



Viewpoint

Media Player for Mac OS Release Notes

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Viewpoint Media Player for Mac OS Release Notes

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Chapter 1: Introduction

New Features in Viewpoint Media Player 3.0.10 for the Mac

Viewpoint™ Media Player™ for Apple® Mac® OS now shares the same Viewpoint Technology™ features as the Microsoft® Windows® version. These features include:

- Support for Viewpoint ZoomView, Viewpoint HyperView, and Viewpoint Technology content containing Macromedia® Flash™ files.
- New to Viewpoint Technology! Conditional XML tags that allow you to create scripts that query the system and browser. For more information, see [Chapter 4: “New XML Tags”](#).
- And more: Viewpoint Media Player is the only Web browser plug-in with these capabilities on the Mac OS:
 - Two-way scripting with Microsoft Internet Explorer and Netscape Navigator
 - Works properly with hidden layers
 - Is windowless in IE and Netscape

About These Release Notes

Viewpoint Media Player for Mac OS Release Notes includes these chapters:

- [Chapter 1: “Introduction”](#) — Overview of the new features in this release, background information about Viewpoint Technology, and minimum system requirements.
- [Chapter 2: “Installation of Viewpoint Media Player for Mac OS”](#) — A complete description of Viewpoint Media Player installation for the Mac, including step-by-step instructions, Viewpoint Media Player files and where they are installed on a user's Mac, and installation requirements, such as cookies.
- [Chapter 3: “Creating and Adapting Viewpoint Technology Content for VMP for Mac OS”](#) — Most Viewpoint Technology-enabled Web pages are fully supported by Viewpoint Media Player for Mac OS. Find out how to “retrofit” old content to work with Viewpoint Media Player for Mac OS and how some features translate to the Mac.
- [Chapter 4: “New XML Tags”](#) — Learn about conditional XML tags that allow you to query user's systems and browsers.
- [Chapter 5: “Help, Resources, and Feedback”](#) — Learn more about Viewpoint Technology, download free application and documentation, and get technical support.
- [Appendix A: “Mac OS X and Viewpoint Media Player for Mac”](#) — Viewpoint Media Player for Mac runs with Classic mode Web browsers on OS X.
- [Appendix B: “Known Issues with VMP for Mac OS”](#) — Known issues with this Beta release of Viewpoint Media Player for Mac OS.
- [Appendix C: “Content Creation Updates for All Platforms”](#) — Content creation techniques that pertain to Windows and Mac OS.

Related Documents

You'll find related information on Viewpoint Developer Central at <http://developer.viewpoint.com/>.

- For an introduction to Viewpoint Technology and related concepts, read [Viewpoint Experience Technology Getting Started](#).
- For descriptions of advanced concepts and techniques, see other Viewpoint documentation, including these:
 - [Viewpoint Experience Technology: Technical Overview](#)
 - [Viewpoint XML Reference Guide](#)
 - [Viewpoint Experience Technology Deployment Guide](#)

Minimum System Requirements

- Mac OS versions 8.5 to 9.x and OS X Classic mode browsers (not native OS X)
- PowerPC 604 Processor or greater
- 128 MB RAM
- 5 MB free hard disk space
- 12 MB (12288 Kb) of memory assigned to the Web browser. The Viewpoint Media Player for Mac installer automatically sets this memory partition for your default Web browser. (Consult your Mac OS documentation to find out how to set memory partitions yourself.)
- Netscape Navigator 4.7 to 4.9, Microsoft Internet Explorer 5.0 and 5.1
- 256 color display (millions of colors recommended)
- 56Kbps modem

Important: Viewpoint Media Player 3.0.10 does not support Netscape 6 or any OS X-native browsers.

About the Web Browser Memory Setting

The memory partition you assign to the browser handles the HTML for any Web pages you browse. Viewpoint Media Player runs in the system heap memory. Therefore, if you set browser memory too high, you may be depriving Viewpoint Media Player and any other applications you run of RAM (system memory).

The Viewpoint Media Player for Mac installer automatically sets the correct memory partition for your default Web browser.

Software Requirements

- Viewpoint Media Publisher 3.0.10 (for publishing new content) — This version of Media Publisher (to be released soon) uses the version of MTS3 Interface your Viewpoint Technology content requires for compatibility with Viewpoint Media Player for Mac. Download this Media Publisher update from Viewpoint Developer Central (<http://developer.viewpoint.com/>).

For more information about content compatibility with Viewpoint Media Player for Mac OS, see [“Viewpoint Technology Content Checklist”](#).

- Viewpoint Control Panel for Mac OS (recommended) — A utility designed to aid in technical support and development of Viewpoint Technology-enabled Web sites and software, Control Panel allows you to check Viewpoint Media Player component version numbers, uninstall Viewpoint Media Player, display the Viewpoint Media Player installation path, and so on.

