
Subject: memory consumption of my application
Posted by [BetoValle](#) on Fri, 05 May 2023 16:15:04 GMT
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Hi,

is there a function that can tell how much my application is consuming?

Thanks

Subject: Re: memory consumption of my application
Posted by [BetoValle](#) on Fri, 05 May 2023 22:57:34 GMT
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In stackoverflow i have located this code but I don't know if it works on linux. My question is, is this the way to go? Or if there is a code already implemented in U++?

```
#include <windows.h>
#include <stdio.h>
#include <psapi.h>

void PrintMemoryInfo( DWORD processID )
{
    HANDLE hProcess;
    PROCESS_MEMORY_COUNTERS pmc;

    // Print the process identifier.

    printf( "\nProcess ID: %u\n", processID );

    // Print information about the memory usage of the process.

    hProcess = OpenProcess( PROCESS_QUERY_INFORMATION |
                           PROCESS_VM_READ,
                           FALSE, processID );
    if (NULL == hProcess)
        return;

    if ( GetProcessMemoryInfo( hProcess, &pmc, sizeof(pmc)) )
    {
        printf( "\tPageFaultCount: 0x%08X\n", pmc.PageFaultCount );
        printf( "\tPeakWorkingSetSize: 0x%08X\n",
                pmc.PeakWorkingSetSize );
        printf( "\tWorkingSetSize: 0x%08X\n", pmc.WorkingSetSize );
        printf( "\tQuotaPeakPagedPoolUsage: 0x%08X\n",
```

```

        pmc.QuotaPeakPagedPoolUsage );
printf( "\tQuotaPagedPoolUsage: 0x%08X\n",
        pmc.QuotaPagedPoolUsage );
printf( "\tQuotaPeakNonPagedPoolUsage: 0x%08X\n",
        pmc.QuotaPeakNonPagedPoolUsage );
printf( "\tQuotaNonPagedPoolUsage: 0x%08X\n",
        pmc.QuotaNonPagedPoolUsage );
printf( "\tPagefileUsage: 0x%08X\n", pmc.PagefileUsage );
printf( "\tPeakPagefileUsage: 0x%08X\n",
        pmc.PeakPagefileUsage );
}

CloseHandle( hProcess );
}

int main( )
{
    // Get the list of process identifiers.

    DWORD aProcesses[1024], cbNeeded, cProcesses;
    unsigned int i;

    if ( !EnumProcesses( aProcesses, sizeof(aProcesses), &cbNeeded ) )
        return 1;

    // Calculate how many process identifiers were returned.

    cProcesses = cbNeeded / sizeof(DWORD);

    // Print the memory usage for each process

    for ( i = 0; i < cProcesses; i++ )
        PrintMemoryInfo( aProcesses[i] );

    return 0;
}

```

File Attachments

1) [2023-05-05_194900.jpg](#), downloaded 241 times



me	Status	12% CPU	83% Memória	5% Disco
Gerenciador de Janelas da Área de Trabalho		0,9%	373,2 MB	0 MB/s
Google Chrome (9)		1,4%	365,0 MB	0 MB/s
theide.exe		1,6%	328,8 MB	0 MB/s



Task Manager

Warning, you are using the root account, you may harm your system.

