

Computer Tips

Brought to you by

Michael's Computer Services

Knowing Your Operating System-2

At the simplest level, an operating system does two things:

1) It manages the hardware and software resources of the system. In a desktop computer, these resources include such things as the processor, memory, disk space and more.

2) It provides a stable, consistent way for applications to deal with the hardware without having to know all the details of the hardware.

The first task, managing the hardware and software resources, is very important, as various programs and input methods compete for the attention of the central processing unit (CPU) and demand memory, storage and input/output (I/O) bandwidth for their own purposes. In this capacity, the operating system plays the role of the good parent, making sure that each application gets the necessary resources while playing nicely with all the other applications, as well as husbanding the limited capacity of the system to the greatest good of all the users and applications.

Lets now look at how the operating system actually does its work. When you turn on the power to a computer, the first program that runs is usually a set of instructions kept in the computer's read-only memory (ROM). This code examines the system hardware to make sure everything is functioning properly. This power-on self test (POST) checks the CPU, memory, and basic input-output systems (BIOS) for errors and stores the result in a special memory location. Once the POST has successfully completed, the software loaded in ROM (sometimes called the BIOS or firmware) will begin to activate the computer's disk drives. In most modern computers, when the computer activates the hard disk drive, it finds the first piece of the operating system: the bootstrap loader (or boot sector).

The bootstrap loader is a small program that has a single function: It loads the operating system into memory and allows it to begin operation. In the most basic form, the bootstrap loader sets up the small driver programs that interface with and control the various hardware subsystems of the computer. It also sets up the divisions of memory that hold the operating system, user information and applications. This done, it then turns control of the computer over to the operating system.

Continued next issue...



Michael's Computer Services

All your computer needs met in one place!



- PC Repairs & Upgrades
- Virus Removal & Prevention
- New & Used Systems
- PC Hardware & Components
- LCD Monitors
- Printers, Inks & Toners
- Peripherals & Much More

Call Michael or Naomi on: **4171 0981**

85 Chester Street, Nanango (cnr Deakin Cresent)