Chapter 2: Installation of Viewpoint Media Player for Mac OS

How to Install Viewpoint Media Player for Mac OS

Note: Viewpoint Media Player is designed to update itself to newer versions as they are released; however, it is possible this release may require downloading a new installer to update Viewpoint Media Player to the newer version.

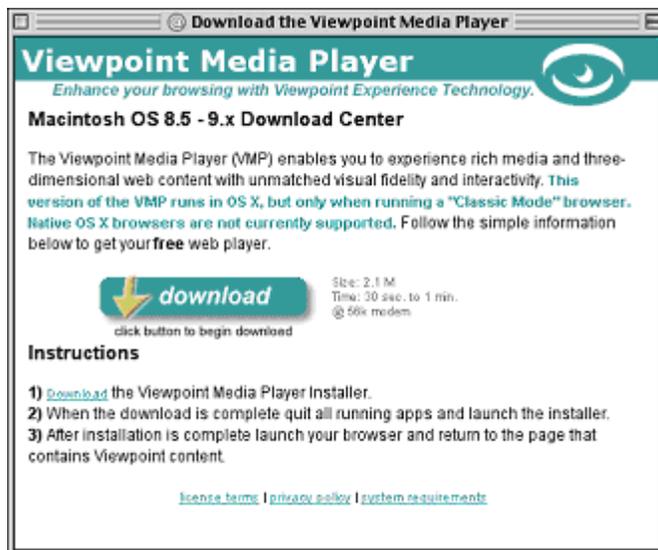
To install Viewpoint Media Player for Mac OS, complete the following steps

- 1 Go to the Viewpoint Media Player download page (<http://www.viewpoint.com/developerzone/5-1.html>) on Viewpoint Developer Central.

- 2 Click Get Player and follow the instructions in the installer pop-up window.

Or, go to any Viewpoint Technology content. When the popup installer window displays, click **Download**. On your desktop double-click the installer file Viewpoint Media Player Min 3.0.10.64 and follow the instructions on the screen.

For more information about what files are included in the Viewpoint Media Player install, go to [“Contents of Viewpoint Media Player Install and Automatic Update”](#).



- 3 When the installation is complete, quit the Web browser and re-launch it. You are now ready view Viewpoint Technology content!

Important: Be sure that to quit your Web browser entirely by pressing **z+ Q**.

Uninstalling Viewpoint Media Player for Mac OS

There are two ways to uninstall Viewpoint Media Player for Mac OS:

- Use the uninstall function of Viewpoint Control Panel.
You can download Viewpoint Control Panel from Viewpoint Developer Central.
- Delete the files shown in [“Initial Viewpoint Media Player Install”](#) earlier in this guide.

To uninstall Viewpoint Media Player with Viewpoint Control Panel

- 1 Download and install Viewpoint Control Panel for Mac from the Authoring section of Viewpoint Developer Central (<http://developer.viewpoint.com/>).
- 2 Start Control Panel.
- 3 Click Uninstall Viewpoint Media Player.

Contents of Viewpoint Media Player Install and Automatic Update

Note: Auto-update of Viewpoint Media Player for Mac is fully supported. For more information about what files are updates, see [“Automatic Updates to Viewpoint Media Player Installation”](#).

Initial Viewpoint Media Player Install

The following is installed with Viewpoint Media Player for the Mac:



System Folder\Extensions\Viewpoint Media Player

- ComponentMgr.dll



System Folder\Extensions\Viewpoint Media Player\Components

- Cursors.dll
- DataTracking.dll
- JpegReader.dll
- Mts2Reader.dll
- Mts3Reader.dll
- ObjectMovie.dll
- SceneComponent.dll
- SreeD.dll
- SWFView.dll
- WaveletReader.dll

- ZoomView.dll



System Folder\Extensions\Viewpoint Media Player\Viewpoint Plugin

- NPMetaStream3.dll
- MTS3 runtime
- MetaStream3.class



Netscape Folder\Plug-ins

- ALIAS to System Folder:Extensions:Viewpoint Media Player:Viewpoint Plugin:NPMetaStream3.dll
- MetaStream3.class



Internet Explorer Folder\Plug-ins

- ALIAS to System Folder:Extensions:Viewpoint Media Player:Viewpoint Plugin:NPMetaStream3.dll
- MetaStream3.class

Miscellaneous

- Each browser's plug-in folder should contain the NPMetaStream3.dll alias and MetaStream3.class.

Automatic Updates to Viewpoint Media Player Installation

While Viewpoint Media Player for Mac OS doesn't automatically install, it does support automatic updates once installed. The automatic update feature ensures that Viewpoint Media Player is silently and automatically updated on the user's computer to provide the best possible performance at all times. Automatic update also installs the components of Viewpoint Media Player based on the needs of the content viewed.

Note: There is no need to restart the browser following a Viewpoint Media Player auto-update.

