IMAGIZER™ III Viewer Installation Guide And User Manual



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INSTALLATION

Windows

To start using *Imagizer*, place the CDROM into your CD tray. If the computer has autorun enabled, this dialog will appear:



Note: If autorun is not enabled, use Windows Explorer to access the CDROM and execute (double mouse click) the *autorun.exe* file found there.

Select the "Install ERDAS Imagizer III" option. Upon selection this dialog will appear:



Select "Yes"

Upon completion of the installation, this dialog will appear:



Select "Finish" – The computer MUST be restarted before continuing.

These two things are happening during this installation process:

1. Updating of these three Windows system libraries:

svcp60.dll msvcrt.dll mfc42.dll

2. Creation the ERDAS registry key.

"HKEY_LOCAL_MACHINE\SOFTWARE\ERDAS\Imagine\8.4"

Since Imagizer was developed to distribute a geospatial viewer along with the producers' own dataset on CDROM, **no** software is actually loaded to the computer system during this installation routine. We are only enabling the computer system to run Imagizer.

Note: There is **no** un-install procedure; therefore you may want to make a backup of those files updated during the installation.

Each computer system that will be utilizing Imagizer Viewer is required to run this installation once.

When the system restarts, place the Imagizer CD in your system, and the Imagizer Viewer will automatically start. This is an example Imagizer Viewer session:



Note: If autorun is not enabled, use Windows Explorer to access the CDROM and execute (double mouse click) the *autorun.exe* file found there.

The versions of Windows supported by Imagizer are:

- Windows 98
- Windows 2000
- Windows NT
- Windows ME

Solaris

To start using *Imagizer Viewer*, place the CDROM into your CD tray. If the Solaris volume daemon (/usr/bin/vold) is running, the CDROM will mount automatically. See your system administrator if the CDROM does not mount correctly.

Since Imagizer was developed to distribute a geospatial viewer along with the producers' own dataset on CDROM, **no** software is actually loaded to the computer system during this execution of this program. Once the CDROM is mounted, you may start the *Imagizer Viewer* from a command shell by typing /cdrom/cdrom0/imagizer_viewer/bin/imagizer.

Terminal	•
<u>W</u> indow <u>E</u> dit <u>O</u> ptions	<u>H</u> elp
robertelee% cd /cdrom/cdrom0/imagizer_viewer/bin robertelee% ./imagizer Using IMAGINE@/cdrom/imgzrv71/imagizer_viewer [1] 1020 robertelee% ■	

Or, the *Imagizer Viewer* can also be started by using the File Manager by selecting /*cdrom/cdrom0/imagizer_viewer/bin/imagizer*.



Select no Arguments or Options, if prompted. The Imagizer Viewer will be started:



NOTE: If you are using Solaris CDE, it is recommended that you turn **off** the "Raise Window When Made Active" option within your CDE "Window Style Manager". The versions of Solaris supported by Imagizer are:

Solaris 8

- Solaris 8Solaris 7
- Solaris 7
 Solaris 2.6

User Manual

Introduction

The Imagizer Viewer User Manual is a tutorial designed to help users learn how to use the ERDAS Imagizer Viewer. This is a comprehensive manual on the ERDAS Imagizer Viewer that will explain each function within the ERDAS Imagizer Viewer. This Viewer guide is not intended to tell users everything there is to know about any one topic, but to show the user some of the basic tools and functionality to get the user started.

This Viewer guide serves as a handy reference that users can refer to while using the ERDAS Imagizer Viewer for their projects.

In this guide, users will be instructed on these topics:

- Starting Imagizer Viewer
- Toolbar
- Choosing Viewer
- Opening files
- Link Viewers
- Zoom
- North arrow
- Measure tool
- Smart cursor
- Arrange layers
- Create annotation layers
- Quick photo
- Using hyperlinks

Starting Imagizer Viewer

The Viewer will automatically start with two datasets, one in the left viewer and one in the right. The producer selects which two datasets to open at startup. Additional datasets, if they exist on the CDROM, may be opened at any time, but must be opened in either the left or right viewer. Once the Viewer is started, the user may interact with the dataset using the toolbar.

