Subject: Memory management question
Posted by zsolt on Fri, 04 Feb 2022 01:12:47 GMT

View Forum Message <> Reply to Message

I have a HTTP server app, and after some running, I can see a huge (1.2 GB) virtual memory usage, but the physical memory usage is at a normal level (10 MB).
The output of ps command:

```
USER       PID %CPU %MEM   VSZ  RSS TTY     STAT START  TIME
www-data 2769421  0.0  0.4 1210720 10156 ?      Ssl  2021  22:10
```

The output of the free command seems to be OK:

```
          total      used      free     shared buff/cache  available
Mem:    2035160    292508    292132     55176   1450520    1499604
Swap:   1048572      6500   1042072
```

Is that normal, or I have some memory leak?
What can be the cause of it?

Subject: Re: Memory management question
Posted by mirek on Mon, 07 Feb 2022 23:16:41 GMT

View Forum Message <> Reply to Message

zsolt wrote on Fri, 04 February 2022 02:12I have a HTTP server app, and after some running, I can see a huge (1.2 GB) virtual memory usage, but the physical memory usage is at a normal level (10 MB).
The output of ps command:

```
USER       PID %CPU %MEM   VSZ  RSS TTY     STAT START  TIME
www-data 2769421  0.0  0.4 1210720 10156 ?      Ssl  2021  22:10
```

The output of the free command seems to be OK:

```
          total      used      free     shared buff/cache  available
Mem:    2035160    292508    292132     55176   1450520    1499604
Swap:   1048572      6500   1042072
```

Is that normal, or I have some memory leak?
What can be the cause of it?

It can be leak, it can be fragmentation.

I suggest dumping MemoryProfile from time to time to find out.

Does it grow from 1.2G further? What is "some running"? Hours, days, weeks, how many requests?

Mirek

Subject: Re: Memory management question
Posted by zsolt on Tue, 08 Feb 2022 00:21:15 GMT
View Forum Message <> Reply to Message

Thanks for suggesting MemoryProfile, I didn't know about it.
I will start using it.

I started the daemon 2 months 23 days ago.
The total running time was that 22 minutes (ps output), serving about 104 thousand requests since the starting.
The virtual memory usage did not grow since my original post, but there was not too much traffic since that time.

This is an HTTP server using CoWork for MT, serving JSON and PDF output to HTTP GET requests and HTTP JSON POSTs. It uses PostgreSQL as backend.

This is my first project, where I use a lot of exceptions in error handling and complex structures as return values. Maybe one of them can be the problem, causing fragmentation.

I will try to find out something.

Thanks a lot.

Subject: Re: Memory management question
Posted by zsolt on Tue, 08 Feb 2022 03:30:35 GMT
View Forum Message <> Reply to Message

Sorry for this silly question :blush:

I have read some Linux docs.
VSZ is the sum of used memory of all threads (the process + shared libraries).
So in a multi threaded app it can be a huge number.