

AutoVue
Web Edition
User's Manual

Support Information

If you have any questions or require support for AutoVue please contact your system administrator. Some customization and maintenance must be done on the server side and cannot be implemented on the client machine. If the administrator is unable to resolve the issue, please contact Cimmetry Systems, Corp.

Contact Information

If at any time you have questions or concerns regarding AutoVue, call or e-mail us.

General inquiries

Telephone: +1 514 735-3219

Fax: +1 514 735-6440

E-mail: info@cimmetry.com

Web Site: <http://www.cimmetry.com>

Sales inquiries

Telephone: +1 514 735-3219 or 1 800 361-1904

Fax: +1 514 735-6440

E-mail: sales@cimmetry.com

Customer Support

Telephone: +1 514 735-9941

Web Site: <http://www.cimmetry.com/support>

CONTENTS

SUPPORT INFORMATION

INTRODUCTION 1

AutoVue 1

Marking Up Documents 1

VIEWING AND EXPORTING

FILE VERSIONS INFORMATION 2

Viewing File Versions 2

Exporting File Versions 2

AUTOVUE BASICS 3

Menu Bar 3

Toolbars 3

Status Bar 4

Quick Menus 4

OPENING FILES WITH AUTOVUE 5

Opening a Local File 5

Opening a URL 5

Opening a File from the Server 5

Archive Files 6

Viewing File Properties 6

WORKING WITH 2D FILES 7

Searching Text 7

Manipulating 2D Views 8

Using Birds Eye View 11

Using the Magnify Glass 11

Using the Magnify Window 12

Conversion 12

 Conversion Options 12

 PDF 14

 X and Y 14

 Converting a File 15

 Changing the Pen Settings 16

Measuring in 2D non-vector Files 16

 Measuring Distance 17

 Calibrating Distance 18

 Measuring Area 18

 Measuring an Angle 19

 Measuring an Arc 19

 Calibrating an Arc 19

Working with 2D Vector Files	20
Manipulating 2D Vector Views	20
Drawing Information	21
Viewing Details of a Single Entity	21
Viewing information for a Set of Entities	22
Viewing Tags/Attributes	22
Viewing XRefs	22
Displaying Details About Missing XRefs	23
Layers	23
Blocks	24
Selecting Views	24
Specifying a View Point	24
Comparing 2D Files	24
Specifying Scale and Offset for a Compare File	26
Overlays	26
Adding an Overlay	26
Modifying an Overlay	26
Removing an Overlay	27
Measuring in 2D Vector Files	27
2D Vector Snapping Modes	28
Measuring Distance	29
Calibrating Distance	29
Measuring Area	30
Measuring an Angle	31
Measuring an Arc	31
Calibrating an Arc	32
CONFIGURING AUTOVUE	34
General Options	34
Configuring Options for CAD Files	34
Raster Files	35
Rendering	35
Configuring XRef Paths	35
Configuring Font Paths	36
Measurement	37
Configuring the Base Font for Text Files	37
Configuring AutoVue for 2D Files	38
Snap Settings	38
Configuring Colors	38
Configuring Background Colors for Graphic Files	38
Configuring Background Colors for Desktop Office	39

MARKUPS	40
Markup Navigation Tree	40
Working with Markup Files	42
Saved States	42
Creating a Markup File	42
Entering Markup Information	42
Saving a New Markup File	43
Opening Markup Files	43
Saving an Existing Markup File	43
Importing a Markup File	44
Exporting a Markup File	44
Setting the Active Markup File	44
Changing the Active Markup File	45
Markup Layers	45
Creating a Markup Layer	46
Setting the Active Markup Layer	46
Changing the Active Markup Layer	47
Changing the Color of a Markup Layer	47
Renaming a Markup Layer	48
Toggling Markup Layers	48
Deleting a Markup Layer	48
Moving a Markup Entity to Another Layer	49
Consolidating Markup Files	49
Modifying Markup Entities	50
“Go To” a Markup Entity	51
Selecting Markup Entities	52
Moving a Markup Entity	52
Editing a Markup Entity	52
Grouping Markup Entities	52
Ungrouping Markup Entities	53
Hiding Markup Entities	53
Changing Line Thickness of an Entity	53
Changing Line Style of an Entity	54
Changing the Arrow Style	54
Changing Line Color of an Entity	54
Changing Fill Color of an Entity	55
Changing Fill Type of an Entity	56
Assigning an Entity the Same Color as the Layer	56
Deleting Markup Entities	57
Modifying Measurement Markup Entities	57

Changing Measurement Units and Symbols	57
Modifying Markup Entity Properties	58
Line Color	58
Line Style	59
Line Thickness	59
Width (Pixels)	59
Arrow Style	59
Fill Type	60
Fill Color	60
Markup Layers	61
Marking Up 2D Files	61
2D Markup Entities	62
Creating a Non-contiguous Freestyle Entity	64
Creating a Contiguous Freestyle Entity	64
Adding a Leader	65
Forcing a Line Segment to Become Horizontal or Vertical	65
Adding Text	66
Adding a Note	66
Symbols	67
Adding a Symbol	67
Creating a New Symbol Library	67
Editing Symbol Library Information	68
Deleting a Symbol Library	68
Working with Hyperlinks	68
Creating a Hyperlink	69
Firing a Hyperlink	69
Editing a Hyperlink	70
Deleting a Hyperlink	70
Viewing List of Hyperlinks	70
Viewing History of a Hyperlink	70
Creating 2D Non-vector Markup Measure Entities	71
Measuring Distance	72
Measuring Cumulative Distance	72
Calibrating Distance	73
Measuring Area	74
Measuring an Angle	74
Measuring an Arc	75
Calibrating an Arc	76
Creating 2D Vector Markup Measure Entities	76
2D Vector Snapping Modes	77

Measuring Distance	78
Measuring Cumulative Distance	79
Calibrating Distance	79
Measuring Area	80
Measuring an Angle	81
Measuring an Arc	82
Calibrating an Arc	83
PRINTING	84
Print Options	84
Configuring the Print Options	87
Print Margins	87
Setting the Margins	87
Headers/Footers	88
Adding a Header and Footer	89
Native Print Settings	90
Watermarks	90
Adding a Watermark	91
Assigning Pen Settings	92
Creating a New Pen Setting	93
Deleting a Pen Setting	93
Partial Preview of a File	93
Previewing a File Before Printing	94
Printing a File	94
Batch Printing	95
COLLABORATION	97
Collaboration User Tree	97
The Host	97
The Controller	98
Lock	98
Observer	98
Open a File	99
Pointer	99
Session Information	99
Session Markup	99
Show Tracker	100
Collaboration Session	100
Initiating a Collaboration Session	100
Changing a User's Layer Color of a Session	101
Adding New Users to a Session	101
Opening a Markup While Initiating a Session	102

Opening a Markup During a Session	102
Joining a Session	103
Inviting Users During a Session	103
Removing Users from a Session	104
Assigning a Host During a Session	104
Granting Control of a Session to Another User	104
Saving a Session Markup	104
Closing a Session	105
Requesting Control of a Session	105
Tracking Changes	105
Unlocking a View	105
Locking a View	106
Viewing Session Information	106
Leaving a Session	106
Chat Window	107
Sending a Message to Selected Users	107
Sending a Message to All Users	108

Introduction

Cimmetry Systems Corp. has developed a family of products designed to meet all levels of business and engineering needs. Collectively, our products provide viewing and Markup capabilities, and support the visualization of 2D engineering and office formats.

AutoVue

AutoVue is a viewing and Markup application that has been developed for both business and technical users.

AutoVue is capable of displaying over 450 different file formats without the authoring application. Supported file types include text, database, graphic and spreadsheet. Even contents of archive files can viewed in AutoVue. Moreover, when you view a file you do not need to specify the file type. AutoVue automatically detects the type of file you are requesting to view — even files with false extensions!

Marking Up Documents

AutoVue has the ability to create markups for all its readable file formats without the document's authoring application. AutoVue creates markups for different formats without modifying the original file.

You can attach comments, notes and drawings to any file you display in AutoVue. This is called marking up a file, commonly known as annotating or redlining. A **Markup** is an object or entity that you attach to a file. All Markups are saved in a separate file called a **Markup** or a **Markup file**. However, when you display a file with its Markups, the Markups appear to be part of it.

AutoVue provides a variety of flexible, user-friendly entities. To name a few, there are circles, clouds, polygons and leaders. You can also attach text to entities, insert a note for longer comments or add a symbol such as a company logo. In addition, you can create measurement markup entities and hyperlinks that link between the current file and other associated files or applications.

Viewing and Exporting File Versions Information

From the **Help About** dialog, you can view the version, build number and date of the decoder dll files, as well as export the files into a text file.

Viewing File Versions

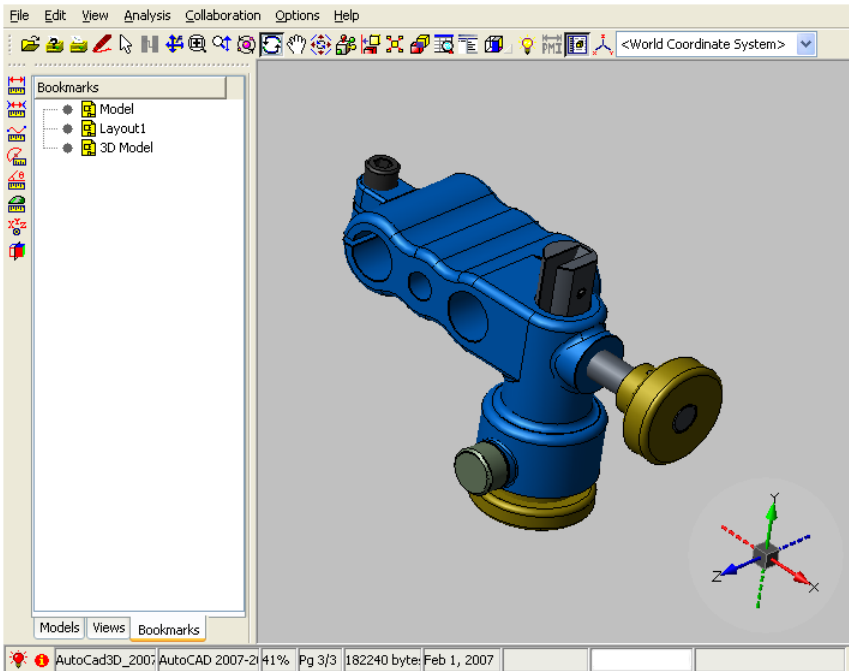
- 1 Select **Help > About** from the AutoVue main menu.
The **About** dialog appears.
- 2 Click **Version Info....**
The **File Versions** dialog appears.
- 3 When you are finished viewing, click **Close**.

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**.
Note: The file can only be exported to text file.
- 6 Click **Save**.
The markup file is exported to the selected directory.

AutoVue Basics

This section introduces you to the basics of working with AutoVue's graphical user interface.



Menu Bar

The **Menu** bar is the main access to all the menu commands. The selection of commands changes according to the tasks being accomplished by AutoVue.


Toolbars


The **Toolbar** buttons offer easy access to the options presented in the drop-down menus found in the **Menu** bar.

Status Bar

In both **View** mode and **Markup** mode, there is a **Status** bar located at the bottom of the main window. The fields displayed from left to right on the **Status** bar are: marker, current active filename, file type, zoom factor, current page and total number of pages, current active file size, file creation date and cursor's coordinate position.

In addition to the fields, there are two markers that may be present on the Status bar.

The red light bulb  indicates that the current active file has associated Markups. While in **View** mode, click the red light bulb to view the **Markup Files** dialog, then select a Markup file or group of Markup files to open. By opening a Markup file, Markup mode is automatically launched.

A red circle with an “i”  indicates that some main resources required to properly read the current active file are not available. To identify the missing resources, click the red circle to display the **File Properties** dialog.

Quick Menu

One of the quickest ways to access options is through **Quick Menus** or context-sensitive shortcut menus. These are the menus you see when you right-click in the workspace. The **Quick Menu** options available depend on the mode you are in and what is selected prior to right-clicking.

Opening Files with AutoVue

How to open a file depends on the current active mode in AutoVue. In **View** mode, you can open base files. In **Markup** mode, you can open a Markup file for a base file.

With AutoVue, you can open a file from the current active directory or from another directory, or manually specify the file to open by entering the URL.

Opening a Local File

- 1 Select **File > Open Local File** from the AutoVue main menu.
The **File Open** dialog appears.
- 2 Browse to locate the file that you want to open.
- 3 Click **Open**.
The file appears in the AutoVue workspace.

Opening a URL

You can open a file by specifying the URL.

- 1 Select **File > Open URL** from the AutoVue main menu.
The **File Open** dialog appears.
- 2 In the **File Name** type the **URL http** or **ftp** path or click **Browse** to locate the file that you want to open.
- 3 Click **OK**.
The file appears in the AutoVue workspace.

Opening a File from the Server

- 1 Select **File > Open from Server** from the AutoVue main menu.
The **File Open** dialog appears.
Note The **Open from Server** option is available in the **File** menu only if you have access to files on the server. Refer to the ***Installation and Administration Manual*** for information on setting up server directories using VueServer.ini.
- 2 Browse the directory to locate the file that you want to open.
- 3 Click **Open**.
The file appears in the AutoVue workspace.

Archive Files

The full archive file directory displays in the AutoVue window. It is not necessary to decompress the file. Double-click a file to display it within AutoVue. If you would like to markup an archive file, the file must be accessible for AutoVue in a format other than archive.

Viewing File Properties

You can access the file properties from the **File** menu. The **Properties** dialog provides information specific to the current active file, such as filename, file size, date of creation and file type. The file properties that you can view are:

Property	Description
File	Information specific to the current active file, such as filename, file size, date of creation, file type and x, y & z dimensions.
Resource Information	Resources specific to the current active file, such as text font, shape file, line style and external reference files.
Native	Custom properties for file types, such as last person who saved the file, signature verification and author comments.

Note The file properties can vary depending on the file format viewed.

- 1 Select **File > Properties** from the AutoVue main menu.
The **Properties** dialog appears.
- 2 To view file properties, click the **File Properties** tab.
To view resource information, click the **Resource Information** tab.
To view native properties, click the **Native Properties** tab.
- 3 Click **OK** to close the dialog.

Working With 2D Files

AutoVue provides easy access to entity information and displays color-coded comparative data for 2D drawings. You can instantly manipulate how the current active file is displayed. You can also modify AutoVue to suit your needs and preferences through a broad range of configuration options.

Searching Text

You can perform a text search on 2D vector and text-based documents.

Note You can not perform a text search on raster files.

AutoVue provides search options that you can use to customize a search. These options are:

Option	Description
Match Whole Word Only	Match a complete word.
Match Case	Search for a word or text string with specific capitalization.
Up	Search backward in the document.
Down	Search forward in the document.




- 1 Select **Edit > Search** from the AutoVue main menu.
The **Find** dialog appears.
- 2 In the **Find What** text box, enter the word or phrase that you want to find.
Note If you are searching in a vector file, select a text string from the list.
- 3 Customize your search.
- 4 Click **Find Next**.
AutoVue highlights the text and zooms into the text area.
- 5 Click **Close** to close the **Find** dialog.
Note To repeat the last search criteria, select **Edit > Repeat Search** from the AutoVue main menu.





Manipulating 2D Views







With the **View** options you can instantly manipulate how the current active file is displayed. You can rotate a file's orientation counterclockwise by 90, 180 or 270 degrees, flip a file's orientation horizontally, vertically or both simultaneously.

AutoVue provides several ways to change the view size of a selected area of a file, display different views, layers and blocks of the current active file. You can also navigate from one page to another page of a multi-page file.

You can access these options from the **View** menu. The options are:

Menu	Option	Description
Zoom	In	Zoom in by a factor of 2. From the toolbar, click the  button.
	Out	Zoom out by a factor of 2. From the toolbar, click the  button.
	Full Resolution	Display the file at full resolution. From the toolbar, click the  button.
	Fit	Adjust the contents of a file along the horizontal or vertical axis to fully display within the current window. Fit Both - AutoVue finds the best fit for the current file with respect to both its vertical and horizontal dimensions. Note This option is also known as Zoom Fit when right-clicking in the workspace. Fit Vertical - Fit the image vertically in the active window. The horizontal dimensions of the image are zoomed proportionally but may be too large or small for the window.

Menu	Option	Description
		Fit Horizontal - Fit the image horizontally in the active window. The vertical dimensions of the image are zoomed proportionally but may be too large or small for the window. Note This option is also know as Zoom Page Width when right-clicking in the workspace.
	Previous	Revert to the previous selected zoom option.
Note The Rotate option is disabled for text-based documents and spreadsheets.		
Rotate	0	Set the file to its original position. From the toolbar, click the  button.
	90	Rotate the file 90 degrees anti-clockwise. From the toolbar, click the  button.
	180	Rotate the file 180 degrees anti-clockwise. From the toolbar, click the  button.
	270	Rotate the file 270 degrees anti-clockwise. From the toolbar, click the  button.
Note When in Markup mode, you can specify if the rotate is to be applied to the Markups only or to the base file and Markups.		
Note The Flip option is disabled for text-based documents and spreadsheets.		
Flip	None	Reset the drawing to its original position.
	Horizontal Axis	Flip the drawing on its horizontal axis.
	Vertical Axis	Flip the drawing on its vertical axis.
	Both Axes	Flip the drawing on its vertical and horizontal axes.
Note When in Markup mode, you can specify if the flip is to be applied to the Markups only or to the base file and Markups.		

Menu	Option	Description
Note The Image option is used for black-and-white (monochrome) raster files.		
Image	Contrast	Light, normal, dark and darkest.
	Anti-alias	Enhance the details of monochrome raster files. Note Also known as “Scale to Grey”.
	Invert	Reverse the background and foreground colors.
Page	Next Page	Go to the next page of a multi-page file. From the toolbar, click the  button.
	Previous Page	Go to the previous page of a multi-page file. From the toolbar, click the  button.
	Page Number	Go to the specified page of a multi-page file. From the toolbar, click the  button.
Special View Modes	Birds Eye	Display a close-up view of a particular area of a file while maintaining a view of the entire file. From the toolbar, click the  button. Note The Birds Eye option is disabled for text-based documents and spreadsheets. See <i>Using Bird’s Eye View</i>
	Magnify Glass	Magnify an area of the file that is specified by the cursor location. From the toolbar, click the  button. See <i>Using the Magnifying Glass</i>
	Magnify Window	Magnify a selected area of a file and displays it in the Magnify Window. From the toolbar, click the  button. See <i>Using the Magnifying Window</i>
	Pan	Click and drag to move the drawing. To exit right-click.

Menu	Option	Description
Show Model Tree		Show/hide the Model tree of the current active file.

Using Birds Eye View

The **Birds Eye** view option allows a close-up view of a particular area of a file while maintaining a full view of the file. The Birds Eye window displays a miniature version of the file. A movable box frame on top of the miniature indicates the area of the file displayed in the AutoVue workspace.


Note The **Birds Eye** option is disabled for text-based documents and spreadsheets.

