

Configuring Video for Windows

The Video Playback Options dialog box (accessed with the Configure Video button) lets you set playback options for video clips used in the Video Playback Performance Test. The playback options let you adjust the way a video sequence appears on your screen. Try one or more options as you see fit. The list at the end of this topic describes the options you can select.

Note Changing these options affect playback of all video sequences that use the [Video for Windows device driver](#). You can also access this dialog box through the Drivers icon in the Control Panel.

To configure Video for Windows

- 1 In the main VidTest window, choose the Advanced button. The Advanced dialog appears.
- 2 Choose the Video button. The Video Playback Performance Test Configuration dialog box appears.
- 3 Choose Configure Video. The Video Playback Options dialog box appears.
- 4 In the Video Playback Options dialog box, choose the options you want to use.

Configuration Options

- **Video Mode**
Video Mode controls display of the image on the screen. Choose Window (the default) or Full Screen. If you choose Window, the video sequence plays in a small window on top of other windows you have open. If you choose Full Screen, the screen is temporarily switched to a 320 x 240 display resolution and the video sequence plays in a large box on a black background that fills the screen. If the video frame size is larger than 320 x 240, an error message displays on the screen.
- **Zoom by 2**
Zoom by 2 doubles the frame size when a Video for Windows sequence plays. Not selected by default.
- **Play Only If Waveform Device Available**
Many video sequences include sound. If the [audio subsystem](#) is already in use and this option is selected, the video sequence won't play until the audio subsystem and the [display subsystem](#) are available. If this option is not selected, the video sequence will play immediately - without sound if the audio subsystem is not available. This option is not selected by default.
- **Seek To Nearest Full Frame**
Compressed video sequences use certain frames as check points. These frames are called key frames, and contain complete image information rather than compressed data. Some applications seek to specific frames within the video sequence, and the key frames make this simpler. Since VidTest does not seek within the video sequence, this option has no effect on the playback or test results. This option is not selected by default.
- **Skip Video Frames If Behind**
This option lets you choose the way sound and video are synchronized. Sometimes the video playback cannot keep pace with the audio playback. If this happens and Skip Video Frames If Behind is checked (the default setting), the system will try to play the entire sound track and skip video frames as needed. If Skip Video Frames If Behind is not checked, the system plays all frames of the video sequence and skips portions of the sound track as needed.
- **Don't Buffer Offscreen**
This option can provide a slightly faster video playback rate. If your system's video playback lags only slightly behind the audio playback rate, this option might allow you to play the video sequence without dropping frames.

If you select this option and your system still lags behind the playback rate of the video sequence, the video images might become fuzzy. This option is not selected by default.

Selecting Video Playback Test Options

The Video Playback Test allows you to test the playback performance of a specific video clip for motion and audio quality on your computer system. This test monitors the number of frames that are skipped and the number of blank sections of audio during playback of the video clip.

The Video Playback Performance Test Configuration dialog box includes controls that allow you to specify the video file to use in the test, and to configure the video playback driver (MCI/AVI) settings in the test.

To select Video Playback Test options

- 1 From the Video Playback Performance Test Configuration dialog box, select the options you want to use.
- 2 If you chose the Browse or Configure Video button, choose OK from that dialog box to return to the Video Playback Performance Test Configuration dialog box.
- 3 Choose OK.

Video Playback Test Options

- **Filename**
Identifies the [AVI file](#) to use in the test. The video compression method used to compress a video clip can affect the playback performance and quality of the video clip. Using compressed video files reduces the amount of required disk space as well as the data streaming rate required to process the files. Compressed video files are loaded in small segments instead of loading the entire file at once, so they can be played even on systems with limited memory. The following AVI files in the \VIDTEST directory of the Multimedia Pack CD-ROM use different compression methods.

DEFRLE.AVI	Microsoft RLE
DEFMSV8.AVI	Microsoft Video 1
DEFMSV16.AVI	Microsoft Video 1
DEFINDEO.AVI	Intel Indeo Compressor
- **Browse button**
Invokes the File Open dialog box for locating and selecting a file on a disk or CD-ROM drive.
- **Configure Video button**
Invokes the dialog box that controls the settings of the Video for Windows driver (MCI/AVI).

See Also

[Configuring Video for Windows](#)

[Interpreting Video Playback Performance Test Results](#)

Interpreting Video Playback Performance Test Results

The Video Playback Performance Test Results dialog box consists of three sections:

- Test Results
- Test Parameters
- File Information

The significance of the test statistics is discussed in the following sections:

Test Results

Information presented in the test results is gathered during the test or calculated from data gathered during the test.

- **Frames Skipped**
This reports how many frames were skipped out of the total number of frames. When the system is unable to maintain the pace of the video sequence, the video playback engine skips one or more frames to catch up to the streaming data rate.
- **Audio Breaks**
This test statistic counts the number of breaks that occurred in the audio track during playback. Breaks in the audio track usually indicate blockages in other parts of the system. A blockage might result from network activity, limitations of other resources, or the load placed on the system. If an audio break occurs in your tests, consider running the other performance tests (Display, Audio, and Streaming) included in VidTest on your system to determine the nature of the blockages.

Test Parameters

Information in this section is a re-statement of the options specified before running the test.

- **File Name**
Identifies the file used in the test: the drive, path, and filename.

Test File Information

The file used in the Video Playback test has the following characteristics:

- **File Length**
Specifies the number of frames (images) in the file.
- **Frame Width**
Specifies the frame (image) width of the test file in [pixels](#).
- **Frame Height**
Specifies the frame (image) height of the test file in [pixels](#).
- **Bit Depth**
Specifies the number of bits used to represent color for each pixel of an image. The Frame Bit Depth ranges from 4 bits (allowing a maximum of 16 different colors in an image) to 24 bits (allowing a maximum of 16 million colors).
- **Frame Rate**
Specifies the number of frames (images) stored in the test file for each second of video playback.
- **Frame Compression**
Specifies how pixel data in each frame is sent to the display:
 - RGB** - specifies data for each pixel of an image as three components: Red, Green, and Blue.
 - RLE** - specifies data for an image using [run-length encoding](#).
- **Video Compression**
Specifies the video storage format used when storing a video sequence in a file. In most cases, a compression method is applied to a video sequence to reduce the overall file size. VidTest recognizes the following formats (compressed or uncompressed):

Full Frames - each frame of an video sequence consists of a complete, uncompressed image.

[Microsoft RLE](#) Compression

[Microsoft Video 1](#) Compression

[Intel Indeo](#) Compression

See Also

[Selecting Video Playback Test Options](#)

Video for Windows Device Driver

The Video for Windows device driver (MCI`AVI.DRV`) controls playback of video sequences stored as [AVI files](#). This driver is also used by Media Player to play Video for Windows video sequences.

Pixel

A pixel is the smallest graphics unit on the screen. Also known as picture elements (pels).

