

RELEASE NOTES:

CMFS SOFTWARE FOR THE
CM-2 AND CM-200 FRONT END,
VMEIO HOST COMPUTER, AND CM-IOP

-- VERSION CMFS 2.0 FINAL --

February 26, 1993

1.0 Overview

These release notes list the contents of the Version 2.0 final CMFS software tape (QIC-150) and describe the new features available with this release. The contents of this tape can be installed on the CM-2 and CM-200 front-end computer, VMEIO host computer, and CM-IOP,

This software is compatible with CMSS 6.1.2 and previous, and with DataVault software version DV 2.0 final.

This tape contains revised CMFS man pages, as well as new man pages for commands new to the DataVault MicroVAX software (see the Release Notes for the DataVault MicroVAX Software). Please add the new man pages to your site's man8 directory (usually in /usr/doc for CM-5 systems or /usr/cm/doc for CM-2 or CM-200 systems) and replace the outdated man pages with the revised ones.

2.0 Tape Contents

This tape contains five directories and an installation script.

A. bin.sun4 Directory Contents

cmchgrp	cmdf	cmIn	cmrm
copyfromdv	cmchmod	cmdu	cmIs
cmrmdir	copytodv	cmchown	cmdump
cmmkdir	cmstat	dvcp	cmcp
cmfind	cmmv	cmtar	ibmtape
cmddd	cmglob	cmrestore	cmtruncate

B. etc.sun4 Directory Contents

CMMAKEDEV	cmfsdebug	dv_disk_util	dvtest2
fstest	cmfs_geometry	cmmknod	dv_util_vmeio
fsserver	socket-server		

C. h Directory Contents

cm_attrfile.h	cm_errno.h	cm_memory.h	cm_stat.h
hippi_ioctl.h	cm_compat.h	cm_file.h	cm_mount.h
cmfs.h	ufb_ioctl.h	cm_conf.h	cm_fs.h
cm_mtio.h	cmfs_in.h	cm_dir.h	cm_ioctl.h
cm_param.h	cmfs_socket.h		

D. lib.sun4 Directory Contents

libcmfs-pg.a libcmfs.a

E. lint Directory Contents

llib-cmfs.ln

F. install_cmfs.csh

3.0 New Features

Several new CMFS library routines are available on this tape:

- CMFS_physical_lseek
A single call can seek up to 32 Gbytes into an SFS file (see note below) and 1 Tbyte into a CMFS file.
- CMFS_serial_dlseek
A single call can seek up to $(2^{51} - 1)$ bytes into an SFS file and up to 1 Tbyte into a CMFS file.
- CMFS_serial_llseek
A single call can seek up to $(2^{63} - 1)$ bytes into an SFS file and up to 1 Tbyte into a CMFS file.
- CMFS_physical_ftruncate
A single call can specify a file length of up to 32 Gbytes for an SFS file and 1 Tbyte for a CMFS file. This routine is also available at the shell level by executing `cmptruncate`.
- CMFS_serial_dftruncate_file
A single call can specify a file length of up to $(2^{63} - 1)$ bytes for an SFS file and up to 1 Tbyte for a CMFS file.
- CMFS_serial_lftruncate_file
A single call can specify a file length of up to $(2^{51} - 1)$ bytes for an SFS file and up to 1 Tbyte for a CMFS file.

For syntax and other information, see these routines' man pages, included on this tape.

Note: an SFS file resides on a Scaleable Disk Array (SDA), a mass storage system on the Connection Machine model CM-5. If your site does not have access to a CM-5 system, the information regarding SFS files is irrelevant.

Installation Guide

The release consists of the CMFS commands, utilities, unix libraries and include files for the Sun Front End. CMFS 2.0 is compatible with CMOST 6.1.2 and previous. The following are the sizes of the different portions:

```
commands: 26.5 MB
utils:    12.6 MB
libs:     6.0 MB
headers:  .07 MB
lint lib: .009 MB
```

The following files are included in the release:

Commands: cmdf cmfind dvcp cmtar cmdump cmrestore cmcp cmdd cmdu cmglob
cmIn cmls cmmkdir cmmv cmrm cmrmdir cmtruncate copyfromdv
copytodv cmchgrp cmchmod cmchown cmstat ibmtape

Utilities: fstest dvtest2 stresstest dv_util_vmeio dv_disk_util cmfsdebug
cmfs_geometry fserver cmmknod CMMAKEDEV

Libraries: libcmfs.a libcmfs-pg.a

Headers: cm_attrfile.h cm_compat.h cm_conf.h cm_dir.h cm_errno.h cm_file.h cm_fs.h
cm_ioctl.h cm_memory.h cm_mount.h cm_mtio.h cm_param.h cm_stat.h cmfs.h
hippi_ioctl.h ufb_ioctl.h cmfs_in.h cmfs_socket.h

Lint Lib: llib-cmfs.ln

Lisp libraries are not included. If a customer requests one, it can be built. Also, the tape library is not shipped, as it is a "one-of" for WGeo.

Additionally, this release can be used on VMEIO (sun) and CMIOPs to bring the CMFS sw up to date on such machines. Simply copy the files over to the vmeio/cmiop host and put them in the appropriate places. Note, the installation script will not work on such systems.

To Install:

```
un tar the tape in a safe place: # tar xf /dev/rst0
```

This will result in the files:

```
bin.sun4          h          lib.sun4
etc.sun4          install_cmfs.csh  lint
```

Turn off any daemons that may be running (fserver, socket-server, for example), and then:

Simply run the script install_cmfs.csh as root. You will be prompted as to whether you want to back up the existing versions. The script checks to be sure that you have enough disk space; but it does not follow sym links! So, for example, if /usr/local/bin/cmcp -> /usr/cm/cm-runtime/bin.sun4/cmcp (see spermo for an example), the script will look for available space in /usr/local/bin; not in /usr/cm/cm-runtime...