Week 1 Orals

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Windows 2000 Operating Systems
Server Models
Stand-Alone Servers
Member Servers
Primary Domain Controllers
Backup Domain Controllers
Mixed & Native Mode
Acronyms
Services
Hardware Compatibility List
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Create 2000 Boot Disks
DOS Prompt
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Licensing
Install Services
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FDISK - Display Partitions
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Windows 2000 Operating Systems

1. Windows 2000
2. Windows 2000 Pro
3. Windows 2000 Server
4. Windows 2000 Advanced Server
5. Windows 2000 Datacenter Server
Server Models

1. Stand-Alone Server
2. Member Server
3. Primary Domain Controller
4. BackUp Domain Controller

**Stand-Alone Server**

- Runs Windows 2000
- Does not participate in a Domain
- Has its own database of users
- Processes its own logon requests
- Does not normally share account information with any other computer
**Member Server**

Runs 2000 Server

Participates in a Domain

Is not a Domain controller

Do not store a copy of the Domain database

Permissions can be set to allow Domain users/groups to access resources

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**Domain Controller Server**

**(Primary Domain Controller (PDC))**

Manages user access to a network

• Login

• Authentication

• Access To Shared Directories & Files

• Access To Shared Software

• Access To Shared Hardware
**Backup Domain Controller (BDC)**
(Mixed Mode Only)

Maintains a copy of the SAM database

SAM – Security Account Manager – database of users, groups, etc.

Users can log onto domain from either Primary Domain Controller or Backup Domain Controller

If problems, can be promoted to Primary Domain Controller

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**Mixed Mode – Native Mode**

The default mode for Windows 2000 servers – allows to access legacy NT Servers (among other things)

Does not support the Universal & Nested Group Enhancements of Windows 2000

Opposite of Native Mode!

Windows 2000 Servers can be changed to Native Mode when all NT Servers are removed from network.
**Windows 2000 Professional**

Supports 2 CPU’s

Memory – Max = 4 GB / Min = 64 MB

SAM database of Users & Groups

IIS Web Server & FTP Server

Does most of what 2000 Server does except DHCP/DNS/WINS

Limited to 10 users using services at one time

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**Acronyms**

**IIS** - Internet Information Services

**FTP** – File Transfer Protocol

**DNS** - Domain Name Service

**DHCP** – Dynamic Host Configuration Protocol

**WINS** - Windows Internet Naming Service
Windows 2000 Server

Supports 4 CPU’s
Memory – Max = 4 GB / Min = 256 MB
SAM database of Users & Groups
IIS, FTP, DHCP, DNS, WINS
Terminal Services
Good File Server, Print Server, Web Server, Moderate Exchange Server

Windows 2000 Advanced Server

Supports 8 CPU’s
Memory – Max = 8 GB / Min = 256 MB
SAM database of Users & Groups
IIS, FTP, DHCP, DNS, WINS, Terminal Services
Windows Clustering Services – enable it to be an Enterprise Server for Microsoft SQL Server or large Exchange Server.
Windows 2000 Datacenter Server

Supports 32 CPU’s

Memory – Max = 8 GB / Min = 256 MB

SAM database of Users & Groups

IIS, FTP, DHCP, DNS, WINS, Terminal Services, Windows Clustering Services

Designed for large Enterprise applications such as Enterprise Data Warehousing

Recommendations

1. Max out memory if you can afford it.

2. Requires Pentium 133 – max out the processors and optimize the speed as you can afford it.

3. Requires 2 GB hard drive with 1 GB free – use at least a 120 GB drive if possible.

4. Use RAID 5 if with hardware controller as opposed to software controller if possible.
HCL – Check Hardware Compatibility List – best way to assure performance.

http://www.microsoft.com/hcl/

Check CPU, Motherboard, Hard Drive, Floppy Drives, Zip Drives, SCSI Hard Drives, CD’s, CD-RW’s, Modems, Network Cards, IDE Controller Cards, Video Cards, etc.

