zoom to fit height. |
| <i>void ZoomByFactor(double factor)</i> | Zoom by factor. |
| Parameters | |
| factor | Zooming factor. |
| <i>void ZoomFullResolution()</i> | Displays rasters using full resolution; for other formats same as ZoomFit. |
| <i>void PrintIt (boolean bPrintDirect</i> | Print current document. |
| Parameters | |
| bPrintDirect | Flag indicating whether or not to show a dialog box to user. |
| <i>void PrintPreview (boolean bPreviewDirect,boolean bWantFrame)</i> | Preview current document printing |
| Parameters | |
| bPreviewDirect | Flag indicating whether or not to show a dialog box to user. |
| bWantFrame | Flag for indicating whether or not to preview with frame. |
| <i>void SetPrintOptions(BSTR sEntry,BSTR sValue)</i> | Set print options, call this method prior to call PrintIt or PrintPreview to set print options |
| Parameters | |
| sEntry: Currently the following options are supported: | Specify which print option to set. |
| PRINT_OPT_ORIENTATION | Set print page orientation. |
| PRINT_OPT_DISABLE_HEADERSFOOTERS | Disable/enable headers/footers print option. |

| | |
|---|--|
| PRINT_OPT_DISABLE_WATER-MARK | Disable/enable watermark print option. |
| PRINT_OPT_DISABLE_MAR-GINS | Disable/enable margin print option. |
| PRINT_OPT_DISABLE_STAMPS | Disable/enable stamp print option |
| PRINT_OPT_DISABLE_PENSETTINGS | Disable/enable pen setting print option. |
| PRINT_OPT_DISABLE_PRINT-TOFILE | Disable/enable print to file print option. |
| PRINT_OPT_DISABLE_PRINT | Disable/enable print function. |
| ALIGNMENT | Printing alignment. |
| PRINTOFFSETX | x offset when ALIGNMENT is set to "CUSTOM". |
| PRINTOFFSETY | y offset when ALIGNMENT is set to "CUSTOM". |
| PRINTPAGEONLY | Disable/enable print only one page print option. |
| LH | Specify text for header left. |
| CH | Specify text for header center. |
| RH | Specify text for header right. |
| LF | Specify text for footer left. |
| CF | Specify text for footer center. |
| RF | Specify text for footer right. |
| sValue - Valid values are dependent on each specific print option entry. | Option values. |
| PRINT_OPT_ORIENTATION | PORTRAIT: Set print page orientation as portrait. LANDSCAPE: Set print page orientation as landscape. |
| PRINT_OPT_DISABLE_HEADERSFOOTERS | TRUE: Disable headers/footers print option. FALSE: Enable headers/footers print option. |
| PRINT_OPT_DISABLE_WATER-MARKs | TRUE: Disable watermark print option. FALSE: Enable watermark print option. |
| PRINT_OPT_DISABLE_MAR-GINS | TRUE: Disable margin print option. FALSE: Enable margin print option. |
| PRINT_OPT_DISABLE_STAMPS | TRUE: Disable stamp print option. FALSE: Enable stamp print option. |
| PRINT_OPT_DISABLE_PENSETTINGS | TRUE: Disable pen setting print option. FALSE: Enable pen setting print option. |
| PRINT_OPT_DISABLE_PRINT-TOFILE | TRUE: Disable print to file print option. FALSE: Enable print to file print option. |
| PRINT_OPT_DISABLE_PRINT | TRUE: Disable print function. FALSE: Enable print function. |

| | |
|---|---|
| ALIGNMENT | One of the following values: <ul style="list-style-type: none"> CUSTOM TOPLEFT TOPCENTER TOPRIGHT MIDDLELEFT CENTER MIDDLERIGHT BOTTOMLEFT BOTTOMCENTER BOTTOMRIGHT |
| PRINTOFFSETX | Value in print units. |
| PRINTOFFSETY | Value in printing units. |
| PRINTPAGEONLY | Disable/enable print only one page print option. 1 : Enable option 0 : Disable options |
| LH | Text for header left. |
| CH | Text for header center. |
| RH | Text for header right. |
| LF | Text for footer left. |
| CF | Text for footer center. |
| RF | Text for footer right. |
| <i>long</i> GetVcetHandle() | Return Value: Returns handle of the VCET window. |
| <i>boolean</i> EnterMarkupMode() | Enter Markup mode. Return Value: TRUE - entered Markup mode successfully FALSE - otherwise |
| <i>boolean</i> ExitMarkupMode() | Exit Markup mode. Return Value: TRUE - exited Markup mode successfully FALSE - user canceled operation |
| <i>IDispatch *</i> MrkObj() | Return Value: Returns pointer to AvMarkupX object if in Markup mode otherwise returns NULL |
| <i>IDispatch *</i> PrnObj() | Return Value: Returns pointer to AvPrintX object if in Print Preview mode otherwise returns NULL |
| <i>short</i> GetMode() | Return Value: Returns current mode 0 - View mode 1 - Markup mode 2 - Print Preview mode |
| <i>void</i> PageNext() | Displays next page. |
| <i>void</i> PagePrevious() | Displays previous page. |
| <i>void</i> PageSelect() | Selects page number. |

boolean **GetMousePos**(double* pPosX, double* pPosY)

Return Value:
TRUE if mouse is in the window rectangle; **FALSE** otherwise

Parameters

*pPosX X coordinate of mouse position
*pPosY Y coordinate of mouse position

void **ZoomInWorld**(double MinX, double MinY, double MaxX, double MaxY)

Zoom box. The box is specified in world coordinate

Parameters

MinX The x-coordinate of the low-left corner of a zoom box.
MinY The y-coordinate of the low-left corner of a zoom box.
MaxX The x-coordinate of the upper-right corner of a zoom box.
MaxY The y-coordinate of the upper-right corner of a zoom box.

boolean **SetLicenseFilePath** (BSTR sLic Path)

Set path environment variable for AutoVueX OCX control.

Return Value:
TRUE if the path environment variable is set
FALSE - otherwise

Parameters

sLicPath The path where the AutoVueX OCX is located

boolean **EnableMarkup**(boolean fEnable)

Enable or disable Markup function.

Return Value: The previous Markup status.

Parameters

fEnable Enable Markup if **TRUE**, disable it otherwise.

void **EnablePanMode**(boolean bEnable)

Enable or disable Pan Mode

Parameters

bEnable Flag that indicates to turn on Pan Mode or not

long **GetNumCrossProbe Entities()**

Return Value: Returns number of entities being cross-probed.

