

# VizEx Reader

9.4.2

Larson Customer Support

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# Contents

<b>Introduction</b>	<b>3</b>
VizEx Reader.....	3
VizEx Professional .....	3
VizEx GeoTech .....	4
<b>VizEx Reader Features</b>	<b>5</b>
CGM and TIFF Viewing.....	5
Annotation .....	6
Printing .....	6
<b>VizEx Reader Interface</b>	<b>9</b>
List of VizEx Reader Tools .....	9
Navigation & Utility Functions .....	9
Annotation Functions .....	9
Tool Bar; Tools and Explanations .....	11
<b>Index</b>	<b>29</b>

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## CHAPTER 1

# Introduction

The VizEx family of products incorporates the powerful Larson CGM and TIFF viewing technology which allows you to easily handle very large images.

The VizEx Family includes:

### In This Chapter

VizEx Reader .....	3
VizEx Professional.....	3
VizEx GeoTech.....	4

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## VizEx Reader



This application operates as either a standalone viewer or plug-in for Internet Explorer that supports all versions of CGM and TIFF.

Download for free at: <http://www.FreeCGMViewer.com>

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## VizEx Professional



VizEx Professional is a powerful viewer with annotation and scaled printing tools. Create and save markups in a separate file or append them to a CGM or TIFF for viewing in VizEx Reader. You can also create hyperlinks to other documents and graphics, convert and save as CGM or TIFF files, copy to Windows clipboard then paste into desktop applications. Advanced printing features include: scaled printing, select multiple sections of logs and concatenate, scale to width with variable vertical scale.

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## VizEx GeoTech



VizEx GT is the ultimate Geotechnical image viewer. Includes all capabilities found in VizEx Professional plus many additional features.

VizEx GT allows multiple files to be viewed simultaneously for file comparison or correlation. Sections of logs can be spliced together into continuous images. Locked scrolling allows multiple logs to be scrolled simultaneously.

VizEx GT also offers advanced printing capabilities with the integrated Larson RIP for both CGM and TIFF, formerly available only in CGM PlotLite and the Network Print Server. This technology reduces plotter memory requirements and length limitations by using host memory to do rasterization.

The Larson Continuous RIP greatly increases efficiency in printing very complex vector graphics.

# VizEx Reader Features

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## CGM and TIFF Viewing

VizEx Reader enables CGM and TIFF viewing as a stand-alone viewer and as a plugin for Internet Explorer. It supports every flavor of binary and ASCII CGM, including the following CGM specifications:

- ATA
- CALS
- ISO CGM v1-4
- WebCGM
- CGM+
- CGM PIP

This makes VizEx Reader the most compatible and standards-compliant CGM viewer available.

Additionally, it is the most efficient and feature complete CGM/TIFF viewer on the market. It's lightning fast vector-graphics drawing functions ensure quick redraws. Users can zoom in/out, pan, add text and graphical markups to aid in collaboration or save as a PNG or TIFF.

When using VizEx Reader as an Internet Explorer plug-in, you have the ability to follow any hotspots that are defined in the CGM. The plug-in will also recognize the CGM MIME-type which will allow web pages with embedded CGMs to display correctly.

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## Annotation

VizEx Reader makes collaborating with colleagues a snap with its handy markup functions. You can add text and graphical objects to your CGM and TIFF files, which can be appended to a new CGM file.

Basically, the markup functions allow you to open a file and click on a drawing tool that can be used to bring attention to certain data in the drawing. Our text markup tool also allows you to add comments or labels to data.

To edit the properties of any markup object, just double-click on it while in Markup Selection Mode. Enter this mode by clicking on the red arrow icon on the toolbar.

Once the annotations have been made, the user can append the markups to a new CGM or TIFF file. Just click the save button on the toolbar, and you will be given the opportunity to save the file with the markups appended.