Individual Assignment: Print first page of HCL and bring it to lecture next week!

Acronyms

**HCL** – Hardware Compatibility List

**CD** – Compact Disk

**NIC** – Network Interface Card

**IDE** – Integrated Device Electronics – controller resides on the drive

**SCSI** – Small Computer System Interface
Acronyms

**OS** – Operating System

**ROM** – Read Only Memory

**RAM** – Random Access Memory

**SIMM** - Single Inline Memory Module

**DIMM** – Dual Inline Memory Module

**SDRAM** – Synchronous Dynamic RAM

**DDR** - Double Data Rate

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**RAID - Fault Tolerant**

**RAID** – Redundant Array Of Independent Disks (Redundant Array Of Inexpensive Disks)

Data & Parity striped across 3 or more drives

1. **RAID 0 – Striping**
2. **Raid 1 – Mirroring**
3. **Raid 5 – Striped Set With Parity ****

You can create Raid-5 only on Dynamic Disks.

You can not mirror or extend Raid-5

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Individual Assignment: Print & Read Good RAID handout from Internet. Record URL!
3 File Systems

FAT – File Allocation Table – 2-4 GB Limit – keeps track of the status of various segments of the disk space used for file storage. [Win 95 & DOS] – No security! No ability to compress files and folders. Slow Performance!

FAT32 – 16-32 GB Limit - a derivation of the FAT – supports smaller cluster sizes than FAT resulting in more efficient space utilization. Same as FAT!


<table>
<thead>
<tr>
<th>Volume Size</th>
<th>Cluster Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-32 MB</td>
<td>512 BYTES</td>
</tr>
<tr>
<td>33-54 MB</td>
<td>1 KB</td>
</tr>
<tr>
<td>65-128 MB</td>
<td>2 KB</td>
</tr>
<tr>
<td>129-255 MB</td>
<td>4 KB</td>
</tr>
<tr>
<td>256-511 MB</td>
<td>8 KB</td>
</tr>
<tr>
<td>512-1023 MB</td>
<td>16 KB</td>
</tr>
<tr>
<td>1024-2047 MB</td>
<td>32 KB</td>
</tr>
<tr>
<td>2048-4095 MB</td>
<td>64 KB</td>
</tr>
</tbody>
</table>

DOS
Win98
FAT

Win98
FAT32

Cluster - The smallest amount of disk space that can be allocated to hold a file.
XP/2000 Pro Formatting

<table>
<thead>
<tr>
<th>Volume Size</th>
<th>FAT16 Cluster Size</th>
<th>FAT32 Cluster Size</th>
<th>NTFS Cluster Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>7 MB-16 MB</td>
<td>2 KB</td>
<td>Not supported</td>
<td>512 bytes</td>
</tr>
<tr>
<td>17 MB-32 MB</td>
<td>512 bytes</td>
<td>Not supported</td>
<td>512 bytes</td>
</tr>
<tr>
<td>33 MB-64 MB</td>
<td>1 KB</td>
<td>512 bytes</td>
<td>512 bytes</td>
</tr>
<tr>
<td>65 MB-128 MB</td>
<td>2 KB</td>
<td>1 KB</td>
<td>512 bytes</td>
</tr>
<tr>
<td>129 MB-256 MB</td>
<td>4 KB</td>
<td>2 KB</td>
<td>512 bytes</td>
</tr>
<tr>
<td>257 MB-512 MB</td>
<td>8 KB</td>
<td>4 KB</td>
<td>512 bytes</td>
</tr>
<tr>
<td>513 MB-1,024 MB</td>
<td>16 KB</td>
<td>4 KB</td>
<td>1 KB</td>
</tr>
<tr>
<td>1,025 MB-2 GB</td>
<td>32 KB</td>
<td>4 KB</td>
<td>2 KB</td>
</tr>
<tr>
<td>2 GB-4 GB</td>
<td>64 KB</td>
<td>4 KB</td>
<td>4 KB</td>
</tr>
<tr>
<td>4 GB-8 GB</td>
<td>Not supported</td>
<td>4 KB</td>
<td>4 KB</td>
</tr>
<tr>
<td>8 GB-16 GB</td>
<td>Not supported</td>
<td>3 KB</td>
<td>4 KB</td>
</tr>
<tr>
<td>16 GB-32 GB</td>
<td>Not supported</td>
<td>16 KB</td>
<td>4 KB</td>
</tr>
<tr>
<td>32 GB-2 terabytes</td>
<td>Not supported</td>
<td>Not supported</td>
<td>4 KB</td>
</tr>
</tbody>
</table>

