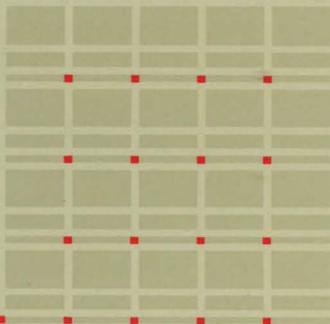


MS-DOS
System
Generation
Guide

IBM
Personal Computer



CORVUS

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MS-DOS System Generation Guide

IBM Personal Computer

Part Number: 7100-06874-01

Release Date: December 1984

Revision: A

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GETTING STARTED

This guide shows how to prepare the OmniDrive™ network disk system with Constellation II software for the IBM® Personal Computer and the MS™-DOS operating system. Versions of MS-DOS from 2.0 to 3.0 are compatible with this Constellation II software. Constellation II manages the Omninet™ local area network for IBM Personal Computers. The guide addresses setting up an OmniDrive for an IBM network or adding the IBM Personal Computer to an existing network of other computer types. It also describes how to upgrade an existing IBM Constellation II network from MS-DOS 2.0 to 3.0. The upgrade may not involve running the system generation program again.

Before beginning this guide, complete the *IBM Personal Computer Network Station Installation Guide*. Then turn to this guide.

HOW THIS GUIDE IS ORGANIZED

This guide shows how to generate the Constellation II software for two different network configurations. The chapter summaries below describe the two configurations.

You should begin with Chapter 1, then turn to either Chapter 2 or Chapter 3 to generate the disk system, depending on your setup. When finished, turn to Chapter 4 to make a boot diskette and transfer files.

Go to **Chapter 1**, “Preparing for IBM Constellation II” to make copies of the Corvus diskettes and update the firmware on the network disk system. These two preliminary steps should be performed for both new and existing drives.

Go to **Chapter 2**, “Setting Up a New Drive,” to set up an OmniDrive that has never been initialized. The OmniDrive can be the start of a single-computer system, a new Omninet network for IBM PCs, or an additional drive on an existing IBM network.

Go to **Chapter 3**, “Adding to an Existing Drive,” to add Constellation II for the IBM Personal Computer to an existing OmniDrive on a network of other computer types.

Go to **Chapter 4**, “Making Boot Diskettes,” to make boot diskettes for the network users and transfer utility programs from diskettes to a volume on the OmniDrive. The utilities are copied to a shared volume so that users can share a printer or exchange information with one another. Chapter 4 also explains the auto log-on feature.

Go to **Appendix B**, “Upgrading from MS-DOS 2.0 to 3.0,” to upgrade your existing IBM Constellation II network. The upgrade replaces the current network software with the MS-DOS 3.0 operating system and the new Constellation II utilities. You must have the MS-DOS 3.0 system diskette to upgrade your network.

USAGE

Throughout this guide, *type* means to enter two or more characters or keyboard symbols on the computer keyboard. Type all words, symbols, and punctuation to the right of *type* exactly as shown. Do not add or leave out punctuation marks at the end of the statement.

Examples:

Type COPY A:*. * B:

Type MAKEDISK

Throughout this guide, *press* means to enter a single character or symbol on the computer keyboard. When a keytop symbol appears, press the key to which it refers. Do not type out each letter of the word in the keytop symbol.

Examples:

Press Y

Press RETURN

When the command *press* or *type* indicates information to be supplied by you, enter the information indicated.

Examples:

Type your user name.

Press the slot number.

To *boot* or *reboot* means to load the operating system into the computer.

This guide uses *initialize* and *generate* interchangeably to mean to prepare an OmniDrive for use by installing Constellation II software.

HARDWARE AND SOFTWARE REQUIRED

An IBM Personal Computer with 128 kilobytes of memory, at least one floppy diskette drive, and the MS-DOS operating system is required to install the Constellation II software. Only versions of MS-DOS from 2.0 to 3.0 can be used with this release of Constellation II; version 1.1 or 3.1 cannot be substituted. The IBM PC AT can be used as a network station with this release of Constellation II, but it cannot be used for system generation or any other Constellation II management activity.

Generating the network disk system requires the following software:

- Constellation II Utilities (six diskettes):
 - CORMS21
 - CORMS22
 - CORMS23
 - CORMS24
 - CORMS25
 - FXFRMGR

- IBM MS-DOS system diskette (2.0 to 3.0)

PREPARING FOR IBM CONSTELLATION II | I

Two preliminary steps should be taken before an OmniDrive network disk system can be initialized for use with the IBM Personal Computer. First, make copies of the distribution diskettes. The copies of the diskettes should be used for the disk initialization process, and the originals should be stored in a safe place. Second, copy a firmware file to the OmniDrive. All users, whether setting up a new drive or adding to an existing drive, should follow the steps in this chapter.

COPYING DISKETTES

1. Put the IBM system diskette into the diskette drive.

Insert the IBM MS-DOS system diskette into drive A.