Toolbar

The toolbar is divided in to three main areas. Each of these three areas is described in detail below.



1: Viewer Selection Tools

These two buttons, left and right viewer, control access to the functionality of the Viewer Specific Tools. When either of these buttons is depressed, the functionality selected by a Viewer Specific Tool is applied to that Viewer.

By default, when Imagizer Viewer is started, both the left and right buttons are in the depressed mode. To disable either button, left mouse click on the button once. This does not enable the user to close a viewer.

2: Viewer Independent Tools



The use of these four tools is independent of the state of the Viewer Selection Tools. When a Zoom or Roam function is selected, it will be active for either viewer. The user may have only selected one of these four buttons.

Reset– This is the default setting. This allows the user to interact with various aspects of the viewer, such as hyperlinks (right mouse only), smart cursor, annotation and link boxes through the standard mouse found on any standard computer system.

Roam/Rotate – Click and hold the left mouse button to roam the viewer. To use the auto-roam feature, single left mouse click and the cursor will change. Move the mouse to control roam speed and direction. By using the center mouse button of a three-button mouse (or Ctrl + left mouse), rotating the data in the viewer is possible.

Zoom In – Left mouse click once to zoom in by a factor of two, centering the zoom area about the point selected. Users may also define an area to view by left mouse hold to define a zoom box. Alternatively, hold the center mouse button (or Ctrl + left mouse) and move the mouse vertically to dynamically zoom in or out.

Zoom Out – Left mouse click once to zoom out by a factor of two, centering the zoom area about the point selected. Users may also define an area to view by left mouse hold to define a zoom box. Alternatively, hold the center mouse button (or Ctrl + left mouse) and move the mouse vertically to dynamically zoom in or out.

3: Viewer Specific Tools



These varied tools are applied to one or both of the viewers, depending on the state of the Viewer Selection Tools. Each of these functions is described below in detail:

Opening files into a viewer – Use this to either select a new dataset for display (.vue) or open an existing annotation layer (.ovr) into an existing dataset. This action can only open datasets that are in the ERDAS View format. In the Imagizer Viewer it is possible to create an annotation layer, and redisplay it upon a base dataset. Upon selecting this button, this following dialog is displayed.

Load View file	×
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prescup1.vue	JN.
Districted State	⊆ancel
	Help
	Becent
	<u>B</u> oto
Channe -	
rie parie	
Files of type: View (*.vue)	
View ("www)	

The user must then navigate to the directory in which the file to be opened resides, select the file and choose OK. The file chosen will be displayed in the viewer (or both viewers) in which the Viewer Selection button is depressed.

Save Annotation – This button will save an annotation layer that is currently being edited by the user. By selecting this option, the user saves the current state of the top annotation layer in the viewer. If no annotation is currently being edited, this button is unavailable.

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Quick Photo – This allows the user to save the current contents of a viewer image to a TIFF (Tagged Image File Format) file. Upon selecting this tool, this dialog is displayed:

Select Output File:	×
File Options	
Look in: 🔄 temp 💌 💽 🗂	ŀ
Channel Info_file:	OK.
I emporary Internet Files etherlinkII	Cancel
ad5064	Help
	Recent
	Goto
File name: Output Sename	
Files of type: TIFF (*.18)	i L
10 Files, 4 Subdirectories, 0 Matches, 938472k Bytes Filee	

After typing in the output filename here, select the "Options" tab near the top of the dialog box to display:

Area to Use:	DK.
@ Full C Visible	Cancel
Dulput Image Size:	Help
Width at 100.0% + is 615 + Poels Height at 100.0% + is 1382 + Poels	Recent . Golo
Use Gray Scale Dutput:	

The following describes the functionality found here that will affect the quality of the output:

Area to Use:

Full- This option will create a file that is as large as the geographic extent of the dataset Visible- This will create a file that is bounded to the extent of the viewer (That which is currently visible to the user)

Output Image Size:

The current state of the viewer controls the ground resolution of the output file at 100% scale. To change resolution, change the zoom ratio of the viewer. To change pixel resolution of the output file, increase the aspect ratio for Width and Height.

