Subject: Re: First results of TPC code profiling
Posted by Florian Uhlig on Fri, 31 Dec 2010 09:02:47 GMT
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Hi Felix

If the crash happens or not probably depends on the memory accessible on a machine. If you're allowed to use 2GB of Memory then the process will crash when it reaches this limit. On another machine this limit doesn't exist and you will have no crash. I am not speaking about the hardware memory but of the memory dedicated to the process by the OS. You can check this with the following command.

Quote:
```
> ulimit -a
core file size          (blocks, -c) 0
data seg size           (kbytes, -d) unlimited
max nice                        (-e) 0
file size               (blocks, -f) unlimited
pending signals                 (-i) unlimited
max locked memory       (kbytes, -l) 256000
max memory size         (kbytes, -m) 256000
open files                      (-n) 8192
pipe size            (512 bytes, -p) 8
POSIX message queues     (bytes, -q) unlimited
max rt priority                 (-r) 0
stack size              (kbytes, -s) 8192
cpu time               (seconds, -t) 60000
max user processes              (-u) unlimited
virtual memory          (kbytes, -v) 1512000
file locks                      (-x) unlimited
```

The interesting information is max memory size. As you can see this value is very small on this interactive machines to prevent people from starting big jobs on this dedicated machine,

By the way there are some small scripts which should help people to find memory problems in the scripts directory of fairbase. Either you add this directory as external packages to pandaroot or you download it standalone. These scripts will not tell you where the actual problem is, but that there is a problem. They are easy to use and since they run in separate processes they will not slow down the root macro, which in my opinion is the real advantage. To isolate the problem you can switch on and of tasks to find the bad guy.

Hope this info helps.

Ciao and happy new year

Florian