2. Turn on the computer.

After prompting for the date and time, the screen displays the operating system prompt.

3. Copy the Corvus diskettes.

Make copies of all the Corvus diskettes. Use the MS-DOS DISKCOPY program to copy all five of the CORMS2 and the FXFRMGR diskette. The *IBM Disk Operating System* guide explains how to use DISKCOPY.

Use the copies to generate your system. Store the originals in a safe place. If any problems arise, the source diskettes will be available.

UPDATING THE FIRMWARE

Before the IBM Personal Computer can communicate with the OmniDrive, a firmware file must be copied from diskette to the drive. The firmware acts as an interpreter for drive commands between the computer and the OmniDrive.

Copying firmware onto the drive is known as updating the firmware. Use the mass storage diagnostic program, found on the CORMS22 diskette, to update the firmware.

1. Turn on the OmniDrive.

Wait until only the READY light is lit before performing the next step.

2. Put the CORMS22 diskette in the diskette drive.

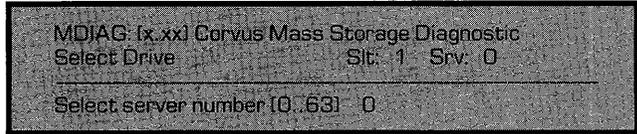
Insert the CORMS22 diskette in drive A.

3. Reboot the computer.

Hold down **CTRL** and **ALT** and

Press **DEL**

After a minute, the screen displays:



4. Select the server number.

Enter the Omninet address of the OmniDrive. Make sure the correct address is entered, since information on the specified drive may be lost. The address was determined in the “Setting the Omninet Address” section of the *OmniDrive Setup Instructions* guide. For example, if the Omninet address is 1,

Press 1

Press **RETURN**

The screen display is similar to:



Verify that you have selected the correct server and drive and

Press Y

The screen displays:

```
MDIAG (x.xx): Corvus Mass Storage Diagnostic
(c) Copyright 1984, Corvus Systems, Inc.  Slit: 1  Srvr: 1

-----
D  — Select Drive
V  — Version Check
P  — Park Heads for Shipment
X  — Exercise Drive
C  — Check for Bad Tracks
S  — Show Results

F  — Format Drive
U  — Update Firmware
M  — Modify Parameters

N  — Set Diag Data File Name
A  — Advanced Options

E  — Exit

-----
Select diagnostic option:
```

5. Select update firmware.

Press U

The screen displays:

```
The selected option may destroy data on
the drive. Ensure the correct device
is selected.

FORMAT and UPDATE options require the
firmware file to be on a controller other
than the selected device.

Selected device is server0, drive 1.

Continue? (Y/N):
```

The firmware file is on the CORMS22 diskette.

Press Y

The screen display is similar to:



Change drive tables? [Y/N]:

Press N

The screen display is similar to:



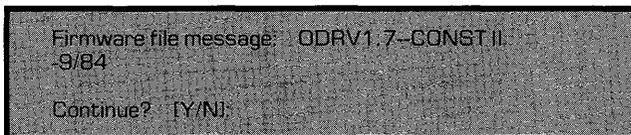
Enter firmware file name: ODRV.FIRMWARE

6. Enter the firmware file name.

The firmware code is contained in the ODRV.FIRMWARE file. This file is included on the CORMS22 diskette. Accept the suggested file name.

Press

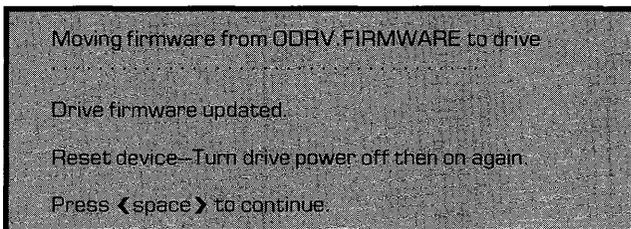
The screen displays:



Firmware file message: ODRV1.7-CONST II.
-9/84
Continue? [Y/N]:

Press Y

The screen displays:



Moving firmware from ODRV.FIRMWARE to drive
.....
Drive firmware updated.
Reset device--Turn drive power off then on again.
Press <space> to continue.

7. Return to the diagnostic program main menu.

Press

8. Exit the diagnostic program.

Press E

9. Remove the CORMS22 diskette and reset the OmniDrive.

Remove CORMS22. Turn off the OmniDrive, then turn it back on. Wait until only the READY light is lit before continuing with the system generation process.

Now that the preliminary steps are complete, go to Chapter 2, "Setting Up a New Drive," or Chapter 3, "Adding to an Existing Drive," to continue the system generation process.

SETTING UP A NEW DRIVE | 2

Before an OmniDrive network disk system can be used on an Omninet network, it must be initialized.

Initialization, or system generation, places names, passwords, and a volume on the OmniDrive. System volumes and files may also have to be added to the drive. These preliminary names, passwords, volumes, and files are required before you can use the OmniDrive to store your own files.

