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Video Capture Options



Step-by-step procedures The topics below provide step-by-step instructions for working with Asymetrix Digital Video Producer.

Adding a clip to the timeline Adding and editing titles Building a video Capturing video Capturing video using an MCIVCR device Copying a clip Copying a palette Importing a media clip Loading a palette Marking a clip segment Modifying a transition effect Moving a clip on the timeline Optimizing a palette Playing a clip Playing back your video Previewing a video Removing a transition effect Saving a palette Saving a project Sending your video to someone Starting a new project



Contents (DVP Capture) Online Help for DVP Capture. Click the topic that you want to know more about.

To use DVP Capture, a video capture board must be installed and configured in your system.

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Step-by-step procedures

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Maps of screen elements



Online Help for DVP Capture. Click the topic that you want to know more about.

To use DVP Capture, a video capture board must be installed and configured in your system.

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Contents (DVP Capture) Online Help for DVP Capture. Click the topic that you want to know more about.

To use DVP Capture, a video capture board must be installed and configured in your system.

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To use DVP Capture, a video capture board must be installed and configured in your system.

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Contents (DVP Capture) Online Help for DVP Capture. Click the topic that you want to know more about.

To use DVP Capture, a video capture board must be installed and configured in your system.

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Technical support contact information

Telephone support

Contact Asymetrix at the telephone numbers listed below for information on telephone support contracts.

Australia/Asia Pacific	(61+3) 5255471
Europe (except France and Germany), Middle East, Africa, Russia	44-923-208-433
UK	0800-716-957 (freephone)
France	05-90-83-19 (freephone)
Germany	01-30-81-27-07 (freephone)
USA and rest of world	206-637-1600

Online services

Asymetrix provides complimentary support via fax, Asymetrix BBS, CompuServe, America Online, and Internet to registered users. Technical support responds to online queries within 48 hours (Monday to Friday).

Technical support fax

- Australia/Asia Pacific (61+3) 5255-482
- Europe 44-923-208-419
- USA 206-454-0672

Asymetrix BBS

- Line 1 (1200-2400 baud/9600 baud, 206-451-1173
- US Robotics HST mode)
- Line 2 (9600-14,400 baud v.32bis) 206-451-8290

America Online

- Find Asymetrix in the Industry Connection,
- a subset of the Computing and Software area.

CompuServe

- Windows Third Party Developer A forum, section 1 go asymetrix or go winapa
- Multimedia Vendors forum, Section 15 go multiven
- IBM Ultimedia Tools A forum, Section 5 go ultiatools

Internet



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File menu



Closes the current <u>project</u>, prompting you to save changes if necessary, and clears the <u>timeline</u> to start a new project.

Step-by-step Starting a new project

Menu commands Open Project



Opens an existing DVP project file. Only one project file can be open at a time.

Option	Description
File Name	Lists the files in the current DVP directory. Select or type the name of the project file you want to open. When you click OK, DVP opens the selected file.
List Files Of Type	Indicates .PRJ as the default file extension.
Directories	Displays the current directory and path. To change to another directory, select it from the Directories box.
Drives	Lists the available drives. To change to another drive, select it from the Drives box.



Saves the contents of the <u>timeline</u> and the <u>Media Window</u> to the current project file. If the <u>project</u> on which you're working has never been saved, this command works the same as the <u>Save Project As</u> command.

Step-by-step Saving a project



Saves the contents of the timeline and the Media Window with a DVP project name that you specify.

Option	Description
File Name	Specifies the name under which the project file will be saved. When you click OK, the file is saved with the .PRJ extension.
List Files Of Type	Indicates .PRJ as the default file extension.
Directories	Displays the current directory and path. To change to another directory, select it from the Directories box.
Drives	Lists the available drives. To change to another drive, select it from the Drives box.

Step-by-step Saving a project



Import Media

See also...

Imports any media files (<u>.AVI</u>, <u>.BMP</u>, <u>.DIB</u>, .<u>FLI</u>, <u>.FLC</u>, <u>.GIF</u>, <u>.PCX</u>, <u>.TGA</u>, <u>.TIF</u>, or <u>.WAV</u> file) that you want to include in your project.

Option	Description
File Name	Lists all the files in the current default directory. Select or type the name of the media file you want to open. Drag to select more than one file, or press Ctrl and click the files you want to import. When you click OK, DVP adds the selected file or files to the <u>Media</u> . <u>Window</u> .
List Files Of Type	Indicates the default file extension.
Directories	Displays the current directory and path. To change to another directory, select it from the Directories box.
Drives	Lists the available drives. To change to another drive, select it from the Drives box.
Preview	When clicked, previews the selected .AVI or .WAV media file. If you are previewing an .AVI file, click the play forward button after clicking Preview.

Step-by-step Importing a media clip



File menu

Removes the selected <u>media file</u> from the <u>Media Window</u> and from the <u>timeline</u>. If no media file is selected in the Media Window, the command is unavailable.



Media Statistics

File menu

Displays information about the <u>media file</u> that is currently selected in the <u>Media Window</u>. If no media file is selected in the Media Window, the command is unavailable.

Choosing this command is the same as double-clicking a media file in the Media Window.

Option	Description	
Name	Name and location of the file.	
Media Type	Type of media file: video, audio, video and audio, or image.	
Length	Number of <u>frames</u> in the media file.	
Frame Rate	Frame rate used to create the media file.	
Frame Size	Size of the frame in pixels.	
Compression	Compression method used in the video file.	
Format	Bit depth of the video or image file.	
Туре	Kind of waveform file (Microsoft WAV or Microsoft PCM).	
Frequency	Number of audio <u>samples</u> per second, expressed in hertz (Hz), in the audio file. The higher the frequency, the better the sound quality.	
Channels	Mono or Stereo. Mono plays the same audio through both speakers, while stereo has two separate channels.	
Sample Size	Amount of data in each sample in the audio file. Most desktop applications use 8-bit sampling; 16-bit sampling is equivalent to CD-quality sound.	



File menu

Plays the <u>.AVI</u> file selected in the <u>Media Window</u>.

Option	Description	
Output Size	Frame size of the output video. The option 100% plays the video at its original size; 200% plays the video at twice the original size; and Full Screen plays it to fill your screen.	
Loop Playback	When checked, specifies that the video will automatically repeat when played back.	
Blank Screen For	or Number of seconds the screen is blank between each repetition (when Loop Playback is checked).	
Start	When clicked, starts the video using the options you specified.	

Note: This command does not work with other file formats.



Displays options for how the selected <u>media file</u> should be scaled or cropped to fit the <u>frame size</u> of your video. This command is available when a media file is selected in the <u>Media Window</u>.

Option	Description
Stretch Video To Output Size	Scales the source video so that it fills the frame. If the <u>aspect ratios</u> between the source video and the output video differ, DVP stretches the source video to fit the output dimensions.
Crop Video To Output Size	Plays the source video at its original size, rather than scaling it up or down to the frame size. If the source video is larger than the frame size of the output video, the video is cropped.
Cropping	When clicked, expands the Scaling dialog box to display cropping controls. This button is available only when Crop Video To Output Size is selected.
Drag Outline To Place Video	Specifies the position of the output video based on where you drag the outline.
Current Position	Specifies the position of the output video based on the coordinates (in pixels) of the upper-left corner. The coordinates also display the position of the upper-left corner if you drag the outline.



Closes DVP, prompting you to save changes to the current project file if necessary.

Edit menu



Reverses the last edit you made on the <u>timeline</u>. If the action cannot be undone, this command is unavailable.



Shortcut Keyboard: Press Ctrl+X

Removes the selected <u>media file</u> or <u>overlay</u> from the <u>timeline</u> and temporarily places it on the DVP internal <u>clipboard</u>. DVP does not use the Windows Clipboard, so you cannot cut or copy anything to, or paste anything from, another Windows program.

If a portion of a media file is selected on the timeline, only the selected portion is removed; the remaining portion either remains in place or moves over to start where the cut portion started, depending on the Cut/Paste option setting in the <u>Options</u> dialog box.

The media file or effect that you cut remains on the internal clipboard until you cut or copy anything else. As long as the media file or effect remains on the internal clipboard, you can paste one or more copies back onto the timeline.

Choosing this command is the same as clicking the <u>Cut button</u> on the tool bar.

Step-by-step Copying a clip Menu commands Copy Duplicate Paste



Shortcut Keyboard: Press Ctrl+C

Copies the selected <u>media file</u> or <u>overlay</u> from the <u>Media Window</u> or the <u>timeline</u> and temporarily places it on the DVP internal clipboard. DVP does not use the Windows Clipboard, so you cannot cut or copy anything to, or paste anything from, another Windows program. If a portion of a media file is selected on the timeline, only the selected portion is copied.

The media file or effect that you copy remains on the internal clipboard until you cut or copy anything else. As long as the media file or overlay remains on the internal clipboard, you can paste one or more copies back onto the timeline.

Choosing this command is the same as clicking the Copy button on the tool bar.

Step-by-step Copying a clip Menu commands Cut Duplicate Paste


Shortcut Keyboard: Press Ctrl+V

Places a copy of a <u>media file</u> or <u>overlay</u> onto the <u>timeline</u>. The media file or overlay must be copied or cut to the DVP internal clipboard before you can paste it onto the timeline. DVP does not use the Windows Clipboard, so you cannot cut or copy anything to, or paste anything from, another Windows program.

When you paste a media file into an area of the timeline already occupied by another media file, the file you paste is either inserted into the existing file or overwrites it, depending on the Cut/Paste option setting in the <u>Options</u> dialog box.

Choosing this command is the same as clicking the Paste button on the tool bar.

Step-by-step Copying a clip Menu commands Copy Cut Duplicate



Specifies the number of copies of a <u>media file</u> or <u>overlay</u> to paste onto the <u>timeline</u>. DVP pastes the copies from the clipboard consecutively along the selected timeline track. The media file or overlay must be copied or cut to the DVP internal <u>clipboard</u> before you can paste it onto the timeline.

You can also use this command to paste blank frames onto the timeline, for example, to create a black background on which you can add a <u>title</u>.

Option	Description
Clipboard Contents	When checked, specifies that the current contents of the DVP internal clipboard are duplicated.
Blank Frame	When clicked, specifies that DVP paste blank frames.
Number Of Copies	Indicates the number of copies to be pasted. This option is useful, for example, when you are pasting a bitmap or blank frame that must cover several frames. The default is 1.

Step-by-step Copying a clip Menu commands Copy Cut Paste View menu



Keyboard: Press (+) on the Numpad

Magnifies the timeline to display it in smaller increments.

Choosing this command is the same as clicking the $\underline{Zoom \ In \ button}$ on the tool bar.

Menu commands <u>Display All Tracks</u> <u>Display Current Track Only</u> <u>Set Range</u> <u>Zoom Out</u>



Shortcut Keyboard: Press (-) on the Numpad

Reduces the view of the timeline to display it in larger increments. Choosing this command is the same as clicking the <u>Zoom Out button</u> on the tool bar. Menu commands Display All Tracks Display Current Track Only Set Range Zoom In



Shortcut Keyboard: Press Ctrl+R

Determines the starting point and the number of frames to display on the <u>timeline</u>. You can display the current range, or set a new range.

Option	Description
Start	The first frame in the range you want to display.
End	The last frame in the range you want to display.
Total	The total number of frames you want to view.

Menu commands Display All Tracks Display Current Track Only Zoom In Zoom Out



When this command is selected, DVP displays all six tracks (Video A, Video B, Trans., Overlay, Audio A, Audio B) of the <u>timeline</u> simultaneously, so that as you work with them, you can see how the media files are arranged in relation to one another.

Menu commands Display Current Track Only Set Range Zoom In Zoom Out



When this command is selected, DVP displays only the <u>timeline</u> track that currently contains the cursor, so that you can work with the <u>media file</u> on that <u>track</u> more easily.

Menu commands Display All Tracks Set Range Zoom In Zoom Out



View menu

Specifies whether or not DVP displays <u>thumbnail</u> views of video and audio frames on the <u>timeline</u>. With the Paint Video Frames or Paint Audio Frames option selected, you can more easily identify a particular location in a video or audio file; with these options off, DVP displays only the first and last thumbnail on the currently visible range, and the timeline scrolls more quickly.

Option	Description
Paint Video Frames	When checked, the timeline displays all thumbnails of the video files. When unchecked, the timeline displays only the first and last thumbnail of the visible range.
Paint Audio Frames	When checked, the timeline displays thumbnails of the audio files. When unchecked, the timeline contains placeholders instead of thumbnails.
Show As Frames	When selected, the tick bar on the timeline displays units as frames.
Show As Time	When selected, the tick bar on the timeline displays units of time.



Specifies whether to display one <u>Player</u> or both, as well as the size at which each plays back video files.

Option	Description
Visible	When checked, the Player is visible in the DVP window.
Zoom Size	Specifies the size at which the Player will play back a video. (The size of the player does not change until you drag a video file into it.)
Play Video Using DVP Palette	When checked, videos play back in the Players using the DVP <u>palette</u> . This eliminates potential palette shifts when you use the Players, but does not affect the palette of the final video you <u>build</u> .
Play Clip Automatically	Specifies that video clips play automatically when you drag them onto the Player window. When unchecked, you must click the play forward button to preview a video clip in a Player.

Step-by-step Playing a clip

Effects



Displays the <u>filters</u> you can apply to the portion of your video that is currently selected on the <u>timeline</u>.

Option	Description
All Filters	Lists all available filters. Click a filter to select it.
Description	Describes the filter that is currently selected in the All Filters list.
Add	When clicked, adds the selected filter to the Selected list.
Remove	When clicked, removes the selected filter from the Selected list.
Selected	Displays the filter or filters that you've added from the All Filters list. You can apply these filters to your video by clicking OK in the Filters dialog box.
Options	Expands the Filters dialog box to display the Filter Options area, which includes a preview window.
Preview	Previews the video with the filters in the Selected list applied.

Reference topics Filters (descriptions)



Displays the <u>transition effect</u> that is currently selected on the timeline, as well as other transitions that you can apply instead. If no transition effect is selected, this command is unavailable.

Option	Description
All Transitions	Lists all available transitions.
Description	Describes the transition that is currently selected in the All Transitions list.
Selected	Displays the selected transition, which will be applied to the video when you click OK in the Transitions dialog box.
Options	Expands the Transitions dialog box to display the Transition Options area.
Preview	Previews the video with the selected transition applied.

Reference topics Transitions (descriptions)



Effects menu

Changes the level of the audio in the selected portion of an audio track.

Use this command to create cross-fades, for example, when you want to fade background music during a voiceover.

Option	Description
Beginning Level	Sets the audio level at the beginning of the selected segment.
Ending Level	Sets the audio level at the end of the selected segment.



Displays the Title Frames dialog box, where you specify the frames that the <u>title</u> will cover in your output video. If you select a range of frames on the tick bar or on any track except the Overlay track before choosing this command, DVP bypasses the Title Frames dialog box. DVP instead opens the Titling dialog box, where you produce or edit text titles for your video.

