

How do I defragment my Hard Drive?

While Windows NT has provisions in the design of the NT file system to minimize the occurrence of file fragmentation, it is not adequate to eliminate the problem. At Eclipse we have experimented with several different hard drive defragmenters: Executive Software's Diskeeper, O&O Software's Defrag by Executive Software, Symantec's Norton Utilities Defragmenter, Golden Bow Systems' Vopt, and Raxco Software's PerfectDisk.

From our experience, PerfectDisk was the clear winner. The other utilities would rarely completely defragment a hard drive. They would terminate as though they had completed the task, but the graphical displays clearly showed otherwise. PerfectDisk was successful nearly every time. The only times we've seen it fail to complete was when the hard drive was almost completely full, and then it gave a message explaining why it couldn't proceed. Most (if not all) of these utilities have downloads available for a free trial evaluation. Raxco offers a 30 free trial. See [Raxco's website](#) for more details.

Defragmenting an ImageEncoder workstation using Perfect Disc 2000

Note: You should **not** be running any encoding or upload jobs when performing the installation of the software, or defragmentation of the hard drive(s).

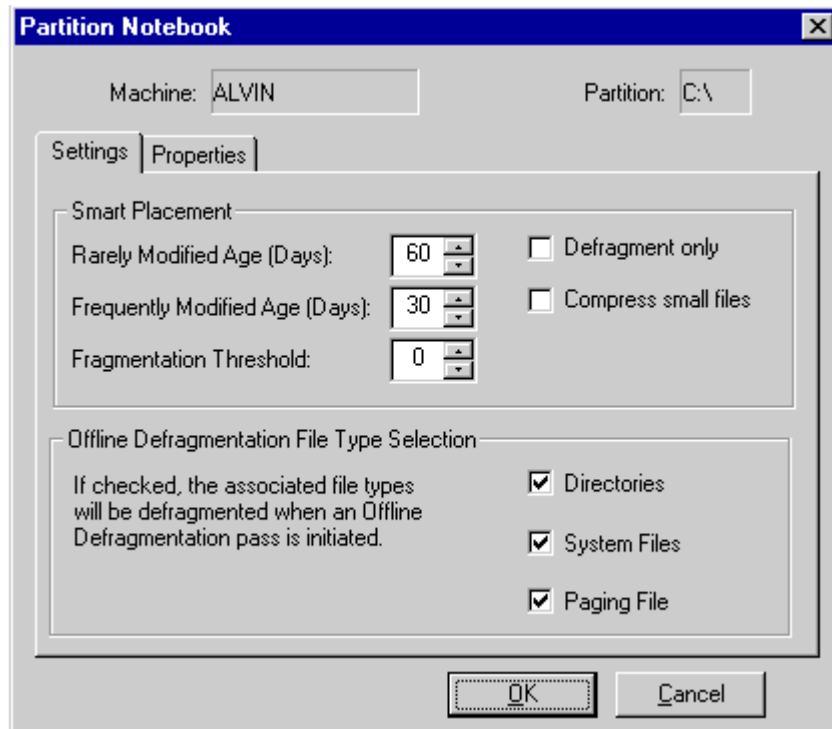
1. Run a file system check on your hard drives first:
2. Open 'My Computer' by double clicking the Icon .
3. Select the C: drive and open the 'Properties' dialog



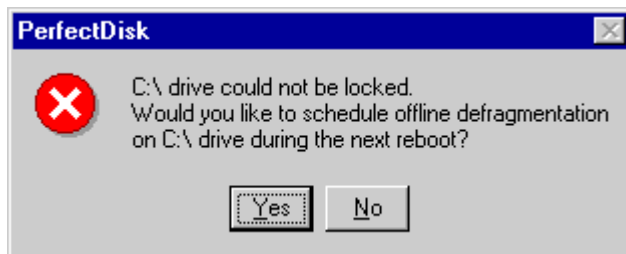
using the Right-mouse.

4. Select 'Tools | Error checking' and press the '**Check Now**' button then press '**Start**'
5. Repeat this procedure for all your logical hard drives.
6. Either make a full backup (including registry) to a DLT or Exabyte tape using the windows NT backup program. Or at a minimum copy the c:\eclipse directory and all the subdirectories to the f:\ drive as a backup measure to save your encoder settings.
7. Install Perfect disk 2000, ignore the warning regarding Active X help files. Use the TYPICAL install of all components. Add Perfect Disk 2000 shortcut to the desktop. Ignore the possible warning about the missing dll and that it can not perform an auto update.
8. Run PerfectDisk 2000 by clicking the shortcut on the desktop (no need to first reboot the system).
9. You may wish to start with an analysis of the hard drives you have to get an idea about the shape they are in. To do this, select the C: drive by clicking once on it, then click the analyze button on the tool bar (this is the magnifying glass icon). Once the analysis is done, you get a dialog box listing all the fragmentation details.
10. To start defragmenting: Select the C: drive by clicking once on it , then click the '**Defragment**' button on the tool bar located to the right of the analyze button). This step may take some time.
11. If this procedure went OK, then you can also perform defragmentation on your other drives (If you have an Eclipse ImageEncoder, do not defragment the E: and F: drives until you have tested rebooting from the newly defragmented C: drive) The process of defragmenting will take longer on larger drive partitions.
12. Close the defragmenter and shutdown and restart the system to make sure all is still well.
13. The C: drive is now mostly defragmented with the exception of some systems files (such as the pagefile) which can not be defragmented on an active partition.
14. To defragment the systems files as well (recommended) you proceed as follows: Open Perfect Disk 2000 again, select drive C: and press the Right mouse button. Then select the '**Edit Partition**' dialog window (shown below) . In the "Offline

Defragmentation File Type Selection" area, check **'Directories'**, **'SystemFiles'** (when not grayed out) and **'Paging File'**. Then close the dialog box.



15. Then Mark drive C: for off-line defragmentation by again pressing the right-mouse button when pointing to drive C:. Select **'Off-line defragment'** and press the **'Yes'** button in following dialog box.



16. Then restart your system.

17. At time of boot-up a separate defragmentation phase will run on a blue screen performing full defragmentation. Be patient and do not power down your system while this is running!

18. After you are running again your system should be fresh again for production.