10.2.4 Installation Planning Facts

Windows installation will go smoother if you take the time to plan and prepare prior to performing the installation. After identifying the operating system version and edition you would like to use, the first step prior to purchase and installation of the operating system is to verify that the operating system is compatible with the hardware and software you will use.

- Check the hardware compatibility list (HCL) to verify that hardware is compatible with the operating system.
- Go to the hardware or software vendor's website and check for operating system compatibility.
- Obtain the latest drivers for all hardware. Remember, 32-bit drivers must be used on older 32-bit operating systems while 64-bit drivers should be used with 64-bit operating systems.
- If you are installing a new version of Windows on an existing computer, run the Upgrade Advisor (if you're upgrading to Windows 7) or the Upgrade Assistant (if you're upgrading to Windows 8 or 10) to determine whether your system is compatible. These tools scan your system and verify that hardware is sufficient and compatible with the new operating system. They can also identify valid upgrade paths from your current operating system version.
- For upgrades on larger networks, you can use the Microsoft Assessment and Planning Toolkit (MAP) to automatically scan multiple computers and identify each computer's compatibility for an upgrade to a newer version of Windows. MAP checks hardware compatibility, identifies the availability of updated device drivers, and recommends a migration path.

After you are sure that the system hardware and software is compatible with the new operating system, you need to choose an installation method, either an in-place upgrade or a clean install.

Be aware of the following:

- Upgrade versions of Windows are available if you have an existing installation of Windows and want to install a newer version on the same computer. Upgrade versions usually cost less than buying a full version of Windows.
- When performing an in-place upgrade, you must abide by the upgrade paths defined by Microsoft. For example, you can perform an in-place upgrade from Windows 7 or Windows 8 to Windows 10. However, you must use a clean install to migrate from Windows Vista to Windows 10.
- You cannot upgrade from a 32-bit operating system to a 64-bit operating system (or vice versa). You must instead perform a clean installation and then migrate user profiles from the old system to the new one.
- You can upgrade from one edition to another as long as the new edition is "higher" than the previous edition (such as Windows 10 Home to Windows 10 Professional).
- You cannot perform an in-place downgrade from one edition to another (such as from Professional to Home).

If necessary, perform a full backup of your existing system prior to performing a clean install or an upgrade.

- If you are doing a clean install, you can use the backup to restore user data to the new installation.
- Though an in-place upgrade does not affect user files and settings, you should still back up the system prior to performing the installation in case something goes wrong.
- If you are unable to complete an upgrade, you can use the backup to restore your existing system.

This lesson covers the following topics:

- In-place upgrade
- Clean install

In-Place Upgrade

An in-place upgrade updates your current Windows installation to a newer version of Windows. All of your applications, user settings, and data are preserved, but the previous installation of Windows will no longer be available.

Clean Install

A clean install adds a new installation of Windows, either on a new system or a system that currently has an operating system.

- Following installation, you will need to reinstall all applications and configure user settings.
- If desired, you can migrate user settings and data from an existing Windows system to the new installation. This can be done using two utilities:
  - Use Windows Easy Transfer to transfer all user settings and data from the old installation to the new installation.
  - Use the User State Migration Tool (USMT) when multiple systems need to be migrated at the same time on a large network.
- You can create a dual boot computer by keeping the existing installation of Windows. To do this, create a new partition on a storage device and install the new version of Windows into it. When complete, the end user can select which installation of Windows to load when the system boots.