

## THREE (3) LEVELS OF I/O LOGIC SOFTWARE LOGIC

**CONCEPT** There are three levels of I/O (input/output) logic in software: the device driver level, the operating system level, and the application level. At the device driver level, the software logic is responsible for communicating with the hardware device and managing its input and output functions. At the operating system level, the software logic is responsible for managing the communication between the hardware device and the application software. At the application level, the software logic is responsible for interpreting the data received from the operating system and presenting it to the user in a meaningful way.

## BACKGROUND

Software logic dates to the early days of computing when input/output operations were managed directly by the application software, with little or no abstraction from the hardware. As computer systems became more complex it became necessary to introduce layers of software to manage the communication between the application software and the hardware. The device driver level was introduced to manage the low-level communication with hardware devices, while the operating system level was introduced to manage the communication between device drivers and application software. Today, the three levels of I/O logic are an essential part of modern computing, enabling hardware devices to communicate with software applications in a way that is reliable, efficient, and user-friendly.

