## **Selecting Display Test Options**

The Display Test builds and sends images to the system display several times a second. This test monitors the performance of the video display adapter and its driver for use with video clips. The Display Performance Test Configuration dialog box includes controls that allow you to specify several characteristics of the images to use in the test.

### **To select Display Test options**

- 1 From the Display Performance Test Configuration dialog box, select the options you want to use.
- 2 Choose OK.

### **Display Test Options**

The Display Test options mimic the most important video display characteristics used by Video for Windows.

Frames

Specifies the number of frames (images) displayed each second. The default frame rate is 15 frames per second.

Width

Identifies the frame width in pixels. A pixel is the smallest basic area accessed on the display.

Height

Identifies the frame height in pixels. A pixel is the smallest basic area accessed on the display.

Zoom by 2

Doubles the frame size of the display sequence.

Format

**RGB** indicates the frames are stored as uncompressed images that contain color information in the Red/Green/Blue format.

**RLE** indicates the frames are stored as compressed frames that store color information using a <u>run-length encoding</u>.

Colors

Identifies the number of bits used to define the color of each pixel in a frame. This option is also known as image depth. To use one of the following image depths, both the display device driver and the display adapter must support that image depth.

4 bits per pixel allows a maximum of 16 different colors in an image.

**8 bits per pixel** allows a maximum of 256 different colors in an image. This image depth uses a color palette to define individual color definitions.

**16 bits per pixel** allows a maximum of 65,535 different colors in an image; however, some video display drivers allow a maximum of 32,767 different colors.

24 bits per pixel allows a maximum of 16 million different colors in an image.

See Also

**Interpreting Display Test Raw Data** 

## **Interpreting Display Test Raw Data**

Raw data from the Display performance test consists of the sections:

Test Results

**Test Parameters** 

A description and the significance of each test statistic appears in the following sections.

#### **Test Results**

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

CPU Usage

Specifies the amount of CPU processing power this test used. The CPU usage is expressed as a percentage of the total processing power of the CPU in your computer. For optimal video playback performance, this value should be less than 30 percent.

Total Test Time

States the duration of the Display Test. (This version of VidTest runs the Display Test for two seconds.)

#### **Test Parameters**

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

- Frame Width
  - Specifies the frame (image) width of the test images in pixels.
- Frame Height
  - Specifies the frame (image) height of the test images 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).

- Zoom by 2
  - Specifies whether the frame size of the video clip was doubled for the Display Test.
- Frame Rate

Specifies the number of frames (images) transferred per second from RAM to the video display hardware.

Frame Compression

Specifies how pixel data 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 <u>run-length encoding</u>. RLE Compression applies only to AVI files that use the 8-bit **Colors** option (image depth).

See Also

Selecting Display Test Options

# **Run-Length Encoding**

Run-length encoding (RLE) is a data-compression method that is based on recognizing repeated data values. When used with images, RLE scans each line of pixels in an image and stores the portions of each line that have repeated values and the other portions that aren't repeated. This information is stored instead of the original pixel data. When it's time to display the image, the system uses the stored information to recreate or rebuild the image.