

Codata 3300 System Restoration Procedure

(With Floppy Diskettes)

1. Getting Started

- A. Power up system.
- B. Insert a ~~4.0~~ bootstrap diskette, close the latch on the floppy drive and depress the reset button.
- C. Your terminal should now display:

```
"Codata Systems Corp. ...Standalone boot v4.0"  
"To boot to: dk(0,0)unix, press <RETURN>"  
"For HELP, type ? and press <RETURN>"
```

2. Formatting Your Disk Drive

Enter:

```
dkformat(4,0)
```

- A. Your terminal should now display:

```
"Enter type of disk:"  
0) User defined  
1) Seagate ST506 ( 6 Mb)  
2) Seagate ST412 (12 Mb)  
3) Atasi 3033 (33 Mb)  
4) Fujitsu 2312 (84 Mb)  
5) Fujitsu 2284 (168 Mb)  
6) Fujitsu 2294 (330 Mb)  
7) Atasi 3047 (47 Mb)
```

```
"Enter (0-7), or press <RETURN>  
for Atasi 3033 (33 Mb)"
```

- B. Enter the number which corresponds to the size of the disk drive in your system, then press <RETURN>.

- C. The terminal will display the configuration information related to the drive selected. Below the configuration information, the terminal should display:

"Last chance before formatting disk 0
type ?, press <RETURN>"

```
-----  
                        IMPORTANT  
-----  
Record the size of the root device, you will  
enter this number in step 3A "Making a File  
System".  
-----
```

- D. You are now ready to format your drive
==> You press <RETURN>
- E. At this point, The terminal should display:
- "Formatting"
- F. During the formatting process your terminal screen will fill-up with a series of dots "." (periods) which move across the screen. Note: There is a one to one correlation between the number of dots and the number of cylinders on the drive being formatted.
- G. When formatting is complete, the terminal should display:

"Would you like to enter spares (y or n):"

2.1. Entering Media Defects (Sparing):

- A. If you don't have a defect log (flaw map)

Enter:

n

C. The terminal should now display:

```
"Reloaded DST"  
"Number of passes:  "
```

Enter:

8

(4 read and 4 write passes to each cylinder)

D. After completion of pass 8, terminal will display:

```
"Reloaded DST  
End of pass 8  
Formatting done"
```

```
To boot to: dk(0,0)unix, press <RETURN>  
For HELP, type ? and press <RETURN>"
```

Enter:

prspare(0,0)

```
-----  
IMPORTANT
```

```
-----  
If any of the spares are incorrectly entered,  
type: "dkspare(0,0)" and press <RETURN>  
to enter correct information.  
-----
```

3. Making A File System

Enter:

fd(0,90)mkfs

A. The terminal should display:

```
"Loading at 0x2000: 21324+6480+7262  
Standalone mkfs
```

```
File system size (blocks):  "
```

Enter:

The number which you recorded in Step 2C.

B. The terminal should display:

```
"File system name in the form 'dev(y,z)': "
```

Enter:

```
dk(0,0)
```

C. The terminal should display:

```
"isize = "  
"m/n = 3 500"  
"Mkfs done"
```

D. At this point, the system should automatically reset itself, read the floppy diskette once again and display:

```
"Codata Systems Corp....Standalone boot v4.0  
To boot to: dk(0,0)unix, press <RETURN>  
For HELP, type ? and press <RETURN>"
```

4. Loading The "Restor" Diskettes

Enter:

```
fd(0,90)restor
```

A. The terminal should display:

```
"Loading at 0x2000: 24344+7028+30140  
Input device in the form 'dev(y,z)': "
```

ATTENTION

```
-----  
|                               |  
|                               |  
|          IMPORTANT          |  
|                               |  
|                               |  
| Before responding to the 'dev(y,z)' prompt, |  
| remove the bootstrap diskette and insert   |  
| volume 1 of the dump/restor diskettes.   |  
|                               |  
|                               |  
|-----
```

Enter:

```
fd(0,0)
```

- B. The terminal should display:

"Output device in the form 'dev(y,z)': "

Enter:

dk(0,0)

- C. The terminal should display:

"Last chance before scribbling on dk(0,0):"

==> You press <RETURN>.

- D. Next, the system will prompt you to remove the current volume and insert the next volume in sequence until the restor process is complete, at which time the terminal should display:

"End of volume
restor
input device in the form 'dev(y,z)':"

IMPORTANT

During the restor process if any error messages are displayed, you should "del" out of the process (which will reboot the system) and go back to "Making the file system", section 3 and proceed as before.

- E. Remove the last restore diskette and insert the Bootstrap diskette.

5. Setting Up The System

- A. Reset/reboot the system (depress the reset button).

- B. The terminal should display:

"Codata Systems Corp....Standalone boot v4.0
To boot to: dk(0,0)unix, press <RETURN>
For HELP, type ? and press <RETURN>"

==> You press <RETURN>.

- C. The system will load the UNIX kernel and display:

```
"Loading at 0x400: 63760+7000+32284
68000 UNIX - March 1, 1982
(C) Copyright 1981 - UniSoft Corporation.
```

```
Codata System Corp. 3300 Release 3.1.1
```

```
Adjusting the number of cache buffers to 52
Adjusting highest accessed memory to 0xFB000
On-board mem = 153600
Multibus mem = 83968
```

```
Codata Systems Configuration Script"
```

This script initializes the configuration-specific files on the root file system. It runs, once only, automatically after the root file-system has been restored to disk.

