

Viewpoint

ZoomView

User Interface Guide

Version 1.0
May 2, 2002

© 2002 Viewpoint Corporation. All Rights Reserved.

Viewpoint ZoomView Interface Kit Guide

Viewpoint, the Viewpoint logo, Viewpoint Experience Technology (VET), Viewpoint Media Compressor, Viewpoint Media Publisher, Viewpoint FinalCheck, and Viewpoint Media Player (VMP) are registered trademarks or trademarks of Viewpoint Corporation in the United States and in other countries.

Companies, names, and data used in examples herein are fictitious unless otherwise noted. Information in this document is subject to change without notice.

All other product and company names mentioned herein are the trademarks of their respective owners.

Disclaimer

Except as expressly provided otherwise in an agreement between you and Viewpoint, all information, software, and documentation is provided “as is,” without warranty of any kind. Viewpoint makes no warranties, express or implied, including without limitation the implied warranties of merchantability and fitness for a particular purpose regarding such information, software and documentation. Viewpoint does not warrant, guaranty, or make any representations regarding the use or the results of the software in terms of its correctness, accuracy, reliability, timeliness, suitability or otherwise. The entire risk as to the results of performance of the software is assumed by you.

In no event will Viewpoint be liable for any special, indirect, consequential, punitive, or exemplary damages or the loss of anticipated profits arising from the performance of the software or resulting from the loss of use, data or profits, whether in an action for breach of contract or warranty or tort (including negligence) arising out of or in connection with the information, technology, software and documentation.

The Web site and publications may contain technical inaccuracies or typographical errors. Viewpoint assumes no responsibility for and disclaims all liability for any such inaccuracy, error, or omission in the Web site and documentation and in any other referenced or linked documentation. Viewpoint may make changes to the information, software, Web site, documentation, prices, technical specifications, and product offerings in its sole discretion at any time and without notice.

Authors: Carolyn Gronlund and Carla Gray

Contributors: Javier Roca, John Cooper, Brian T. Doherty, Danny Huang, Ales Holecek, Sree Kotay, and Scott Krinsky

Viewpoint Corporation

498 Seventh Avenue
Suite 1810
New York, NY 10018

Contents

Chapter 1: Getting Started	4
What is Viewpoint Experience Technology?	4
About 3D, ZoomView, and HyperView	4
About Viewpoint ZoomView User Interface.....	4
Minimum System Requirements	4
Required for Authoring VET Content	4
Required for Viewing VET Content.....	5
Required Tools and Applications	5
Chapter 2: How ZoomView Interface Works	6
Description of Navigation Actions	6
Direct Navigation vs. Indirect Navigation	6
Navigation Actions with a ZoomView Image	7
Zoom	7
Pan.....	7
Reset	7
Help	8
Chapter 3: Adding a User Interface to a ZoomView Image	9
Preparing Images for ZoomView	9
Image Checklist	9
Enhancing Image Quality	9
Checklist: Are You Ready to Add a ZoomView Interface to an Image?.....	10
Step-by-Step: Adding an Interface to a ZoomView Image.....	10
Chapter 4: Customizing the User Interface	11
Button Sensitivity	11
Shared Resource Files	11
Skins	11
Toolbar	12
Rollover Background for Buttons.....	12
Buttons.....	12
Alpha Map	13
Tool Tips	14
Border	14
Help Movie.....	14
How to Customize the User Interface.....	15

Chapter 1: Getting Started

What is Viewpoint Experience Technology?

Viewpoint Experience Technology™ (VET) is Viewpoint Corporation's unique technology that delivers rich media over the Internet via Viewpoint Media Player™ (VMP), a Web browser plug-in.

VET allows you to combine all types of rich media, including 2D photos and drawings, 3D models, animation, ZoomView images, Macromedia® Flash™ movies, video, text, and audio-to create rich media content. Using a sophisticated set of compression techniques, Viewpoint® tools create a visually crisp, smooth-streaming multimedia experience for the user.

Viewpoint's technology was bundled in the release of Adobe's Photoshop 7.0 software, which offers native ZoomView export. You can find the latest ZoomView downloads, documentation, samples, and much more at ZoomView's portal: <http://www.viewpoint.com/zoomview/>.