- 1 Select **View > Special View Modes > Birds Eye** from the AutoVue main menu.
The **Bird's Eye** window appears displaying a full view of the file.
- 2 To view the changes in “real time”, select **Options > Dynamic** from the **Birds Eye** menu.
- 3 To view a close-up of a specific area of the file in the AutoVue workspace, minimize the frame box by clicking and dragging the frame handles.
To view a different area of the file in the AutoVue workspace, click and drag the frame box to the area that you want to view.
Note If you perform a zoom function in the AutoVue workspace, the area displayed in the workspace is highlighted by the frame box in the **Birds Eye** window.
- 4 Select **Bird's Eye > Exit** to close the **Bird's Eye** dialog.
The last view performed remains in the AutoVue workspace.

Using the Magnify Glass

The **Magnify Glass** view option zooms an area specified by the position of the Magnify Glass. You can view the details of a selected area of a file while maintaining a full view of the file.

- 1 Select **View > Special View Modes > Magnify Glass** from the AutoVue main menu.


Note You can also click the Magnify Glass button  on the AutoVue toolbar.

- 2 Move the cursor to the area that you want to magnify.
- 3 Click and hold the left mouse button.
The area is magnified in the Magnify Glass.
Note To view different areas of the file, click and drag the mouse.
- 4 Right-click to exit **Magnify Glass**.

Using the Magnify Window

The **Magnify Window** option zooms an area specified by the position of the cursor. You can view the details of a select portion of the displayed file while maintaining the display of the full file.

- 1 Select **View > Special View Modes > Magnify Window** from the AutoVue main menu.
The **Magnify Window** appears.

Note You can also click the Magnify Window button  on the AutoVue toolbar.

- 2 Move the cursor to the area that you want to magnify in the current active file.
- 3 Click once.
The area appears magnified in the **Magnify Window**.
- 4 Right-click to exit the **Magnify Window**.

Conversion

Sometimes you need to translate a file to be able to use it with an application it was not created from. AutoVue provides several conversion file formats for you.

Conversion Options

Depending on the conversion type being performed, the available options in the **Convert** dialog will vary. These options are:

Option	Description
Color Depth	<p>Select an option from the drop-down list:</p> <ul style="list-style-type: none"> • 1 = Black and white • 4 = 16 colors • 8 = 256 colors • 24 = True color • auto = AutoVue selects the color depth that best matches the original file.
Convert to Format	<p>A drop-down list of all the possible types of output file formats currently available for conversion. The available formats are:</p> <ul style="list-style-type: none"> • CALS GP4 • Encapsulated Postscript (Raster) • HP Laserjet Printer (HLP) • PCX Bitmap • PDF • Run Length RLC File • TIFF • Windows Bitmap • Compuserve GIF
Output	<p>Specify the name and path of the file in which the conversion is to be stored. This file is also known as the output file. You can use Browse to provide AutoVue with the file's path.</p> <p>Note If writing onto an existing file, a warning message appears, asking if you want to overwrite the existing file.</p>
Sub-Format	<p>The Sub-Format drop-down list appears when you selected HP Laserjet Print, TIFF, or Compuserve GIF from the Convert to Format drop-down list. Specify the variety of convert-to-format by selecting a sub-format.</p>

Option	Description
Convert Region	<p>The area of the file to be converted. The available options are:</p> <ul style="list-style-type: none"> • Display - refers to the image to fit on the output page. For example, if you zoomed in on a particular region of the file, the zoomed portion of the file is converted. • Extents - refers to the entire extents of the file.
Convert Pages	<p>The number of pages to be converted. The available options are:</p> <ul style="list-style-type: none"> • All - converts all pages. • Current - converts the current page • Range - converts the pages indicated in the range
X and Y	<p>Choose from pixels, inches and millimeters for the units.</p> <p>Note With raster files the units are preset as pixels:</p> <ul style="list-style-type: none"> • X indicates the number of horizontal pixels • Y is the number of vertical pixels for the current active file contents. <p>At times, AutoVue will preset X and Y to match the specifications of the selected conversion file format. Other times, X and Y will be available and may be changed according to your preferences. Your selection here will not affect the current display but will affect the conversion file's resolution.</p>

PDF

With AutoVue it is possible to convert Office, 2D and EDA formats to PDF. When converted from **Markup Mode**, markups are “burned” onto the PDF. When you open the PDF, you will see the base file along with all markups.

X and Y

Three factors affect the resolution of an image: the type of image you are converting, the output device and the acceptable file size. High-resolution scans often require large files, causing longer processing and print time. Note that a high-resolution may not produce a better-quality printed image if your output device does not recognize the higher resolution information stored in the file. To

keep file sizes manageable, select the lowest resolution that provides acceptable quality on your output device.

With some file types, the **Size** option appears giving you a choice between millimeters and inches. Page sizes can be selected from the **Size** drop-down list or you can customize page sizes by configuring the Initialization file. For more information, *see System Administration Guide*.

Technical Drawing Page Sizes	ISO Paper Format
A8.5" X 11.0" (216 mm X 279 mm)	A4 285 mm X 198 mm
B11.0" X 17.0" (279 mm X 432 mm)	A3 396 mm X 273 mm
C17.0" X 22.0" (432 mm X 559 mm)	A2 570 mm X 396 mm
D22.0" X 34.0" (559 mm X 864 mm)	A1 817 mm X 570 mm
E34.0" X 44.0" (864 mm X 1118 mm)	A0 1165 mm X 817 mm

Converting a File

- 1 Select **File > Convert** from the AutoVue main menu.
The **Convert** dialog appears.
Note The **Input** area varies according to the type of file. A word-processing file displays the file format; a raster file displays the file format and size. Both vector and database files display the size, file type and dimensions.
- 2 In the **Save As** text box, enter the path and filename or click **Browse** to locate the directory where you want to save the converted file.
Note If writing on to an existing file, the contents of the output file will be overwritten.
- 3 Select the convert options that you want to set for the file.
See Conversion Options
- 4 Click **OK**.
The file is converted and appears in the specified directory.
Note You can convert several selected pages of a multi-page file to a multi-page TIFF.

Changing the Pen Settings

With AutoVue, you can specify a thickness for each pen color.

Note This option only applies to vector files.

- 1 Select **File > Convert** from the AutoVue main menu.
The **Convert** dialog appears.
- 2 Click **Pens**.
The **Pen Settings** dialog appears.
- 3 In the **From/To**, select the **Color Index** for which you want to modify the thickness.

Note To select more than one **Color Index**, click the **Shift** or **Ctrl** key while selecting.

- 4 From the **Units** drop-down list, select the unit in which you want to set the thickness.
- 5 Click **Thickness**.
The **Modify Pen Thickness** dialog appears.
- 6 Enter a thickness.
- 7 Click **OK**.
The new **Thickness** appears beside the selected **Color Index**.
- 8 To save the changes that you made, click **Save As**.
The **Save As** dialog appears.
- 9 Enter a **Name** for the new pen settings.
- 10 Click **OK**.

The new pen settings are saved and appear in the **Current Pen Settings** list.





Note To modify an existing **Pen Settings**, select the pen settings from the **Current Pen Settings** drop-down list, make the changes, then click **Save**.

- 11 Click **OK** to close the **Pen Settings** dialog.

Measuring in 2D non-vector Files

AutoVue provides the ability to perform measurements in 2D files. Measure options vary between vector and non-vector files. For vector files, AutoVue provides the option to “snap” to fixed points on the drawing. For non-vector files, you can only “free snap”.


AutoVue provides several measure options that you can choose from. You can access the measure options from the **Analysis > Measure** menu. The options are:

Name	Description
Angle	Measure the angle between selected points. Click the Angle button  in the toolbar.
Arc	Measure an arc. Click the Arc button  in the toolbar.
Area	Measure a selected area. Click the Area button  in the toolbar.
Distance	Measure the distance between two points. Click the Distance button  in the toolbar.

Measuring Distance

Use the **Distance** option to measure the distance between two specific points.

- 1 Select **Analysis > Measure** from the AutoVue main menu.
The **Measurement** dialog appears.

Note You can also click the Distance button  on the AutoVue toolbar.

- 2 Click the **Distance** tab.
- 3 From the **Measured Distance Units** drop-down list, select the unit in which you want to measure the distance.

Note If you want to measure the distance along a path, select **Cumulative**.

- 4 Click a point on the drawing to define the starting point.
- 5 Click another point on the drawing to define the end point.

Note If you selected **Cumulative**, continue clicking points along the path that you want to measure.

- 6 Right-click to complete the measurement.
The points are joined by a line. The measured distance, Delta-X and Delta-Y appear in the **Measurement** dialog.

Note Click **Reset** to take another measurement.


- 7 Click **Close** to close the **Measurement** dialog.

Calibrating Distance

- 1 Measure distance between two points or measure cumulative distance.
See *Measuring Distance*
- 2 In the **Measurement** dialog, click **Calibrate**.
The **Distance Calibration** dialog appears displaying the measured distance.
- 3 From the **Measured Dist.** drop-down list, select the unit to which you want to calibrate the distance.
- 4 Click **Calibrate to** and enter a value if you want to calibrate the distance to a value.
Click **Set Factor** and enter a value if you want to calibrate the distance by a factor.
- 5 Click **OK**.
The calibration result appears in the **Measurement** dialog.
- 6 Click **Close** to close the **Measurement** dialog.

Measuring Area


Use the **Area** option to measure the area and perimeter of a region.

- 1 Select **Analysis > Measure** from the AutoVue main menu. The **Measurement** dialog appears.
Note You can also click the Area button  on the AutoVue toolbar.
- 2 Click the **Area** tab.
- 3 From the **Measured Area Units** drop-down list, select the unit in which you want to measure the area.
From the **Perimeter Units** drop-down list, select the unit in which you want to measure the perimeter.
Note To cumulate a **Net Area Result** of different areas, select **Add** in the **Measurement** dialog. To subtract an area from the **Net Area Result**, select **Subtract**. Select **Clear** to clear the **Net Area Result**.
- 4 Click a point on the drawing to define the starting point.
- 5 Continue clicking points on the drawing to define the area you want to measure.
Each point is joined by a line. The area and perimeter measurements appear in the **Measurement** dialog.
- 6 Right-click to complete the measurement.
Note Click **Reset** to take another measurement.
- 7 Click **Close** to close the **Measurement** dialog.

Measuring an Angle

Use the **Angle** option to measure the angle between points on a drawing.

- 1 Select **Analysis > Measure** from the AutoVue main menu.
The **Measurement** dialog appears.

Note You can also click the Angle button  on the AutoVue toolbar.

- 2 Click the **Angle** tab.
- 3 From the **Measured Angle Units** drop-down list, select the unit in which you want to measure the angle.
- 4 Click points on the drawing to define the angle you want to measure.
Angle arms appear with an arc connecting them. The angle measurement appears in the **Measurement** dialog.


Note Click **Reset** to take another measurement.

- 5 Click **Close** to close the **Measurement** dialog.

Measuring an Arc

Use the **Arc** option to define an arc in the drawing and measure its radius, center and diameter.

- 1 Select **Analysis > Measure** from the AutoVue main menu.
The **Measurement** dialog appears.

Note You can also click the Arc button  on the AutoVue toolbar.

- 2 Click the **Arc** tab.
- 3 From the **Arc Info** drop-down list, select the unit in which you want to measure the arc.
- 4 From the **Measured Angle Units** drop-down list, select the unit in which you want to measure the angle.
- 5 Click points on the drawing to define the arc.
The points are joined by an arc. The measurements for center point coordinates, radius, diameter, arc length, start and end of angle and sweep appear in the **Measurement** dialog.

Note Click **Reset** to take another measurement.

- 6 Click **Close** to close the **Measurement** dialog.

Calibrating an Arc

- 1 Measure an arc in the drawing.
See *Measuring an Arc*

- 2 In the **Measurement** dialog, click **Calibrate**.
The **Radius Calibration** dialog appears displaying the measured distance.
- 3 From the **Measured Rad.** drop-down list, select the unit to which you want to calibrate the distance.
- 4 Click **Calibrate to** and enter a value if you want to calibrate to a value.
Click **Set Factor** and enter a value if you want to calibrate by a factor.
- 5 Click **OK**.
The calibration result appear in the **Measurement** dialog.
- 6 Click **Close** to close the **Measurement** dialog.

Working with 2D Vector Files

In addition to all features that are available for generic 2D files, AutoVue provides the ability to access entity information, access views saved in the drawing and the ability to “intelligent snap” when performing measurements.


AutoVue references various sources to obtain all data required to completely and accurately display vector files. These sources can be internal to the file, like layers and blocks or external reference files that are located outside the file.



Manipulating 2D Vector Views

With the **View** options you can instantly manipulate how the current active file is displayed. You can rotate a file’s orientation counterclock-wise by 90, 180 or 270 degrees, flip a file’s orientation horizontally, vertically or both simultaneously.

AutoVue provides several ways to change the view size of a selected area of a file, display different views, layers and blocks of the current active file. You can also navigate from one page to another page of a multi-page file. For more information on how to manipulate views, **see *Manipulating 2D Views***.

For 2D vector files, there are additional **View** options:

Option	Description
Views	Select and display different views of a drawing. From the toolbar, click the  button. See <i>Selecting Views</i>

Option	Description
Layers	Select and display different layers of a drawing. From the toolbar, click the  button. See <i>Layers</i>
Blocks	Select and display a block from a drawing. From the toolbar, click the  button. See <i>Blocks</i>

Drawing Information

Note This feature is currently not supported with AutoVue Server running on Unix Platforms.

The **Drawing Information** option is available with AutoCAD and MicroStation drawings, and is accessed from **Analysis** of the AutoVue main menu in both **View** and **Markup** modes. The **Drawing Information** options available are: **Select Single Entity**, **List Tags/Attributes** and **Entity Information**.

Viewing Details of a Single Entity

Note This feature is currently not supported with AutoVue Server running on Unix Platforms.

- 1 Select **Analysis > Drawing Information > Select Single Entity** from the AutoVue main menu.
- 2 Click the entity for which you want to view information.
The **Get Entity Info** dialog appears displaying the information for the selected entity.
The **XData** button appears if additional information exists for that entity. Click **XData** to view the information.
Note If you did not select an entity, a message appears informing you that no entities were found and prompts you to select again.
- 3 Click **OK** to close the **Get Entity Info** dialog.

Viewing information for a Set of Entities

Note This feature is currently not supported with AutoVue Server running on Unix Platforms.

The **Entity Information** option allows you to view information of a set of entities contained in a specific area of a file.

- 1 Select **Analysis > Drawing Information > Entity Information** from the AutoVue main menu.
- 2 Click and drag to draw a box around an area for which you want to view entity information for the list of entities contained inside the area. The **List Entities** dialog appears displaying the information of all the selected entities.

Note If there are no entities within the selected area, a message appears informing you that no entities were found and prompts you to select again.

- 3 Click **OK** to close the **List Entities** dialog.

Viewing Tags/Attributes

Note This feature is currently not supported with AutoVue Server running on Unix Platforms.

- 1 Select **Analysis > Drawing Information > List Tags/Attributes** from the AutoVue main menu.
- 2 Click in the area of the file for which you want to view information on block attributes and tags.

The **Block Attributes** dialog appears displaying the attributes/tags for the selected entity.

Note If there are no entities within the selected box, a message appears informing you that no entities were found and prompts you to select again.

- 3 Click **OK** to close the **Block Attributes** dialog.

Viewing XRefs


AutoVue references various sources to obtain all the data required to completely and correctly display files. These sources can be internal to the file, like layers and blocks. External reference files or Xrefs are located outside the file.


Use the **XRefs** option to display the external references of the current active file.


Note For AutoVue to locate a resource file, the **XREFPATHS** must point to the directory or directories where the resource files exist. For more information, *see System Administration Guide*.


- 1 Select **View > XRefs** from the AutoVue main menu.
The **Select the External References to display** dialog appears listing the external reference files associated with the current active file.
- 2 Select the checkbox beside the **XRefs** that you want to display.
Clear the checkbox beside the **XRefs** that you want to hide.
- 3 Click **OK**.
The selected **XRefs** are displayed.

Displaying Details About Missing XRefs

If a file has missing resources, a red circle with an “i”  appears to the left of the AutoVue status bar.

- 1 Click the Resource icon  on the AutoVue status bar.
The **Properties** dialog appears.
Note You can also select **File > Properties** from the AutoVue main menu.
- 2 Click the **Resource Information** tab to display details about missing resource information required to properly display this file.


A green check mark  indicates the resources that AutoVue is able to access.

A red  indicates the external reference files or components that are not accessible.
- 3 Click **OK** to close the **Properties** dialog.

Layers

Use this option to configure the current active file’s layers to display.


- 1 Select **View > Layers** from the AutoVue main menu.
The **Select the layers to display** dialog appears listing the layers and layer visibility for the current active file.

Note You can also click the Layers button  on the AutoVue toolbar.
- 2 To sort the list of layers in the dialog, click **Name** to sort alphabetically or numerically, or click **Status** to sort by visibility.
- 3 Select the checkbox beside the layers that you want to set visible.
Clear the checkbox beside the layers that you want to hide.
- 4 Click **OK**.
The selected layers are displayed.

Blocks

Use this option to select a block to display from the current active file.

- 1 Select **View > Blocks** from the AutoVue main menu.
The **Select a block to display** dialog appears listing the blocks for the current active file.


Note You can also click the Block button  on the AutoVue toolbar.

- 2 From the drop-down list, select the block that you want to display.
- 3 Click **OK**.
The selected block is displayed.

Selecting Views

The **Views** option allows you to access different named views of a file.

- 1 Select **View > Views** from the AutoVue main menu.
The **Select a named view** dialog appears.

Note You can also click the View button  on the AutoVue toolbar.

- 2 From the drop-down list, select the view that you want to display.
- 3 Click **OK**.
The selected view is displayed.

Specifying a View Point

The **View Point** option allow you to render a drawing from a selected viewpoint. The default view point is the one used to create the file.

- 1 Select **View > View Point** from the AutoVue main menu.
The **View Point** dialog appears.
- 2 Enter the **X**, **Y** and **Z** coordinates for the viewpoint with which you want to render the drawing.
- 3 Click **OK**.
The drawing is displayed from the selected viewpoint.




Comparing 2D Files

AutoVue provides the ability to visually compare two files and display color-coded comparative data. When you compare two files, AutoVue displays three windows, the first containing the original file, the second containing the file you compared the original against, and the third containing the comparison results.

In the **Comparison Result** window you can specify whether you want to display only the additions, deletions or unchanged, or any combination of the three. To access these options, right-click in any window and select an option from the pop-up menu.

The comparison results are displayed in different colors to differentiate the results of the file comparison. The comparison options and corresponding colors are:

Option	Color	Description
View Additions	Green	Indicates that something has been added.
View Deletions	Red	Indicates that something has been deleted.
View Unchanged	Blue	Indicates that there is no change.

- 1 View the base file in AutoVue.
- 2 Select **Analysis > Compare** from the AutoVue main menu.
The **File Open** dialog appears.
- 3 Enter the **File Name** or click **Browse** to select the file that you want to compare with the current active file.
- 4 Click **OK**.
AutoVue displays three windows, the first displaying the original file, the second displaying the compare file and the third displaying the comparison results.
Note If you apply a change from the **View** menu, all three windows display the synchronized change.
- 5 To access the **Compare** options, right-click in any of the windows.
A pop-up menu appears displaying the **Compare** options.
Note To maximize any of the windows, click the  button on the title bar of the window that you want to maximize. To minimize, click the  button. To restore the window, click the .
- 6 To exit **Compare** mode, select **File > Exit Compare Mode** from the AutoVue main menu.
The original file appears in the workspace.
Note You can also exit **Compare** mode by right-clicking in any of the windows and selecting **Exit Compare Mode** from the pop-up menu.
See Also *Specifying Scale and Offset for a Compare File*

Specifying Scale and Offset for a Compare File

You can scale or translate a file in order to compare files accurately. With the **Scale and Offset** option you can modify the coordinates (**XOffset** and **YOffset**) or enter a scaling factor for the second file.

