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* Versions and Features of Windows XP and 2000
	+ Windows XP (Home Edition and Pro)
		- New user interface with new look and feel
		- Ability to simultaneously log on two or more users
		- Windows Media Player and Windows Messenger
		- Windows Security Center (with Service Pack 2)
		- User-friendly CD burning process
		- Remote Assistance and expanded Help
	+ Windows XP Professional offers additional features
		- Example: support new higher-performance CPU’s
	+ Two systems built on Windows XP Professional
		- Windows XP Media Center Edition
		- Windows XP Table PC Edition
	+ Windows XP Professional x64 Edition
		- Used with 64-bit processors such as Intel Itanium
	+ Windows 2000 includes four operating systems:
		- Windows 2000 Professional
		- Windows 2000 Server
		- Windows 2000 Advanced Server
		- Windows 2000 Datacenter Server
* Windows 2000/XP Architecture and Operating Modes
	+ Two operating modes used:
		- User mode
			* Several subsystems that interact with users/programs
			* All applications relate to the OS via Win32 subsystem
				+ Each DOS application runs on its own NTVDM
				+ 16-bit Windows 3.X apps run in a WOW environment
				+ 32-bit applications interact directly with the OS (protected)
			* Process: running program or group of programs
			* Thread: single task that process requests from kernel
			* A process can spawn multiple threads
* Networking Features
	+ Workgroup: logical group of computers and users
		- Resources are shared within a workgroup
		- Administration is decentralized
	+ Workgroup users a peer-to-peer networking model
	+ Domain: group of networked computers
		- Resources are controlled via a centralized directory
	+ A domain uses a client/server networking model
		- Networking operating system (NOS) controls directory
		- Some NOSs: Windows Server 2003, Novel Netware
	+ Windows 2000/XP Logon
		- Administrator account
			* Has rights and permissions to all computer resources
			* Used to set up other user accounts and assign privileges
		- Logon is required before OS can be used
		- Rights and permissions granted according to user group
		- Windows XP allows multiple users to be logged on
		- To logoff or switch to another user, press Ctrl-Alt-Del
		- Log Off Windows dialog box appears
* How Windows 2000/XP Manages Hard Drives
	+ Hard drive organization: partition, logical drive, sector
	+ Steps involved in logically organizing a drive
		- Cylinders on the drive are divided into partitions
			* Partition table defines where partition begins and ends
		- Partitions are divided into logical drives; e.g., C, D, E
			* Creating first two levels is called partitioning the drives
		- Each logical drive is formatted with a file system
			* Some file systems used: FAT16, FAT32, or NTFS
	+ Master Boot Record (MBR) or master boot sector
		- Contains master boot program and the partition table
	+ Actions performed by master boot program at POST:
		- 2 partitions per drive
		- Max of 4 partitions
		- Integrity of partition table is checked
		- Primary Drive: Store operating system
		- Other Drive: Storage
		- Active (system) partition is located
		- OS boot program in active partition is executed
		- Massive boot anything is MAJOR; anything that attacks the hard drive is a malicious virus
			* Attacks the master boot program
	+ Types of partitions in Windows 2000/XP
		- Primary: has only one logical drive, such as C
		- Extended: can have multiple logical drives; e.g., D, E
	+ Up to four partitions allowed in Windows 2000/XP
		- The active partition is always a primary partition
		- There can only be one extended partition
	+ System partition: active partition with OS boot record
	+ Boot partition: store Windows 2000/XP OS
	+ System and boot partitions are usually the same
	+ Each logical drive is formatted with a file system
	+ FAT16
		- Wasted space in cluster(s)
		- 16 bit cluster entries
		- DOS and Windows 95
	+ FAT32
		- Used with Windows 98 OS
		- 32 bit entries
	+ NTFS
		- Used in Windows 2000, XP, and beyond
		- File compression/encryption abilities
		- Recoverable file system
		- Supports encryption and disk quotas
		- Supports the larger drives
	+ Advantages of Windows XP over 2000
		- Greater stability
		- Easier installation
		- Increased security
		- Better driver support
	+ When to retain Windows 2000
		- The OS was included with a notebook