Viewpoint Media Player for Mac automatic update installs files as shown below:



System Folder\Extensions\Viewpoint Media Player

- ComponentRegistry.ini



System Folder\Extensions\Viewpoint Media Player\DownloadedComponents

- DownLoadHist.ini
- HostRegistry.ini

- MetaStreamConfig.ini
- MetaStreamID.ini
- MTSDownloadSites.txt



System Folder\Extensions\Viewpoint Media Player\NewComponents



System Folder\Extensions\Viewpoint Media Player\Resources

Chapter 3: Creating and Adapting Viewpoint Technology Content for VMP for Mac OS

Introduction

Viewpoint is the first company to integrate the communication between Microsoft Internet Explorer and Netscape Navigator for Mac OS and Mac OS IE plug-ins. Viewpoint Media Player for Mac OS (versions 8.5 to 9.x) achieves feature parity with Viewpoint Media Player for Windows.

Note: Viewpoint Media Player for Mac supports the full range of Viewpoint Technology rich media, except sound.

Following are instructions for adapting Viewpoint Technology-enabled Web pages for Mac users. For more details on using MTS3Interface, see [Viewpoint Experience Technology Deployment Guide](#), Appendix B: Viewpoint Technology-Enabling Your Web Page With MTS3 Interface.

For information about special-case limitations of Viewpoint Media Player for Mac, see [Appendix B: “Known Issues with VMP for Mac OS”](#)

Viewpoint Technology Content Checklist

Viewpoint Technology content has the same features and authoring requirements for display on both the Windows and Mac OS platforms:

- Use the latest version of MTS3Interface.js (version 4.0.3.21).

To ensure new Viewpoint Technology content uses the correct version of MTS3Interface, you can publish it with the newest release of Viewpoint Media Publisher. Media Publisher is a tool designed to publish Viewpoint Technology content to a Web page and has been released in a new (3.0.10) that contains the version of MTS3 Interface that supports content viewed with Viewpoint Media Player for Mac. Install latest version of Media Publisher from Viewpoint Developer Central (<http://developer.viewpoint.com/>).

To find out more about using MTS3Interface, download [Viewpoint Experience Technology Deployment Guide](#) from Viewpoint Developer Central.

- Make sure all referenced files are available and that paths are correct.

Viewpoint Media Player for Windows allowed Viewpoint Technology content to display, even if resource files (such as .swf or .jpg files) were missing. Viewpoint Media Player for Mac requires that all files in a Viewpoint Technology Web application are available in the correct folders and paths.

Important: The browser does not return an error if files are missing. If there are missing files, often nothing will display where the Viewpoint Technology content would be.

- Remove any Mac sniffer scripts from your HTML file.

Some Web sites used sniffer scripts to detect the Mac OS and show alternate content. Here's an example of what a Mac sniffer looks like in the JavaScript:

```
var agt=navigator.userAgent.toLowerCase();
var isWin = agt.indexOf('win') != -1;
var isMac = agt.indexOf('mac') != -1;
if (isWin) {}
else if (isMac) parent.location="mac_page.html";
```

- Correct DIV and Layer tags for Netscape 4.x.

This involves adding sniffer script available on Web developer resource sites to detect the Web browser type and version.

Important: Do not create sniffer scripts that refer to variables (such as isIE or isNN) set in MTS3Interface.js, as this JavaScript file is modified periodically to accommodate new functionality and variables contained in it may change.

- Do not call Viewpoint Media Player constructor from within a form tag.

Encapsulating the Viewpoint Media Player constructor call in form tags causes problems with scripting in Microsoft Internet Explorer for Mac. Do not put the constructor call between form tags as shown here:

```
<form>
<script language="javascript">
vmp = new MTSPugin("filename.mtx", 600, 600, "bkey.txt", "popup"
</script>
</form>
```

If you must use form tags on a page—for instance, for buttons—use form tags around each form item individually.

- Use JPEG compression of panorama images or any image larger than 256 x 256 pixels.

Due to memory limitations on the Mac, Trixels NT (wavelet) compression of images used for images larger than 256 x 256 pixels can slow down a scene viewed in Viewpoint Media Player for Mac. For cross-platform compatibility, use the JPEG compression for panoramas, or other large images.

- Use default cursor resources for Viewpoint Media Player.

The Viewpoint Media Player default cursors accommodate operating system differences between the Mac OS and Windows.

- Preload any files you want to display in HyperView mode.

Because of Mac OS limitations, a Viewpoint Technology scene cannot be in HyperView mode while files are streaming over the network. Be sure that files you want to display in HyperView are preloaded. Set HyperView restrictions to ensure Viewpoint Technology content on the Mac behaves properly under all circumstances. See "HyperView Controls for Mac OS" for more information.

Note: For ZoomView images, it is not practical to preload image tiles (.mzv files). For this reason, the ZoomView-HyperView combination on Mac OS is only for previewing content from a local hard drive. This combination does not work over a network. For more information, see [Appendix B: "Known Issues with VMP for Mac OS"](#).