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Note: VizEx Reader adds a small print-stamp to the lower right corner of the image. To avoid having this stamp added to original files, make sure you do not overwrite the original file name.

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## Printing

Printing CGM files on the Windows platform is a task that is often far more complex than it seems. Many CGMs contain a huge amount of extremely complex vector data that simply overwhelms the technology designed for simpler documents such as spreadsheets and reports. This is particularly true for the Geo Sciences.

For this reason, specialized applications are required to rasterize complex CGM files and print them to perfect scale. Larson CGM Software provides two such applications, VizEx GeoTech and the Network Print Server, which provide this capability for the single-user or for the multiple networked users, respectively. You can find more information about these applications, specific to *geoscience* ([http://www.cgmlarson.com/industry/oil\\_gas.php](http://www.cgmlarson.com/industry/oil_gas.php)) and *engineering* ([http://www.cgmlarson.com/industry/design\\_engineer.php](http://www.cgmlarson.com/industry/design_engineer.php)) on our *website* <http://www.cgmlarson.com>.

VizEx Reader printing is a fit-to-page utility, meaning whatever the size of the image, it will be scaled to fit to the page-size. If you need more advanced printing such as scaled printing or continuous printing for logs, you will need VizEx Professional or VizEx GeoTech.

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Note: When printing CGMs Internet Explorer, DO NOT use the File | Print function from Internet Explorer. This will not work since that function is not tied into VizEx Reader's print system. Instead, always right-click on the image and choose Print from the context menu, or use the printer icon on the VizEx Reader Toolbar.

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## CHAPTER 2

# VizEx Reader Interface














## In This Chapter

List of VizEx Reader Tools.....9

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## List of VizEx Reader Tools

### Navigation & Utility Functions

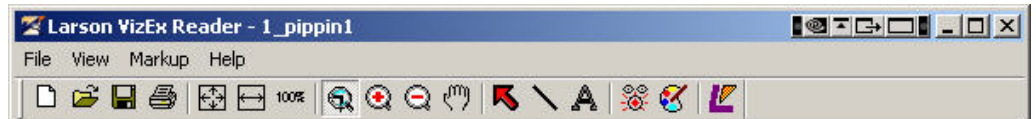
	Close CGM/TIFF File		Zoom out by 0.5X
	Open CGM/TIFF File		Pan Mode
	Save CGM/TIFF File		Color Management
	Print Picture Per Current Scaling		Upgrade to VizEx Professional
	Scale Picture to Fit Window		
	Scale Picture Width to Fit Window		
	Scale Picture to 100%		
	Interactive Zoom Mode		
	Zoom in by 2X		

### Annotation Functions

	Markup Selection Mode		Draw Text
	Draw Line		Show or Hide All Hotspots



## Tool Bar; Tools and Explanations



### Navigations & Utility Functions

#### Close CGM/TIFF File



Closes the current image without exiting the software.

#### Open CGM/TIFF File



Browse the file system and open a CGM or TIFF file in the viewer.

#### Save CGM/TIFF File



Browse the file system and save a copy of the CGM or TIFF currently open in the viewer. If you have added markups to the drawing, the markups will be appended to the new file. Using this functionality you can make annotations then save them to a new CGM file which can be shared with others.

VizEx Reader has a trial version of the VizEx Professional and VizEx GT conversion features. You can save to CGM, PNG, and TIFF formats, however, VizEx Reader will append a small stamp to the bottom right corner of your image indicating it was created with VizEx Reader. This print stamp does not appear in VizEx Professional or VizEx GeoTech.

#### Print Picture



Launches the print dialog box which allows you to select a printer.

#### Scale Picture to Fit Window



Fits the whole drawing within the view window at the largest magnification possible.

#### Scale Picture Width to Fit Window



Displays the drawing as large as possible without any image data extending beyond the left or right boundaries of the view window.