CPU: 5% Processes: 133 Memory: 987.8 MiB / 1.9 GiB Swap: 24.8 MiB / 953.0 MiB

Task	PID	PPID	State	RSS	CP
java-1.11.0-openjdk-amd64/bin/java -Djava.util.logging.config.file=/opt/tomcat/conf/logging.properties -Djava.util.loggin...	703	1	S	412.2 MiB	0
Xorg :10 -auth .Xauthority -config xrdp/xorg.conf -noreset -nolisten tcp -logfile .xorgxrdp.%s.log	1335	1321	S	103.2 MiB	1
sddm-greeter --socket /tmp/sddm-:0-KfluyC --theme /usr/share/sddm/themes/debian-theme	1078	975	S	95.5 MiB	3
mysqld	832	1	S	84.6 MiB	0
Thunar --daemon	1415	1	S	69.8 MiB	0
xfdesktop	1417	1	S	39.2 MiB	0
Xorg -nolisten tcp -auth /var/run/sddm/{ddb1e6df-d960-4ee8-9e20-aa1776feb14a} -background none -noreset -displayf...	760	707	S	39.0 MiB	0
Task Manager	15146	1413	R	38.3 MiB	1
xfce4-power-manager	1443	1	S	36.9 MiB	0
klauncher --fd=8	1586	1585	S	30.9 MiB	0
xfce4-panel	1413	1	S	28.4 MiB	0
xrdp	14983	729	S	25.0 MiB	1
isislySKS	12090	1	S	23.0 MiB	0

debian¹⁰

Subject: Re: memory consumption of my application
Posted by [BetoValle](#) on Sat, 06 May 2023 20:34:21 GMT
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Hi,

I found these 2 codes for windows and linux. I think they are reasonable to have a base. On windows I did the test and the values don't match with the manager since they use different structure (as the note in the example). On linux the values are already close to the test application!

