**Key Terms of Chapter 7**

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| **Key Term** |  | **Definition** |
| access speed | 访问速度 | Measures the amount of time required by the storage device to retrieve data and programs |
| Blu-Ray Disc (BD) | 蓝光光盘 | Newest form of optical storage designed to store hi-def (high definition) video |
| capacity | 存储容量 | How much a storage medium can hold |
| cloud computing | 云计算 | Internet acts as a “cloud” of servers that supply application services |
| cloud storage | 云存储 | Internet servers that supply applications as a service for online storage |
| compact disc (CD) | 光盘 | The first widely available optical format for PC users, but have largely been replaced by DVDs and Blu-rays |
| cylinder | 硬盘柱面 | Part of a hard disk that runs through each track of a stack of platters |
| density | 密度 | How tightly the bits (electromagnetic charges) can be packed next to one another on a disk |
| digital versatile disc or digital video disc (DVD) | DVD，一种大容量光盘 | Standard optical disc in PCs, similar to CDs except that typical DVD discs can store 4.7 GB (gigabytes)—seven times the capacity of CDs |
| disaster recovery specialist | 硬盘修复专家 | Are responsible for recovering systems and data after a disaster strikes an organization as well as they create plans to prevent and prepare for disasters |
| disk caching | 硬盘高速缓冲 | Enhances hard disk performance by improving processing by acting as a temporary high-speed holding area between a secondary storage device and the CPU |
| drive | 驱动器 | Storage device that reads data and programs from storage media |
| enterprise storage system | 企业级存储系统 | Large organizations use to promote efficient and safe use of data across the networks within their organizations |
| external hard drive | 移动硬盘 | Connect to a port on the system unit, are not as fast as internal drives, and are removable, providing unlimited storage using a single port |
| file compression | 文件压缩 | Performance enhancement that increases storage capacity by reducing the amount of space required to store data and programs |
| file decompression | 文件解压 | Rebuilding a file that has been compressed |
| file server | 文件服务器 | Dedicated computer with very large storage capacity that provides users access to fast storage and retrieval of data |
| flash drive | 优盘 | Solid-state storage device that connects directly to a computer’s USB port |
| flash memory card | 存储卡 | Small solid-state storage device that is widely used with portable devices |
| hard disk drive | 硬盘 | Secondary storage device of one or more metallic disks using magnetic charges to record data and have large storage capacities and fast retrieval times |
| hi-def (high definition) | 高清 | Video format used on Blu-ray discs |
| hybrid drives | 混合驱动器 | Storage drives that contain both solid-state storage and hard disks to gain the speed and power benefits of SSDs while still having the low cost and large capacity of hard drives |
| internal hard disk | 内置式硬盘 | Magnetic secondary storage device that is located inside the system unit |
| land | 凸面 | Flat area that optical discs use to represent 1s and 0s |
| mass storage | 海量存储 | Refers to the tremendous amount of secondary storage required by large organizations |
| mass storage device | 海量存储设备 | Specialized high-capacity secondary storage device |
| media | 存储器物理介质 | Physical material that holds data and programs |
| network attached storage (NAS) | 网络附加存储 | Like a file server except simpler and less expensive designed for homes and small businesses |
| network drive | 网络存储 | Hard drive on a network and can be located across the world from the system unit, popular solution for individuals and businesses where access speed is not essential, but capacity and durability are crucial |
| online storage | 在线存储 | Internet servers that supply applications as a service for storage (See also Cloud Storage) |
| optical disc | 光盘 | Storage device that uses a laser beam to alter the surface of a plastic or metallic disc to represent data |
| optical disc drive | 光驱 | Uses a laser that projects a tiny beam of light on a disc to reflect the light to determine a pit or land |
| organizational cloud storage | 组织性云存储 | High-speed Internet connection to a dedicated remote organizational cloud storage server |
| pit | 凹面 | Bumpy area that optical discs use to represent 1s and 0s |
| platter | 硬盘盘面 | Component of a hard disk made of a rigid metallic material and stacked one on top of another |
| primary storage | 主存（内存） | RAM or memory, where data is stored before being processed |
| RAID system | RAID系统 | System that enhances organizational security by constantly making backup copies of files moving across the organization’s networks |
| random-access memory (RAM) disc | 随机读写存储器 | Like write-once discs except that the disc surface is not permanently altered when data is recorded |
| read-only memory (ROM) disc | 只读存储器 | Cannot be written on or erased by the user |
| recordable (R) disc | 可写光盘（一次性可写） | Discs can be written on once then can be read only |
| redundant array of inexpensive disks (RAID) | 廉价磁盘冗余阵列 | Larger versions of the specialized devices that enhance organizational security by constantly making backup copies of files moving across the organization’s networks |
| rewritable (RW) disc | 可写光盘 | Like write-once discs except that the disc surface is not permanently altered when data is recorded |
| secondary storage | 辅助存储 | Provides permanent or nonvolatile storage |
| secondary storage device | 辅助存储器 | Hardware where data and programs can be retained after the computer has been shut off (see also storage device) |
| sector | 扇区 | Section shaped like a pie wedge that divides the tracks on a disk |
| solid-state drive (SSD) | 固态存储器 | Storage device that is fast and durable and require little power, making it popular for cell phones, tablets, and laptops |
| solid-state storage | 固态存储器 | Storage devices with no moving parts |
| storage area network (SAN) | 存储区域网络 | SAN is a mass storage development to link remote computer storage devices to computers such that the devices are as available as locally attached drives |
| storage device | 存储器 | Hardware where data and programs can be retained after the computer has been shut off (see also secondary storage device) |
| track | 磁道 | Rings of concentric circles without visible grooves, part of how files are stored and organized on a flexible disk |
| Ultra HD Blu-ray (UHD BD) | 4K蓝光光盘 | Newest Blu-ray discs, able to play back 4K video content and store up to 100 GB of data |
| USB flash drive | 优盘 | Hard drive that connects to a computer’s USB port enabling transfer of files |
| write-once disc | 可写光盘（一次写） | Can be written on once, after that the disc can be read many times but cannot be written on or erased making these discs ideal for creating permanent archives |