#### Scale Picture to 100%



Displays the drawing at a 1:1 ratio (100% zoom)

### Interactive Zoom Mode



This button will put you into Interactive Zoom Mode, which allows you to zoom in on a specific area by clicking and dragging a rectangle around it. This is the default mode at startup.

### Zoom in by 2X



This button will zoom in to double the current magnification.

### Zoom out by 0.5x



This button will zoom out to half the current magnification.

### Pan Mode



This button switches the current mode to Pan Mode, allowing you to drag the view right, left, up, and down using the mouse. Of course, this only works if you are zoomed in on the drawing since there is no where to pan when zoomed out on the drawing.

### Color Management



This option lets you change certain color settings. You can switch to monochrome, change the media color, or reverse video based on several conditions. There is also an option to optimize for printing. This option forces the images to be black art on a white background.

## Annotation Functions

### Markup Selection Mode



Markup Selection Mode allows you to select, move and delete markups. Click and drag a markup to move it to a new location. Click a markup to select it, then hit the Delete key to delete it. You can also change parameters of existing markup elements by double-clicking a markup element. Also, when a graphical object is selected, handles will appear that allow you to scale and transform the object.

### Draw Line



Left click and hold to lay down the first point of the line, then drag the intended endpoint and release to draw a line. After drawing a line, the mouse mode will change to Markup Selection Mode

### Draw Text



This button will open a text-entry dialog where you can enter markup text to add to the drawing. You can set the font, size, color, and style of the text. After text entry, click Ok to exit the text dialog. Click the pencil cursor where you would like the text to be placed. The cursor will then return to Markup Selection Mode, allowing you to move the text to the desired position.

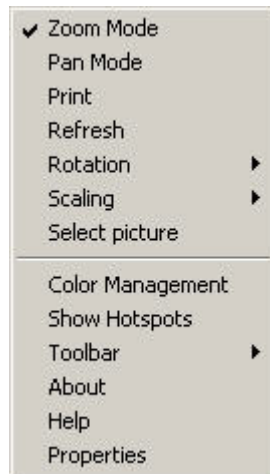
### Show or Hide All HotSpots



When activated, all hotspots present in the current CGM file will be highlighted. When not activated, all hotspots will be hidden unless moused over.

## Right-Click Context Menu

The VizEx Reader context menu can be accessed by right-clicking anywhere in the view window while a file is displayed. All functions, including some that cannot be accessed via the toolbar, are available here. This is what the context menu looks like and below are descriptions of the available functions.



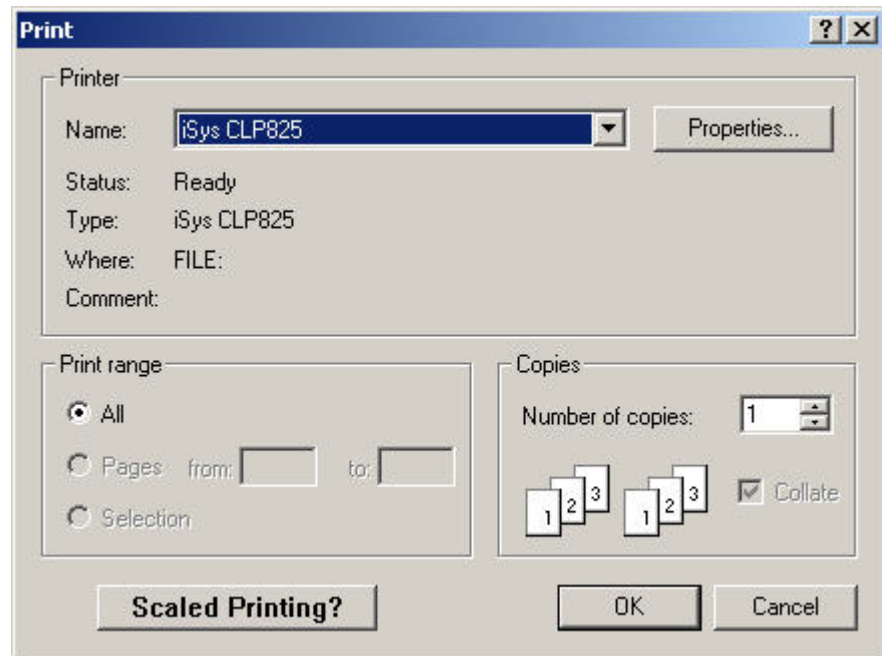
### Zoom Mode

Puts you into zoom mode, which allows you to zoom in on a specific area by dragging a rectangle around it. This is the default mode at startup.

