



Operating Systems



Networking for Home and Small Businesses – Chapter 2

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Mind Wide Open™

Objectives

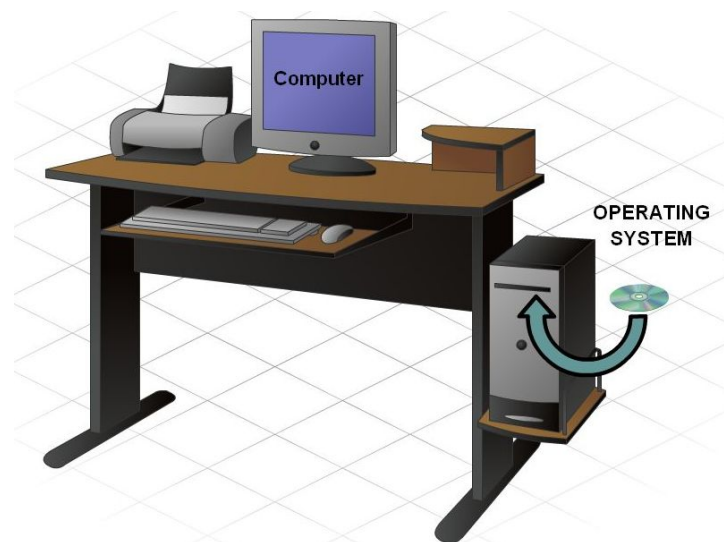
- Describe the purpose of an OS and identify common operating systems available.
- Perform an actual or simulated installation of an operating system and prepare the computer to participate on the network.
- Maintain the operating system.

Purpose of an Operating System

- Describe the purpose of an operating system

User Interface: CLI vs. GUI

Use of resources: OS vs. NOS



Purpose of an Operating System

- Identify common operating systems and describe license requirements

	Commercial License	GPL License
Access	Restrictive in nature and limits what the end-user can do with the code	Ensures everyone has full access to the source code and can participate in enhancements of the product
Cost	Often very expensive depending on deployment (for example Windows XP license must normally be purchased for every client machine on a network)	Often released free-of-charge (for example Linux can be freely installed on as many machines as desired)
Development Cycle	Very structured development cycle and changes are not quickly available	Developmental cycle is usually less structured and changes are more quickly implemented
Support	Structured support available for a fee	Less of a structured support arrangement often relying on community (user based) support