Note **XOffset** and **YOffset** are relative to the base drawing and all options are displayed at their current values.

- 1 In Compare mode, select **View > Scale and Offset** from the AutoVue Main window.
The **Scale and Offset** dialog appears.
- 2 In the **Scale and Offset** dialog, enter the required values for the **Scale Options: XOffset, YOffset** and **Scale**.
- 3 Click **OK**.
The scaling/offset modifications are applied to the file in the second window.

Overlays

When working with 2D files, you can overlay other files over the current active file. You can also adjust an overlay, move an overlay, and scale an overlay by defining the X and Y coordinates and the scaling factor.

Adding an Overlay

Note When working with a raster file, it should be used as the base file because raster formats are opaque and would hide files underneath them.

- 1 View the file that you want to use as the base file for the overlay.
 - 2 Select **Analysis > Overlays > Select** from AutoVue main menu.
The **File Open** dialog appears.
 - 3 Enter the **File Name** or click **Browse** to select the file you want to overlay.
 - 4 Click **OK**.
The base file is displayed with the selected overlay file on top of it.
- Note** To lay multiple files over one base file, repeat steps 2 to 4 using the same base file. Overlays are added one at a time.

Modifying an Overlay

- 1 Select **Analysis > Overlays > Modify** from AutoVue main menu.
The **Modify Overlay** dialog appears.
- 2 Select the Overlay that you want to modify.
- 3 Click the **Action** that you want to apply to the overlay.

- Click **Move** if you want to move the overlay.
Click a point on the base file where you want to set the lower left corner of the overlay. Click another point where you want to set the upper right corner of the overlay.
Note As you select the point to define the position of the upper right corner, you can resize the destination box.
 - Click **Scale** if you want to resize the overlay.
Enter the **XOffset** and **YOffset** coordinates and/or the **Scale** factor.
Note **XOffset** and **YOffset** are relative to the base drawing and all options are displayed at their current values.
 - Click **Warp** to adjust the overlay.
Click a point on the overlay and drag the cursor to where you want the overlay starting point. Click another point and drag the cursor to where you want the overlay to end.
Note The overlay's size is scaled to accommodate the origin and destination points you defined.
- 4 Click **OK**.
The changes are applied to the selected overlay.
Note To modify other overlays, repeat steps 2 to 4.





Removing an Overlay

- 1 Select **Analysis > Overlays > Modify** from AutoVue main menu.
The **Modify Overlay** dialog appears.
- 2 Select the Overlay that you want to remove.
- 3 Click **Remove**.
A confirmation dialog appears.
- 4 Click **Yes**.
The overlay is removed from the list in the **Modify Overlay** dialog and from the display.

Measuring in 2D Vector Files

AutoVue provides the ability to perform measurements in 2D files. Measurement options vary between vector and non-vector files. For vector files, AutoVue provides the option to “snap” to fixed points on the drawing. For non-vector files, you can only “free snap”.



You can access the measure options from the **Analysis > Measure** menu. These options are:



Name	Description
Angle	Measure the angle between selected points. From the toolbar, click the  button.
Arc	Measure an arc entity. From the toolbar, click the  button.
Area	Measure selected area. From the toolbar, click the  button.
Distance	Measure the distance between two points. From the toolbar, click the  button.

2D Vector Snapping Modes

The **Snapping Modes** available allow you to click to precise geometrical points on a drawing. For example, if you select **Snap to end-point** and you move the cursor over an end-point of a line, the end-point will be highlighted by a snap box.

The **Snapping modes** allow you to snap to the mid, center and end-points of an entity:

Button	Snap to	Description
	End-point	Geometric snap mode where a snap box appears when moving the cursor near a linear component's end point.
	Mid-point	Geometric snap mode where a snap box appears when moving the cursor near the halfway point of a linear component.


Button	Snap to	Description
	Center-point	Geometric snap mode where a snap box appears when moving the cursor near the center of an elliptical component.
	Free snap	Allow snapping at any point on the drawing.

Measuring Distance

Use the **Distance** option to measure the distance between two specific points.

- 1 Select **Analysis > Measure** from the AutoVue main menu.

The **Measurement** dialog appears.

Note You can also click the Distance button  on the AutoVue toolbar.

- 2 Click the **Distance** tab.
- 3 Select the **Snapping Modes** that you want to use for measuring.
To select all **Snapping Modes** click **All On**. To clear all **Snapping Modes** click **All Off**.
See 2D Vector Snapping Modes
- 4 From the **Measured Distance Units** drop-down list, select the unit in which you want to measure the distance.
Note If you want to measure the distance along a path, select **Cumulative**.
- 5 Click a point on the drawing to define the starting point.
- 6 Click another point on the drawing to define the end point.
Note If you selected **Cumulative**, continue clicking points along the path that you want to measure.
- 7 Right-click to complete the measurement.
The points are joined by a line. The measured distance, Delta-X and Delta-Y appear in the **Measurement** dialog.
Note Click **Reset** to take another measurement.
- 8 Click **Close** to close the **Measurement** dialog.

Calibrating Distance

- 1 Measure distance between two points or measure cumulative distance.
See Measuring Distance
- 2 In the **Measurement** dialog, click **Calibrate**.


The **Distance Calibration** dialog appears displaying the measured distance.

- 3 From the **Measured Dist.** drop-down list, select the unit to which you want to calibrate the distance.
- 4 Click **Calibrate to** and enter a value if you want to calibrate the distance to a value.
Click **Set Factor** and enter a value if you want to calibrate the distance by a factor.
- 5 Click **OK**.
The calibration result appears in the **Measurement** dialog.
- 6 Click **Close** to close the **Measurement** dialog.

Measuring Area

Use the **Area** option to measure the area and perimeter of a region.

- 1 Select **Analysis > Measure** from the AutoVue main menu. The **Measurement** dialog appears.

Note You can also click the Area button  on the AutoVue toolbar.

- 2 Click the **Area** tab.
- 3 Select **Between Points** if you want to measure the area between points on a drawing. **Snapping Modes** are enabled.
- 4 Select the **Snapping Modes** that you want to use for measuring.
To select all **Snapping Modes** click **All On**. To clear all **Snapping Modes** click **All Off**.


See 2D Vector Snapping Modes

- 5 Select **Shape** if you want to measure the area of a predefined shape on the drawing. **Snapping Modes** are disabled.
- 6 From the **Measured Area Units** drop-down list, select the unit in which you want to measure the area.
- 7 From the **Perimeter Units** drop-down list, select the unit in which you want to measure the perimeter.
- 8 To cumulate a **Net Area Result** of different areas, click **Add**.
To subtract an area from the **Net Area Result**, click **Subtract**.
Select **Clear** to clear the **Net Area Result**.
- 9 If you selected **Between Points**, click points on the drawing to define the area.
Each point is joined by a line. The area and perimeter measurements appear in the **Measurement** dialog.
- 10 Right-click to complete the measurement.

- 11 If you selected **Shape**, click the edge of the predefined shape.
The shape is highlighted and the area and perimeter measurements appear in the **Measurement** dialog.
Note Click **Reset** to take another measurement.
- 12 Click **Close** to close the **Measurement** dialog.

Measuring an Angle


Use the **Angle** option to measure the angle between points on a drawing.

- 1 Select **Analysis > Measure** from the AutoVue main menu.
The **Measurement** dialog appears.
Note You can also click the Angle button  on the AutoVue toolbar.
- 2 Click the **Angle** tab.
- 3 Select **From 3 Points** if you want to measure the angle between three points. **Snapping Modes** are enabled.
- 4 Select the **Snapping Modes** that you want to use for measuring.
To select all **Snapping Modes** click **All On**. To clear all **Snapping Modes** click **All Off**.
See 2D Vector Snapping Modes
- 5 Select **Between 2 lines** if you want to measure the angle between two lines. **Snapping Modes** are disabled.
- 6 From the **Measured Angle Units** drop-down list, select the unit in which you want to measure the angle.
- 7 If you selected **From 3 Points**, click three points on the drawing to define the angle.
- 8 If you selected **Between 2 Lines**, click two lines on the drawing to define the angle.
Angle arms appear with an arc connecting them. The angle measurement appears in the **Measurement** dialog.
Note Click **Reset** to take another measurement.
- 9 Click **Close** to close the **Measurement** dialog.

Measuring an Arc

Use the **Arc** option to define an arc in the drawing and measure its radius, center and diameter.

- 1 Select **Analysis > Measure** from the AutoVue main menu.
The **Measurement** dialog appears.

Note You can also click the Arc button  on the AutoVue toolbar.

- 2 Click the **Arc** tab.
- 3 Select **From 3 Points** if you want to measure the arc between three points. **Snapping Modes** are enabled.

Click the **Snapping Modes** that you want to select as the points for the measurement.

See 2D Vector Snapping Modes

Note To select all **Snapping Modes** click **All On**. To clear all **Snapping Modes** click **All Off**.

- 4 Select **Arc Entity** if you want to measure a predefined arc. **Snapping Modes** are disabled.
- 5 From the **Arc Info** drop-down list, select the unit in which you want to measure the distance.
- 6 From the **Measure Angle Units** drop-down list, select the unit in which you want to measure the angle.
- 7 If you selected **From 3 Points**, click three points on the drawing to define the arc.

The points are joined by an arc. The measurements for center point coordinates, radius, diameter, arc length, start and end of angle and sweep appear in the **Measurement** dialog.

- 8 If you selected **Arc Entity**, click the edge of the arc that you want to measure.
The arc is highlighted. The measurements for center point coordinates, radius, diameter, arc length, start and end of angle and sweep appear in the **Measurement** dialog.

Note Click **Reset** to take another measurement.

- 9 Click **Close** to close the **Measurement** dialog.

Calibrating an Arc

- 1 Measure an arc in the drawing.
See *Measuring an Arc*
- 2 In the **Measurement** dialog, click **Calibrate**.
The **Radius Calibration** dialog appears displaying the measured distance.
- 3 From the **Measured Rad.** drop-down list, select the unit to which you want to calibrate.
- 4 Click **Calibrate to** and enter a value if you want to calibrate to a value.
Click **Set Factor** and enter a value if you want to calibrate by a factor.
- 5 Click **OK**.

- The calibration result appears in the **Measurement** dialog.
- 6 Click **Close** to close the **Measurement** dialog.

Configuring AutoVue

Use the configuration options to configure the AutoVue workspace for different groups of file formats or for all files in general. For example, you can set different background colors for 2D or Office files. You can also set paths to locate external resources such as fonts, symbols, or XREFS, or configure measurement options.

You can access the configuration options using the Configuration dialog. To open the Configuration dialog, select **Options > Configuration** from the AutoVue main menu.

For details on each configuration option, see:

General Options

Configuring AutoVue for 2D Files

Configuring Background Colors for Graphic Files

Configuring Background Colors for Desktop Office

General Options

To access the **General** configuration options, select **Options > Configuration** from the main menu. In the **Configuration** dialog that appears, click **General** in the tree.

Configuring Options for CAD Files

Configure how you want to display w.r.t. text, dimensions, line styles, and so on for CAD files:

Option	Description
Text	<ul style="list-style-type: none">• Select to display text entities.• Clear to hide text entities.
Dimensions	<ul style="list-style-type: none">• Select to display all dimensional entities.• Clear to hide simple dimension entities.
Line Weights	<ul style="list-style-type: none">• Select to display varying line thicknesses.• Clear to make all lines appear equal, with a width of 1 pixel. No line weights display for any line.

Option	Description
Force to Black	<ul style="list-style-type: none">• Select to force all colors of a drawing to black.• Clear to display the file in color.
Line Style	<ul style="list-style-type: none">• Select to display dotted and dashed lines.• Clear to display all lines as solid.
Filling	<ul style="list-style-type: none">• Select to display filled entities as filled rather than just an outline.• Clear to hide filling for filled entities.
Load External References	<ul style="list-style-type: none">• Select to load Xrefs automatically.• Clear to keep Xrefs from loading automatically.

Raster Files

Select **Full Resolution** to display raster files at full resolution, or select **Fit to Window** to display raster files to fit the current window.

Rendering

When **Enable Look Ahead** is selected and you zoom into a part of a file, AutoVue renders adjacent tiles. The advantage to this is improvement in performance when zooming in on parts of a file. The disadvantage is that if the client machine is idle for at least one second, **Enable Look Ahead** is triggered which could slow down current operations. However, once all tiles are rendered, all zoom operations speed up again.

If **Enable Look Ahead** is cleared, AutoVue renders the tiles when requested, that is, only when you zoom in on parts of the file).

Configuring XRef Paths

Xref Paths are the directory paths for any external reference files associated with 2D, 3D, or EDA files.

- 1 Select **Options > Configuration** from the main menu.
The **Configuration** dialog appears.
- 2 Click **General > XRef Paths** in the tree.
- 3 Click the **Add** button
The **Add Path** dialog appears.

- 4 Enter the directory path, or scroll to locate the directory where the external reference files are located.
To browse all subdirectories below the current path, type two asterisks** at the end of the file path.
For example, **C:\samples**** results in browsing all subdirectories below “samples”.
To browse one subdirectory below the current path, type one asterisk * at the end of the file path.
For example, **C:\samples*** results in browsing one subdirectory below “samples”.
- 5 Click **OK**.
The directory path appears.
Note To add more than one path to the list, repeat steps 3 to 5.
- 6 To change the order, select the path you want to move, then click **Up** or **Down** to move the path to where you want it in the list.
- 7 To remove a path, select the path and click **Remove**.
- 8 Click **OK** to close the **Configuration** dialog.

Configuring Font Paths

Font Paths are the directory paths for fonts required by 2D, 3D, EDA, or Office files.

- 1 Select **Options > Configuration** from the AutoVue main menu.
The **Configuration** dialog appears.
- 2 Click the **General > Font Paths** in the tree.
- 3 Click the **Add** button.
The **Add Path** dialog appears.
- 4 Enter the directory path or scroll to locate the directory where the external font files are located.
To browse all subdirectories below the current path, type two asterisks ** at the end of the file path.
For example, **C:\samples**** will result in browsing all subdirectories below “samples”.
To browse one subdirectory below the current path, type one asterisk * at the end of the file path.
For example, **C:\samples*** will result in browsing one subdirectory below “samples”.
- 5 Click **OK**.
The directory path appears.
Note To add more than one path to the list, repeat steps 3 to 5.

- 6 To change the order, select the path you want to move, then click **Up** or **Down** to move the path to where you want it in the list.
- 7 To remove a path, select the path and click **Remove**.
The selected path disappears from the list.
- 8 Click **OK** to close the **Configuration** dialog.

Measurement

To access the common **Measurement** configuration options, select **Options > Configuration** from the main menu. In the **Configuration** dialog that appears, click **General > Measurement** in the tree.

The **Measurement** options let you define the default measurement units and the number of decimal places, as follows:

Option	Description
Decimal Digits	Lets you specify the number of decimal digits displayed for each measurement. Enter a number from 1 to 18.
Default Units	Lets you specify the default unit for measuring. Select a unit from the drop-down list.

Configuring the Base Font for Text Files

- 1 Select **Options > Configuration** from the main menu.
The **Configuration** dialog appears.
- 2 Select **General > Base Font** from the tree.
- 3 Select a font from the **Font** list.
- 4 Select a font size from the **Size** list.
- 5 Select the **Bold** option, **Italic** option, or both options to change the font style.
Note You can see a preview of the text in the **Sample** area.
- 6 Click **OK** to apply the font change and close the **Configuration** dialog.

Note The font changes will only apply to text files.

Configuring AutoVue for 2D Files

You can configure background color and snap settings for 2D files. To access the 2D configuration options, select **Options > Configuration** from the main menu. In the **Configuration** dialog that appears, click **2D** in the tree.

Snap Settings

In measurement mode, when you move the cursor within a predetermined snap radius, the snap box appears for the entity to be selected. To change the snap radius, change the value in the **Snap Radius** field. The snap radius is configured in pixels.

Access this option from the **Configuration** dialog. Select **Options > Configuration** from the main menu, then click **2D** in the tree.

Configuring Colors

The **Colors** settings let you modify colors for 2D files. In the **Configuration** dialog, select **2D > Colors** in the tree to display the following options:

Option	Description
Background	Change the color of the background for 2D files.
Measurement	Modify the color you want displayed when taking measurements on 2D files.

Configuring Background Colors for Graphic Files

Specify background colors for mono raster files and color raster files.

To access these configuration options, select **Options > Configuration** from the main menu. In the **Configuration** dialog that appears, click **Graphics** in the tree.

Configuring Background Colors for Desktop Office

Specify background colors for the following types of Desktop Office files:


- Document
- Spreadsheet
- Database
- Archive

To access these configuration options, select **Options > Configuration** from the main menu. In the **Configuration** dialog that appears, click **Desktop Office** in the tree.

Markups

AutoVue has the ability to view over 450 different file formats and to create markups for all its readable file formats without the document's authoring application.

Marking up refers to drawing and writing on an electronic document. AutoVue provides the ability to markup different formats without modifying the original file. When you create a markup for a file, the markup is created on top of the original file. Markups are saved in separate files.

If a file has existing markup files, a red light bulb  appears on the status bar at the bottom of the AutoVue workspace. Clicking this button opens the **Markup Files** dialog allowing you to select markup files to open or create a new markup file. When you open a markup file, AutoVue lays the markup over the original file.

In Markup mode you can:

- create entities such as arcs, boxes, circles, clouds, lines, arrows and polygons
- add a symbol, add information to an entity by adding text or a note
- create, name and color layers to organize your work
- create a new markup file that combines copies of selected layers of different markup files
- create measurement markup entities that can be moved or resized
- navigate markups through a hierarchy tree, view markup properties and sort the tree according to each property
- view markup layers individually or in combination

Note Markup capability is only available in certain versions of the AutoVue product. See the **Product Variations Checklist** for more information.

Markup Navigation Tree

When opening a file in **Markup** mode, a **Markup Navigation Tree** appears to the left of the document. If the **Markup Navigation Tree** does not appear, select **View > Show Model Tree**, then click the **Markups** tab.

The **Markup Navigation Tree** displays a hierarchy tree of markups or comments created by users. You can navigate through the markups. A set of

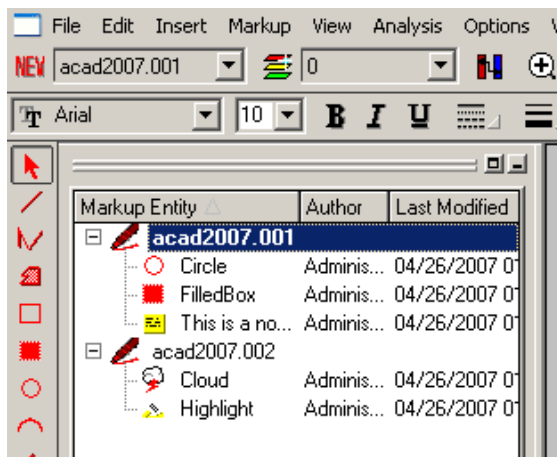
properties are generated for each markup. You can sort the markups in the tree according to each property by clicking the column headers. These properties are:

Property	Description
Entity	Type of markup entity created.
Author	The name of the user who created the markup.
Last Modified	The date and time the markup was modified.
Page	Page number of the original document on which the markup entity is created.
Layer	Markup layer on which the markup entity is created.