Installation Options

Set up Windows 2000 on this computer. You can upgrade your current version of Windows, or create a separate Windows installation.
Ways To Launch Install

1. If you have a Windows OS already, insert CD and select Install Windows 2000. (Recommend Installing On Separate Partition! – Don’t Recommend Upgrade! – Use a clean install!)

   A. Might want larger partition.
   B. Upgrade not always real successful on all things.
   C. Items, such as user accounts, left in the profiles of NT instead of Documents and Settings. Things not always where you would expect!
   D. Does require all software and hardware installs.

Ways To Launch Install (cont)

2. Alter CMOS to hardware boot from CD-ROM. CMOS is an acronym for Complementary Metal Oxide Semiconductor - a semiconductor chip on the mother board that requires very low power from a CMOS battery.
Entering CMOS During Boot Cycle

New Systems:
F1 during the boot process.
F2 during the boot process.
Esc during the boot process.
Del during the boot process.

Older Systems:
Ctrl + Alt + Esc during the boot process.
Ctrl + Alt + Ins during the boot process.
Ctrl + Alt + Enter during the boot process.
Ctrl + Alt + S during the boot up process.
Page up during the boot process.
Page down during the boot process.
Install Disk
Boot - Run CDSetUp to connect CD!

Individual Assignment: Make two copies of the Install Disk and bring them to lecture.

Ways To Launch Install (cont)

3. Bootable Floppy Disk with CD Rom Drivers - winnt.exe

- D: ← make D [CD ROM] the default drive
- cd I386 ← make drive
- lock
- winnt ← execute file winnt.exe
4. Network Bootable Floppy Disk - I386 Folder on Network Drive - winnt.exe

- Navigate to I386 folder
- \texttt{\textbackslash}\texttt{lock} \texttt{\textbackslash}\texttt{winnt} \texttt{\textbackslash}\texttt{execute}
  - file winnt.exe

5. FAT Partition with I386 Folder - assume drive C - winnt.exe

- C:
- \texttt{Cd I386}
- \texttt{\textbackslash}\texttt{lock}
  - \texttt{\textbackslash}\texttt{winnt} \texttt{\textbackslash}\texttt{execute}
    - file winnt.exe
Ways To Launch Install (cont)

6. Use the four floppy disk to boot - it will continue to load CD ROM drivers until it finds a match; it then starts the winnt.exe.

Windows no longer ships OS with these?

Make 4 Install Boot Disk - 1

Open Folder BOOTDISK on Windows CD
Make 4 Install Boot Disk - 2

Double Click On MAKEBOOT.EXE

![Image of MAKEBOOT.EXE window]

Make 4 Install Boot Disk - 3

Open Folder BOOTDISK on Windows CD

![Image of MAKEBOOT.EXE window with message]

Enter ->A
Feed four floppy disks!
Launch DOS Command Prompt - A
Using the mouse, Hold Down The Start Menu & Select Programs - Select Accessories - Select Command Prompt

Launch DOS Command Prompt - B
Using the mouse, Hold Down The Start Menu & Select Run

Enter cmd or command
Alternate Make 4 Install Boot Disk

Individual Assignment: Make One Set Of Install Disks and bring to class next week.

