Reducing Default Paging Space (hd6) For AIX 3.1 - 4.1

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About this Document

This document describes how to reduce the size of the default paging space (hd6) on a RISC System/6000 in AIX 3.1 or 3.2 or 4.1.

Warning: Please do not use this document if the system is a /usr client, diskless client, or dataless client.

Steps

1. Determine how many paging space logical volumes exist on your system with the following command:

   ```
   lsps -a
   ```

   If you have more than one paging space in rootvg, note their names (listed in the "Page Space" column) and go to step 3.

   If you have just one paging space in rootvg (it will be be named hd6), continue with step 2.

2. Check how many free physical partitions (PPs) you have available with this command:

   ```
   lsvg -p rootvg
   ```

   Create a paging space to use temporarily with the following command, where "X" is a number between 1 and the total number of free PPs shown in the lsvg output.

   ```
   mkps -s X -a rootvg
   ```

   Run "lsps -a" again and note the name of the new paging space (probably "paging00").

3. Change the characteristics of the default paging space (hd6) so that it is not active at the next reboot:

```
chps -a n hd6
```

4. Edit the file:

   ```
   For AIX 4.1 and 3.2:  /sbin/rc.boot
   For AIX 3.1 only:  /etc/rc.boot4
   ```

   Change the line "swapon /dev/hd6" to "swapon /dev/pagingXX", where "XX" is the number of one of the paging spaces found in step 1, or the number of the new paging space created in step 2.

5. Determine which disk is the boot disk with the lslv command. The boot disk will be shown in the PV1 column of the lslv output.

   ```
   lslv -m hd5
   ```

WARNING: Please do not proceed further if the system is a /usr client, diskless client, or dataless client.

6. Now, run the bosboot command, using the hdisk# determined in step 5.

   ```
   bosboot -a -d /dev/hdisk#
   ```

7. The system needs to be rebooted in order to inactivate the hd6 paging space:

   ```
   shutdown -Fr
   ```

8. At AIX 4.1 the default dump device is set to hd6. hd6 cannot be removed while it is the dump device. Check the dump device:

   ```
   sysdumpdev -l
   ```

   If the primary or secondary dump device is set to hd6 then reset the pointer:

   ```
   sysdumpdev -P -p /dev/sysdumpnull
   ```

9. Because certain scripts are currently hard-coded to activate "/dev/hd6", it is recommended that you create the new paging space under the same name. Remove hd6 and create a new hd6 of smaller size, with the following commands (where "<PS size in 4 Meg blocks>" is the number of PPs that you want to allocate to hd6):

   ```
   rmps hd6
   mklv -y hd6 -t paging rootvg <PS size in 4 Meg blocks>
   ```

10. Edit the file:

    ```
    For AIX 4.1 and 3.2:  /sbin/rc.boot
    For AIX 3.1 only:  /etc/rc.boot4
    ```

    Change the "swapon" line back to "swapon /dev/hd6".

| 11. Run:

| ```
| lsps -a
| ```

| to see if "hd6" is marked to be automatically swapped on at boot time. This
| is determined by a "y" under the "auto" column for hd6. If a "n" is under the
| "auto" column, run:

```
chps -a y hd6
```

to change the characteristics of the default paging space.

12. Run the bosboot command, using the hdisk# determined in step 5.

    ```
    bosboot -a -d /dev/hdisk#
    ```

13. If you did not create a temporary paging space, you are finished with this procedure. Otherwise, continue with the following steps.

14. Change the characteristics of the temporary paging space (which is assumed to be paging00 in these steps), so that it is not active at the next reboot:

    ```
    chps -a n paging00
    ```

15. The system needs to be rebooted in order to inactivate the temporary paging space:

    ```
    shutdown -Fr
    ```

16. Remove the temporary paging space:

    ```
    rmps paging00
    ```

17. For AIX 4.1: IF the dump device was changed in step 8 then reset the dump pointer:

    ```
    sysdumpdev -P -p /dev/hd6
    ```

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