When a markup entity is created, it appears in the **Markup Navigation Tree** and the information is recorded and saved in the markup file.

Note Hover your mouse over an entity to see its Author and Date properties appear in a tooltip.

To see more markup properties or to expand the tree, click and drag the **Markup Navigation Tree** window. You can also drag the column headers left or right to resize the columns. Click the column headers to sort the markups in the tree.



Working with Markup Files

Markup files are divided into uniquely named layers. Create, name and color layers to organize your work. For example, different colors can indicate time priorities and each layer can contain Markups related to a common purpose.


Saved States

When you create and save a Markup file, you also save the view state, such as the zoom level at which you are working. If you save the Markup file while you are working at your preferred zoom level, the next time you open the Markup it displays at the same zoom level. Some examples of view states include zoom level (extents), rotation and flip settings.

State information is also saved with each markup entity. For instance, if you were at a certain zoom level when you created a markup entity, AutoVue saves the information with the markup entity. To “Go To” the state you were at when you created or modified the markup entity, select the markup entity and select **Go To**.

Creating a Markup File

- 1 View a file that you want to markup.
- 2 Select **File > Markup** from the AutoVue main menu.

Note You can also click the Markup button  in the AutoVue main toolbar.

AutoVue enters **Markup** mode and a new Markup file appears in the Markup Navigation tree.

See Also *Creating a Markup Layer*

Entering Markup Information

In AutoVue, when creating a Markup you can provide user information that you can save with the Markup.


- 1 Select **Markup > Information** from the main menu.
The **Markup Information** dialog appears.
- 2 Enter a **User** name.
- 3 Enter a **Department**.
- 4 Enter a **Company** name.
- 5 Enter the **Location** of the Company.

- 6 Enter a **Telephone** number.
- 7 Click **OK**.
The Markup Information is saved.

Saving a New Markup File

- 1 Select **File > Save As** from the AutoVue main menu.
The **Save Markup File As** dialog appears.
The **Markup Information** that you entered when creating the Markup displays in the dialog.
- 2 Enter a **Markup ID** consisting of any combination of characters or numbers.
- 3 Click **OK**.
The Markup file is saved and remains displayed in the workspace.

Opening Markup Files

- 1 View a file that has existing markups.
- 2 Click the red lightbulb button  in the bottom-left corner of the status bar.
Note: If this button does not display, the file you opened has no existing markups associated to it.
The **Markup Files** dialog appears.
- 3 From the **Markup list**, select the checkbox beside the markup(s) that you want to open.
Note: If you select more than one Markup, the **Active Markup** menu lets you select which one of them is initially active.
- 4 Click **OK**.
The selected markup(s) appear in the workspace on top of the original file.
Note: When you select more than one markup file, the markups display simultaneously.

See Also *Setting the Active Markup File*

Saving an Existing Markup File

- 1 Modify the markup file.
- 2 Select **File > Save** from the AutoVue main menu.
Note If you have multiple markups open that you have modified and want to save them all, select **File > Save All**.
Note To save an existing Markup as a new Markup, select **File > Save As**.

Importing a Markup File

- 1 Select **File > Open** from **Markup** mode.
- 2 In the **Markup Files** dialog that appears, click **Import**.
The **Select markup file to import** dialog appears.
- 3 Navigate to the markup file that you want to import and select it.
- 4 Click **Open**.
The imported Markup file appears in the workspace on top of the original file.

Exporting a Markup File

- 1 In Markup mode, select **File > Save As**.
Note For a new Markup file, select **File > Save**.
- 2 Click **Export**.
The **Select markup file export to** dialog appears.
- 3 Navigate and select the directory you want to export the markup file to.
- 4 Enter **File name**.
- 5 Click **Save**.
The markup file is exported to the selected directory.
Note The default format saved is **Markup Files (*.*)**, but you can select another one. In the **Save as type** drop-down list, there are six formats to choose from: Markup Files (*.*), DXF Output (*.dxf), AutoCAD DWG R12 (.dwg), AutoCAD DWG R13 (.dwg), AutoCAD DWG 14 (.dwg) and Microstation DGN Output (*.dgn).

Setting the Active Markup File

A file can have several markup files. When you open several markup files simultaneously, you can set one of the markups as the active markup. Any changes you make is applied to the current active markup.

- 1 In Markup Mode, select **File > Open**.
The **Markup Files** dialog appears.
- 2 Click the checkbox beside the markups you want to open.
The **Active Markup** drop-down list appears when you select more than one markup.
- 3 From the **Active Markup** drop-down list, select the markup you want to make active.
Note: An active markup displays in bold in the **Markup Navigation Tree**.

- 4 Click **OK**.

The selected markup appears in the AutoVue workspace.

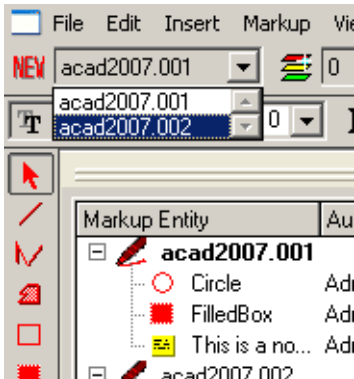
Changing the Active Markup File

When you have multiple markup files open, you can change the active markup.

Note: An active markup displays in bold in the **Markup Navigation Tree**.

Take one of the following steps:

- In the Markup Navigation Tree, right-click the name of the markup file you want to make active, then select **Set Active** from the menu.
- You can set the active markup by selecting a markup from the drop-down list on the Markup toolbar.



- Take the following steps:
 - a. Select **File > Set Active** from the Markup menu.
 - b. In the **Set Active Markup** dialog appears, select the markup you want to make active from the **Select Active Markup** drop-down list.
 - c. Click **OK** to make the selected markup file active.

Markup Layers


Markup files can be divided into layers with each layer having its own unique name. You can create, name and color layers to organize your work. For example, different colors can indicate time priorities and each layer can contain markups relating to a common purpose.

When working with markup layers, you can view layers individually or in combination, add, rename or delete layers. You can also specify a different color for each layer; default layer color is red.

Creating a Markup Layer

Note Ensure that no markup entity is selected when creating a markup layer.

- 1 Select **Markup > Markup Layers** from the Markup menu.
The **Markup Layers** dialog appears.

Note You can also click the Markup Layers button  on the Markup toolbar.

- 2 In the **Markup Layers** dialog, click **New**.
The **New Markup Layer** dialog appears.
- 3 Enter the name that you want for the markup layer.
- 4 Click **OK**.
The new markup layer is added to the list in the **Markup Layers** dialog.
- 5 To change the color of the new layer, click **Color** in the **Markup Layer** dialog.
The **Layer Color** dialog appears. Select a **Color**, then click **OK**.
- 6 Click **OK** to close the **Markup Layers** dialog.

Setting the Active Markup Layer

A markup can have several layers and you can set a layer as the active markup layer. When a markup layer is active, all modifications you make are applied to that markup layer.

Note Ensure that no markup entity is selected when setting the active markup layer.

- 1 Select **Markup > Markup Layers** from the Markup menu.
The **Markup Layers** dialog appears.

Note You can also click the Markup Layers button  on the Markup toolbar.

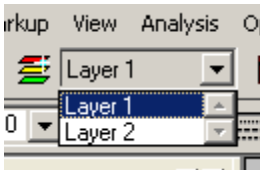
- 2 From the **Markup Layers** list, select the checkbox beside the layer you want to make active.
- 3 Click **OK**.
The selected Markup layer appears in the workspace.

Changing the Active Markup Layer

When you have multiple markup layers, you can change the active layer to another layer.

- 1 Select **Markup > Markup Layers** from the Markup menu.
The **Markup Layers** dialog box appears.
- 2 From the **Currently Active Layer** drop-down list, select the layer you want to make active.
- 3 Click **OK**.
The selected layer appears in the workspace.


You can also change the active layer by selecting the layer from the drop-down list on the Markup toolbar.




Changing the Color of a Markup Layer

Note Ensure that no markup entity is selected when changing the color of a markup layer.

- 1 Select **Markup > Markup Layers** from the Markup menu.
The **Markup Layers** dialog appears.

Note You can also click the Markup Layers button  from the Markup toolbar.

- 2 Select the markup layer that you want to change the color.
- 3 Click **Color**.
The **Layer Color** dialog appears.
- 4 Select a **Color**.
- 5 Click **OK**.

Note Only the entities that were created with the by-layer  color defined in the **Markup Layers** dialog will change color. Any entities that were created using the color options from the Markup toolbar, will override the by-layer color and will not change color.

- 6 Click **OK** to close the **Markup Layers** dialog.

Renaming a Markup Layer

- 1 Select **Markup > Markup Layers** from the Markup menu.
The **Markup Layers** dialog appears.

Note You can also click the Markup Layers button  from the Markup toolbar.

- 2 Under **Markup Layers**, select the checkbox beside the markup layer you want to rename.
- 3 Click **Rename**.
The **New Markup Layer** dialog appears.
- 4 Enter the new layer name.
- 5 Click **OK**.
The markup layer is assigned the new name.
- 6 Click **OK** to close the **Markup Layers** dialog.

Toggling Markup Layers

From the **Markup Layers** dialog, you can turn a layer's visibility on and off, even if there is only one layer. Turning a layer's visibility off, hides all markups belonging to that layer.

- 1 Select **Markup > Markup Layers** from the Markup menu.
The **Markup Layers** dialog appears.

Note You can also click the Markup Layers button  from the Markup toolbar.

- 2 Under **Markup Layers**, select the layer(s) you want visible.
- 3 Click **Toggle**.
A checkmark appears beside the selected layers.
- 4 To hide a layer, select the layer(s) with a checkmark, then click **Toggle** again.

Note You can also view a layer by selecting the checkbox beside it. To hide a layer, clear the checkmark. To view all the Markup layers, click **All On**. To hide all Markup layers click **All Off**.

- 5 Click **OK**.
The markup entities belonging to the selected layer(s) appear in the workspace on top of the original file.

Deleting a Markup Layer

- 1 Select **Markup > Markup Layers** from the Markup menu.

The **Markup Layers** dialog appears.

Note You can also click the Markup Layers button  from the Markup toolbar.

- 2 From the **Markup Layers** list, select the checkbox beside the markup layer you want to delete.


Note You can select more than one layer to delete at the same time.

- 3 Click **Delete**.
- 4 Click **OK**.

The layer is deleted along with all entities belonging to the layer.


Moving a Markup Entity to Another Layer

- 1 Select the entity or entities that you want to move.
- 2 Select **Markup > Markup Layers** from the Markup menu.
The **Move to Layer** dialog appears.

Note You can also click the Layer button  on the Markup toolbar.

- 3 Select the **Layer** you want to move the entity or entities to.
- 4 Click **OK**.

The selected entity or entities are moved to the selected layer.

Note Only the entities that were created with the  **By Layer** color defined in the **Markup Layers** dialog will change color. Any entities that were created using the color options from the Markup toolbar, will override the by-layer color and will not change color.

Consolidating Markup Files

The **Consolidate** option allows you to create a new markup file that combines copies of selected layers of different markup files. During the review cycle, consolidation simplifies document revisions by providing the author with one combined markup file instead of several markup files.

Note The **Consolidate** option is only active when more than one markup file is opened.

- 1 Open the markup files that you want to consolidate.
- 2 Select **File > Consolidate** from the Markup menu.
The **Consolidate Markups** dialog appears.
- 3 Select the markup layers that you want to consolidate into one file.



- 4 Enter a **Markup ID** for the new markup file.
- 5 If you want to open the newly consolidated markup as the active markup, select the **Open as active markup** option.
- 6 Click **OK**.
The consolidated markup file is saved. If you selected **Open as active markup**, the consolidated markup opens and is set as the active markup.





Modifying Markup Entities

With AutoVue, you can assign an entity its own color, the same color as the current active layer or create a custom color. You also have the option of grouping Markup entities. When you group Markup entities, you can manage the group as you would a single entity.

In Markup mode, there are several options for modifying an entity. You can apply these options to selected entities while you specify the change or new entities that you add.

The modify options can be accessed from the **Markup** menu in Markup mode. The options are:

Option	Description
Delete	Delete a selected markup entity or entities.
Delete All	Delete all markup entities.
Group or Ungroup	Group or ungroup markup entities. See <i>Grouping Markup Entities</i>
Line Style	Change the line style for a selected markup entity or entities. Click the Line Style button  in the toolbar. See <i>Changing the Line Style</i>
Line Thickness	Change the line thickness for a selected markup entity or entities. Click the Line Thickness button  in the toolbar. See <i>Changing the Line Thickness</i>

Option	Description
Arrow Style	<p>Add an arrow head at one or both ends of a markup line entity.</p> <p>Click the Arrow Style button  in the toolbar.</p> <p>See <i>Changing the Arrow Style</i></p>
Fill Type	<p>Change the transparency for selected markup entity or entities.</p> <p>Click the Fill Type button  in the toolbar.</p> <p>See <i>Changing the Fill Type of An Entity</i></p>
Entity Color	<p>Change the line color, fill color and fill type for a selected markup entity or entities.</p> <p>Click the Line Color button  in the toolbar to change the line color.</p> <p>See <i>Changing the Line Color of An Entity</i></p> <p>Click the Fill Color button  in the toolbar to change the fill color.</p> <p>See <i>Changing the Fill Color of An Entity</i></p>
Entity Rotate	<p>Rotate a selected Symbol markup entity.</p>
Markup Entity Properties	<p>Open the Markup Entity Properties dialog, which lets you see and modify markup entity properties from one dialog.</p> <p>See <i>Modifying Markup Entity Properties</i></p>
Hide Markups	<p>Hide all markup entities.</p> <p>See <i>Hiding Markup Entities</i></p>


“Go To” a Markup Entity

Go To restores the view state when a created entity is saved. Opening an existing markup for a file also restores the last saved view state.

- 1 From the **Markup Navigation Tree**, select the markup entity that you want to view.
- 2 Right-click and select **Go To** from the drop-down menu.
AutoVue displays the markup page containing the entity.

Note If you selected a Markup entity that is on another page of the Markup, the page containing that entity will be displayed.

Selecting Markup Entities

- 1 Click the Select button  from the Markup toolbar, then from the workspace click the entity's outer edge.

Note You can also select the entity from the **Markup Navigation Tree**.

Note To select multiple entities, press the **Shift** or **Ctrl** key while selecting.

Moving a Markup Entity

- 1 In the **Markup Navigation Tree** or in the workspace, select the entity or entities that you want to move.
See *Selecting Markup Entities*
- 2 In the workspace, click and drag the selected entity or entities to anywhere in the workspace.

Editing a Markup Entity

The entities that you can edit are notes, text, dimensions, leaders and hyperlinks.

- 1 In the **Markup Navigation Tree** or from the workspace, double-click the entity that you want to edit.
AutoVue zooms in on the entity and the appropriate dialog appears allowing you to make changes to the entity.
Note You can also edit an entity by right-clicking it in the **Markup Navigation Tree** and selecting **Edit** from the pop-up menu.

Grouping Markup Entities

When you group markup entities, you can move, delete, copy and paste, resize, or perform any modification on the group of entities that you would on a single markup entity.

- 1 In the **Markup Navigation Tree** or from the workspace, select the entities that you want to group.
See *Selecting Markup Entities*
- 2 Select **Markup > Group** from the Markup menu.
The group of entities appear on the **Markup Navigation Tree** as a **Group**.

- 3 Perform any modifications.
The modifications are applied to all the entities in the group.

Ungrouping Markup Entities

- 1 In the **Markup Navigation Tree** or the workspace, select the **Group** that you want to ungroup.
- 2 Select **Markup > Ungroup** from the Markup menu.
The group of entities appear on the markup as individual entities.

Hiding Markup Entities


To hide the Markup entities of a markup file, take one of the following steps:

- In the Markup Navigation Tree, right-click the markup file, then select **Hide**.
Note To show hidden Markups, right-click the file name again and select **Show**.
- Select **Markup > Hide Markups** from the Markup menu.
The markup entities are hidden on the markup file.
Note To “unhide” markups, select **Markup > Hide Markups** again from the Markup menu.

Changing Line Thickness of an Entity

Note A checkmark beside the thickness option indicates the current line thickness.

- 1 Select the entity or entities for which you want to change the line thickness.
See *Selecting Markup Entities*
- 2 From the Markup menu, select **Markup > Line Thickness** and the line thickness that you want.
The line thickness changes for the selected entity or entities.

Note You can also click the Line Thickness button  on the Markup toolbar.
- 3 To define a custom line thickness, select **Modify > Custom Thickness** from the Markup menu.
The **Custom Thickness** dialog appears.
- 4 Enter an integer value in pixels.
- 5 Click **OK** to close the **Custom Thickness** dialog.

Note Any new entities that you create will have the new line thickness.

See Also *Modifying Markup Entity Properties*

Changing Line Style of an Entity

Note A checkmark beside the style option indicates the current line style.

- 1 Select the entity or entities for which you want to change the line style.

See *Selecting Markup Entities*

- 2 From the Markup menu, select **Markup > Line Style** and the line style that you want.

The line style changes for the selected entity or entities.

Note You can also click the Line Style button  on the Markup toolbar.

Note Any new entities that you create will have the new line style.

See Also *Modifying Markup Entity Properties*


Changing the Arrow Style

- 1 Select the line entity or entities for which you want to change the arrow style.

See *Selecting Markup Entities*

- 2 Take one of the following steps:

- Right-click the entity and select **Arrow Style** from the menu.

- Click the Arrow Style button  in the toolbar.

- Select **Markup > Arrow Style** from the main menu.

- 3 From the **Arrow Style** drop-down list, select the style of arrow that you want for the entity.

You have the choice between no arrow heads, an arrow head at either one or the other end of the line entity, or arrow heads at both ends of the line entity. The arrow style changes for the selected line entity or entities.

Note Any new entities that you create will have the new arrow style.

See Also *Modifying Markup Entity Properties*

Changing Line Color of an Entity

- 1 Select the entity or entities for which you want to change the line color.


See *Selecting Markup Entities*


- 2 Select **Markup > Entity Color** from the Markup menu.

The **Entity Color** dialog appears.

Note You can also click the **Line Color** button  on the Markup toolbar.

- 3 From the **Line Color** drop-down list, select the color that you want for the entity.

Note Selecting **By Layer**  changes the entity color to the color of the layer.

- 4 To define a custom line color, select **Custom Color**  from the **Line Color** drop-down list.
- 5 From the **Color** dialog that appears, select a color and click **OK**.
- 6 Click **OK** to close the **Entity Color** dialog.

The line color changes for the selected entity or entities.

Note Any new entities that you create will have the new line color.

See Also *Modifying Markup Entity Properties*

Changing Fill Color of an Entity


- 1 Select the entity or entities for which you want to change the fill color.


See *Selecting Markup Entities*

- 2 Select **Markup > Entity Color** from the Markup menu.
The **Entity Color** dialog appears.

Note You can also click the Fill Color button  on the Markup toolbar.

- 3 From the **Fill Color** drop-down list, select the color that you want for the entity.

Note Selecting  **By Layer** changes the entity color to the color of the layer.

- 4 To define your own color, select **Custom Color**  from the **Fill Color** drop-down list.
- 5 From the **Color** dialog that appears, select a color and click **OK**.
The fill color changes for the selected entity or entities.
- 6 Click **OK** to close the **Entity Color** dialog.