About 3D, ZoomView, and HyperView

Web content that uses 3D, ZoomView, and HyperView is going to be new to many in your target audience. Here is a brief overview of what these technologies entail:

- **3D** Lifelike objects that may involve animations. 3D allows users to see an object from all angles, unlike a 2D JPEG image. 3D objects are generally made of a geometric mesh (the shape of the object), a texture (the skin or surface of the object), and a lightmap (a realistic representation of how light reflects on the object's surface).
- **ZoomView** A revolutionary technology developed by Viewpoint that allows you to publish high-resolution images to the Web without slowing your users' experience. Allows users to see print catalog-quality detail.
- **HyperView** Another dramatic technology from Viewpoint, HyperView allows you to display content anywhere on a user's desktop. HyperView can be used to display 3D or ZoomView content.

About Viewpoint ZoomView User Interface

On the Web, documents are typically composed of text and images, sometimes with links to audio and video content. While user interfaces for accessing text and static 2D images are widely used, users are not familiar with navigating a dynamic 2D image. Viewpoint's proprietary ZoomView technology requires a set of intuitive interface controls so users can easily interact with images.

The Viewpoint ZoomView User Interface template enables you to quickly create a standard user interface that helps users intuitively understand and navigate 2D images. Viewpoint Media Publisher includes the templates necessary for you to add a user interface to VET scenes in minutes.

Minimum System Requirements

Check that your system meets the minimum requirements for the image authoring application and other tools you use.

Required for Authoring VET Content

- 200 MHz Pentium® Processor
- 64 MB System RAM
- 10 MB free hard disk space
- Color display (24-bit or greater recommended)
- 1024 x 768 monitor resolution

Required for Viewing VET Content

Viewpoint Media Player (VMP) is designed to run under the following minimum system:

Windows

- Windows 95, 98, 2000, ME, XP or NT 4
- Netscape Navigator 4.07 or later (not 6.0)
- Microsoft Internet Explorer 4.x or later
- AOL version 4, 5, 6, or 7
- 256 color display (24-bit recommended)
- 28.8 Kbps modem
- 5 MB free disk space
- 32 MB RAM (64 MB recommended)
- Pentium 166 or faster (Pentium II recommended)

Macintosh

- Mac OS 8.5 to 9.x (not OS X)
- Netscape Navigator 4.7
- AOL version 4, 5, or 6
- Microsoft Internet Explorer 5.x
- 256 color display (millions of colors recommended)
- 56 Kbps modem
- 5 MB free disk space
- 128 MB RAM
- PowerPC 604 processor

Required Tools and Applications

You'll need the following to publish Viewpoint ZoomView images.

- **High-Resolution Image source**
- **Viewpoint ZoomView Builder** A free tool that allows you to convert high-resolution JPEGs to the Viewpoint ZoomView format. Viewpoint ZoomView Builder User Guide is also included.
- **Adobe Photoshop 7.0 (optional)** This new release of Photoshop exports images as Viewpoint ZoomView images. You can use this application instead of Viewpoint ZoomView Builder.
- **Viewpoint Media Player (VMP)** The Web browser plug-in necessary to view VET content. You can download it from <http://www.viewpoint.com/developerzone/5-1.html>.

To add the user interface to your ZoomView images, you will need:

- **Viewpoint Media Publisher** This application enables you to add or removed the user interface to your ZoomView images.
- **UI Template** Use the UI template to add navigation to your ZoomView images.
- **Resources folders** The templates are packaged with associated resources folders.

Chapter 2: How ZoomView Interface Works

Description of Navigation Actions

VET ZoomView scenes allow users to interact with high-resolution images that download progressively as the user zooms into the image. You can also use HyperView to displays ZoomView images anywhere on a desktop. Viewpoint ZoomView Interface template lets you add the following navigation controls:

- **Zoom** Get a close-up view or full view of a ZoomView image. Zoom determines the magnification level for an image.
- **Pan** Look to the left, right, top, and bottom of a ZoomView image.
- **Reset** Puts the image view to its original zoom level and orientation.
- **Help** Displays a Flash movie with basic instructions for using the navigation.

Direct Navigation vs. Indirect Navigation

Direct navigation refers to the user's ability to interact with the ZoomView image using keyboard shortcuts or by using the mouse directly with the image. On the other hand, indirect navigation refers to using the user interface buttons.

Tip: To use keyboard shortcuts, ensure that you set `Evtnt="1"` in the ZoomView animator, which is typically named `mySmoothZoom`.