BSTR **GetCrossProbeEntityType** (long nIndex)

Return Value: Returns a string that represents the internal type of the entity being cross-probed.

Parameters

nIndex Index of the entity being cross-probed.

BSTR **GetCrossProbeEntity Name** (long nIndex)

Return Value: Returns a string that represents the internal name of the entity being cross-probed.

void **ClearCrossProbeEntities()**

Marks all the entities as not used for cross-probing.

| | |
|---|---|
| <i>void</i> AddCrossProbeEntity (BSTR sType, BSTR sName) | Marks an entity as used for cross-probing. |
| Parameters | |
| sType | Internal type of the entity. |
| sName | Internal name of the entity. |
| <i>void</i> ZoomSelected() | Zoom fit to the selected entity/entities. |
| <i>void</i> ShowNetConnectivity() | Highlight all the graphical entities. |
| <i>long</i> GetNumEcadEntities (LPCTSTR sType) | Return the number of entities of a specified type that are present in the loaded document |
| Parameters | |
| sType | Entity type. |
| <i>BSTR</i> GetEcadEntityName (LPCTSTR sType, long indx) | Return the standard name of the indexed entity of the specified type. |
| Parameters | |
| sType | Entity type. |
| indx | Entity index. |
| <i>long</i> GetEcadEntityNAttr (LPCTSTR sType, long indx) | Return the number of attributes of the specified entity |
| Parameters | |
| sType | Entity type. |
| indx | Entity index. |
| <i>BSTR</i> GetEcadEntityAttrName (LPCTSTR sType, long indx, long j) | Return the name of the 'j'th attribute of the specified entity |
| Parameters | |
| sType | Entity type. |
| indx | Entity index. |
| j | Entity's "j"th attribute. |
| <i>BSTR</i> GetEcadEntityAttrValue (LPCTSTR sType, long index, long j) | Return the value of the 'j'th attribute of the specified entity as a string. |
| Parameters | |
| sType | Entity type. |
| indx | Entity index. |
| j | Entity's "j"th attribute. |
| <i>long</i> GetNumEcadEntityDefs() | Return the number of entity definitions. |
| <i>BSTR</i> GetEcadEntityDefName (long indx) | Return the name of the indexed entity definition. |

Parameters

| | |
|------|---------------|
| indx | Entity index. |
|------|---------------|

| | |
|--|--|
| <i>long</i> GetEcadEntityDefFlags (long indx) | Return the flags of the indexed entity definition. |
|--|--|

Parameters

| | |
|------|---------------|
| indx | Entity index. |
|------|---------------|

| | |
|--|---|
| <i>long</i> GetEcadEntityDefNAttr (long indx) | Return the number of attributes of the indexed entity definition. |
|--|---|

Parameters

| | |
|------|---------------|
| indx | Entity index. |
|------|---------------|

| | |
|--|---|
| <i>BSTR</i> GetEcadEntityDefAttrName (long indx, long attr) | Return the name of the 'attr'th attribute of the indexed entity definition. |
|--|---|

Parameters

| | |
|------|---------------|
| indx | Entity index. |
|------|---------------|

| | |
|------|----------------------|
| attr | “attr” th attribute. |
|------|----------------------|

| | |
|---|--|
| <i>long</i> GetEcadEntityDefAttrFlags (long indx, long attr) | Return the flags of the 'attr'th attribute of the indexed entity definition. |
|---|--|

Parameters

| | |
|------|---------------|
| indx | Entity index. |
|------|---------------|

| | |
|------|----------------------|
| attr | “attr” th attribute. |
|------|----------------------|

| | |
|--|---|
| <i>long</i> GetEcadEntityDefAttrType (long indx, long attr) | Return the type of the 'attr'th attribute of the indexed entity definition. |
|--|---|

Parameters

| | |
|------|---------------|
| indx | Entity index. |
|------|---------------|

| | |
|------|----------------------|
| attr | “attr” th attribute. |
|------|----------------------|

| | |
|--|---------------------------------|
| <i>void</i> ShowEntityTypeFilterDlg() | Show Entity Type Filter dialog. |
|--|---------------------------------|

| | |
|--|----------------------------|
| <i>void</i> ShowVerifyDesignDlg() | Show Verify Design dialog. |
|--|----------------------------|

| | |
|---|-----------------------------|
| <i>void</i> ShowEntityBrowserDlg() | Show Entity Browser dialog. |
|---|-----------------------------|

| | |
|--|-------------------------------|
| <i>void</i> ShowBillofMaterialDlg() | Show Bill of Material dialog. |
|--|-------------------------------|

| | |
|--|--------------------------------|
| <i>void</i> ShowEntityPropertiesDlg() | Show Entity Properties dialog. |
|--|--------------------------------|

| | |
|---|---------------------------------------|
| <i>void</i> ShowFileVersionInfoDlg() | Show File Version Information dialog. |
|---|---------------------------------------|

| | |
|---|------------------------|
| <i>void</i> SetPageByTitle (BSTR sTitle) | Set the page by Title. |
|---|------------------------|

Parameters

| | |
|--------|--------------------|
| sTitle | Title of the page. |
|--------|--------------------|

| | |
|---|------------------|
| <i>void</i> SetNamedView (long lIndex) | Set Named views. |
|---|------------------|