System generation has two stages. The first stage involves creating the server name and password, drive name and password, and CORVUS volume. If the OmniDrive being generated will be added to a network already working with the IBM and MS-DOS, the process is finished after creating the names and volume.

However, if the drive will be a single-computer system or the first on a new Omninet network for IBM PCs, a second stage is required. In the second stage, other information, such as the IBM system manager's user account and system files, must be copied from diskettes to the OmniDrive.

The firmware should already be updated and the distribution diskettes copied before beginning the steps below. Remember to use the copies when initializing the drive.

1. Put the CORMS21 diskette in the computer.

Insert the CORMS21 diskette in drive A.

2. Reboot the computer.

Hold down **CTRL** and **ALT** and

Press **DEL**

After a minute the screen displays:



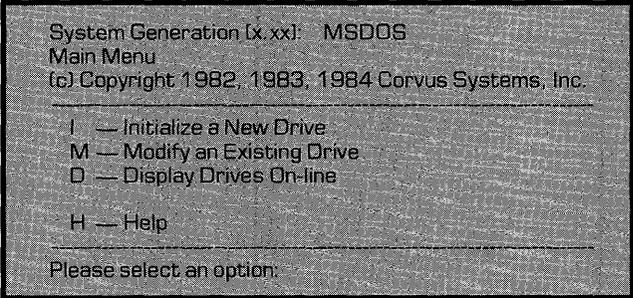
Enter SYSGEN Password:

3. Enter the password.

Type HAI

Press **RETURN**

The password does not appear on the screen. The screen displays the main menu of the system generation program:



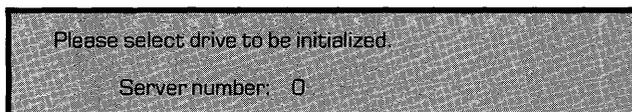
```
System Generation (x.xx):  MSDOS
Main Menu
(c) Copyright 1982, 1983, 1984 Corvus Systems, Inc.
-----
I  — Initialize a New Drive
M  — Modify an Existing Drive
D  — Display Drives On-line

H  — Help
-----
Please select an option:
```

4. Select the option to initialize a new drive.

Press I

The screen displays:

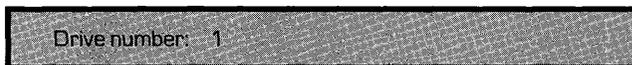


5. Select the server address.

Enter the Omninet address of the OmniDrive. Make sure the correct address is entered, since any information on the specified drive will be lost. The address was determined in the "Setting the Omninet Address" section of the *OmniDrive Setup Instructions* guide. After entering the Omninet address,

Press

The screen displays:

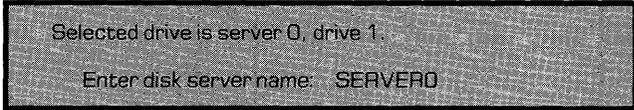


6. Select the drive.

An OmniDrive is always drive 1. To accept the suggested drive number,

Press

The screen display is similar to:



```
Selected drive is server 0, drive 1.  
Enter disk server name: SERVER0
```

7. Name the OmniDrive server.

The OmniDrive network disk system has a built-in disk server that is identified by name. Constellation II uses the server name to recognize drives on the network. Every mass storage system must have a server name.

The suggested name is formed from the server address, but a server may have any name up to ten characters in length. Choose a name that begins with a letter, and write the name in Appendix A for future reference. Then type the name and press . For example,

Type DATA1

Press

To accept the suggested server name,

Press

The screen displays:



```
Enter disk server password: SERVER0
```

8. Assign the server password.

The suggested server password is also formed from the server address, but a server may have any password up to eight characters. Choose a password that begins with a letter, and write the password in Appendix A for future reference. Then type the password and press . For example,

Type DATA1

Press

To accept the suggested password,

Press

The screen displays:



Enter drive name: DRIVE1

9. Name the drive.

The OmniDrive has only one disk associated with its server, but other disk servers can have more than one disk attached. Constellation II uses the drive name to recognize individual disks connected to each server on the network. Every disk must have a drive name.

The suggested drive name is DRIVE1, but a drive may have any name up to 10 characters. Choose a name that begins with a letter, and write the name in Appendix A for future reference. Then type the name and press . For example,

Type FIRST

Press

To accept the suggested drive name,

Press

The screen displays:



10. Assign the drive password.

The drive password is the key to protecting the information on the drive from unauthorized changes. If only you know the password, only you can change the information.

The suggested drive password is DRIVE1, but a drive may have any password up to eight characters. Choose a password of up to eight characters, either letters or numbers, with the first character a letter. Write the password in Appendix A for future reference. Then type the password and press . For example,

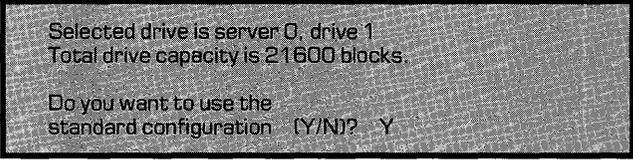
Type LOCK

Press

To accept the suggested drive password,

Press

The screen display is similar to:



Selected drive is server 0, drive 1
Total drive capacity is 21600 blocks.