Purpose of an Operating System

- Operating System Requirements



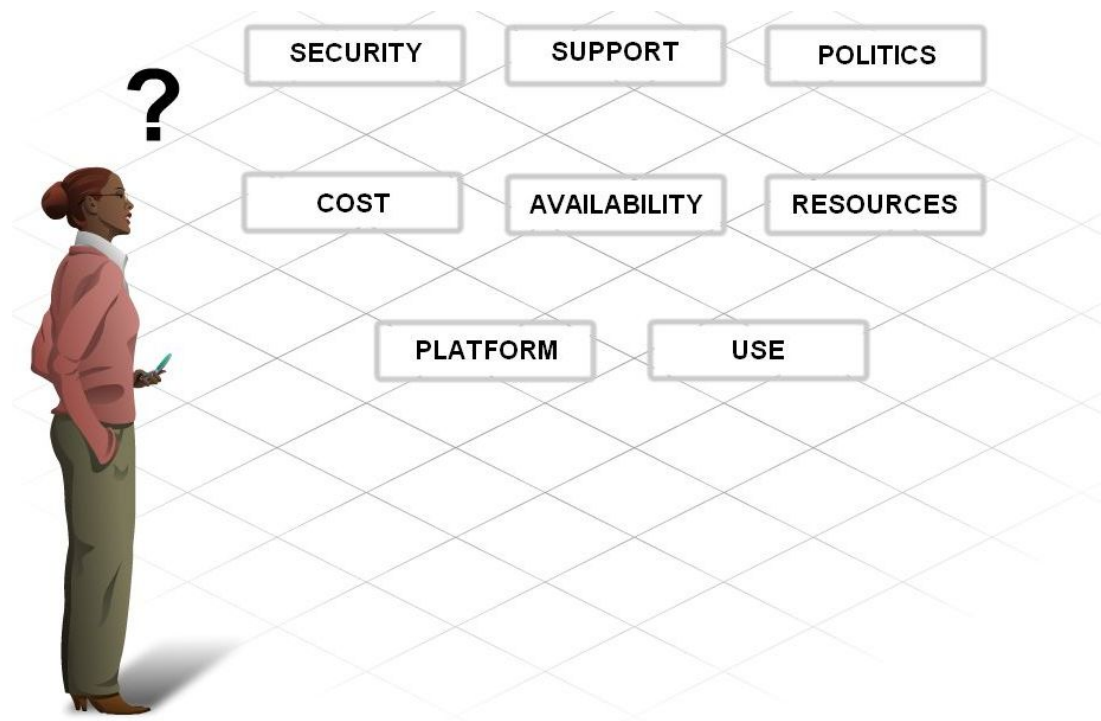
Minimum



Recommended

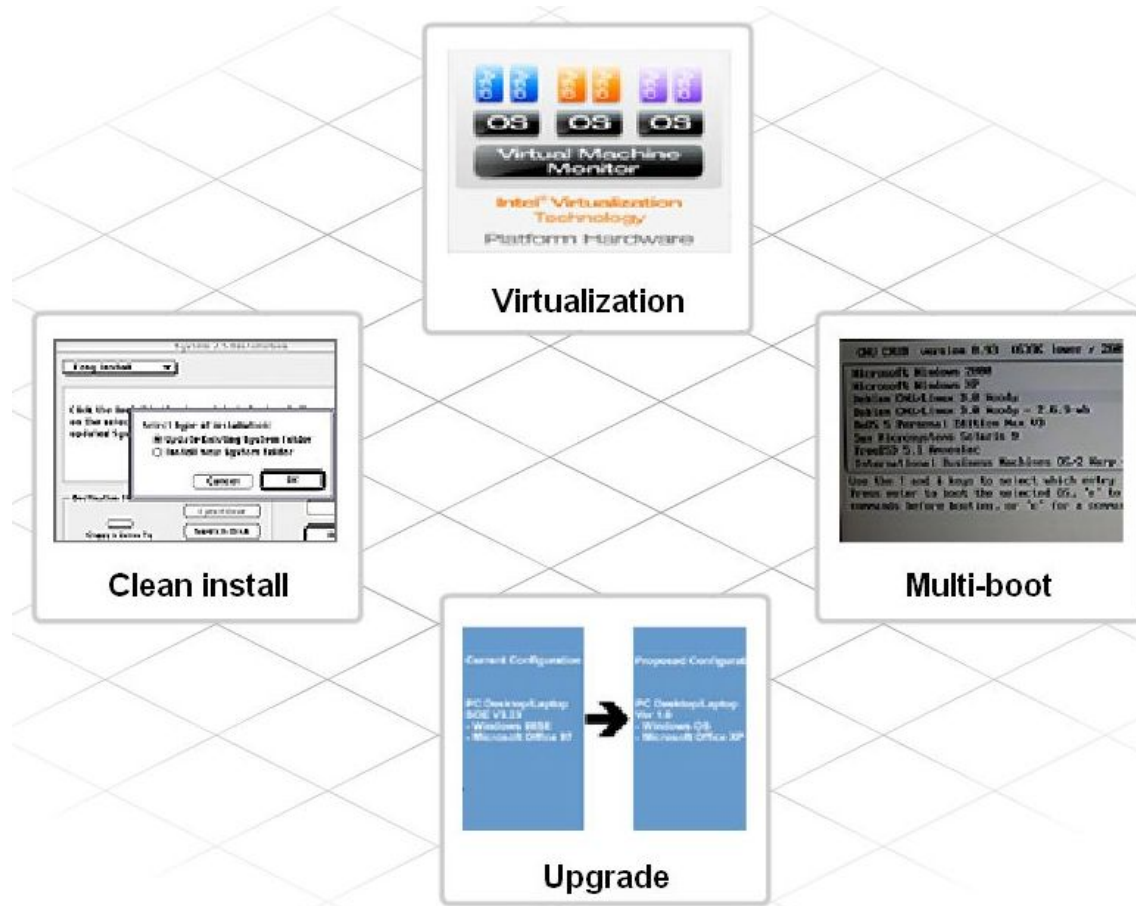
Purpose of an Operating System

- Describe how to select an operating system



Installation of an Operating System

- Describe and select an installation method for an operating system



Installation of an Operating System

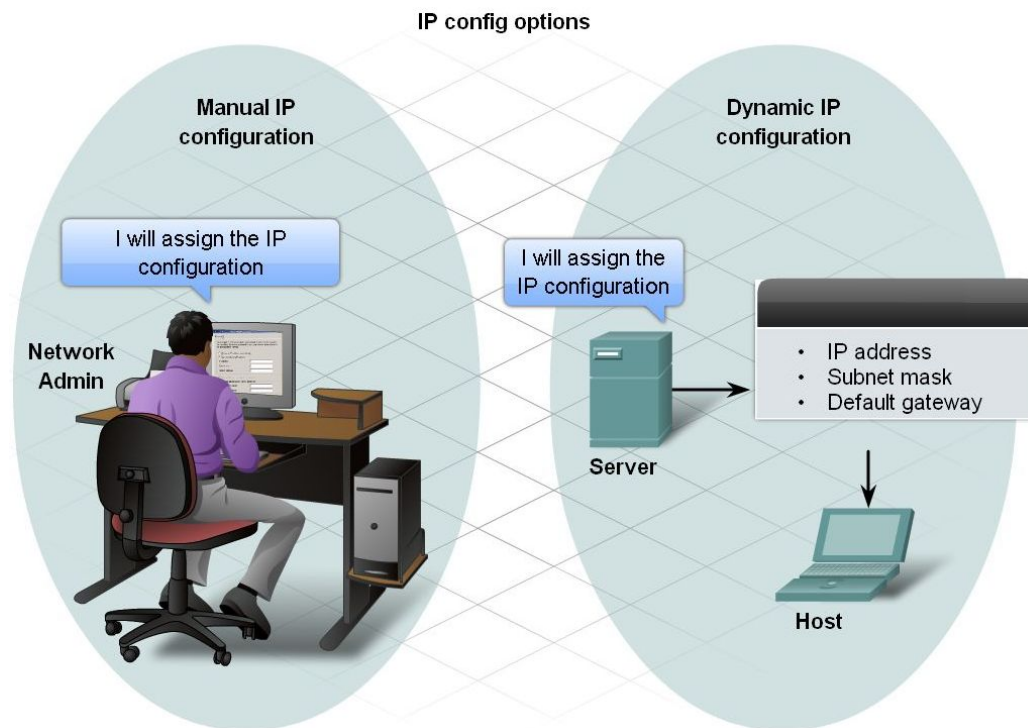
- Describe how to complete a pre-installation checklist for installing an operating system

Task	Verified by	Date
Data switch received		
Serial port of components installed		
OS/ISO image/CDs verified		
Site location and media type verified		
Installation CD-ROM copied		
Site map established and backbone information entered		
Site power voltages verified		
Site environmental specifications verified		
IP addresses (if needed) assigned		
Hardware labels available		
Network connection equipment available		
Serial module in slot		
Serial (optional) power supply installed		
AC power supply connected to AC source; separate plug required		
All ejector buttons disabled and secure		
Captive installation shows on supervisor engine module		
Bus modules and power supplies checked		
Kit contents (diskette) installed		
ACD/ Terminal checked to the console port		
OS/ISO CD-ROM loaded; F-Boot is 7.14; diskette ready		
All power supplies turned ON		
PSU and PDU power/Thermistor status confirmed		
System boot complete (Format disk)		
ASP module operational (cat > PShow ASP > go)		

ACD/1 - American Standard Code for Information Interchange.