Action Name	Keyboard Shortcut	Mouse Shortcut
Zoom In	Shift	Windows: Left click Mac OS: Click
Zoom Out	Ctrl	Windows: Right click Mac OS: Ctrl + click
Pan	Arrow keys	Windows: Left click + drag Mac OS: Click + drag

Indirect navigation refers to the buttons or icons (user interface elements) you place in a scene that the user can click to interact with the scene.



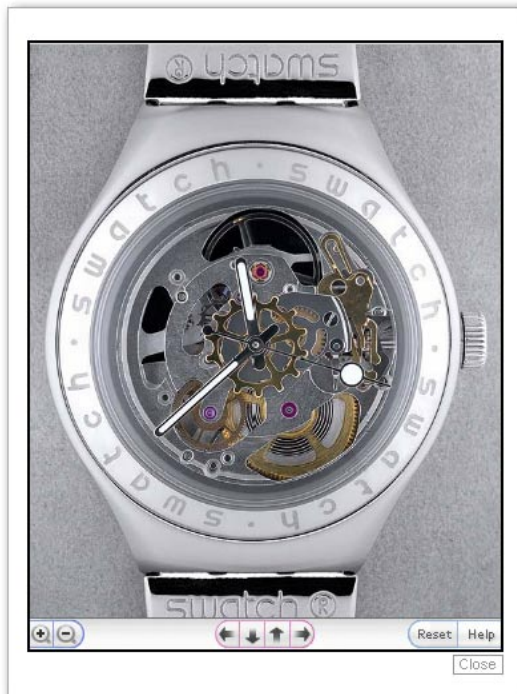
Navigation Actions with a ZoomView Image

Zoom

The following graphic depicts the icons for zooming in and out of an image.



In the following graphic, you can see the original size of an image and how the image's detail is preserved when you zoom in.



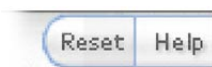
Pan

The following graphic depicts the icons for panning an image. The icons include left, right, up, and down movement.



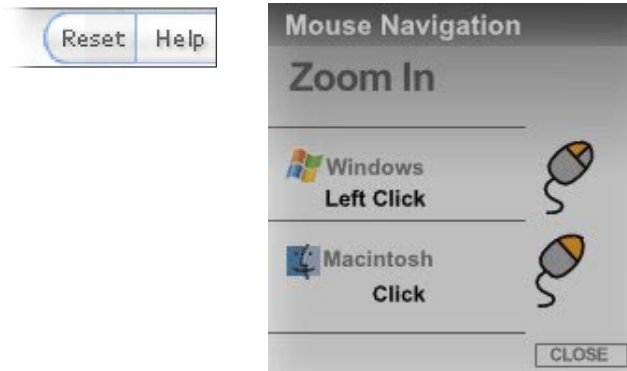
Reset

The following image depicts the **Reset** button, which returns the image to its original view.



Help

The following image depicts the Help button, which launches a Flash movie that provides users with more information about how to navigate ZoomView images.



Chapter 3: Adding a User Interface to a ZoomView Image

Preparing Images for ZoomView

With Photoshop, you can export a ZoomView scene from any file format that Photoshop supports, whereas ZoomView Builder enables you to export JPEG and TIFF files only (see the “RGB format” instructions in the “Image Checklist” below). While it’s true that you can create a ZoomView scene from any image file, not every image will make a great ZoomView scene. If the image resolution is too low, then all you will be zooming in on is a blurry or pixelated image. If the image resolution is too high, the load time for the ZoomView file may be excessive.

For a more detailed discussion of images, read Chapter 2: “Guidelines for Preparing Images for ZoomView” in the *Viewpoint ZoomView Technology User Guide* included in the Documentation portion of Viewpoint Media Publisher.

Image Checklist

- **File size** Use an image resolution appropriate to the purpose of ZoomView. Retail images may not need to be as high-resolution as an image used to scientific purposes, for instance. Try to use images whose file size is greater than 1 megapixel, or about 768 x 1024.
- **RGB format with 8-bit channels.** CMYK or greyscale images must be converted to RGB. For best results, use an image created natively as RGB.

Enhancing Image Quality

- Sharpen with Adobe Photoshop’s Unsharp Masking or Sharpen Filters.
- Adjust (increase) Hue and Saturation settings for images converted to RGB from another format, such as CMYK.

Consult the Photoshop user manual or online help for instructions on using these techniques.

Checklist: Are You Ready to Add a ZoomView Interface to an Image?

You are ready to add a user interface to a VET scene, once you've completed the following:

- Installed Media Publisher.
- Installed the appropriate templates included with Media Publisher.
- Converted your image into a ZoomView image and tested that it works.