The first command executed in this script is 'fsck'. After the root file-system has been restored from a backup medium, 'fsck' will find some errors in the file system, correct them, and ask you to reboot the system. After you do so, this script will be run again. This time, 'fsck' should not report any errors, and the script will continue to query you for other information.

The script itself is in the file /etc/init.profile, which is a link to the file /etc/first.profile. It is invoked from /.profile, and is removed after it runs to completion. This means that if all goes well, this script will only run once in the lifetime of the root file-system.

- D. Press <RETURN> to continue, or to stop:

==> You press <RETURN>.

- E. A file system check (fsck) of the root device will be performed.

- F. At the end of the file system check, The terminal should display:

```
"***** BOOT UNIX (NO SYNC!) *****"
```

- G. Reset/reboot the system (depress the reset button).

H. The terminal should display:

```
"Codata Systems Corp....Standalone boot v4.0
To boot to: dk(0,0)unix, press <RETURN>
For HELP, type ? and press <RETURN>"
```

==> You press <RETURN>.

I. Your system is now restored with the UNIX Operating System and ready for configuration.

5.1. Configuring The System

A. Your terminal should display:

```
"Codata Systems Configuration Script"
```

This script initializes the configuration-specific files on the root file system. It runs, once only, automatically after the root file-system has been restored to disk.

The first command executed in this script is 'fsck'. After the root file-system has been restored from a backup medium, 'fsck' will find some errors in the file system, correct them, and ask you to reboot the system. After you do so, this script will be run again. This time, 'fsck' should not report any errors, and the script will continue to query you for other information.

The script itself is in the file /etc/init.profile, which is a link to the file /etc/first.profile. It is invoked from /.profile, and is removed after it runs to completion. This means that if all goes well, this script will only run once in the lifetime of the root file-system.

B. Press <RETURN> to continue.

==> You press <RETURN>

C. This time after the file system check is complete, the terminal will display:

```
"Please enter the number of disk
drives on the system (1-4)
and press <RETURN>: "
```


D. Verify the number of hard disk on your system.

==> Enter a number (1-4) and press <RETURN>

E. The terminal will display:

```
"Please enter the number of serial
ports on the system other than the
CONSOLE and AUXILIARY ports
(enter 0, 8, 16, 24, or 32), and
press <RETURN>: "
```

F. Verify the number of ports on the systems back panel, covering the card cage.

==> Enter the number of serial ports.

G. The terminal will display:

```
From this point on, you have the option
of initializing all, or just some of the
UNIX file-systems. If you choose to
allow all the UNIX file-systems (except
the ROOT file-system and SWAP area) to
be initialized, the script will proceed
run the 'mkfs' program on all file sys-
tems on all disk drives.
```

```
THIS WIPES OUT ALL PREVIOUS INFORMATION
(IF ANY) ON ALL DISK DRIVES ON THE SYS-
TEM, EXCEPT FOR THE ROOT FILE-SYSTEM AND
THE SWAP AREA.
```

```
IF THIS IS NOT A NEW SYSTEM, WE RECOM-
MEND THAT YOU DO NOT TYPE 'y' IN REPOSE
TO THE NEXT QUESTION.
```

H. The terminal will display:

```
"Do you want all file-systems
initialized on the 1 drive?
Press y or n followed by <RETURN>: "
```

Enter:

y

I. The terminal will display:

```
"Press y followed by <RETURN> to wipe
out all file systems except ROOT & SWAP
or press n followed by <RETURN> to change
your mind:  ".
```

Enter:

y

J. The terminal will display:

```
"+ rm -f /etc/checklist /etc/rc
/etc/ttytype /etc/motd
/dev/swap /dev/tty[0-9b]*
```

```
+ Initializing /etc/checklist
+ Creating /etc/rc
+ Linking /dev/cd02 to /dev/swap
+ Creating /etc/ttys
+ Creating /etc/ttytype
+ mknod /dev/ttyb c 0 1
+ mknod /dev/tty0 c 4 0
+ mknod /dev/tty1 c 4 1
+ mknod /dev/tty2 c 4 2
+ mknod /dev/tty3 c 4 3
+ mknod /dev/tty4 c 4 4
+ mknod /dev/tty5 c 4 5
+ mknod /dev/tty6 c 4 6
+ mknod /dev/tty7 c 4 7
+ creating /etc/motd
```

```
Drive 0 File-system structure:
```

```
Logical device 1 ...
Logical device 2 ...
Logical device 3 ...
```

```
+ mkfs /dev/...
```

```
+ File-system configuration finished"
```

5.2. Configuring Your UNIX Kernel

The file, /unix, is the file you boot to from the Standalone environment. It is actually a link to the file /unix.cd.dm.i, which is the UNIX operating system, configured for:

- Any Autoconfiguring disk drive(s) (6Mb, 33Mb, 168Mb, etc.)
- Cartridge tape drive (or no tape drive at all)
- Floppy drive(s) (or no floppy drive at all)
- Any amount of On-board RAM
- Up to 1 Megabyte Multibus RAM
- Console and Auxiliary (ttyb) serial ports
- 0 to 32 additional serial I/O ports

If your system has a different configuration, or additional peripherals that aren't mentioned above, you will have to reconfigure your UNIX kernel. This means that the operating system will be recompiled and installed under /unix.

A. The terminal should display:

"Do you want to reconfigure your UNIX kernel?"

If you do not need to make a new kernel, type n and follow the instructions.

If you do need to make a new kernel, type y and answer the queries to make the new kernel, follow the instructions that are displayed after the kernel has been made.

B. Reset and reload the system, this time note the "Configuration Script" is no longer displayed.

You are now ready to use your system. Good Luck!