Note Any new entities that you create will have the new fill color.

See Also *Modifying Markup Entity Properties*

Changing Fill Type of an Entity

- 1 Select the entity or entities for which you want to change the fill type.

See *Selecting Markup Entities*

- 2 Select **Markup > Entity Color** from the Markup menu.
The **Entity Color** dialog appears.

Note You can also click the Fill Type button  on the Markup toolbar.

- 3 From the **Fill Type** drop-down list, select the fill type that you want for the entity.

Select **Solid Fill**, if you want the fill color to be solid.

Select **Transparent Fill**, if you want the fill color to be transparent.

Select **No Fill**, if you do not want any fill color.

- 4 Click **OK**.

The fill type changes for the selected entity or entities.

Note Any new entities that you create will have the new fill type.


See Also *Modifying Markup Entity Properties*

Assigning an Entity the Same Color as the Layer

- 1 Select the entity or entities for which you want to assign the color of the layer that they belong to.

See *Selecting Markup Entities*

- 2 Select **Markup > Entity Color** from the Markup menu.
The **Entity Color** dialog appears.

- 3 To assign the line color, select the  **BYLAYER** from the **Line Color** drop-down list.

Note You can also click the Line Color button  from the Markup toolbar.

- 4 To assign the fill color, select the  **BYLAYER** from the **Fill Color** drop-down list.

Note You can also click the Fill Color button  from the Markup toolbar.

- 5 Click **OK**.

The selected entity or entities change to the color of the layer that the entity belongs to.

Deleting Markup Entities

- 1 Select the entity or entities that you want to delete.
See *Selecting Markup Entities*
- 2 Select **Markup > Delete** from the Markup menu.
The selected entity or entities are deleted from the current active file.
Note To delete all entities, select **Markup > Delete All** from the Markup menu. **Delete All** will delete all existing entities from the active markup, whether they are visible or not.

Modifying Measurement Markup Entities

In AutoVue, you can modify the font of a measurement.

- 1 Create the markup measure entity that you want.
See *Creating 2D non-vector Markup Measure Entities*
Creating 2D Vector Markup Measure Entities
- 2 Double-click the measurement for which you want to modify the font.
The appropriate **Measure** dialog appears.
- 3 Click **Font**. The **Font** dialog appears.
From the **Font** drop-down list, select the type of font.
From the **Size** drop-down list, select the size of font.
Select the font **Style(s)**, then click **OK**.
- 4 Click **OK** to close the appropriate **Measure** dialog.
The measurement font is modified.

Changing Measurement Units and Symbols

In AutoVue, you can change the unit of measure and add a symbol to a measurement and have it appear on the drawing.

- 1 Create the markup measure entity that you want.
See *Creating 2D non-vector Markup Measure Entities*
Creating 2D Vector Markup Measure Entities
- 2 Double-click the measurement that you want to change the unit of measure or add a symbol to.
The appropriate **Measure** dialog appears.

- 3 Clear the checkmark beside **Display Unit** if you want to hide the unit on the drawing. Unit appears by default.
- 4 From the **Units** drop-down list, select the unit that you want to change the measurement to.
- 5 From the **Symbol** drop-down list, select the symbol that you want to add to the measurement.
- 6 Click **OK**.
The unit of measure changes and the selected symbol is added to the measurement and appears in the workspace.



Modifying Markup Entity Properties

In AutoVue, you can use the Markup Entity Properties dialog to modify markup entities.

To open the Markup Entity Properties dialog, select **Markup > Markup Entity Properties** from the Markup menu. You can also right-click a markup entity in the Markup Navigation Tree or the workspace and select **Markup Entity Properties** from the contextual menu.

Line Color

Change the line color the selected markup entity or entities.

- 1 Select the entity or entities for which you want to change the line color.
See *Selecting Markup Entities*
- 2 From the **Line Color** drop-down list, select the color that you want for the entity.
Note: Selecting **By Layer**  changes the entity color to the color of the layer.
- 3 To define a custom line color, take the following steps:
 - a. Select **Custom Color**  from the **Line Color** drop-down list.
 - b. From the **Color** dialog that appears, select a color and click **OK**.
- 4 Make other changes you want with the **Markup Entity Properties** dialog, then click **OK** to close it.
The line color changes for the selected entity or entities.
Note: Only selected entities that you create will have the new line color. To apply the new line color to any new entity you create, make sure no entity is selected before opening the **Markup Entity Properties** dialog.

See Also *Changing the Line Color of An Entity*

Line Style

Change the line style for a selected markup entity or entities.

- 1 Select the entity or entities for which you want to change the line style.

See *Selecting Markup Entities*

- 2 Select the line style that you want from the **Line Style** menu.

The line style changes for the selected entity or entities.

Note: Any new entities that you create will have the new line style.

See Also *Changing the Line Style*

Line Thickness

Change the line thickness for a selected markup entity or entities.

- 1 Select the entity or entities for which you want to change the line thickness.

See *Selecting Markup Entities*

- 2 Select the line thickness that you want from the **Line Thickness** menu.

The line thickness changes for the selected entity or entities.

To define a custom line thickness, take the following steps:

- 1 Select **Customize** from the **Line Thickness** menu.
- 2 In the **Width (Pixels)** menu, enter the desired width.
- 3 Make other changes you want with the **Markup Entity Properties** dialog, then click **OK** to close it.

The line thickness changes for the selected entity or entities.

Note: Any new entities that you create will have the new line thickness.

See Also *Changing the Line Thickness*

Width (Pixels)

Customize the line thickness when **Customize** is selected in the Line Thickness menu. When other line thicknesses are selected, this field displays its value in pixels but cannot be edited.

See *Line Thickness*

Arrow Style

Add an arrow head at one or both ends of a markup line entity.

- 1 Select the line entity or entities for which you want to change the arrow style.

See *Selecting Markup Entities*

- 2 From the **Arrow Style** drop-down list, select the style of arrow that you want for the entity.
- 3 Make other changes you want with the **Markup Entity Properties** dialog, then click **OK** to close it.

The arrow style changes for the selected entity or entities.

Note: Any new entities that you create will have the new arrow style.

See Also *Changing the Arrow Style*

Fill Type

Change the transparency for selected markup entity or entities.

- 1 Select the entity or entities for which you want to change the fill type.

See *Selecting Markup Entities*

- 2 From the **Fill Type** drop-down list, select the fill type that you want for the entity.

- Select **Solid Fill**, if you want the fill color to be solid.
- Select **Transparent Fill**, if you want the fill color to be transparent.
- Select **No Fill**, if you do not want any fill color.

- 3 Make other changes you want with the **Markup Entity Properties** dialog, then click **OK** to close it.

The fill type changes for the selected entity or entities.

Note: Any new entities that you create will have the new fill type.

See Also *Changing the Fill Type of An Entity*


Fill Color

Change the line color, fill color and fill type for a selected markup entity or entities.


- 1 Select the entity or entities for which you want to change the fill color.

See *Selecting Markup Entities*

- 2 From the **Fill Color** drop-down list, select the color that you want for the entity.

Note: Selecting  **By Layer** changes the entity color to the color of the layer.

- 3 To define you own color, take the following steps:

- a. Select **Custom Color**  from the **Fill Color** drop-down list.

- b. From the **Color** dialog that appears, select a color and click **OK**.
The fill color changes for the selected entity or entities.
- 4 Make other changes you want with the **Markup Entity Properties** dialog, then click **OK** to close it.
The fill type changes for the selected entity or entities.
Note: Any new entities that you create will have the new fill color.
See Also *Changing the Fill Color of An Entity*

Markup Layers

When you have multiple markup layers, you can change the active layer to another layer.

- 1 From the **Markup Layers** drop-down list, select the layer you want to make active.
- 2 Make other changes you want with the **Markup Entity Properties** dialog, then click **OK** to close it.
The selected layer appears in the workspace.
See Also *Changing the Active Markup Layer*







Marking Up 2D Files

AutoVue provides a variety of user-friendly markup options that you can use when marking up 2D files. You can create entities such as arcs, boxes, circles, clouds, lines and polygons. You can draw a leader with multi-line segments and add text to it. You can also add a symbol, add text to an entity or add information by adding a note.




Note When you are creating a markup entity, you can press **Escape** to cancel.

2D Markup Entities

In AutoVue, you can drawing many different types of entities. You can access the entities from the **Entities** menu in Markup mode. The entities are:


Option	Description
Note	Right click to complete an entity.
Arc	<p>Click and drag the mouse to draw an arc.</p> <p>From the toolbar, click the Arc button .</p>
Box	<p>Click and drag to draw a rectangle.</p> <p>From the toolbar, click the Box button .</p> <p>Note To draw a square instead of a rectangle, press and hold the Shift key while you click and drag.</p>
Closed Polyline	<p>Click and drag to draw a closed Polyline. Right-click to define the last point.</p> <p>From the toolbar, click the Closed Polyline button .</p>
Cloud	<p>Click and drag to draw a cloud.</p> <p>From the toolbar, click the cloud button .</p>
Circle	<p>Click and drag to draw an ellipse.</p> <p>From the toolbar, click the Circle button .</p> <p>Note To draw a circle instead of an ellipse, press and hold the Shift key while you click and drag.</p>
Filled Box	<p>Click and drag to draw a filled box. The box is filled with a solid color.</p> <p>From the toolbar, click the Filled Box button .</p> <p>Note To draw a square Filled Box instead of a rectangular Filled Box, press and hold the Shift key while you click and drag.</p>

Option	Description
Freestyle	<p>Click, release mouse button, then drag to draw an entity.</p> <p>From the toolbar, click the Freestyle button .</p> <p>Note You can create a contiguous or non-contiguous freestyle entity.</p> <p>See <i>Creating a Non-contiguous Freestyle Entity</i></p> <p>See <i>Creating a Contiguous Freestyle Entity</i></p>
Highlight	<p>Click and drag to highlight a boxed area.</p> <p>From the toolbar, click the Highlight button .</p> <p>Note The highlighted box will be filled with a transparent color.</p>
Leader	<p>Click and drag to draw a leader.</p> <p>From the toolbar, click the Leader button .</p> <p>Note To force a line segment in a Leader entity to be aligned to the closer axis, horizontal or vertical axis, hold the Shift key while you click and drag for that line segment.</p> <p>See <i>Adding a Leader</i></p> <p>See <i>Forcing a Line Segment</i></p>
Line	<p>Click and drag to draw a line.</p> <p>From the toolbar, click the Line button .</p> <p>Note To draw a line and force it to be aligned to the closer axis, horizontal or vertical, press and hold the Shift key while you click and drag.</p> <p>See <i>Forcing a Line Segment</i></p>
Note	<p>Add a note to the Markup.</p> <p>From the toolbar, click the Note button .</p> <p>See <i>Adding a Note</i></p>

Option	Description
Polyline	<p>Click and drag to draw a polyline. Right-click to define the last point.</p> <p>From the toolbar, click the Polyline button .</p> <p>Note To force a line segment in a Polyline entity to be aligned to the closer axis, horizontal or vertical, press and hold the Shift key while you click and drag for that line segment.</p> <p>See <i>Forcing a Line Segment</i></p>
Symbol	<p>Click and drag a symbol to the Markup.</p> <p>From the toolbar, click the Symbol button .</p> <p>See <i>Adding a Symbol</i></p>
Text	<p>Add text to the Markup.</p> <p>From the toolbar, click the Text button .</p> <p>See <i>Adding Text</i></p>

Creating a Non-contiguous Freestyle Entity

- 1 Select **Entities > FreeStyle** from the Markup menu.

Note You can also click the Freestyle button  from the Markup toolbar.

- 2 Click a point on the drawing where you want to start the freestyle entity.
- 3 Move the cursor to create the freestyle entity.
- 4 Click a point on the drawing where you want to interrupt the freestyle entity.
- 5 Click another point on the drawing where you want to restart the freestyle entity.

Note You can interrupt the freestyle entity as many times as you like by repeating steps 4 and 5.

- 6 Right-click to end the freestyle entity.


Creating a Contiguous Freestyle Entity

- 1 Select **Entities > FreeStyle** from the Markup menu.

Note You can also click the Freestyle button  on the Markup toolbar.

- 2 Click a point on the drawing where you want to start the freestyle entity.
- 3 Move the cursor to create the freestyle entity.
- 4 Right-click to end the freestyle entity.

Adding a Leader

- 1 Select **Entities > Leader** from the Markup menu.
Note You can also click the Leader button  from the Markup toolbar.
- 2 Click a point on the document where you want the leader to start.
- 3 Move the cursor to draw the leader.
Note To draw a leader and force it to be aligned to the closest axis, vertical or horizontal, hold the **Shift** key while moving the cursor.
- 4 To draw a leader with multiple line segments, repeat steps 2 and 3 as often as you like. You can click, then drag as often as you like.
- 5 Right-click to end the leader.
The **Text** dialog appears.
- 6 To change the font, click **Font**. The **Font** dialog appears.
From the **Font** drop-down list, select the type of font.
From the **Size** drop-down list, select the size of font.
Select the checkbox beside the font style(s).
Type the text that you want to attach to the leader, then click **OK**.
- 7 Right-click outside the text area to complete the modification.
The leader appears on the drawing and in the **Markup Navigation Tree**.
Note To edit the leader text, double-click the leader in the **Markup Navigation Tree** or in the workspace to open the **Text** dialog.
See Also *Forcing a Line Segment*

Forcing a Line Segment to Become Horizontal or Vertical

You can draw a line segment and force it to be aligned with the closer axis, horizontal or vertical. You can also take an existing line segment and have it align with the closer axis. The types of line segments that you can align are lines, line segments of leaders and polylines, and measure entities.

Note This procedure only works for measure entities that are drawn using **Free snap**.


- 1 To draw and force a line segment, press and hold the **Shift** key while you click and drag for that line segment.

To force an existing line segment, click and hold the left mouse button on the line segment, then press and hold the **Shift** key.

- 2 When you see that the line segment is horizontal or vertical, release the left mouse button, then release the **Shift** key.


Adding Text

With AutoVue, you can add text entities to a markup.


- 1 Select **Entities > Text** from the Markup menu.
Note You can also click the Text button  from the Markup toolbar.
- 2 Click a point on the drawing where you want to add text.
The **Text** dialog appears.
- 3 To change the font, click **Font**. The **Font** dialog appears.
From the **Font** drop-down list, select the type of font.
From the **Size** drop-down list, select the size of font.
Select the checkbox beside the font style(s).
Type the text that you want to add, then click **OK**.
- 4 Right-click outside the text area to complete the modification.
The text appears on the drawing and in the **Markup Navigation Tree**.
- 5 To move the text box click and drag it.
- 6 Click and drag the frame handles to enlarge the text box.
Note To edit text, double-click the text in the **Markup Navigation Tree** or in the workspace to open the **Text** dialog.

Adding a Note

You can attach longer comments and notes to a markup with AutoVue's Markup Control Note Editor. A note is represented by a standard size graphical symbol labelled **Note**. To read the text inside, double-click the entity to open it or move the mouse over the entity to display the tooltip.

- 1 Select **Entities > Note** from the Markup menu.
Note You can also click the Note button  from the Markup toolbar.
- 2 Click a point on the document where you want to insert the note.
The **Note** dialog appears.
- 3 Enter the text that you want in the note.
- 4 To change the default font, select **Font** and the type of font.
- 5 Close the **Note** dialog.
The note appears on the drawing and in the **Markup Navigation Tree**.

- 6 Right-click outside the note area to complete the modification.
- 7 To move the note, click and drag it.

Note To edit a note, double-click the note symbol  in the **Markup Navigation Tree** or in the workspace to open the **Note** dialog.

Symbols


A **Symbol** is a graphical entity, such as a company logo. Before a graphic entity can be used as a symbol, it must be added to a **Symbol Library**.

In AutoVue, you can create a Symbol Library and add symbols to it.

Adding a Symbol

A symbol is a graphical entity, such as a company logo. With AutoVue, you can add a symbol to a markup.


- 1 Select **Entities > Symbol** from the Markup menu.
The **Symbols** dialog appears.

Note You can also click the Symbol button  in the Markup toolbar.

- 2 Click the **Symbols** tab.
- 3 From the **Symbol Library** drop-down list, select the library from which you want to select a symbol.
The symbols appear for the selected library.
- 4 Click **Isotropic** if you want to scale the symbol proportionately.
Click **Anisotropic** if you want to scale the symbol disproportionately.
- 5 Drag the symbol onto the workspace.
The symbol appears on the drawing and in the **Markup Navigation Tree**
- Note** To add more symbols, repeat steps 3 to 5.
- 6 Click **OK**.

Creating a New Symbol Library

- 1 Select **Entities > Symbol** from the Markup menu.
The **Symbols** dialog appears.


Note You can also click the Symbol button  in the Markup toolbar.

- 2 Click the **Libraries** tab.
- 3 Click **Create**.
The **Symbol Library** dialog appears.

- 4 Enter the **Library Name**, **Description**, **Author** and **Keywords**.
- 5 To add a symbol to the library, click **Add**.
The **Open** dialog appears.
- 6 Browse to locate the symbol you want to add, then click **Open**.
The file appears in the **Selected Files** list.
Note To add more symbols, repeat steps 4 and 5. To remove a symbol, select the symbol and click **Remove**.
- 7 Click **OK** to close the **Symbols** dialog.

Editing Symbol Library Information

- 1 Select **Entities > Symbol** from the Markup menu.
The **Symbols** dialog appears.

Note You can also click the Symbol button  in the Markup toolbar.
- 2 Click the **Libraries** tab.
- 3 From the **Symbol Libraries** list, select the library that you want edit.
- 4 Click **Edit**.
The **Symbol Library** dialog appears.
- 5 Edit the information.
- 6 Click **OK**.
- 7 Close the **Symbols** dialog.

Deleting a Symbol Library

- 1 In the **Symbols** dialog, click the **Libraries** tab.
- 2 From the **Symbol Libraries** list, select the library that you want to delete.
- 3 Click **Delete**.
The library disappears from the list and from the **Symbol Library** drop-down list under the **Symbols** tab.
- 4 Close the **Symbols** dialog.

Working with Hyperlinks

A hyperlink is a link between the current file and the new file or application. You can create hyperlinks within your current file so that your files and applications outside AutoVue are only a click away. The main benefit of adding hyperlinks to a file is that you can gather all files of related information into one file with the files kept separate. In other words, the files may be accessible from one location but the information is referenced, not duplicated. This ensures a manageable file

size when loading. If changes need to be made to a linked file, they need to be done in one location — to the linked file itself.

Creating a Hyperlink

When you create a hyperlink, you can choose where to open the hyperlinks.

Open in	Description
Applet	Opens the file in another AutoVue window.
Current Applet	Opens the file in the current AutoVue window.
Browser	Opens the file in the default browser window.
Current Browser	Opens the file in the current browser window.

- 1 Select **Markup > Hyperlink > Establish** from the Markup menu.
- 2 Click a point on the document where you want to place the hyperlink.
The **Establish Hyperlink** dialog appears.
- 3 Enter a **Link Name**.
- 4 Enter a **Description** (optional).
- 5 Type the **URL** or click **Browse** to locate the file that you want to link to.
- 6 From the **Link to** drop-down list, select the type of link.
For example, **Data File** opens a document file, whereas **Application** open an application other than AutoVue.
- 7 From the **Open in** drop-down list, select where you want the hyperlink to open.
- 8 Click **OK**.
The hyperlink appears on the Markup.