Note: When you add a title to a project, DVP places it on the Overlay track in the location you specify. If any other title or overlay occupies the same spot on the track, DVP replaces it with the new title. To add several overlays and titles in the same location, you must create multiple <u>builds</u>.

After you specify the title frame length and click OK, the Titling dialog box appears, in which you produce or edit text titles for your video.

Option	Description
Start Of Title	Shows the beginning location of the titles. Enter a new number to specify a different beginning point.
Length Of Title	Shows the number of frames the titles cover. Enter a new number to specify a different title length.

Title Frames dialog box

Titling dialog box

Option	Description
Titles For Selected Frames	Lists the titles that you've created.
Edit Title	Displays the area in which you can write a new title or edit the title selected in the Titles For Selected Frames box.
Start At Frame	Shows the first frame in the specified title range. Initially, this frame is the one that you selected on the <u>timeline</u> , but you can change the starting frame by entering a new frame number.
End At Frame	Shows the last frame in the specified title range. Initially, this frame is the one that you selected on the timeline, but you can change the ending frame by entering a new frame number.
Total Frames	Shows the range of frames that will contain titling. Initially, this number is the number of frames that you selected on the timeline, but you can change the range by entering a new number.
Path	Displays the Path dialog box, in which you can specify options for moving, zooming, and rotating titles and other overlays (see below). This button is available after you type a title in the Titles For Selected Frames list.
Delete (button)	Removes selected text without placing a copy on the Windows Clipboard.
Foreground Color (button)	Opens the color palette, in which you specify the color of the text.
Font (button)	Displays the Font dialog box, in which you select type specifications for the titling. Type specifications apply to all type in a title.

Path dialog box

Option	Description
Path (point)	Determines the path of the title. You can specify how your title moves by clicking a series of points in the dialog box. If you add two or more points, the title moves smoothly from one point to the next. To produce the effect of moving a title on- or offscreen, you can position points outside the preview thumbnail.
	Note: By default, a title is centered in the video window.
Options Points (buttons)	When clicked, expands the Path dialog box to display the Path Options area. When clicked, adds a point on the path, or removes the selected point from the path. Points are added on top of the selected point; you then drag the new point to position it.

Add Uniform Points	When checked, all points are distributed equally over time. If you add a new point, or increase the time a selected point occupies, the timing of all other points is modified accordingly so that the title still occupies the same amount of time. When unchecked, if you add a new point or increase the Get Here or Wait Here frames, DVP removes an equal number of frames from the end of the overlay sequence. For details about the Get Here and Wait Here options, see their descriptions below.
Set Object's Rotation	Indicates the rotation of the selected point. As an overlay moves from one point to another point to which you've applied a different rotation, it rotates smoothly from one position to the next.
Set Object's Size	Indicates the size of the object on the path in pixels. As an overlay moves from one point to another point to which you've applied a different size, the object zooms smoothly from one size to the next.
Get Here	Indicates the number of frames between the previous point and the selected one. Increasing the number of frames causes the title to move more slowly; decreasing the number of frames causes the title to move more quickly.
Wait Here	Indicates the number of frames the title should remain at a point before moving on to the next. You can specify the number of frames by entering a value.
Preview (buttons)	When clicked, DVP steps backward or forward through the titling sequence. You can click to move to the beginning or end of the titles, step through one point at time, or step through one frame at a time.
Video	Indicates whether the thumbnail displays an outline of the video track, or displays the video. You can specify what is displayed by selecting Preview Outline or Preview Image. Displaying an outline lets you step through a title sequence more quickly, while displaying the image can help you coordinate the titling with the action in the video.
Overlay	Indicates whether the thumbnail displays the image of the title, an outline of the title, or just the point. You can specify what is displayed by selecting Preview Image, Preview Outline, or Preview Point. Displaying a preview image provides the most detail about how the titles will appear in your video; displaying the outline indicates the size, position, and rotation of the title; displaying the point indicates only the location of the center of the title.

Т<mark>Б</mark>ТТ Overlay Options

Displays options for the video or graphics tracks on the Overlay track, including keying and path information.

Option	Description
Preview	Displays the current frame in the overlay; by clicking the scroll bar buttons, you can proceed through the key frames one frame at a time.
Preview Tracks	Specifies which tracks are displayed in the preview window: the video tracks, the Overlay track, or both. To view the Overlay track <u>keyed</u> onto the video track, click Both.
Key Color (Red, Green, Blue)	Displays the <u>key color</u> for the overlay. You specify the color you want by entering red, green, and blue (RGB) values, or by clicking a color area in the preview window.
Alpha	Shows the degree of the overlay's transparency. Adjust the Alpha value, then click Preview to view the effects in the preview window.
Tolerance	Shows the acceptable deviance from the specified color that will be keyed. Tolerance allows colors within a specified range to key correctly. For solid backgrounds, such as those in a bitmap or animation, adjusting tolerance may not be necessary. For backgrounds that vary slightly in color, such as a live video that includes tints of a single color (as in shadow areas), adjust the Tolerance value, then click Preview to view the effects in the preview window.
Preview	Displays the video, the overlay, or both, depending on the option you select for Preview Tracks. You move the scroll bar to view different frames.
Update	When clicked, displays the effects of the current settings in the preview window.
Path	Opens the Path dialog box, in which you specify options for moving, zooming, and rotating the overlay.

Path dialog box

Option	Description
Path (point)	Determines the path of the overlay. You can specify how your overlay moves by clicking a series of points in this dialog box. If you add two or more points, the overlay moves smoothly from one point to the next. To produce the effect of moving an overlay on- or offscreen, you can position points outside the preview thumbnail.
	Note: By default, an overlay is centered in the video window.
Options	Expands the Path dialog box to display the Path Options area.
Points (buttons)	When clicked, adds a point on the path, or removes the selected point from the path. Points are added on top of the selected point; you then drag the new point to position it.
Add	Indicates whether points are added before or after the selected point.
Uniform Points	When checked, all points are distributed equally over time. If you add a new point, or increase the time a selected point occupies, the timing of all other points is modified accordingly so that the overlay still occupies the same amount of time. When unchecked, if you add a new point or increase the Get Here or Wait Here frames, DVP removes an equal number of frames from the end of the overlay sequence. For more details about the Wait Here and Get Here options, see their descriptions below.
Set Object's Rotation	Indicates the rotation of the selected point. As an overlay moves from one point to another point to which you've applied a different rotation, it rotates smoothly from one position to the next.
Set Object's Size	Indicates the size of the object on the path in pixels. As an overlay moves from one point to another point to which you've applied a different size, the object zooms smoothly from one size to the next.
Get Here	Indicates the number of frames between the previous point and the selected one. You can specify the number of frames by entering a value. Increasing the number of frames causes the overlay to move more slowly; decreasing the number of frames causes the overlay to move more quickly.

Wait Here	Indicates the number of frames the overlay should remain at a point before moving on to the next. You can specify the number of frames by entering a value.
Preview	When clicked, DVP steps backward or forward through the titling sequence. You can click to move to the beginning or end of the overlay, step through one point at time, or step through one frame at a time.
Video	Indicates whether the thumbnail displays an outline of the video track, or displays the video. You can specify what is displayed by selecting Preview Outline or Preview Image. Displaying an outline lets you step through an overlay sequence more quickly, while displaying the image helps you coordinate the overlay with the action in the video.
Overlay	Indicates whether the thumbnail displays the image of the overlay, an outline of the overlay, or just the point. You can specify what is displayed by selecting Preview Image, Preview Outline, or Preview Point. Displaying a preview image provides the most detail about how the overlay appears in your video; displaying the outline indicates the size, position, and rotation of the overlay; displaying the point indicates only the location of the center of the overlay.

Video



Shortcut Keyboard: Press Ctrl+P

Opens a preview window that plays the current contents of all tracks on the timeline.

Option	Description
Play forward button	Click to play the video. To pause the video, click the button again.
Scroll bar	Contains controls for moving the video forward or backward.



Displays options for the output video. When you choose options and click OK, DVP builds the video; if you need to specify <u>compression</u>, <u>filter</u>, or other options, do so before specifying build options.

Option	Description
File Name	Displays the location and name (up to eight characters) for the new video file. Type the name and location of your video file. Or click Browse to open the Browse dialog box, in which you can locate an existing file that you want to overwrite.
Title	Type a title to add it to your video. The title is stored as an .AVI file. DVP and other programs that use .AVI files, such as Video For Windows, can display the title.
Description	Stored with the video file and displayed in the Media Window if you subsequently import the output video you produce back into DVP. The description can also be displayed in other programs that use .AVI files, such as Video For Windows.
Compress All	When unchecked, specifies that DVP does not re-compress frames that are unchanged. (Changed frames include those you have resized or cropped; or to which you have applied a video effect or filter, or made other changes.) Compressing only frames that have changed helps speed compression and can improve image quality. However, if you have made other changes to the video, such as changing the frame rate, you should check this option.
Warn On Data Rate Failure	When checked, warns if the compression rate specified in the <u>Compression dialog</u> <u>box</u> is being exceeded as the video is built. Use this option when you need to keep the <u>data rate</u> below a certain level. In particular, when your video will be played back from a CD-ROM, the data rate should be limited to one a typical CD-ROM can keep up with.
Full Optimization	When checked, DVP examines the colors in every frame of the source videos, and produces a fully-optimized color palette for 8-bit video. This palette option is the slowest, but prevents palette shifts during playback of the output video.
Partial Optimization	When checked, DVP optimizes only video frames that have changed since you last built the video. This option may be faster than Full Optimization, but palette shifts may occur during playback of the output video.
Previous Frame	When checked, for any given frame, DVP uses palettes from the source clips. If the source clip does not have a palette, DVP uses the palette from the previous frame rather than optimizing a new one. This option is faster than Full or Partial Optimization, but is likely to produce palette shifts during playback of the output video.
Video Palette	When clicked, DVP uses a palette you opened or created. This option appears only if you have pasted an <u>8-bit</u> palette into the video.

Note: Palette options (Full Optimization, Partial Optimization, Previous Frame, and Video Palette) are relevant only if you are creating an 8-bit output video. Video and graphics with <u>bit depths</u> greater than 8 bits do not use palettes; DVP ignores these settings if the output is at a bit depth greater than 8 bits.

When you click Build, DVP produces the output video. Depending on the size and complexity of the source files, the effects you have applied, and the options you have selected, the process of building a video can require a significant amount of time. As DVP works, it displays the progress of the build in a preview window.

Step-by-step Building a video

Reference topics Color palettes Compression tips



Displays format options for your output video.

Option	Description
File Format	Displays the file format for your project. In addition to the default format (<u>.AVI</u>), DVP can create audio-only <u>.WAV</u> files, video-only <u>.FLI</u> or <u>.FLC</u> files, or a series of <u>bitmaps</u> in a variety of formats.
Size	Shows the size of the output video, in pixels. Common sizes for .AVI files are 160 by 120, or 320 by 240 (which produces an output file four times as large as the smaller size). To change the size of your video, type new values for the width and height.
Bit Depth	Displays the bit depth options for your video.
Frame Rate	Specifies the number of frames per second for your new video. Video For Windows files typically are 15 frames per second (<u>fps</u>), which provides a smooth sense of motion. Higher frame rates, up to 30 fps, provide smoother motion, but also result in much larger video files. Lower frame rates, such as 8 fps, use less data but result in rough, jerky motion.
Maintain Frame Numbers	When clicked, DVP includes source video clips on a frame-by-frame basis. If you are editing video files that all have the same frame rates, this is the best option, because DVP will never drop frames or add additional frames. However, if this option is selected when you mix video source files that have different frame rates, audio (which is time-dependent) and video from a source clip will no longer be synchronized. In this case, Synchronize Video may be a better option.
Synchronize Video	When clicked, DVP will drop or add video frames as needed to maintain the same time as the source clip. This ensures that the audio remains synchronized at the new frame rate. You can also use this option to create slow-motion and fast-motion effects.
Pad Frames For CD- ROM Playback	Creates an output video file that plays most efficiently from a CD-ROM. Check this option if your output video will be distributed on a CD-ROM.
Channels	Specifies Mono or Stereo.
Sample Size	Specifies the amount of audio data to be included in each sample. A 16-bit sample produces better sound, but larger files.
Frequency	Specifies the <u>frequency</u> with which the sound is sampled per second. Higher sample rates produce better quality sound, but larger files.
Interleave Audio Every	Specifies how often to add audio portions between blocks of video. In most cases, the default (every frame) works best. If the audio in the output video is choppy, or the video itself delays, you can experiment with different settings for this value. (Note If you choose Pad Frames For CD-ROM Playback, DVP automatically sets this option to 1 frame to give you the best results for CD-ROM playback. You cannot edit this setting unless you uncheck Pad Frames For CD-ROM Playback.)
Use Format From First Video Input	Specifies that every source video clip you import use the same frame rate, frame size, and compression rate as the first video clip you import. When unchecked, each video clip you import uses the default settings for these options until you choose specific settings. The default settings are: 160 by 120 pixels (frame size), 15 frames per second (frame rate), and MS Video 1 (compression).

Step-by-step Building a video

Reference topics Sound characteristics





Displays the compression methods you can use for your output video, as well as other options that affect its quality and file size.

Option	Description
Compressor	Lists the compression/decompression routines, called codecs, that come with DVP, or that come with your video capture board (if you have one). Choose the one you want from the list.
Compression Quality	Specifies the compression quality of your video. On a relative scale of 0 (more compression, lower quality) to 100 (less compression, higher quality), you can control the tradeoff between quality and file size. Higher-quality videos require large files, and may take longer to compress.
Key Frame Every	Specifies how often <u>key frames</u> are included in your output video. In general, a choice of 1 key frame for every 15 frames provides a good balance between quality and performance.
Data Rate	Determines the <u>data rate</u> , which should correspond to the data rate of the media device that will be used to play the output video. Selecting the correct data rate ensures that the rate does not exceed the capacity of the media device on which it will be played. In particular, <u>CD-ROM</u> drives have relatively low data rates (that is, they're slower than a typical hard disk); if you expect to play back your video on a CD-ROM drive, you can limit the data rate to that of the CD-ROM drive.
Configure	When checked, displays additional configuration options for the selected compressor, if available.
About	Displays version and copyright information about the compression method selected in the Compressor box.
Preview	Previews the video after compressing it using the selected compression method.

Step-by-step Building a video

Reference topics


Plays the most recent output video. This command is available only if you have built a video since you started the current session of DVP.



When checked, automatically <u>cross-fades</u> all audio transitions during the build. If unchecked, the overlapping portions of the audio segments are mixed together at normal volume.

Any time two audio segments overlap on the <u>timeline</u>, DVP mixes the end of the first audio clip and the beginning of the second. (This transition is similar to the transition between two video segments.)

Reference topics Sound characteristics Palette



Displays the available <u>palette</u> files that you can use when you create an <u>8-bit</u> (256-color) video. When you open a palette file, DVP places a copy of the palette on the Windows Clipboard, then prompts you to paste it into the current project.

