

Re: memory and page faults (continued)

Source: <http://unix.derkeiler.com/Mailing-Lists/AIX-L/2006-01/msg00229.html>

- *From:* Mark Schlechte <mschlechte@xxxxxxxxxx>
 - *Date:* Mon, 30 Jan 2006 09:34:50 -0600
-

Title: *Message*

ok. I'll start there and see if I can make some improvements.

>>> Simon.Green@xxxxxxxxxxxxxx 29/Jan/2006 6:28 am >>>

Minperm/Maxperm will have the largest effect.

Different systems will have different settings – it depends on the DB configuration, the amount of memory, the load on the system, the non-DB load etc.

Really, the only way to get it right is to try it and see, then change it a little bit if it's not right. Values of 3–8 or 5–10 look about right to me; 15–40 is a bit conservative for a system with a decent amount of memory. What it's controlling is how much memory to keep for normal filesystem access, and how much to just leave alone, which is what will be available to the DB to use – for SGA. Obviously you need to have Oracle configured to use this memory, otherwise you'll stop the paging, (which will have a positive effect) but not get full use of the system's resources.

--

Simon Green
Altria ITSC Europe s.a.r.l.

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

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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@xxxxxxxxxxxxxx>] **On Behalf Of** Mark Schlechte

Sent: 27 January 2006 19:49

To: aix-l@xxxxxxxxxxxxxx

Subject: Re: memory and page faults (continued)

Since my last post I've been trying to do some research on vmtune etc.

So I'm looking at something like this on a 6way-6f1 with 8GB of RAM, Oracle, JFS filesystems.

Re: memory and page faults (continued)

```
"vmtune -p5 -P10 -f 720 -F 736 -r 2 -R 16"
```

I haven't implemented anything yet.

Seen some different minperm/maxperm setting suggestions (3-8, 5-10, 15-40).

Am I better off just doing minperm/maxperm first or do I need the other minfree/maxfree etc. settings also?

Just trying to be cautious and I still need to investigate sga_size settings as suggested.

Also, should I get nmon installed to help me diagnose?

fyi, I'm also looking at asynch aio settings and my disk layout.

```
>>>Simon.Green@xxxxxxxxxxxxx 01/23/06 7:25 am >>>
```

Just checking the paging in vmstat should pretty quickly tell you if the new VMM settings are helping.

If you want a more detailed look there are various tools that will give you more information, but I'm not sure how valuable any of them would be to you at the moment.

```
-- ?xml:namespace prefix = o ns = "urn:schemas-microsoft-com:office:office" />
```

Simon Green

Altria ITSC Europe s.a.r.l.

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

From: IBM AIX Discussion List [mailto:aix-l@xxxxxxxxxxxxx] **On Behalf Of** Mark Schlechte

Sent: 23 January 2006 14:13

To: aix-l@xxxxxxxxxxxxx

Subject: Re: memory and page faults

Thanks Y'all.

I'll start with vmtune then.

To monitor my changes then is it a matter of trying to compare vmstat outputs during similar loads?

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