Firing a Hyperlink

- 1 To fire a hyperlink, double-click on it from the workspace.
The hyperlink file opens in the window you selected in the **Establish Hyperlink** dialog.
Note You can also fire a hyperlink by selecting it, then right-clicking and selecting **Hyperlinks > Fire** from the pop-up menu or selecting **Hyperlink > Fire** from the Markup menu.

Editing a Hyperlink

- 1 In the **Markup Navigation Tree** or from the workspace, select the hyperlink that you want to edit.
- 2 Select **Markup > Hyperlink > Edit** from the Markup menu.
The **Edit Hyperlink** dialog appears.
Note You can right-click a hyperlink in the **Markup Navigation Tree** and select **Edit** from the pop-up menu.
- 3 Edit the information that you want.
- 4 Click **OK**.
The changes are saved.

Deleting a Hyperlink

- 1 In the **Markup Navigation Tree** or from the workspace, select the hyperlink that you want to delete.
- 2 Select **Markup > Hyperlink > Break** or **Markup > Delete** from the Markup menu.
The hyperlink is deleted from the file.
Note You can also delete a hyperlink by right-clicking it in the **Markup Navigation Tree** and selecting **Delete** from the pop-up menu.

Viewing List of Hyperlinks

- 1 Select **Markup > Hyperlink > List** from the Markup menu.
The **List Hyperlinks** dialog appears listing the hyperlinks.
Note You can right-click in the workspace and select **Hyperlinks > List** from the pop-up menu.
Note You can fire a hyperlink by selecting the hyperlink and clicking **Fire**.
- 2 Click **OK**.

Viewing History of a Hyperlink

AutoVue lets you view information about a hyperlink's path. From a file that is launched from a hyperlink, you can see what document invoked the hyperlink.

- 1 From the hyperlink file, select **File > Markup** from the AutoVue main menu.
- 2 Select **Markup > Hyperlink > History** from the Markup menu.

- The **Hyperlink History** dialog appears listing the path linking the hyperlink file to the file that invoked the hyperlink.
- 3 To jump to the file where you fired the hyperlink from, select the path in the **Hyperlinks History** dialog.
 - 4 Click **Jump to**.
Note You can also go back by right-clicking in the hyperlink file and selecting **Go Back** from the pop-up menu.



Creating 2D Non-vector Markup Measure Entities



When marking up 2D non-vector files, in addition to all the markup options available for 2D files, you can create markup measure entities. The measure options in Markup mode work a bit differently than in View mode. For information on marking up 2D files, **see *Marking Up 2D Files***.

When measuring in Markup mode, the specified measurement lines and values are displayed on the current active markup layer as entities. These entities can be moved, resized, hidden or deleted. You can also modify the font of a measure entity, align a “free snap” measure entity to the horizontal or vertical axis, as well as add units of measure and symbols to a measurement and have them appear on the drawing.

Note When you are creating a markup entity, you can press **Escape** to cancel. Measure options vary between vector and non-vector files. For vector files, AutoVue provides the option to “snap” to fixed points on the drawing. For non-vector files, you can only “free snap”.

In Markup mode, you can choose from several measure options to create markup measure entities. You can access the measure options from the **Analysis > Measure** menu. The options are:

Option	Description
Angle	Measure the angle between selected points. From the toolbar, click the Angle button  .
Arc	Measure an arc entity. From the toolbar, click the Arc button  .


Option	Description
Area	Measure a selected area. From the toolbar, click the Area button  .
Distance	Measure the distance between two points. From the toolbar, click the Distance button  .

Measuring Distance

Use the **Distance** option to measure the distance between two specific points.

Note If you want a markup entity for the measurement, you must ensure that **Add Distance** is selected in the **Measurement** dialog.

- 1 Select **Analysis > Measure** from the Markup menu.
The **Measurement** dialog appears.

Note You can also click the Distance button  on the Markup toolbar.

- 2 Click the **Distance** tab.
 - 3 From the **Measured Distance Units** drop-down list, select the unit in which you want to measure the distance.
 - 4 Click a point on the drawing to define the starting point.
 - 5 Click another point on the drawing to define the end point.
The measured line path appears as an entity on the current active markup.
 - 6 Drag to move the measured line path.
 - 7 Click on the measured line path.
The measurement and unit appear as an entity on the current active markup layer. The measured distance, Delta-X and Delta-Y appear in the **Measurement** dialog.
 - 8 Click and drag the frame handles to change the size of the box.
- Note** Click **Reset** to take another measurement.
- 9 Click **Close** to close the **Measurement** dialog.


See Also *Modifying Measurement Markup Entities*

Measuring Cumulative Distance

Use the **Cumulative Distance** option to measure the distance along a path of multi-faceted (adjoining) points.

Note If you want a markup entity for the measurement, you must ensure that **Add Distance** is selected in the **Measurement** dialog.

- 1 Select **Analysis > Measure** from the Markup menu.
The **Measurement** dialog appears.

Note You can also click the Distance button  on the AutoVue toolbar.

- 2 Click the **Distance** tab.
 - 3 From the **Measured Distance Units** drop-down list, select the unit in which you want to measure the distance.
 - 4 Select **Cumulative**.
 - 5 Click a point on the drawing to define the starting point.
 - 6 Continue clicking points along the path that you want to measure.
Each point is joined by a line.
 - 7 Right-click to complete the measurement.
The measured line path, measurement and unit appear as an entity on the current active markup layer. The cumulated measured distance, Delta-X and Delta-Y appear in the **Measurement** dialog.
 - 8 Click and drag the frame handles to change the size of the box.
- Note** Click **Reset** to take another measurement.
- 9 Click **Close** to close the **Measurement** dialog.

See Also *Modifying Measurement Markup Entities*

Calibrating Distance


- 1 Measure the distance between two points or measure cumulative distance.
See *Measure Distance*
- 2 In the **Measurement** dialog, click **Calibrate**.
The **Distance Calibration** dialog appears displaying the measured distance.
- 3 In the **Distance** drop-down list, select the unit to which you want to calibrate the distance.
Click **Calibrate to** and enter a value if you want to calibrate the distance to a value.
Click **Set Factor** and enter a value if you want to calibrate the distance by a factor.
- 4 Click **OK**.
The calibration result appears in the **Measurement** dialog.
- 5 Click **Close** to close the **Measurement** dialog.

Measuring Area

Use the **Area** option to measure the area and perimeter of a region.

Note If you want a markup entity for the measurement, you must ensure that **Add Area** is selected in the **Measurement** dialog.

- 1 Select **Analysis > Measure** from the Markup menu. The **Measurement** dialog appears.

Note You can also click the Area button  on the Markup toolbar.

- 2 Click the **Area** tab.
- 3 From the **Measured Area Units** drop-down list, select the unit in which you want to measure the area.
From the **Perimeter Units** drop-down list, select the unit in which you want to measure the perimeter.
- 4 To cumulate a **Net Area Result** of different areas, select **Add** in the **Measurement** dialog.
To subtract an area from the **Net Area Result**, select **Subtract**.
Select **Clear** to clear the **Net Area Result**.
- 5 Click a point on the drawing to define the starting point.
- 6 Continue clicking points on the drawing to define the area you want to measure.
Each point is joined by a line.
- 7 Right click to complete the measurement.
The measured line path, measurement and unit appear as an entity on the current active markup layer. The area and perimeter measurements appear in the **Measurement** dialog.
- 8 Click and drag the frame handles to change the size of the box.
- Note** Click **Reset** to take another measurement.
- 9 Click **Close** to close the **Measurement** dialog.


See Also *Modifying Measurement Markup Entities*

Measuring an Angle

Use the **Angle** option to measure the angle between points on a drawing.

Note If you want a markup entity for the measurement, you must ensure that **Add dimensions** is selected in the **Measurement** dialog.

- 1 Select **Analysis > Measure** from the Markup menu.
The **Measurement** dialog appears.

Note You can also click the Angle button  on the Markup toolbar.

- 2 Click the **Angle** tab.
- 3 From the **Measured Angle Units** drop-down list, select the unit in which you want to measure the angle.
- 4 Click points on the drawing to define the angle you want to measure. The points are joined by angle arms with an arc connecting them.
- 5 Click again to complete the measurement. The measured line path, angle measurement and unit appear as an entity on the current active markup layer and in the **Measurement** dialog.
- 6 Click and drag to change the size of the arc.
- 7 Click and drag the frame handles to change the size of the box.

Note Click **Reset** to take another measurement.

- 8 Click **Close** to close the **Measurement** dialog.


See Also *Modifying Measurement Markup Entities*

Measuring an Arc

Use the **Arc** option to define an arc in the drawing and measure its radius, center and diameter.

Note If you want a markup entity for the measurement, you must ensure that **Add Radius** or **Add Diameter** is selected in the **Measurement** dialog.

- 1 Select **Analysis > Measure** from the Markup menu. The **Measurement** dialog appears.

Note You can also click the Arc button  on the Markup toolbar.

- 2 Click the **Arc** tab.
- 3 From the **Arc Info** drop-down list, select the unit in which you want to measure the arc.
- 4 From the **Measured Angle Units** drop-down list, select the unit in which you want to measure the angle.
- 5 Select **Add Radius** if you want to measure the radius of the arc. Select **Add Diameter** if you want to measure the diameter of the arc.
- 6 Click points on the drawing to define the arc you want to measure. The points are joined by an arc.
- 7 Click again to complete the measurement. The measured line path, arc measurement and unit appear as an entity on the current active markup layer and in the **Measurement** dialog.
- 8 Click and drag the box anywhere on the drawing. Click and drag the frame handles to change the size of the box.

Note Click **Reset** to take another measurement.

- 9 Click **Close** to close the **Measurement** dialog.

See Also *Modifying Measurement Markup Entities*

Calibrating an Arc

- 1 Measure an arc in the drawing.

See *Measuring an Arc*

- 2 In the **Measurement** dialog, click **Calibrate**.
The **Distance Calibration** dialog appears displaying the measured distance.
- 3 From the **Distance** drop-down list, select the unit to which you want to calibrate the distance.
Click **Calibrate to** and enter a value if you want to calibrate to a value.
Click **Set Factor** and enter a value if you want to calibrate by a factor.
- 4 Click **OK**.
The calibration result appears in the **Measurement** dialog.
- 5 Click **Close** to close the **Measurement** dialog.

Creating 2D Vector Markup Measure Entities





When marking up 2D vector files, in addition to all the markup options available for 2D files, you can create markup measure entities. The measure options in Markup mode work slightly different than in View mode. For information on marking up 2D files, **see** *Marking Up 2D Files*.

Measure options vary between vector and non-vector files. For vector files, AutoVue provides the option to “snap” to fixed points on the drawing. For non-vector files, you can only “free snap”.

When measuring in Markup mode, the specified measurement lines and values are displayed on the current active markup layer as entities. These entities can be moved, resized, hidden or deleted. You can also modify the font of a measure entity, align a “free snap” measure entity to the horizontal or vertical axis, as well as add units of measure and symbols to a measurement and have them appear on the drawing.

Note When you are creating a markup entity, you can press **Escape** to cancel.



In Markup mode, you can choose from several measure options to create markup measure entities. You can access the measure options from the **Analysis > Measure** menu. The options are:



Option	Description
Angle	Measure the angle between selected points. From the toolbar, click the Angle button  .
Arc	Measure an arc entity. From the toolbar, click the Arc button  .
Area	Measure selected area. From the toolbar, click the Area button  .
Distance	Measure the distance between two points. From the toolbar, click the Distance button  .

2D Vector Snapping Modes

The **Snapping Modes** available allow you to click to precise geometrical points on a drawing. For example, if you select **Snap to end-point** and you move the cursor over an end-point of a line, the end-point will be highlighted by a snap box.

The **Snapping modes** allow you to snap to the mid, center and end-points of an entity:

Button	Snap to	Description
	End-point	Geometric snap mode where a snap box appears when moving the cursor near a linear component's end point.
	Mid-point	Geometric snap mode where a snap box appears when moving the cursor near the halfway point of a linear component.


Button	Snap to	Description
	Center-point	Geometric snap mode where a snap box appears when moving the cursor near the center of an elliptical component.
	Free snap	Allow snapping at any point on the drawing.

Measuring Distance

Use the **Distance** option to measure the distance between two specific points.

Note If you want a markup entity for the measurement, you must ensure that **Add Distance** is selected in the **Measurement** dialog.

- 1 Select **Analysis > Measure** from the Markup menu.
The **Measurement** dialog appears.

Note You can also click the Distance button  on the Markup toolbar.

- 2 Click the **Distance** tab.
- 3 Select the **Snapping Modes** that you want to use for measuring.
To select all **Snapping Modes** click **All On**. To clear all **Snapping Modes** click **All Off**.

See 2D Vector Snapping Modes

- 4 From the **Measure Distance Units** drop-down list, select the unit in which you want to measure the distance.
 - 5 Click a point on the drawing to define the starting point.
 - 6 Click another point on the drawing to define the end point.
The measured line path appears as an entity on the current active markup.
 - 7 Drag to move the measured line path.
 - 8 Click on the measured line path.
The measurement and unit appear as an entity on the current active markup layer. The measured distance, Delta-X and Delta-Y appear in the **Measurement** dialog.
 - 9 Click and drag the frame handles to change the size of the box.
- Note** Click **Reset** to take another measurement.
- 10 Click **Close** to close the **Measurement** dialog.


See Also *Modifying Measurement Markup Entities*

Measuring Cumulative Distance

Use the **Cumulative Distance** option to measure the distance along a path of multi-faceted (adjoining) points.

Note If you want a markup entity for the measurement, you must ensure that **Add Distance** is selected in the **Measurement** dialog.

- 1 Select **Analysis > Measure** from the Markup menu.
The **Measurement** dialog appears.

Note You can also click the Distance button  on the Markup toolbar.

- 2 Click the **Distance** tab.
- 3 Select the **Snapping Modes** that you want to use for measuring.
To select all **Snapping Modes** click **All On**. To clear all **Snapping Modes** click **All Off**.
See 2D Vector Snapping Modes
- 4 From the **Measured Distance Units** drop-down list, select the unit in which you want to measure the distance.
- 5 Select **Cumulative**.
- 6 Click a point on the drawing to define the starting point.
- 7 Continue clicking points along the path that you want to measure.
Each point is joined by a line.
- 8 Right-click to complete the measurement.
The measured line path, measurement and unit appear as an entity on the current active markup layer. The cumulated measured distance, Delta-X and Delta-Y appear in the **Measurement** dialog.
- 9 Click and drag the frame handle to change the size of the box.
Note Click **Reset** to take another measurement.
- 10 Click **Close** to close the **Measure Distance** dialog.

See Also *Modifying Measurement Markup Entities*

Calibrating Distance

- 1 Measure the distance between two points or measure cumulative distance.
See Measuring Distance
- 2 In the **Measurement** dialog, click **Calibrate**.
The **Distance Calibration** dialog appears displaying the measured distance.
- 3 In the **Measured Distance** drop-down list, select the unit to which you want to calibrate the distance.

Click **Calibrate to** and enter a value if you want to calibrate the distance to a value.

Click **Set Factor** and enter a value if you want to calibrate the distance by a factor.

- 4 Click **OK**.

The calibration result appears in the **Measurement** dialog.


- 5 Click **Close** to close the **Measurement** dialog.

Measuring Area

Use the **Area** option to measure the area and perimeter of a region.

Note If you want a markup entity for the measurement, you must ensure that **Add Area** is selected in the **Measurement** dialog.

- 1 Select **Analysis > Measure** from the Markup menu.
The **Measurement** dialog appears.

Note You can also click the Area button  on the Markup toolbar.

- 2 Click the **Area** tab.
- 3 Select **Between Points** if you want to measure the area between points on a drawing. **Snapping Modes** are enabled.
Select the **Snapping Modes** that you want to use for measuring.
To select all **Snapping Modes** click **All On**. To clear all **Snapping Modes** click **All Off**.

See 2D Vector Snapping Modes

- 4 Select **Shape** if you want to measure the area of a predefined shape on the drawing. **Snapping Modes** are disabled.
- 5 From the **Measured Area Units** drop-down list, select the unit in which you want to measure the area.
- 6 From the **Perimeter Units** drop-down list, select the unit in which you want to measure the perimeter.
- 7 To cumulate a **Net Area Result** of different areas, select **Add** in the **Measurement** dialog.
To subtract an area from the **Net Area Result**, select **Subtract**.
Select **Clear** to clear the **Net Area Result**.
- 8 If you selected **Between Points**, click points on the drawing to define the area, then right click to complete the measurement.
Each point is joined by a line. The measured line path, measurement and unit appear as an entity on the current active markup layer. The area and perimeter measurements appear in the **Measurement** dialog.
- 9 If you selected **Shape**, click the edge of a predefined shape on the drawing.

The shape is highlighted. The measured line path, measurement and unit appear as an entity on the current active markup layer. The area and perimeter measurements appear in the **Measurement** dialog.

- 10 Click and drag the frame handles to change the size of the box.

Note Click **Reset** to take another measurement.

- 11 Click **Close** to close the **Measurement** dialog.


See Also *Modifying Measurement Markup Entities*

Measuring an Angle

Use the **Angle** option to measure the angle between points on a drawing.

Note If you want a markup entity for the measurement, you must ensure that **Add dimensions** is selected in the **Measurement** dialog.

- 1 Select **Analysis > Measure** from the Markup menu.
The **Measurement** dialog appears.

Note You can also click the Angle button  on the Markup toolbar.

- 2 Click the **Angle** tab.

Select **From 3 Points** if you want to measure the angle between three points. **Snapping Modes** are enabled.

Select the **Snapping Modes** that you want to use for measuring.

To select all **Snapping Modes** click **All On**. To clear all **Snapping Modes** click **All Off**.

See *2D Vector Snapping Modes*

- 3 Select **Between 2 lines** if you want to measure the angle between two lines. **Snapping Modes** are disabled.
- 4 From the **Measured Angle Units** drop-down list, select the unit in which you want to measure the angle.
- 5 If you selected **From 3 Points**, click three points on the drawing to define the angle.
If you selected **Between 2 Lines**, click two lines on the drawing to define the angle.
Angle arms appear with an arc connecting them.
- 6 Click to complete the measurement.
The measured line path, measurement and unit appear as an entity on the current active markup layer. The measured angle appears in the **Measurement** dialog.
- 7 Click and drag to change the size of the arc.
- 8 Click and drag the box anywhere on the drawing.

- 9 Click and drag the frame handles to change the size of the box.

Note Click **Reset** to take another measurement.

- 10 Click **Close** to close the **Measurement** dialog.


See Also *Modifying Measurement Markup Entities*

Measuring an Arc

Use the **Arc** option to define an arc in the drawing and measure its radius, center and diameter.

Note To create a markup entity for the measurement, you must ensure that **Add Radius** or **Add Diameter** is selected in the **Measurement** dialog.

- 1 Select **Analysis > Measure** from the Markup menu.
The **Measurement** dialog appears.

Note You can also click the Arc button  on the Markup toolbar.

- 2 Click the **Arc** tab.
- 3 Select **From 3 Points** if you want to measure the arc between three points.
Snapping Modes are enabled.

Select the **Snapping Modes** that you want to use for measuring.

To select all **Snapping Modes** click **All On**. To clear all **Snapping Modes** click **All Off**.

