The Clarion for Windows *Performance Gauge* launches test programs that compare the relative performance of Clarion for Windows, Visual Basic, and PowerSoft. The PowerSoft libraries have not been included on the install disks because of their size. For the same reason, the Visual Basic run-time DLL has also been excluded. If you are interested in running the performance tests on your own machine, these files will be available in the "Clarion" forum on CompuServe.

The CW "Sieve" runs **over 20 times** faster than the VB "Sieve" and **over 600 times** faster than the PB "Sieve". Clarion for Windows video performance is about **50% faster** than Visual Basic. As of this writing, the PowerBuilder video performance has not been determined.

The "Sieve of Eratosthenes" is an ancient algorithm for finding the prime numbers between one and any positive integer. This algorithm is a common benchmark used for measuring compiler efficiency. The *Performance Guage* measures the number of times per minute that each program can find the all the primes between 1 and 1,000. To produce similar test periods, the CW "Sieve" cycles 2,000 times, the VB "Sieve" cycles 100 times, and the PB "Sieve" cycles 4 times.

To test video performance, a typical 3D dialog box is displayed repeatedly. The dialog box contains text controls, a combo box, a spin box, and "OK" and "Cancel" buttons. The entry fields are initialized with data. As soon as the dialog box has been painted, it is closed. Visual Basic requires custom controls (.VBXs) to produce 3D effects. *3D Gizmos* by MicroHelp have been used for this purpose. You may not redistribute these .VBX files. You may not utilize them to develop your own applications, because we have not provided the license files.

The benchmark programs are stand-alone .EXEs that can be run independently. However, these programs have been written as dynamic data exchange (DDE) servers. The *Performance Gauge* is their client, launching them with a RUN statement, and stimulating them to action using the Clarion DDE library.

The "proper" Clarion DDE strategy would be to start the benchmark with a DDEEXECUTE statement, then return to the ACCEPT loop waiting for the DDE server to issue a DDEWRITE. This will stimulate an EVENT:DDEdata event which should be processed by issuing a DDEREAD to receive the performance data.

But the *Perfomance Guide* needs to "stall" after initiating a Clarion benchmark so it doesn't interfere with the timing by stealing cycles or receiving focus. So the Clarion benchmarks are started by a DDEREAD and respond with a DDEWRITE. DDEREAD "waits" up to 5 seconds for a corresponding DDEWRITE. The dialog box test must complete within that time or DDEREAD will time out and will not receive the timing data. The sieve test does not permit Windows to time out because it does not relinquish control during the test.

The *Performance Gauge* can be moved to any drive and path, however, the directory containing GAUGE.EXE must also contain CW, VB, and PB subdirectories for the benchmark executables.