Chapter 2: Installing Windows XP Professional
Objectives

• Determine if an upgrade is possible
• Boot multiple operating systems
• Plan an installation or upgrade
• Understand the types of installations available
• Work with important setup and advanced installation options
Objectives (continued)

- Work with WINNT and WINNT32
- Understand partitioning, volume licensing, and activating Windows XP
- Set up Windows XP Professional and upgrade to multiple processors
- Remove Windows XP Professional
Upgrading Versus Installing

- Choose between:
  - Upgrading
  - Clean installation
Upgrading

- Version of Windows already installed
- Can preserve settings
- Upgrade from:
  - Windows 95 OSR2, Windows 98, Windows 98 SE, and Windows ME
  - Windows NT 4.0 Workstation (with Service Pack 6 or later)
  - Windows 2000 Professional (with any service packs)
  - Windows XP Home Edition
  - Windows 95
Upgrade Option From Setup Wizard

Figure 2-1 Choosing the Upgrade option from the Windows Setup Wizard
Clean Installation

• Installs new version
• No settings maintained
• Good option for system with problems
Windows XP Upgrade Advisor

- Inspects computer to determine if hardware and software are compatible with Windows XP
- Can only be used on a system with an existing Windows OS
- Report can be saved to a file for future reference
Booting Multiple Operating Systems

• Install more than one OS on the same computer
• Should be installed in chronological order
• XP can be dual-booted with any Microsoft OS
• Boot loader:
  • Software that shows all currently available operating systems
Planning The Installation

- Careful planning is important
- Determine whether to do upgrade or clean installation
Types Of Attended Installations

• Choice between:
  • Network installation
  • CD installation
• Local CD-ROM faster
Installing over the Network

• Launch setup routine from network share
• \I386 folder on CD contains files
• Execute WINNT or WINNT32 command
Activity 2-1: Network Installation Setup

- **Objective:** Prepare a Windows 2000 Server or Windows Server 2003 as a network installation point for Windows XP Professional
- Follow instructions to share CD-ROM folder and set permissions
CD-ROM Installation
Launched from Setup Boot Floppies

• Use setup boot disks (or floppies) to install from local CD-ROM
• Preferred method when:
  • Must install storage drivers manually
  • System will not boot from CD
  • No existing OS
  • No network access
Using a Bootable CD

- CD is self-booting
- Most common method
Text Mode Setup

- Used when initializing the setup from any method other than launching Setup from a preexisting Windows OS
GUI Setup Method

- Employs initialization Setup Wizard
- Advanced Options for:
  - Source path
  - Systemroot
  - Whether to copy all files from the CD before rebooting
  - Whether to allow manual selection of destination partition during Setup
GUI Setup Method (continued)

- Decide if you want to upgrade drive with NTFS
- Dynamic Update:
  - New feature
  - Enables Setup to download updates and patches for Windows XP before installation begins
Advanced Customized Installation Options

• Supports both unattended and customized installation options
• Requires significant system and setup script preparation and preconfiguration
Automated Installations

• Unattended installations:
  • Similar to attended
  • Answer file provides responses
Uniqueness Database File (UDF)

- Allows override of answer file settings
- Can be created in notepad
UNATTEND.TXT File

- Contains default settings
- Modify with Setup Manager Wizard
Activity 2-2: Windows XP Support Tools

- **Objective:** Install the Windows XP support tools.
- **Follow instructions to install tools**
Activity 2-3: Unattended Installation Preparation

• **Objective:** Create an answer file for an unattended installation of Windows XP using the Setup Manager Wizard
• Launch Setup Manager Wizard
• Create and save answer file
Using Remote Installation Service (RIS)

- Windows Server-based service
- Allows operating systems to be automatically installed onto target systems over network
- Admin only needs to power on client
- Takes advantage of DHCP
Using Remote Installation Service (RIS) (continued)

• Common mistake:
  • Install applications so that only the local administrator has access

• Causes significant network traffic
  • Solution: dedicate network segment to RIS
Using Windows Installer Service (WIS)

• Simplifies deployment of multiple applications onto new clients
• Centralizes application installations
Using Systems Management Server (SMS)

- Only used for upgrades
- Offers automated application installation and configuration settings control
- Complexity outweighs benefits
Using Remote Installation Preparation (RIPrep)

• Create RIS distributable images of fully configured prototype computer
• Target system must have same HAL
Using SYSPREP

- System duplication tool
- Duplicates entire hard drive
- Systems must have similar core hardware configurations
- Cannot be used for upgrades
- Must be used with a third-party disk-imaging product
WINNT AND WINNT32

• Command-line tools
• Function has changed since Windows NT and 2000
WINNT

• 16-bit setup tool
• Launched from DOS or OS that relies on DOS
• Standard and automated installations with few additional options
WINNT Syntax

WINNT [/S[:sourcepath]] [/T[:tempdrive]]
[/U[:answer_file]]
[/UDF:id[,UDF_file]] [/R:folder][/RX:folder]
[/E:command] [/A]
WINNT32

- 32-bit setup tool
- Launched from 32-bit operating systems
- Standard and automated installations
WINNT32 Syntax

Partitioning The Hard Disk

• Active partition
  • Houses Windows XP boot files

• To partition:
  • Use the DOS FDISK before installation
  • Or can partition during setup

• To remove partitions:
  • Use DELPART command
Activity 2-4: Disk Partitioning

- **Objective:** Remove and create partitions using the FDISK command
- **Boot to DOS**
- **Locate and use FDISK**
Volume Licensing

- Cost effective for multiple machines
- Special version of Windows XP Professional installation CD
- Can purchase from 5 to over 100,000 volume licenses
Activating Windows XP

• Product has finite initial functional lifetime
• After 30 days must be activated to function
• Product activation:
  • Type of registration where system hardware is identified and matched with product license
Activating Windows XP (continued)

• Drawbacks:
  • Hardware changes may invalidate activation
  • Difficult if lacking Internet access
• Can be completed during or after setup
Windows XP Professional Setup: Step By Step From Floppies Or From A Bootable CD

- Not difficult
- Installation procedure is fairly self-regulating and self-healing
Activity 2-5: Manual Install of Windows XP

- **Objective:** Install Windows XP without using any of the automated features (unattend file, RIS, imaging, etc.)
- **Follow instructions to perform installation**
Upgrading To Multiple Processors

- Update the HAL before installing second CPU into the system
- Fail to properly update the HAL:
  - STOP error indicating a HAL mismatch occurs upon attempted reboot
Removing Windows XP Professional

- Supported:
  - When upgrade is performed over Windows 95/98/OSR2/SE/ME
- If installation fails, rollback restores system state
- Use the Add or Remove Programs applet for uninstall
- Easiest method for older previous OS:
  - Destroy installation and start fresh with another OS
Activity 2-6: Removing Windows XP

• **Objective:** Remove Windows XP and prepare the computer for another operating system
• Follow instructions to remove XP
• **Warning:** need to install another OS to use computer
Summary

• Choose hardware for a successful installation
• Can be installed locally or across network
• Can use RIS to install from server
• Must be activated using Product Activation before 30 days
• Clean install vs. upgrade have different installation options