Option	Description
File Name	Lists the available palette files. Select or type the name of the palette file you want to open; when you click OK, DVP opens the selected palette and places it on the Windows Clipboard.
List Files Of Type	Indicates .PAL as the default file extension.
Directories	Displays the current directory and path. To change to another directory, select it from the Directories box.
Drives	Lists the available drives. To change to another drive, select it from the Drives box.

Reference topics



Palette menu

Specifies a name and location for a palette file that you want to save. You can then use the palette in other videos. For this command to be available, you must first create a palette or paste a palette from the Windows Clipboard.

Option	Description
File Name	Displays the file name. Type a file name of up to eight characters; when you click OK, the file is saved with the .PAL extension.
List Files Of Type	Indicates .PAL as the default file extension.
Directories	Displays the current directory and path. To change to another directory, select it from the Directories box.
Drives	Lists the available drives. To change to another drive, select it from the Drives box.



Displays options for copying the palette.

After you copy a palette, you can <u>paste</u> it into the current project so that the output video uses this palette (provided that you build an 8-bit video and the Video Palette option is selected in the Build dialog box).

For this command to be available, the cursor must be located in an <u>8-bit video</u>, <u>animation</u>, or <u>bitmap</u> on the Video A, Video B, or Overlay track.

Option	Description
From File	Copies the palette from the first selected frame of an 8-bit video on the <u>timeline</u> to the Windows Clipboard.
From Video	Copies an <u>optimized</u> video palette (if you've created one) to the Windows Clipboard. For this option to be available, you must have created and optimized a palette.



Palette menu

Pastes the palette that is currently on the Windows Clipboard into the current project.

Because DVP pastes the palette from the Windows Clipboard, you can paste a palette from any <u>8-bit</u> (or less) bitmap; open the bitmap in a bitmap editing program, copy it to the Clipboard, open DVP, and paste the palette using the Paste Palette command.

This command is unavailable when the Windows Clipboard does not currently contain a palette.



Create Optimal Palette



Optimizes all the colors in a project to an <u>8-bit palette</u>, so that you can control how DVP creates the palette. Use this command to



select a range of the timeline to use as the basis for the optimized palette.

include a background palette in the optimized palette.

Note: DVP offers another way to create an optimized palette. When you build an output video by choosing Build from the Video menu, you can select optimization options in the Build dialog box. However, using the Create Optimal Palette command provides you with more control over the palette's contents, since you can choose what sources the palette is based upon.

Option	Description
Whole Video	When clicked, specifies that DVP use the whole video as the basis for the palette. Use this option when the video contains many different colors in different sections.
Section	When clicked, displays values that specify the range of frames on which to base the palette. Use this option when colors are fairly uniform throughout the video.
Options	Displays the <u>Optimization Options</u> dialog box, which lists the colors used in the current palette. You can specify how DVP handles background colors.

Reference topics



Palette menu

Shows the palette that is currently pasted in the video, along with the number of colors it contains. This command is unavailable if you have not pasted a palette into the video.



Optimization Options Palette menu

Displays optimization information and options, which you can use to add a <u>background palette</u> to the project.

Option	Description
System Colors	Indicates that Windows reserves 20 colors for its own use.
Background Colors	Shows the colors copied from the Windows Clipboard, which DVP will incorporate into the palette for the video. (For details, see Set Background below.)
Available Colors	Shows the colors available to be extracted from the video.
Background Source	Indicates the source of the background colors, if any.
Total Colors	Shows the number of colors in the palette.
Set Background	Click this option to avoid palette shifts when you play the output video from within another program, such as a presentation. With this option selected, DVP incorporates the colors used in the other program into your video palette. When this option is selected, the source of the background colors appears in the Background Source box.

Note: To use the Set Background option in the Optimization Options dialog box correctly, you must first copy the colors to the Windows Clipboard, or create a palette file that you open in DVP.

Tools



Opens <u>DVP Capture</u>, which you use to capture video from a VCR, video camera, or videodisc player.

For DVP Capture to open, a video capture board must be installed and configured in your system.



Specifies what happens when you edit clips on the <u>timeline</u>. The setting you choose appears on the Cut and Paste indicators on the timeline.

Option	Description
Delete/Insert	Clicking Delete/Insert specifies the following: When you cut a portion of a clip from the timeline, the following section of the clip moves over to occupy the same time with no gap. When you paste a clip on top of another clip, the clip underneath moves to follow the clip you paste.
Erase/Overwrite	Clicking Erase/Overwrite specifies the following: When you cut a portion of a clip from the timeline, that portion is removed and the other segments remain unaffected. When you paste a clip on top of another clip, the clip underneath does not change position; only the portion of it that extends beyond the end of the clip you paste will play.
Snap Cuts To End	When checked, a clip dragged from the <u>Media Window</u> onto the timeline automatically snaps to the end of the last clip. This option can be helpful if you need to sequence clips quickly, but it prevents you from positioning a clip in any other location on the timeline. (However, you can subsequently <u>drag</u> the clip to a new position, or cut and paste it.)



Glossary Click a letter to display glossary entries. ľ

B C N<XK<CH03D0ZZFXFH

Α

analog audio analog video animation anti-aliasing aspect ratio audio AVI

В

background palette bit depth bitmap BMP <u>build</u>

С

CD audio

CD-ROM chroma-key Cinepak clip clip media clipboard codec compression cross-fade

D

data rate delete device driver device-independent DIB digital audio digital video digitize display device dithered drag DVI DVP DVP Capture

Ε

edit points 8-bit (color) erase

F

filter FLI/FLC font fps (frames per second) frame frame rate frame size frequency

G

<u>GIF</u>

Η

high-color

I

<u>image</u> in point Indeo

J

<u>JPEG</u>

Κ

<u>key</u> key color <u>key frame</u> <u>keying</u> Kodak Photo CD

L

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Μ

marking MCI (Media Control Interface) media device media device channel media file media source Media Window MIDI MPEG multimedia

Ν

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Ρ

PAL (Phase Alternation by Line) palette palette shift PCX pixel play Player Point & Click project

Q

<u>QuickTime</u>

R

<u>RLE</u>

S

sample scale scanning SECAM segment smoothing sound

Т

TGA thumbnail tick bar TIF timecode timeline title track transition effect

U

V

VCR video video capture video capture board Video for Windows videodisc VISCA visual media clips voiceover

W

WAV (wave audio) waveform

X - Z

<u>zoom</u>

analog audio

The audio signal that comes from an analog audio source, such as an analog audio tape recorder, or sound from a videotape player, videodisc player, camera, or television tuner. Unlike digital audio, which represents the audio information as bits, analog audio is created by the characteristics of electrical signals transmitted through one or more wires. See also digital audio, videodisc.

analog video

The video signal that comes from an analog video source, such as a videotape player, videodisc player, camera, or television tuner. Unlike digital video, which represents the video information as patterns of bits, analog video is created by the characteristics of electrical signals transmitted through one or more wires. See also digital video, videodisc.

animation

A simulation of movement produced by displaying a series of successive images onscreen.

The two basic kinds of computer animation are frame and cast-based. Frame animation is created by designing a separate frame for each screen view, much like a separate individual frame of a filmstrip or videotape. Cast-based animation is created by individually designing all of the moving objects to be used through a series of frames; assigning each object its own character traits (such as position, pattern, size, and ink); then assembling a complete picture frame containing the individual objects. See also digital video.

anti-aliasing

When overlaying graphics or text, a method of blending the edges around the keyed areas. Also called smoothing.

aspect ratio

The relative width and height of a graphic or video window, without regard to its size. For example, a 2-inch by 4-inch graphic has the same aspect ratio as one that is 3 inches by 6 inches.

audio

Recorded sound, such as in a .WAV file, or the sound portion of an .AVI file.

AVI (Audio/Video Interleaved)

A format for storing digital video in a file that alternates blocks of visual and sound information. .AVI files are particularly suited for storing on CD-ROM, because their interleaved format lends itself to efficient retrieval with the techniques used on CD-ROM drives.

background palette

Colors used in a presentation in which your video will be played. By including background colors in an optimized 8-bit palette applied to your video, you can avoid palette shifts when the video is played within the presentation application.

bit depth

The number of bits of color information stored for every video pixel. Standard values for video are 8-bit (up to 256 colors), 16-bit (up to 65,536 colors, also called high-color), and 24-bit (up to 16.7 million colors, called true-color).

bitmap

An image composed of pixels. Bitmaps are typically used to reproduce images that contain detail, shading, and color, such as photographs and film images. You can create bitmaps by using DVP Capture, using paint software, or scanning photographs or flat art.

BMP

The Windows and OS/2 bitmap file format. Identical to .DIB.

build

The process of creating a new video in DVP using the video, sound, bitmaps, and effects assembled on the timeline.

CD audio

Compact disc audio (sometimes called Red Book audio) is sound that is stored digitally (as a series of binary values) and converted to analog (continuous sound) within the CD-ROM drive, then played back via the audio cable. Because the CD-ROM, and not your computer, converts the data from digital to analog, it does not limit the other actions the CPU can simultaneously perform. To use CD audio, you must have a CD-ROM drive and a CD audio device driver installed through the Windows Control Panel.

CD-ROM

Compact disc read-only memory.

chroma-key

A type of keying in which the transparency of a particular area is dependent on a key color that you specify. Used to superimpose portions of one image on another, such as the image of a television weather reporter superimposed on a weather map.

Cinepak

A compression method designed by SuperMac Technologies and included with DVP. Cinepak is a lossy compression method.
clip

A reference to a segment of any media source or file that includes a start point, end point, and name. Only the reference is stored in DVP. Defining a clip sets the starting and ending points in a media file or media device.

clip media

Electronic images, music, and video that you can use in your own productions. Commercial clip media is available from many sources, such as clip libraries and electronic bulletin boards, and comes on different media, such as floppy disk and CD-ROM.

clipboard

A temporary storage location where Windows places the item most recently cut or copied.

DVP also contains its own internal clipboard, which it uses for copying and pasting clips. DVP does not copy clips to or paste them from the Windows Clipboard.

DVP copies and pastes palettes using the Windows Clipboard.

codec

Compressor/decompressor. The compression portion codecs are used to compress and decompress video files.

compression

The process of compacting video data so that it will require less space on a hard disk. Video compression methods are lossy in nature--greater compression comes at the expense of quality.

cross-fade

The transition between two overlapping audio segments in which the first one fades out as the second fades in.

data rate

A way of referring to the amount of digital information that a video file contains. The data rate depends on several factors: the number of frames per second (fps) in the video; the frame size; the video and audio formats; and the type of compression used. An uncompressed video with a high frame rate, relatively large frame size, and rich video and audio formats requires hardware capable of sustaining a high data rate to play back with acceptable quality. The appropriate data rate for a video depends on the capabilities of the delivery medium. In particular, CD-ROM drives support much lower data rates than disk drives do.

delete (segment)

When you delete a segment from the timeline, the following portion of the clip moves over to occupy the position of the segment you deleted. (In comparison, when you erase a segment, the following portion of the clip does not move, and instead a gap appears in the clip.) You can control whether DVP deletes or erases segments by choosing Options from the Tools menu.

device driver

A program that allows Windows 3.1 to communicate with a specific piece of multimedia hardware, such as a video capture board. Device drivers are installed through the Windows Control Panel. See also multimedia.

device-independent

Describes an image or video that can be displayed at any resolution.

DIB (device-independent bitmap)

A Windows and OS/2 bitmap format. Indentical to .BMP.

digital audio

Audio that is converted into a digital format by a process called digitizing and stored as a file (usually a .WAV file) on a hard disk, CD-ROM, or floppy disk. See also analog audio.

digital video

Video that is converted into a digital format by a process called digitizing and stored as a file on a hard disk, CD-ROM, or floppy disk. See also animation.

digitize

To convert analog audio and video into digital audio and video that can be manipulated on a computer.

display device

The combination of video card and video driver that determines a system's color capability. For example, an 8-bit video card used with the appropriate video driver can display 256 colors at a time.

dithered

Describes a color that appears onscreen as a mixture of different solid colors.

drag

In DVP, you move clips around by dragging them. You drag a clip by positioning the pointer over the clip or selected segment, pressing and holding down the left mouse button, and moving the mouse. As you do, the pointer arrow changes to a drag pointer. When the drag pointer is positioned where you want to place the clip or segment, you release the mouse button.

DVI

A hardware-dependent compression technique used with ActionMedia hardware.

DVP

Asymetrix Digital Video Producer.

DVP Capture

The utility that comes with Asymetrix Digital Video Producer that you use to digitize video from a source such as a VCR or videodisc. A capture board must be installed on your system for DVP Capture to work.

edit points

The In and Out points representing the segment of a source clip to be used in a production.

8-bit color

Describes an image or video that can contain up to 256 colors.

erase (segment)

When you erase a segment, the succeeding portion of the clip does not move, and a gap appears in the clip. (By comparison, when you delete a segment from the timeline, the succeeding portion of the clip moves over to occupy the position of the segment you deleted.) You can control whether DVP deletes or erases segments by choosing Options from the Tools menu.

filter

A technique used to alter the appearance of an image on a single track, such as by changing its colors or applying a special effect. You apply a filter to a video by selecting a video on the timeline and choosing Filter from the Effects menu. Filters differ from transition effects because you apply filters to a single track, while transitions are applied any time two video tracks overlap.

FLI/FLC

An animation file format used by Autodesk Animator (and other programs) that is supported by DVP.

font

The complete set of characters for one typeface, size, and style, such as Courier 12-point italic.

fps (frames per second)

The number of complete images in one second of video, expressed as its frame rate. Digital video on the desktop can support a maximum frame rate of 15 fps without the need for a video capture board; with a video capture board, frame rates of up to 30 fps are possible. (A video with a frame rate below 15 fps may appear jerky when played; television is broadcast at 30 fps; movies run at 24 fps.)

frame

A single image within a video file. Like a conventional video, a video file contains a sequence of frames that, when played back, gives the appearance of motion.

frame rate

The number of frames that occur in a video during a second of playback time, expressed in frames per second (fps). The higher the frame rate of a video, the better the quality.

frame size

The dimensions of a digital video image, usually expressed in pixels.

frequency

The number of samples per second in a sound or video file. The higher the frequency, the better the quality of the video or sound.

GIF

A compressed image format that may contain up to 256 colors. GIF format is widely used for images on commercial electronic bulletin board services (BBS).

high-color

A video or bitmap that is in 16-bit or 24-bit format. A high-color image or video does not require color palettes as an 8bit image or video does.

image

A still picture in the form of a bitmap.

in point

The point in a source clip where a segment begins. You specify an in point by using the editing controls in a Player.