### Pan Mode

This switches the current mode to Pan Mode, allowing you to drag the view right, left, up and down using the mouse.

## Print

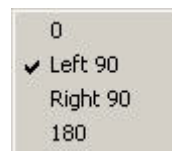


This submenu offers access to the print functions of VizEx. The printing of CGM files using the Windows printing system has long been a problem for those whose files contain a large amount of complex vector data or who need precise one to one scaling. Unfortunately, this is still the case, so specialized applications are sometimes necessary to provide these higher end functions. VizEx Reader is *not* one of those specialized applications. Its printing functions are provided for the use of those who need to print fairly simple CGM files and do not require scaled printing. For those with a need to print very complex CGM files and scaling options, we recommend that you consider VizEx Professional or VizEx GeoTech.

## Refresh

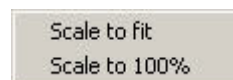
This option redraws the current view leaving the view window at its current position and zoom level.

## Rotation



This submenu allows you to set the rotation of the drawing.

## Scaling



This submenu sets the default scaling preference for VizEx. This setting is remembered between viewing sessions.

### Scale To Fit

Sets the zoom level so that the drawing is displayed as large as possible while fitting the whole image within the view window.

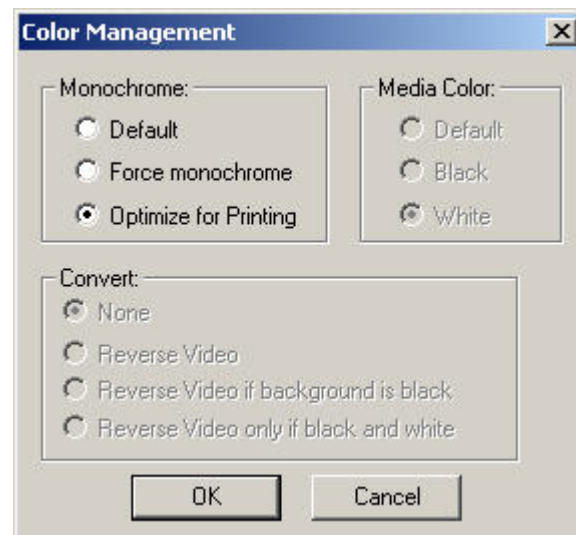
### Scale to 100%

Sets the zoom level in order to display the picture at its actual scale. In other words, it attempts to allow you to view the drawing at the size at which it will print at 1:1 scaling.

### Select Picture

For use with CGM files that contain multiple separate images within one file. Usually, the pictures are designated by number. Just type the number of the picture you want to view and click **Ok**. Alternatively, you can use the PAGE UP/PAGE DOWN keys to scroll through the available pictures.

### Color Management



This submenu allows the user to set persistent viewer settings that affect how colors are displayed.

### Monochrome

This setting allows the user to force the viewer to display all files monochromatically. It will also carry over to the printed output. The Optimize for Printing mode forces all colors to black except pure white. This can be useful for Ideas users, especially, because it will make all the line and text elements of a drawing stand out against a white background.

### **Media Color**

Allows the user to force the background color of all files to black or white or to allow the files to determine their own background color by choosing "Default". The default is white because many common CGM files, like those from UniGraphics, combine a black background with black lines and text. Defaulting to white background solves this problem.

