

8 Special notes on memtype parameter in proc.mem items

The memtype parameter is supported on *AIX*, *FreeBSD*, *Linux* and *Solaris* platforms. On all these platforms 3 common values of memtype are supported: `pmem`, `rss`, `vsize`. On some of the platforms also platform-specific memtype values are supported.

AIX

memtype value	Is default	Description	Tries to be compatible with
<code>vsize</code>	*	virtual memory size	
<code>pmem</code>		percentage of real memory	<code>ps -o pmem</code>
<code>rss</code>		resident set size	<code>ps -o rssize</code>
<code>size</code>		size of process (code + data)	"ps gvw" SIZE column
<code>dsize</code>		data size	
<code>tsize</code>		text (code) size	"ps gvw" TSIZ column
<code>sdsiz</code>		data size from shared library	
<code>drss</code>		data resident set size	
<code>trss</code>		text resident set size	
<code>dvm</code>		data virtual memory size	shows the same value as 'size'

FreeBSD

memtype value	Is default	Description	Tries to be compatible with
<code>vsize</code>		virtual size	<code>ps -o vsz</code>
<code>pmem</code>		percentage of real memory	<code>ps -o pmem</code>
<code>rss</code>		resident set size	<code>ps -o rss</code>
<code>size</code>	*	size of process (code + data + stack)	
<code>tsize</code>		text (code) size	<code>ps -o tsiz</code>
<code>dsize</code>		data size	<code>ps -o dsiz</code>
<code>ssize</code>		stack size	<code>ps -o ssiz</code>

Linux

memtype value	Is default	Description
<code>vsize</code>	*	virtual memory size
<code>pmem</code>		percentage of real memory
<code>rss</code>		resident set size
<code>data</code>		size of data segment
<code>exe</code>		size of code segment
<code>hwm</code>		peak resident set size
<code>lck</code>		size of locked memory
<code>lib</code>		size of shared libraries
<code>peak</code>		peak virtual memory size
<code>pin</code>		size of pinned pages
<code>pte</code>		size of page table entries
<code>size</code>		size of process code + data + stack segments
<code>stk</code>		size of stack segment

memtype value	Is default	Description
swap		size of swap space used

Notes for Linux:

1. Not all memtype values are supported by older Linux kernels. For example, Linux 2.4 kernels do not support hwm, pin, peak, pte and swap values.
2. We have noticed that self-monitoring of Zabbix agent active checks process with `proc.mem[...,..., data]` shows a value 4 kB larger than reported by VmData line in the agent's `/proc/<pid>/status` file. At time of self-measurement the agent's data segment increases by 4 kB and then returns to the previous size.

Solaris

memtype value	Is default	Description	Tries to be compatible with
vsize	*	size of process image	ps -o vsz
pmem		percentage of real memory	ps -o pmem
rss		resident set size It may be underestimated - see rss description in "man ps".	ps -o rss

From: <https://www.zabbix.com/documentation/3.0/> - **Zabbix Documentation 3.0**

Permanent link: https://www.zabbix.com/documentation/3.0/manual/appendix/items/proc_mem_notes?rev=1415808333

Last update: **2014/11/12 16:05**