Indeo

A lossy video compression standard designed by Intel.
JPEG (Joint Photographic Experts Group)

A lossy compression standard used for 24-bit color and 8-bit grayscale bitmaps.

key

To add a background color to an overlay, which is then made transparent so that the underlying video shows through. Keying is used, for example, to create titles on an overlay; the key color becomes transparent, allowing the video to appear behind the titles.

key color

In the process of keying, the background color used for transparency in the foreground image. The key color becomes transparent when the video is built, allowing areas on underlying video tracks to show through, such as when you add a title overlay.

key frame

A complete video frame that contains all information about the image in the video. (By comparison, nonkey frames typically contain only data about areas of the frame that have changed compared to the previous frame.)

keying

The process of displaying a background image through certain colors of a foreground image, such as the image of a meteorologist in the foreground superimposed on a weather map. The meteorologist is actually in front of a single-color background panel, the color of which is then keyed to be transparent.

Kodak Photo CD

A compact disc that contains photos. To use Photo CD images, your CD-ROM drive must be capable of playing Photo CDs.

lossless

Refers to a compression method that does not remove information from the video or image being compressed. The image quality is not affected by lossless compression methods, but file size reduction may not be as great as that achieved by lossy methods. Microsoft RLE is a lossless compression method.

lossy

Refers to a compression method that permanently removes information from the video or image being compressed. Although the image quality is decreased, the results may be imperceptible to your audience, and the file size may be greatly reduced. Cinepak and Intel Indeo are examples of lossy compression methods. See also lossless.

marking

The process of defining edit points on a source clip.

MCI (Media Control Interface)

A Windows standard set of commands that can be used to control media devices. Used for communication with external devices such as VCRs and videodisc players.

media device

Hardware that controls a source of multimedia. For example, a CD-ROM drive can play CD audio, and a sound board can play MIDI and wave audio.

media device channel

A hardware device used to play a sound. Only one sound of a specified media type can play at a time through the channel, because only one sound at a time can access the necessary hardware. If you have a sound card with a MIDI port, you can play a MIDI and a wave audio file simultaneously, but you cannot play two MIDI files or two wave audio files simultaneously.

media file

Any wave audio, MIDI, animation, bitmap, or digital video file that can be used within Asymetrix Digital Video Producer.

media source

Any media--including files, CD audio, videodiscs, videotape, or embedded wave audio or MIDI resources--from which you can create clips.

MIDI

Musical Instrument Digital Interface. MIDI devices are the standard way to connect synthesizers, keyboards, and other musical instruments to computers to create synthesized sound. MIDI is not actual sound, but a series of commands sent to the synthesizer. You must have a Media Control Interface (MCI)-compatible sound card installed to play MIDI files.

MPEG (Motion Picture Experts Group)

A video compression standard that does not require, but benefits greatly from, built-in support provided by some video capture board manufacturers. MPEG is also used for compressing interactive television video. Refer to your video capture board documentation to determine if it supports this standard.

multimedia

Any combination of sound, graphics, digital video, animation, and analog video played on a computer.

nonlinear editing

Editing video using many video clips that can be manipulated and arranged independently and in combination, as in DVP.

NTSC (National Television Standards Committee)

Acronym for a video standard used in the U.S., Canada, Mexico, Japan, and Central and Latin America. The NTSC standard has a vertical resolution of 525 lines and 30 frames per second.

optimize

To create an 8-bit color palette based on the most frequently used colors in a range of video frames. You can optimize a palette as you convert 24-bit or 16-bit video to 8-bit video to prevent palette shifts when the 8-bit video is subsequently played back.

optimization

A procedure that determines the most frequently used colors in a range of video frames and creates the best possible 256-color palette for a particular image or video clip, which you can then apply.

out point

The point in a source clip where a segment ends.

overlay

An image, digital video, analog video, or title that appears in front of the other images in your video. In DVP, overlay clips appear on the Overlay track. See also digital video, videodisc.

PAL (Phase Alternation by Line)

A video standard used in Western Europe (except France), Africa, the Middle East, and Brazil. The PAL standard has a vertical resolution of 625 lines and 25 frames per second.

palette

A predefined set of colors that is stored with a 256-color bitmap or video, or that you store in a palette file (extension .PAL). Palettes are for use with 256-color display devices; most often, you use them to create a common set of colors throughout a video and avoid palette shifts. You can create, save, load, and apply palettes to videos that you create in DVP.

palette shift

A brief flashing that occurs as you switch from one image to another (for example, by opening an image file, or playing a video clip) while using an 8-bit video display system. Windows switches color palettes so that the new image displays on your screen correctly. As it does, a brief flashing may occur, and the images and other portions of your screen may momentarily appear with the wrong colors. Although Windows quickly adjusts the screen to the new palette, the palette shift can be distracting to a viewer.

PCX

A Windows-compatible bitmap format used by many bitmap editing programs that may contain 1, 4, 8, or 24 bits. Also called Paintbrush format.

pixel

Short for picture element. A dot of color in a video or still image. Combined, pixels of varying colors or shades create an image.

play

To activate a clip. You play a clip by dragging it into a Player window and clicking the play forward button (unless Play Clip Automatically is checked in the Player Options dialog box).

project

A collection of source clips and effects arranged on the timeline and used by DVP to build new videos.

QuickTime

A video file format originally used on Apple Macintosh computers and now available under Windows. To use a QuickTime movie with DVP, you must first convert it to .AVI format.

RLE (Run-Length Encoding)

A type of 8-bit compression typically used with animation files and some bitmaps. It best provides compression for media that have relatively uniform color.

sample

The process of digitizing analog audio and video into computer information. Also called capturing.

scale

Frame sequence, expressed either as absolute frame numbers or in timecode.

scanning

The process of creating a digital version of a graphic that you can manipulate on your computer.

SECAM

Acronym for a video standard (Séquentiel Couleur Avec Mémoire) used in France, Eastern Europe, Russia, and parts of Africa. The SECAM standard has a vertical resolution of 625 lines and 25 frames per second.
segment

In DVP, a series of sequential frames extracted from one media clip.

smoothing

When overlaying graphics or text, a method of blending the edges around the keyed areas. Also called anti-aliasing.

sound

A CD audio, MIDI, or wave audio clip that can be played in a DVP application.

TGA (Targa)

A bitmap format developed by Truevision. TGA is a standard format, but not as widely used as .BMP, .PCX, or .TIF formats. TGA files may be saved as uncompressed or compressed (run-length encoded).

thumbnail

A small image representing a video or other media clip, displayed as a placeholder on the DVP timeline, in the Media Window, or in a preview window (when a video is stopped).

TIF (or TIFF, Tagged Image File Format)

A platform-independent bitmap format standard created by Aldus. TIFF is used widely, but many variations of it exist, including different versions that may use any of six different compression methods (no-compression, Huffman, Pack Bits, LZW, Fax Group 3, and Fax Group 4).

timecode

A method of representing time. HH:MM:SS:FF displays hours, minutes, seconds, and frames, respectively. Timecode (as opposed to frame number) is available with professional video decks; you use timecode with DVP Capture to capture one or more specific sequences from a source video, based on their exact chronological positions in the source video.

title

Text that is added to a video, like credits that appear in a video. In DVP, you can add titles to videos and control how they move, rotate, and zoom.

track

An area of the DVP window where you drag and drop a clip. You arrange clips (video, image, sound, transition, and overlay) on tracks to create your video.

transition effect

A special effect, such as a wipe, that creates a smooth shift from the end of one video clip to the beginning of another.

VCR

Video Casette Recorder.

video

A series of images that occur over time, and that may contain sound. In DVP, you create your video by combining other videos, bitmaps, and sound.

video capture

The process of digitizing audio and video into computer information. You can use DVP Capture to capture video files from a source such as a VCR, video camera, or videodisc, and then save the captured video as an .AVI file. Also called sampling.

video capture board

A specialized piece of hardware that allows your computer to digitize video from a source such as a VCR, a video camera, or a videodisc.

Video for Windows

A file format and specification for storing video and audio in Windows. The file format used is Audio/Video Interleaved (.AVI), a format that automatically synchronizes audio and video information.

videodisc

A read-only optical disc used to store analog video images and associated audio information, which you can use in a DVP video. See also multimedia.

VISCA

A protocol developed by Sony Corporation for controlling VCR machines from the computer, for precise and easy capture and editing.

visual media clip

A clip created from an animation, digital video, analog video, Photo CD image, or bitmap.

voiceover

Sound, such as narration, that you add to a video during the production process rather than while recording the video.

WAV (wave audio)

A digital audio format for sound that is stored as a file on a hard disk, CD-ROM, or floppy disk.

waveform

A representation of sound in which the volume of an individual sample is displayed, showing the peaks and lulls in volume over time.

zoom

To increase or decrease the size of a title or overlay. In DVP, you create zoom effects using the Path dialog box.

Map pop-ups

Open Project button

Opens an existing DVP project file. Only one project file can be open at a time. Clicking this button is the same as choosing Open Projectfrom the File menu.

Import Media button

Imports any media files (.AVI, .BMP, .DIB, .FLI, .FLC, .GIF, .PCX, .TGA, .TIF, or .WAV) that you want to include in your project.

Choosing this command is the same as choosing the Import Media command on the File menu.

Build button

Displays options for the output video. When you choose options and click OK, DVP builds the video; if you need to specify compression, filter, or other options, do so before specifying build options. Clicking this button is the same as choosing Build from the Video menu.

Play Last Built button

Plays the most recent output video. This command is available only if you have built a video since you started the current session of DVP.

Clicking this button is the same as choosing Play Last Built from the Video menu.

Cut button

Removes the selected media file or effect from the timeline and temporarily places it on the DVP internal clipboard. Clicking this button is the same as choosing Cut from the Edit menu.

Copy button

Copies the selected media file or effect from the Media Window or the timeline and temporarily places it on the DVP internal clipboard.

Clicking this button is the same as choosing Copy from the Edit menu.

Paste button

Places a copy of a media file or effect onto the timeline. Clicking this button is the same as choosing Paste from the Edit menu.

Zoom In button

Magnifies the timeline to display it in smaller increments. Clicking this button is the same as choosing Zoom In from the View menu.

Zoom Out button

Reduces the view of the timeline to display it in larger increments. Clicking this button is the same as choosing Zoom Outfrom the View menu.

View Range button

Displays the starting point and the number of frames to display on the timeline. You can view the current range, or choose a new view range.

Clicking this button is the same choosing Set Rangefrom the View menu.

Display All Tracks button

When this command is selected, DVP displays all six tracks (Video A, Video B, Trans., Overlay, Audio A, and Audio B) of the timeline simultaneously. You can then see how the media files are arranged relative to one another as you work.

Clicking this button is the same choosing Display All Tracks from the View menu.

Point & Click button

A button on the DVP tool bar that you use to get information about features in the DVP window. Click the Point & Click button and then click an area of the DVP window to get information about the area of interest.

Trans. track

The track on the timeline where transitions are located.
Overlay track

The track on the timeline used for overlay images, videos, or titles.

Cut and Paste indicators

Indicates the current setting for the Cut/Paste option in the Options dialog box.

Media Window

The location where media files that are part of the project are stored. When you import a media file, DVP adds the file to the Media Window. Media files must be added to the timeline to appear in your output video.

Tool bar

The place where buttons for commonly-used DVP tools are located. Click the Point & Click button at the bottom of the tool bar, then click the button about which you want information.

Tick bar

The area just above the timeline that displays the current view range in frame numbers.

timeline

Six tracks used for constructing new videos. You drag clips from the Media Window or drag segments from the Player windows onto a timeline track. You can then arrange the clips on the timeline in the way you want them to play in your video.

Video track

Either of two tracks on which videos are located.

Audio track

Either of two tracks on which audio clips are located.

Title bar

The area at the top of the DVP window that indicates the name of the project file that is currently open.

Menu bar

Located below the title bar, along the top of the DVP window. The menu bar contains all DVP commands. To view the contents of a menu, do one of the following:



Within DVP, click the menu name with the mouse.

Within DVP, press Alt+*n*, the underlined letter in the menu name.

Player preview window

The area in the Player where you view and edit video and animation files.

Clip indicator

Highlights the segment of the clip that you have marked.

Player

The area in the DVP window that you use for viewing and editing video files. If the clip is audio-only, the window remains dark as the audio plays.

Exit button

Clears the Player, and restores it to its original size. (You can drag a new clip into the Player without clicking Exit. The older clip clears automatically.)

Video button

To view a clip without sound, click the Video button.

Audio button

To play the sound in a clip without viewing the video, click the Audio button.

Video and Audio button

To play both video and audio, click the Video and Audio button.

Step Back button

Moves the clip one frame backward.

Step Forward button

Moves the clip one frame forward.

Jump To Start button

Moves the clip to the first frame.

Jump To End button

Moves the clip to the last frame.

Jump Back button

Moves the clip back approximately 10 percent of its length.

Jump Forward button

Moves the clip forward approximately 10 percent of its length.

Play Reverse button

Plays the clip backward at normal speed.

Play Forward button

Plays the clip forward at normal speed.

Pause button

Stops the clip at the current frame.

Frame Select knob

Drags the clip to a specific frame.

Edit Point indicator

Shows the current location of the Mark In and Mark Out points.

Mark In button

When clicked, marks the current frame as the beginning of the segment. The frame number is indicated in the display to the left of the button.

Mark Out button

When clicked, marks the current frame as the end of the segment. The frame number is indicated in the display to the left of the button.

Frame Counter

Indicates the current frame number and total number of frames in the clip.

Key frame indicator

A "K" indicates that the current frame is a key frame.



Asymetrix Digital Video Producer Quick Start This section provides an overview of how to create a video using Asymetrix Digital Video Producer (DVP).

Although projects differ, creating a video typically follows this sequence:

- 1. Selecting media files and adding them to the project
- 2. Previewing and marking a clip
- 3. Positioning media on the timeline
- 4. Adding special effects
- 5. Adjusting color palettes
- 6. Previewing the video
- 7. Building the video
- 8. Saving your project



1. Selecting media files and adding them to the project Overview

After starting DVP, you begin a project by locating and importing <u>media files</u>. These files may be <u>video</u>, <u>audio</u>, or <u>bitmap</u> files, which can be in a number of file formats.

You can import video from two types of sources. You can import existing files from your hard disk or <u>CD-ROM</u>, or you can use <u>DVP Capture</u> to capture video from a source such as a <u>VCR</u> or <u>videodisc</u>, then import the captured video into your project.

You import media using the <u>Import Media</u> command on the File menu. When you import a media file, DVP adds the file to the <u>Media Window</u>, where it displays the media files that you'll use in your project. Although a file in the Media Window is associated with your project, it doesn't become part of your video until you drag it onto the <u>timeline</u>.