- Create content to avoid the opening of multiple browser windows containing Viewpoint Technology content. For best performance, only one browser window containing Viewpoint Technology content should be open at a time.

Converting Existing Web Pages to Use MTS3 Interface

MTS3Interface version 4.0.3.21 is required for content you want to view on the Mac with Viewpoint Media Player 3.0.10. You can quickly update any existing Web pages (.html) that use the object/embed tag to use the MTS3Interface.js file and the constructor tag.

To update an existing HTML page to use MTS3 Interface and the constructor line

- 1 Choose a location for the MTS3Interface.js file for your Web site, and copy the file there.

Tip: By using one MTS3Interface.js file for a Web site, you are able to easily take advantage of updates and improvements to this file's support for Viewpoint Technology scenes. You need only replace one file to update. This also benefits user viewing your Viewpoint Technology content: The MTS3Interface.js file is cached after a user views the first Viewpoint Technology scene on your site, thereby speeding up all other pages viewed.

- 2 Include references to the object variables and JavaScript library (MTS3Interface.js) in within the HEAD tag of the HTML document:

```
<head>
<script language="javascript"
src="pathname/MTS3Interface.js"></script>
<script language="JavaScript">
var vmp; // Declaration of the object
</script>
</head>
```

- 3 Replace your standard Viewpoint object/embed with the following MTS3 Interface constructor tag:

- For non-layered pages, use a call like this:

```
<body>
...
<script language="javascript">
vmp = new MTSPugin("filename.mtx", 600, 600, "bkey.txt", "popup"
</script>
</body>
```

- For layered pages, use a call like the following. (Note that content placed in a layer must reference the layer name in the variable call.)

```
<opening layer tag id="Layer1" style="position:absolute; left:20px;
top:350px; width:310px; height:310px; z-index:1">

<script language="javascript">
vmp = new MTSPugin("ase_pub_alpha.mtx", 300, 300, "bkey", "popup",
"layer=Layer1");
</script>

</closing layer tag>
```

- 4 Change JavaScript calls between the HTML page and Viewpoint Media Player with the new MTS3 Interface JavaScript functions, such as the following:

```
onclick="vmp.TriggerAnim('name of animation')"
```

For example:

Change this: onclick="triggeranimation('anim1')

To this: onclick="vmp.TriggerAnim('anim1')

- 5 Remove all previous functions which are now unused from the HTML.

Viewpoint Media Player User Interface Comparison: Mac and Windows

Viewpoint Media Player follows the standard translation of keyboard and mouse commands from Windows to Mac OS. These user interfaces are implemented using Viewpoint XML interactors. For more information on scripting interactors, see Viewpoint Interactor Authoring Guide.

3D User Interface

This triggers in Windows...	...Does this...	...Translates to this on the Mac OS
Standard: Left click and drag	Rotates camera	Click and drag (Mac mouse) Left click and drag (USB mouse)
Standard: Right click and drag Alternate: Control + left click and drag	Zooms in and out	Control + click and drag (Mac mouse) Ctrl + left click and drag (USB mouse) Command + click and drag (Mac mouse)
Standard: Both click (left + right) and drag Alternate: Left click + spacebar	Moves an object	Shift + click and drag (Mac mouse) Shift + left click and drag (Mac mouse) Click + spacebar (Mac mouse) Left click + spacebar (USB mouse)

ZoomView User Interface

This triggers in Windows...	...Does this...	...Translates to this on the Mac OS
Left click	Zooms in	Click (Mac mouse) Left click (USB mouse)
Right click	Zooms out	Control + click (Mac and USB mouse)
Left click and drag	Pan	Click and drag (Mac mouse) Left click and drag (USB mouse)

Chapter 4: New XML Tags

Conditional XML Tags: IF and COND

This version of VMP includes two new XML tags-IF and COND. You can use these tags to check for a number of predefined variables in the .mtx file. For instance, you can check for:

- Generic operating system name (for example, Mac OS or Windows)
- Specific operating system name (for example, NT or 9x)
- Browser name (for example, CompuServe)
- Browser version
- Language
- Specific VMP components installed

IF

Description	Parent element containing a conditional statement
Tag	<IF> </IF>
Attributes	Cond, CondX (x equals a sequential positive integer.)
Viewpoint Media Player Version	Introduced in version 3.0.9 (3.0.10 for Mac OS).
Remarks	IF does not work independently of the COND tag. Conditional statements can be nested: <pre><IF Cond="OSName=='WIN'"> <MTSCursor Name="YinYang" > <!-- Cursor info here for Windows 32 x 32 --> <HotSpot x = "1" y = "1" /> </MTSCursor> </IF> <IF Cond="OSName=='MAC'"> <MTSCursor Name="YinYang" > <!-- Cursor info here for Mac 16 x 16 - --> <HotSpot x = "1" y = "1" /> </MTSCursor> </IF></pre>