### **Convert**

This menu provides options for automatic color conversion of viewed drawings according to certain rules. The user has the option to do no conversion, reverse all colors, reverse colors only when viewing a file with a black background, or to reverse only the black and white elements of all drawings.

### **Show Hotspots**

When activated, all hotspots present in the current CGM file will be highlighted. When not activated, all hotspots will be hidden unless moused over.

### **Toolbar**



This submenu allows you to control the toolbar appearance.

### **Show/Hide**

This setting allows you to turn the tool bar on or off.

### **Float**

This setting is only functional when being used in the Internet Explorer PlugIn mode. It separates the tool bar from the Internet Explorer window and makes it a floating dialog box.

### **About**

Brings up the version, copyright, and purchase information for upgrades.

### **Help**

Displays the help file.

### **Properties**

Brings up technical information regarding the absolute size, relative extents and scale fact of the current file.

## Toolbar Menus

- File - general file options such as open/close and saving options.
- View - provides access to all settings and tools that impact the view.
- Markup - provides access to all markup tools and markup options.
- Help - contains version information as well as purchase information for upgrades.

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Note: Most options provided in the menus are also available in the tool bar.

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## File Menu

New	Ctrl+N
Open...	Ctrl+O
Close	
Save	Ctrl+S
Save As...	
Properties	
Print...	Ctrl+P
License	
1 lgcmap.cgm	
2 bigcgm03.cgm	
3 allelm01.cgm	
4 3d mig_cb.cgm	
Exit	

### **New**

This is currently an inactive feature.

### **Open**

Allows you to browse to either a CGM or TIFF file, and then open it in VizEx.

### **Close**

Closes the current CGM or TIFF file, while leaving the application open.

### **Save**

This will save the current file. Also, if you have a specific area selected or if you have zoomed in, this will save the selected area as a new file. You will be prompted with a "Save As" dialog box the first time you select **Save** during a session. After that, selecting **Save** during the same session will automatically create a new file by incrementing the file name.

### **Save As**

This will save the current file. Also, if you have a specific area selected or if you have zoomed in, this will save the selected area as a new file. You will be prompted with a "Save As" dialog box, allowing you to enter a file name, each time you choose "Save As".

### **Properties**

Displays the file properties such as width and height, VDC extents, and the source of the file.

### **Print**

This will launch the print dialog box.

**License**

Allows you to install a new license, or enter the name of a license server for a network license.

**Exit**

This will exit the VizEx application.

## View Menu



### Refresh

This will redraw the current window.

### Rotation

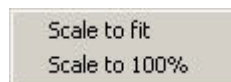
This will allow you to access the rotation options. The rotation options apply to the whole image, and not to individual markups. These options can also be accessed by clicking the corresponding icons on the toolbar.



This submenu allows you to set the rotation of the drawing.

### Scaling

This allows access to the various scaling options for viewing an image. These options can also be accessed by clicking the corresponding icons on the toolbar.



This submenu sets the default scaling preference for VizEx. This setting is remembered between viewing sessions.

### Zoom

This allows zooming in and out; these options can also be accessed by clicking the corresponding icons on the toolbar.

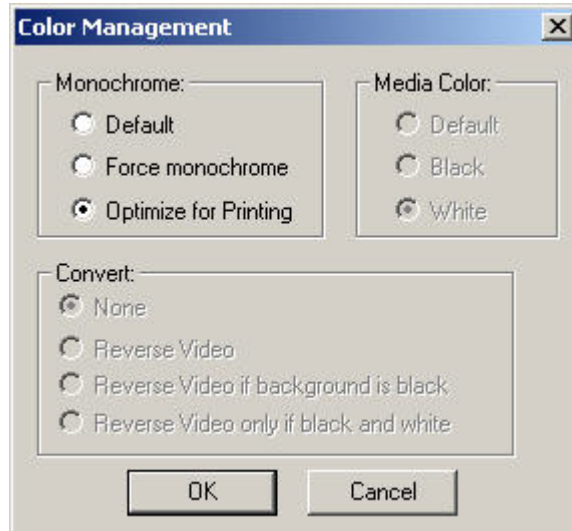
### Zoom Mode

Puts you into zoom mode, which allows you to zoom in on a specific area by dragging a rectangle around it. This is the default mode at startup.

