COHERENT Operating System Release Notes

Release 3.0.0+

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Section 1:
Release Notes

This document contains the release notes for COHERENT version 3.0. Be sure to read this document carefully before you begin the installation process.

Also attached is a compatibility list — hardware reported to work with this release of COHERENT, as well as a list of incompatible hardware. Please check these lists prior to installing COHERENT.

Finally, these notes contain a set of errata — errors in the manual that were discovered after the manual went to press. Try as we might, in a manual more than 1,000 pages long, consisting of 17 lengthy tutorials and more than 700 individual Lexicon articles, mistakes are nearly inevitable. We suggest that you pencil the corrections into your manual, and we hope that you will accept our apologies for whatever inconvenience this may have caused you.

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Section 2:
Compatibility Information

This section of the release notes details machines, add-on cards and BIOS ROMs reported to work with the COHERENT operating system, as well as those reported not to work.

Before you continue, please note the following caveats:

First, this is only a partial list of the hardware on which COHERENT runs. We receive confirmation of new machine configurations on an almost daily basis. If you believe that you have a machine, BIOS or add-on board that is **not** compatible with COHERENT but is listed below, we suggest calling our technical support department.

Second, manufacturers make changes to their hardware as part of redesigns or product improvements. These can include logic, timing, firmware or functionality changes. While efforts have been made in order to support tested products, Mark williams Company cannot guarantee compatibility with products not under its control.

Lastly, if you believe that your computer cannot run COHERENT, please contact the Mark Williams Company technical support department.

Systems

The following systems have been tested with COHERENT. Note that configurations vary, especially with respect to disk controllers, so not all possible configurations have been tested.

```
Acer 910, 1100
AGI 3000D, 3000G
ALR PowerFlex, 386/220
American Semiconductor 286 PC
Arche 386/25
AST Premium 286, 386/33
AT&T 6386
Austin 386/33
Bondwell 286 Laptop
Club AT, 1800
Compaq 286, 386, 386 Portable, LTE/286
CompuAdd 286-10, 286-12, 320
Computer Directions 386SX
Dataworld 386/33
Dell System 210, 300, 310
DTK PEM-2000 386
Dyna 386/20
EDP 386SX
Emerson 8286ECV
EPS 386
Epson Equity II+
Executive AT-286
Five Star 386/20
Gateway 2000 (RLL and ESDI)
GCH 386 AT
HP Vectra RS/20 (ESDI), ES/12
```

IBM PC/AT (286)
Jameco 3550
Logix 386-25
MAXAR 386
Micro-1 386
Micro-Designs 386, 25MHz
Micro Express 386
Micronics 386
Mitsubishi 286L, 386
MultiTech 900
MYLEX MWS386, 25 MHz
NCR 386
NEC 386/25, Powermate 386/20, 386SX
Northgate 286/20, 386/16, 486
Optima 386
Packard Bell Axcel 386SX, PB900, Pack-Mate, Legend V
PC's Limited AT
SEFCO 16 MHz 386SX
Smart Micro 386
Standard Brands 386-25, 386/SX
Sys Technologies 386
Tandy 3000HD, 4000
Telex 1280
Tera-Tek 386
Toshiba T3200, T5200
Touche' 5550T
Tri-Star 386
Unisys 2850
UTI 386
Wells American AT, 14 MHz
Wyse 2200
Zenith 386/33, SuperSport 286

Add-On Boards

The following add-on boards have been tested with
COHERENT. Note that board and firmware revisions may
vary. Not all possible configurations have been tested.

```
BTC 1505 Monochrome Graphic Printer Card
Data Technology DTC7287 RLL 1:1
DTK Graphicsmith
DTK PEI-301 32-bit memory expansion
Emulex DCP/MUX
IBM Monochrome Printer card
National Computer Ltd NDC545 MFM
SEFCO serial adapter
SEFCO Monochrome adapter
Ultrastore Ultra 12 ESDI
Western Digital WD1006V-MM2 1:1 MFM
Western Digital WD1006V-SR2 1:1 RLL
Western Digital WD1007 ESDI
```

BIOS ROMs

The following BIOS ROMs have been tested with
COHERENT.

```
AMI 286
DTK 386
IBM AT (286)
PHOENIX 386
PHOENIX 386SX
```