Sample XML Code

```
<MTSAction Name="set_browser_name">
  <IF Cond="BrowserName=='MOZILLA'">
    <MTSJavaScript
Target="change_text('browser_name','Mozilla')
"/>
  </IF>
  <IF Cond="BrowserName=='MSIE'">
    <MTSJavaScript
Target="change_text('browser_name','Internet
Explorer')"/>
  </IF>
  <IF Cond="BrowserName=='NETSCAPE'">
    <MTSJavaScript
Target="change_text('browser_name','Netscape'
)"/>
  </IF>
  <IF Cond="BrowserName=='CS'">
    <MTSJavaScript
Target="change_text('browser_name','CompuServ
e')"/>
  </IF>
  <IF Cond="BrowserName=='AOL'">
    <MTSJavaScript
Target="change_text('browser_name','AOL')"/>
  </IF>
</MTSAction>
```

Cond

Description	Conditional statement contained within an IF element. Values for Cond are stated with a category of the condition followed by the specific condition.
Tag	Cond="value"
Value(s)	<p>OSName — Name of the operating system (OS), such as Windows or Mac.</p> <ul style="list-style-type: none"> • MAC — Apple Mac OS • NT — Microsoft Windows NT • WIN — Any version of Microsoft Windows • WINDOWS — Microsoft Windows <p>OSVer — Operating system version number.</p> <ul style="list-style-type: none"> • 4.0 — Windows NT 4.0 • 5.0 — Windows 2000 • 5.1 — Windows XP • 95 — Windows 95 • 98 — Windows 98 • ME — Windows ME

BrowserVer — Web browser version.

- 4.0 to 7.0 — Range: Release (version) number of the Web browser, such as Internet Explorer 5.0.

BrowserName — Web browser brand name.

- MSIE — Microsoft Internet Explorer
- NETSCAPE — Netscape Navigator
- CS — CompuServe's built-in Web browser.
- AOL — AOL built-in Web browser.
- MOZILLA — An open-source Web browser. See Mozilla.org for more information.

Lang — Operating system language setting.

- Windows Codes — Get these codes from <http://msdn.microsoft.com/> (search for Table of Language Identifiers). Truncate the first three characters from the code and add H at the end (for hexadecimal).
 - 0409H — English (United State)
 - 40CH — French (Standard)
 - 407H — German (Standard)
 - 40AH — Spanish (Standard)
 - 411H — Japanese
- Mac OS Codes — Get these codes from <http://apple.developer.com/> (search for Language Codes). Add I after the code number (for integer).
 - 0I — English (United State)
 - 1I — French (Standard)
 - 2I — German (Standard)
 - 6I — Spanish (Standard)
 - 11I — Japanese

Dependencies	Embedded in an IF element.
Viewpoint Media Player Version	Introduced in version 3.0.9 (3.0.10 for Mac OS).

Remarks

Syntax of Value Statement

Values for this are stated in a manner borrowed from JavaScript. The category of the condition is stated (OSVer, for example, meaning operating system version), and then the specific condition (such as WIN for the Windows OS). The condition tag looks like:

```
Cond="OSVer=='MAC' "
```

The entire value is in double quotes (" "); the condition category is separated from the specific condition by two equal signs (==) that literally mean "is equal"; and the specific condition is in single quotes (' ').

Querying the System

You can use the conditional statement to query a system and browser, asking for type and version number.

Sample XML Code

```
<IF Cond="OSName=='WIN' ">
  <MTCursor Name="YinYang" >
    <!-- cursor info -->
  </MTCursor>
</IF>
<IF Cond="OSName=='MAC' ">
  <MTCursor Name="YinYang" >
    <!-- cursor info -->
  </MTCursor>
</IF>
```

Condx (Cond1, Cond2, Cond3, etc.)

Description	A variation on the Cond tag that means "or" and allows you to combine conditions.
Tag	Condx="value" (x equals a sequential positive integer.)
Value(s)	Same as Cond
Dependencies	Embedded in an IF element.
Viewpoint Media Player Version	Introduced in version 3.0.9 (3.0.10 for Mac OS).
Remarks	The following code checks for any non-NT based Windows OS, starting with Windows 95.

Sample XML Code

```
<IF Condx="OSName='WIN' ">
  <IF Cond1="OSVer=='95' "
  Cond2="OSVer=='98' " Cond3="OSVer=='ME' ">
    <!-- Response to condition here. -- >
  </IF>
</IF>
```

HyperView Controls for Mac OS

Because of limitations of the Mac OS, VMP cannot load files while a scene is in HyperView mode. To guarantee proper functioning of scenes containing HyperView, use the following tags.