Step-by-Step: Adding an Interface to a ZoomView Image

If you have a new ZoomView image without any existing animations, you can follow these simple instructions to add a user interface.

Note: If you have a ZoomView image with existing animations, you will need to create a custom template that copies those animations and adds the user interface to the output file.

Using this template will remove any existing user interfaces.

- 1** From your Photoshop or ZoomView Builder, save or publish your image as a ZoomView image.
- 2** Start Viewpoint Media Publisher.
- 3** From the **Template** menu, select either the add2DNavigation.mtx or add2DSharedNavigation.mtx template.
 - **add2DNavigation.mtx** This template adds the user interface to your ZoomView image.
 - **add2DSharedNavigation.mtx** Use this template if you have multiple ZoomView images to which you want to add the interface.
- 4** Drag the .mtx file (which was created when you exported your ZoomView image) onto the Media Publisher window.

Now that you have the user interface, you can add any animations to your ZoomView image.

Chapter 4: Customizing the User Interface

The ZoomView UI template has several interface options so you can customize how the user interface appears and behaves. You can adapt the following attributes of the user interface:

- **Button sensitivity** You can change how fast the zoom in and zoom out feature works for indirect navigation. The default is 50. Use ZoomView Builder to set button sensitivity for direct navigation.
- **Shared resource files** If you have multiple images and would like to apply the same UI to all of those images, you can use the add2DSharedNavigation.mtx template. With the shared resource file, the customized UI is cached when it is first accessed, making it load even faster when users access other images using that UI.
- **Skins** You can change the appearance of the navigational user interface.

Button Sensitivity

You can change the button sensitivity of the zoom buttons in Media Publisher for indirect navigation.

- 1 Launch Viewpoint Media Publisher.
- 2 In the **Template** menu, select either the add2DSharedNavigation.mtx or add2DNavigation.mtx template.
- 3 In the **Button Sensivity** field, change the number from 50 to the value you prefer.
If you want the zoom to be slower, choose a higher number.
If you want the zoom to be faster, choose a lower number.

Shared Resource Files

Use the add2DSharedNavigation.mtx template to apply the same custom UI to all of your images. The shared resource file has to be an absolute URL path to the server where the file resides.

- 1 Launch Viewpoint Media Publisher.
- 2 In the **Template** menu, select the add2DSharedNavigation.mtx template.
- 3 In the **Resource Path** field, enter the absolute URL path to the server where the file resides.

Skins

In the case of Viewpoint ZoomView UI, a skin is the overall look of the ZoomView image navigation as determined by several design elements, such as the toolbar, background color, icon image, and tool tips. You can change several aspects of the navigational user interface.

Note: The entire user interface should not be more than 10 Kb for optimal downloading.

To customize the look of the existing UI, you will need to substitute the existing files with the files of a new skin. The files should be located either in the template directory or in the published user interface. Several different layers comprise the user interface; the following sections describe each of these layers in detail.

Toolbar



This layer of the skin is a Flash file. The original version contains a black line on the top and a gradient. To change the appearance of the toolbar, you will need to change the following file:

Name	Description
navline.swf	Background for toolbar

Rollover Background for Buttons



This layer is a Flash file for rollovers. To change the appearance of the rollover background, you will need to change the following files:

Name	Description
34x25.swf	Rollover background for Help button
38x25.swf	Rollover background for Pan Left and Pan Right buttons
42x25.swf	Rollover background for Zoom Out button
71x25.swf	Rollover background for Reset button
19x25.swf	Rollover background for Pan Top (pan up), Pan Bottom (pan down), and Zoom In buttons

Note: The 38x25.swf, 42x25.swf, and 71x25.swf files have extra white space to ensure that the buttons display appropriately. When creating new buttons, do not remove this space or add graphics into it.

Buttons



This layer is a JPEG image of the navigation button. You will need to use ViewPoint Final Check to convert the .jpg file to an .mzv file. To change the appearance of the buttons, you will need to change the following files:

Name	Description
help.mzv	Help button
pan_bottom.mzv	Pan Bottom button

Name	Description
pan_left.mzv	Pan Left button
pan_right.mzv	Pan Right button
pan_top.mzv	Pan Top button
reset.mzv	Reset button
zoomin.mzv	Zoom In button
zoomout.mzv	Zoom Out button

Note: The pan_left.mzv, pan_right.mzv, reset.mzv, and zoomout.mzv files have extra white space to ensure that the buttons display appropriately. When creating new buttons, do not remove this space or add graphics into it.

