

# 64-bit vs. VMotion ...

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[matt-brewster](#) 79 posts since

Apr 12, 2007 Hi all,

I've got a Poweredge 6850 (4 \* Xeon 3Ghz 667Mhz FSB) and a Poweredge 2850 (2 \* 3.2Ghz 800 FSB). From looking at the VMotion compatibility guide ([http://www.dell.com/downloads/global/solutions/vmotion\\_compatibility\\_matix.pdf](http://www.dell.com/downloads/global/solutions/vmotion_compatibility_matix.pdf)) it appears that my CPUs only support 32-bit OSs. Am I interpreting this matrix correctly? Will my CPUs support 64-bit guests OK but VMotion won't work, or will they fail to run 64-bit guests altogether?

Thanks

Matt



[canadait](#) 463 posts since

Feb 4, 2005 1. **Re: 64-bit vs. VMotion** Apr 25, 2007 7:35 AM

VMotion and 64 bit are two differnt things.

If you need both you need to ensure that both are available on the model(s) that you are looking at buying.

It depends what series you have as only the Intel 7000/71000 series on the 6850 support 64 bit OS. If so you can run 64 bit OS on the 6850 if yo have the 7000/7100 processors but you can not vmotion those guests to the 2850.

Personally unless you have big reasons why you need 64 Bit OS I would roll out 32 Bit. From what I have read unless you are using more then 4 GB of Ram in a guest it doesn't make much of a difference and in some cases can use more memory then a 32 Bit OS.

So if you un 32 Bit it looks like you can vmotion between the 2850 and the 6850. My only concern would be that they 6850 is a much bigger box then the 2850 so don't expect to be able to put the same number of VMs on the box.

Best of luck!



[matt-brewster](#) 79 posts since

Apr 12, 2007 2. **Re: 64-bit vs. VMotion** Apr 25, 2007 8:11 AM

 in response to: [canadait](#) I know the two are different, my question just wasn't phrased that well..!

Basically I am unsure as to whether my CPUs:

- (a) support 64-bit guests and VMotion will work
- (b) support 64-bit guests but VMotion won't work
- (c) won't support 64-bit guests at all

The Dell guide seemed to hint either (b) or (c) but I couldn't ascertain which one. Is there a simple list of the processors that support 64-bit guests? I could find one relating to Workstation but not ESX.

One of my guests needs 8GB RAM, and I'm looking at rolling out Exchange 2007 which requires a 64-bit OS.

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[balacs](#) 213 posts since

Sep 6, 2005 3. **Re: 64-bit vs. VMotion** Apr 25, 2007 11:12 AM

👤 in response to: [matt-brewster](#) Its (c). The servers you have dont support 64-bit VMs.

Thanks,

Bala.

Dell Inc.



[jurajfox](#) 342 posts since

Apr 7, 2006 4. **Re: 64-bit vs. VMotion** Apr 25, 2007 11:14 AM

👤 in response to: [matt-brewster](#) They won't support 64bit guest VMs period.

VMotion will still work for your 32bit guest VMs.



[Todd Wilkerson](#) 105 posts since

Jan 27, 2005 5. **Re: 64-bit vs. VMotion** Apr 26, 2007 2:08 PM

👤 in response to: [matt-brewster](#) Bottom line for Intel procs is that it must have VT capability and be VT enabled in the host's BIOS to run 64-bit VMs. This article doesn't have ESX included, but it's worth noting.

<http://kb.vmware.com/selfservice/microsites/search.do?cmd=displayKC&externalId=1901>

For ESX 3.x, you need VT.



[matt-brewster](#) 79 posts since

Apr 12, 2007 6. **Re: 64-bit vs. VMotion** Apr 27, 2007 1:33 AM

Thanks for the help everyone, it's much appreciated. Looks like I'll be sticking with Exchange 2003..!