MTSBaseComponent - RestrictMacHyperView

Description	A tag that manages the behavior of HyperView on Mac OS.
Tag	RestrictMacHyperView="value"
Value(s)	<p>0 — Attempt HyperView. Content allows HyperView as long as you are not downloading files. As soon as the scene attempts to stream a file, it leaves HyperView mode. Best for content that does not download files during HyperView.</p> <p>1 — No HyperView. Content receives MTSEventModalBegin and then immediately receives MTSEventModalEnd. The effect is as if a scene began to enter HyperView and you immediately pressed escape (Esc).</p> <p>2 — Default: Fake HyperView mode. VMP will not switch into HyperView, but content receives an MTSEventModalBegin message. This keeps the scene's state machine in sync with what is scripted to occur normally. If you press a key to escape HyperView, the scene receives an MTSEventModalEnd as expected.</p>
Viewpoint Media Player Version	Introduced in version 3.0.10.
Remarks	<p>Viewpoint ZoomView images cannot be used with HyperView over a network on the Mac. HyperView-ZoomView combination scenes display and behave properly when the files are on your local hard drive. For more information, see Appendix B: "Known Issues with VMP for Mac OS".</p> <p>The default setting for HyperView on the Mac OS allows state machines in the scene to continue running, because they receive HyperView events whether HyperView actually works or not.</p>

Note: Preload any files you want displayed during HyperView.

Chapter 5: Help, Resources, and Feedback

Viewpoint Developer Central: A Complete Resource

[Viewpoint Developer Central](#) is a complete resource for Viewpoint Technology content developers. At this website, you can access Viewpoint applications, user guides, downloadable example files, support, production tips, and techniques – to name just a few of the offerings there.

Access to Viewpoint Developer Central to:

- Get Assistance For questions about using Viewpoint Technology, click **Forums** under **Support** in the left navigation bar.
- Get Examples Click **Examples & Tips** in the left navigation bar.
- Subscribe to the Viewpoint Developer Newsletter Learn new production tips and techniques for creating 3D and rich media content for the web with Viewpoint Technology. Click **Newsletter** in the left navigation bar.
- Give Feedback About Viewpoint Applications Viewpoint Corporation values your feedback. Direct your comments and suggestions to the Viewpoint Forums.

You can also visit the [Viewpoint Corporation website](#) for company news, links to websites featuring Viewpoint Technology, and more.

Download Viewpoint Applications, Guides, and Examples

Viewpoint Developer Central is updated continuously with the latest versions of applications, user guides, and examples. Find links to the following in the left navigation bar.

Viewpoint Applications

You can download Viewpoint applications free of charge. The following applications are available for download from [Viewpoint Developer Central](#).

- Viewpoint Media Player The web browser plug-in necessary to view Viewpoint content with Netscape Navigator or Internet Explorer.
- Viewpoint Scene Builder An essential application for assembling a scene and publishing it in .html/.mtx/.mts format.
- Viewpoint Media Publisher An application enabling you to quickly create Viewpoint Technology web applications from Viewpoint media files (.mtx/.mtz) by embedding them in web (html) pages or running transformations on .mtx (xml) files through built-in XSLT support.
- Viewpoint Stream Tuning Studio An application for reducing .mts file sizes, enabling optimized 3D scenes rendered on a web page to stream quickly and retain visual integrity.
- Viewpoint Control Panel A utility for checking, installing, and removing individual Viewpoint Media Player components.

Note: Of the Viewpoint tools, only Control Panel is designed to run on the Mac. Run the other applications in Microsoft Windows or in Connetix Virtual PC™ (<http://www.connectix.com/products/vpc5m.html>)

User Guides

For more information on Viewpoint Technology and related utilities, check out these documents on [Viewpoint Developer Central](#) :

See this document	To learn about
Viewpoint Technology Feature Overview	What Viewpoint Technology is and how you can use rich media components-including 2D photos and drawings, 3D models, animation, ZoomView images, Macromedia Flash movies, video, text, and audio-to create rich media content.
Using 3D in Viewpoint Technology	Describes how to create a basic 3D Viewpoint Technology web application with simple interactivity and Flash effects. You'll learn how to take content created in a 3D modeling application, enhance it with Viewpoint Technology, and publish it to a web page.
Viewpoint Scene Builder User Guide	Offers step-by-step procedures for using Viewpoint Scene Builder to edit and assemble the components of a Viewpoint Technology scene before publishing it in the Viewpoint media file format.
Using High-Resolution 2D Graphics in Viewpoint Technology	This guide is a comprehensive reference for ZoomView, a technology that permits the deployment of large, print quality images online. The guide explains the three authoring paths to create ZoomView images, which include Adobe® Photoshop® 7, ZoomView Builder, and ZoomView Hosted Solutions. It also describes how to add advanced features to your ZoomView scenes by making changes to XML code in your .mtx file.
Viewpoint Stream Tuning Studio Guide	Explains how to use Viewpoint Stream Tuning Studio to optimize uncompressed .mts files from Viewpoint Scene Builder and other applications that export .mts files for Viewpoint Technology scenes.
Viewpoint Media Publisher Guide	New features of Viewpoint Media Publisher provide a fast and convenient path to the web for Viewpoint Technology content. Viewpoint Media Publisher enables you to quickly create Viewpoint Technology web applications from Viewpoint Media Files (.mtx/.mtz) by embedding them in web (html) pages or running transformations on .mtx (xml) files. This guide includes step-by-step instructions for creating Viewpoint Technology-enabled web pages, customizing html templates, customizing .mtx files with XSLT, and publishing Viewpoint content.
Using Vector Graphics in Viewpoint Technology	Describes how to integrate Macromedia® Flash™ and Scalable Vector Graphics (SVG) with other rich media, such as animated 3D objects, high-resolution photographs, object movies, and panoramas into Viewpoint Technology scenes.

