Recovery from an LED C31 in AIX 4.1

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Causes of an LED C31

An LED C31 during IPL on a RISC System/6000 in AIX 4.1 may be caused by an incorrect console configuration, by a corrupt ODM (Object Data Manager), or by a non-terminal device (such as a modem or printer) plugged into port 1 or 2.

Summary of the Recovery Procedure

To resolve the LED C31, check for a non-terminal device plugged into port 1 or 2. If that is not the problem, you will need to boot up in Service mode and change the console with the "chcons" command as in the following steps.

STEPS

1. Check for a non-terminal device plugged into serial port 1 or 2. If there is not such a device, go to step 2. If there is one, unplug it or turn it off. Then reboot the machine with the key in Normal position. You do not need to continue with these steps.
2. Turn the key to the Service position.
3. 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
   - Mksysb
   - Bootable Install Tape

   Follow the prompts to the "Welcome to Base OS" menu.
4. Choose "Start Maintenance Mode for System Recovery" (Option 3)

   The Next Screen would prompt the following Menu "Maintenance"

- Choose "Access a Root Volume Group" (Option 1)

  At this stage the console would display information about rootvg, and also Display a Menu with 2 Options.

- 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.

5. Change the system console with the following command. The change will take effect at the next startup of the system.

   If your console is an lft (6091), run the following:

   ```
   chcons -a login=enable /dev/lft/0
   ```

   If your console is a tty (ibm3151), run the following:

   ```
   chcons -a login=enable /dev/tty0
   ```

6. With the key in Normal position, run

   ```
   shutdown -Fr
   ```

7. If the system does not stop at LED C31 during reboot, you do not need to continue with these instructions.

   If the system still stops on LED C31 during reboot, repeat steps 2-4 and then follow the following menu.

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

   The Next Screen would prompt the following Menu "Maintenance"

   - Choose "Access a Root Volume Group" (Option 1)

     At this stage the console would display information about rootvg, and also Display a Menu with 2 Options.

   - Choose "Access this volume group and start a shell before mounting the filesystems" (Option 2)

8. Run the following commands, which will remove much of the system's configuration, saving it to backup directory.

```
mount /dev/hd4 /mnt
mount /dev/hd2 /usr
mkdir /mnt/etc/objrepos/bak
cp /mnt/etc/objrepos/Cu* /mnt/etc/objrepos/bak
cp /etc/objrepos/Cu* /mnt/etc/objrepos
/etc/umount all
exit
```

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
```

Save the clean ODM database to the boot logical volume. ('#' is the number of the fixed disk, determined with the previous command.)

```
savebase -d /dev/hdisk#
```

Continue with step 10.

9. Turn the key to Normal position and run

   ```
   shutdown -Fr
   ```

10. If LED C31 still occurs when you reboot your system and you need further assistance with this problem, 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.

Reader's Comments

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