windows:

```
void defP(){
    // Task Manager windows 10 uses VM_COUNTERS_EX2 similar structure is defined (in
ntddk.h)
    MEMORYSTATUSEX memInfo;
    memInfo.dwLength = sizeof(MEMORYSTATUSEX);
    GlobalMemoryStatusEx(&memInfo);
    DWORDLONG totalVirtualMem = memInfo.ullTotalPageFile;

    DWORDLONG virtualMemUsed = memInfo.ullTotalPageFile - memInfo.ullAvailPageFile;

    PROCESS_MEMORY_COUNTERS_EX pmc;
    GetProcessMemoryInfo(GetCurrentProcess(), (PROCESS_MEMORY_COUNTERS*)&pmc,
sizeof(pmc));
    SIZE_T virtualMemUsedByMe = pmc.PrivateUsage;

    DWORDLONG totalPhysMem = memInfo.ullTotalPhys;

    DWORDLONG physMemUsed = memInfo.ullTotalPhys - memInfo.ullAvailPhys;

    SIZE_T physMemUsedByMe = pmc.WorkingSetSize;

    SIZE_T x=pmc.PagefileUsage;
    SIZE_T y=pmc.PrivateUsage;
    Cout() <<"m virtual usada-----> " << virtualMemUsedByMe/1024 << EOL;
    Cout() <<"m fisica usada-----> " << physMemUsed/1024/1024 << EOL;
    Cout() <<"total m usada-----> " << totalPhysMem << EOL;
    Cout() <<"m privada usada-----> " << y/1024 << EOL;

}

CONSOLE_APP_MAIN
{
    SetLanguage("pt-br");
    SetDateFormat("%3:02d/%2:02d/%1:4d"); // format code in editor
    SetDateScan("dmy");

    defP();
}
```

```

}

linux:
#include <iostream>
#include <Core/Core.h>
#include <SysInfo/SysInfo.h>

using namespace Upp;

int parseLine(char* line){
    // This assumes that a digit will be found and the line ends in " Kb".
    int i = strlen(line);
    const char* p = line;
    while (*p <'0' || *p >'9') p++;
    line[i-3] = '\0';
    i = atoi(p);
    return i;
}

int getValue(){ //Note: this value is in KB!
    FILE* file = fopen("/proc/self/status", "r");
    int result = -1;
    char line[128];

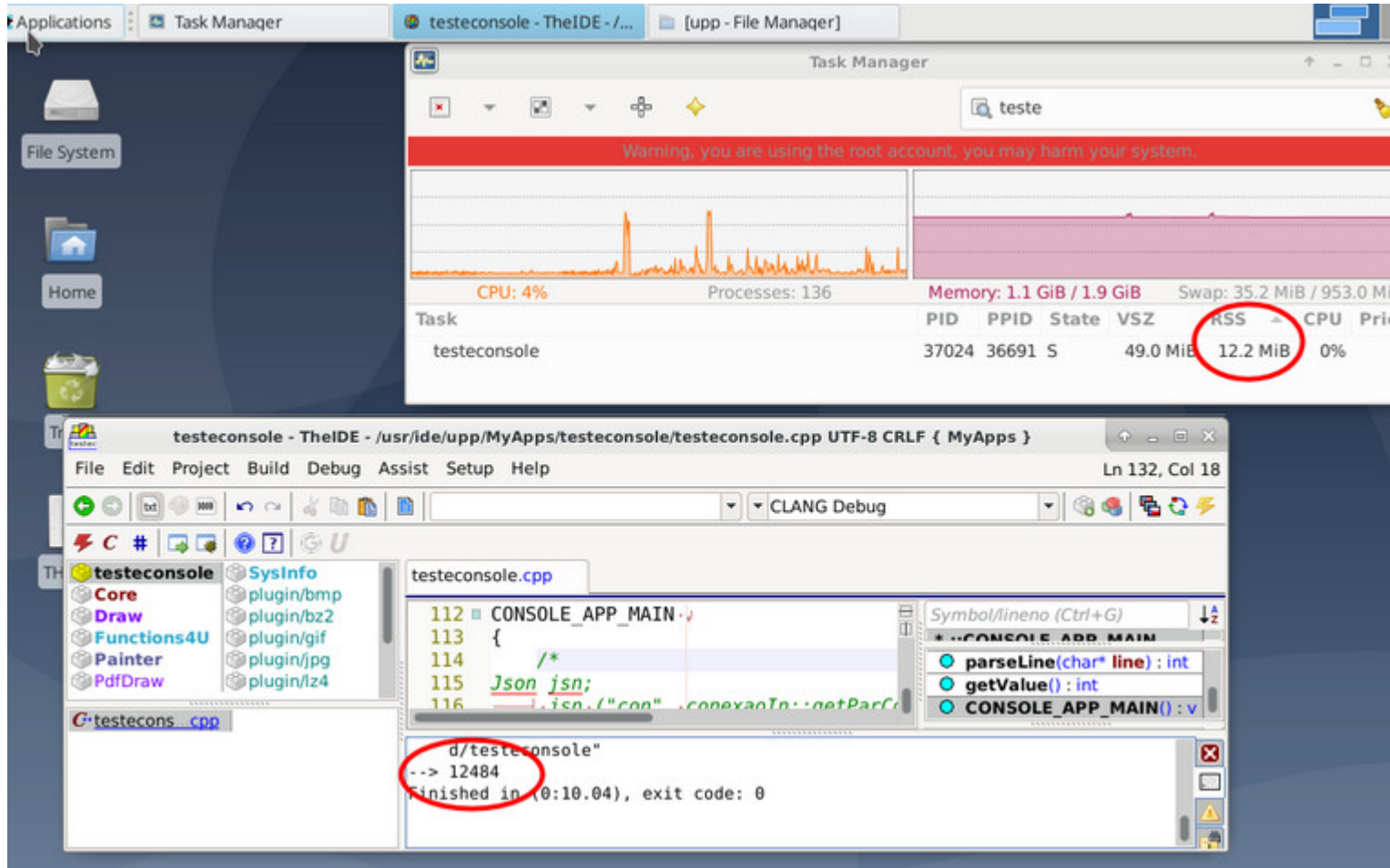
    while (fgets(line, 128, file) != NULL){
        if (strncmp(line, "VmRSS:", 6) == 0){
            result = parseLine(line);
            break;
        }
    }
    fclose(file);
    return result;
}

CONSOLE_APP_MAIN
{
    Cout() << "--> " << getValue() << EOL;
}

```

File Attachments

1) [2023-05-06_171011.jpg](#), downloaded 243 times



Subject: Re: memory consumption of my application
Posted by [mirek](#) on Sun, 14 May 2023 08:34:54 GMT
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For U++ heap, you can use `MemoryUsedKb`, `MemoryUseKbMax`, `MemoryProfile`, or `PeakMemoryProfile`.

There is even `MemoryProfileInfo` function in `CtrlLib` that show it in Prompt.