Parameters

| | |
|--|--|
| Llindex | Named view index. |
| <i>void SetNamedViewByName</i> (BSTR sName) | Set Named view by names. |
| Parameters | |
| sName | Name of the view. |
| <i>void ShowImportDesignDlg()</i> | Show Import Design dialog. |
| <i>void EnableZoomBoxMode</i> (boolean bEnable) | Enable zoom (box) mode. |
| Parameters | |
| bEnable | TRUE: For non-3D file format, it will force to exit from pan or magnify mode. Enable zoom mode (zoom mode is default in non-3D file formats). For 3D file formats it will force to enter the zoom mode FALSE: For non-3D file format, it will not perform any action. For 3D file formats, exit zoom mode and enter rotate mode (rotate mode is default for 3D file formats). |
| <i>void EnableRotateMode</i> (boolean bEnable) | Enable the rotate mode. Works only for 3D file formats |
| Parameters | |
| bEnable | TRUE: Enter the rotate mode, will force to exit zoom, pan or spin modes. FALSE: No action. |
| <i>void ReCenter</i> (short nType) | Applicable to 3D file formats only, re-center the complete drawing or selected entity based on "nType". |
| Parameters | |
| nType | 0 - Re-center the complete drawing. 1 - Re-center the selected drawing. 2 - Re-center the entity. |
| <i>void ShowPMIFilteringDlg()</i> | Applicable to 3D file formats only. Show the PMI Filter dialog. |
| <i>void ShowLightingDlg()</i> | Applicable to 3D file formats only. Show the lighting dialog. |
| <i>void ShowDefineSectionDlg()</i> | Applicable to 3D file formats only. Show the Define section dialog |
| <i>void ShowUserCoordSystems Dlg()</i> | Applicable to 3D file formats only. Show the User coordinate systems dialog |
| <i>void EnableManipulators</i> (boolean bEnable) | Applicable to 3D file formats only. Enable/Disable the manipulator. |
| Parameters | |
| bEnable | TRUE: Enable the manipulator (if already active, then no action). FALSE: Disable the manipulator (if already disable, then no action). |
| <i>void ShowPartAlignmentDlg()</i> | Applicable to 3D file formats only. Show the Part Alignment dialog. |
| <i>void ShowModelTransformDlg()</i> | Applicable to 3D file formats only. Show the Model Transform dialog. |
| <i>void ResetTransformation()</i> | Applicable to 3D file formats only. Reset transformation. |
| <i>void ShowInterferenceCheck Dlg()</i> | Applicable to 3D file formats only. Show the Interference Check dialog. |

| | |
|---|--|
| <i>long</i> SelectOverlay() | Opens a dialog that allows a file to be selected and added as an overlay. Returns the overlay ID, if successful, or -1 if the operation was cancelled |
| <i>long</i> AddOverlay (BSTR sFileName) | Adds sFileName as an overlay. Returns the overlay ID, if successful, or -1 if the operation failed. |
| <i>boolean</i> RemoveOverlay (long ID) | Removes the overlay with id = ID. Returns "true", if successful, or "false" if the operation failed. |
| <i>long</i> RemoveOverlays() | Removes all existing overlays. |
| <i>long</i> LoadOverlay (BSTR sFileName, double x, double y, double scale, boolean positionByUser, boolean sizeByUser) | Adds sFileName as an overlay using the supplied parameters. Returns the overlay ID if successful, or -1 if the operation failed. |
| Parameters | |
| x,y | The coordinates of the top-left corner of the new overlay. |
| scale | The scale of the new overlay. |
| positionByUser | If true , the user will interactively specify the top-left corner of the overlay (position the overlay). |
| sizeByUser | If true , the user will interactively specify the scale for the overlay (resize the overlay). |
| <i>boolean</i> SetOverlayParameters (int ID, double x, double y, double scale, boolean positionByUser, boolean sizeByUser) | Sets overlay parameters for the specified overlay ID. For parameters description see LoadOverlay . |
| <i>boolean</i> GetOverlayFileName (int ID) | Returns the filename of the overlay with specified ID. |
| <i>double</i> GetOverlayPosX (int ID) | Returns the X coordinate of the top-left corner of the overlay with specified ID. |
| <i>double</i> GetOverlayPosY (int ID) | Returns the Y coordinate of the top-left corner of the overlay with specified ID. |
| <i>double</i> GetOverlayScale (int ID) | Returns the scale of the overlay with specified ID. |
| <i>BSTR</i> GetOverlayParameters (int ID, double* x, double* y, double* scale) | Returns information about the overlay with specified ID. File name is returned as a result from this function, top-left position and scale are set if pointers to the corresponding variables are passed. |
| <i>boolean</i> DumpModelTree (BSTR fileName) | Exports the data contained in the current model tree to the specified XML file. Return Value: TRUE if the file could be written, FALSE otherwise. |
| Parameters | |
| fileName | Output filename. |
| <i>long</i> ShowConvertDialog() | Displays Conversion dialog. |
| <i>void</i> ConvertIt() | Perform conversion based on the setting previously saved in avx.ini . |
| <i>void</i> SetConvertOptions (string sEntry, string sValue1, string2 sValue2) | Save conversion settings into avx.ini . |
| Parameters | |
| sEntry | Option name. |

sValue1 Option value.

sValue2 Additional option value.
It is used just for PAGESIZE. Must be the empty string for all other options.

Options

- AREA <string>
DISPLAY | EXTENTS | ALL | SELECTED
- FORMAT <string>
PCRS_BMP | PCRS_EPN | PCRS_EPS | PCRS_GP4 |
PCRS_IBM | PCRS_PCL | PCRS_PCX | PCRS_RLC |
PCRS_TIF | PC3D_STL
- SUBFORMAT <integer>
- OUTPUT <filename as string>
- SIZE <width as integer> <height as integer>
- STEPSPERINCH <integer>
- PAGESIZE <size as string>
A | B | C | D | E | A4 | A3 | A2 | A1 | A0
- UNITS <unit as string>
INCH | MM
- SCALE <scale as integer>%
- COLORDEPTH
ORIGINAL | <number as integer>
- PAGERANGE
<from_page as integer>-<to_page as integer>
- STL_POSITIVE_TRIANGLES
ON | OFF

boolean **Export3DBom**(BSTR file-
Name) Export 3D BOM (Bill of Material) as text file.
Return Value:
TRUE if the file could be written, FALSE otherwise.

Parameters

fileName Output filename.

boolean **ExportEdaBom**(BSTR
sFileName, BSTR sFormat,
boolean bCurPage, BSTR sAt-
tributes) Export EDA BOM (Bill of Material) as text file.
Return Value:
TRUE if the file could be written, FALSE otherwise.