Do you want to use the
standard configuration (Y/N)? Y

11. Choose the desired configuration.

The configuration sets the size and attributes of the CORVUS volume. If you are setting up a single-computer system or the first drive for an IBM network, the standard configuration will be fine.

Press

and skip to step 13.

However, if you are setting up an additional OmniDrive for an existing IBM Constellation II network, you should change the configuration.

Press N

Press

The screen displays:

Do you want to change the location
of the system volumes(Y/N)? N

Press

The screen displays:

Do you want to create only
the CORVUS volume(Y/N)? N

Creating only the CORVUS volume initializes a drive without transferring the IBM Constellation II software to it. Select this option only if the drive will be added to a network of IBM computers that already has IBM Constellation II software on another network disk system.

Press Y

Press

The screen displays:

Do you want to change the size
of the CORVUS volume(Y/N)? N

Press

The screen displays:

Blocks 9 through 309 will be overwritten.
OK to initialize the additional drive(Y/N)?

12. Initialize the additional drive.

Press **Y**

Press **RETURN**

The screen display is similar to:

```
Selected drive is server 1, drive 1.  
  
Initializing CORVUS volume . . .  
[  0] . . . . .  
[ 40] . . . . .  
[ 80] . . . . .  
[120] . . . . .  
[160] . . . . .  
  
196 system table blocks initialized.  
-----
```

Then the screen display is similar to:

```
Opening file BOOT.IBMPC  
Mounting volume CORVUS from server SERVER1 at  
address 1 on unit 12  
Copying file . . . . .  
Boot table updated.  
  
-----  
Additional drive initialized  
Please insert the CORMS21: diskette in drive A.  
Press <space> after inserting the diskette.
```

The diskette should still be in drive A. After making sure it is,

Press **SPACE**

The screen displays the system generation main menu. Now reset the OmniDrive. Turn off the drive, then turn it back on. Wait until only the READY light is lit, then insert the IBM MS-DOS system diskette in drive A and reboot the computer.

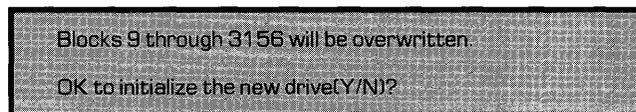
After inserting the diskette, hold down **CTRL** and **ALT** and

Press **DEL**

The screen displays the operating system prompt. You are finished with system generation for the additional drive. Go to the *IBM Personal Computer Multiple Server Update Guide* to make the additional OmniDrive compatible. Do not follow the rest of the steps in this guide.

13. Initialize the new drive.

The screen display should be similar to:



```
Blocks 9 through 3156 will be overwritten.  
OK to initialize the new drive(Y/N)?
```

Press **Y**

Press **RETURN**

The screen display is similar to:

```
Selected drive is server 0, drive 1
Initializing CORVUS volume . . .
[  0] .....
[ 40] .....
[ 80] .....
[120] .....
[160] .....

196 system table blocks initialized.
```

The screen then displays:

```
Selected drive is server 0, drive 1.
Opening file BOOT.IBMPC
Mounting volume CORVUS from server SERVER0 at
address 0 on unit 12
Copying file .....
Boot table updated.
Adding users to server SERVER0 at address 0
.....
IBMSYS volume initialized.
IBMBOOT volume initialized.
IBMBACK volume initialized.
IBMMS volume initialized.
.....
```

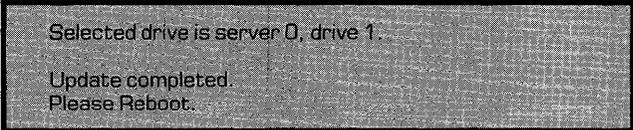
After a minute, the screen display is similar to:

```
Selected drive is server 0, drive 1.

Loading program UPDATE . . .

Copying contents of floppy . . . . .
```

The remainder of the system generation process involves copying Constellation II software from diskettes to the volumes just initialized. After the first diskette, CORMS21, is copied, the screen requests CORMS22. Continue to insert diskettes and press **SPACE** as requested. After the last diskette, FXFRMGR, is copied, the screen displays:



Selected drive is server D, drive 1.

Update completed.
Please Reboot.

14. Reset the OmniDrive and reboot the computer.

Turn off the OmniDrive, then turn it back on. Wait until only the READY light is lit before rebooting the computer. Insert the MS-DOS system diskette in drive A, then hold down **CTRL** and **ALT** and

Press **DEL**

After prompting for the date and time, the screen displays the operating system prompt.

The OmniDrive network disk system is now initialized. Go to Chapter 4, "Making Boot Diskettes."

