

Re: how to Reduce page file usage

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- *From:* "needlove" <crunch@xxxxxxxxxxxxxxxxxxxx>
 - *Date:* Wed, 13 Dec 2006 10:35:40 -0700
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Why then does Windows only see the initial size of the pagefile? If I set the initial size to say 180 MBs and the maximum to 300 MBs then when the initial size is reached (180 MBs) windows gives me a caution sign and says it is increasing the size of the virtual memory. That doesn't make sense it should only increase it when the maximum is reached. I use the Bill James monitor and it shows my pagefile size at the minimum i have set "188MBs". What is the point of having a minimum and a maximum if only the minimum is seen as the actual size?

"Ron Martell" <ron.martell@xxxxxxxxx> wrote in message news:5fkun214teed2lv6mh0hh3j54gp69jdk0o@xxxxxxxxxx

| "Dale" <dale.ng6@xxxxxxxxxxxxxxxxxxxxxxxx> wrote:

|

| >How do I restrict Windows XP from using the page file?

| >

| >I have 1.5 GB of RAM, and TaskManager tells me there is over 1 GB of

| >Physical Memory Available.

| >All my programs take, at most, 1 GB of memory once loaded (including shared

| >memory for video card). This info comes summary values in TaskManager; add

| >memory in use (Installed minus Available) plus PF usage.

| >This means that I would have half a Gig of spare memory, even if XP left

| >everything in RAM.

| >

| >Windows keeps dumping stuff into the page file, even though there is no need

| >(since there is no shortage of memory). As a result of this behaviour, when

| >I go to use a previously loaded program that I have not switched to for an

| >hour, I have to wait half a minute for it to load into RAM from the PF.

| (It

| >is a large program.) Sometimes, after waiting for 5 minutes, the program

| >still is not ready for use. Maybe XP is thrashing, or fighting with itself;

| >it loads a page, sees there is less than 1 GB of available memory, so it

| >flushes another page that is also needed by the program... ?

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|>What is the point of me waiting, when there is a ton of spare memory?

It

|>should not be flushing ANY RAM to PF in the first place. I see no value in

|>the computer trying to keep 1 GB of Available memory at all times.

|>

|>So I tried using Computer Properties \ Advanced \ Performance \ Settings \

|>Advanced \ Virtual memory setting to force the page file down to 256 MB.

|>Yes that's small, but it's not like the computer needs the extra memory

|>space. I can confirm that C:\pagefile.sys is 268,435,456 bytes.

|>TaskManager still gives PF Usage at over 500 MB though, and the computer is

|>still making me wait at least 30 seconds to start using the program again

|>after an hour delay.

|>

|>Where is Windows dumping the info to disk, since C:\pagefile.sys is the

|>correct size?

|>So, how do I force XP to stop being stupid with the pagefile? I want to

|>force XP to keep ALL programs in physical RAM, since there is no shortage of

|>it.

|>

|>Windows says MS recommends against eliminating the swap file entirely...

How

|>important is that?

|>

| Hi Dale.

| Gerry Cornell pointed you in the right direction.

| One concept that is hard to appreciate unless it is explained to you is that Windows reports a lot of "phantom" page file usage. That is why it is better to make your decisions based on the utility that Gerry mentioned rather than on what Task Manager reports as PF Usage.

| The starting point for all of this has to do with the way memory is allocated. Various items, such as application programs, device drivers, and Windows components, issue Memory Allocation Requests to the operating system. By design, Windows must sufficient memory address space to all of these requests. However the reality is that almost everything tends to ask for memory allocations that are larger than what is actually needed under normal circumstances.

| So what Windows does is to allocate RAM only to those portions of the requests that are actually used, with the unused portions being mapped to locations in the paging file. Note that this mapping of the unused portions of memory requests to the paging file does not require any actual disk activity – all that is necessary is to make

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| appropriate entries in the memory mapping tables maintained by the
| CPU.

| Windows Task Manager (and most other Windows reporting functions)
| count this mapping of unused requests as usage of the paging file; and
| technically they are correct because the memory addresses represented
| by that paging file space have been allocated and cannot be used
| elsewhere until released.

| MVP Bill James' utility (the one Gerry referred you to) on the other
| hand only counts the actual valid memory content that has been moved
| from RAM to the paging file. This is the true physical usage of the
| paging file, and should be a relatively low figure. There is about
| 50 mb or so of memory content used by Windows and various startup
| items that is seldom or never used again but which must remain in
| memory in order to preserve integrity. Very often some or all of that
| will be moved to the paging file as a routine housekeeping measure.
| But anything more than 50 mb or so of actual valid memory content in
| the paging file is usually an indicator that your system would benefit
| from having more RAM installed.

| Just to illustrate the various paging file figures here is the current
| data for my own computer:

| PF Usage (Task Manager) = 524 mb

| Actual usage (Bill James' utility) = 86 mb

| Actual physical size of the paging file (c:\pagefile.sys) = 128 mb

| The computer presently has 1 gb of RAM installed.

| Ron Martell Duncan B.C. Canada

| —

| Microsoft MVP (1997 – 2006)

| On-Line Help Computer Service

| <http://onlinehelp.bc.ca>

| Syberfix Remote Computer Repair

| "Anyone who thinks that they are too small to make a difference
| has never been in bed with a mosquito."

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