Step-by-step Adding a clip to the timeline Importing a media clip Starting a new project



2. Previewing and marking a clip

You can preview a clip and mark the section that you want to use in your video. You do this by dragging a clip from the Media Window into either of the two Players. You can then preview the clip (whether it's a video, animation, bitmap, or audio file) and mark the beginning and ending points of the segment you want to use in your video.
Step-by-step Adding a clip to the timeline Marking a clip segment Playing a clip



3. Positioning media on the timeline

Overviev

After you've used the <u>Player</u> to <u>mark</u> the <u>segment</u> of a media file that you want to use in your video, you're ready to add the marked segment to the <u>timeline</u>. Do this by <u>dragging</u> the segment from the Player to the timeline. Once a clip is on the timeline, you can move it, delete it, and preview it. You can also add <u>transitions</u> and other effects; <u>titles</u> and other overlays; and other <u>video</u>, <u>audio</u>, and <u>bitmap</u> media.

Step-by-step Adding a clip to the timeline Marking a clip segment Modifying a transition effect Moving a clip on the timeline Previewing a video



4. Adding special effects

Overview

Once a media <u>clip</u> is on the <u>timeline</u>, you can modify it in a number of ways. You can apply one or more <u>filters</u> to a single video track to create simple video effects such as fade-ins and fade-outs, or more specialized effects such as color inversion or ripples.

You can also control how media on each of the two audio and video tracks interact in the video by modifying the <u>transition</u> between them. For audio tracks, you can choose whether or not to <u>cross-fade</u> as one track ends and the next begins. For video, you can choose from a list of transition effects (many of which you can customize) to control how one video clip ends as the next begins.

Finally, you can easily add <u>titles</u> and other <u>overlay</u> tracks, and specify <u>key</u> colors. You can also control how <u>titles</u> or other overlays move, zoom, or rotate in the video.

Step-by-step <u>Adding a clip to the timeline</u> <u>Adding and editing titles</u> <u>Modifying a transition effect</u> <u>Removing a transition effect</u>



5. Adjusting color palettes



Getting acceptable color quality can be a challenge when you're working with <u>8-bit</u> videos, which are commonly used in desktop presentations. If an 8-bit video file uses several different color palettes, the video goes through <u>palette shifts</u> when the video plays.

DVP can help you avoid these palette shifts and create smooth, professional videos. You can create a palette that is optimized for the colors in your video; you can include the colors in the presentation in which your video will be played as part of this palette. You can then apply this optimized palette to your video, and save it for use with other videos.

Note: Although you typically create and apply palettes after importing and arranging media <u>clips</u> on the <u>timeline</u>, it's a good idea to plan for color before you start creating a video. In general, if your final video will be played back on an 8-bit monitor, you should limit color changes within the video if possible, particularly if your video contains color video segments (as opposed to black-and-white videos or simpler animations, for example).

Step-by-step Copying a palette Loading a palette Optimizing a palette Saving a palette



6. Previewing the video

Overview

As you create your video, you'll want to check your progress frequently. You can do this in DVP without actually <u>building</u> a version of your video (which can be time consuming), but by previewing the contents of the <u>timeline</u>, including <u>transitions</u>, <u>filters</u>, <u>titles</u>, <u>keying</u>, <u>audio</u>, and <u>palettes</u> that you've applied.

Note: Previewing the contents of the timeline is different than previewing a single media file. You preview the contents of the timeline in the preview window. Because DVP must play each media clip and effect simultaneously, playback is slower than it is in the final video. In contrast, you preview (and <u>mark</u>) single video clips in a <u>Player</u>, where you can step through them frame by frame or play them in real time.

Step-by-step Building a video Previewing a video



7. Building the video

Overview

When your video is arranged the way you want it on the DVP <u>timeline</u>, the challenge is to build an output video that meets both your technical and aesthetic requirements. At this stage, you'll need to decide how to handle the tradeoff between quality and economy. In general, the higher the quality of a video, the more expensive the hardware you need to play it properly. More particularly, you'll face questions such as:



How many colors: 8-bit, or better?

What size and visual quality are required?

How good must the audio sound? Does it only include a voice, or does it include music that requires higher quality reproduction?

How much information will the playback equipment be able to handle? In particular, will the video be played back from a <u>CD-ROM</u> (which is slower than a hard disk, and therefore can't handle as much information)?



What are the file size limitations for your video?

Decisions about these and other questions come into play when you <u>build</u> a video. You control the quality and economy of your video by specifying the frame size of the video, the format of the video, the quality of the <u>audio</u>, the type of <u>compression</u>, <u>data rate</u>, <u>key frames</u>, <u>bit depth</u>, and other important factors.

Note: In addition to video format, you can build your video in other formats--as a series of bitmaps, if you want, or simply as an audio file.

Step-by-step Building a video

Menu commands Compression Build Output Format

Reference topics <u>Color palettes</u> <u>Compression tips</u> <u>Frame rate</u> <u>Frame size</u> <u>Sound characteristics</u> <u>Tips for using sound</u>



8. Saving your project

It's a good idea to save your project file often throughout the process of creating your video, as you do for any important work. Not only do you avoid losing work in the event that a system failure or other problem occurs, but you can use the current project as the basis for creating different versions of your video in the future.

Step-by-step Saving a project



Reference topics

<u>Color palettes</u> <u>Filters (descriptions)</u> <u>Frame rate</u> <u>Frame size</u> <u>Media file formats</u> <u>Sound characteristics</u> <u>Tips for using sound</u> <u>Transitions (descriptions)</u> <u>Compression tips</u>



Color palettes

Reference topics



If you create a video in DVP to play back on an <u>8-bit</u> display system (such as a standard SVGA video system), you'll get the best color results if you learn how to work with <u>palettes</u>. When you work in DVP, you generally use color palettes for two reasons:

To reduce the thousands or millions of colors in your project's <u>images</u> and <u>video</u> clips to the 256 colors <u>available</u> for playing back the output video at the best quality possible.

To prevent <u>palette shifts</u> when you use your video in a presentation, which has its own palette. Only 8-bit formats use palettes. These include <u>bitmaps</u>, <u>animations</u>, and videos created with RLE compression or Microsoft Video 1 compression. If you are creating a <u>high-color</u> video, you may not need to be concerned about color palettes.

Creating and applying palettes is particularly important (and challenging) for video; one segment in a video may look best using one palette, while another segment requires a completely different palette. Although you can apply different palettes to different portions of a video, the resulting palette shifts during playback are distracting and generally not acceptable for professional-quality productions. The best solution is usually to optimize one palette for each video, even though this may mean compromising the overall quality of 8-bit color reproduction. More commonly, if you combine two or more video sources in DVP, DVP can create an <u>optimized</u> palette that all the combined media sources can use.

Most images have a palette stored with them, which generally contains the 236 most common colors in that particular image. (Although 8-bit video can display up to 256 colors, Windows reserves 20 of these colors for its own use.) When you display an image that contains more than 236 colors, Windows uses the palette to determine which 236 colors it should display. If the palette is optimized correctly, the image displays at the best quality possible, given the limits of your system.

Note: If you're creating video sequences for 8-bit systems, you should use an 8-bit video format. If you play 16- or 24-bit videos on an 8-bit system, the video is automatically mapped to a palette and displayed. However, high-color video sequences use <u>dithering</u> to display color information properly on an 8-bit display adapter. Dithering slows color display and lowers the quality of color reproduction.

When you work in DVP, the program uses its own palette to prevent palette switching; all <u>thumbnail</u> images are mapped to this palette. Everything in the <u>Media Window</u>, on the <u>timeline</u>, or in a video that is paused in a <u>Player</u> is displayed using the DVP palette. When you play a video clip in a Player, DVP switches to that video's palette. When playback is complete or paused, DVP switches back to its own palette. (If you want to avoid switching palettes, check Play Video Using DVP Palette in the <u>Player Options</u> dialog box, which maps video playback to the DVP palette.)

The DVP palette is stored in the DVP.PAL file. If you delete this file, DVP uses a grayscale palette in its place.

Step-by-step Loading a palette Optimizing a palette Saving a palette

Menu commands Create Optimal Palette



Filters (descriptions) Reference topics

DVP comes with several filters, which you can apply to a video track one at a time or in combination.

Filter	Description	Options
Fade to Black	Current video fades to black.	Out To Black In From Black
Fade to White	Current video fades to white.	Out To White In From White
Black and White	Current video loses color.	None
Invert	Red, green, or blue channels invert to their opposite color.	Red Channel Green Channel Blue Channel
Ripples	Current video warps like ripples in water.	Number of Waves Wavelength
Color Balance	Red, green, and blue values of current video are adjusted.	Red Green Blue
Brightness and Contrast	Brightness and contrast of current video are adjusted.	Brightness, Contrast
Tile	Current video is replicated in multiple tiles.	Vertically <i>n</i> Times Horizontally <i>n</i> Times
Blur	Current video is blurred.	Amount of blur
Sharpen	Current video is sharpened, enhancing details.	Amount of sharpening
Emboss	Current video is given a sculpted appearance.	None
Chalk Drawing	Current video is outlined, as if drawn on a blackboard.	None

Menu commands <u>Filters</u>



Frame rate

Reference topics

The value for <u>frame rate</u> specifies the number of frames per second for your new video. AVI files typically play 15 to 18 frames per second (fps), which provides a realistic sense of motion. Higher frame rates of up to 30 fps (the frame rate of television in the U.S.) provide smoother motion, but also result in much larger video files and require a video board to run smoothly. Frame rates lower than 15 fps result in smaller video files but can be rough or jerky when played back.

It's particularly important to consider frame rate in your DVP video when you use clips from files that have different frame rates. The default option for frame rate in the <u>Output Format</u> dialog box (Maintain Frame Numbers) specifies that video be inserted on a frame-by-frame basis.

For example, if one video clip is 20 fps, but you are inserting 5 seconds from a 10 fps video clip, all 50 video frames of the second clip will be inserted into the new video. At the new frame rate of 20 fps, the 50 frames result in only 2.5 seconds of video. However, since audio is time-dependent, you will have inserted a full 5 seconds of audio into the new video. Therefore audio and video from the source clip will no longer be synchronized.

To maintain video/audio synchronization while mixing frame rates, select Synchronize Video in the Output Format dialog box. This option causes video frames to be dropped or added as needed to maintain the full 5 seconds of video at the new frame rate. This option can also be used to create slow-motion and fast-motion effects.

To prevent dropping or adding frames when you are editing files that have similar frame rates, select Maintain Frame Numbers.

Step-by-step Building a video

Menu commands Output Format



The size of your video onscreen is expressed in X and Y <u>pixel</u> values. The X value is the horizontal dimension, and the Y value is the vertical dimension. In DVP, you select the frame size in the <u>Output Format</u> dialog box.

Many .<u>AVI</u> files have a frame size of 160 pixels by 120 pixels. Although larger frame sizes may look better, they also require more disk space and a faster machine on which to play back. For example, a 320-pixel-by-240-pixel video requires four times the disk space, and may play back with jerky motion, compared to the same video at 160 pixels by 120 pixels. Selecting a frame size, then, depends on the amount of space available for storage and the capabilities of the systems used to play it back.

Step-by-step Building a video

Menu commands Output Format



Media file formats Reference topics

Reference

A large number of media types currently exist for storing images, audio, and video. Each of these types also has a number of attributes, such as <u>compression</u>, <u>data rate</u>, and <u>frame size</u>. Although DVP handles the combinations of attributes, occasionally you may need to adjust some formats.

Tip: To view the format information about a media clip, double-click the thumbnail image in the Media Window, or select the clip and choose <u>Media Statistics</u> from the File menu.

The default format in DVP is the <u>Audio/Video Interleaved (.AVI)</u> format. .AVI allows both video and audio to be stored together for synchronous playback.

The format DVP uses for audio-only files is the <u>wave audio (.WAV)</u> format. Use this format to store music and narration that do not require accompanying motion video.

The formats DVP uses for animation files are <u>.FLI</u> and <u>.FLC</u> formats. These formats do not include audio information. Also, the format is not synchronous; unlike .AVI files, which, if played on a slower machine, skip video frames as necessary to keep in time, .FLI and .FLC files slow down in order to display every frame.

Still image information can be stored in a variety of bitmap formats: .BMP, .DIB, .GIF, .PCX, .TIF, and .TGA.

Step-by-step Importing a media clip

Menu commands Import Media Output Format



Sound characteristics

Reference topics



An integral part of every video is the soundtrack. Understanding how to use audio in DVP requires a grasp of a few key ideas.

K

Channels Mono plays the same audio through both channels, while stereo has two separate channels. Typically on the computer, stereo is only used for high-fidelity music applications or sound effects.

Sample size The amount of data in each <u>sample</u> of audio. Most desktop applications use 8-bit sampling; 16-bit sampling is equivalent to CD-quality sound.

Sample rate The number of audio samples per second, expressed in kilohertz (kHz). The higher the sample rate, the better the sound quality (and the more space required). DVP works with audio files sampled at 11.025kHz, 22.05kHz, and 44.1kHz.

Higher quality audio is not always the best choice. For example, an audio track that is 44.1kHz, 16-bit stereo requires sixteen times the space of the same audio sample at 11.025kHz 8-bit mono. Because the amount of data in an audio stream can drastically reduce the playback performance of the video, you should always use the lowest acceptable quality for audio.

Menu commands Audio Cross-Fade Audio Level

Reference topics



Tips for using sound



Selecting what your audience will hear, and how they hear it, is critical to the quality of your videos. If you record your own sound, always make sure your audio track is loud enough by positioning your microphone as close as possible to the sound source. You might find that an external microphone with a long cord helps you get professional quality sound. When recording a soundtrack for editing, keep in mind that the quality of audio recording on a hi-fi camcorder is probably better than any nonprofessional recording equipment you may own.



Narration If the video is not self-explanatory, a <u>voiceover</u> can be an important tool for clarification. When using narration, remember to fade down music or any other sound during narration segments. With DVP, you can easily add narration by dropping it on the unused audio track. If necessary, you can fade the other audio track to accommodate the narration.

Music Select music based on the mood, tempo, and energy you want to convey. You can add music from any audio source (provided that you have secured copyright permission as necessary), including libraries of stock music on CD-ROM.

Remember to fade music in and out to avoid any abrupt blast of sound. If you need to add both narration and music to an original soundtrack, add the narration first, then build the video. Afterwards, load the new video, place it on the Video A and Audio A tracks, and then add music to the Audio B track.



Rhythm Videos look most professional when a video cuts from one scene to another with the rhythm of the sound. Make your cut when the tempo of the music changes, or when the narrator pauses. In DVP, you can use the waveform graphs on the audio tracks to locate these changes and pauses.



Transparent editing Audio from one scene can lead into the next, producing a smoother transition. Creating this type of smooth transition is called transparent editing. For example, from one scene you can continue the audio track of a conversation for a couple of seconds into the next scene, so the audience sees the beginning of the second scene while hearing the end of the conversation.

Menu commands Audio Cross-Fade Audio Level

Reference topics Sound characteristics



Transitions (descriptions) Reference topics

When two video tracks overlap, DVP automatically adds the default transition, a wipe. You can modify the transition by applying one of the transitions below.