Incompatible Hardware

The following hardware is known **not** to work with this release of COHERENT.

```
AT&T 6300
IBM MicroChannel PS/2 models
Perstore RLL hard disk controllers
SCSI interface devices
Western Digital WD1004-27X
```

Section 3:
Errata

The following manual sections are incomplete in the printed Lexicon. These will be fixed in the next release.

getty	Terminal initialization
kill	Signal a process
kill	System call
mail	Electronic mail
mknod	System call
mount	System call
sync	System call
umount	System call

Undocumented Features

1. Setting environment variable **ASKCC** to **YES** causes **mail** to prompt for a list of names to recieve copies of the message being sent.

2. The login prompt can be changed by editing the file **/etc/logmsg**.

3. The **kill** command accepts signal names as well as numbers. The following signal names may be used: **SIGHUP, SIGINT, SIGQUIT, SIGALRM, SIGTERM, SIGREST, SIGSYS, SIGPIPE, SIGKILL, SIGTRAP, SIGSEGV, SIGILL, SIGIOT, SIGEMT, SIGFPE, SIGBUS**. The letters *SIG* at the start of the signal name may be omitted. Upper- or lower-case may be used for the signal name. An optional hyphen may precede the signal name.

4. The shell script **/etc/brc** is executed by the **init** process when COHERENT enters single-user mode. The commands in **/etc/brc** do such things as check the file system and initialize the time. See the **rc** lexicon entry for the analogous script executed when COHERENT enters multi-user mode.

Install Problems

If you are having trouble using your parallel printer with COHERENT, it may be due to differences in naming conventions. DOS device **LPT1:** may actually be COHERENT device **/dev/lpt2**.

To see if this is the case, try sending output to /dev/lpt2, e.g.

```
echo HELLO WORLD > /dev/lpt2
```

with your printer on line. If the output is printed, you need to link **/dev/lp** to **/dev/lpt2**. To do this, log in as root and type

```
ln -f /dev/lpt2 /dev/lp
```

Serial Communications

Using the **r** option for a port in the */etc/ttys* file will cause users dialing in to be prompted for a remote access password in addition to their login name and optional password. The */etc/passwd* file has an entry for **remacc** where this password is stored in encrypted form. To avoid prompting for the remote access password, delete the second field of the remote access entry in */etc/passwd* (e.g., change the entry to read

```
remacc::::Remote access::
```

while logged in as root).

UUCP

1. Immediately after adding a new site, outgoing mail should be queued to that site (i.e., use **mail** to send a message to any login at the remote site).

2. When */usr/lib/uucp/uucico* calls a remote site using a modem that is enabled for logins, the port used is disabled during the transfer and then re-enabled before */usr/lib/uucp/uucico* exits. When the port is re-enabled after the transfer, permissions for the port are restored by **init** to the default values rather than to their previous value.

3. If a site can be reached using **kermit** but not using **uucico**, check the */usr/lib/uucp/Permissions* file. If the **LOGNAME** entry for the site in question is not a **u** followed by the value specified in the **MACHINE** field, try changing it to be so. For example,

```
LOGNAME=uxyz    MACHINE=xyz \
```

Known Bugs and Limitations

1. On some systems, when using DOS 4.01, any operations from DOS that write to the file allocation table (FAT) of the DOS partition cause the COHERENT master boot to stop working.

2. Device **/dev/tty** is accessible only from the console and terminal ports set as *remote*, not from terminals set as *local*. (This will be fixed in the next release of COHERENT.)

3. The **-v** option to **/etc/fdformat** does not work correctly.

4. In shell scripts, the start of a *here document* must be the last thing on a line, e.g.

```
cat > outfile << SHAR_EOF
```

works, but

```
cat << SHAR_EOF > outfile
```

does not.

5. In shell scripts, a newline may not occur inside a double-quoted string, although it may occur inside a single-quoted string. For example,

```
FOO='x
yz'
```

works, but

```
BAZ="x
yz"
```

does not.

6. Wildcards are *not* expanded in redirection arguments. If you enter

```
echo hello > junk
```

then

```
cat < junk
```

works, but

```
cat < ju*
```

does not.