Parameters

sFileName Output filename.

sFormat Export format, one of two values "PDX" or CSV". If nothing is specified, "CVS" is used.

bCurPage If BOM should be calculated for current page only or for all pages.

sAttributes List of attributes used to calculate the BOM (separated by ","). If nothing is specified, default list of attributes will be used.

| | |
|--|--|
| <i>void</i> ShowExplodeDialog() | Show 3D Explode dialog. Show the 3D explode dialog. Applicable to 3D file formats only. |
| <i>void</i> Show3DSearchDialog() | Show 3D Search dialog. Applicable to 3D file formats only. |
| <i>bool</i> SaveViewStateToFile (BSTR sFileName) | Save the current view state into an external file. Return Value: TRUE if the function succeeds, FALSE - otherwise. |
| Parameters | |
| sFileName | Output filename. |
| <i>bool</i> RestoreViewStateFromFile (BSTR sFileName) | Restore the view state from an external file and apply it. Return Value: TRUE if the function succeeds, FALSE - otherwise. |
| Parameters | |
| sFileName | Input filename. |
| <i>long</i> GetNumPages () | Obtain number of pages for the currently opened file. Return Value: Number of pages |
| BSTR GetEcadDesignName (in nPage) | Obtain design name of a page in the EDA document. Return Value: Name of the design of the given page |
| Parameters | |
| nPage | '1' based page index. |
| BSTR GetEcadDesignPage Type (in nPage) | Obtain design page type of a page in the EDA document. Return Value: Design type of the given page. Can be the following possible values: <ul style="list-style-type: none"> • "PCB" – PCB Layout • "SCH" – Schematic design • "PCB3D" – PCB 3D View |
| Parameters | |
| nPage | '1' based page index. |
| BSTR GetEcadDesignPage Name (in nPage) | Obtain page name of an EDA document. Return Value: Name of the given page |
| Parameters | |
| nPage | '1' based page index. |
| <i>long</i> GetNumCrossProbeHits () | Obtain number of Crossprobe "hits" generated by the previous call to AddCrossProbeEntity. Return Value: Number of Crossprobe "hits". |
| <i>void</i> ShowCrossProbeHit (long nIndex) | Instruct AutoVueX to display a Crossprobe "hit". |

Parameters

| | |
|--------|--|
| nIndex | Index of the Crossprobe “hit”. Has to be between 0 and value returned by GetNumCrossProbeHits, |
|--------|--|

Events

| Event | Descriptions |
|---|---|
| <i>void</i> ModeChanged (short nOldMode, short nNewMode) Parameters nOldMode nNewMode | Fired when modes changes. OldMode value (see GetMode method for values). NewMode value (see GetMode method for values). |
| <i>void</i> StatusChanged (short nNewStatus) Parameters nNewStatus | Fired when status changes. New status value: <ul style="list-style-type: none"> • STATUSIDLE = 0x00 • STATUSPROCESSING = 0x01 • STATUSREADING = 0x02 • STATUSREPFRESHING = 0x04 • STATUSREGENERATING = 0x08 • STATUSREADINGFINISHED = 0x10 |
| <i>void</i> HelpString (BSTR szMsg) Parameters szMsg | Help String for status indicator. Help message. |
| <i>void</i> ExtentsChanged (double extMinX, double extMinY, double extMaxX, double extMaxY) Parameters extMinX, extMinY, extMaxX, extMaxY | Fired when extents change internally (not when properties change). New extents' values. |
| <i>void</i> PageChanged (short nNewPage) Parameters nNewPage | Fired when page changes internally. New page value. |
| <i>void</i> RotateChanged (short nNewRotate) Parameters nNewRotate | Fired when rotate values changes internally. New rotate value. |
| <i>void</i> FlipChanged (short nNewFlip) Parameters nNewFlip | Fired when flip value changes internally. New flip value. |
| <i>void</i> OnLMButtonDown (double xPos, double yPos) | Fired when left mouse button is pressed down. |

| Event | Descriptions |
|---|--|
| Parameters | |
| xPos | Horizontal mouse position. |
| yPos | Vertical mouse position. |
| <i>void OnLMButtonUp</i> (double xPos, double yPos) | Fired when left mouse button is released. |
| Parameters | |
| xPos | Horizontal mouse position. |
| yPos | Vertical mouse position. |
| <i>void OnLMButtonDbkClk</i> (double xPos, double yPos) | Fired when left mouse button is double-clicked. |
| Parameters | |
| xPos | Horizontal mouse position. |
| yPos | Vertical mouse position. |
| <i>void OnRMButtonDown</i> (double xPos, double yPos) | Fired when right mouse button is pressed down. |
| Parameters | |
| xPos | Horizontal mouse position. |
| yPos | Vertical mouse position. |
| <i>void OnRMButtonUp</i> (double xPos, double yPos) | Fired when right mouse button is released. |
| Parameters | |
| xPos | Horizontal mouse position. |
| yPos | Vertical mouse position. |
| <i>void OnRMButtonDbkClk</i> (double xPos, double yPos) | Fired when right mouse button is double-clicked. |
| Parameters | |
| xPos | Horizontal mouse position. |
| yPos | Vertical mouse position. |
| <i>void OnMMButtonDown</i> (double xPos, double yPos) | Fired when middle mouse button is pressed down. |
| Parameters | |
| xPos | Horizontal mouse position. |
| yPos | Vertical mouse position. |
| <i>void OnMMButtonUp</i> (double xPos, double yPos) | Fired when middle mouse button is released. |

| Event | Descriptions |
|---|--|
| Parameters | |
| xPos | Horizontal mouse position. |
| yPos | Vertical mouse position. |
| <i>void OnMMButtonDbIClk</i> (double xPos, double yPos) | Fired when middle mouse button is double-clicked. |
| Parameters | |
| xPos | Horizontal mouse position. |
| yPos | Vertical mouse position. |
| <i>void OnMouseMove</i> (double xPos, double yPos) | Fired when mouse gets moved. |
| Parameters | |
| xPos | Horizontal mouse position. |
| yPos | Vertical mouse position. |
| <i>void OnNewDocument</i> (BSTR szFileName) | Fired when new file is loaded. |
| Parameters | |
| szFileName | New filename. |
| <i>void CrossProbeEvent</i> (short-NEventType) | Fired when cross-probe event occurred. |
| Parameters | |
| nEventType | 0 - Change in entity selections 1 - Zoom Selected command being invoked 2 - Show net connectivity command being invoked |
| <i>void BasefileHyperlinkEvent</i> (short-NEventType, short nArg1, BSTR szArg2) | Fired when any of the events in the table below occur due to a hyperlink. |

| Parameter | nEventType | nArg1 (short) | nArg2 (BSTR) |
|-------------------|------------|---|---------------|
| Set Page | 0 | Page Index | "" (not used) |
| Set Page by title | 1 | 0 (not used) | Title |
| Rotate | 2 | Degree (possible values: 0, 90, 180, 270) | "" (not used) |

| | | | |
|------------------|---|---|---------------|
| Flip | 3 | Flip setting: 0 - none 1 - Horizontal flip 2 - Vertical flip 3 - Both | "" (not used) |
| Zoom fit | 4 | 0 (not used) | "" (not used) |
| Zoom by factor | 5 | Factor | "" (not used) |
| Set view | 6 | View index | "" (not used) |
| Set view by name | 7 | 0 (not used) | View name |

