

Re: lpar and advanced virtualization question.

Source: <http://unix.derkeiler.com/Mailing-Lists/AIX-L/2006-04/msg00065.html>

- *From:* "Green, Simon" <Simon.Green@xxxxxxxxxxxxxx>
 - *Date:* Thu, 6 Apr 2006 18:48:45 +0200
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Two partitions are effectively two completely different servers, so what you do on one has no effect on the other.

If you're using all the fancy dynamic virtualization stuff then there could be some interaction: if you make LPAR1 more important than LPAR2 then a sudden processor demand on LPAR1 could decrease the processing capacity available to LPAR2. But that's all under your control.

Other performance tuning – vmtune, no, etc – will be completely independent on the two partitions.

Some disadvantages to using a single, partitioned server are...

1. Added complexity. You have to manage the partitioning and will need an HMC. (Although you may also have an HMC for the standalone servers anyway.) Even more complexity if you're using advanced virtualization rather than the simple partitioning.
2. Single point of failure. Anything which takes out the whole server will affect both systems. There's lots of redundancy built into them these days, though.
3. Firmware maintenance would require you to shut down both partitions.
4. You would probably want to configure NIM for the partitions. Though again, you might want to do that for standalone servers anyway, particularly if you're using CSM.

Some advantages are...

1. Price. Maybe. One big server may be cheaper than two small ones.
2. Flexibility. Particularly with micro-partitioning you have much more flexibility in how much resources you allocate to each partition. This can also affect price, by allowing you to have a single partitioned server with less total memory and CPU capacity than two standalone servers.
3. Capacity Upgrade on Demand. The ability to have some spare processors and memory which you can allocate at peak times, or to satisfy general growth of the application load.

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AIX-L Archive at <https://lists.princeton.edu/listserv/aix-l.html>

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New to AIX? <http://publib-b.boulder.ibm.com/redbooks.nsf/portals/UNIX>

N.B. Unsolicited email from vendors will not be appreciated.
Please post all follow-ups to the list.

-----Original Message-----

From: IBM AIX Discussion List [<mailto:aix-l@xxxxxxxxxxxxxxx>] On Behalf Of
MARLON BORBA
Sent: 06 April 2006 17:22
To: aix-l@xxxxxxxxxxxxxxx
Subject: lpar and advanced virtualization question.

dear aix meisters,

suppose for a moment I got the money to buy a new shining ibm system p5 or
eserver p5 with several processors, large memory and huge disk space.
suppose, also, that i've decided to partition the server into two virtual
ones, the first to run a client application (telnet) written in a 4gl which
connects over the network to the second, an ingres dbms server. as you can
see, distinct applications and, of course, very different performance
requirements.

what would be the overall performance of my server? does a performance
adjustment applied to one of them impact the other, as their performance
requirements are so different? are standalone servers a better solution?

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