Ultimate Low-Level Disk Clean
Run Debug.exe from Boot Floppy Drive

Screen Response: You Input The Following:

F 200 L1000 0 <Enter>
A CS:100 <Enter>
xxxx:100 MOV AX,301 <Enter>
xxxx:103 MOV BX,200 <Enter>
xxxx:106 MOV CX,1 <Enter>
xxxx:109 MOV DX,80 <Enter>
xxxx:010C INT 13 <Enter>
xxxx:010E INT 20 <Enter>
xxxx:0100 <Leave Blank & Enter>
G <Enter>
Q <Enter>

Will repair damage to Partition Table that fdisk and partition magic can't manipulate. Will Remove Foreign Partition layouts such as OS2.

Individual Assignment: Run this on your server before you start the install process.
**Licensing**

All clients which are to use the server for File Storage, E-Mail, Print Services, etc. must have a Client Access License (CAL).

**Per Seat** - gives you the option to do licensing across the board - sometimes 5/10 licenses bundled with the server. You are to use!

**Per Server** - sever specific. Expensive and redundant if multiple servers

Can go, one time, from per server to per seat, but not visa versa!

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**Administrator**

Default Administrative Account - can add others!

Select a good administrative password!

- At least 8 Characters Long
- Both Upper & Lower Case & Special Character(s)
- Make sure spell checker can’t crack it!

**Encourage User Security!**

Team Assignment due in two weeks: Add a user account for thicks and make him an administrator. E-mail him the password. Add accounts for each team member & student.
Install Only These Window Components! - 1

Windows Components Wizard

Windows Components

You can add or remove components of Windows 2000.

To add or remove a component, click the checkbox. A checked box means that only part of the component will be installed. To see what's included in a component, click Details.

Components:

- [ ] Access to Windows 2000
- [ ] Certificate Services
- [ ] Indexing Service
- [ ] Internet Information Services (IIS)
- [ ] Management Tools

Description: Includes tools for monitoring and improving network performance.

Total disk space required: 11.4 MB
Space available on disk: 10989.6 MB

Install Only These Window Components! - 2

Windows Components Wizard

Windows Components

You can add or remove components of Windows 2000.

To add or remove a component, click the checkbox. A checked box means that only part of the component will be installed. To see what's included in a component, click Details.

Components:

- [ ] Message Queueing Services
- [ ] Networking Services
- [ ] Other Network File and Print Services
- [ ] Remote Installation Services
- [ ] Remote Systems

Description: Includes tools for monitoring and improving network performance.

Total disk space required: 11.4 MB
Space available on disk: 10989.6 MB
Install Only These Window Components! - 3

The components can be changed (added & deleted) using the Add/Remove Programs Applet in the Control Panel.

Install Only These Window Components! - 4

Using the mouse, push the Add/Remove Windows Components Button. See Left!
Install Only These Window Components! - 5

The components can be added & deleted using the Add/Remove Programs Applet in the Control Panel.

Bring Up The Network Applet - 1
Right Mouse Click on My Network Places & Select Properties

You will have one entry for each network card on the system.
Bring Up The Network Applet - 2
Right Mouse Click on Local Area Connection & Select Properties

Alternate Bring Up The Network Applet - 1
Double-Click on Network and Dialup Connections [in the Control Panel]

You will have one entry for each network card on the system.
Alternate Bring Up The Network Applet - 2

Right Mouse Click on Local Area Connection & Select Properties

Setting up TCP/IP - 1

Transmission Control Protocol/Internet Protocol

Using the mouse, select the TCP/IP object!

Using the mouse, push the Properties button.

Check This To Get A Connection Icon In The Task Bar!
TCP/IP Configuration

Duplicate IP Addresses do bad things to a network.

The DHCP Server and/or Router can be configured to dispense IP addresses upon demand.

Avoids Duplicates - Possible For Several To Use Same IP - What Internet Service Providers (ISP's) do.

Not What We Are Going To Do!

TCP/IP Configuration

Each team is to use their own IP address.

All other fields in your TCP/IP configuration shall be the same as those listed to the left!
Use Ping To Make Sure Your IP Is Not Used!  
[On Some System other than your server]

Note that the DNS Server is resolving the Name.