Use Grey Scale Output:

Select this option to bypass an RGB Tiff output and create a monochrome TIFF image.

Clear Viewer – Selecting this option will erase all data from the viewer (or both viewers) in which the Viewer Selection button is depressed.

Create Annotation Layers – This allows the user to create new annotations in a viewer. The new file selection dialog is opened, and the user must enter a file name in a directory in which write permissions are active. The annotations toolbar is opened at this time as well. To add annotation to the viewer, see the annotation toolbar documentation elsewhere in this document.

Link Viewers – The Link button will geographically link the two viewers. This is represented by a "link box" in either the left or right viewer, depending on the zoom state of the viewers at time of selection.

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Linking is appropriate when two Viewers cover the same geographic area (at least partially) and are referenced to the same map units. When two Viewers are linked:

- either the same geographic point is opened in the centers of both Viewers, or a link box shows where one view fits inside the other
- scrolling one viewer affects the other
- you can manipulate the zoom ratio and rotation of one viewer from another

It is often helpful to open a wide view of a scene in one viewer, and then a close-up of a particular area in another viewer. When two such viewers are linked, a link box appears in the wide view window to show where the close-up view lies.

To unlink the viewers, select the Link button again.

Fit To Window – This option will change the zoom state of the selected viewer to fit in the dataset to the extent of the viewer.

Reset Zoom – This option changes the zoom of the dataset in the selected viewer to the default scale (1 to 1 resolution) of the bottom layer in the dataset. It also will remove any rotations applied by the user.

Zoom In – Click to zoom in by a factor of two, towards the center of the displayed portion of the dataset.

Zoom Out – Click to zoom out by a factor of two, from the center of the displayed portion of the dataset.

North Arrow – When the north arrow tool is selected, a north arrow is placed in the center of the selected viewer. The north arrow can be moved any place within the extent of the viewer. When the two viewers are linked, the north arrows keep the same location within the opposite viewer. Select the button again to remove the north arrow.

Arrange Layers – By selecting the Arrange layers button, users may rearrange datasets displayed within a viewer by dragging layers (left mouse) to any position within the stack, delete the layer from the viewer or toggle a layer's visibility. After positioning the layers, use the apply button to make the changes in the viewer.

The user can also choose one of these options below by clicking (right mouse) on one of the layers in the dialog box:

Raise To Top – This will put the selected layer to the top
Lower To Bottom – This will put the selected layer to the bottom
Delete Layer – This will remove the layer from the viewer
Layer Visibility – This will make the layer invisible until selected to be visible again.

📀 Arrange Layers Vie	swer #1 🛛 🔀
Vector: cityc	
Vector: rdsc	Vector Options
Vector: stoc	Raise To Top Lower To Bottom Delete Layer
lendsat.sid(1, landsat.sid(1,La) landsat.sid(1,La)	Layer Visibility ver_2] ver_3]
Accly Reset	Jp. Close

Measurement Tool – The measurement tool enables the user to measure points, lines, polygons, rectangles and ellipses within the current viewer.

Mcasulc	ment Tool	for Viewer	#2			_ 🗆 ×
<u>File E</u> dit						
	x +	$\sim \varnothing$		Ĵa		
1. Point at 3. 2. Line Leng 3. Polygon F 4. Rectangle 5. Ellipse Pe	24.492776, 4 th 0.0955547 erimeter 0.66 Perimeter 0. rimeter 0.248	306.442569 miles. Azimut 1437 kilomel 381517 mile: 293 kilomete	kilometers h 88.9168 ters. Area 2 s. Area 0.00 rs. Area 1.2	degrees .860102 ac: 19095 sqmile 12275 acre	165 95 5	<u>*</u>

The options in the tool are as described below.

Point – This tool reports the individual point coordinates (x,y) in the data.

Line – Move the cursor into the Viewer then click and drag between two points or click again to add a vertex to the length, and then double click to end the measurement.