Transition	Description	Options
Wipe	New video gradually covers old video.	Wipe Direction
Dissolve	Old video fades into new video.	None
Iris	Old video opens up into new video.	Iris Shape
Clock	New video covers old video in circular motion.	None
Slide In	New video slides onscreen, covering old video.	Slide In Direction
Slide Out	Old video slides offscreen, revealing new video.	Slide Out Direction
Band Slide In	Bands of new video slide into view, covering old video.	Vertical or Horizontal Number of Bands
Band Slide Out	Old video splits into bands and slides off, revealing new video.	Vertical or Horizontal Number of Bands
Barn Doors	Old video splits to reveal new video.	Orientation Doors Slide
Blinds	New video wipes over old video in several bands.	Vertical or Horizontal Number of Blinds
Push	New video pushes old video offscreen.	Push Direction
Blocks	Blocks of new video appear, covering old video.	Grid Remove Blocks
Fizzle	Old video "fizzles" pixel by pixel into new video.	None
Blizzard	Old video "blows away, revealing new video.	None

Step-by-step Modifying a transition effect

Menu commands Transitions



Compression tips

Reference topics ١.

Video compression modifies a video file to decrease its size.

Video sequences are compressed and decompressed by special routines called codecs. You use the compressor portion of a codec when you create a video; when you play back the video, the codec decompresses the video so it can be displayed on your computer system.

You can choose from among several types of compression when you create a video in DVP. The one you choose depends on the quality you need (meaning both the appearance of the video and how smoothly it plays); file size limitations; and the time required for compression and playback. You may need to experiment to determine which compression method works best for your video.

Avoid applying multiple compression methods to a video sequence. Most methods result in some loss of quality. and the loss is compounded if multiple techniques are applied. When experimenting with compression settings, save the original uncompressed version of your video sequence.

If you own a video capture board, you may have received other compressor drivers than the codecs that come with DVP. For details, refer to your video capture board's documentation.

DVP includes these codecs:

E. Microsoft Video 1 Combines good playback quality with relatively quick compression time. If you use the 8-bit format, you can specify which palette to use in the video sequence, providing better control over the palette colors than compression methods using an automatic dithering technique. This method does not support 24-bit color.

٦. Cinepak Codec by SuperMatch Provides excellent compression for video sequences delivered on CD-ROM. Cinepak provides good image and motion guality at CD-ROM data-transfer rates. The video sequence is stored using the 24-bit color format, which preserves much of the original video's color information. When playing on 8-bit displays. Cinepak uses dithering to transfer the 24-bit color values to an 8-bit palette format. Cinepak uses an asymmetric compression technique, one that takes much longer during compression than during playback.



Intel Indeo Video R3.2 Provides high-quality video for delivery on CD-ROM and other systems. Indeo uses an asymmetric compression technique and stores the video in a 24-bit color format. When played on 8-bit video display devices, the codec dithers the 24-bit color to an 8-bit format. Intel recommends using a key-frame interval of



Intel Indeo Video Raw Creates smaller video files by separating the color information differently rather than by compressing the file. Available on any video capture board that uses the I750 compressor chip, such as the Intel Smart Video Recorder or Creative Labs Video Blaster RT300. Offers you a viable way to reduce file sizes during video capture and then apply more significant compression later in your video production process.

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Microsoft RLE Provides compression best used for computer-generated animation, bitmaps, and media that have relatively uniform color. The quality suffers and file size increases with more complex video scenes, such as live video that you're capturing directly from a video camera. You can use this method only when producing 8-bit video sequences.



Full Frames (uncompressed) Saves each frame in the video as an uncompressed bitmap. If the sequence was already compressed, the bitmaps will show any distortions introduced during compression. While it can save some time to do rough-cut editing in this format, only compressing after the final cut, DVP's drivers minimize recompression.

Step-by-step Building a video

Menu commands Compression (command)



Importing a media clip

Step-by-step

Importing media <u>clips</u> into a project is the first step in editing a video. DVP imports only information about the location of the file on your hard disk or CD-ROM; the file itself is not moved, copied, or altered.

To import a media clip:

- 1. Click the Import Media button on the tool bar. Or choose Import Media from the File menu.
- 2. In the Import Media dialog box, select one or more media files you want to import.
 - Press Ctrl as you click to select more than one file.

By default, all valid file types are in the dialog box. To list only files of one type, select a file type from List Files Of Type.

If you want to preview an .AVI or .WAV file before importing it, click Preview after selecting the file, then click the play forward button that appears. To preview additional media files, continue to select files and click the play forward button.

3. Click OK.

The file or files you selected appear in the Media Window.

Note: To import a media clip, the file extension must correspond to the driver installed on your system. File extensions for each installed driver are shown in the Import Media dialog box.



Saving a project



When you save a project, you're saving information about the arrangement of media <u>clips</u>, <u>transitions</u>, <u>filters</u>, and <u>titling</u> on the timeline, as well as information about the location of the associated media files on your hard disk or CD-ROM. Saving a project does not create or save your video; to do that, you must build your video.

To save a project:



Choose Save Project from the File menu.

If the project has never been saved, the Save Project dialog box appears, in which you name the project. By default, DVP adds the file extension .PRJ.

You can save a new version of an existing project when, for example, you want to create several versions of a video.

To save a new version of an existing project:



Choose Save Project As from the File menu.

The Save Project dialog box appears, in which you type a new name for the project. By default, DVP adds the file extension .PRJ.

Step-by-step Building a video



Starting a new project



When you start DVP, the program automatically opens a new <u>project</u>, into which you can import media files for viewing and editing. You can also start a new project after working on an existing one. However, only one project can be open at a time.

To start a new project:



Choose <u>New Project</u> from the File menu.

DVP opens a new project file and clears the <u>timeline</u> of all existing clips and effects. If you have not saved the changes you made to an existing project, DVP prompts you to save these changes before clearing the timeline. Media clips from the previous project remain in the <u>Media Window</u> of the new project. You can then import additional clips, or remove unneeded ones.
Step-by-step Importing a media clip

Menu commands Import Media Open Project



Adding a clip to the timeline



You add a clip to the timeline by dragging it either from a Player or from the Media Window.

To add a clip to the timeline:



Drag the clip from a Player or from the Media Window to the position on the tick bar where you want it to

DVP adds the media file to the timeline on the appropriate track (video, audio, or overlay) at the position of the cursor (unless the Snap Cuts To End option is checked in the <u>Options</u> dialog box). For video segments that contain sound, DVP adds the video portion of the segment to a video track, and the sound portion to an audio track.

If you drag a clip from a Player in which you've marked <u>edit points</u>, DVP adds only the marked segment to the timeline. Otherwise, DVP adds the entire clip to the timeline.

You can also drag a clip directly from the Media Window to the track on which you want it to appear. If you add a video clip containing audio to an audio track, only the audio portion is added.

Step-by-step Moving a clip on the timeline



Moving a clip on the timeline



You can move a <u>clip</u> by <u>dragging</u> it from one position to another on the <u>timeline</u>, or by cutting and pasting it. When you cut or copy a clip, DVP places a copy of the clip on the DVP <u>clipboard</u>, so you can subsequently paste it as many times as you want. You can also move a portion of a clip.

To move a clip by dragging:



Click the clip to select it, then drag it to a new location. DVP moves the clip to start at your new insertion

To move a clip by cutting and pasting:

- 1. Click the clip to select it.
- 2. Click the Cut button on the tool bar, or choose <u>Cut</u> from the Edit menu (Ctrl+X).
- Click where you want to position the clip on the timeline.
 You can move a clip to either video track, either audio track, or to the Overlay track. However, if you add a video clip to an audio track, only the audio track actually gets added (if the video clip has an audio track).
- 4. Click the Paste button on the tool bar, or choose Paste from the Edit menu (Ctrl+V).

To move a section of a clip:

- Press Ctrl and drag along the clip to select the portion you want to move. Make sure the clip is not selected before you press Ctrl and drag.
- Continue pressing Ctrl as you drag the segment to a new position on the track, or to a different track. When you move a section of a clip, the section is either <u>deleted</u> or <u>erased</u> from the original clip, depending on the Cut/Paste option setting in the <u>Options</u> dialog box.

Note: You can select a portion of all tracks simultaneously by pressing Ctrl and dragging along the <u>tick bar</u>. Continue to press Ctrl as you move the selection to its new location.

Step-by-step Adding a clip to the timeline Copying a clip

Menu commands Duplicate Undo



You can copy a clip from the timeline and then paste the copy back onto the timeline.

To copy a clip:

- 1. Click the clip to select it. Or press Ctrl and drag along the clip to select the portion you want to copy.
- **Note:** If you want to select a portion of a clip, make sure the clip is not selected before you press Ctrl and drag. 2. Click the Copy button, or choose <u>Copy</u> from the Edit menu.
- DVP places a copy of the clip on the DVP Clipboard. You can then <u>Paste</u> the clip, or paste multiple copies of it by <u>Duplicating</u> it.

Step-by-step Adding a clip to the timeline Moving a clip on the timeline



Playing a clip



You can preview an individual clip in your project (except .FLC and .FLI clips) at any time.

To play a clip:

- 1. Click a clip to select it in the Media Window or on the timeline.
- 2. Drag the clip to a Player window.

The Player immediately plays the clip if Play Clip Automatically is checked in the Player Options dialog box. Otherwise, you need to click the play forward button. If you drag the clip from the Media Window, the entire clip plays. If you drag a clip from the timeline, only that clip plays (although the clip may be part of a longer clip in the Media Window).

You can pause, play, step forward, and step backward through the clip using the Player controls.

Tip: You can play the last video you built (since you started DVP) without importing it into the project. Choose <u>Play</u> <u>Last Built</u> from the Video menu.

Step-by-step Building a video Previewing a video



Marking a clip segment



You <u>mark</u> a segment to define the range of a clip that you want to use in your project. You can choose the beginning and ending frames of a clip as you preview the clip in the Player window, or you can specify the frame numbers of the beginning and ending frames.

To mark a clip segment:

1. <u>Drag</u> the clip to a <u>Player</u> window.

The clip begins playing immediately if Play Clip Automatically is checked in the Player Options dialog box. Otherwise, click the play forward button to preview the clip.

Note: DVP can play all types of media files except <u>.FLC</u> and <u>.FLI</u> files.

- 2. When the clip reaches the frame where you want the segment to begin, click the <u>Mark In</u> button. This marks the current frame as the beginning of a segment.
- 3. Play the clip until it reaches the frame where you want the segment to end, and click the <u>Mark Out</u> button. This marks the current frame as the end of a segment.

For fine adjustment, use the Player control buttons to <u>step forward</u> or <u>step backward</u>, and then click the Mark In or Mark Out button.

Important: If you know the frame number of your beginning and ending frames, you can mark those frames without playing the video clip. Press the Ctrl key as you click either the Mark In or Mark Out button. Then specify the particular frame number and click OK. You'll find this technique particularly useful when you work with long video clips.

You have now chosen a set of <u>edit points</u> for this clip. If you drag the clip from the Player window onto the timeline, only the marked segment appears on the timeline and is included in the output video. If you change your mind about the location of the edit points, you can simply choose new ones by repeating this procedure and clicking new Mark In and Mark Out locations.

Maps of screen elements <u>DVP window</u>



Modifying a transition effect



When you add a <u>clip</u> to a video track on the <u>timeline</u>, and it overlaps a clip on the other video track, DVP automatically assigns a default <u>transition effect</u> effect (a wipe) to the <u>Trans. track</u>. This makes one clip in your output video flow smoothly into the next. You can easily modify the transition by choosing another type of effect. In addition, you can specify options for many of the transition effects.

To modify a transition:

- 1. Double-click the transition on the Trans. track.
- In the Transitions dialog box, select a thumbnail effect.
 A description of the selected effect appears at the top of the dialog box, and the selected thumbnail demonstrates the transition. Scroll the display in the All Transitions box to view other transition effects.
- Click Options to specify options for the transition effect.
 The thumbnails demonstrate only the basic transition effect, and not the options that you specify.
 You can preview the transition by clicking the play forward button.
- 4. Click OK to close the Transitions dialog box and apply the effect.

Step-by-step Removing a transition effect



Removing a transition effect



Because a <u>transition</u> is necessary any time a clip in one video track overlaps a clip on the other video track, removing a transition effect restores the default transition effect, a wipe.

To remove a transition effect:

- 1. Click the transition on the Trans. track to select it.
- 2. Press Delete.

Step-by-step Modifying a transition effect



Previewing a video



As you work, it's helpful to check your progress. When you preview a video, DVP plays all the visual tracks in the timeline simultaneously: all video, transitions, and other visual effects. Because of the complexity of mixing all tracks, a video preview generally runs more slowly than the final output video.

To preview a video:

- 1. Click the tick bar where you want the preview to begin.
- 2. From the Video menu, choose Preview.
- A preview window appears.
- 3. Click the play button in the preview window.

The video plays one frame at a time.

You can play or pause the preview with the button in the lower left corner of the preview window. If you modify the clip in the timeline, the preview window immediately reflects your changes. To close the preview window, double-click the control-menu box in its upper-right corner.

Step-by-step Building a video Playing a clip



Building a video

Step-by-step

Building is the final step in creating a video. Building a video can be a time-consuming task for your computer. Before you start the build, make sure that

all the clips are edited and arranged on the timeline as you want them.

transitions, filters, titling, and other effects are as you want them.

you've specified the format for the output video.

you've specified the compression options for the output video.

you've determined the best way to handle the color palettes in 8-bit output video.

you have enough disk space for the video.

you've <u>previewed</u> the video to make sure it contains what you expect.

Note: Because fragmentation of your hard disk can effect the quality of the video, you should run a utility to determine whether your drive is fragmented and, if necessary, defragment it before building a video.

Once you've ensured that preparations are complete, you're ready to build the video.

To build a video:

- 1. Choose Build from the Video menu.
- 2. In the Build dialog box, select options for your video.
- 3. Click Build.

The Build Progress window appears, in which you can view the output video as DVP builds it.

Note: The time DVP requires to build a video ranges from a few minutes to several hours, depending on the type of computer you use, the size and length of the clips, the format of your video, the type of compression, and the effects you applied.

Step-by-step Previewing a video Reference topics Compression tips



Adding and editing titles



In DVP, you can quickly create <u>titles</u> and add them to your video. You can specify fonts and colors, and animate your titles (for example, moving, magnifying, or rotating them).

You add titles to the <u>Overlay track</u>. A project can contain only one overlay; if you need to overlay other tracks in addition to titles, you can build an intermediate video and reimport it to one of the video tracks.

To add and edit titles:

- 1. Select the section of the clip that the title will overlay.
- 2. Choose Titling from the Effects menu.
- 3. If you did not select a segment, in the Title Frames dialog box, specify the frames in which the titles should appear, then click OK.

The Titling dialog box appears.

4. Type your titles in the Edit Title box.

Type each title on a separate line.

5. With a line of type selected, apply <u>font</u> attributes or a foreground color by clicking the buttons at the top of the dialog box.

Note: When you build your video, DVP displays the text on top of the video.

- 6. Apply frame ranges in the Title Frames box.
- 7. Click Path to adjust the path (the position, movement, zoom, and rotation) of each line of text, then click OK.
- 8. Click OK to close the Titling dialog box.