AvMarkupX Control

Properties

| Property | Description |
|--------------------------------|-------------------------------------|
| <i>long</i> EntityColor | Current EntityColor (COLORREFvalue) |
| <i>long</i> PenStyle | Current Pen Style |
| <i>long</i> LineWidth | Current line Width |

Methods

| Method | Description |
|---|---|
| <i>void</i> TestMarkup (BSTRsz File-Name) | Load specified file and enter Markup mode (for testing purposes). |
| Parameters | |
| szFileName | File to load. |
| <i>void</i> Open () | Opens Markup file. |
| <i>boolean</i> OpenMarkup (BSTR sFileName, boolean bCloseAll) | Open specified markup file. Return Value: TRUE - success FALSE - otherwise |
| Parameters | |
| szFileName | Markup file name to open bCloseAll. True: Close all existing markup files. False: otherwise |
| <i>boolean</i> EnterMarkupmode (OLE_HANDLE hVcetControl) | Enter Markup mode. Return Value: TRUE - success FALSE - otherwise |
| Parameters | |
| hVcetControl | Handle of the VCET control window. |
| <i>long</i> NotifyProc (long msg, long wParam, long lParam) | Called by VCET control notify procedure. Return Value: Message specific. |
| Parameters | |
| msg | Message to process. |
| wParam | Message WPARAM. |
| lParam | Message LPARAM. |
| <i>void</i> Save () | Save current Markup in file. |

| | |
|--|---|
| <i>void</i> SaveAs() | Save current Markup under new name. |
| <i>void</i> DrawLine() | Draw line entity. |
| <i>void</i> DrawArc() | Draw arc entity. |
| <i>void</i> DrawBox() | Draw box entity. |
| <i>void</i> DrawCircle() | Draw Circle entity. |
| <i>void</i> DrawFilledBox() | Draw filled box entity. |
| <i>void</i> DrawFilledCircle() | Draw filled circle entity. |
| <i>void</i> DrawFilledPolygon() | Draw filled polygon entity. |
| <i>void</i> DrawLeader() | Draw leader entity. |
| <i>void</i> DrawFreeStyle() | Draw free style entity. |
| <i>void</i> DrawCloud() | Draw cloud entity. |
| <i>void</i> DrawText() | Draw Text entity. |
| <i>void</i> DrawHighlight() | Draw highlight entity. |
| <i>void</i> DrawNote() | Draw Note entity. |
| <i>void</i> DrawSymbol() | Draw Symbol entity. |
| <i>void</i> DrawOLE() | Draw OLE object entity. |
| <i>boolean</i> IsCurrentEntity (long nEntId, long nSubType, long nFillType) | Return Value: Returns whether the specified entity is current or not. |
| Parameters | |
| nEntId | The entity ID. |
| nSubType | The sub type of the entity. |
| nFillType | Entity fill type. |
| <i>void</i> ModifyLayers() | Display Modify Markup Layers dialog. |
| <i>void</i> ModifyFont() | Display Modify Font dialog. |
| <i>void</i> Undo() | Undo last Markup operation. |
| <i>void</i> Redo() | Redo last cancelled Markup operation. |
| <i>boolean</i> IsUndoAvailable() | Return Value: Returns whether there is an operation to undo or not. |
| <i>boolean</i> IsRedoAvailable() | Return Value: Returns whether there is an operation to redo or not. |
| <i>boolean</i> ExitMarkupMode() | Exit Markup mode. Return Value: TRUE - exit successful FALSE - user cancelled operation |
| <i>long</i> GetControlHandle() | Return Value: Returns handle of the Markup control window. |

| | |
|--|--|
| <i>void</i> MeasureDistance() | Measure distance between two points. |
| <i>void</i> MeasureCumDistance() | Measure cumulative distance. |
| <i>void</i> MeasureArea() | Measure area. |
| <i>void</i> Calibrate() | Currently unsupported. |
| <i>void</i> ZoomFit() | Zoom to fit. |
| <i>void</i> Rotate (short nDegrees) | Rotate Markups. |
| Parameters | |
| nDegrees | Rotation value, can be only 0, 90, 180 or 270. |
| <i>void</i> Flip (short nFlag) | Flip Markups. |
| Parameters | |
| nFlag | Flipping value. |
| 0 | No flipping. |
| 1 | Flip horizontal. |
| 2 | Flip vertical. |
| 3 | Flip both. |
| <i>boolean</i> ResetAction() | Reset current action. Return Value: TRUE - if action was reset from adding entity to none FALSE - otherwise |
| <i>void</i> ShowInfo() | Show Markup information. |
| <i>void</i> CreateNew() | Open new Markup. |
| <i>void</i> SetFgBgColor (boolean fBackGroundColor, long color) | |
| Parameters | |
| fBackGroundColor | TRUE/FALSE |
| color | RGB color value. |
| <i>void</i> DeleteSelEntities() | Delete selected Markup entities. |
| <i>boolean</i> CopyToClipboard() | Copy selected Markup entities to clipboard. Return Value: TRUE - if action was successful FALSE - otherwise |
| <i>boolean</i> PasteFromClipboard() | Paste Markup entities from clipboard into current active Markup. Return Value: TRUE - if action was successful FALSE - otherwise |
| <i>void</i> OnMarkupConsolidate() | Generate consolidated Markup from current loaded Markups. |
| <i>void</i> OnModifyMarkupOnOff() | Toggle - show/hide Markups. |

| | |
|-----------------------------------|--|
| <i>long</i> GetFillStyle() | Get current fill style. Return Value: 0 - No fill 1 - Solid fill 2 - Transparent fill |
|-----------------------------------|--|

| | |
|--|---|
| <i>void</i> SetFillStyle (long nNewValue) | Set current fill style. |
| Parameters | |
| nNewValue | 0 - No fill 1 - Solid fill 2 - Transparent fill |

| | |
|-------------------------------------|--|
| <i>long</i> GetCtlSnapType() | Get current snap type. Return Value: <ul style="list-style-type: none"> • 0x00000001 - MRK_SNAPTO_NONE • 0x00000002 - MRK_SNAPTO_VERTEX • 0x00000004 - MRK_SNAPTO_EDGE • 0x00000008 - MRK_SNAPTO_MIDEDGE • 0x00000010 - MRK_SNAPTO_ARCCENTER • 0x00000020 - MRK_SNAPTO_FACE • combination of all above snap types – MRK_SNAPTO_ALL |
|-------------------------------------|--|

