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

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About This Document

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

Recovery Procedure

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

```
tar -cvf /dev/fd0 /var
```

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

Edit the file "/.exrc" and add as the first line:

```
set directory=/tmp
```

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

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

   ```
   umount /var
   ```

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

   ```
   rmfs /var
   ```

10. Create the logical volume for /var with the command "mklv -y hd9var rootvg x", where x is the number of physical partitions you want to allocate. Partitions are 4MB by default. For example,

    ```
    mklv -y hd9var rootvg 2
    ```

    makes logical volume hd9var of size 8MB (2 4MB partitions) in the rootvg volume group.

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

    ```
    crfs -v jfs -d hd9var -m /var -a check=false -a free=false -a vol=/var
    ```

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

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

    ```
    mount /var
    ```

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

    ```
    chmod g-s /var
    chmod 755 /var
    chown bin.bin /var
    ```

16. Restore the /var files from your backup.

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

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

    Note: After the system reboots, you may want to edit the file "/.exrc" and remove the line you added previously.

Reader's Comments

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