The titles appear on the Overlay track. Unlike other clips, you cannot move or copy titles on the timeline. Instead, to modify an existing title track, double-click the title on the Overlay track. You can delete a title clip just as you do any other clip: select the clip and press Delete.

You can preview your titles by choosing Preview from the Video menu.

Tip: You can apply a different set of attributes to each line of text in your titles. For example, to display text with two different sets of attributes simultaneously, you apply the attributes to each line of text, and assign them the same frame ranges, then adjust their positions by selecting each title and clicking Path.

Menu commands Titling



Capturing video using an MCIVCR device

Step-by-step

With an MCIVCR-compliant video cassette recorder, you can use DVP Capture to specify exact starting and ending points for capturing from a videotape; you can capture up to ten video segments as a single unattended batch job. In addition, using an MCIVCR device can improve the quality of the capture, since you can specify that DVP step through the capture one frame at a time.

To set up an MCI capture session:

- 1. Choose Settings from the Capture menu in DVP Capture. The Capture Settings dialog box appears.
- 2. Check Enable MCI Capture, then click MCI Settings. (This option and button are available only if an MCIVCR capture device is correctly installed in Windows.)

The MCI Capture dialog box appears. The MCI Driver list contains the currently-installed MCIVCR devices.

- 3. From the MCI Driver list, choose the VCR device you plan to use.
- 4. If necessary, check the Step Capture option.

With Step Capture checked, the MCI device steps through the video one frame at a time, allowing DVP to capture and store each frame sequentially. Depending on your capture hardware, you may achieve better image quality and compression by enabling Step Capture, because DVP will not need to drop frames. This option is particularly helpful when the capture is demanding, such as when you specify a large frame size, high-quality compression, and high frame rate for the capture.

When you use Step Capture, make sure that you capture the video to disk by choosing Capture To Disk in the Capture Settings dialog box. Choosing this setting ensures that your MCI driver has the memory it needs to perform the task. However, because Step Capture can require significantly more time than normal capture, you should use Step Capture only if necessary. If you can achieve acceptable quality using normal motion capture, do so.

If you have pre-allocated disk space (using the <u>Allocate File Space</u> command on the File menu in DVP Capture), the first file listed in the list is the pre-allocated capture file. Keep in mind that only the first video you capture can use this file.

- 5. To add a capture file, click New.
 - The Add New Video dialog box appears.
- 6. Select or type the name for the capture file.
- 7. Specify the Start and End times for the capture.

These specifications should be in <u>timecode</u> (HH:MM:SS:FF); for example, 00:08:18:03. To use the current frame as either the start time or end time, click the cursor in the Start Time or End Time box and click the Use Current Frame button.

8. Click OK to close the Add New Video dialog box.

9. Continue to modify the capture list as desired.



To add additional video captures to the list, repeat steps 5 through 8.

To modify a capture specification you've already added, select the capture file in the list and click Edit.

To delete a capture specification, select the capture in the list and click Delete. When the capture list is complete, click OK.



Copying a palette



You can copy a palette from one portion of a media file and apply it to the entire output video.

At any time, you can examine the list of current video palette by choosing <u>Show Current Palettes</u> from the Palette menu.

To copy a palette from an existing media file:

- 1. Ctrl+click to select a frame on the timeline that contains the desired palette.
- 2. Choose Copy Palette from the Palette menu.
 - The <u>Copy Palette</u> dialog box appears.

By default, From File (the palette for the frame you selected) is selected. (If you have already applied a palette to the project, From Movie copies the existing movie palette to the Windows Clipboard.)

Note: If the selected file does not use palettes (that is, if it has 16 or more bits), the option is unavailable.

- Click the Copy button.
 DVP copies the palette to the Windows Clipboard, and the Paste From Clipboard dialog box appears, allowing you to paste the palette into the video.
- 4. Click Paste to paste the palette into the video.

DVP pastes the palette into the project, where it is applied to all frames when you build an <u>8-bit</u> output video. The palette remains on the Windows Clipboard until you cut or copy something else. If you wish, you can open and paste the palette into another project.

Step-by-step Loading a palette Optimizing a palette Saving a palette

Reference topics



Optimizing a palette

Step-by-step

When you build an <u>8-bit</u> video, DVP can automatically create an <u>optimized palette</u> and apply it to the output video. However, if you want to include a <u>background palette</u> in your video, or if you want to optimize over a certain range of frames, you can create a custom optimized palette as described here.

To optimize a palette:

- 1. Choose Create Optimal Palette from the Palette menu.
 - The Optimize Palette dialog box appears.
- 2. Click Whole Video to create the optimized palette based on all video frames in the video, or click Section and select a range of frames on which to base the palette.
- 3. If you want to include background colors in the optimized palette for your video, click Options. Otherwise, skip to Step 5.

The Optimization Options dialog box appears.

- Click Set Background, then click OK.
 Note: To include background colors in the optimized palette, you must have copied the palette you want to include to the Windows <u>Clipboard</u>.
- 5. In the Optimize Palette dialog box, click OK.

A preview window appears as DVP creates the palette. You can stop building a palette by clicking Stop Build. When DVP finishes creating the optimized palette, it applies the new palette to your video and places a copy on the Windows Clipboard. Step-by-step Copying a palette Loading a palette Saving a palette

Reference topics



Loading a palette

Step-by-step

If you have <u>saved a palette</u> to a file, you can open the <u>palette</u> file and apply the palette to your video.

To load a palette:

- 1. Choose <u>Open Palette</u> from the Palette menu.
- The Open Palette dialog box appears.
- Locate and select the palette file you want to open, then click OK.
 DVP places the palette on the Windows <u>Clipboard</u>. The Paste From Clipboard dialog box appears, confirming your choice to apply the palette to your video.
- 3. Click Paste to apply the palette to your video. Or, if you want to use the palette later as a background palette, click Cancel. (The palette remains on the Windows Clipboard until you cut or copy something else.)

Step-by-step Copying a palette Optimizing a palette Saving a palette

Reference topics



Saving a palette

Step-by-step

DVP lets you save a <u>palette</u> as a file that you can use in future editing sessions or apply to other videos.

To save a palette:

- If necessary, copy the palette you want to save to the Windows <u>Clipboard</u>. DVP saves the palette that is on the Windows Clipboard, regardless of its source. To copy a palette from your current video, see <u>Copying a palette</u>.
- 2. Choose <u>Save Palette As</u> from the Palette menu. The Save Palette dialog box appears.
- 3. Type a name for your palette and select a directory in which to save it, then click OK. DVP saves the palette with the name you specify.

Step-by-step Copying a palette Loading a palette Optimizing a palette

Reference topics



Capturing video

Step-by-step

You can use <u>DVP Capture</u> to <u>capture</u> video from a VCR or videodisc player and save it as an <u>.AVI</u> file that you import into DVP. The procedure below describes the basic steps for capturing a video; however, you may need to experiment with these steps to obtain the best quality possible on your system.

Tip: Capturing video is demanding for both your computer and its hard disk. You can prepare for the best possible capture by defragmenting your hard disk using any of the commercially available defragmentation programs. In addition, capturing video works best if you capture to an uncompressed drive (that is, a drive on which you're not using Stacker or DoubleSpace).

To capture video:

1. Choose <u>Video Capture</u> from the Tools menu in DVP.

If you start DVP Capture from within DVP, the capture video is automatically added to the <u>Media Window</u>. You can also start DVP Capture by double-clicking the DVP Capture icon in Program Manager, but you'll then need to import the captured video into a DVP project.

Note: You must have a video capture board installed on your system for DVP Capture to start.

Set the file name you will be capturing to, and allocate space for the captured file.
 You set the file name by choosing <u>Set Capture File</u> on the File menu in DVP Capture.
 You allocate space for the captured file by choosing <u>Allocate File Space</u> from the File menu in DVP Capture.

3. Set capture options:

Option	Description
Audio Format (Options menu)	Options for capturing audio.
Video Format (Options menu)	Frame size and other settings supported by your capture board.
<u>Settings</u> (Capture menu)	General capture settings.
Compression (Options menu)	Compression methods you can use for saving the captured video, as well as other options that affect the quality (and file size) of the video.
Video Source (Options menu)	Settings for the video signal from your capture board, if your video capture board supports these features.
<u>Video Display</u> (Options menu)	Settings for your capture board's video signal, if your video capture board supports its own VGA monitor output.

4. If your video capture board supports <u>8-bit</u> video formats (many do not), you can apply an 8-bit palette to the captured file.

For more information, see Palette (DVP Capture).

5. Set preview options.

You can choose from <u>Preview Mode</u> or <u>Overlay Mode</u>, if your video capture board supports video overlay.

- 6. Start playback on your VCR or other video device.
- 7. Capture the video.

You start capturing by choosing a command from the Capture menu or by clicking a button on the tool bar. You have four options for capturing.

Option	Description					
Single Frame	Captures the current frame.					
<u>Frames</u>	Captures video as a series of individual bitmaps.					
<u>Video</u>	Captures motion video.					
<u>Palette</u>	Captures the palette of the current frame, which you can then save or apply to the entire capture file.					

8. If necessary, end the capture by pressing Esc.



Playing back your video

Step-by-step

After building a video file, you can play it back using DVP, Media Player, or another video tool, such as VidEdit, that supports <u>.AVI</u> files. When you install DVP, the Setup program also installs Media Player and the .AVI drivers you need on your hard disk.

To play a video file in DVP:

- 1. Start the DVP program.
- 2. From the File menu, choose Open Project.
- 3. Select the DVP file you want to play, then click OK.
- 4. Drag the file from the Media Window to a Player. The clip starts playing immediately if Play Clip Automatically is checked in the Player Options dialog box. Otherwise, click the play forward button to play your video file.

To play a video file in Media Player:

- 1. Start Media Player.
 - If necessary, use the DVP installation disks to install Media Player first.
- 2. From the File menu, choose Open.
- 3. Select the file you want to play, then click OK.
- 4. Click the Play button.

Step-by-step <u>Playing a clip</u> Sending your video to someone



Sending your video to someone

Step-by-step

When you distribute the video files you build in DVP, you need to make sure that your audience has the appropriate <u>.AVI</u> drivers installed on their hard disks, so they can play back the files. (Your audience does not need special hardware to play back DVP files, but playing them on an i486 or Pentium system ensures that your files perform well.)

We included a disk called Video for Windows Runtime Setup with the DVP installation disks to make your video file distribution easier. This disk contains all the driver files your audience needs to view your DVP video. You can copy the entire contents of this disk to another disk to include with your DVP video. You may also want to include instructions (like the sample ones below) on how to install the files and play the video.

To install the Video for Windows runtime files:

- 1. Insert Video for Windows Runtime Setup into an appropriate disk drive.
- 2. From the File menu in the Program Manager, choose Run.
- 3. In the Command Line box, type b:\setup (or specify another disk drive if necessary).
- 4. Click OK, then follow the installation instructions onscreen.

The necessary .AVI drivers are installed along with Media Player, which lets you use the drivers to play the video.

To play a DVP video:

- 1. Copy the DVP video files to your hard disk.
- 2. Locate and run Media Player.
- 3. From the File menu, choose Open.
- 4. Select the file you want to play, then click OK.
- 5. Click the Play button.

Step-by-step <u>Playing a clip</u> <u>Playing back your video</u>



DVP window Click the area of the Asymetrix Digital Video Producer window that you'd like to know more about. **Other maps...**

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Maps of screen elements DVP Capture window



DVP Capture window Click the area of the DVP Capture window that you'd like to know more about.



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Maps of screen elements <u>DVP window</u>

Open Project button Opens an existing DVP project file. Only one project file can be open at a time. Clicking this button is the same as choosing Open Project from the File menu.

Import Media button Imports any media files (.AVI, .BMP, .DIB, .FLI, .FLC, .GIF, .PCX, .TGA, .TIF, or .WAV) that you want to include in your project.

Choosing this command is the same as choosing the Import Media command on the File menu.

Build button

Displays options for the output video. When you choose options and click OK, DVP builds the video; if you need to specify compression, filter, or other options, do so before specifying build options. Clicking this button is the same as choosing Build from the Video menu.

Play Last Built button Plays the most recent output video. This command is available only if you have built a video since you started the current session of DVP.

Clicking this button is the same as choosing Play Last Built from the Video menu.

Cut button

Removes the selected media file or effect from the timeline and temporarily places it on the DVP internal clipboard. Clicking this button is the same as choosing Cut from the Edit menu.

Copy button Copies the selected media file or effect from the Media Window or the timeline and temporarily places it on the DVP internal clipboard.

Clicking this button is the same as choosing Copy from the Edit menu.

Paste button

Places a copy of a media file or effect onto the timeline. Clicking this button is the same as choosing Paste from the Edit menu.

Zoom In button

Magnifies the timeline to display it in smaller increments. Clicking this button is the same as choosing Zoom In from the View menu.

Zoom Out button

Reduces the view of the timeline to display it in larger increments. Clicking this button is the same as choosing Zoom Out from the View menu.

View Range button Displays the starting point and the number of frames to display on the timeline. You can view the current range, or choose a new view range.

Clicking this button is the same as choosing Set Range from the View menu.

Display Current Track Only button Displays only the timeline that currently contains the cursor, so that you can work with the media file on that track more easily.

Clicking this button is the same as choosing Display Current Track Only from the View menu.

Display All Tracks button Displays all six tracks (Video A, Video B, Trans., Overlay, Audio A, and Audio B) of the timeline simultaneously. You can then see how the media files are arranged relative to one another as you work.

Clicking this button is the same as choosing Display All Tracks from the View menu.

Point & Click button

A button on the DVP tool bar that you use to get information about features in the DVP window. Click the Point & Click button and then click an area of the DVP window to get information about the area of interest.

Trans. track

The track on the timeline where transitions are located.

Overlay track The track on the timeline used to overlay images, videos, or titles.

Cut and Paste indicators These indicators display the current setting for the Cut/Paste option (which is located in the Options dialog box).

Media Window

The location where media files that are part of the project are stored. When you import a media file, DVP adds the file to the Media Window. Media files must be added to the timeline to appear in your output video.

Tool bar

The place where buttons for commonly-used DVP tools are located. Click the Point & Click button at the bottom of the tool bar, then click the button you want information about.

Tick bar The area just above the timeline that displays the current view range in frame numbers.

Timeline

Six tracks used for constructing new videos. You drag clips from the Media Window or drag segments from the Player windows onto a timeline track. You can then arrange the clips on the timeline in the way you want them to play in your video.

Video track

Either of two tracks on which videos are located.

Audio track

Either of two tracks on which audio clips are located.

Title bar The area at the top of the DVP window that indicates the name of the project file that is currently open.

Menu bar

Located below the title bar, along the top of the DVP window. The menu bar contains all DVP commands. To view the contents of a menu, do one of the following:



Within DVP, click the menu name with the mouse.

Within DVP, press Alt+*n* (the underlined letter in the menu name).