ADDING TO AN EXISTING DRIVE

3

This chapter explains how to add Constellation II software for the IBM Personal Computer to an existing network of different computer types using an OmniDrive network disk system. Adding to an existing drive takes three steps. First, make sure enough free space is available on the existing drive for the volumes created by this system generation. Second, check user and volume names on the drive to be modified to make sure none match those created by this system generation. Third, once all checks are made, add IBM Constellation II to the existing drive.

This chapter assumes the OmniDrive network disk system is initialized and works with a computer that uses Constellation II software. The IBM should already be connected to the existing network.

FINDING A FREE AREA

To add Constellation II for the IBM, you must first find a free area of at least 2848 blocks on the drive. Log on as the system manager at a computer that already works on the network and select the drive you want to contain the IBM Constellation II system information. Enter the volume manager and select the free space option to list the free areas and their addresses.

If the largest free area on the drive is 2848 blocks or greater, note the address of this unused area. Although the system generation program should automatically suggest this address, write it down anyway, just for reference.

If the largest area on the drive is less than 2848 blocks, create an area of at least 2848 blocks by moving or deleting existing volumes. For instructions, see the system manager's guide for the existing computer type.

Once an area of 2848 blocks is freed, note the free area's address. This address will be used in step 8 of this chapter's section "Modifying an Existing Drive." If you clear an area, be sure to write down its address; if an incorrect address is used, existing data could be overwritten.

Return to the volume manager main menu and continue to the next section.

CHECKING NAMES

The Constellation II system volumes and user accounts for the IBM PC have preassigned names. Existing volumes and user accounts cannot have the same names as those created when generating IBM Constellation II.

To list the volume names, select the list volumes option from the volume manager main menu. If any of the existing volumes are called IBMMS, IBMBACK, IBMBOOT, or

IBMSYS, select the change volume attributes option of the volume manager to change the names of the existing volumes.

After checking and correcting volume names, exit to the Constellation II main menu and select the user manager option.

To check the user names, select the list users and devices option from the user manager main menu. If any of the existing user accounts are named IBMGR, IBMBACKUP, IBMUSER, or TEMP, create new user accounts with different names, but leave all other attributes identical. Remove the duplicate user names, and be sure to tell the affected users about the changes.

After checking and correcting user names, return to the Constellation II main menu.

MODIFYING AN EXISTING DRIVE

After checking the addresses for a free area and making sure no volume or user names conflict, modify the existing OmniDrive. Make sure the OmniDrive to be modified is turned on, and remember that the IBM must already be connected to the existing network.

1. Put the CORMS21 diskette in the IBM Personal Computer.

Insert the diskette in drive A.

2. Reboot the computer.

Hold down **CTRL** and **ALT** and

Press **DEL**

After a moment, the screen displays:



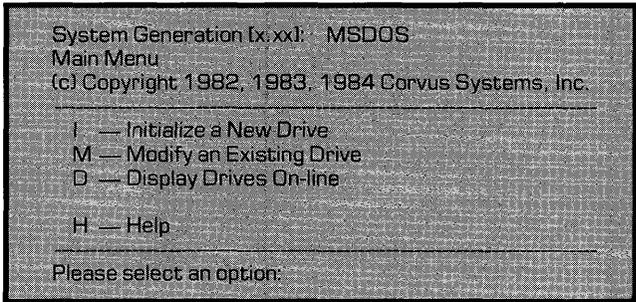
```
Enter SYSGEN Password.
```

3. Enter the password.

Type HAI

Press **RETURN**

The password does not appear on the screen. The screen displays the main menu of the system generation program:



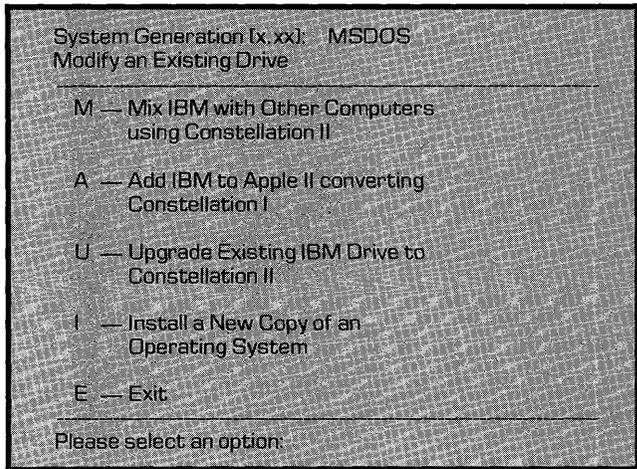
```
System Generation 1x.xx1: MSDOS
Main Menu
(c) Copyright 1982, 1983, 1984 Corvus Systems, Inc.
-----
I — Initialize a New Drive
M — Modify an Existing Drive
D — Display Drives On-line

H — Help
-----
Please select an option:
```

4. Select the option to modify an existing drive.

Press M

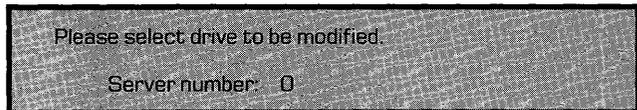
The screen displays the drive modification menu:



5. Select the option to mix with other computer types.

Press M

The screen displays:



6. Select the drive to modify.

Enter the Omninet address of the OmniDrive that was checked for names and free space in the previous section. Make sure the correct address is entered, since information on the specified drive may be lost if the wrong one is selected. After entering the Omninet address,

Press

The screen displays:

```
Drive number: 1
```

7. Select the drive number.

An OmniDrive is always drive 1. To accept the default,

Press

The screen display is similar to:

```
Selected drive is server 0, drive 1.  
Total drive capacity is 21600 blocks.  
Please enter starting disk  
address of system volumes: 2757
```

8. Select the system volume address.

The program automatically suggests the largest free area. Either accept the suggested area or enter the address noted in the section "Finding a Free Area" if it is different. After selecting an address,

Press

The screen display is similar to:

```
Blocks 2757 through 5804 will be overwritten.  
OK to modify the drive(Y/N)?
```

9. Initialize the drive.

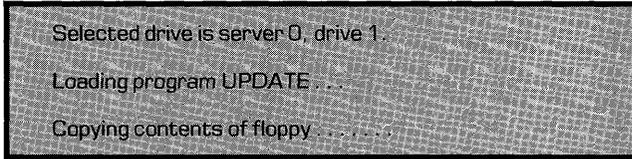
Press Y

Press

The screen display is similar to:

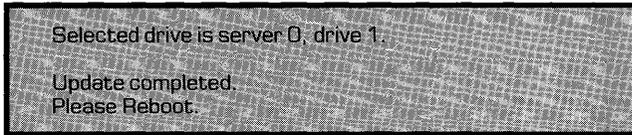
```
Selected drive is server 1, drive 1.  
Opening file BOOT.IBMPC  
Mounting volume CORVUS from server SERVER0 at  
address 0 on unit 12  
Copying file . . . . .  
Boot table updated.  
Adding users to server SERVER0 at address 0  
. . . . .  
IBMSYS volume initialized.  
IBMBOOT volume initialized.  
IBMBACK volume initialized.  
IBMMS volume initialized.  
. . . . .  
-----
```

After a minute, the screen display is similar to:



```
Selected drive is server 0, drive 1.  
Loading program UPDATE . . .  
Copying contents of floppy . . . . .
```

The remainder of the system generation process involves copying Constellation II software from diskettes to the volumes just initialized. After the first diskette, CORMS21, is copied, the screen requests CORMS22. Continue to insert diskettes and press `[SPACE]` as requested. After the last diskette, FXFRMGR, is copied, the screen displays:



```
Selected drive is server 0, drive 1.  
Update completed.  
Please Reboot.
```

10. Insert the IBM system diskette and reboot the computer.

Insert the system diskette in drive A. Hold down `[CTRL]` and `[ALT]` and

Press `[DEL]`

After prompting for the date and time, the screen displays the operating system prompt.

The existing OmniDrive now has Constellation II software for the IBM Personal Computer. Go to Chapter 4, "Making Boot Diskettes."

MAKING BOOT DISKETTES

4

This chapter explains how to make boot diskettes and copy files to the OmniDrive. Once the boot diskette is made, log on and copy the Corvus utility programs to IBMMS, a volume created during system generation, so that all users can share a printer or activate their own volumes.

Corvus provides a way to simplify the log-on sequence that saves having to enter a name and password each time you boot. See the section "Setting the Auto Log-on" for a description of how to modify the boot diskettes to take advantage of this feature.

MAKING A BOOT DISKETTE

Corvus provides a program called **MAKEDISK** to make boot diskettes. You should have a blank diskette that can be made into the boot diskette, or you can use the fixed disk in an IBM XT or AT as its boot disk. If you are setting up an IBM Omninet network, each user must have either a copy of the boot diskette or the files on his fixed disk.

The diskette does not have to be formatted before performing the steps in this section, but it must not be write-protected. However, the fixed disk must have the MS-DOS system files already on it to be made into a Corvus boot disk. Skip step 1 if you are setting up a fixed disk as the boot disk.

Follow the steps below to format a diskette and use MAKEDISK to make the Corvus boot disk. The screen should be displaying the prompt for drive A or the fixed disk, with the system diskette in drive A or the system files on the fixed disk.

1. Format a diskette using the /S option.

Type FORMAT B: /S

Press

The FORMAT program prompts for inserting the blank diskette in drive B. After the diskette is formatted, remove it from the drive and return to the system prompt.

