

# In a perfect world...rootvg would always reside on hdisk0

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In a perfect world, 99.9% of AIX administrators would prefer their systems to look like this:

```
# lspv | grep rootvg
```

```
hdisk0      00c342c68dfcbdfb      rootvg      active
```

However, in reality, 99.9% of AIX administrators live with systems that look something like this:

```
# lspv | grep rootvg
```

```
hdisk39     00c342c68dfcbdfb      rootvg      active
```

And 99.9% of them don't have time to tidy up their systems so that rootvg resides on **hdisk0**.

Most of them have much bigger fish to fry, such as performance, virtualisation, automation, security, project delivery, TPS reports, etc!

If they did have time, they could use the **mirrorvg** and **rendev** commands to *'bring order to the Universe'*.

**WARNING! Let me make this perfectly clear! The procedure that is shown below is NOT SUPPORTED by IBM. If you choose to follow these procedures, DO NOT contact IBM support for help. They will not be able to assist you. YOU HAVE BEEN WARNED!**

**Note: Disk drive devices that are members of the root volume group, or that will become members of the root volume group (by means of LVM or install procedures), must not be renamed. Renaming such disk drives may interfere with the ability to recover from certain scenarios, including boot failures. Some devices may have special requirements on their names in order for other devices or applications to use them. Using the `rendev` command to rename such a device may result in the device being unusable.**

**Note: To protect the configuration database, the `rendev` command cannot be interrupted once it has started. Trying to stop this command before completion, could result in a corrupted database.**

**1. Add a new disk to the system.**

```
# lspv
```

```
hdisk39    00c342c68dfcbdfb    rootvg    active
hdisk40    00c342c6161c6b47    None
```

**2. Rename the new disk to `hdisk0`.**

```
# rendev -l hdisk40 -n hdisk0
```

```
hdisk0
```

**3. Add the disk to `rootvg` and mirror to it.**

```
# extendvg rootvg hdisk0
```

```
# mirrorvg rootvg hdisk0
```

0516-1804 chvg: The quorum change takes effect immediately.

0516-1126 mirrorvg: rootvg successfully mirrored, user should perform

bosboot of system to initialize boot records. Then, user must modify

bootlist to include: hdisk0 hdisk39.

#### 4. Create a boot image on hdisk0.

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

bosboot: Boot image is 49180 512 byte blocks.

```
# ipl_varyon -i
```

```
[S 3670248 14942228 07/24/12-10:18:11:104 ipl_varyon.c 1270] ipl_varyon -i
```

PVNAME	BOOT DEVICE	PVID	VOLUME GROUP ID
hdisk39	YES	00c342c68dfcbdfb00000000000000000	00c342c600004c00
<b>hdisk0</b>	<b>YES</b>	00c342c6161c6b470000000000000000	00c342c600004c00

```
[E 3670248 0:087 ipl_varyon.c 1410] ipl_varyon: exited with rc=0
```

#### 5. Check and update the bootlist. Ensure hdisk0 is in the bootlist.

```
# bootlist -m normal hdisk0
```

```
# bootlist -m normal -o
```

```
hdisk0 blv=hd5 pathid=0
```

```
hdisk0 blv=hd5 pathid=1
```

## 6. Unmirror rootvg on hdisk39. Remove hdisk39 from rootvg.

```
# unmirrorvg rootvg hdisk39
```

0516-1246 rmlvcopy: If hd5 is the boot logical volume, please run 'chpv -c <diskname>'

as root user to clear the boot record and avoid a potential boot

off an old boot image that may reside on the disk from which this

logical volume is moved/removed.

0516-1804 chvg: The quorum change takes effect immediately.

0516-1144 unmirrorvg: rootvg successfully unmirrored, user should perform

bosboot of system to reinitialize boot records. Then, user must modify

bootlist to just include: hdisk0.

```
# lspv -l hdisk39
```

```
#
```

```
# reducevg rootvg hdisk39
```

```
#
```

## 7. Order in the Universe has been restored.

```
# lspv | grep rootvg
```

```
hdisk0      00c342c6161c6b47      rootvg      active
```

Of course, all of this assumes that the name, **hdisk0**, is not already in use by a *hdisk* in another volume group on the system.

Again, if you have the time, then you could perform the following to rectify the situation.

### 1. datavg resides on hdisk0.

```
# lspv | grep datavg
```

```
hdisk0      00c342c6161c6b47      datavg      active
```

### 2. Unmount all data file systems in this volume group. Varyoff the VG.

```
# unmount /datafs
```

```
# varyoffvg datavg
```

### 3. Rename hdisk0 to hdisk99 (or something other than hdisk0).

```
# rendez -l hdisk0 -n hdisk99
```

hdisk99

**4. Varyon the volume group, datavg. Mount the data file systems in datavg.**

```
# varyonvg datavg
```

```
# mount /datafs
```

**5. datavg now resides on (the newly renamed) hdisk99.**

```
# lspv | grep datavg
```

```
hdisk99      00c342c6161c6b47      datavg
```

Now that the name, hdisk0, is free, you can perform the steps, outlined above, to restore 'Order in the Universe' and put rootvg back on hdisk0!

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