See *2D Vector Snapping Modes*

- 4 Select **Arc Entity** if you want to measure a predefined arc. **Snapping Modes** are disabled.
- 5 From the **Arc Info** drop-down list, select the unit in which you want to measure the distance.
- 6 From the **Measure Angle Units** drop-down list, select the unit in which you want to measure the angle.
- 7 Select **Add Radius** if you want to measure the radius.
Select **Add Diameter** if you want to measure the diameter
- 8 If you selected **From 3 Points**, click three points to define the arc, then click to complete the measurement
The points are joined by an arc.
If you selected **Arc Entity**, click the edge of the arc that you want to measure. The arc is highlighted.
- 9 Click to complete the measurement.
The measured line path, measurement and unit appear as an entity on the current active markup layer. The measurements for center point coordinates,

radius, diameter, arc length, start and end of angle and sweep appear in the **Measurement** dialog.

- 10 Click and drag the box anywhere on the drawing.
- 11 Click and drag the frame handles to change the size of the box.

Note Click **Reset** to take another measurement.

- 12 Click **Close** to close the **Measurement** dialog.

See Also *Modifying Measurement Markup Entities*

Calibrating an Arc

- 1 Measure an arc in the drawing.

See *Measuring an Arc*

- 2 In the **Measurement** dialog, click **Calibrate**.
The **Radius Calibration** dialog appears displaying the measured distance.
- 3 From the **Measured Rad.** drop-down list, select the unit to which you want to calibrate the distance.
Click **Calibrate to** and enter a value if you want to calibrate to a value.
Click **Set Factor** and enter a value if you want to calibrate by a factor.
- 4 Click **OK**.
The calibration result appears in the **Measurement** dialog.
- 5 Click **Close** to close the **Measurement** dialog.

Printing

With AutoVue, you can print and preview files. Original files can be printed on their own or with associated Markups and Overlays.

With the **Batch Print** option, you can send a list of files to print at the same time.

When printing a file, there are print properties that you can define. The properties are:

Option	Description
Print	Define the print options. See <i>Configuring the Print Options</i>
Margins	Define the margin settings. See <i>Setting the Print Margins</i>
Headers/Footers	Define the headers/footers to be included on every page printed. See <i>Adding a Header/Footer</i>
Watermark	Define the watermark to be included on every page printed. See <i>Adding a Watermark</i>
Pen Settings	Change the thickness assigned to a pen. See <i>Assigning Pen Settings</i>

Print Options

From the **Options** tab of the **Print Properties** dialog, you can define options for the printed file.


Option	Type	Description
Printer	Modify	Select a printer and configure print properties, such as paper size, number of copies, etc.
	Paper size	Displays selected paper size.

Option	Type	Description
	Orientation	<ul style="list-style-type: none"> • Portrait - Specify if file should be printed portrait • Landscape - Specify if the file should be printed landscape • Auto - Specify if orientations should be printed as saved in the file <p>Note Option is available with Java 2 and is only enabled for PDF and word documents.</p>
	Units	Select a unit from the drop-down list to set the unit for Scaling and Alignment/Offset . The available units are pixels, inches and millimeters.
Scaling	Fit to Page	Scales the image to fit on the output page.
	Factor	Scales the image according to the scaling factors that you have manually entered in the input fields.
	Scale	Scales the image according to a percentage. You can select a predefined scaling factor or manually enter a custom scaling factor. Note Decimal places are accepted.
Alignment/Offset		Specify where the drawing will appear on the printout. Some of the available options are Top-Left, Center-Right, Bottom-Center, etc. Note You can define custom alignment by entering a X and Y value.
Document Pages		Specify the document pages to print: All , Current or Range .
Page Area		Select the page area to print.
	Extents	Print the extent of the document.
	Displayed	Print the area displayed in the View window. Note Option is only enabled when Current is selected for Document Pages.

Option	Type	Description
	Limits	Prints the file limits instead of extents. Note Option is only enabled when Current is selected for Document Pages.
	Selected	Print selected area. When option is selected, the select button is enabled allowing you to select an area on the drawing. Note Option will only be enabled when Current is selected for Document Pages.
Force to Black		Force all colors to black.
High Resolution		Prints the file with more definition. Note AutoVue Web Edition is based on Java 1.1 to make it compatible with the current browsers. One drawback with Java 1.1 is its limited support for printing -- the print resolution is limited to 72 dpi. AutoVue implements and delivers this limited print capability as part of the package. Cimmetry has identified the need for higher resolution and has implemented a solution for High Resolution and Large Format printers/ plotters output for client machines running on a Windows platform.
Output a single page		Limits output to a single page when the scaling options selected causes a single page to span over several pages.
Print Row Headers		Print row headers. Note Option is only enabled for spreadsheets, archive and database files.
Print Column Headers		Print column headers. Note Option is only enabled for spreadsheets, archive and database files.
Partial Preview		Display a view of the printer page, highlighting the printable area.

Configuring the Print Options

- 1 Select **File > Print** from the AutoVue main menu.
The **Print Properties** dialog appears.

Note You can also click the Print button  on the AutoVue toolbar.
- 2 Click the **Options** tab.
- 3 Configure the print options.
See *Configuring Print Options*
- 4 Configure other print properties.
See *Setting the Print Margins*
Adding a Header/Footer
Adding a Watermark
Assigning Pen Settings
- 5 To view a partial view of the file, click **Partial Preview**.
The **Partial Preview** dialog appears.
See *Partial Preview of a File*
- 6 Click **OK** to print.
The **Print** dialog appears indicating the document is printing.
See Also *Previewing a File Before Printing*


Print Margins

From the **Margin** tab of the **Print Properties** dialog, you can define the top, bottom, right and left margins for the printed file. You can define:

Option	Description
Margins	Set the value for the Left , Top , Right and Bottom margins.
Minimum	Set the acceptable minimum margins for the selected printer.
Units	Specify the unit for the margins.

Setting the Margins

- 1 Select **File > Print** from the AutoVue main menu.
The **Print Properties** dialog appears.

Note You can also click the Print button  on the AutoVue toolbar.

- 2 Click the **Margins** tab.
- 3 Enter the margin that you want for **Left, Top, Right** and **Bottom** or click **Minimum** if you want to set the margins to the minimum acceptable for the selected printer.

Note When you click **Minimum**, the minimum margins allowable automatically appear in the **Margins**.

- 4 From the **Units** drop-down list, select the unit in which you want to set the margins at.
- 5 Configure other print properties.

See ***Configuring Print Options***
Adding a Header/Footer
Adding a Watermark
Assigning Pen Settings

- 6 To view a partial view of the file, click **Partial Preview**.
The **Partial Preview** dialog appears.

See ***Partial Preview of a File***

- 7 Click **OK** to print.
The **Print** dialog appears indicating the document is printing.

See Also ***Previewing a File Before Printing***

Headers/Footers

From the **Headers/Footers** tab of the **Print Properties** dialog, you can define the headers and footers that you want to print on every page of the document. You can enter the text manually or choose from a list of **Insert Codes**.

The list of insert codes are:

- %f: Full path of document
- %v: Document Drive
- %d: Document Directory
- %b: Document Base name
- %e: Document file extension
- %n: Total document pages
- %p: Current page number
- %N: Total tiled-pages
- %P: Current tile number


- %Y: Date: Year
- %M: Date: Month
- %D: Date: Day
- %W: Date: Day of week
- %H: Time: Hour
- %U: Time: Minute
- %S: Time: Seconds
- %r: New line
- %F: Native Print Settings (Excel)

Note A literal percentage mark is entered manually as %%.

You can also print system variables in headers and footers. Select a variable from the **Insert Variable** drop-down list. Some **Insert Variable** options are: user.name, browser and java.home.

Adding a Header and Footer

- 1 Select **File > Print** from the AutoVue main menu.
The **Print Properties** dialog appears.

Note You can also click the Print button  on the AutoVue toolbar.

- 2 Click the **Headers/Footers** tab.
- 3 Click in the **Left**, **Center** or **Right** box and enter the text that you want to appear in the header and footer, or choose an **Insert Code** or **Insert Variable**.
- 4 To **Insert Code** in the header or footer, click **Left**, **Center** or **Right**, then select a code from the drop-down list.
- 5 To **Insert Variable** in the header or footer, click **Left**, **Center** or **Right**, then select a variable from the drop-down list.
- 6 To change the Font, click **Set Font**. The **Font** dialog appears.
From the **Font** drop-down list, select the type of font.
From the **Size** drop-down list, select the size of font.
To set the font **Style**, click **Bold** or **Italic** or both, then click **OK**.
- 7 In the **Print Properties** dialog, configure other print properties.
See *Configuring Print Options*
Setting the Print Margins
Adding a Watermark
Assigning Pen Settings
- 8 To view a partial view of the file, click **Partial Preview**.
The **Partial Preview** dialog appears.

See *Partial Preview of a File*

- 9 Click **OK** to print.

The **Print** dialog appears indicating the document is printing.

See Also *Previewing a File Before Printing*

Native Print Settings

You can choose to include predefined headers and footers when printing an Excel file from AutoVue.

- 1 From the **Print Properties** dialog, click the **Headers/Footers** tab.
- 2 Under **Headers** and **Footers**, click inside the **Left**, **Center** and **Right** boxes corresponding to the header or footer position in the original file.
- 3 Select **%F: Native Print Settings (Excel)** from the **Insert Code** drop-down list.
- 4 Click **OK** to print.
The Excel file's headers and footers are printed.

Watermarks

From the **Watermark** tab of the **Print Properties** dialog, you can specify a watermark that will appear on a printed file. When printing a watermark, it appears transparent on the file contents. You can choose a horizontally or vertically oriented watermark.

In addition to entering text, you can:

- set the type, size and style of font
- insert Watermark information
- print system variables

To insert Watermark information, AutoVue provides a list of codes that you can choose from. These codes are:

- %f: Full path of document
- %v: Document Drive
- %d: Document Directory
- %b: Document Base name
- %e: Document file extension
- %n: Total document pages
- %p: Current page number
- %N: Total tiled-pages
- %P: Current tile number


- %Y: Date: Year
- %M: Date: Month
- %D: Date: Day
- %W: Date: Day of week
- %H: Time: Hour
- %U: Time: Minute
- %S: Time: seconds
- %r: New line

Note A literal percentage mark is entered manually as %%.

You can also print system variables in watermarks. Select a variable from the **Insert Variable** drop-down list. Some **Insert Variable** options are: user.name, browser and java.home.

Adding a Watermark

- 1 Select **File > Print** from the AutoVue main menu.
The **Print Properties** dialog appears.

Note You can also click the Print button  on the AutoVue toolbar.

- 2 Click the **Watermark** tab.
- 3 Enter the **Watermark Text** that you want to appear on the file.
To insert a code in the watermark, select a code from the **Insert Code** drop-down list.

For example, if you select **%n: Total document pages**, the total number of pages for the selected file will appear in the Watermark.

Note You can insert more than one code.

- 4 To insert a system variable, select a variable from the **Insert Variable** drop-down list.

For example, if you select **browser.version**, the version of the browser that the file is displayed in will appear in the Watermark.

Note You can insert more than one system variable.

- 5 To set the orientation of the watermark, click **Diagonal, Horizontal or Vertical**.
- 6 To change the Font, click **Set Font**. The **Font** dialog appears.
From the **Font** drop-down list, select the type of font.
From the **Size** drop-down list, select the size of font.
To set the font **Style**, click **Bold** or **Italic** or both, then click **OK**.
- 7 In the **Print Properties** dialog, configure other print properties.

See *Configuring Print Options*


Setting the Print Margins
Adding a Header/Footer
Assigning Pen Settings

- 8 To view a partial view of the file, click **Partial Preview**.
 The **Partial Preview** dialog appears.
See *Partial Preview of a File*
- 9 Click **OK** to print.
 The **Print** dialog appears indicating the document is printing.
See Also *Previewing a File Before Printing*

Assigning Pen Settings

From the **Pen Settings** tab of the **Print Properties** dialog, you can set the thickness of the color indices for the print file.

Note AutoVue uses the default pen color indices of the native document for the vector file being viewed. You will not be able to change the color assigned to a pen with AutoVue.

- 1 Select **File > Print** from the AutoVue main menu.
 The **Print Properties** dialog appears.
Note You can also click the Print button  on the AutoVue toolbar.
- 2 Click the **Pen Settings** tab.
- 3 Under **From/To**, select the **Color Index** for which you want to assign a new pen thickness.
Note To change more than one color indices, press the **Shift** or **Ctrl** key while selecting.
- 4 From the **Units** drop-down list, select the unit that you want to set for the thickness.
- 5 Click **Thickness**. The **Modify pen thickness** dialog appears.
 Enter the new thickness, then click **OK**.
 The new **Thickness** appears beside the **Color Index**.
- 6 In the **Print Properties** dialog, configure other print properties.
See *Configuring Print Options*
Setting the Print Margins
Adding a Header/Footer
Adding a Watermark
- 7 To view a partial view of the file, click **Partial Preview**.
 The **Partial Preview** dialog appears.

*See **Partial Preview of a File***

- 8 Click **OK** to print.

The **Print** dialog appears indicating the document is printing.

*See Also **Previewing a File Before Printing***

Creating a New Pen Setting

- 1 Set the thickness for the color indices that you want.

*See **Assigning Pen Settings***

- 2 Click **Save As**. The **Save As** dialog appears.

Enter a pen **Name** for your pen setting, then click **OK**.

The new pen setting appears in the **Current Pen Settings** drop-down list.

- 3 In the **Print Properties** dialog, click **OK** to print.

The **Print** dialog appears indicating the document is printing.

Deleting a Pen Setting

- 1 Select the pen setting that you want to delete from the **Current Pen Settings**.

- 2 Click **Delete**.

The pen setting disappears from the list.

- 3 Click **Cancel** to close the **Print Properties** dialog.

Partial Preview of a File

The **Partial Preview** dialog displays the printable area on top of the page area so that users can have a clear idea of what will be printed.

Note Option is only enabled when **Current** is selected from **Document Pages**.

- 1 Configure the print properties.

*See **Configuring Print Options***

Setting the Print Margins

Adding a Header/Footer

Adding a Watermark

Assigning Pen Settings

- 2 Click **Partial Preview** in the **Print Properties** dialog.


The **Partial Preview** dialog appears. The **Partial Preview** dialog highlights the area that will be printed. The **Paper size**, **Printable Area** and **Drawing Area** are displayed.

- 3 Click **OK** to close the **Partial Preview** dialog.

Previewing a File Before Printing

You can preview a print copy of the current active file on screen according to your printer's capabilities and the print property settings.

- 1 View the file in AutoVue.
- 2 Select **File > Print Preview** from the AutoVue main menu. The **Print Properties** dialog appears.

Note You can also click the Print Preview button  on the AutoVue toolbar.

- 3 Configure the print properties.

See ***Configuring Print Options***
Setting the Print Margins
Adding a Header/Footer
Adding a Watermark
Assigning Pen Settings


- 4 Click **OK**.
The file appears in Print Preview Mode in the **Print Preview** window.
Note You can print the file from the **Print Preview** window by clicking **Print**. You can also zoom in and out of a file, as well as navigate from one page to another of a multi-page file.
- 5 Click **Close** to close the **Print Preview** window.

Printing a File

In AutoVue you can print original files along with their Markup files and selected Markup layers together so that they appear as one file.

- 1 Open the file you want to print in AutoVue.
To print the associated Markups, open the Markup file(s) you want to print. If you are printing Markup file(s) and you want to print the visible layers, select **Modify > Markup Layers** from the Markup menu, then from the **Markup Layers** dialog select the Markup layers you want visible.
- 2 Select **File > Print** from the AutoVue main menu.

The **Print Properties** dialog appears.

Note You can also click the Print button  on the AutoVue toolbar.

- 3 Configure the print properties.

See *Configuring Print Options*

Setting the Print Margins

Adding a Header/Footer

Adding a Watermark

Assigning Pen Settings

- 4 To view a partial view of the file, click **Partial Preview**.

The **Partial Preview** dialog appears.

See *Partial Preview of a File*

- 5 Click **OK** to print.

The **Print** dialog appears indicating the document is printing.

See Also *Previewing a File Before Printing*

Batch Printing

The **Batch Print** option lets you send a list of files to print at the same time. You can also generate a batch by simultaneously opening all the files included in the batch print.

- 1 Select **File > Batch Print** from the AutoVue main menu.

The **Batch Print** dialog appears.

- 2 To add a file to the **List of files to be printed**, click **Add**. The **File Open** dialog appears.

Enter a **File Name** or click browse to locate the file you want to add, then click **OK**.

The file(s) appears in the **List of files to be printed**.

Note To add more files to the list, repeat steps 2 to 4. To remove a file(s), select the file from the **List of files to be printed** and click **Remove**.

- 3 Click **Print** in the **Batch Print** dialog.

The **Print Properties** dialog appears.

- 4 Configure the print properties.

See *Configuring Print Options*

Setting the Print Margins

Adding a Header/Footer

Adding a Watermark

Assigning Pen Settings

- 5 Click **OK** to print.
The **Print** dialog appears indicating the document is printing.

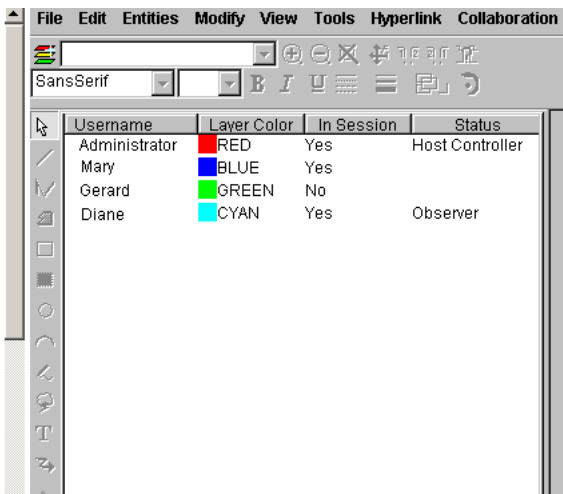
Collaboration

Collaboration option enables multiple users to review files interactively and simultaneously, thereby shortening the review process for documents.

Participants in a Collaboration Session assume different roles. Each Collaboration Session has a Host, a Controller and one or more users. These participants have varying privileges during the Collaboration Session.

Collaboration User Tree

When you are in a Collaboration Session, the bar on the left-hand side of the screen displays the **Users** and **Markup Tree** tabs, in addition to the tabs displayed when you are normally viewing a file. The **Users** tab displays the **Username**, the **Layer Color** representing the user, the **In Session** value and the user **Status**. The **Markup Tree** tab displays the Markup entities added to the file.



The Host

The person who initiates the Collaboration Session is automatically the acting Host and Controller by default. The Host and Controller are not always the same

person. The acting Host can assign another user to be the Host by selecting **Assign Host** from the **Collaboration** menu.

The Host is the only one who can save the Session Markup. When initiating a Collaboration Session, the Host can specify the Markup to open; the host can also open a Markup file during a session. The Host can invite other users to join the Collaboration Session during the session or at initiation of the session.


The Controller

The **Controller** is the person who controls the base file's view during the Collaboration Session. Other participants in the Collaboration Session can choose between displaying or hiding the Controller's View changes.

When a session is initiated, the Controller is also the Host. The Controller can change the base file anytime during the Collaboration Session. However, when the Controller is no longer the Host, opening a new file has to be approved by the acting Host.

At any time during a session, a participant who is not an Observer can request control of a Collaboration Session.

