Recovery From rm * From the Root (/) Directory

Special Notices

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> **Note:** The information in this document has **not** been verified for AIX 4.1.

About This Document

This document describes steps to recover after executing the rm command in the root directory.

Summary of the Recovery Procedure

Deleting the files in the root directory will delete the links:

```
bin -> /usr/bin
bootrec -> /usr/sbin/bootrec
lib -> /usr/lib
u -> /home
unix -> /usr/lib/boot/unix
```

In the root directory, removing the bin link disables the korn shell needed for login. The recovery will boot in service mode and rebuild the links.

Steps

1. Turn the key to the Service position.
2. With BOSboot or installation media OF THE SAME VERSION AND LEVEL AS THE OPERATING SYSTEM, boot the system.

```
+-----------------------------------------------------------+
|                                                           |
| WARNING:  If you boot a 3.2 system with 3.1 media, or     |
| boot a 3.1 system with 3.2 media, then you will not be    |
| able to use the standard scripts (getrootfs or            |
| /etc/continue) to bring your workstation into full main-  |
| tenance mode.                                             |
|                                                           |
| Moreover, performing the scripts on a 3.1 system with     |
| 3.2 boot media may actually remove some files and         |
| prevent your system from booting successfully in normal   |
| mode until missing files (/etc/mount and /etc/umount)     |
| are replaced on the disk.                                 |
|                                                           |
+-----------------------------------------------------------+
```

Notes

a. For information on BOSboot diskettes, refer to InfoExplorer or order fax #2462 from 1-800-IBM-4FAX (or 415-855-4FAX outside the U.S. from a fax machine phone).

b. If booting from diskettes, when you see LED c07, insert the next diskette. This may be the optional display extensions diskette (required for AIX 3.2.5) or the display diskette.

c. If you have AIX 3.2.5, used a fddi network install, and selected that option for the install device, you will need the communications extensions diskette. If this diskette is not available, you can build it from another system with fddi installed or call your branch office for assistance.

Follow the prompts to the installation/maintenance menu.

3. Choose the maintenance shell option 4

4. Determine the hdisk# to use with the getrootfs or /etc/continue command. If you have only one disk, then "hdisk0" is the proper hdisk# to use. If you have more than one disk, do the following:

   - For AIX 3.2.4 or later run:

     ```
     getrootfs
     ```

     The output indicates the disk that should be used with getrootfs in the next step.

   - For AIX 3.1 to 3.2.3E run:

     ```
     lqueryvg -Atp hdisk# | grep hd5
     ```

     for each hdisk# (hdisk0, hdisk1, etc.) until you get output that looks like:

     ```
     00005264feb3631c.2  hd5 1
     ```

     The exact output you get will be different but will follow the form:

     ```
     large_number.x  hd5 1
     ```

You may find more than one disk has this output. These will all be disks which belong to the rootvg volume group. You may use any of the disks identi- fied to be in rootvg in the following step.

5. On the hdisk discovered above run:

   ```
   getrootfs hdisk# sh
   ```

   If you get errors from getrootfs, do not continue with the rest of this procedure. Correct the problem causing the error. If you need assistance correcting the problem causing the error, contact one of the following:

   - local branch office
   - your point of sale
   - 1-800-CALL-AIX (to register for fee-based services)

   All of the above avenues for assistance may be billable.

6. mount the root filesystem with:

   ```
   fsck -y /dev/hd4
   mount /dev/hd4 /mnt
   ```

7. rebuild the missing links with:

   ```
   cd /mnt
   ln -s /usr/bin bin
   ln -s /usr/lib/boot/unix unix
   ln -s /usr/sbin/bootrec bootrec
   ln -s /usr/lib lib
   ln -s /home u
   ```

8. Type the following:

   ```
   cd /
   umount /dev/hd4
   exit
   sync;sync;sync
   turn the key back to normal mode
   reboot
   ```

9. This should allow the machine to reboot in normal mode so that you can login. Depending what else was in the root directory, you will probably have to restore files from a backup tape at this point.

Reader's Comments

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Be sure to print your name and fax number below if you would like a reply:

Name: Fax Number:

END OF DOCUMENT (recover.rm.root.32.cmd, 4FAX# 4825)