

XP features

XP Home Edition

- Designed for typical home use
- Lacks advanced business related feature

XP Pro Features

- Offline files & folders
- Group Policy – Domain Networks – Login through a central server
- Can Support 2 physical CPU's & 4GB RAM
- Encryption File System (EFS)
- Internet Information Services (Web page production)
- Remote Desktop
- NTVDM – New Technology Virtual DOS Machine.
- IIS Internet Information Systems (webhosting).
- NTFS – More Secure

Types of Upgrade

- Clean / Fresh – Lose of Applications, User and Systems Settings
- Upgrade – Can lead to unstable
- Imaging/Cloning/Ghosting – Replication of problems (i.e. Virus), Hardware must be similar.

Windows XP Boot Process

1. Power On Self Test
2. BIOS (if entered in to)
 - checks for peripherals
 - System Configuration
 - Checks Boot Sequence (A,CD-ROM, C)
3. Volume Root Record (VBR) - Points to boot loader
4. Master Boot Record (MBR) - Contains HDD layout
5. Boot.ini - Partition structure - Looking for the active partition.
6. NTLDR (new technology loader)
7. NTDETECT.com
8. NTOSKRNL.exe
9. Loading of graphics/sound/network drivers & services (DHCP - dynamic host config protocol i.e. network info)
10. Authentication - Login/username/password
11. Start-up programs (NTUSER.DAT - contains all the user information i.e. screen settings, desktop background).

XP Recovery

Safe Mode
Loads Basic Drivers
Graphics card
Keyboard & Mouse
Storage Controller

Safe Mode with Networking
Same as above with the addition of a network driver

Safe Mode with Command Prompt
Safe Mode opens a MS Dos Window (no desktop view)

Fault Finding

Remember the 3 C's

Connections - check Molex power cables
SATA or IDE?
IDE cable pin 1 to pin 1 (i.e. red strip close to red power cable.)

Configuration - Ensure master and slave jumpers are correct.
Check the BIOS, ensure it's recognised.
Check IDE controllers in BIOS for if they are on/off (ON BOARD
PCIIDE ENABLED - OPTIONS NONE/PRIMARY/SECONDARY/BOTH)

Component Failure - Replace IDE cable.
Change CD Drive over for a working model.
Check power cable connections for voltage.