

# EASYTALK SHELL

## Reduce High NTVDM CPU Usage

### Description:

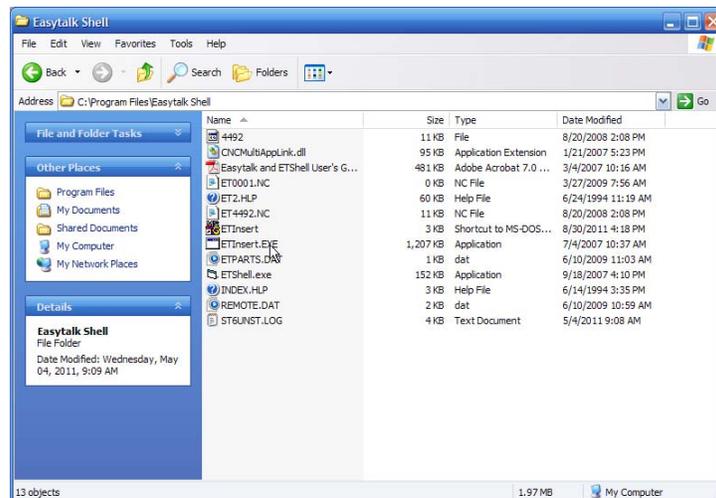
Easytalk and Easytalk Shell are both 16-bit MS-DOS applications. As such these programs, like all 16-bit programs, must operate within a virtual DOS environment when running on a 32-bit Windows operating system. In general this method works well for most DOS applications. However, there is an inherent problem when the DOS program is scanning for keyboard or mouse input. The problem is that the virtual DOS machine (NTVDM.exe), the Windows program that actually runs the DOS application, can consume a very large portion of the computer's CPU time. As such the DOS program, as well as other Windows' processes may suffer extremely slow response time.

### How to diagnose the problem:

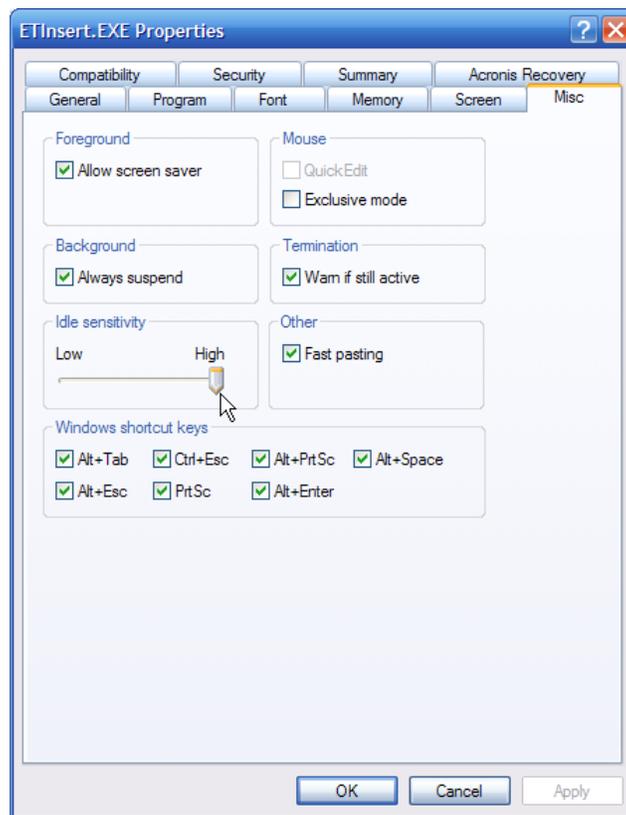
Start the Easytalk Shell program and allow it to sit idle on the Easytalk Main Menu. Now open the Windows Task Manager by holding the CTRL-ALT-DEL keys. From the Applications Tab highlight and right click the ETInsert.exe task. From the pop-up menu select the option to Go to Process. You will now see the NTVDM.exe process that is running the ETInsert DOS program. The CPU column will display the percentage of CPU time consumed by the process. If the percentage rate is 50% or more there will likely be some impact on the program's efficiency as well as Windows processes in general.

### How to reduce CPU Usage:

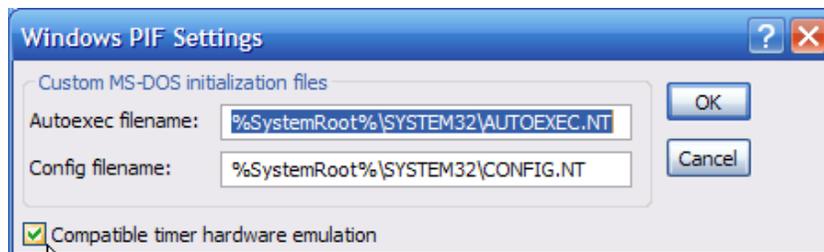
First, it is assumed that your operating system is running the latest Microsoft service pack. Next it will be necessary to change the run-time properties of the ETInsert.exe program. Simply navigate to the C:\Program Files\Easytalk Shell folder, then right-click and select the Properties option for ETInsert.exe.



As shown below, click the Misc Tab and check the option to Always Suspend located in the Background section. Second, move the Idle Sensitivity slider to High. If you drip-feed NC programs it will also be good to un-check the option to allow a screen saver.



As an additional measure open the Program Tab, click the Advanced button, and check the selection box for Compatible timer hardware emulation.



To test the changes simply restart Easytalk Shell and once again monitor the CPU usage time. It should be dramatically reduced and therefore allow your PC to run more efficiently and thus avoid expected program and system errors.