Player preview window Plays videos or images that you drag into the Player.

Clip indicator Highlights the segment of the clip that you have marked.

Player The area in the DVP window that you use for viewing and editing video files. If the clip is an audio-only clip, the window remains dark as the audio plays.

Exit button

Clears the Player, and restores it to its original size. (You can drag a new clip into the Player without clicking Exit. The older clip clears automatically.)

Video button

To view a clip without sound, click the Video button.

Audio button

To play the sound in a clip without viewing the video, click the Audio button.

Video and Audio button To play both video and audio, click the Video and Audio button.

Step Back button Moves the clip one frame backward.

Step Forward button Moves the clip one frame forward.
Jump To Start button Moves the clip to the first frame.

Jump To End button Moves the clip to the last frame.

Jump Back button Moves the clip back approximately 10 percent of its length.

Jump Forward button Moves the clip forward approximately 10 percent of its length.

Play Reverse button Plays the clip backward at normal speed.

Play Forward button Plays the clip forward at normal speed.

Pause button

Stops the clip at the current frame.

Frame Select knob

Drags the clip to a specific frame.

Edit Point indicator

Shows the current location of the Mark In and Mark Out points.

Mark In button

When clicked, marks the current frame as the beginning of the segment. The frame number is indicated in the display to the left of the button.

Mark Out button

When clicked, marks the current frame as the end of the segment. The frame number is indicated in the display to the left of the button.

Frame Counter

Indicates the current frame number and total number of frames in the clip.

Key frame indicator A "K" indicates that the current frame is a key frame.

Set Capture File button

Specifies the location and name of the file in which to save the current captured video. Clicking this button is the same as choosing Set Capture File from the File menu in DVP Capture.

Save File button

Saves the current capture file (which you specify using the Set Capture File command) to a new file. Clicking this button is the same as choosing Save Captured Video As from the File menu in DVP Capture.

Preview Mode button

When selected, DVP Capture displays video frames in the preview window as they are captured. When not selected, DVP Capture displays single frames in the preview window.

Clicking this button is the same as choosing Preview Mode from the Options menu in DVP Capture.

Overlay Mode button

When clicked, DVP displays the video signal as live video on your monitor, rather than digitized video. This button is available only if your video capture board supports its own VGA monitor output; otherwise, the button is dimmed. Clicking this button is the same as choosing Overlay Mode in DVP Capture.

Single Frame button

Captures the current frame and displays it. You can then save the captured frame by using the Save Single Frame command, or you can copy it and then paste it into another program.

Clicking this button is the same as choosing Single Frame from the Capture menu in DVP Capture.

Frames button

Captures a series of individual frames to the capture file. Clicking this button is the same as choosing Frames from the Capture menu in DVP Capture.

Video button

Begins capturing the input video to the capture file, using the frame rate and other capture settings that you've specified. You end a capture by pressing Esc (unless you've changed this option in the Settings dialog box). Clicking this button is the same as choosing Video from the Capture menu in DVP Capture.

Palette button

Creates an 8-bit palette based on your captured video.

Clicking this button is the same as choosing the Palette command from the Capture menu in DVP Capture. **Note:** This command is available only if your video capture board supports 8-bit video.

Capture Preview window

Displays video from your video source.

Menu bar

Located below the title bar, along the top of the DVP Capture window. The menu bar contains all DVP Capture commands.

To view the contents of a menu, do one of the following:



Within DVP Capture, click the menu name with the mouse.

Within DVP Capture, press Alt+*n* (the underlined letter in the menu name).



Load Palette File menu (DVP Capture)

Displays the palette files you can select and apply to an $\underline{8-bit}$ captured video.

Option	Description
File Name	Displays a list of available palette files. Select the palette file you want to open. When you click OK, DVP Capture opens the selected palette file.
List Files Of Type	Indicates .PAL as the default file extension.
Directories	Displays the current directory and path. To change to another directory, select it from the Directories box.
Drives	Lists the available drives. To change to another drive, select it from the Drives box.



Specifies the location and name of the file in which to save the current captured video.

Note: The capture file is best used for temporary storage of a captured video. Its contents are replaced without warning each time you capture a video segment (unless you change the name of the capture file). If you intend to keep a captured video, use the <u>Save Captured Video As</u> command to save a permanent copy of the current capture file.

Option	Description
File Name	Specifies the file name under which the captured video will be saved. Type a file name of up to eight characters; when you click OK, the file is saved with the .AVI extension.
List Files Of Type	Indicates .AVI as the default file extension.
Directories	Displays the current directory and path. To change to another directory, select it from the Directories box.
Drives	Lists the available drives. To change to another drive, select it from the Drives box.

Menu commands Save Captured Video As



Allocate File Space File menu (DVP Capture)

Reserves space on your hard disk for storing the capture file. Allocating space can help prevent dropped frames when you capture a video.

Option	Description
Free Disk Space	Shows the amount of space available on the current disk drive. To change target disk drives, choose <u>Set Capture File</u> from the File menu.
Capture File Size	Shows the amount of disk space (in megabytes) to set aside for the capture file. The capture file always uses the entire allocated space, regardless of the length or complexity of the video you capture, and will use more than that amount if necessary.

Menu commands Set Capture File (DVP Capture)



Saves the current capture file (which you specify using the <u>Set Capture File</u> command) to a new file. Use this command to rename the current capture file, so you can capture successive clips without overwriting the file.

Option	Description
File Name	Specifies the file name under which the capture video will be saved. Type a file name of up to eight characters; when you click OK, the file is saved with the .AVI extension.
List Files Of Type	Indicates .AVI as the default file extension.
Directories	Displays the current directory and path. To change to another directory, select it from the Directories box.
Drives	Lists the available drives. To change to another drive, select it from the Drives box.



Save Palette

File menu (DVP Capture)



Saves the current palette from an <u>8-bit</u> captured video.

This command is available only if your capture board supports 8-bit video, and you have set it to capture video in 8-bit format. You specify the format of a video capture by using the $\underline{Video Format}$ command.

Option	Description
File Name	Specifies the file name under which the current palette will be saved. Type a file name of up to eight characters; when you click OK, the file is saved with the .PAL extension.
List Files Of Type	Indicates .PAL as the default file extension.
Directories	Displays the current directory and path. To change to another directory, select it from the Directories box.
Drives	Lists the available drives. To change to another drive, select it from the Drives box.

Reference topics



Save Single Frame File menu (DVP Capture)

Opens the Save Frame As dialog box, so that you can save the frame that is currently playing as a bitmap file with a .BMP or .DIB extension. You specify the file name, extension, and location in which to save the frame.

The bitmap file you save has the same bit depth as the video from which it was captured. To change the captured video's bit depth, use the Video Format command.

Option	Description
File Name	Specifies the file name under which the current frame will be saved. Type a file name of up to eight characters; when you click OK, the file is saved with either a .BMP or .DIB extension.
List Files Of Type	Indicates .BMP as the default file extension. You can also specify .DIB as the file extension.
Directories	Displays the current directory and path. To change to another directory, select it from the Directories box.
Drives	Lists the available drives. To change to another drive, select it from the Drives box.



Closes DVP Capture. If you opened DVP Capture from within Asymetrix Digital Video Producer, the display returns to DVP, where the captured video is placed in the <u>Media Window</u>.



Copies the currently captured frame and its palette to the Windows Clipboard.



Paste Palette

Edit menu (DVP Capture)

Pastes the palette that is currently on the Windows Clipboard into DVP Capture, which applies it to the next <u>8-bit</u> video that you capture.

Any 8-bit palette that can be copied to the Windows Clipboard can be pasted into DVP Capture. For example, you can paste a palette from any 8-bit bitmap: simply open a bitmap in a bitmap-editing program, copy it to the Clipboard, switch to DVP Capture, then paste the palette using the Paste Palette command.

This command is unavailable if your capture board does not support 8-bit video, or if the Windows Clipboard does not currently contain a palette.



Audio Format

Options menu (DVP Capture)



Displays options for capturing audio. In general, you should capture audio at the lowest acceptable level of quality. While higher-quality audio sounds better, capturing it successfully is more demanding for your hardware and increases file size.

Option	Description
Sample Size	Sets the amount of data in each sample. Audio sampled at 16 bits sounds better, but produces larger files.
Channels	Sets the channel, Mono or Stereo. Mono plays the same audio through both speakers, while stereo has two separate channels.
Frequency	Number of audio <u>samples</u> per second, expressed in Hertz (Hz), in the audio file. The higher the frequency, the better the sound quality.
Reference topics Sound characteristics



Options menu (DVP Capture)

Specifies the frame size and other settings for a video capture that are supported by your capture board. The specific settings available depend on the kind of video capture board you're using. The kinds of settings below are common, but refer to your video capture board documentation for more information:



Resolution, frame size, or image size

Compression tips

Bit depth

Key frames



Video Source

Options menu (DVP Capture)

Displays settings for the video signal from your capture board. This command is available only if your video capture board supports these features; otherwise, the command is dimmed. The specific settings available in this dialog box depend on the kind of video capture board you're using; the settings below are common, but refer to your video capture board documentation for more information.

Option	Description
Video Signal Type	If your capture board supports different video signal types, displays a choice of Composite video, S-Video, or RGB video input.
Video Standard	Depending on the standards your board supports, displays a choice of <u>NTSC</u> (American), <u>PAL</u> (European), or <u>SECAM</u> .
Real-Time Filters	Displays real-time filters such as tint, contrast, and brightness.



Options menu (DVP Capture)

Displays settings for your capture board's video signal and options for monitoring the video capture. This command is available only if your video capture board supports its own VGA monitor output; otherwise, the command is dimmed. The specific settings available depend on the kind of video capture board you are using. The settings below are common, but refer to your video capture board's documentation for more information.

Option	Description
Input/Capture	Toggles between monitoring the video input signal and monitoring the actual captured frames.
Filters	Specifies video <u>filters</u> for the monitor.



Compression

Options menu (DVP Capture)

Displays software-based <u>compression</u> methods you can use for saving the captured video, as well as options that affect the quality (and file size) of the video. For the best results, use this command to compress video that you're capturing on an <u>MCIVCR device</u>. Otherwise, avoid using this command and instead use the hardware-assisted compression available through the <u>Video Format</u> command.

Using software-assisted compression during capture requires a lot of processing power, which can lead to dropped <u>frames</u>. Your <u>video capture board</u> handles most of the work for hardware-assisted compression, so you get better results.

When you use this command, the options available will vary depending on the compressors that come with your video capture board. You may need to experiment to determine how the options affect video capture when used with other DVP Capture options. For more information, refer to your video capture board documentation.

Option	Description
Compressor	Lists compressor/decompressor routines, called codecs, that come with DVP, or that come with your video capture board.
Compression Quality	Controls the tradeoff between quality and file size. Higher-quality output videos require larger files, and may take longer to compress.
Key Frame	Specifies how often <u>key frames</u> are inserted in the video. In general, choosing 1 key frame for every 15 frames provides a good balance between quality and performance.
Configure	Displays additional options for the selected compressor, if they are available.



Preview Mode Options menu (DVP Capture)

When checked, DVP Capture displays video frames in the preview window as they are captured. When not checked, DVP Capture displays single frames in the preview window.

Choosing this command is the same as clicking the <u>Preview Mode</u> button.



Overlay Mode Options menu (DVP Capture)

When checked, DVP Capture displays the video signal as live motion video on your monitor, rather than digitized video. This button is available only if your video capture board supports its own VGA monitor output; otherwise, the button is dimmed.

Choosing this command is the same as clicking the Overlay Mode button.



Captures the current frame and displays it. You can then save the captured frame by using the <u>Save Single Frame</u> command, or you can <u>copy</u> it and then paste it into another program.

Choosing this command is the same as clicking the Single Frame button.



Frames Capture menu (DVP Capture)

Captures a series of individual frames to the capture file.

Choosing this command is the same as clicking the $\underline{\mbox{Frames}}$ button.

Option	Description
Capture	When clicked, adds the current frame to the capture file.
Done	Ends the capture.

Menu commands Set Capture File



Capture menu (DVP Capture)

Begins capturing the input video to the capture file, using the frame rate and other capture settings that you've specified. You end a capture by pressing Esc (unless you've changed this option in the <u>Settings</u> dialog box). Choosing this command is the same as clicking the <u>Video</u> button.



Palette

Capture menu (DVP Capture)

Creates an <u>8-bit</u> palette based on your capture video. When you specify the number of colors and frames and then click OK, DVP Capture scans the specified number of frames and creates a palette based on the colors used most often. It then applies this palette to all 8-bit video that you capture, until you either create another new palette, <u>load</u> <u>a palette</u>, or <u>exit</u> DVP Capture. You can save a captured palette and use it with other videos by using the <u>Save</u> <u>Palette</u> command.

Choosing this command is the same as clicking the Palette button.

Note: This command is available only if your video capture board supports 8-bit video.

Option	Description
Colors	Specifies the number of colors for the palette. The default is 236 colors, which allows Windows to use its 20 reserved colors.
Frames	Specifies the number of frames that DVP Capture should sample to build the palette. Sampling 10 to 30 frames can produce a palette that doesn't contain substantial changes in color.

Tip: If your video source contains many color shifts, choose the segment of video you use to create a palette carefully, keeping in mind that the palette will be applied to all the video that you capture at 8 bits. Because DVP Capture applies the new palette to the source video, you can preview the effect of the palette you capture in the preview window. To do so, you must check <u>Preview Mode</u> on the Options menu, and select either 8-Bit Palettized or 8-Bit Dithered for the video format (choose <u>Video Format</u> from the Options menu).



Displays	options	for	capturing	video.
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Option	Description
Frame Rate	Specifies the number of frames per second (fps) to be captured. A rate of 30 fps is equivalent to the American television frame rate. The default rate of 15 fps is the maximum that Video For Windows can play on a system without a video board installed. A frame rate under 15 fps tends to create jerky motion, depending on the action in the source video.
Enable Capture Time Limit	Specifies a time limit (in seconds) for the capture.
Capture To Memory	Specifies that DVP Capture stores as many captured frames as possible in memory. When it has used all available memory, it begins storing captured frames on the hard disk.
Capture To Disk	Specifies that DVP Capture stores captured frames on the hard disk. Capturing to disk takes longer than capturing to memory and so better suited for video with a small frame size or low frame rate.
Escape Key	Specifies to press the Esc key to end video capture.
Left Mouse Button	Specifies to click the left mouse button to end video capture.
Right Mouse Button	Specifies to click the right mouse button to end video capture.
Enable MCI Capture	If you have an MCIVCR-compatible video device installed on your system, check this option to use the Media Control Interface (MCI) for video device control. This option is available only if an MCI device driver is installed on your system.
Capture Audio	When checked, audio is captured with the video. When unchecked, no audio is captured.
MCI Settings	Opens the MCI Capture dialog box, in which you specify options for <u>capturing</u> <u>video</u> using an MCI video device. This button is available only if an MCI device is installed on your system.