TMC TECHNICAL BULLETIN

Date:

March 18, 1992

TD:

"6.1-022-6.1.1-patch-additional"

Hardware Environment:

CM-2, CM200, Sun and Vax front end

Software Environment: CMSS6.1.1

Problem:

Before you install 6.1.1, please read this.

- 1. There are two files missing in the 6.1.1 distribution(cm-runtime-6104/microvax/{ugidd.sun4,ugidd.vax}). is also a new README to replace the one that is in cm-runtime-6104/microvax. They can be ftp'd under the directory ~csg/patches-for-6-1/6.1.1 directory.
- 2. This release attempts to separate the patch and original files in two different file trees. There is a shell script "merge" under ~csg/patches-for-6-1/6.1.1 avaliable for you to use if you choose to merge the patch release and the 6.1 together later on.
- 3. For VAX user, the cm-acctd under cm-runtime-6104/etc.vax is not the corrected binary. You can ftp the correct binary under ~csg/patches-for-6-1/6.1.1.
- 4. For Sun 600 series users, please make sure you have the Rev A7 VBI board before you attempt to use your Sun 600 as a front end. The system will crash with a panic message either at startup time or at any time while the machine is running.
- 5. For Sun 600 series users, the install-sun4-driver script has been modified for this architecture. If you are reinstalling all the software, you should do the following:
 - a. Install 6.1, answering *no* to the "install driver" question.
 - b. Install the 6.1.1 patch release.
 - c. cd into the patch release directory "./cm-runtime-6104/install"
 - d. Do: ./install-sun4-driver <directory>/cm-runtime-6104 and answer the questions as though they were in the 6.1 install script.

If you are not reinstalling 6.1, you can do c and d after you have installed the 6.1.1.

Contact:

chungf@think.com

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Message #13 (from WHEATIES:/homes/pao/mail/pao.babyl)

From: Robert Whaley <whaley@think.com>

Date: Mon, 17 May 1993 11:24 EDT To: tech-bull-announce@think.com

Subject: 2.0-003-comprehensive-install-problems

Reply-To: whaley@think.com

Thinking Machines Corporation

TECHNICAL BULLETIN

Date: 05-17-93

ID: "2.0-003-comprehensive-install-problems"

Hardware Environment: DataVault and CM2/CM200 Sun Front-ends

Software Environment: DVSW 2.0 Final and CMFS 2.0 Final

Problem:

This tech bull encompasses all currently known problems encountered as a result of the DVSW 2.0 and CMFS 2.0 installs. It incorporates 2 earlier tech bulls. Namely:

- 2.0-001-dvheal-in-wrong-directory and
- 2.0-002-dv_coldboot.config-reference-in-2.0-final-install-notes

Installing 2.0 takes 2-3 hours. Before you start read though this tech bull. Thanks to Yasunari Tosa, Chris Garvin, Paul Barth, and Harvey Richardson for tracking down and disseminating information about these problems.

- 1. The last line of the DVSW 2.0 Final installation notes says "Remember to restore the dv_coldboot.config file that you backed up, also." Please disregard this instruction.
- 2. When the dv_daemon attempts to autoheal, it looks for the dvheal utility in /usr/local/etc/diag. The DV 2.0 install puts dvheal in /usr/local/etc so the heal fails. The executable dvheal should be moved to /usr/local/etc/diag. Remember to install this file on the back up filesystem of /usr/local ra1g as well.
- 3. The default location for CMFS include file is /usr/include. This is incorrect. These files should be installed in /usr/include/cm. When installing the CMFS 2.0 software, override this default with the correct directory. (A replacement install script is available in ~csg/patches-for-cmfs-2.0 that fixes this problem.)
- 4. When installing the commands, utilities, and librarys, be sure to specify the actual location *not* the location of a link. By default these files will be installed in /usr/local/bin, /usr/local/lib, and /usr/local/etc. But on many systems this is not the appropriate location. For example, if the librarys are actually located in /usr/cm/cm_runtime_6104/lib.sun4 but there are links pointing to these librarys in /usr/local/lib, be sure to load the files in /usr/cm/cm_runtime_6104/lib.sun4 not in the default location: /usr/local/lib.

If you don't specify the actual location then you will suffer problems such as compilers not being able to locate the CMFS librarys.

- 5. The CMFS libraries maybe installed without the correct links depending upon how the links are set prior to the install. After installing, carefully check and correct the links in /usr/local/lib/ and the links in the cm-runtime-6104 library. (A replacement install script is available in ~csg/patches-for-cmfs-2.0 that fixes this problem.)
- 6. Do not use the -a -h or -p options for dv-daemon unless you are willing to deal with the problems that may arise from this new way of sparing and healing. In particular, note that healing may take a long time to perform and consequently you may want to do this manually.
- 7. Consider disabling inode caching on the fsserver process (use the -IO or -II switch). Caching is new with release 2.0 and is the default. If

you don't disable caching explicitly, caching will be turned on. While caching can improve performance, it can also cause inconsistent results when the cashed data is not flushed (for example, deleted files appear to still be present and permission or ownership changes don't take effect).

- 8. dvtest2 has been modified and uses more memory than in previous versions. If your CM has small (256k) or medium (1M) memory, be sure to use the -q option to dvtest2 in order to avoid running out of memory.
- 9. The file /usr/local/etc/diag/ram.img is incorrect. After loading the tape, replace it with the ram.img from ~csg/patches-for-dvss-2.0. If this file is not replaced, dvck may hang. Remember to install this file on the back up filesystem of /usr/local ra1g as well.
- 10. unfsd does not support read-write filesystems (it only supports read-only file systems. A patch to fix this problems is available in ~csg/patches-for-dvss-2.0. If you use this version of unfsd, be sure to include in unfsd_exports each system that NFS mounts the data vault, otherwise unfsd will hang.

A couple of problems from earlier releases still present:

- .unlk files may appear on the datavault when and existing file is the destination of the 'cmmv' command. You can try to remove these files with cmrm -- this works at least some of the time.
- 2. cmfsck resets the file access times on the Datavault. No workaround.

Contact:

garvin@think.com

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TMC TECHNICAL BULLETIN

Date: Sept, 2 1992

ID: "6.1-030-fsserver-bugs"

Hardware Environment: Datavault

Software Environment: DVSS 6.1.2

Description:

There were 2 bugs found in the 6.1.2 fsserver after the tapes were made, therefore the fixes were not able to be distributed. The problems are:

1. fsserver core dumped when talking to pre 6.1 CMFS programs.

2. Truncating a directory will cause fsserver crash.

A patched version of fsserver is now available. You can ftp from the directory ~csg/patches-for-6-1/fsserver on cmms.think.com. There are three files in it. fsserver.sun4 is for sun front ends without a datavault and the cm filesystem on the sun frontend. The fsserver.vax is for the vax frontend and datavault. The fsserver.dv is a soft link to fsserver.vax. If you prefer a tape, please send mail to chungf@think.com and we will arrange a patch tape to be sent to you.

Please replace the fsserver with the one that was tared off the 6.1.2 release tape with the patched fsserver before you install the 6.1.2 Datavault software. The location of the fsserver is in the directory \${release-dir}/cm-runtime-6104/microvax. The \${release-dir} is where you tar off the 6.1.2 release tape.

Contact: chungf@think.com

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