Booting in Service Mode at AIX 4.1

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About This Document

This fax discusses the procedures for booting into Service mode at AIX 4.1 for various RS/6000 models.

Booting the 43P:

The 43P does not support booting off of an install tape. For tapes, it only supports booting off of a 43P mksysb tape with AIX 4.1.4 and SMS 1.07 or later. The only other acceptable boot media for keyless machines when booting into Service mode is an AIX Install CD. If your current bootlist lists the CDROM or tape drive before the hard drive, you can insert your boot media into the drive and restart your system, from which point you can follow Step 2 of the Keyed Machine instructions below.

If the CDROM or tape drive is not on your current bootlist, you will need to alter your bootlist before proceeding further:

1. Insert the SMS diskette in the disk drive.
2. Restart the system.
3. As soon as the first screen appears, press the F4 key. This is after the keyboard icon appears on the screen, but before the last icon appears. The System Management Services screen will appear.
4. Choose "Select Boot Devices", and set the sequence for boot devices to be read at boot time so that the CDROM or tape drive is read before the hard drive.
5. Go back to the System Management Services screen, and choose F3 to reboot once you have removed the SMS diskette and inserted the bootable media into the appropriate drive. The system will begin to boot off the CD or tape.
6. You are now in Step 2 of the Keyed Machine boot intructions below.

Booting the 850 (Thinkpad):

The 850 cannot boot from tape, only from an AIX Install CD. Per the 850 instruction book,

1. Power off the system and wait 5 seconds.
2. Press and hold F1; then turn on the computer.
3. Keep holding down F1 until the Easy-Setup menu appears
4. When the EASY-SETUP screen appears, select the STARTUP icon (shows a diskette, cdrom, hard drive, a question mark, and the numbers 1 and 2) which lets you change the order in which the computer searches for boot devices for the operating system. CLEAR the current setting and then select the cdrom for choice 1 and hdd (the hard disk) for option 2. Select OK.
5. Insert the install CD in the drive, and then select the EXIT icon. This should start the AIX boot process from the CD or tape.
6. You are now in Step 2 of the Keyed Machine boot intructions below.

Booting the E20, E30, and F30:

The E20 will ONLY boot from a mksysb or Sysback tape, not an IBM install tape. If you don't have a mksysb or Sysback tape, your only boot option is an AIX Install CD. If the current bootlist lists the CDROM or tape drive before the hard drive, you can simply insert your boot media into the drive and restart your system, from which point you can follow Step 2 of the Keyed Machine instructions below.

If the CDROM or tape drive is not on your current bootlist, you will need to alter your bootlist before proceeding further:

1. Boot the system and wait for the keyboard icon to appear, then press F4 before the long beep.
2. To select a boot device or boot from a specific device, change the StartUp option. Clear the bootlist and set the sequence for boot devices to be read at boot time so that the CDROM or tape drive is read before the hard drive.
3. Insert the bootable media into the appropriate drive and reboot. The system will begin to boot off the CD or tape.
4. You are now in Step 2 of the Keyed Machine boot intructions below.

Booting an SMP Machine (G30, J30, or R30):

The procedure for booting these three models are similar to the standard keyed machines (explained below). The Key Mode Switch on the front panel needs to be in the Service position, or the Electronic Mode Switch needs to be set to Service (while the physical Key Switch is set to Normal). If the AutoService IPL

flag is enabled, the system will boot as outlined below. However, if the AutoService IPL flag is disabled, you will be brought up to the maintenance menu. If this happens, choose the SYSTEM BOOT option, then choose BOOT FROM LIST. This will boot the system from the Service mode boot list. You can then follow the normal Service procedures below.

Booting a Keyed Machine Into Maintenance at AIX 4.1:

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

   The Next Screen will prompt the "Maintenance" menu. Choose option 1:

   `"Access a Root Volume Group"`

   The next screen will print a warning message and ask you to select 0 to continue. Select 0.

   `"0 Continue"`

   The next screen will ask you to select the proper volume group. Select the proper volume group for your machine.

   The console will display information about rootvg, and also display a Menu with two Options. Choose option 1:

   `"Access this volume group and start a shell"`

   If you get errors from the above option, do not continue with the rest of this procedure. Correct the problem or if you need assistance correcting the 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.
4. Once the previous step is successful, enter the fol- lowing command:

   ```
   ODMDIR=/etc/objrepos
   export ODMDIR
   ```
5. Set the TERM variable to match the terminal you are using.

You will need to know the terminal type, such as "Lft" or "ibm3151". To set the TERM variable, enter the fol- lowing, replacing "<terminal_type>" with the appropriate value:

```
TERM=<terminal_type>
export TERM
```

Setting TERM to the correct terminal will allow vi to work properly.

6. When you are finished working in maintenance mode, turn the key to Normal (eject the bootable media on keyless systems), and run "shutdown -Fr" to boot back into Normal mode.

Reader's Comments

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