Alpha Map



This layer is a JPEG image that determines the transparency/opacity of the button. It allows the rollover background to appear through the navigation button. To increase opacity, add more black. To increase transparency, add more white. To change the appearance of the alpha map, you will need to change the following files:

Name	Description
help_a.mzv	Help alpha map
pan_bottom_a.mzv	Pan Bottom alpha map
pan_left_a.mzv	Pan Left alpha map
pan_right_a.mzv	Pan Right alpha map
pan_top_a.mzv	Pan Top alpha map
reset_a.mzv	Reset alpha map
zoomin_a.mzv	Zoom In alpha map
zoomout_a.mzv	Zoom Out alpha map

Note: The pan_left_a.mzv, pan_right_a.mzv, reset_a.mzv, and zoomout_a.mzv files have extra white space to ensure that the buttons display appropriately. When creating new buttons, do not remove this space or add graphics into it.

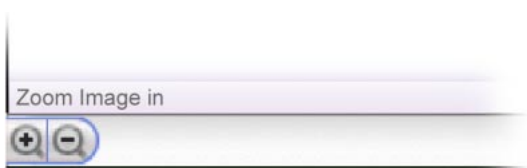
Tool Tips



This layer is a Flash file that displays the background for the tool tips. The tool tips provide tips on the navigation buttons and appear above the navigation toolbar. You can change the font attributes of the text in the .mtx template (either add2DSharedNavigation.mtx or add2DNavigation.mtx). To change the appearance of the tool tips, you will need to change the following file:

Name	Description
tipBackground.swf	Background for the bar that displays tool tips and sharpening messages

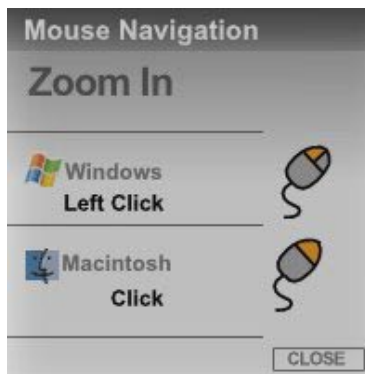
Border



This layer is a Flash file that is stretched to display the black border framing the image. It is stretched at maximum horizontally and vertically. To change the appearance of the border, you will need to change the following file:

Name	Description
lines.swf	Borders

Help Movie



When users click the Help button on the toolbar, this Flash movie appears, providing them with tips on how to use the interface. To change the Flash movie, you will need to modify the following file:

Name	Description
instructions.swf	Instructions

How to Customize the User Interface

When you customize the user interface, you can either customize just the buttons or the entire user interface (including the toolbar, buttons, and border).

Note: When customizing the user interface elements, ensure that you maintain the same file names as those packaged with the template.

To change the buttons

- 1 Open Viewpoint FinalCheck.
- 2 Create a new JPEG image for the button.
Refer to the “Buttons” section on page 13 for a list of the alpha map files that need to be replaced.
- 3 In FinalCheck, click **Open File** to open the .jpg file you created.
- 4 Click **Rename JPG to MZV** to convert the file to an .mzv file.
- 5 Create a new JPEG image for the alpha map.
Refer to the “Buttons” section on page 13 for a list of the alpha map files that need to be replaced.
- 6 In FinalCheck, click **Open File** to open the .jpg file you created.
- 7 Click **Rename JPG to MZV** to convert the file to an .mzv file.
- 8 Create a new Flash file for the background to ensure that the rollover color and texture match the new button.
Refer to the “Rollover Background for Buttons” section on page 12 for a list of the background files.

Note: The start diffuse color of the rollover animation in the.mtx template (either add2DSharedNavigation.mtx or add2DNavigation.mtx) has to be the same color as the start color of the texture in the Flash file.

The following graphic depicts how the rollover feature works, as well as the three components that comprise each button. Notice that the start and end rollover color are the same.



To change the entire user interface

- 1 Create a new Flash file for the toolbar and save it as navline.swf.
- 2 Follow steps 1-7 in the “To change the buttons” section above.
- 3 Create a new Flash file for the background to ensure that the rollover color and texture match the new buttons.
Refer to the “Rollover Background for Buttons” section on page 12 for a list of the background files.
- 4 Create a new Flash file for the border and save it as lines.swf.