



1.5 Systems Software Misconceptions and Questions

QUESTIONS	ANSWERS
How are device drivers found?	Modern Operating Systems have the concept of plug and play which means that device drivers are automatically downloaded from a website so that the user can plug the device in, and it will install the software and work. In older Operating Systems the user would have to install device drivers from a disc.
Does a Defragmentation tool need to be run on both a standard magnetic hard disk drive and a solid-state drive?	No. The reason that it is important to use a defragmentation tool on a magnetic disk drive is because the read/write arm must move to desired track/sector. Solid state drives have no moving parts and therefore it doesn't make a noticeable difference to the speed of reading fragmented data. Drives can be optimised, but it can do more harm than good trying to defragment a solid-state drive.

MISCONCEPTIONS	EXPLANATION
Some people refer to Storage Space as memory	In computers memory management refers to the computer's primary memory – which is the RAM (Random Access Memory). There is often a misconception that storage space on the hard disk drive is called memory – with comments “the hard disk drive is out of memory – I therefore have to delete some files” being made. Storage Space refers to any long-term storage of data and memory management refers to the management of the computers RAM (for short term storage of data and instructions)
The processor completes lots of processes at the same time.	The processor divides its time up between processes – therefore it appears to complete many processes at the same time, but the processor is allocated to each task for a very small amount of time before moving onto the next task. Each process is said to be given a time slice of the processor. To a user it appears that all tasks are taking place at the same time.