

Boosting Computer Performance & Reliability

Over the last few years, computer processor speed has not increased substantially due to the apparent upper limits of silicon based chips. There have been minor performance gains but nothing to warrant replacing a computer that is a few years old. In fact the two primary potential performance gains are based on more RAM memory, 8gb is now pretty standard, and in the case of higher end computers, a solid state drive.

These items are often relatively inexpensive upgrades that can be made to an existing or refurbished computer. If the computer is in otherwise good working condition, this is something that should normally be considered before replacement. The hardware cost to do this type of upgrade is around \$50 to go from 4gb Ram to 8gb with the cost of a solid state drive or SSD being dependent on the size required.

For 250gb, this cost is typically \$120, for 500gb, around \$220 and for 1TB, the cost can run \$300-\$400 and more, depending on what's on sale at the time. Most business level computers can get by quite comfortably with 250gb of storage.

The other advantages to a solid state drive are reliability (1 million hours between failures) and little or no degradation due to file fragmentation. This is due to the lack of moving parts needed to pick up the various fragments of a larger file which are typically spread over the entire hard drive.

In the last 3 months, we have averaged an unusual 5 to 6 drive failures per month. This can result in lost data and requires far more time to get the computer operational again, when compared to cloning the old drive prior to failure.

For this reason, some clients are taking a more proactive approach to dealing with this potential problem and are having us Clone & Replace the drive with an SSD before the drive fails. This gives the user the added benefit of a noticeably faster machine and lessens the chance of a drive failure which is typically a lot more expensive to repair.

Outlook PST File Problems

In the early days of email, there were fewer emails and relatively few large attachments going back and forth. For Outlook 2000 & 2002, the internal design only permitted the total size of the Outlook.pst file to be 2gb before running into serious trouble. When the file reached this size, Outlook would effectively crash without warning. There were procedures to repair the file but this generally resulted in some degree of lost emails.

Starting with Outlook 2003, this upper limit was raised to 20gb for newly created Outlook.pst files. If you upgraded to Outlook 2003 or 2007 however, there was no automatic upgrade feature to fix the earlier size limitation and you would still run into trouble if your older file reached 2gb in size before you converted to the newer 2003 file format.

The increase in maximum size to 20gb gave Outlook some breathing room for a few years until that limit was reached as well with similar results. Now however, the file had gotten so large that repair procedures could take many hours, even days to complete, so avoiding the 20gb limit is fairly important. One way to do this is to Archive Older E-Mails by copying them to another pst file. You can then Compact your primary file to keep it under the 20gb limit. Even this procedure can run into problems when your Archive File reaches 20gb in size and can no longer accept more data.

Beginning with Outlook 2010, the upper size limit went to 50gb and this increase did not require a conversion procedure for 2003/2007 level files.

To avoid these types of time consuming and potentially expensive problems, you can take a number of simple actions to avoid downtime once per month if the size is within 10% of upper limits:

- 1) Delete older & junk e-mails and periodically empty your Deleted Items Folder.
- 2) Archive Data to another Folder based on the long past date of the e-mail.
- 3) In the Control Panel / Mail Options, select your data files and Compact overnight.