| | |
|---|--|
| <i>long</i> SetCtlSnapType (long dwSnapType) | Set current snap type. |
| Parameters | |
| dwSnapType | Takes one of the following values: <ul style="list-style-type: none"> • 0x00000001 - MRK_SNAPTO_NONE • 0x00000002 - MRK_SNAPTO_VERTEX • 0x00000004 - MRK_SNAPTO_EDGE • 0x00000008 - MRK_SNAPTO_MIDEDGE • 0x00000010 - MRK_SNAPTO_ARCCENTER • 0x00000020 - MRK_SNAPTO_FACE • combination of all above snap types – MRK_SNAPTO_ALL |

| | |
|---------------------------------|---|
| <i>short</i> GetAction() | Get current Markup control action. Return Value: <ul style="list-style-type: none"> • 0 - MRKP_ACTION_NONE • 1 - MRKP_ACTION_ADD • 2 - MRKP_ACTION_DEL • 3 - MRKP_ACTION_COPY • 4 - MRKP_ACTION_EDIT • 5 - MRKP_ACTION_MOVE • 6 - MRKP_ACTION_SEL • 7 - MRKP_ACTION_HYBRID |
|---------------------------------|---|

| | |
|--|------------------------------------|
| <i>void</i> SetAction (short nAction) | Set current Markup control action. |
| Parameters | |

| | |
|--|---|
| <i>nAction</i> | <p>Takes one of the following values:</p> <ul style="list-style-type: none"> • 0 - MRKP_ACTION_NONE • 1 - MRKP_ACTION_ADD • 2 - MRKP_ACTION_DEL • 3 - MRKP_ACTION_COPY • 4 - MRKP_ACTION_EDIT • 5 - MRKP_ACTION_MOVE • 6 - MRKP_ACTION_SEL • 7 - MRKP_ACTION_HYBRID |
| <i>void Draw3DVertexCoord()</i> | Draw 3d vertex coordinates entity. |
| <i>void Draw3DDistance()</i> | Draw 3D measurement distance entity. |
| <i>void Draw3DArc()</i> | Draw 3D measurement arc entity. |
| <i>void Draw3DAngle()</i> | Drawing 3D measurement angle entity. |
| <i>void EditText()</i> | Edit a text entity in the currently opened Markups. |
| <i>void EditNote()</i> | Edit a note entity in the currently opened Markups. |
| <i>void EditDimensions()</i> | Edit a 3D dimension entity (including distance, arc, angle and vertex coordinates) in the currently opened Markup. |
| <i>void HideDimensions()</i> | Hide all 3D dimension entities in the currently opened Markups. |
| <i>void DeleteDimensions()</i> | Delete all 3D dimension entities in the currently opened Markups. |
| <i>boolean IsThisEntityAvailable</i> (short <i>nEntityID</i>) | <p>Determines if the given entity is available.</p> <p>Return Value: TRUE - if entity is available FALSE - otherwise</p> |
| Parameters | |
| <i>nEntityID</i> | The entity ID. |
| <i>boolean IsThisEntityType Available</i> (short <i>nEntityType</i>) | <p>Determines if any entity of the specified type actually exists in the currently opened Markups.</p> <p>Return Value: TRUE - if there is at least one entity of this type FALSE - otherwise</p> |
| Parameters | |
| <i>nEntityType</i> | The entity type. |
| <i>boolean IsThisEntitySelected</i> (short <i>nEntityType</i>) | <p>Determines if any entity of the specified type is selected in the currently opened Markups.</p> <p>Return Value: TRUE - if at least one entity is selected FALSE - otherwise</p> |
| Parameters | |
| <i>nEntityType</i> | The entity type. |

| | |
|--|---|
| <i>boolean</i> IsThisEntityType Hidden (short nEntityType) | Determines if any entity of the specified type is hidden in the currently opened Markups. Return Value: TRUE - if at least one entity is hidden FALSE - otherwise |
| Parameters | |
| nEntityType | The entity type. |

| | |
|---|--|
| <i>long</i> GetEntityPageIndex (long handle) | Get the page index to which the Markup entity belongs to. Return Value: 0 based page index. |
| Parameters | |
| handle | The entity handle |

| | |
|--|---|
| <i>boolean</i> IsEntityEditable (long handle) | Determine if the given entity is editable. Return Value: TRUE - if the entity is editable FALSE - otherwise |
| Parameters | |
| handle | The entity handle. |

| | |
|---|------------------------|
| <i>void</i> EditEntity (long handle) | Edit the given entity. |
| Parameters | |
| handle | The entity handle. |

| | |
|--|---|
| <i>short</i> GetEntityLineStyle (long handle) | Get the line style of the given entity. Return Value: <ul style="list-style-type: none"> • 0 - MRK_PENSTYLE_SOLID • 1 - MRK_PENSTYLE_DASH • 2 - MRK_PENSTYLE_DOT • 3 - MRK_PENSTYLE_DASHDOT • 4 - MRK_PENSTYLE_DASHDOTDOT • 5 - MRK_PENSTYLE_HOLLOW • 6 - MRK_PENSTYLE_ARC • 7 - MRK_PENSTYLE_TRIANGLE |
| Parameters | |
| handle | The entity handle. |

| | |
|--|--|
| <i>short</i> GetEntityLineWidth (long handle) | Get the line width of the given entity. Return Value: The line width in pixels. |
| Parameters | |
| handle | The entity handle. |

| | |
|-----------------------------------|---|
| <i>long</i> GetSelCount () | Get the number of the selected entities in the currently opened Markups. Return Value: The number of the selected Markup entities. |
|-----------------------------------|---|

| | |
|--|---|
| <i>void</i> RotateRelative (short nDegrees) | Rotate markup control together with base file |
|--|---|

Parameters

| | |
|--|--|
| nDegrees | Rotation angle in degree, can be only 0, 90, 180, 270. |
| <i>short</i> IsThisMarkupVisible (long nMrkIndex) | Check if the given markup is visible. Return Value: TRUE if the given markup is visible. FALSE otherwise. |

Parameters

| | |
|--|--------------------------------|
| nMrkIndex | The markup index |
| <i>short</i> ShowThisMarkup (long nMrkIndex, boolean bShow) | Show or hide the given markup. |

Parameters

| | |
|-----------|---|
| nMrkIndex | The markup index |
| bShow | TRUE if show the markup, otherwise FALSE. |

AvPrintX Control

Properties

No properties.