2. Insert the CORMS24 diskette in drive A.

3. Run the MAKEDISK program.

The MAKEDISK program transfers the Corvus files needed to make a boot diskette. MAKEDISK can also copy the files to the fixed disk on an IBM XT or AT. You must specify which drive you want to receive the files. For example, to make a boot diskette with a diskette in drive B,

Type A:MAKEDISK B:

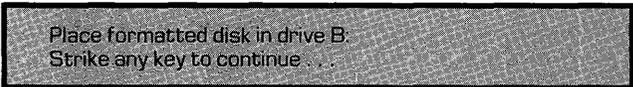
Press

To make a fixed disk on drive C the boot disk and eliminate the need for a boot diskette,

Type A:MAKEDISK C:

Press

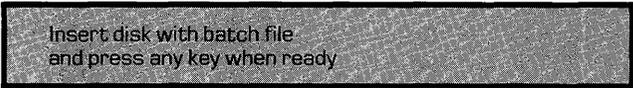
After you type the program name and the drive specifier, the screen display is similar to:



Place formatted disk in drive B.
Strike any key to continue . . .

If you specified a fixed disk or drive B on an IBM with two diskette drives, strike any key and the program will begin copying files.

If you have only one diskette drive, the procedure varies a bit. After you insert the formatted disk in the drive and strike a key, the screen displays:



Insert disk with batch file
and press any key when ready

Return the CORMS24 diskette to the diskette drive and

Press any key.

Now the COPY program prompts you for the diskettes for drives A and B as needed.

MAKEDISK copies the files CORDRV.BIN, SPLDRV.BIN, CONFIG.SYS, PBOOT.DAT, and CSD.COM onto the formatted diskette or

the fixed disk. After the files are copied, remove CORMS24 and place it with the other Corvus diskettes.

Remove the new boot diskette and label it *Corvus Boot Diskette*. If you are setting up an IBM network whose users will need boot diskettes, use the DISKCOPY program to make a copy of this diskette for each network user.

COPYING FILES

The steps below show how to put Corvus utilities in the volume IBMMS, which was created during system generation. All IBM network users can share programs and other files in IBMMS after their user accounts are established. IBMMS will be write-protected for all users except one, IBMUSER, a user account created during system generation. Log on as IBMUSER to copy files into IBMMS.

Corvus creates IBMMS to hold Corvus utilities and other programs that all users can share. For example, IBMMS can store programs from the MS-DOS system diskette. Placing them in IBMMS would be convenient, since the boot diskette made above has only the files needed to boot.

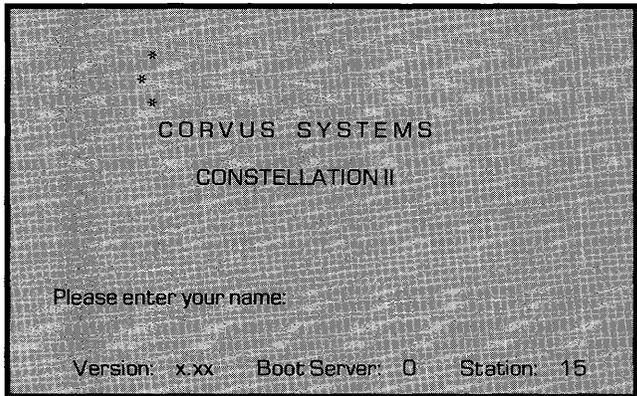
1. Reboot the computer.

Insert the Corvus boot diskette made in the previous section into drive A, or just reboot an XT or AT whose fixed disk has the Corvus boot files.

Hold down **CTRL** and **ALT** and

Press **DEL**

The screen displays the Constellation II log-on message, similar to:



2. Log on as IBMUSER.

Type IBMUSER

Press **RETURN**

The screen display is similar to:

```
Mounting volume IBMMS from server SERVER0 on UNIT C:  
  
Corvus-IBM driver CORDRV [x.xx] installed.  
  
Installing Corvus Spool Driver SPLDRV [x.xx] for the IBM PC.  
Spooling to Pipe "PRINTER" on Device "SERVER0".  
Spool Driver installed.
```

After prompting for the date and time, the screen displays the operating system prompt. Note the mount unit for the volume IBMMS.

3. Copy the Corvus utilities to the IBMMS volume.

Insert the CORMS25 diskette in drive A.

Copy all the files from CORMS25 to IBMMS. For example, if IBMMS is mounted on unit C,

Type COPY A:*. * C:

Press

The programs just copied, SPOOL.EXE, DESPOOL.EXE, and MNTMGR2.EXE, are explained in the *IBM Personal Computer MS-DOS Network Station User Guide*. While you are logged on as IBMUSER, copy any other programs or files you want all IBM network users to share to IBMMS.

The system generation process is complete. Next you should read the *IBM Personal Computer MS-DOS System Manager's Guide* to find out how to create volumes and user accounts for network users. However, if you want to make each user's boot disk automatically log him on, go to the next section, "Setting the Auto Log-on," first. It explains the requirements for the user account and the boot diskette. Note that you do not have to use the auto log-on feature; it is designed only for convenience.

SETTING THE AUTO LOG-ON

The auto log-on is a convenience feature that allows a boot diskette to be personalized. Adding a user name to the CONFIG.SYS file on the boot diskette opens the specified user account every time the user boots with the diskette.