Run `ipconfig /all` after you have configured your network connection!
How To Initialize CD ROM
Insert Boot Disk With Dos Utilities Into Drive A!
CD Mounted As Drive D Below!

Microsoft (R) Windows 98
(C)Copyright Microsoft Corp. 1983 - 1998
A:\>cdsetup
A:\>mscdex /d:MSCD001 /m:10
MSCDEX Version 2.25
Copyright (C) Microsoft Corp. 1986-1995. All rights reserved.
Drive D = Driver MSCD001 unit 0
A:\>

How To Start FDisk - 1
Insert Boot Disk With Dos Utilities Into Drive A!
Enter Y for Large Disk Support!

A:\>fdisk
--------------------------------------------------------------------------
Your computer has a disk larger than 512 MK. This version of Windows includes improved support for large disks, resulting in more efficient use of disk space on large drives, and allowing disks of 2 GB to be formatted as a single drive.

IMPORTANT: If you enable large disk support and create any new drives on this disk, you will not be able to access the new drives(s) using other operating systems, including some versions of Windows 95 and Windows NT, as well as earlier versions of Windows and MS-DOS. In addition, disk utilities that were not designed explicitly for the FAT32 file system will not be able to work with this disk. If you need to access this disk with other operating systems or older disk utilities, do not enable large drive support.

Do You wish to enable large disk support (Y/N)..............? Y[Y]
Your computer has NTFS partitions which may require large drive support. If you are using another operating system, such as Windows NT, which supports large drives you should enable treating these partitions as large. Note: If you answer Y and the partition display looks incorrect or a hang or crash occurs do nothing, run FDISK again, and answer N to this question.

Should NTFS partitions on all drives be treated as large (Y/N)? [Y]

FDisk - Display Partition Info - 1
To Display Partitions info on drive 1, Select Menu Choice 4

Microsoft Windows 98
Fixed Disk Setup Program
(C)Copyright Microsoft Corp. 1983 - 1998

FDISK Options

Current fixed disk drive: 1

Choose one of the following:
1. Create DOS partition or Logical DOS Drive
2. Set active partition
3. Delete partition or Logical DOS Drive
4. Display partition information

Enter choice: [4]

Press Esc to exit FDISK
FDisk - Display Partition Info - 2
Hit ESC Key To Return To Main Menu
This drive has one Primary Dos FAT Partition

Display Partition Information
Current fixed disk drive: 1

Partition Status Type Volume Label Mbytes System Usage
C: 1 A PRI DOS unknown 16%

Total disk space is 6197 Mbytes (1 Mbyte = 1048576 bytes)

Press Esc to continue

FDisk - Change Current Drive - 1
Requires 2 or More Hard Drives - Current Drive Is Now # 1
Select Menu Choice 5

Microsoft Windows 98
Fixed Disk Setup Program
(C)Copyright Microsoft Corp. 1983 - 1998

FDISK Options
Current fixed disk drive: 1
Choose one of the following:
1. Create DOS partition or Logical DOS Drive
2. Set active partition
3. Delete partition or Logical DOS Drive
4. Display partition information
5. Change current drive

Enter choice: [5]

Press Esc to exit FDISK
FDisk - Change Current Drive - 2
Requires 2 or More Hard Drives - Current Drive Is Now # 1

<table>
<thead>
<tr>
<th>Disk</th>
<th>Drv</th>
<th>Free</th>
<th>Usage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>14653</td>
<td>8</td>
<td>100%</td>
</tr>
<tr>
<td>2</td>
<td>8056</td>
<td></td>
<td>100%</td>
</tr>
</tbody>
</table>

(1 Mbyte = 1048576 bytes)

Enter Fixed Drive Disk Number (1-2) .............................................[1]

Press ESC to return to F Disk Options

FDisk - Create Primary DOS Partition - 1
A Drive May Have Only One Primary DOS Partition!
To Create A 1 GB Primary Partition On Drive 1, Select Menu Choice 1

