

My LPAR always boots into SMS. Why?

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If you turn on **Multiboot** from within the SMS menu (as shown below), your LPAR will always boot into SMS, regardless of your AIX boot list and/or LPAR profile settings.

PowerPC Firmware

Version EM310_048

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Multiboot

1. Select Install/Boot Device
2. Configure Boot Device Order
- 3. Multiboot Startup <ON>**

Navigation keys:

M = return to Main Menu

ESC key = return to previous screen X = eXit System Management Services

Type menu item number and press Enter or select Navigation key:

If your LPAR always boots to the SMS menu, check the Multiboot Startup setting. If its set to ON, change it to OFF (as shown below). To access this option you must enter “5. Select Boot Options” from the main SMS menu.

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Multiboot

1. Select Install/Boot Device
2. Configure Boot Device Order
- 3. Multiboot Startup <OFF>**

Navigation keys:

M = return to Main Menu

ESC key = return to previous screen X = eXit System Management Services

Type menu item number and press Enter or select Navigation key:

Enabling **Multiboot** is only useful if you're planning on dual-booting AIX and Linux within an LPAR. With **Multiboot** turned on, each time you reboot the LPAR, you are taken to SMS so you can choose

which disk to boot from i.e. the **AIX** boot disk or the **Linux** boot disk. I've never come across anyone actually doing this in the commercial world. Mathew Davis (from IBM) wrote an article about dual booting AIX and Linux on pSeries back in 2005:

<http://www.ibmssystemsmag.com/aix/aprilmay05/tipstechniques/6640p1.aspx>

There can be other reasons why an LPAR always boots into SMS. The following link has some information on this:

<http://www.aixmind.com/?tag=keeps-booting-to-sms>

This IBM document explains how to select a boot disk from within the SMS menu.

http://www-01.ibm.com/support/docview.wss?rs=1209&context=SWG10&dc=DB520&q1=multiboot+SMS&uid=isg3T1011805&loc=en_US&cs=UTF-8&lang=en

Remember, if the disk doesn't have a valid boot image, it won't appear in the SMS menu as a boot device!

One way to check you have a boot device on your system is to run the `ipl_varyon` command from the AIX command line (before restarting your LPAR!):

```
# ipl_varyon -i
```

```
PVNAME      BOOT DEVICE  PVID          VOLUME GROUP ID
```

```
hdisk0      YES          00f6048868b4e0ef0000  00f6048800004c00
```

If you don't see a boot device on your system, perhaps someone has accidentally removed the boot record? Or maybe it was never created?

For example, in the commands that follow, I have “accidentally” run the `chpv -c` command against my boot disk. This clears the boot record from the disk! The `ipl_varyon` command no longer shows `hdisk0` as a bootable device.

Leaving the system in this state would **prevent the system from booting!**

To recreate the boot image, I run the `bosboot` command against `hdisk0`. Now `ipl_varyon` recognises `hdisk0` as a bootable device again. Phew!

```
# chpv -c hdisk0
```

```
# ipl_varyon -i
```

```
PVNAME      BOOT DEVICE  PVID          VOLUME GROUP ID
```

hdisk0 **NO** 00f6048868b4e0ef0000 00f6048800004c00

```
# bosboot -a -d /dev/hdisk0
```

bosboot: Boot image is 42689 512 byte blocks.

```
# ipl_varyon -i
```

PVNAME	BOOT	DEVICE	PVID	VOLUME GROUP ID
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hdisk0	YES		00f6048868b4e0ef0000	00f6048800004c00
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