Methods

| Method | Descriptions |
|--|--|
| <i>void</i> PrintIt (OLE_HANDLE hVcetControl,OLE_HANDLE hMarkupControl, boolean bPrintDirect) | Print file along with Markups. |
| Parameters | |
| hVcetControl | Handle of the VCET control window (must not be NULL) |
| hMarkupControl | Handle of the Markup control window (can be NULL). |
| bPrintDirect | Flag that indicates whether to show a dialog to user or not. |
| <i>void</i> PrintFile (BSTR szFile Name,boolean bPrintDirect) | Prints specified file. |
| Parameters | |
| szFileName | Filename to print. |
| bDirectPrint | Flag indicating whether or not to show a dialog to user. |
| <i>void</i> PrintPreview (OLE_HANDLE hVcetControl, OLE_HANDLE hMarkupControl, boolean bPreviewDirect, boolean bWantFrame) | Enter Print Preview mode. |
| Parameters | |
| hVcetControl | Handle of the VCET control window (must not be NULL). |
| hMarkupControl | Handle of the Markup control window (must not be NULL). |
| bPreviewDirect | Flag that indicates whether to show a dialog to user or not bWantFrame - flag for preview with frame or not. |
| <i>void</i> PrintPreviewFile (BSTR szFileName, boolean bPreviewDirect, boolean bWantFrame) | Enter Print Preview mode for specified file. |
| Parameters | |
| szFileName | Filename to preview. |
| bPreviewDirect | Flag that indicates whether to show a dialog to user. |
| bWantFrame | Flag for indicating preview with frame. |
| <i>void</i> PreviewPrint() | In Print Preview window - send Print command. |
| <i>void</i> PreviewNextPage() | In Print Preview window - go to next page. |
| <i>void</i> PreviewPrevPage() | In Print Preview window - go to previous page. |
| <i>void</i> PreviewNumPage() | In Print Preview window - switch between 1 and 2 page display. |
| <i>void</i> PreviewZoomIn() | In Print Preview window - zoom in. |
| <i>void</i> PreviewZoomOut() | In Print Preview window - zoom out. |
| <i>void</i> PreviewClose() | Close Print Preview window. |

| Method | Descriptions |
|--|--|
| <i>void</i> SetPrintPageOrientation (boolean bLandscape) | Set page orientation for printing. |
| Parameters | |
| bLandscape | True if print as landscape, otherwise as portrait. |
| <i>void</i> EnablePrintOptions (short nOption, boolean bEnable) | Enable/disable a print option. |
| Parameters | |
| nOption | Takes one of the following values: 0 - PRINTOPT_GENERAL 1 - PRINTOPT_HEADERSFOOTS 2 - PRINTOPT_WATERMARK 3 - PRINTOPT_MARGINS 4 - PRINTOPT_STAMPS 5 - PRINTOPT_PENSETTINGS 6 - PRINTOPT_PRINTTOFILE 7 - PRINTOPT_PRINTSETTINGS |

Events

| Event | Description |
|--------------------------------------|--|
| <i>void</i> EndPrintPreview() | Fired when user closes Print Preview window. |
| <i>void</i> EndPrint() | Fired when finished printing. |

AutoVue CompareX Control

Properties

| Property | Descriptions |
|---------------------------------------|--|
| <i>BSTR</i> File1 | First source filepath. |
| <i>BSTR</i> File2 | Second source filepath. |
| <i>boolean</i> ShowScrollBar | Flag indicating whether or not to show Scrollbar. |
| <i>boolean</i> ShowMainToolBar | Flag indicating whether or not to show Main toolbar. |
| <i>boolean</i> ShowAuxiToolBar | Flag indicating whether or not to show Auxiliary toolbar. |
| <i>boolean</i> ShowStatusBar | Flag indicating whether or not to show Status bar. |
| <i>boolean</i> EnablePopupMenu | Flag indicating whether or not to enable Popup menu. |
| <i>OLE_COLOR</i> CtlBgColor | Background color. |
| <i>short</i> Rotate | Specifies current rotation value. Can be only 0, 90, 180, 270. |
| <i>short</i> Flip | 0 - No flipping 1 - Flip horizontal 2 - Flip vertical 3 - Flip both |
| <i>short</i> Page | Specifies current page. |
| <i>short</i> ZoomType | 0 - Zoom fit width 1 - Zoom fit height 2 - Zoom fit both 3 - Zoom fit resolution 4 - Zoom by factor (Default 1) 5 - Zoom custom: The following 4 properties are used to determine the extents |
| <i>double</i> ExtMinX | Minimal X coordinate of extents. |
| <i>double</i> ExtMinY | Minimal Y coordinate of extents. |
| <i>double</i> ExtMaxX | Maximal X coordinate of extents. |
| <i>double</i> ExtMaxY | Maximal Y coordinate of extents. |
| <i>boolean</i> ViewAdditions | If TRUE , shows the entities that are in the second file but not in the first file. |
| <i>boolean</i> ViewDeletion | If TRUE , shows the entities that are in the first file but not in the second file. |
| <i>boolean</i> ViewUnchanged | If TRUE , shows the entities that are in both files. |

Methods

| Method | Descriptions |
|---|---|
| <i>void</i> ZoomFit() | Zoom to fit. |
| <i>void</i> ZoomPrevious() | Undoes last zoom operation. |
| <i>void</i> ZoomWidth() | Zooms to fit width. |
| <i>void</i> ZoomHeight() | Zooms to fit height. |
| <i>void</i> ZoomByFactor (double factor) | Zooms by factor. |
| Parameters | |
| factor | Zooming factor. |
| <i>void</i> ZoomFullResolution() | Displays rasters using full resolution, for other formats same as ZoomFit |
| <i>void</i> Print (boolean bDirectPrint) | Prints current document. |
| Parameters | |
| bDirectPrint | Flag indicating whether or not to show a dialog to user |
| <i>void</i> PrintPreview (boolean bDirect- Print) | Previews current document. |
| Parameters | |
| bDirectPreview | Flag indicating whether or not to show a dialog to user. |
| <i>void</i> PageNext() | Displays next page. |
| <i>void</i> PagePrevious() | Displays previous page. |
| <i>void</i> PageSelect() | Selects page number. |
| <i>void</i> SetContrastLight() | Sets the image contrast to be light, this only applies to raster files. |
| <i>void</i> SetContrastNormal() | Sets the image contrast to be normal, this only applies to raster files. |
| <i>void</i> SetContrastDark() | Sets the image contrast to be dark, this only applies to raster files. |
| <i>void</i> SetContrastDarkest() | Sets the image contrast to be darkest, this only applies to raster files. |
| <i>void</i> GetContrast() | Returns the image contrast value. The value can be one of the following for the raster file: CONTRAST_LIGHT (-50) CONTRAST_MEDIUM (0) CONTRAST_DARK (66) CONTRAST_DARKER (100) |
| <i>void</i> SetAntiAlias() | Scales to grey, enhances the details of the raster file image that are viewed at less than 100% zoom. |
| <i>void</i> InvertImage() | Reverses the background and foreground colors of the raster file image. |
| <i>void</i> ShowLayersDlg() | Displays the Layer dialog. |
| <i>void</i> ShowBlocksDlg() | Displays the Blocks dialog. |

| Method | Descriptions |
|--|---------------------------------|
| <i>void</i> ShowNamedViewsDlg() | Displays the Named View dialog. |
| <i>void</i> ShowXRefDlg() | Displays the Xref dialog. |