Microsoft Windows 98
Fixed Disk Setup Program
(C)Copyright Microsoft Corp. 1983 - 1998

FDISK Options

Current fixed disk drive: 1

Choose one of the following:

1. Create DOS partition or Logical DOS Drive
2. Set active partition
3. Delete partition or Logical DOS Drive
4. Display partition information

Enter choice: [1]

Press Esc to exit FDISK
FDisk - Create Primary DOS Partition - 2
A Drive May Have Only One Primary DOS Partition!
To Create A New Primary Partition On Drive 1, Select Menu Choice 1

Create Primary DOS Partition
Current fixed disk drive: 1
Verifying drive integrity, 100% complete.

Max FAT Is 2 GB - Select No - We Want A 1 GB Partition

Create Primary DOS Partition
Current fixed disk drive: 1
Do you wish to use the maximum available size for a Primary DOS Partition and make the partition active (Y\N).................? [N]

Press Esc to return to FDISK Options

FDisk - Create Primary DOS Partition - 3
Enter 1000 MB or 1024 MB

Current fixed disk drive: 1

Total disk space is 6197 Mbytes (1 Mbyte = 1048576 bytes)
Maximum space available for partition is 6197 Mbytes (100%)
Enter partition size in Mbytes or percent of disk space (%) to create a Primary DOS Partition.........................: [1000]

Press Esc to return to FDISK Options
FDisk - Create Primary DOS Partition - 4
Partition Created! - Hit ESC To Return To FDisk Options

Create Primary DOS Partition
Current fixed disk drive: 1

<table>
<thead>
<tr>
<th>Partition</th>
<th>Status</th>
<th>Type</th>
<th>Volume Label</th>
<th>Mbytes</th>
<th>System</th>
<th>Usage</th>
</tr>
</thead>
<tbody>
<tr>
<td>C: 1</td>
<td>PRI</td>
<td>DOS</td>
<td></td>
<td>1004</td>
<td>UNKOWN</td>
<td>16%</td>
</tr>
</tbody>
</table>

Primary DOS Partition created
Press Esc to continue

General Thoughts About Partitions
You must create a Primary DOS Partition in order to create an Extended DOS Partition. The Extended Partition was created to enable drives larger than 2 GB.

Once you have an Extended Partition, you can add logical drives which will map as D, E, F, etc.

In Deleting Partitions, you must delete the logical drives, before the extended DOS partition, before you delete the Primary DOS Partition.

Partitions are deleted in the reverse order in which they are inserted!
FDisk - Delete A NTFS Partition - 1
Select Menu Choice 3

Current fixed disk drive: 1

Choose one of the following:
1. Create DOS partition or Logical DOS Drive
2. Set active partition
3. Delete partition or Logical DOS Drive
4. Display partition information
5. Change current disk drive

Enter choice: [3]

Press Esc to exit FDISK

FDisk - Delete A NTFS Partition - 2
NTFS is a Non-DOS Partition - Select Menu Choice 3

Delete DOS Partition or Logical DOS Drive

Current fixed disk drive: 1

Choose one of the following:
1. Delete Primary DOS partition
2. Delete Extended DOS Partition
3. Delete Logical DOS Drive(s) in the Extended DOS Partition
4. Delete Non-DOS Partition

Enter choice: [4]

Press Esc to return to FDISK Options
FDisk - Delete A NTFS Partition - 3
Select Partition 1 - Yes Continue

Delete Non-DOS Partition

Current fixed disk drive: 1

<table>
<thead>
<tr>
<th>Partition</th>
<th>Status</th>
<th>Type</th>
<th>Volume Label</th>
<th>Mbytes</th>
<th>System</th>
<th>Usage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>A</td>
<td>NTFS</td>
<td></td>
<td>6189</td>
<td>100%</td>
<td></td>
</tr>
</tbody>
</table>

Total disk space is 6197 Mbytes (1 Mbyte = 1048576 bytes)

WARNING! Data in the deleted Non-DOS Partition will be lost.

