

I/O system calls encapsulate device behaviors in generic classes Device-driver layer hides differences among I/O controllers from kernel New devices talking already-implemented protocols need no extra work Each OS has its own I/O subsystem structures and device driver frameworks Devices vary in many dimensions Character-stream or block Sequential or random-access Synchronous or asynchronous (or both) Sharable or dedicated Speed of operation read-write, read only, or write only