Polygon – Move the cursor into the Viewer then click and drag along the perimeter of the area of measurement, click again to add a vertex to follow the edges of the polygon to be measured, then double click to close the polygon.

Rectangle – Move the cursor above a corner of the item to be measured and click and drag to the opposite corner

Ellipse – Move the cursor above the center of the circular item to be measured and click and drag to fit area.

Copy – The copy option is used if the user want to copy from the Measurement Tool window to another application desired by the user.

Lock Tool – Use the Lock tool to lock and unlock the currently selected measurement tool for repeated use.

Use the Edit|Set Units... option to enable display of measurements in these various units:

Length: inches, feet, yards, miles, centimeters, meters and kilometers Area: square miles, acres, and hectares

Use the **Edit|Set Map Type...** option to enable display of measurements coordinates in either Map or Lat/Lon.

Smart Cursor – The Smart cursor will allow users to query a location and display those coordinates in either Geographic (Lat/Lon) or MGRS (Military Grid Reference System). Smart Cursor also allows users to view attributes of vector data as well histogram attributes of image data.



Below is an overview of smart cursor Location functionality:

Below is an overview of smart cursor Location functionality:

	😣 Smart	Cursor	_		
	Location	Attributes			
	Arc Type:	Point			
The vector type is	Row	Attribute	Value		
displayed here	34	stsc: AREA	1.57286e+009		
	35	stsc: PERIMETER	310414		
	36	stsc: STSC# 1	41		
	37	stsc: STSC-ID .	1178		The vector attributes
	38	stsc: STATE_FIPS	24		are displayed here
	39	stsc: CNTY_FIPS 1	5		
	40	stsc: FIPS	24005		
	41	stsc: STATE_NAME	Maryland		
	42	stsc: CNTY_NAME	Baltimore		
	43	stsc: SUB_REGION	S Atl		
	44	stsc: STAT_FLAG	1	<u>ا ل</u> ے	
			<u> </u>		
					Dismiss Smart
				Close	Cursor

Note: To change the color of the Smart Cursor, press the Space Bar located on the keyboard to display color choices:



Annotation Tools – By selecting this button, the annotation toolbar will open. . If no annotation is currently being edited, this button is unavailable. This is a description of their functions:

Select Annotation – The Select tool is used to select and reposition objects in the annotation layer. Click on an object to select it. Shift-click to add to a selection.

Box Select Annotation – Use the Marquee tool to select multiple elements. This is also a useful tool when selecting very small elements.

Rectangle – The rectangle tool is to draw filled or unfilled rectangles and squares. Press the shift key while drawing to create a perfect square.

Ellipse – Use the Ellipse tool to draw filled or unfilled ellipses or circles. Press the shift key to create a perfect circle.

Polygon – Draw filled or unfilled polygons with as many vertices as needed. Double click to end polygon.

Polyline – Draw polylines with as many vertices as needed. Double click to end polyline.

Arc – Draw elliptical arcs. Press the shift key while drawing to create a perfectly circular arc.

Symbol – This will place a symbol as chosen in the Symbol Style tool. The default symbols is a crosshair.

A Text – This will let you add text to the annotation layer. Left mouse where the text should be placed and this dialog will appear:

😨 Annotation Text	×
Enter Text String:	Cut
This is test annotation	Copy
	Paste
	Kepboard
	ASCII File
· · · · · · · · · · · · · · · · · · ·	OK.
	Cancel
T	

Enter free text here, or import an ASCII file. When finished, select OK. The text will be positioned in the viewer at the point that was selected.

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Undo – This will undo the last annotation action.

K Cut – 7

 $\boldsymbol{Cut}-\boldsymbol{This}$ will remove the selected item.

- **Copy** This will copy the selected item.
- **Paste** This will paste an item, after it has been cut or copied.

Reshape – This is used for correcting or refining the vertices of a polygon or polyline.

Styles – This allows the user to select the default style for all newly created annotations, or edit the existing style of a chosen piece of annotation.

📀 Styles for de	lete.ovr	×
Line Style:		Close
Fill Style:		
Text Style:	AaBbCc	
Symbol Style:	+ 0	