Viewpoint Technology: Technical Overview	Describes the architecture of a Viewpoint Technology scene, including the key components that comprise it: objects, animations, events, and properties. You'll learn how to combine these components and organize them in the Viewpoint Technology scene .mtx description file.
Deployment for System Administrators	Steps that Administrators can take to set up a web server with Viewpoint Technology content.
Testing and Deploying Viewpoint Technology Content	Describes how to test and prepare your Viewpoint Technology content for deployment. Details the MTS3Interface, the auto-installer, and their usage, making it an invaluable resource for Viewpoint content producers.
Viewpoint XML Reference Guide	A powerful reference tool containing the most up-to-date information and examples for the XML tags and properties that control a Viewpoint Technology scene. Viewpoint Technology uses XML scripted in an .mtx file to orchestrate the elements of a scene, including animation, interactivity, and loading of files, as well as ZoomView and HyperView functionality.

Examples

You'll also find several online examples of Viewpoint Technology content on the Viewpoint Developer Central Web. Each example offers downloadable files that illustrate specific techniques or ways to solve particular problems. The files for each example are commented.

[Click here](#) to choose from a list of available examples that you can download to your computer.

Appendix A: Mac OS X and Viewpoint Media Player for Mac

VMP for Mac OS supports Mac OS X in Classic mode only with some limitations.

Note: According to Apple's OS X upgrade specification, Classic technology supports most current Mac OS 9 applications.

Following is a summary of how VMP runs in Mac OS X Classic mode using Internet Explorer 5 and Netscape 4.x, both for Classic (OS 9) technology:

- VMP Installation — Appears to work properly.
- 3D — Display and behaviors work as expected.
- ZoomView — Display and interactivity work as expected.
- HyperView — Graphics may become scrambled, likely because of the different screen drawing technologies of Classic and OS X. HyperView can be used with ZoomView only from a local hard drive (no network support). Also, files used for HyperView content must be preloaded before HyperView mode is available.
- The MAC OS is limited to processing only one application at a time. If you have an application (including HyperView) running, a Web browser cannot run simultaneously to download images (for example, ZoomView images) or download content.

OS X Terms

Mac OS Term	Meaning
Classic	Mac OS 9.1.x (or greater) is running as an application within OS X
Classic Applications	Non-carbonized. Can only run when OS 9 is the boot OS, or within the Classic environment of OS X.
Carbonized	An application can run natively in OS X or in OS 8 or 9 if used as a boot OS.

Launching a Classic Web Browser

If you have OS X installed on your computer, there is a folder called Applications (Mac OS 9) at its root. These are all the applications you had on your computer when it was running OS 9—these are Classic applications.

Launch Microsoft Internet Explorer from this location:

Applications (Mac OS 9)/Internet Explorer 5/Internet Explorer

Launch Netscape Navigator from this location:

Applications (Mac OS 9)/Netscape Communicator Folder/Netscape Communicator

Note: You cannot have the OS X native version of IE running at the same time as the Classic version.

Appendix B: Known Issues with VMP for Mac OS

Limitations in Functionality

VMP Limitations

- No uninstaller — VMP plug-in files exist in the VMP folder, as well as in a class file and alias for Netscape plug-ins.
- The number of Viewpoint Technology embeds that can run concurrently in an HTML page is limited by system memory — Multiple Viewpoint Technology embeds may be unstable in low memory.
- Do not put a layer in front of Viewpoint Technology content — This is problematic when viewing content with Microsoft Internet Explorer.
- Gutters between multiple embeds — When viewed on Mac OS, narrow gutters display between multiple Viewpoint Technology scene embeds. You may want to plan for this in your Web page design.

Mac OS Limitations

- For best results, users should have only one browser window containing Viewpoint Technology content open at a time.
- The number of concurrent streams of scene resource files is dependent on browser memory allocation.
- The Macromedia Flash 6 player does not support Mac OS 8.5 and Netscape Navigator 4.74. This platform combination may cause Viewpoint Technology scene interactions dependent on Flash to be disabled.
- Mac OS downloads from the network are slower than on Windows.
- Viewpoint ZoomView images cannot be used with HyperView over a network on the Mac. HyperView-ZoomView combination scenes display and behave properly when the files are on your local hard drive.

