4.5.7 Device Driver Installation Facts

This lesson covers the following topics:

- Device installation considerations
- Device Manager

Device Installation Considerations

Be aware of the following when installing devices:

- Before purchasing or installing the device, verify that the device is compatible with the version of Windows you are running. You can:
    - Check the product documentation and look for the Certified for Windows logo.
    - Check the Microsoft Hardware Compatibility List (HCL).
    - Contact the manufacturer to see if the device is compatible.
- Obtain the latest driver before installation. Instead of using the driver included on the installation disc, check the manufacturer's website for the latest driver.
- Read the product documentation and follow the instructions for installation. Always follow the manufacturer's instructions for installing and configuring a device.
- For USB devices, you will typically install the driver prior to connecting the device.
- For internal and non-hot swappable devices, turn off and unplug the system before installing the device.
- Windows will automatically configure a device if:
    - The device is fully plug and play capable.
    - There are no resource conflicts or other problems.
    - Windows finds a suitable driver in its driver database.
    - The driver is signed and from a trusted publisher.
- On Windows, unsigned and self-signed drivers must be manually approved. However, you cannot install unsigned drivers on x64 versions of Windows.

Device Manager

Use Device Manager to view installed devices and their status.

- To open Device Manager:
    - Right-click **Start** and select **Device Manager**.
    - In the search field on the taskbar, type **Device Manager**.
    - Press the **Windows** key + **R** and type **devmgmt.msc**.
- Use the device icon to identify the status of the device:
    - If the icon for the device is not there, then Windows did not detect the device. Try scanning for new hardware or rebooting the system to detect the device.
    - A normal icon means the device was configured, the appropriate driver was installed, and the device is working properly.
    - An icon with a yellow exclamation mark means the device was detected, but could not be configured properly. In this case, make sure you have the latest driver for the device.
    - An icon with a black down-arrow means the device is disabled.
- To identify the system resources used by a device:
    1. Right-click the *device* and select **Properties**.

      2. Select the **Resources** tab.

- To view all resources used by the computer:
  - On the file menu in Device Manager, select **View** > **Resources by type** (or **Resources by connection**).
  - Alternatively, press the **Windows** key + **R**, type **Msinfo32**.