Events

| Event | Description |
|--|--|
| <i>void</i> StatusChanged (short nNewStatus) | Fired when status changes. |
| Parameters | |
| nNewStatus | New status value: STATUSIDLE = 0x00 STATUSPROCESSING = 0x01 STATUSREADING = 0x02 STATUSREFRESHING = 0x04 STATUSREGENERATING = 0x08 STATUSREADINGFINISHED = 0x10 |
| <i>void</i> HelpString (BSTR szMsg) | Help String for status indicator |
| Parameters | |
| szMsg | Help message |
| <i>void</i> ExtentsChanged (double extMinX, double extMinY, double extMaxX, double extMaxY) | Fired when extents change internally (not when properties change). |
| Parameters | |
| extMinX, extMinY, extMaxX, extMaxY | New extents' values. |
| <i>void</i> PageChanged (short nNewPage) | Fired when page changes internally. |
| Parameters | |
| nNewPage | New page value. |
| <i>void</i> RotateChanged (short nNewRotate) | Fired when rotate value changes internally. |
| Parameters | |
| nNewRotate | New rotate value. |
| <i>void</i> FlipChanged (short nNewFlip) | Fired when flip value changes internally. |
| Parameters | |
| nNewFlip | New flip value. |

Integration: AutoVue and "Visual Basic" Applications

All the integration methods available through "C" are also available under Visual Basic. Visual Basic provides hooks to call DLL functions and create "C"-like data structures. The easiest way to integrate AutoVue would be through OLE-Automation. This has several advantages, to wit:

- Access to a high level API
- The code that is produced can be used, with little or no modification, in applications that support VBA (Visual Basic for Applications). VBA is a programming language available in most Microsoft Office products (Word, Excel, Access etc.)
- Language is easy to use and extensible

OLE Automation Example:

```
; Declare the OLE Automation Object
Dim OleObj As Object

; Function: Create the Ole automation object. Must be called once when your program starts up.
Sub LoadOleObj()
    ' Create the OLE Automation Object
    Set OleObj = CreateObject("AutoVue.Application")
End Sub

; Function: Destroy the Ole automation object.
; Must be called once when your program exits. Performs necessary
; cleanups.
Sub UnloadOleObj()
    If (IsObject(OleObj)) Then
        ' Close the window
        OleObj.Execute ("CHILD CLOSE")
    End If
    ' Clean up
    Set OleObj = Nothing
End Sub

; Function: This sample function accessed
; to OLE Automation object and performs several operations.
; You should put in your own code here.
Sub ExecuteOleObj()
    If (IsObject(OleObj)) Then
        ' Open file
        OleObj.Execute ("FILE OPEN C:\AV19.1\samples\Desktop-Office\Word.doc")
        OleObj.Execute ("FILE OPEN ""C:\AV19.1\samples\3d\3D
Compare\Component_V1\Component.SLDASM""")
    End If
End Sub
```

```
OleObj.Execute ("COMPARE ""C:\AV19.1\samples\3d\3D  
Compare\Component_V2\Component.SLDASM""")
```

```
' Display window: The Application is, by default, hidden
```

```
OleObj.Execute ("WINDOW SHOW")
```

```
'OleObj.Execute ("CHILD SHOW")
```

```
' Display another file
```

```
'OleObj.Execute ("FILE OPEN c:\autoexec.bat")
```

```
' Print the file
```

```
' OleObj.Execute ("PRINT")
```

```
OleObj.Execute ("COMPARE ""C:\AV19.1\samples\3d\3D  
Compare\Component_V2\Component.SLDASM""")
```

```
End If
```

```
End Sub
```


Format Support

To see the latest list of file formats supported by the AutoVue family of products, please visit our website at: <http://www.oracle.com/applications/autovue/index.html>

A list of supported file formats is also available in PDF format with your AutoVue installation.

Utilities

In addition to the APIs discussed in the Integration chapter, additional tools are provided with AutoVue. These include:

Full Text Extraction

This utility allows users to extract text information from virtually any type of document, whether it be CAD, vector, text, etc. This utility is perfect for extracting text from a file and providing textual information to a search engine for indexing. It also eliminates duplicates. For example, users can fully text index AutoCAD or MicroStation drawings in a document management system. Further information on this tool can be found in the Docs directory of your AutoVue CD.

Using the FullText Extraction Utility

- 1 From the **Tools** menu in AutoVue, select **Auto Text Extraction**. Alternatively, open the file **Outtext.exe** located in the directory **C:\Program Files\av\avwin**.

The **Automatic Text Extraction** dialog appears.

- 2 In the **From** text box, enter the path and name of the file from which the text is to be extracted.
- 3 In the **To** text box, enter the path and name of the file to which the discovered text is to be copied.

File extensions include **.txt** and **.out**. The default is **text.out** located in the temp directory. If the file entered does not exist, it will be created for you.

- 4 Click **Extract**.

Text found in the **From** file are listed under **Contents** in the **Automatic Text Extraction** dialog.

Ftype

This utility provides the file type of a file. For example, provided the filename **doc1.doc**, Ftype lets users determine that the file is a Microsoft Word document. This tool is useful for implementing batch check-in of files into a document management system or for providing MIME type information to a web server. Further information on this tool can be found in the Docs directory of your AutoVue CD.

CAD Information Extraction

This utility allows users to extract XRef information from a CAD file. This is useful for batch importing AutoCAD, MicroStation and various other types of CAD files into a document management system. To access this tool, select **CAD/Doc Text Extraction** from the **Tool** menu.

Examples of integrations using these tools and APIs can be found in the Integrat directory of the AutoVue CD.

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