Reducing the Size of the /tmp File System in AIX 4.1

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About This Document

This document describes how to reduce the /tmp file system in AIX 4.1 on a RISC System/6000.

Recovery Procedure

Note: BACK UP THE DATA in the /tmp file system before preceding. One way to do this is the following:

```
tar -cvf /dev/fd0 /tmp
```

(/dev/fd0 can be replaced with /dev/rmt# or the full path of a file; that file CANNOT BE in the /tmp file system.)

Note: If neccessary, set the service mode boot list to include diskette, CD-ROM and tape drives with the following command:

```
bootlist -m service fd cd rmt badisk scdisk
```

After the procedures in this document have been completed, the bootlist can be returned to the values desired.

1. Turn the key to the Service position.
2. With BOOTABLE MEDIA OF THE SAME VERSION AND LEVEL AS THE SYSTEM, boot the system.

   The bootable media can be ANY ONE of the following:

   - Bootable cdrom
   - NON_AUTOINSTALL Mksysb
   - Bootable Install Tape

     Follow the screen prompts to the following menu:

```
Welcome to Base Operating System
Installation and Maintenance
```

3. Choose "Start Maintenance Mode for System Recovery" (Option 3)

   The next screen has the "Maintenance" Menu

4. Choose "Access a Root Volume Group" (Option 1)

   The next screen displays a warning that indicates you will not be able to return to Base OS menu without rebooting.

5. Choose "0 continue"

   The next screen displays information about all volume groups on the system.

6. Select the root volume group by number.

7. Choose "Access this volume group and start a shell" (Option 1)

   If you get errors from the above option, 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 fol- lowing:

   - 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. If no errors occur, proceed with the steps outlined below:

8. Unmount the /tmp file system with the following command:

   ```
   umount /tmp
   ```

9. Remove the /tmp file system, with the following command:

   ```
   rmfs /tmp
   ```

10. Create the logical volume for /tmp with the command "mklv -y hd3 rootvg x", where x is the number of physical partitions you want to allocate. Partitions are 4MB by default. For example,

    ```
    mklv -y hd3 rootvg 2
    ```

    makes logical volume hd3 of size 8MB (2 4MB partitions) in the rootvg volume group.

11. Create the /tmp file system with the following command:

    ```
    crfs -v jfs -d hd3 -m /tmp -a check=false -a free=false -a vol=/tmp
    ```

12. Now you must set your TERM variable and export it. If you are using a megapel display, try setting TERM=lft. For example:

    ```
    export TERM=lft
    ```

    If you are using an ASCII terminal of some sort (say an ibm3151), set your TERM to the appropriate terminal type. For example:

```
export TERM=ibm3151
```

13. Edit /etc/filesystems with the following command.

    ```
    vi /etc/filesystems
    ```

    Go down to the stanza for /tmp (search for "tmp"). Within that stanza go to the line that says "mount = false" and change the word "false" to "automatic". Save the file.

14. Mount the /tmp file system, with the following command:

    ```
    mount /tmp
    ```

15. Change the ownership and permissions to the proper values with the following commands:

    ```
    chmod g-s /tmp
    chmod 1777 /tmp
    chown bin.bin /tmp
    ```

16. Restore the /tmp files from your backup.

17. With the key in Normal position, issue the reboot command.

    ```
    sync;sync;sync;reboot
    ```

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