The user account cannot have a password associated with it if you want to use the auto log-on. The fact that each user will have his own diskette makes a password unnecessary. You will set up user accounts after reading the system manager's guide, so make a note now to remind yourself about not adding a password for anyone who will use the auto log-on feature. If you have upgraded an existing network, remove the password from any user accounts whose users will be using the auto log-on.

The CONFIG.SYS file on the boot diskette must be modified to run the auto log-on. Note that, since each user name is different, you must make each individual boot diskette using DISKCOPY before modifying CONFIG.SYS. The CONFIG.SYS file is

modified with the line editor, EDLIN. The *IBM Disk Operating System* guide explains how to use EDLIN.

Using EDLIN, change the line

```
DEVICE = CORDRV.BIN
```

to contain the user account name for the intended network user. For example, to make IBMUSER's boot diskette an auto log-on diskette, change the line to:

```
DEVICE = CORDRV.BIN /U:IBMUSER
```

To modify boot diskettes for other network users, just substitute the appropriate user name in the example above.

The paragraphs below discuss the steps required to use EDLIN to make the change.

First make sure the boot diskette is in the diskette drive. Then run EDLIN with the file name CONFIG.SYS. EDLIN displays an asterisk when ready to begin editing. After the asterisk, enter an *L*. The screen displays all the lines in CONFIG.SYS. Note the number of the line *DEVICE = CORDRV.BIN*. At the asterisk, enter the number. EDLIN displays that line and positions the cursor at the beginning of a blank line with the same number. Type the same line and add user name information as in the example above. Press **RETURN** to enter the new line. At the asterisk, enter another *L* to list the file again. If it is correct, enter an *E* at the asterisk. EDLIN saves the file and returns the DOS prompt.

The boot diskette now has a modified CONFIG.SYS file that will automatically log on the specified user account. If you list the directory of the diskette you will see a file named CONFIG.BAK. EDLIN renamed the old CONFIG.SYS to CONFIG.BAK before editing it. If you ever want to undo the auto log-on, simply delete the edited CONFIG.SYS and rename CONFIG.BAK to CONFIG.SYS again.

Once the file CONFIG.SYS has been modified, rebooting the IBM with the modified diskette will automatically run the log-on for the specified user.

NAMES AND PASSWORDS



Disk server name: _____
Disk server password: _____
Drive name: _____
Drive password: _____

/

UPGRADING FROM MS-DOS 2.0 TO 3.0

B

There are two possibilities for upgrading your existing IBM Constellation II network from MS-DOS 2.0 to MS-DOS 3.0. One method is simpler, but the second method places the newest Constellation II utilities on your disk. The first method only updates the Corvus boot diskettes and MS-DOS utilities that network users use, and the second method updates the diskettes and reinitializes the drive. You must be very careful when performing the second method, and Corvus recommends that only experienced system managers attempt it.

METHOD 1 involves making new versions of the Corvus boot diskette that use MS-DOS 3.0 and replacing the Corvus utilities in IBMMS with the latest versions. Instructions for making the diskettes and copying the files are in Chapter 4, "Making Boot Diskettes," in this guide. Turn to Chapter 4 if you only want to perform the first upgrade method.

Note that the procedure for making boot diskettes requires a blank floppy. Reuse the existing boot diskettes rather than blank floppies to avoid having different versions of Corvus boot diskettes. The old boot diskettes are invalid after upgrading, so overwriting them causes no problems.

METHOD 2 allows network users to run MS-DOS 3.0 on the network, and it also updates the disk system with the new Constellation II utilities. The advantages of the new utilities include the ability to create 32 megabyte volumes and having an enlarged IBMSYS

volume to make future software updates simpler. However, the drive must be reinitialized in order to hold the new IBM Constellation II.

If you are an experienced system manager and feel confident using the Constellation II software, follow the procedure outlined below to perform the second upgrade, which reinitializes your drive.

The first and most important step is to back up all the data currently on the drive. The system volumes will be re-created when you run the system generation program again, but the other volumes and all the data in them will be destroyed.

After backing up all the data on your drive, use the list volumes and list users options in Constellation II to get complete lists of all the volumes and users on the drive. You will have to make all the volumes and users again, so be sure to write down all the attributes for each entry.

Use the list volumes accessible option for each user currently on the network to have a list of which volumes to grant to the users when you make the user accounts again.

After you are certain that all the data is backed up and all the lists are complete, go to Chapter 1 of this manual to prepare for adding the new version of IBM Constellation II, then go to Chapter 2 and follow the steps for initializing a new drive.

Note that when you enter the server and drive numbers for the drive to be reinitialized, you will see a warning message that the drive is already initialized. After ensuring once again that all the data is backed up and all the lists are complete, continue the system

generation procedure. Be sure to select the standard configuration in step 11 so the new system volumes and files will be created.

After the drive is reinitialized, go to Chapter 4 and make the new boot diskettes and copy the new files to IBMMS. Then log on as IBMGR and begin the process of re-creating the volumes and user accounts. When the volumes are all in place, restore the data to them.