### Pan Mode

This switches the current mode to Pan Mode, allowing you to drag the view right, left, up and down using the mouse.

### Color Management



This submenu allows the user to set persistent viewer settings that affect how colors are displayed.

#### *Monochrome*

This setting allows the user to force the viewer to display all files monochromatically. It will also carry over to the printed output. The Optimize for Printing mode forces all colors to black except pure white. This can be useful for Ideas users, especially, because it will make all the line and text elements of a drawing stand out against a white background.

#### *Media Color*

Allows the user to force the background color of all files to black or white or to allow the files to determine their own background color by choosing "Default". The default is white because many common CGM files, like those from UniGraphics, combine a black background with black lines and text. Defaulting to white background solves this problem.

#### *Convert*

This menu provides options for automatic color conversion of viewed drawings according to certain rules. The user has the option to do no conversion, reverse all colors, reverse colors only when viewing a file with a black background, or to reverse only the black and white elements of all drawings.

**Show Hotspots**

When activated, all hotspots present in the current CGM file will be highlighted. When not activated, all hotspots will be hidden unless moused over.

**Status Bar**

This will turn on/off the status bar at the bottom of the VizEx Window.

**Toolbar**

This will allow for the toolbar to be hidden or made visible if currently hidden.



### Markup Menu



### Markup Types

Choosing any of these options will allow you to add the respective type of markup. This can also be accomplished by choosing your particular markup tool from the toolbar.



## Help Menu



### **About**

Displays version, copyright, purchase and upgrade information.



# Index

## A

About • 16, 27  
Annotation • 6  
Annotation Functions • 12

## C

CGM and TIFF Viewing • 5  
Close • 19  
Close CGM/TIFF File • 11  
Color Management • 12, 15, 22  
Convert • 16, 22

## D

Draw Line • 12  
Draw Text • 13

## E

Exit • 20

## F

File Menu • 19  
Float • 16

## H

Help • 16  
Help Menu • 27

## I

Interactive Zoom Mode • 12  
Introduction • 3

## L

License • 20  
List of VizEx Reader Tools • 9

## M

Markup Menu • 25  
Markup Selection Mode • 12  
Markup Types • 25  
Media Color • 16, 22  
Monochrome • 15, 22

## N

Navigations & Utility Functions • 11  
New • 19

## O

Open • 19  
Open CGM/TIFF File • 11

## P

Pan Mode • 12, 13, 22  
Print • 14, 19  
Print Picture • 11  
Printing • 6  
Properties • 16, 19

## R

Refresh • 14, 21  
Right-Click Context Menu • 13  
Rotation • 14, 21

## S

Save • 19  
Save As • 19  
Save CGM/TIFF File • 11  
Scale Picture to 100% • 11  
Scale Picture to Fit Window • 11  
Scale Picture Width to Fit Window • 11  
Scale to 100% • 15  
Scale To Fit • 15  
Scaling • 14, 21  
Select Picture • 15  
Show Hotspots • 16, 23  
Show or Hide All Hotspots • 13  
Show/Hide • 16  
Status Bar • 23

## T

Toolbar • 16, 23  
Toolbar Menus • 17  
Tool Bar • 11

## **V**

View Menu • 21

VizEx GeoTech • 4

VizEx Professional • 3

VizEx Reader • 3

VizEx Reader Features • 5

VizEx Reader Interface • 9

## **Z**

Zoom • 21

Zoom in by 2X • 12

Zoom Mode • 13, 21

Zoom out by 0.5x • 12