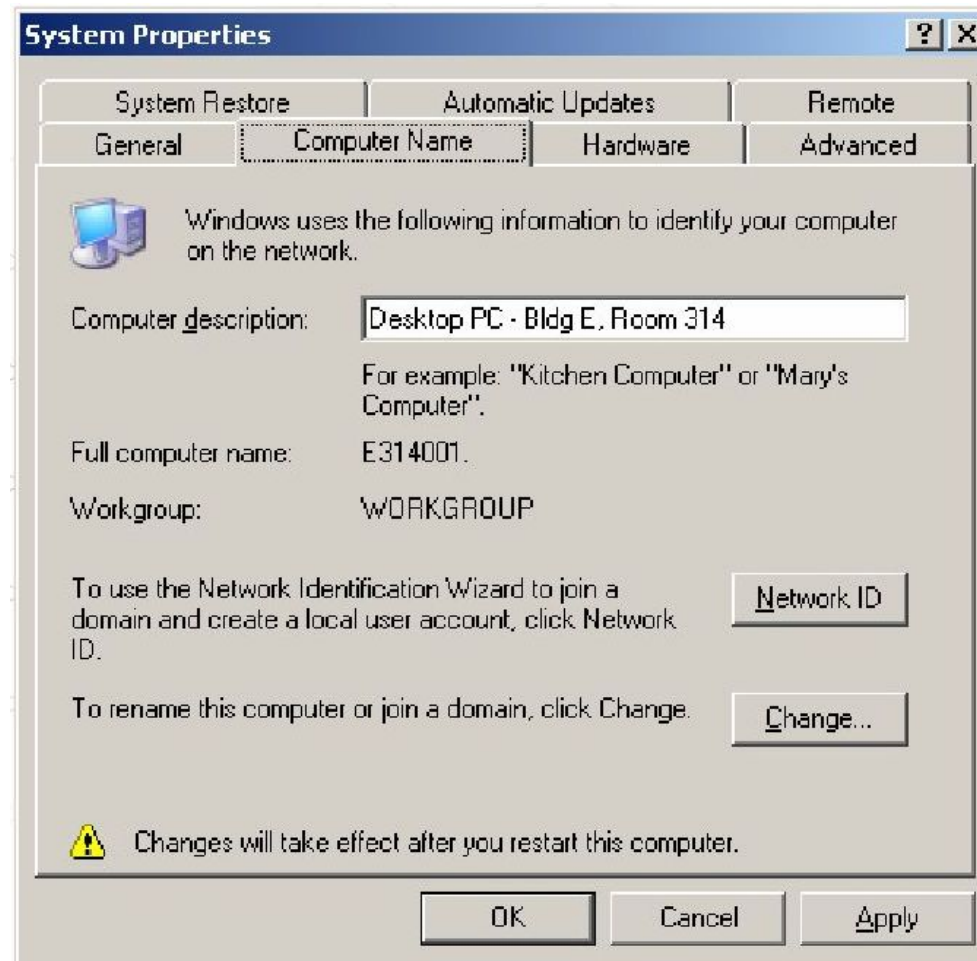
Installation of an Operating System

- Prepare your computer to participate in the network



Installation of an Operating System

- Describe the purpose of a naming scheme



Installation of an Operating System

- Describe how to plan for multiple devices on a network.



Operating System Maintenance

- Describe the purpose of a patch
- Identify when a patch should be applied



Operating System Maintenance

- Identify sources of Applications patches



Summary

- An operating system is the most important software in a PC. It is responsible for making all of the components and software applications work together.
- An OS is installed in a disk partition.
- To participate in a network, a computer requires an IP address, subnet mask and default gateway.
- An OS must be kept up-to-date with the latest revisions, or patches.
- Before installing a wireless network an installation plan should be created.