Lock

Any user who is not the Controller of the Collaboration Session can select **Lock View** from the **Collaboration** menu or click the Lock View button  in the lower left part of the screen to display the Controller's View modifications on the base file and the other participants' modifications on the Markup file made during the Collaboration Session.

When you lock your view, the file displayed will have the same Configuration options the Controller has set in the **Configuration** menu.

Note For all users, except for the Controller, view options are disabled.

Observer

Observers can take part in a Collaboration Session but cannot create Markup entities. They can observe and make comments in the Chat window. The Host can designate a user as an Observer when he invites him to the Collaboration Session. A user can also decide to take part as an Observer in the Collaboration


Session by selecting **Observer** in the **Join Session** dialog. There can be more than one Observer during a Collaboration Session.

Open a File

The Controller is the only user who can open a file during a Collaboration Session. To open a URL, select **File > Open URL** from the menu. To open a local file, select **File > Open Local File** from the menu. The **File Open** dialog box appears, letting you specify the file to open.

When AutoVue Web Edition is integrated with a Document Management System (DMS), clicking **Open URL** opens dialog that lets you view a DMS file. You can work on this file opened through **Open URL** during the Collaboration Session. When the Host opens a URL, he or she is prompted to save the Session Markup from the Collaboration Session that was in session. When the Controller opens a URL, the Host still owns the Collaboration Session and is the only one who can save the Session Markup.

Pointer

The **Pointer**  is the cross-hair marker the Controller uses to point to a specific place in the file.

Session Information

The **Session Information** option is available from the **Collaboration** menu during a Collaboration Session. It displays the **Session Subject** (the name assigned to the Collaboration Session), the **Session ID**, the name of the base file viewed, the **Host** and the list of users participating.

Session Markup

This is the Markup file created during the Collaboration Session. All participants can add Markup entities to the Session Markup file.

Note Only the Host can save the Session Markup. **Save** and **Save As** are disabled for all other users.

Show Tracker

The **Show Tracker** option in the **Collaboration** menu is available to any user whose view is set to unlocked. When you select **Show Tracker** from the **Collaboration** menu, the **Collaboration View** window appears displaying a bird's eye view of the base file viewed and the Markup changes done during the Collaboration Session.

When you use **Show Tracker**, you can simultaneously track the Controller's base file view changes and everyone's Markup changes in the **Collaboration View** window while your main window display remains unaffected by anyone's modifications. It is like having a locked view and an unlocked view on hand at the same time.

Collaboration Session

The **Collaboration** menu provides you with a means to initiate a Collaboration Session or join an existing session. When you initiate a Collaboration Session, a session object is created on the server and you are the Host and Controller of the session. The Host owns the Session Markup and is the only one who can save it and open an existing Markup. The Host can also invite other users during a session.

Initiating a Collaboration Session

When you initiate a Collaboration Session, a session object is created on the server. The session object is maintained for the duration of the Collaboration Session. When you initiate a session from View mode, you are the Host and the Controller of the session.

- 1 Select **Collaboration > Initiate Session** from the AutoVue main menu. The **Initiate Session** dialog appears.
- 2 Under **Session Subject**, enter a session name.
- 3 If you want to open a Markup for the Collaboration Session, click **Browse**.
See *Opening a Markup While Initiating a Session*
- 4 Click **Public** if you want the Collaboration Session visible to others who may want to join the session.
Click **Private** if you want the Collaboration Session only visible to the participants.
- 5 If you want to set a password for the Collaboration Session, enter a **Password**, then enter it again to **Confirm**.

Note If you selected **Private** and chose not to set password, when you click **OK**, a confirmation dialog appears asking if you are sure you do not want to set a password.

- 6 From the **Users** list, select the users that you want to invite.

- 7 Click **Add**.

The user you selected appears in the **Invited** list.

Note To remove a user, select the user from the **Invited** list and click **Remove**.

- 8 To designate a user as an **Observer**, select the checkbox under **Invited**.

- 9 Click **OK**.

AutoVue goes into **Collaboration** mode and the session is started. The user(s) that are invited receive a tooltip notification that he or she has been invited to join the session. The notification message indicates Session Name, File and Initiator.

Changing a User's Layer Color of a Session


- 1 In the **Initiate Session** dialog, click **Layer Color**.

The **Layer Color** dialog appears.

- 2 Select a **Layer Color** from the drop-down list or select **Let user choose** if you want the user to choose their own color.

- 3 Click **OK**.

In the **Initiate Session** dialog, the selected **Layer Color** appears beside the **Username** in the **Invited** list.

If you selected **Let user choose**, a custom color  appears beside the **Username**, indicating that the color can be changed **By User**.

Adding New Users to a Session

- 1 In the **Initiate Session** dialog, click **Add New**.

The **Add User** dialog appears.

- 2 Enter **Username**.

- 3 Select **Observer** if you want to designate the user as an Observer.

- 4 Select a **Layer Color** from the drop-down list or select **Let user choose** if you want the user to choose their own color.

- 5 Click **OK**.

The new user is added to the **Invited** list in the **Initiate Session** dialog.

Note To add more than one user, repeat steps 1 to 5.

Opening a Markup While Initiating a Session

- 1 Select **Collaboration > Initiate Session** from the AutoVue main menu.
The **Initiate Session** dialog appears.
- 2 Click **Browse**.
The **Open markup** dialog appears.
- 3 In the **Markup list**, select the checkbox beside the Markup that you want to open.
- 4 To import a Markup file, click **Import**.
The **Select markup file to import** dialog appears.
- 5 Locate the file that you want to open.
- 6 Click **Open**.
- 7 Click **OK** in the **Open markup** dialog.
- 8 In the **Initiate Session** dialog, select **Session Markup** if you want to open a Session Markup and keep the layer colors and Markup entities from the Collaboration Session.
- 9 Click **OK**.
The selected Markup appears in the **Initiate Session** dialog.

Opening a Markup During a Session

The Host can open Markups during a Collaboration Session. These Markups can be session markups created during Collaboration Sessions or any non-session Markup files.

- 1 During a Collaboration Session, select **File > Open** from the AutoVue main menu.
A confirmation dialog appears, prompting you to save the current Session Markup.
- 2 Click **Yes** or **No**.
The **Open markup** dialog appears.
- 3 Click the checkbox beside the Markup that you want to open.
- 4 To import a Markup file, click **Import**.
The **Select markup file to import** dialog appears.
- 5 Locate the file that you want to open.
- 6 Click **Open**.
- 7 In the **Open markup** dialog, select **Session Markup** if you want to open a Session Markup and keep layer colors and Markup entities from the Collaboration Session.
- 8 Click **OK**.

The selected Markup appears in the Collaboration window.

Joining a Session

Note If you do not want to receive any notifications to join Collaboration Sessions, select **Collaboration > Do Not Disturb** from the AutoVue main menu.

- 1 Select **Collaboration > Join** from the AutoVue main menu.
The **Join Session** dialog appears.

Note You can also click the Join Session button  on the status bar at the bottom of the workspace.

- 2 From the **Session ID** drop-down list, select the active session you want to join.
- 3 Enter the **Session ID** of the session you want to join.
- 4 Enter the **Password** if the Host has set one.
- 5 If you just want to be an **Observer**, select the checkbox.
- 6 If you want to select a layer color, click **Layer Color**.
The **Layer Color** dialog appears.

Note The **Layer Color** is disabled if the Host did not select **Let user choose** when initiating the Collaboration Session or when you are invited to join the session.

- 7 Select a color from the drop-down list.
- 8 Click **OK**.
- 9 Click **OK** in the **Join Session** dialog.
You have joined the session.

Inviting Users During a Session

- 1 Select **Collaboration > Invite** from the AutoVue main menu.
The **Invite** dialog appears.
- 2 From the **Users** list, select the user(s) that you want to invite.
- 3 Click **Add**.

The user(s) you selected appears in the **Invited** list.

Note You can add user(s) that are going to join the session at a later time by clicking **Add New** and entering the **Username**.

- 4 Click **OK**.
The user(s) receives a tooltip notification that he or she has been invited to join the session.

Removing Users from a Session

- 1 Select **Collaboration > Invite** from the AutoVue main menu.
The **Invite** dialog appears.
- 2 From the **Invited** list, select the user(s) that you want to remove.
- 3 Click **Remove**.
The user(s) you selected appear in the **Online** list.
- 4 Click **OK**.
The user(s) receives a tooltip notification that he or she is no longer invited to the session.

Assigning a Host During a Session

- 1 Select **Collaboration > Assign Host** from the AutoVue main menu.
The **Assign Host** dialog appears.
- 2 From the **Users** list, select the user that you want to assign as host.
- 3 Click **OK**.
The user you selected is now the host of the Collaboration Session.

Granting Control of a Session to Another User

When you initiate a Collaboration Session, you are the default Controller of the session until you relinquish control to another user. You may grant control to another user any time during the session. Once you grant control to another user, all other users will automatically lock their views to the new Controller.

- 1 Select **Collaboration > Grant Control** from the AutoVue main menu.
The **Grant Control** dialog appears.
- 2 From the **Users** list, select the user that you want to grant control to.
- 3 Click **OK**.
The user you selected has control of the Collaboration Session.

Saving a Session Markup

The Host owns the Session Markup and is the only one who can save it.

- 1 At the end of the Collaboration Session, select **File > Save As** from the AutoVue main menu.
The **Save Markup File As** dialog appears.
- 2 Enter the **Markup ID**.

Note The **Markup Information** is optional.

- 3 Click **OK**.
The session Markup is saved.


Closing a Session

Only a Host can close a Collaboration Session.

- 1 Select **Collaboration > Close Collaboration Session** from the AutoVue main menu.
The **Save Markup** dialog appears prompting you to save the Session Markup.
- 2 Click **Yes**.
All users are notified that the Collaboration Session is closed.

Requesting Control of a Session

- 1 Select **Collaboration > Request Control** from the AutoVue main menu.

Note You can also click the Wand button  on the status bar at the bottom of the workspace.

The Controller receives a message that you have requested control.

- 2 The Controller clicks **Yes**.
You become the Controller of the Collaboration Session.

Note If the Controller does not respond within 10 seconds, control is automatically granted to the user who requested it.

Tracking Changes


The **Show Tracker** option allows you to simultaneously track the Controller's base file view changes and everyone's markup changes while your markup file remains unchanged.

Note You must be in an unlocked state before selecting **Show Tracker**.

- 1 Select **Collaboration > Show Tracker** from the AutoVue main menu.
You can now track changes without affecting your view.

Unlocking a View

If you do not want to see the Controller's view changes, clear the Lock View.



- 1 Select **Collaboration** and deselect **Lock View** from the AutoVue main menu.
The checkmark disappears beside the **Lock View** option.
Note You can also click the Unlock View button  on the status bar.
- 2 Select **Collaboration > Show Tracker** if you want to simultaneously track the Controller's base file view changes and everyone's markup changes while your markup file remains unchanged.
You can now track changes without affecting your view.
Note The **Show Tracker** option is only available when a view is set unlock.

Locking a View

The **Lock View** option allows you view changes the Controller is making. When you select the **Lock View** option, you are also propagating your Markup modifications to the other participants in the session.

Note **Lock View** is the default for all participants in a session.

- 1 Select **Collaboration > Lock View** from the AutoVue main menu. Lock View set by default.

Note You can also click the Lock View button  on the status bar at the bottom of the workspace.
A checkmark appears beside the **Lock View** option and the Lock View button  turns red on the status bar.

Viewing Session Information

- 1 Select **Collaboration > Session Information** from the AutoVue main menu.
The **Session Information** dialog appears displaying the **Subject**, **Session ID**, **File Name**, **Host** and **Users** of the session.
- 2 Click **OK**.

Leaving a Session

Only a Host can close a Collaboration Session. All other participants can leave a Collaboration Session and rejoin at a later time if it is still in session.

- 1 Select **Collaboration > Leave Collaboration Session** from the AutoVue main menu.
The other participants are notified that you left the Collaboration Session and AutoVue returns to **View** mode.

Chat Window

The **Chat Window**, is a tool you can use to communicate with other users. You send each other messages via the **Chat Window**. The **Chat Window** is also useful in giving you Collaboration Session updates such as which users are present and which users have joined or left the session.


At the end of the Collaboration Session, a transcript of the **Chat Window** is saved as a **Note** entity along with the Markup as the Collaboration Session Markup file. The **Note** entity contains session information such who the Host was, who was invited and session time and duration.

The **Chat Window** contains these menu options:

Menu	Option	Description
File	Send Message	Sends text messages to other users.
	Print	Prints the contents of the Chat window.
	Quit	Closes the Chat window.
Edit	Copy	Copy text from the Chat window.
	Clear	Clears all the text in the Chat window.
	Select All	Selects the entire text in the Chat window.
Options	Users	Displays the users in the Collaboration Session.

Sending a Message to Selected Users

- 1 Select **Collaboration > Chat Window** from the AutoVue main menu.
The **Chat** dialog appears.

Note You can also click the Chat Window button  on the status bar at the bottom of the workspace.

- 2 Click **Selected users**.

A list of **Users** appear in the **Chat** dialog.

- 3 Under **Users**, select the user(s) that you want to send the message to.

Note To select more than one user, press the **Shift** or **Ctrl** key while selecting.


- 4 In the **Send Message to:** type your message.

- 5 Click the Send Message  button.

The private message is sent to the selected users of the Collaboration Session.

Sending a Message to All Users

- 1 Select **Collaboration > Chat Window** from the AutoVue main menu. The **Chat** dialog appears.

Note You can also click the Chat Window button  on the status bar at the bottom of the workspace.

- 2 Click **All Users**.

- 3 In the **Send Message to:** type your message.

- 4 Click the Send Message  button.

The message is sent to all users in the Collaboration Session.

Numerics

2D Files 7

2D Vector Files 20

A

Adding an Overlay 26

Archive Files 6

AutoVue 1

AutoVue Basics 3

 menu bar 3

 quick menus 4

 status bar 4

 toolbars 3

B

Batch printing 90

Birds Eye 10, 11

Blocks 23

 view 23

C

Calibrate Arc

 2D non-vector 19

 2D vector 32

Calibrate Distance

 2D non-vector 17

 2D vector 29

Collaboration 92

 controller 93

 host 92

 lock 93

 observer 93

 open URL 94

 pointer 94

 session information 94

 session markup 94

 show tracker 95

 User Tree 92

Collaboration Session 95

 add new user 96

 assign host 99

 change layer color 96

Chat Window 102

 options 102

 send message to all users
 103

 send message to selected users
 102

close 100

grant control 99

initiate 95

invite users 98

join 98

leave session 101

lock view 101

open markup

 during a session 97

 while initiating a session 97

remove users 99

request control 100

save markup 99

track changes 100

unlock view 100

view information 101

Compare

 2D 24

 options 25

 results window 24

 scale and offset 26

Configure

 2D 38

 options

 raster files 35

 vector files 34

 rendering 35

 snap settings 38

 3D

- Measurement 37
- contact Cimmetry Systems 2
- Convert
 - 2D 12
 - options 12
 - pen settings 15
- Creating Hyperlinks 64

D

- Delete
 - hyperlink 65
 - Markup entities 56
 - Markup layer 48
- Deleting a Hyperlink 65
- Drawing Information 21
 - view details of an entity 21
 - view information for a set of entities 21
 - view tags/attributes 22

E

- Editing a Hyperlink 64
- enter Markup mode 52
- Entity
 - view details 21
 - view information 21
- Exporting file versions 2

F

- File preview 89
- File print 89
- File Properties 6
 - file information 6
 - native 6
 - resource information 6
- File Versions 2
 - exporting 2
 - viewing 2

- Files
 - archive 6
 - open 5
 - open from server 5
 - open local 5
 - open url 5
- Flip 9
 - both axes 9
 - horizontal axis 9
 - none 9
 - vertical axis 9
- Freestyle
 - contiguous 60
 - non-contiguous 60

H

- Hyperlinks 63
 - create 64
 - delete 65
 - edit 64
 - fire 64
 - view history 65
 - view list 65

I

- Image 10
 - anti-alias 10
 - contrast 10
 - invert 10
- Insert Codes 83
- Introduction 1

L

- Layers
 - view 2D 23

M

- Magnify Glass 10, 11

Magnify Window 10, 12

Manipulating Views

2D 8

EDA 20

Marking Up Documents 1

Marking up Files 40

Markup

2D 57

add leader 61

add note 62

add symbol 63

add text 62

contiguous freestyle 60

entities 58

arc 58

box 58

circle 58

closed polyline 58

cloud 58

filled box 58

freestyle 59

highlight 59

leader 59

line 59

note 59

polyline 60

symbol 60

text 60

non-contiguous freestyle 60

change active 45

consolidate files 49

create file 42

export file 44

import file 44

Navigation Tree 40

open file 43

save existing file 43

save new file 43

saved states 42

set active 44

user information 42

Markup Calibrate Arc

2D non-vector 71

2D vector 78

Markup Calibrate Distance

2D non-vector 68

2D vector 74

Markup entities 50

arrow style 51

assign same color 56

change line color 54

color 51

change fill color 55

change fill type 55

delete 50, 56

delete all 50

edit 52

fill type 51

go to 51

group 52

hide 51, 53

line style 50

change 54

line thickness 50

change 53

move 52

select 52

ungroup 53

Markup Layers 45

change active layer 47

change color 47

create 46

delete 48

move entity 49

rename 48

set active layer 46

toggle 48

Markup Measure

2D non-vector 66

2D vector 71

Markup Measure Angle

2D non-vector 69

2D vector 76

Markup Measure Arc

2D non-vector 70

2D vector 77

Markup Measure Area

2D non-vector 68

2D vector 75

Markup Measure Cumulative Distance

2D non-vector 67

2D vector 74

Markup Measure Distance

2D non-vector 67

2D vector 73

Markup measure entities

change symbols 57

change units 57

modify 56

Measure

2D non-vector 16

2D vector 27

Measure Angle

2D non-vector 18

2D vector 31

Measure Arc

2D non-vector 19

2D vector 31

Measure Area

2D non-vector 18

2D vector 30

Measure Distance

2D non-vector 17

2d vector 29

Missing XRefs

display details 23

Modifying on Overlay 26

O

Overlay

add 26

Overlays 26

modify 26

remove 27

P

Page 10

next page 10

page number 10

previous page 10

Pan 10

paths

hyperlink 65

Printing 79

batch 90

file 89

header/footer

add 83

insert codes 83

native settings 85

options

configure 82

partial preview 88

pen settings

assign 87

create 88

delete 88

preview 89

set margins 82

watermark

add 85

insert codes 85

R

Removing an Overlay 27

Rotate 9

S

Saving an Existing Markup File 43

Scale and Offset 26

Search

 2D text 7

 perform 7

Selecting views 24

Show Tree 11

Snap Modes

 2D vector 28, 72

Symbols

 scale anisotropic 63

 scale isotropic 63

V

Vector_Distance 29

View Point 2D

 specify 24

Viewing blocks 23

Viewing details of an entity 21

Viewing entity information 21

Viewing file versions 2

Viewing layers

 2D 23

Viewing List of Hyperlinks 65

Viewing Tags/Attributes 22

Viewing Xrefs 22

W

Watermarks 85

X

XREFPATHS 22

XRefs

 missing 23

 view 22

Z

Zoom 8

 fit 8

 both 8

 horizontal 9

 vertical 8

 full resolution 8

 in 8

 out 8

 previous 9