The MAC OS is limited to processing only one application at a time. If you have an application (including HyperView) running, a Web browser cannot run simultaneously to download images (for example, ZoomView images) or download content.

- Hot Spot Text: Strikethrough does not work on Mac OS. Note that the underline is very thin as well.

Issues Related to Microsoft Internet Explorer for the Mac

- For best results, a pop-up HTML page associated with a Viewpoint Technology page requires `setTimeout`. Add a 3 second timeout prior to the popup being opened.

Issues Related to Netscape Navigator for the Mac

- Resizing a window containing a VMP embed may require increased resources. Content can be fixed by adding JavaScript code that instructs Netscape to reload the Viewpoint Technology-enabled Web page whenever the window is resized.
- Reloading or refreshing a Web page with content can cause the content to not display. This is related to a problem with Mac Internet Explorer not updating its navigator.plugins properly.

Known Bugs and Workarounds

- HyperView fails when browser is in second monitor. If you try to view a Viewpoint Technology scene on a second monitor on a dual-monitor configuration, HyperView fails.
- Enabling VirtualMouse causes the cursor to disappear.

Appendix C: Content Creation Updates for All Platforms

Update MM_findObj

Web pages created in Macromedia Dreamweaver often use the "MM_findObj" function (sometimes called "findObj"). Typically, version 3.0 of this function is used. However, to ensure that layers show and hide correctly, you must use version 4.0 of this function.

To update MM_findObj to version 4.0

1 In your content, search for MM_findObj (sometimes called "findObj").

- Version 3 content appears in this format:

```
function MM_findObj(n, d) { // v3.0
  var p,I,x; if(!d) d=document;
  if((p=n.indexOf("?"))>0&&parent.frames.length) {
    d=parent.frames[n.substring(p+1)].document;
    n=n.substring(0,p);}
  if(!(x=d[n])&&d.all) x=d.all[n]; for
  (I=0;!x&&I<d.forms.length;I++)
  x=d.forms[I][n];
  for(I=0;!x&&d.layers&&I<d.layers.length;I++)
  x=MM_findObj(n,d.layers[I].document); return x;
}
```

- Version 4 content looks like this:

```
function MM_findObj(n, d) { // v4.0
  var p,I,x; if(!d) d=document;
  if((p=n.indexOf("?"))>0&&parent.frames.length) {
    d=parent.frames[n.substring(p+1)].document;
    n=n.substring(0,p);}
  if(!(x=d[n])&&d.all) x=d.all[n]; for
  (I=0;!x&&I<d.forms.length;I++)
  x=d.forms[I][n];
  for(I=0;!x&&d.layers&&I<d.layers.length;I++)
  x=MM_findObj(n,d.layers[I].document);
  if(!x && document.getElementById)
  x=document.getElementById(n); return x;
}
```

2 For each function using version 3.0, replace all content between "{" and "}" with the content **in bold** below:

```
function MM_findObj(n, d) { // v4.0
  var p,I,x; if(!d) d=document;
  if((p=n.indexOf("?"))>0&&parent.frames.length) {
    d=parent.frames[n.substring(p+1)].document;
    n=n.substring(0,p);}
  if(!(x=d[n])&&d.all) x=d.all[n]; for
  (I=0;!x&&I<d.forms.length;I++)
  x=d.forms[I][n];
  for(I=0;!x&&d.layers&&I<d.layers.length;I++)
  x=MM_findObj(n,d.layers[I].document);
  if(!x && document.getElementById) x=document.getElementById(n);
  return x;
```

Note: While this issue isn't directly related to Viewpoint technology, updating this version will help you avoid many potential content problems for content to be viewed on Mac OS.

Accommodate Flash Triggering

Some content may rely on communication between Macromedia Flash and VMP. This content may not work correctly due to limitations in the Macromedia Flash player.

For more information, see the knowledge base on the Macromedia website (<http://www.macromedia.com>).

JavaScript: Use If-Else, Not Switch Statement

Avoid using a switch statement in JavaScript. In Netscape Navigator versions 4.7 and 4.8 this is especially problematic. Use an If-Else statement instead.

MZV File Extension for Viewpoint Technology Scenes Only

MZV is a Viewpoint proprietary extension for VMP-streamed content only, not for general Web page content development (such as embedding in a Web page). Use the MVZ extension for all JPEGs in a Viewpoint Technology scene.

Note: Browsers may not recognize the MZV extension when embedded in HTML.

Use One MTS3Interface.js File for a Site

By using one MTS3Interface.js file for a Web site, you are able to easily take advantage of updates and improvements to this file's support for Viewpoint Technology scenes. You need only replace one file to update.

This also benefits user viewing your Viewpoint Technology content: The MTS3Interface.js file is cached after a user views the first Viewpoint Technology scene on your site, thereby speeding up all other pages viewed.