

## Re: AIX Memory and Paging Space

**Source:** <http://unix.derkeiler.com/Mailing-Lists/AIX-L/2005-05/0104.html>

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**From:** hercom (*hercom\_at\_ETB.NET.CO*)

**Date:** 05/13/05

Date: Thu, 12 May 2005 23:44:58 -0500

To: aix-l@Princeton.EDU

AIX will always try to use 100% of real memory--> AIX will use the amount of memory solicited by your processes. The remaining capacity will be used as filesystem cache.

You can change the minimum and maximum amounts of memory used to cache files with vmtune (vmo for 5.2+), and it is advised to do so if your're running databases with data on raw devices (since the db engine usually has its own cache algorithm, and AIX can't cache data on raw devices). The values to modify are minperm, maxperm, minclient and maxpin (use at you own risk!!!).

Paging space use will be very low: 5% is about right--> A paging space so little used seems to be oversized. In general, the paging space should be under 40%, and the size must be determined accordingly to the application running (i.e. 4X the physical memory size for oracle). In AIX 5L a paging space can be reduced without rebooting. Anyway, AIX always uses some paging space, even keeping copies of the data on memory and on disk, as a "predictive" paging.

Look in topas for the values "comp mem" (proceses) and "non comp mem" (filesystem cache) to see the distribution of the memory usage. Nmon can show you the top proceses by memory usage, along with many other statistics.

Hernán Camargo

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AIX-L: Re: AIX Memory and Paging Space

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From: IBM AIX Discussion List [mailto:aix-l@Princeton.EDU] On Behalf Of Green, Simon  
Sent: Wednesday, May 04, 2005 4:06 AM  
To: aix-l@Princeton.EDU  
Subject: Re: AIX Memory and Paging Space

AIX will always try to use 100% of real memory, (apart from a very small amount left unused for sudden demands). If you've got enough memory, paging space use will be very low: 5% is about right, allowing for the overheads of LVM and a small amount of paging space use after a boot.

There are several tools which can give you a more detailed picture of how memory is being used. "svmon" is very comprehensive. Tools such as topas and nmon will also give you a bit more information.

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Simon Green  
Altria ITSC Europe s.a.r.l.  
AIX-L Archive at <https://new-lists.princeton.edu/listserv/aix-l.html>  
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@Princeton.EDU] On Behalf Of Akash Jain  
Sent: 04 May 2005 07:00  
To: aix-l@Princeton.EDU  
Subject: AIX Memory and Paging Space  
Hi,

Is it correct to say that AIX server is running on full 100% utilisation and memory usage is below 5%( paging space). What does this mean? Please explain if any one has any idea about it.

Is there anyway of monitoring actual memory utilisation without paging space.