What Non-DOS partition do you want to delete...? [1]

Do you wish to continue (Y\N).................? [Y]

Press Esc to return to FDISK Options

FDisk - Delete A NTFS Partition - 4
Partition Deleted! - Hit ESC To Return To FDisk Options

Delete Non-DOS Partition

Current fixed disk drive: 1

Total disk space is 6197 Mbytes (1 Mbyte = 1048576 bytes)

Non-DOS Partition deleted

Press Esc to continue
FDisk - Set Active Partition - 1
One Partition On A Drive Must Be The Active Partition To Tell The Operating System Boot Loader Where To Start

Microsoft Windows 98
Fixed Disk Setup Program
(C)Copyright Microsoft Corp. 1983 - 1998

FDISK Options

Current fixed disk drive: 1

Choose one of the following:

1. Create DOS partition or Logical DOS Drive
2. Set active partition
3. Delete partition or Logical DOS Drive
4. Display partition information
5. Change current disk drive

Enter choice: [2]

WARNING! No partitions are set active - disk 1 is not startable unless a partition is set active

Press Esc to exit FDISK

FDisk - Set Active Partition - 2
Boot Loader Now Set For Partition 1

Set Active Partition

Current fixed disk drive: 1

Partition Status Type  Volume Label  Mbytes  System   Usage
C: 1 PRI DOS 1004 unknown 16%
2 NTFS 5020 unknown 80%

Total disk space is 6197 Mbytes (1 Mbyte = 1048576 bytes)

Enter the number of the partition you want to make active...: [1]

Press Esc to return to FDISK Options
FDisk - Set Active Partition - 3
Let Us Check The Display To Make Sure Active Partition Is #1

Display Partition Information

Current fixed disk drive: 1

<table>
<thead>
<tr>
<th>Partition</th>
<th>Status</th>
<th>Type</th>
<th>Volume Label</th>
<th>Mbytes</th>
<th>System</th>
<th>Usage</th>
</tr>
</thead>
<tbody>
<tr>
<td>C: 1</td>
<td>A</td>
<td>PRI DOS</td>
<td></td>
<td>1004</td>
<td>unknown</td>
<td>16%</td>
</tr>
<tr>
<td>2</td>
<td></td>
<td>NTFS</td>
<td></td>
<td>5020</td>
<td>unknown</td>
<td>80%</td>
</tr>
</tbody>
</table>

Total disk space is 6197 Mbytes (1 Mbyte = 1048576 bytes)

Press Esc to continue

How Format Drive New Primary DOS Drive
Insert Boot Disk With Dos Utilities Into Drive A!

A:\>format c:

WARNING. ALL DATA ON NON-REMOVABLE DISK
DRIVE C: WILL BE LOST!
Proceed with Format (Y/N)? Y

Formatting 1,004.03 M
Format complete.
Writing out file allocation table
Complete.
Calculating free space (this may take several minutes)
Complete.

Volume label (11 characters, ENTER for none)? DOS-BOOT

1,050,730,496 bytes total disk space
1,050,730,496 bytes available on disk
Volume Serial Number is 3873-14D9
A:\>
How To Transfer System - Make C Bootable
Insert Boot Disk With Dos Utilities Into Drive A!
The directory listing below shows that the operating system boot file has been transferred. Command.com

A:\>sys c:
System Transferred

A:\>
A:\>dir C:
command.com 93,880 05-11-98 8:01p
1 file(s) 93,880 Bytes
0 dirs 1,050,333,184 bytes free

A:\>

How Copy DOS Utility Files To Directory DOS
Insert Boot Disk With Dos Utilities Into Drive A!

A:\>mkdir C:\DOS

A:\>
A:\>copy A:\*.* C:\DOS
What You Are To Do As A Team

- Run Assembly Debug to wipe disk
- Use Fdisk to create a ~1 GB Fat Partition & make it the Active A partition
- Use Format to format the new partition
- Use Sys to transfer the system utilities to your new disk partition
- Create folder c:\dos
- Copy all files from the boot disk to folder c:\dos