

Lab 4.2.4: Creating a DOS Boot Disk

Estimated time: 25 Minutes

Objective

Upon completion of this lab, you will know which files are necessary to make a floppy disk bootable. Also, you will know the commands necessary to create a boot disk.

Equipment

The following equipment is required for this exercise:

- Operational computer with Windows 98 or below installed
- A blank floppy diskette

Note: This lab will not work with Windows ME, Windows 2000, or Windows XP.

Scenario

As a computer technician, you need to create a boot disk in order to prepare a computer for installation. This disk will include utilities such as fdisk and format so that a hard drive can be prepared for an operating system.

Procedures

Formatting prepares the disk for use. For DOS, make a bootable disk using the same version of DOS that is on your hard drive.

Use caution that you do not accidentally format the Hard Drive.

Step 1

If the computer is not already booted and at a DOS prompt, turn it on now. Put a floppy diskette into the drive and format the floppy diskette using the following command:

C:\> FORMAT A: /

Which three files are necessary in order to make the disk bootable?

_____, _____, _____

Step 2

Leave the diskette in the drive and reboot the system. This process will test the disk to make sure it is bootable.

Did the system successfully boot to a prompt? _____

What does the prompt look like? _____

Step 3

When the system boots using Microsoft's DOS, there are five files that are involved. They

are autoexec.bat, command.com, config.sys, io.sys, and msdos.sys.

Assuming all five files are available on a bootable disk, what order are these files accessed when the system is booted?

1. _____
2. _____
3. _____
4. _____
5. _____

Step 4

In addition to the five files mentioned above, there are certain utilities that can be helpful when working with a computer that does not have an operating system.

- DEFRAG.EXE
- EDIT.COM (which may also require QBASIC.EXE if you are using an older version of DOS)
- FDISK.EXE
- FORMAT.COM
- MEM.EXE
- SCANDISK.EXE
- SYS.COM
- UNDELETE.EXE

Troubleshooting

Many times, a computer is restarted without removing the floppy disk from the floppy drive. If the disk is not bootable (does not have io.sys, msdos.sys, and command.com), then an error message is generated that says "Non-System disk or disk error. Replace and strike any key when ready" will display. It is possible you did not use the /S switch if you get this message after formatting a disk. Double-check that the disk has the proper files on it to make it bootable.

Reflection

List any other utilities that would be useful on a boot disk:
